SCENIC RIM REGIONAL COUNCIL

Attachments

Under Separate Cover

Ordinary Meeting

Wednesday, 29 April 2026

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SCENIC RIM REGIONAL COUNCIL

SCENIC RIM PLANNING SCHEME 2020

AMENDMENT NO. 8

For PUBLIC CONSULTATION
May 2026

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Scenic Rim Planning Scheme 2020

AMENDMENT NO.<Insert number>

This is to certify that this is a true and correct copy of the *Scenic Rim Planning Scheme 2020* Amendment No. 8 adopted on <insert date> and commenced on <insert date>.

David Keenan

CHIEF EXECUTIVE OFFICER

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Preliminary

Short title

This amendment may be cited as *Scenic Rim Planning Scheme 2020 Amendment No. 8*.

Purpose

This Major Amendment is made in accordance with Chapter 2, Part 4 of the Minister's Guidelines and Rules (Version 2.0) made under the *Planning Act 2016* and prescribed in the *Planning Regulation 2017*.

The purpose of this Major Amendment is to:

1. update a range of policy matters that have been identified through the implementation of the planning scheme;
2. make amendments to support the development of Residential Care Facilities and Retirement Facilities in the right locations as identified in the Scenic Rim Growth Management Strategy 2041;
3. make other operational amendments, including zoning changes to improve alignment with the policy intent of the planning scheme; and
4. update mapping relating to:
    - Agricultural Land;
    - Key Resource Areas;
    - Future Railway Corridors; and
    - Urban Footprint boundaries released under Shaping SEQ South East Queensland Regional Plan 2023.

Application

This Major Amendment applies to the following version of the Scenic Rim Planning Scheme 2020:

Scenic Rim Planning Scheme 2020 (30 June 2023)

Item 1: Revised levels of assessment and policy for Residential Care Facilities and Retirement Facilities

Summary

Review of levels of assessment and policy for Residential Care Facilities and Retirement Facilities in relevant zones to ensure that the development of these uses is appropriately encouraged to meet the projected need for these uses. The relevant zones include:

- District Centre Zone;
- Low-Density Residential Zone (No precinct);
- Low-Medium Density Residential Zone;
- Major Centre Zone;
- Mixed Use Zone (No precinct);
- Township Zone (No precinct); and
- Township Zone (Township Residential Precinct).

Explanation

Council's Growth Management Strategy identified that *'an assessment of future housing needs has indicated that there is a need to plan for more retirement facilities and residential aged care facilities to support an increasing ageing population to have access to this housing type in the local area and provide the ability to continue to live locally, or ''age-in-place''.*

As such, the strategy identified a need to review the Planning Scheme to consider incentives to encourage development of Residential Care Facilities and Retirement Facilities.

The review has identified the opportunity to reduce levels of assessment for these land use activities in appropriately located zones across the Scenic Rim. Related changes to assessment benchmarks are also proposed.

State Interests

SEQ Regional Plan 2023

The Regional Plan, Part A – Goal 1: Grow, Outcome 4.2 requires *support and promote accessible, safe, secure and affordable housing choice for people with disability and older people.*
The proposed amendments support and promote housing choice for older people through reduced levels of assessment for Residential Care Facilities and Retirement Facilities in appropriately located zones and areas.

State Planning Policy 2017 – Housing supply and diversity

The State Interest identifies *Diverse, accessible and well-serviced housing, and land for housing, is provided and supports affordable housing outcomes*. Specifically, State Interests (2), (3), and (4) are relevant to the proposed amendment.

Reducing levels of assessment for Retirement Facilities and Residential Care Facilities in identified zones supports development to address the current and projected demographic profile of the area and supports housing for seniors and people requiring assisted living.

State Planning Policy 2017 – Liveable Communities

State Interest (2) requires communities lifestyle needs to be facilitated by a mix of land uses that meet the needs of the diverse demographic needs of the community.

Reducing levels of assessment for Retirement Facilities and Residential Care Facilities in identified zones supports development to meet the needs of the community, including for older persons and people requiring assisted living.

Proposed Changes

1. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.3 District Centre Zone, amend Table 5.5.3.1 to insert new categories of development and assessment, and assessment benchmarks, as shown below:

Table 5.5.3.1 – District Centre Zone

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	If not located on Tamborine Mountain	District Centre Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	If not located on Tamborine Mountain	District Centre Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

2. In Part 6 Zones, Section 6.2.3 District Centre Zone Code, amend Overall Outcome (b) to insert a new point iv. as shown below and renumber remaining points:

2. The purpose of the District Centre Zone Code will be achieved through the following overall outcomes:
   b. Land uses:
      iv. include Residential care facilities and Retirement facilities (where not located on Tamborine Mountain) to meet the diverse housing needs of the community and support 'aging-in-place';

3. In Part 6 Zones, Section 6.2.3 District Centre Zone Code, amend Table 6.2.3.2.1 as shown below:

Table 6.2.3.2.1 – Consistent Use and Potentially Consistent Uses in the District Centre Zone

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dwelling unit (where located above the ground floor of a commercial activity or behind a commercial activity) Home based business (if not involving Industrial activities other than minor industrial activities) Residential Care Facility (if not located on Tamborine Mountain) Retirement Facility (if not located on Tamborine Mountain)	Multiple dwelling (where located above the ground floor of a commercial activity in the Boonah district centre) Rooming accommodation (where located above the ground floor of a commercial activity in the Boonah district centre)

4. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change Use, 5.5.8 Low Density Residential Zone, amend Table 5.5.8.1 as shown below:

Table 5.5.8.1 – Low Density Residential Zone – (Where no precinct applies)

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Low Density Residential Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Low Density Residential Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

5. In Part 6 Zones, Section 6.2.8 Low Density Residential Zone Code, amend Table 6.2.8.2.1 as shown below:

Table 6.2.8.2.1 – Consistent Use and Potentially Consistent Uses in the Low Density Residential Zone (Where no precinct applies)

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dwelling house Dual occupancy Home based business (if not involving Industrial activities other than minor industrial activities) Sales office Multiple dwelling (where involving 3 dwelling units) Residential care facility (where involving ~~10~~ 20 bedrooms or less) Retirement facility (where involving ~~10~~ 20 bedrooms or less)	Multiple dwelling* Residential care facility* Retirement facility*

**other than as specified in column 1*

6. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.9 Low-medium Density Residential Zone, amend Table 5.5.9.1 as shown below:

Table 5.5.9.1 – Low-medium Density Residential Zone

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	~~If involving 10 bedrooms or less~~	Low-Medium Density Residential Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	~~If involving 10 bedrooms or less~~	Low-Medium Density Residential Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

7. In Part 6 Zones, Section 6.2.9 Low-medium Density Residential Zone Code, amend Table 6.2.9.2.1 as shown below:

Table 6.2.9.2.1 – Consistent Use and Potentially Consistent Uses in the Low-medium Density Residential Zone

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dwelling house Dual occupancy Home based business (if not involving Industrial activities other than minor industrial activities) Sales office Multiple dwelling (where involving 6 dwelling units or less) Residential care facility ~~(where involving 10 bedrooms or less)~~ Retirement facility ~~(where involving 10 bedrooms or less)~~	Multiple dwelling* ~~Residential care facility*~~ ~~Retirement facility*~~

**other than as specified in column 1*

8. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.10 Major Centre Zone, amend Table 5.5.10.1 to insert new categories of development and assessment, and assessment benchmarks, as shown below:

Table 5.5.10.1 – Major Centre Zone

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	Code Assessment	
		Major Centre Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	Code Assessment	
		Major Centre Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

9. In Part 6 Zones, Section 6.2.10 Major Centre Zone Code, amend Overall Outcome 2.(b) to insert a new point iv. as shown below and renumber remaining points:

2. The purpose of the Major Centre Zone Code will be achieved through the following overall outcomes:
   b. Land uses:
      iv. include Residential care facilities and Retirement facilities to meet the diverse housing needs of the community;

10. In Part 6 Zones, Section 6.2.10 Major Centre Zone Code, amend Table 6.2.10.2.1. as shown below:

Table 6.2.10.2.1 – Consistent Use and Potentially Consistent Uses in the Major Centre Zone Code

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dwelling house (if involving extensions to an existing Dwelling house or any domestic outbuildings associated with the dwelling) Dwelling unit (where located above the ground floor of a commercial activity) Home based business (if not involving Industrial activities other than minor industrial activities) Multiple dwelling (where located above the ground storey of a commercial activity) Rooming accommodation (where located above the ground storey of a commercial activity) Residential Care Facility Retirement Facility	

11. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, Section 5.5.13 Mixed Use Zone, amend Table 5.5.13.1 as shown below:

Table 5.5.13.1 – Mixed Use Zone – (Where no precinct applies)

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	~~Where involving 10 bedrooms or less~~	Mixed Use Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	~~Where involving 10 bedrooms or less~~	Mixed Use Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

12. In Part 6 Zones, Section 6.2.13 Mixed Use Zone Code, amend Table 6.2.13.2.1 as shown below:

Table 6.2.13.2.1 – Consistent Use and Potentially Consistent Uses in the Mixed Use Zone (Where no precinct applies)

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Dwelling house (if involving extensions to an existing Dwelling house or any domestic outbuildings associated with the dwelling) Dwelling unit (where located above the ground floor of a commercial activity) Home based business (if not involving Industrial activities other than minor industrial activities) Multiple dwelling (where not exceeding 6 dwellings) Residential care facility ~~(where involving 10 bedrooms or less)~~ Retirement facility ~~(where involving 10 bedrooms or less)~~	Multiple dwelling Rooming accommodation ~~Residential care facility~~ ~~Retirement facility~~

13. In Part 5, Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, Section 5.5.19 Township Zone, amend Table 5.5.19.1 & Table 5.5.19.2 as shown below:

Table 5.5.19.1 – Township Zone – (Where no precinct applies)

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Township Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Township Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

Table 5.5.19.2 – Township Zone – Township Residential Precinct

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Residential Care Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Township Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code
Retirement Facility	**Code Assessment**	
	If involving ~~10~~ 20 bedrooms or less	Township Zone Code Medium Density Residential Uses Code Earthworks, Construction and Water Quality Code Infrastructure Design Code Landscaping Code Parking and Access Code General Development Provisions Code

14. In Part 6 Zones, Section 6.2.19 Township Zone Code, amend Overall Outcome (b) for the Township Zone (Where no precinct applies) as shown below:

2. The purpose of the **Township Zone (where no precinct applies)** will be achieved through the following overall outcomes:
   b. Land uses:
   ii. Include low density residential activities including Community residences, Dual occupancies, Dwelling houses, Dwelling units, small scale and low intensity Residential care facilities and Retirement facilities ~~(where involving 10 bedrooms or less)~~ and Home based businesses;

15. In Part 6 Zones, Section 6.2.19 Township Zone Code, amend Table 6.2.19.2.1 as shown below:

Table 6.2.19.2.1 – Consistent Use and Potentially Consistent Uses in the Township Zone (Where no precinct applies)

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dual occupancy (on a minimum site area of 1,000m^2 where connected to the reticulated sewerage network, otherwise a minimum site area of 4,000m^2) Dwelling house Dwelling unit Home based business (if not involving Industrial activities other than minor industrial activities) Residential care facility (if involving ~~10~~ 20 bedrooms or less) Retirement facility (involving ~~10~~ 20 bedrooms or less)	Dual occupancy* Residential care facility* Retirement facility*

** other than as specified in column 1*

16. In Part 6 Zones, Section 6.2.19, amend Overall outcome (b) for the Township Zone – Township Residential Precinct as shown below:

1. The purpose of the **Township Zone - Township Residential Precinct** will be achieved through the following overall outcomes:
   b. Land uses:
   iii. Include small scale and low intensity Residential care facility ~~(where involving 10 bedrooms or less)~~ and Retirement facility ~~(where involving 10 bedrooms or less)~~ that:
      A. are compatible with the character of the precinct;
      B. complements the height and scale of adjoining development; and
      C. are located in areas that are well serviced and are highly accessible;

17. In Part 6 Zones, Section 6.2.19 Township Zone Code, amend Table 6.2.19.2.2 as shown below:

Table 6.2.19.2.2 – Consistent Use and Potentially Consistent Uses in the Township Zone – Township Residential Precinct

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Community residence Dual occupancy (on a 1,000m^2 or greater lot where connected to the reticulated sewerage network, otherwise a minimum site area of 4,000m^2) Dwelling house Home based business (if not involving Industrial activities other than minor industrial activities) Residential care facility (if involving ~~10~~ 20 bedrooms or less)	Dual occupancy* Residential care facility* Retirement facility*

Retirement facility (involving ~~10~~ 20 bedrooms or less)	

** other than as specified in column 1*

18. In Part 9 Development Codes, Section 9.3.12 Medium Density Residential Uses Code, Section 9.3.12.1 Purpose, amend Overall Outcome 2(a)(ix) as shown below:

2. The purpose of the code will be achieved through the following overall outcomes:
   a. development:
      i. is designed to create attractive and high quality buildings that add visual interest to the streetscape and contribute positively to the character of a neighbourhood;
      ii. supports the provision of housing diversity for various household types to meet the existing and future needs of the community;
      iii. is designed to address the street and public spaces and integrate with neighbouring residential premises;
      iv. provides a high standard of privacy and amenity for occupants and residents of adjoining residential premises;
      v. provides private and communal open space that is adequate and useable to service the recreational needs of residents;
      vi. is designed and orientated to promote a safe environment within the site, adjoining streets and public spaces, including safe and convenient pedestrian and vehicle access to and from the site;
      vii. incorporates and is supported by infrastructure and services commensurate with the scale of the use and its location;
      viii. being Workforce accommodation, is limited to short or medium term accommodation required in conjunction with a specific large-scale project.
      ix. for larger Retirement facilities and Residential care facilities and other similar high density residential developments are established in localities that have access to an appropriate level of services and infrastructure to cater for the needs of the future residents of these facilities, and also to ensure that their scale and intensity does not detrimentally impact the communities in which they are located. A Social Impact Assessment is undertaken to demonstrate the achievement of this overall outcome.

19. In Part 9 Development Codes, Section 9.3.12 Medium Density Residential Uses Code, amend Table 9.3.12.3.1 to add new Performance Outcomes as shown below, and renumber the remaining sections:

Table 9.3.12.3.1 - Criteria for Assessable Development - Multiple dwelling, Residential Care Facility, Retirement Facility and Rooming Accommodation

Performance Outcomes	Acceptable Outcomes
PO14 A Social Impact Assessment demonstrates that a proposed Retirement Facility or Residential Care Facility of more than 20 bedrooms: 1. is established in a location that enables residents and employees access to an appropriate level of services and infrastructure; and 2. is of a scale and intensity that does not detrimentally impact the community in which it is located. ***Note** - The preparation of a Social Impact Assessment by a suitably qualified professional is the method required to demonstrate the achievement of this outcome.*	**AO14** Retirement Facilities and Residential Care Facilities of more than 20 bedrooms are supported by a Social Impact Assessment which provides a detailed assessment of social and health impacts of the development, along with strategies to mitigate potential negative impacts and enhance positive impacts and mechanisms to monitor the effectiveness of the strategies.

Item 2: Additional assessment benchmarks to address visual impacts of retaining walls and usable development area

Summary

Amendment to the Reconfiguring a Lot Code to include additional outcomes to ensure retaining walls in new subdivisions are designed to minimise visual impacts and to ensure minimum dimensions to support buildings are achieved where any cutting, filling, retaining walls and earthworks are required.

Explanation

Additional Performance Criteria and Acceptable Outcomes are proposed to the provisions for retaining walls and earthworks in the Reconfiguring a Lot Code to support improved design outcomes for new subdivisions which result in retaining walls.

State Interests

Not applicable.

Proposed Changes

1. In Part Reconfiguring a Lot Code, amend the outcomes for earthworks and retaining walls in Table 9.4.6.3.1 – Assessable Development as shown below:

Table 9.4.6.3.1— Assessable Development

Performance Outcomes	Acceptable Outcomes
Earthworks and Retaining Walls	
PO13 Reconfiguring a lot and associated operational work is designed to minimise the need for earthworks, retaining walls and batters.	**AO13** No acceptable outcome is prescribed.
PO14 Where unavoidable, development ensures that batter slopes and retaining walls: 1. do not encroach onto, or impact upon, an adjoining property or public place; 2. are designed to manage stormwater effectively on the site; 3. can be easily accessed and maintained by the owner; ~~and~~ 4. are located wholly within the lot receiving the benefit of the structure; 5. are designed to soften the visual impact on the public realm; and 6. do not prevent the development of the lot from achieving the built form requirements of the planning scheme.	**AO14.1** Development provides that batter slopes and retaining walls: 1. are not located within existing or proposed road reserves or other public purpose land; 2. must not encroach onto any adjoining property or public place; 3. result in a maximum vertical dimension or minimum horizontal dimension of 1m for either: a. a single level change; or b. any step in a series of level changes; 4. are set back a minimum distance of 0.6 metres from a boundary (including both the top and toe of a retaining wall or batter slope) 5. must drain discharge to the street or other legal point of discharge; 6. where facing the public realm, use design techniques to minimise visual impacts, including colours, materials, textures, planting, screening and tiering; and 7. do not impose loading on any adjoining structures, including underground utility services.

	AO14.2 Development ensures that a minimum rectangle dimension of 10x15 metres is located on land with an existing slope of less than 1 in 5 prior to any cutting, filling, retaining walls or earthworks occurring on the site.

Item 3: [Deleted] Removal of Temporary Use provisions for Tourist Parks involving camp sites

This item has been deleted and will be investigated further in a future planning scheme amendment.

Item 4: Clarification of assessment benchmarks for Building Work

Summary

Amendment to Table of Assessment for Building Work and the Table of Assessment for Overlays for development involving Building Work in natural hazard areas and on land in regional infrastructure corridors and buffer areas.

Explanation

The amendment updates the Table of Assessment for Building Work and the Table of Assessment for Overlays to clarify where building work that is not associated with a Material Change of Use triggers Code Assessment.

This amendment ensures that a consistent policy applies for development involving carports and sheds in flood and landslide hazard areas, as well as on land in regional infrastructure corridors and buffer areas.

In particular, the amendment will ensure that buildings in a flood and landslide hazard /steep slope area respond to the risk of flooding and ensure the design, built form and materials stored on site do not increase the potential for damage on the site or to other properties.

In relation to the protection of regional infrastructure corridors, the amendment will ensure that development is located and constructed to avoid compromising the efficiency, integrity, operation and maintenance of existing and planned Regional Infrastructure.

State Interests

State Planning Policy - Natural hazards, risk and resilience:

Development in bushfire, flood, landslide, storm tide inundation or erosion prone natural hazard areas:

(a) avoids the natural hazard area; or

(b) where it is not possible to avoid the natural hazard area, development mitigates the risks to people and property to an acceptable or tolerable level.

Development in natural hazard areas:

(a) supports, and does not hinder disaster management capacity and capabilities

(b) directly, indirectly and cumulatively avoids an increase in the exposure or severity of the natural hazard and the potential for damage on the site or to other properties

(c) avoids risks to public safety and the environment from the location of the storage of hazardous materials and the release of these materials as a result of a natural hazard

(d) maintains or enhances the protective function of landforms and vegetation that can mitigate risks associated with the natural hazard.

State Planning Policy - Infrastructure integration

Existing and planned infrastructure is protected from development that would compromise the ability of infrastructure and associated services to operate safely and efficiently.

Proposed Changes

1. Amend Part 5, Section 5.7 Categories of Development and Assessment - Building Work as shown below:

5.7 Categories of Development and Assessment - Building Work

~~There is no building work regulated by the planning scheme.~~ Table 5.7.1 identifies the categories of assessment for carrying out building work.

Editor's note - The ~~above~~ levels of assessment in Table 5.7.1 apply unless an overlay further changes the category of assessment or as otherwise prescribed in the Act or the Regulation.

Table 5.7.1 - All Zones

Building work	Category of assessment	Assessment benchmarks for assessable development and requirements for accepted development
All Building Work	**Accepted**	
		Not applicable

2. Amend Table 5.10.1 in Part 5, Section 5.10 Categories of Development and Assessment - Overlays, where an overlay applies to development involving building work:

    - if a local utility;
    - in the Flood Hazard Overlay;
    - in the Landslide Hazard and Steep Slope Overlay; and
    - in the Regional Infrastructure Overlay.

Note - all other categories of development and assessment for development in Table 5.10.1 remain unchanged.

Table 5.10.1 - Overlays

Development	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
All Overlays		
Material Change of Use if a local utility. **Reconfiguring a Lot** if a local utility. **Operational Work** if a local utility. **Building Work** if a local utility. ***Note** - If not a local utility, the category of assessment identified for each Overlay below applies.*	Accepted	Not applicable
Flood Hazard Overlay **Flood Hazard Overlay Map – Hazard Area OM-06-A**		
Building work not associated with a Material Change of Use in a Flood Hazard Area	Code assessment	Flood Hazard Overlay Code
Landslide Hazard and Steep Slope Overlay **Landslide Hazard and Steep Slope Overlay Map – Steep Slope OM-07-A**		
Building work not associated with a Material Change of Use in a Steep Slope Area if in an area up to a 25% Slope Hazard	Accepted subject to requirements	Landslide Hazard and Steep Slope Overlay Code
Building work not associated with a Material Change of Use in a Steep Slope Area if not Accepted development above	Code assessment	Landslide Hazard and Steep Slope Overlay Code
Landslide Hazard and Steep Slope Overlay **Landslide Hazard and Steep Slope Overlay Map – Landslide Hazard Area OM-07-B**		
Building Work not associated with a Material Change of Use in a Landslide Hazard Area	Code assessment	Landslide Hazard and Steep Slope Overlay Code
Regional Infrastructure Overlay **Regional Infrastructure Overlay Map - Water and Wastewater Infrastructure OM-09-A and** **Regional Infrastructure Overlay Map - Electricity, Roads and Rail Infrastructure OM-09-B**		
Building work not associated with a Material Change of Use: 1. in the Wastewater Treatment Plant Buffer Area; or 2. in the Bulk Water Supply Buffer Area; or 3. in the Major Electricity Infrastructure Buffer Area; or 4. on a lot impacted by the Road Investigation Corridor; or 5. in the Rail Buffer Area.	Accepted subject to requirements	Regional Infrastructure Overlay Code

Item 5: Amendment to increase the maximum Gross Floor Area for Roadside Stalls

Summary

Amendment to increase the use area for a Roadside Stall in the Acceptable Outcome related to the scale of the development.

Explanation

The amendment proposes to increase the Gross Floor Area of a roadside stall from 9m^2 to 12m^2 and also provide allowance for stalls that are not conducted within a building or structure. The change is made is response to feedback from local roadside stall operators and a comparison of other requirements in Southeast Queensland and New South Wales.

State Interests

Not applicable.

Proposed Changes

In Part 9, 9.3.13 Roadside Stalls Code, amend AO2.1 in Table 9.3.13.3 as shown below:

Performance Outcomes	Acceptable Outcomes
Scale	
PO2 A Roadside stall is: 1. small-scale; and 2. visually integrates with the surrounding area.	**AO2.1** ~~A Roadside stall is fully located within the site and has a total development footprint (excluding on-site parking, access and maneuvering areas) of no more than 9m^2.~~ The gross floor area of the stall is no more than 12m^2. OR If the stall is not operated within a building or structure, the total area used for sales and storage is no more than 12m^2.
	AO2.2 A maximum of 2 advertising devices are associated with the use.
	AO2.3 Each advertising device associated with the use: 1. has a maximum sign face area of 1m^2; 2. is located on the same site as the Roadside stall; 3. is not illuminated, flashing, moving, rotating or reflective; 4. is written so as to be easily read by motorists with lettering at least 150 millimetres in height; and 5. must not imitate a traffic control device.
	AO2.4 The majority of goods sold from the Roadside stall are grown or produced on the site.
	AO2.5 A Roadside stall is not artificially illuminated.

Item 6: Amendment to Transport Depot requirements

Summary

Updated levels of assessment for Transport Depots in the Rural Residential Zone - Rural Residential A Precinct and Township Zone (Where no precinct applies)

Explanation

Additional parameters for a Transport Depot that is Accepted Development in the Rural Residential Zone - Rural Residential A Precinct and Township Zone (Where no precinct applies), are proposed to address potential negative amenity impacts.

Transport Depots are a use supported in the Rural Residential A Precinct and Township Zone to enable heavy vehicle business owners/drivers to park their vehicles on the site.

A Transport Depot is defined in the Planning Scheme as:

Column 1 Use	Column 2 Definition	Column 3 Examples include	Column 4 Does not include the following examples
Transport depot	means the use of premises for— a. storing vehicles, or machinery, that are used for a commercial or public purpose; or b. cleaning, repairing or servicing vehicles or machinery, if the use is ancillary to the use in paragraph (a). *Examples of a transport depot—* *using premises to store buses, taxis, trucks, heavy vehicles or heavy machinery*	contractor's depot, bus depot, truck yard, heavy machinery yard	Home based business, Warehouse, Low impact industry, Service industry

The proposed changes seek to limit the activity to sites greater than 1.5ha; reduce the existing allowance of 4 heavy vehicles to 2; and provide for up to 2 light vehicles as part of the use.

The amendment also proposed to make Transport Depots in the Rural Residential A Precinct that do not comply with criteria Impact Assessable, rather than Code in order to achieve better alignment with the purpose of the Precinct, which is to support rural residential living.

Transport Depots that are not Accepted are proposed to remain Code Assessable in the Township Zone (Where no precinct applies) as the purpose of the Township Zone is to provide for a range of activities, uses in a rural setting.

Heavy vehicles are currently defined in the Planning Scheme to support the level of assessment triggers for Transport Depots, but there is a need to provide a definition for light vehicles to support this change.

Heavy vehicle is currently defined in the planning scheme for the purpose of regulating Transport Depots as follows:

Column1 Administrative Term	Column 2 Definition
Heavy vehicle (HV)	Where the vehicle is used for business purposes a heavy vehicle includes any of the following: 1. medium rigid truck - more than 8 t GVM with not more than two axles and with or without a trailer weighing 9 t GVM or less; 2. medium rigid tractor - more than 8 t GVM with not more than two axles; 3. medium rigid bus - more than 8 t GVM with not more than two axles; 4. heavy rigid truck - and more than 8 t GVM with more than two axles with or without a trailer weighing 9 t GVM or less, this includes a single prime mover; 5. heavy rigid bus - with more than 8 t GVM with more than two axles and with or without a trailer weighing 9 t GVM or less; 6. articulated bus - more than 8 t GVM with more than two axles; 7. heavy combination - rigid truck more than 8 t GVM towing one trailer weighing more than 9 t GVM; 8. heavy combination - prime mover more than 8 t GVM towing one semitrailer; 9. B-double - prime mover towing two semitrailers, with one semitrailer supported at the front, and connected to the other semitrailer; 10. a specially constructed vehicle more than 8 t GVM being: a. a crane, hoist or load shifting equipment for which a WHS Certificate is issued; b. any other motor vehicle that is not constructed to carry passengers or a load , except things used in performing a vehicles functions; but c. does not include a motor vehicle with a chassis that is substantially the same as a truck chassis.

State Interests

Not applicable.

Proposed Changes

1. Amend Part 5 Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.16 Rural Residential Zone, Table 5.5.16.2 - Rural Residential Zone - Rural Residential A Precinct as shown below:

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Transport depot	**Accepted**	
	If: 1. limited to no more than 2 *heavy vehicles* and 2 *light vehicles*; 2. on a site greater than 1.5ha; and 3. not involving building work (other than minor building work) ~~not exceeding 2 heavy vehicles.~~	Not applicable
	~~**Code assessment**~~	
	~~If;~~ ~~1. not Accepted; and~~ ~~2. not exceeding 4 heavy vehicles.~~	~~Rural Residential Zone Code~~ ~~General Development Provisions Code~~ ~~Parking and Access Code~~

2. Amend Part 6, Section 6.2.16 Rural Residential Code, **Table 6.2.16.2.2 - Consistent Uses and Potentially Consistent Uses in the Rural Residential Zone - Rural Residential A Precinct** as shown below:

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Industrial activities	
Transport depot (not exceeding 4 2 heavy vehicles and 2 light vehicles, on a site greater than 1.5ha, and not involving building work, (other than minor building work))	

3. Amend Part 5 Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.19 Township Zone, Table 5.5.19.2 - Township Zone (Where no precinct applies) as shown below:

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Transport depot	**Accepted**	
	If: 1. limited to no more than 2 *heavy vehicles* and 2 *light vehicles*; 2. on a site greater than 1.5ha; and 3. not involving building work (other than minor building work) ~~If involving not more than 2 heavy vehicles.~~	Not applicable
	Code assessment	
	If not accepted.	Township Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Infrastructure Design Code Landscaping Code Parking and Access Code

4. In Schedule 1 Definitions, SC1.2 Administrative Definitions include a new definition for *Light vehicle* as shown below:

Column1 Administrative Term	Column 2 Definition
Light vehicle	A light vehicle is a vehicle other than a *Heavy vehicle*.

Item 7: [REVISED] Amendment to level of assessment for solar farms in the Rural Zone

This item has been revised by Council in response to the informal state interest request as part of the State Interest Review dated 19 June 2025.

The State Government recently amended the planning framework in regards to the assessment of Renewable Energy Facilities (Solar Farms). A new Item 37 has been included which involves amendments to Renewable Energy Facilities to reflect changes made to the *Planning Regulation 2017*.

Item 8: Clarification of assessment benchmarks for Dual Occupancy development in the Rural Residential Zone

Summary

Amendment to the Dual Occupancy Code to clarify that the outcome sought for casual surveillance is only applicable in the Low Density, Low-medium Density and Medium Density Residential Zones.

Explanation

The Performance and Acceptable Outcome for casual surveillance in the Dual Occupancy Zone requires development to provide opportunities for casual surveillance, which is not relevant in the Rural and Rural Residential Zones.

The outcome also conflicts with the Rural Residential Zone Code which requires a Dual Occupancy to have the appearance of a single dwelling when viewed from the street and the majority of Dual Occupancies in the Rural Residential Zone would be two separate dwellings on a lot.

An amendment to the Dual Occupancy Code is proposed that clarifies that the outcome sought for casual surveillance is only applicable in the Low Density, Low-medium Density and Medium Density Residential Zones.

State Interests

Not applicable.

Proposed Changes

In Part 9 Development Codes, 9.3.4 Dual Occupancy Code, amend the heading for PO/AO5 in Table 9.3.4.3.1 - Criteria for Accepted and Assessable Development to ensure the outcome only applies to development in the Low Density and Low-medium Density and Medium Density Residential Zones.

Table 9.3.4.3.1— Criteria for Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Casual Surveillance (Low Density and Low-medium Density and Medium Density Residential Zones only)	
PO5 Each dwelling of a Dual occupancy is sited and designed to provide opportunities for casual surveillance of the street and any adjoining public spaces.	**AO5** The window of at least one habitable room of each dwelling of the Dual occupancy overlooks the street or adjoining public spaces.

Item 9: Update to lot frontage width requirements for the Township Zone - Township Residential Precinct

Summary

Amend lot frontage width requirements for the Township Zone - Residential Precinct to align with the Rural Residential Zone (Where no precinct applies).

Explanation

Land development in the Township Zone - Residential Precinct is more akin to development in the Rural Residential Zone (Where no precinct applies). The current lot frontage widths prescribed in the Reconfiguring a Lot Code would result in long, narrow lots, giving the appearance of density, rather than the low density residential, large lot character that is sought in the zone.

State Interests

Not applicable.

Proposed Changes

1. In Part 9 Development Codes, amend Table 9.4.6.3.2 - Minimum Lot Size and Design in the Reconfiguring a Lot Code as shown below:

Table 9.4.6.3.2 - Minimum Lot Size and Design

Zone	Minimum Lot Size	Minimum Width of Access Easements (Metres)	Minimum Lot Frontage (Metres) to a Constructed Road	Minimum width of Access for Rear Lots (Metres)
Township Zone - Township Residential Precinct	1. Minimum 1,000m^2 where reticulated sewer is provided; 2. Minimum 4,000m^2 where reticulated sewer is not provided.	10	For lots where reticulated sewer is provided: 1. 25m for normal lots; 2. 10m for cul-de-sac lots; and 3. 25m for corner lots. For lots where reticulated sewer is not provided: 1. 40m	No rear lots created.

Item 10: [Deleted] Update to natural hazard management requirements for tourist accommodation sites

This item will be investigated further in a future planning scheme amendment.

Item 11: Inclusion of EV charging provisions in the Parking and Access Code

Summary

Update to the Parking and Access Code to include consideration of electric vehicle parking.

Explanation

An implementation action of the *Scenic Rim Climate Change 3 Year Action Plan 2024-2026* includes:

"Amending the Scenic Rim Planning Scheme to include requirements for new multi-residential and non-residential developments for carparking to be EV ready".

To achieve the above, an amendment is proposed that requires assessable development (Code and Impact Assessable) to consider electric vehicle charging needs based on the expected demand for the number and type of vehicles likely to be generated by a use in the context of emerging transport technology.

This change is expressed in the Performance Outcome and related Overall Outcome that requires development to consider parking provision rates for development. Applicants can consider how the development responds to this outcome, but there is no specified number of EV charging stations proposed to be stipulated in the planning scheme with the exception Shopping Centre developments where the shops comprise a single integrated complex in excess of 4,000m2 gross floor area. In this instance, a minimum of 2 EV charging stations is proposed as the Acceptable Outcome.

State Interests

Not applicable.

Proposed Changes

1. In Part 9, Development Codes, 9.4.5 Parking and Access Code, amend 9.4.5.2 Purpose as shown below:

9.4.5.2 Purpose

1. The purpose of the Parking and Access Code is to ensure that vehicular parking, external and internal roads, and driveway access meet the needs of development, maintain a safe and efficient transport network and preserve the character and amenity of the surrounding area.
2. The purpose of the Parking and Access Code will be achieved through the following overall outcomes:
    a. Vehicular parking, external and internal roads, and driveway access is designed to:
        i. meet the demand generated by the development;
        ii. meet Council's standards and other relevant standards including Australian Standards;
        iii. protect the amenity of nearby uses and achieve a high standard of design;
        iv. provide a safe environment for both pedestrians and vehicles;
        v. provide pick up and set down areas for larger scale, high traffic uses;
        vi. ensure loading and unloading of vehicles can occur easily and safely within the site;
        vii. maintain or improve the function and safety of the transport network external to the site;
        viii. cater for requirements of emergency and other essential service vehicles; ~~and~~
        ix. allow for future integration with public transport facilities: and
        x. adapt to emerging transport technology, such as electric vehicle charging.

2. In Part 9, Development Codes, 9.4.5 Parking and Access Code, amend Table 9.4.5.3.1 - Criteria for Accepted and Assessable Development PO1/AO1 as shown below:

Performance Outcomes	Acceptable Outcomes
Parking Provision Rates	
PO1 Development provides for sufficient vehicle and service vehicle parking and electric vehicle charging stations on site to satisfy the expected demand for the number and type of vehicles likely to be generated by a use having regard to the particular circumstances of the premises including the: 1. nature, intensity and hours of operation of the use; and 2. the existing and expected future traffic conditions in the surrounding area.	**AO1** Development provides the number of ~~vehicle and service vehicle~~ parking spaces and electric vehicle charging stations on site identified in **Table 9.4.5.3.3 - Car and Service Vehicle Parking**. ***Note*** *- Car parking for people with disabilities must be addressed in accordance with the provisions of the National Construction Code, Volume 1, Part D3.5 Accessible Carparking.*

3. In Part 9, Development Codes, 9.4.5 Parking and Access Code, amend Table 9.4.5.3.3 - Car and Service Vehicle Parking as shown below:

Land Use	No. of Car Parking Spaces	No. of Service Vehicle Parking Spaces	Additional Requirements for Assessable Development
Shopping Centre	1 space per 20m^2 of total leasable area.	1 SRV space where the gross floor area is less than 500m^2. 1 SRV space and 1 HRV space where the gross floor area is 500m^2 or more but less than 2,000m^2. As determined upon submission of carparking assessment to Council, where the gross floor area is 2,000m^2 or more.	Where the shops comprise a single integrated complex in excess of 4,000m^2 gross floor area, provision is to be made for— a. on-site bus and taxi parking; b. a minimum of 2 EV charging stations; and c. bicycle parking.

Item 12: Amendment to zone of Council owned land to either Community Facilities Zone or Recreation and Open Space Zone

Summary

Amendment to Zone Maps ZM08, ZM22, ZM24, ZM30, ZM33 and ZM34 to include Council owned lots in either the Community Facilities Zone or the Recreation and Open Space Zone.

Explanation

Recent residential subdivisions have resulted in Council receiving ownership of land for community and recreation purposes, however the current zoning of the land does not align with this intended purpose. The listed properties are currently located in the:

- Low Density Residential Zone;
- Low-medium Density Residential Zone;
- Rural Residential Zone - Rural Residential A Precinct; and
- Township Zone - Township Residential Precinct

The intent of the amendment is to amend the zoning of each listed lot to align with the purpose and current use of the land. The table below identifies the location of each lot, current and proposed zoning, the purpose of the land and the Zone Map number the amendment takes place on.

Property Description	Address	Current Zoning (30.06.2023)	Proposed Zoning	Purpose	Zone Map
Lot 335 SP312144	2 Gunsynd Drive BEAUDESERT	Low-Medium Density Residential Zone	Community Facilities Zone	Stormwater infrastructure	ZM33
Lot 337 SP312144	Gunsynd Drive BEAUDESERT QLD	Low-Medium Density Residential Zone	Community Facilities Zone	Entry sign	ZM33
Lot 913 SP330340	47 Todman Crescent BEAUDESERT	Low-Medium Density Residential Zone	Community Facilities Zone	Stormwater infrastructure	ZM33
Lot 900 SP280644	29 Jason Day Drive BEAUDESERT	Low-Medium Density Residential Zone	Community Facilities Zone	Stormwater infrastructure and footpath	ZM33
Lot 900 SP261570	22 Diamantina Circuit BEAUDESERT	Low-Medium Density Residential Zone	Recreation and Open Space Zone (where no precinct applies)	Park	ZM34
Lot 999 SP333195	Ruby Street GLENEAGLE	Low-Medium Density Residential Zone	Recreation and Open Space Zone (where no precinct applies)	Open space, footpath and stormwater infrastructure	ZM22 and ZM33
Lot 642 SP291371	11 Annabelle Way GLENEAGLE	Low-Medium Density Residential	Recreation and Open Space Zone (where no precinct	Park	ZM33

Property Description	Address	Current Zoning (30.06.2023)	Proposed Zoning	Purpose	Zone Map
		Zone	applies)		
Lot 990 SP298419	Sutherland Street GLENEAGLE	Low-medium Density Residential Zone	Recreation and Open Space Zone (where no precinct applies)	Park	ZM33
Lot 991 SP330089	Outlook Boulevard GLENEAGLE	Low-medium Density Residential Zone	Recreation and Open Space Zone (where no precinct applies)	Park	ZM33
Lot 992 SP330088	Edinburgh Crescent GLENEAGLE	Low-medium Density Residential Zone	Recreation and Open Space Zone (where no precinct applies)	Park	ZM33
Lot 508 SP230709	63 Riemore Circuit TAMBORINE	Rural Residential Zone - Rural Residential A Precinct	Recreation and Open Space Zone - Passive Recreation Precinct	Park	ZM24
Lot 999 SP305534	Riemore Circuit TAMBORINE	Rural Residential Zone - Rural Residential A Precinct	Recreation and Open Space Zone - Passive Recreation Precinct	Open space	ZM24
Lot 903 SP317658	38 Woodfull Street DUGANDAN	Low Density Residential Zone	Community Facilities Zone	Stormwater infrastructure	ZM30
Lot 900 SP324713	1 Wilson Place HARRISVILLE	Township Zone - Township Residential Precinct	Community Facilities Zone	Stormwater infrastructure	ZM08

Lot 508 SP230709 (63 Riemore Circuit, Tamborine)

As part of the SIR dated 19 June 2025, a request for further information was made to update the zoning of Lot 508 SP230709 to either Conservation Zone or Recreation and Open Space Zone (Passive Recreation Precinct). The site contains approximately 1ha of category B area containing least concern regional ecosystems, 1ha of essential habitat, and also vegetation associated with stream order 2 and stream order 6 watercourses/drainage features. If the lot is rezoned to Recreation and Open Space (no precinct), the urban area/urban purpose exemption in Schedule 21, part 2, item 6(a)(b)(c)(v) of the *Planning Regulation 2017* will be enabled. This will allow clearing of all Matters of State Environmental Significance (MSES) on the lot for urban purposes (for example, sporting and recreation purposes) provided the clearing is consistent with the purpose of the trust and is carried out by or for the trustee. The site is a Council owned park known as Massie Park. The purpose of the Passive Recreation Precinct is to ensure development:

1. provides for low-impact informal or non-organised forms of recreational activity which are carried out in an ecologically sustainable manner in a natural environment;
2. protects the integrity of open space and reserve areas with respect to their nature conservation values, scenic and landscape amenity values and recreational value to the community;
3. does not detract from the amenity of sensitive receivers; and
4. contributes to the regional open space network.

As the site is currently used as a park and complies with the intent of the Passive Recreation Precinct and to ensure the MSES regulated vegetation is more appropriately zoned to protect the biodiversity values on

the subject site, it is proposed that this lot be amended to be included in the Recreation and Open Space Zone (Passive Recreation Precinct).

Current Zoning for Lot 335 & 337 SP 312144 & Lot 913 SP330340
(Low-medium Density Residential Zone)

Proposed Zoning for Lot 335 & 337 SP 312144 & Lot 913 SP330340
(Community Facilities Zone)

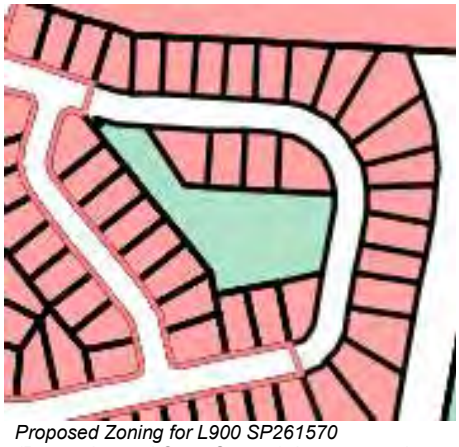
Current Zoning for L900 SP280644

(Low-medium Density Residential Zone)

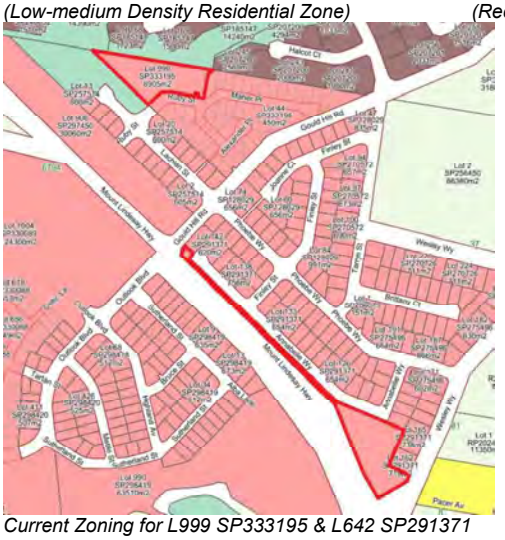
Proposed Zoning for L900 SP280644

(Community Facilities Zone)

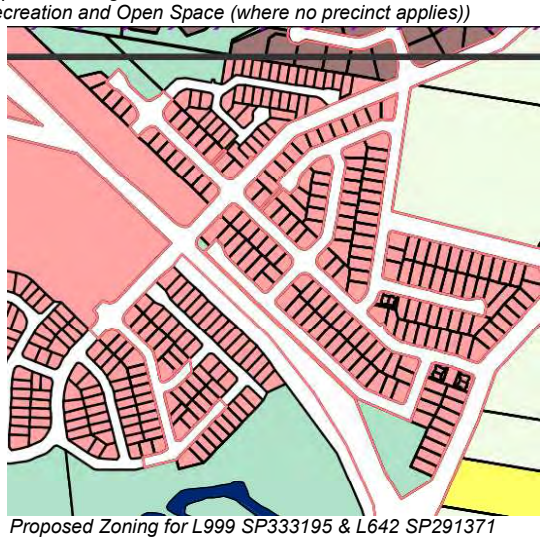
Current Zoning for L900 SP261570
(Low-medium Density Residential Zone)



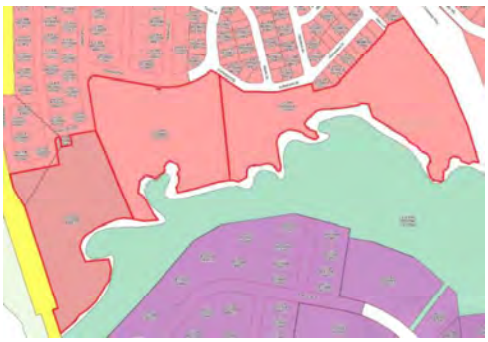
Proposed Zoning for L900 SP261570
(Recreation and Open Space (where no precinct applies))



Current Zoning for L999 SP333195 & L642 SP291371
(Low-medium Density Residential Zone)

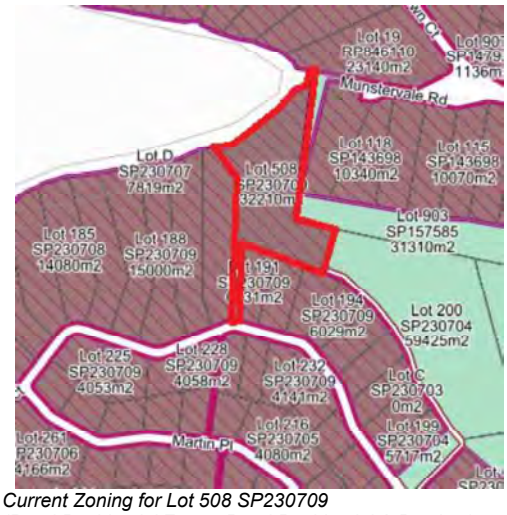


Proposed Zoning for L999 SP333195 & L642 SP291371
(Recreation and Open Space (where no precinct applies))

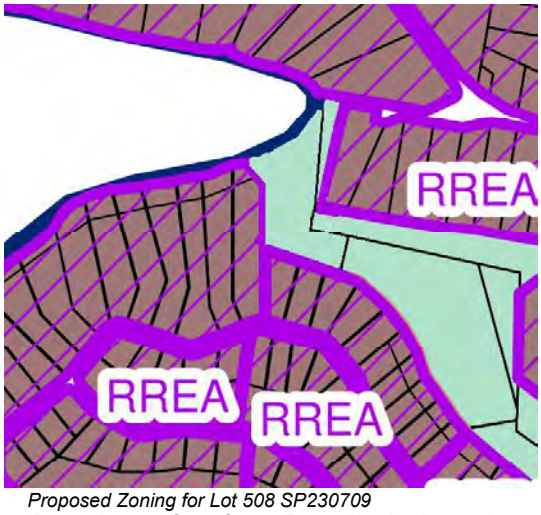


Current Zoning Lot 990SP298419, Lot 991 SP330089
Lot 992 SP330088
(Low-medium Density Residential Zone)

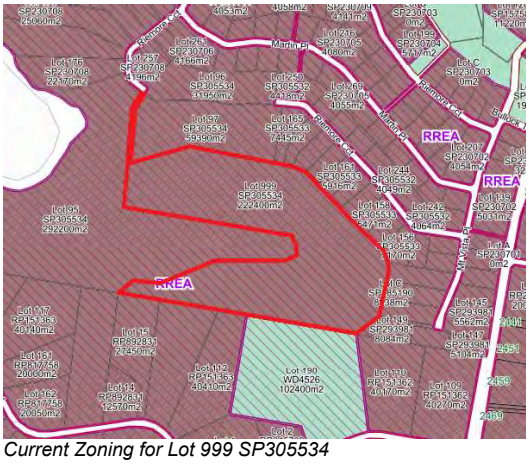
Proposed Zoning Lot 990 SP298419 & Lot 991 SP330089
Lot 992 SP330088
(Recreation and Open Space (where no precinct applies))



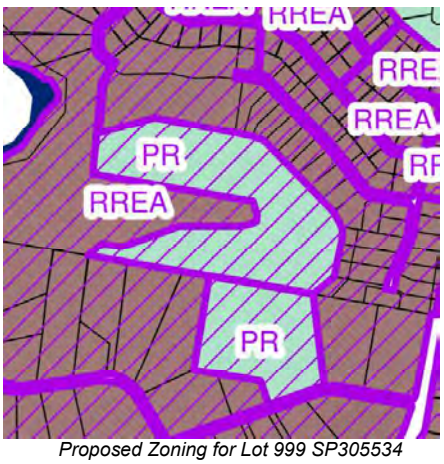
Current Zoning for Lot 508 SP230709
(Rural Residential Zone - Rural Residential A Precinct)
Precinct)



Proposed Zoning for Lot 508 SP230709
(Recreation and Open Space Zone - Passive Recreation



Current Zoning for Lot 999 SP305534
(Rural Residential Zone - Rural Residential A Precinct)

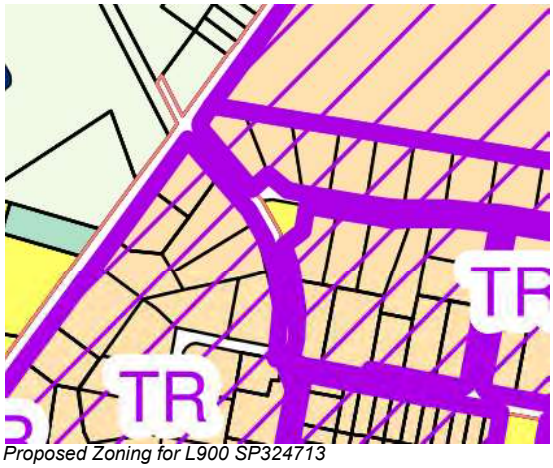


Proposed Zoning for Lot 999 SP305534
(Recreation and Open Space Zone - Passive Recreation
Precinct)

Current Zoning for L903 SP317658
(Low Density Residential Zone)

Proposed Zoning for L903 SP317658
(Community Facilities Zone)

Current Zoning for L900 SP324713
(Township Zone - Township Residential Precinct)



Proposed Zoning for L900 SP324713
(Community Facilities Zone)

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the either the Urban Footprint or the Rural Living Area under Shaping SEQ 2023. In accordance with Chapter 3 Part B, the proposed change in zoning to either Community Facilities Zone or Recreation and Open Space Zone is consistent with the intent and description of the Urban Footprint and Rural Living Area whereby open space, park and infrastructure is being provided to support the surrounding residential lots.

State Planning Policy 2017 - Liveable Communities and Housing

The proposal takes into consideration the State Interest component regarding liveable communities. The amendment preserves the subject lands for park and open space purposes and provides for necessary infrastructure to enhance the liveability of the surrounding community.

Proposed Changes

1. Amend the zoning of the below land to the zone listed in Column 4 'Proposed Zoning':

Zone Map	Property Description	Address	Proposed Zoning
ZM33	Lot 335 SP312144	2 Gunsynd Drive BEAUDESERT	Community Facilities Zone
ZM33	Lot 337 SP312144	Gunsynd Drive BEAUDESERT QLD	Community Facilities Zone
ZM33	Lot 913 SP330340	47 Todman Crescent BEAUDESERT	Community Facilities Zone
ZM33	Lot 900 SP280644	29 Jason Day Drive BEAUDESERT	Community Facilities Zone
ZM34	Lot 900 SP261570	22 Diamantina Circuit BEAUDESERT	Recreation and Open Space Zone (where no precinct applies)
ZM22 & ZM33	Lot 999 SP333195	Ruby Street GLENEAGLE	Recreation and Open Space Zone (where no precinct applies)
ZM33	Lot 642 SP291371	11 Annabelle Way GLENEAGLE	Recreation and Open Space Zone (where no precinct applies)
ZM33	Lot 990 SP298419	Sutherland Street	Recreation and Open Space Zone

Zone Map	Property Description	Address	Proposed Zoning
		GLENEAGLE	(where no precinct applies)
ZM33	Lot 991 SP330089	Outlook Boulevard GLENEAGLE	Recreation and Open Space Zone (where no precinct applies)
ZM33	Lot 992 SP330088	Edinburgh Crescent GLENEAGLE	Recreation and Open Space Zone (where no precinct applies)
ZM24	Lot 508 SP230709	63 Riemore Circuit TAMBORINE	Recreation and Open Space Zone - Passive Recreation Precinct
ZM24	Lot 999 SP305534	Riemore Circuit TAMBORINE	Recreation and Open Space Zone - Passive Recreation Precinct
ZM30	Lot 903 SP317658	38 Woodfull Street DUGANDAN	Community Facilities Zone
ZM08	Lot 900 SP324713	1 Wilson Place HARRISVILLE	Community Facilities Zone

Item 13: Inclusion of National Park Land in the Conservation Zone

Summary

Amendment to reflect the updated National Park network on:

- Zone Maps ZM48, ZM49, ZM51, ZM52 and ZM62 to include new areas in the Conservation Zone; and
- SFM-01 Strategic Framework Map Communities and Character - include new areas in *Natural Areas* layer.

Explanation

The intent of the amendment is to acknowledge the new land now identified as part of the Main Range National Park (Part of Lot 1 AP23636) and Mount Barney National Park (Part of Lot 1 AP19334). The amendment requires changes to the Zone Maps and the SFM-01 Strategic Framework Map - Communities and Character.

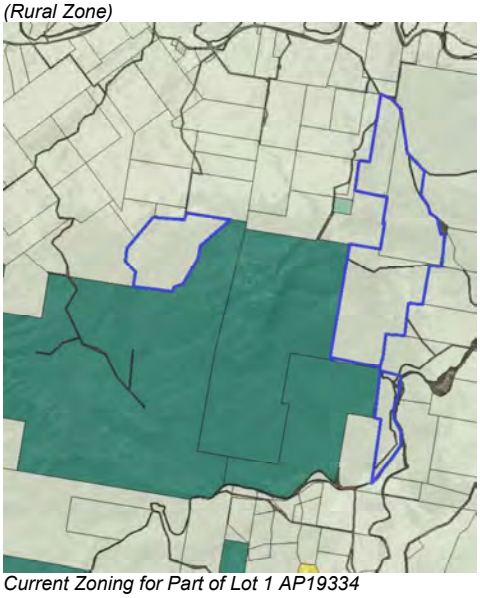
Zone Maps

The amendment involves updating the Zoning of land added to the National Park network. The below table provides the list of location of each lot, the current and proposed zoning and the Zone Maps affected by this amendment.

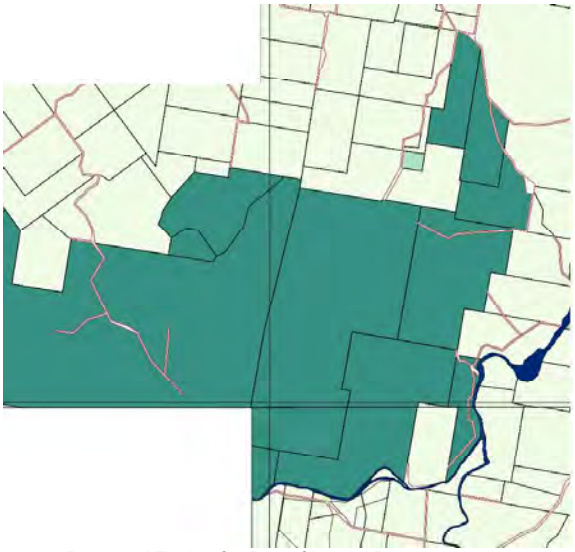
Property Description	Address	Current Zoning (30.06.2023)	Proposed Zoning	Purpose	Zone Map
Part of Lot 1 AP23636	Unamed Road, MOOGERAH	Rural Zone	Conservation Zone	National Park	ZM48 and ZM49
Part of Lot 1 AP19334	Near: • Newlove Road MAROON; • Forest Home Road RATHDOWNEY; and • Seidenspinner Road MOUNT BARNEY	Rural Zone	Conservation Zone	National Park	ZM51, ZM52 and ZM62

Current Zoning for Part of Lot 1 AP23636 (Rural Zone)

Proposed Zoning for Part of Lot 1 AP23636 (Conservation Zone)



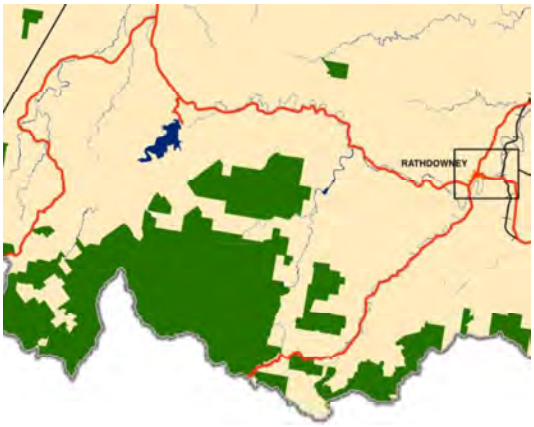
Current Zoning for Part of Lot 1 AP19334 (Rural Zone)



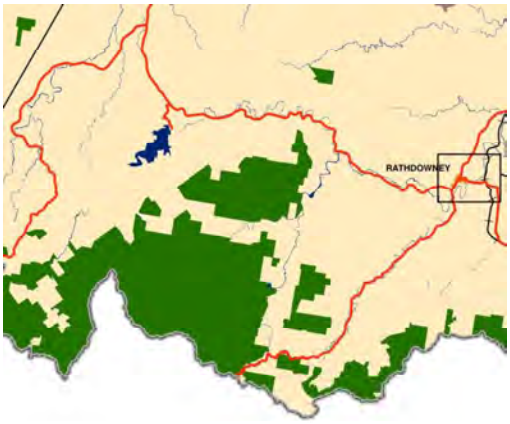
Proposed Zoning for Part of Lot 1 AP19334 (Conservation Zone)

SFM-01 Strategic Framework Map - Communities and Character

The expansion of the National Park network requires an update to the areas identified as ***Natural Areas*** on SFM-01 Strategic Framework Map - Communities and Character. The ***Natural Areas*** layer predominantly represents the land with a Conservation Zoning under Schedule 2 Mapping (SC2.3 Zone Maps) of the Planning Scheme.



Example of Natural Areas - Existing Planning Scheme



Example of Natural Areas - Proposed amendment

State Interests

State Planning Policy 2017 - Planning for the Environment and Heritage: Biodiversity

The proposal takes into consideration the State Interest component regarding Biodiversity. In accordance with Policy (2), Matters of State Environmental Significance (MSES) are required to be identified. The new areas identified as National Park are also identified as MSES - Protected Areas under the SPP mapping. The proposed update to the Zone Maps and the ***Natural Areas*** layer will ensure that the protection of these conservation areas is realised.

Note: An amendment to the Environmental Significance Overlay mapping to reflect the new areas identified as MSES - Protected Areas is part of a separate planning scheme amendment package (Amendment No.6).

Proposed Changes

1. Amend the zoning of the below lots to the zone listed in Column 4 'Proposed Zoning':

Zone Map	Property Description	Address	Proposed Zoning
ZM48 and ZM49	Part of Lot 1 AP23636	Unnamed Road, MOOGERAH	Conservation Zone
ZM51, ZM25 and ZM62	Lot 1 AP19334	Near: • Newlove Road MAROON; • Forest Home Road RATHDOWNEY; and • Seidenspinner Road MOUNT BARNEY	Conservation Zone

2. Update the *Natural Areas* layer on SFM-01 Strategic Framework Map - Communities and Character to reflect the newly zoned conservation land in point (1) above.
(Refer to Attachment 1).

Item 14: Dedication of zoning for unzoned land

Summary

Amendment to Zone Maps ZM29, ZM28 and ZM40 to dedicate a zone for land that is current unzoned.

Explanation

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. Recent resumptions of road reserve have resulted in portions of land without a zoning and the proposed amendment aims to designate a Zone over these portions. The below table identifies the location of each lot, proposed zoning, justification for the proposed zoning and the affected Zone Map number.

Property Description	Address	Proposed Zoning	Justification	Zone Map
Lot 20 SP331086	Warwick Road CROFTBY	Rural Zone (where no precinct applies)	Land absorbed into the adjoining property. Land surrounding the parcel is designated as Rural Zone (where no precinct applies).	ZM40
Lot 900 SP306812	Boonah-Fassifern Road TEMPLIN	Community Facilities Zone	Infrastructure purposes - Urban Utilities Reservoirs. Reflects existing infrastructure which is consistent with the Zone. Proposed zone supports ongoing use for public infrastructure.	ZM29
Lot 35 SP320368	17 Greville Street MOOGERAH	Community Facilities Zone	Infrastructure purposes - Seqwater water treatment plant and Works depot. Reflects existing infrastructure which is consistent with the Zone. Proposed zone supports ongoing use for public infrastructure.	ZM28

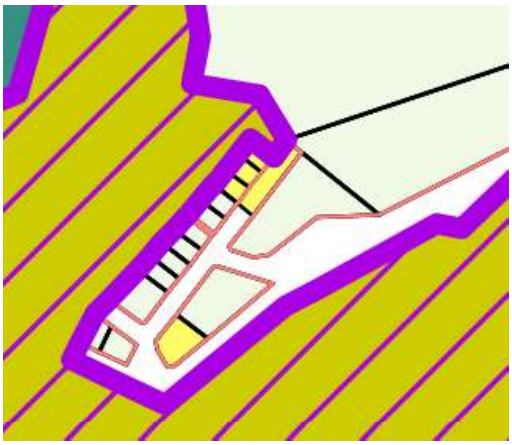
Current Zoning for L20 SP331086
(Part Unzoned, Part Rural Zone)

Proposed Zoning for L20 SP331086
(Rural Zone)

Current Zoning for L900 SP306812
(Part Unzoned, Part Rural Zone)

Proposed Zoning for L900 SP306812
(Community Facilities Zone)

Current Zoning for L35 SP320368
(Part Unzoned, Part Community Facilities Zone)



Proposed Zoning for L35 SP320368
(Community Facilities Zone)

State Interests

Not applicable.

Proposed Changes

1. Amend the zoning of the below lots to the zone listed in Column 4 'Proposed Zoning':

Zone Map	Property Description	Address	Proposed Zoning
ZM40	Lot 20 SP331086	Warwick Road CROFTBY	Rural Zone (where no precinct applies)
ZM29	Lot 900 SP306812	Boonah-Fassifern Road TEMPLIN	Community Facilities Zone
ZM28	Lot 35 SP320368	17 Greville Street MOOGERAH	Community Facilities Zone

Item 15: Amendment to zone to reflect recent subdivision (Benobble Heights) at Benobble

Summary

Amendment to Zone Map ZM35 and ZM36 to include recently subdivided lots at Benobble in the Rural Residential Zone - Rural Residential A Precinct and the Rural Zone - Rural Escarpment Protection Precinct.

Explanation

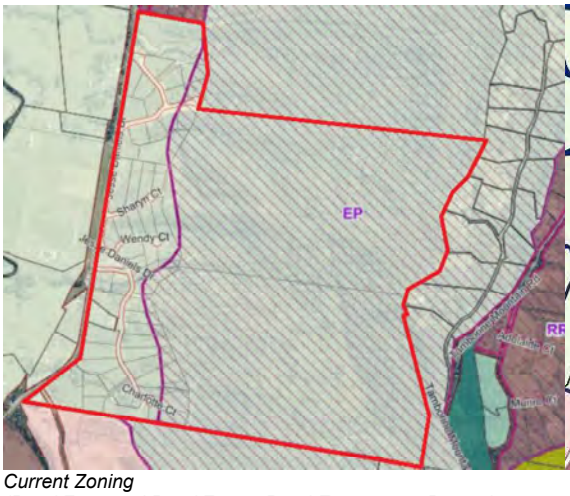
The planning scheme is required to identify the most suitable zone for each parcel of land within the region. A recently executed subdivision at Benobble Heights (ref: Development Permit MCU18/162 (Decision Notice issued under Court Order - P&E Court No. 4126 of 2018) resulted in the creation of 54 rural residential lots and two larger rural lots that form part of the escarpment of Tamborine Mountain. The amendment involves amending Zone Map ZM35 and ZM36 to include the below list of properties in the Rural Residential Zone - Rural Residential A Precinct and two larger escarpment lots in the Rural Zone - Rural Escarpment Protection Precinct.

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 1 SP342145	7 Timothy Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection	Rural Residential Zone - Rural Residential A Precinct	ZM35 & ZM36
Lot 2 SP342145	9 Timothy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 3 SP342145	3 Timothy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 4 SP342145	5 Timothy Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 5 SP342145	20 Jesse Daniels Drive BENOBBLE QLD	Part Rural Zone Part Rural Zone - Rural Escarpment Protection		
Lot 6 SP342145	18 Jesse Daniels Drive BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 7 SP342145	6 Timothy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 8 SP342145	4 Timothy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 9 SP342145	16 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 10 SP342145	14 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 11 SP342145	21 Jesse Daniels Drive BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		

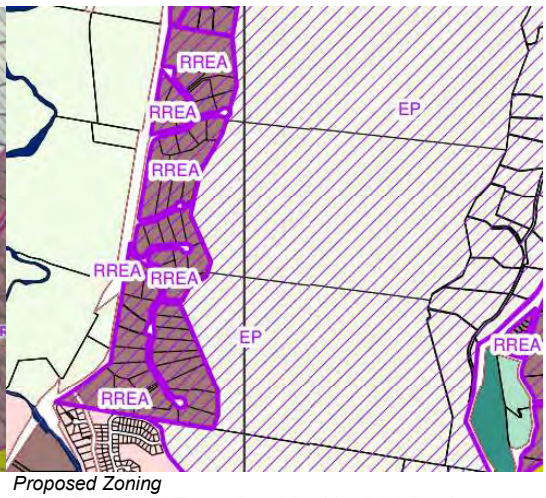
Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 12 SP342145	19 Jesse Daniels Drive BENOBBLE QLD	Part Rural Zone Part Rural Zone - Rural Escarpment Protection		
Lot 13 SP342145	17 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 14 SP342145	15 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 15 SP342145	13 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 16 SP342144	10 Sharyn Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 17 SP342144	8 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 18 SP342144	6 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 19 SP342144	4 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 20 SP342144	2 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 21 SP342144	7 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 22 SP342144	5 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 23 SP342144	3 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 24 SP342144	1 Sharyn Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 25 SP340166	2 Wendy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 26 SP340166	2 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 27 SP340166	1 Wendy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 28 SP340166	5 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 29 SP340166	3 Wendy Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 30 SP340166	5 Wendy Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 31 SP340166	1 Jesse Daniels Drive BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 32 SP340166	3 Jesse Daniels Drive BENOBBLE	Rural Zone (where no precinct applies)		

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
	QLD			
Lot 33 SP340166	2 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 34 SP340167	6 Charlotte Place, BENOBBLE	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 35 SP340167	8 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 36 SP340167	10 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 37 SP340167	12 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 38 SP340167	14 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 39 SP340167	16 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 40 SP340167	18 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 41 SP340167	20 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 42 SP340167	23 Charlotte Place BENOBBLE QLD	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection		
Lot 43 SP340167	21 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 44 SP340167	19 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 45 SP340167	17 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 46 SP340167	15 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 47 SP340167	13 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 48 SP340167	Finch Road, BENOBBLE	Rural Zone (where no precinct applies)		
Lot 49	11 Charlotte Place,	Rural Zone (where no		

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
SP340167	BENOBBLE	precinct applies)		
Lot 50 SP340167	9 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 51 SP340167	7 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 52 SP340167	3 Charlotte Place BENOBBLE QLD	Rural Zone (where no precinct applies)		
Lot 12 SP107658	2544 Beaudesert-Nerang Road, BENOBBLE	Rural Zone (where no precinct applies)		
Lot 100 SP282988	2494 Beaudesert-Nerang Road, BENOBBLE	Rural Zone (where no precinct applies)		
Lot 54 SP342144	9 Sharyn Place, BENOBBLE	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection Precinct	Rural Zone - Rural Escarpment Protection Precinct	
Lot 53 SP340166	4 Charlotte Place, BENOBBLE	Part Rural Zone (where no precinct applies) Part Rural Zone - Rural Escarpment Protection Precinct		



Current Zoning
(Rural Zone and Rural Zone - Rural Escarpment Protection Precinct)



Proposed Zoning
(Rural Residential Zone - Rural Residential A Precinct and Rural Zone - Rural Escarpment Protection Precinct)

Given the size of the newly subdivided parcels and intent of this land, the land is more aligned with the purpose of the Rural Residential Zone, which is to *provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services*. The Rural Residential A Precinct facilitates *low density residential living on large acreage lots in a semi-rural or natural landscape setting*. The Rural Residential A Precinct is also a continuation of similar sized properties located to the north of the site and part of the "Wagon Wheel Estate" development. The Rural Zone - Rural Escarpment Protection Precinct boundary will be adjusted to align with the new property boundaries but will remain the zoning for the larger eastern lots, to continue protecting the Tamborine Mountain

escarpment.

Note: No additional amendments are proposed for Overlay Map OM-13 Minimum Lot Size Overlay as the above lots are outside the Urban Footprint and no further subdivision is permitted under the Planning Regulation 2017..

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in Regional Landscape Rural Production Area (RLRPA). Whilst the proposal is identifying land in the RLRPA as Rural Residential Zone, the zoning amendment is reflecting an executed approval for large rural residential lots and the purpose of the Rural Residential Zone better reflects the use of the land.

Proposed Changes

1. Amend the zoning of the below lots to the zone listed in Column 4 'Proposed Zoning'

Zone Map	Property Description	Address	Proposed Zoning
ZM35 & ZM36	Lot 1 SP342145	7 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 2 SP342145	9 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 3 SP342145	3 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 4 SP342145	5 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 5 SP342145	20 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 6 SP342145	18 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 7 SP342145	6 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 8 SP342145	4 Timothy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 9 SP342145	16 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 10 SP342145	14 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 11 SP342145	21 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 12 SP342145	19 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 13 SP342145	17 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 14 SP342145	15 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 15 SP342145	13 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 16 SP342144	10 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 17 SP342144	8 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 18 SP342144	6 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct

Zone Map	Property Description	Address	Proposed Zoning
	Lot 19 SP342144	4 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 20 SP342144	2 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 21 SP342144	7 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 22 SP342144	5 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 23 SP342144	3 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 24 SP342144	1 Sharyn Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 25 SP340166	2 Wendy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 26 SP340166	2 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 27 SP340166	1 Wendy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 28 SP340166	5 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 29 SP340166	3 Wendy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 30 SP340166	5 Wendy Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 31 SP340166	1 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 32 SP340166	3 Jesse Daniels Drive BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 33 SP340166	2 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 34 SP340167	6 Charlotte Place, BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 35 SP340167	8 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 36 SP340167	10 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 37 SP340167	12 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 38 SP340167	14 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 39 SP340167	16 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 40 SP340167	18 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 41 SP340167	20 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 42 SP340167	23 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 43 SP340167	21 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 44 SP340167	19 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 45 SP340167	17 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct

Zone Map	Property Description	Address	Proposed Zoning
	Lot 46 SP340167	15 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 47 SP340167	13 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 48 SP340167	Finch Road, BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 49 SP340167	11 Charlotte Place, BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 50 SP340167	9 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 51 SP340167	7 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 52 SP340167	3 Charlotte Place BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 12 SP107658	2544 Beaudesert-Nerang Road, BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 100 SP282988	2494 Beaudesert-Nerang Road, BENOBBLE QLD	Rural Residential Zone - Rural Residential A Precinct
	Lot 54 SP342144	9 Sharyn Place, BENOBBLE QLD	Rural Zone - Rural Escarpment Protection Precinct
	Lot 53 SP340166	4 Charlotte Place, BENOBBLE QLD	Rural Zone - Rural Escarpment Protection Precinct

Item 16: Amendment to zone to reflect recent subdivisions at Benobble, Canungra and Kalbar

Summary

Amendment to Zone Map ZM35 and ZM18 to include recently subdivided lots in the Rural Residential Zone (where no precinct applies) at:

- Seymour Drive and Wojei Rise at Benobble and Canungra; and
- Young Drive at Kalbar.

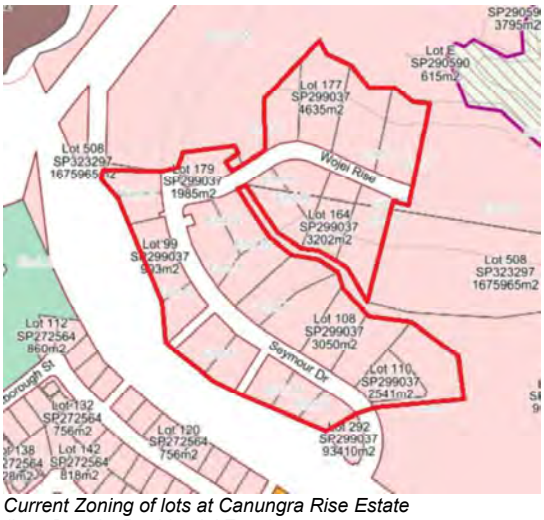
Explanation

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. One recent subdivision at the Canungra Rise Estate has resulted in the creation of 29 large residential lots which was approved as part of a larger subdivision under court order (P&E Appeal no. BD2151 of 2006). A subdivision at Kalbar along Young Drive has also resulted in the creation of 15 large residential lots. The amendment involves amending Zone Map ZM35 and ZM18 to include the below list of properties in the Rural Residential Zone (where no precinct applies).

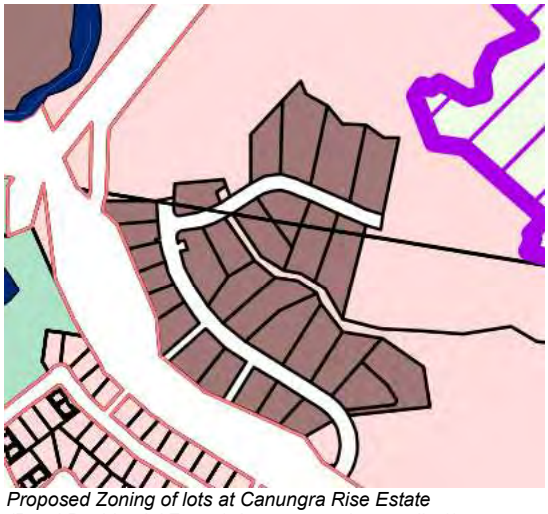
Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 92 SP299037	4 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	ZM35
Lot 93 SP299037	6 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 94 SP299037	8 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 95 SP299037	10 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 96 SP299037	12 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 97 SP299037	14 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 98 SP299037	16 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 99 SP299037	18 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 100 SP299037	20 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 101 SP299037	22 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 102 SP299037	24 Seymour Drive CANUNGRA QLD	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 103 SP299037	3 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 104 SP299037	1 Wojei Rise CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 105 SP299037	17 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 106 SP299037	15 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 107 SP299037	13 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 108 SP299037	11 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 109 SP299037	9 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 110 SP299037	7 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 111 SP299037	5 Seymour Drive CANUNGRA	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 162 SP299037	7 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 163 SP299037	9 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 164 SP299037	11 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 165 SP299037	13 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 175 SP299037	14 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 176 SP299037	12 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 177 SP299037	10 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 178 SP299037	8 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 179 SP299037	2 Wojei Rise BENOBBLE	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 25 SP334831	3 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	ZM18
Lot 26 SP334831	5 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 27 SP334831	7 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 28 SP334831	9 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 29 SP334831	11 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 30 SP334831	13 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 31 SP334831	18 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 32 SP334831	16 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 33 SP334831	14 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 34 SP334831	12 Young Drive	Low Density	Rural Residential Zone	

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
	KALBAR	Residential Zone	(where no precinct applies)	
Lot 35 SP334831	2 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 36 SP334831	4 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 37 SP334831	6 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	
Lot 39 SP334831	10 Young Drive KALBAR	Low Density Residential Zone	Rural Residential Zone (where no precinct applies)	



Current Zoning of lots at Canungra Rise Estate
(Low Density Residential Zone)



Proposed Zoning of lots at Canungra Rise Estate
(Rural Residential Zone (where no precinct applies))

Current Zoning for lots at Young Drive
(Low Density Residential Zone)

Proposed Zoning for lots at Young Drive
(Rural Residential Zone (where no precinct applies))

Canungra Rise Estate

The current zone of the land is Low Density Residential Zone and the intent of the amendment is to appropriately reflect the approved subdivision. Under section 6.2.16.2 of the Planning Scheme, the purpose of the Rural Residential Zone *is to provide for residential uses and activities on large lots, including*

lots for which the local government has not provided infrastructure and services. The lots range from 993m2 to 4381m2 and seven of these lots contain a nature conservation covenant. The purpose and overall outcomes of the Rural Residential Zone (where no precinct applies) better aligns with the existing development in this area.

*Note: As a result of the above proposal, Overlay Map OM-13 Minimum Lot Size Overlay is proposed to be amended to include the lots under the 4000m2 Minimum Area precinct. See **Item 33.***

Young Drive

The land is currently in the Low Density Residential Zone and the intent of the amendment is to appropriately reflect the approved subdivision. Under section 6.2.16.2 of the Planning Scheme, the purpose of the Rural Residential Zone *is to provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services.* The subject lots range from 4000m^2 to 8395m^2 and these parcels have no connection to the sewer network.

*Note: As a result of the above proposal, Overlay Map OM-13 Minimum Lot Size Overlay is proposed to be amended to include the lots under the 4000m2 Minimum Area precinct. See **Item 33.***

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under Shaping SEQ 2023. Chapter 3 Part A, Outcome 1 Efficient Land Use requires new rural residential development to be located in the Urban Footprint only where land is unsuitable for urban use (see Strategy 1.6). Whilst the proposal is identifying more land in the Urban Footprint as Rural Residential Zone, the amendment:

- For Canungra Rise Estate - reflects the old approval for large residential lots and the purpose of the Rural Residential Zone better reflects the use of the land and the conservation values on some of the lots; and
- For Young Drive - reflects the size of the lots and lack of connection to the sewer network.

Proposed Changes

1. Amend the Zoning of the below lots to the Zone listed in Column 4 'Proposed Zoning'

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM35	Lot 92 SP299037	4 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 93 SP299037	6 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 94 SP299037	8 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 95 SP299037	10 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 96 SP299037	12 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 97 SP299037	14 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 98 SP299037	16 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 99 SP299037	18 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 100 SP299037	20 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)

Zone Map	Property Description	Address	Proposed Zoning and Precinct
	Lot 101 SP299037	22 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 102 SP299037	24 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 103 SP299037	3 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 104 SP299037	1 Wojei Rise CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 105 SP299037	17 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 106 SP299037	15 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 107 SP299037	13 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 108 SP299037	11 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 109 SP299037	9 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 110 SP299037	7 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 111 SP299037	5 Seymour Drive CANUNGRA	Rural Residential Zone (where no precinct applies)
	Lot 162 SP299037	7 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 163 SP299037	9 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 164 SP299037	11 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 165 SP299037	13 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 175 SP299037	14 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 176 SP299037	12 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 177 SP299037	10 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 178 SP299037	8 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
	Lot 179 SP299037	2 Wojei Rise BENOBBLE	Rural Residential Zone (where no precinct applies)
ZM18	Lot 25 SP334831	3 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 26 SP334831	5 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 27 SP334831	7 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 28 SP334831	9 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 29 SP334831	11 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 30 SP334831	13 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 31 SP334831	18 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 32 SP334831	16 Young Drive	Rural Residential Zone (where no precinct

Zone Map	Property Description	Address	Proposed Zoning and Precinct
		KALBAR	applies)
	Lot 33 SP334831	14 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 34 SP334831	12 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 35 SP334831	2 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 36 SP334831	4 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 37 SP334831	6 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)
	Lot 39 SP334831	10 Young Drive KALBAR	Rural Residential Zone (where no precinct applies)

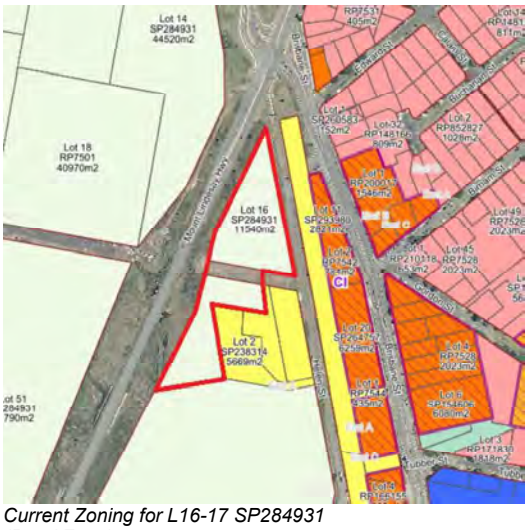
Item 17: Amendment of zone to Mixed Use Zone - Commercial Industry Precinct for lots at Beaudesert

Summary

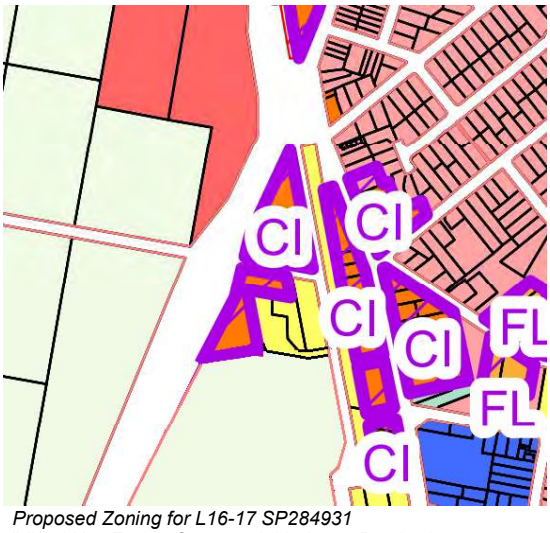
Amendment to Zone Map ZM33 to include Lots 16 and 17 SP284931, 65 Helen Street and Unnamed Road Beaudesert in the Mixed Use Zone - Commercial Industry Precinct.

Explanation

The amendment involves amending Zone Map ZM33 to include Lots 16 SP284931, 65 Helen Street and Lot 17 SP284931, Unnamed Road, BEAUDESERT in the Mixed Use Zone - Commercial Industry Precinct.



Current Zoning for L16-17 SP284931
(Rural Zone)



Proposed Zoning for L16-17 SP284931
(Mixed Use Zone - Commercial Industry Precinct)

The land is currently in the Rural Zone and within the Urban Footprint. The land is located next to Seqwater's bulk water supply infrastructure and the Beaudesert bypass on the west.

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The Mixed Use Zone - Commercial Industry Precinct designation is considered to be more suitable for the land.

Under section 6.2.13.2 of the planning scheme, the purpose of the Mixed Use Zone is to *provide for a variety of uses and activities, including, for example, business, residential, retail, service industry, tourist accommodation or low impact industrial uses or activities.* Specifically, the Commercial Industry Precinct aims to facilitate *a mix of activities that may include business, non-convenience retailing, cafes and dining, lower impacting industrial uses and recreation uses to integrate with and support the centres of the region.*

Both lots were considered to be consistent with the Mixed Use Zone - Commercial Industry Precinct land adjacent and consistent with other land east of Brisbane Street. Relevant development constraints can be addressed by the Overlay Code requirements.

A residential zoning was also investigated for the site, however the setback requirements for sensitive uses from Seqwater's bulk water supply infrastructure would not be achievable and therefore, a commercial zoning was considered more appropriate.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under Shaping SEQ 2023. In accordance with Chapter 3 Part B, the proposed change in zoning to Mixed Use Zone - Commercial Industry Precinct is consistent with the intent and description of the Urban Footprint.

Proposed Changes

1. Amend the zoning of the below lots to the zone listed in Column 4 'Proposed Zoning'.

Zone Map	Property Description	Address	Proposed Zoning
ZM33	Lot 16 SP284931	65 Helen Street BEAUDESERT	Mixed Use Zone - Commercial Industry Precinct
	Lot 17 SP284931	Unnamed Road BEAUDESERT	Mixed Use Zone - Commercial Industry Precinct

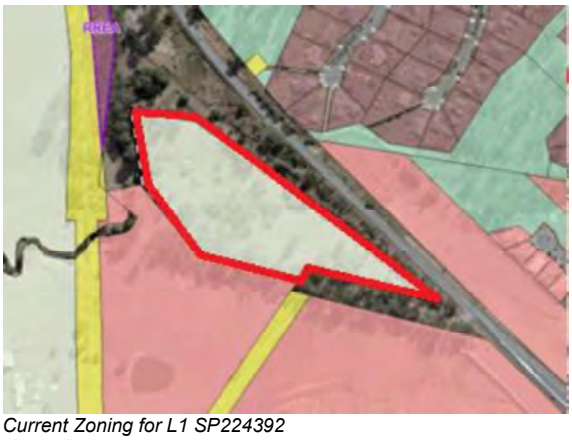
Item 18: Amendment to zone of Lot 1 SP224392 Gleneagle to Low-medium Density Residential Zone

Summary

Amendment to Zone Map ZM33 to include Lot 1 SP224392, Mt Lindesay Highway, Gleneagle in the Low-medium Density Residential Zone.

Explanation

The amendment involves amending Zone Map ZM33 to include Lot 1 SP224392, Mt Lindesay Highway GLENEAGLE in the Low-medium Density Residential Zone.



Current Zoning for L1 SP224392
(Rural Zone)

Proposed Zoning for L1 SP224392
(Low-medium Density Residential Zone)

The land is currently in the Rural Zone and is designated as Urban Footprint under *Shaping SEQ 2023.*

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. A Rural Zoning within an urban setting increases the potential for rural land use conflicts with the neighbouring residential lots. The subject site is therefore more suited to a Low-medium Density Residential Zone designation. Under section 6.2.9.2 of the Planning Scheme, the purpose of the Low-medium Density Residential Zone is to provide for:

a) *a variety of low to medium density dwelling types; and*
b) *community uses, and small-scale services, facilities and infrastructure, to support local residents.*

This site was considered to be consistent with the adjacent residential land to the south and east and development constraints can be addressed by the Overlay Code requirements.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under Shaping SEQ 2023. In accordance with Chapter 3 Part B, the proposed change in zoning is consistent with the intent and description of the Urban Footprint.

Proposed Changes

1. Amend the zoning of the below lots to the zone listed in Column 4 'Proposed Zoning'.

Zone Map	Property Description	Address	Proposed Zoning
ZM33	Lot 1 SP224392	Mt Lindesay Highway, GLENEAGLE	Low-medium Density Residential Zone.

Item 19: Amendment of zoning to Rural Residential Zone - Rural Residential A Precinct for lots in Canungra

Summary

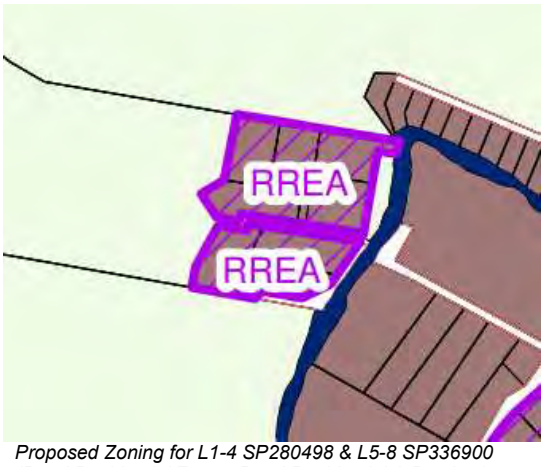
Amendment to Zone Map ZM35 to include Lots 1-4 SP280498 and Lots 5-8 SP336900, 49-57 Geiger Road, Canungra in the Rural Residential Zone - Rural Residential A Precinct.

Explanation

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The amendment involves amending Zone Map ZM35 to include the below list of properties in the Rural Residential Zone - Rural Residential A Precinct.

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 1 SP280498	49 Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	ZM35
Lot 2 SP280498	51 Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 3 SP280498	55 Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 4 SP280498	57 Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 5 SP336900	49B Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 6 SP336900	49A Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 7 SP336900	53 Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	
Lot 8 SP336900	55A Geiger Road CANUNGRA	Rural Zone	Rural Residential Zone - Rural Residential A Precinct	

Current Zoning for L1-4 SP280498 & L5-8 SP336900 (Rural Zone)



Proposed Zoning for L1-4 SP280498 & L5-8 SP336900 (Rural Residential Zone - Rural Residential A Precinct)

The land is currently in the Rural Zone, however, was recently reconfigured to eight large residential blocks and a residual rural block. The land borders Canungra Creek and the lots are isolated in a flood event. The lots are also highly fragmented and act as a transition area from the Urban Footprint to the Regional Landscape and Rural Production Area (Shaping SEQ 2023 designations).

Under section 6.2.16.2 of the Planning Scheme, the purpose of the Rural Residential Zone is to *provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services.* Specifically, the Rural Residential A Precinct aims to facilitate *low density residential living on large acreage lots in a semi-rural or natural landscape setting.* The subject land is therefore more suited to a Rural Residential Zone - Rural Residential A Precinct designation.

The amendment from Rural Zone to a Rural Residential Zoning also discourages the potential for rural land use conflicts on already very small rural lots.

Note: The above lots are not intended to be identified on Overlay Map OM-13 Minimum Lot Size Overlay given the area transitions from the Urban Footprint to the Regional Landscape and Rural Production Area (Shaping SEQ 2023) and the potential to increase the number of people isolated during flood events.

Note: No changes to the Zoning of Lot 9 SP336900 (Rural Zone) are proposed as part of this amendment.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the either the Urban Footprint or the Regional Landscape and Rural Production Area under Shaping SEQ 2023 (refer to the below table). In accordance with Chapter 3 Part B, the proposed change in zoning is consistent with the intent and description of the Urban Footprint and Regional Landscape and Rural Production Area.

Property Description	Address	Proposed Zoning and Precinct
Lot 1 SP280498	49 Geiger Road CANUNGRA	Urban Footprint
Lot 2 SP280498	51 Geiger Road CANUNGRA	Part Urban Footprint, Part Regional Landscape and Rural Production Area
Lot 3 SP280498	55 Geiger Road CANUNGRA	Part Urban Footprint, Part Regional Landscape and Rural Production Area

Property Description	Address	Proposed Zoning and Precinct
Lot 4 SP280498	57 Geiger Road CANUNGRA	Regional Landscape and Rural Production Area
Lot 5 SP336900	49B Geiger Road CANUNGRA	Urban Footprint
Lot 6 SP336900	49A Geiger Road CANUNGRA	Urban Footprint
Lot 7 SP336900	53 Geiger Road CANUNGRA	Regional Landscape and Rural Production Area
Lot 8 SP336900	55A Geiger Road CANUNGRA	Regional Landscape and Rural Production Area

Shaping SEQ 2023 Designation (Pink is Urban Footprint)

For the land located in the Urban Footprint under Shaping SEQ 2023, Chapter 3 Part A, Outcome 1 Efficient Land Use requires new rural residential development to be located in the Urban Footprint only where land is unsuitable for urban use (see Strategy 1.6). Whilst the proposal is identifying more land in the Urban Footprint as Rural Residential Zone, the amendment reflects the size of the lots and the constraints of the land. Further residential intensification of development in this area is not envisaged for the life of the planning scheme.

Proposed Changes

1. Amend the Zoning of the below lots to the Zone listed in Column 4 'Proposed Zoning'

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM35	Lot 1 SP280498	49 Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 2 SP280498	51 Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 3 SP280498	55 Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 4 SP280498	57 Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 5 SP336900	49B Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 6 SP336900	49A Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 7 SP336900	53 Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct
	Lot 8 SP336900	55A Geiger Road CANUNGRA	Rural Residential Zone - Rural Residential A Precinct

Item 20: Amendment to zoning of Lot 37 SP185265 Aratula to Township Zone (where no precinct applies)

Summary

Amendment to Zone Map ZM28 to include Lot 37 SP185265, 6883 Cunningham Highway, Aratula in the Township Zone (where no precinct applies).

Explanation

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. A service station was recently approved and built on the subject site. The amendment involves amending Zone Map ZM28 to include the following lot in the Township Zone (where no precinct applies):

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 37 SP185265	6883 Cunningham Highway ARATULA	Rural Residential Zone - Rural Residential A Precinct	Township Zone (where no precinct applies)	ZM28

Current Zoning for L37 SP185265
(Rural Residential Zone - Rural Residential A Precinct)

Proposed Zoning for L37 SP185265
(Township Zone (where no precinct applies)

The lot is currently in the Rural Residential Zone - Rural Residential A Precinct and a service station is inconsistent in this zone. The Township Zone (where no precinct applies) designation is a more suitable zone as a service station considered a 'consistent use' and the designation is a natural extension of the zoning from the adjoining property in the north east. The land is generally unconstrained and suitable for Township Zone related activities. Section 6.2.19.2 of the Planning Scheme outlines the purpose of the Township Zone, which is to provide for:

a) small to medium urban areas in a rural area; and
b) a variety of uses and activities to service local residents, including, for example, business, community, education, industrial, open space, recreation, residential or retail uses or activities; and
c) tourist attractions and short-term accommodation, if appropriate for the area.

*Note: As a result of the above proposal, Overlay Map OM-13 Minimum Lot Size Overlay is proposed to be amended to remove the above lot from the 1ha Minimum Area precinct. See **Item 33** for this amendment.*

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under *Shaping SEQ 2023*. In accordance with Chapter 3 Part B, the proposed change in zoning to Township Zone (where no precinct applies) is consistent with the intent and description of the Urban Footprint.

Proposed Changes

1. Amend the zoning of the below lot to the Zone listed in Column 4 'Proposed Zoning and Precinct'

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM28	Lot 37 SP185265	6883 Cunningham Highway ARATULA	Township Zone (where no precinct applies)

Item 21: Amendment to land designated Recreation and Open Space Zone that is privately owned in Burnett Creek, Kooralbyn, Christmas Creek and Tamborine

Summary

Amendments to convert privately owned land designated as Recreation and Open Space Zone to a more suitable zone.

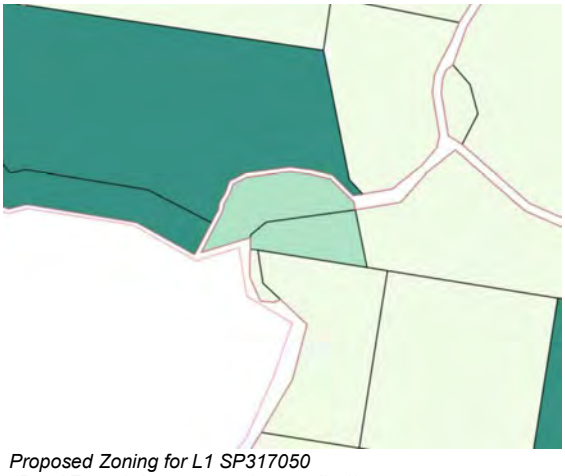
Explanation

The amendment involves amending Zone Maps ZM24, ZM42, ZM43, ZM55, and ZM59 to the following:

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 1 SP317050	2821 Carneys Creek Road BURNETT CREEK	Recreation and Open Space Zone (where no precinct applies)	Rural Zone (where no precinct applies)	ZM59
Lot 140 SP296603	236-280 Wellington Bundock Drive KOORALBYN	Recreation and Open Space (where no precinct applies)	Rural Residential Zone - Rural Residential A Precinct	ZM42 & ZM43
Lot 183 RP 197821	151-161 Wellington Bundock Drive KOORALBYN	Recreation and Open Space (where no precinct applies)	Rural Residential Zone - Rural Residential A Precinct	ZM43
Lot 235 SP266415	98 Fedamore Road CHRISTMAS CREEK	Recreation and Open Space (where no precinct applies)	Rural Zone (where no precinct applies)	ZM55
Lot 200 SP230704	23-25 Riemore Circuit TAMBORINE	Recreation and Open Space (where no precinct applies)	Parcel to be split zoned: • No change to northern part - Recreation and Open Space Zone (where no precinct applies) • Southern part - Rural Residential Zone (Rural Residential A Precinct)	ZM24

2821 Carneys Creek Road BURNETT CREEK (Lot 1 SP317050)

Current Zoning for L1 SP317050
(Recreation and Open Space (where no precinct applies))



Proposed Zoning for L1 SP317050
(Rural Zone (where no precinct applies))

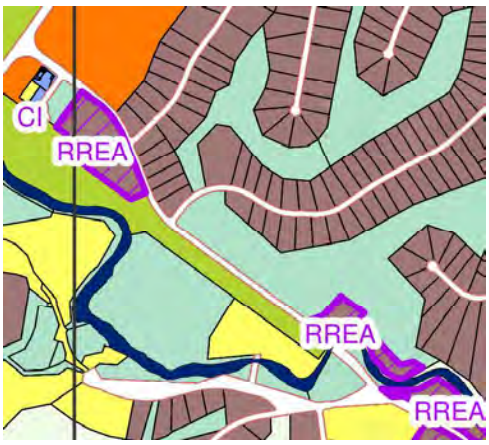
The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The lot is currently in the Recreation and Open Space Zone. The lot was part of a subdivision (one into two lots) and the smaller lot (the subject site) was sold to private ownership. The lot has a dwelling house and the adjoining lot is in the Rural Zone. The purpose of the Rural Zone is:

a. *provide for rural uses and activities; and*
b. *provide for other uses and activities that are compatible with:*
    i. *existing and future rural uses and activities; and*
    ii. *the character and environmental features of the zone; and*
c. *maintain the capacity of land for rural uses and activities by protecting and managing significant natural resources and processes.*

The proposed Rural Zone is consistent with neighbouring land, and reflects the private ownership and existing development on the land.

Wellington Bundock Drive KOORALBYN (Lot 140 SP296603 & Lot 183 RP197821)

Current Zoning of Lot 140 SP296603 & Lot 183 RP197821 (Recreation and Open Space Zone (where no precinct applies))



Proposed Zoning of Lot 140 SP296603 & Lot 183 RP197821 (Rural Residential Zone - Rural Residential A Precinct)

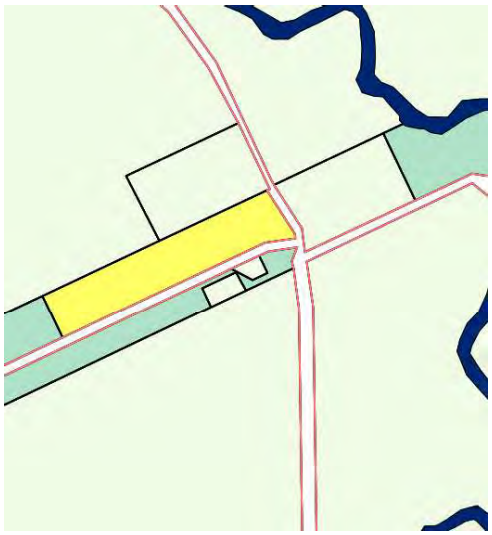
Both lots are located in the Recreation and Open Space Zone and is categorised under *Shaping SEQ 2023* as *Urban Footprint*.

The rural residential zoning is consistent with surrounding zones and the development constraints can be addressed by the Overlay Code requirements. Under section 6.2.16.2 of the Planning Scheme, the purpose of the Rural Residential Zone is to *provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services.* Given the size of the lots, the Rural Residential A Precinct is appropriate as it aims to facilitate *low density residential living on large acreage lots in a semi-rural or natural landscape setting.*

Whilst the land is located in the Urban Footprint, further subdivision of the land is not recommended due to the proximity to the Kooralbyn airfield. To avoid the potential for conflict with sensitive uses, the lots will not be identified on Overlay Map OM-13 Minimum Lot Size Overlay.

98 Fedamore Road CHRISTMAS CREEK (Lot 235 SP266415)

Current Zoning for L235 SP266415
(Recreation and Open Space Zone (where no precinct applies))



Proposed Zoning for L235 SP266415
(Rural Zone (where no precinct applies))

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The lot is currently in the Recreation and Open Space Zone (where no precinct applies).

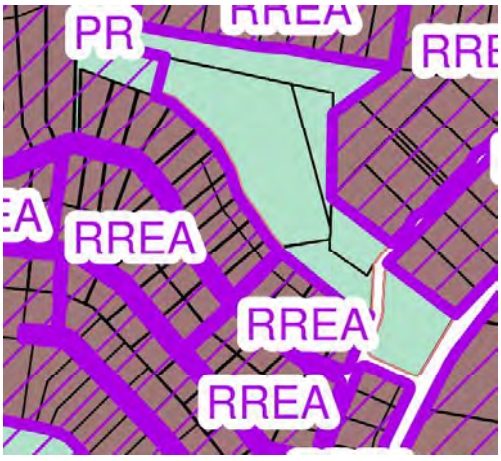
The lot has a dwelling house and sheds, and surrounding lots are located in the Rural Zone. The purpose of the Rural Zone is:

a. *provide for rural uses and activities; and*
b. *provide for other uses and activities that are compatible with:*
    iii. *existing and future rural uses and activities; and*
    iv. *the character and environmental features of the zone; and*
c. *maintain the capacity of land for rural uses and activities by protecting and managing significant natural resources and processes.*

The proposed Rural Zone is consistent with neighbouring lands, and better reflects the private ownership of the land and the residential use existing on the land (Dwelling House).

23-25 Riemore Circuit TAMBORINE (Lot 200 SP230704)

Current Zoning for L200 SP231704
(Recreation and Open Space Zone (where no precinct applies)



Proposed Zoning for L200 SP231704
(Northern part - Recreation and Open Space (where no precinct applies. Southern part - Rural Residential Zone - Rural Residential Precinct)

The land is currently in the Recreation and Open Space Zone and is designated as Rural Living Area under *Shaping SEQ2023.* The lot comprises two (2) parts. One part of the lot is located in the north, and one (1) part of the lot is located in the south and fronts Riemore Circuit. The amendment involves amending Zone Map ZM24 to include the southern part of Lot 200 SP230704, 23-25 Riemore Circuit TAMBORINE in the Rural Residential Zone - Rural Residential A Precinct.

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The northern portion of the lot is subject to flooding (100%) with a 'High' hazard rating and consists of open space with water bodies. Therefore no amendment is proposed for the northern portion of the land.

The southern part of the lot is proposed to be included in the Rural Residential Zone - Rural Residential A Precinct, which is consistent with surrounding land. The lot is partially subject to flooding, however a building envelope is identified on the site which outlines a permitted building footprint. Under section 6.2.16.2 of the Planning Scheme, the purpose of the Rural Residential Zone is to *provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services.* Further, the Rural Residential A Precinct is appropriate as it aims to facilitate *low density residential living on large acreage lots in a semi-rural or natural landscape setting.*

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the either the Urban Footprint, Rural Living Area or the Regional Landscape and Rural Production Area under Shaping SEQ 2023 (refer to the below table). In accordance with Chapter 3 Part B, the proposed change in zoning is consistent with the intent and description of the Urban Footprint, Rural Living Area and the Regional Landscape and Rural Production Area.

Property Description	Address	Proposed Zoning and Precinct
Lot 1 SP317050	2821 Carneys Creek Road BURNETT CREEK	Regional Landscape and Rural Production Area
Lot 2 SP145145	1-17 Ogilvie Place KOORALBYN	Urban Footprint

Lot 140 SP296603	236-280 Wellington Bundock Drive KOORALBYN	Urban Footprint
Lot 183 RP 197821	151-161 Wellington Bundock Drive KOORALBYN	Urban Footprint
Lot 235 SP266415	98 Fedamore Road CHRISTMAS CREEK	Regional Landscape and Rural Production Area
Lot 200 SP230704	23-25 Riemore Circuit TAMBORINE	Rural Living Area

Proposed Changes

1. Amend the Zoning of the below lots to the Zone listed in Column 4 'Proposed Zoning and Precinct'

Zone Map	**Property Description**	**Address**	**Proposed Zoning and Precinct**
ZM59	Lot 1 SP317050	2821 Carneys Creek Road BURNETT CREEK	Rural Zone (where no precinct applies)
ZM43	Lot 2 SP145145	1-17 Ogilvie Place KOORALBYN	Parcel to be split zoned: • No change north of Ogilvie Place - Recreation and Open Space Zone (where no precinct applies) • South of Ogilvie Place - Rural Residential Zone (where no precinct applies)
ZM42 & ZM43	Lot 140 SP296603	236-280 Wellington Bundock Drive KOORALBYN	Rural Residential Zone - Rural Residential A Precinct
ZM43	Lot 183 RP 197821	151-161 Wellington Bundock Drive KOORALBYN	Rural Residential Zone - Rural Residential A Precinct
ZM55	Lot 235 SP266415	98 Fedamore Road CHRISTMAS CREEK	Rural Zone (where no precinct applies)
ZM24	Lot 200 SP230704	23-25 Riemore Circuit TAMBORINE	Parcel to be split zoned: • No change to northern part - Recreation and Open Space Zone (where no precinct applies) • Southern part - Rural Residential Zone (Rural Residential A Precinct)

Item 22: Amendment to zoning of Lot 170 RP888308 and Lot 169 WD5071 Beaudesert to Mixed Use (where no precinct applies)

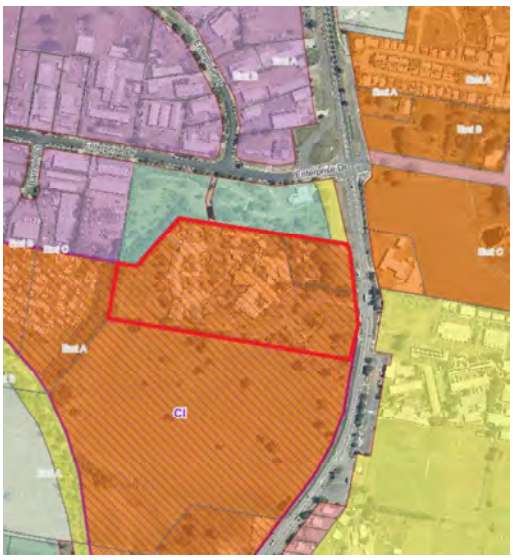
Summary

Amendment to Zone Map ZM33 to include Lot 170 RP888308, 210-218 Brisbane Street BEAUDESERT and Lot 169 WD5071, 220-226 Brisbane Street BEAUDESERT in the Mixed Use Zone (where no precinct applies).

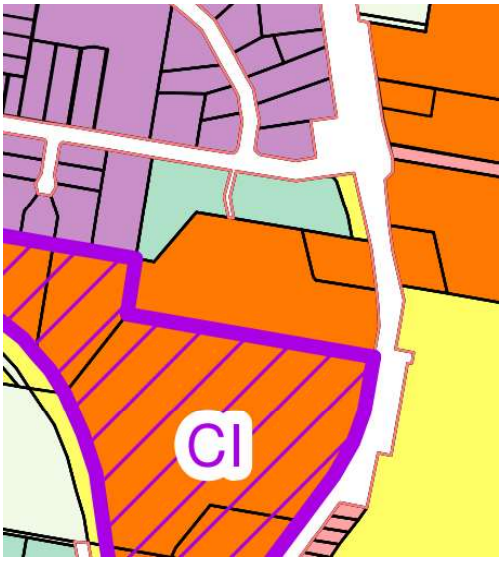
Explanation

The amendment involves amending Zone Map ZM33 to include the following lots in the Mixed Use Zone (where no precinct applies).

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 170 RP888308	210-218 Brisbane Street BEAUDESERT	Mixed Use Zone (Commercial-industry precinct)	Mixed Use Zone (where no precinct applies)	ZM33
Lot 169 WD5071	220-226 Brisbane Street BEAUDESERT	Mixed Use Zone (Commercial-industry precinct)	Mixed Use Zone (where no precinct applies)	ZM33



Current Zoning of L170 RP88308 and L169 WD5071



Proposed Zoning for L170 RP88308 and L169 WD5071

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The land is currently in the Mixed Use Zone - Commercial Industry Precinct, which does not support residential activities (other than Caretaker's Accommodation). An aged care facility (Wongaburra) is established on Lot 170 and 12 dwelling units are established on Lot 169. Mixed Use Zoning (where no precinct applies) better supports the existing residential activities on the land and maintains consistency with the zoning opposite the site (along Brisbane Street). Development constraints can be addressed by the Overlay Code requirements.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under Shaping SEQ 2023. In accordance with Chapter 3 Part B, the proposed change in zoning to Mixed Use Zone (where no precinct applies) is consistent with the intent and description of the Urban Footprint.

Proposed Changes

1. Amend the zoning of the below lot to the Zone listed in Column 4 'Proposed Zoning and Precinct'

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM33	Lot 170 RP888308	210-218 Brisbane Street BEAUDESERT	Mixed Use Zone (where no precinct applies)
ZM33	Lot 169 WD5071	220-226 Brisbane Street BEAUDESERT	Mixed Use Zone (where no precinct applies)

Item 23: Amendment to zoning of Lot 158 MAR617 and Lot 162 CC3601 Harrisville to Township Zone - Township Residential Precinct

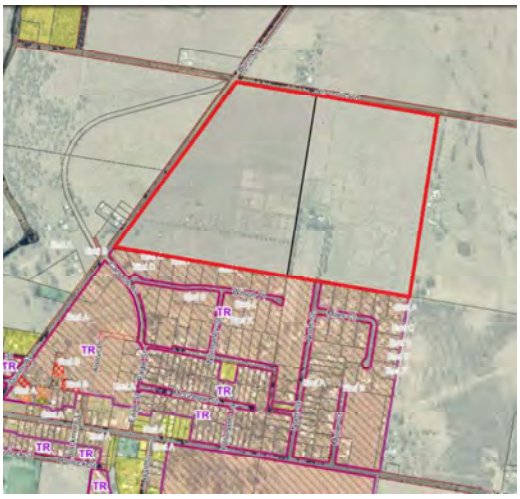
Summary

Amendment to Zone Map ZM08 to include Lot 158 MAR617, 67-133 Dunns Avenue, Harrisville and Lot 162 CC3601, 60 North Street, Harrisville in the Township Zone - Township Residential Precinct.

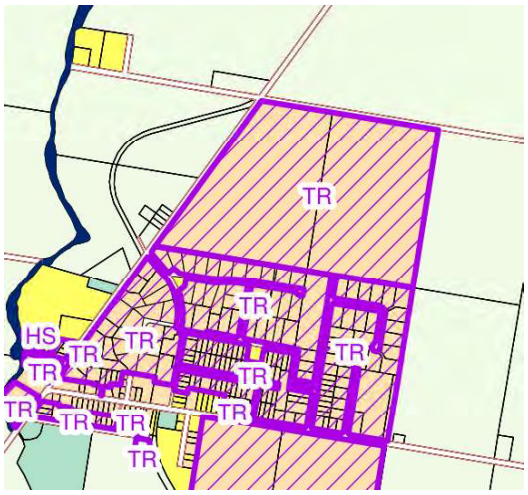
Explanation

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The amendment involves amending Zone Map ZM08 to include the following lots in the Township Zone - Township Residential Precinct:

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 158 MAR617	67-133 Dunns Avenue HARRISVILLE	Rural Zone (where no precinct applies)	Township Zone - Township Residential Precinct	ZM08
Lot 162 CC3601	60 North Street HARRISVILLE	Rural Zone (where no precinct applies)	Township Zone - Township Residential Precinct	ZM08



Current Zoning of L158 MAR617 & L162 CC3601 (Rural Zone (where no precinct applies))



Proposed Zoning for L158 MAR617 & L162 CC3601 (Township Zone - Township Residential Precinct)

The current zoning of this lot is Rural Zone (where no precinct applies) and both lots have recently been re-categorised under *Shaping SEQ 2023* from *Regional Landscape and Rural Production Area* to *Urban Footprint*.

The purpose of the Township Zone - Township Residential Precinct is to provide for:

a. small to medium urban areas in a rural area; and

b. a variety of uses and activities to service local residents, including, for example, business, community, education, industrial, open space, recreation, residential or retail uses or activities; and
c. tourist attractions and short-term accommodation, if appropriate for the area.

Specifically, the Township Residential Precinct aims to:
a. facilitates low density residential living on large lots; and
b. protects the high level of residential amenity and privacy expected in the precinct;

The Township Zone - Township Residential Precinct designation is consistent with adjacent zoning and the development constraints can be addressed by the Overlay Code requirements. The proposed zoning also reflects an approved aged care facility on Lot 162 CC3601. The Township Zone - Township Residential Precinct would support unsewered lot creation of appropriate sizes and provide opportunities for additional residential development in the township. Additional development would support the sustainability of businesses and community activities in Harrisville.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Urban Footprint under Shaping SEQ 2023. In accordance with Chapter 3 Part B, the proposed change in zoning to Township Zone - Township Residential Precinct is consistent with the intent and description of the Urban Footprint.

Proposed Changes

1. Amend the zoning of the below lot to the Zone listed in Column 4 'Proposed Zoning and Precinct'

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM08	Lot 158 MAR617	67-133 Dunns Avenue HARRISVILLE	Township Zone - Township Residential Precinct.
ZM08	Lot 162 CC3601	60 North Street HARRISVILLE	Township Zone - Township Residential Precinct

Item 24: Amendment to zoning of Lots 17-33 RP28761 at Harrisville to Limited Development Zone - Historical Subdivision Precinct

Summary

Amendment to Zone Map ZM08 to include Lots 17-28 RP28761, Warrill View Peak Crossing Road, Harrisville and Lots 29-33 RP28761, Wilsons Plains Road, Harrisville in the Limited Development Zone - Historical Subdivision Precinct.

Explanation

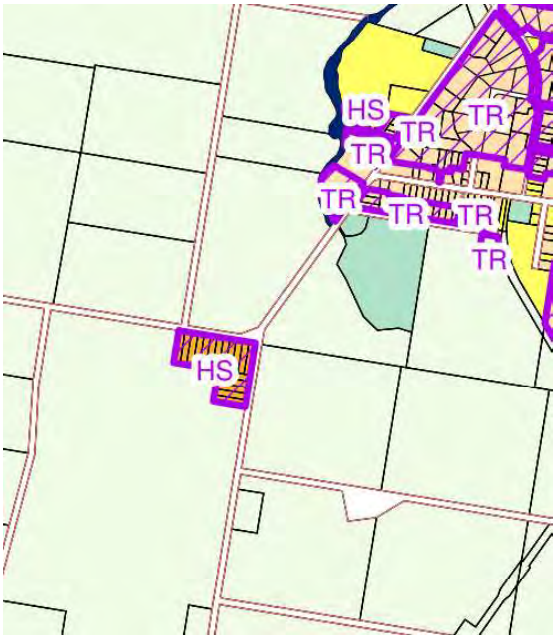
Amendments to Zone Map

The planning scheme is required to identify the most suitable zone for each parcel of land within the region. The amendment involves amending Zone Map ZM08 to include the below list of properties in the Limited Development Zone - Historical Subdivision Precinct.

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 17 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	ZM08
Lot 18 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 19 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 20 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 21 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 22 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 23 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 24 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 25 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 26 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 27 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	

Property Description	Address	Current Zoning (30.06.23)	Proposed Zoning and Precinct	Zone Map
Lot 28 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 29 RP28761	Wilsons Plains Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 30 RP28761	15 Wilsons Plains Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 31 RP28761	17 Wilsons Plains Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 32 RP28761	Wilsons Plains Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	
Lot 33 RP28761	Wilsons Plains Road HARRISVILLE	Rural Zone (where no precinct applies)	Limited Development Zone - Historical Subdivision Precinct	

Current Zoning of Lots 17-33 RP28761
(Rural Zone (where no precinct applies))

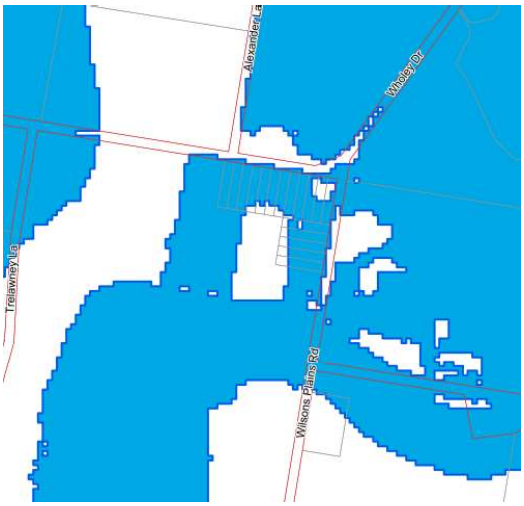


Proposed Zoning of Lots 17-33 RP28761
(Limited Development Zone - Historical Subdivision Precinct)

The land is currently within the Rural Zone (where no precinct applies) and the lots are categorised under *Shaping SEQ 2023* as *Regional Landscape and Rural Production Area*.

The purpose of the Limited Development Zone *is to identify land that is significantly affected by 1 or more development constraints, including, for example, constraints relating to defence requirements, flooding, historical subdivisions, land contamination, past or future mining activities or topography*. The Historical Subdivision Precinct caters for small isolated lots within a rural setting, which have limited access to services and infrastructure. The precinct encourages the amalgamation of land to ensure that wastewater services can be adequately accommodated for onsite. Under the precinct, a Dwelling house can be provided where on a lot at least 2ha in size. The subject lots are 2,023m^2 each and the proposed zoning

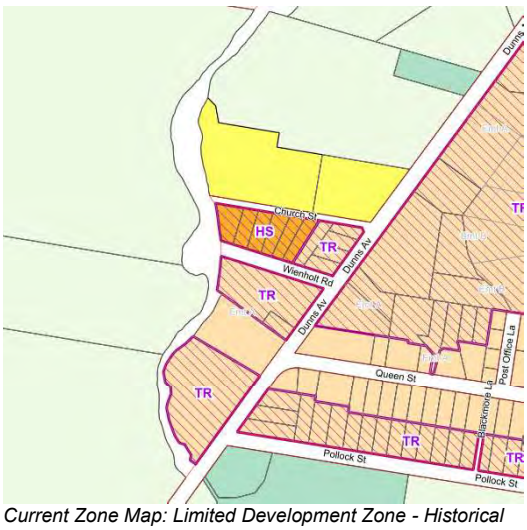
would therefore encourage an amalgamation of all properties to establish a Dwelling house if the 2ha minimum requirement is applied. Importantly, all the lots are constrained by flooding and a Limited Development Zone - Historical Subdivision Precinct designation (requiring the amalgamation of lots to establish a house) would reduce the potential number of households at risk during a flood.



Overlay OM-06-B Flood Hazard Overlay Map - Category Area
(Blue represents Defined Flood Area)

Amendments to Policy

Given the subject lots are located in the locality of Harrisville, to provide clarity that a minimum of 2ha is required to establish a Dwelling house (and not 4,000m2 where located in Harrisville as the policy states), amendments to parts of the Planning Scheme are required. The amendments include a reference to *Wienholt Road* when Harrisville is mentioned in the policy. The below image shows the locality of the lots along Wienholt Road that are subject to the policy requiring a minimum 4,000m^2 lot size to establish a dwelling. The combined total area that is zoned Historical Subdivision Precinct along Wienholt Road is 7,114m^2.



Current Zone Map: Limited Development Zone - Historical Subdivision Precinct (in orange with precinct text 'HS') at Weinholt Road, Harrisville that is subject to a 4000m2 minimum lot size for a Dwelling House.

Aerial of Weinholt Road properties (the Bowels Club) with a Historical Subdivision Precinct designation.

In summary, the relevant Planning Scheme sections that require the amendments include:

- Table of assessment for a Material Change of Use within the Zone;
- Table of assessment for reconfiguring a lot (subdivision); and
- The Zone code.

Refer to the 'Proposed Changes' section of this item for the policy amendments.

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

The subject lands are located in the Regional Landscape and Rural Production Area under *Shaping SEQ 2023*. In accordance with Chapter 3 Part B, the proposed change in zoning to Limited Development Zone - Historical Subdivision Precinct is consistent with the intent and description of the Regional Landscape and Rural Production Area designation.

Proposed Changes

1. Amend the zoning of the below lots to the Zone listed in Column 4 'Proposed Zoning and Precinct'.

Zone Map	Property Description	Address	Proposed Zoning and Precinct
ZM08	Lot 17 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 18 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 19 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 20 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct

Zone Map	Property Description	Address	Proposed Zoning and Precinct
	Lot 21 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 22 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 23 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 24 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 25 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 26 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 27 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 28 RP28761	Warrill View Peak Crossing Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 29 RP28761	Wilsons Plains Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 30 RP28761	15 Wilsons Plains Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 31 RP28761	17 Wilsons Plains Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 32 RP28761	Wilsons Plains Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct
	Lot 33 RP28761	Wilsons Plains Road HARRISVILLE	Limited Development Zone - Historical Subdivision Precinct

2. In Part 5 Tables of Assessment, Section 5.5 Categories of Development and Assessment - Material Change of Use, Section 5.5.6 Limited Development Zone, amend Table 5.5.6.3 - Limited Development Zone - Historical Subdivision Precinct, as shown below:

Table 5.5.6.3 - Limited Development Zone - Historical Subdivision Precinct

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Dwelling house	**Accepted subject to requirements**	
	If: 1. obtaining access from a constructed road and the lot is a minimum of 2ha; or 2. where located in Wienholt Road, Harrisville and obtaining access from a constructed road and the lot is a minimum of 4000m2.	**Dwelling House Code**
	Code Assessment	

	If: 1. not obtaining access from a constructed road and the lot is a minimum of 2ha; or 2. where located in Wienholt Road, Harrisville and not obtaining access from a constructed road and the lot is a minimum of 4000m^2.	Limited Development Zone Code Dwelling House Code

3. In Part 5 Tables of Assessment, Section 5.6 Categories of Development and Assessment - Reconfiguring a Lot, amend Table 5.6.1—Reconfiguring a Lot, as shown below:

Table 5.6.1—Reconfiguring a Lot

Zone	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Limited Development Zone - Historical Subdivision Precinct	**Code assessment**	
	If: 1. all proposed lots are 2 hectares or greater where not located in Wienholt Road, Harrisville; or 2. all proposed lots are 4000m^2 or greater where located in Wienholt Road, Harrisville.	Limited Development Zone Code Reconfiguring a Lot Code Earthworks, Construction and Water Quality Code Infrastructure Design Code
	Impact assessment	
	If not code assessment	The Planning Scheme

4. In Part 6 Zones, Section 6.2.6 Limited Development Zone Code, amend 6.2.6.2 Purpose and Overall Outcomes, point 5, as shown below:

5. The purpose of the **Limited Development Zone Code - Historical Subdivision Precinct** will be achieved through the following overall outcomes:
   b. **Land uses**:
      i. are compatible with the limited level of infrastructure and service provision;
      ii. provide for a Dwelling house on a lot at least 2ha (or where in Wienholt Road, Harrisville, 4000m^2) in area where safe and lawful access to a constructed road is obtained;
      iii. include very low impact rural activities;
      iv. are limited to:
         A. the uses listed as a consistent use in column 1 of **Table 6.2.6.2.3 - Consistent Uses in the Limited Development Zone - Historical Subdivision Precinct**; or
         B. the uses listed as potentially consistent uses in column 2 of **Table 6.2.6.2.3 - Consistent Uses in the Limited Development Zone - Historical Subdivision Precinct** where further assessment has determined that the use is appropriate in the zone having regard to such matters as its impact, scale and intensity, built form and consistency with the character of the zone;
      v. where not listed in **Table 6.2.6.2.3 Consistent Uses in the Limited Development Zone - Historical Subdivision Precinct** are inconsistent uses and are not intended to occur in the precinct;
   c. **Character**:
      i. consists predominantly of Dwelling houses on lots with a minimum area of 2ha (or where in Wienholt Road, Harrisville, 4000m^2) in a rural or natural landscape setting;

5. In Part 6 Zones, Section 6.2.6 Limited Development Zone Code, amend Table 6.2.6.2.3 - Consistent Uses in the Limited Development Zone - Historical Subdivision Precinct, as shown below:

Table 6.2.6.2.3 - Consistent Uses in the Limited Development Zone - Historical Subdivision Precinct

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Residential Activities	
Dwelling house (where the lot is a minimum 2 ha (or where in Wienholt Road, Harrisville, 4000m^2)) Home based business (if not involving Industrial activities other than minor industrial activities)	

6. In Part 6 Zones, Section 6.2.6 Limited Development Zone Code, amend Table 6.2.6.3.2 - Assessable Development - Historical Subdivision Precinct, as shown below:

Table 6.2.6.3.2—Assessable Development - Historical Subdivision Precinct

Performance Outcomes	Acceptable Outcomes
Land Uses	
PO1 Development being a Dwelling house: 1. facilitates low density rural living; and 2. is located on a lot having a minimum area of 2 ha (or where in Wienholt Road, Harrisville, 4000m^2).	**AO1** No Acceptable Outcome is prescribed.

Item 25: Update to Agricultural Land Classification Mapping

Summary

Update mapping to display the latest available Agricultural Land Classes (Class A and B) data on *Overlay Map OM-01 Agricultural Land Overlay* and *Strategic Framework Map SFM-02 Growing Economy.*

Explanation

The amendment involves updating *Overlay Map OM-01 Agricultural Land Overlay* and *Strategic Framework Map SFM-02 Growing Economy* to reflect the latest Queensland agricultural land classes - land class A and B mapping and updated SPP mapping.

Overlay Map OM-01 Agricultural Land Overlay

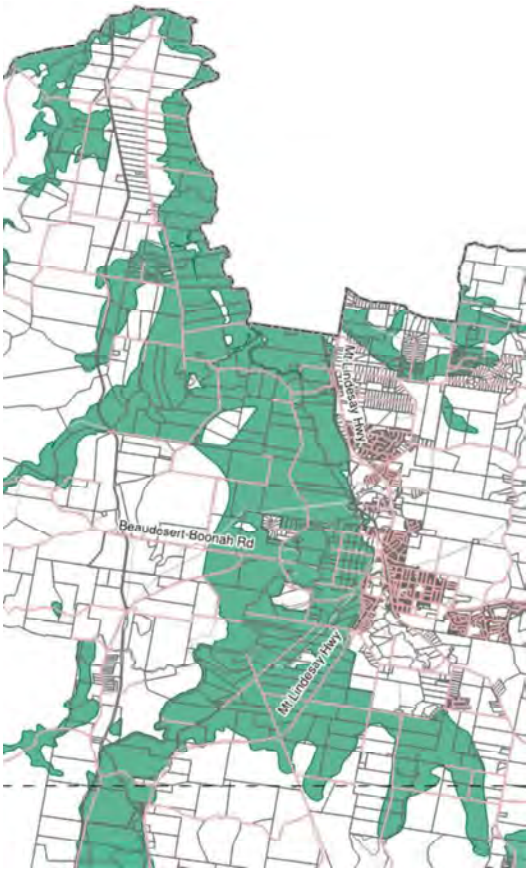
Proposed amendment involves updating the ***Agricultural Land Classification (Class A and Class B)*** and a subsequent update of the ***Agricultural Land Buffer Area*** layer given the change in the Agricultural Land Classification data.

- ***Agricultural Land Classification (Class A and Class B)*** layer - Using the latest available *Queensland Agricultural Land Classes - Land Class A and B with Urban Mask* data (publication date 29 July 2020), updated Urban Footprint boundaries released under the Shaping SEQ plan in December 2023 were removed to reflect the prioritisation of urban areas.
- ***Agricultural Land Buffer Area*** layer - A 40m buffer has been created around the above data to represent the updated ***Agricultural Land Buffer Area***.

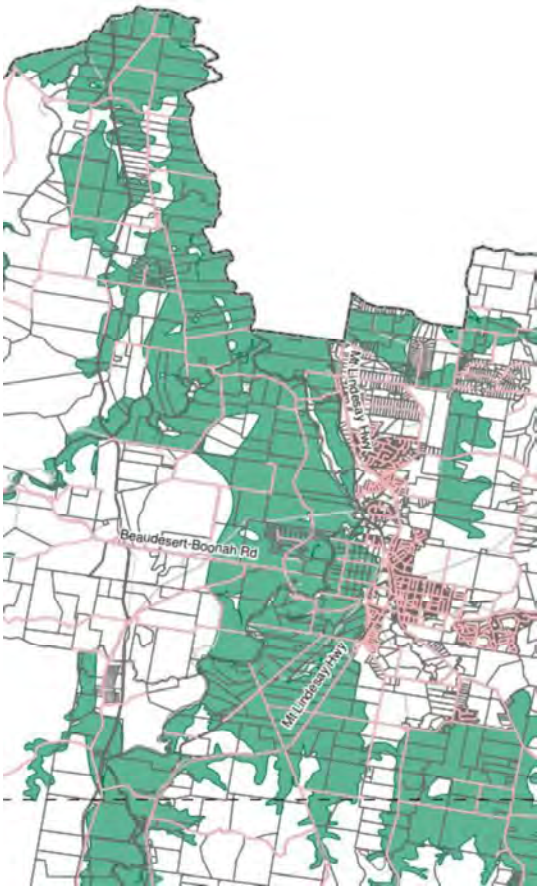
For noting, there have been no changes in the mapping methodology between the current and proposed versions of the Agricultural Land Overlay Map. Refer to Attachment 2 - Proposed Overlay Maps to view amended *Overlay Map OM-01 Agricultural Land Overlay.*

Strategic Framework Map SFM-02 Growing Economy

Proposed amendment involves updating ***Agricultural Land Classification (Class A and Class B)*** layer. The finalised ***Agricultural Land Classification (Class A and Class B)*** layer created under *Overlay Map OM-01 Agricultural Land Overlay* has been used to update this map. Refer to Attachment 1 - Proposed Strategic Framework Maps to view amended *Strategic Framework Map SFM-02 Growing Economy.*



Example of current mapping (30.06.2023)



Example of proposed mapping

Areas Impacted

Most of the mapping changes have occurred in the Logan and Albert River Catchment Area.

State Interests

State Planning Policy 2017 - Planning for Economic Growth: Agriculture

The proposal takes into consideration the State Interest component regarding agriculture. In accordance with Policy (2) the update of the mapping assists in the protection of Agricultural Land Classification Class A and Class B. The *Queensland Agricultural Land Classes - Land Class A and B with Urban Mask* data is the latest SPP mapping available. The buffer width (of 40m) surrounding the Class A and Class B land remains the same policy as the existing mapping, and assists in achieving (2)(b) avoiding development that will have an irreversible impact on adjacent Class A and Class B land.

Proposed Changes

1. Amend the following maps under Schedule 2 Mapping - SC2.5 Overlay Maps, to update the ***Agricultural Land Classification (Class A and Class B)*** and ***Agricultural Land Buffer Area*** layers:
   - OM-01.1 Agricultural Land Overlay
   - OM-01.2 Agricultural Land Overlay
   - OM-01.3 Agricultural Land Overlay
   - OM-01.4 Agricultural Land Overlay

   (Refer to Attachment 2)

2. Amend SFM-02 Growing Economy under Schedule 2 Mapping - SC2.2 Strategic Framework Maps, to update ***Agricultural Land Classification (Class A and Class B)*** layer.
   (Refer to Attachment 1)

Item 26: Update to Key Resource Area (KRA) Mapping

Summary

Update mapping to display the latest available Key Resource Area (KRA) data on *Overlay Map OM-05 Extractive Resources Overlay* and *Strategic Framework Map SFM-02 Growing Economy.*

Explanation

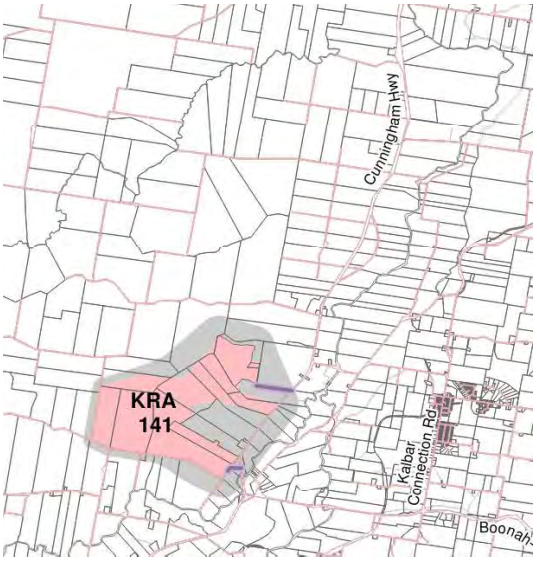
Overlay Map and Strategic Framework Map

The amendment involves updating *Overlay Map OM-05 Extractive Resources Overlay* and *Strategic Framework Map SFM-02 Growing Economy* to reflect the latest KRA mapping and updated SPP mapping. The amendment includes the addition of new KRA 172 Warrill View Silverdale and an adjustment to KRA 141 Kangaroo Mountain boundaries.

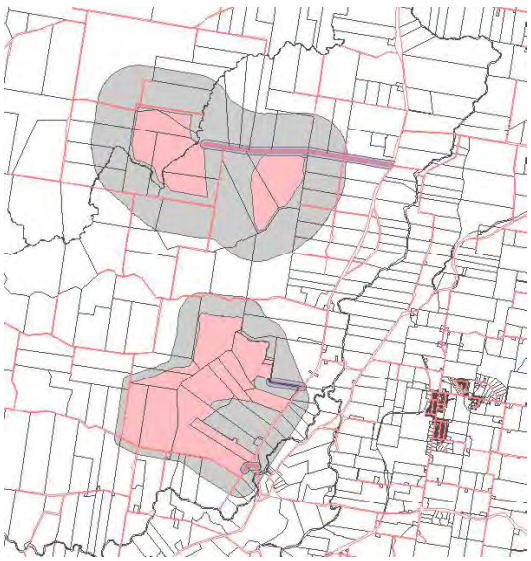
The following layers will be amended on both maps:

- *Resource Area / Processing Area*
- *Separation Area*
- *Transport Route*
- *Transport Route Separation Area*

A copy of the Queensland Government Key Resource Area Reports for KRA 172 and KRA 141 can be found in Attachment 3 and Attachment 4. Refer to Attachment 2 - Proposed Overlay Maps to view amended *Overlay Map OM-05 Extractive Resources Overlay* and refer to Attachment 1 - Proposed Strategic Framework Maps to view amended *Strategic Framework Map SFM-02 Growing Economy.*



Current mapping (30.06.2023) displaying location of KRA 141



Proposed mapping with new KRA 172 and adjusted KRA 141

Areas Impacted

The new KRA 172 affects properties in Rosevale (Leitch Road, I Zahnows Road, Hayes Road one unnamed road) and Silverdale (Horan Road and a number of unnamed roads).

State Interests

State Planning Policy 2017 - Planning for Economic Growth: Mining and Extractive Resources

The proposal takes into consideration the State Interest component regarding extractive resources. In accordance with Policy (1) the updated mapping illustrates the latest boundaries for the resource/processing area, separation area, transport route and transport route separation areas. Under the Extractive Resources Overlay Code, development (with the exception of Animal husbandry or Cropping) occurring in these new areas will now trigger an application and assessment against this code.

Proposed Changes

1. Amend the following map under Schedule 2 Mapping - SC2.5 Overlay Maps, to update the ***Resource Area / Processing Area, Separation Area, Transport Route,*** *and* ***Transport Route Separation Area*** layers:
   - OM-05.1 Extractive Resources Overlay

   (Refer to Attachment 2)

2. Amend SFM-02 Growing Economy under Schedule 2 Mapping - SC2.2 Strategic Framework Maps, to update the ***Resource Area / Processing Area, Separation Area, Transport Route,*** *and* ***Transport Route Separation Area*** layers.
   (Refer to Attachment 1)

Item 27: Update to Future Rail Network Mapping

Summary

Update mapping to display the latest available future rail corridor data and revised buffer on *Overlay Map OM-09 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure*.

Explanation

The amendment involves updating the ***Future Rail Network*** and ***Rail Buffer Area*** layer on *Overlay Map OM-09 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure* and ***Future Rail Network*** on *Strategic Framework Map SFM-02 Growing Economy* to reflect the latest SPP mapping. The Inland Rail has been included as a 'Future Railway Corridor" on the SPP mapping.

Overlay Map OM-09 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure

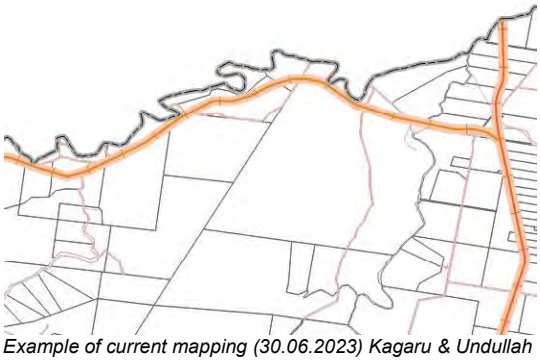
The proposed mapping updates include:

- ***Future Rail Network*** layer - Uses the latest Future State Transport Corridor Railway data under the SPP. The symbology has also been updated on the legend.
- ***Rail Buffer Area*** layer - A 100m buffer either side of the corridor has been created around the above layer to represent the updated ***Rail Buffer Area***.

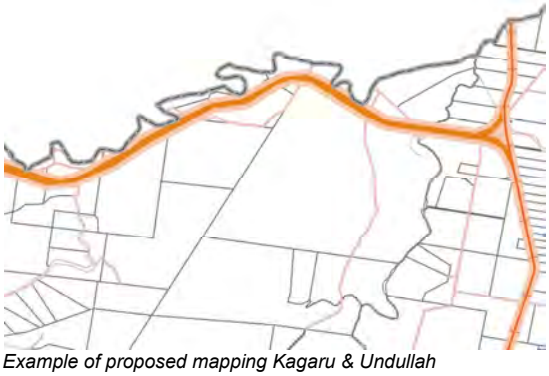
Refer to Attachment 2 - Proposed Overlay Maps to view amended *Overlay Map OM-09 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure.*

Strategic Framework Map SFM-02 Growing Economy

The proposed amendment involves updating the ***Future Rail Network*** alignment and amending the symbology. Refer to Attachment 1 - Proposed Strategic Framework Maps to view amended *Strategic Framework Map SFM-02 Growing Economy.*



Example of current mapping (30.06.2023) Kagaru & Undullah



Example of proposed mapping Kagaru & Undullah

Areas Impacted

The conversion of the ***Future Rail Network*** layer symbology will mean a larger area is affected by both the ***Future Rail Network*** the ***Rail Buffer Area*** layers in Peak Crossing, Washpool, Undullah and Kagaru where the alignment traverses***.***

State Interests

State Planning Policy 2017 - Planning for Infrastructure: Transport Infrastructure

The proposal takes into consideration the State Interest component regarding future state transport corridors. In accordance with Policy (1), (6) and (7) the updated future transport corridors are reflected in the scheme and a new 100m wide buffer (either side) will trigger an application to ensure:

1. development is compatible with the future rail network (Policy (6)); and
2. the safety and efficiency of the corridor is not adversely affected by development (Policy (7)).

Proposed Changes

1. Amend the following maps under Schedule 2 Mapping - SC2.5 Overlay Maps, to update the ***Future Rail Network*** the ***Rail Buffer Area*** layers:
   - OM-09.1 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure
   - OM-09.2 Regional Infrastructure Overlay - Major Electricity Roads & Rail Infrastructure

   (Refer to Amendment 2)

2. Amend SFM-02 Growing Economy under Schedule 2 Mapping - SC2.2 Strategic Framework Maps, to update the ***Future Rail Network*** layer and amend the symbology.
   (Refer to Attachment 1)

Item 28: Update to Minimum Lot Size Overlay Mapping

Summary

Update *Overlay Map OM-13 Minimum Lot Size Overlay* to reflect the amendments made to land zoned Rural Residential under the Zone Maps and amend a mapping error.

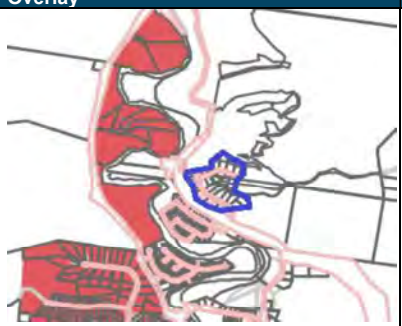
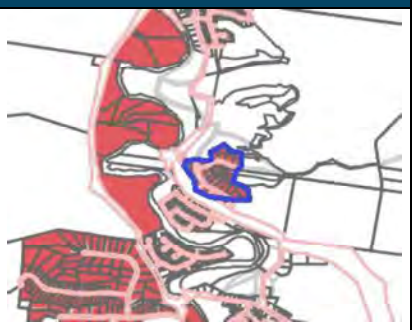
Explanation

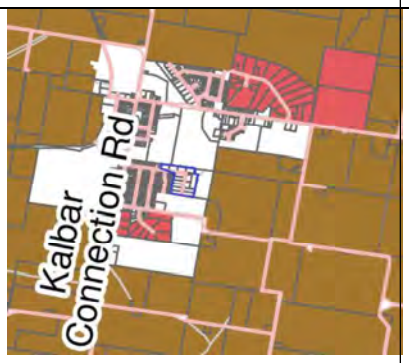
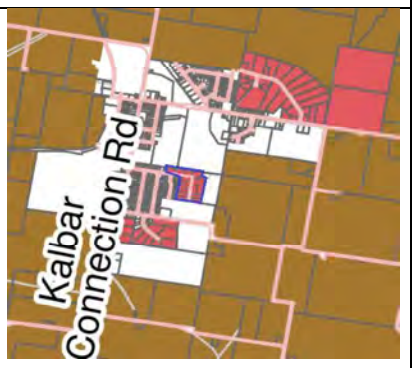
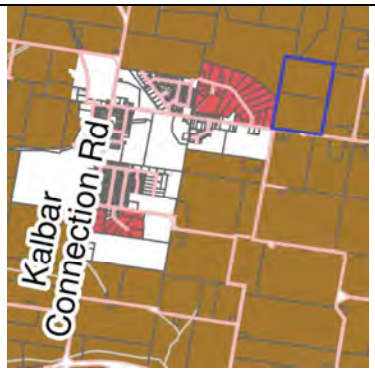
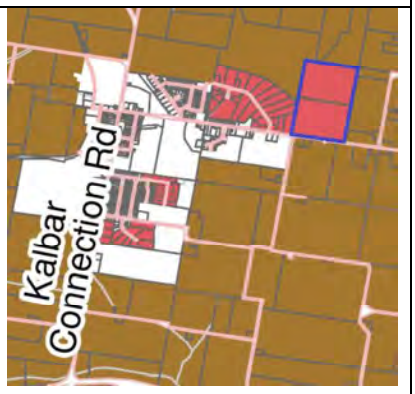
The amendment involves updating *Overlay Map OM-13 Minimum Lot Size Overlay* to reflect the amendments made to land in the Rural Residential Zone where it is located within the Urban Footprint under the Shaping SEQ 2023. All lots are proposed to be included under the ***4000m2 Minimum Area*** layer except for one site Lot 37 SP185265 which involves its removal from the ***1ha Minimum Area*** layer. As part of this amendment package, Lot 37 SP185265 at Aratula is proposed to be zoned Township and no longer has a rural residential zoning (see **Item 25**).

Overlay Map OM-13 Minimum Lot Size Overlay is used as an administrative layer in *Part 5.6 Categories of Development and Assessment - Reconfiguring a Lot* of the Planning Scheme. Rural Residential zoned land occurs across the Scenic Rim Region however subdivision for Rural Residential Zone lots can only occur in the Urban Footprint area (Shaping SEQ 2023) and not in the Regional Landscape and Rural Production Area designation. The map assists in identifying where lots zoned Rural Residential are located in the Urban Footprint and where subdivision can be considered.

A mapping error has been identified for Lot 1 and Lot 2 RP20983 (163 Teviotville Road, Kalbar). The lots currently have a rural subdivision precinct designation under *Overlay Map OM-13 Minimum Lot Size Overlay (**Rural 40ha Precinct**)*. A rural subdivision precinct designation is typically reserved for land identified in the Rural Zone on the Zone Maps. Lot 1 and Lot 2 RP20983 (163 Teviotville Road, Kalbar) however are located in the Rural Residential Zone. Given that the land has a Rural Residential Zone designation and is located in the Urban Footprint, it is proposed that both lots be corrected and included under the ***4000m2 Minimum Area*** rural residential subdivision precinct designation. This is also consistent with the approach for the neighbouring property which has a Rural Residential Zone designation under the Zone Maps and a ***4000m2 Minimum Area*** rural residential subdivision precinct designation under *Overlay Map OM-13 Minimum Lot Size Overlay.*

The following table provides a summary of the amendments:

Property Description and Address	Proposed Layer	Current Mapping (30.06.2023) identifying Lots Subject to Minimum Lot Size Overlay	Proposed Minimum Lot Size Overlay Amendments
Lot 92-111 SP299307 Lot 162-165 SP299037 Lot 175-179 SP299037 **Seymour Dr and Wojei Rise, CANUNGRA and BENOBLE** *See **Item 21** for related Zoning amendment	4000m2 Minimum Area		

Property Description and Address	Proposed Layer	Current Mapping (30.06.2023) identifying Lots Subject to Minimum Lot Size Overlay	Proposed Minimum Lot Size Overlay Amendments
Lot 37 SP185265 **6883 Cunningham Highway ARATULA** *See **Item 25** for related Zoning amendment	**REMOVE** lot from 1ha Minimum Area~ ~Lot is proposed to be amended to Township Zone.		
Lots 25-37 and Lot 39 SP334831 Young Drive KALBAR *See **Item 21** for related Zoning amendment	4000m2 Minimum Area		
Lot 1 and Lot 2 RP20983 **163 Teviotville Road KALBAR** *This amendment is an identified error	4000m2 Minimum Area		

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

Under the Shaping SEQ 2023, subdivision of land in the Rural Residential Zone cannot be contemplated where it has a Regional Land Use Category of *Regional Landscape and Rural Production Area*. The proposal limits any subdivision to urban areas and reinforces *Regional Priority 1 - A Sustainable Growth Pattern.*

Proposed Changes

1. Amend the following maps under Schedule 2 Mapping - SC2.5 Overlay Maps, to update the ***4000m2 Minimum Area*** and ***1ha Minimum Area*** layers:
   - OM-13.1 Minimum Lot Size Overlay
   - OM-13.2 Minimum Lot Size Overlay
   - OM-13.4 Minimum Lot Size Overlay

Item 29: Update to Strategic Framework Map - Communities and Character

Summary

Update *SFM-01 Strategic Framework Map - Communities and Character* mapping to display:

1. Updated ***Township*** and ***Urban Areas*** layers to reflect the updated Urban Footprint boundaries released under Shaping SEQ South East Queensland Regional Plan 2023; and
2. updated ***Acreage Areas*** layer to reflect zoning amendments.

Explanation

The amendment involves updating the following layers on the *SFM-01 Strategic Framework Map - Communities and Character:*

1. Updated Urban Footprint boundaries released under Shaping SEQ South East Queensland Regional Plan 2023 (impacting the ***Township*** and ***Urban Areas*** layers); and
2. updated ***Acreage Areas*** layer.

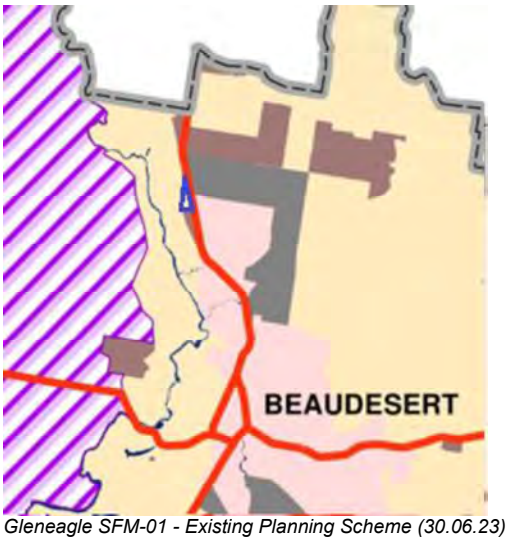
Township and Urban Areas layer

In December 2023, the Shaping SEQ South East Queensland Regional Plan 2023 released new Urban Footprint boundaries. Scenic Rim received approximately 70ha of additional Urban Footprint. The majority of the expansion (approx. 50ha) is located in Harrisville, north of the existing township area. On SFM-01, Harrisville is identified as ***Township*** and the proposed change reflects the expanded Urban Footprint in the north.

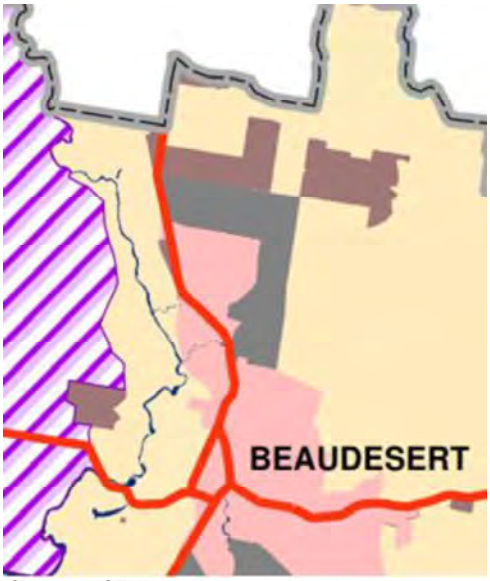
The remainder of the new Urban Footprint expansion is located at Gleneagle (approx. 20ha) on the western side of the Mount Lindesay Highway. This area was in the Regional Landscape Rural Production Area under the former South East Queensland Regional Plan 2017 and was identified as an ***Acreage Area*** on SFM-01. The proposed amendment identifies the lands as ***Urban Area*** on SFM-01 to reflect the new Shaping SEQ 2023 Urban Footprint boundary and make it consistent with surrounding Urban Footprint land.

Harrisville SFM-01 - Existing Planning Scheme (30.06.23)

Harrisville SFM-01 - Proposed amendment



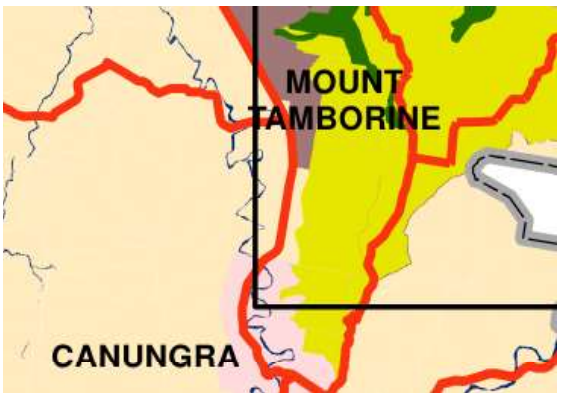
Gleneagle SFM-01 - Existing Planning Scheme (30.06.23)



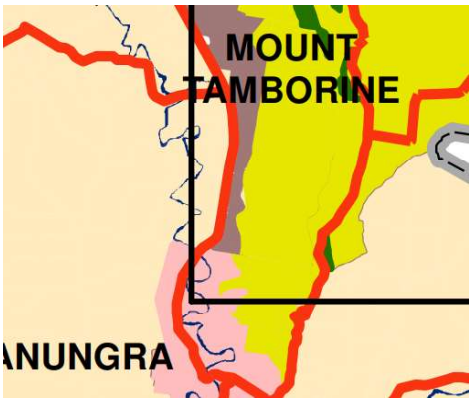
Gleneagle SFM-01 - Proposed amendment

Acreage Areas

The ***Acreage Areas*** layer identified on SFM-01 generally represents the properties zoned Rural Residential Zone - Rural Residential A Precinct (where they are outside of a ***Future Investigation Area***). Land identified as Rural Residential Zone - Rural Residential A Precinct has been altered as part of this amendment package (see **Item 20**, **Item 24**, **Item 25**, and **Item 26** above) and the proposed amendment to SFM-01 reflects the amendments.



Example of Acreage Areas - Existing Planning Scheme (30.06.23)



Example of Acreage Areas - Proposed amendment

State Interests

Shaping SEQ South East Queensland Regional Plan 2023 (Planning Regulation 2017)

Amendments to the ***Township*** and the ***Urban Areas*** layers intend to reflect the new Urban Footprint boundary expressed under the Shaping SEQ 2023.

Proposed Changes

1. Amend *SFM-01 Strategic Framework Map - Communities and Character* map under Schedule 2 Mapping - SC2.2 Strategic Framework Maps to update the ***Township, Urban Areas,*** *and* ***Acreage Areas*** layers.
   (refer to Attachment 1)

Item 30: Deletion of Boundary Realignment definition

Summary

Deletion of definition for ***boundary realignment*** under SC1.2 Administrative Definitions.

Explanation

The definition for ***boundary realignment*** is proposed to be deleted from the definitions under SC1.2 Administrative Definitions of the planning scheme. The definition of *boundary realignment* reads as follows:

> *Means any minor adjustment to the boundary of existing lots that share boundaries and does not create an additional lot.*
>
> ***Note:*** *The purpose of a boundary realignment is for the adjustment of boundaries to remedy existing encroachment and/or land management problems. The adjustment should be minor and the location, areas and dimensions of the lots do not alter significantly.*

The use of the term 'minor' in the definition is subjective and has led to some development applications requiring Impact Assessment, because the adjustment of boundaries was not considered 'minor' (see extract from Table 5.6.1 Reconfiguring a Lot below).

Table 5.6.1 - Reconfiguring a Lot

Zones	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
All Zones	**Code assessment**	
	If involving a *boundary realignment* and no new lots are created.	The relevant Zone Code Reconfiguring a Lot Code Earthworks, Construction and Water Quality Code Infrastructure Design Code

Given assessment triggers need to be objective so that planning scheme users are clearly able to determine the level of assessment for development, an amendment is proposed that deletes this definition.

The removal of the definition is not considered to result in further consequences, or lack of clarity, because the assessment benchmarks for boundary realignments in Section 9.4.6 Reconfiguring a Lot Code are considered to adequately address the outcomes sought for development, including consistency with the zoning and useability of the land in terms of its configuration and servicing.

State Interests

Not applicable.

Proposed Changes

1. In SC1.2 Administrative Definitions, amend Table SC1.2.1 - Index of Administrative Definitions to remove the text Boundary realignment.

2. In SC1.2 Administrative Definitions, amend Table SC1.2.2 - Administrative Definitions as shown below:

Column 1 Administrative Term	Column 2 Definition
~~Boundary realignment~~	~~Means any minor adjustment to the boundary of existing lots that share boundaries and does not create an additional lot.~~ ~~***Note**: The purpose of a boundary realignment is for the adjustment of boundaries to remedy existing encroachment and/or land management problems. The adjustment should be minor and the location, areas and dimensions of the lots do not alter significantly.*~~

Item 31: NEW Post SIR Response June 2025 – Amendment to Renewable Energy Facilities (where involving solar farms) to reflect amendments to the *Planning Regulation 2017*

Summary

Amendment to the level of assessment tables to include Solar Farms, amendment to the definition of Renewable Energy Facility, the introduction of new definition for Solar Farm to reflect changes made in the *Planning Regulation 2017* and other consequential amendments.

Explanation

On 18 July 2025, the State Government amended the planning framework to make all Relevant Solar Farms Impact Assessable and the development application is assessed and decided by the State Assessment and Referral Agency (SARA). A Relevant Solar Farm is a Solar Farm that has a maximum instantaneous electricity output of 1MW or more or a Solar Farm in a Priority Development Area. A Solar Farm with a maximum instantaneous electricity output of less than 1MW will be assessed and decided by the Local Government and will not be required to undertake a Social Impact Assessment (SIA) or have a Community Benefit Agreement (CBA) in place.

In the current planning scheme, Solar Farms (currently identified as a Renewable Energy Facility) are code assessable. As Solar Farms now have their own use definition, they will be included as a separate use in the tables of assessment and be code assessable which is no change from Councill's current policy position on Solar Farms.

Furthermore, the consistent uses and potentially consistent uses table in the Community Facilities Zone, Rural Zone and the Special Purposes Zone Codes have been amended to include Solar Farms as a consistent use. This is no change from Council's current position of Renewable Energy Facilities being a consistent use in these zones.

Lastly, as a consequential amendment, the Parking and Access Code has been included as an assessment benchmark for both a Renewable Energy Facility and Solar Farm. The exclusion of this benchmark for a Renewable Energy Facility is an oversight in the current planning scheme.

This amendment seeks to align the Scenic Rim Planning Scheme with the changes made to the *Planning Regulation 2017*. Specifically, the change involves:

- amendment of the Tables of Assessment in the Community Facilities Zone, Rural Zone (where no precinct applies) and the Special Purposes Zone (Bulk Water Storage Precinct) to include Solar Farms as Code Assessable;
- amendment of the use definition for Renewable Energy Facility to reflect the updated definition in the *Planning Regulation 2017*;
- introduction of a new use definition for Solar Farm to reflect the updated definition in the *Planning Regulation 2017*;
- amendment to the Consistent Uses and Potentially Consistent Uses tables in the Community Facilities Zone, Rural Zone and the Special Purposes Zone to include Solar Farms as a consistent use; and
- including the Parking and Access Code as an assessment benchmark for a Renewable Energy Facility and a Solar Farm.

State Interests

State Planning Policy 2017 - Energy and Water Supply

State Interests (4) requires that the development and supply of renewable energy at the regional, local and individual scale is enabled in appropriate locations. The proposed amendment still supports small scale solar farms in appropriate locations and identifies them as potentially consistent development in the Community Facilities Zone, Rural Zone (Where no precinct applies) and the Special Purposes Zone (Bulk Water Storage Precinct).

Proposed Changes

1. In Part 5 Tables of Assessment, 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.1 Community Facilities Zone, amend Table 5.5.1.1 - Community Facilities Zone as shown below:

Table 5.5.1.1 - Community Facilities Zone

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Renewable energy facility	**Code Assessment**	
		Community Facilities Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code
Solar Farm	**Code Assessment**	
		Community Facilities Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code

2. In Part 5 Tables of Assessment, 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.17 Rural Zone, amend Table 5.5.17.1 - Rural Zone - (Where no precinct applies) as shown below:

Table 5.5.17.1 - Rural Zone - (Where no precinct applies)

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Renewable energy facility	**Code Assessment**	
		Rural Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code
Solar Farm	**Code Assessment**	
		Community Facilities Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code

3. In Part 5 Tables of Assessment, 5.5 Categories of Development and Assessment - Material Change of Use, 5.5.18 Special Purposes Zone, amend Table 5.5.18.1 - Special Purposes Zone - Bulk Water Storage Precinct as shown below:

Table 5.5.18.1 - Special Purposes Zone - Bulk Water Storage Precinct

Use	Categories of development and assessment	Assessment benchmarks for assessable development and requirements for accepted development
Renewable energy facility	**Code Assessment**	
		Special Purpose Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code
Solar Farm	**Code Assessment**	
		Community Facilities Zone Code Earthworks, Construction and Water Quality Code General Development Provisions Code Landscaping Code Parking and Access Code

4. In Part 6, 6.2.1 Community Facilities Zone Code, amend Table 6.2.1.2.1 - Consistent Uses and Potentially Consistent Uses in the Community Facilities Zone as shown below:

Table 6.2.1.2.1 - Consistent Uses and Potentially Consistent Uses in the Community Facilities Zone

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Infrastructure Activities	
Air service (where involving a helipad for Emergency Services) Major electricity infrastructure Renewable energy facility Solar Farm Substation Telecommunications facility Utility installation	Air service*

** other than as specified in column 1*

5. In Part 6, 6.2.17 Rural Zone Code, amend Table 6.2.17.2.1 - Consistent Uses and Potentially Consistent Uses in the Rural Zone (Where no precinct applies) as shown below:

Table 6.2.17.2.1 - Consistent Uses and Potentially Consistent Uses in the Rural Zone (Where no precinct applies)

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Infrastructure Activities	
Landing Major electricity infrastructure Renewable energy facility Solar Farm Substation Telecommunications facility Utility installation	

** other than as specified in column 1*

6. In Part 6, 6.2.18 Special Purpose Zone Code, amend Table 6.2.18.2.1 - Consistent Uses and Potentially Consistent Uses in the Special Purposes Zone - Bulk Water Storage Precinct as shown below:

Table 6.2.18.2.1 - Consistent Uses and Potentially Consistent Uses in the Special Purposes Zone - Bulk Water Storage Precinct

Column 1 Consistent Uses	Column 2 Potentially Consistent Uses
Infrastructure Activities	
Major electricity infrastructure Renewable energy facility Solar Farm Substation Telecommunications facility Utility installation (where involving minor utility installation or groundwater extraction)	Air service Utility installation*

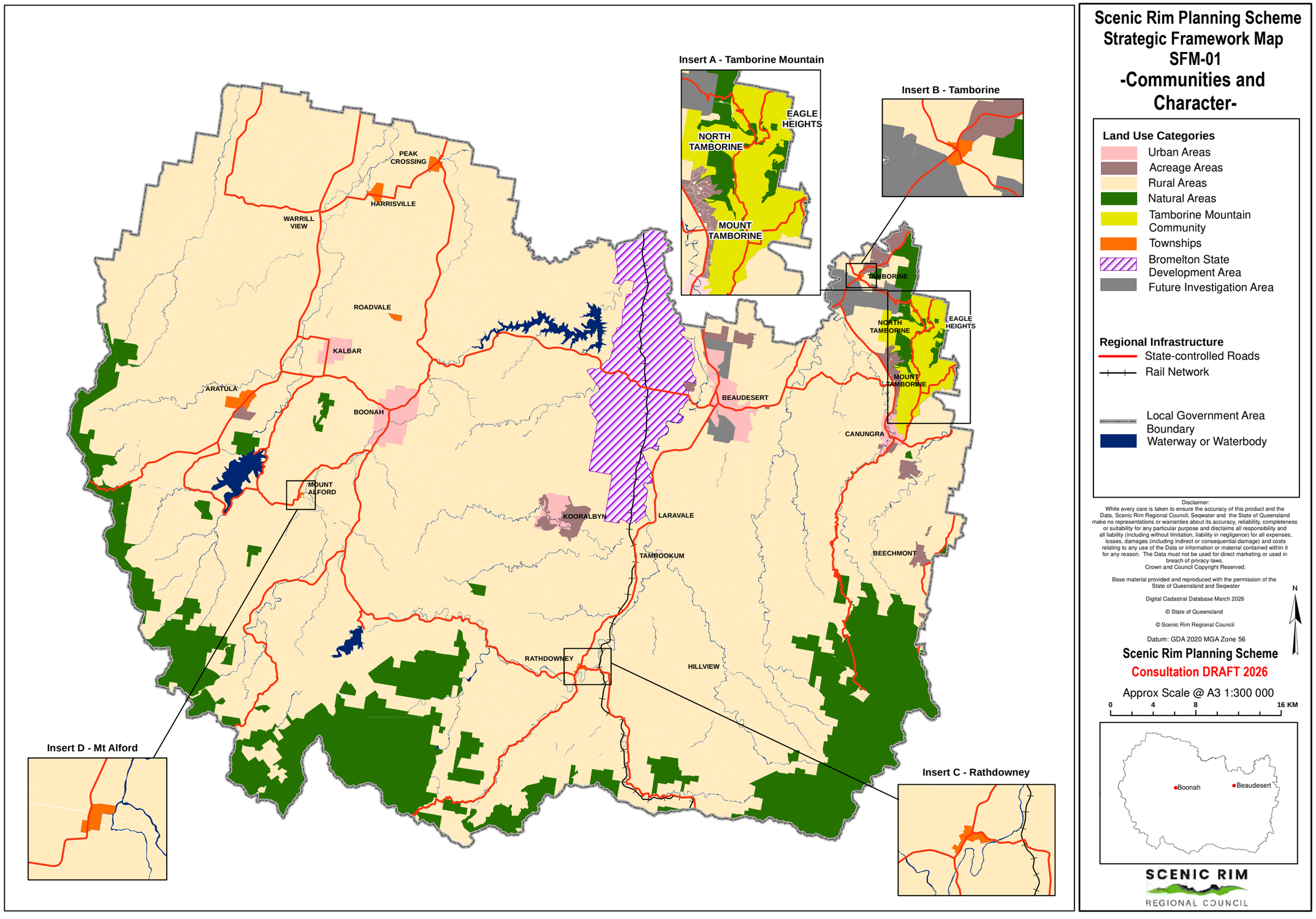
** other than as specified in column 1*

7. In SC1.1 Use Definitions, amend Table SC1.1.2 - Use Definitions as shown below:

Regulated requirements		Guidance	
Column 1 Use	**Column 2 Definition**	**Column 3 Examples include**	**Column 4 Does not include the following examples**
Renewable energy facility	a. means the use of premises for the generation of electricity or energy from a renewable energy source, including, for example, sources of bioenergy, geothermal energy, hydropower, ocean energy, ~~solar energy~~ or wind energy; but ~~b. does not include the use of premises to generate electricity or energy to be used mainly on the premises.~~ b. does not include – i. the use of premises for the generation of electricity or energy to be used mainly on the premises; or ii. a solar farm; or iii. a wind farm.	~~solar farm,~~ tidal power	wind turbine or solar panels supplying energy to domestic or rural activities on the same site
Solar farm	a. means the use of premises for the generation of electricity or energy from a source of solar energy, other than electricity or energy to be used mainly on the premises; and b. includes the use of premises for any of the following if the use		solar panels supplying energy to domestic or rural activities on the same site

Regulated requirements		Guidance	
Column 1 Use	**Column 2 Definition**	**Column 3 Examples include**	**Column 4 Does not include the following examples**
	relates, or is ancillary, to the use stated in paragraph (a) – i. a building or structure, including, for example, a site office or temporary workers' accommodation; ii. a storage area or maintenance facility, including, for example, a lay down area; iii. infrastructure or works, including, for example, site access, foundations, electrical works, substations, facilities or devices for storing and releasing energy, or landscaping.		

Attachment 1 - Proposed Strategic Framework Maps



Scenic Rim Planning Scheme Strategic Framework Map SFM-01 -Communities and Character-

Land Use Categories
- Urban Areas
- Acreage Areas
- Rural Areas
- Natural Areas
- Tamborine Mountain Community
- Townships
- Bromelton State Development Area
- Future Investigation Area

Regional Infrastructure
- State-controlled Roads
- Rail Network

- Local Government Area Boundary
- Waterway or Waterbody

Datum: GDA 2020 MGA Zone 56

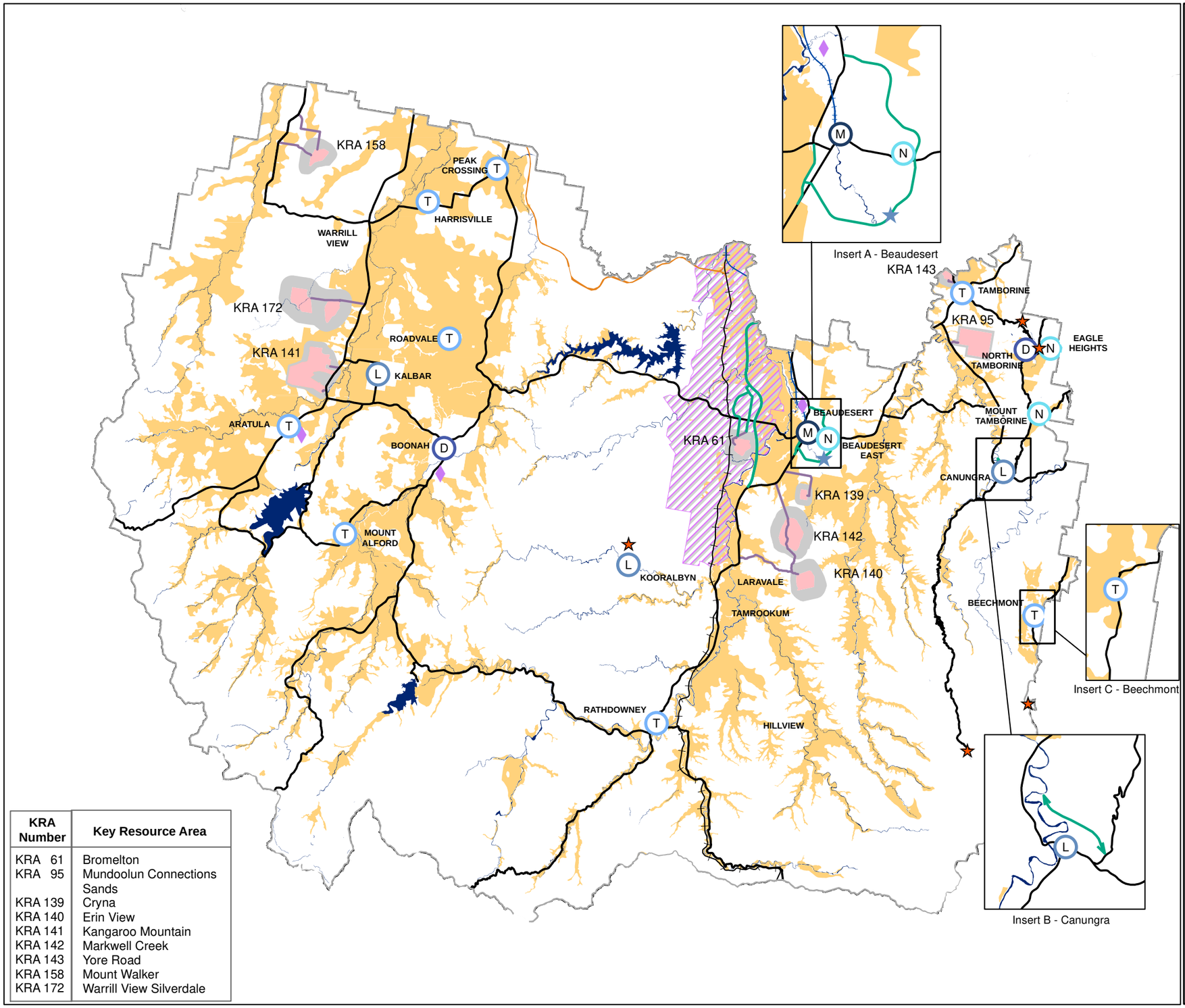
Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:300 000

0 4 8 16 KM

SCENIC RIM REGIONAL COUNCIL



KRA Number	Key Resource Area
KRA 61	Bromelton
KRA 95	Mundoolun Connections Sands
KRA 139	Cryna
KRA 140	Erin View
KRA 141	Kangaroo Mountain
KRA 142	Markwell Creek
KRA 143	Yore Road
KRA 158	Mount Walker
KRA 172	Warrill View Silverdale

Scenic Rim Planning Scheme
Strategic Framework Map SFM-02
-Growing Economy-

Centres Hierarchy
- Major Centre
- District Centre
- Local Centre
- Neighbourhood Centre
- Township
- Future Neighbourhood Centre

Land Use Categories
- Key Tourism Areas
- Industry
- Bromelton State Development Area

Natural Resources

Agricultural Land
- Agricultural Land Classification (Class A and Class B)

Key Resource Areas
- Resource Area/ Processing Area
- Extractive Resource Separation Area
- Transport Route
- Transport Route Separation Area

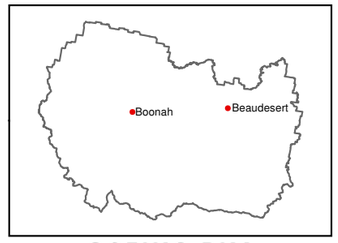
Regional Infrastructure
- State-controlled Roads
- Road Investigation Corridor
- Rail Network
- Future Rail Network
- Rail Investigation Corridor
- Local Government Area Boundary
- Waterway or Waterbody

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

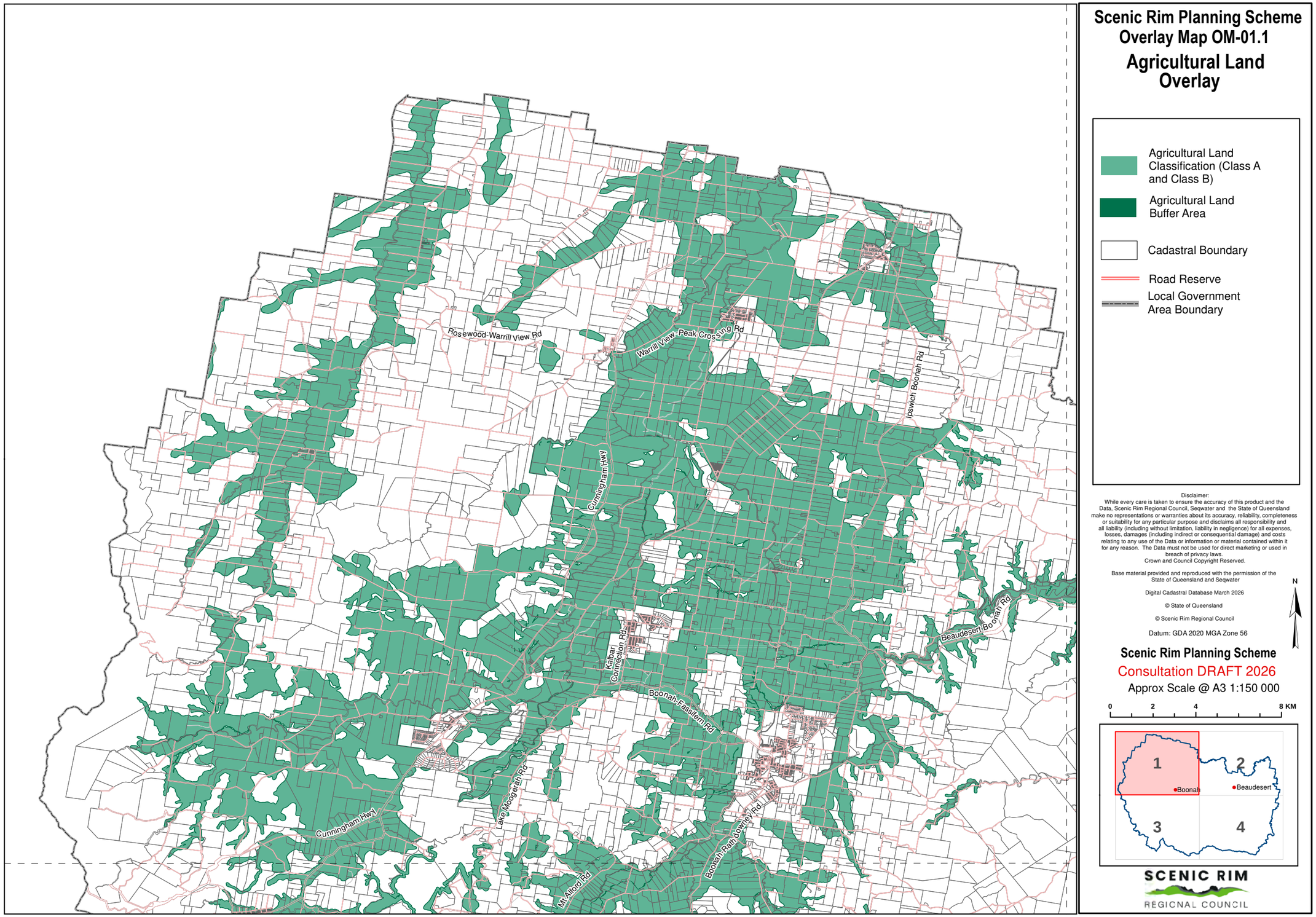
Consultation DRAFT 2026

Approx Scale @ A3 1:300 000



SCENIC RIM REGIONAL COUNCIL

Attachment 2 - Proposed Overlay Maps



Scenic Rim Planning Scheme Overlay Map OM-01.1

Agricultural Land Overlay

- Agricultural Land Classification (Class A and Class B)
- Agricultural Land Buffer Area
- Cadastral Boundary
- Road Reserve
- Local Government Area Boundary

Datum: GDA 2020 MGA Zone 56

N

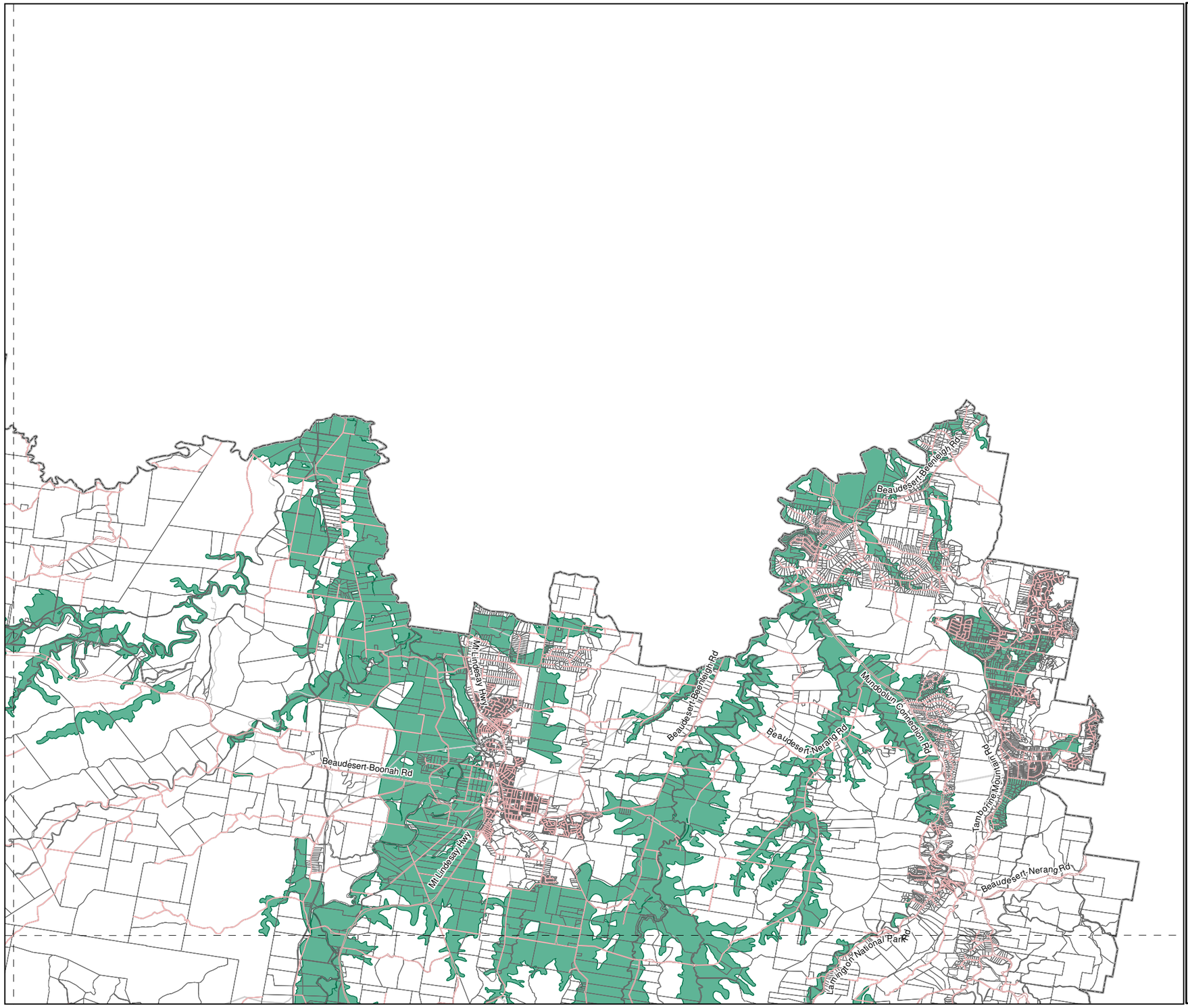
Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:150 000

0 2 4 8 KM

SCENIC RIM REGIONAL COUNCIL



Scenic Rim Planning Scheme Overlay Map OM-01.2

Agricultural Land Overlay

- Agricultural Land Classification (Class A and Class B)
- Agricultural Land Buffer Area
- Cadastral Boundary
- Road Reserve
- Local Government Area Boundary

Datum: GDA 2020 MGA Zone 56

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Scenic Rim Planning Scheme

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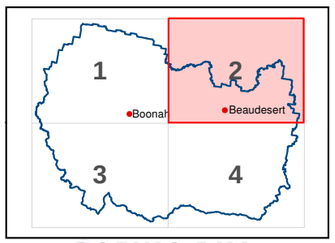

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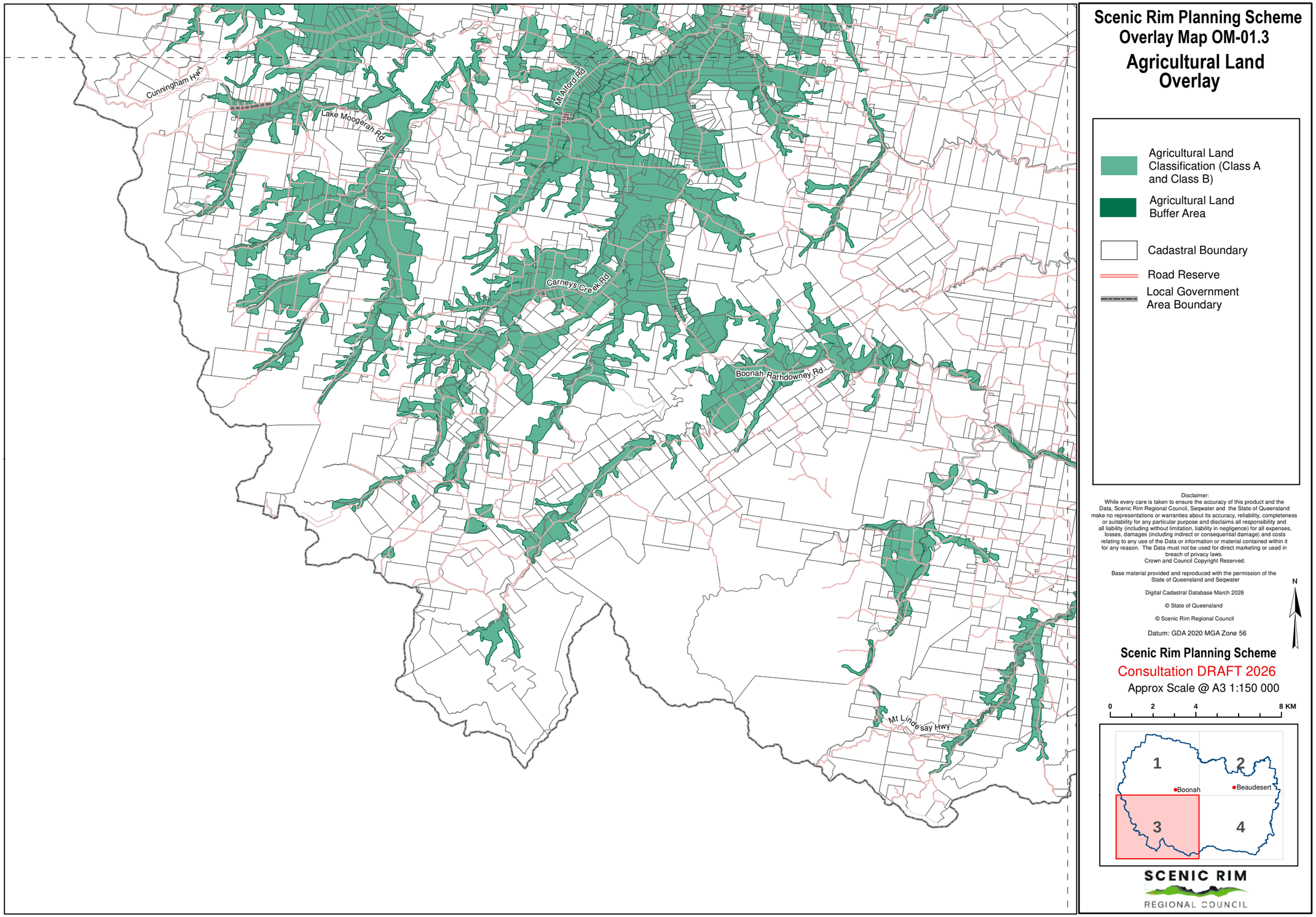
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Carneys Creek Rd
Boonah-Rathdowney Rd
Mt Lindesay Hwy
Scenic Rim Planning Scheme
Overlay Map OM-01.3
Agricultural Land Overlay
Agricultural Land Classification (Class A and Class B)
Agricultural Land Buffer Area
Cadastral Boundary
Road Reserve
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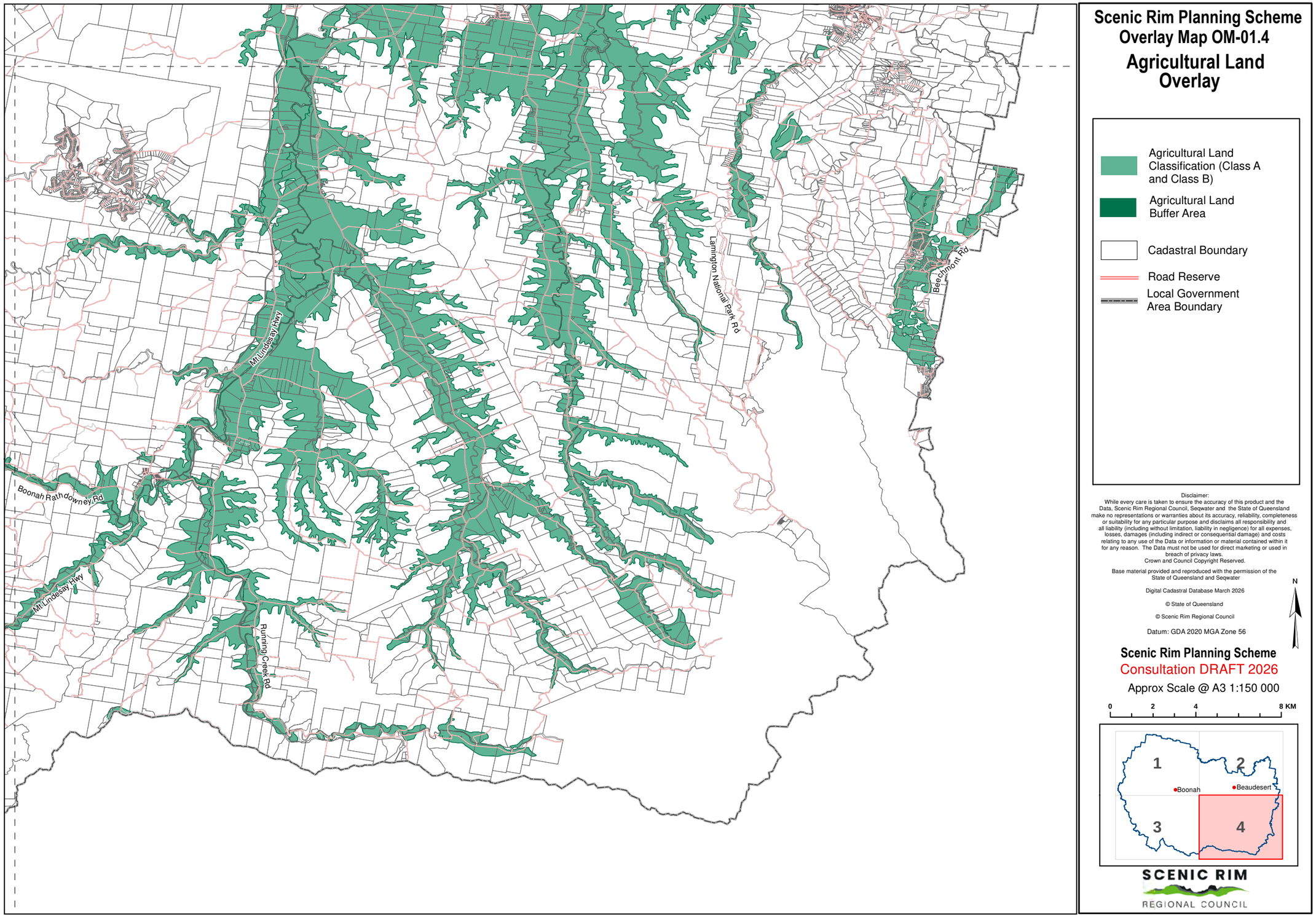
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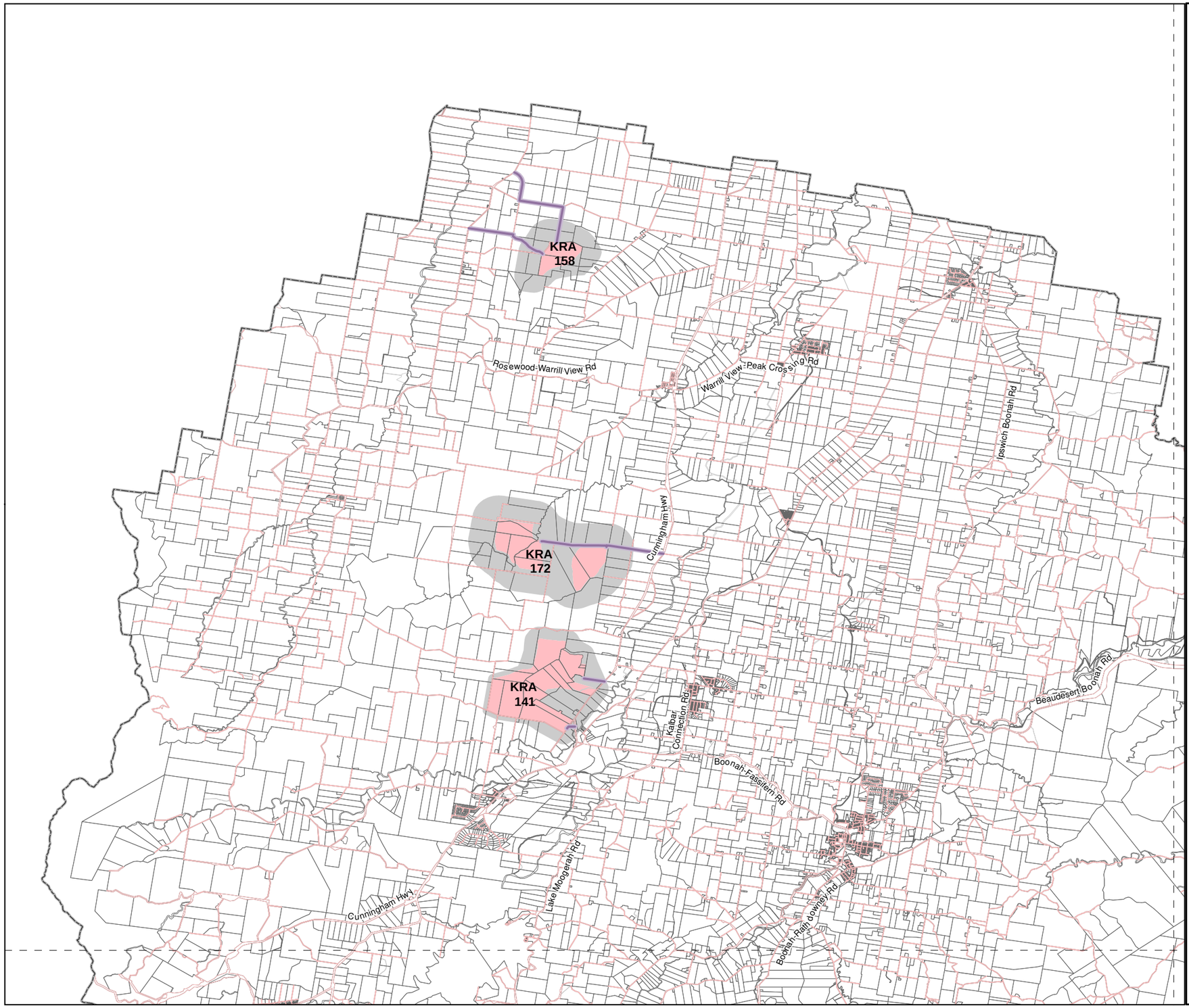

Scenic Rim Planning Scheme Overlay Map OM-05.1

Extractive Resources Overlay

Key Resource Areas (KRA)

- Resource Area / Processing Area
- Separation Area
- Transport Route
- Transport Route Separation Area
- Cadastral Boundary
- Road Reserve
- Local Government Area Boundary

KRA Number	Key Resource Area
KRA 61	Bromelton
KRA 95	Mundoolun Connections Sands
KRA 139	Cryna
KRA 140	Erin View
KRA 141	Kangaroo Mountain
KRA 142	Markwell Creek
KRA 143	Yore Road
KRA 158	Mount Walker
KRA 172	Warrill View Silverdale

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

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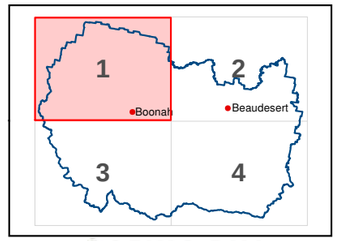

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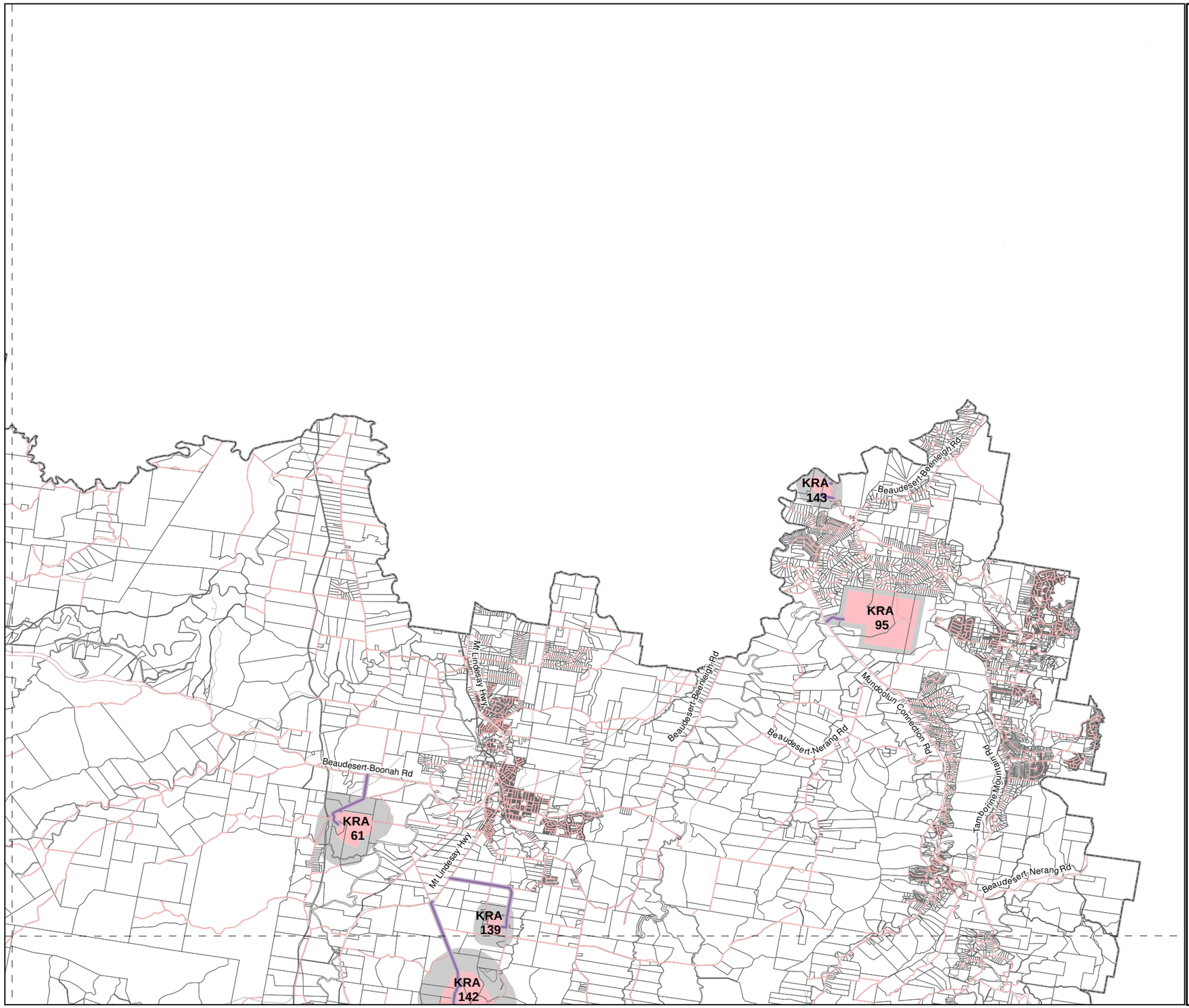

Scenic Rim Planning Scheme Overlay Map OM-05.2

Extractive Resources Overlay

Key Resource Areas (KRA)

- Resource Area / Processing Area
- Separation Area
- Transport Route
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- Cadastral Boundary
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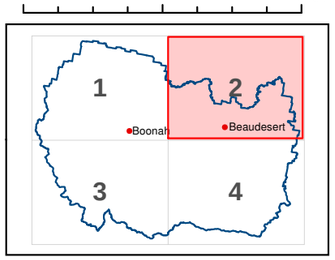

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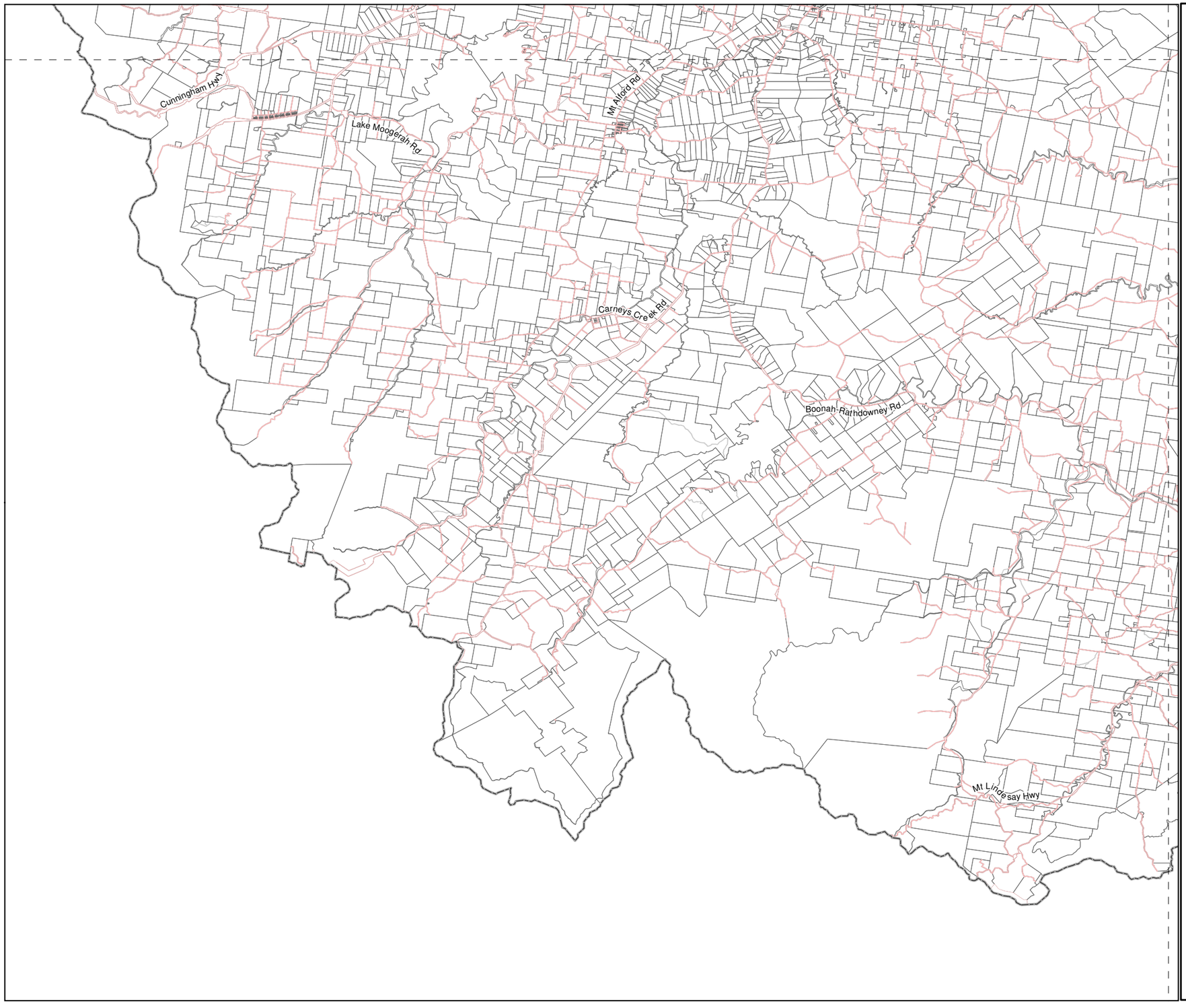

Scenic Rim Planning Scheme Overlay Map OM-05.3

Extractive Resources Overlay

Key Resource Areas (KRA)

- Resource Area / Processing Area
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- Transport Route
- Transport Route Separation Area
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Scenic Rim Planning Scheme

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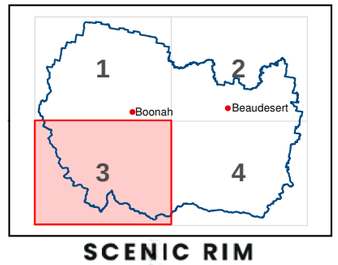

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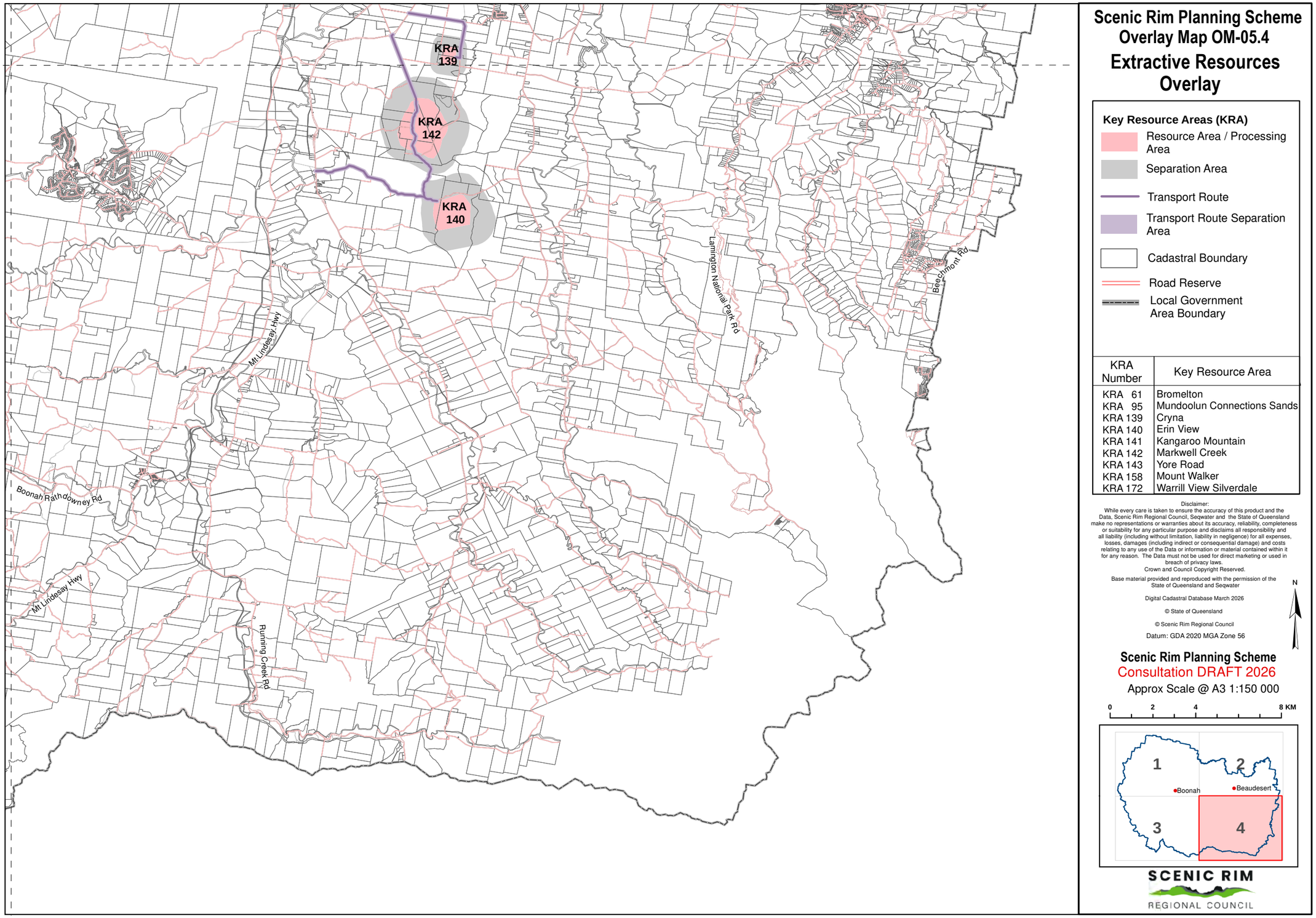

Scenic Rim Planning Scheme Overlay Map OM-05.4

Extractive Resources Overlay

Key Resource Areas (KRA)

- Resource Area / Processing Area
- Separation Area
- Transport Route
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- Cadastral Boundary
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KRA Number	Key Resource Area
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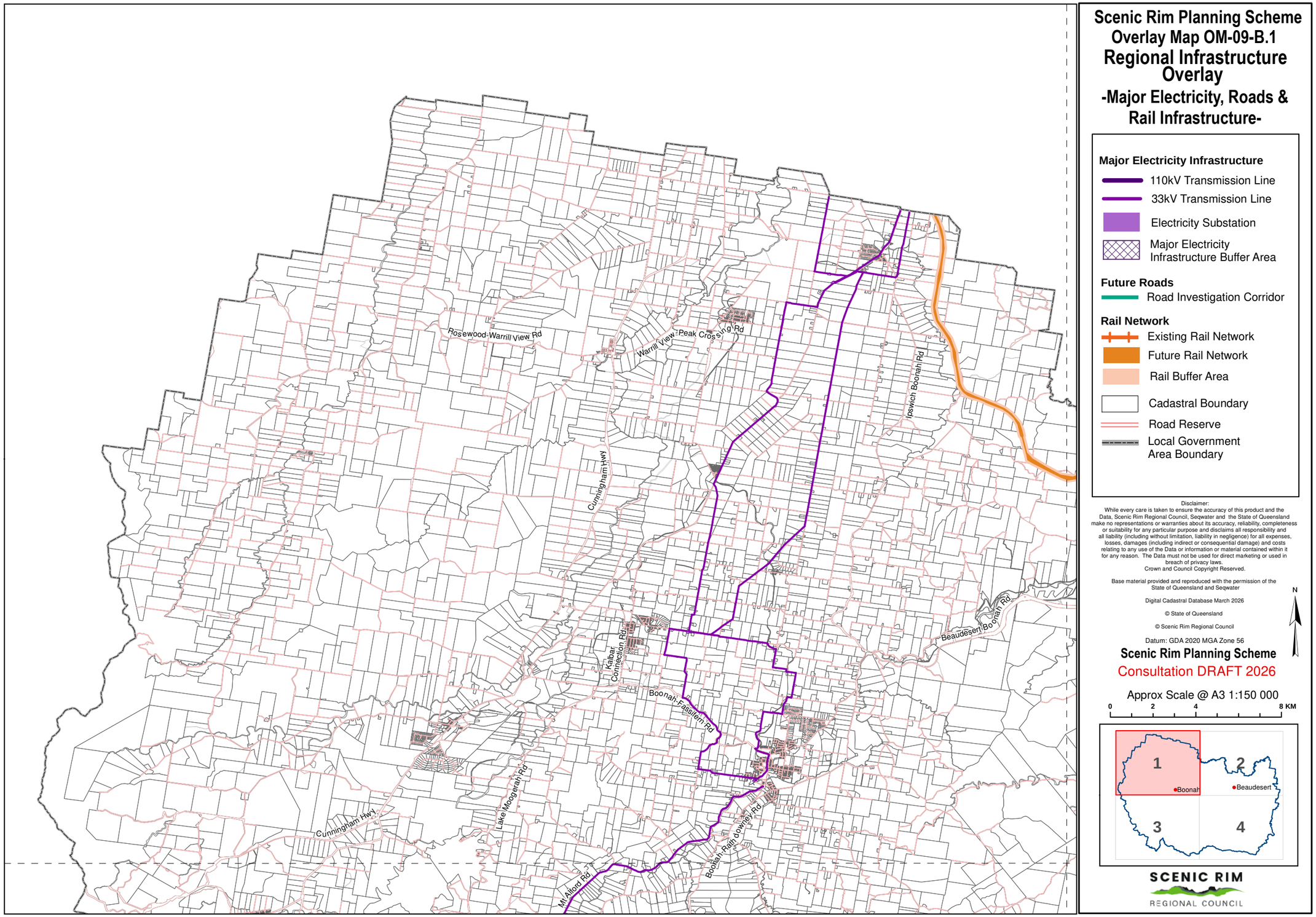

Scenic Rim Planning Scheme
Overlay Map OM-09-B.1
Regional Infrastructure Overlay
-Major Electricity, Roads & Rail Infrastructure-

Major Electricity Infrastructure
- 110kV Transmission Line
- 33kV Transmission Line
- Electricity Substation
- Major Electricity Infrastructure Buffer Area

Future Roads
- Road Investigation Corridor

Rail Network
- Existing Rail Network
- Future Rail Network
- Rail Buffer Area

- Cadastral Boundary
- Road Reserve
- Local Government Area Boundary

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

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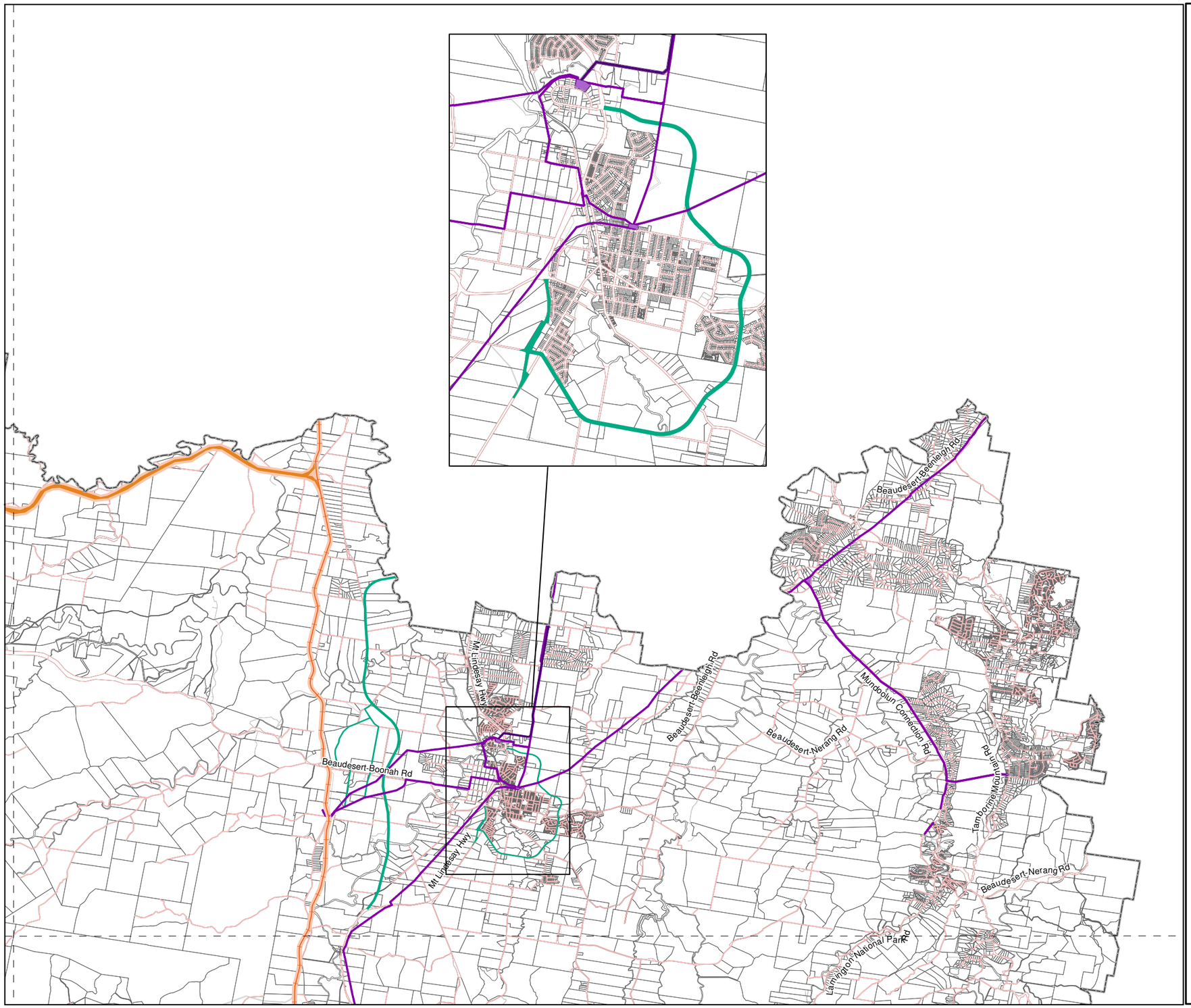

Scenic Rim Planning Scheme
Overlay Map OM-09-B.2
Regional Infrastructure Overlay
-Major Electricity, Roads & Rail Infrastructure-

Major Electricity Infrastructure
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Scenic Rim Planning Scheme

Consultation DRAFT 2026

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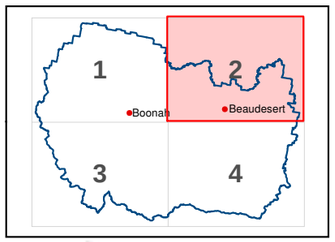

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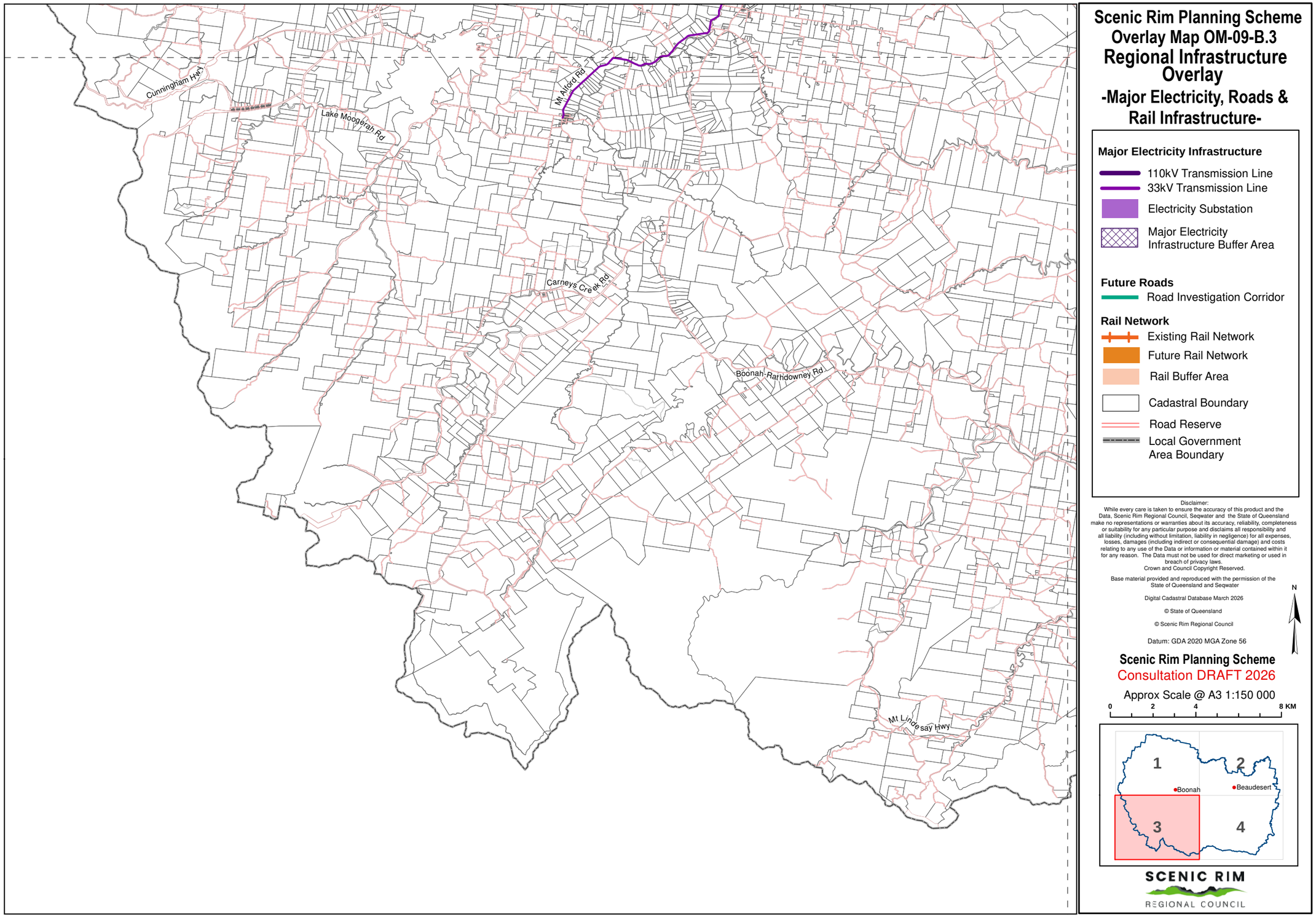
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Overlay Map OM-09-B.3
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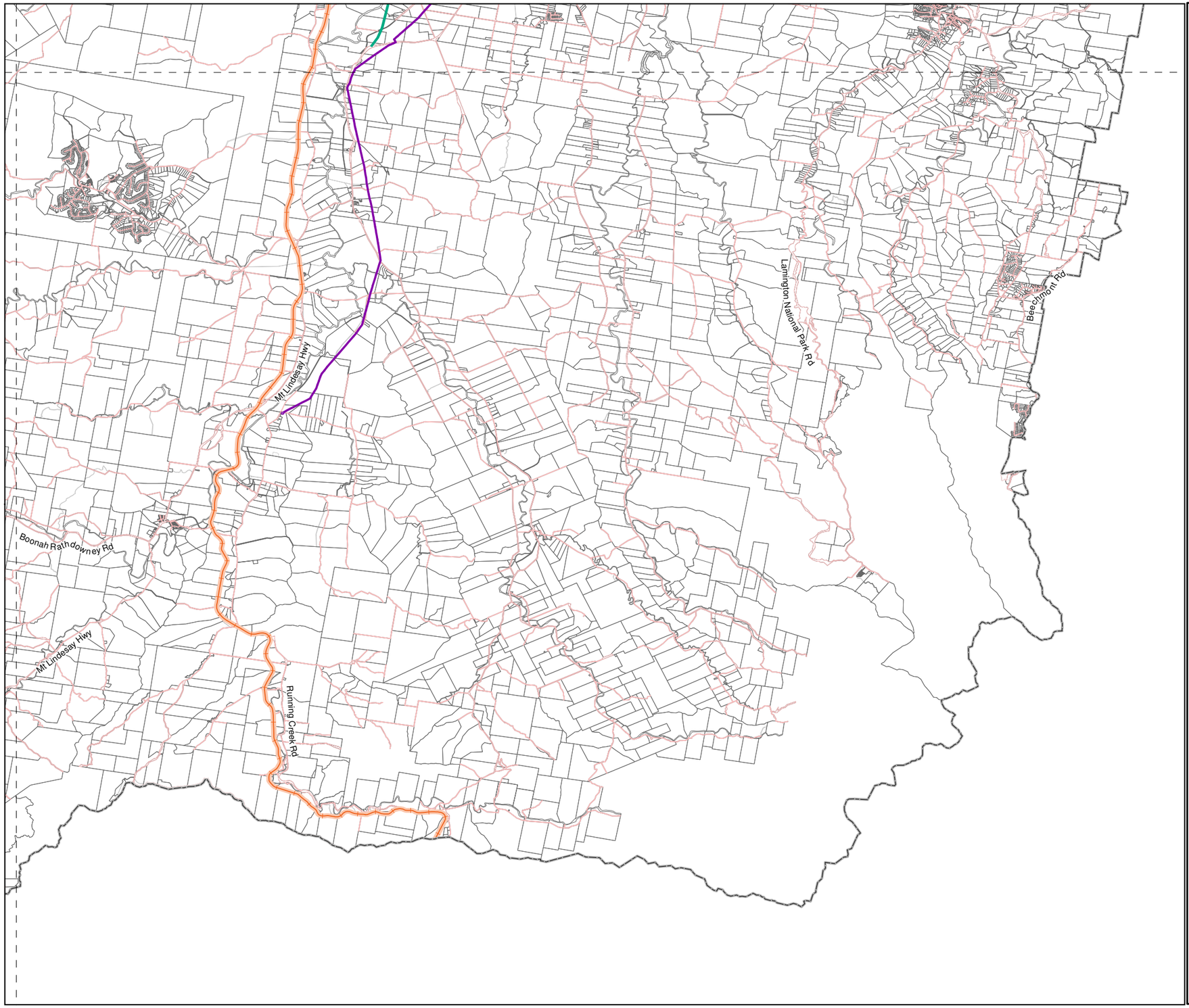

Scenic Rim Planning Scheme
Overlay Map OM-09-B.4
Regional Infrastructure Overlay
-Major Electricity, Roads & Rail Infrastructure-

Major Electricity Infrastructure
- 110kV Transmission Line
- 33kV Transmission Line
- Electricity Substation
- Major Electricity Infrastructure Buffer Area

Future Roads
- Road Investigation Corridor

Rail Network
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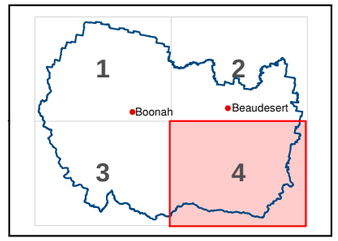

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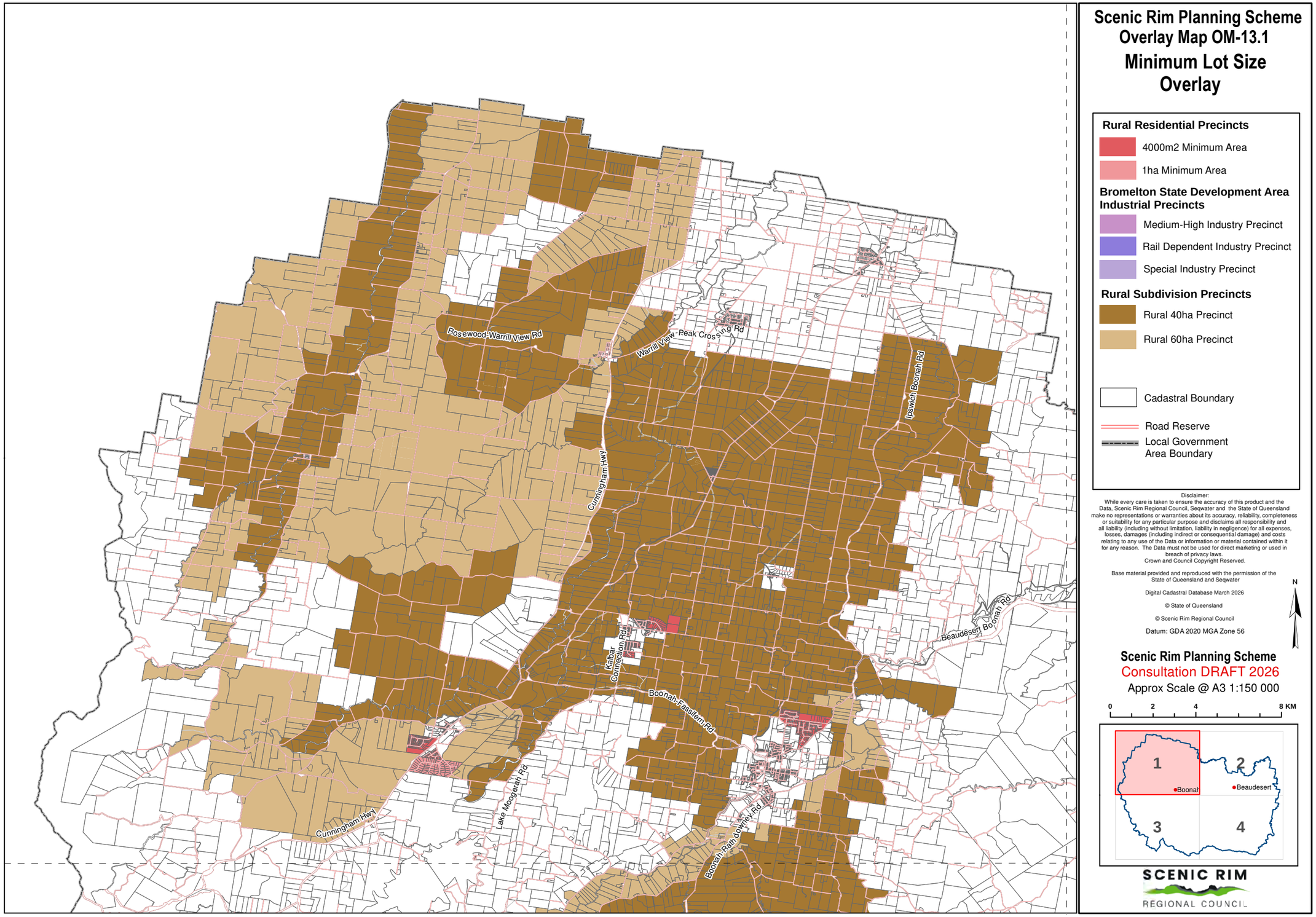

Scenic Rim Planning Scheme Overlay Map OM-13.1

Minimum Lot Size Overlay

Rural Residential Precincts

- 4000m2 Minimum Area
- 1ha Minimum Area

Bromelton State Development Area Industrial Precincts

- Medium-High Industry Precinct
- Rail Dependent Industry Precinct
- Special Industry Precinct

Rural Subdivision Precincts

- Rural 40ha Precinct
- Rural 60ha Precinct

- Cadastral Boundary
- Road Reserve
- Local Government Area Boundary

Datum: GDA 2020 MGA Zone 56

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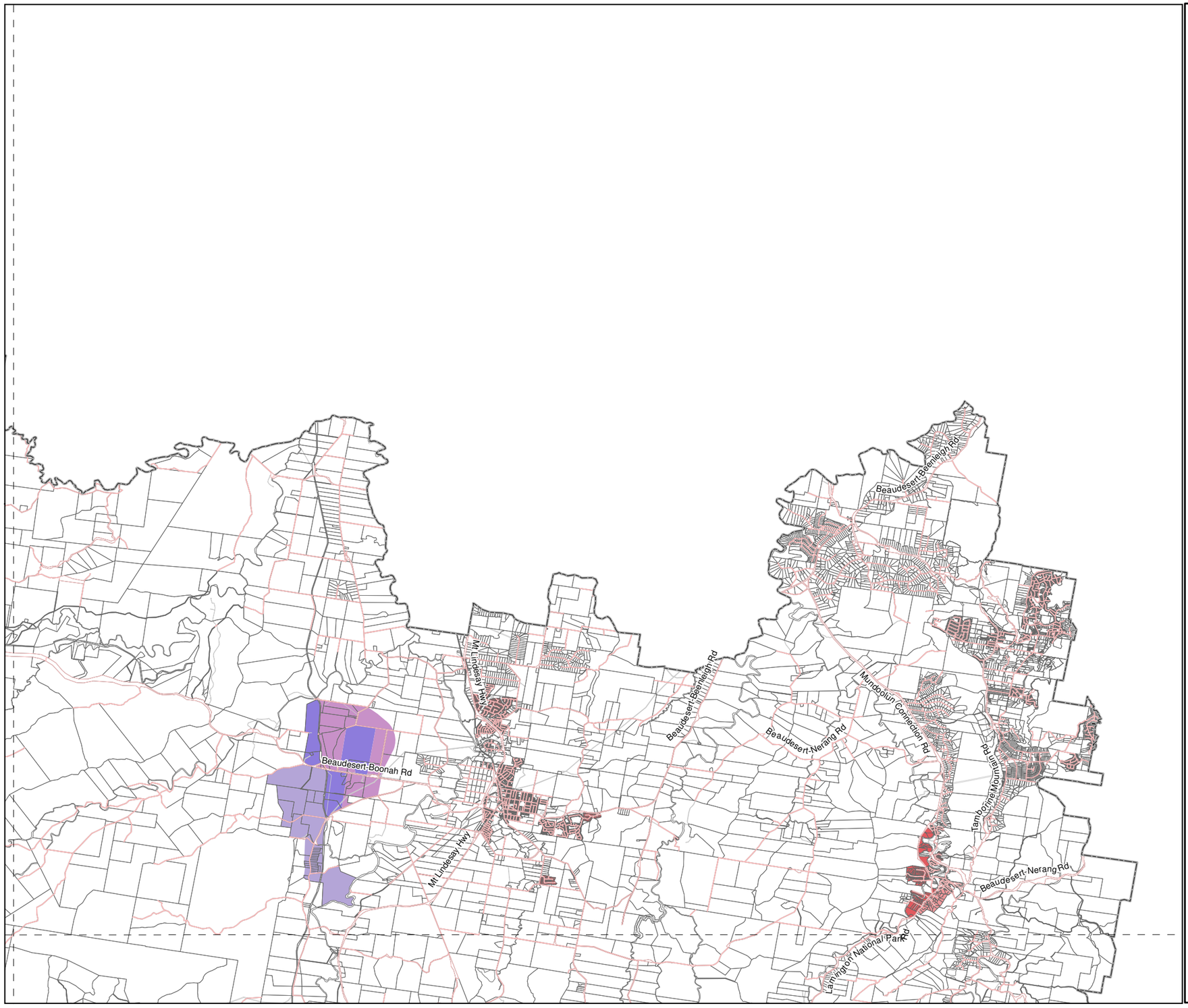

Scenic Rim Planning Scheme Overlay Map OM-13.2

Minimum Lot Size Overlay

Rural Residential Precincts

- 4000m2 Minimum Area
- 1ha Minimum Area

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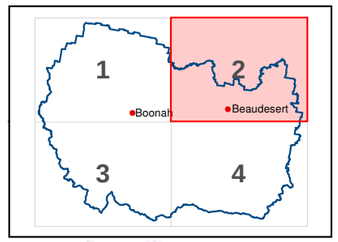

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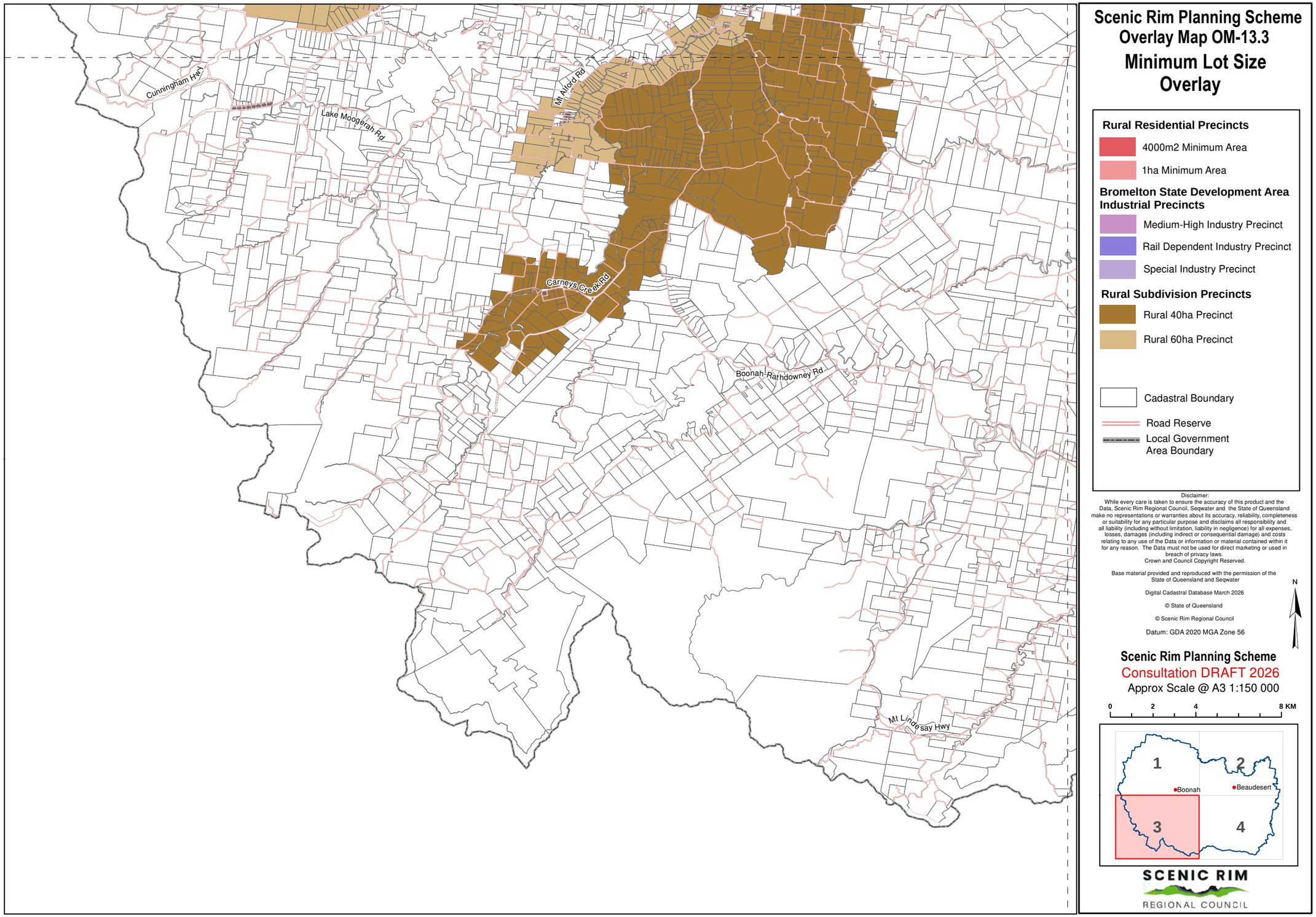
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Overlay Map OM-13.3
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1ha Minimum Area
Bromelton State Development Area Industrial Precincts
Medium-High Industry Precinct
Rail Dependent Industry Precinct
Special Industry Precinct
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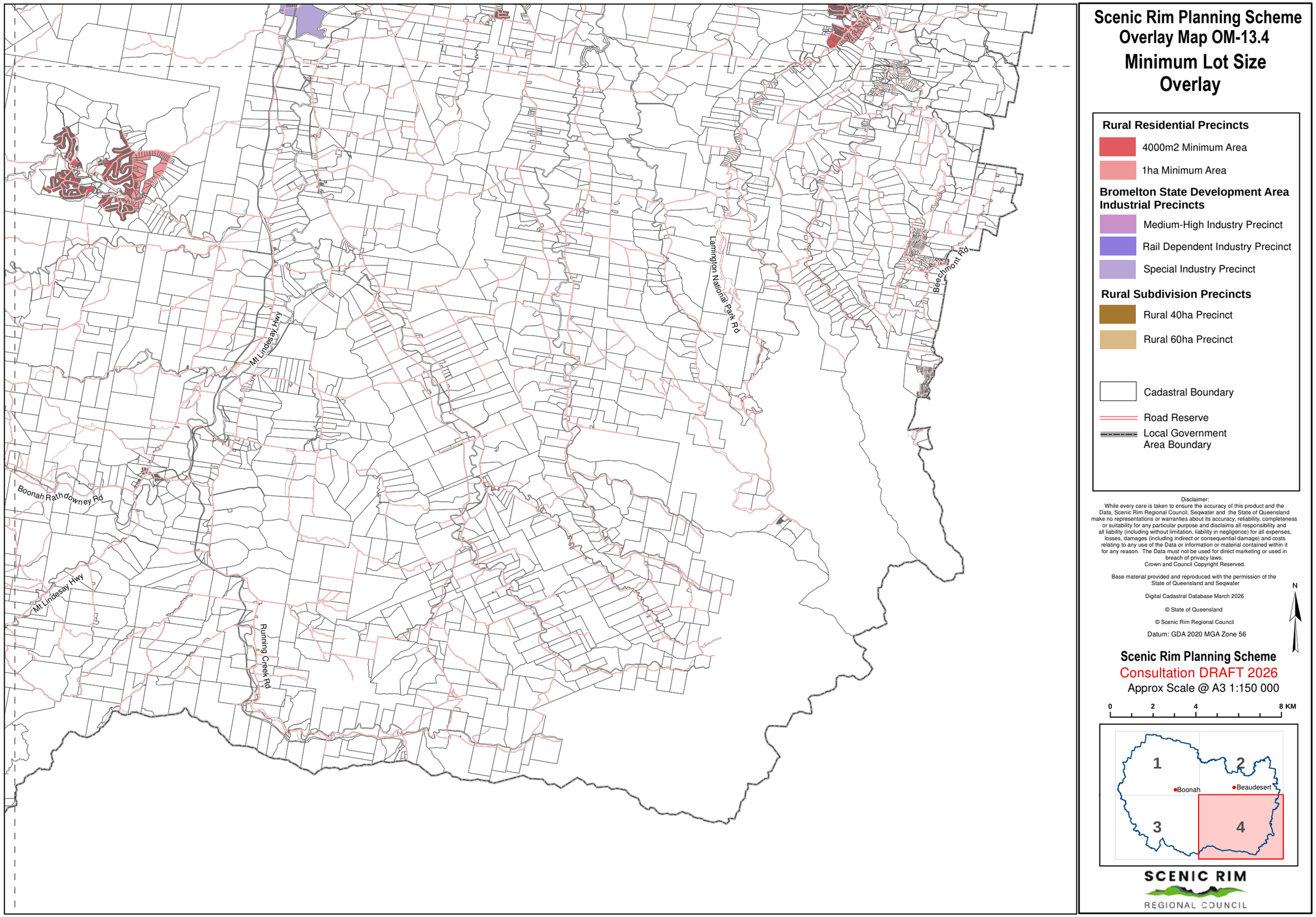
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Attachment 3 - Kangaroo Mountain Key Resource Area - KRA141 Report and Map

KANGAROO MOUNTAIN KEY RESOURCE AREA - KRA 141

LOCAL GOVERNMENT AREA: Scenic Rim Regional Council

LOCATION:
The resource is located west of the Cunningham Highway approximately 4 kilometres north of Aratula, about 4 kilometres west of Kalbar, and about 40 kilometres southwest of Ipswich in Southeast Queensland (see map KRA 141).

EXTRACTIVE RESOURCE: Quarry Rock (and minor sand and gravel)

EXTRACTIVE RESOURCE DESCRIPTION:
The resource consists of a massive trachyandesite intrusion forming a broad northeasterly trending ridge between Kangaroo Mountain on the southern end and an unnamed peak near its northern end. The intrusion is known to be greater than 100 metres thick with varying overburden. A sand and gravel alluvial deposit has been included in the resource area at the western and southern foot of Kangaroo Mountain.

SIGNIFICANCE:
The resource is well placed to supply the expansion of urban development in the South East Queensland Regional Plan Area. The resource is capable of meeting the demand for the Ipswich and Scenic Rim regions for many years. The resource is suitable for most types of construction aggregate and probably rip rap with appropriate extraction techniques.

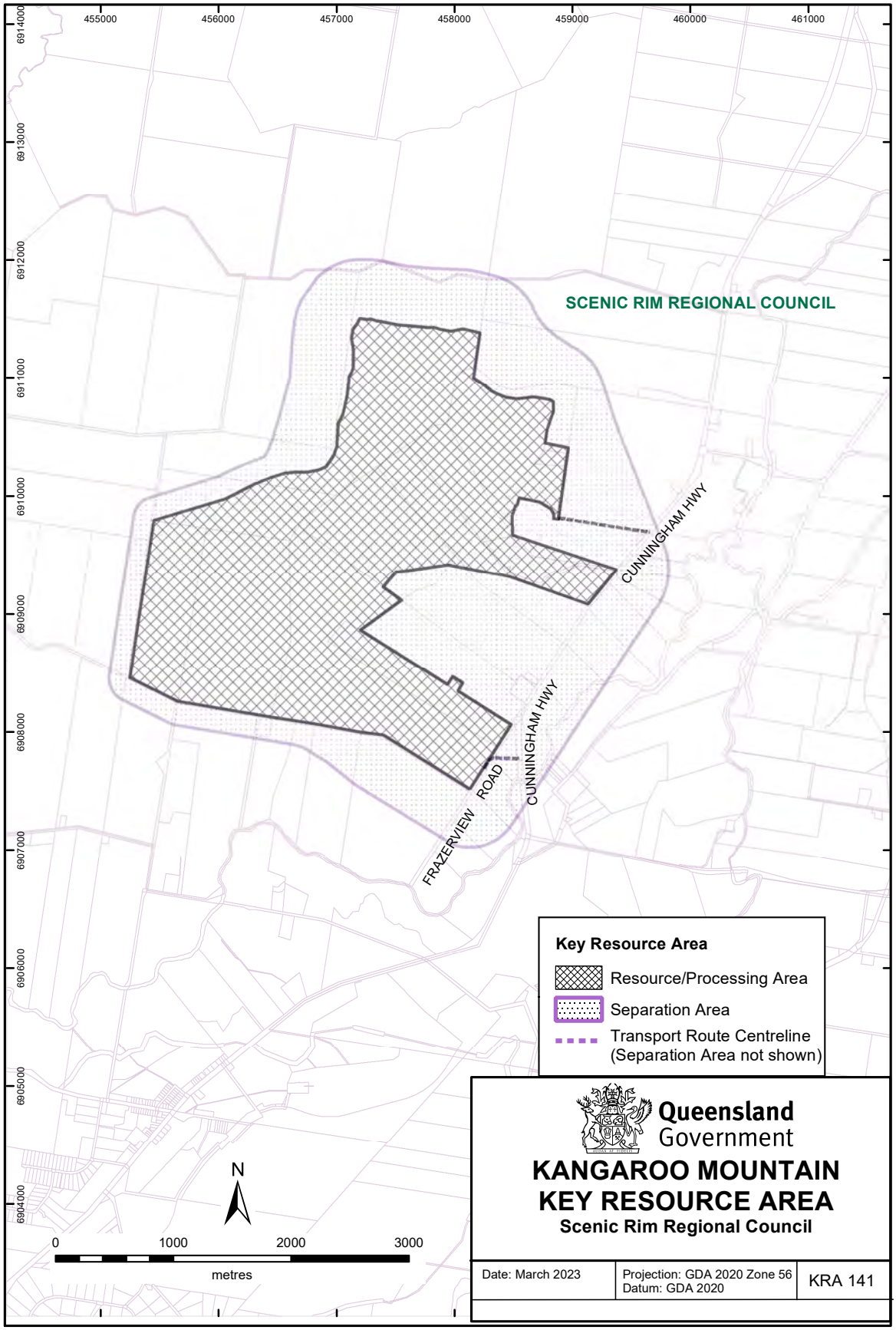
SEPARATION AREA:
The resource/processing area is defined by the area which is screened from adjacent properties and current extractive industry approvals over the western and northern portion of the KRA. As most of this area is surrounded by ridge crests which are higher than the surrounding land, a separation distance of 500 metres from the resource/processing area is applied. A 200 metres separation area is applied around the sand resource at the western portion of the KRA.

TRANSPORT ROUTE:
An existing route exits the centre of the resource using existing road reserves and extends eastwards to the Cunningham Highway. Materials from the northern portion of the KRA are to be transported through Lot 2 on RP209974, directly to the Cunningham Highway.

SPECIAL CONSIDERATIONS:
Some parts of the resource area of the KRA are covered by A1 (Crop land – broadcare and horticulture) and B (Limited crop land) of the Agricultural Land Classification (ALC) within the Agriculture state interest of the State Planning Policy.

A very small part of the resource area contains “of concern dominant” (RE 12.8.16/12.9-10.7) vegetation. Some parts of the resource area also contain “of least concern” (RE 12.8.9/12.8.17) vegetation.

Some parts of the resource area also fall within the Koala Habitat Area (KHA) for South East Queensland.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SCENIC RIM REGIONAL COUNCIL
CUNNINGHAM HWY
CUNNINGHAM HWY
FRAZERVIEW ROAD
Key Resource Area
Resource/Processing Area
Separation Area
Transport Route Centreline
(Separation Area not shown)
Queensland Government
KANGAROO MOUNTAIN
KEY RESOURCE AREA
Scenic Rim Regional Council
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2000
3000
metres
Date: March 2023
Projection: GDA 2020 Zone 56
Datum: GDA 2020
KRA 141

Attachment 4 - Warrill View Silverdale Key Resource Area - KRA172 Report and Map

WARRILL VIEW SILVERDALE KEY RESOURCE AREA – KRA 172

LOCAL GOVERNMENT AREA: Scenic Rim Regional Council

LOCATION:
The resource is located west of the Cunningham Highway about 6 kilometres north west of Kalbar, about 8 kilometres south west of Warrill View and about 35 kilometres south west of Ipswich (see map KRA 172).

EXTRACTIVE RESOURCE: Quarry Rock

EXTRACTIVE RESOURCE DESCRIPTION:
The main rock at the site consists of massive, hard, durable and variably weathered trachyte. Minor occurrence of basalt and meta-sediments have also been reported.

Scenic Rim Regional Council approved a quarry within the northern resource area in August 2019. Material test work results confirmed that the unweathered rock is of high strength, hardness and durability and will be suitable for use as concrete, asphalt and sealing aggregates.

SIGNIFICANCE:
The resource is well placed to supply the expansion of urban development in the South East Queensland Regional Plan Area. The resource is capable of meeting the demand for the Ipswich and Scenic Rim regions for many years.

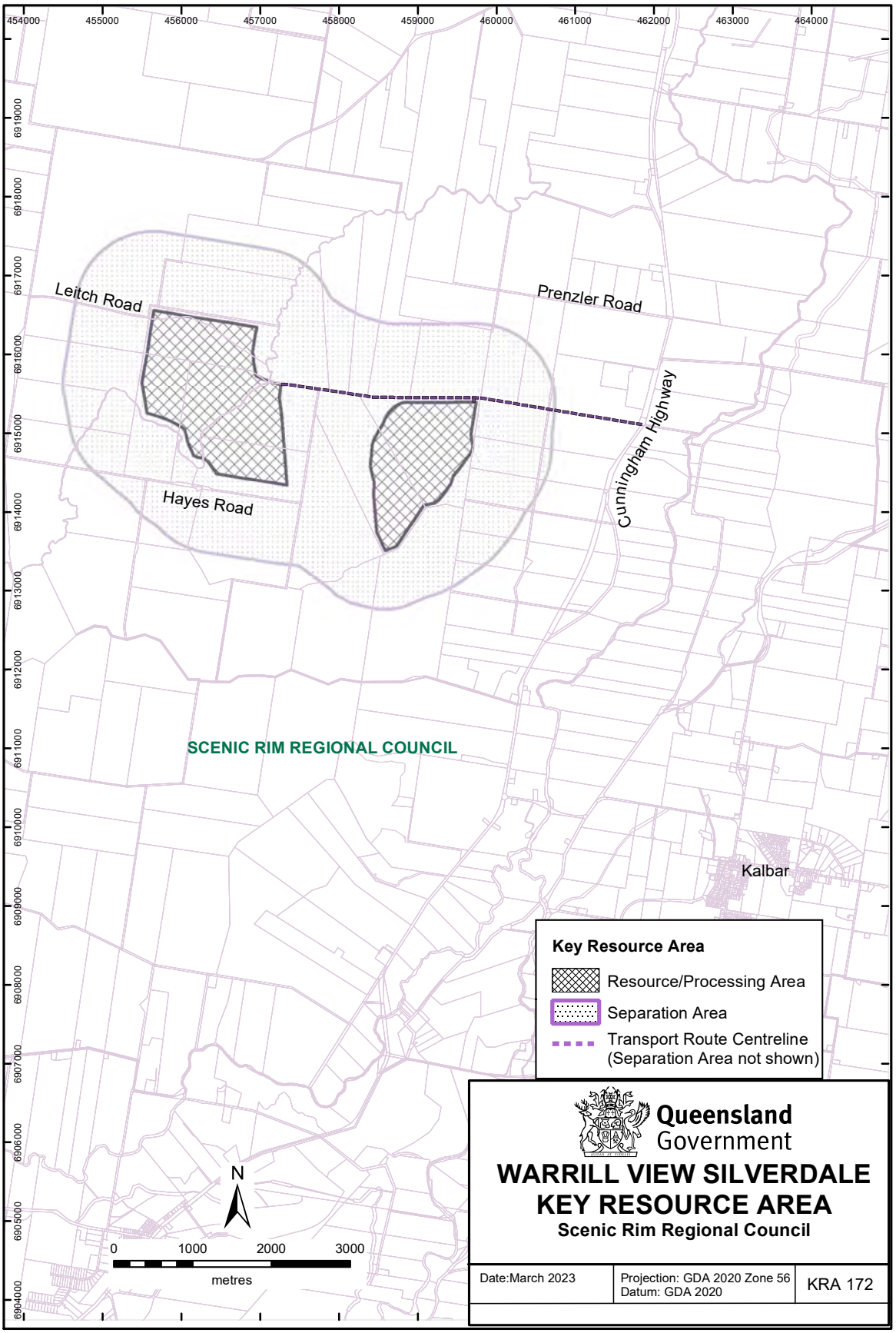
The resource is suitable for most types of construction aggregate and capable of producing rip rap and unbound pavement materials.

The resource meets the KRA criteria in terms of its size and production capacity and ability to supply to more than one significant market area of the region.

SEPARATION AREA:
A separation distance of 1000 metres has been applied mostly around the resource area as the surrounding areas are lower than the resource area. The south east side has a reduced 750 metres separation distance as this side is screened by a ridge.

TRANSPORT ROUTE:
The materials are transported from the site via an unformed unnamed road onto the Cunningham Highway. The Council has set a condition to construct this road to an asphalt seal standard before commencing the quarry operation.

SPECIAL CONSIDERATIONS:
Some parts of the resource area contain “of least concern” (RE 12.8.17/12.8.9/12.3.7) vegetations.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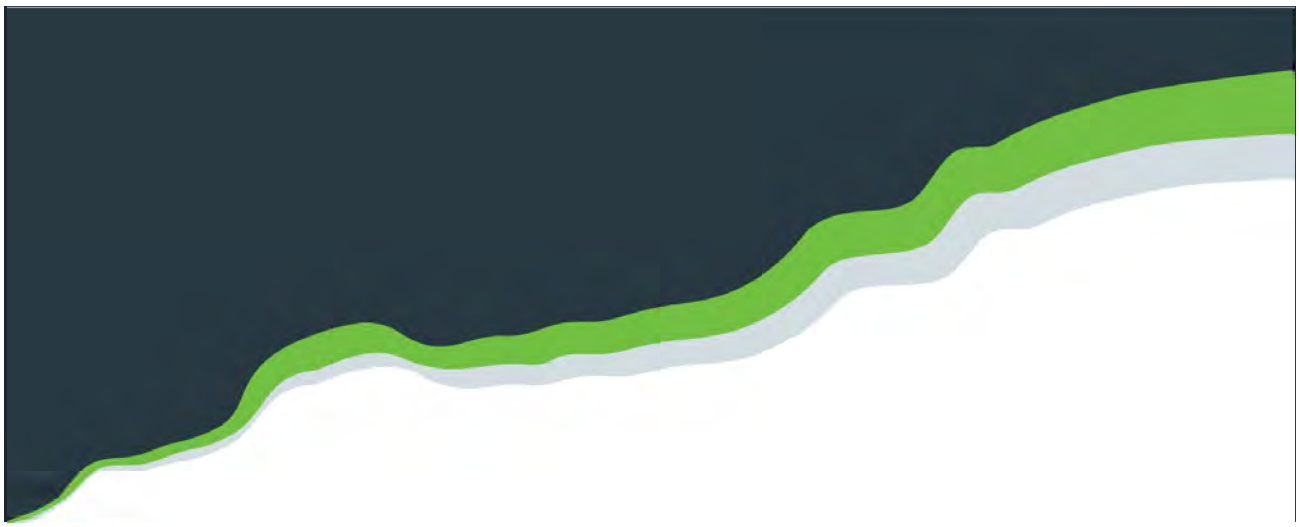
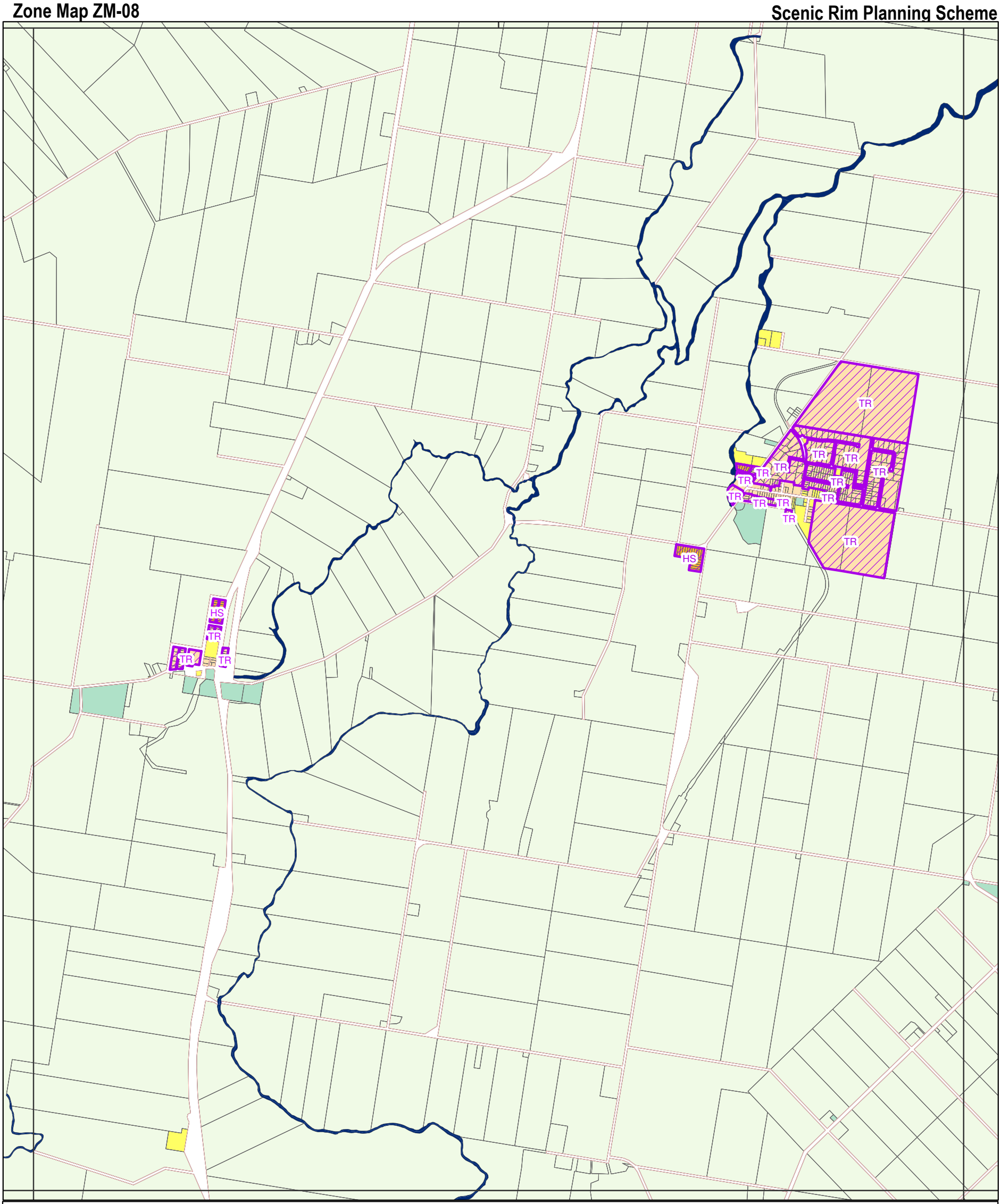
6912000
6911000
6910000
6909000
6908000
6907000
6906000
6905000
6904000
Leitch Road
Prenzler Road
Cunningham Highway
Hayes Road
SCENIC RIM REGIONAL COUNCIL
Kalbar
Key Resource Area
Resource/Processing Area
Separation Area
Transport Route Centreline
(Separation Area not shown)
N
0
1000
2000
3000
metres
Queensland Government
WARRILL VIEW SILVERDALE
KEY RESOURCE AREA
Scenic Rim Regional Council
Date:March 2023
Projection: GDA 2020 Zone 56
Datum: GDA 2020
KRA 172



SCENIC RIM
REGIONAL COUNCIL

PO Box 25 | 82 Brisbane Street
Beaudesert QLD 4285
Telephone 07 5540 5111
scenicrim.qld.gov.au

Zone Map ZM-08 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
- BW Bulk Water Storage
- CI Commercial Industrial
- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

0 0.4 0.8 1.6 KM

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Map Sheet Reference

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37 38 39 40 41 42 43 44 45 46 47
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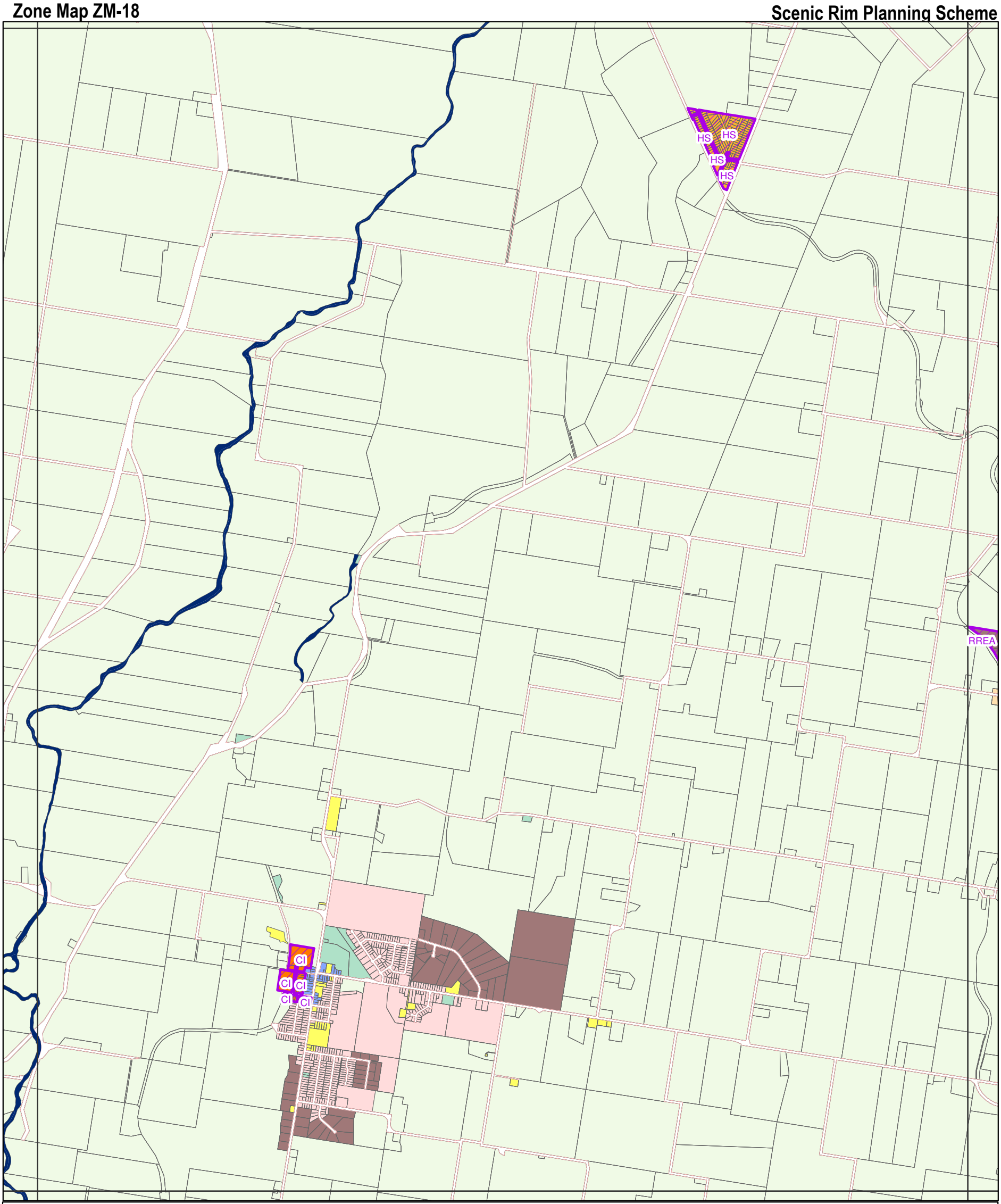
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-18 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
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- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA — Bromelton State Development Area
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- TMR — Tamborine Mountain Rural
- TR — Township Residential
- PR — Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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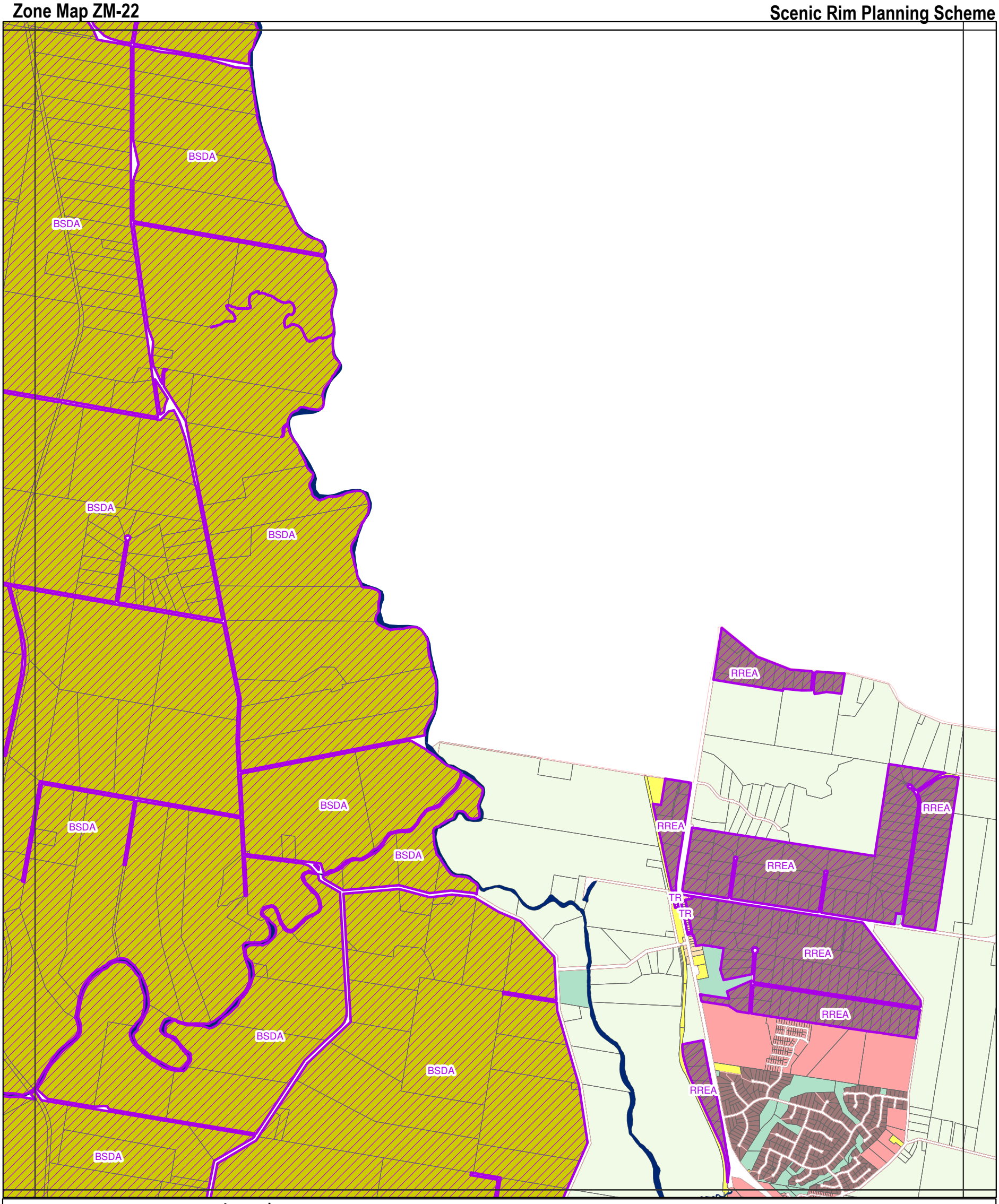
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-22

Scenic Rim Planning Scheme



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
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- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
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- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
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- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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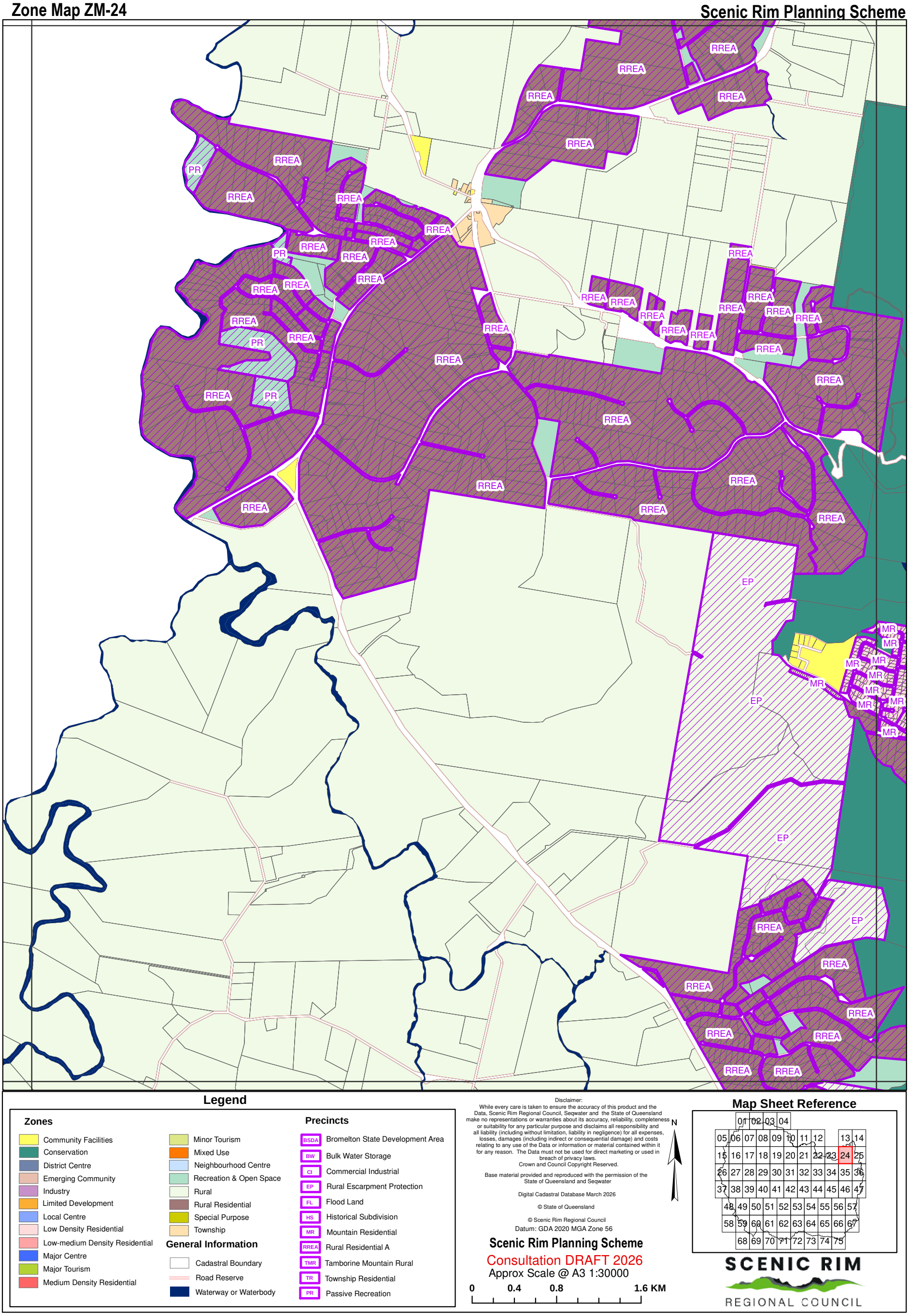
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-24

Scenic Rim Planning Scheme



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA — Bromelton State Development Area
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- CI — Commercial Industrial
- EP — Rural Escarpment Protection
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- MR — Mountain Residential
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- TR — Township Residential
- PR — Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

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Approx Scale @ A3 1:30000

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Map Sheet Reference

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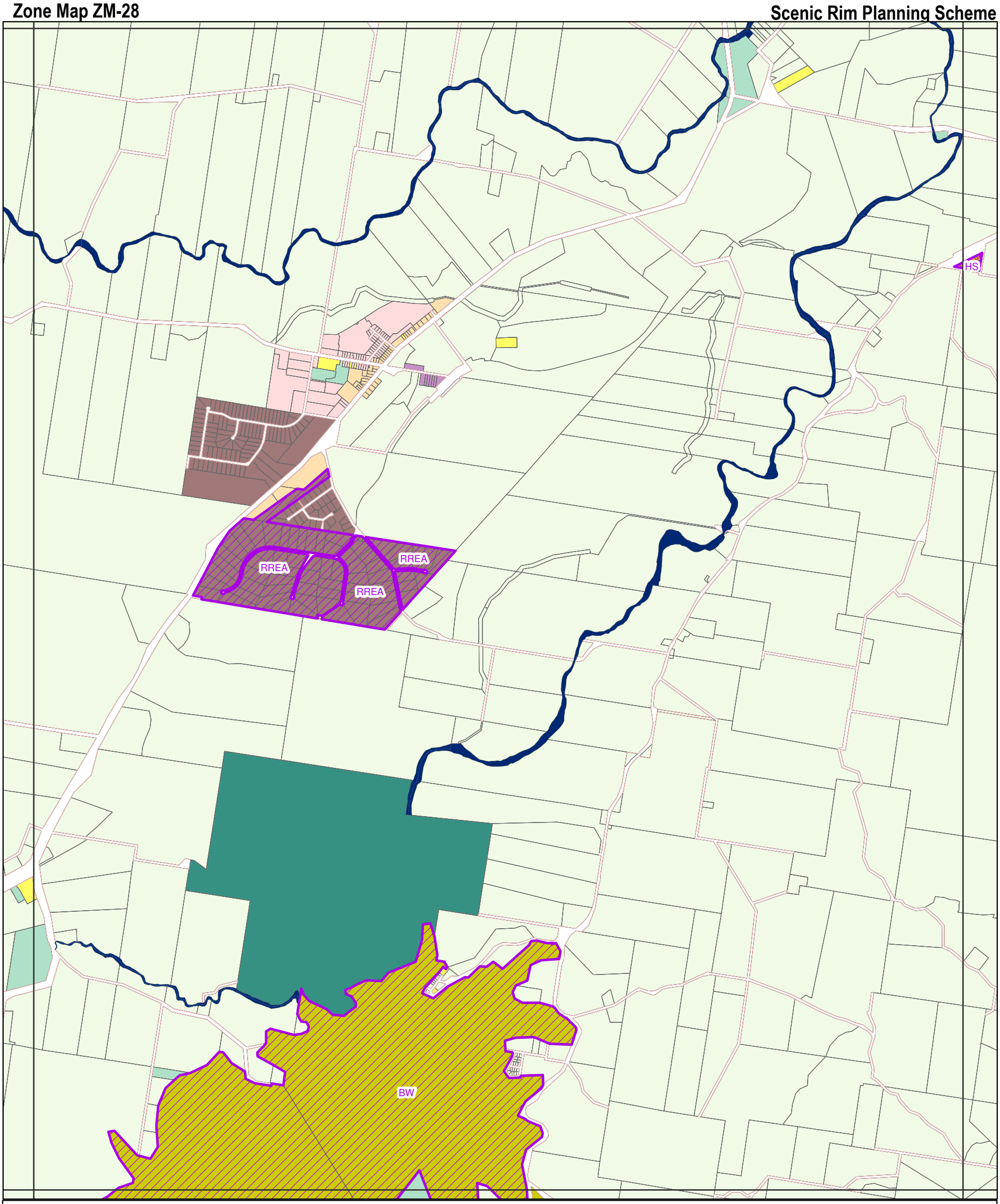
Zone Map ZM-28 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
- BW Bulk Water Storage
- CI Commercial Industrial
- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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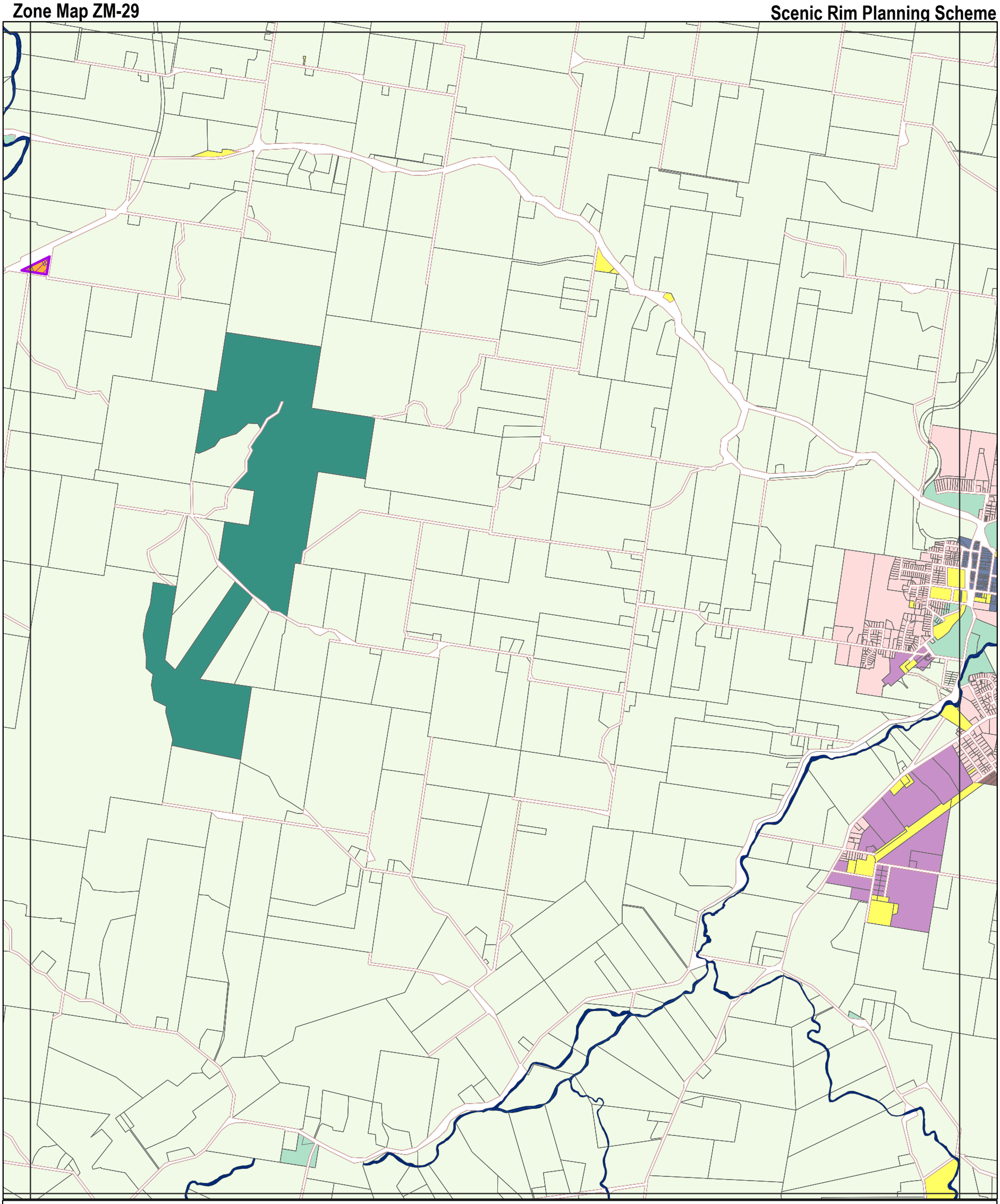
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-29 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
- BW Bulk Water Storage
- CI Commercial Industrial
- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

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Map Sheet Reference

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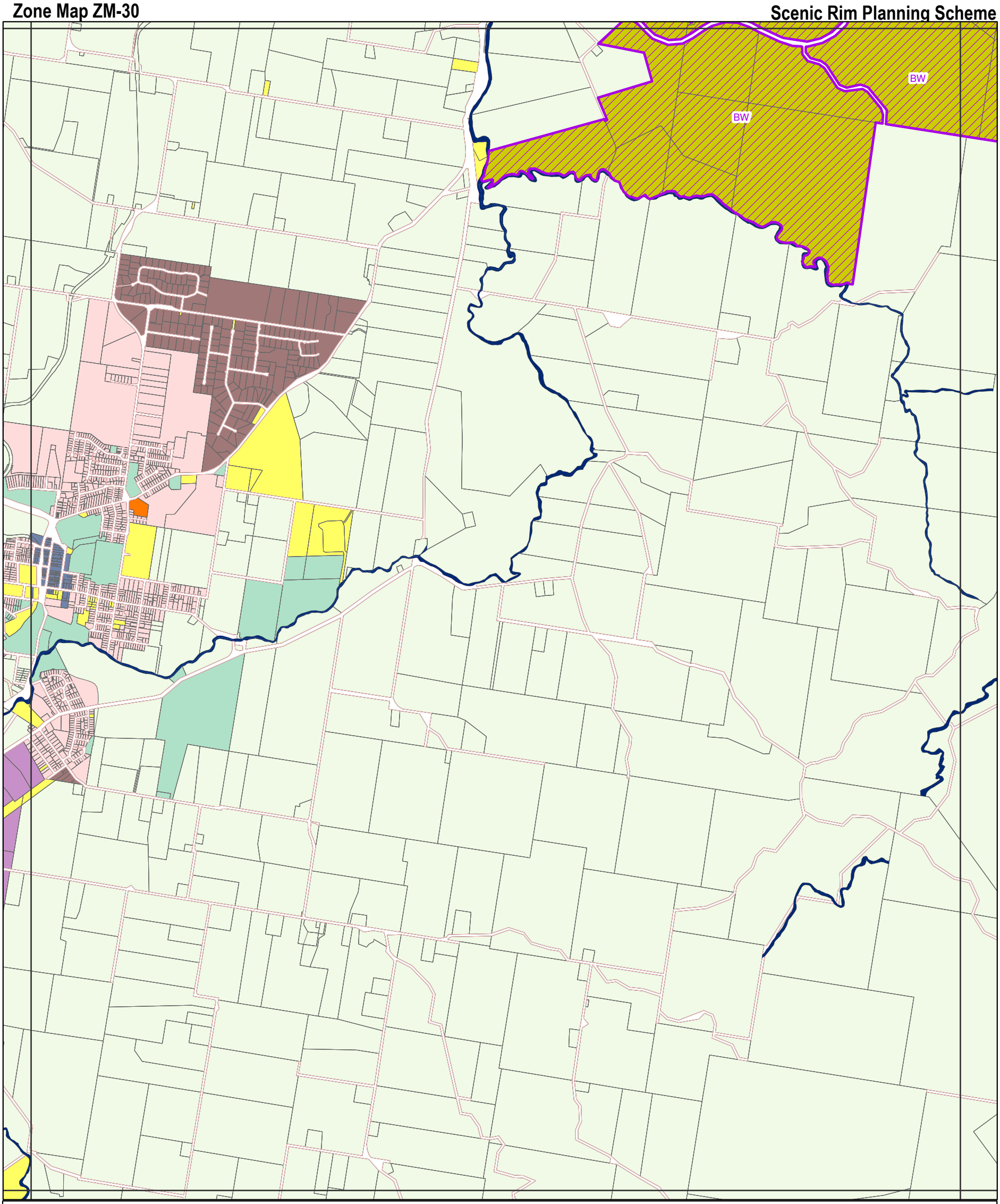
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-30 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
- BW Bulk Water Storage
- CI Commercial Industrial
- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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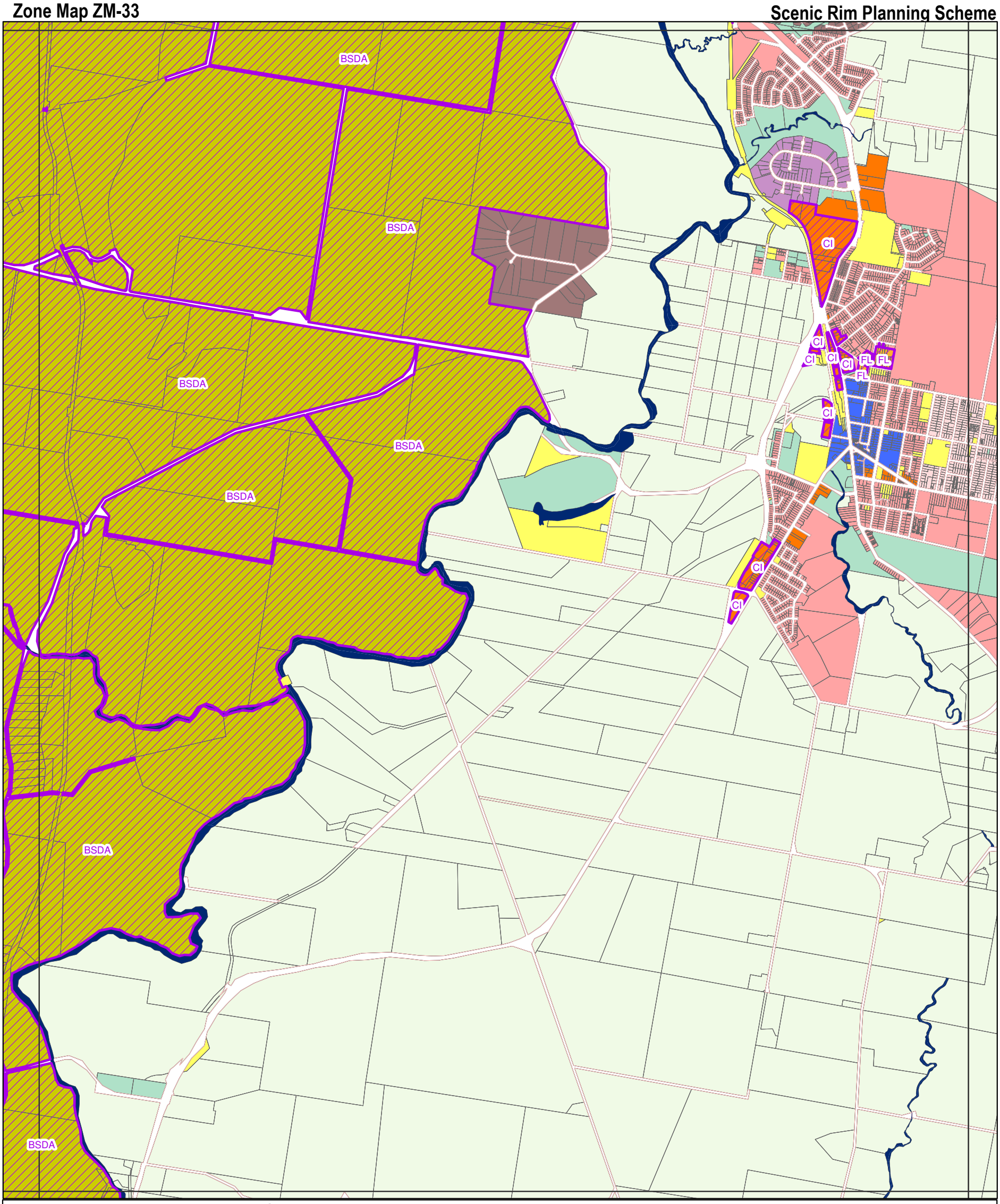
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-33

Scenic Rim Planning Scheme



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
- BW Bulk Water Storage
- CI Commercial Industrial
- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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37 38 39 40 41 42 43 44 45 46 47
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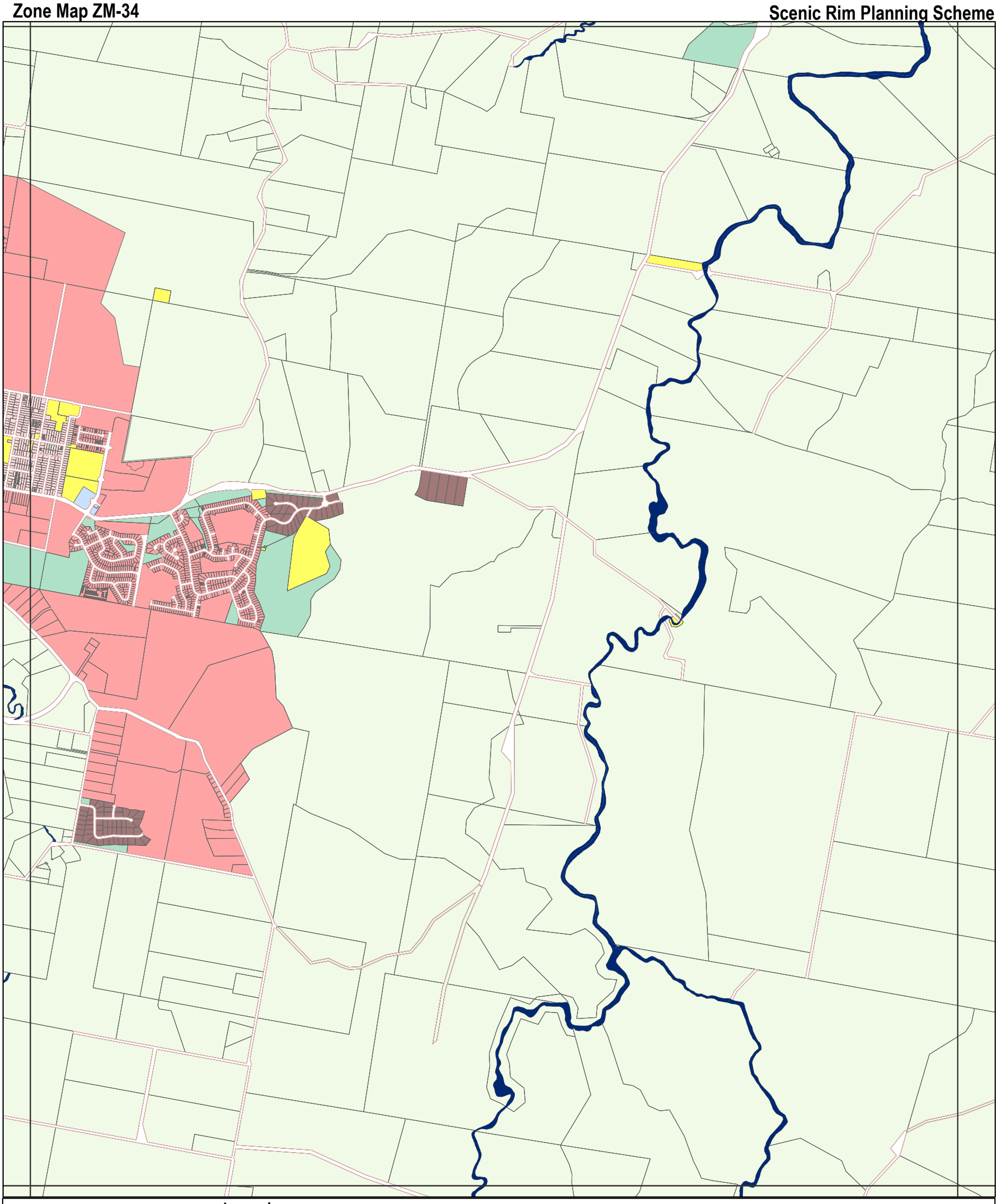
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-34 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

- BSDA Bromelton State Development Area
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- EP Rural Escarpment Protection
- FL Flood Land
- HS Historical Subdivision
- MR Mountain Residential
- RREA Rural Residential A
- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

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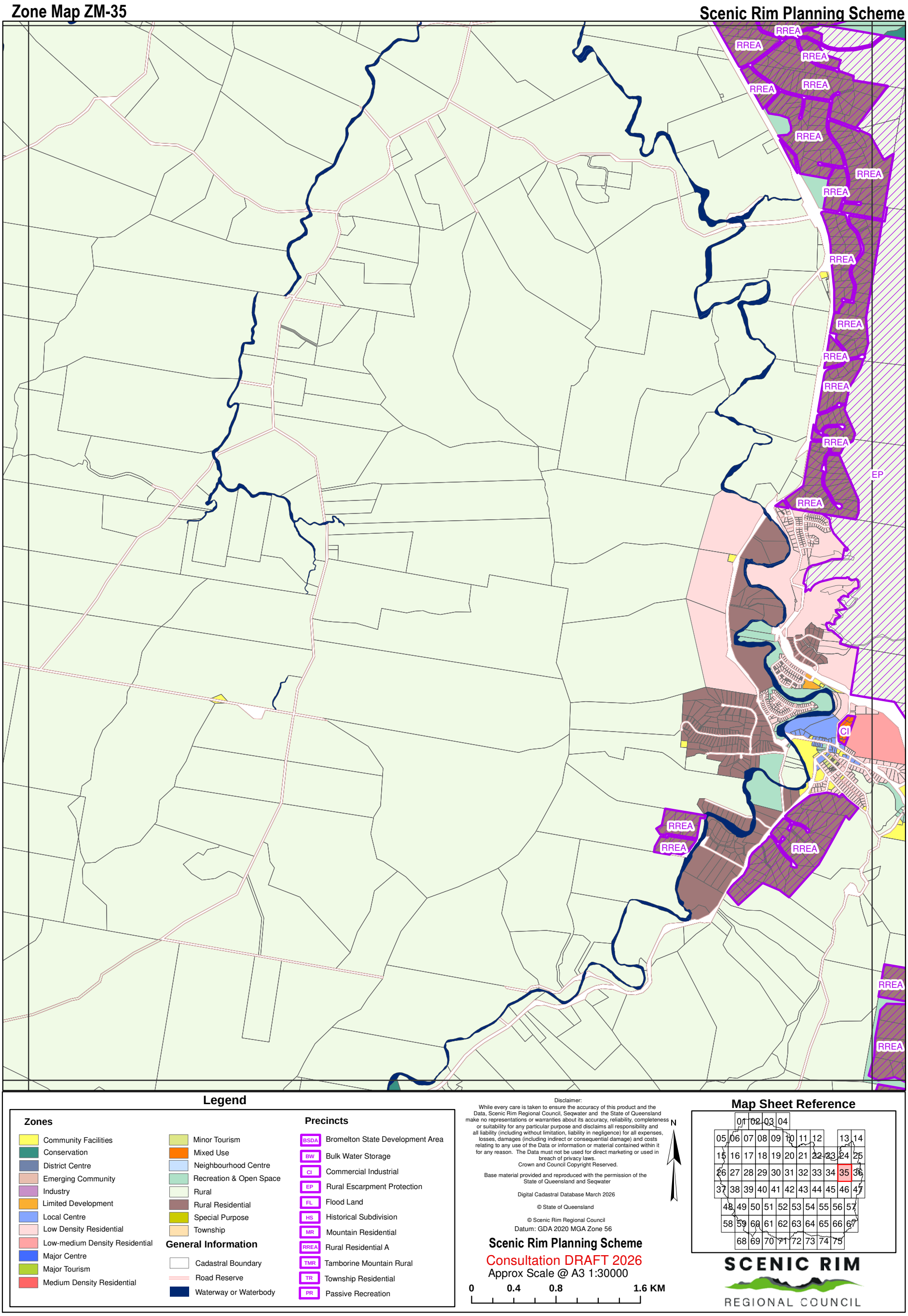
SCENIC RIM REGIONAL COUNCIL


Zone Map ZM-35
Scenic Rim Planning Scheme
RREA
EP
CI
Legend
Zones
Community Facilities
Conservation
District Centre
Emerging Community
Industry
Limited Development
Local Centre
Low Density Residential
Low-medium Density Residential
Major Centre
Major Tourism
Medium Density Residential
Minor Tourism
Mixed Use
Neighbourhood Centre
Recreation & Open Space
Rural
Rural Residential
Special Purpose
Township
General Information
Cadastral Boundary
Road Reserve
Waterway or Waterbody
Precincts
BSDA Bromelton State Development Area
BW Bulk Water Storage
CI Commercial Industrial
EP Rural Escarpment Protection
FL Flood Land
HS Historical Subdivision
MR Mountain Residential
RREA Rural Residential A
TMR Tamborine Mountain Rural
TR Township Residential
PR Passive Recreation
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Scenic Rim Planning Scheme
Consultation DRAFT 2026
Approx Scale @ A3 1:30000
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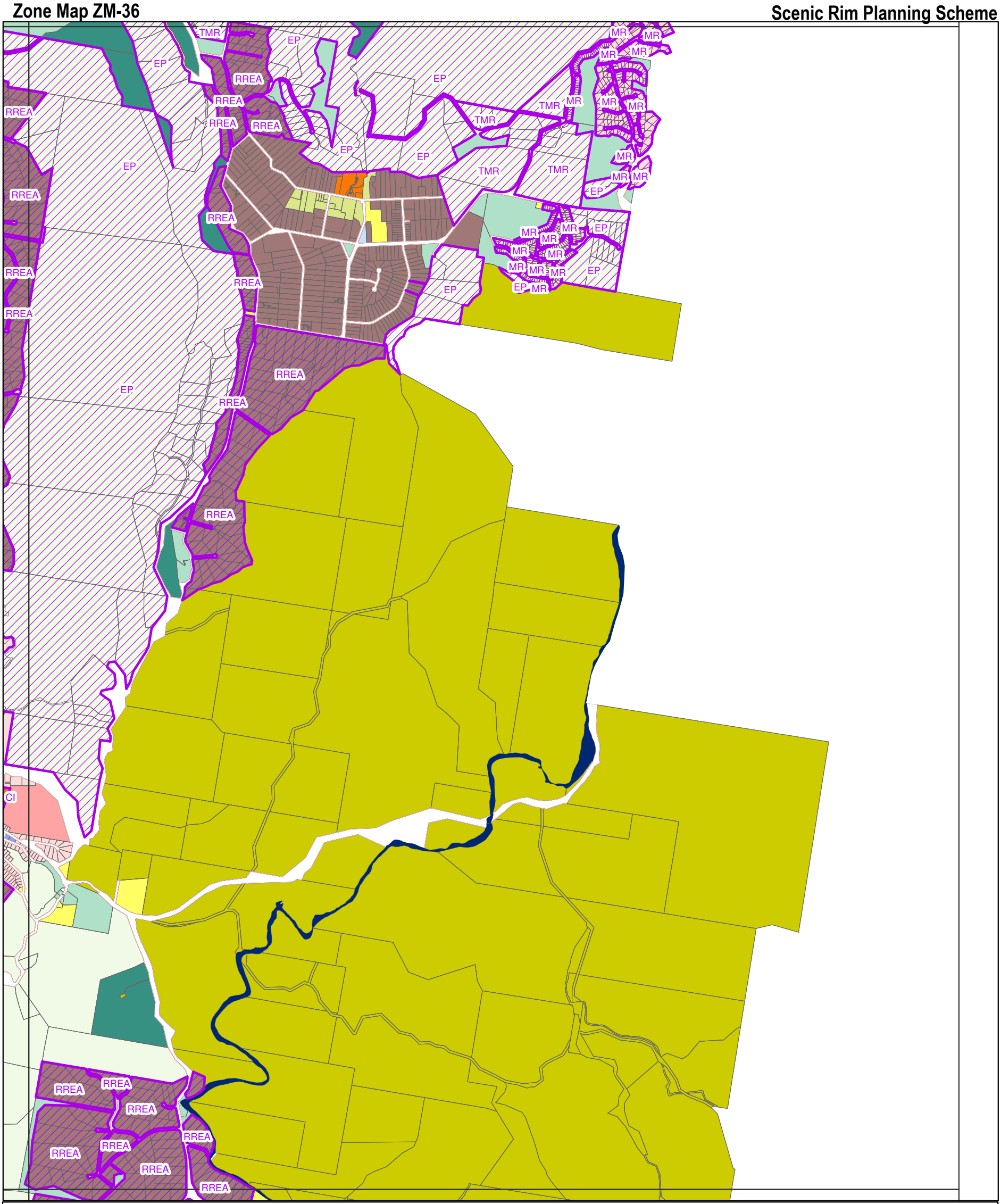
SCENIC RIM
REGIONAL COUNCIL

Zone Map ZM-36

Scenic Rim Planning Scheme



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
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- Rural
- Rural Residential
- Special Purpose
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General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

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Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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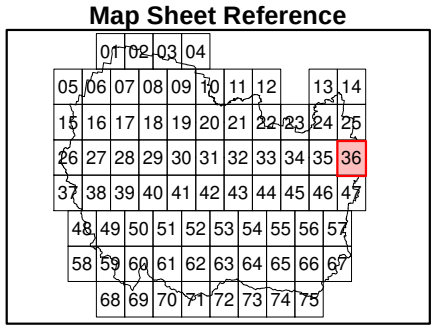
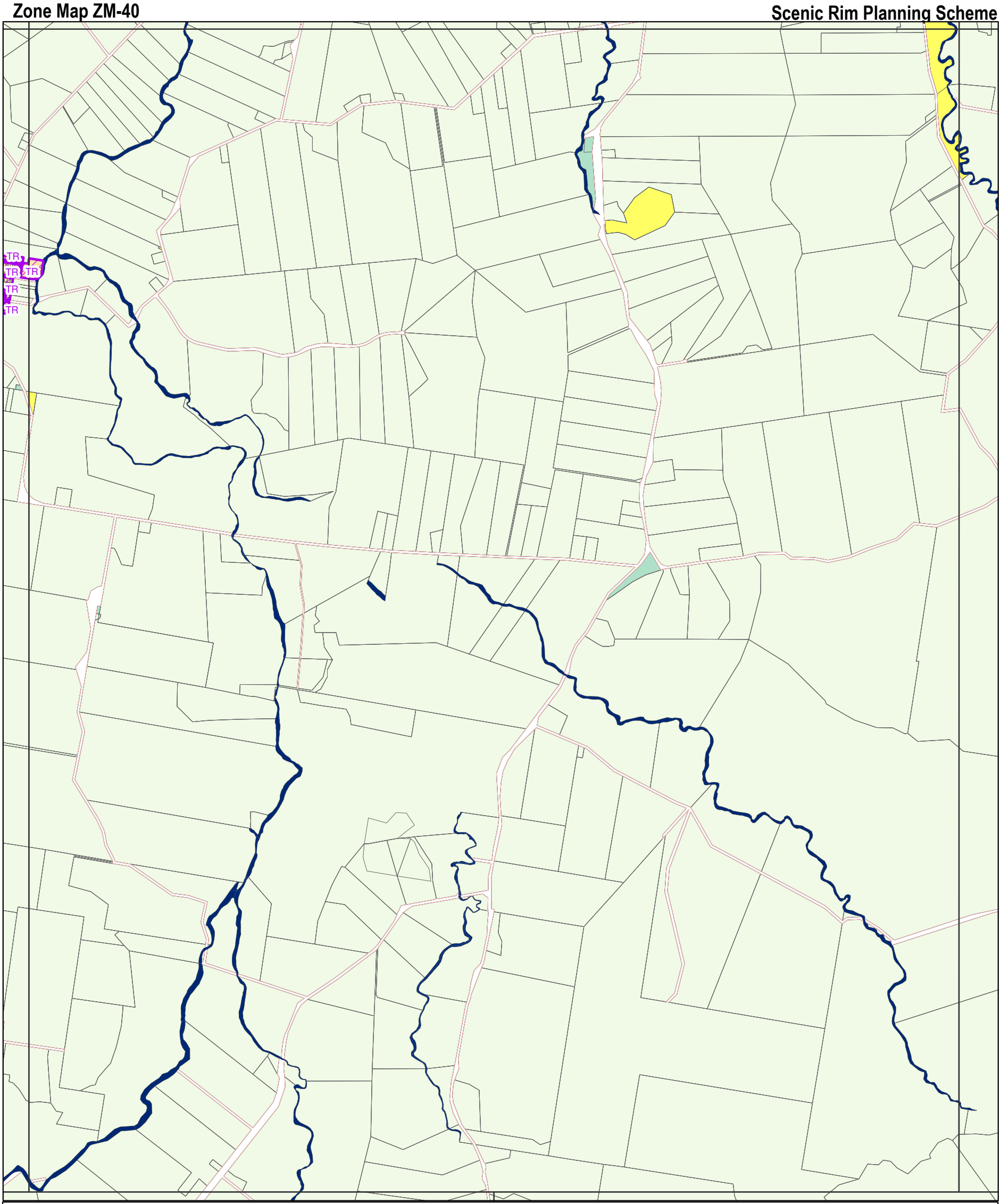
Map Sheet Reference



SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-40 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
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- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

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- FL Flood Land
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- TMR Tamborine Mountain Rural
- TR Township Residential
- PR Passive Recreation

Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

Approx Scale @ A3 1:30000

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Map Sheet Reference

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37 38 39 40 41 42 43 44 45 46 47
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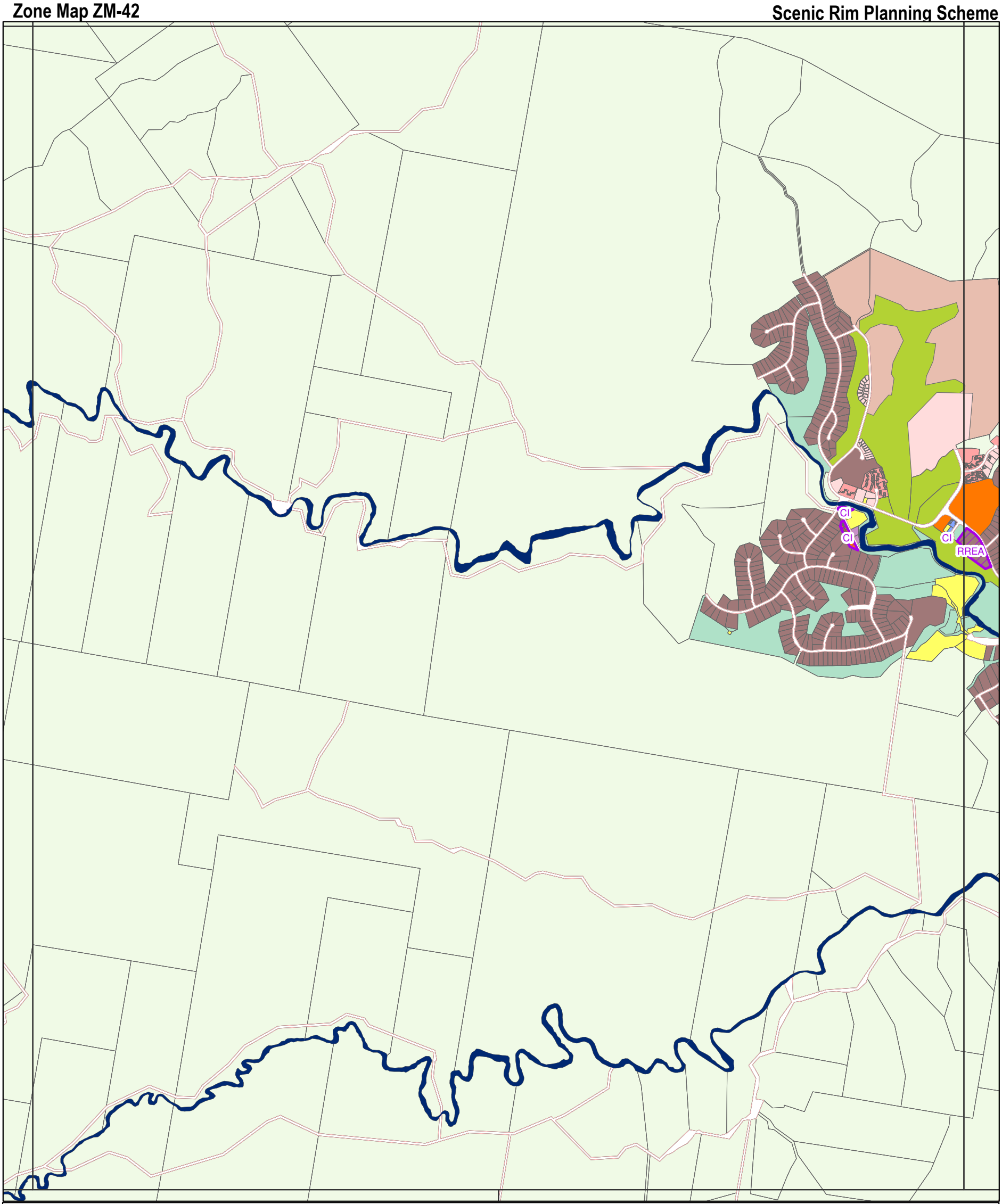
68 69 70 71 72 73 74 75

SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-42 **Scenic Rim Planning Scheme**



Legend

Zones

- Community Facilities
- Conservation
- District Centre
- Emerging Community
- Industry
- Limited Development
- Local Centre
- Low Density Residential
- Low-medium Density Residential
- Major Centre
- Major Tourism
- Medium Density Residential
- Minor Tourism
- Mixed Use
- Neighbourhood Centre
- Recreation & Open Space
- Rural
- Rural Residential
- Special Purpose
- Township

General Information

- Cadastral Boundary
- Road Reserve
- Waterway or Waterbody

Precincts

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Datum: GDA 2020 MGA Zone 56

Scenic Rim Planning Scheme

Consultation DRAFT 2026

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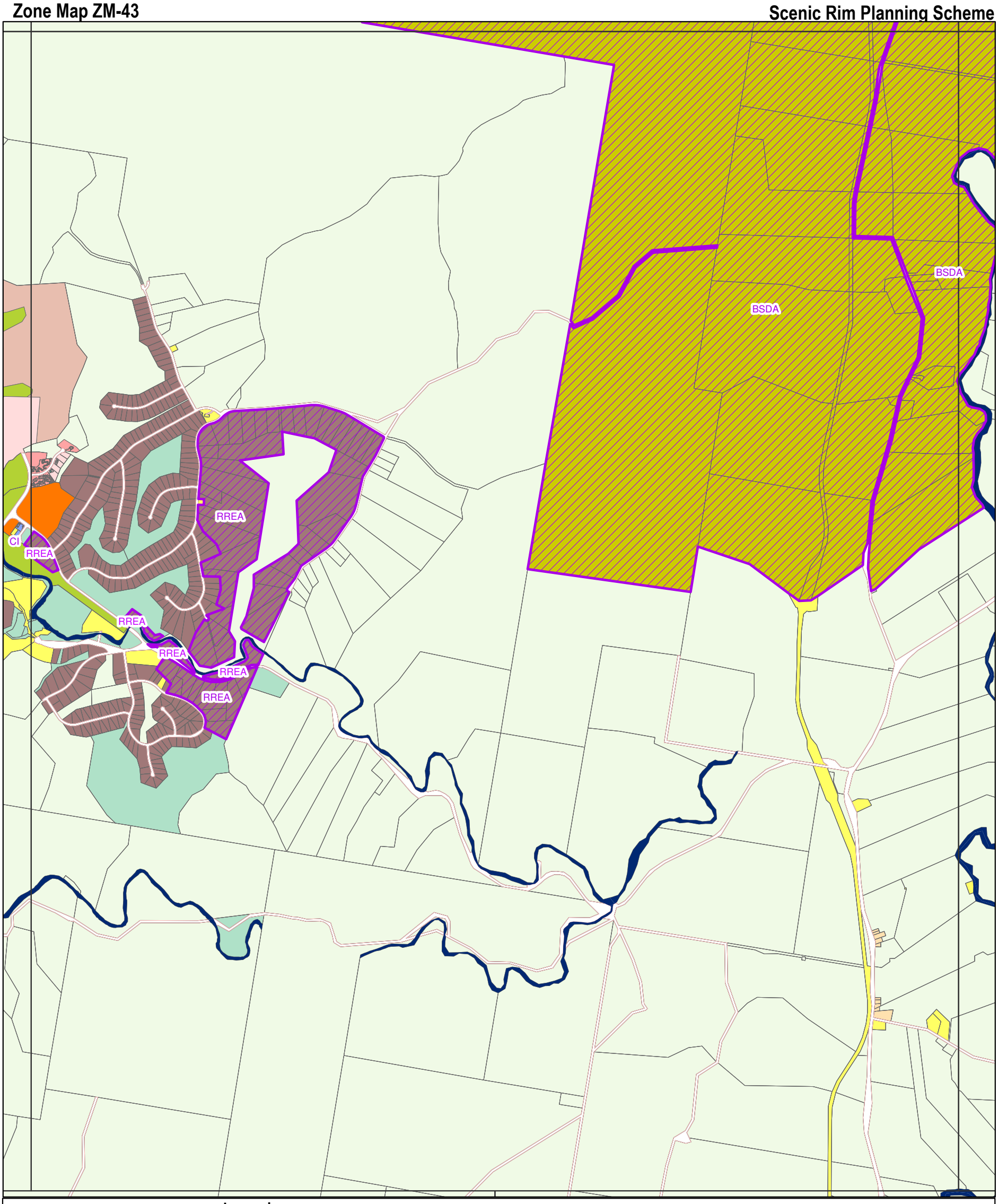
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-43

Scenic Rim Planning Scheme



Legend

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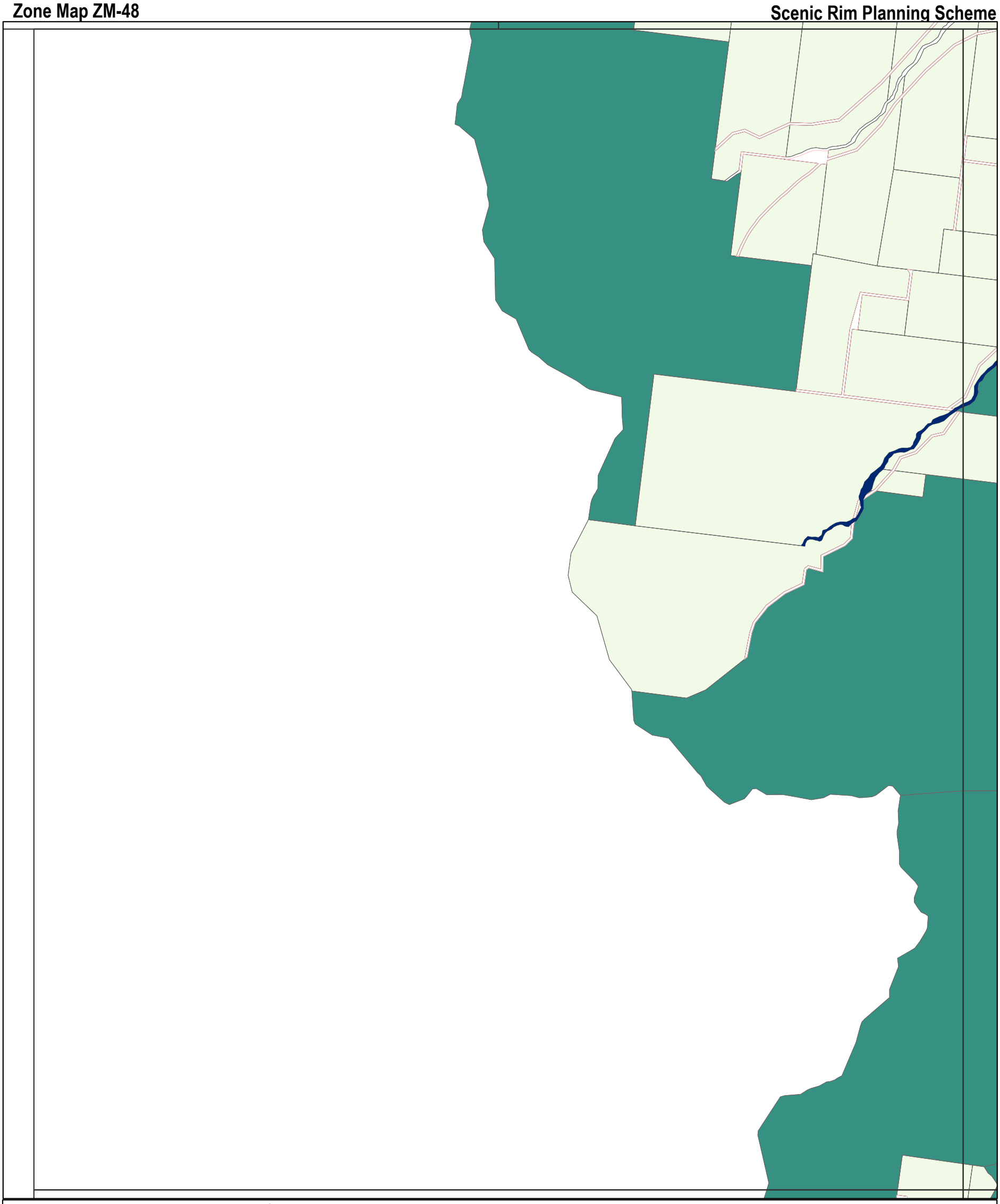
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-48

Scenic Rim Planning Scheme



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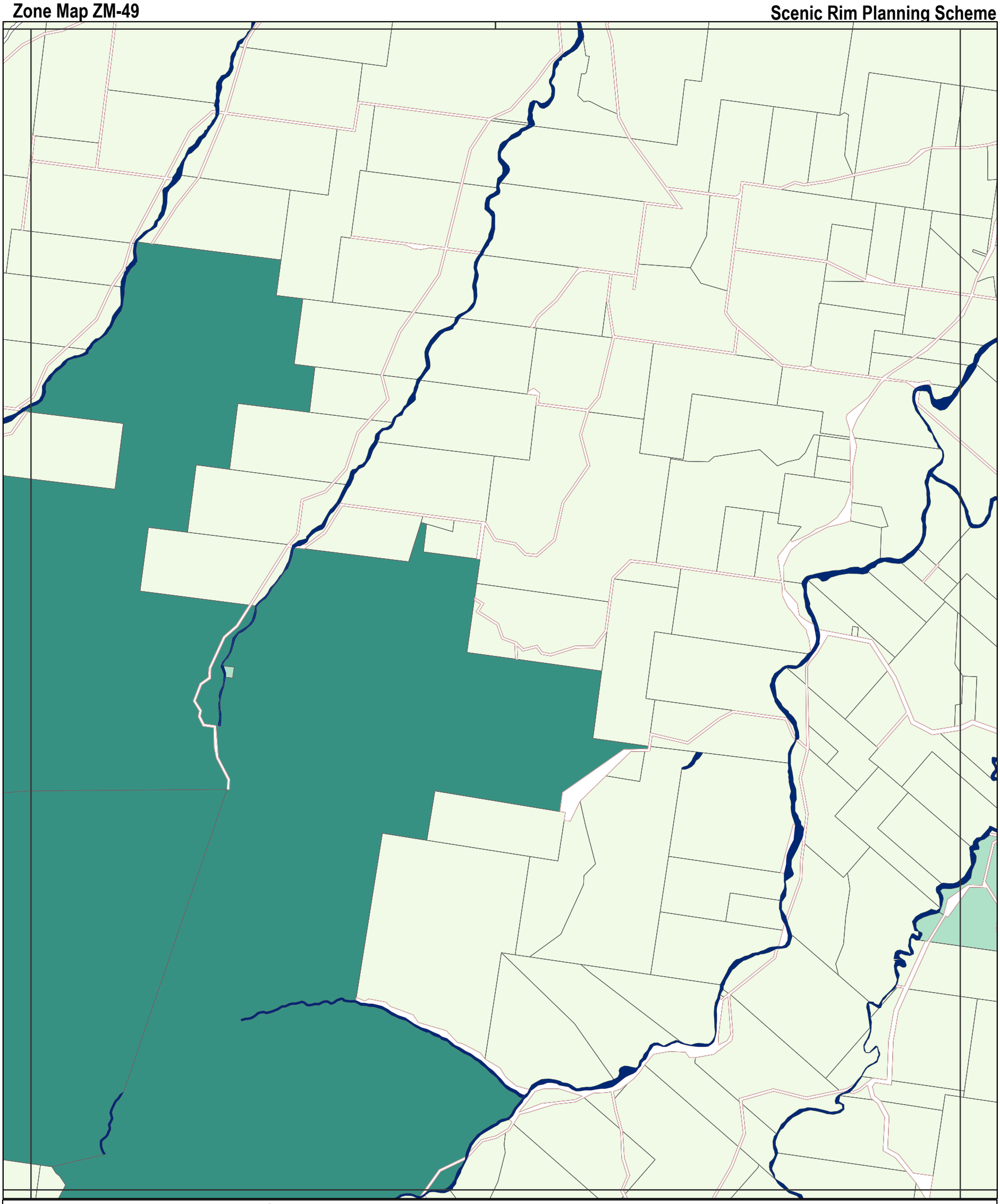
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-49 **Scenic Rim Planning Scheme**



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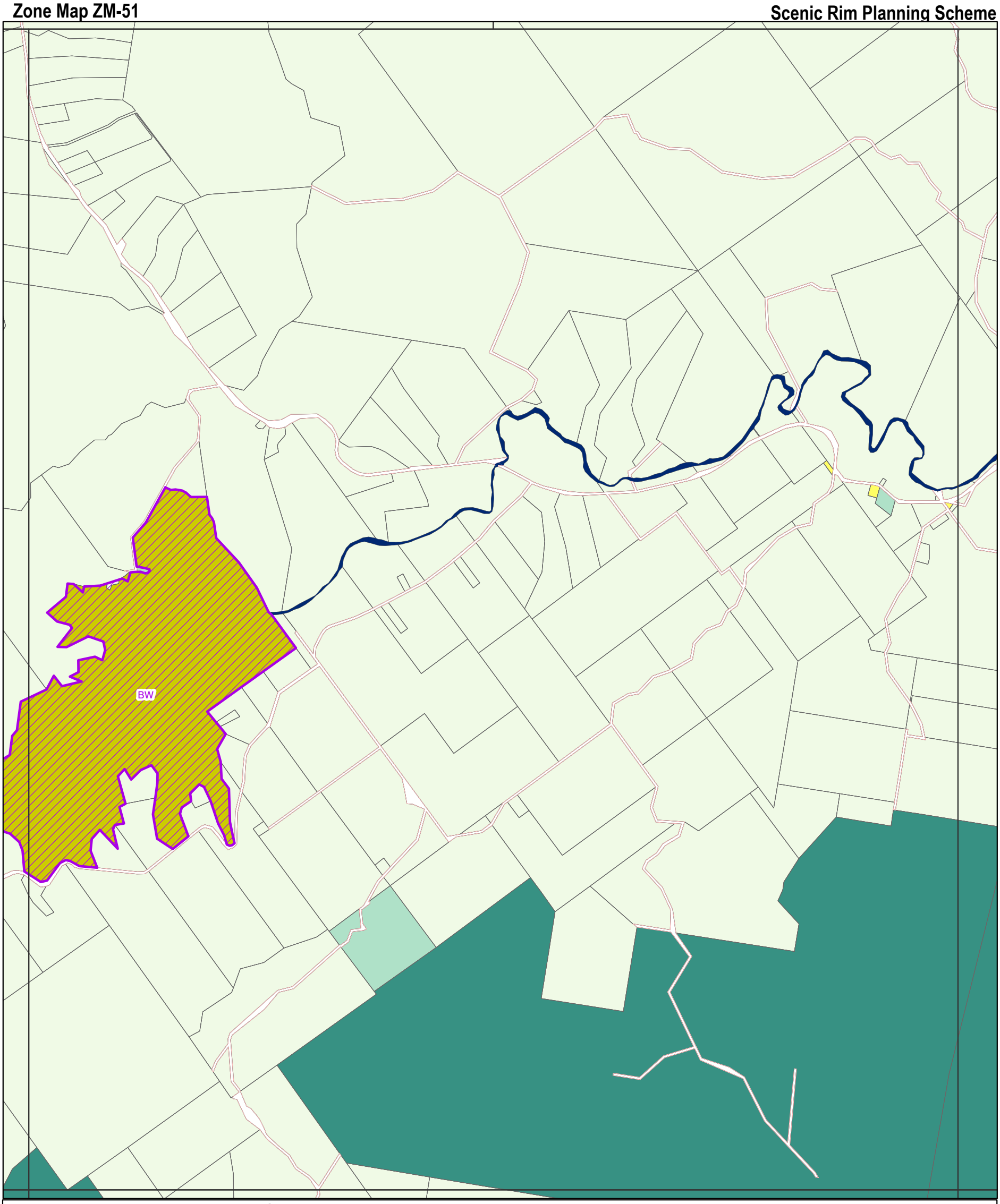
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-51 **Scenic Rim Planning Scheme**



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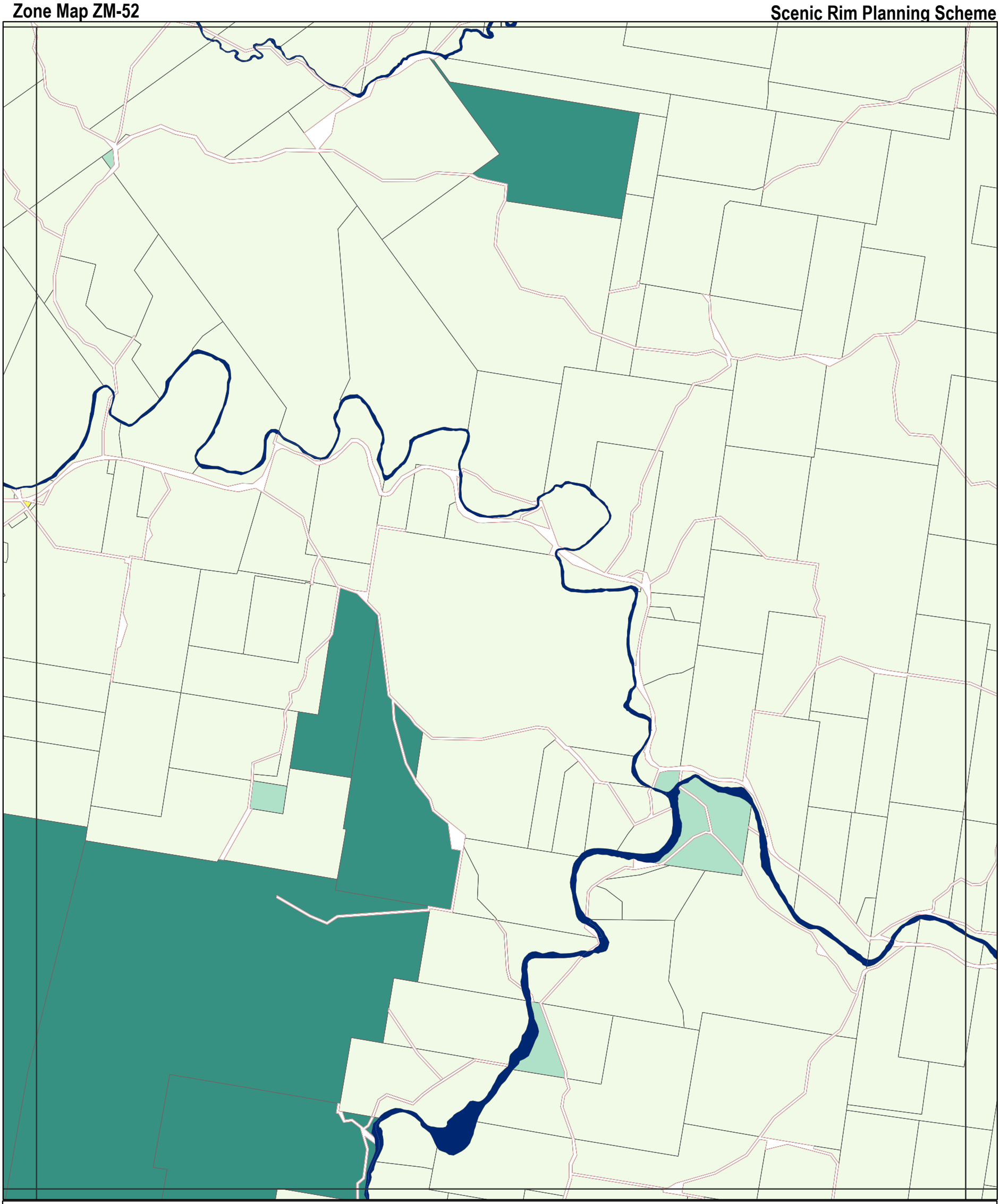
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-52 **Scenic Rim Planning Scheme**



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Scenic Rim Planning Scheme

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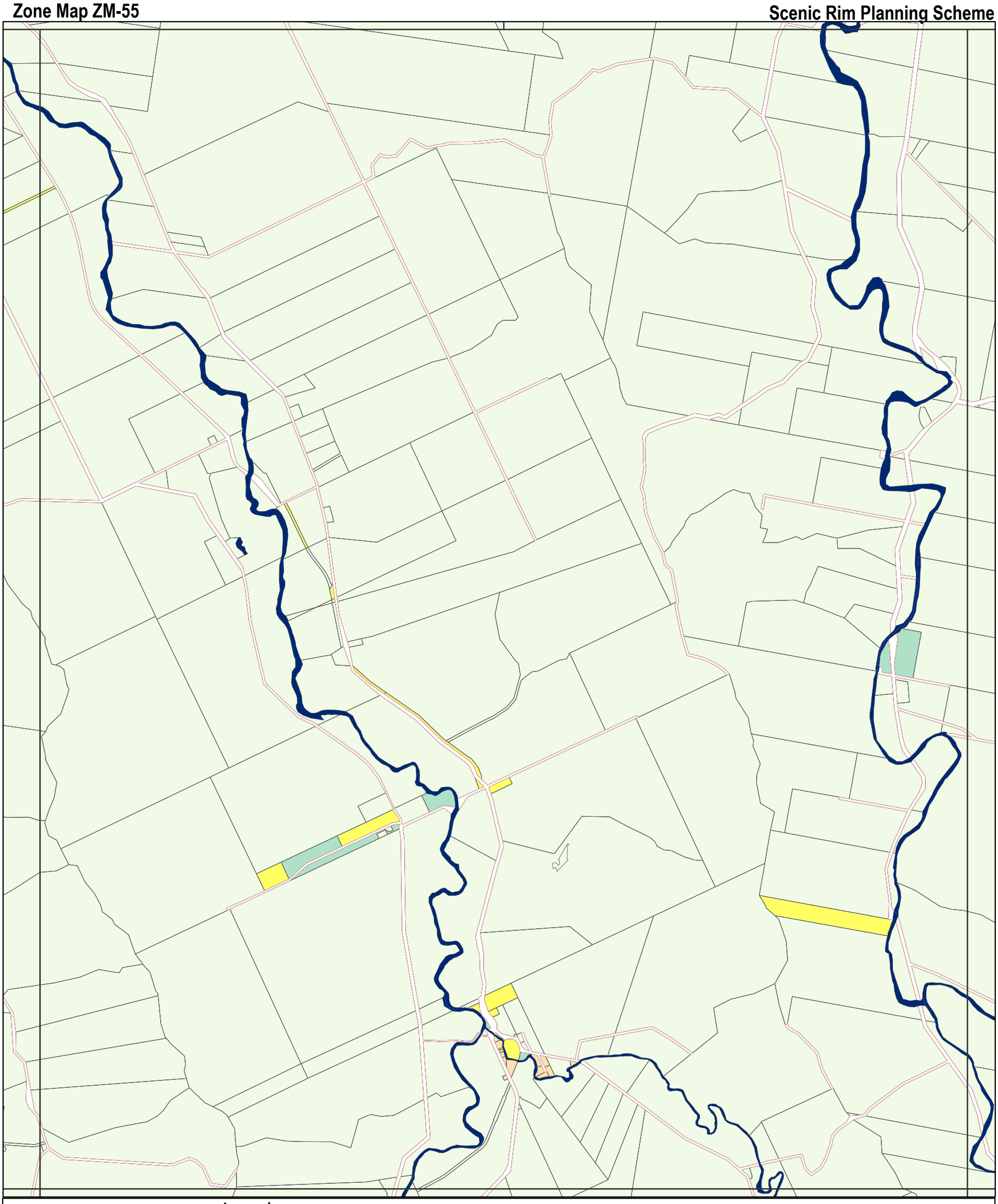
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-55 **Scenic Rim Planning Scheme**



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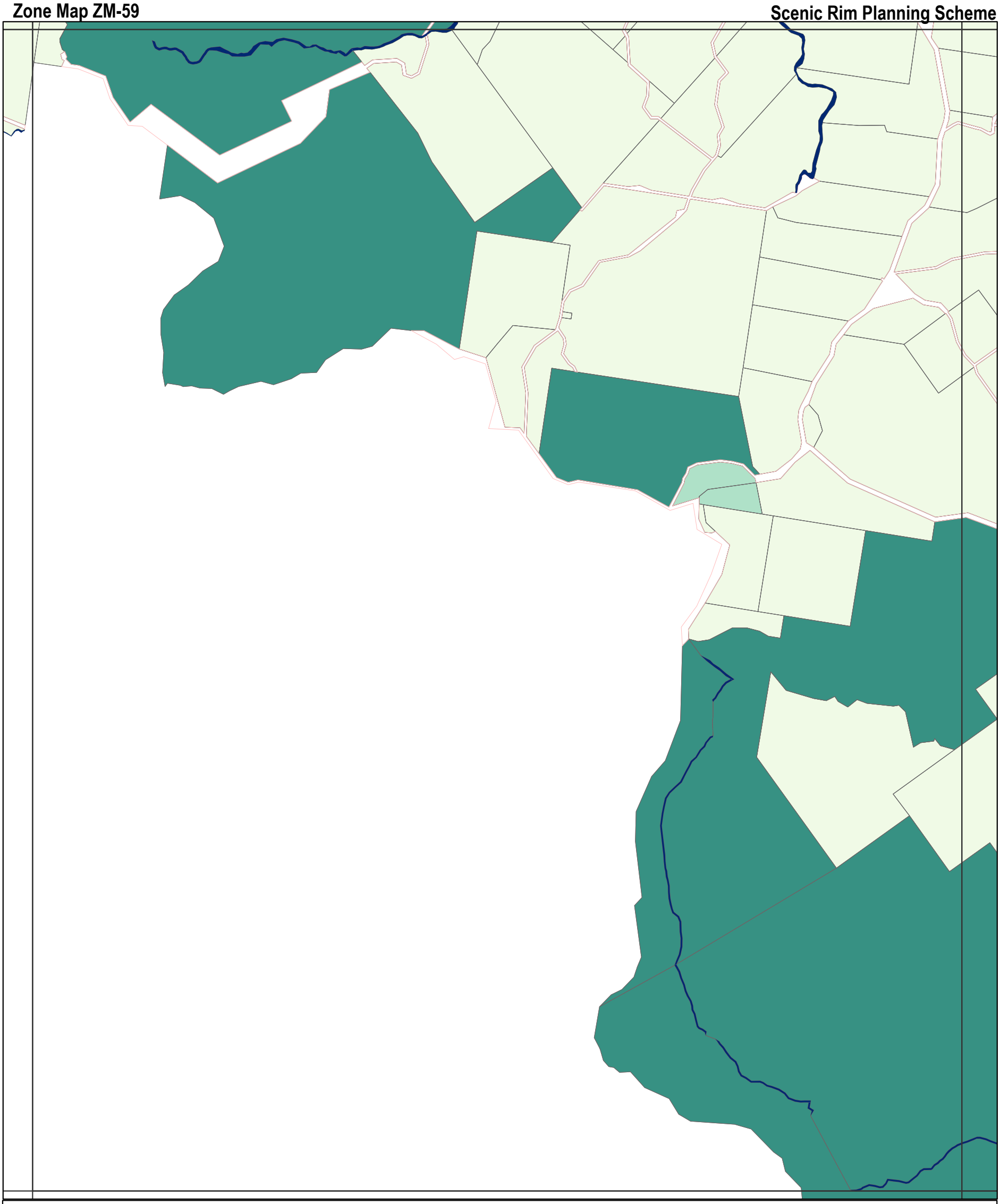
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-59 **Scenic Rim Planning Scheme**



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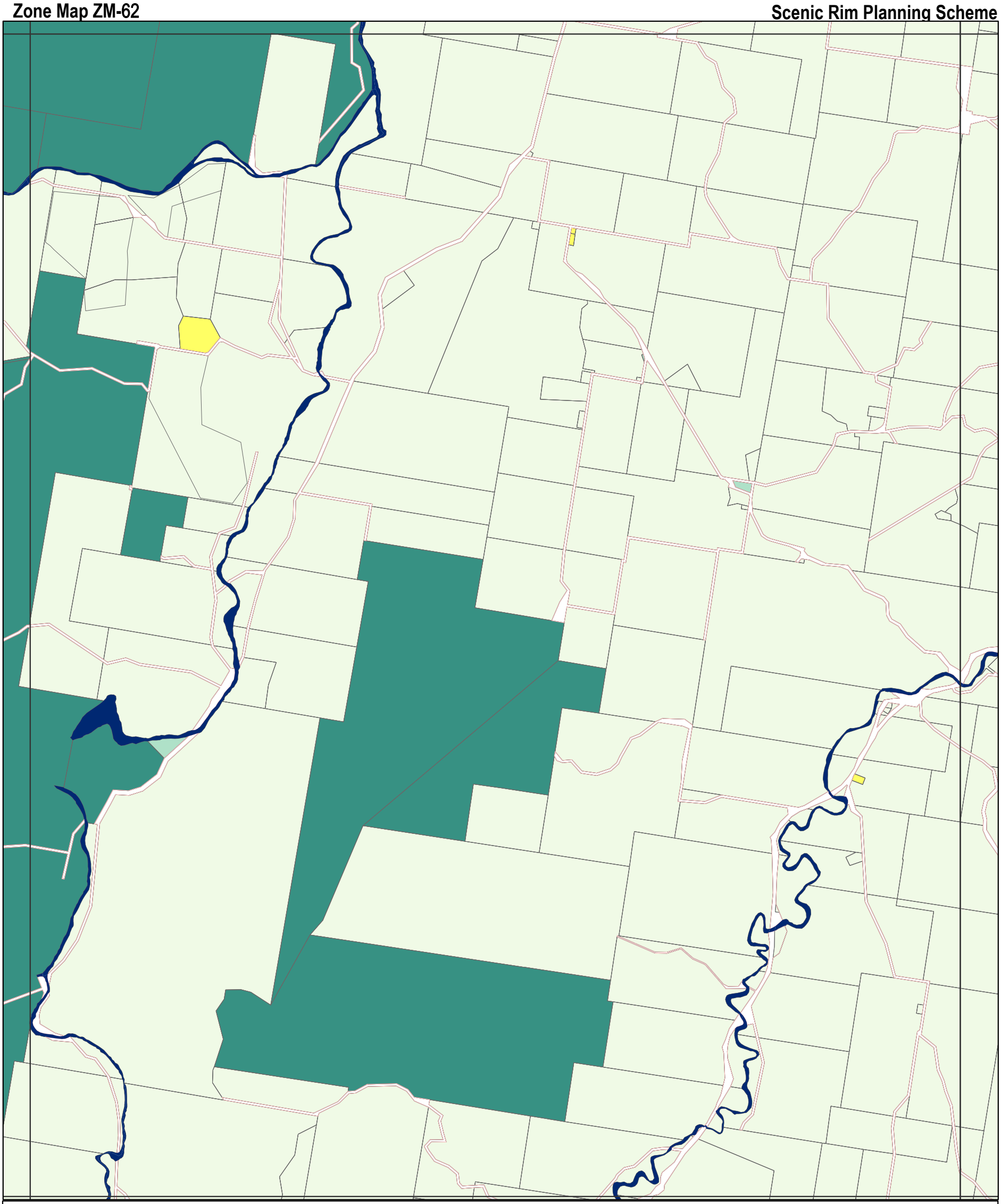
SCENIC RIM REGIONAL COUNCIL

Zone Map ZM-62 **Scenic Rim Planning Scheme**



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SCENIC RIM REGIONAL COUNCIL

SCENIC RIM

INTEGRATED TRANSPORT PLAN

2025-2035

scenicrim.qld.gov.au

SCENIC RIM REGIONAL COUNCIL


| 2

Scenic Rim Regional Council Integrated Transport Plan | Version 1.0
Published: 2026 | Prepared by: Scenic Rim Regional Council

CONTENTS

1. INTRODUCTION

1.1 BACKGROUND

The Scenic Rim Local Government Area (LGA) is unique. It borders the growing urban areas of the Gold Coast, Logan and Ipswich and the mostly rural communities of the Lockyer Valley and the Southern Downs. The Scenic Rim LGA is home to multiple towns and unique environmental areas. It is situated between coastal hinterlands and the start of the Great Dividing Range along the Queensland and New South Wales border.

For the past 20 years, the Scenic Rim's population has grown at around 2 per cent per year. The population is now expected to grow at 2.7 per cent per year. This means the Scenic Rim's population will increase from 44,000 residents to more than 67,000 residents by 2041. This population growth is being driven by the lifestyle and affordability of the Scenic Rim compared to nearby areas such as the Gold Coast, Logan and Brisbane.

Scenic Rim Regional Council recently developed its Growth Management Strategy (GMS) which considered community, land use and housing needs for the region to 2041. In addition, Council is updating its Local Government Infrastructure Plan (LGIP) which will provide the necessary infrastructure to support existing and future urban development. The Scenic Rim's ITP will be important to the development of the Local Government Infrastructure Plan (LGIP) and the delivery of the Growth Management Strategy (GMS).

What is an Integrated Transport Plan (ITP)?

Integrated Transport Plans define the transport vision, policies, goals and actions that are needed to respond to growth.

Scenic Rim LGA Map and Council Divisions

1.2 WHY PREPARE AN ITP FOR THE SCENIC RIM?

Diverse environmental landscapes, agricultural resources and distinctive towns all help to make the Scenic Rim an attractive place to live, work, and visit. With this attractiveness comes significant transport planning challenges. These challenges include:

- competing transport needs for regional communities and tourists
- relying heavily on the state road network, and
- managing a large mostly rural road network with environmental constraints.

This ITP addresses the specific needs and challenges of the Scenic Rim. It aims to:

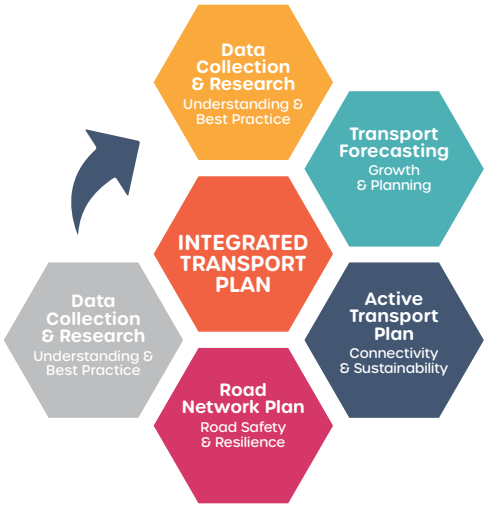
- increase road network efficiency
- improve safety, and
- promote the use of sustainable transport options.

It will provide the foundation for strategic decision making for transport infrastructure and services across the LGA into the future.

1.3 STUDY PROCESS

The studies undertaken to develop the ITP included:

- transport forecasting
- road network planning
- active transport planning, and
- community engagement.



Transport forecasting

Population growth across the Scenic Rim and South East Queensland was assessed to understand the impacts and future needs of the transport network.

Transport models were used to test the benefits of potential upgrades to the road network (such as new road connections or intersections).

Road network planning

Road network planning considered road user types and their needs, as well as road operation and safety issues across the LGA.

The data used to create the Road Network Plan included population and employment growth data, crash statistics, transport network efficiency metrics and the locations and types of activities that generate freight.

Current and emerging transport challenges were identified and actions to address them have been recommended in the ITP.

Active transport planning

Active transport, which includes walking, cycling and e-mobility, is essential for connecting growing communities and for promoting healthy lifestyles.

The Active Transport Plan reviewed existing walking and cycling infrastructure gaps, community input and visitor needs. It then established an active transport network to meet the needs of growth in the region.

Community engagement

Gaining experiences and ideas from community members and other key stakeholders living and travelling in and around the Scenic Rim every day provided an opportunity to confirm the issues and needs identified in the technical assessments.

Community engagement during the preparation of the ITP included pop-up stalls at local markets, a workshop with key stakeholders, an online survey and an online map on which people could leave their comments and ideas.

2. CURRENT TRANSPORT NETWORK

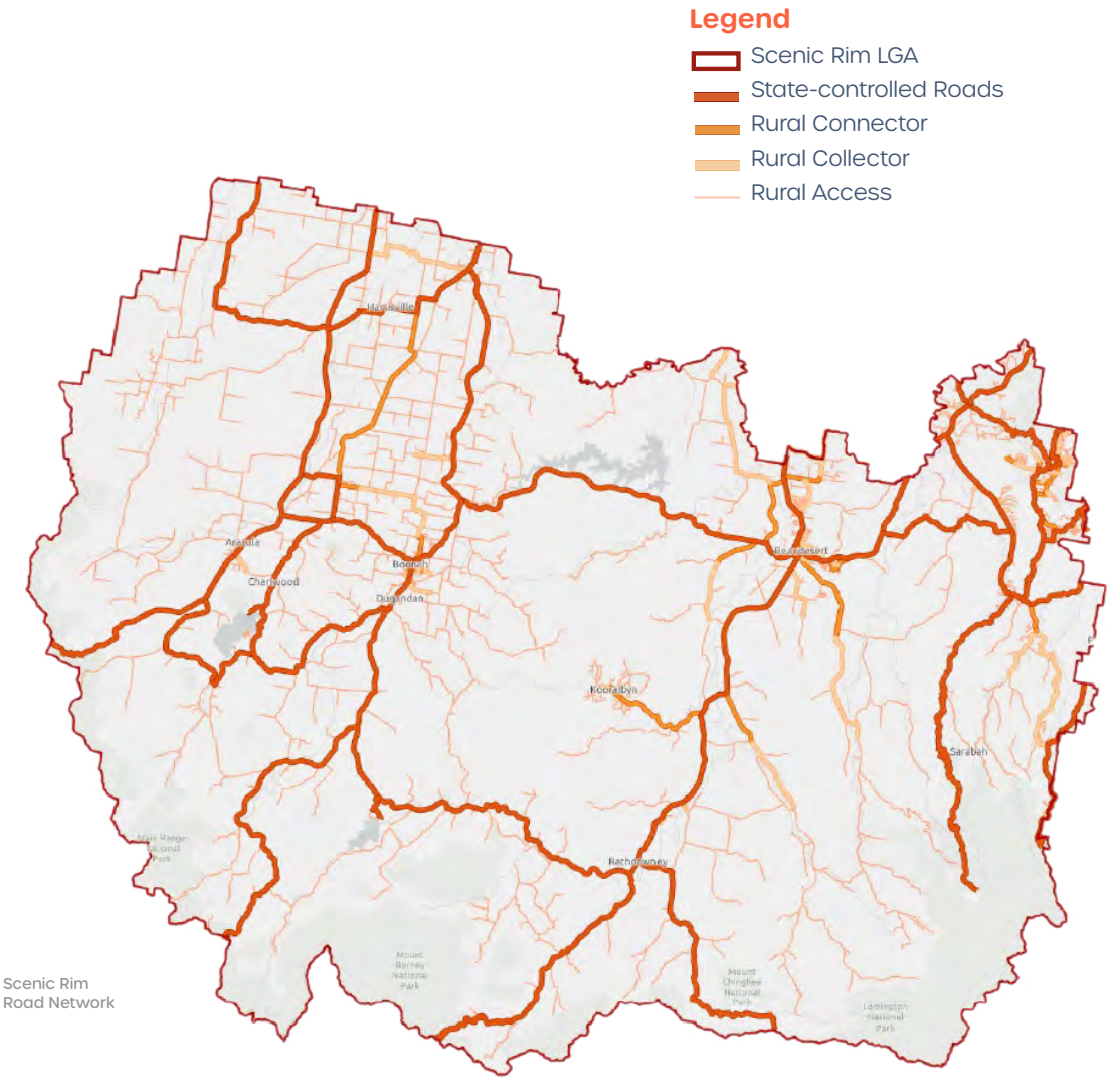
2.1 ROAD NETWORK

The Scenic Rim's road network serves three primary purposes: social and community, economic, and tourism. These functions are crucial for connecting the region's rural and town centres to each other and to the broader South East Queensland (SEQ) network.

- Land area of **4,249 km²**
- Highest populations **Beaudesert, Tamborine Mountain, Canungra and Boonah**
- Region has approx. **2,360 km** of road network
- Roads provide access for **1.3 million+ tourists** per year
- Roads are important to the region's economy which is worth **$2 billion each year**
- Roads serve **a vital community purpose**. They provide access to housing, employment, services, leisure activities and businesses.

The Importance of State Roads for the Scenic Rim

Only **25 per cent** of the region's road network is owned, controlled and maintained by the state but these State-controlled roads carry about **75 per cent** of the daily vehicle trips within the region.



2.2 TRAVEL PATTERNS AND STATISTICS

Journey to work

According to Australia Bureau of Statistics (ABS) data, around 40 per cent of Scenic Rim residents travel to locations outside the LGA for work.

Each day there are:

- 5,000 work trips made by Tamborine Mountain and Canungra residents to the Gold Coast
- almost 4,000 work trips made by Gold Coast residents into the Scenic Rim
- 8,000 work trips made by Boonah, Peak Crossing, Kalbar and Aratula residents to Ipswich, and
- Fewer than 1,000 work trips made between the Scenic Rim and the Brisbane CBD.

Transport mode share to work

Private vehicles are the main way in which people travel to work across the Scenic Rim. In fact, on average, each household owns at least two vehicles, and only 3 per cent of households do not own a vehicle.

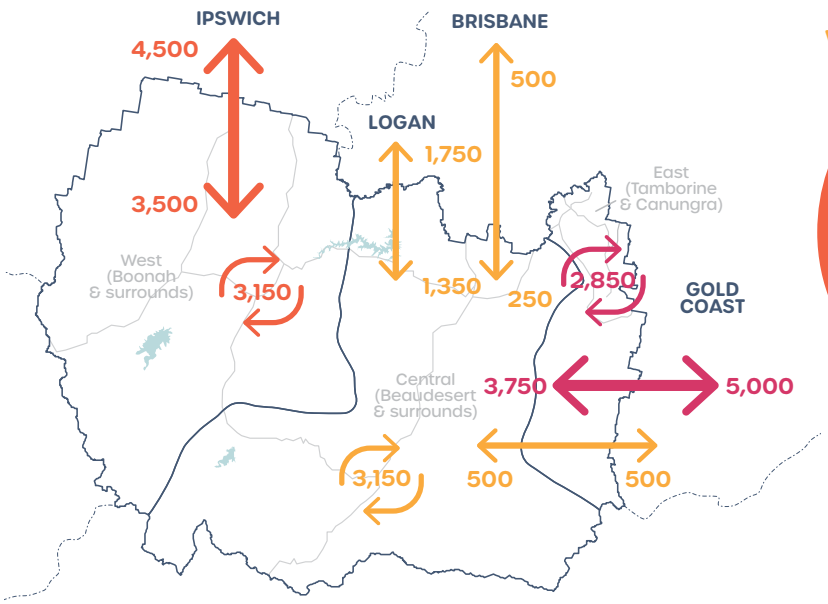
Private vehicle trips account for almost 96 per cent of all trips made.

Working from home is popular within the Scenic Rim. Up to 28 per cent of residents work from home for one or more days of the week. This plays a role in when and why private vehicle trips occur across the Scenic Rim for work-based travel.

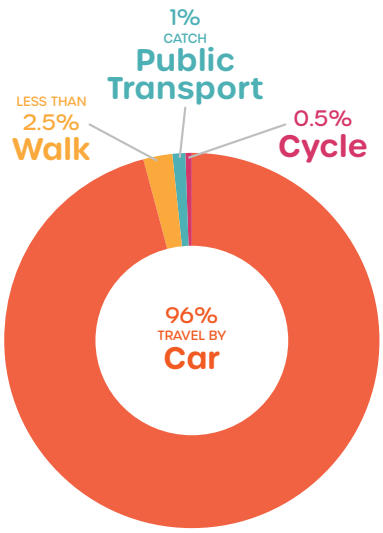
Public transport accounts for only 1 per cent of work-based travel in the Scenic Rim. Walking and cycling make up another 3 per cent.

The low percentage of work-based travel made by public transport aligns with the limited number of bus routes in the Scenic Rim. This limited public transport coverage is typical for dispersed rural and regional populations such as those in the Scenic Rim.

Where people travel for work



Travel modes



Car ownership

2.3 ROAD SAFETY

The Scenic Rim has a **relatively high crash rate** with fatality and casualty rates that are significantly higher than state and national averages.

34 road deaths from 2018 to 2022

1,013 road casualties from 2018 to 2022

398 casualties including **18 fatalities** in single vehicle crashes

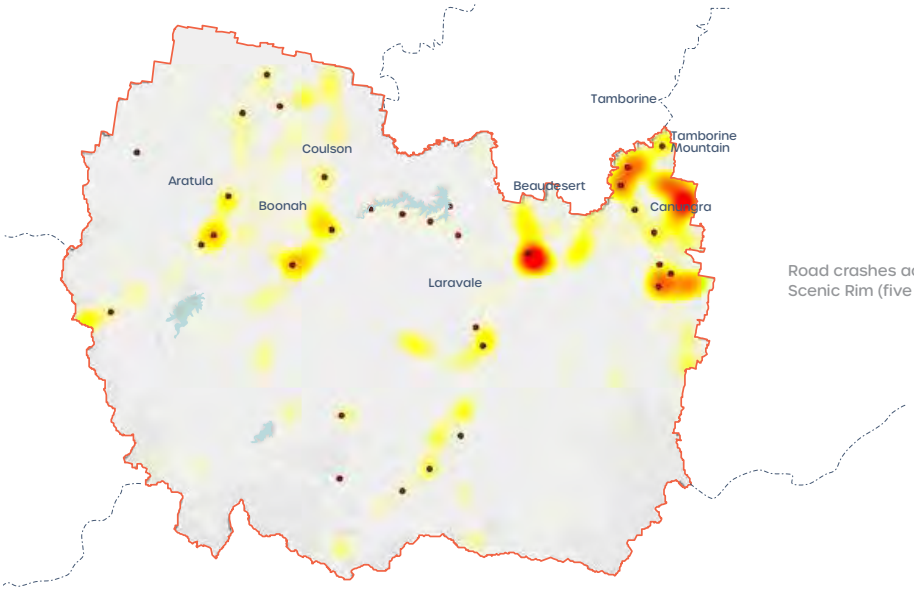
Scenic Rim is ranked **13th** of all Queensland LGAs for total fatalities and ranked **sixth** in terms of fatality rate per resident. These statistics reinforce the need to improve road safety, and for road safety to be a key part of the ITP's Road Network Plan.

Diverse road environments

Integrated Transport Plans define the transport vision, policies, goals and actions that are needed to respond to growth.

Motorcycle crashes

The Scenic Rim is a popular destination for motorcycle use on tourist routes and connectors to key destinations across the region. Around **26 per cent** of recorded crashes, including 10 fatalities, involved motorcyclists. This is higher than the national average. This is a significant over-representation of this user group when only one to two per cent of all trips are motorcycle trips. Most motorcycle crashes occurred near Tamborine Mountain, Canungra, and Rathdowney.



Road crashes across the Scenic Rim (five years)

2.4 PUBLIC TRANSPORT

Bus

There is currently only one bus route (Route 540) that operates within the Scenic Rim. This bus route links Beaudesert to Park Ridge and Browns Plains and runs every hour. It services only 15 per cent of the Scenic Rim's population, mostly located in Beaudesert and its northern suburbs.

The lack of bus services across the rest of the LGA means that, for most trips, private vehicle is the only option available to residents and visitors.

Rail

The north-south rail line passes through the Scenic Rim. It is part of the Sydney-Brisbane rail freight corridor and does not carry passenger services. The nearest passenger rail stations are located in the neighbouring LGAs of Logan, Ipswich and the Gold Coast.

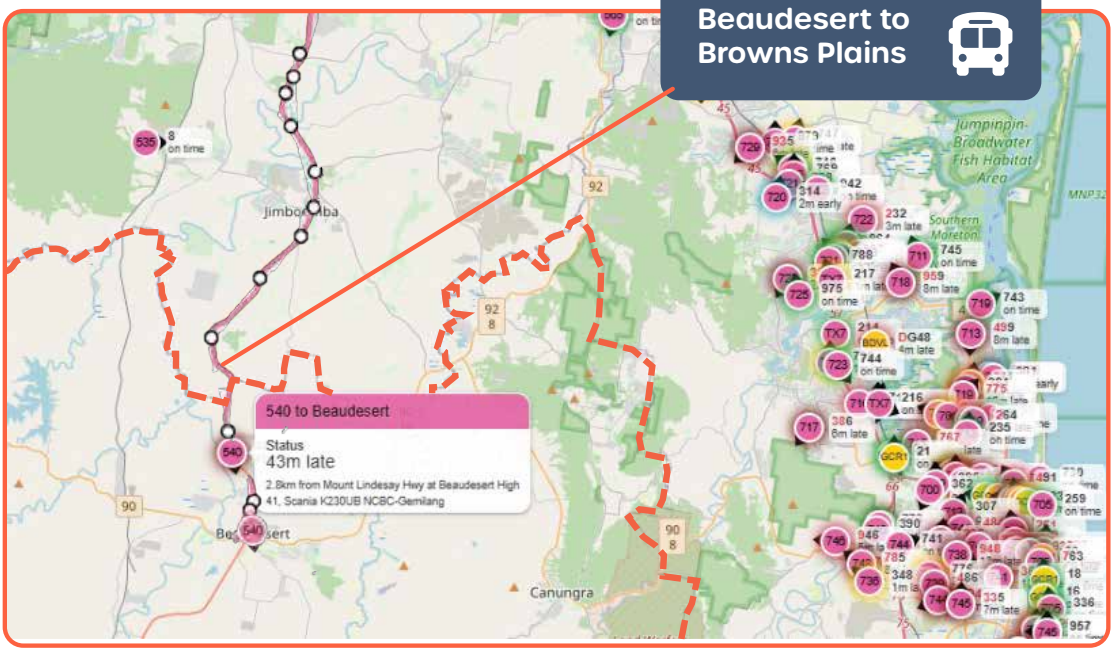
The Queensland Government has completed the Salisbury to Beaudesert Passenger Rail Study, which describes how passenger rail may develop across the region. The recommendations of this study do not have any implementation or funding commitments and are only considered as part of the longer-term planning for the region.

Community and private on-demand travel

The Scenic Rim has a number of private and community-based transport options for its residents to connect to key destinations such as health, community and shopping facilities as well as for tourism.

The Scenic Rim has only one major public bus route which connects Beaudesert to Browns Plains

Live Tracking Example of Bus Service 540 to Beaudesert



2.5 FREIGHT

Freight movements across the Scenic Rim generally occur on the major Council and State-controlled roads. However, trucks also need to access towns and villages in the Scenic Rim to provide services and deliveries. This often results in conflicts with other traffic on streets and at intersections in these towns and villages.

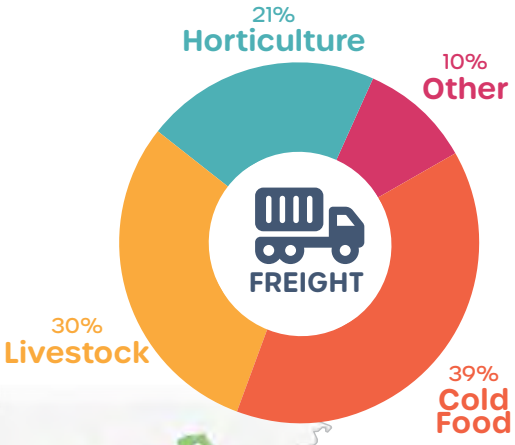
790,000 tonnes of freight per year

42,000 truck trips per year

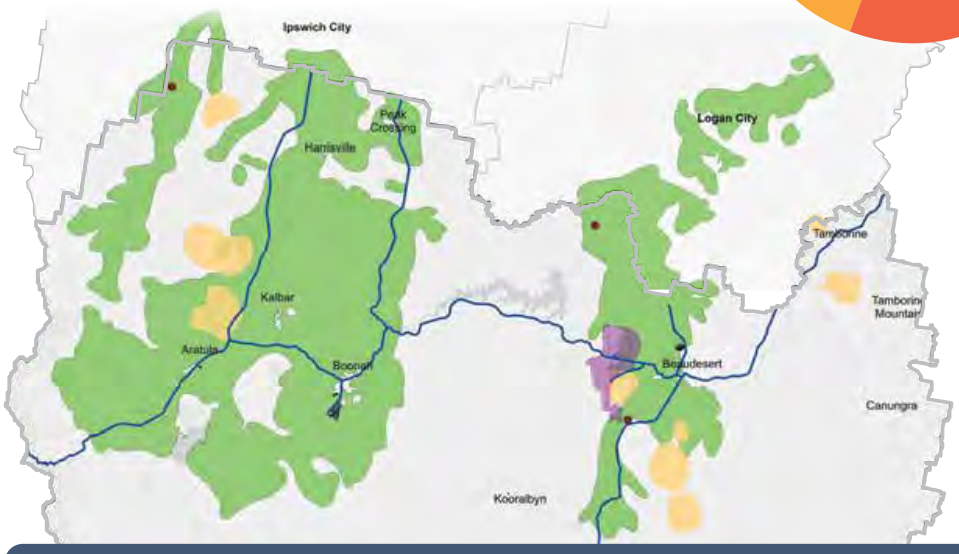
$2 billion of economic output per year

Maintaining a secure and efficient transport network for the movement of goods is important for the economic prosperity of the Scenic Rim.

The major freight route across the Scenic Rim is the Cunningham Highway which carries 1,500 to 2,000 heavy vehicles per day. The Cunningham Highway, which connects to the Newell Highway, provides a key north-south route between Queensland, New South Wales and Victoria.



The Scenic Rim Road Freight Network and Key Freight Generating Areas



The Bromelton SDA is an 1,800 hectare area that is earmarked for the development of freight and logistics industries. It has direct access to the Mount Lindsay Highway.

The Department of Transport and Main Roads has identified a new link road, called the Bromelton North-South Arterial Road. This road will connect the Bromelton SDA with the Mount Lindsay Highway at Woodhill.

3. KEY CHALLENGES AND OPPORTUNITIES

3.1 TRANSPORT CHALLENGES

The Scenic Rim transport network faces a number of current and emerging challenges. These include:

- a sparse, dispersed and ageing population
- work locations that require the use of private vehicles
- a diversity of destinations as different parts of the Scenic Rim interact with other LGAs. For example, Canungra and Tamborine Mountain trips have a strong attraction to the Gold Coast while Boonah trips are more closely related to Ipswich
- road trauma rates, and
- road pavement condition.

As the Scenic Rim population grows, these challenges will increase.

A **reliable and resilient road network** is critical to address the challenges faced across the Scenic Rim.

A reliable road network allows residents to be confident about how long a trip will take. A resilient road network allows residents to be confident that roads will not be blocked, including during weather events where the road network needs to provide evacuation routes. Where road closures occur, they need to be re-opened quickly to reduce disruption.

The Scenic Rim population is expected to grow by **23,000 people by 2041**. Most of this growth is likely to occur in Beaudesert, Boonah, Canungra, Kalbar and Kooralbyn.

The Scenic Rim is a **collection of towns and villages** each with their own local business district. **94 per cent** of trips are made by private vehicles. **97 per cent** of households have access to at least one private vehicle.

The Scenic Rim is an important **tourist destination**. Tourism in the Scenic Rim is expected to grow and diversify.

38 per cent of the population are under 18 or 70+, higher than the national average. Vulnerable road users, common in these age groups, require more infrastructure and services to help them get around safely.

Each year the Scenic Rim generates **790,000** tonnes of freight, **42,000** truck trips and **$2 billion** of economic output.

50 per cent of workers within the Scenic Rim **travel into work from outside** the area each day. **60 per cent** of employed people living in the Scenic Rim **travel outside the area** for **work each day**.

The Scenic Rim is subject to **floods and bush fires** which can limit road connectivity at times. Poor **road condition** was a key concern raised by residents of the Scenic Rim.

Key roads experience **localised traffic congestion** during the peak morning and evening periods.

The Scenic Rim has a **road fatality rate higher** than the state and national averages.

Community feedback snapshot

During the engagement process, the community indicated that:

- walking and cycling are not well catered for
- footpaths need to be better maintained
- pedestrian crossings are needed for people with additional mobility needs
- road safety is a key issue
- safe, accessible and reliable public transport should be a key priority, and
- 79 per cent of survey responses indicated that the current transport system does not work well for the community.

What makes a good road network?

A reliable and resilient road network prioritises community access and promotes business, industry, and tourism.

It also responds to emergency needs and is resilient to the impacts of extreme weather events.

3.2 TRANSPORT OPPORTUNITIES

The ITP has identified several key transport opportunities that could help respond to the transport challenges facing the Scenic Rim. These opportunities:

- promote movement across the region and movement to and from the region
- improve road safety
- support high-quality places for residents and visitors
- support increased employment, and
- support housing opportunities.

Movement and place

The Movement and Place Framework is a nationally recognised road planning and management tool. This framework focuses on creating successful roads by balancing:

- the efficient and safe **movement** of people and goods by direct routes using high order roads, and
- the development of **place** by prioritising the amenity and quality of local centres, managing through-trips and increasing human interaction and enhancing asense of community.

Adopting the principles of the **Movement and Place Framework** to better separate high volume roads and local 'places'.

Providing more public transport services to more parts of the Scenic Rim will help to increase the use of public transport by residents and visitors.

Capitalising on the **Bromelton State Development Area** provides an opportunity to increase local employment, reduce long-distance commuting and attract state and nationally significant industrial activities.

Promoting walking as a viable travel mode around towns and villages by improving the coverage, connection and quality of facilities

Implementing a **cycling network** to make cycling safe and attractive for all users

Leading **transport innovation** by facilitating the use of emerging technologies such as electric vehicle charging and on-demand transport options.

Improving parking policies to help Council achieve its traffic regulation, parking enforcement, planning control and financing obligations.

Supporting the principles of **Safe Systems** to reduce crash occurrence and severity in line with national and international targets.

Community feedback

During the engagement process, members of the community indicated that they were seeking:

- better facilities for cyclists across the region
- better walking facilities around towns and villages, especially for elderly (vulnerable) users
- bus connections between the Gold Coast and Tamborine Mountain to better connect the regions, and
- electric vehicle infrastructure

Members of the community indicated that as Canungra, Tamborine Mountain, Beaudesert and Kooralbyn are tourist destinations, better infrastructure could enhance these areas for visitors.

4. COMMUNITY INPUT

4.1 METHODS

Community feedback about how residents want to travel around the Scenic Rim now and into the future was captured through:

- 1,577 visits to Council's Let's Talk Scenic Rim project page
- 213 responses to an online survey
- 132 pins dropped on an interactive map, and
- 79 community members attending in-person drop-in sessions at Beaudesert, Boonah, Tamborine Mountain, Canungra and Harrisville.

Thirty transport industry and community group representatives also provided input through targeted stakeholder workshops to inform the ITP and gain feedback on the outcomes. This input helped the project team to understand what members of the local community experiences when they use the current transport network and their priorities for improving the transport network within the Scenic Rim.

4.2 COMMUNITY FEEDBACK SUMMARY

The common topics raised by community members related to:

- the need to rely on private motor vehicles
- road safety, condition and congestion
- a lack of suitable walking and cycling paths and poor walking and cycling connections
- the need for safer and more accessible public transport, particularly for travelling between towns within the Scenic Rim and for travel to and from nearby regions, and
- the need to better cater for residents and visitors with additional mobility needs.

Scenic Rim community's key feedback

Active transport feedback

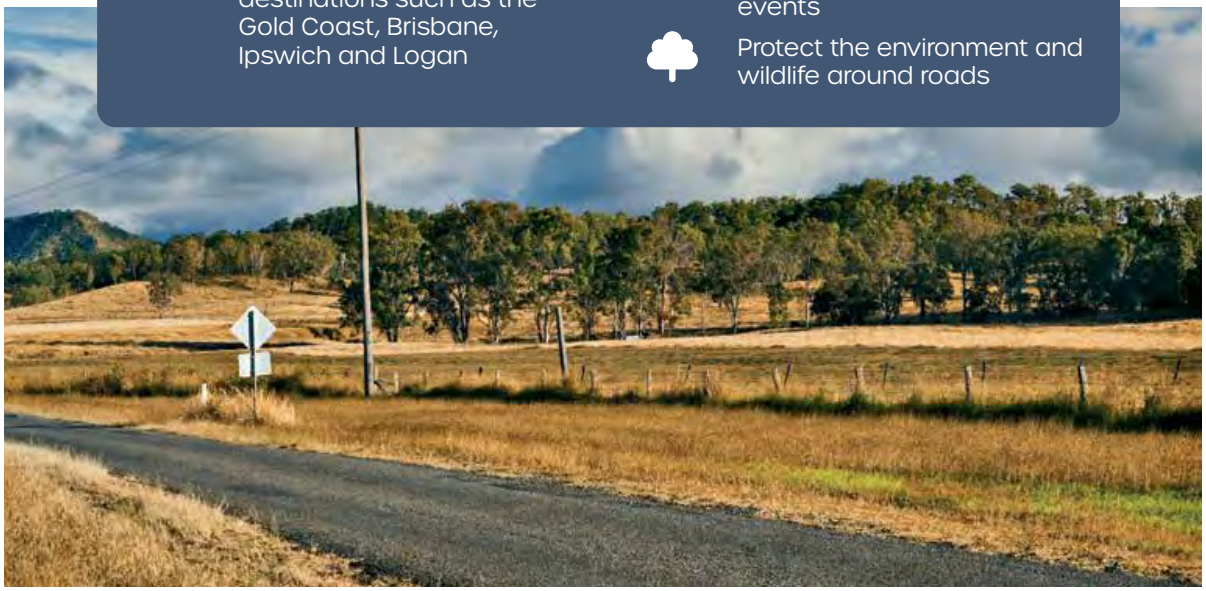
- Improve pathways and connections across towns
- Fix and provide more pedestrian crossings in towns
- Improve facilities for people with accessibility needs and for the elderly
- More off-road cycle paths

Public transport feedback

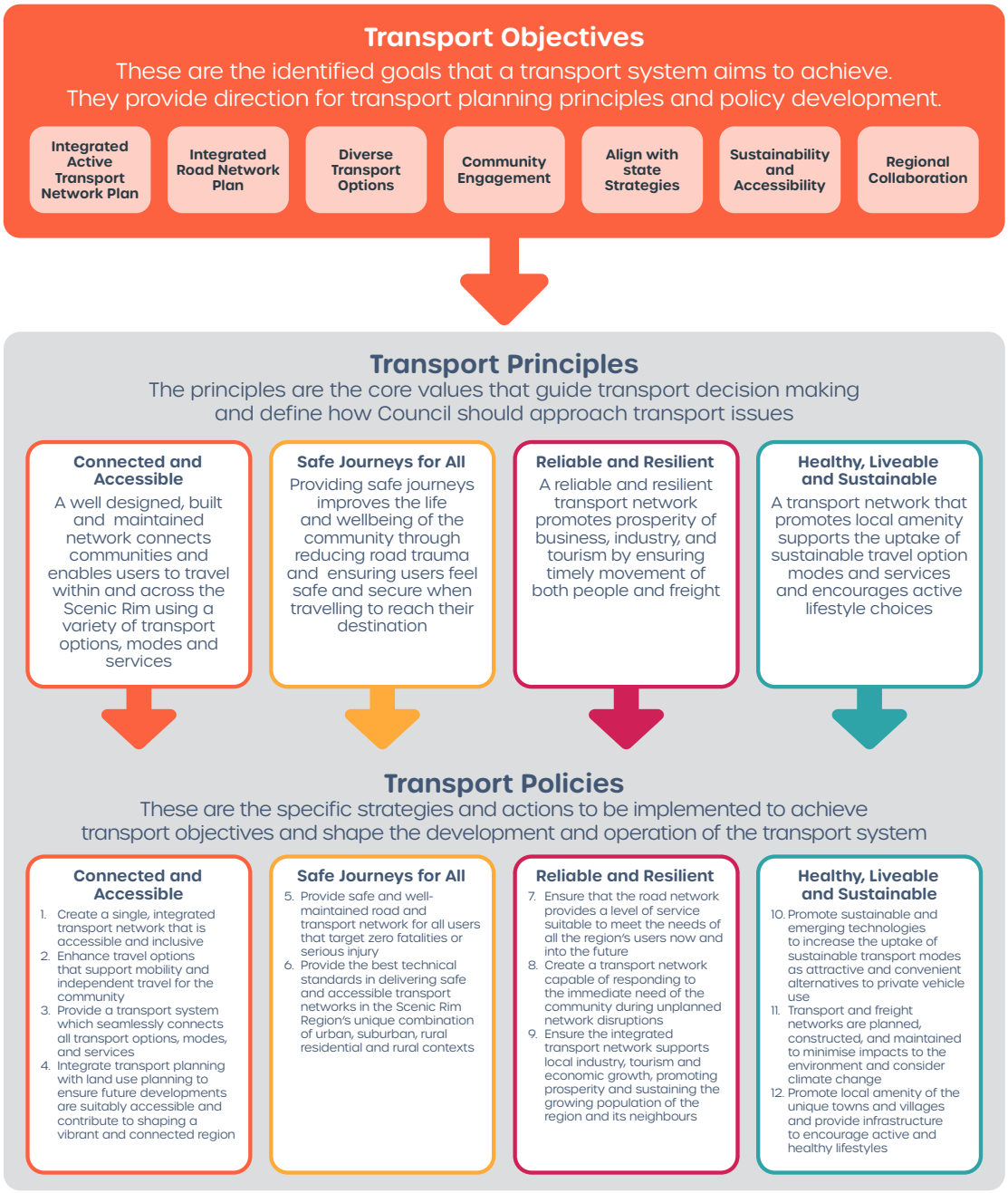
- Existing public transport coverage and frequency is poor and needs to be improved
- Need to better connect local towns and improve access to and from surrounding major destinations such as the Gold Coast, Brisbane, Ipswich and Logan

Road feedback

- Better road pavement conditions
- Better road connections between towns
- Reduce traffic congestion in towns
- Improve road safety for all users
- Improve connections to remote areas for emergencies and external events
- Protect the environment and wildlife around roads



5. TRANSPORT OBJECTIVES, PRINCIPLES AND POLICIES



6. ROADS STRATEGY

6.1 ACCOMMODATE TRAFFIC GROWTH ACROSS THE SCENIC RIM

The Scenic Rim will continue to be an attractive lifestyle destination to live, work and play. With growth, traffic volumes into and out of the Scenic Rim will increase on major roads, especially those roads that link to its neighbours such as the Gold Coast, Logan, Ipswich and Brisbane.

To support this growth, the road strategy recommends **21 new local roads** be constructed across the Scenic Rim together with **62 road upgrades** to widen and improve existing roads. The road strategy also recommends updating the road hierarchy definition to better manage road planning.

With over 75 per cent of traffic using State-controlled roads, the reliance on this network will continue. It is important that Council works closely with Department of Transport and Main Roads (TMR) to plan and deliver improvements across the State-controlled road network to support growth in the region.

Recommended road infrastructure and improvements

- **582km** of road upgrades
- **54** road safety treatments
- **14** road safety investigations recommended
- **62** capacity upgrades
- **9** intersection upgrades
- **21** new road links

Key roads include:

- Nerang-Beaudesert Road through Beaudesert and Canungra
- Mount Lindsay Highway through Beaudesert and Gleneagle
- Beaudesert-Beenleigh Road through Tamborine, which will be the key route linking the Scenic Rim to Logan
- Tamborine-Oxenford Road at Tamborine Mountain, and
- Ipswich-Boonah Road through Boonah.

6.2 IMPROVE ROAD CONDITIONS

Council's road network will require significant investment to improve road conditions and to cater for future growth. This will include more than **580km of road upgrades** involving road widening and increasing capacity.

6.3 IMPROVE ROAD SAFETY

Improving road safety is a key part of the Road Strategy with **54 road safety treatments** and **14 road safety investigations** recommended across the region.

Future road upgrades should be supported by a Road Safety Plan. This plan should aim to change driver behaviour and increase road safety awareness. It should also include targeted campaigns to address the needs of high-risk road user groups, such as young drivers, motorcycle riders, older drivers and visitors.

6.4 MANAGING ROAD FREIGHT

Recommendations to manage the impacts of road freight include pavement widening and pavement quality improvements on key roads that service activity areas across the region. The development of the Bromelton SDA will also require significant investment, and planning and collaboration between the Queensland Government, Council and private enterprise to deliver the access roads needed to support this growth area.

6.5 SUPPORTING POLICIES AND PLANNING

Supporting policies and additional planning studies are required to underpin the design and delivery of road upgrades across the Scenic Rim. These policies will ensure that improvements to the road network are targeted to the specific needs of the Scenic Rim. Policies and initiatives should include:

- Preparing a Road Safety Plan and Black Spot funding grants application
- Updating Council's Road Design Standards to ensure all new roads meet best practice guidelines
- Updating the Parking Policy
- Creating Local Area Parking Plans to support local centres
- Embracing emerging technologies associated with parking management, electric vehicles and on-demand bus service
- Preparing a Road Asset Management Plan to deliver and record improvements for maintenance
- Reviewing environmental policies to ensure road upgrades consider unique waterways, and flora and fauna needs.

6.6 LOCAL TOWNS AND VILLAGES

Local towns including Beaudesert, Boonah, Canungra, Tamborine Mountain and Tamborine will experience increased traffic.

Many of these local towns are already cut by state roads. Council will need to work closely with TMR to manage the 'Movement' and 'Place' conflicts along these roads and to plan local road upgrades to cater for growth.

Local area road network improvements have been proposed for 10 towns and villages across the Scenic Rim. These improvements will cater for increased traffic and improve road safety for all road users.

Maps showing the improvements are provided in **Appendix A: Local Area Improvement Maps**.

7. ACTIVE TRANSPORT STRATEGY

Active transport improvements

- Construct **7.3kms** of missing paths
- Construct **22** missing crossing facilities
- Construct **192** missing kerb ramps
- Upgrade **26** existing crossings
- Repair **15** damaged paths
- Widen **6.6kms** of existing paths
- Upgrade **87** existing kerb ramps
- Provide **19** supporting facilities (shading, seating, water stations)

7.1 IMPROVE PEDESTRIAN FACILITIES

The existing pathway network and crossing facilities require significant investment to encourage walking and cycling in towns and villages across the Scenic Rim. This includes building up to **40km of pathways** to complete missing links, adding **22 missing crossing facilities** and providing **192 more kerb ramps**.

Significant investment is required for accessibility upgrades. Many existing paths need to be widened, or the pavement repaired, to provide safe and convenient paths for people of all ages, but especially residents aged over 50 or younger than 17.

Maps showing the proposed active transport improvements across 10 local towns and villages are provided in **Appendix A: Local Area Improvement Maps**.

7.2 IMPROVE DESIGN STANDARDS

Improved design standards for new pedestrian and cycling facilities is recommended. This includes aiming for walking and cycling paths to be 2.5m wide and on at least one side of the road for major routes, and 1.8m wide on secondary routes. This will cater for all types of pedestrians and cyclists.

Guidelines for the design of kerb ramps and crossing points have also been developed. These guidelines consider safety, level of use and universal design principles for all users.

7.3 IMPROVE SIGNATURE TRAILS AND PATHWAYS

The Scenic Rim has many recognised walking trails located around towns and National Parks which are popular with tourists. Council should consider providing transport-related infrastructure for existing and new walking trails, including parking areas, active transport connections, wayfinding signage, water points, shelters and signage that classifies the trail.

The **Bethania to Beaudesert Rail Trail** is a potential walking and cycling trail along the former Beaudesert Rail Corridor that connects the Scenic Rim to Logan. The Active Transport Strategy includes recommendations for the 7.5km long Scenic Rim section of the Rail Trail that consider the experiences of internationally successful Rail Trails.

Apart from the tourism benefits, this facility provides an opportunity to connect neighbourhoods north of Beaudesert with emerging suburbs in Logan.

During community engagement, significant interest was also expressed for the **Boonah to Ipswich Trail**.

Council should also investigate potential upgrades to the **Boonah to Beaudesert Rail Trail** to leverage successful examples across the region.

Potential upgrades could ensure that the facility connects local towns with a facility accessible to a variety of users.

TMR's **Priority Cycle Network (PCN)** plans for a network of cycleways and shared paths. The current PCN identifies routes through Beaudesert and north to Gleneagle for future implementation. These 'signature active transport routes' aim to increase cycling in Beaudesert and its planned growth areas.

Council will work closely with TMR to progress these projects and to identify new PCN routes across the region.

7.4 SUPPORTING STRATEGIES

Supporting strategies have been recommended to promote the use of active transport. These initiatives include:

- **International Car-free Day:** An annual event that encourages motorists to give up their cars for one day, to promote the use of walking, cycling and public transport
- **Monthly Walking Themes:** Advertising different walking themes to encourage residents and tourists to walk more often, including Walking Trails, Group Walk and Favourite Walk
- **The Scenic Coffee Route:** An initiative to encourage residents and tourists to cycle and explore restaurants and cafes within the Scenic Rim
- **Bicycle Workshops:** Council-organised bicycle workshops in different local community areas to provide training on how to repair and maintain bicycles
- **Community Breakfast Trails:** Council-organised walking and cycling events, with breakfast provided, that can be extended to include school-walking routes
- **Electric Bike Incentives:** Advertising state and federal government rebate schemes which provide monetary support to purchase electric bicycles
- **Travel Behaviour Change Program:** Developing and implementing marketing and communication initiatives to encourage active transport use.

8. PUBLIC TRANSPORT STRATEGY

8.1 FUTURE PUBLIC TRANSPORT NETWORK OPPORTUNITIES

Given the limited public transport options currently available in the Scenic Rim, the following public transport improvements should be investigated:

- increasing the frequency of the Route 540 service connecting Beaudesert to Logan
- extending the 540 bus route
- advocating for the Beaudesert to Salisbury Rail connection
- providing new public transport routes that connect the Gold Coast with Canungra, Tamborine Mountain and Beaudesert
- providing bus connections that service both local and tourist markets between Tamborine Mountain, Logan, Beenleigh and the Gold Coast
- providing public transport connections that link Boonah to Ipswich, and
- providing bus services for local trips between Beaudesert, Boonah, Tamborine Mountain and Canungra.

8.2 FUTURE SERVICE DELIVERY AND OPERATIONAL CONSIDERATIONS

Low density regional communities across the Scenic Rim will be difficult to service with public bus services. Alternative methods of public transport should be considered including 'on-demand' services, autonomous vehicles and smaller (low-cost) bus options.

Public transport planning should align with regional development goals and consider the needs of ageing communities. New services should include infrastructure that can easily expand to cater for a growing demand for public transport.

To address low population density, providing demand-responsive transport targeted at the needs of the community is key. For the ageing population, door-to-door services and accessible infrastructure are essential. Insights from Ipswich and other similar regions highlight the potential for autonomous vehicle trials and cross-LGA collaboration.

8.3 COUNCIL'S ROLE IN PUBLIC TRANSPORT

Public transport services within the Scenic Rim have limited coverage and frequency. They are also regulated by the Queensland Government. This means that investment in new services in the Scenic Rim needs to compete for funding with other growth areas across Queensland.

With the recent state commitment to provide 50 cent fares, there are clear benefits in Council continuing to advocate for more urban bus services that connect its communities (both within and around the Scenic Rim) and provide a viable alternative to private vehicles.

Community engagement was essential in identifying public transport needs for the region, especially for older and younger members of the community who do not drive. The social and community benefits that additional 'tailored' bus services will provide for the mobility of the community is key.

8.4 PUBLIC TRANSPORT INFRASTRUCTURE AND ACCESSIBILITY

Bus-related infrastructure such as pathway connections, shelters, set-down areas and electric charging stations should be implemented as needed to support future public transport services.

8.5 PLANNING AND DEVELOPMENT

Urban planning should focus on ensuring future subdivisions and developments have road connections between them. This will allow for future direct bus routes without the need for excessive detours.

9. IMPLEMENTATION

9.1 PRIORITISING AND DELIVERING TRANSPORT NETWORK IMPROVEMENTS

The Scenic Rim's transport network requires significant improvements and upgrades to support its growing communities. With limited funding available, these transport improvements and upgrades will need to be prioritised carefully in coming years.

Road network improvements should be prioritised and delivered based on:

- providing a **safer** road network
- supporting **movement and place** principles
- providing an **efficient** network for freight
- maintaining road condition to a **high level of quality**, and
- providing **value for money**.

Active transport improvements should be prioritised and delivered based on:

- **completing connections** for pedestrians and cyclists to key activity locations
- providing an **accessible** network for all users
- **attracting** as many new users as possible
- ensuring **safe** pathway and crossings, and
- providing **value for money**.

9.2 INVESTING IN TRANSPORT

Without adequate planning and funding the Scenic Rim faces a future of increased levels of traffic congestion, reduced road safety and reduced amenity for its residents and visitors.

Recent reduced funding levels present a significant challenge. With reduced funding, it is difficult for investment in infrastructure to keep pace with growth, especially given the extensive road network across the Scenic Rim.

More roads mean more road maintenance costs, which is where most of the current transport funding is spent. However, more investment in public and active transport is required to reduce the demand for new roads and to meet the transport needs of the Scenic Rim.

9.3 FUNDING OPPORTUNITIES

Responsibility for funding the major transport infrastructure required to deliver the ITP is shared between local, state and dederal governments. The funding of new transport infrastructure planning and construction across the Scenic Rim will be achieved through:

- Council's capital works program and Local Government Infrastructure Plan (LGIP)
- public-private partnerships and conditions of consent triggered by developments across the region
- state funding through TMR's Road Infrastructure Plan (RIP) for State-controlled transport infrastructure improvements as well as the Bromelton SDA, and
- federal Black Spot funding grants for identified safety issues.

9.4 POLICY ALIGNMENT AND GOVERNANCE

The Scenic Rim ITP acts as a blueprint. It links to Council's economic strategies and land use planning. It also guides decisions about where development should occur, aiming to create communities where more people can use walking, cycling and public transport to access jobs, services, and recreational opportunities.

Other Council documents linked to the ITP include:

- The Corporate Plan 2025-2030
- Growth Management Strategy
- Future Parking Policy, and
- local town centre master plans (i.e. Canungra, Kooralbyn, Kalbar).

The ITP also addresses the need to reduce greenhouse gas emissions created by transport. The policies related to this include:

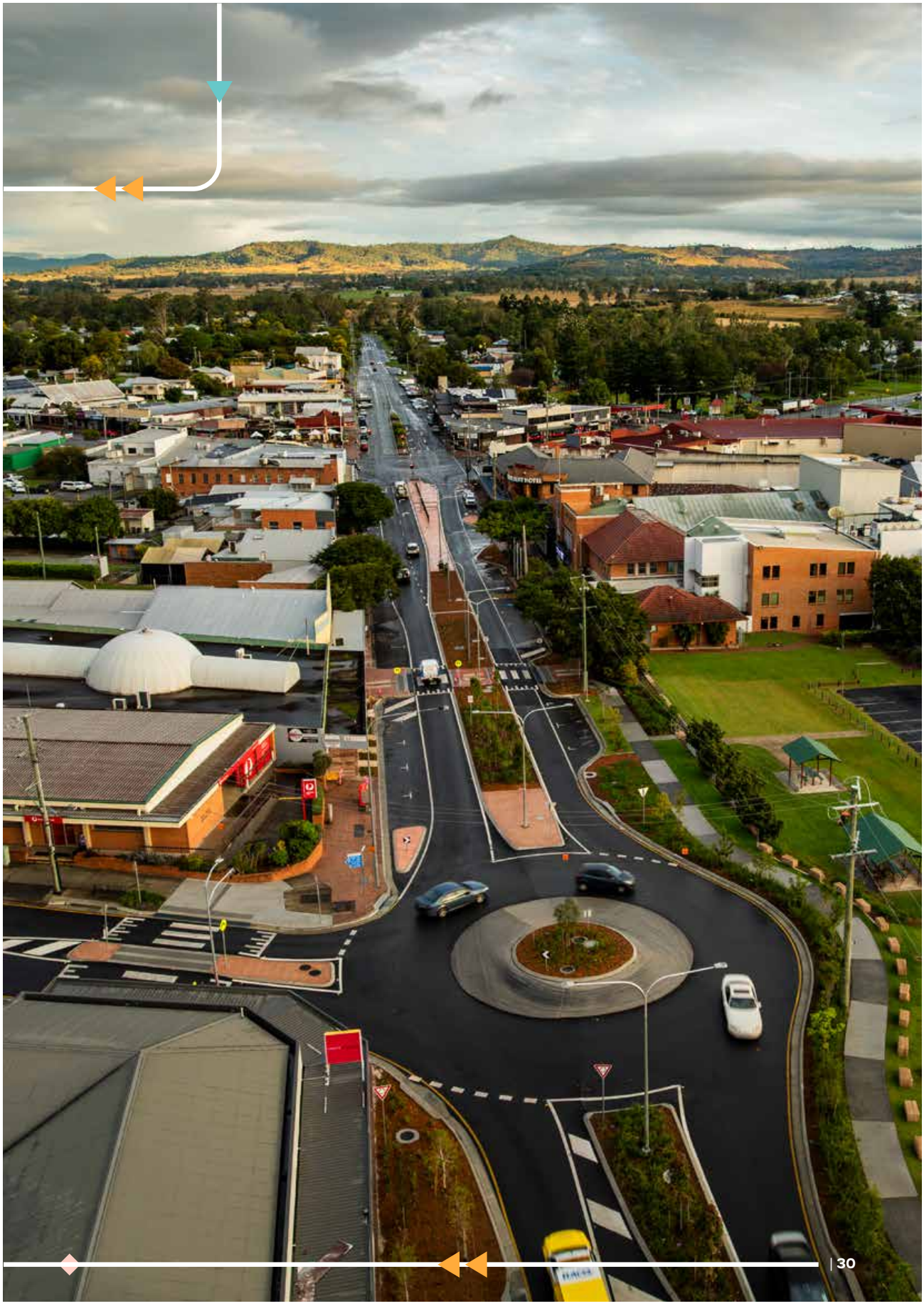
- promoting active transport (walking and cycling)
- advocating for public transport improvements across the Scenic Rim
- advocating for public transport connections to neighbouring LGAs, and
- supporting the transition to electric vehicles.

The ITP also aligns with strategies related to the natural environment. This will ensure that transport infrastructure developed is sustainable and maintains the unique natural assets that make the Scenic Rim such an attractive place to live, work and visit.

9.5 ONGOING MONITORING AND REVIEW

The ITP includes recommendations that should be monitored and formally reviewed every five years. This will ensure that outcomes are achieved and associated actions are updated. This monitoring and review should include:

- updating traffic forecasting tools so that they remain current and reflect changes in planning, development, policy and infrastructure
- maintaining asset registers related to transport infrastructure conditions and construction works
- incorporating community and stakeholder feedback on newly identified transport needs and incorporating this feedback into the Infrastructure Prioritisation Tool
- updating or adapting the ITP to align with changes in Council policy, emerging technologies or funding opportunities
- maintaining regular communication with the Queensland Government and neighbouring councils on regional transport issues to align transport network planning.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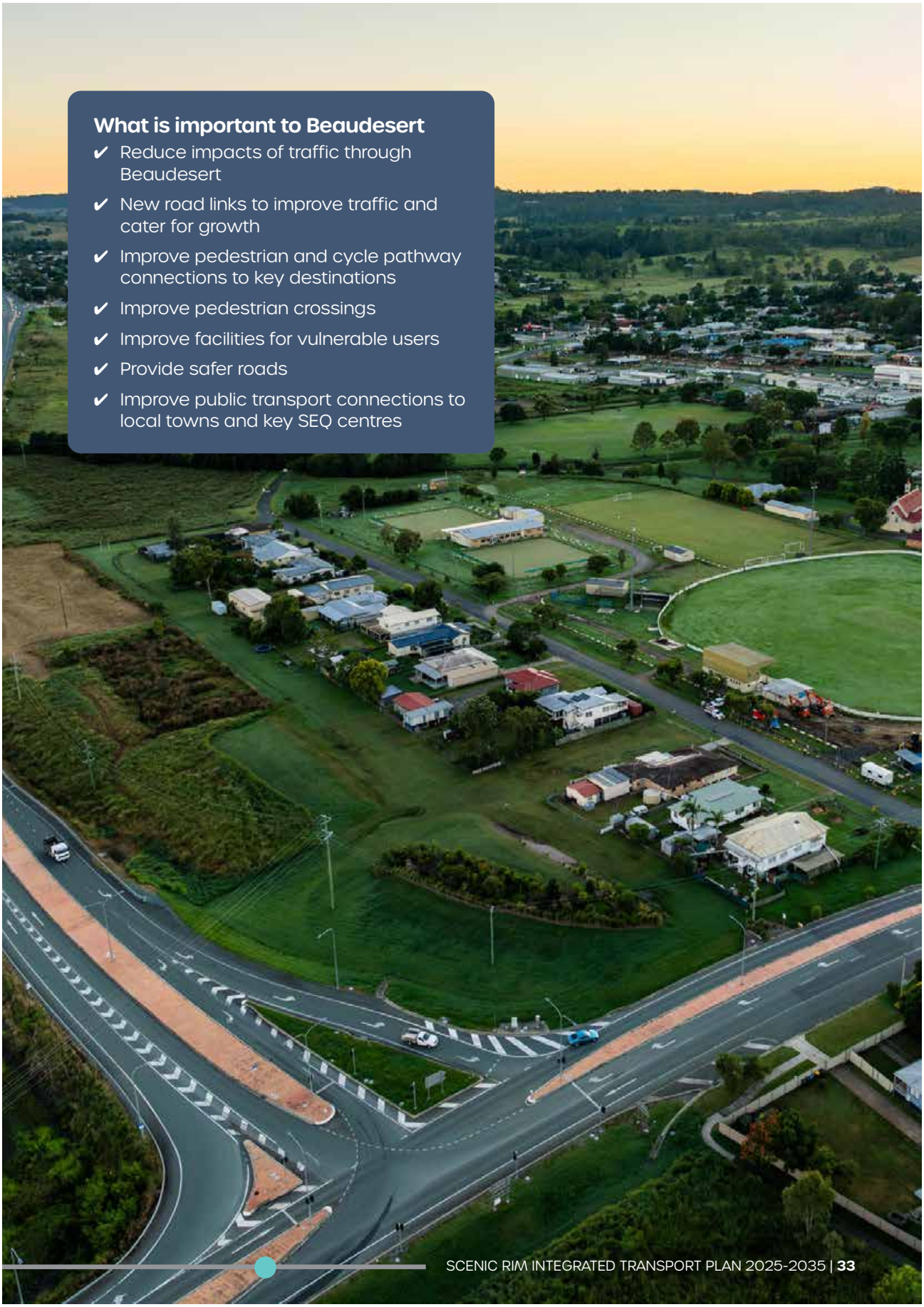
APPENDIX A: LOCAL AREA TRANSPORT IMPROVEMENT MAPS

LOCAL AREA TRANSPORT IMPROVEMENTS BEAUDESERT

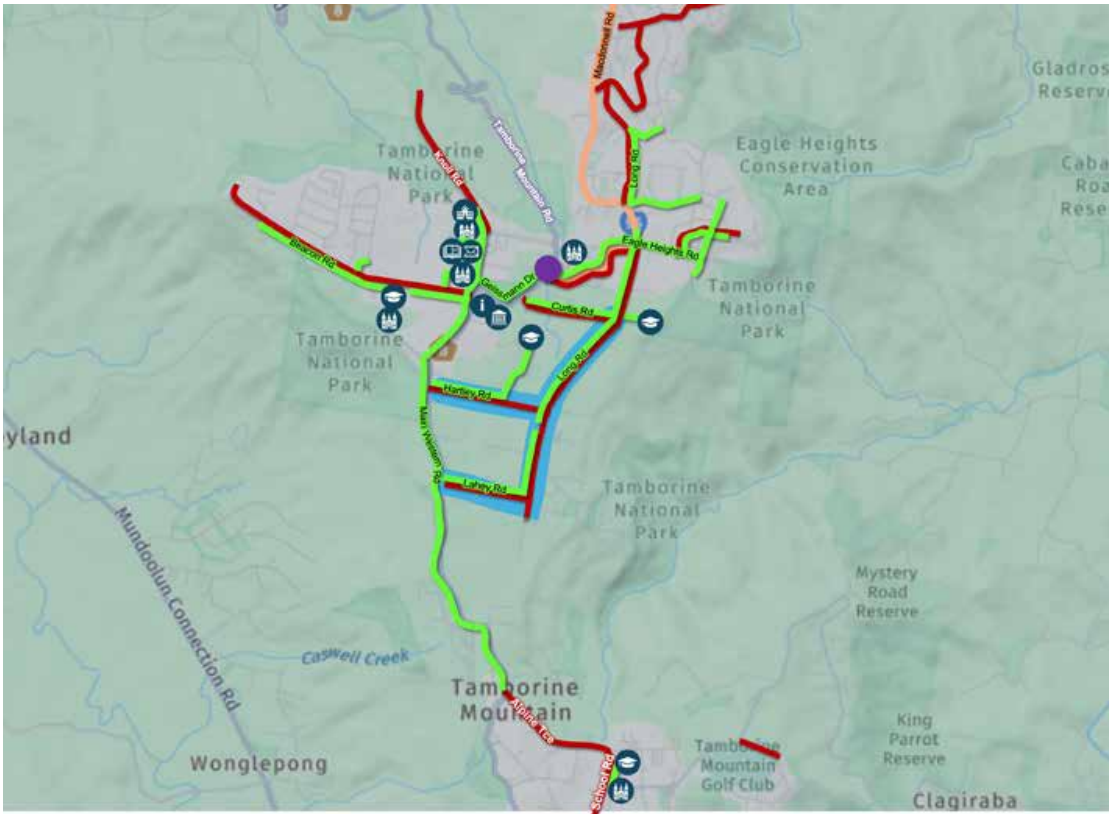
Key

- Road Network Improvements
- Future Road Link
- Intersection Improvements and Investigation
- Active Transport Improvements
- Principal Cycle Network Route
- Beaudesert to Bethania Rail Trail
- Movement and Place Investigation Area
- State-controlled Road

- Hospital
- Educational Institute
- Community Centre
- Convention Centre
- Court House
- Library
- Local Government Administration
- Museum
- Place of Worship
- Post Office
- Tourist Information Centre


What is important to Beaudesert
✔ Reduce impacts of traffic through Beaudesert
✔ New road links to improve traffic and cater for growth
✔ Improve pedestrian and cycle pathway connections to key destinations
✔ Improve pedestrian crossings
✔ Improve facilities for vulnerable users
✔ Provide safer roads
✔ Improve public transport connections to local towns and key SEQ centres

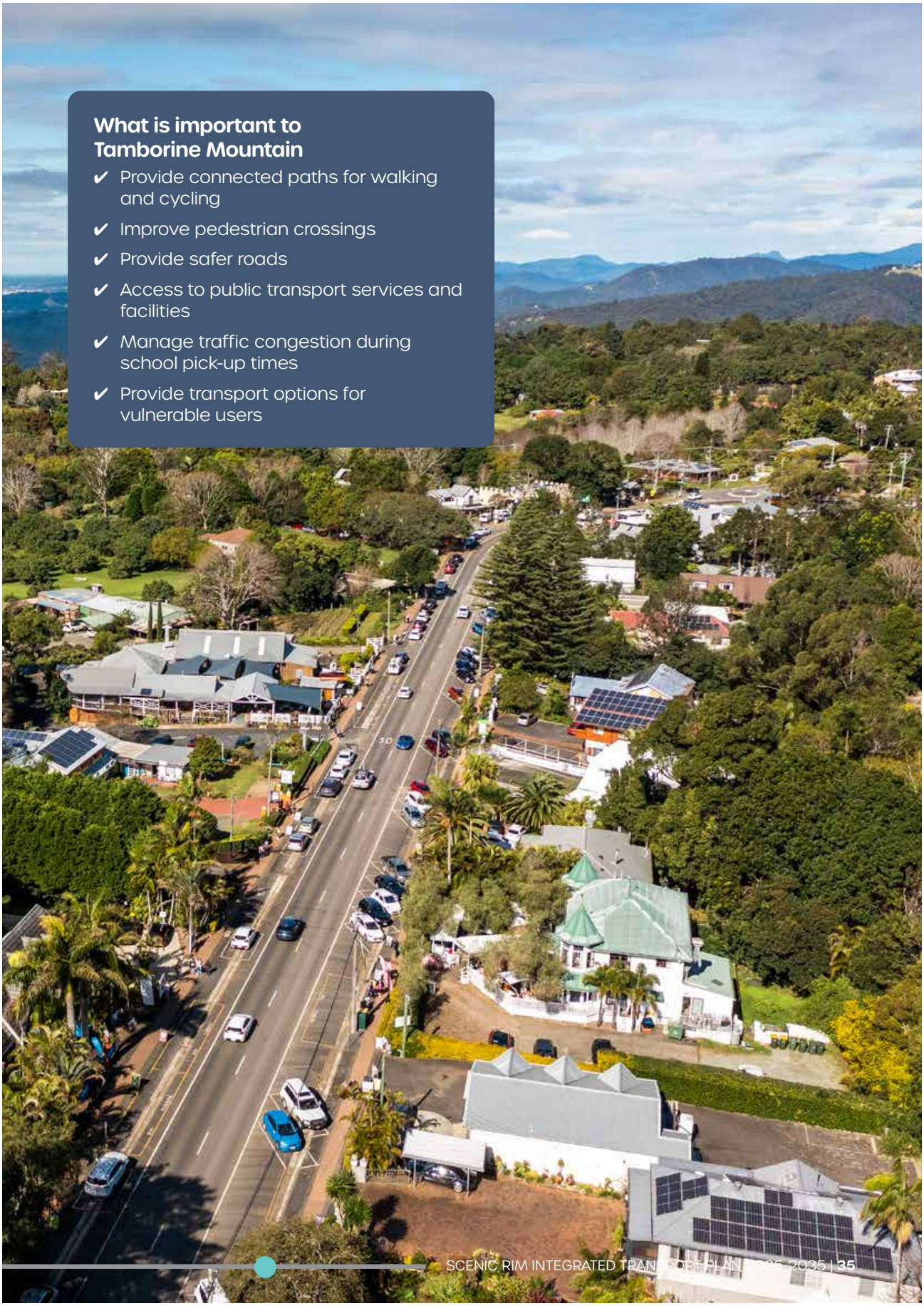
LOCAL AREA TRANSPORT IMPROVEMENTS TAMBORINE MOUNTAIN



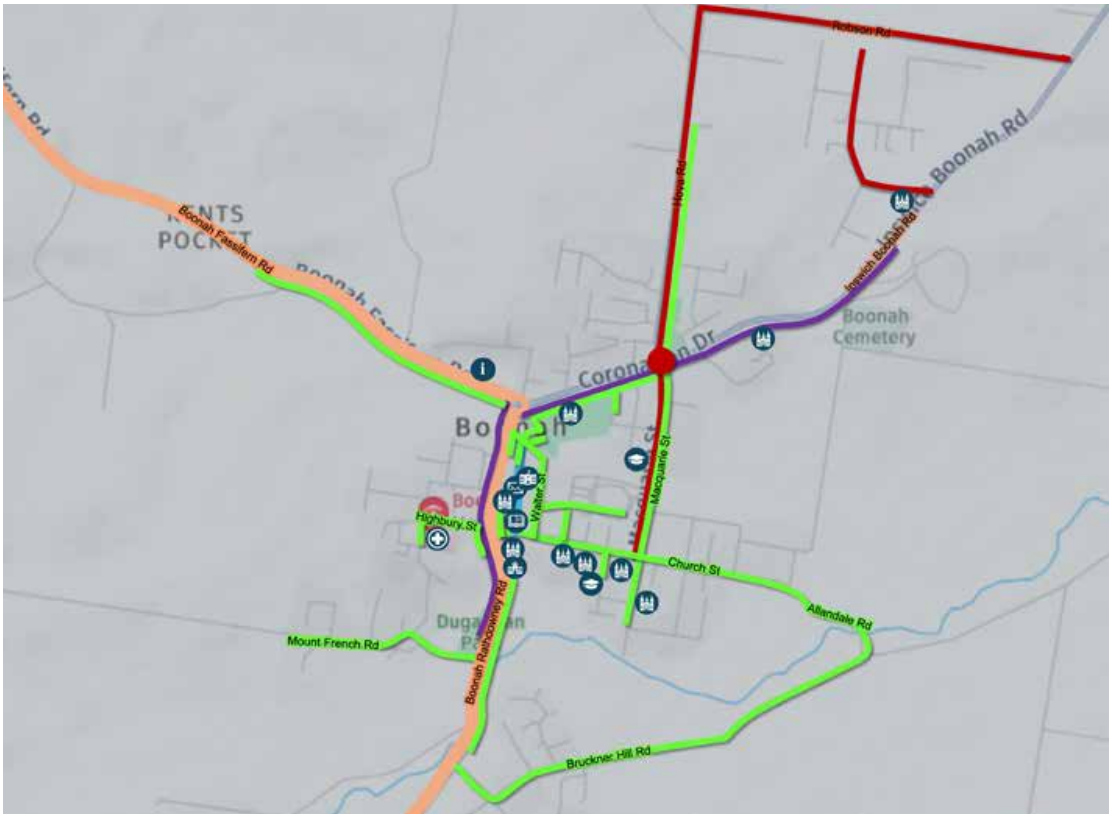
Key

- Road Network Improvements
- Safety Investigation
- Safety Enhancements Investigation
- Active Transport Improvements
- Movement and Place Investigation Area
- State-controlled Road

- Educational Institute
- Community Centre
- Library
- Museum
- Place of Worship
- Post Office
- Tourist Information Centre


What is important to Tamborine Mountain
✔ Provide connected paths for walking and cycling
✔ Improve pedestrian crossings
✔ Provide safer roads
✔ Access to public transport services and facilities
✔ Manage traffic congestion during school pick-up times
✔ Provide transport options for vulnerable users

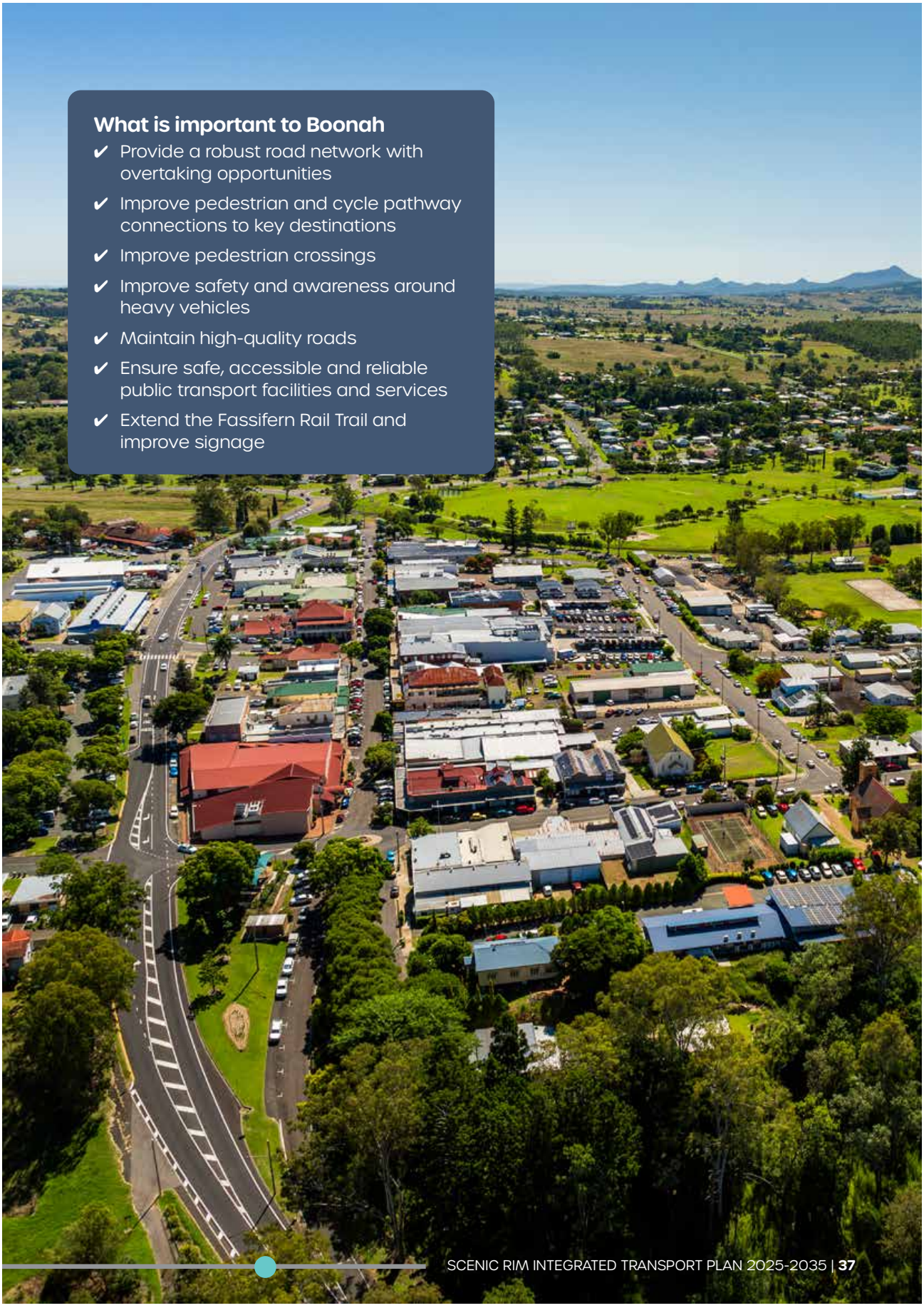
LOCAL AREA TRANSPORT IMPROVEMENTS BOONAH



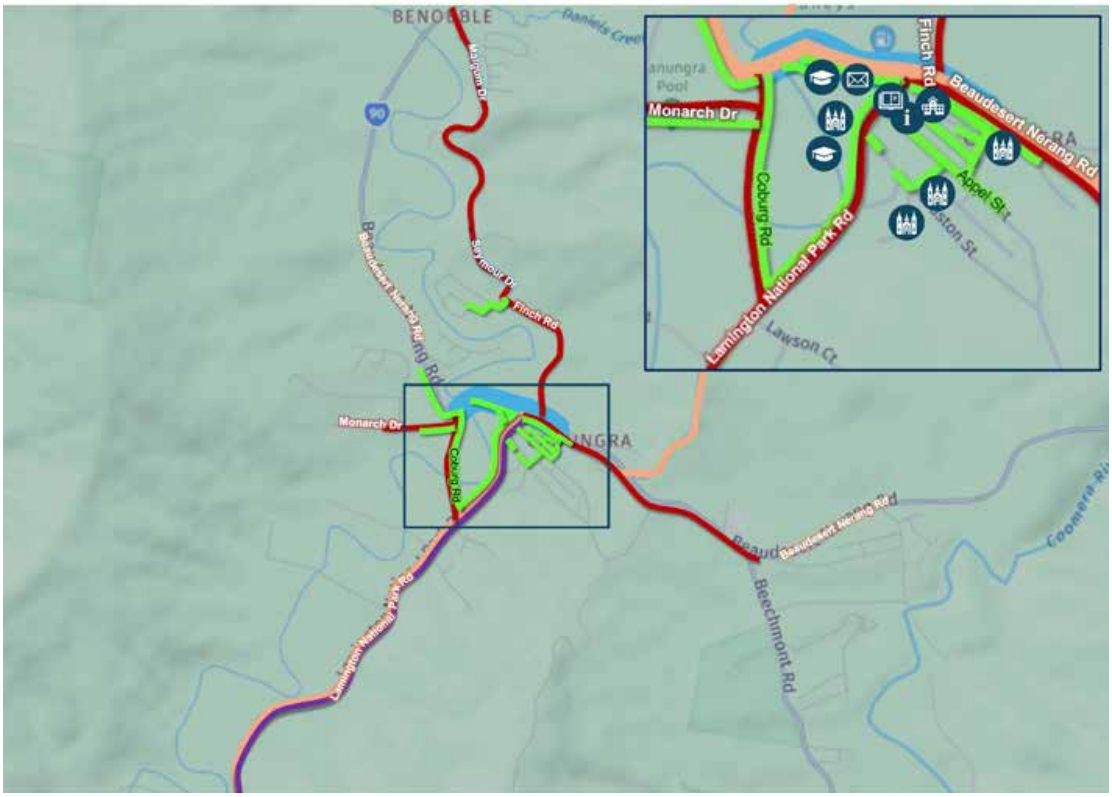
Key

- Road Network Improvements
- Safety Investigation
- Safety Enhancements Investigation
- Active Transport Improvements
- Movement and Place Investigation Area
- State-controlled Road

- Tourist Information Centre
- Post Office
- Place of Worship
- Local Government Administration
- Library
- Community Centre
- Educational Institute
- Hospital


What is important to Boonah
✔ Provide a robust road network with overtaking opportunities
✔ Improve pedestrian and cycle pathway connections to key destinations
✔ Improve pedestrian crossings
✔ Improve safety and awareness around heavy vehicles
✔ Maintain high-quality roads
✔ Ensure safe, accessible and reliable public transport facilities and services
✔ Extend the Fassifern Rail Trail and improve signage

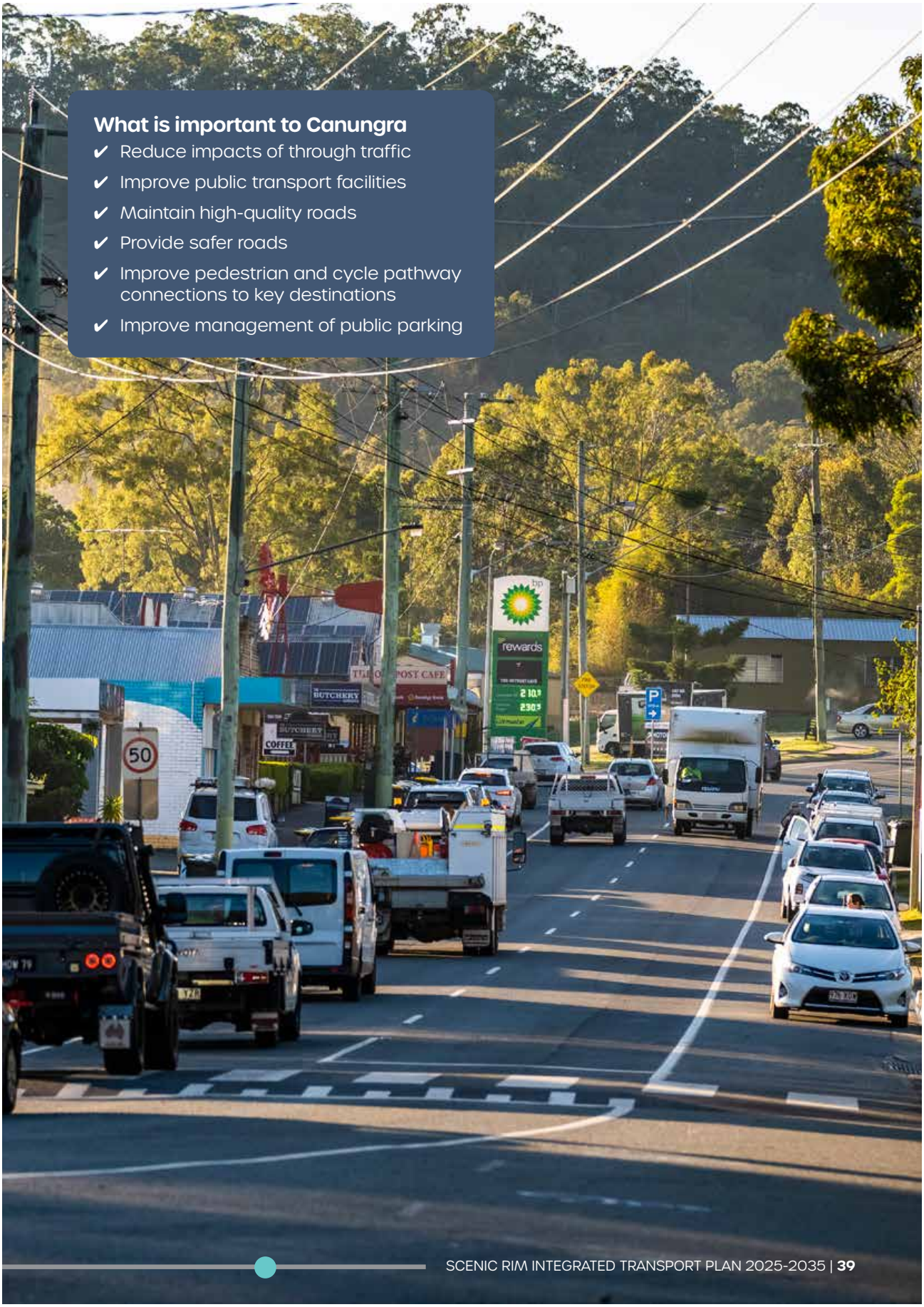
LOCAL AREA TRANSPORT IMPROVEMENTS CANUNGRA



Key

- Road Network Improvements
- Safety Investigation
- Movement and Place Investigation Area
- Active Transport Improvements

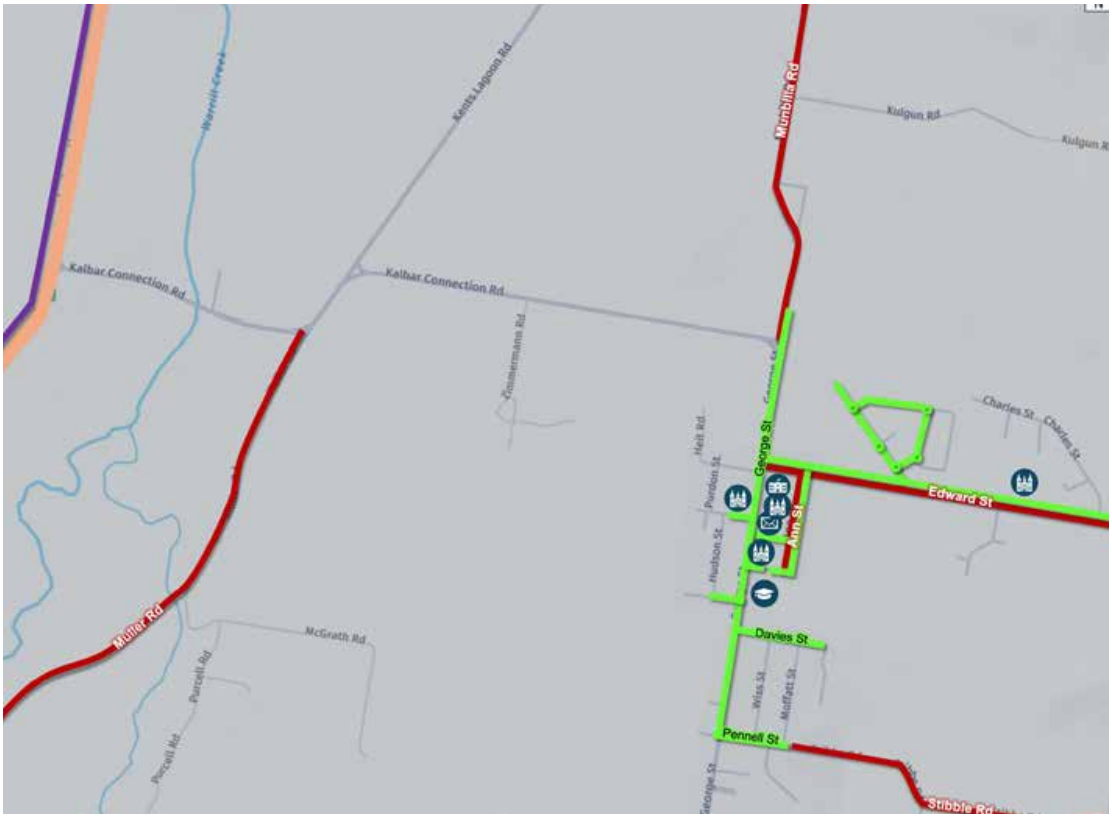
- Educational Institute
- Community Centre
- Library
- Place of Worship
- Post Office
- Tourist Information Centre



What is important to Canungra

- ✔ Reduce impacts of through traffic
- ✔ Improve public transport facilities
- ✔ Maintain high-quality roads
- ✔ Provide safer roads
- ✔ Improve pedestrian and cycle pathway connections to key destinations
- ✔ Improve management of public parking

LOCAL AREA TRANSPORT IMPROVEMENTS KALBAR



Key

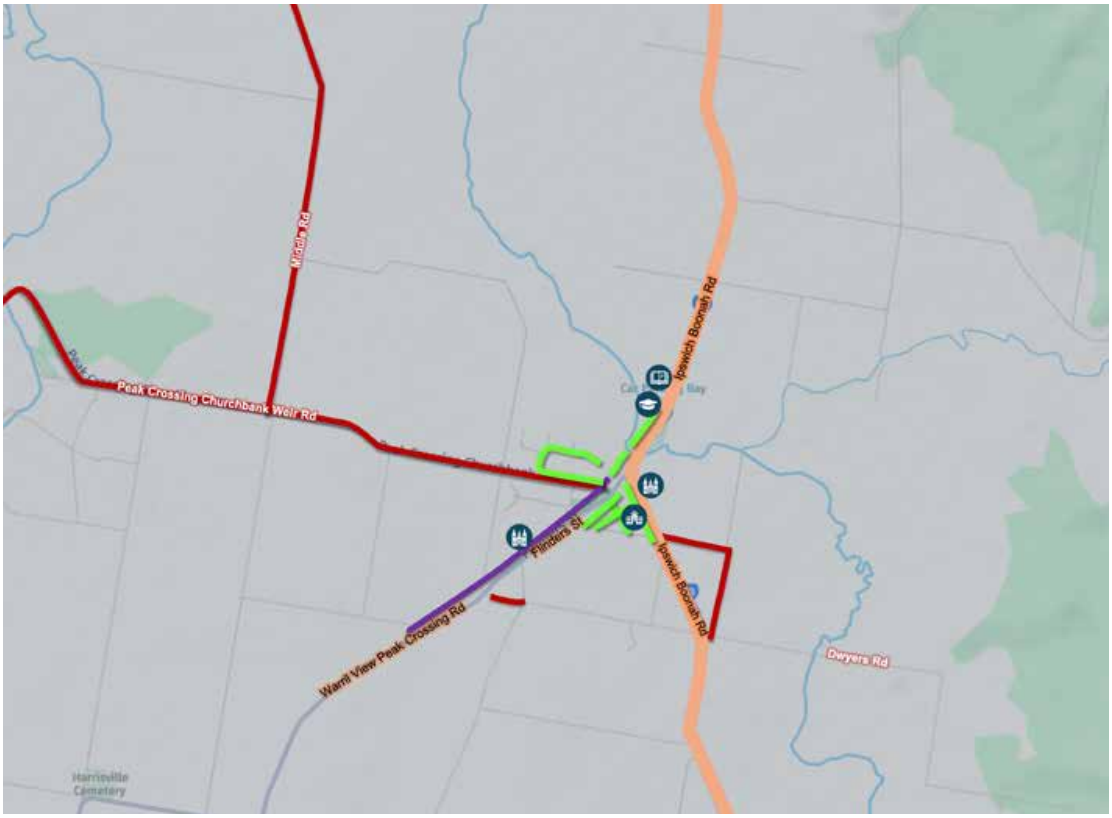
- Road Network Improvements
- Safety Investigation
- Active Transport Improvements
- State-controlled Road

- Educational Institute
- Civic Centre
- Place of Worship
- Post Office

What is important to Kalbar

- ✔ Provide better connected paths for walking and cycling
- ✔ Provide Safer roads
- ✔ Reduce impacts of traffic through Kalbar
- ✔ Improve pedestrian crossings
- ✔ Maintain high-quality roads
- ✔ Reduce the impacts of road works and traffic control

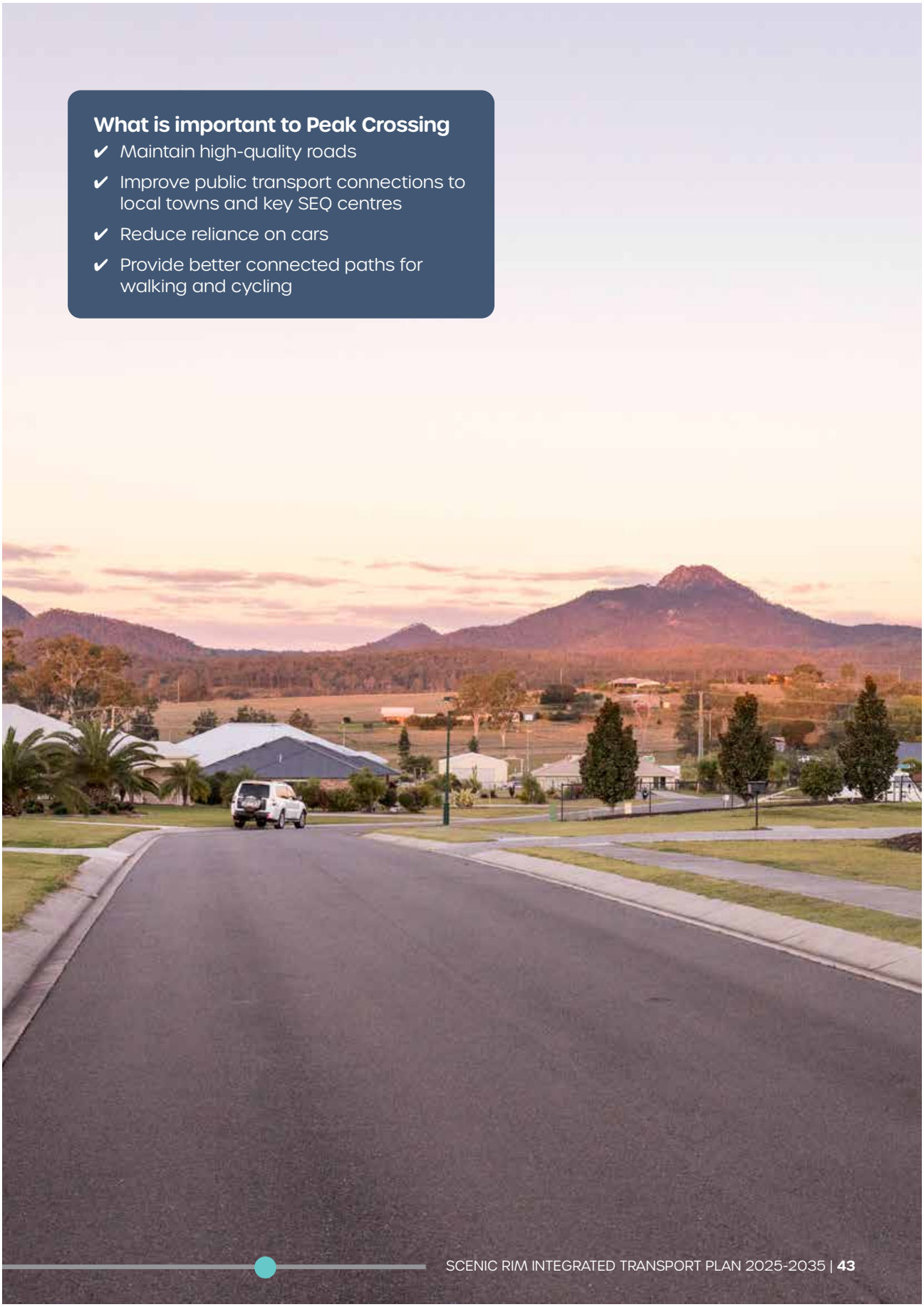
LOCAL AREA TRANSPORT IMPROVEMENTS PEAK CROSSING



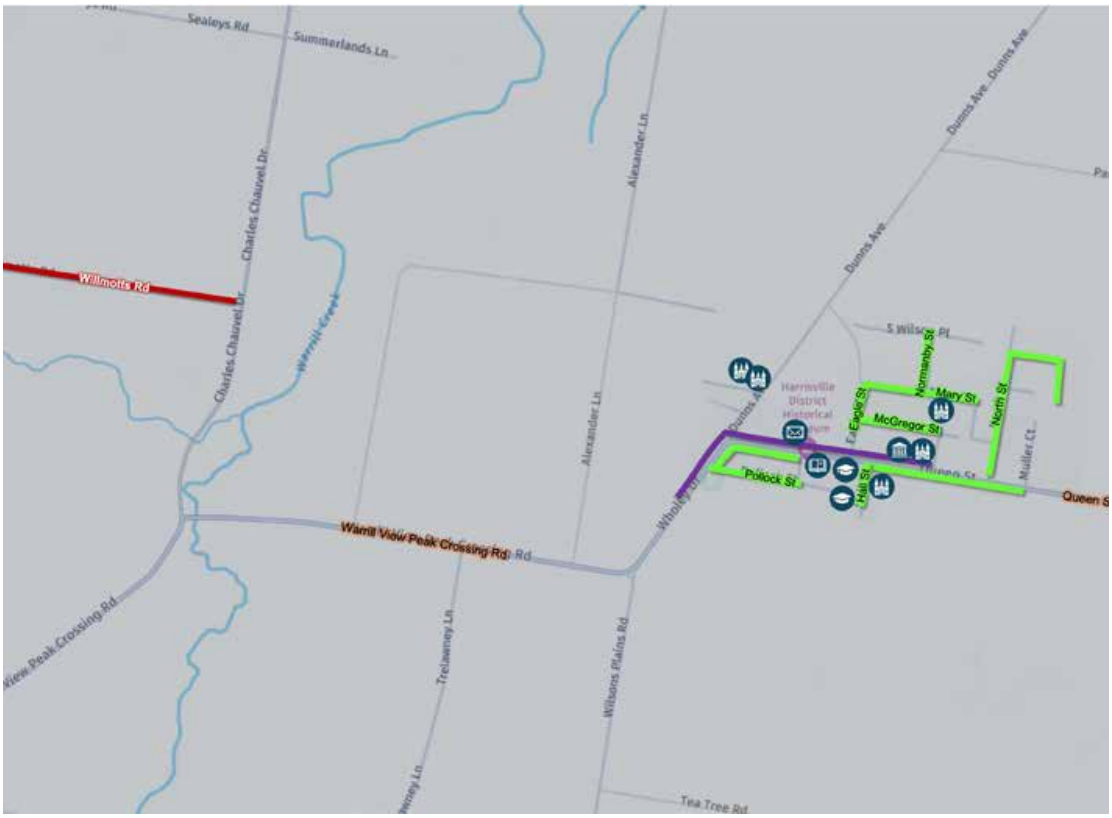
Key

- Road Network Improvements
- Safety Investigation
- Active Transport Improvements
- State-controlled Road

- Educational Institute
- Comunity Hall
- Library (Mobile)
- Place of Worship


What is important to Peak Crossing
✔ Maintain high-quality roads
✔ Improve public transport connections to local towns and key SEQ centres
✔ Reduce reliance on cars
✔ Provide better connected paths for walking and cycling

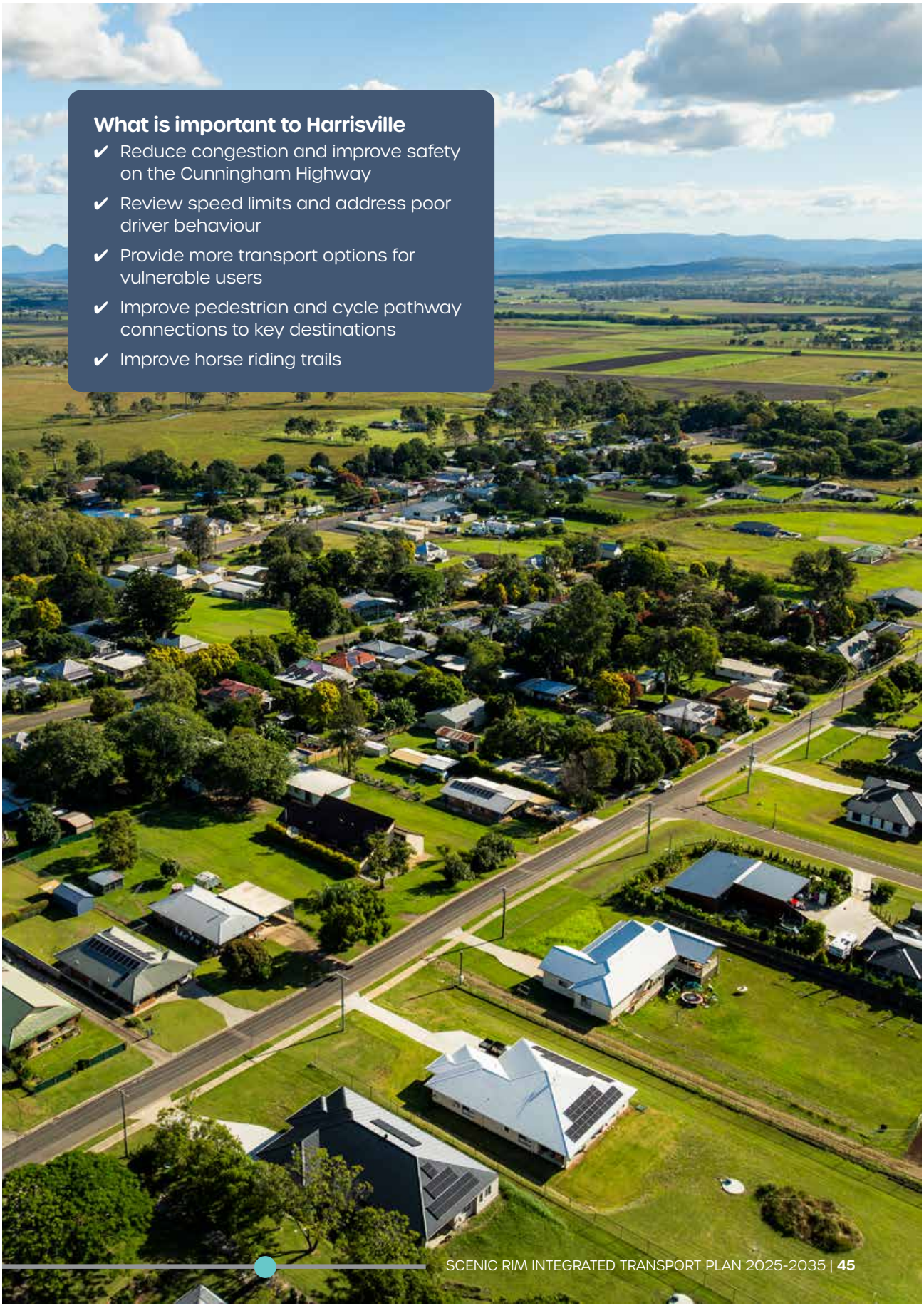
LOCAL AREA TRANSPORT IMPROVEMENTS HARRISVILLE



Key

- State-controlled Road
- Road Network Improvements
- Safety Investigation
- Active Transport Improvements

- Educational Institute
- Library (Mobile)
- Museum
- Place of Worship
- Post Office

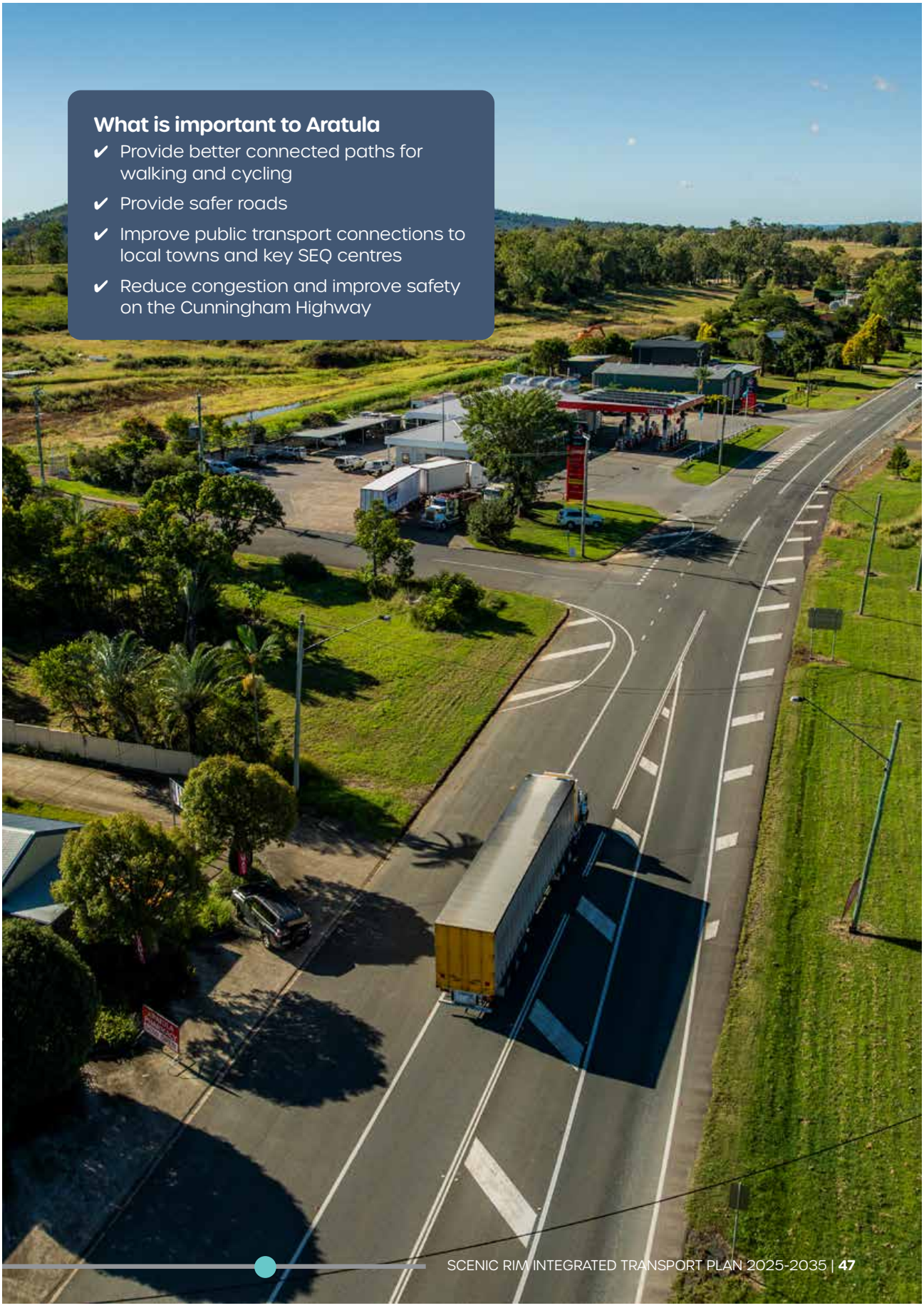

What is important to Harrisville
✔ Reduce congestion and improve safety on the Cunningham Highway
✔ Review speed limits and address poor driver behaviour
✔ Provide more transport options for vulnerable users
✔ Improve pedestrian and cycle pathway connections to key destinations
✔ Improve horse riding trails

LOCAL AREA TRANSPORT IMPROVEMENTS ARATULA

Key

- Road Network Improvements
- Active Transport Improvements
- State-controlled Road

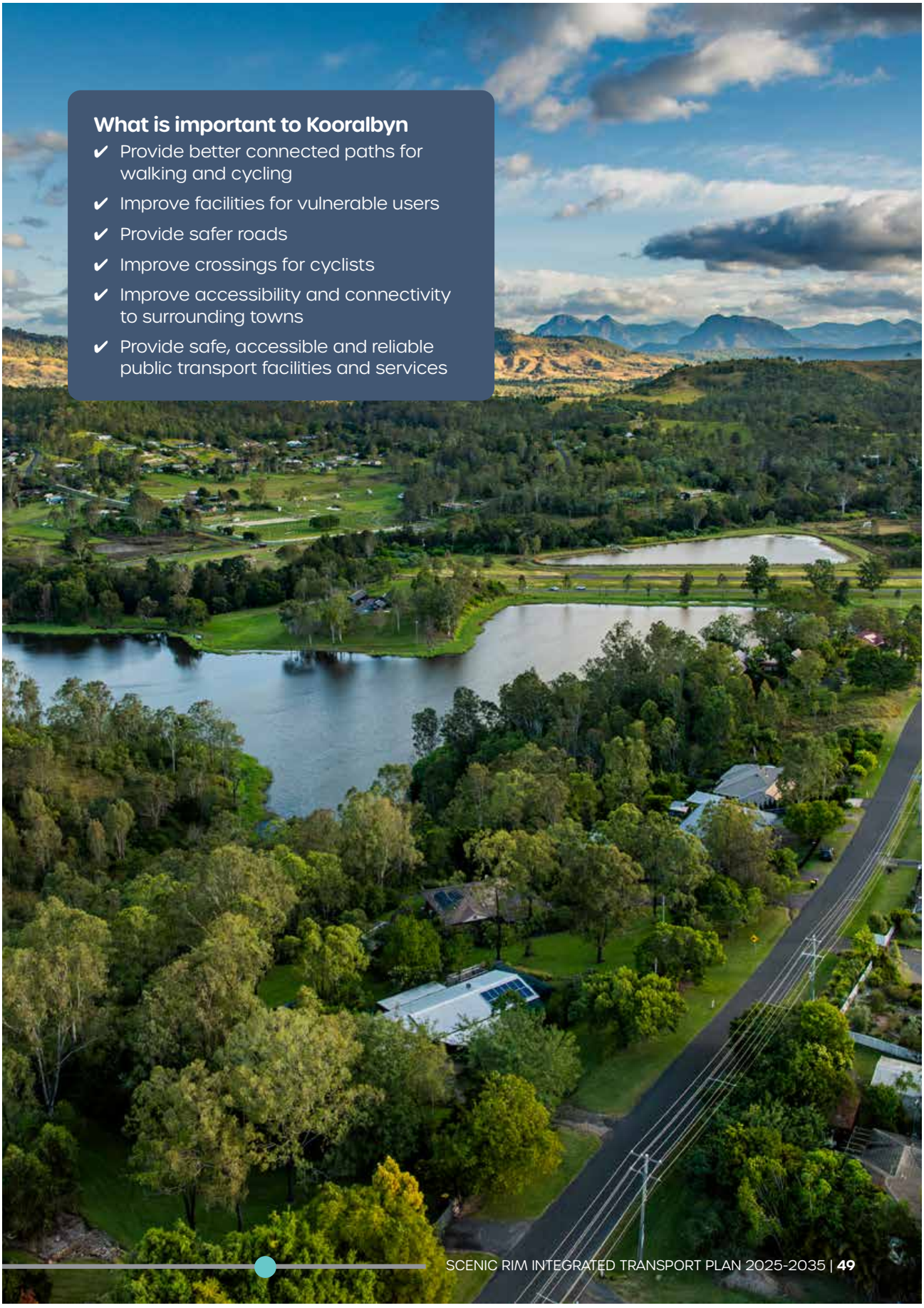
- Educational Institute
- Community Centre
- Library
- Post Office


What is important to Aratula
✔ Provide better connected paths for walking and cycling
✔ Provide safer roads
✔ Improve public transport connections to local towns and key SEQ centres
✔ Reduce congestion and improve safety on the Cunningham Highway

LOCAL AREA TRANSPORT IMPROVEMENTS KOORALBYN

Key

- Intersection Improvements
- Road Network Improvements
- Movement and Place Investigation Area
- Active Transport Improvements
- Educational Institute
- Comunity Centre
- Library (Mobile)
- Museum
- Place of Worship
- Post Office


What is important to Kooralbyn
✔ Provide better connected paths for walking and cycling
✔ Improve facilities for vulnerable users
✔ Provide safer roads
✔ Improve crossings for cyclists
✔ Improve accessibility and connectivity to surrounding towns
✔ Provide safe, accessible and reliable public transport facilities and services

SCENIC RIM
REGIONAL COUNCIL

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SCENIC RIM

ACTIVE TRANSPORT PLAN

2025-2035

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SCENIC RIM REGIONAL COUNCIL


FOX
SANTA CRUZ

CONTENTS

1. EXECUTIVE SUMMARY

Active modes of transport are the most basic and equitable forms of transport available. Most individual trips, regardless of the mode of transport, begin and end with active transport movements. Active transport specifically involves pedestrian and cycling. Pedestrians include people who are walking or running, pushing a pram or using a mobility aid device. Beyond enhancing connectivity, development of active transport networks is proven to improve public health outcomes by increasing physical activity and social stimulation.

Bitzios Consulting was engaged by Scenic Rim Regional Council (Council) to develop an Integrated Transport Plan (ITP), which aims to enhance the efficiency, safety and sustainability of transportation networks in the Scenic Rim. This Active Transport Plan (ATP) is a component of the ITP intended to guide Council's ongoing provision of pedestrian and cycling routes and associated facilities within Scenic Rim.

The ATP comprises the key findings of a number of separate reports and was developed with strong emphasis on community engagement and community feedback, which is reflected in the action plan, recommended policy updates and potential actions. Further, the ATP aims to guide Council's ongoing provision of a pedestrian and cycling network by outlining priority actions and identifying Council documents and policies requiring updates. The separate reports completed as part of the ATP are shown as follows:

Study Areas

Council generally defined 10 key study areas to form part of the ATP, shown in Figure 2.3.

Policies and Principles

As part of the ITP, transport policies and principles have been developed. The ITP policies and principles are shown in below and drive the purpose and implementation of the ATP.

Methodology

A detailed review of the existing Scenic Rim Local Government Area (Scenic Rim LGA) profile has been undertaken to inform the development of the ATP. Key population and employment centres, travel behaviour trends

and vulnerable user groups were identified. Community and stakeholder engagement provided local knowledge on issues and challenges within the existing network and informed the infrastructure audit priorities.

Bitzios Consulting has undertaken a detailed audit of key pedestrian and cyclist routes across the 10 study areas. The route audits did not include every single road within Scenic Rim, rather they were guided by TMR's Walking Network Plan Guidance and community engagement feedback regarding areas of significant concern and areas with more active transport usage potential.

The ATP also assessed the potential infrastructure and supporting infrastructure for sections of the Principal Cycle Network (PCN) routes in Beaudesert, the Bethania to Beaudesert Rail Trail and potential walking trails, as well as supporting non-infrastructure actions and activities

Recommendations

A recommended action program has been developed and evaluated using a Multi Criteria Assessment (MCA) evaluation, which resulted in a Prioritisation Tool. The MCA was undertaken to evaluate and prioritise the recommended treatments collated from the site audits. Each treatment was then scored based on level importance defined by accessibility, connectivity, safety, cost and level of activity.

In addition, recommendations have been provided for the development of the Principal Cycle Network, Rail Trails and Walking Trails, as well as non-physical infrastructure opportunities. These include car-free days, bicycle workshops, community breakfast trails and other programs that were explored.

Funding sources for the delivery of the recommended upgrades identified a number of State infrastructure cost sharing arrangements and grants and opportunities to condition developer contributions for development projects that increase active transport demand on Council's trunk infrastructure network. With implementation and monitoring of the ATP the responsibility of Council, this is influenced by funding sources, other Council projects, review of pedestrian and cyclist trips and crash statistics.

2. INTRODUCTION

2.1 BACKGROUND

Active modes of transport are the most basic and equitable forms of transport available. Most individual trips, regardless of the mode of transport, begin and end with active transport. Active transport involves people walking and people cycling. Beyond enhancing connectivity, development of active transport networks is proven to improve public health outcomes by increasing physical activity and social stimulation.

Bitzios Consulting was engaged by Council to develop an ITP, which is aimed at enhancing the efficiency, safety, and sustainability of transport networks in the Scenic Rim. The ITP will serve as a strategic decision-making tool for Council and provide a long-term vision for improving transportation in the Scenic Rim LGA. Additionally, it will equip Council with a solid technical foundation for engaging with other levels of government regarding the Scenic Rim LGA's role within the region and the need to enhance transport outcomes

The ATP is a component of the ITP intended to guide Council's ongoing provision of the pedestrian and cycling routes and facilities within the Scenic Rim, with a focus on encouraging and increasing local pedestrian and cyclist activity. Pedestrians include people who are: walking or running, pushing a pram, in a wheelchair, using a mobility scooter, using a skateboard, foot scooter or rollerblades. Cyclists include those using road bikes, electric bikes, cargo bikes, mountain bikes, adaptive bicycles etc.

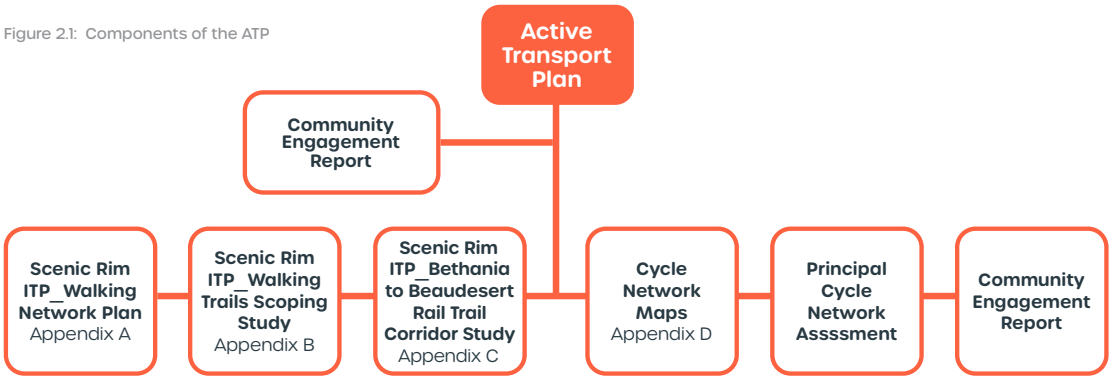
For some Scenic Rim residents, walking and/or cycling is their only means of access to local services and amenities. This includes young residents, seniors, people living with a vision or mobility impairment and people who do not own a private vehicle. For these user groups, safe and continuous paths are critical for maintaining their access to essential services.

Through the sustainable development of a network of pedestrian and cycle paths, and facilities, the ATP aims to meet the needs of those dependent on active travel and offer an alternative mode of travel to private vehicles.

The ATP intends to guide Council's ongoing provision of a pedestrian and cycling network by outlining priority actions and identifying Council documents and policies that need updates.

Separate reports have been completed, as part of the ATP, and have been provided as appendices. As shown in Figure 2.1.

Figure 2.1: Components of the ATP



2.2 PROBLEM DEFINITION

Studies show that safety concerns emerge as one of the most powerful barriers to achieving higher levels of active transport. Further, despite a wide range of policies and initiatives over the two decades intended to increase active transport usage, active transport mode share remains at similar levels since 2006 across Australia. Irrespective, evidence also shows that a combination of infrastructure and supporting actions can boost numbers of people cycling and walking.

It is also noted that interventions to increase active transport usage need to be tailored specifically for each area's unique characteristics, i.e. regional/rural centres require different intervention types, compared to more urbanised areas.

Austroads generally separate active transport interventions into four brackets of major intervention types. These are organised into a pyramid format which shows infrastructure upgrades (such as the provision of paths) act as a foundation for increasing active transport mode share. This means that without a supportive transport network, significant growth in active transport mode share is unlikely.

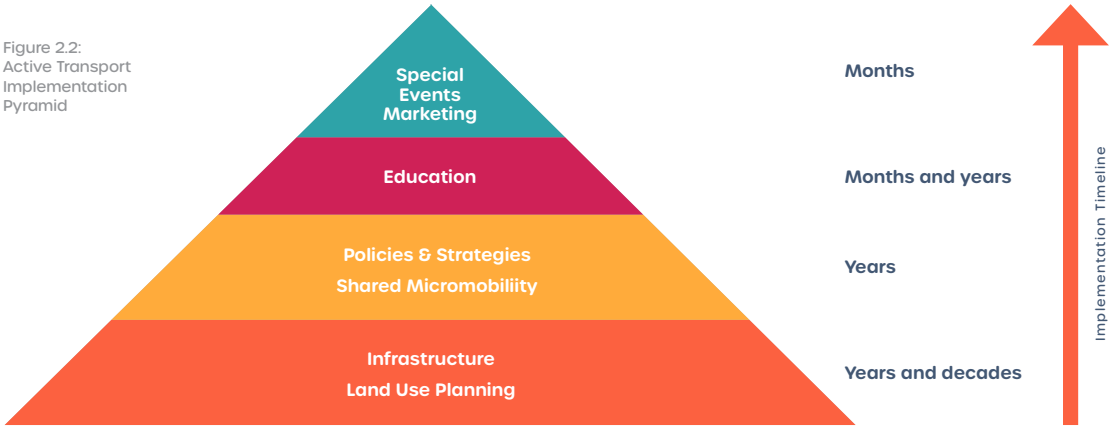
The interventions on the next level of the pyramid act as 'supporters of' the infrastructure provision and will generally be more successful once progress has been made on actions at the base of the pyramid.

Figure 2.2 illustrates the active transport interventions and approximate timeframe for each layer of the pyramid.

Source: Austroads Research Paper AP-R711-24

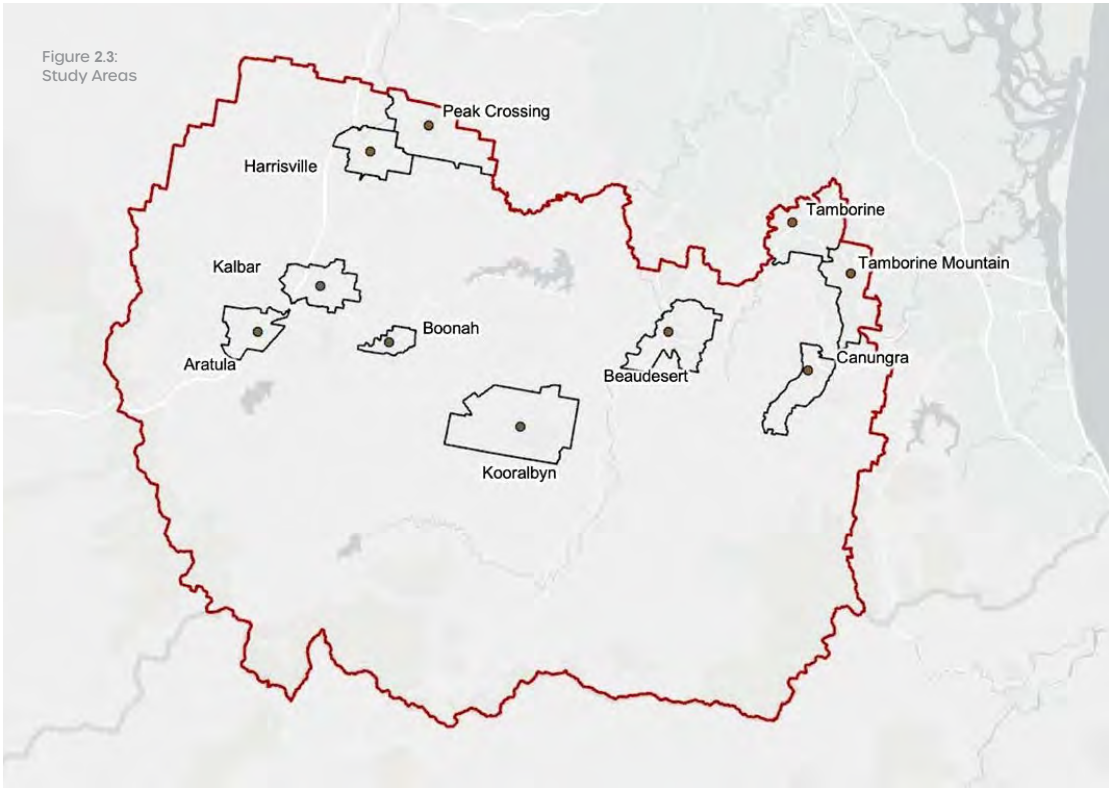
This document will support Council in identifying priority areas in active transport in the region informing the 10-year CAPEX program and supporting growth in the region. The report recommends an action program, supporting infrastructure, interventions, education programs (amongst others) tailored to the Scenic Rim's characteristics, with an aim of making active transport modes more attractive to a range of users and consequently increase active transport modal share in the area.

Figure 2.2:
Active Transport Implementation Pyramid



2.3 STUDY AREAS

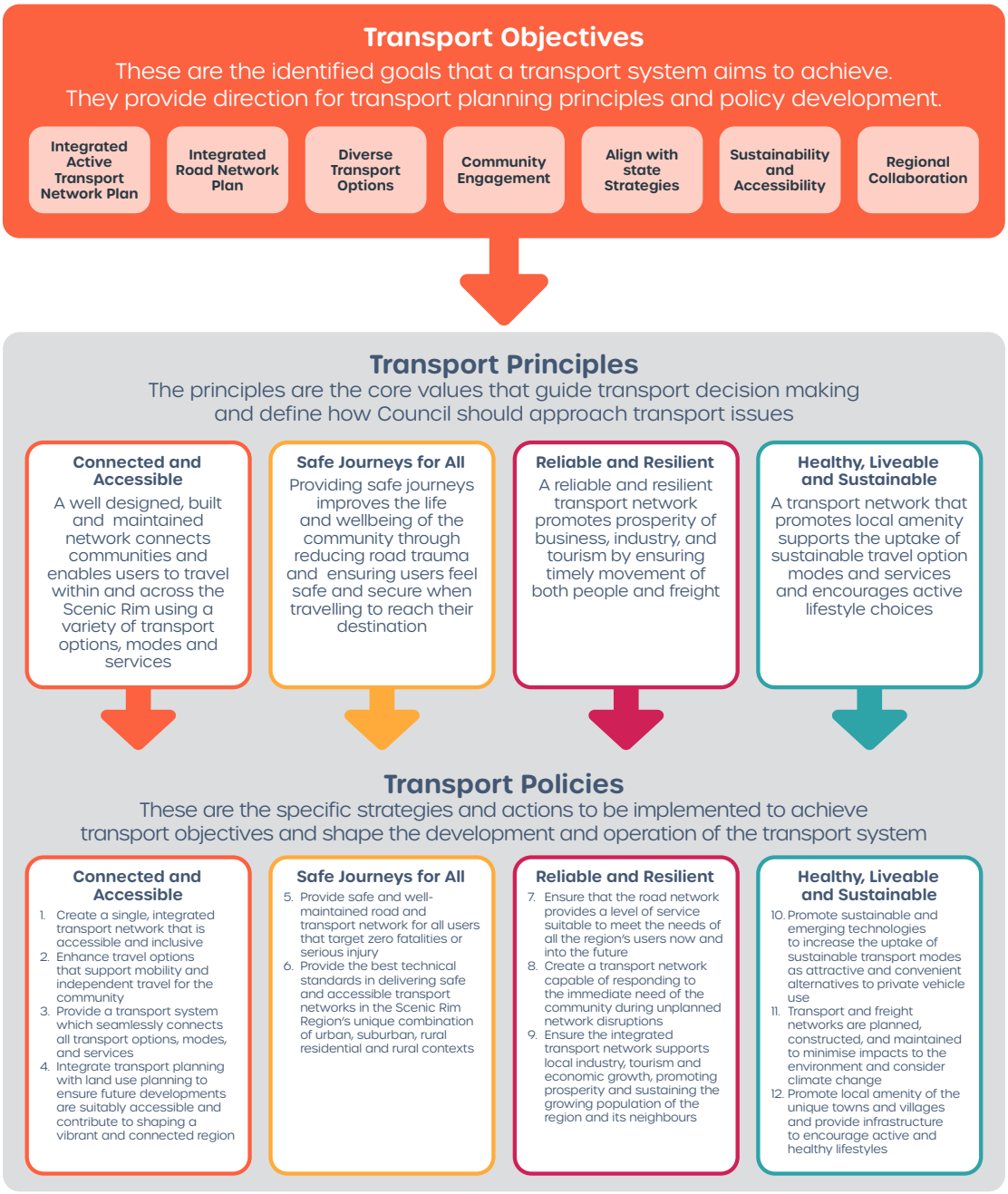
Council generally defined ten key study areas to form part of the ATP, shown in Figure 2.3.



2.4 POLICIES AND PRINCIPLES

As part of the ITP, transport policies and principles have been developed. These are shown in Figure 2.4 and drive the purpose and implementation of the ATP.

Figure 2.4: Transport Policies and Principles



2.5 COMMUNITY ENGAGEMENT PROCESS

Community engagement is critical for developing the ATP. Feedback and comments provided by Scenic Rim residents and relevant stakeholders is key to gathering 'local knowledge' to identify and prioritise options to establish fit-for-purpose recommendations to support a safe network for all road users, particularly those walking and cycling.

The goal of the engagement process is to ensure key community input to shape the development of the action plan and the proposed infrastructure and non-infrastructure upgrades.

A number of community and stakeholder engagement sessions have been undertaken as part of the ITP.

The engagement activities were advertised in the *Let's Talk Scenic Rim* community engagement platform, social media, news outlets and through pamphlets distributed locally. The stakeholder and community engagement activities included:

- on-line survey
- on-line mapping
- five in-person community drop in sessions, and
- focused stakeholder engagement workshop.

Key outcomes of the community engagement process are further discussed in Section 6.

3. SCENIC RIM CHARACTERISTICS

3.1 OVERVIEW

In broad terms, people who walk and those who cycle can be considered to be moving from:

- home to a destination
- home to home on a recreational trip, or
- home to public transport.

The location of population density, employment density, recreational locations and public transport stops are therefore important 'demand drivers' when developing pedestrian and cycling routes and prioritising works.

The Scenic Rim LGA is located on the traditional lands of the Mununjali, Wangerriburra, Ugarapul and Migunberri Peoples in South East Queensland (SEQ). Scenic Rim is bounded by Logan City Council and Ipswich City Council to the north, City of Gold Coast Council to the east and Tweed Heads Shire Council (New South Wales) to the south.

Known for its National Parks and natural areas, the Scenic Rim LGA covers an area of approximately 4,200km^2, which is predominantly natural, rural and residential areas, with most of its commercial and retail land uses in the centres of Tamborine Mountain, Beaudesert and Boonah.

Figure 3.1 shows Scenic Rim LGA and surrounding LGAs.

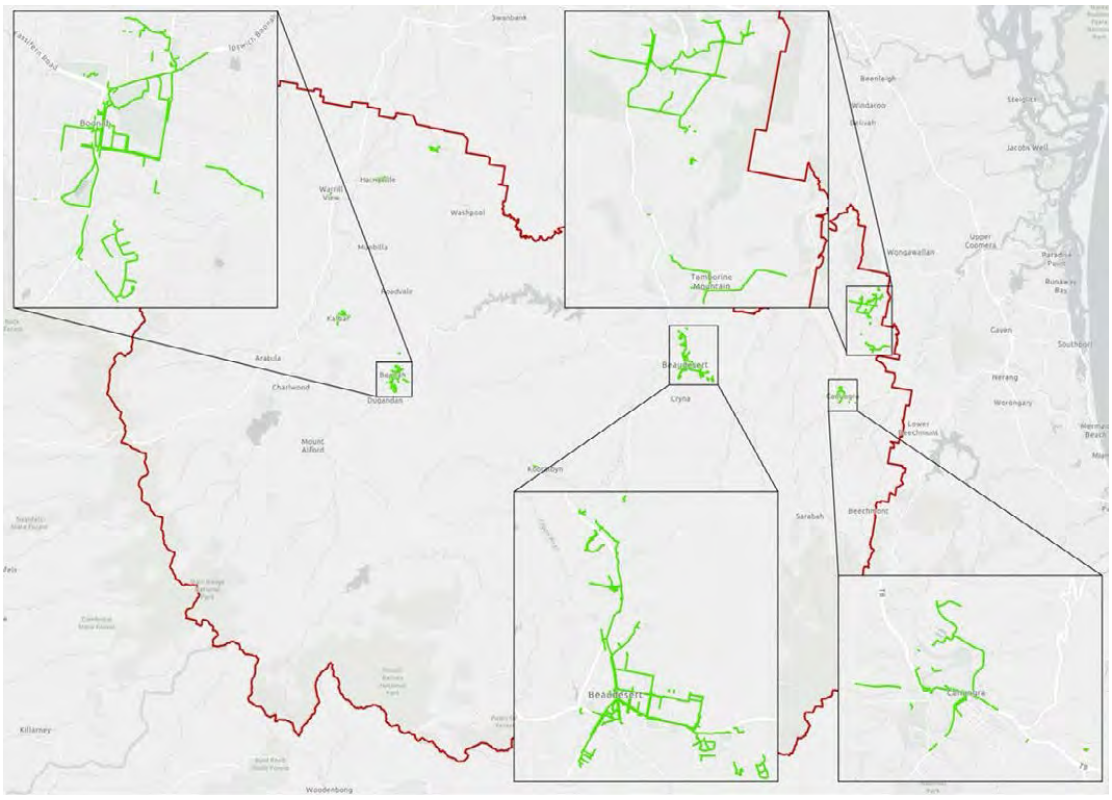
Figure 3.1: Scenic Rim LGA

3.2 ACTIVE TRANSPORT NETWORK

The active transport network within the Scenic Rim LGA mostly consists of footpaths and shared paths (noting that bikes are allowed to be ridden on footpaths in Queensland). The paths are concentrated in the most populated areas and predominantly located within the key centres of Boonah, Beaudesert, Tamborine Mountain and Canungra. Gaps are noted within the active transport network, particularly outside the key centres.

Figure 2.3 shows the existing active transport network in the Scenic Rim LGA.

Figure 3.2: Active Transport Network



Legend

- Scenic Rim LGA
- Footpath Network

3.2.1 ACTIVE TRANSPORT BARRIERS

The Scenic Rim LGA land use generally comprises natural and low-density residential areas. The majority of commercial and retail land uses are concentrated in the centres of Tamborine Mountain, Beaudesert and Boonah. The low-density residential developments with limited surrounding commercial and retail land uses mean walking and cycling may not be feasible alternatives for a number of residents, especially for long distance-trips.

The Scenic Rim LGA also presents significant slope in a number of roads, which impacts both the provision and the use of active transport. Further, a number of the study areas are effectively divided by major roads (e.g. Ipswich Boonah Road, Beaudesert Boonah Road, Mount Lindesay Highway, etc), with limited pedestrian and cycling crossing provision, impacting safe pedestrian movements.

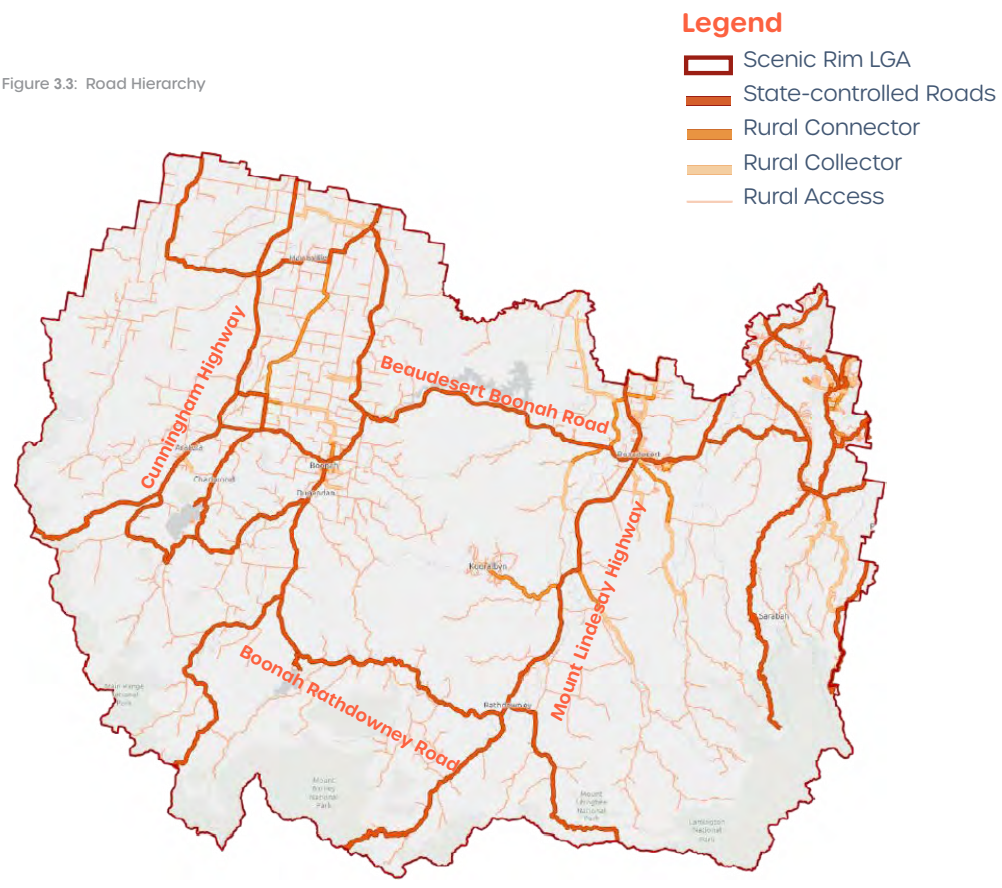
3.3 ROAD NETWORK

Figure 3.3 shows the road network and road hierarchy of the Scenic Rim LGA and also distinguishes the state-controlled and Council-controlled roads.

The two major north-south roads that run through the Scenic Rim LGA are:

- Mount Lindesay Highway that travels through Beaudesert, Kooralbyn and Rathdowney, and
- Cunningham Highway that travels through Harrisville, Kalbar and Aratula.

Figure 3.3: Road Hierarchy



3.4 PUBLIC TRANSPORT

The Scenic Rim LGA has limited public transport provision, with only one bus service operating between Beaudesert and Browns Plains in Logan hourly during week days. The remainder of the Scenic Rim LGA has no public bus routes servicing the local area and surrounds.

3.5 JOURNEY TO WORK MODE SHARE

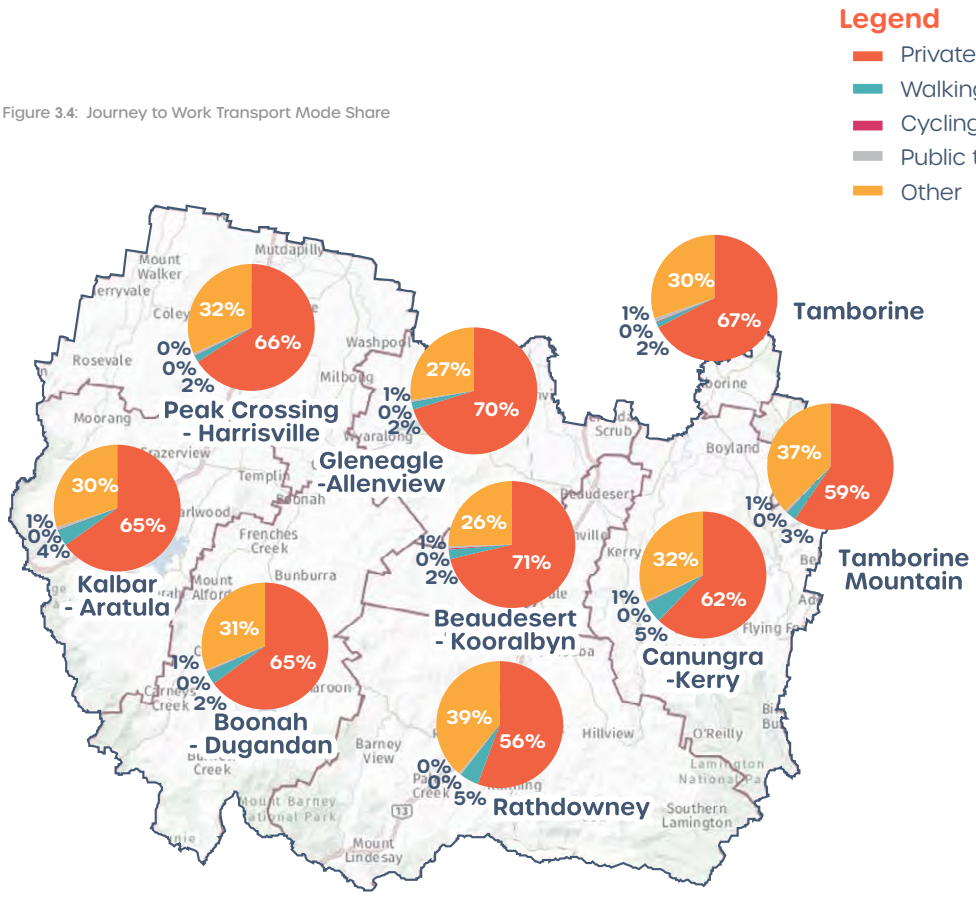
The 2021 Australian Bureau of Statistics (ABS) Census Journey to Work (JtW) data has been reviewed to determine the commuter travel patterns within the Scenic Rim LGA. The modal share presents the similar trends for all areas within Scenic Rim, with limited cycling and pedestrian uptake.

Private vehicles are the main method of travel to work within the study area (68 per cent) with only about three per cent of the population commuting by walking and 0.2 per cent commuting cycling. Public transport use is low throughout the region due to the limited availability of bus/train services and infrastructure.

Figure 3.4 shows the JtW modal share break down.

Source: Australian Bureau of Statistics (2021)

Figure 3.4: Journey to Work Transport Mode Share



3.6 MOTOR VEHICLE OWNERSHIP

The Scenic Rim LGA has a significant private vehicle ownership, with approximately 97 per cent of dwellings owning at least one vehicle. Further, approximately 70 per cent of the Scenic Rim LGA dwellings have at least two vehicles. This high vehicle ownership is expected to be related to the same barriers discussed in Section 3.1.1 and the limited public transport availability in the area.

Figure 3.5 shows the vehicle ownership within Scenic Rim Shire (ABS 2021).

3.7 CRASH DATA

Crash data for the Scenic Rim LGA was sourced for the period from April 2018 to April 2023 (the most recent five years). The crash data was further disaggregated to only include pedestrian-related crashes (noting Queensland Police crash reports do not specify cyclist-related crashes) to identify any trends and crash clusters. The crash data details are shown in Figure 3.6.

During the five-year period, there were 18 pedestrian-related crashes within the Scenic Rim LGA. Figure 3.6 details the crash statistics by year.

Figure 3.5: Scenic Rim Private Vehicle Ownership

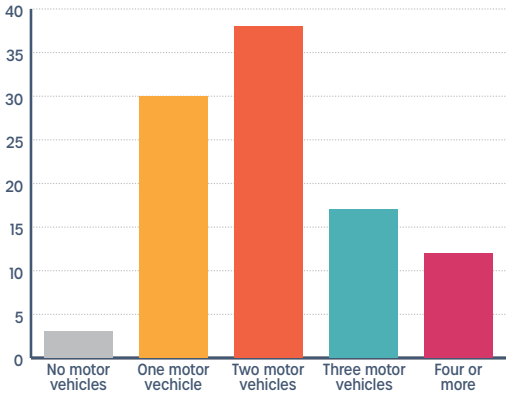
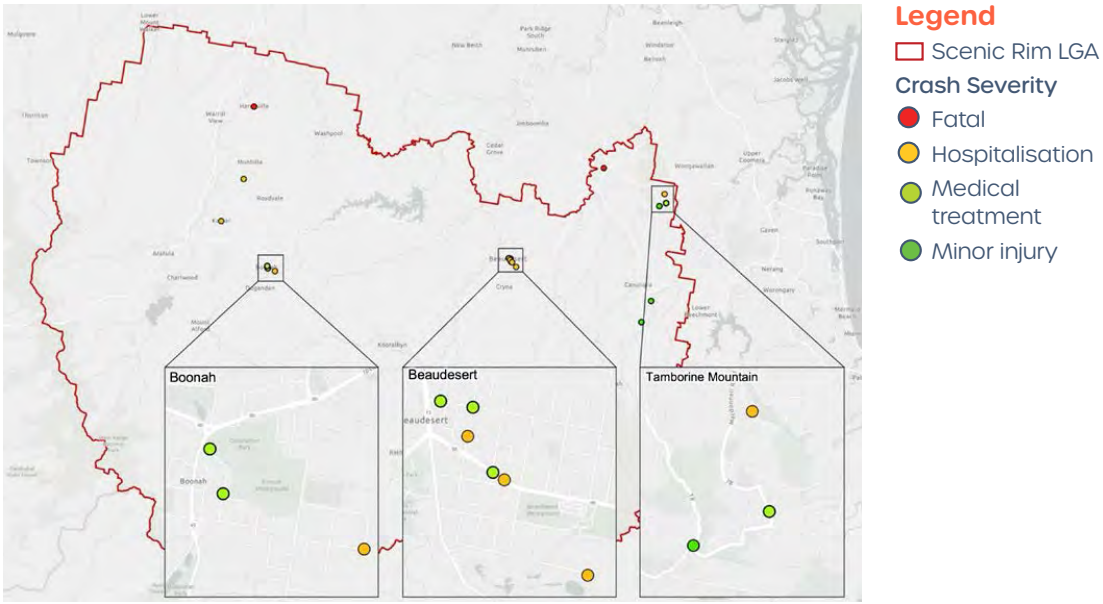
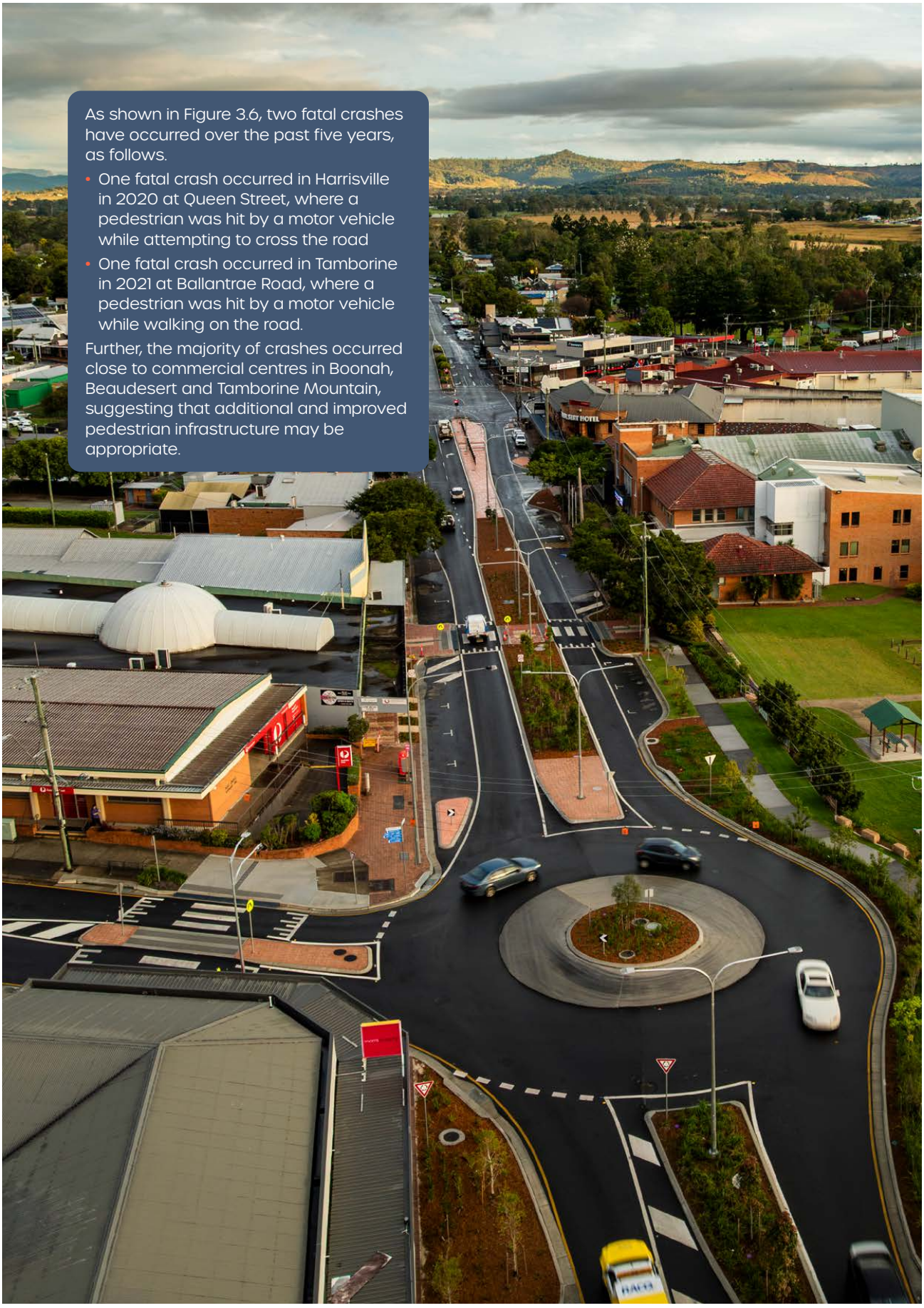


Figure 3.6: Pedestrian Related Crash Data in Scenic Rim LGA (2018 - 2023)





As shown in Figure 3.6, two fatal crashes have occurred over the past five years, as follows.

- One fatal crash occurred in Harrisville in 2020 at Queen Street, where a pedestrian was hit by a motor vehicle while attempting to cross the road
- One fatal crash occurred in Tamborine in 2021 at Ballantrae Road, where a pedestrian was hit by a motor vehicle while walking on the road.

Further, the majority of crashes occurred close to commercial centres in Boonah, Beaudesert and Tamborine Mountain, suggesting that additional and improved pedestrian infrastructure may be appropriate.

4. RESEARCH AND REVIEW

4.1 OVERVIEW

A number of relevant plans and documents have been reviewed to ensure the ATP is strategically aligned with state and local documents. A summary of the documents reviewed is shown in Table 4.1.

Table 4.1: Research and Review

Document name	Document ownership	Relevance to the ATP
Queensland Cycling Strategy 2017 - 2027	Queensland Government	The Queensland Cycling Strategy (QCS) aims to facilitate cycling in Queensland, considering the existing infrastructure and key growth areas. It sets the direction for cycling in Queensland, supported by an Action Plan and a State of Cycling Report.
Principal Cycle Network Plan – South East Queensland	Queensland Government	The Principal Cycle Network Plan (PCNP) shows core routes needed to get more people cycling more often. The PCNP is supported by maps and is intended to support, guide and inform the planning, design and construction of the cycling network.
Movement and Place Practitioner Guidance	Queensland Government	The Movement and Place Practitioner Guidance provides details on how practitioners can apply the Movement and Place Policy into decision-making, planning, design and management of the wider transport network. The Guidance provides support on optimising the functional requirements of transport infrastructure to best support the social, economic and environmental needs of communities.
Priority Cycle Route Improvement Plan	Queensland Government	The Priority Cycle Route Improvement Plan (PCRIP) aims to facilitate the development of complete cycle routes through coordinated planning and investment. The PCRIP provides a framework for developing better connected and complete cycle routes, consistent with the needs of the community.
Scenic Rim Community Plan 2011 – 2026 * The Community Plan 2011-2026 is now superseded by the Scenic Rim Regional Council Corporate Plan 2025-2030.	Scenic Rim Regional Council	The Scenic Rim Community Plan outlines seven themes that present a collective vision and strategy for the region's future. As part of the community plan, Council will take into direct consideration the community's expectations and help advocate for the local community when needed. The plan's themes of Accessible and Serviced Regions and Healthy, engaged and Resourceful communities promote the vision for better and safer roads and call for improved infrastructure for access to other transport alternatives, including walking, cycling, public transport and rail.
Scenic Rim Footpath and Bikeway Strategy (2015 – 2020)	Scenic Rim Regional Council	The previous Footpath and Bikeway Strategy delineates Strategic Priority Areas to accommodate the integration of a comprehensive footpath and bikeway network across the Scenic Rim region. The document also provides current bike and footpath connection maps that show there is great need for improvement, as indicated in other park and recreation plans for the Scenic Rim LGA.

Document name	Document ownership	Relevance to the ATP
Scenic Rim Health and Wellbeing Plan	Scenic Rim Regional Council	The Scenic Rim Health and Wellbeing plan reflects the social, health, sport and recreation needs of the region, including the need for more transportation options within the Scenic Rim. This includes the necessary pedestrian infrastructure for safe walking and cycling, as well as mobility connections. This was identified as a significant barrier to participation in the Scenic Rim, alongside age, gender and social inclusion.
Spring Creek Master Plan	Scenic Rim Regional Council	The Spring Creek Master Plan is used to identify strategies and priorities for the development of a well-designed and integrated recreational space that meets the needs of the Scenic Rim community for the next 10 to 20 years. The plan identifies an ageing community, and the lack of accessible infrastructure and public transport, as well as the need for improved wheelchair/disability access, pedestrian and cycle paths and facilities that assist the increased use of mobility scooters.

5. TYPICAL USER GROUPS

5.1 DEMOGRAPHICS

5.1.1 EXISTING POPULATION

The population in the Scenic Rim LGA is approximately 45,250 residents based on 2023 Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) data. The most populated areas are Beaudesert, Tambourine Mountain and Canungra, with approximately 50 per cent of the entire Scenic Rim LGA's population.

Half of the Scenic rim's population live in Beaudesert, Tamborine Mountain and Canungra

Table 5.1 provides the 2023 population breakdown within the Scenic Rim LGA.

5.1: Population by Area (2023)

Area	Population
Beaudesert—Kooralbyn and District	9,533 (21%)
Tamborine Mountain	8,545 (19%)
Canungra—Kerry and District	5,705 (13%)
Peak Crossing—Harrisville and District	5,082 (11%)
Boonah—Dugandan and District	4,768 (11%)
Gleneagle—Allenview and District	3,459 (8%)
Kalbar—Aratula and District	3,241 (7%)
Tamborine	3,035 (7%)
Rathdowney and District	1,880 (4%)
Scenic Rim Regional Council	**45,248**

5.1.2 FUTURE POPULATION

The Scenic Rim Growth Management Strategy 2041 presents the future demographic figures for the Scenic Rim LGA. The strategy has assumptions and objectives that the population will exceed 67,000 residents by 2041. The majority of population growth is expected to be targeted at Beaudesert, Boonah, Canungra, Kalbar and Kooralbyn.

67,000 residents by 2041. An increase of 22,000.

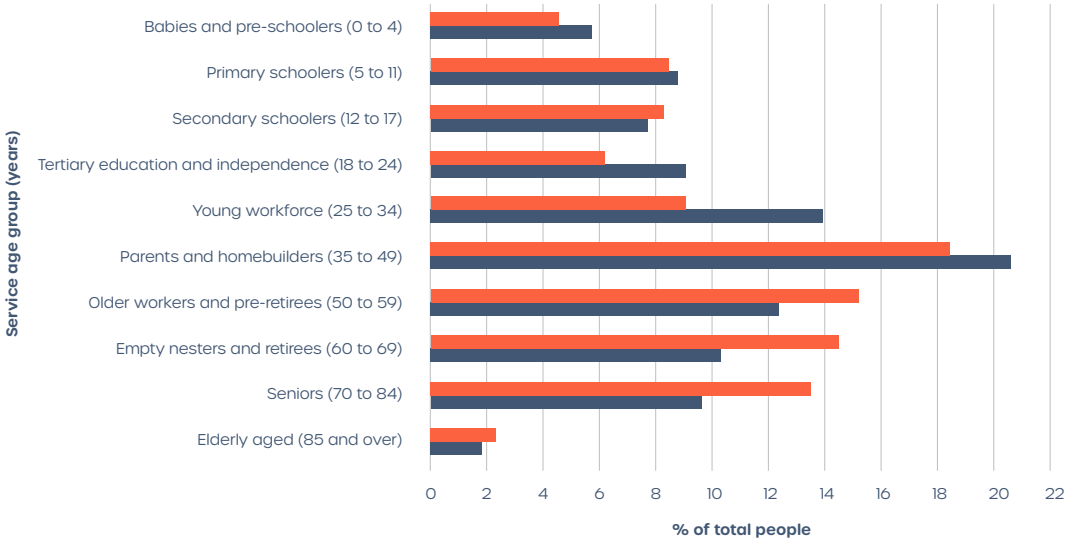
5.2 PEDESTRIAN USER GROUPS

Planning for pedestrians considers several user groups' needs based on age and assumed mobility levels. Figure 5.1 shows key pedestrian demographic groups for the Scenic Rim LGA.

Source: Adapted from the Australian Bureau of Statistics, 2021

The age profile for Scenic Rim LGA demonstrates that approximately 45 per cent of the residents are aged 50 and over, compared to approximately 34 per cent for South East Queensland. This shows the Scenic Rim LGA has an ageing population, which presents current and future challenges for pedestrian access and mobility, including reduced mobility, decreased fitness, use of mobility aids and visual impairment. In addition, approximately 17 per cent of Scenic Rim's resident population are aged between five and 17 years. This user group is expected to attend school, which presents additional challenges providing safe pedestrian paths and crossing points to and from school areas.

Figure 5.1: Age Profile of the Scenic Rim LGA in Comparison to SEQ



5.3 CYCLING USER GROUPS

TMR's Selector and Design of Cycle Tracks Guideline divides cyclists into four main categories. For cycling to be a viable mode of choice, the 'interested but concerned' (typically the largest group) is a key demographic to be considered, and the barriers for this group generally consist of a fear of mixing with motor vehicle traffic. The cyclist categories and the typical proportion of the community that populates these are shown in Figure 5.2. The types of cyclists and proportions described below will be considered as part of the ATP, along with the Scenic Rim's local characteristics.

Figure 5.2: Typical Cycling User Groups

6. COMMUNITY AND STAKEHOLDER ENGAGEMENT

6.1 OVERVIEW

A number of community and stakeholder engagement sessions have been undertaken as part of the ITP. The engagement activities were advertised on *Let's Talk Scenic Rim* community engagement platform and social media, news outlets and through pamphlets distributed locally.

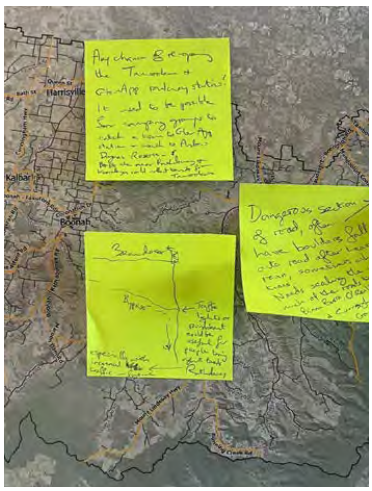
Stakeholder and community engagement were used to gather local knowledge and understanding of the key pedestrian and cycling-related issues faced by people walking and people cycling within the Scenic Rim LGA.

The summarised key feedback related to walking and cycling during the engagement period shows:

- walking and cycling are not well catered for in the Scenic Rim LGA and residents would like to use active transport more often as a method of transport
- the lack of suitable walking and cycling paths is a key issue when traveling in and around the Scenic Rim LGA
- the biggest issue for people with additional mobility needs is the lack of maintained footpaths, the need for additional pedestrian crossings and difficulty in using mobility devices
- better connected paths are needed for people to walk and cycle more often, and
- more pedestrian pathways should be a priority over the next 10 years.

The detailed community engagement feedback has been provided in the **Community Engagement Report** on *Let's Talk Scenic Rim*.

Importantly, the community feedback was also used to refine the priority routes and to develop the Evaluation Framework in Section 11.



7. ACTIVITY AREAS

7.1 OVERVIEW

The development of the prioritised active transport network generally followed TMR's guidelines and considered the expected pedestrian and cycling usage in the study areas described in across the Scenic Rim.

This process consisted of defining a primary destination and a number of secondary destinations. It is noted that additional assessments have been undertaken to encompass the cycling aspects of the ATP, including a larger catchment area (i.e. between 4km and 7km), as well as considerations to terrain and slope.

This approach has been undertaken due to the typical different characteristics, travel speed and potential travel distance between people walking and people cycling.

7.2 PRIMARY DESTINATION

The purpose of mapping the primary destination is to determine the destination for most walking and cycling trips. The primary destinations for the study areas have been defined in conjunction with Council and are provided in Table 7.1.

Table 7.1: Primary Destinations

Study Area	Primary Destination
Tamborine Mountain	Tamborine Mountain Town Centre (Main Street) and Gallery Walk
Beaudesert	Beaudesert Town Centre (intersection of Brisbane Street and Beaudesert Nerang Road)
Boonah	Boonah Town Centre (High Street)
Canungra	Canungra Town Centre (Beaudesert Nerang Road)
Kalbar	Kalbar Town Centre (Kalbar Connection Road)
Peak Crossing	Peak Crossing Town Centre (The Peak Pub)
Harrisville	Harrisville Town Centre (Queen Street)
Aratula	Aratula Town Centre (Cunningham Highway)
Kooralbyn	Kooralbyn Town Centre (Wellington Bundock Drive)
Tamborine	Tamborine Central (intersection of Beaudesert Beenleigh Road and Leach Road)

7.3 SECONDARY DESTINATION

Council provided a list with a number of secondary destinations. The secondary destinations were further investigated, and a shortlist was recommended to Council and TMR.

The secondary destinations generally include the following land uses:

- hospitals/medical facilities
- sporting facilities
- educational facilities (schools and colleges)
- tourist attractions
- shopping centre/commercial area
- community facility
- stores/shops
- showground
- food and drink outlets
- caravan park/accommodation
- motel
- aged care
- club
- child care, and
- parks/national parks.

7.4 EXISTING POPULATION

Mesh block data was downloaded from the ABS open data website, including the latest available population data.

7.5 APPROVED DEVELOPMENT POPULATION GROWTH

Council provided the approved development dataset which informs the future approved development growth areas. In general, the land use and number of dwellings from the approved developments in each study area are utilised to project the future population.

7.6 FUTURE POPULATION GROWTH

Council has also provided a list of future longer term planned developments (not approved). These have been considered as longer term, aspirational/strategical growth areas.

7.7 PATH GRADIENT

A review of the path gradients and terrain slope within the study area was conducted to understand areas where new paths could be provided. In accordance with TMR Supplement to Austroads Guide to Road Design Part 6a, a desirable path gradient is three per cent or less. Path gradients exceeding five per cent increase effort significantly and should only be considered where other solutions are not feasible.

8. DEVELOPMENT OF PRIORITISED ACTIVE TRANSPORT ROUTES

8.1 OVERVIEW

The Austroads Research Report on Prioritising Active Transport demonstrates that providing fully separated bike lanes/shared paths and pedestrian paths is one of the most effective ways to make active transport users feel safe when walking and cycling and increase active transport usage.

This section of the report details the development of a comprehensive active transport network for the 10 study areas within the Scenic Rim LGA, with an aim to increase the ability for residents and visitors to the Scenic Rim to travel within the region.

8.2 METHODOLOGY

The following section outlines how the key active transport routes have been defined, as well as the definition of the route's priority within each study area.

The process was divided into two stages as follows:

- **Stage 1:** Definition of active transport routes
- **Stage 2:** Prioritisation of active transport routes.

Definition of active transport routes

The aim of this process was to identify the highest priority routes for people walking and cycling. These are the routes that generate significant pedestrian and cyclist traffic.

This process included assessing the potential number of trips for the secondary destinations, reviewing the land uses (i.e. commercial, industrial, residential, etc), assessing crash clusters to identify any trends and key safety risks, pedestrian and cyclist desire lines*, public transport stops (if any), future planning considerations and path gradients.

This process culminated in an active transport network, which was divided into three main categories:

- **Pedestrian routes:** Routes that are expected to be used mostly by pedestrians. These are generally routes along low speed/low-traffic residential streets, where minimal cyclists' demands are expected
- **Cyclist routes:** Routes that are further away from the primary destinations (i.e. generally between 2km and 7km), that are mostly expected to be used by cyclists, and

*Desire lines are paths worn into the ground by walkers or cyclists taking shortcuts, bypassing designated routes.

- **Multimodal routes/shared routes:** Routes that are expected to be mostly used by people walking and cycling concurrently.

Prioritisation of active transport routes: The aims of this process were to prioritise the active transport network into different levels (namely primary routes and secondary routes). The objective of defining the route hierarchy is to identify the level of active transport infrastructure upgrades and expected level of usage.

A higher level in the hierarchy (i.e. primary route) was given to routes servicing a higher number of active transport trips (such as routes within commercial precincts and key pedestrian/cycle links). Generally, routes servicing low-density residential areas were identified as secondary routes given the lower demand for pedestrian/cycling activity in these areas.

The definition of the primary and secondary routes has been generally described in Table 8.1.

Table 8.1: Criteria to Determine Route Priority

Classification	Criteria
Primary Route	Routes that are fronted by ground level retail and form part of the core of the activity centre Routes that represent significant active transport usage potential or are known to be heavily used by active transport users Routes generally connecting primary and secondary destinations Routes that presented significant active transport crash clusters
Secondary Route	Balance of the key active transport network routes within the study areas

The **primary and secondary route maps** are detailed in **Appendix G**.

9. DESIGN STANDARDS

9.1 OVERVIEW

The design standards to be applied for this ATP include adopting the principles of Universal Design, which aim to provide all-inclusive access that eliminates the need for adaptation and specialised design for mobility-impaired community members. The design standards include a combination of Australian Standards, Austroads Guidelines, and TMR technical directions and model drawings.

9.2 RECOMMENDED PATH PROVISION AND PATH WIDTH

Given the rural characteristics of the Scenic Rim LGA and reduced walking catchment for a number of study areas, TMR's recommended path provision and width is considered excessive to apply to all locations across the Scenic Rim are unlikely to be achievable.

Further, based on the community engagement feedback and expected level of cycle usage, shared paths have been recommended for cycling routes instead of dedicated fully separated cycling paths (which is also in line with the PCN planning) and further discussed in Section 13.3.

As an alternative to TMR's recommendations, reference was also made to the minimum path widths outlined in AGRD6a. When considering the Scenic Rim's specific factors in consultation with Council, the minimum width requirements have been refined for various areas across the Scenic Rim walking network plans.

10. ROUTE AUDITS

10.1 OVERVIEW

A desktop analysis of the ATP routes was undertaken prior to the route audits using GIS data provided by Council and aerial mapping platforms such as Google maps, QLD Globe and Nearmap, including their associated street view capabilities. The desktop analysis was used to inform any key missing links for the detailed route audits.

Detailed site audits were conducted on 4, 12 and 19 June 2024. Further site audits, encompassing the updated WNP routes (following community engagement), occurred on 11, 24, 25 and 31 August 2024.

The site audits were undertaken on all the primary and secondary routes to identify issues and potential remedial works. Auditing of issues, or deficiencies, was based on the issues that would fundamentally impact walking and cycling within the Scenic Rim, as follows:

- **Connectivity:** Is the route connected to the rest of the network? Is the route clear and easy to follow?
- **Safety:** Is the route and crossing points safe to use by all users?
- **Accessibility:** Is the route and crossing points accessible to all users irrespective of ability, fitness level of use of mobility aid devices?
- **Level of Usage**: Does the route cater for the total potential users? Is the route pleasant considering the total potential users?

The audit considered footpaths, shared paths, cycling facilities, kerb ramps, crossing points and other active transport facilities. A description of the issues found during the audits is shown in Table 10.1

Table 10.1: Audit Issue Description

Themes	Description
Missing path	Missing path, missing shared path.
Damaged path	Trip hazard (lips), cracked path, uneven path
Narrow path	Path below the minimum design standard width
Missing crossing facility	Missing crossing facility at key desire line
Missing kerb ramp	Missing kerb ramp at intersection, missing mid-block kerb ramp at crossing points
Unsafe or non-standard crossing facility	Crossing points with limited sight lines, raised crossing island with insufficient landing/storing area, crossing points leading to crossovers, crossing points leading to kerbs
Physical obstruction	Physical obstruction on the path impacting accessibility, safety and/or connectivity. Landscape overgrowing over path, impacting path width
Non-standard kerb ramp	Narrow kerb ramp, steep kerb ramp, cracked kerb ramp, kerb ramp directing pedestrian into intersection/traffic
Missing supporting infrastructure	Locations that could benefit from seating, shading or water provision

10.2 KEY FINDINGS

A summary of the types of issues found by study area is presented in Table 10.2.

Table 10.2: Summary of Issue Types

Study Areas	Missing path	Narrow path	Missing Crossing Facility	Missing kerb ramp	Unsafe/Non-standard crossing facility	Non-standard kerb ramp	Damaged path	Physical obstruction	Missing support infrastructure
Beaudesert	10km	8km	8	55	5	23	-	-	5
Tamborine Mountain	9.6km	6.1km	6	39	7	13	1	-	1
Boonah	4.7km	6km	4	29	9	18	1	1	3
Kalbar	2.7km	3km	1	15	1	11	7	1	3
Canungra	2.1km	2.7km	1	9	1	3	0	1	0
Harrisville	1km	2.3km	0	6	1	11	6	1	3
Aratula	2.5km	0.8km	0	18	-	-	-	1	2
Peak Crossing	1.5km	1.8km	0	7	1	6	-	-	2
Tamborine	1.9km	0.1km	1	14	-	1	-	-	-
Kooralbyn	4km	0.4km	1	-	-	-	-	-	-
Total	**40km**	**31km**	**22**	**192**	**25**	**86**	**15**	**5**	**19**

10.3 RECOMMENDED UPGRADES

The network deficiencies and non-compliances noted during the route audits were investigated and recommended upgrades/treatments were developed, generally in accordance with the design standards described in Section 9.

The recommended upgrade maps for each study area have been provided in the **Walking Network Ians**


HOHL PLUMBING
Hohl Plumbing Ph. 5541 1600
7 ELEVEN
Mobil
Unleaded E10
153.9
Unleaded
155.9
Diesel Efficient
167.9
velocity
Coffee
Smoothies & Frappés
Earn Rewards
HISTORICAL MUSEUM 900m
ROAD WORK AHEAD

11. EVALUATION FRAMEWORK

11.1 OVERVIEW

An MCA was undertaken to evaluate and prioritise the recommended treatments.

The MCA criteria and approach allows for the relative importance of a broad range of impacts and benefits to be considered. Five criteria in total were selected based on the project objectives, including three criteria related to potential benefits, one criterion related to impacts (i.e. costs), and one criterion related to the location/level of active transport activity.

Given the initial stages of planning, a 40 per cent weighting relative to costs and 60 per cent weighting relative to benefits was applied.

The MCA criteria is described in Table 11.1.

Table 11.1: Multi Criteria Assessment

Criteria	Description	Measurement and scoring method	Weighting
Accessibility	The level of benefit the recommended treatment will have in providing a pedestrian network accessible to everyone	Measured based on assessment of improvement to perceived active transport accessibility. Scored based on 1 to 9 scale Lowest perceived accessibility improvement = 1 Highest perceived accessibility improvement = 9	20%
Connectivity	The level of benefit the recommended treatment will have on the general pedestrian network connectivity	Measured based on assessment of improvement to perceived active transport connectivity. Scored based on 1 to 9 scale Lowest perceived connectivity improvement = 1 Highest perceived connectivity improvement = 9	20%
Safety	The level of benefit the recommended treatment will have on pedestrian user safety	Measured based on assessment of improvement to perceived active transport safety. Scored based on 1 to 9 scale Lowest perceived safety improvement = 1 Highest perceived safety improvement = 9	20%
Cost	Estimated infrastructure costs	Measured in foreseeable infrastructure cost $ (2023). Scored based on 1 to 9 scale Higher cost = 1 Lower cost = 9	40%
Level of Activity	The expected number of potential active transport users benefited by the recommended treatment	Measured based on the ATP route priority, provided as an adjustment factor. Primary Route = 1 Secondary Route = 0.5	Not applicable

11.2 LEVEL OF ACTIVITY

As discussed in Section 8.1, the level of activity was scored based on the ATP route priority. Each route priority (i.e. primary route and secondary route) was provided with an adjustment factor as follows:

- **Primary Route: 1.0**
- **Secondary Route: 0.5**

The adjustment factor was then applied to the combined accessibility, connectivity, safety and cost scores, providing the final score for each treatment. This was used to prioritise treatments that would benefit a larger number of users (i.e. treatments along primary routes), while reducing the importance of treatments along secondary routes, while not overlooking 'easy fix'/'quick win' treatments.

11.3 ACTION PROGRAM

The action program has been prioritised based on the MCA results. The maps and priority register for the Scenic Rim ATP have been provided in the **Walking Network Plans**.

Where possible, supporting infrastructure such as seating and shading has been recommended. Irrespective of the above, Council's open space/park team could also be engaged to determine the ability to provide supporting infrastructure along the ATP routes.

12. FUTURE ACTIVE TRANSPORT CONNECTIONS

12.1 OVERVIEW

Future active transport links and future investigation links have been identified to support Council in the on-going development and provision of the active transport network, when new/further areas are developed within the Scenic Rim LGA.

12.2 LOCAL GOVERNMENT INFRASTRUCTURE PLAN ROUTES

A network of strategic active transport links network has been developed considering future significant developments within the Scenic Rim LGA. It provides a connection between either the existing active transport network or the recommended action program upgrades to/from the new significant developments.

The Local Government Infrastructure Plan (LGIP) routes have been developed considering when the level of foot traffic generated by a significant development would significantly increase the active transport demand in any given route. The LGIP routes have been indicatively separated by 2031 LGIP Routes and 2041 LGIP routes, considering the year that significant developments are expected to be built.

It is recommended that Council incorporates the network in the LGIP and tie the delivery of the active transport upgrades to the construction of the developments.

12.3 ROUTES FOR FURTHER CONSIDERATION

A network of routes for further consideration has also been provided. These routes generally did not achieve the threshold to be considered a primary route or secondary route and did not have significant developments to be warranted as part of the LGIP routes.

These routes should be revisited and reassessed by Council to confirm if they should form part of the LGIP routes or if they should be included in the action plan for further investigation.

12.4 FURTHER ASSESSMENT

The process for assessing LGIP routes did not include every route within the Scenic Rim LGA, as well as every future potential development. As such, it is recommended the Council undertakes a future detailed assessment to further detail and develop an LGIP active transport route network.

13. ADDITIONAL CONSIDERATIONS

13.1 OVERVIEW

As discussed in Section 1, as part of the ATP, separate reports have been developed for Walking Trails, the Bethania to Beaudesert Rail Trail and the Principal Cycle Network Development Plan. The key findings from these reports are as follows.

13.2 BETHANIA TO BEAUDESERT RAIL TRAIL

The Bethania to Beaudesert Rail Trail is a proposed walking and cycling trail along the former Beaudesert Rail Corridor connecting Scenic Rim to Logan. The 7.5km Scenic Rim section of the rail trail connects the historic Beaudesert Railway Station and continues north towards Gleneagle on the western side of Mount Lindesay Highway. TMR is in the process of removing redundant rail infrastructure along the Scenic Rim section of the Bethania to Beaudesert rail trail corridor.

The rail trail, part of TMRs principal cycle network, is expected to provide additional off-road active transport route for residents and visitors within the Scenic Rim LGA and is planned to connect to the Logan section of the rail trail (which has sections with planned construction due 2025).

A review of operational aspects of the rail trail has been undertaken and recommendations have been made regarding rail trail best practice infrastructure, information, guidance, cross-section and external connections. These recommendations align with the fundamental principles of Safe System Approach, focusing on understanding interactions between different elements and design features, especially in areas where conflicts between path users and vehicles or other path users may arise.

The Scenic Rim section of the rail trail alignment and its recommended supporting infrastructure, design consideration and connections to the external network is indicatively shown in Figure 13.1.

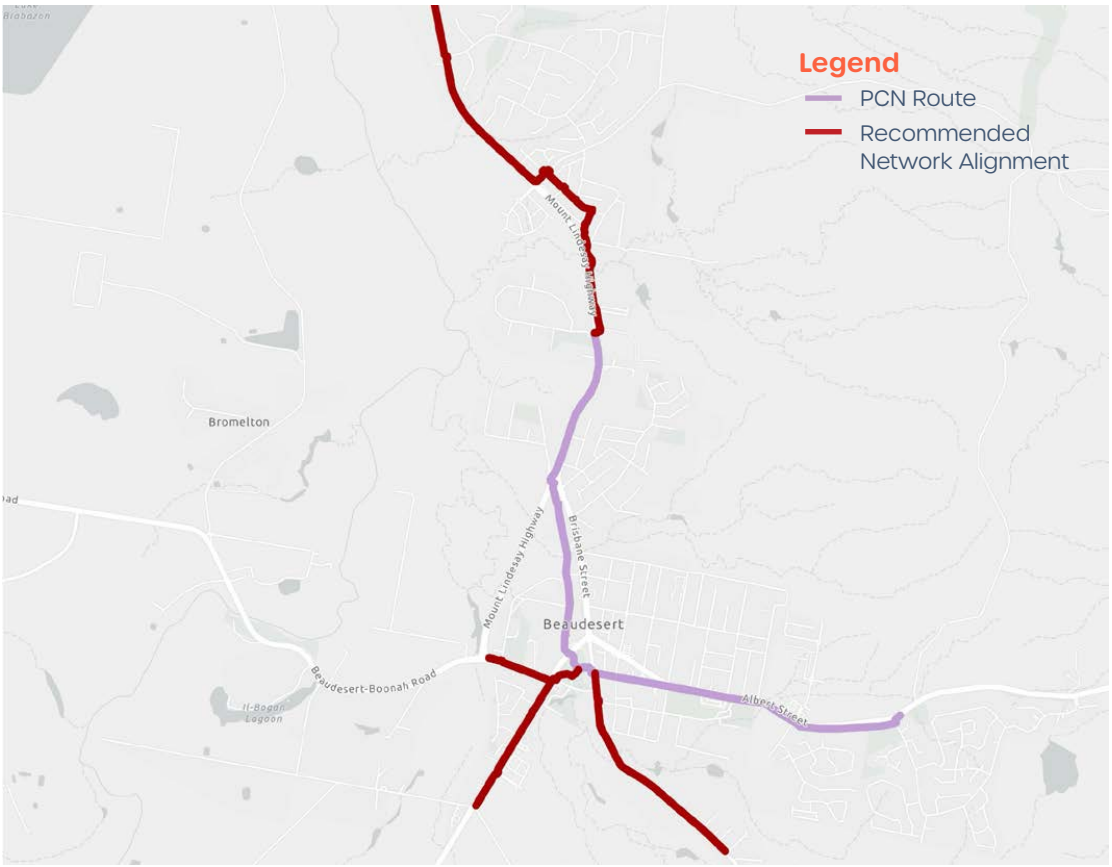
Figure 13.1: Scenic Rim Rail Trail Map

13.3 PRINCIPAL CYCLE NETWORK PLAN DEVELOPMENT

TMR's PCN provides a vision to support, guide and inform practitioners in the development of key cycling networks. The principal routes presented in the PCN represent potential cycle desire lines and indicate the most important routes within a region.

Concept plans have been developed for sections of the PCN, which generally include three-metre wide shared paths. The preferred route alignment is shown in Figure 13.2.

Figure 13.2: Preferred Alignment



13.4 WALKING TRAILS

Walking trails are typically not provisioned as active transport infrastructure; rather, they are constructed as recreational infrastructure to provide exercise, tourism, cultural, heritage and/or environmental experiences for users. Therefore, walking trails cannot be considered in isolation in a feasibility assessment, but instead considered within a context of activities to attract visitation to the area by locals and tourists alike.

Research from Australia and overseas shows walking trails provide significant tourism and economic benefits to local areas. These include money spent in rural and regional areas, return visits and increases in overnight stays (both for domestic and international tourists). More popular trails have the potential to generate supporting businesses, which directly leverage the trails, through equipment hire, transport services, accommodation, food and cultural experiences to name a few.

Figure 13.3: Scenic Rim Walking Trails Map

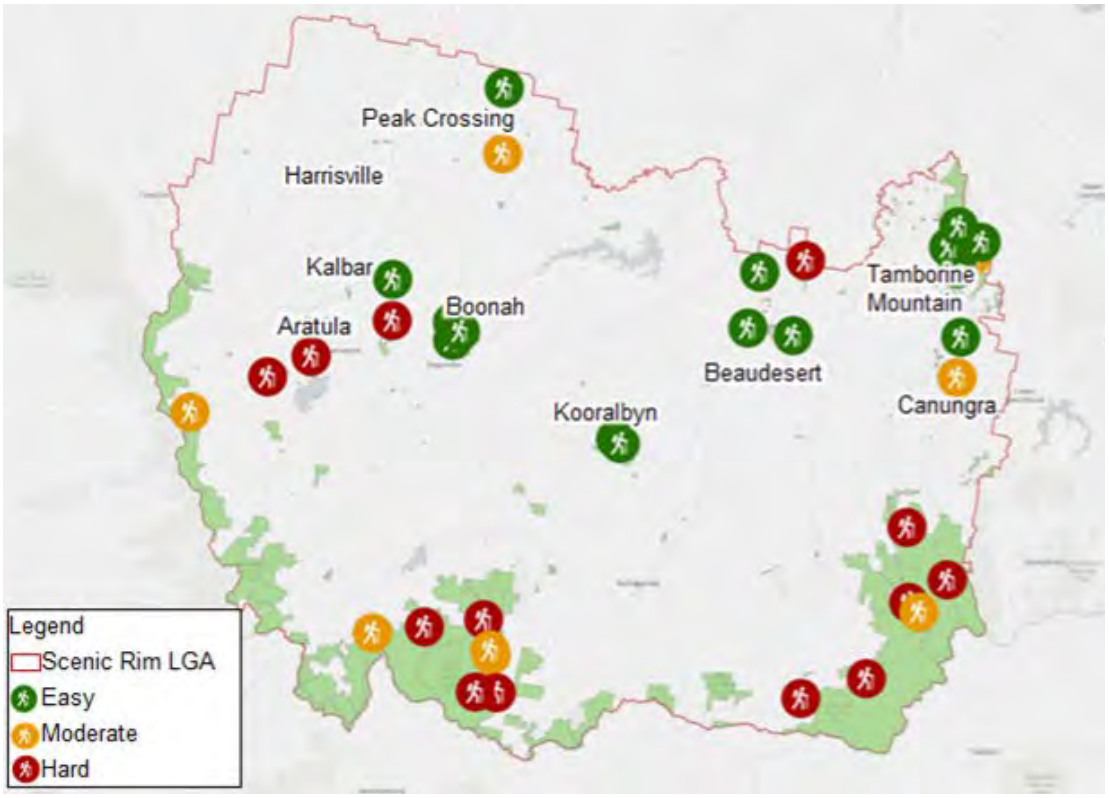


Figure 13.3. categorises the walking trails located in the Scenic Rim LGA by technical difficulty.

A range of supporting infrastructure may be needed when developing walking trails. The level of infrastructure is dependent on the trail classification, expected user groups, location of trail, etc. When there is existing infrastructure surrounding the walking trail location, it is recommended to align the trail with the existing facilities.

Generally, the facilities to support walking trails are:

- car parking
- active transport connections, and
- supporting infrastructure, such as water, shelter and signage.

Based on community feedback and the technical assessment, it is recommended that:

- Council investigate the feasibility of providing a car park in close proximity to Fassifern Rail Trail
- Council investigate the feasibility of completing the missing Scenic Rim sections of Boonah to Ipswich Trail
- Council liaise with TMR regarding the development of the Scenic Rim section of the Bethania to Beaudesert Rail Trail
- Council investigate the provision of dog parks and/or walking trails that allow dogs, particularly in proximity to the key centres of Beaudesert, Boonah and Tamborine Mountain
- Council investigate the development of additional horse-friendly trails and/or trail sections.

14. NON-INFRASTRUCTURE OPPORTUNITIES

14.1 OVERVIEW

As discussed in Section 2.2, there are a number of initiatives, non-infrastructure actions and strategies to encourage active transport methods and increase walking and cycling uptake. These include periodical targeted actions and activities such as International Car Free Day education measures, such as Bicycle Workshops, and use of Council's social media, to outline the benefit of physical activity, provide tips on using active transport and detail Council's actions and activities related to active transport.

14.2 INTERNATIONAL CAR-FREE DAY

The International Car Free Day (ICFD) occurs among on 22 September to encourage motorists to give up their cars for one day, promoting walking, cycling and public transport modes. The event is celebrated worldwide and is observed once a week in some countries to limit air pollution and traffic.

There are number of ways Council can encourage residents not to drive on the ICFD. These include social media advertising, events to discuss Council's active transport initiatives and even a day of free public transport fare, pending discussions with public transport providers and funding.

14.3 MONTHLY WALKING TEAMS

The monthly Walking Teams initiative is used by The Ireland Walking Guide to encourage residents and tourists to walk more often. Each month, a walking theme is advertised, such as Walking Trails, Group Walk and Favourite Walk.

Council could create a list of potential walks in the region accordingly to the monthly theme and encourage participants to share their walking experiences on social media.

14.4 THE SCENIC COFFEE ROUTE

The Cake Scape is an initiative from Essex in England to encourage residents and tourists to cycle and, at the same time, explore the restaurants and cafes in the area.

Participants of the Cake Scape can cycle to any of the participating cafes and restaurants in the area and earn a reward stamp at the till after making a purchase. When they collect a certain number of stamps, they receive a free slice of cake.

This is a great initiative that has the potential to increase cycling uptake across the Scenic Rim as well as provide benefits to restaurants, cafes and the local economy. There may be an opportunity for local branding using café/ coffee shops as the Scenic Coffee Route and promote along businesses within the Scenic Rim LGA.

14.5 BICYCLE WORKSHOPS

Bicycle workshops have the potential to increase knowledge and safety for bicycle users, particularly for new users such as children, retirees or new community members to the area. Council could organise Bicycle Workshops in a range of local community areas to provide training on the repair and maintenance of their bicycles. The periodical workshop could offer a pop-up station of tools with a bicycle mechanic to assist their learning. This is a great opportunity

to activate spaces in local areas and has the potential to increase cycling in the community.

14.6 COMMUNITY BREAKFAST TRAILS

Council could organise planned walking and cycling routes that end with a free breakfast in a local area. The routes could be advertised on Council's website and social media platforms. This type of event is great for making people more confident in walking and cycling and promoting active transport usage.

For school children during the week, providing a free breakfast in specific areas along a common route or at school gates can help to promote walking and cycling to school. Council could promote this action through partnership with private and public schools.

14.7 ELECTRIC BIKE INCENTIVES

Given the typical hilly terrain and potential long distances of travel in Scenic Rim, Electric bikes (e-bikes) can represent a more feasible active transport mode for a number of users (compared to regular bikes). It is further noted that e-bikes have an elevated market-price, which can hinder their uptake.

The Queensland Government provided an e-mobility rebate scheme that allowed applicants to receive up to $500 per eligible e-bike. It is recommended that Council make residents aware should similar incentives be available.

14.8 TRAVEL BEHAVIOUR CHANGE PROGRAM

Research demonstrates that behaviour change and individualised marketing have the potential to increase active transport uptake and interest. This may include the development and implementation of marketing and communications initiatives, local wayfinding programs to inform the community regarding safe routes and school-based programs (such as cycle/ride to school programs).

It is recommended that Council maintains an up-to-date active transport map for each region, promotes active transport initiatives and uses Council's communications channels and media opportunities to make residents and tourists aware of active transport options.

15. FUNDING SOURCES

15.1 DEPARTMENT OF TRANSPORT AND MAIN ROADS

Funding for the recommended upgrades presented in the ATP can be achieved through a number of means, including:

- co-contribution Council/state investment (e.g. TMR/Local Government Cost Sharing Arrangement within state-controlled roads)
- tmr cycle network local government grant, for projects with a high priority principal cycle network route, and
- other funding opportunities, subject to grants and/or funding applications.

All actions identified in the ATP can be included as part of funding applications to TMR.

15.2 DEVELOPER CONTRIBUTIONS

Infrastructure charges allow Council to charge developments that increase the demand on Council's trunk infrastructure network, including transport. Should a development increase pedestrian activity or demand, it would be reasonable for Council to seek a contribution towards improvements to pedestrian facilities in the area or adjacent to these developments, to provide a link between the development and the local pedestrian network or facilities.

In relation to the ATP implementation, Council may consider including some of the works as part of its infrastructure charges, if relevant.

15.3 IMPLEMENTATION AND MONITORING

The next stages of the ATP are for Council to:

- organise funding sources to establish a budget and timeframe
- establish an implementation program, and
- monitor the implementation of the ATP and its outcomes in conjunction with other relevant Council projects and plans.

Funding and budget for recommendations should be identified and set in the budget with higher priority works being given precedence.

It is common to have a monitoring program for the ATP which would typically involve:

- recording of all proposed pedestrian works in a database
- review of pedestrian usage and mode share
- analysis of crash statistics, and
- collection of pedestrian count information
- periodic updating of the ATP.

16. CONCLUSION AND NEXT STEPS

16.1 CONCLUSION AND NEXT STEPS

It is recommended that Council seeks funding, implements and monitors the actions provided in the ATP. A summary of the recommendations considering Austroads Active Transport Implementation Pyramid is provided in Figure 16.1.

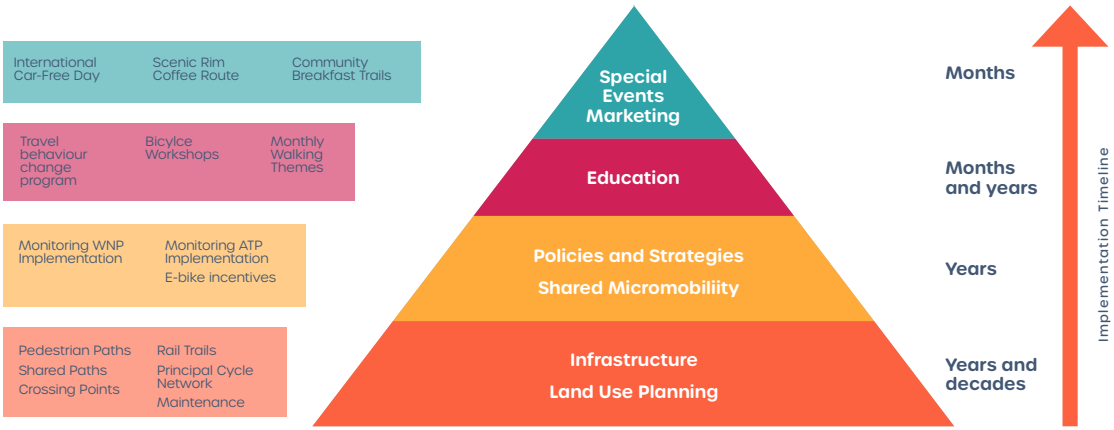


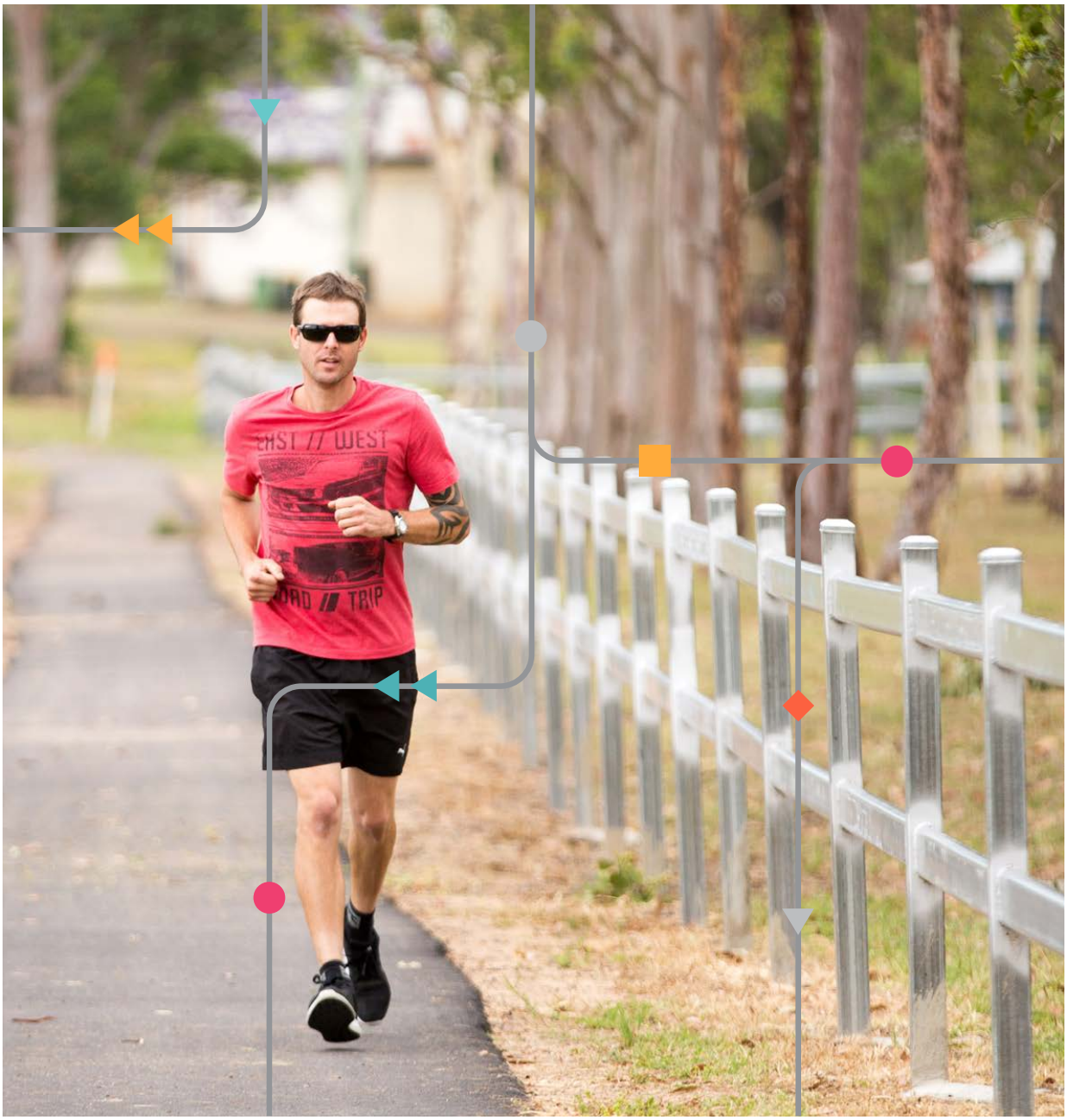
Figure 16.1: Scenic Rim ATP Implementation Pyramid

APPENDIX A:
Walking Network Plan

APPENDIX B:
Walking Trails Scoping Study

APPENDIX C:
Bethania to Beaudesert Rail Trail

APPENDIX D:
Cycle Network Plans



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Walking Network Plans

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29 May 2025

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1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Scenic Rim Regional Council (Council) to develop an Integrated Transport Plan, which is aimed at enhancing the efficiency, safety, and sustainability of transportation networks in the Scenic Rim. This plan will serve as a strategic decision-making tool for Council and provide a long-term vision for improving transportation in the LGA. Additionally, it will equip Council with a solid technical foundation for engaging with other levels of government regarding the LGA's role within the region and the imperative to enhance transport outcomes

The active transport component of the ITP is intended to guide Council's ongoing provision of the pedestrian and cyclists' network for Scenic Rim residents and visitors. Pedestrians include people who are: walking or running; pushing a pram; in a wheelchair; using a mobility scooter; using a skateboard, foot scooter or rollerblades. Cyclists include people using road bikes, electric bikes, cargo bikes, mountain bikes, adaptive bicycles, etc.

The active transport component of the ITP will form the Scenic Rim Active Transport Plan, which includes:

- **Walking Network Plans (this study)**
- Cycle Network Plans
- Principal Cycle Network Assessment
- Walking Trails Scoping Study
- Bethania to Beaudesert Rail Trail

1.2 Walking Network Plan (WNP) Methodology

The methodology undertaken in this WNP follows the *Department of Transport and Main Roads* (TMR) *2021 Walking Network Planning Guideline* ("the guideline") Version 1, including the *Guidelines for developing Principal Pedestrian Networks* (Victorian PPN) (State of Victoria, 2015) and the *Walkability Improvement Tool* (WIT) (Queensland Treasury, 2020).

It is noted an updated version of the Guideline has been released in 2024. The new WNP version was announced after the Scenic Rim WNP commenced, as such has not been incorporated in the assessment. Importantly this WNP is considered fit for purpose.

The guideline is subdivided in six stages:

- Stage 1 – Prepare draft walking network plan
- Stage 2 – Test the draft walking network plan
- Stage 3 – Finalise the walking network plan
- Stage 4 – Prepare draft works program
- Stage 5 – Finalise and implement the works program
- Stage 6 – Evaluate and promote the network plan and works program.

1.3 Transport Policies and Principles

As part of the ITP, transport policies and principles have been developed in conjunction with Council. The ITP policies and principles is shown in Figure 1.1.

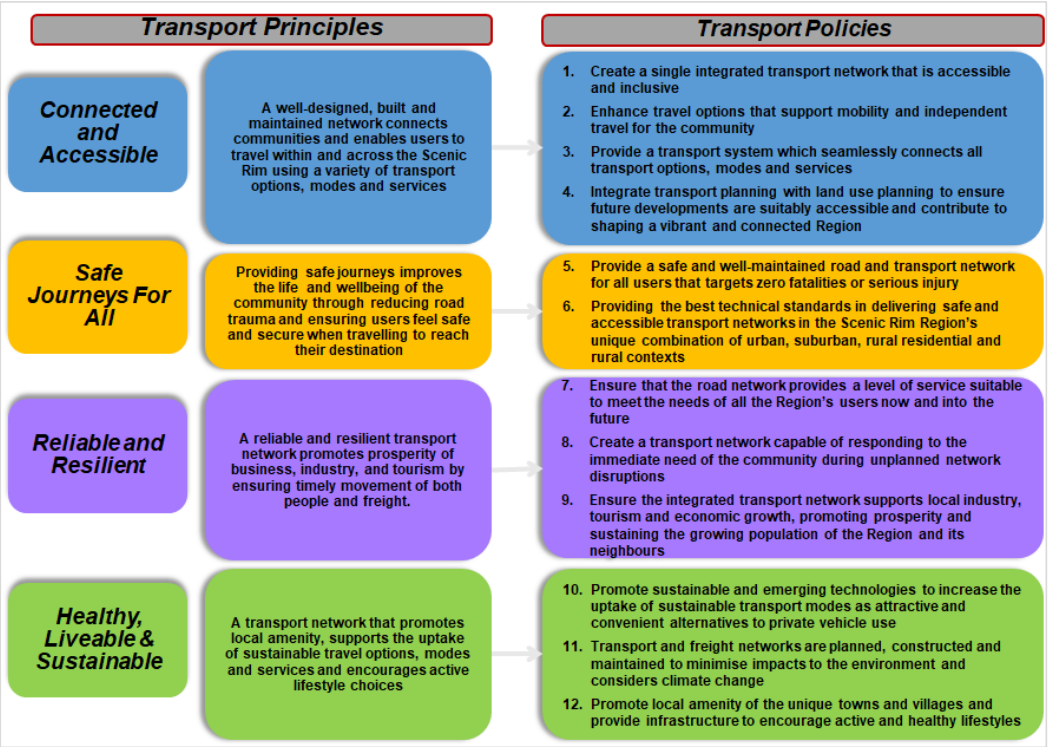


Figure 1.1: Transport Policies and Principles

These policies and principles drive the purpose and implementation of the WNP.

1.4 Study Areas

Council defined ten study areas to form part of the WNP as follows:

- Tamborine Mountain
- Beaudesert
- Boonah
- Canungra
- Kalbar
- Peak Crossing
- Harrisville
- Aratula
- Kooralbyn
- Tamborine.

2. SCENIC RIM CHARACTERISTICS

2.1 Overview

In broad terms, pedestrians can be considered to be moving from:

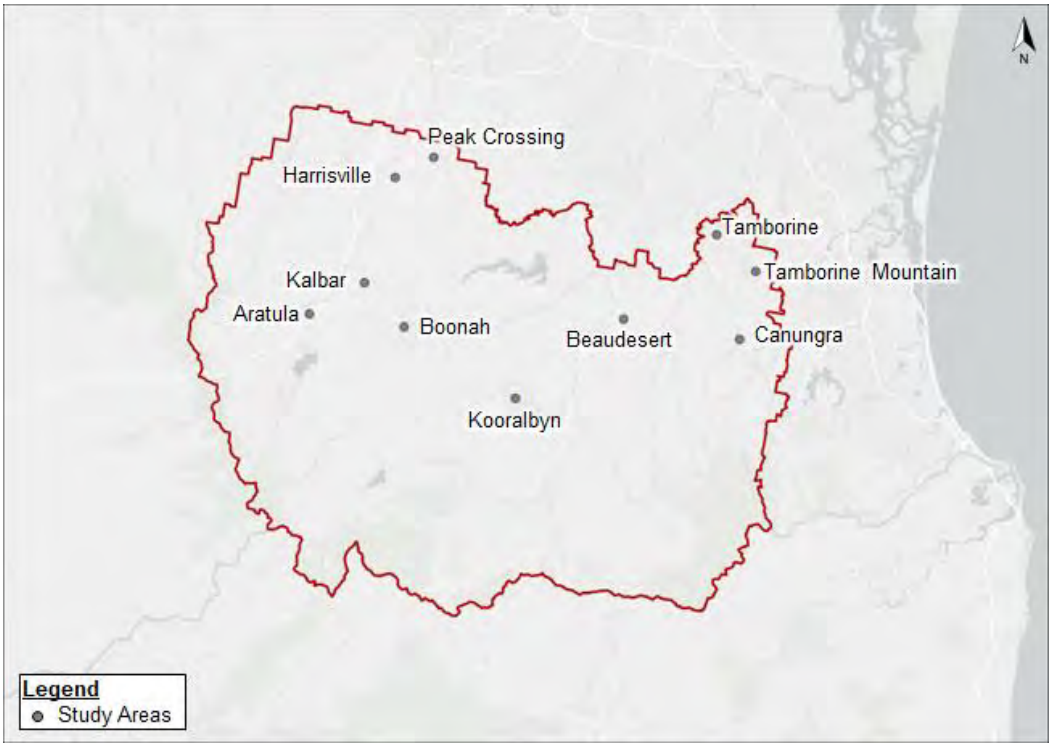
- Home to a destination
- Home to home on a recreational trip
- Home to public transport.

The location of population density, employment density, recreational locations and public transport stop locations are therefore important 'demand drivers' when developing pedestrian routes and prioritising works.

Scenic Rim Local Government Area (LGA) is located on the traditional lands of Mununjali, Wangerriburra and Ugarapul people, in South East Queensland (SEQ).

Known for its National Parks, Scenic Rim LGA covers an area of approximately 4,200km^2, which is predominantly natural, rural and low density residential areas, with most of its commercial and retail land uses in the centres of Tamborine Mountain, Beaudesert and Boonah.

Figure 2.1 shows the Southern Downs LGA with the study areas highlighted for context.



Source: Google Maps

Figure 2.1: Scenic Rim LGA – Study Area Locations

2.2 Demographics

2.2.1 Existing Demographics

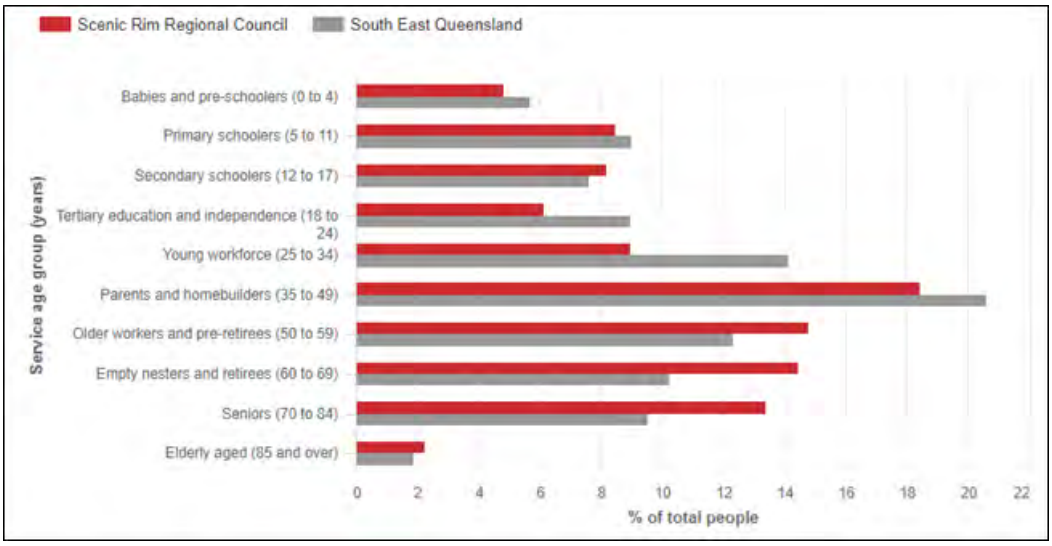
The population in Scenic Rim LGA is approximately 45,250 residents in 2023 based on Australian Bureau of Statistics (ABS) data.

2.2.2 Future Demographics

Scenic Rim Growth Management Strategy 2041 presents the future demographic figures for Scenic Rim LGA. The strategic planning and economic development objectives have assumptions and objectives to reach over 67,000 residents by 2041. The majority of population growth will be targeted at Beaudesert, Boonah, Canungra, Kalbar and Kooralbyn.

2.2.3 Pedestrian User Groups

Pedestrian planning considers several pedestrian facility user groups based on age and assumed mobility levels. Figure 2.2 shows key pedestrian demographic groups for Scenic Rim LGA.



Source: Adapted from the Australian Bureau of Statistics, 2021

Figure 2.2: Age Profile of Scenic Rim LGA in Comparison to SEQ

The age profile for Scenic Rim LGA demonstrates that approximately 45% of the residents are aged 50 and over, compared to approximately 34% for SEQ. This shows the LGA has an aging population, which presents current and future challenges for pedestrian access and mobility, including reduced mobility, decreased fitness, use of mobility aids and visual impairment.

In addition, approximately 17% of Scenic Rim's resident population are aged between 5 to 17 years. This user group is expected to attend school, which presents additional challenges to provide safe pedestrian paths and crossing points to and from school areas.

2.3 Road Hierarchy

The overall road network within each study area is presented in **Appendix A**.

2.4 Public Transport

Scenic Rim LGA has limited public transport provision, with only one hourly service operating between Beaudesert and Browns Plains (Logan) during weekdays. The rest of the Scenic Rim LGA has no public bus routes servicing their local area and surrounds.

2.5 Active Transport Barriers

As described in Section 2.2, Scenic Rim LGA land uses generally comprises of natural, rural and low-density residential areas. A level of commercial and retail land uses is present in the centres of Tamborine Mountain, Beaudesert and Boonah. The low-density residential developments with limited commercial and retail land uses means walking may not be a feasible alternative for a number of residents.

Further, a number of the study areas are effectively divided by major roads (e.g. Ipswich Boonah Road, Beaudesert Boonah Road, Mount Lindesay Highway, etc), with limited pedestrian crossing provision, impacting safe pedestrian movements.

3. STAGE 1: DRAFT WALKING NETWORK PLAN

3.1 Primary Destination

In accordance with TMR's Walking Network Planning Guideline and Victoria Government's Principal Pedestrian Networks Guidelines, the purpose of mapping the primary destination is to determine the destination for most walking trips.

The primary destination for the study areas has been defined in conjunction with Council and is provided in Table 3.1.

Table 3.1: Primary Destinations

Study Area	Primary Destination
Tamborine Mountain	Tamborine Mountain Town Centre (Main Street) and Gallery Walk
Beaudesert	Beaudesert Town Centre (intersection of Brisbane Street and Beaudesert Nerang Road)
Boonah	Boonah Town Centre (High Street)
Canungra	Canungra Town Centre (Beaudesert Nerang Road)
Kalbar	Kalbar Town Centre (Kalbar Connection Road)
Peak Crossing	Peak Crossing Town Centre (The Peak Pub)
Harrisville	Harrisville Town Centre (Queen Street)
Aratula	Aratula Town Centre (Conningham Highway)
Kooralbyn	Kooralbyn Town Centre (Wellington Bundock Drive)
Tamborine	Tamborine Central (intersection of Beaudesert Beenleigh Road and Leach Road)

TMR WNP Guidelines recommend using a 2km walking catchment (i.e. 'ped-shed') from the primary destination to define the WNP catchment, where infrastructure should be focused.

Given the natural and rural characteristics of Scenic Rim LGA, the process for defining the WNP catchment has been slightly amended, as follows:

- **Tamborine Mountain, Beaudesert and Boonah:** the WNP catchment has been defined as the 2km radius from the primary destination, plus surrounding areas with significant planned growth
- **Canungra, Kalbar, Peak Crossing, Harrisville, Aratula, Kooralbyn and Tamborine:** Given the natural and rural characteristics of these areas, 2km ped-shed is considered excessive (the majority of land uses surrounding the primary destinations area are defined as rural / low density residential developments, parks, environmental significant areas, etc). As such the WNP catchments have been defined to mostly to contain urban areas, plus areas with significant future planned developments.

TMR was consulted on the above and provided in-principle support on this approach.

The WNP primary destination and catchment for each study area has been provided in **Appendix B**.

3.2 Secondary Destination

Council provided a list with a number of secondary destinations. Following the methodology described in the TMR's Walking Network Planning Guideline, the secondary destinations were further interrogated and a shortlist was recommended to Council and TMR.

The future planning development areas are being considered as future population as outlined in section 3.3.3 which were not covered in this section as secondary destinations.

The secondary destinations for the study areas are provided in **Appendix C.**

3.3 Available Data

3.3.1 Baseline Roads and Tracks Data

The baseline roads and tracks dataset was downloaded from Queensland Government (QG) open data portal on 9th February 2024. The roads and tracks dataset was reviewed against the existing footpath network (desktop review) and against the Council footpaths and pathways mapping file provided by Council GIS team.

The roads and tracks dataset was updated to include roads and pedestrian paths that were not included in the original dataset, particularly within parks and recreational areas.

The updated roads and tracks baseline map for each of the study areas is presented in **Appendix D**.

3.3.2 ABS Data

Mesh block data was downloaded from ABS open data website, including the latest available population data (i.e. 2021 Census data). The existing population demographic within each study area is shown in **Appendix E** as dot density plots.

3.3.3 Future Population

Council provided the approved development dataset which informs the future growth areas. In general, the land use and number of dwellings from the approved developments in each study area are utilised to project the future population. These population have been integrated into the analysis, as presented in **Appendix E** as density plots.

3.3.4 Secondary Destinations Population

TMR Walking Network Planning Guideline outlines that secondary trip destination population should be estimated using appropriate traffic generation rates. It is noted however that traffic generation rates generally relate to vehicle trips only, which can underestimate the potential for walking trips.

In order to account for all potential walking trips, a 'person trip' generation rate is considered more appropriate compared to 'vehicle trip' rates. That is, secondary destinations were assessed considering the total number of persons using a land use, rather than the total number of vehicle trips. When a person trip rate was not available for a land use, an average 'person per vehicle' was used, in accordance with *Australian Transport Assessment and Planning (ATAP) – PV2 Road Parameter Values.*

In addition, a number of land uses defined as Secondary Destinations do not have prescribed industry standard trip generation rates, such as public parks, tourist attractions and sporting fields. The trip generation for these land uses can vary significantly based on their location, nearby land uses, facilities, etc. A first-principles approach was therefore adopted to define the potential trip generation for these land uses in the local context.

The trip generation rates used for assessing the potential pedestrian trips for the secondary land uses are shown in Table 3.2.

Table 3.2: Pedestrian Trip Generation Rates

Land Use	Rate Source
Hospitals / Medical facilities	Transport for New South Wales ▪ TfNSW (formerly RTA) Guide to Traffic Generating Developments (2002)
Educational facilities (schools and colleges)	Transport for New South Wales ▪ Trip Generation Schools analysis report (2014)
Shopping centre / Commercial area	Transport for New South Wales ▪ NSW Small Suburban Shopping Centre Data Report (2018) ▪ RTA Guide to Traffic Generating Developments (2002)
Stores / shops	Transport for New South Wales ▪ NSW Small Suburban Shopping Centre Data Report (2018)

Land Use	Rate Source
Food and Drink Outlets	Transport for New South Wales ▪ RTA Guide to Traffic Generating Developments (2002)
Motel	Transport for New South Wales ▪ RTA Guide to Traffic Generating Developments (2002)
Club	Transport for New South Wales ▪ RTA Guide to Traffic Generating Developments (2002)
Parks	First principle assessment ▪ Based on number of parking bays and average vehicle occupancy
Sporting facilities	First principle assessment ▪ Based on number of players and average vehicle occupancy
Tourist attraction	First principle assessment ▪ Based on number of parking bays, average vehicle occupancy and popularity
Community facility	First principle assessment ▪ Based on number of parking bays and average vehicle occupancy
Showground	First Principle Assessment ▪ Based on the land uses established (e.g. sporting facilities) and types of activities organizing on the showground
Caravan Park / Accommodation	First Principle Assessment ▪ Based on parking bays, number of cabins and average number of occupancy
Aged Care	Transport for New South Wales ▪ TfNSW (formerly RTA) Guide to Traffic Generating Developments – Technical Direction (2013)
Child Care	Transport for New South Wales ▪ TfNSW (formerly RTA) Guide to Traffic Generating Developments (2002)

3.4 Shortest Route Mapping

For **Tamborine Mountain, Beaudesert and Boonah**, the shortest route mapping was undertaken using ArcGIS Pro software and QGIS software in accordance with TMR's Walking Network Planning Guideline, as follows:

- The primary and secondary destinations were created considering their main access point
- The shortest routes between the population mesh blocks / future population / secondary destinations and the primary destination were created using the shortest path tool in QGIS and considering the updated Baseline Roads and Tracks network (discussed in Section 3.3.1)
- Based on the population of the mesh blocks / future population / secondary destinations, the number of potential walking trips were assigned to the corresponding sections of the shortest routes
- The route sections were then graphically presented based on their accumulated potential walking trips compared to the total potential walking trips within the study area.

The result of the shortest route and potential walking trips analysis are shown in **Appendix F**, which depicts the proportion of potential walking trips from the mesh blocks / future population / secondary destinations to the primary destination for **Tamborine Mountain, Beaudesert and Boonah**.

For **Canungra, Kalbar, Peak Crossing, Harrisville, Aratula, Kooralbyn and Tamborine** an alternative approach has been undertaken. Given the small scale of these study areas and WNP catchment, a qualitative assessment has been undertaken considering the existing population, secondary destinations and future planned growth to define key WNP routes which will be further discussed in section 3.6.

TMR was consulted on the above and provided in-principle support on this approach.

3.5 Crash Data

Pedestrian crash data for Scenic Rim LGA was sourced for the period from April 2018 to April 2023 (most recent five (5) years). The crash data was further disaggregated to only include pedestrian related crashes within a the WNP catchment from each of the study areas to identify any trends and crash clusters. The crash data details are shown in Table 3.3.

During the five-year period, there were 12 active transport related crashes within the study areas, as shown in Table 3.3.

Table 3.3: Active Transport Related Crash Data

Study Area	Pedestrian Related Crashes			
	Injury	Hospitalisation	Fatal	Total
Tamborine Mountain	1	0	0	1
Beaudesert	3	3	0	6
Boonah	2	1	0	3
Canungra	0	0	0	0
Kalbar	0	1	0	1
Peak Crossing	0	0	0	0
Harrisville	0	0	1	1
Aratula	0	0	0	0
Kooralbyn	0	0	0	0
Tamborine	0	0	0	0
Total				**12**

As shown in Table 3.3 one fatal crash occurred in Harrisville in 2020 at Queen Street, where a pedestrian was hit by a motor vehicle while attempting to cross the road.

It is noted that a number of crashes occurred close to commercial centres, suggesting that additional and improved pedestrian infrastructure may be appropriate.

The crash data maps for study areas where pedestrian related crashes occurred are shown in **Appendix G.**

3.6 Delineating the Draft WNP

As per the TMR Guideline, the walking routes shall be delineated into two levels, namely **primary pedestrian routes** and **secondary pedestrian routes**.

The objective on defining the route hierarchy is to identify the level of pedestrian infrastructure upgrades. Primary pedestrian routes will be audited and a detailed recommended works program will be provided, while secondary pedestrian routes will be used to inform longer term / aspirational planning for pedestrian improvements.

The route hierarchy was defined based on their potential and importance to generate pedestrian trips, desktop review and Council's local knowledge. Generally, the primary routes have been defined as follows:

- Routes that are fronted by ground level retail and form part of the core of the activity centre
- Routes where the total number of potential trips is approximately 20% of the total potential trip population in the area
- Routes generally connecting primary and secondary destinations
- Routes that presented significant pedestrian crash clusters
- Routes that although did not show a significant level of pedestrian activity based on the shortest routes analysis, are known to be heavily used by pedestrians

In addition, concurrently to this study Bitzios Consulting is undertaking a Cycle Network Plan (CNP) for Scenic Rim. As expected, a number of routes overlap between the WNP and the CNP. The overlapping routes have also been considered as primary routes.

As noted, Council's feedback was gathered for 'local knowledge', since the mapping software cannot always predict accurately where people will walk within an activity centre. The balance of the key pedestrian network within the walkable catchment has been defined as secondary routes.

Council also provided TMR with the Draft WNP. Upon review of the routes, TMR provided comments regarding the route priorities and primary and secondary destinations. This feedback has also been considered and the WNPs updated.

The draft primary and secondary routes for the study areas are shown in **Appendix H**.

4. STAGE 2: TEST THE DRAFT WALKING NETWORK PLAN

4.1 Overview

As described in Section 1.1, this study forms part of the Scenic Rim Integrated Transport Plan. A number of community and stakeholder engagement sessions have been undertaken as part of the Integrated Transport Plan.

The engagement activities were advertised in Let's Talk Scenic Rim website, social media, news outlets and through pamphlets distributed locally. The stakeholder and community engagement activities included the following:

- On-line survey
- On-line mapping
- Five in-person community drop in sessions
- Focused stakeholder engagement workshop.

The Let's Talk Scenic Rim website page advertising the community engagement activities is shown in Figure 4.1.

Figure 4.1: Let's Talk Scenic Rim Website

The summarised key feedback related to walking during the engagement period is provided as follows:

- Walking is not well catered for in Scenic Rim and residents would like to walk more often as a method of transport
- The lack of suitable walking paths is a big issue when traveling in and around scenic Rim
- The biggest issue for people with additional mobility needs is the lack of unmaintained footpaths, need for additional pedestrian crossing and difficulty in using mobility devices
- Better connected paths are needed for people to walk more often
- More pedestrian pathways should be a priority over the next ten years.

The interim community engagement report has been provided in **Appendix I**.

Importantly the community feedback was also used to refine the Draft WNP and to develop the Multi Criteria Assessment (MCA) in Section 6.8.

4.2 Stakeholder Engagement Workshop

A targeted stakeholder engagement workshop was undertaken with relevant community groups such as school principals, local walking groups, not-for-profit organisations, local Council staff and TMR staff. The stakeholder engagement was undertaken on 22 August 2024.

During the engagement workshop Bitzios staff provided an overview of the Walking Network Plan objectives and goals, as well as the development of the primary and secondary routes. Stakeholders were then invited to review the primary and secondary destinations and the WNP routes and their hierarchy (i.e. primary and secondary pedestrian routes), as well as share any specific areas of concern or ideas for improving the walking network.

Key feedback included the following:

- Uneven pathways in key centres
- Trip hazards
- Lack of pram ramps
- Width of paths
- Lack of shade and seating
- Poor and old facilities.

In addition to the above, more pedestrian pathways has been noted as the fourth most important theme in the Scenic Rim overall transport network.

4.3 Online Consultation

An online community consultation was also undertaken from 22 July to 2 September 2024.

An interactive map and on-line survey were provided in Council's The Let's Talk Scenic Rim website and. A total of 43 pedestrian related pins were received (which represented one third of all pins included in the map). The majority of comments related to the following:

- Missing paths
- Unsafe paths and crossing points
- Maintenance of existing paths
- Missing crossing points.

Regarding the on-line survey, the survey indicated that respondents:

- Sometimes (35%) walk as a method of transport, but think that walking is not well catered for in Scenic Rim overall (46%) and would prefer to walk more often as a method of transport (74%)
- Regularly (31%) or sometimes (34%) walk for recreation and would like to do it more often (84%)
- Better connected paths would encourage residents to walk more often.

4.4 Drop-in Sessions

Five in person community drop-in session have also been undertaken as follows:

- Canungra Village Markets – 11 August 2024 from 9am to 11am
- Beaudesert Library – 22 August 2024 from 9am to 11am
- Boonah County Markets – 24 August 2024 from 7:30am to 10:30am
- Tamborine Mountain State School Markets – 25 August 2024 from 8:30am to 11:30am
- Harrisville Agricultural Expo – 31 August 2024 from 9:30am to 11:30am.

A total of 79 residents participated in the drop-in sessions. Similar to the online consultation feedback, the majority of the comments were related to missing paths and missing crossings points.

5. STAGE 3: FINALISE THE WALKING NETWORK PLAN

5.1 Refined Walking Network Plan

The draft primary and secondary routes for the ten WNPs were refined based on the Stakeholder Engagement Workshop, Online Consultation, drop-in sessions and TMR/Council feedback.

The final WNP routes are shown in **Appendix J**.

6. STAGE 4 AND STAGE 5: WORKS PROGRAM

6.1 Design Standards

The design standards to be applied for this WNP include adopting the principles of Universal Design, which aim to provide all-inclusive access that eliminates the need for adaptation and specialised design for mobility-impaired community members. The design standards include a combination of Australian Standards, Austroads Guidelines, and TMR technical directions and model drawings.

Some of the reference documents used include:

- Footpaths and kerb ramps:
  - TMR Active Transport Investment Program Technical Guidance
  - Australian Standards AS1428.4.1: 2009 Design for Access and Mobility
  - Austroads Guide to Road Design Part 3: Geometric Design (AGRD3)
  - Austroads Guide to Road Design Part 6A: Pedestrian and Cycle Paths (AGRD6a).
- Crossings:
  - Austroads Guide to Road Design Part 4: Intersections and Crossings (AGRD4)
  - Australian Standards AS1428.1: 2009 Design for Access and Mobility
  - Australian Standards AS1742.10: Pedestrian Control and Protection.
- Tactile Ground Surface Indicators (TGSIs):
  - Australian Standards AS1428.4.1: 2009 Design for Access and Mobility

6.2 TMR Recommended Path Provision and Path Width

TMR Active Transport Investment Program Technical Guidance recommended requirements for pedestrian provision at existing roads, the recommended path provision is provided in Table 6.1, while the path width requirements are provided in Table 6.5.

Table 6.1: Recommended Path Provision (TMR)

Land Use	Pedestrian path provision	
	Preferred	Minimum
Commercial and industrial	Both sides	Both Sides
Residential (on arterial roads)		
Residential (on collector roads)		
Residential (on local streets)	Both sides	One side

Table 6.2: Recommended Path Width (TMR)

Path Type	Pedestrian path width	
	Preferred	Minimum
Shared path	3m	2.5m
Medium use (walking path)	3m	2m
Medium-high use (walking path)	>3m	3m

6.3 Recommended Path Provision and Path Width

Given the rural characteristics of the Scenic Rim, and reduced walking catchment for a number of study areas, TMR's recommended path provision and width is considered excessive to apply to all locations across the Scenic Rim and unlikely to be achievable.

Alternate to TMR's recommendations, reference was also made to the minimum path widths outlined in AGRD6a. When considering the Scenic Rim's specific factors in consultation with Council, the minimum width requirements have been refined for various areas across the Scenic Rim as outlined in Table 6.3.

Table 6.3: Minimum Path Width

Study areas	Primary Route	Secondary Route
Tamborine Mountain **Beaudesert** **Boonah**	▪ 2.5m wide for at least one side of the road within ▪ Other side of road shall be a minimum 1.8m to allow for two mobility devices to pass each other	▪ 1.8m wide to allow for two mobility devices to pass each other (at least one side of the road)
Canungra **Kalbar** **Peak Crossing** **Harrisville** **Aratula** **Kooralbyn** **Tamborine**	▪ 2.5m wide for at least one side of the road within	▪ 1.8m wide to allow for two mobility devices to pass each other (at least one side of the road)

The minimum recommended pathways were considered individually on a case-by-case basis including potential impacts and physical constraints, such as limited verge widths, potential impacts to travel lanes, parking lanes and private properties. This is to ensure each proposed pathway is designed, costed and prioritised accordingly at this strategic planning stage.

It is further noted that a Bicycle Network Plan has been prepared separately from this WNP for Council. Routes that overlap between the bicycle network and the walking network have been recommended to be provided at a 2.5m wide to allow for a safer network to all active transport users, irrespective of their priority (i.e. primary route or secondary route).

6.4 Recommended Crossings

The recommended crossings points design standards are shown in Table 6.4

Table 6.4: Recommended Crossings

Intersection Type	Design Standard
Signalised crossings	Ideally signalised pedestrian crossing provided at all intersection legs
Roundabouts	Ideally raised pedestrian crossings with pedestrian refuge island at all legs
School crossings	Ideally wombat crossing at school pedestrian crossing points

6.4.1 Kerb Ramps

Kerb ramp requirements are generally described in AS1428.1 Design for Access and Mobility.

Kerb ramps are used to provide a smooth transition between the path level and road level and shall be provided at pedestrian crossing facilities aligned in the direction of travel and pedestrian desire line of walk.

The kerb ramps should be provided with a minimum 1,000mm width, a maximum rise of 190mm and a maximum length of 1,520mm with a maximum gradient of 1 in 8 (12.5%) to allow for people with a range of mobility levels (and/or using mobility devices) to move to/from the footpath and road level.

6.5 Additional Considerations

It is noted the minimum design standards need to be assessed in a case-by-case basis, considering potential impacts to travel lanes, private properties, trees, on-street parking, grades, property access points, road widths, etc.

Additional infrastructure supporting pedestrian paths (such as shade, regular seating, water access, etc) is important to support the active transport network. Although no referenced have been made to such supporting infrastructure by the community during the engagement process, the following is noted:

- The provision of indicative seating is recommended at key pedestrian routes, particularly due to the high proportion of elder residents in Scenic Rim
- Although shading is an important aspect to increase the use of pedestrian paths, the majority of paths within Scenic Rim benefits from shading and canopy coverage. Irrespective, where possible additional tree planting shall be investigated
- It is difficult to infer where there may be water infrastructure to provide for water access along paths, however Council should further investigate the provision of additional water stations where possible.

6.6 Route Audits

A desktop analysis of the WNP routes was undertaken prior to the route audits using GIS data provided by Council and aerial mapping platforms such as Google maps, QLD Globe and Nearmap, including their associated street view capabilities. The desktop analysis was used to inform any key missing links for the detailed route audits.

Detailed site audits were conducted on 4 June, 12 June and 19 June 2024. Further site audits encompassing the updated WNP routes (following community engagement) have occurred on 11 August, 24 August, 25 August and 31 August 2024.

The site audits were undertaken on all the primary and secondary routes to identify issues and potential remedial works. Auditing of issues, or deficiencies, were based on the '5C' criteria outlined in the Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* (AGRD6a:2021) which are:

- **Connectivity:** is the route connected to the rest of the network?
- **Comfort:** is the route well maintained, smooth and unobstructed? Is the route attractive and free from excessive traffic noise?
- **Convenience:** are there adequate crossing opportunities? Are key destinations within walking distance of one another?
- **Conviviality:** how pleasant is the walking environment?
- **Conspicuousness:** are the walking routes clearly lit and easy to follow?

The audit considered footpaths, kerb ramps, crossing points and other pedestrian facilities, and issues that would fundamentally impact the use of the paths or access to the paths for any pedestrian user level. A description of the issues found during the audits is shown in Table 6.5.

Table 6.5: Audit Issue Description

Themes	Description
Missing path	Missing footpath, missing shared path
Damaged path	Trip hazard (lips), cracked path, uneven path
Narrow Path	Path below the minimum design standard width
Missing crossing facility	Missing crossing facility at key desire line
Missing kerb ramp	Missing kerb ramp at intersection, missing mid-block kerb ramp at pedestrian crossing
Unsafe or non-standard crossing facility	Pedestrian crossing with limited sight lines, raised pedestrian island with insufficient landing/storing area, pedestrian crossing points leading to crossovers, pedestrian crossing points leading to kerbs.
Physical obstruction	Physical obstruction on the path impacting accessibility, safety and / or connectivity. Landscape overgrowing over path, impacting path width

Non-standard kerb ramp	Narrow kerb ramp, steep kerb ramp, cracked kerb ramp, kerb ramp directing pedestrian into intersection / traffic
Missing supporting infrastructure	Locations that could benefit from seating, shading or water provision

6.7 Key Findings

A summary of the types of issues by study area is presented in Table 6.6

Table 6.6: Summary of Issue Types

Study Areas	Number of Issues (unit)									
	Missing path	Missing crossing facility	Missing kerb ramp	Unsafe or non-standard crossing facility	Narrow path	Non-standard kerb ramp	Damaged path	Physical obstruction	Missing support infrastructure	Total
Tamborine Mountain	16	7	20	8	41	16	1	3	4	116
Beaudesert	31	8	31	7	61	24	0	0	5	167
Boonah	19	4	21	9	40	18	1	3	3	118
Canungra	20	1	9	1	25	3	0	2	0	61
Kalbar	15	1	13	1	17	11	7	1	3	69
Peak Crossing	10	0	7	1	13	6	0	0	2	39
Harrisville	8	0	6	1	15	11	9	1	3	54
Aratula	16	0	18	1	6	0	0	2	2	45
Kooralbyn	10	1	0	0	1	0	0	0	0	12

6.8 Works Priority

The pedestrian network deficiencies and non-compliances noted during the route audits were interrogated and recommended upgrades / treatments were developed, generally in accordance with the design standards described in Section 6.3.

6.8.1 Multi Criteria Assessment

Upon the definition of upgrades / treatments, a works priority schedule has been developed generally in accordance with TMR's Walking Network Planning Guideline. However, a Multi Criteria Assessment (MCA) was undertaken to evaluate and prioritise the recommended treatments.

The MCA criteria and approach allows the relative importance of a broad range of impacts and benefits to be considered. A total of five criteria were selected based on the project objectives, including three criteria related to potential benefits, one criterion related to impacts (i.e. costs), and one criterion related to the location / level of pedestrian activity.

Given the initial stages of planning, a 40% weighting relative to costs and 60% weighting relative to benefits was applied.

It is noted that TMR's WNP Guideline outlines those treatments along secondary routes should be used to inform longer term planning for pedestrian improvements and be categorised as *Non-Essential*. For that, a 0.5 adjustment factor has been provided for all treatments along secondary routes.

The MCA criteria is described in Table 6.7.

Table 6.7: Multi Criteria Assessment

Criteria	Description	Measurement and Scoring Method	Weighting
Accessibility	The level of benefit the recommended treatment will have in providing a pedestrian network accessible to everyone	Measured based on assessment of improvement to perceived active transport accessibility. Scored based on 1 to 10 scale Lowest perceived accessibility improvement = 1 Highest perceived accessibility improvement = 9	20%
Connectivity	The level of benefit the recommended treatment will have on the general pedestrian network connectivity	Measured based on assessment of improvement to perceived active transport connectivity. Scored based on 1 to 10 scale Lowest perceived connectivity improvement = 1 Highest perceived connectivity improvement = 9	20%
Safety	The level of benefit the recommended treatment will have on pedestrian user safety	Measured based on assessment of improvement to perceived active transport safety. Scored based on 1 to 10 scale Lowest perceived safety improvement = 1 Highest perceived safety improvement = 9	20%
Cost	Estimated infrastructure costs	Measured in foreseeable infrastructure cost $ (2023). Scored based on 1 to 9 scale Higher cost = 1 Lower cost = 9	40%
Level of Activity	The expected number of potential active transport users benefited by the recommended treatment	Measured based on the ATP route priority, provided as an adjustment factor. Primary Route = 1 Secondary Route = 0.7	Not applicable

6.8.2 Scoring of Issues

Pedestrian related issues described in Table 6.5 were evaluated in accordance with their importance relative to the MCA.

The evaluation of the importance of each issue considered the stakeholder feedback, particularly the importance the community presented in the provision of more pedestrian paths and crossing points and improvements to the existing facilities. Each criteria score is provided in Table 6.8

Table 6.8: Evaluation Criteria and Level of Importance

Themes	Accessibility	Connectivity	Safety	Total
Missing path	9	8	9	**26**
Missing crossing facility	8	9	8	**25**
Missing kerb ramp	7	7	6	**20**
Unsafe or non-standard crossing facility	6	5	7	**18**
Narrow path	4	6	4	**14**
Non-standard kerb ramp	5	4	5	**14**
Damaged path	3	2	3	**8**
Physical obstruction	1	3	2	**6**
Missing supporting infrastructure	2	1	1	**4**

6.8.3 Implementation Costs Scoring

A list of cost estimates for pedestrian related infrastructure items was sourced from Council and provided in **Appendix K**. The costs were then calculated for each of the recommended treatments and include a 60% contingency.

Note, generally maintenance related to landscape overhang and vegetation taking over the path are undertaken either by the resident/owner or Council's maintenance team. That means that funding is not required to implement this treatment as part of the WNP. As such, as part of this assessment a zero ($0) cost has been considered for maintenance related issues. The overall costs of each priority treatments are shown in Table 6.9.

The cost scoring was developed based the average (score 5) and then dividing the difference between the maximum and minimum costs into four equal brackets. As shown in Table 6.9 cheaper treatments received a higher score (i.e. more cost effective, greater benefit), whereas more expensive treatments received a lower score.

Table 6.9: Implementation Cost

Treatment Cost	Score
$0 - $8,000	9
$8,001 - $53,500	8
$53,501 - $99,000	7
$99,001 - $144,500	6
$144,501 - $190,000	5
$190,001 - $760,500	4
$760,501 - $1,331,000	3
$$1,331,001 - $1,901,500	2
>$1,901,500	1

6.8.4 Level of Activity

As discussed in Section 6.8.1, the level of activity was scored based on the WNP route priority. Each route priority (i.e. primary route and secondary route) was provided with an adjustment factor as follows:

- **Primary Route:** **1.0**
- **Secondary Route:** **0.5**

The adjustment factor was then applied to the combined Accessibility, Connectivity, Safety and Cost scores, providing the final score for each treatment. This was used to prioritise treatments that would benefit a larger number of users (i.e. treatments along primary routes), while reducing the importance of treatments along secondary routes, however not overlooking 'easy fix/quick win' treatments, in accordance with TMR's WNP guideline to prioritise treatments at 'primary routes'

6.9 Recommended Action Program

The works program map outlining all the recommended upgrades and treatments for each of the study areas is presented in **Appendix L.**

Where possible, supporting infrastructure such as seating and shading has been recommended. Irrespective of the above, Council's open space / park team should also be engaged to determine the ability to provide supporting infrastructure along the WNP routes.

6.10 Not Applicable (N/A) Items

A number of network deficiencies were noted as Not Applicable (N/A) and removed from the recommended action program. Most N/A items are related to works that are already being undertaken by Council (e.g. Gallery Walk upgrades at Tamborine Mountain), areas where grades are too steep to provide a path (e.g. Appel Street at Canungra), paths at private proprieties (e.g. Beaudesert Central Shopping Centre access at Beaudesert) and paths build to boundary (e.g. Curtis Road at Tamborine Mountain).

6.11 Further Recommendations

It is recommended the Council undertakes a speed limit review for Beaudesert, specifically on William Street and Brisbane Street. Both William Street and Brisbane Street have significant level of pedestrian movements and reducing vehicle speeds would improve safety in the area.

6.12 Funding Sources

6.12.1 Department of Transport and Main Roads and Council

Funding for the recommended upgrades presented in this WNP can be achieved through a number of means, including:

- Joint Council / State investment (e.g. TMR / Local Government Cost Sharing Arrangement within State Controlled Roads)
- TMR Cycle Network Local Government Grant, for projects with a high priority Principal Cycle Network route
- Council's active transport budget (i.e. footpaths / shared path budget)
- Other funding opportunities, subject to grants and/or funding applications.

All actions identified in this WNP can be included as part of funding applications to TMR.

6.12.2 Developer Contributions

Infrastructure charges allow for Council to charge developments that increase the demand on Council's trunk infrastructure network, including transport. Should a development increase pedestrian activity or demand then it would be reasonable for Council to seek contribution toward improvements to pedestrian facilities in the area or adjacent to these developments, to provide a link between the development and the local pedestrian network or facilities.

In relation to the WNP implementation, Council may consider including some of the works as part of their infrastructure charges, if relevant.

7. STAGE 6: EVALUATE AND PROMOTE THE NETWORK PLAN AND WORKS PROGRAM

7.1 Implementation and Monitoring

The next stages of the WNP are for Council to:

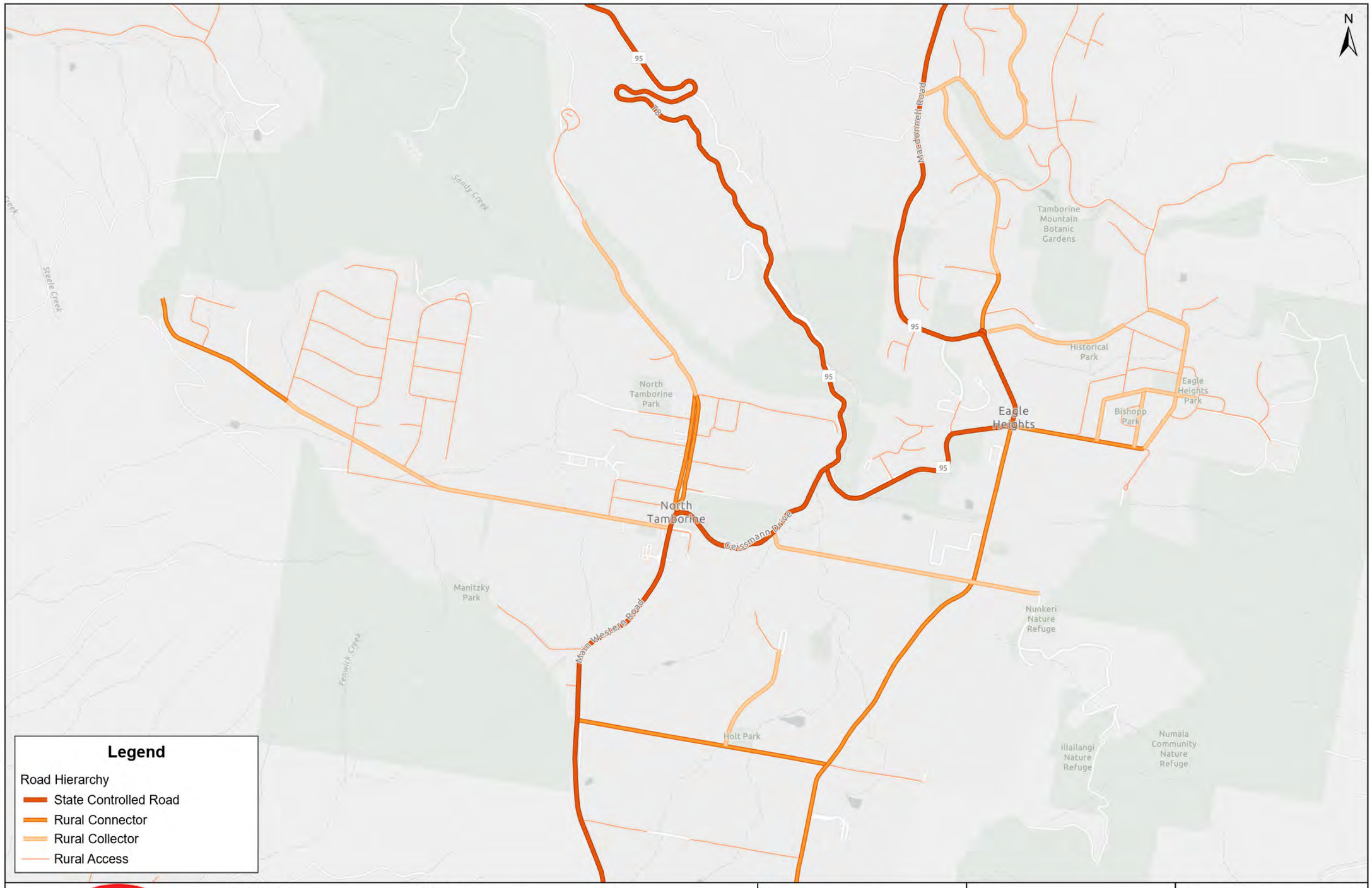
- Organise funding sources to establish a budget and over what timeframe
- Establish an implementation program
- Monitor the implementation of the WNP and its outcomes in conjunction with other relevant Council projects and plans.

Funding and budget for recommendations should be identified and set in the budget, and higher priority works be given precedence.

It is common to have a monitoring program for the WNP which would typically involve:

- Recording of all proposed pedestrian works in a database
- Review of pedestrian usage and mode share
- Analysis of crash statistics
- Collection of pedestrian count information
- Periodic updating of the WNP.

Appendix A: Road Hierarchy



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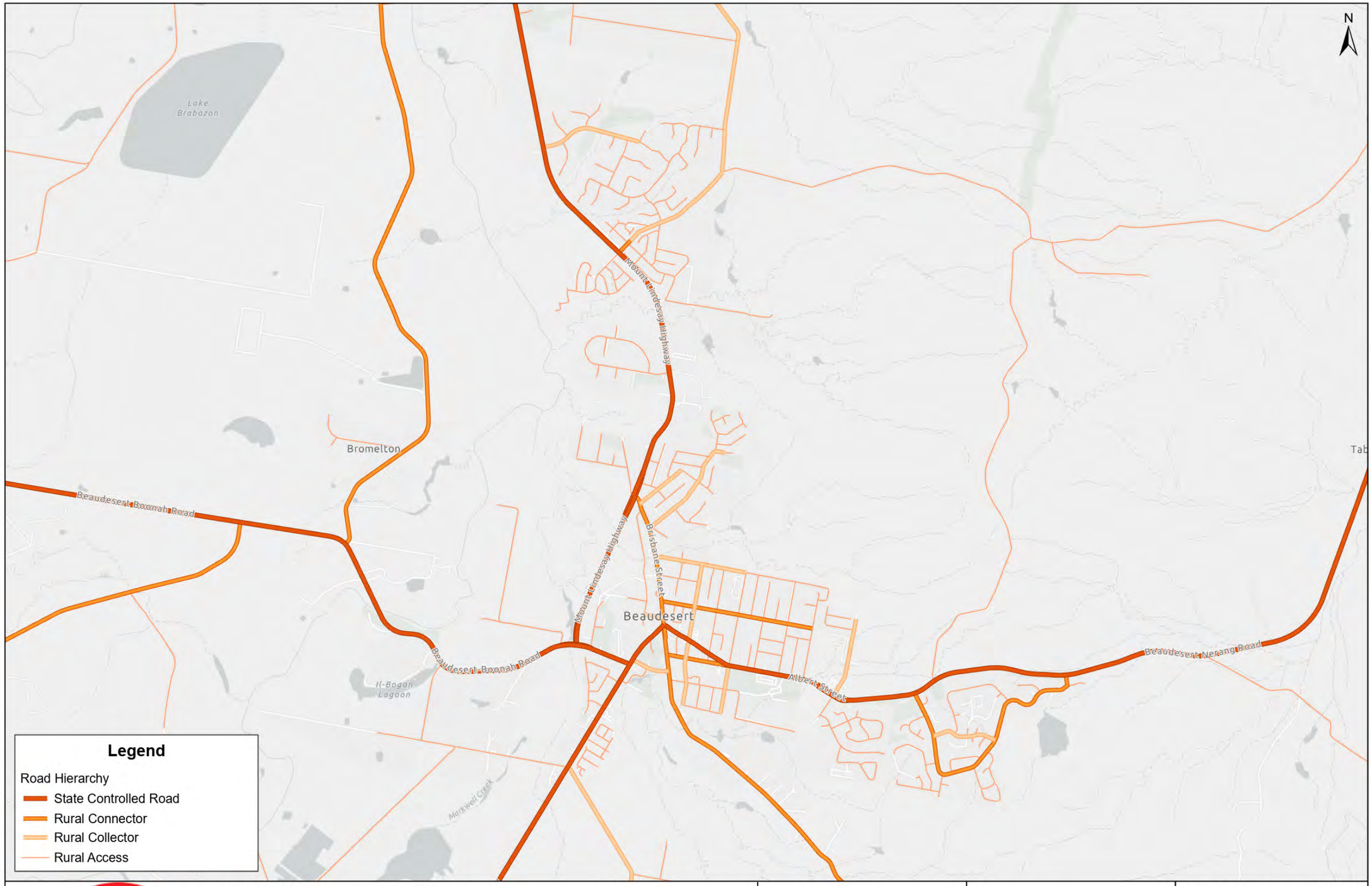
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Road Hierarchy Tamborine Mountain Study Area
Project Number:	P6364
Date:	19/04/2024
Issue:	1



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Project Number:	P6364
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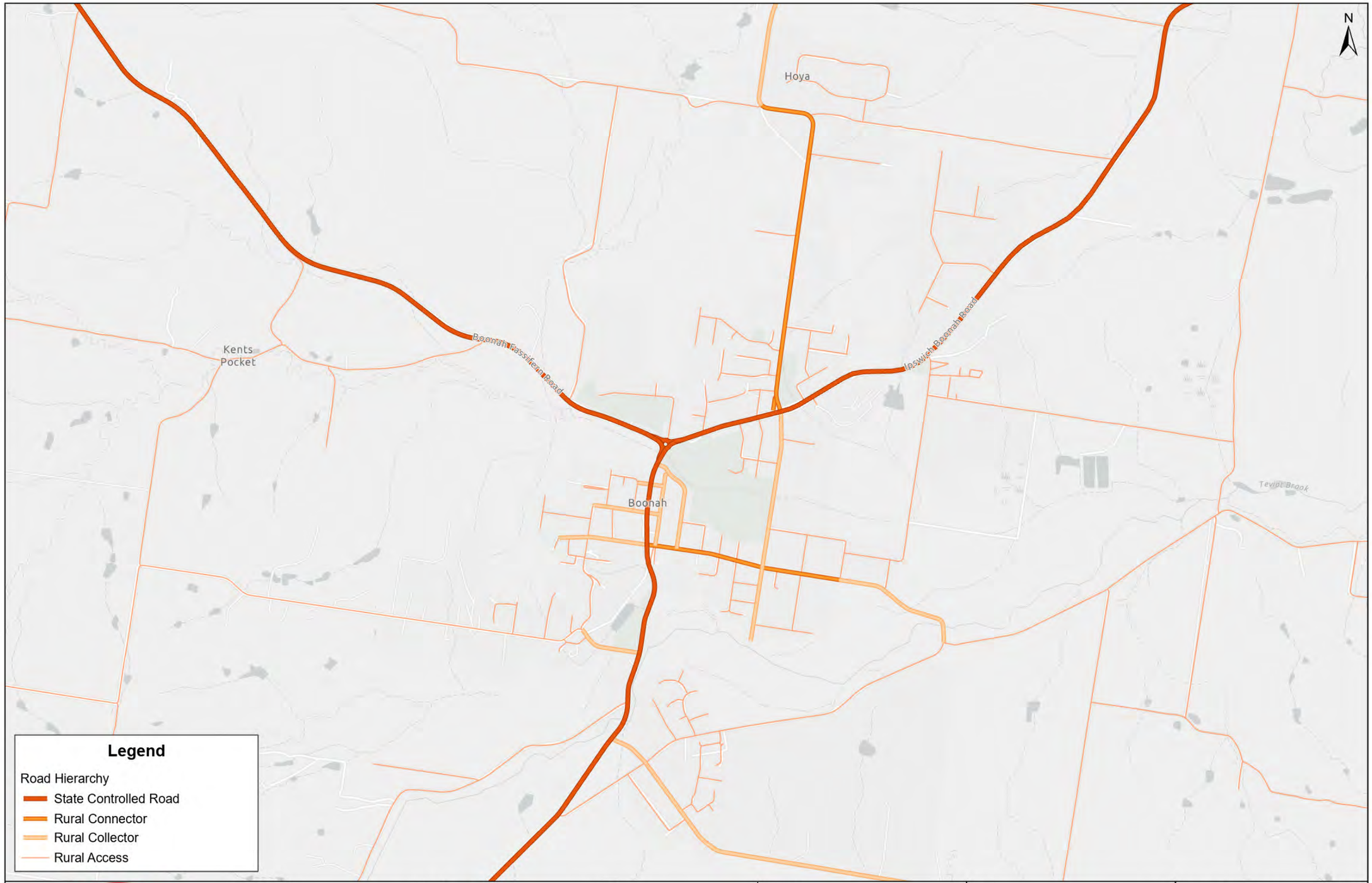
Issue:	1



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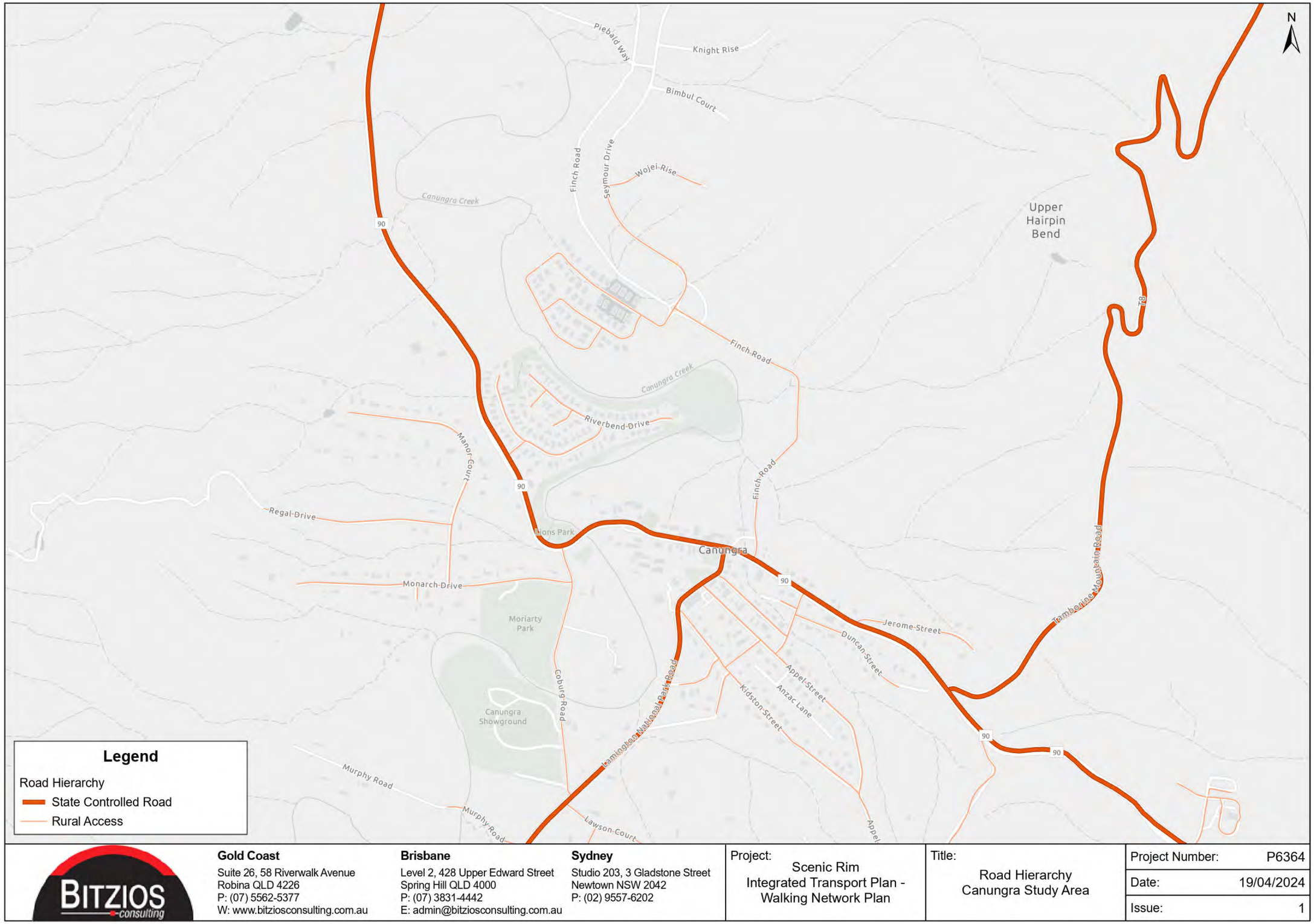
Project: Scenic Rim Integrated Transport Plan - Walking Network Plan

Title: Road Hierarchy Boonah Study Area

Project Number:	P6364
Date:	19/04/2024
Issue:	1



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Title:	Road Hierarchy Canungra Study Area
Project Number:	P6364
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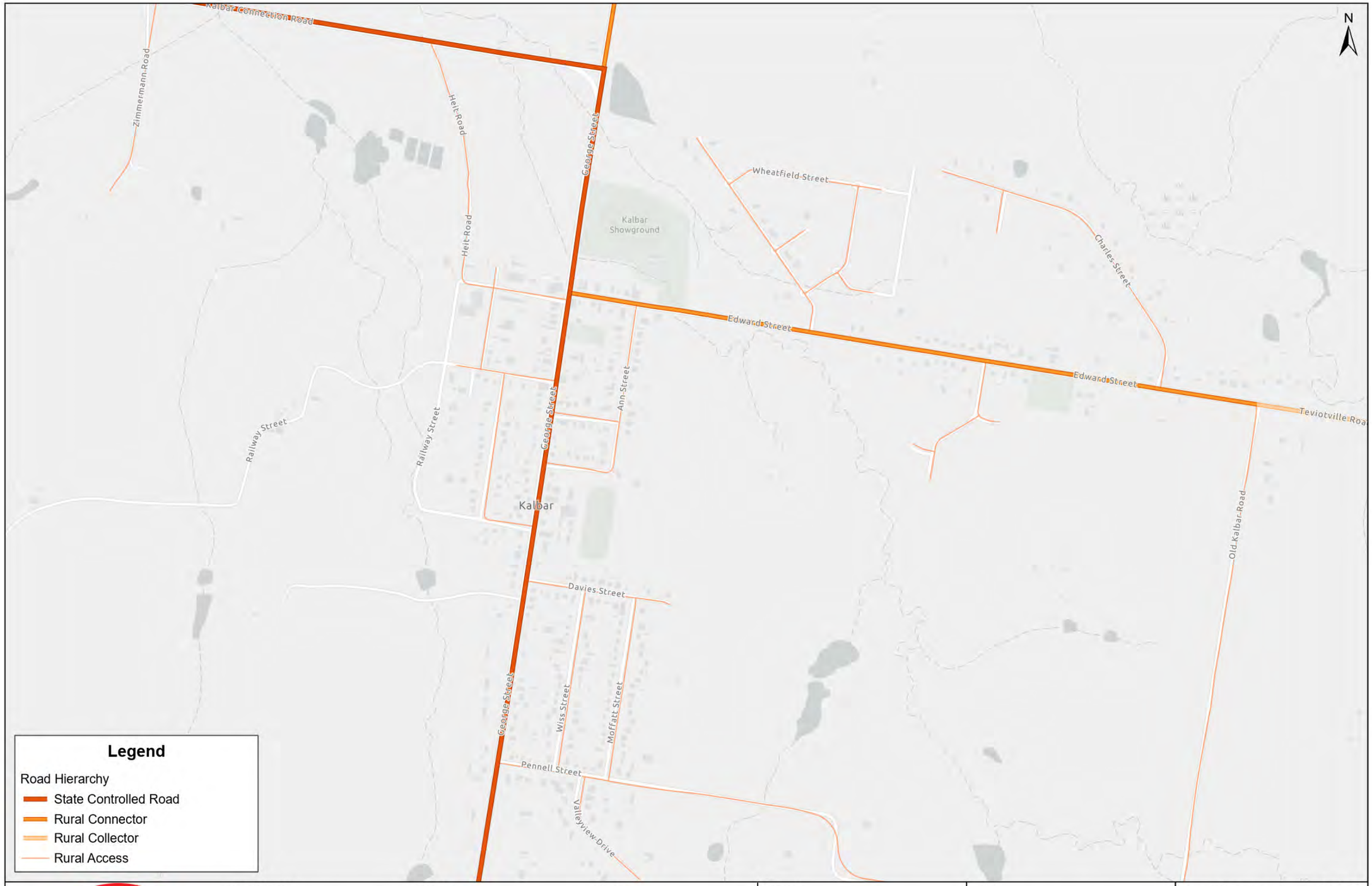

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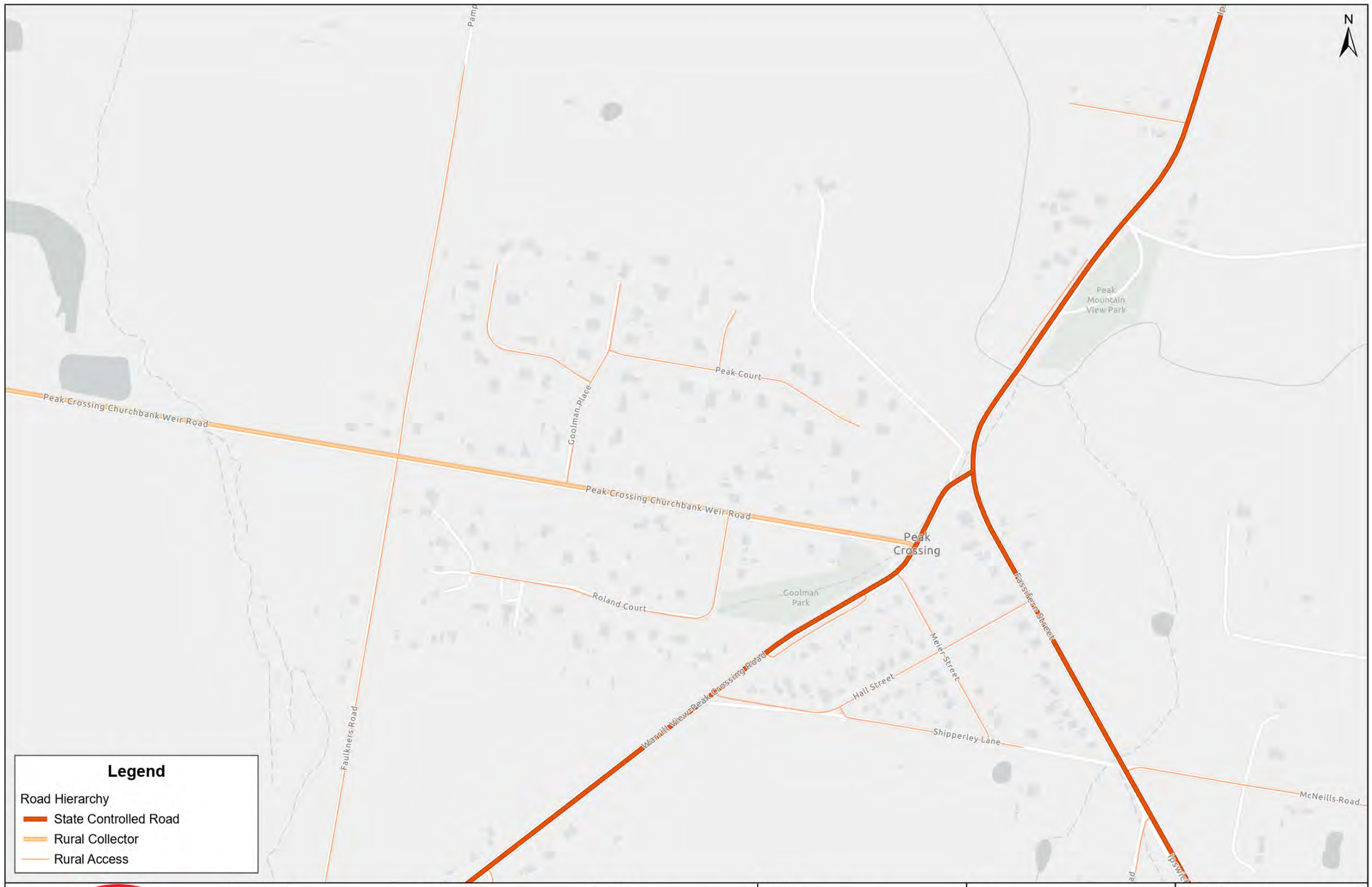

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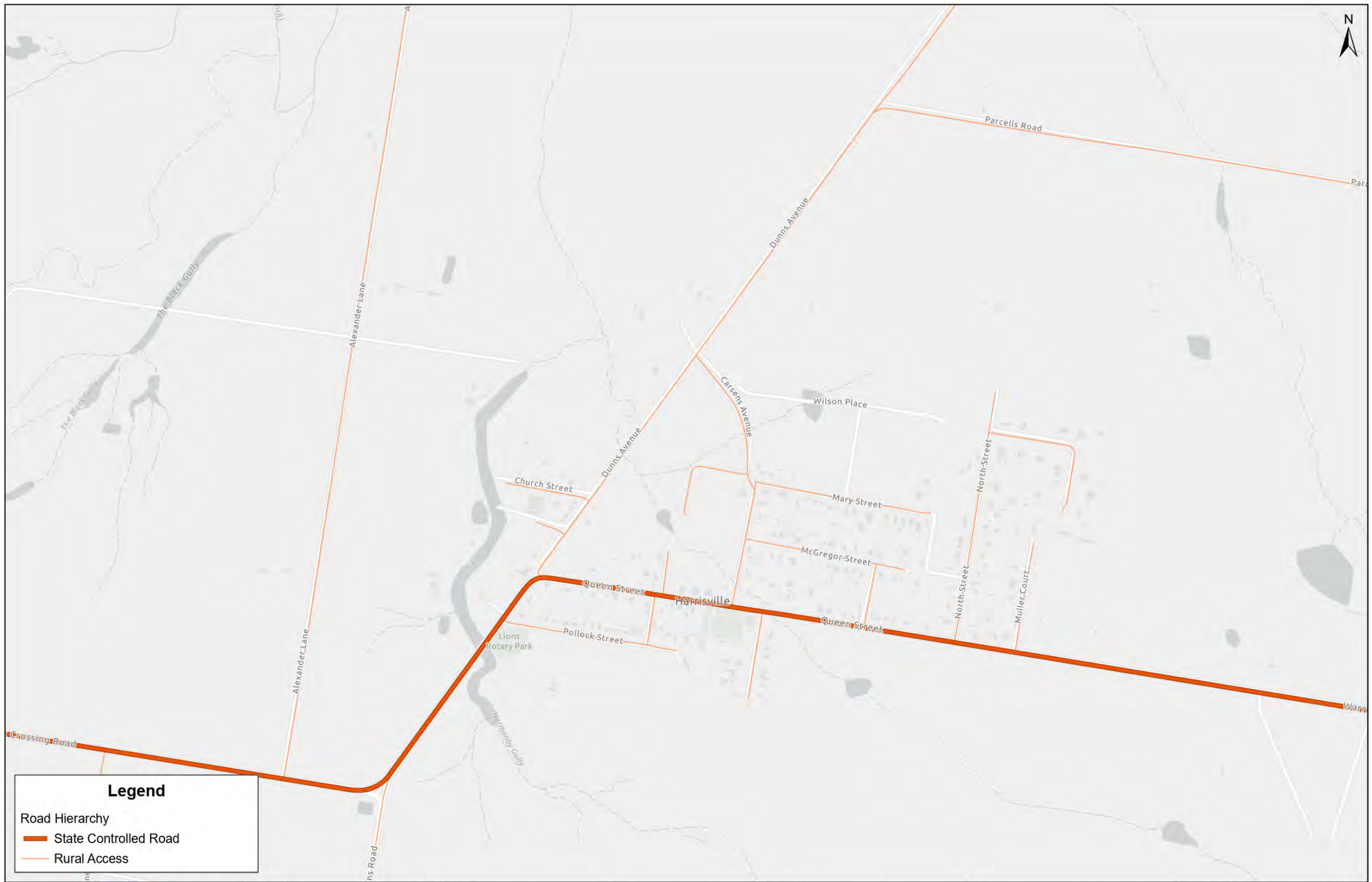

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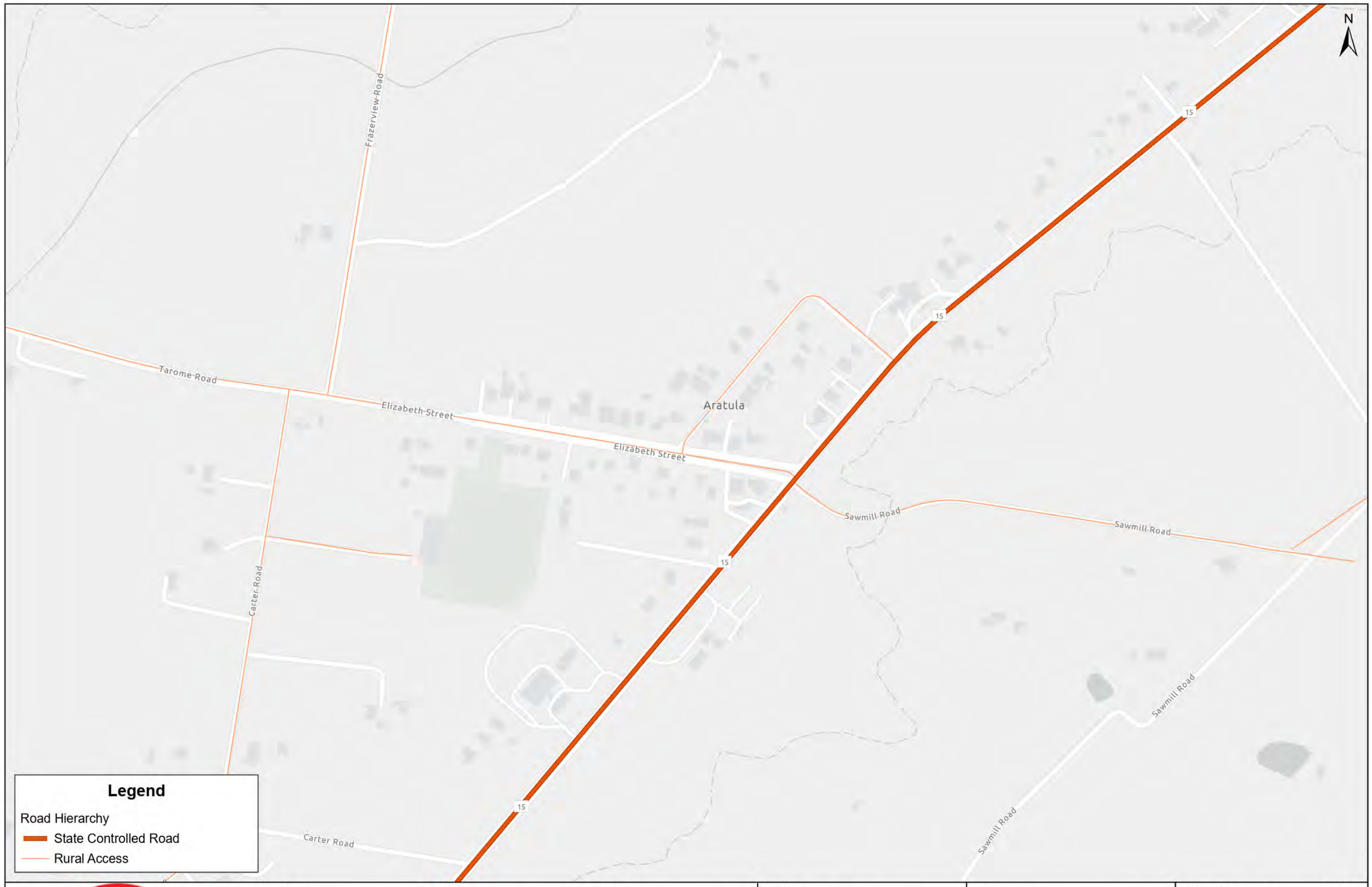
Issue:	1



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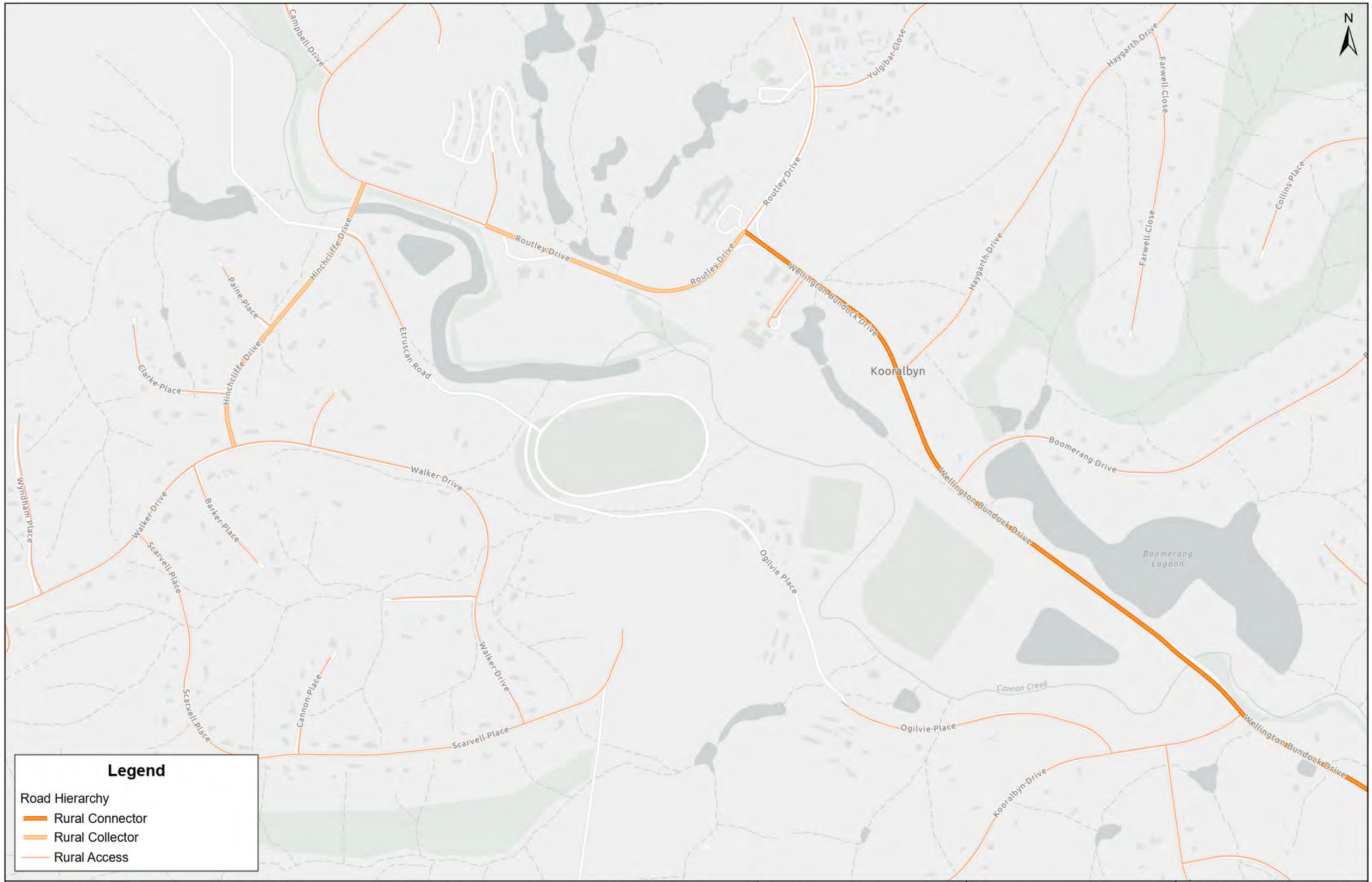
Project:
Scenic Rim
Integrated Transport Plan -
Walking Network Plan

Title:
Road Hierarchy
Aratula Study Area

Project Number:	P6364
Date:	19/04/2024
Issue:	1



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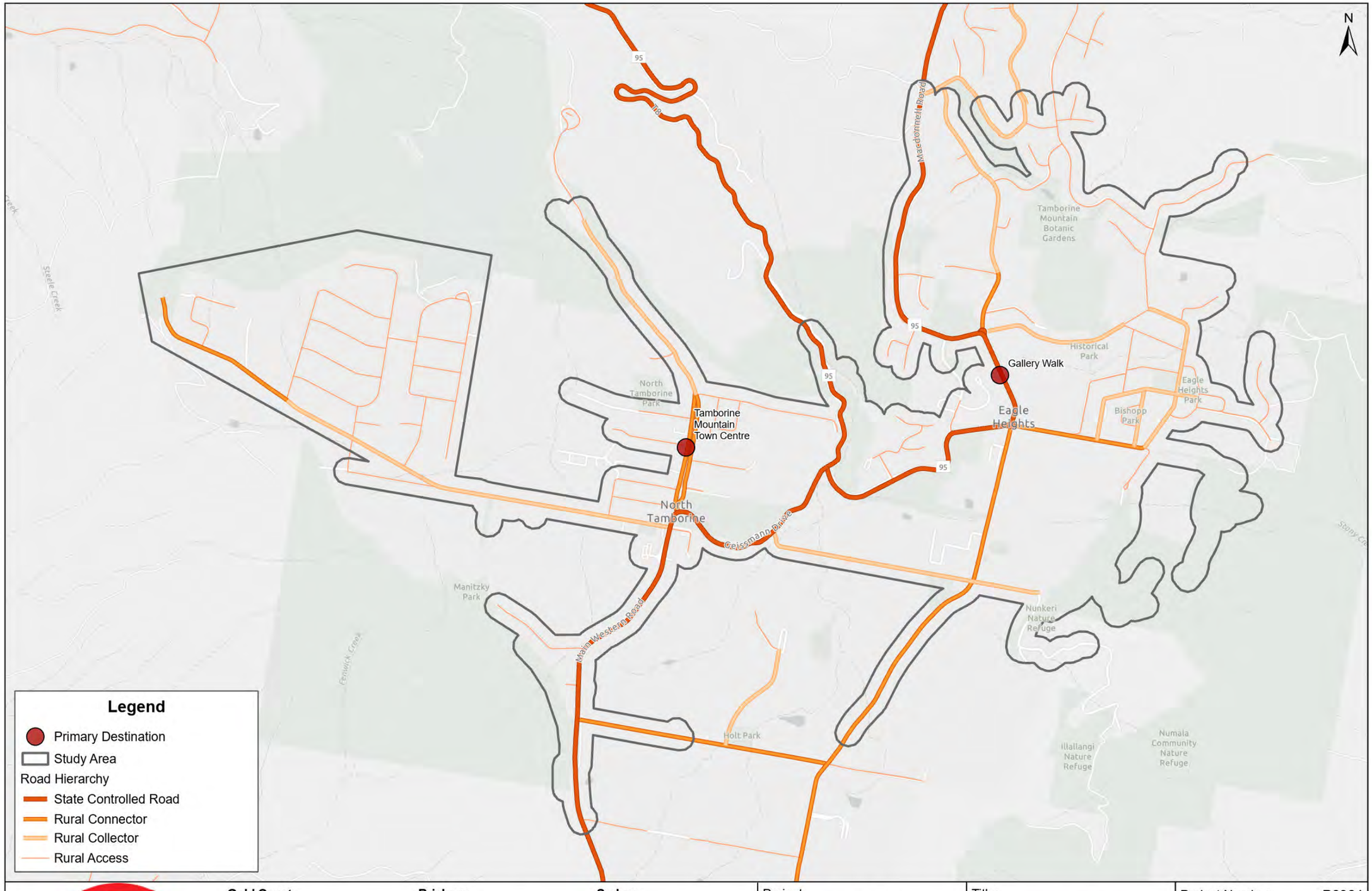
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Road Hierarchy Tamborine Study Area
Project Number:	P6364
Date:	19/04/2024
Issue:	1

Appendix B: Primary Destination



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Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Primary Destination Tamborine Mountain Study Area
Project Number:	P6364
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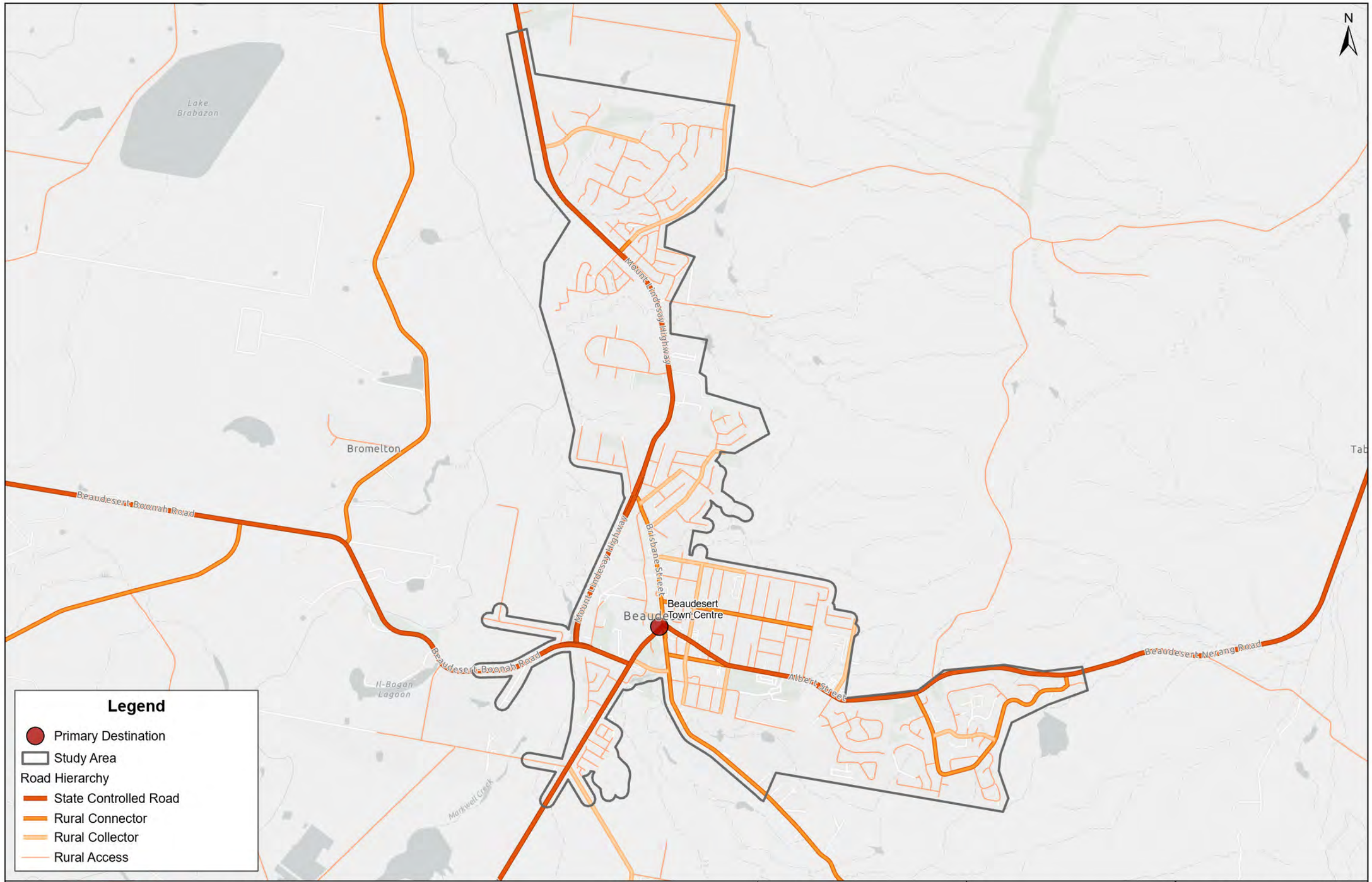
Issue:	1



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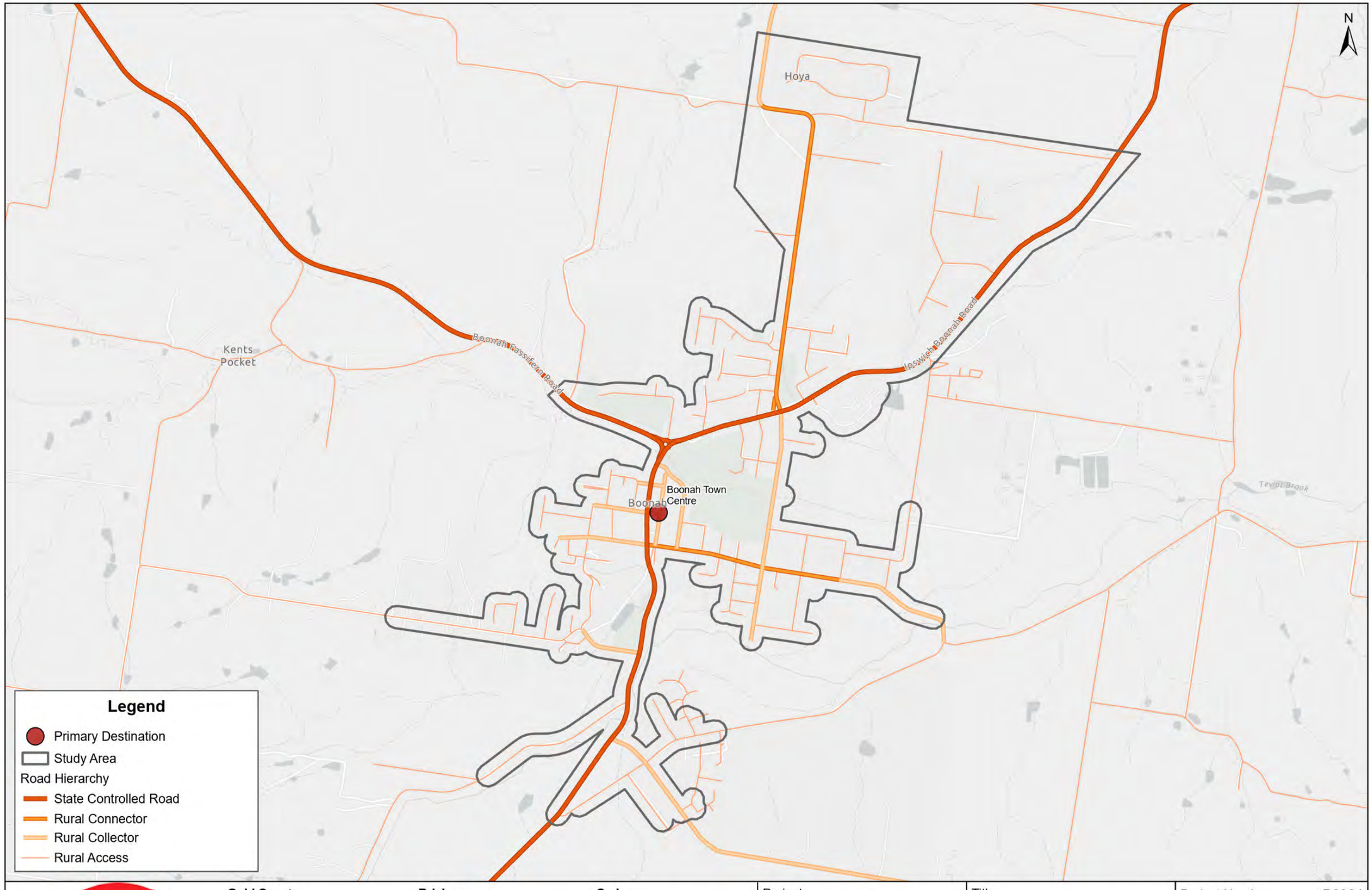

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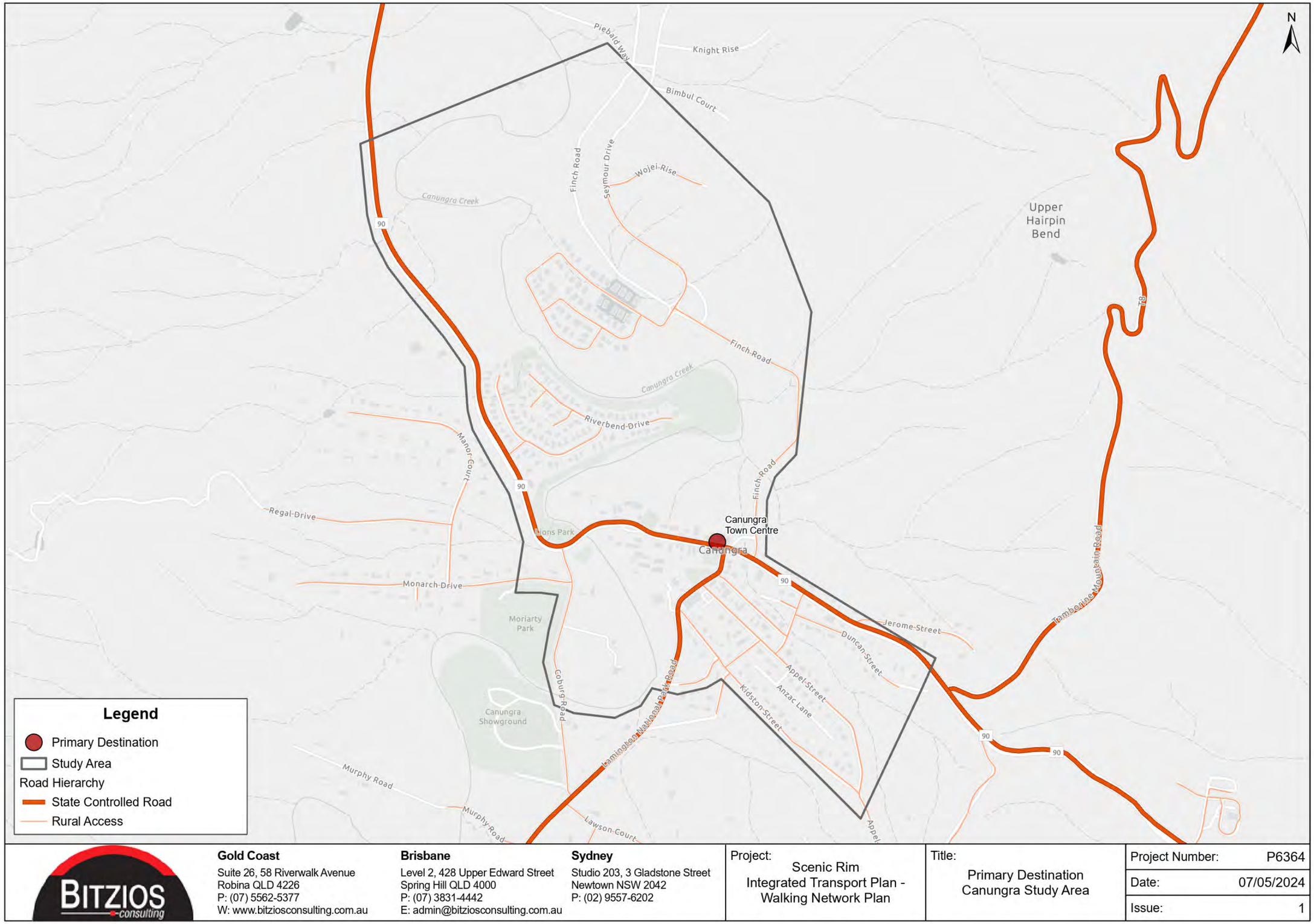

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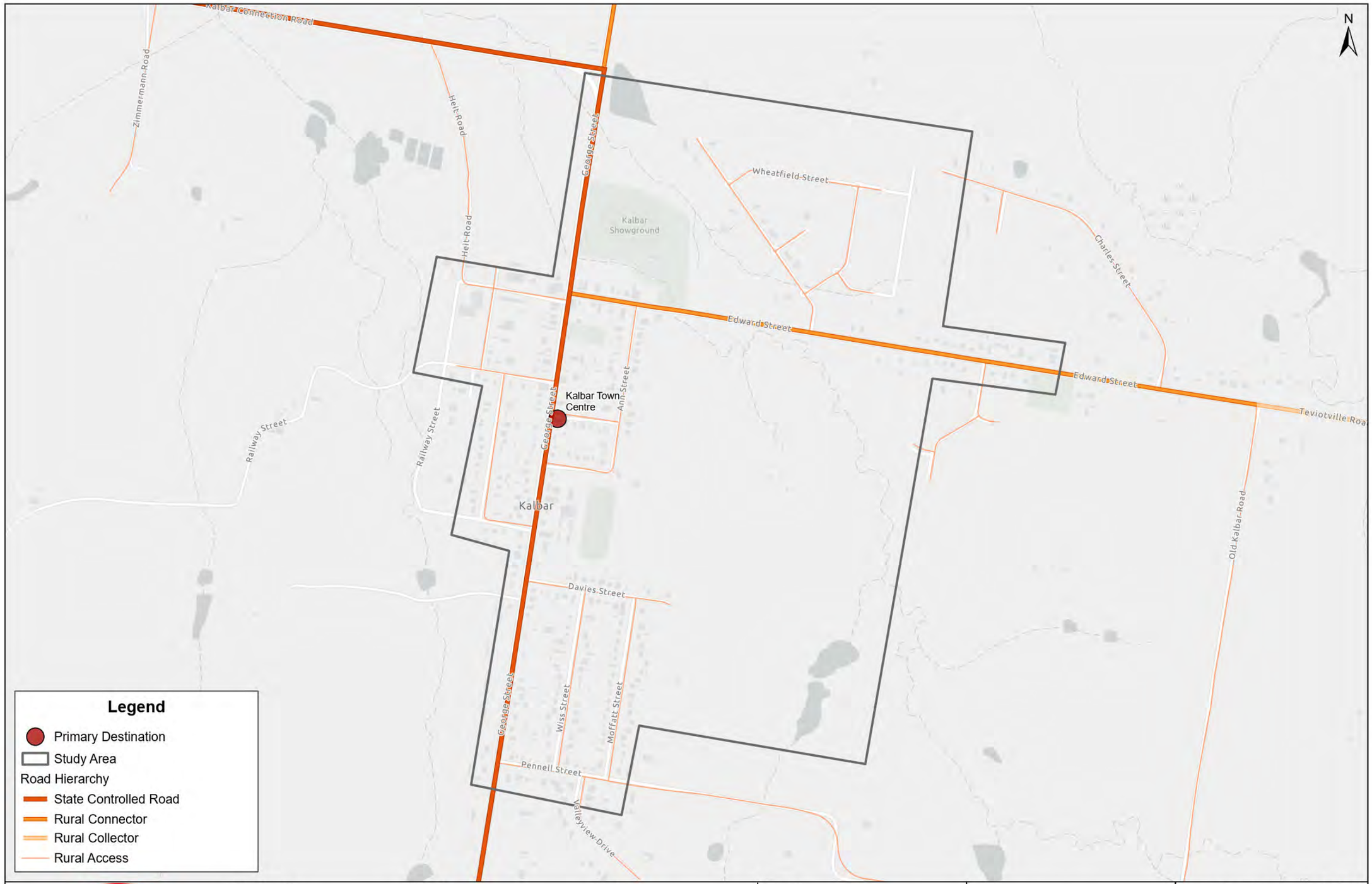

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Title:	Primary Destination Kalbar Study Area
Project Number:	P6364
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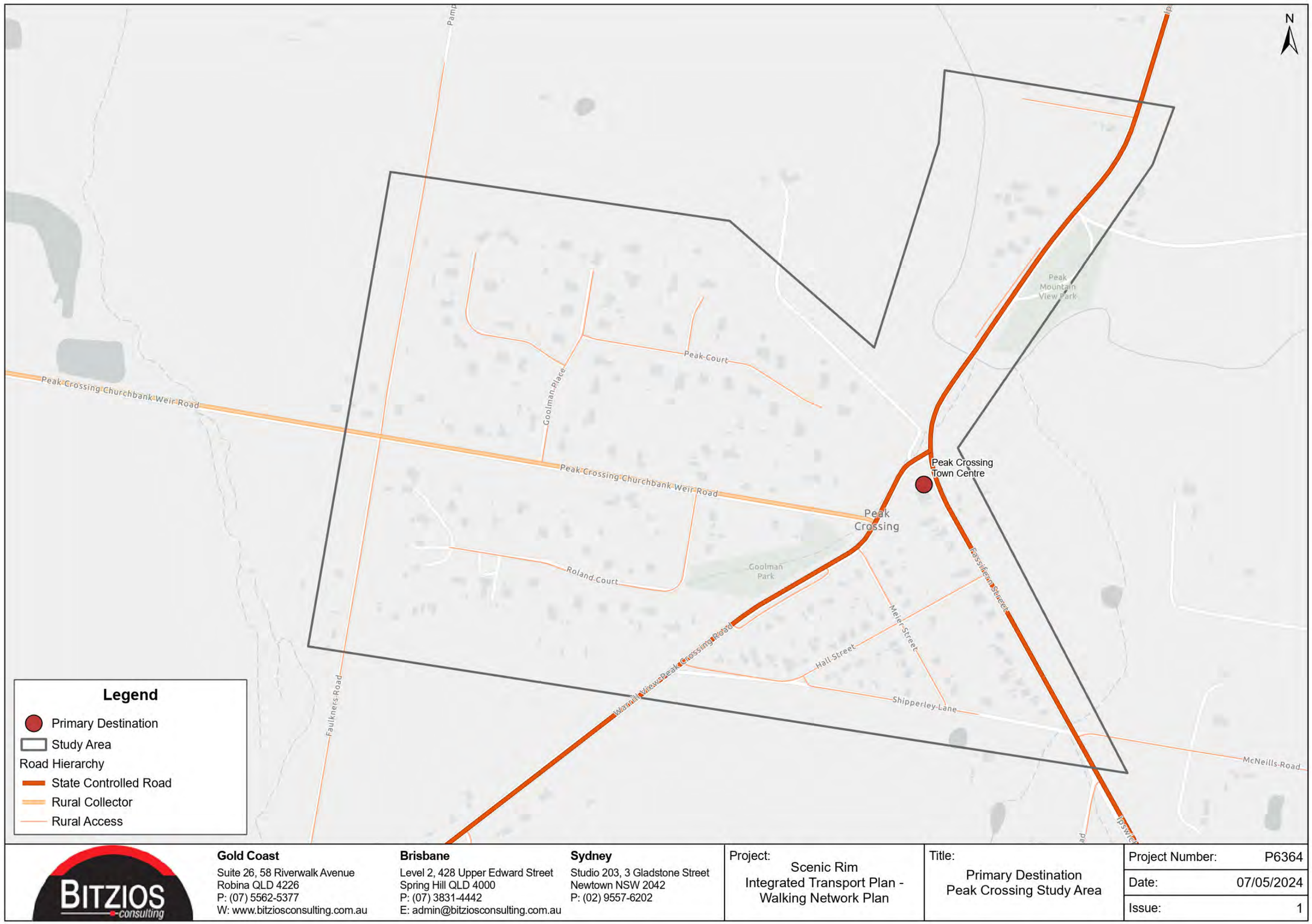

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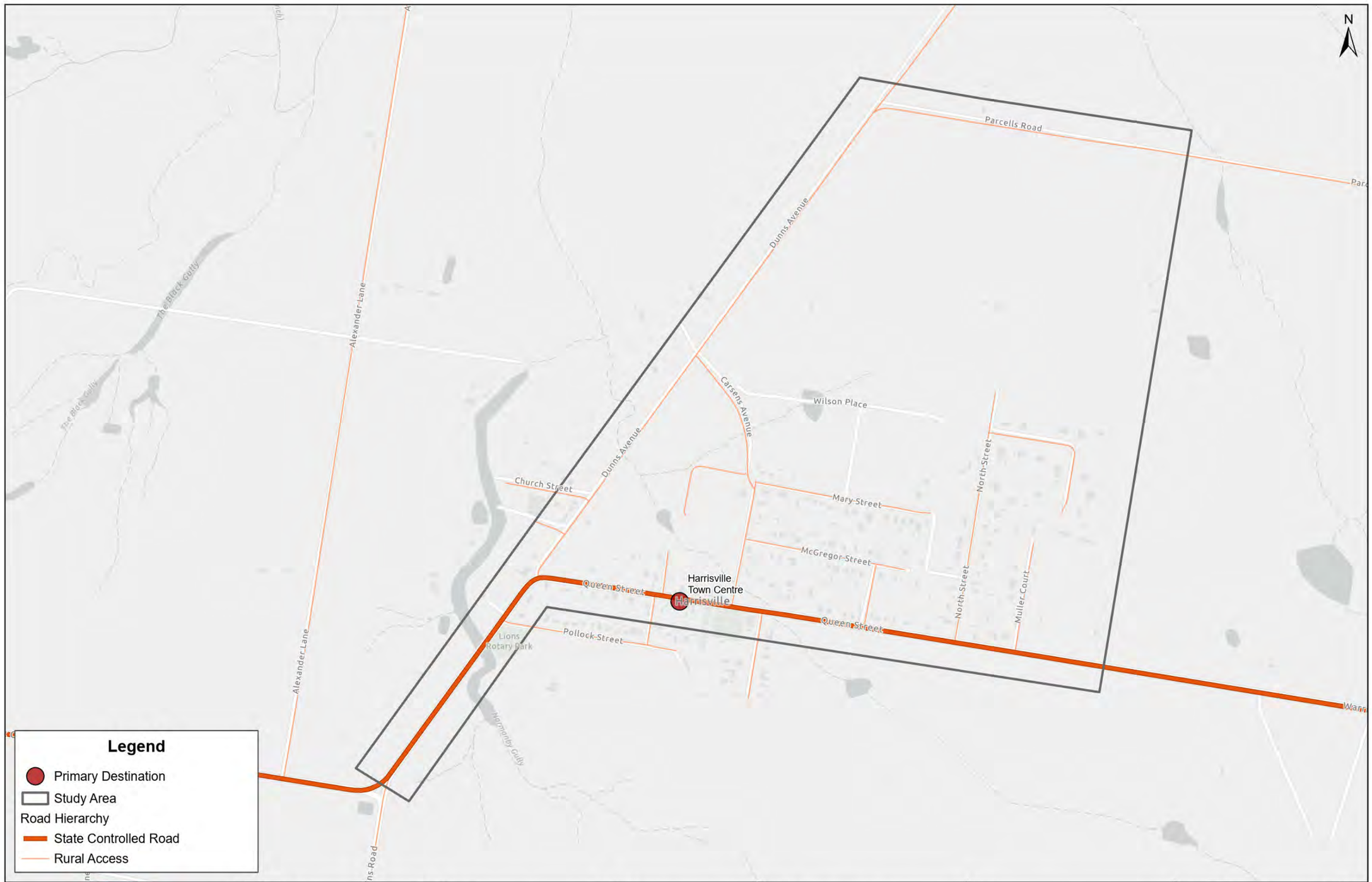
Date:	07/05/2024
Issue:	1



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Title:	Primary Destination Aratula Study Area
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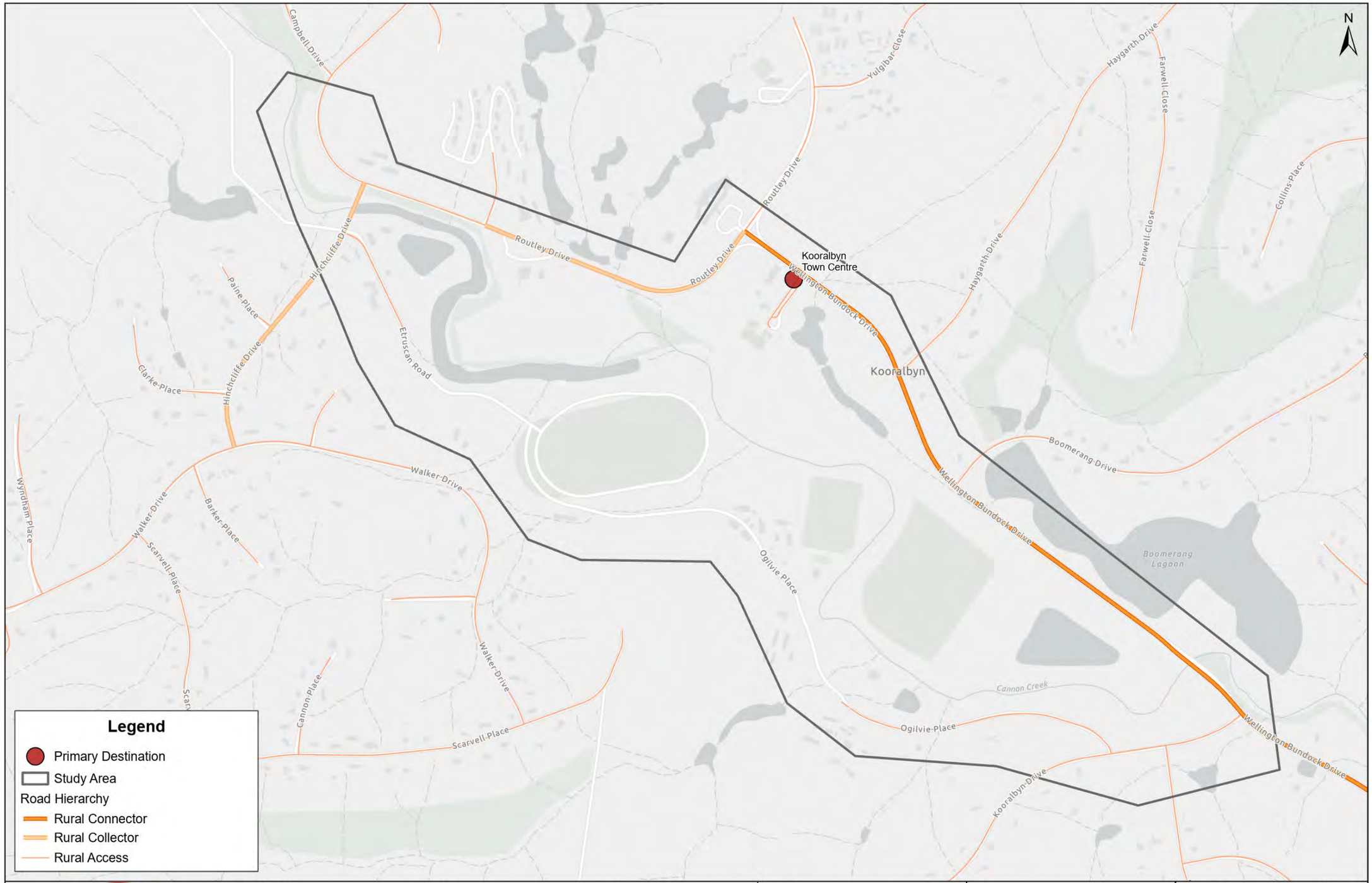

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Title:	Primary Destination Kooralbyn Study Area
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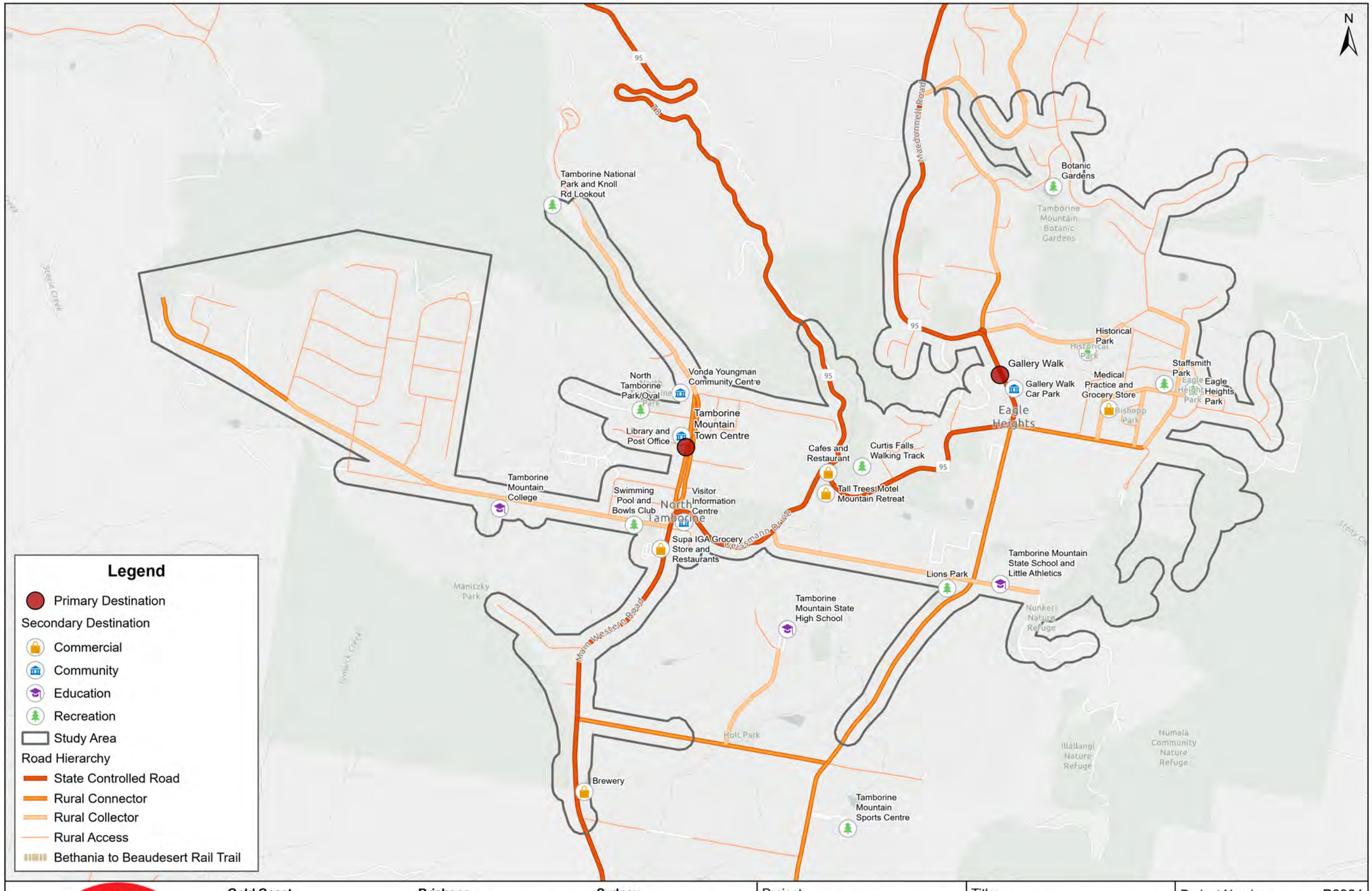
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Draft Walking Network Plan Tamborine Study Area
Project Number:	P6364
Date:	28/05/2024
Issue:	1

Appendix C: Secondary Destination



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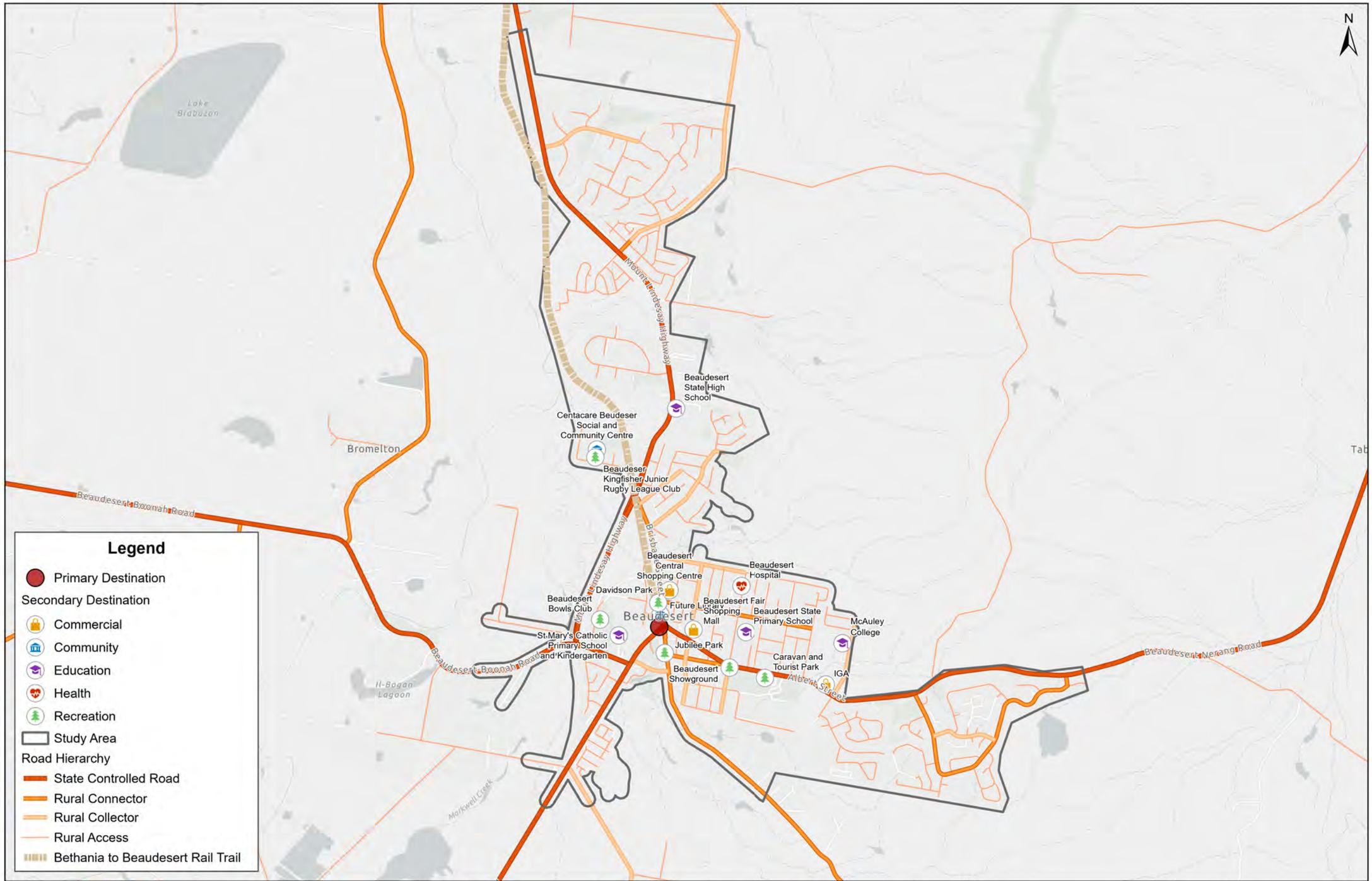

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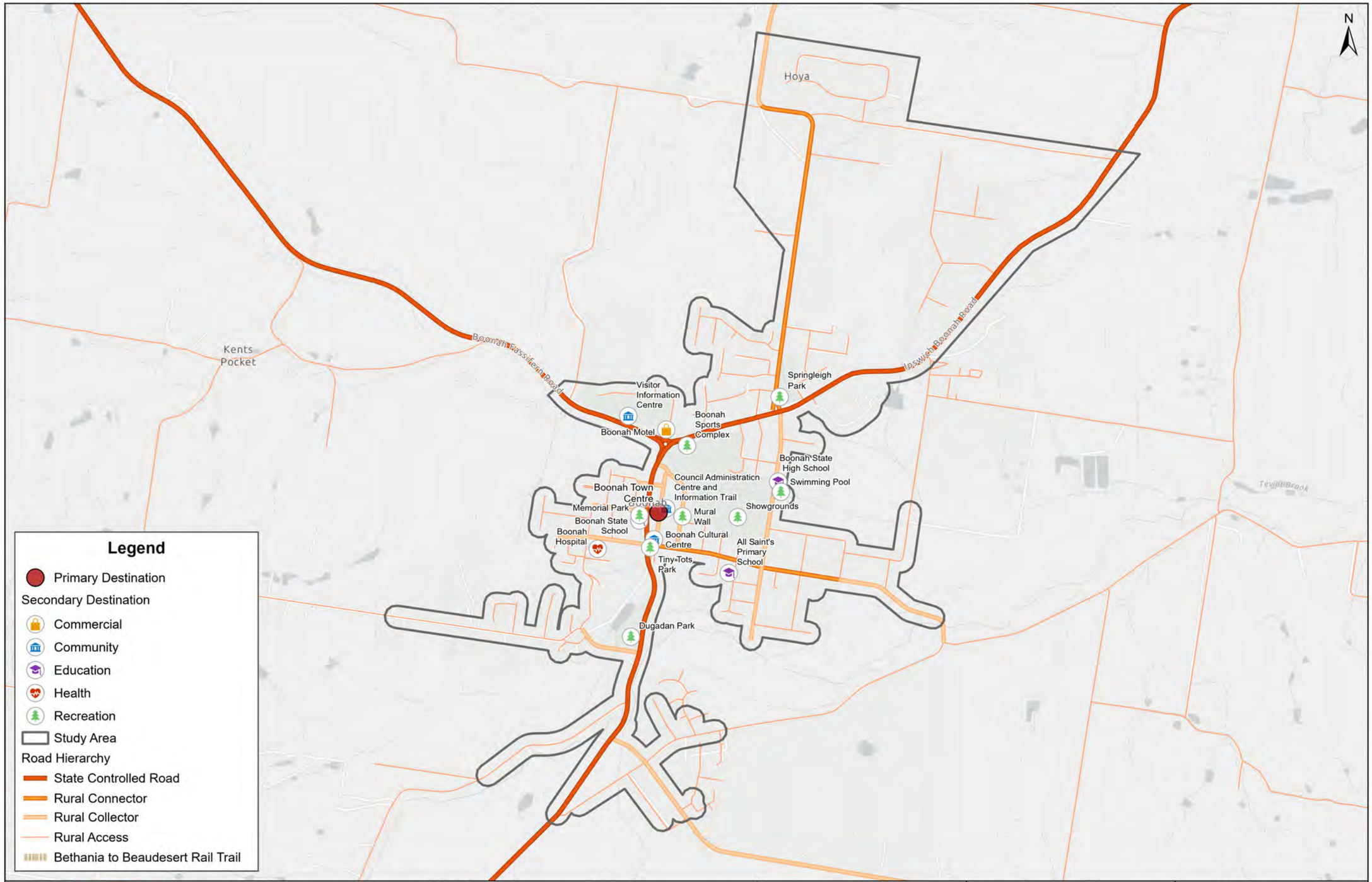
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Draft Walking Network Plan Beaudesert Study Area
Project Number:	P6364
Date:	28/05/2024
Issue:	1



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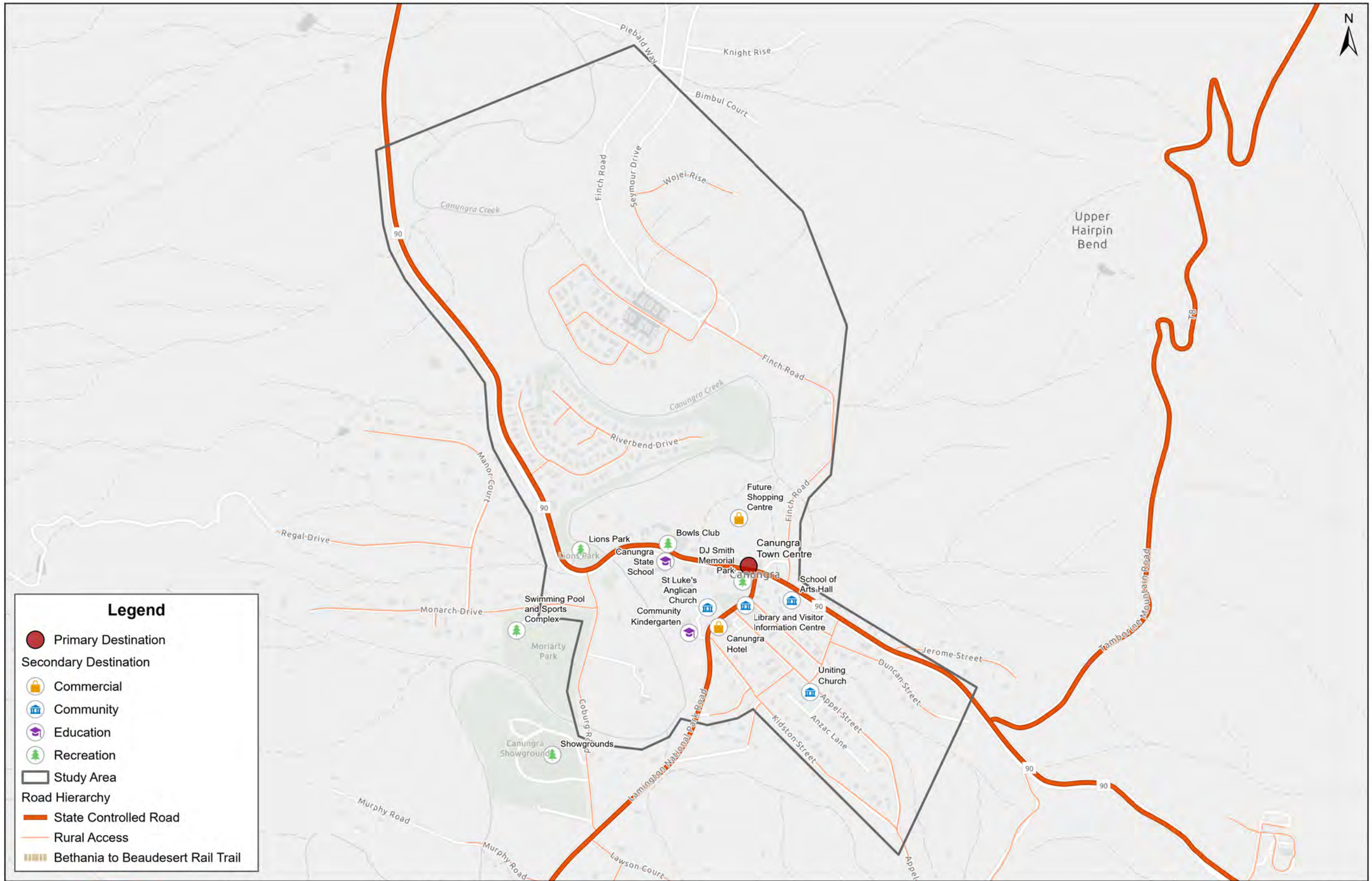

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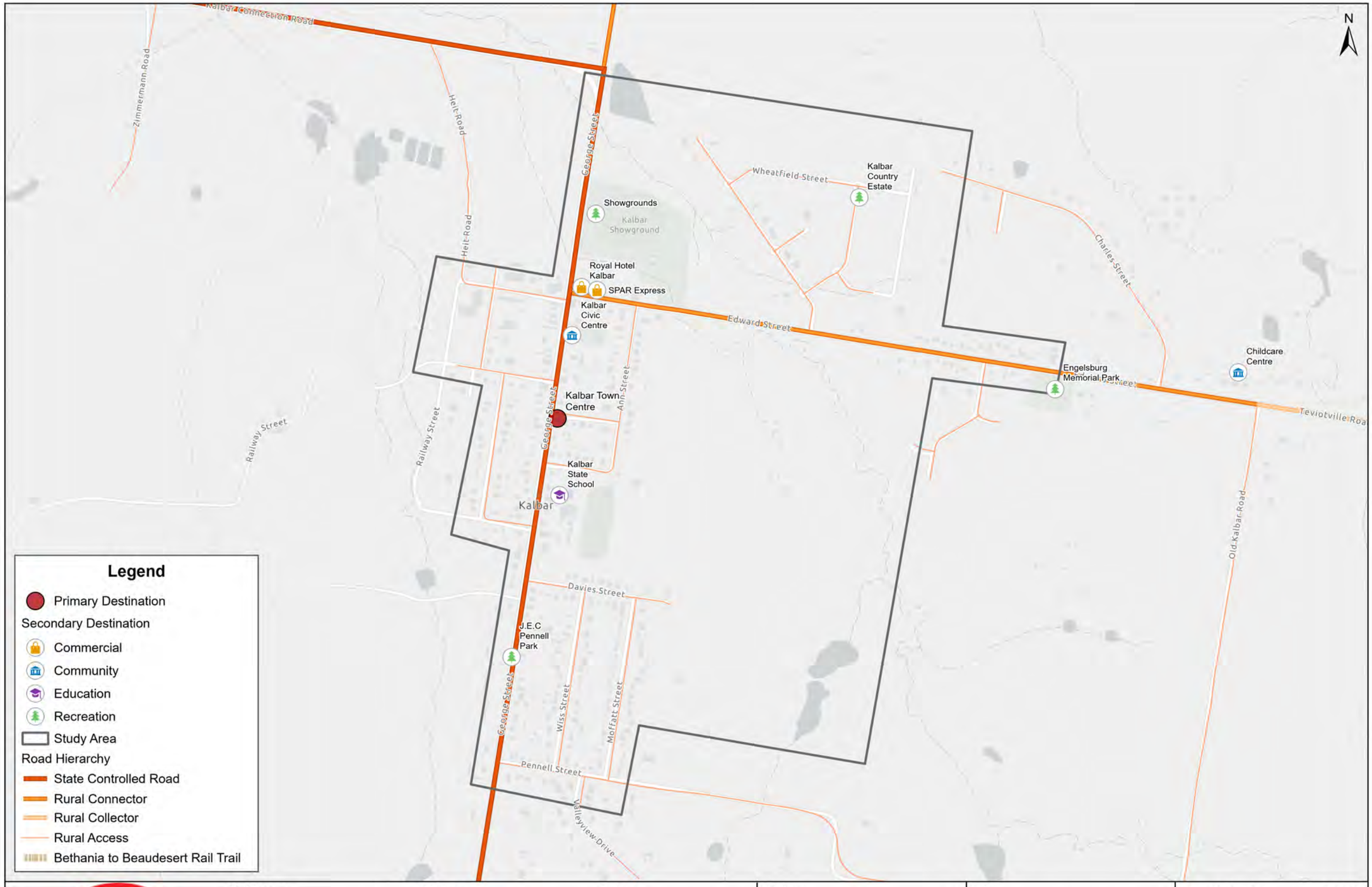

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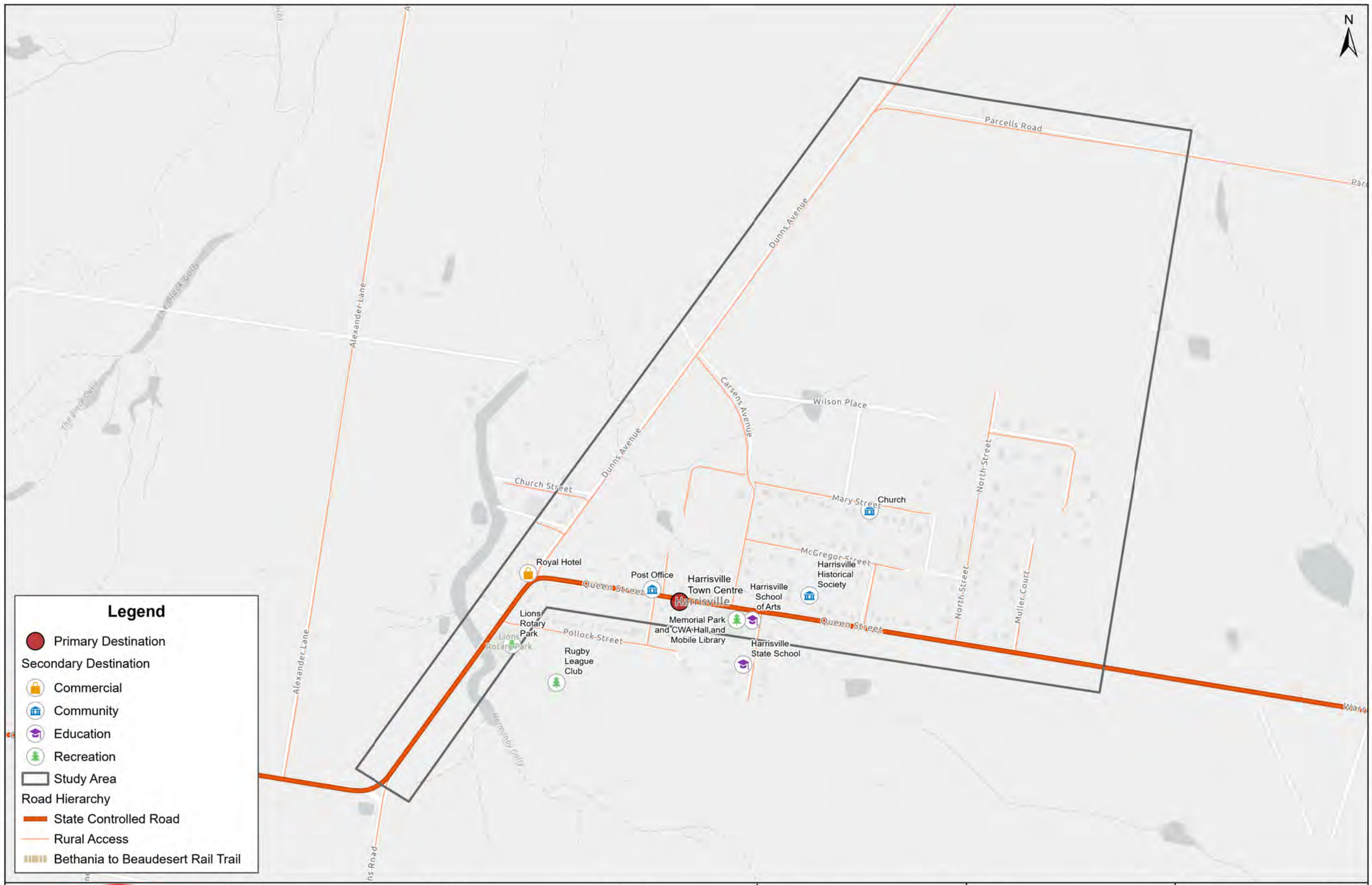

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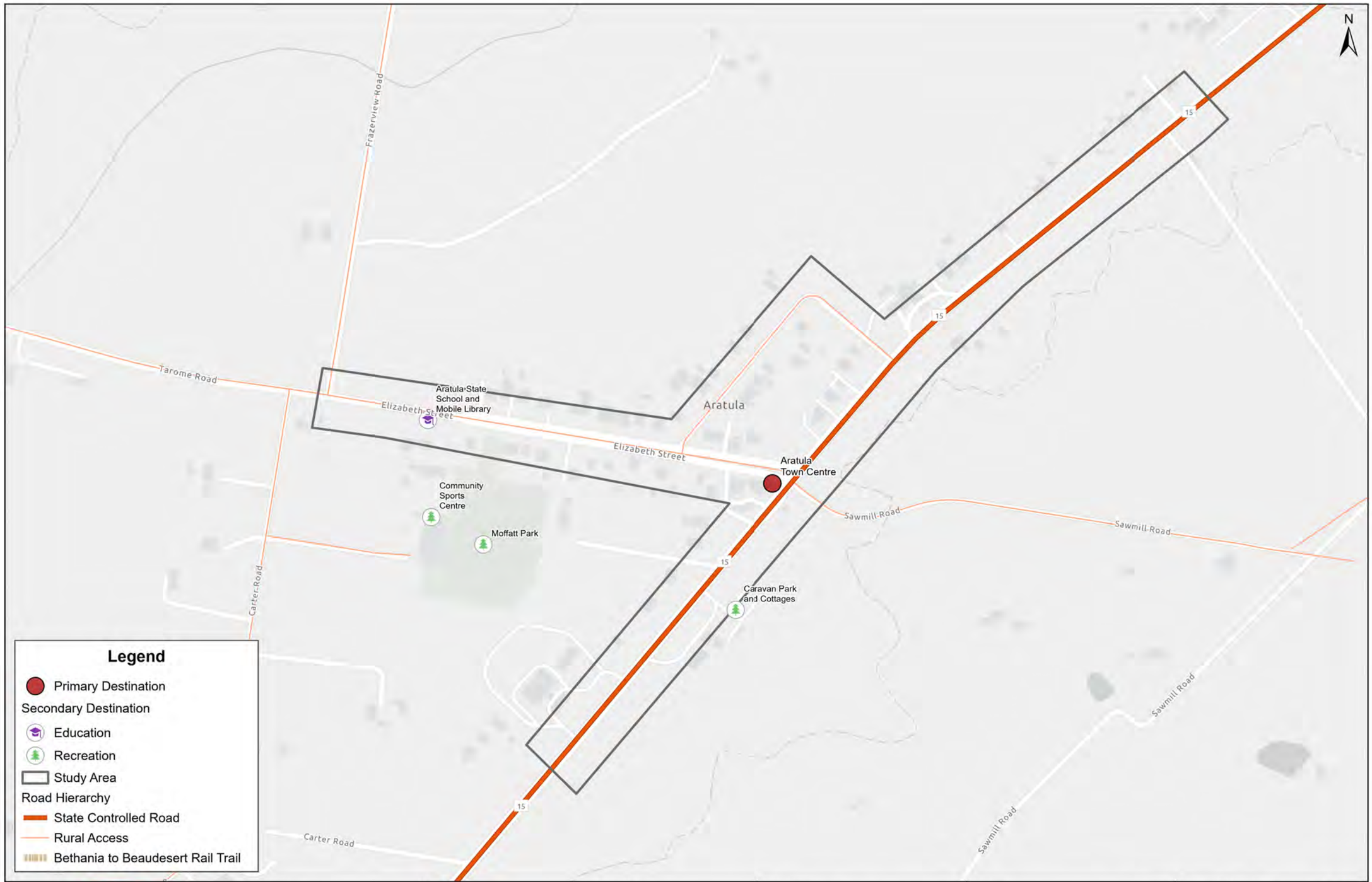

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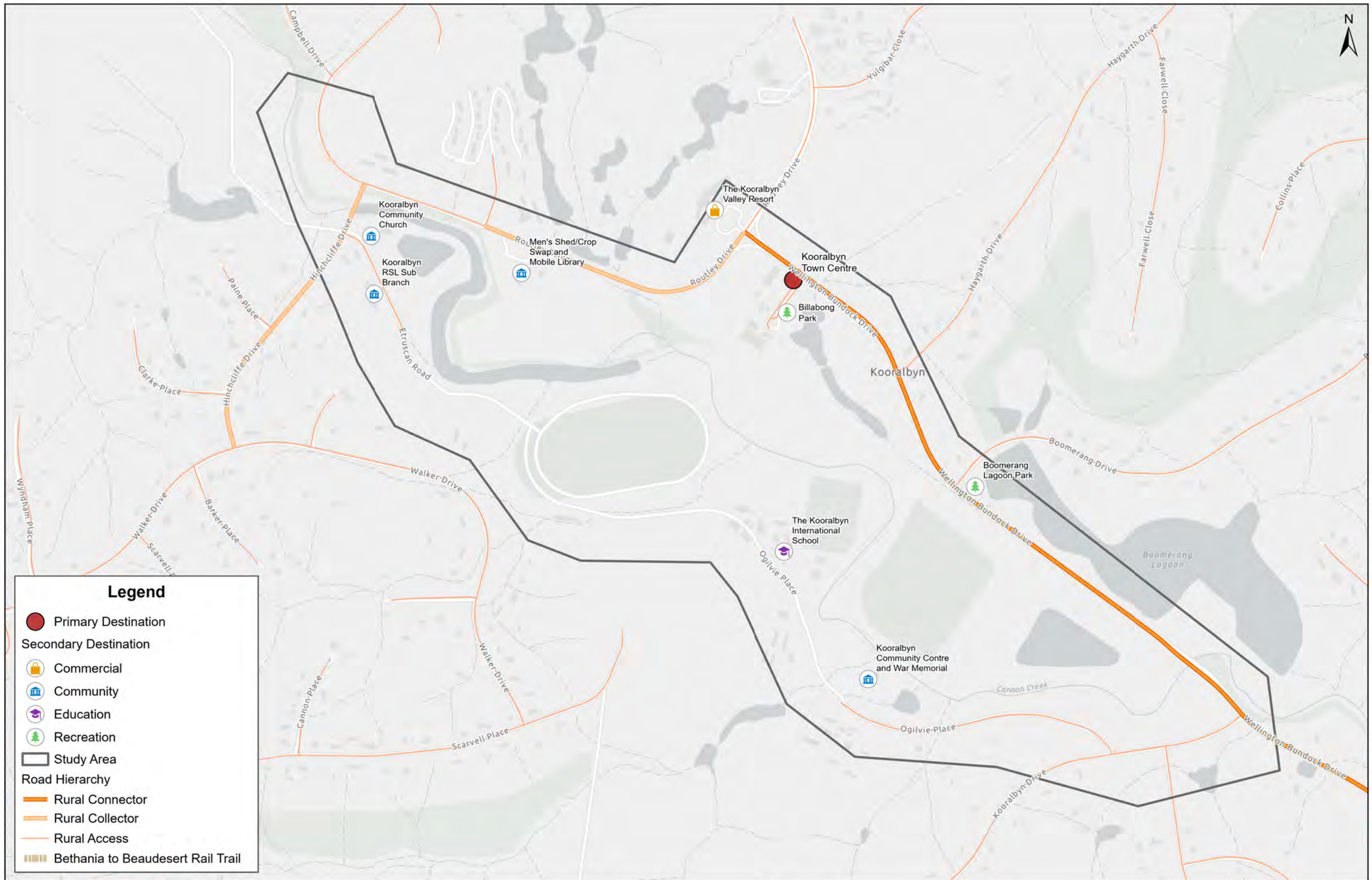

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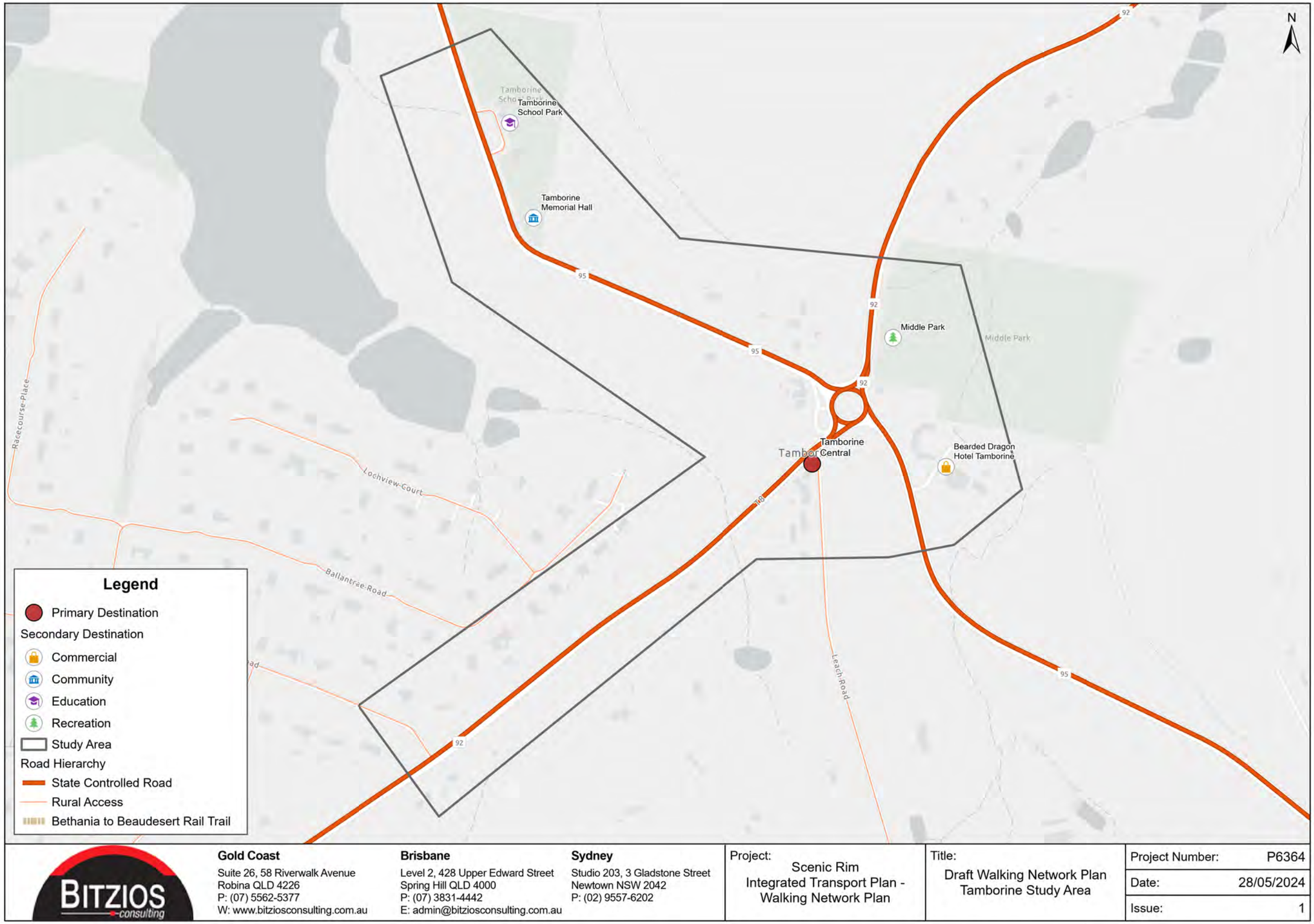

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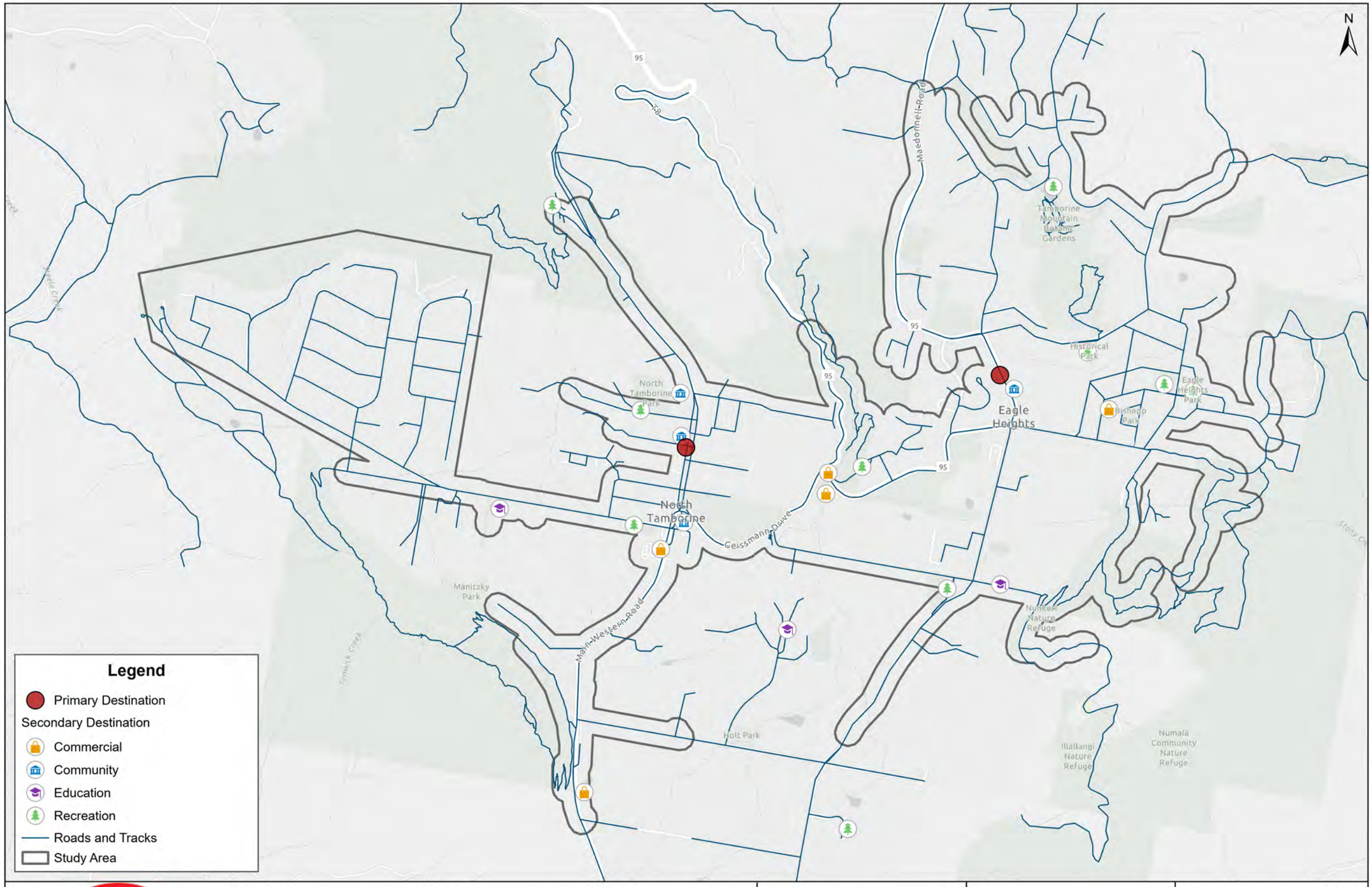
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Draft Walking Network Plan Tamborine Study Area
Project Number:	P6364
Date:	28/05/2024
Issue:	1

Appendix D: Roads and Tracks



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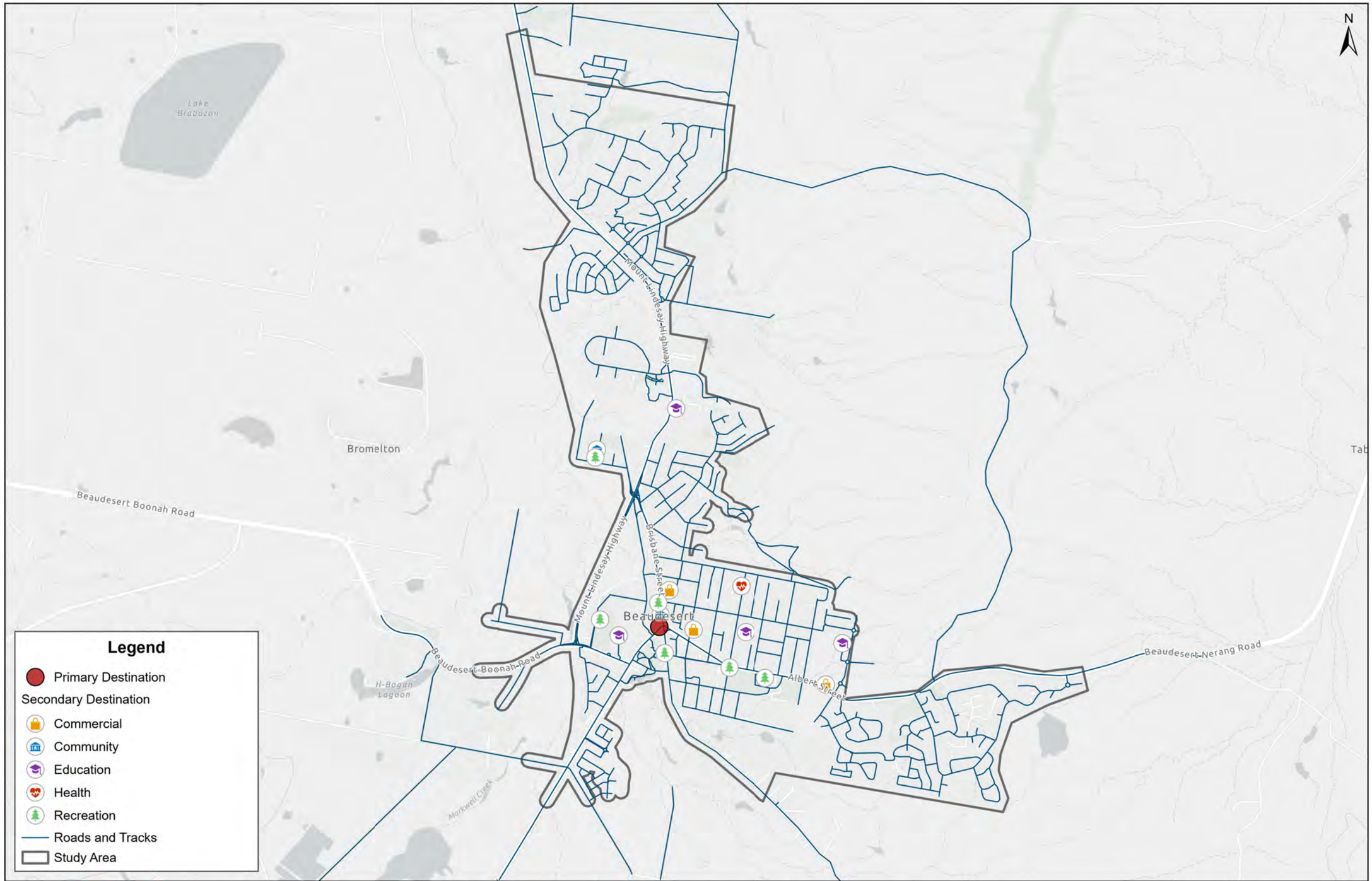

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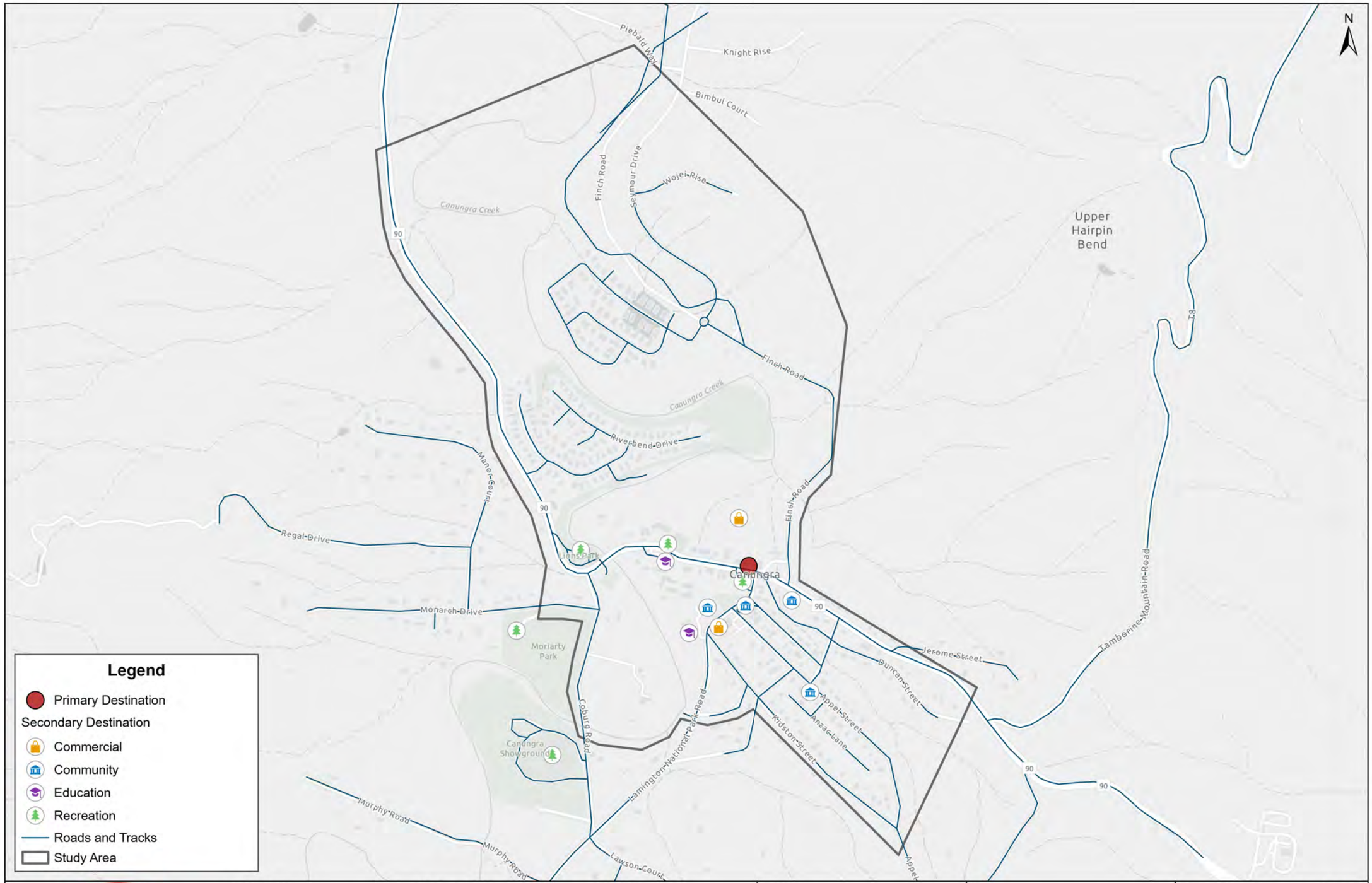

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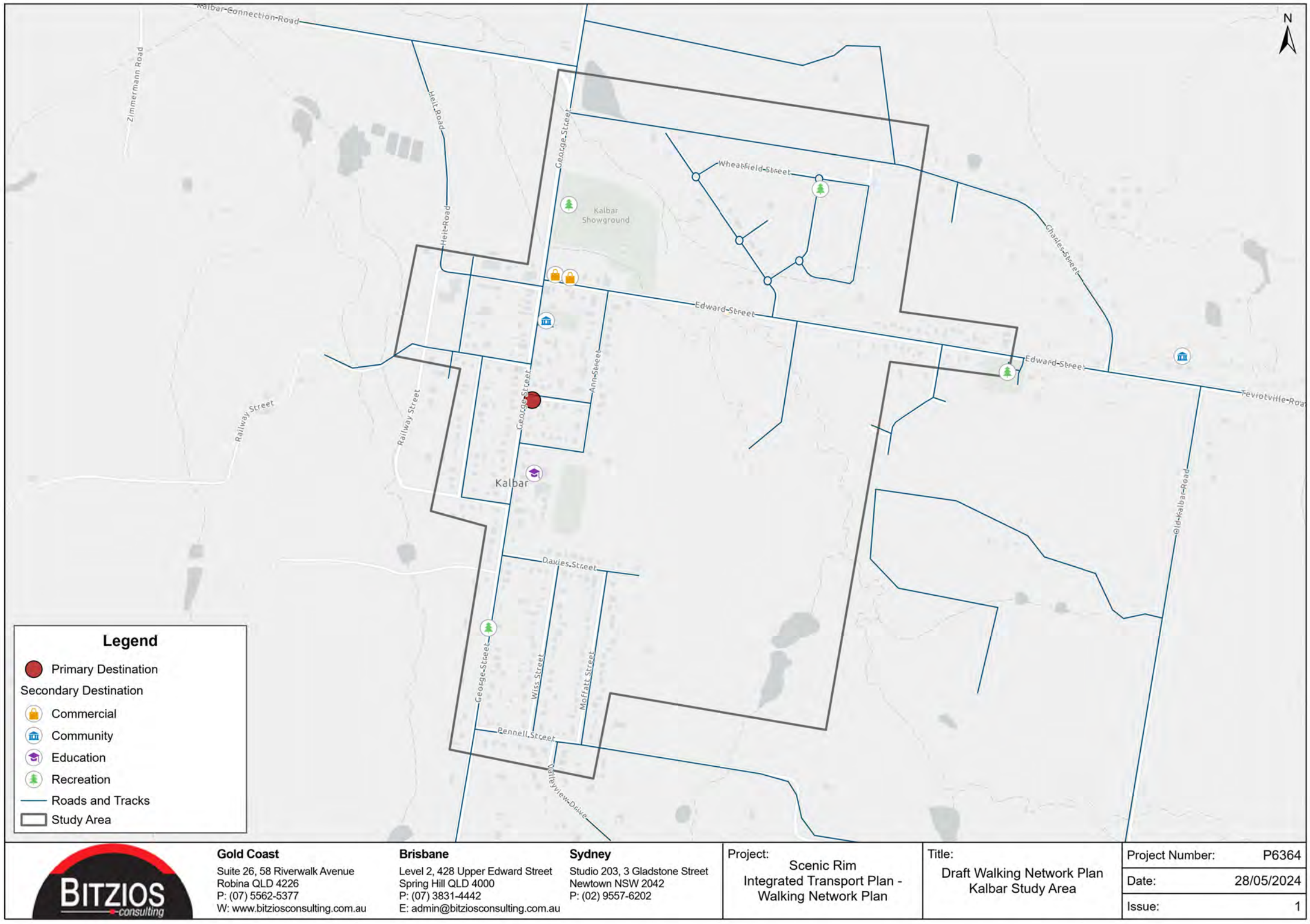
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Kalbar-Connection-Road
Zimmermann Road
Held Road
George Street
Wheatfield Street
Kalbar Showground
Charles Street
Edward Street
Edward Street
Teviotville Road
Railway Street
Railway Street
George Street
Ann Street
Kalbar
Old Kalbar Road
Davies Street
George Street
Wiss Street
Moffatt Street
Rennell Street
Dairyview Drive
Legend
Primary Destination
Secondary Destination
Commercial
Community
Education
Recreation
Roads and Tracks
Study Area
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Project:
Scenic Rim
Integrated Transport Plan -
Walking Network Plan
Title:
Draft Walking Network Plan
Kalbar Study Area
Project Number: P6364
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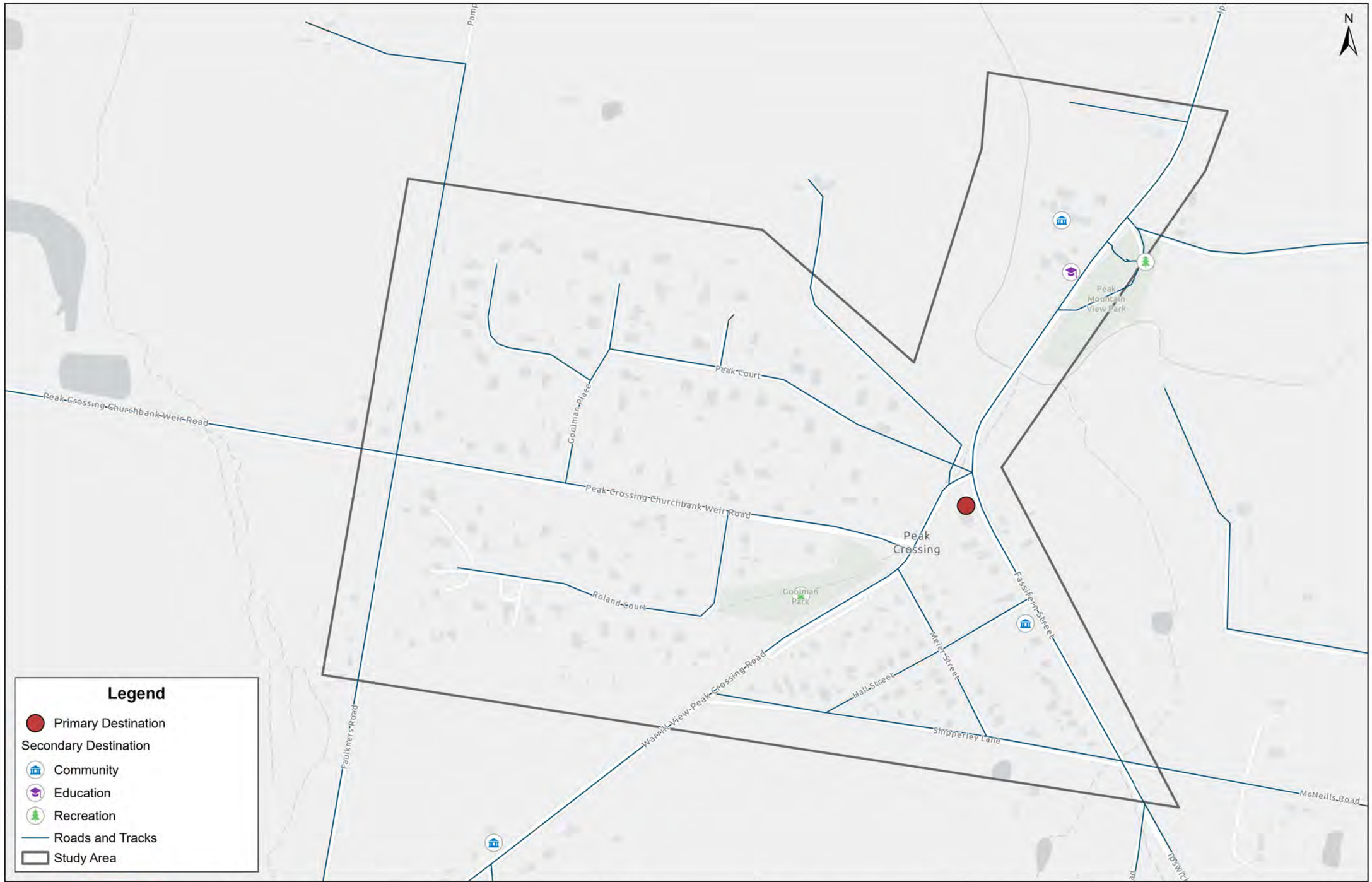

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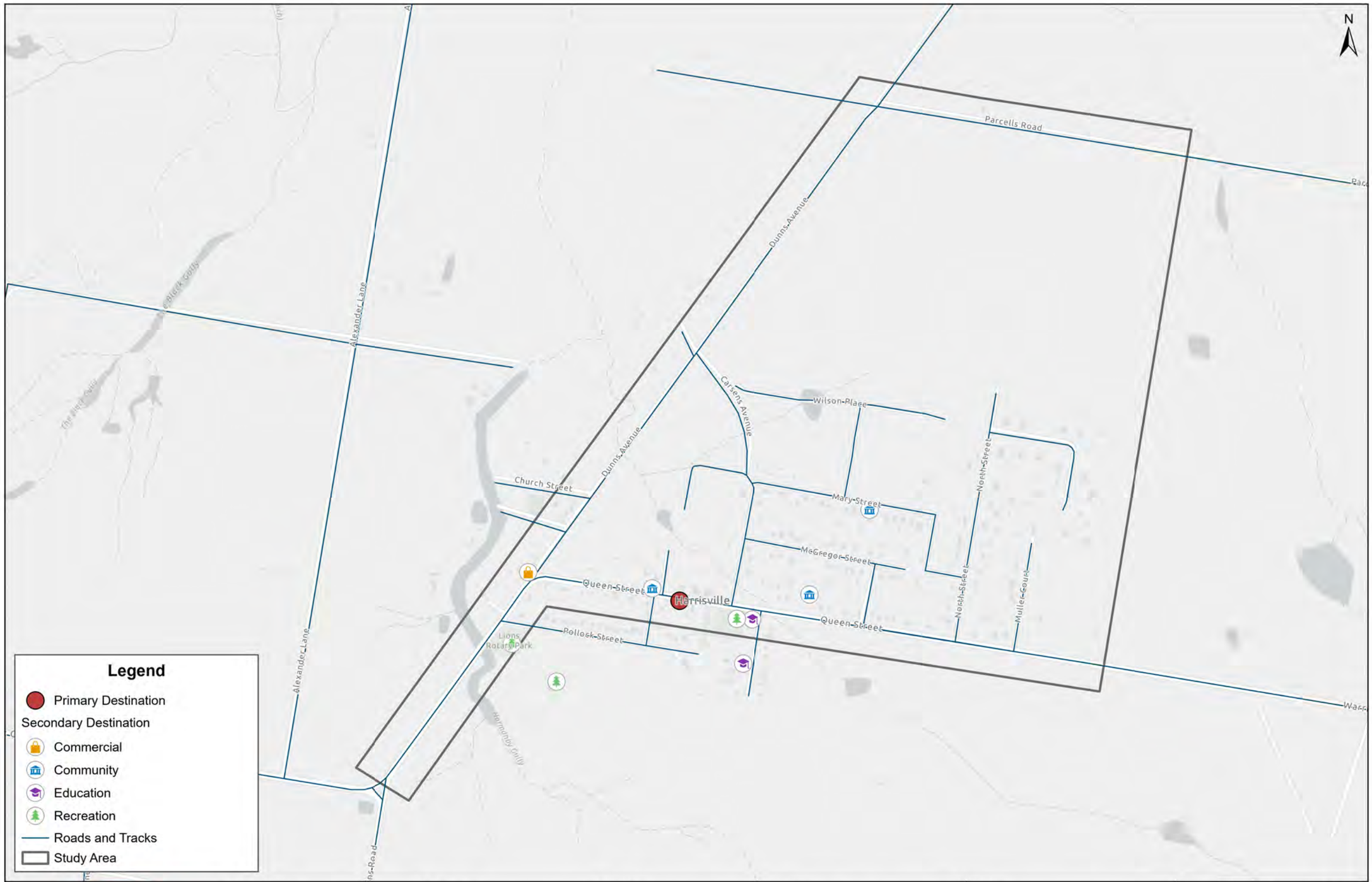

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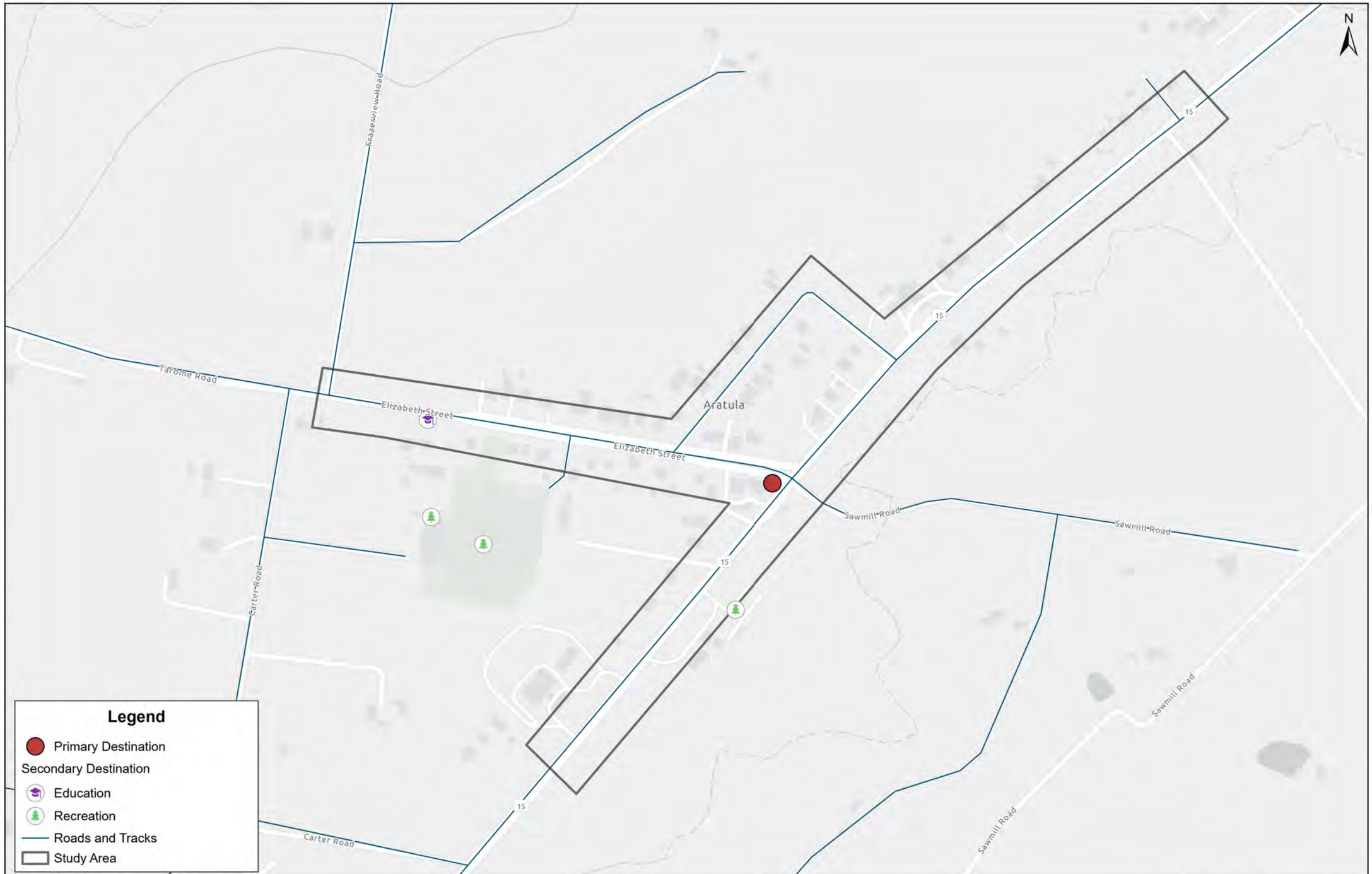

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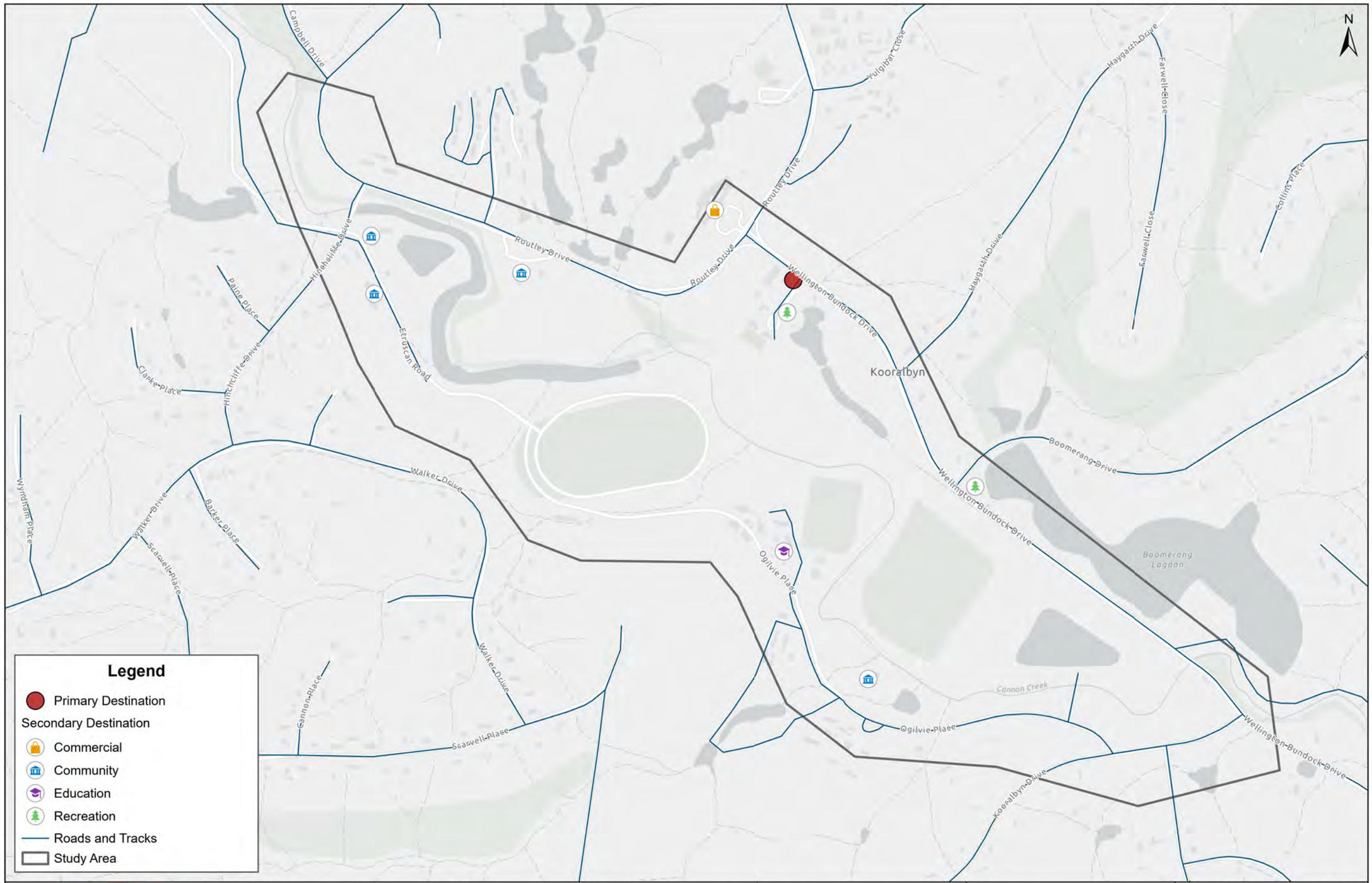

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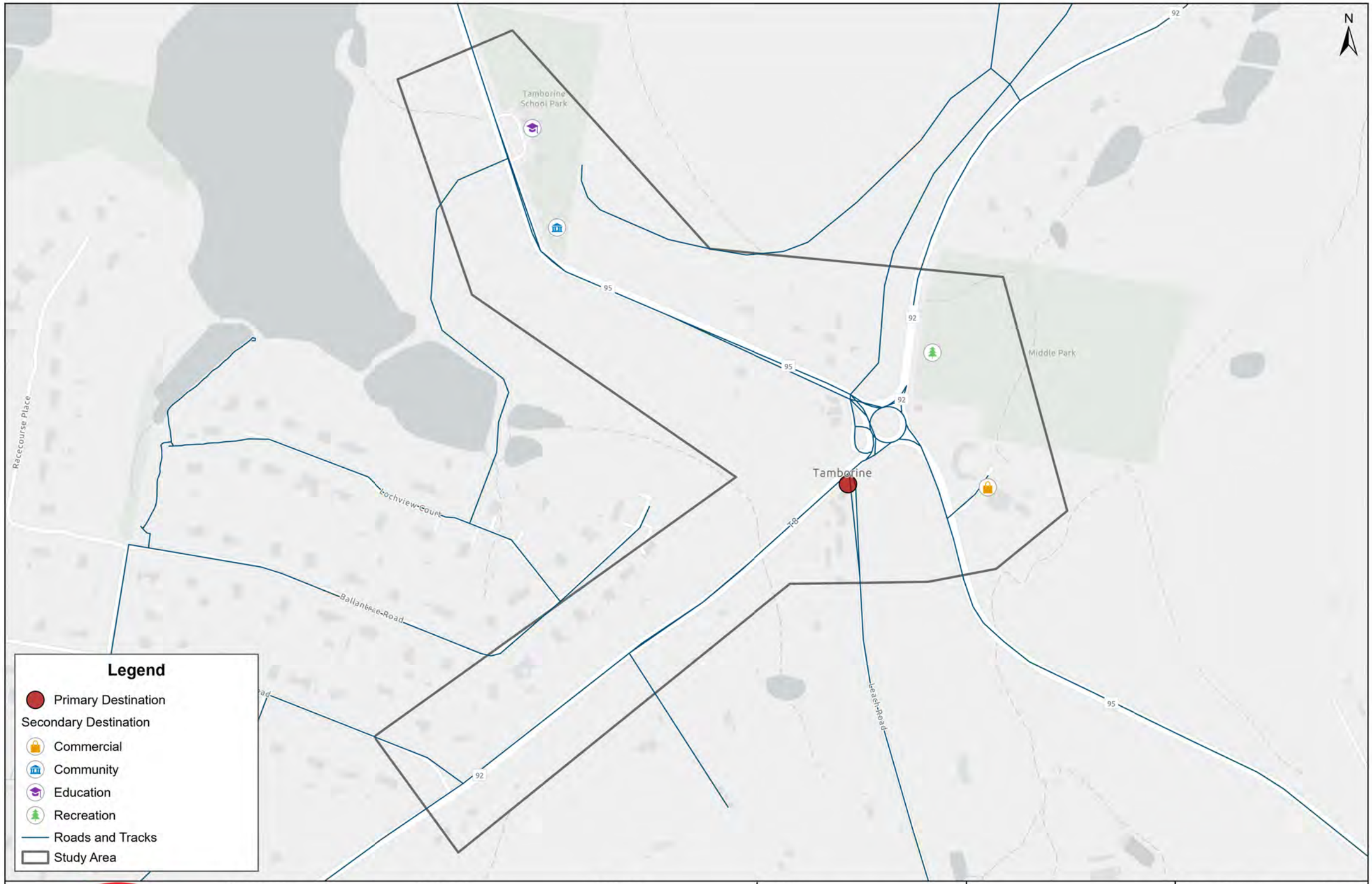

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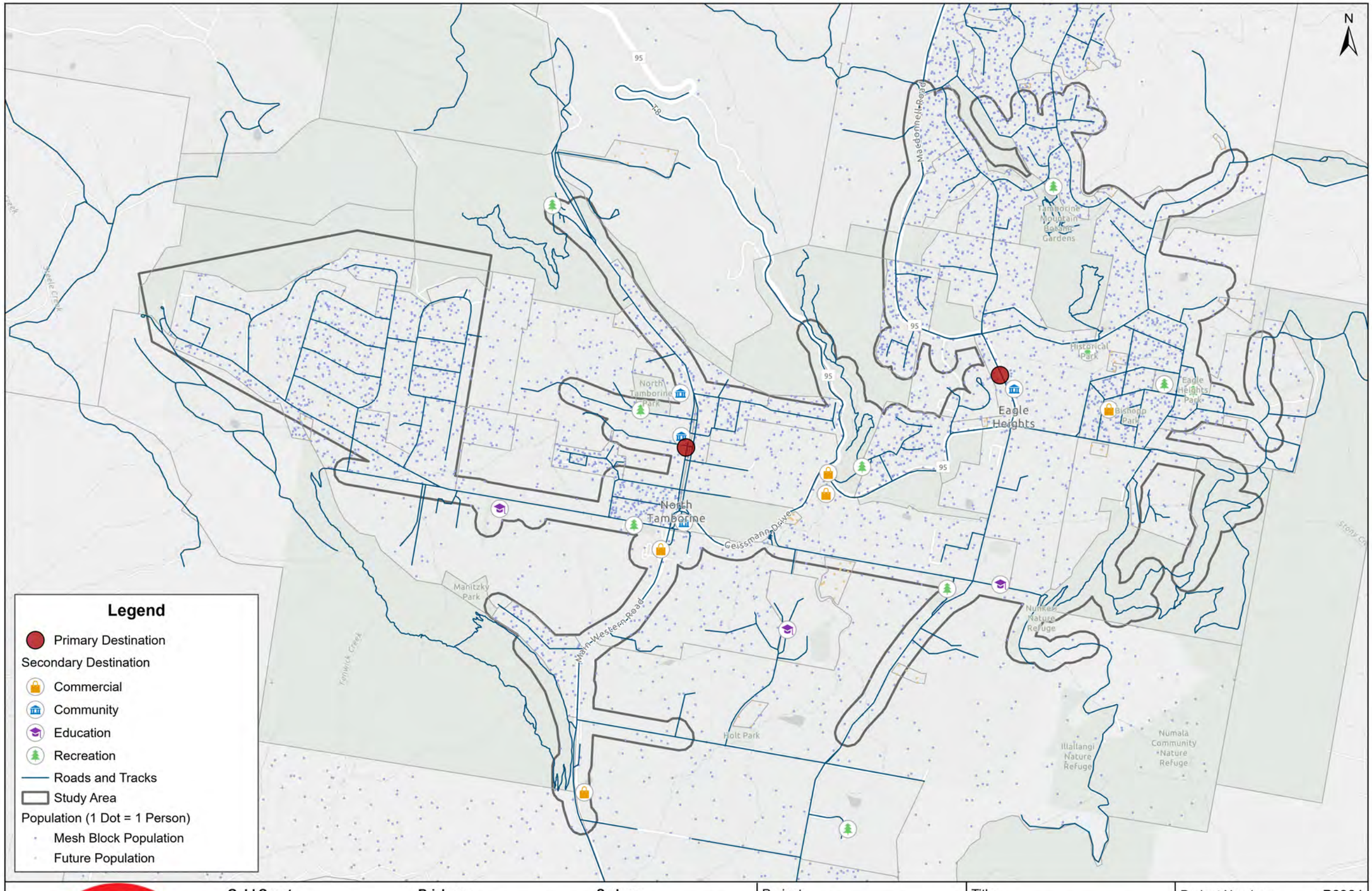
Project:
Scenic Rim
Integrated Transport Plan -
Walking Network Plan

Title:
Draft Walking Network Plan
Tamborine Study Area

Project Number:	P6364
Date:	28/05/2024
Issue:	1

Appendix E: Population Density



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Title:
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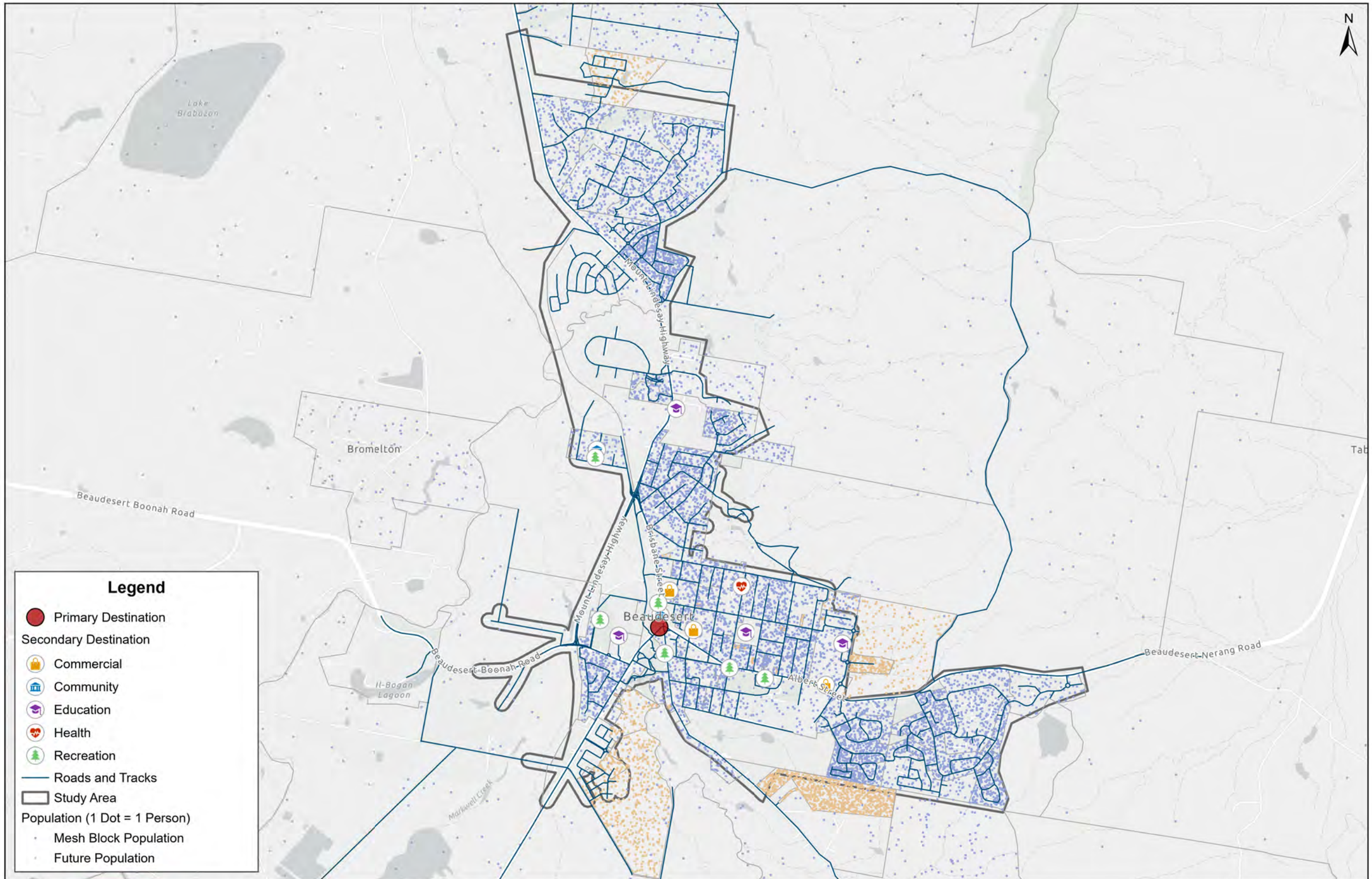

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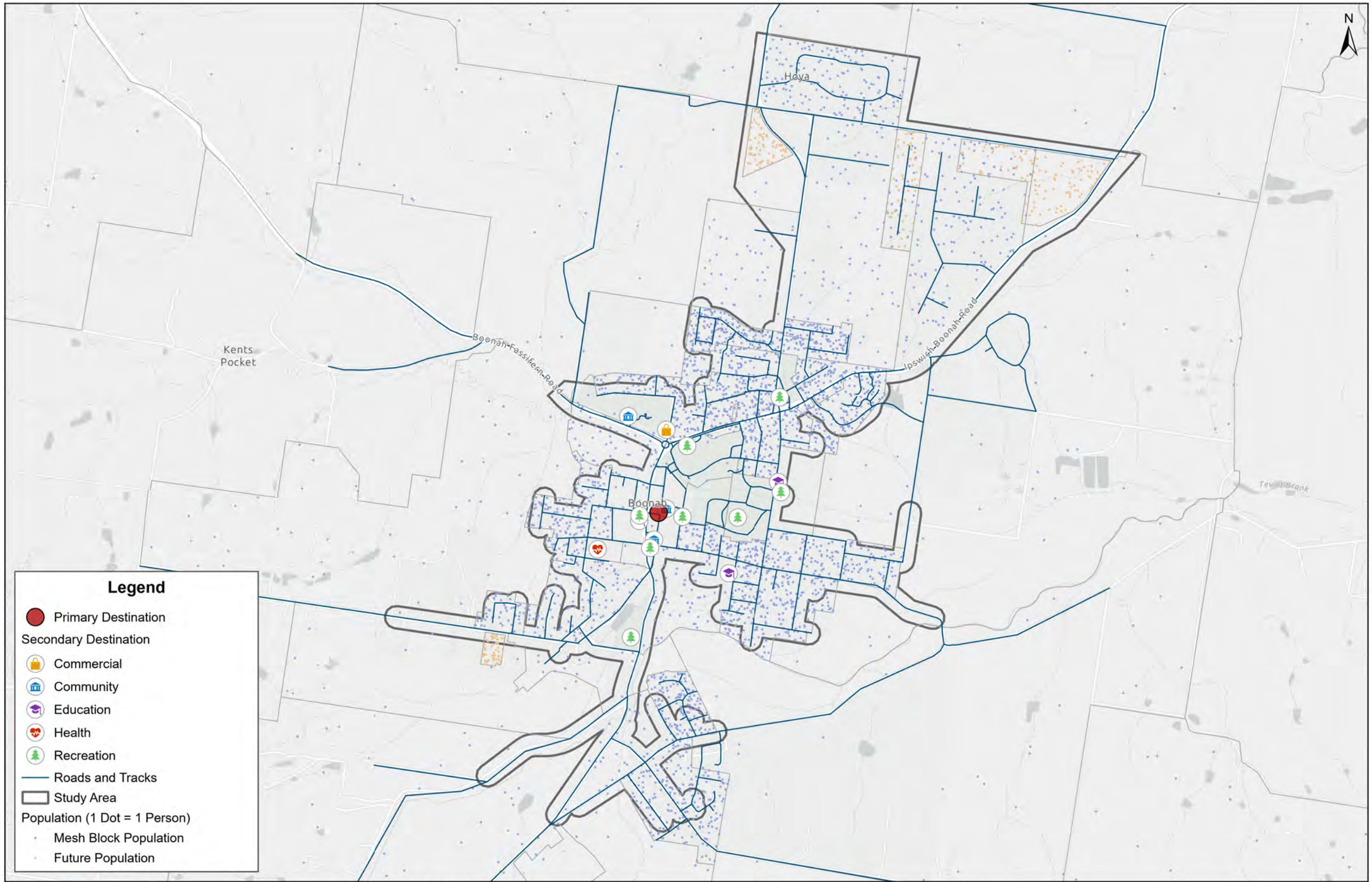

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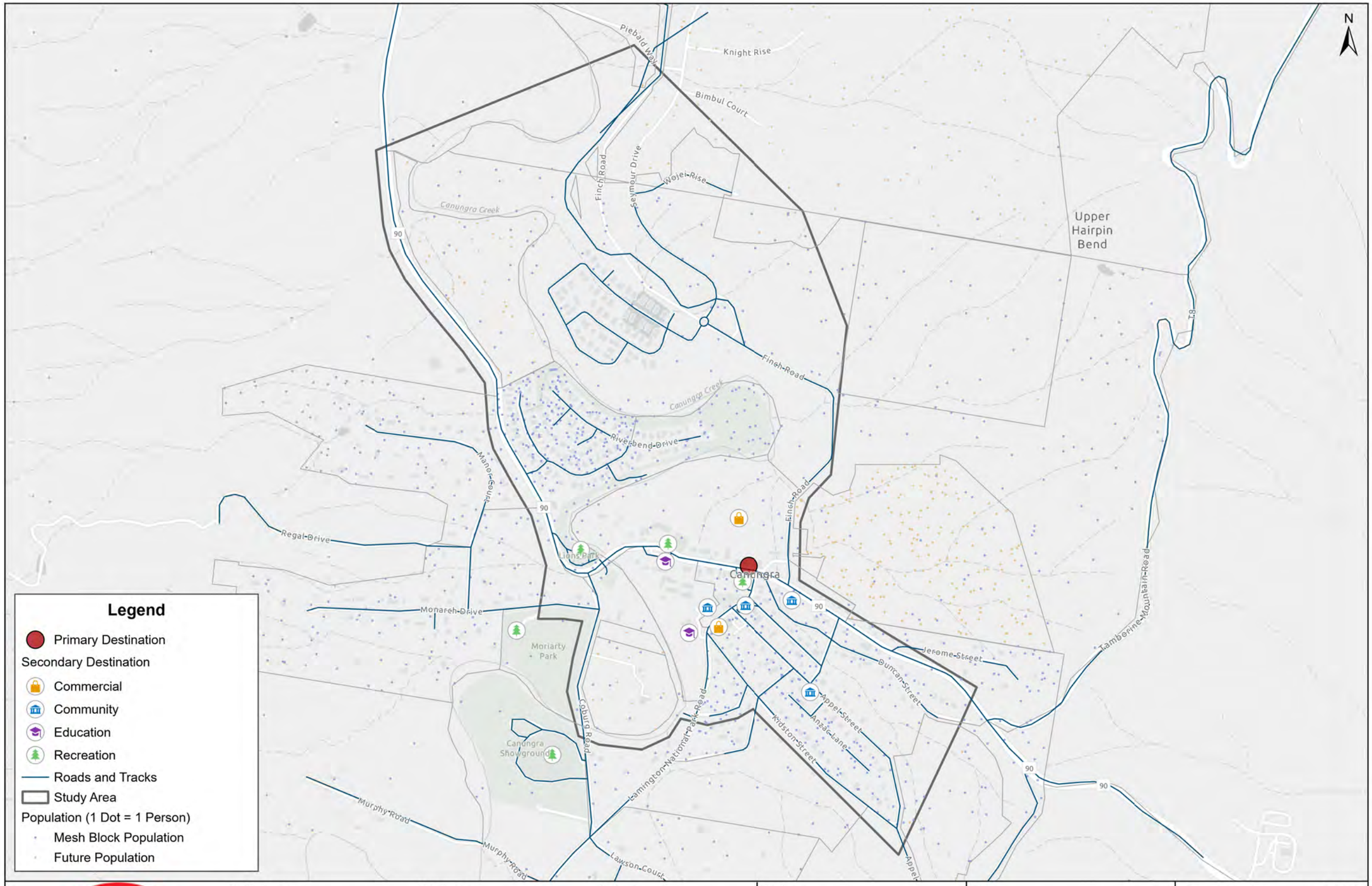

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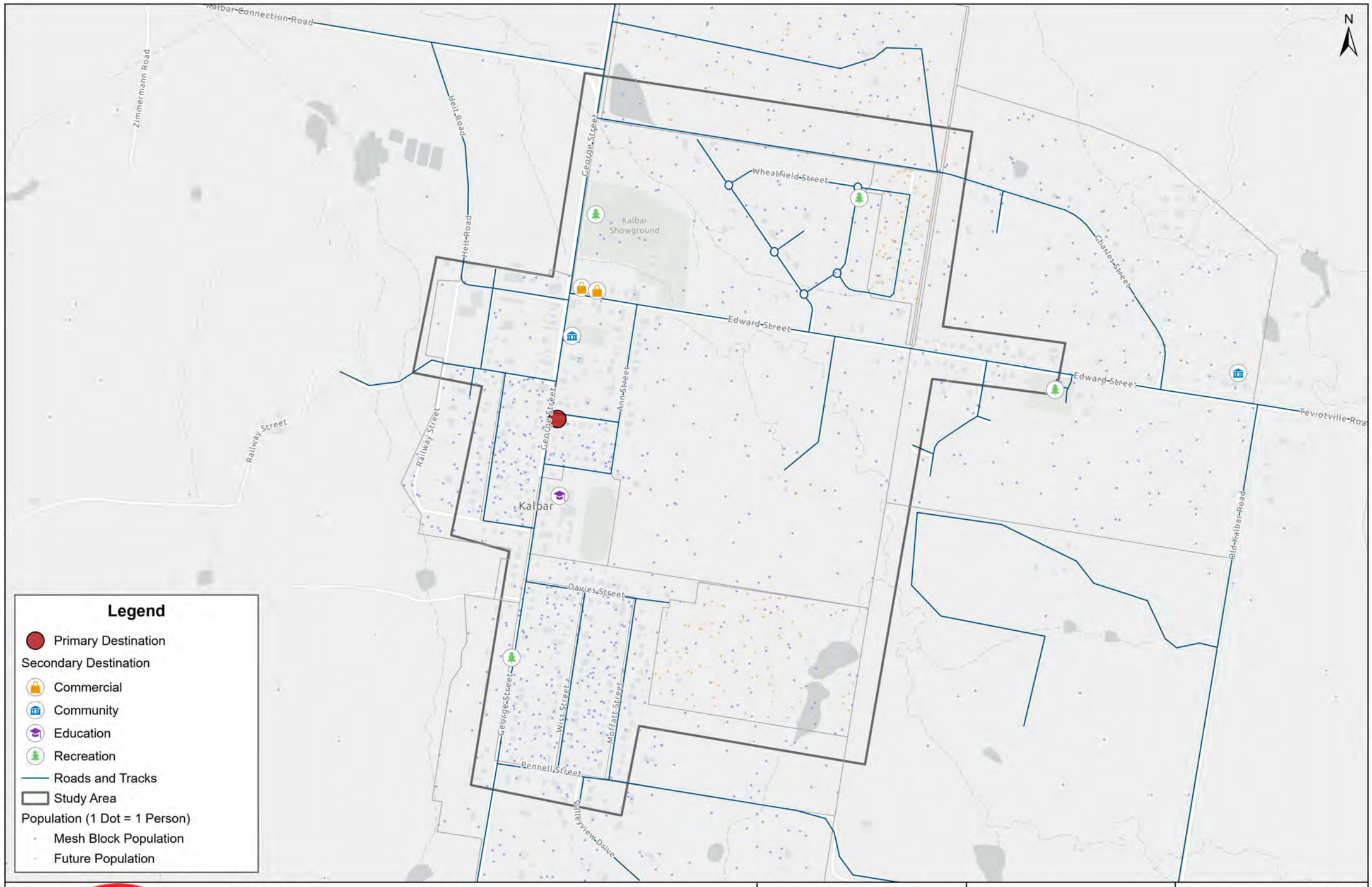

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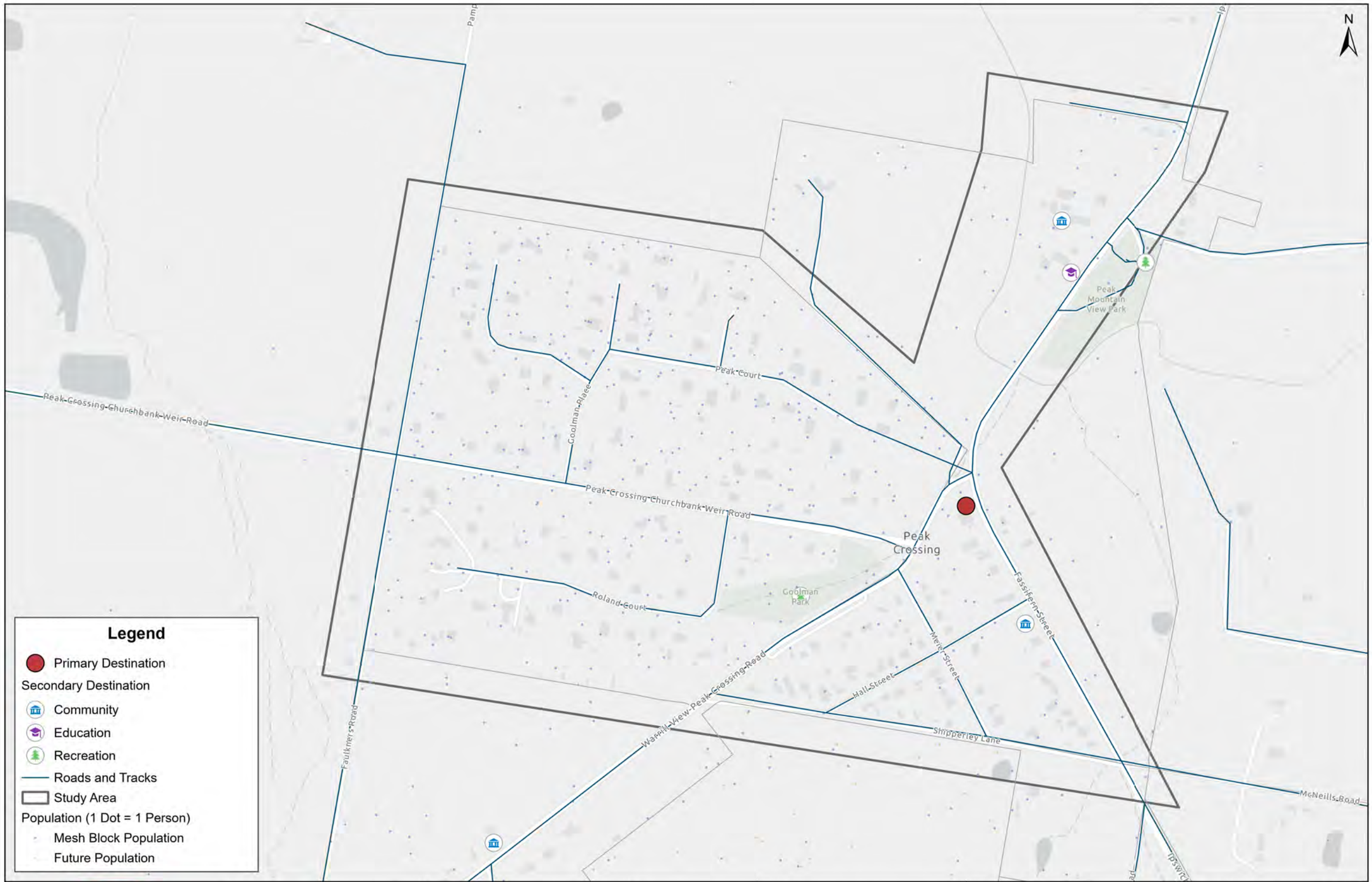

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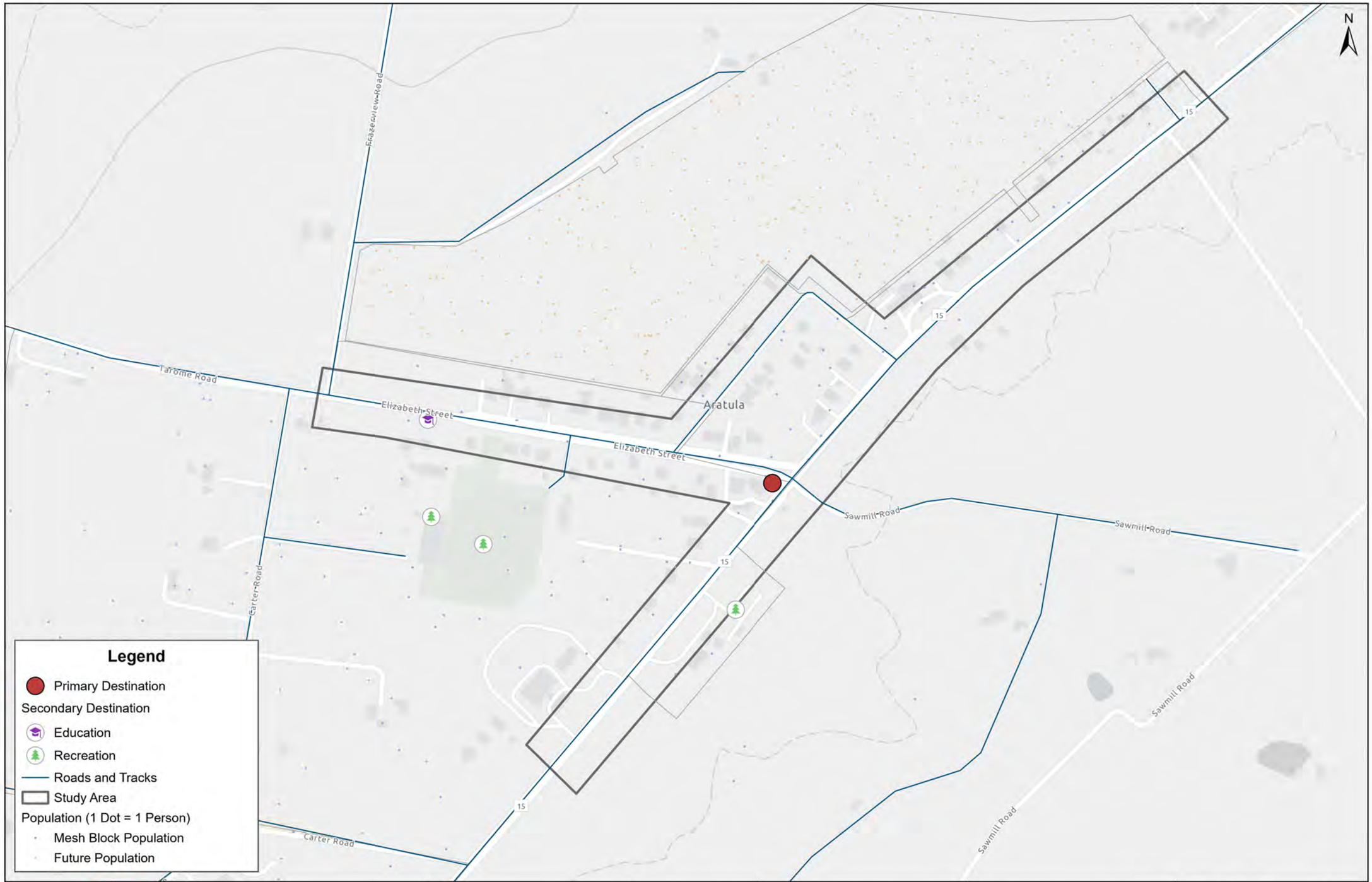

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Title:	Draft Walking Network Plan Aratula Study Area
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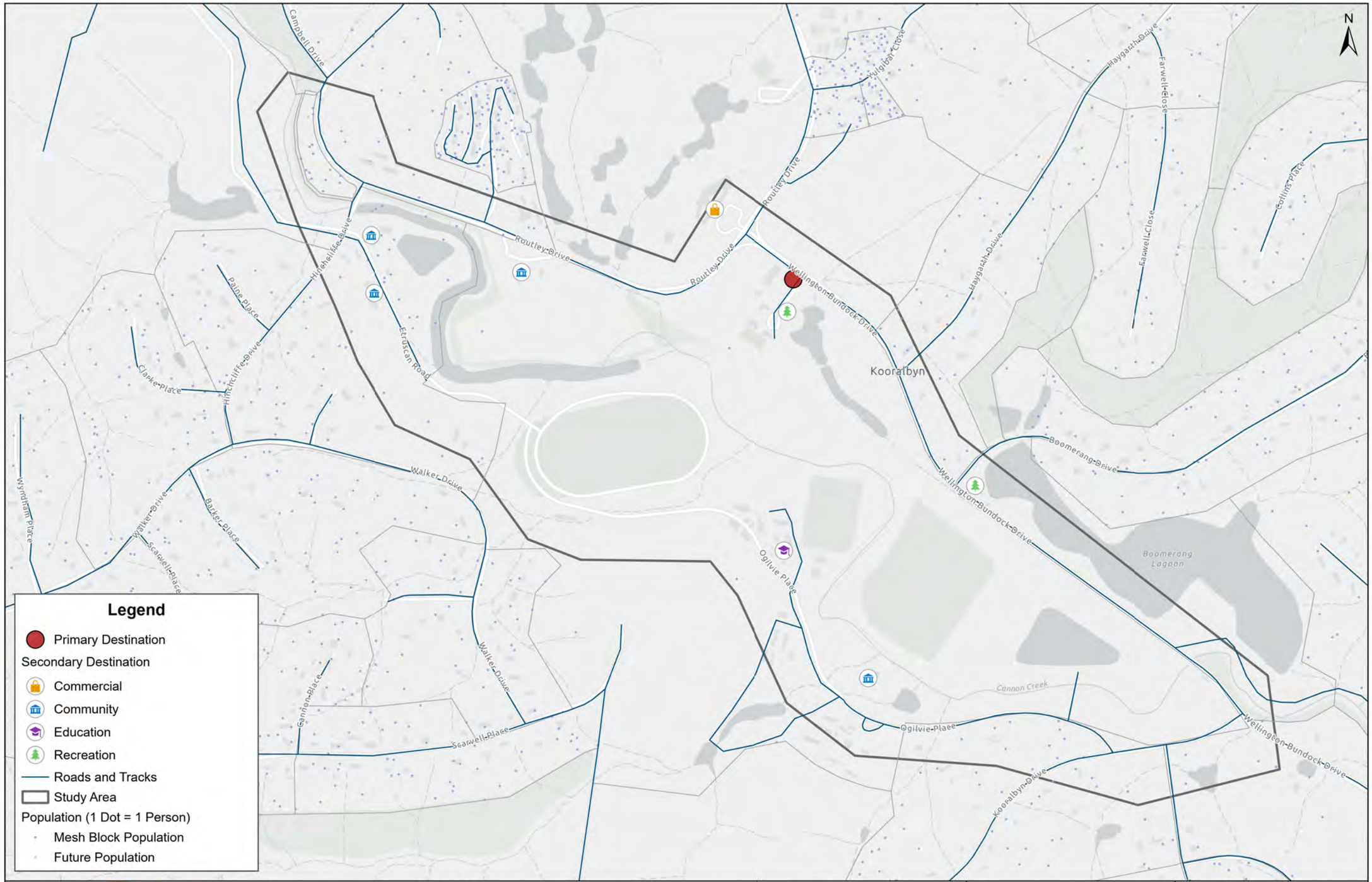

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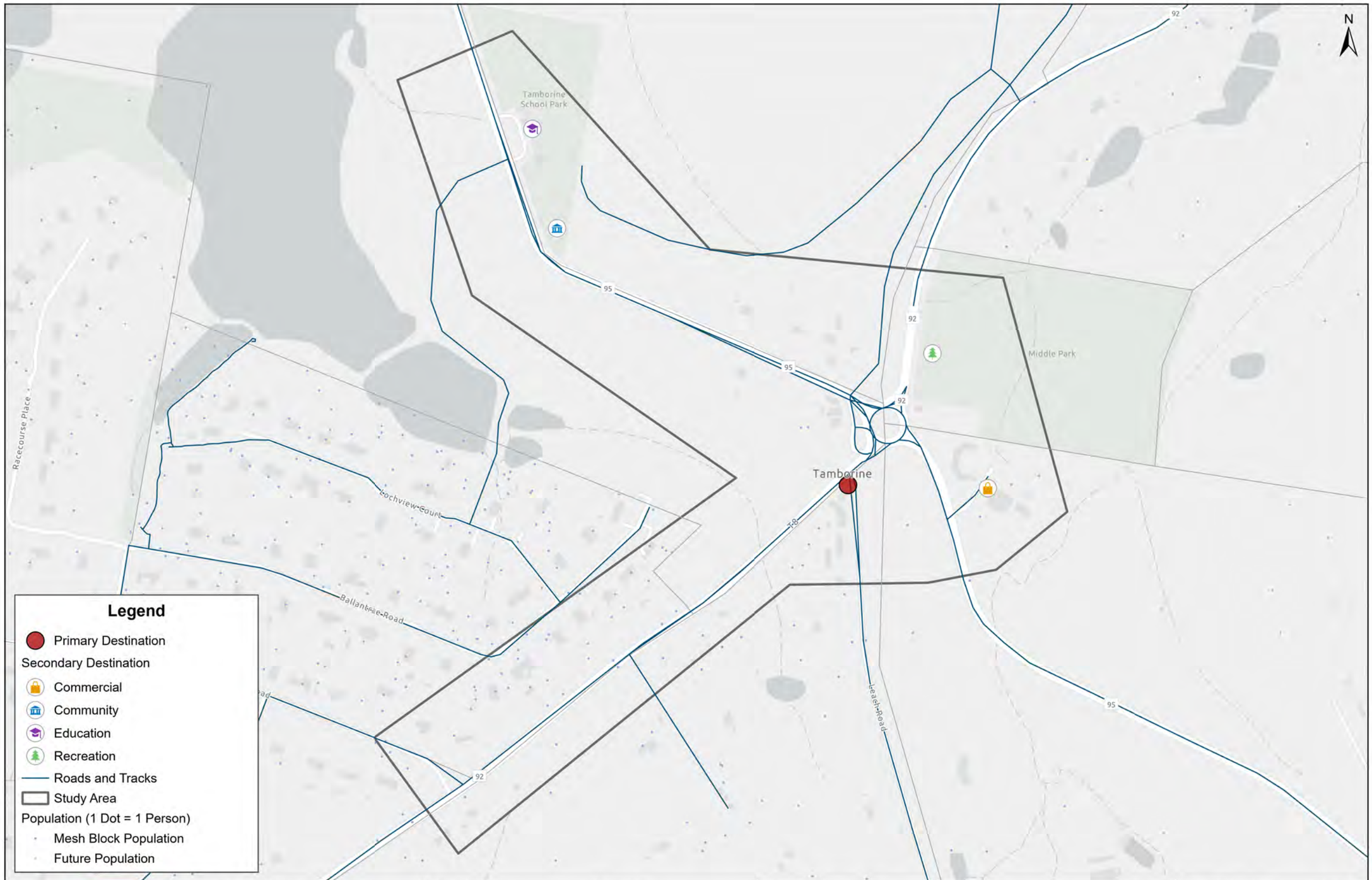

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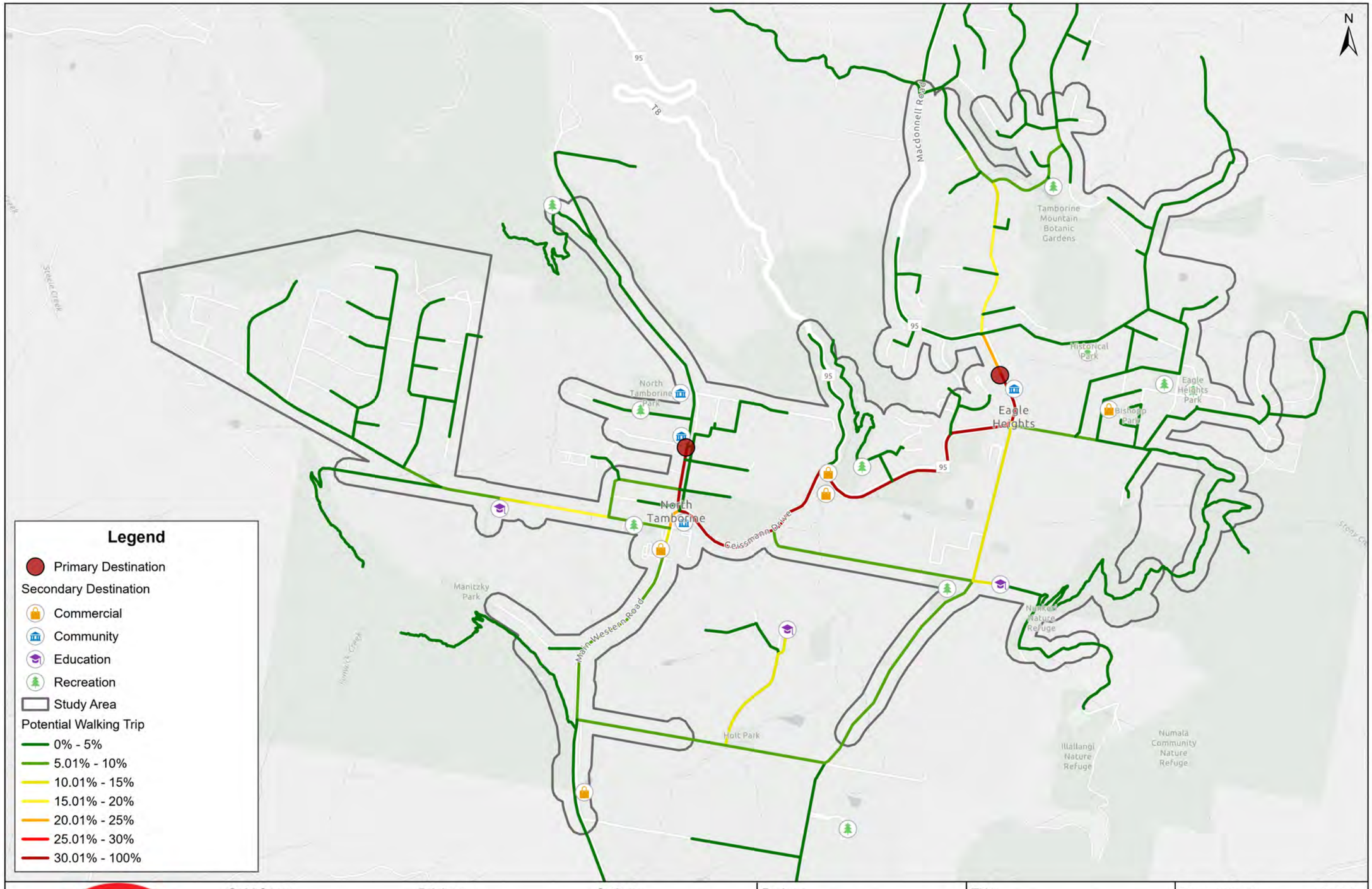
Title:	Draft Walking Network Plan Tamborine Study Area
Project Number:	P6364
Date:	28/05/2024
Issue:	1

Appendix F: Shortest Route and Potential Walking Trip Analysis



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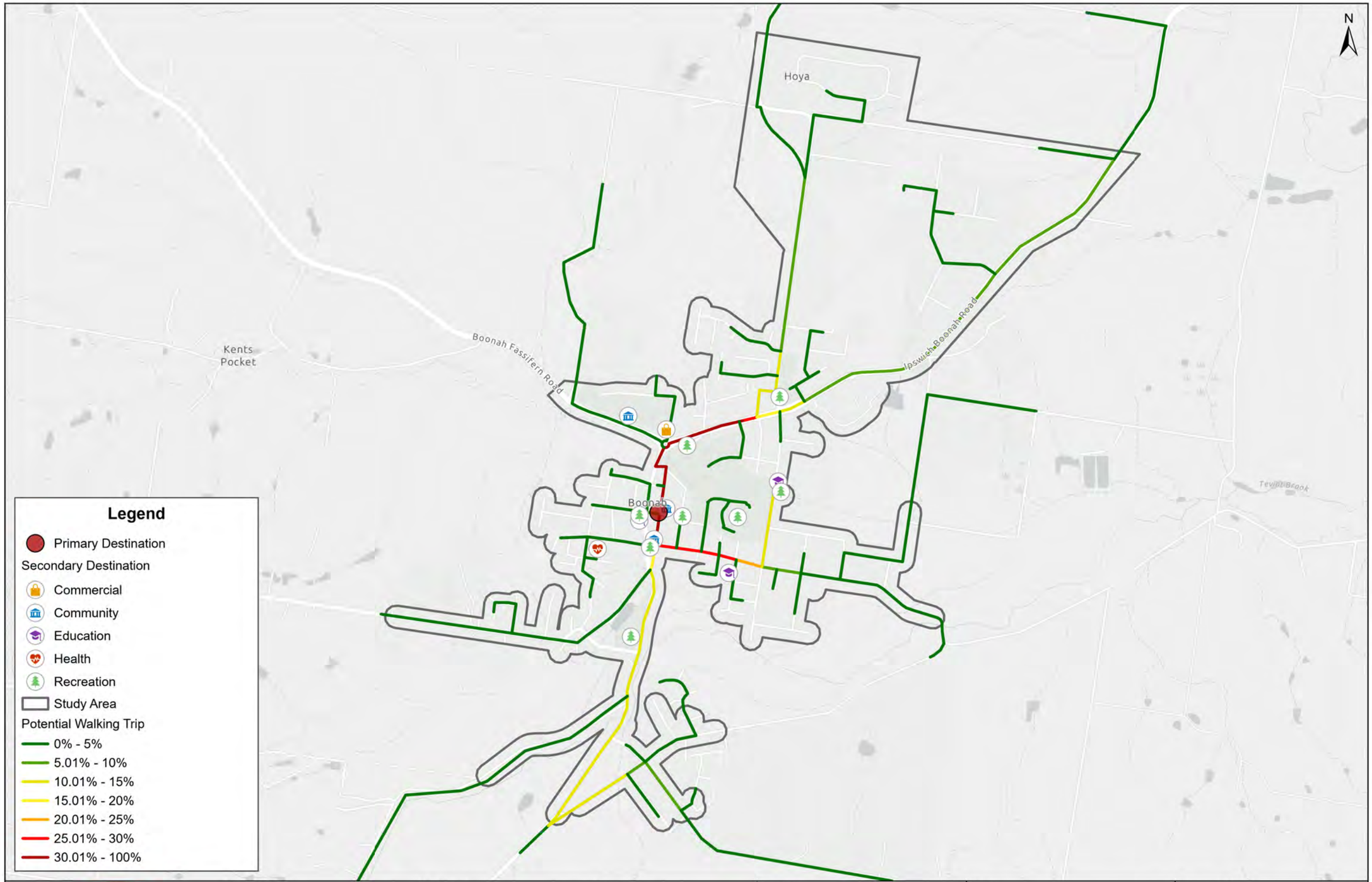

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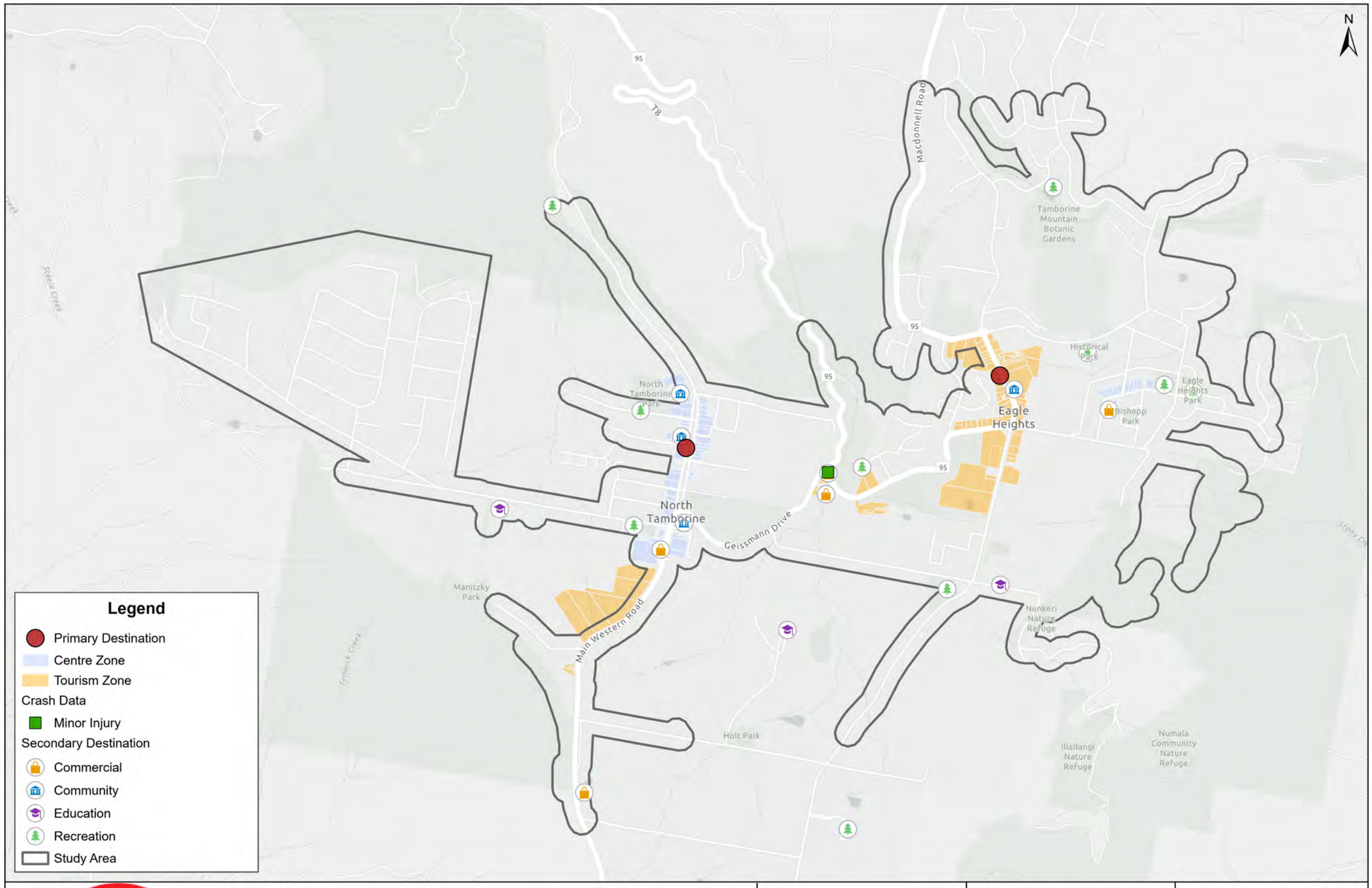
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Draft Walking Network Plan Boonah Study Area
Project Number:	P6364
Date:	28/05/2024
Issue:	1

Appendix G: Crash Data



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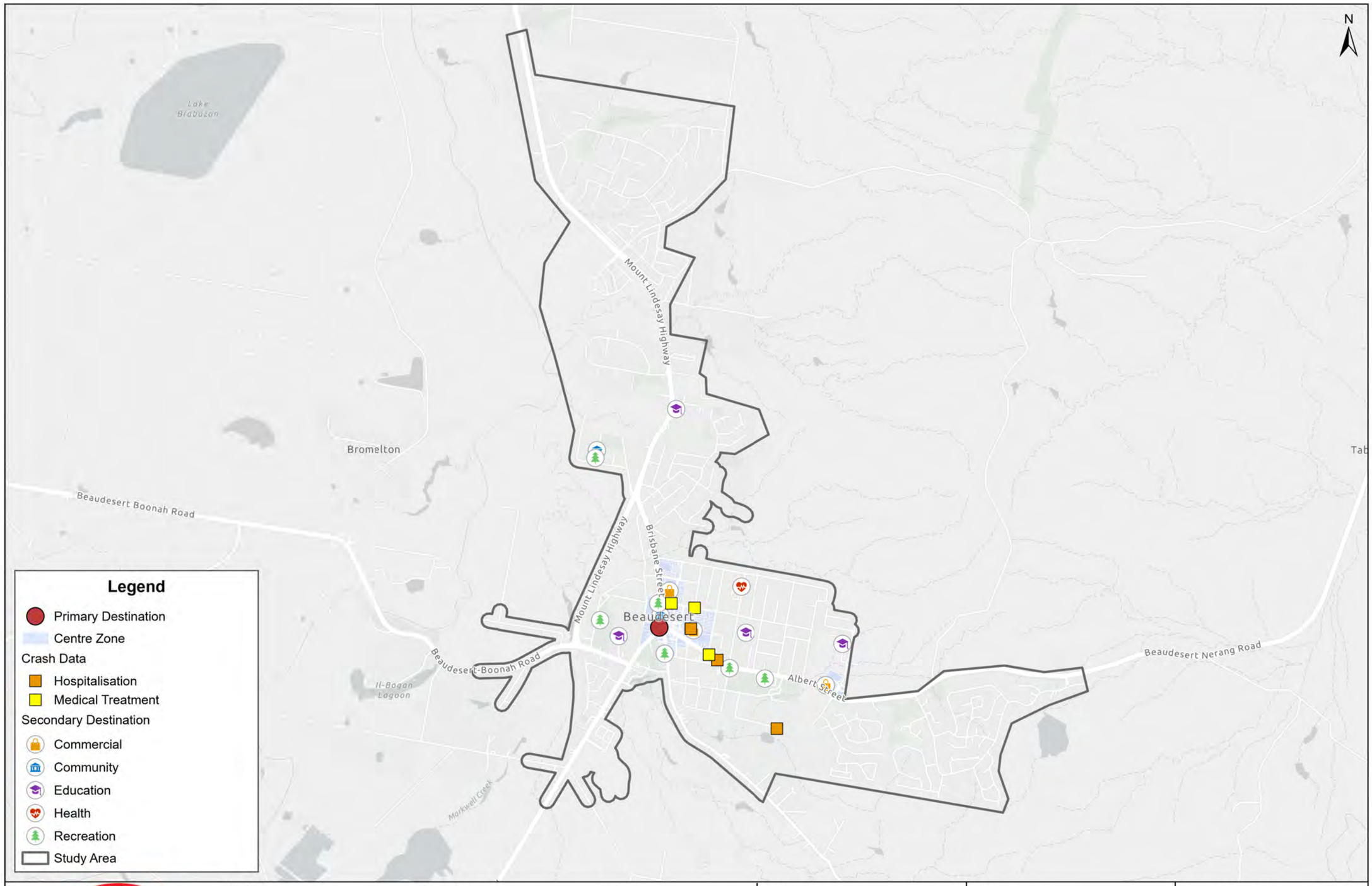

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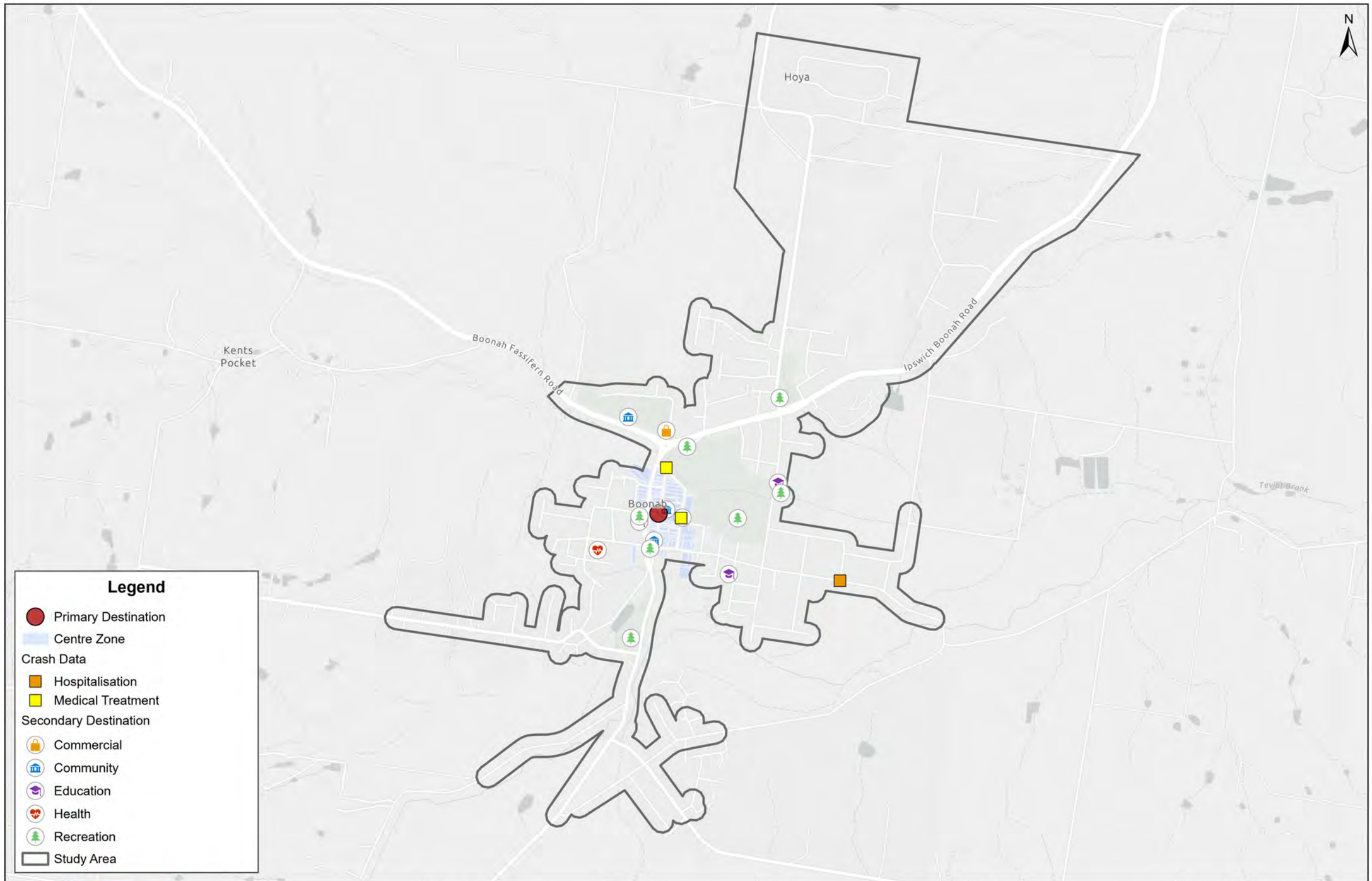

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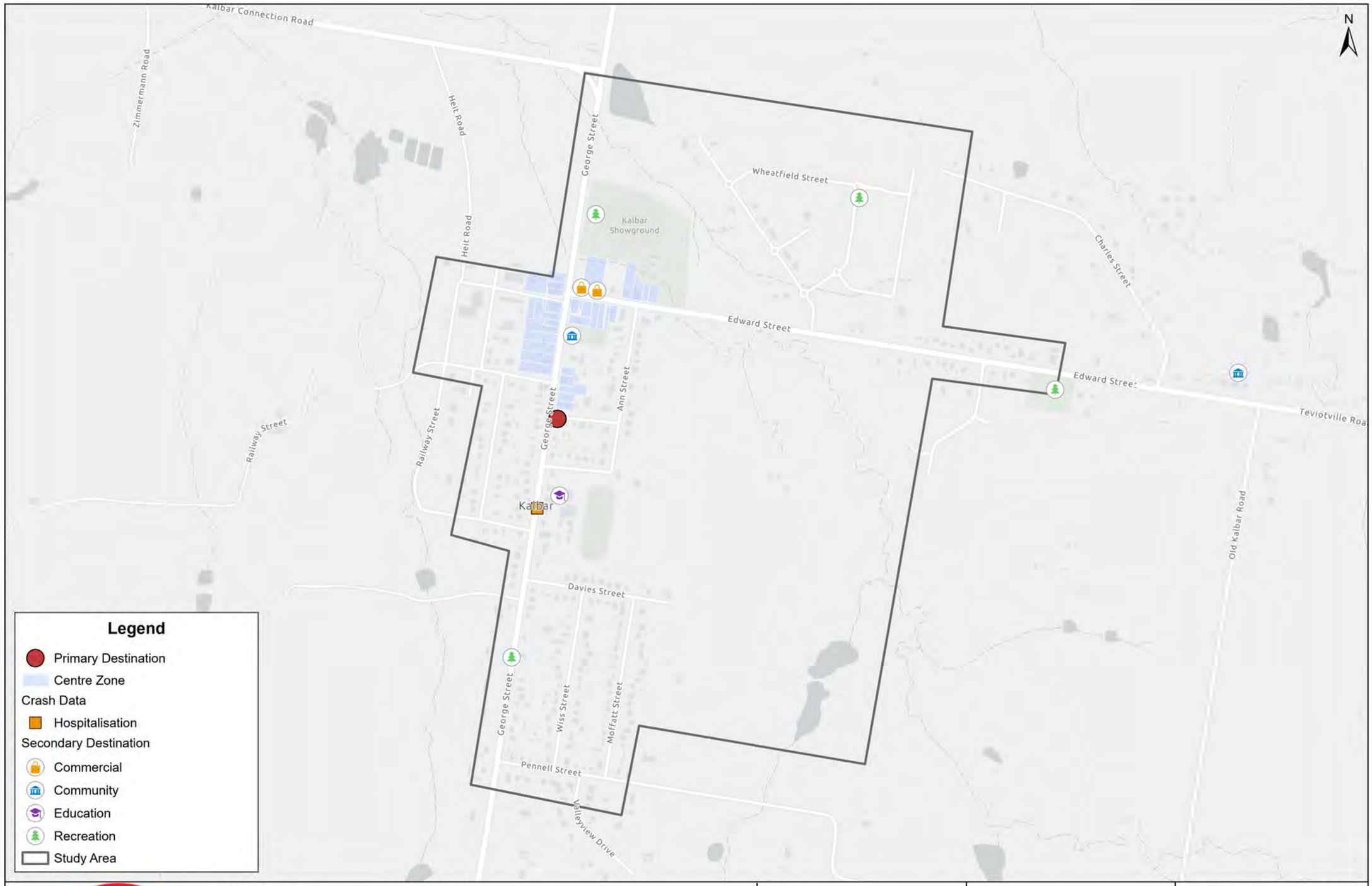

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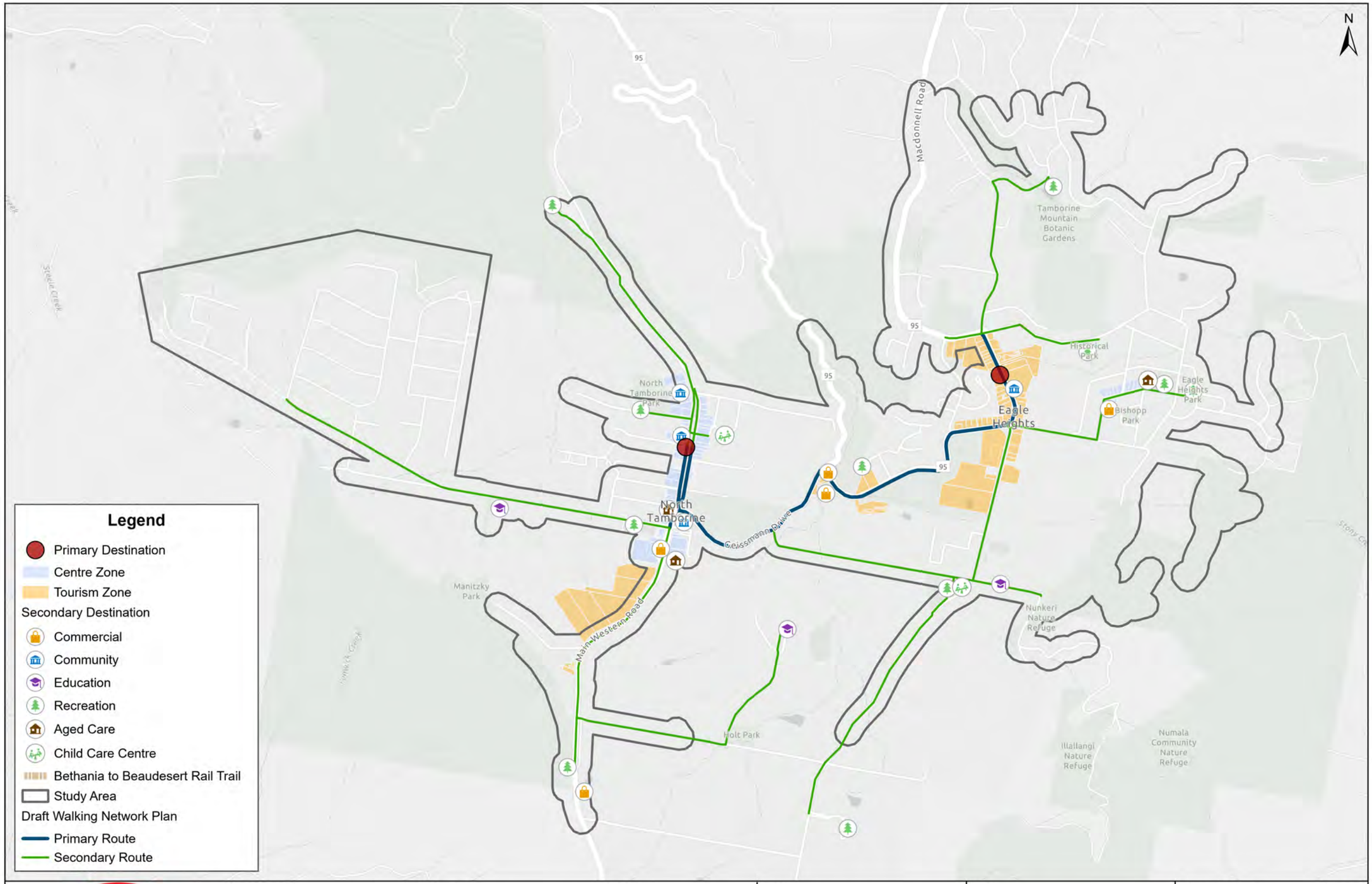
Issue:	1

Appendix H: Draft Walking Network Plan



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Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Draft Walking Network Plan Tamborine Mountain Study Area
Project Number:	P6364
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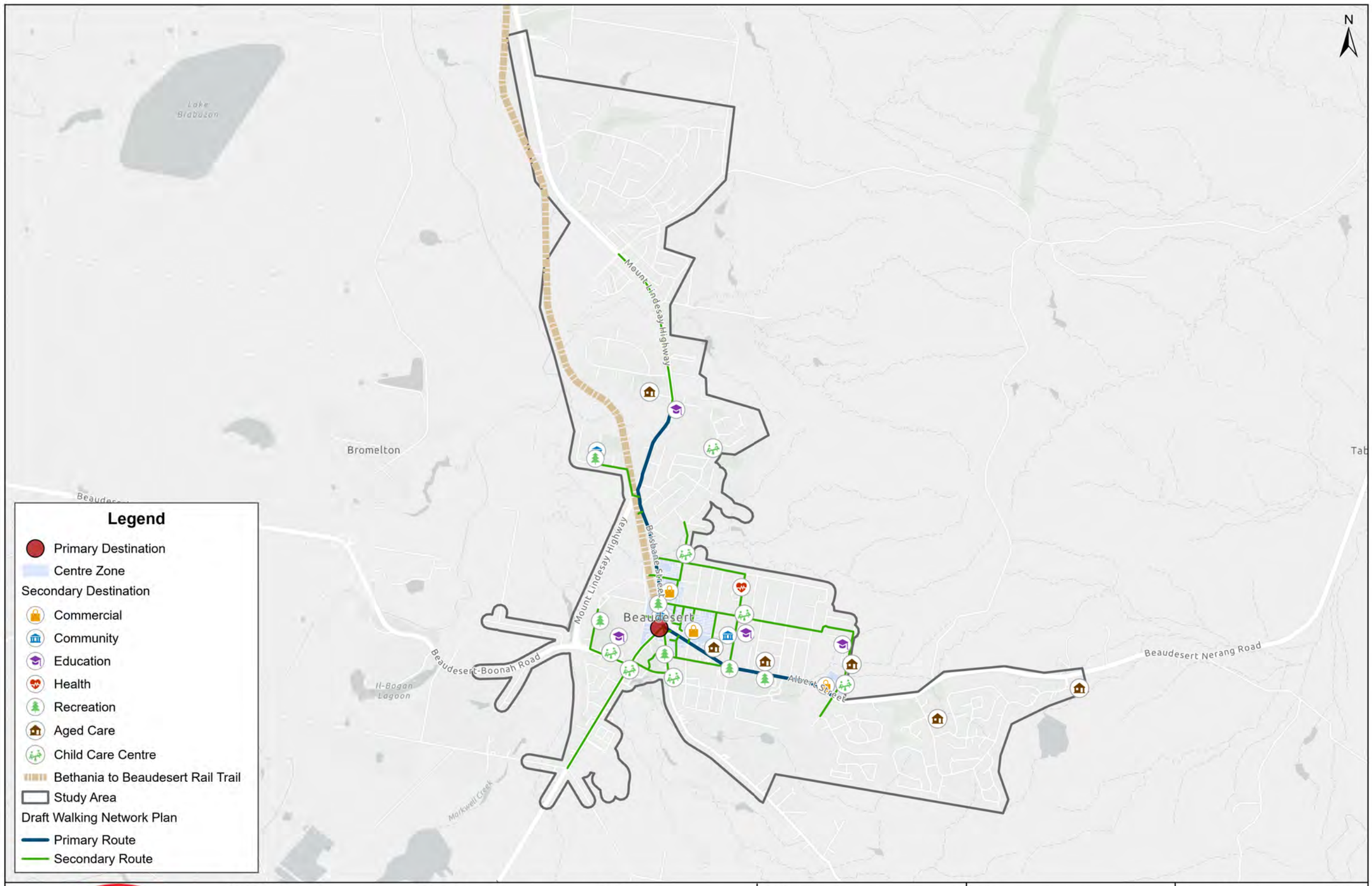
Issue:	2



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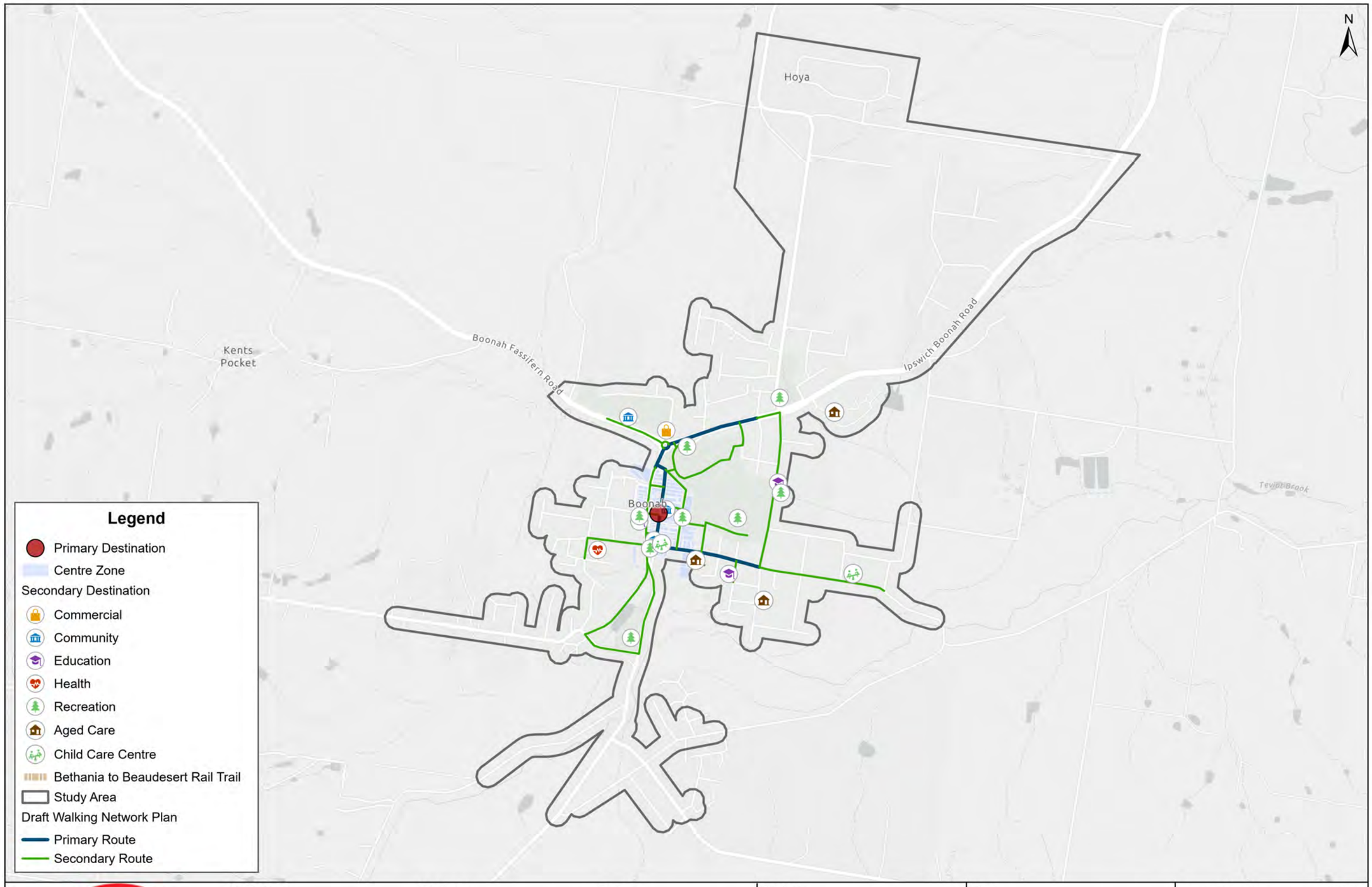

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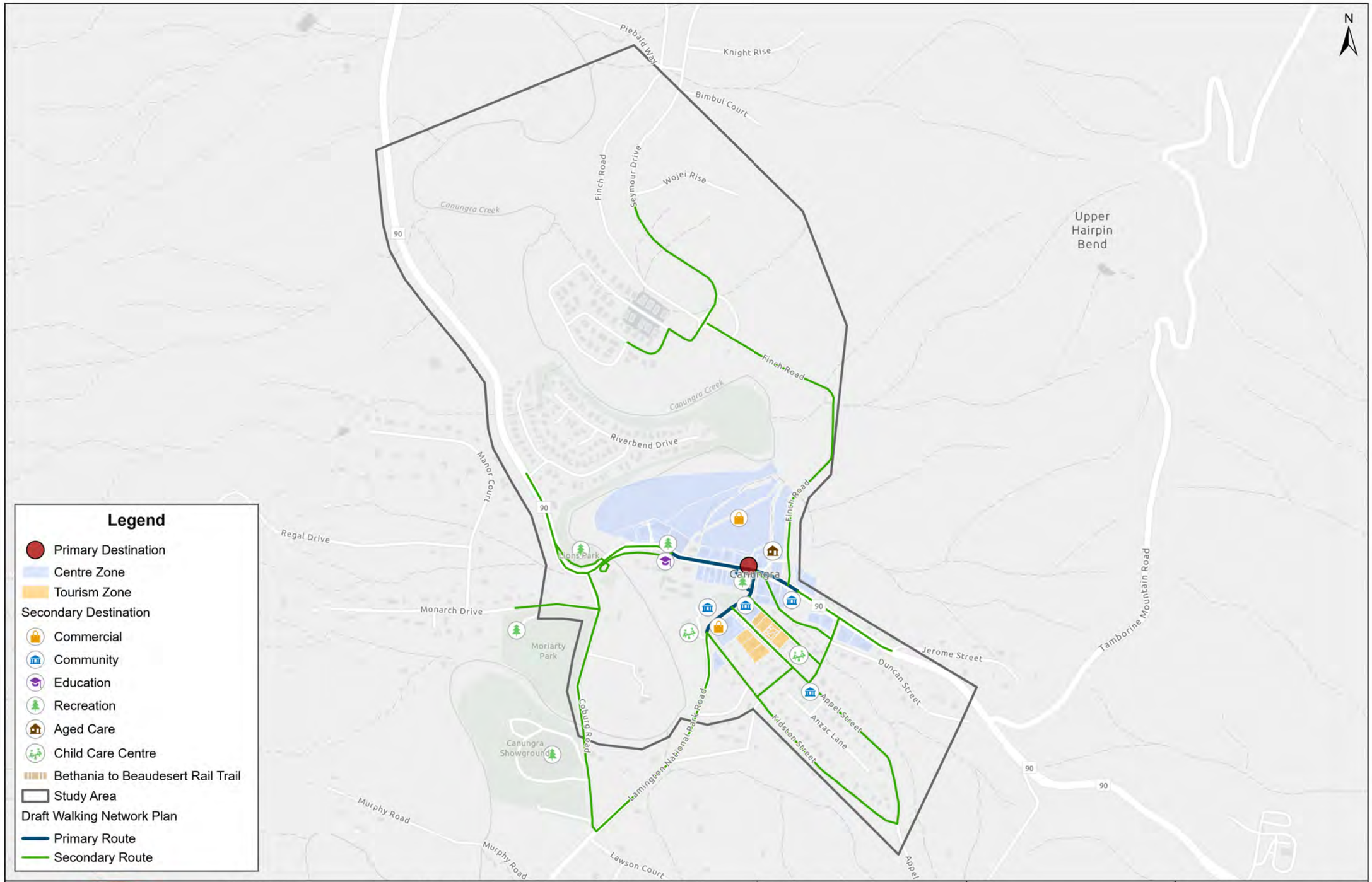

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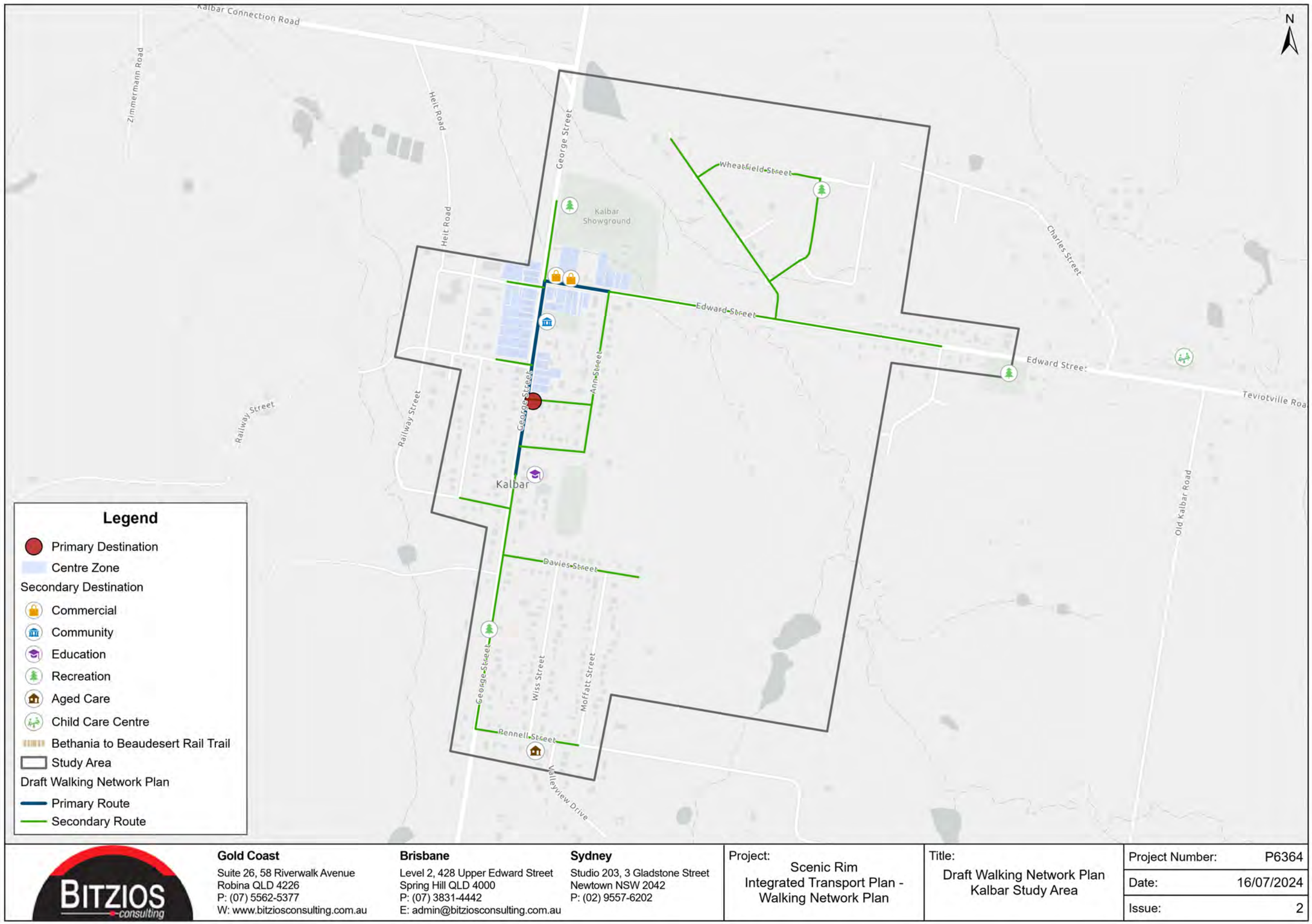

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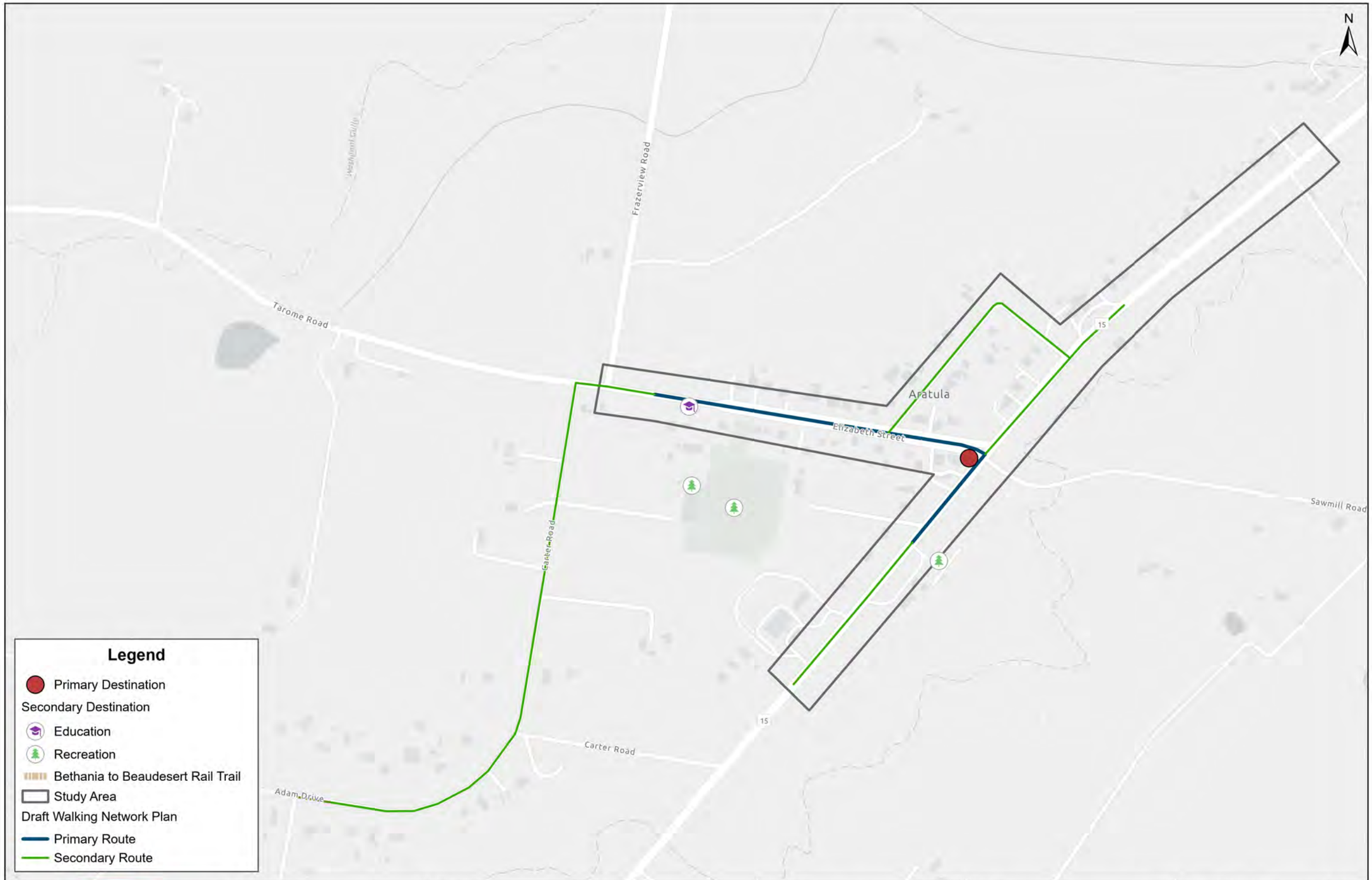

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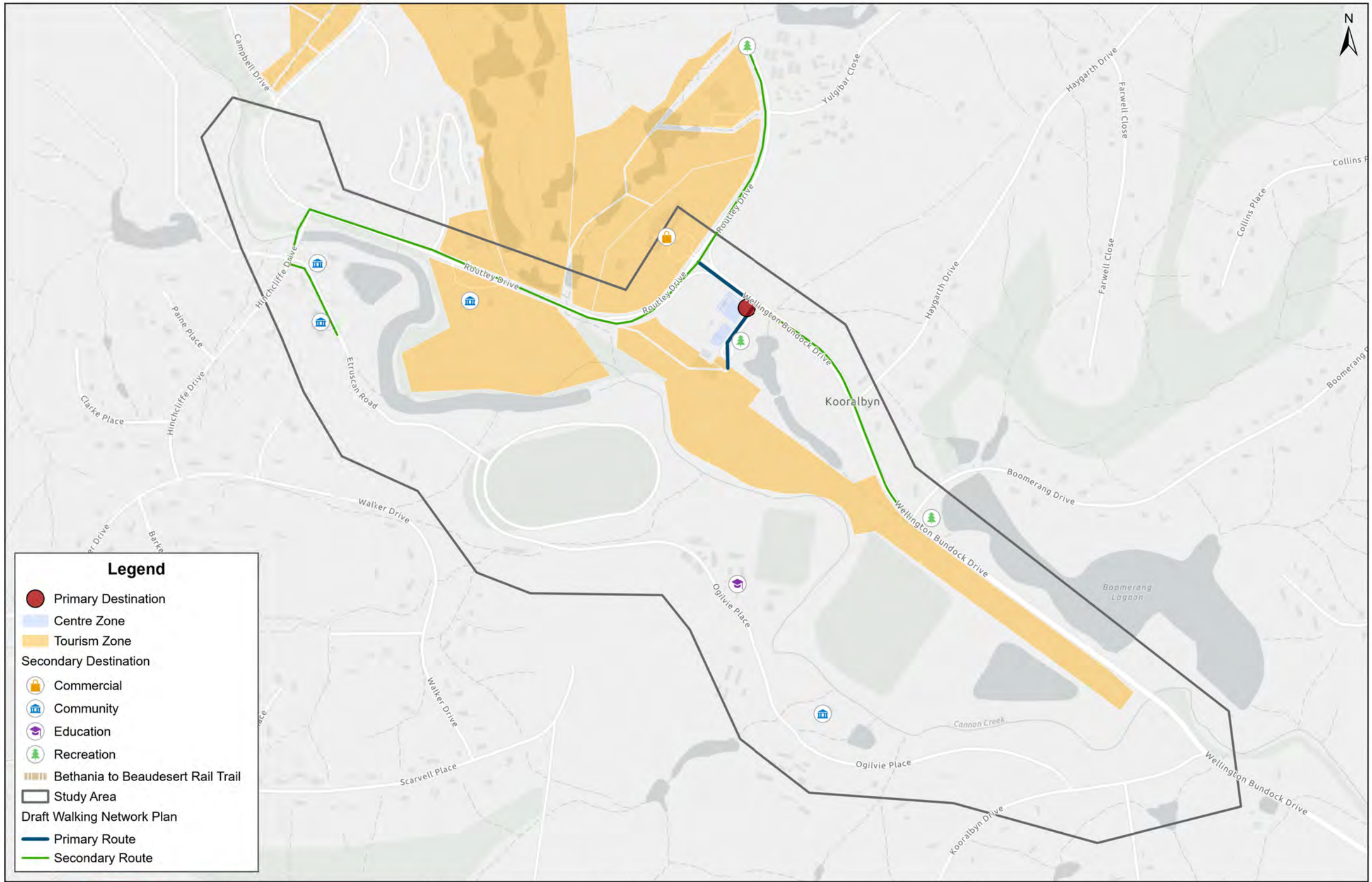

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Issue:	2

Appendix I: Interim Community Engagement Report

Leisa Prowse
CONSULTING

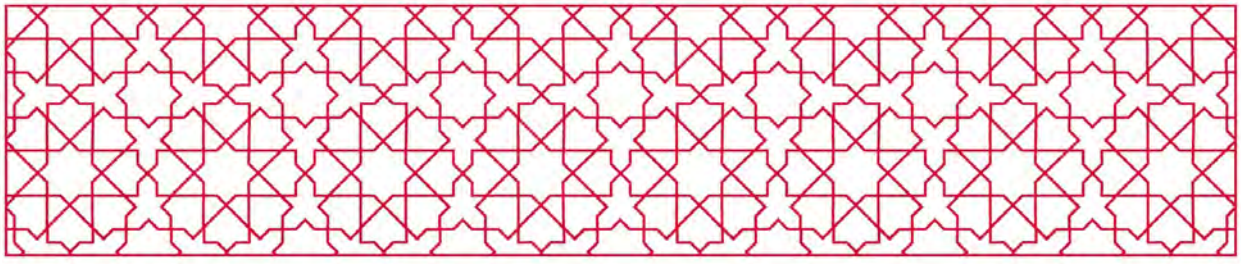
Scenic Rim Regional Council
Integrated Transport Plan
Stage 1 - Interim Community Engagement Report

September 2024

Document Control Sheet

Version History

Version	Date	Author	Reviewer	Action
1.0	25/09/24	Sophie Perissinotto Anna Uhr	Anna Uhr	Issued to Bitzios Consulting for review.
1.1	3/10/2024		Bodie Campbell	Bitzios Consulting review.
2.0	4/10/2024	Sophie Perissinotto	Council	Updated and issued to Council.
2.1	25/10/2024	Anna Uhr Sophie Perissinotto		Incorporating Council comments



Contents

Leisa Prowse Consulting

1 Introduction

Scenic Rim Regional Council (Council) is developing an Integrated Transport Plan (ITP). The ITP will help Council to better plan for the transport needs of the people across the Scenic Rim Region.

The Scenic Rim Region is projected to grow at an annual rate of 2%, reaching an estimated population of 67,000 by 2041. The projected population increase is expected to bring additional employment opportunities around the region. Rapidly rising population growth in neighbouring local government areas such as the Gold Coast, Ipswich and Logan will place further demand on the transport infrastructure in the Scenic Rim.

Council is developing the ITP to ensure that transport networks and connections in the Scenic Rim can grow with the population, meet increasing demand and are efficient, safe, reliable, accessible and sustainable. The ITP will be informed by a series of technical reports and community and stakeholder feedback.

The ITP will respond to the unique needs of the Scenic Rim by providing a strategic plan to guide works and upgrades for the road network, walking and cycling network and transport connections. The plan will also inform strategic planning documents, such as the Local Government Infrastructure Plan (LGIP).

Council has previously undertaken studies where transport, connectivity and mobility have been identified as priority issues for the Scenic Rim community including:

- Council Growth Management Strategy 2041
- Sport and Recreation Plan 2024-2034
- Health and Wellbeing Program Review
- Master planning projects, i.e. town centre Kalbar and Canungra (ongoing)
- Scenic Rim Community Plan 2011 - 2026
- Scenic Rim Planning Scheme 2020 – Strategic Framework
- Scenic Rim 2026 Corporate Plan.

Feedback provided by community members and stakeholders relating to transport was considered when designing this engagement process.

This document reports on Stage 1 stakeholder and community engagement. Stage 1 of engagement launched on Monday 22 July 2024 and concluded on Monday 2 September 2024.

This report outlines:

- the engagement aims and goals
- the engagement approach
- engagement activities, and who were involved
- feedback from the engagement activities
- key findings and insights.

2 Engagement approach

The goal of Stage 1 engagement was to reach a broad range of community members and stakeholders and hear about their current travel behaviour, experience, the issues they have faced and the ideas they have about travelling in and around the Scenic Rim.

The engagement is planned in two stages.

- **Stage 1: Informing the Draft Integrated Transport Plan**, which involves technical investigations and explores community and stakeholder experiences of travelling across road networks, walking paths, cycling routes and transport connections to inform the Draft ITP.
- **Stage 2: Commenting on the Draft Integrated Transport Plan,** which will make sure the plan meets the transport needs of the region and addresses any issues or concerns raised from the Stage 1 engagement.

An overview of the engagement approach is displayed in Figure 1.

The engagement process included a variety of engagement activities and communication tools to promote the engagement activities. These activities encouraged broad online engagement across the region, and opportunities for in-person conversations at some suburbs, towns and villages.

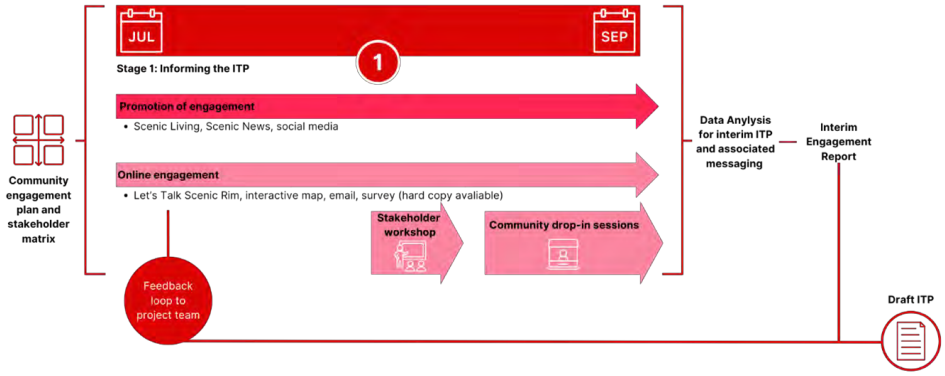


Figure 1: Engagement approach

2.1 Identified stakeholders

A range of stakeholders with an anticipated interest in the ITP were identified. These stakeholders included the following groups:

- Scenic Rim Regional Council Councillors
- Scenic Rim Regional Council staff
- Queensland Government agencies with an interest in roads and active transport
- schools located in the Scenic Rim
- buses and transport businesses in the Scenic Rim
- community interest groups and associations
- businesses in key town centres
- businesses and organisations in key industries of tourism, transport, disability transport
- environmental organisations
- active transport community groups and organisations
- local media outlets
- interested community members.

3 Engagement activities, respondents and reach

The feedback and data captured during the engagement process is detailed below.

Stage 1 of the engagement process ran for 6 weeks, from Monday 22 July to Monday 2 September 2024. During Stage 1 of engagement:

- 160 online survey responses were received
- 3 hard copy surveys were received
- 132 'pins' and associated comments were placed on the interactive map
- 79 community members spoke to a project team member at the drop-in sessions
- 14 stakeholders attended the stakeholder workshop
- 256 flyers were distributed
- 1,036 page visits were captured on the Let's Talk Scenic Rim project page and it continues to grow, currently at 1,128 page visits.

Section 4 of this report analyses in detail the ideas, insights and observations received by the project team during the engagement period.

3.1 Survey (online and hard copy)

The online survey was available on the Let's Talk Scenic Rim project page through the engagement period. 160 responses were received during this time.

The printed hard copy survey generally reflected the online survey. Printed copies of the survey were made available at Council Customer Contact Centres in Beaudesert, Boonah, Tamborine Mountain Library, and Canungra Library. Hard copy surveys were displayed at the drop-in sessions and were available to download from the Let's Talk Scenic Rim project webpage. 3 hard copy surveys were returned during the consultation period. A copy of the hard copy survey is provided at Appendix A.

The survey captured information about travel experience in, around and through the Scenic Rim Region. Questions in the survey included:

- the most common journeys taken in a week and the purpose of that journey
- the mode of transport used and if the respondent has access to a car
- the current experience of respondents travelling in the Scenic Rim
- the current experience of respondents using active transport (walking and cycling)
- the biggest issues travelling around the Scenic Rim
- future priorities for transport
- the experience of travelling around the Scenic Rim for respondents with additional mobility needs and family of those with additional mobility needs.

The survey also allowed respondents to provide a different, or other, response to most multiple-choice questions.

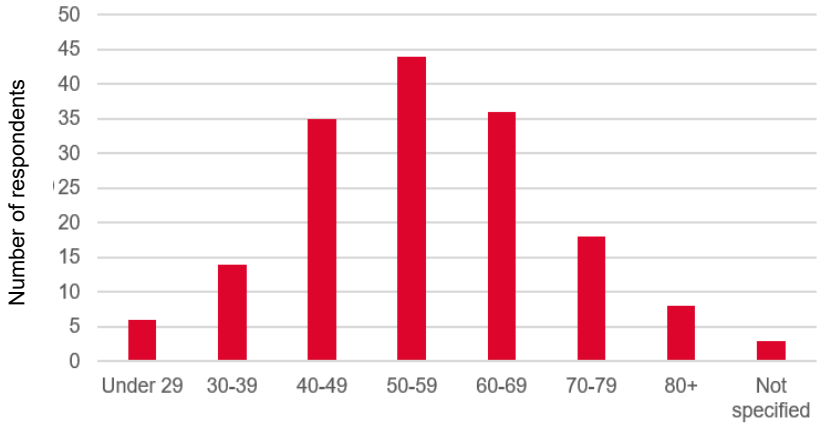
Open-ended questions in the survey explored:

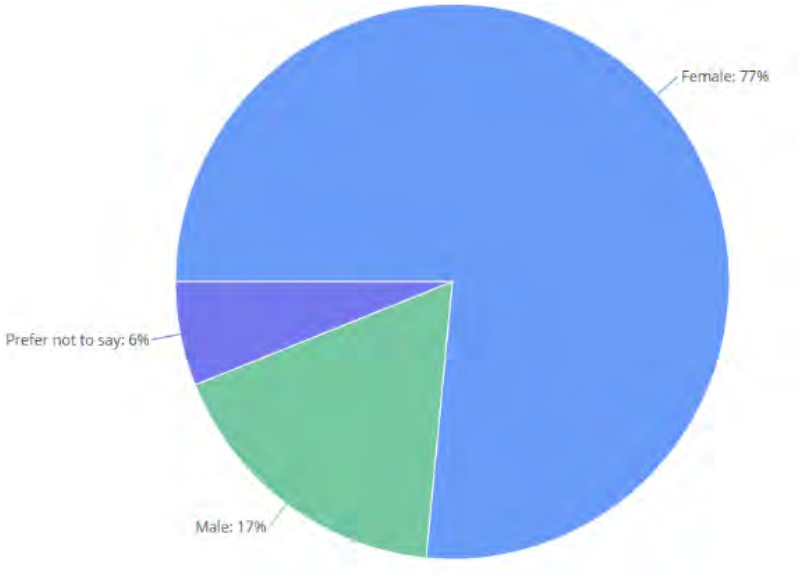
- more detail about travel experience
- more detail about travel experience for people with additional mobility needs.

Let's Talk Scenic Rim gathers demographic information as part of user registration. This was a required step before the online survey could be completed. Additional demographic questions were added to the hard copy survey.

A summary of feedback from the survey is further detailed in section 4 of this report. Verbatim feedback received in the survey is attached in Appendix B.

The most popular age group for survey respondents was between 50–59 years. Most survey respondents are female. Refer to Figures 2 and 3.





Figures 2 and 3: Age and sex of survey respondents

22% of respondents live in Boonah, as seen in Table 1. The next largest number of respondents live in Beaudesert (14%) and Kooralbyn (14%).

Table 1: Where do respondents live

Suburb	%	Number of respondents	Suburb	%	Number of respondents
Boonah	22%	35	Bromelton	1%	1
Beaudesert	14%	23	Bunjurgen	1%	1
Kooralbyn	14%	22	Cedar Grove	1%	1

Tamborine Mountain	9%	15	Ferny Glen	1%	1
Mount Tamborine	4%	6	Frenches Creek	1%	1
Canungra	3%	5	Greenbank	1%	1
Dugandan	3%	5	Hoya	1%	1
Gleneagle	3%	5	Moorang	1%	1
Tamborine	3%	5	Mount Alford	1%	1
Boyland	2%	4	North Tamborine	1%	1
Beechmont	2%	3	Obum Obum	1%	1
Kalbar	2%	3	Peak Crossing	1%	1
Eagle Heights	1%	2	Rathdowney	1%	1
Moogerah	1%	2	Roadvale	1%	1
Veresdale Scrub	1%	2	Springwood	1%	1
Allenview	1%	1	Undullah	1%	1
Auchenflower	1%	1	Witheren	1%	1
Dangandan	1%	1	Wongawallan	1%	1
Darlington	1%	1	Yamanto	1%	1
Barney View	1%	1	Net	100%	162
Brisbane City	1%	1			

Most survey respondents (63, 47%) live, work and pay rates in the Scenic Rim (Figure 4). Few respondents are visitors to the Scenic Rim (21 respondents), or work in the Scenic Rim (7 respondents) without living in the area. Respondents who are visitors to the Scenic Rim live in Brisbane, Logan and Ipswich local government areas.

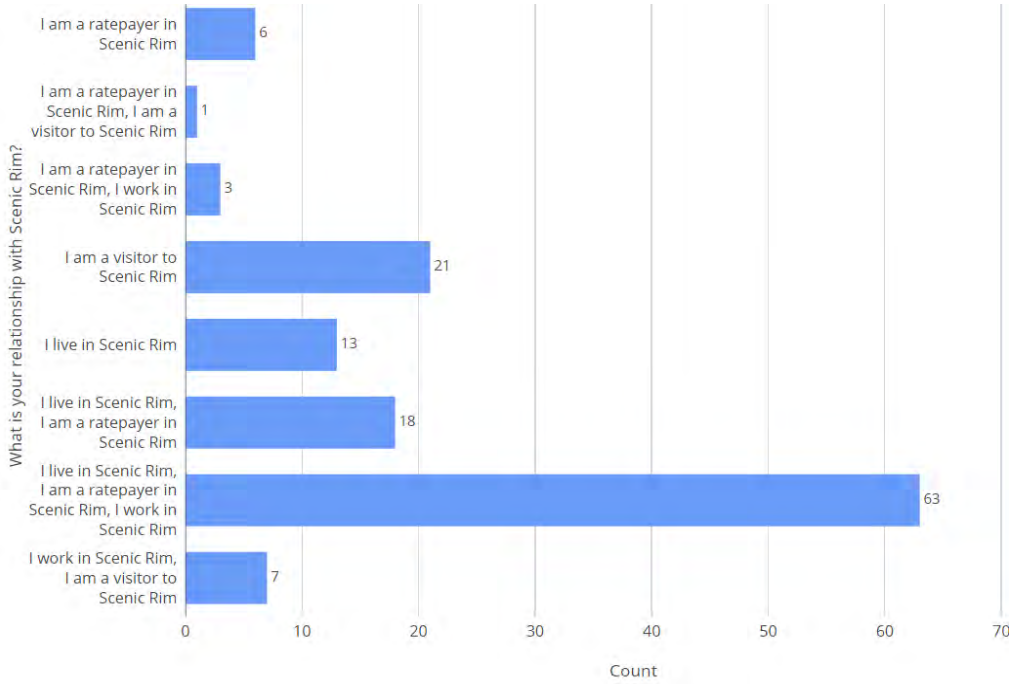


Figure 4: Survey respondents' connection with the Scenic Rim

3.2 Interactive map

The interactive map was available on Let's Talk Scenic Rim from 22 July 2024 to 2 September 2024. 34 community members placed 132 pins on the map. The map included 6 different pin categories: road safety, traffic congestion, walking, cycling, bus, and heavy vehicle/farm vehicle. Respondents could add up to 6 'pins'.

The top category of pin was walking followed by road safety (Figure 5).

Further analysis of the interactive map is discussed in section 4 of this report.

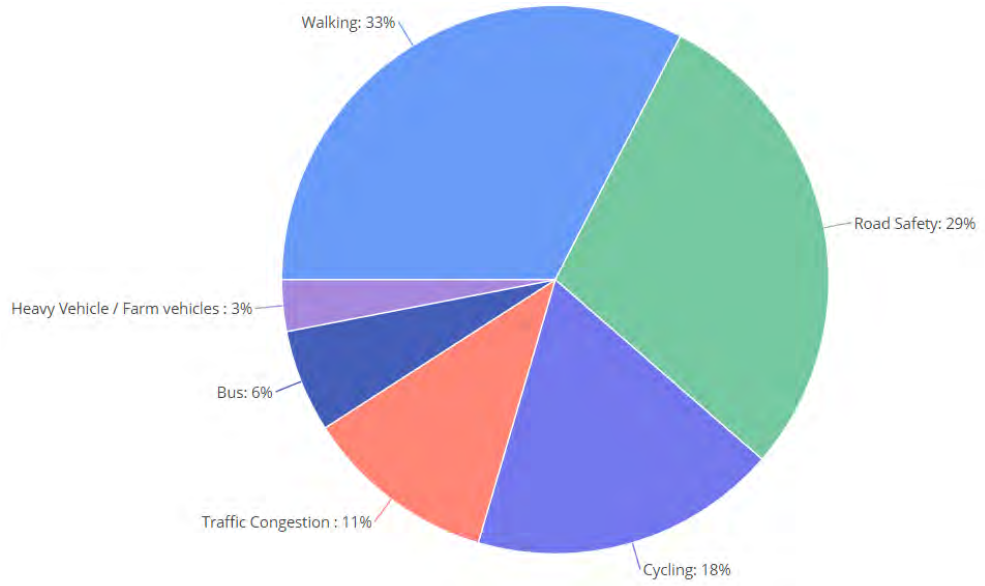


Figure 5: Categories of feedback provided on the interactive map

3.3 Drop-in sessions

5 drop-in sessions were held across the Scenic Rim Region, at:

- Canungra, on Sunday 11 August 2024 from 9am-11am at Canungra Village Markets
- Beaudesert, on Thursday 22 August 2024 from 9am-11am at Beaudesert Library
- Boonah, on Saturday 24 August 2024 from 7am-11am at Boonah Country Markets
- Tamborine Mountain, on Sunday 25 August 2024 from 8.30am-11.30am at Tamborine Mountain State School Markets
- Harrisville, on Sunday 31 August 2024 from 9.30am-11.30am at the Harrisville Agricultural Expo.

The project team had 79 conversations with community members who visited a drop-in session and handed out 256 project flyers.

The feedback captured at the drop-in sessions is discussed in section 4 of this report.

3.4 Stakeholder workshop

The project team held a stakeholder workshop on Thursday 22 August 2024 from 1pm-4pm at The Centre in Beaudesert.

The workshop aimed to gather feedback from stakeholders representing a range of community groups, businesses and organisations in the Scenic Rim about their insights, issues and ideas about travel in, around and through the region. The workshop included 5 activities which are analysed in section 4 of this report.

14 stakeholders attended the workshop.

3.5 Project promotion

The project was launched on Monday 22 July 2024 through email to registered users on Let's Talk Scenic Rim. 74 users opened the Let's Talk Scenic Rim project page from the launch email in the first week of the engagement period (22 – 28 July 2024).

The project was promoted through 6 posts on Council's LinkedIn and Facebook pages during the consultation period. The posts received a combined 40 reactions and 8 reposts. There were 547 'clicks through' to the Let's Talk Scenic Rim project page from social media posts.

A flyer was designed to advertise the project. The flyer included a short introduction to the project, the purpose of the project and engagement activities. The flyer also included a QR code which directed people to the Let's Talk Scenic Rim project page. The poster was distributed to local libraries and sent via email to local schools. A copy of the project flyer is provided at Appendix A.

The project was promoted in the following online and traditional media publications:

- Scenic Living in June 2024
- Scenic Rim Regional Council website on 19 September 2024
- Beaudesert Bulletin on 23 August 2024
- Beaudesert Times on 30 August 2024.

4 Engagement findings

This section of the report summarises community and stakeholder feedback captured throughout the engagement process. Analysis of this feedback paints a clear picture about aligned community and stakeholder priorities, and areas where there are differing views and opinions.

The analysis outlined in this section of the report includes:

- analysis of data captured through the survey
- analysis of data captured through the interactive map
- analysis of the most common themes discussed at the drop-in sessions
- analysis of feedback received at the stakeholder workshop.

The project team also used the feedback provided on maps to guide their technical assessments.

4.1 Survey

Feedback captured through the survey related to:

- current experience with the transport network
- current and potential future issues with the transport network
- current journeys and trips
- experience for people with additional mobility needs.

4.1.1 *Current experience with the transport network*

The most common responses from the survey indicated that respondents:

- have regular access to a motor vehicle (97%) and mainly travel by private car (98%)
- have mixed experiences in travel, being 'sometimes good and sometimes bad' (44%)
- sometimes (35%) walk as a method of transport, but think that walking is not well catered for in the Scenic Rim overall (46%) and would prefer to walk more often as a method of transport (74%)
- regularly (31%) or sometimes (34%) walk for recreation and would like to do it more often (84%)
- rarely (32%) or never (37%) cycle as a method of transport and think that cycling is not well catered for in the Scenic Rim (44%), but would like to cycle more often as a method of transport (65%)
- sometimes (37%) or rarely (26%) cycle for recreation and would like to do it more often (80%).
- think the current transport system does not work well for the community (79%).

When asked what would need to happen for them to walk more often as a method of transport, the most popular response was 'better connected walking paths' (126 selections) (Figure 6).

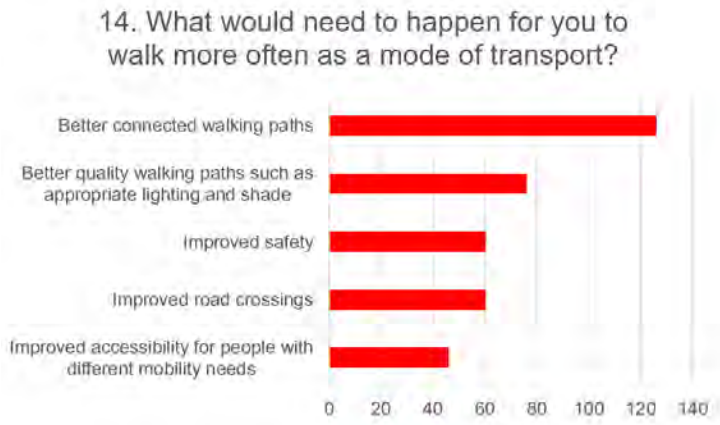


Figure 6: Responses to 14. What would need to happen for you to walk more often

Respondents were able to select multiple suggested changes in response to this question. When further analysing these responses by the home suburbs, towns or villages with the most respondents, the top responses were slightly different (Table 1).

Table 1: Priorities for the walking network by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Changes that would encourage respondents to walk more often as a method of transport	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Better connected walking paths	80%	16
	Better quality walking paths	60%	12
	Improved road crossings	40%	8
Boonah	Better connected walking paths	90%	28
	Better quality walking paths	68%	21
	Improved road crossings	45%	14
Kooralbyn	Better connected walking paths	94%	16
	Better quality walking paths	59%	10
	Improved accessibility for people with different mobility needs	53%	9
Tamborine Mountain	Better connected walking paths	100%	14
	Improved safety	57%	8
	Improved road crossings	50%	7

When asked what would need to happen for them to cycle more often as a method of transport, the most popular response was ‘better connected cycling paths’ (76 selections), followed by ‘improved safety’ (63 selections). Respondents were able to select multiple issues in response to this question (Figure 7).

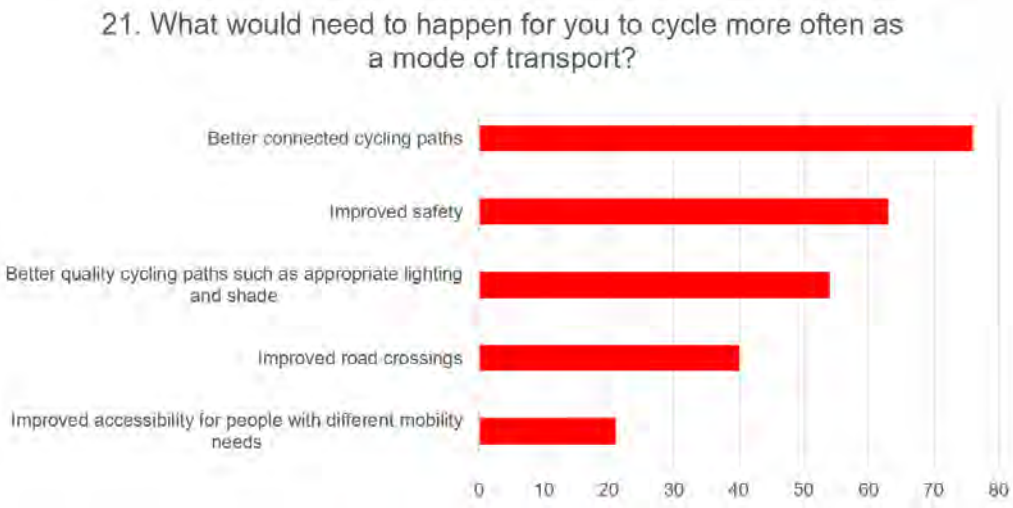


Figure 7: Responses to 14. What would need to happen for you to cycle more often

When further analysing these responses by the home suburbs, towns or villages with the most respondents, the responses placed ‘better quality cycling paths’ as a higher priority (Table 2).

Table 2: Priorities for the cycling network by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Changes that would encourage respondents to walk more often as a method of transport	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Better connected cycling paths	86%	12
	Better quality cycling paths	64%	9
	Improved road crossings	57%	8
	Improved safety	57%	8
Boonah	Better connected cycling paths	82%	18
	Better quality cycling paths	59%	13
	Improved road crossings	36%	8
Kooralbyn	Better connected cycling paths	86%	6
	Better quality cycling paths	71%	5
	Improved safety	71%	5
	Improved road crossings	57%	4
Tamborine Mountain	Better connected cycling paths	88%	7
	Improved safety	75%	6
	Better quality cycling paths	38%	3
	Improved road crossings	38%	3

These responses indicate that respondents from across the Scenic Rim would like to see the active transport network be more connected. This was the top response for all towns and villages to both questions.

When it comes to the walking network:

- Beaudesert, Boonah, Kooralbyn and Tamborine Mountain highlighted the quality of walking paths as a second priority.
- Respondents from Kooralbyn also highlighted potential for accessibility improvements.

When it comes to the cycling network respondents from all towns and villages prioritised path quality, with Tamborine Mountain respondents also prioritising safety.

The survey included an open-ended question asking respondents to expand on their current experience with travel in the Scenic Rim. Most responses related to the following common themes:

- road condition and maintenance (e.g., pavement condition and potholes)
- traffic congestion
- reliance on cars
- road safety and safety from drivers (e.g., safety concerns from road maintenance, speeding and road accidents)
- public transport
- active transport safety and accessibility (e.g., lack of connected and safe paths)
- access to services and facilities (e.g., distance to health services and speciality stores)
- access and parking (e.g., lack of parking at a destination, roads impacted by flooding, difficult intersections limiting access to an area)
- indirect roads (e.g., meandering or slow routes)
- mobility challenges and disability.

Figures 8 and 9 illustrate the responses to each open-ended question by theme. The most common theme of response was road condition and maintenance, which was mentioned in 85 responses.

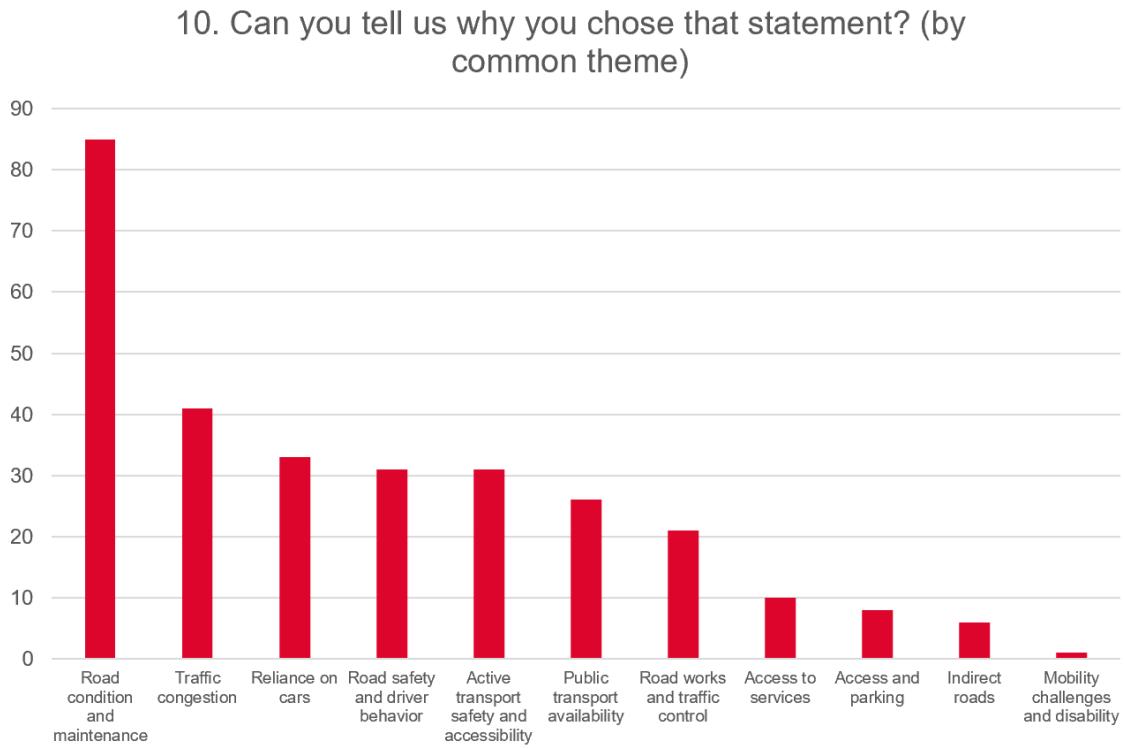


Figure 8: Common themes from responses to survey question 10

When further analysed by the home suburb of people living in the Scenic Rim, the most significant responses were about road condition and maintenance from people living in Boonah (18 responses) and Kooralbyn (12 responses), and active transport safety and accessibility from people living in Boonah (12 responses). Figure 9 illustrates the theme of comments by home suburb.

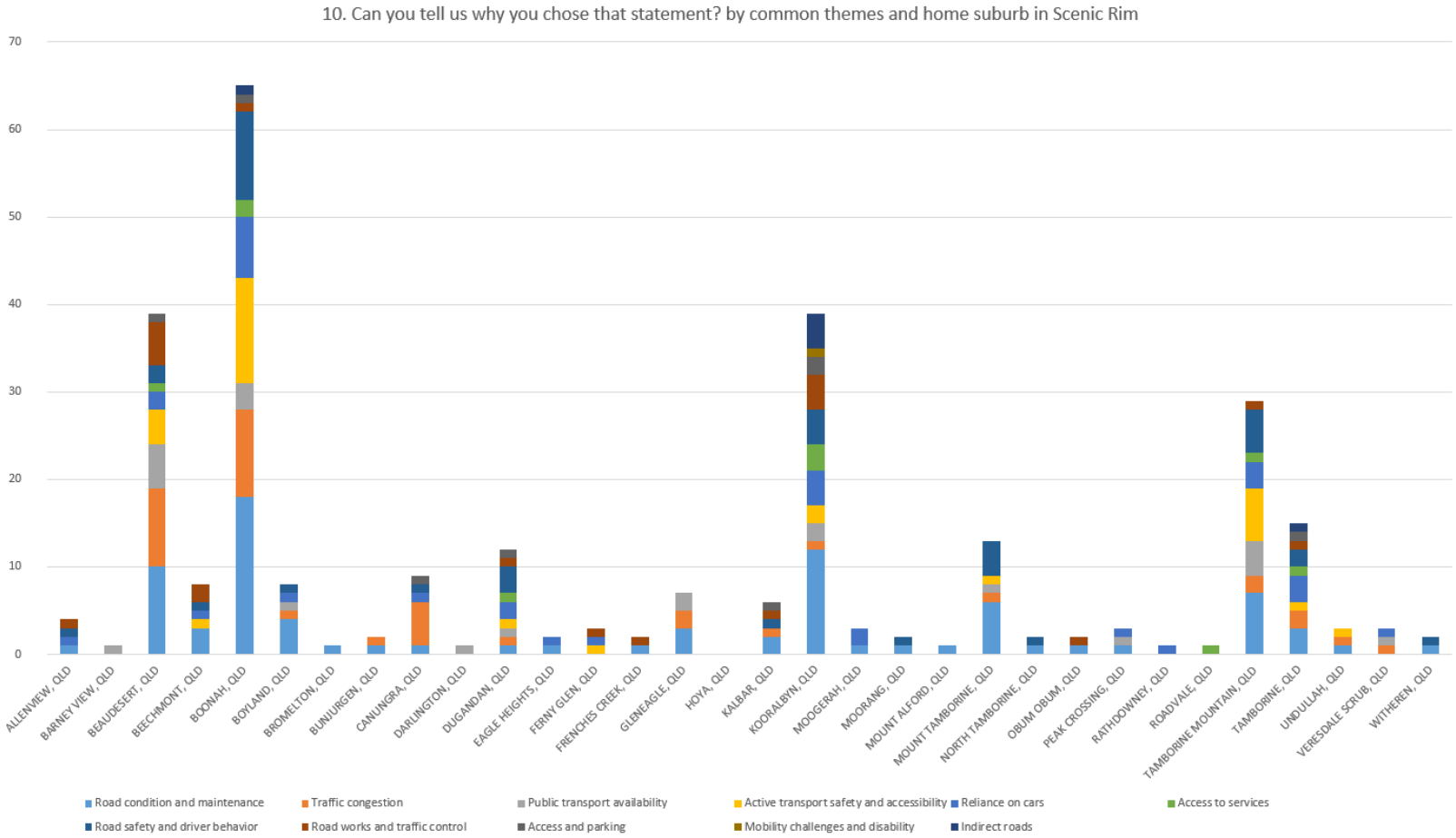


Figure 9: Common themes from responses to survey question 10 by home suburb, town or village

4.1.2 *Current and potential future issues with the transport network*

When asked about the biggest issues for them when travelling in and around the Scenic Rim, respondents selected:

- poor road conditions (73% of respondents selected this option)
- access to public transport services and facilities (55% of respondents selected this option)
- lack of suitable walking and cycling paths (54% of respondents selected this option).

Respondents were able to select multiple issues in response to this question.

However, when further analysing these responses by the home suburbs, towns or villages with the most respondents, the top issues are slightly different (Table 3).

Table 3: Transport priorities by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Priorities	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Poor road conditions	78%	18
	Access to public transport services and facilities	65%	15
	Lack of suitable walking and cycling paths	39%	9
Boonah	Poor road conditions	71%	25
	Lack of suitable walking and cycling paths	69%	24
	Lack of overtaking lanes on major roads	57%	20
Kooralbyn	Poor road conditions	81%	17
	Access to public transport services and facilities	62%	13
	Lack of suitable walking and cycling paths	33%	7
Tamborine Mountain	Lack of suitable walking and cycling paths	73%	11
	Poor road conditions	67%	17
	Access to public transport services and facilities	53%	13

When asked about their top 3 transport priorities for the community in the next 10 years, respondents selected:

- providing safe, accessible and reliable public transport (54% of respondents selected this option)
- higher quality roads connecting towns (52% of respondents selected this option)
- more pedestrian pathways linking residents to key destinations (e.g., school, shops) (36% of respondents selected this option).

When further analysing these responses by the home suburbs, towns or villages with the most respondents, the top transport priorities were:

- providing safe, accessible and reliable public transport for Beaudesert respondents (61%), Kooralbyn respondents (68%) and Tamborine Mountain respondents (67%)
- higher quality roads connecting towns for Boonah residents (60%).

Respondents from each of these towns and villages were concerned about road quality. Concerns about limited overtaking lanes was a significant difference for respondents who live in Boonah. This aligns with the following question, where Boonah respondents selected 'higher quality roads connecting towns' as their top transport priority.

Beaudesert, Kooralbyn and Tamborine Mountain respondents all selected providing safe, accessible and reliable public transport as their top transport priority for the next 10 years. However, these top priorities were very close in number of responses across the region at 54% and 52% respectively.

4.1.3 *Current journeys and trips*

Survey respondents provided their top 3 most common journeys. There were several destinations and reasons that were similar among different respondents (Table 4).

Table 4: Most common destination and reason for the journey for survey respondents

Destination	Reason for journey	Number of respondents
Beaudesert	Shops and other services	42
Beaudesert	Work	29
Boonah	Shops and other services	16
Beaudesert	Medical and health care services	13
Tamborine Mountain	Work	13
Brisbane	Work	12
Boonah	Work	11
Canungra	Shops and other services	9
Ipswich	Medical and health care services	9
Ipswich	Shops and other services	9

The most common journey was to Beaudesert for shops and services. Beaudesert was also the most common location for all journeys.

The most common reason respondents travel to the largest towns and villages in the Scenic Rim are:

- Aratula for work or sports (2 respondents to each)
- Beaudesert for shops and other services (42 respondents)
- Boonah for shops and other services (16 respondents)
- Rathdowney for work (4 respondents)
- Kalbar for shops and services (8 respondents)
- Tamborine Mountain for work (13 respondents).

Figure 10 illustrates the journeys and trips mentioned by survey respondents. The most popular journeys for larger suburbs and towns in the Scenic Rim is listed in Table 5.

Table 5: Most popular journeys and number of respondents who listed this journey

Journey	Number of respondents
Beaudesert – Gold Coast	7
Beaudesert – Boonah	12

Beaudesert – Brisbane	7
Beaudesert – Logan	3
Beaudesert – Canungra	3
Beaudesert – Ipswich	3
Beaudesert – Rathdowney	3
Within Beaudesert	9
Canungra – Beaudesert	8
Boonah – Brisbane	5
Boonah – Beaudesert	22
Boonah – Ipswich	11
Within Boonah	7
Kooralbyn – Brisbane	5
Kooralbyn - Beaudesert	24
Koorlabyn – Tamborine and Tamborine Mountain	5
Rathdowney – Gold Coast	5
Tamborine – Gold Coast	5
Tamborine Mountain – Beaudesert	14
Tamborine Mountain – Canungra	6
Within Tamborine Mountain	10

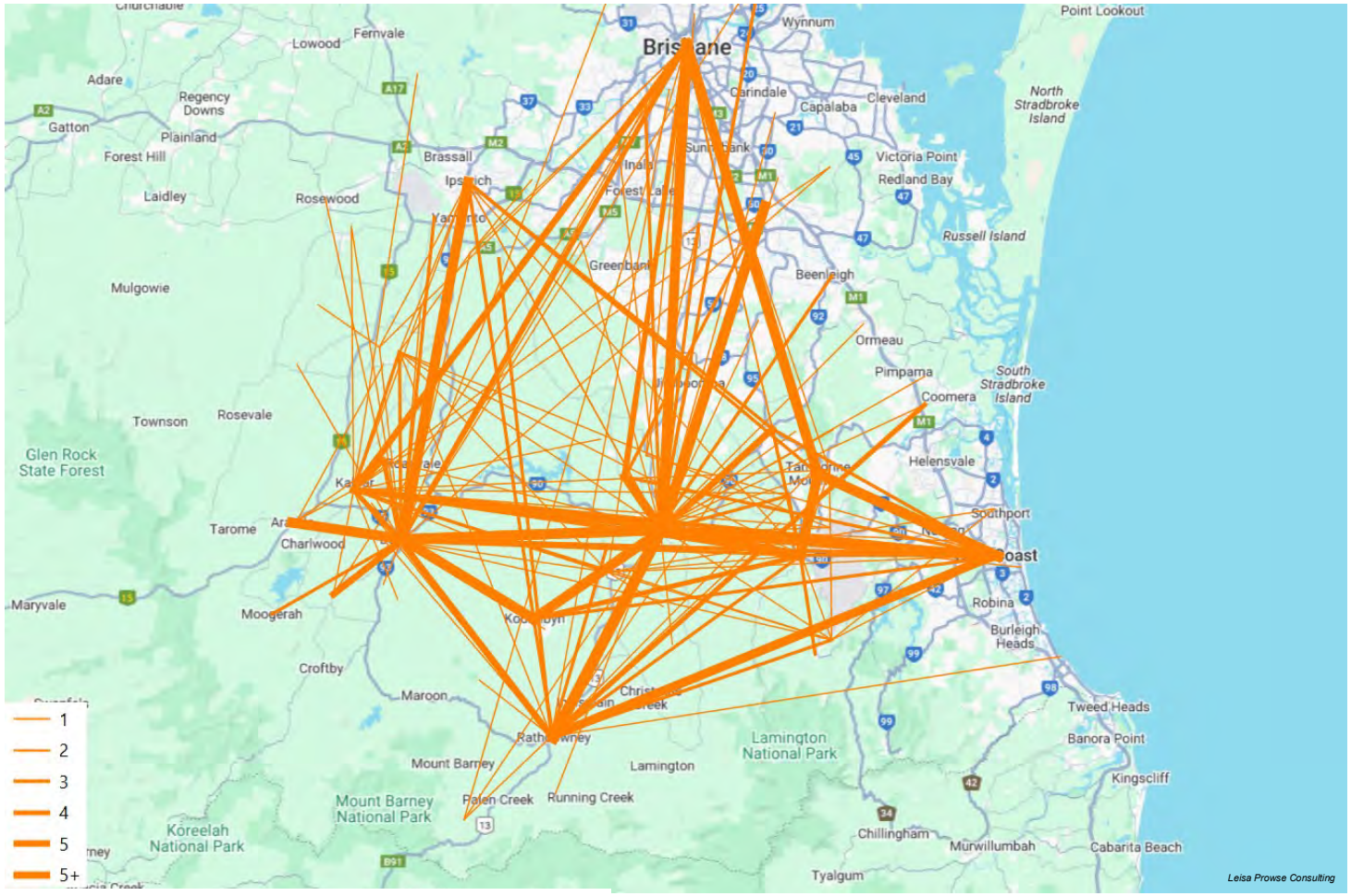


Figure 10: Survey respondents most common journeys

4.1.4 *Experience for people with additional mobility needs*

Most survey respondents said that they do not have any additional mobility needs (90%). However, 88% of the respondents who do have additional mobility needs indicated that these needs impact their travel experience.

When asked to elaborate more on those impacts, respondents mentioned:

- lack of or unmaintained footpaths
- need for additional pedestrian crossings
- difficulties in using mobility devices
- limited person with disability (PWD) car parks
- limited public transport options
- isolation caused from mobility challenges
- reliance on other people for transport
- difficulty in accessing services and facilities.

21% of respondents care for or have a family member who has additional mobility needs. 89% of those respondents indicated that the additional mobility needs of that person impacts their travel experience (89%). Respondents noted similar issues to the previous list of impacts.

4.2 Interactive map

The online interactive map was hosted on Let's Talk Scenic Rim. It asked respondents to write a comment associated with a location and a category. During the engagement period, the interactive map received 132 contributions from 24 contributors.

When making comments, contributors were asked to categorise their contribution by:

- Bus
- Cycling
- Heavy vehicles
- Walking
- Road safety
- Congestion.

The most popular category for contributions was walking (33% of all pins). Figure 11 displays the percentage of comments made on the map by category.

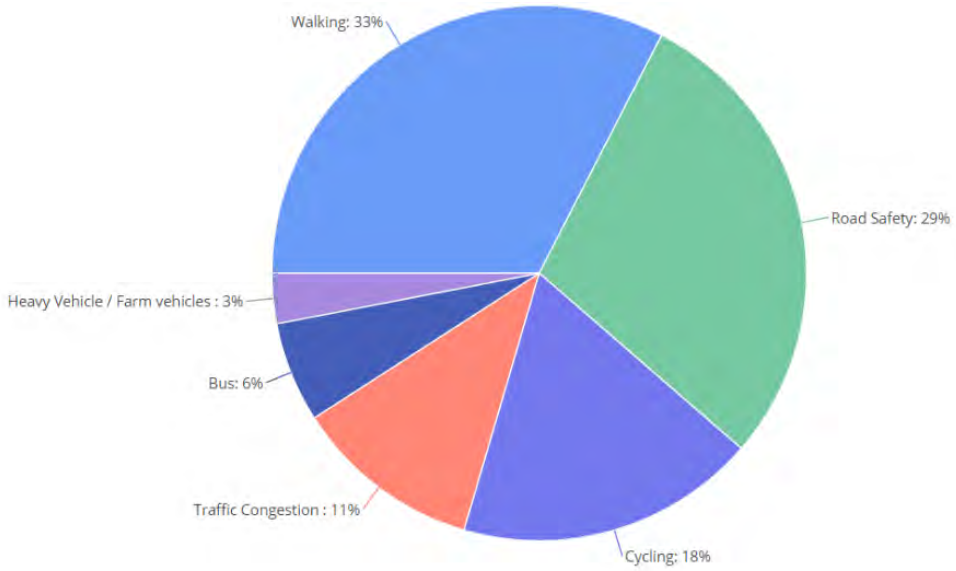


Figure 11: Percentage of interactive map comments by category

Comments provided were analysed to find common themes. The most common themes across all categories were safety concerns, active transport infrastructure and connections, and road condition and maintenance.

These themes reflect the responses provided to open-ended questions in the survey, and feedback received during drop-in sessions.

4.2.1 *Contributions by category*

4.2.1.1 Walking

Contributions related to walking were mainly concerns about safety of the footpath or missing footpaths. Concerns included the slope of the footpath being too steep, missing connections to shops, homes and other attractions, feeling unsafe on the paths and limited signage.

When analysed by theme coding, comments in the walking category related to:

- Safety concerns
- Maintenance and upgrades
- Connectivity.

The largest cluster of contributions was on Boonah, followed by Tamborine and Tamborine Mountain. Most of the comments in Boonah related to suggestions for new paths and the Fassifern Rail Trail, including suggestion to extend the trail, connect to other areas or add a carpark. Comments for Tamborine Mountain related to connections to the Botanic Garden, steep paths, suggestions for new paths and suggestion to improve safety for people walking.

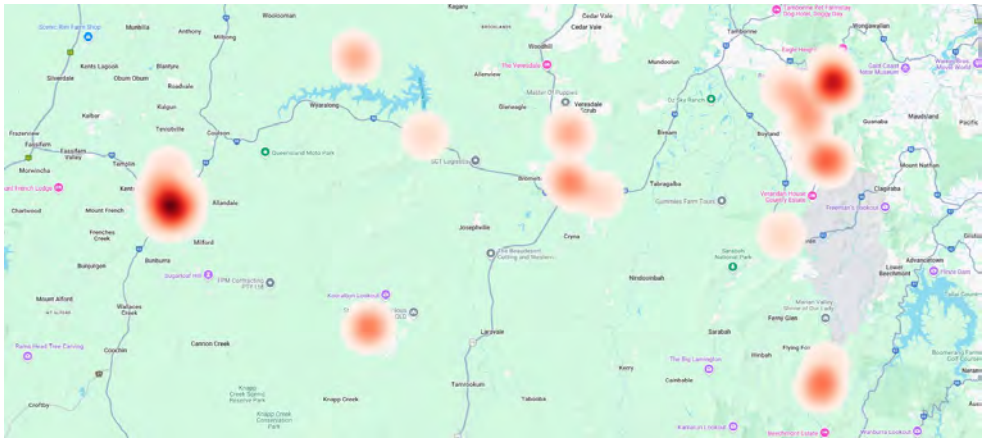


Figure 12: Heat map of interactive map 'pins' about walking

4.2.1.2 Road safety

Contributions related to road safety were mainly concerns about safety on roads and footpaths. Concerns included the condition and maintenance of roads, limited or no pedestrian crossings, safety of intersections and behaviour of drivers.

When analysed by theme coding, comments in the road safety category related to:

- Safety concerns for road user
- Safety concerns for walking
- Maintenance and upgrades.

The largest cluster of contributions was placed around Tamborine Mountain. Most of the comments in the area related to speed limits, road maintenance, congestion, intersection design, behaviour of drivers and road width.

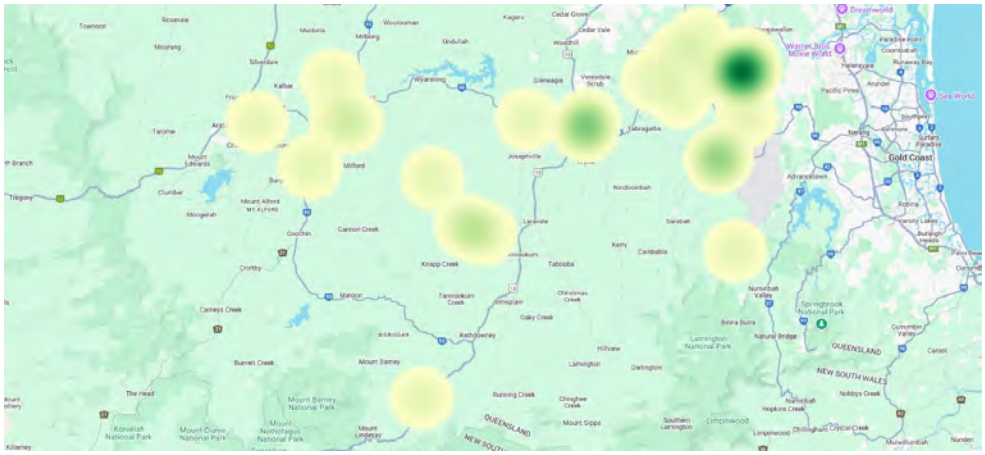


Figure 13: Heat map of interactive map 'pins' about road safety

4.2.1.3 Cycling

Contributions related to cycling were mainly about cycling infrastructure. Concerns included path widths, end of trip facilities, connectivity, suggestions for new bike paths, safety concerns and signage.

When analysed by theme coding, comments in the cycling category related to:

- Cycling infrastructure
- Connectivity.

The largest cluster of contributions was placed around Boonah. Most of the comments in the area related to safety concerns, suggestions to extend the Fassifern Rail Trail and improve signage.

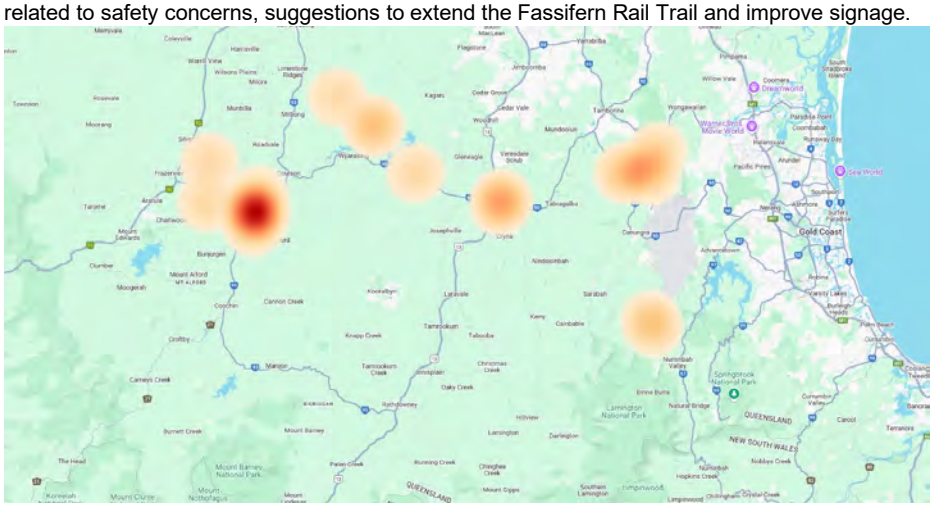


Figure 14: Heat map of interactive map 'pins' about cycling

4.2.1.4 Traffic congestion

The largest cluster of contributions was placed around Tamborine Mountain and Beaudesert. Most of the comments in the area related to congestion from intersections, school hours, new development, suggestion for bypass and visibility.

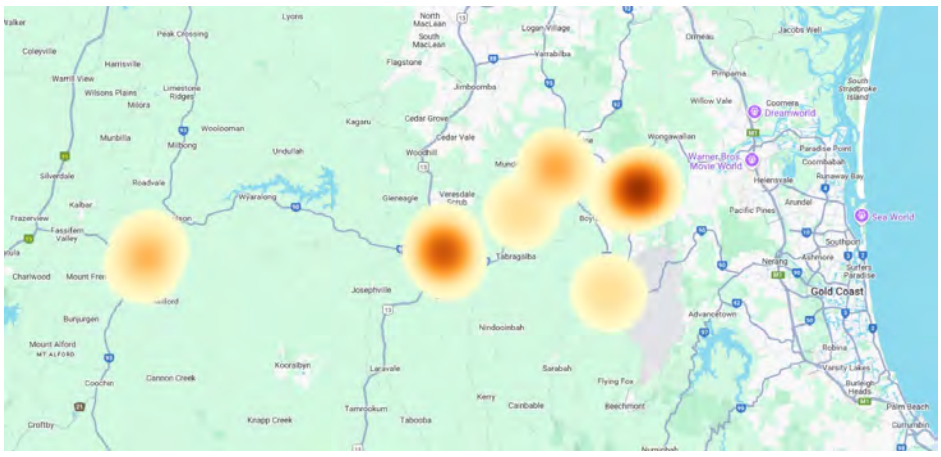


Figure 15: Heat map of interactive map 'pins' about traffic congestion

4.2.1.5 Bus

Contributions related to bus were mainly about suggestions for bus routes or stops. Suggestions included:

- Hop on, hop off bus in Tamborine Mountain, Binna Burra and Lamington National Park
- Bus routes for Boonah, Kalbar, Tamborine Mountain and Beaudesert.

The largest cluster of contributions was placed around Tamborine Mountain.

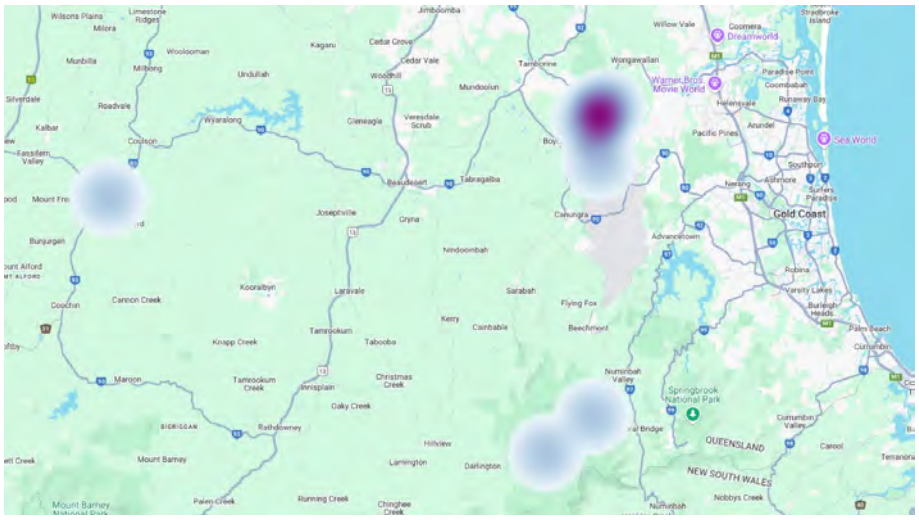


Figure 16: Heat map of interactive map 'pins' about buses

4.2.1.6 Heavy vehicle or farm vehicles

Contributions related to heavy vehicle and farm vehicles were mainly about traffic and safety concerns. Concerns included safety concerns from heavy vehicles and request for more signage.

When analysed by theme coding, comments in the heavy vehicle category related to traffic safety.

The largest cluster of contributions was placed around Boonah. These comments related to signage to limit engine braking.

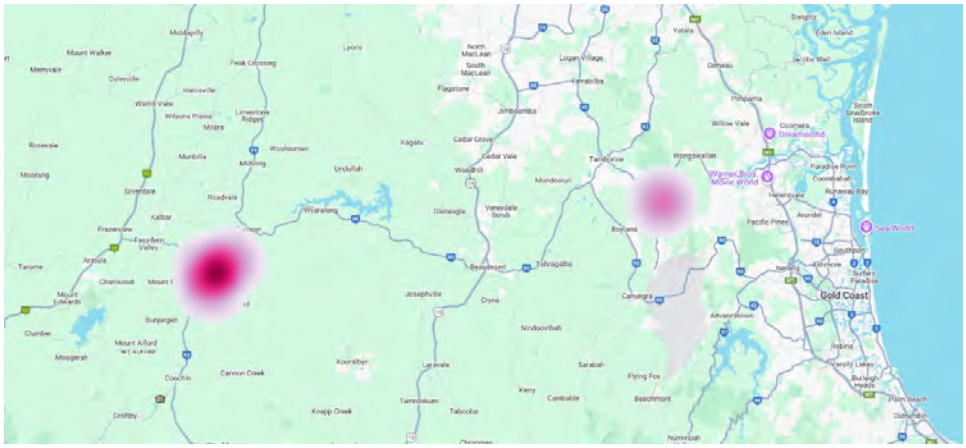


Figure 17: Heat map of interactive map 'pins' about heavy vehicles or farm vehicles

4.3 Drop-in sessions

The project team took summary notes of the discussions with community members at each drop-in session. By going to the places where people gather, insights were captured from passers-by who may not ordinarily engage in such an activity. Most of the visitors who provided their home suburb or town, lived in the area where the drop-in was held.

Conversations with visitors to the drop-ins indicated that the top-of-mind issues for community members were generally consistent with the themes raised in the survey.

Sections 4.3.1 to 4.3.5 breaks down drop-in feedback by location. However, overall, the most common feedback about car travel included road conditions and maintenance, road design, parking and congestion. The most common means of transport discussed at the drop-in sessions was public transport with 39 feedback items.

4.3.1 *Canungra Markets*

Feedback at Canungra Markets generally related to:

- heavy vehicles impacting the road condition
- school buses stopping on the road
- road conditions, including potholes, verge maintenance,
- road safety, including concealed driveways, speeding
- road design, including overtaking lanes and intersections
- traffic congestion in Canungra town centre
- lack of and unmaintained footpaths
- disconnected cycling network.

Figure 18: Canungra Markets drop-in session

4.3.2 *Beaudesert Library*

Feedback at Beaudesert Library generally related to:

- public transport, including the bus timetable, lengthy drive to the train station in Darra or Loganlea, connection between bus and train, opportunity for community bus network, suggestions for new bus routes
- traffic congestion, including during school drop-off and pick-up,
- walking around Beaudesert, nearby hikes, lack of footpaths
- cycling connection to rail trails and cycling routes for children and older people
- road design, including intersections
- limited car parking in Beaudesert
- new housing developments with limited footpaths and connectivity.

4.3.3 *Boonah Country Markets*

Feedback at Boonah Country Markets generally related to:

- the insufficient public transport network, including the need for bus or train connections around the Scenic Rim, as well as to Ipswich, Brisbane and the Gold Coast.
- impacts of car dependency on the mobility of youth and the elderly.
- maintenance of potholes and other road damage caused by extreme weather events
- dangerous speed limits, driver behaviour and concealed driveways in Boonah
- limited street parking in Boonah
- traffic congestion on roads to and from Boonah, as well as the lack of overtaking lanes
- the lack of safe footpaths and pedestrian crossings
- access to health care, via affordable community transport for the elderly the dangers of uneven footpaths for mobility vehicle users.

4.3.4 *Tamborine Mountain State School Markets*

Feedback at Tamborine Mountain State School Markets generally related to:

- unsafe road conditions, including dangerous speed limits, lack of overtaking lanes and impacts of weather events
- congestion caused by single lane roads
- lack of footpaths, pedestrian crossings and cycle paths
- insufficient public transport, including suggestions for a mountain shuttle bus to reduce congestion, as well as train links between Tambourine Mountain and other Scenic Rim suburbs.
- transportation for the elderly, including public transport to health care facilities
- car dependency.

4.3.5 *Harrisville Agricultural Expo*

Feedback at Harrisville Agricultural Expo generally related to:

- insufficient road infrastructure, particularly the dangerous turn offs and congestion on the Cunningham Highway
- road quality and maintenance, including potholes
- dangerous speed limits and driver behaviour
- lack of public transport limiting the mobility of youth and the elderly
- car dependency
- lack foot and cycle paths
- access to essential facilities including healthcare and education
- lack of horse-riding trails.

4.4 Stakeholder workshop

The stakeholder workshop gathered feedback about the participants':

- vision for the future of transport in the Scenic Rim
- views on the current transport network
- feedback on experience of different groups of people using the transport network
- feedback on the cycling and walking network
- top priorities for the transport network.

Participants discussed their ideas for the future at small tables and project team members took notes of the discussion. Feedback related to connectivity, infrastructure, safety, accessibility and technology (Table 5).

Table 5: Theme of feedback and verbatim feedback from workshop participants about ideas for transport

Theme	Verbatim feedback
Connections across the Scenic Rim	• Connect smaller towns to major centres • Local roads to connect across the Scenic Rim and connecting towns • Road connectivity for Kooralbyn to Boonah • Canungra by-pass • Public transport connections to Kooralbyn • Railway line completed – Boonah to Ipswich trail connection • Great Escarpment trail – Barrington tops to Boonah • Kooralbyn to Boonah Road • Fassifern rail trail to Boonah CBD • Connections
New and improved infrastructure	• Better quality roads • Active transport (walking in Kooralbyn) new paths • Road connectivity for Kooralbyn to Boonah • Canungra by-pass • More local roads in Kooralbyn • Beaudesert to Jimboomba cycling track (Rail trail) • Bitumen road (especially for school busses) • Servicing more small villages • EV charges • Public transport • Canungra active transport link • On road and off-road cyclists
Safety	• Safety for all transport modes (crossing, lighting) • Wild life corridors protection for Bromelton SDA (Todd Lane) • Kooralbyn flooding risk (one way out) • Reduce traffic through town • No traffic lights in small towns (keep their character)
Accessibility	• Access to public transport for all • Connect smaller towns to major centres (access for all, including vulnerable users) • Public transport connections to Kooralbyn • Light rail from Beaudesert to Flagstone • On-demand transport (growth and tourism) • More taxis
Technology	• EV air direct to city (v-tol) • Autonomous

	• Data to allow the network to respond • Drones
Other	• Major roads connecting towns • Keeping scenic identity • Freight – separation of heavy vehicles from local small towns and key centres and improving facilities, safety and amenities • Parking in Canungra • Increased traffic from Bromelton SDA to the Gold Coast • No inland rail

The following activity asked participants to discuss their main views on the current state of the transport network. The most common theme of feedback was about the road network and ideas for public transport (Table 6).

Table 6: Theme of feedback and verbatim feedback from workshop participants about their experience with the transport network

Theme	Verbatim feedback
Road network	• Main roads: lack of overtaking lanes • Bridges: single lane issues • Rural road condition issues and safety • Boyland road (100km/hr) rat run for turf trucks • Biddaddaba road • Wellington Bundock Dr Road entry into wildlife corridor • Local roads in Kooralbyn reduce speed to 50km/hr • Duck creek road reopening • Lions road – Running creek to Chinghee creek connection • Sealed shoulders to be wider for cycling • Mount Elliot Road to Lillybrook • Boonah to Ipswich trail to be completed • Boonah paths to be retrofitted • Kooralbyn to Boonah • Roundabout at Boonah police station • Coronation Dr
Public transport	• Lack of public transport services • Lack of information • Lack of integration with services • Missing public transport (on-demand) across the whole shire • Boonah to Ipswich • Fassifern rail trail into CBD. Connections into Boonah
Pedestrian safety	• Uneven pathways in key centres • Trip hazards • Lack of pram ramps • Width of paths • Lack of shade and seating • Poor and old facilities
Signage	• Poor signage and visibility on main roads • Lack of info signs on bridges • Warning signage • Driver education issues • Local road – wayfinding signage • Boonah – ‘no air braking’ sign to be provided

Other	• Out-of-towners on bridges • Preventing wildlife from being trapped by road guards and fences • Employment opportunities for Kooralbyn in Boonah • Emergency access to Kooralbyn • EV fast charging station • Safety for cyclists

The following activity asked participants to describe the particular issues of the groups and interests they represent. Participants discussed the experience of a bike rider, private bus tour, communities in the Scenic Rim, and local wildlife (Table 7).

Table 7: Interest or group and verbatim feedback from workshop participants about their experience with the transport network.

Interest or group	Key points
Bike riding	• Rail trail for cyclists and walkers. • Road safety needs to be improved for cyclists. • Top priority is promoting the rail trail, with Council support. • Beaudesert is a difficult place for cycling due to the hilly terrain. • Some older people have moved to electric bicycles. This option will increase the number of older people riding bikes. Accessibility upgrades could be needed to support this.
Private bus tour	• 30-40 people picked up per week from Tamborine Mountain. • Education opportunity for tourists about second route down the Mountain. • Suggestion to integrate the hop on hop off day pass with the Translink network to fill the rural network gaps, given there are few bus options currently. • Would like to see subsidised public transport and free travel for people over 65 years old.
Boonah community	• Many approvals for more housing in Boonah. • Recent approval for a traffic light signalled, but the community organisation would rather see a roundabout at the intersection. Note that Council highlighted part of Boonah's scenic amenity is the lack of no traffic lights.
Kooralbyn community	• Long-term request for a road from Kooralbyn to Boonah. The current route is 66 kilometres, via Beaudesert. • People living in Koorlabyn who cannot access the centre. • There is one road in and out which is at risk to fire and flood. • Koorlabyn is isolated and has low visitor numbers. • The footpath is not meeting needs. • Potential for connection to Kooralbyn in 2032 Games. • Local businesses are struggling.
Canungra community	• Thriving tourism hub. • Residents are trying to balance liveability with high tourism. • Concerned about road safety and accessibility.
Wildlife	• Would like to see more overpasses on the highway. • Would like to see a new reserve for mature eucalyptus.

The following activity was a deep dive into the cycling and walking network in the Scenic Rim. The project team has integrated this feedback directly into the technical components. Participants made notes on walking and cycling network maps for different towns and villages in the Scenic Rim. Verbatim feedback is included at Appendix B.

In the final activity, the project team gave participants 3 stickers each and asked them to place stickers on their top transport priorities for the Scenic Rim. Table 8 displays the number of stickers each priorities received. The priorities reflect the question included in the survey (Table 8).

Table 8: Theme of feedback and verbatim feedback from workshop participants about their experience with the transport network

Priority	Number of stickers
Providing safe, accessible and reliable public transport.	7
Higher quality roads connecting towns.	6
Protecting local green spaces and wildlife	5
More pedestrian pathways linking residents to key destinations (e.g., schools, shops).	4
Shared and/or dedicated cycle paths in towns.	4
Improving existing pedestrian facilities and streetscaping in towns.	4
Improving safety of the roads through education and enforcement programs.	3
Improving access to local businesses and shops.	2
Reducing traffic delays in towns and along major roads.	1
Cycle/trail connections between towns.	0
Providing support for people with mobility issues to access transport options.	0
Providing support for people from culturally diverse backgrounds to access transport options.	0
Additional comments and suggestions for priorities: • Shared and/or dedicated cycle and walking paths in towns, and recreation/rail trails. • Connecting roads between all towns. • The State government's Southeast regional plan: equity and fairness. It's not fair that after 32 years there is still not a road connecting Kooralbyn and Boonah.	

The most popular priority was 'providing safe, accessible and reliable public transport.' This aligns with the top priority from survey respondents. The second priority, 'higher quality roads connecting towns', was also in the top 3 priorities from survey respondents.

5 Insights and conclusions

Feedback captured during the engagement process has provided insights into community and stakeholder perceptions about the transport network in the Scenic Rim. This section summarises the feedback received to inform the ITP.

Analysis of community and stakeholder feedback indicates the following points.

- Most community members and stakeholders rely on motor vehicle for transport.
- Community members and stakeholders face several challenges when travelling in and around the Scenic Rim.
- Community members and stakeholders shared their concerns about road conditions and maintenance across all engagement activities, relating to various towns and villages in the Scenic Rim.
- The most important prevalent issues for community members and stakeholders travelling in and around the Scenic Rim are:
  - poor road conditions
  - lack of suitable walking and cycling paths
  - connections across the Scenic Rim.
- The top priority for community members and stakeholders is providing safe and accessible public transport.
- Community members and stakeholders with additional mobility needs are very highly impacted by these additional needs when travelling in and around the Scenic Rim.

The community and stakeholder engagement process was designed to capture input to inform the development of the ITP. Stage 1 of the engagement process was delivered early in the project to ensure that the feedback captured from community members and stakeholders would inform the development of the ITP.

Stage 2 will test the draft plan and seek further feedback to ensure the feedback gathered during Stage 1 and summarised in the report reflects the intentions of community members and stakeholders.

Appendix A: Project collateral

Scenic Rim Regional Council

INTEGRATED TRANSPORT PLAN

Take the scenic route – Have your say to improve transport in, across and through the Scenic Rim Region.

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

Our region is projected to grow at an annual rate of 2%, reaching an estimated population of 64,679 by 2041. This growth will impact on our transport networks and connections.

Council is developing an Integrated Transport Plan to make sure our transport networks and connections grow with the population and are efficient, safe, reliable, accessible and sustainable. This is the first time a comprehensive study encompassing all transport network needs has been undertaken by Council.

This plan will provide a framework for the development of future transport needs within the Scenic Rim. It will also be a tool to help Council make strategic decisions to enhance transport outcomes.

Aligning the plan to the needs of the community forms an important part of the process.

Council is seeking your knowledge and experience of travelling around our region. We want to know about your experience travelling across road networks, walking paths, cycling routes and transport connections.

Your feedback will help Council to deliver better transport outcomes. It will make getting around the Scenic Rim safer, through an integrated transport network that is connected, reliable, accessible and sustainable.

The Plan with be informed by technical inputs and both previous and current community and stakeholder feedback. We will use your feedback to build on what we have already heard.

Ways to get involved:

- **complete our survey** online on *Let's Talk Scenic Rim* or by scanning the QR below
- **drop a pin** on the interactive map to tell us about specific locations link on *Let's Talk Scenic Rim* or by scanning the QR below
- **fill in a printed version** of the survey. You'll find these at your local Council offices and libraries
- **speak to our project team** in person at one of our drop-in sessions planned at key locations around the Scenic Rim in August. Check on *Let's Talk Scenic* Rim as we confirm dates and locations.
- **email the project team:** mail@scenicrim.qld. gov.au attention ***Integrated Transport Project team.***

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

The Walking Network Plans for the Integrated Transport Planning are 50% funded by the Department of Transport and Main Roads Queensland as part of the Walking Local Government Grant Scheme.

Scenic Rim Regional Council

INTEGRATED TRANSPORT PLAN

Take the **Survey**

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

1. What is your connection with the Scenic Rim? *(Select all that apply)*

- ☐ I am a Scenic Rim resident
- ☐ I am a visitor to the Scenic Rim
- ☐ I live in Scenic Rim
- ☐ I am a ratepayer in Scenic Rim
- ☐ I work in Scenic Rim
- ☐ I am a student in Scenic Rim
- ☐ I am a visitor to Scenic Rim
- ☐ I am not a resident of the Scenic Rim, but travel to the Scenic Rim for work.

2. Please indicate your gender: *(Choose any one option)*

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

3. Please indicate your age category. *(Choose any one option)*

- ☐ Under 15
- ☐ 15 to 24
- ☐ 25 to 44
- ☐ 45 to 65
- ☐ 66 to 79
- ☐ 80+
- ☐ Prefer not to say

4. Where do you live? *(town or suburb)*

5. Which cultural background do you most identify with? *(choose any one option))*

- ☐ Aboriginal
- ☐ Torres Strait Islander
- ☐ Aboriginal and Torres Strait Islander
- ☐ English
- ☐ Australian
- ☐ Irish
- ☐ Scottish
- ☐ German
- ☐ Other

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

6. Thinking of a typical week, describe the regular journeys you take within the Scenic Rim.

The three most common journeys I take in a typical week are:

Journey 1

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

Journey 2

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

Journey 3

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

7. Do you have regular access to a motor vehicle?

☐ Yes ☐ No

8. What modes of transport do you regularly use when you travel in and around the Scenic Rim? *(select all that apply)*

- ☐ Private car
- ☐ Motorcycle
- ☐ Heavy vehicle
- ☐ Work vehicle (e.g., car, motorcycle, truck)
- ☐ Car-pooling with neighbour, friends or family
- ☐ Bicycle (including e-bikes)
- ☐ Personal transport device (e.g., scooters, mobility vehicle)
- ☐ Bus (public transport)
- ☐ Walk
- ☐ Community transport (e.g., courtesy bus, community support transport)
- ☐ Ride share vehicle or taxi
- ☐ Farm vehicle (e.g., tractor)
- ☐ Private bus (e.g., school bus, aged care transport, private coach)
- ☐ Other, please specify in the space below

9. Select the statement which best describes your current experience of travelling in the Scenic Rim.
(Choose any one option)

- ☐ I have no problems at all travelling around the Scenic Rim
- ☐ There are occasional issues but overall it is fine
- ☐ Sometimes good sometimes bad
- ☐ It is often challenging for me to get around
- ☐ I can't reach everything I need

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

10. Can you tell us why you chose that statement?

Active transport modes involve human-powered activities like walking and cycling. Tell us more about your experience walking in the Scenic Rim.

11. Do you think that walking is well catered for in the Scenic Rim?

☐ Yes ☐ No ☐ Could be better ☐ Don't walk (skip to question 18) ☐ Not sure

12. How often do you walk as a mode of transport?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

13. Would you like to walk more often as a mode of transport?

☐ Yes ☐ No

14. What would need to happen for you to walk more often as a mode of transport? *(choose all that apply)*

☐ Better connected walking paths
☐ Improved road crossings
☐ Better quality walking paths such as appropriate lighting and shade
☐ Improved safety
☐ Improved accessibility for people with different mobility needs
☐ Other, please specify in the space below

15. How often do you walk for recreation?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

16. Would you like to walk more often for recreation?

☐ Yes ☐ No

17. What would need to happen for you to walk more often for recreation? *(choose all that apply)*

- ☐ Better connected walking paths
- ☐ Improved road crossings
- ☐ Better quality walking paths such as appropriate lighting and shade
- ☐ More recreational walking trails (for example, the Curtis Falls Walking Trail or Fassifern Rail Trail Walk)
- ☐ Improved safety
- ☐ Improved accessibility for people with different mobility needs
- ☐ Other, please specify.

Tell us about your experience cycling in the Scenic Rim.

18. Do you think that cycling is well catered for in the Scenic Rim?

☐ Yes ☐ No ☐ Could be better ☐ Don't cycle (skip to question 25) ☐ Not sure

19. How often do you cycle as a mode of transport?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

20. Would you like to cycle more often as a mode of transport?

☐ Yes ☐ No

21. What would need to happen for you to cycle more often as a mode of transport? *(choose all that apply)*

- ☐ Better connected cycling paths
- ☐ Improved road crossings
- ☐ Better quality cycling paths such as appropriate lighting and shade
- ☐ Improved safety
- ☐ Improved accessibility for people with different mobility needs
- ☐ Other, please specify in the space below

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

22. How often do you cycle for recreation?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

23. Would you like to cycle more often for recreation?

☐ Yes ☐ No

24. What would need to happen for you to cycle more often for recreation? *(choose all that apply)*

☐ Better connected cycle paths
☐ Improved road crossings
☐ Better quality of cycle paths such as appropriate lighting and shade
☐ Better quality facilities such as water fountains and toilets
☐ More recreational cycling trails (for example, Mount Joyce Mountain Bike Trails and Castle Hill Blackstone Reserve Mountain Bike Trails)
☐ Improved safety
☐ Improved accessibility for people with different mobility needs
☐ Other, please specify in the space below

25. Do you think the ways in which people can travel in and around the Scenic Rim works well for the community?

☐ Yes ☐ No ☐ Other, please specify

26. What are the biggest issues for you when travelling in and around the Scenic Rim? *(number the boxes 1, 2 and 3)*

☐ Access to public transport services and facilities
☐ Lack of suitable walking/cycling paths
☐ Traffic congestion, queuing and delays
☐ Poor road conditions (e.g., pot holes, unsealed roads)
☐ Road safety due to other driver behaviour (e.g., speed, road rage)
☐ Busy roads through local towns
☐ Danger caused by wildlife/ livestock
☐ Lack of overtaking lanes on major roads

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

- [ ] Transport facilities not designed for people with accessibility issues
- [ ] Transport facilities not designed for people with cultural or language barriers
- [ ] Access to information about travel during an emergency or disaster
- [ ] Other, please specify in the space below

27. When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? *(number the boxes 1, 2 and 3)*

- [ ] Providing safe, accessible and reliable public transport
- [ ] Reducing traffic delays in towns and along major roads
- [ ] Improving existing pedestrian facilities and streetscaping in towns
- [ ] Higher quality roads connecting towns
- [ ] Shared and/or dedicated cycle paths in towns
- [ ] Cycle / trail connections between towns
- [ ] More pedestrian pathways linking residents to key destinations (e.g., schools, shops)
- [ ] Protecting local green spaces and wildlife
- [ ] Improving access to local businesses and shops
- [ ] Providing support for people with mobility issues
- [ ] Providing support for people from culturally diverse backgrounds
- [ ] Improving safety of the roads through education and enforcement programs
- [ ] Other, please specify in the space below

We understand there is proportion of the Scenic Rim population with mobility needs.

28. Do you have additional mobility needs?

- [ ] Yes
- [ ] No (skip to question 31)

29. If you answered yes above, does this have any impacts on your travel experience?

- [ ] Yes
- [ ] No

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

30. If you answered yes above, could you please tell us about these impacts?

31. Does anyone in your family, or anyone you are a carer for, have additional mobility needs?

☐ Yes ☐ No (skip to question 34)

32. If you answered yes above, does this have any impacts on your or their travel experience?

☐ Yes ☐ No

33. If you answered yes above, could you please tell us about these impacts?

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

34. Overall, when it comes to travelling in and around the Scenic Rim, is there anything else you would like to comment or provide feedback on?

Thank you for taking the time to submit your feedback. Your participation helps Council shape decisions for road networks, walking paths, cycle routes and transport connections as the Scenic Rim grows.

To submit your survey using this printed form, please email the completed form to **mail@scenicrim.qld.gov.au** or post your form to PO Box 25, Beaudesert QLD 4285 or drop it off at one of Council's Administration or Customer Contract Centres. Please mark your submission attention Integrated Transport Project Team.

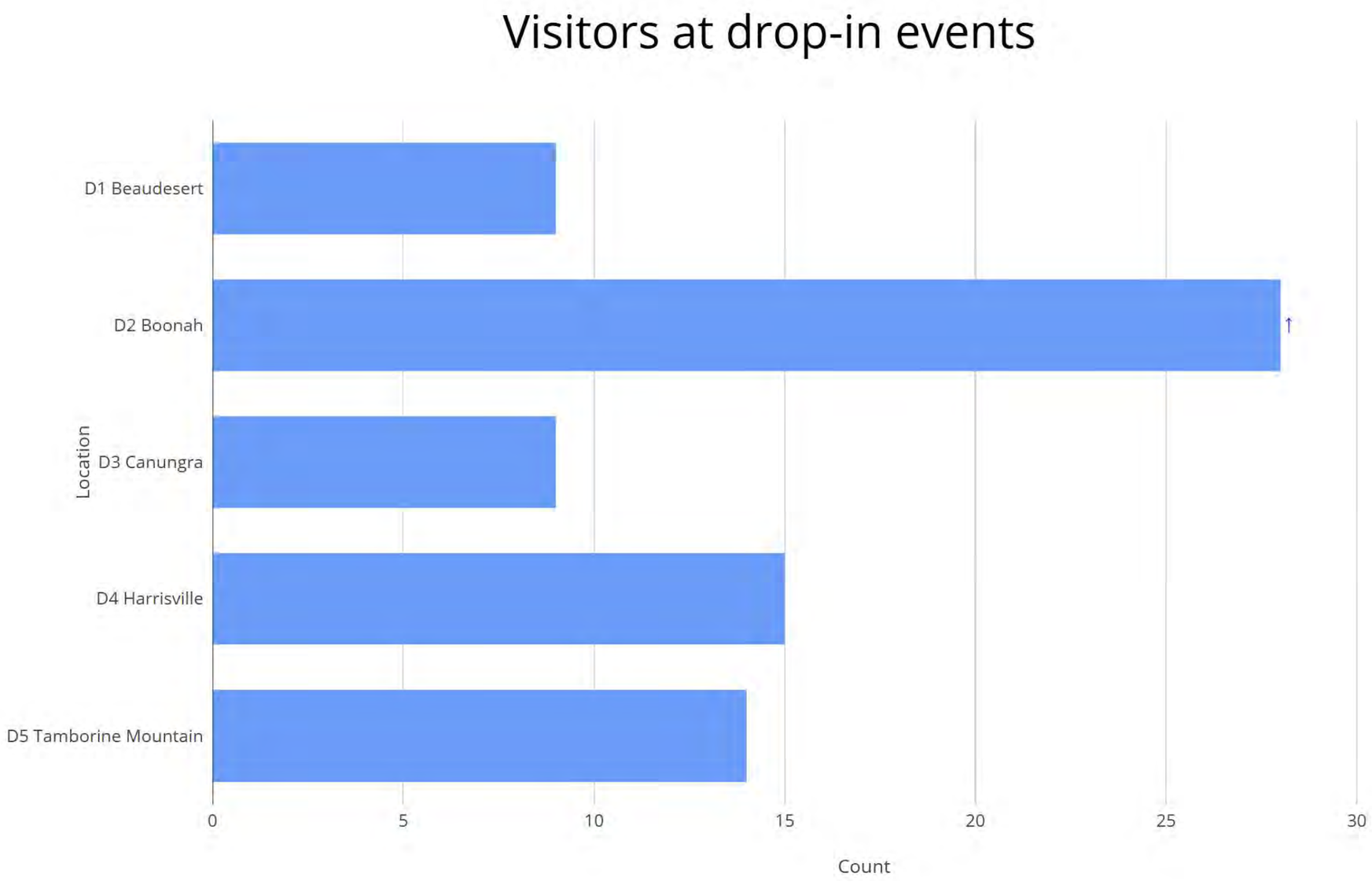
If you would like to receive updates and outcomes of this survey, please 'subscribe' to the project page on *Let's Talk Scenic Rim* (https://letstalk.scenicrim.qld.gov.au/) to receive notifications and updates.

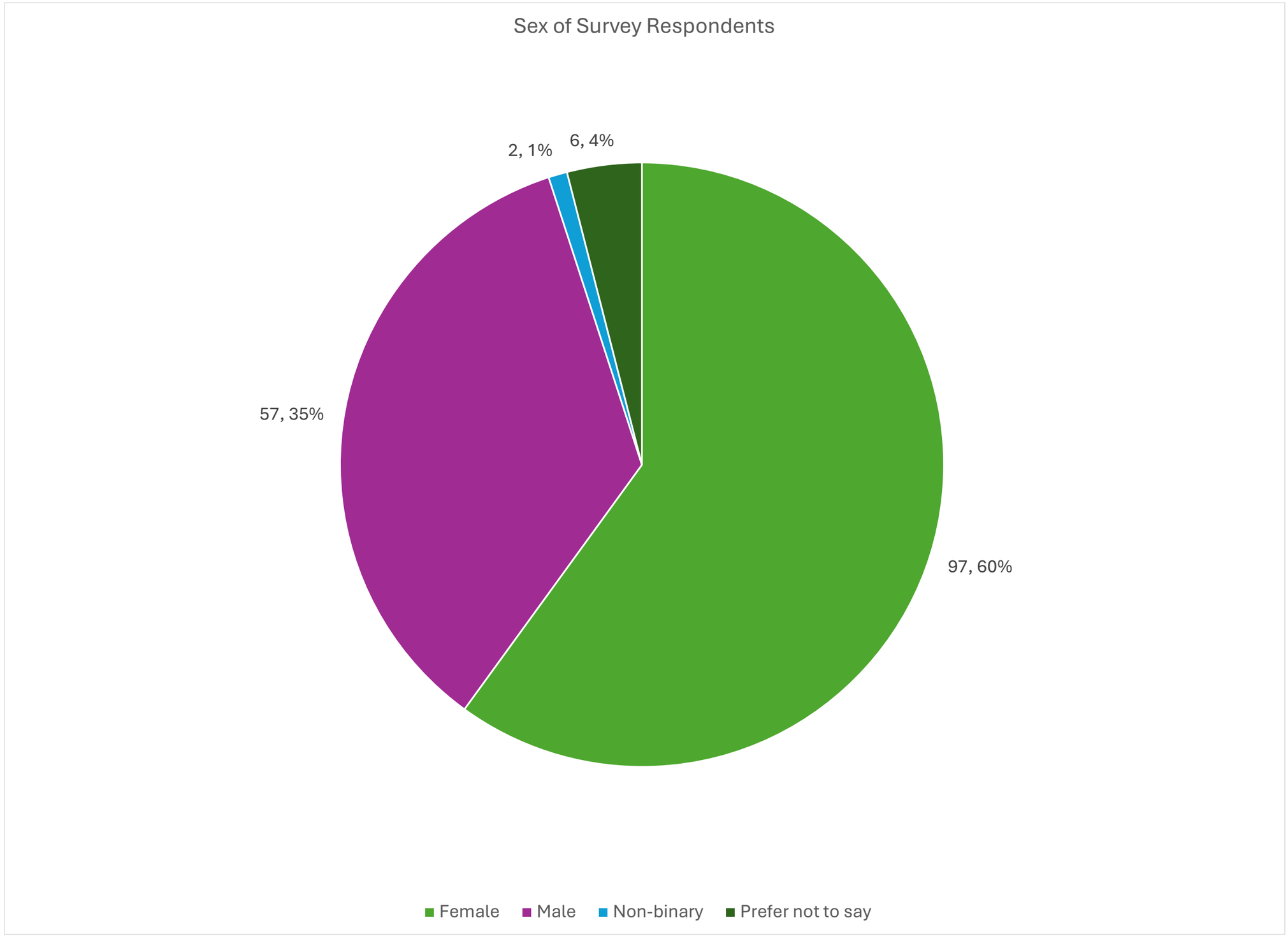
The Walking Network Plans for the Integrated Transport Planning are 50% funded by the Department of Transport and Main Roads Queensland as part of the Walking Local Government Grant Scheme.

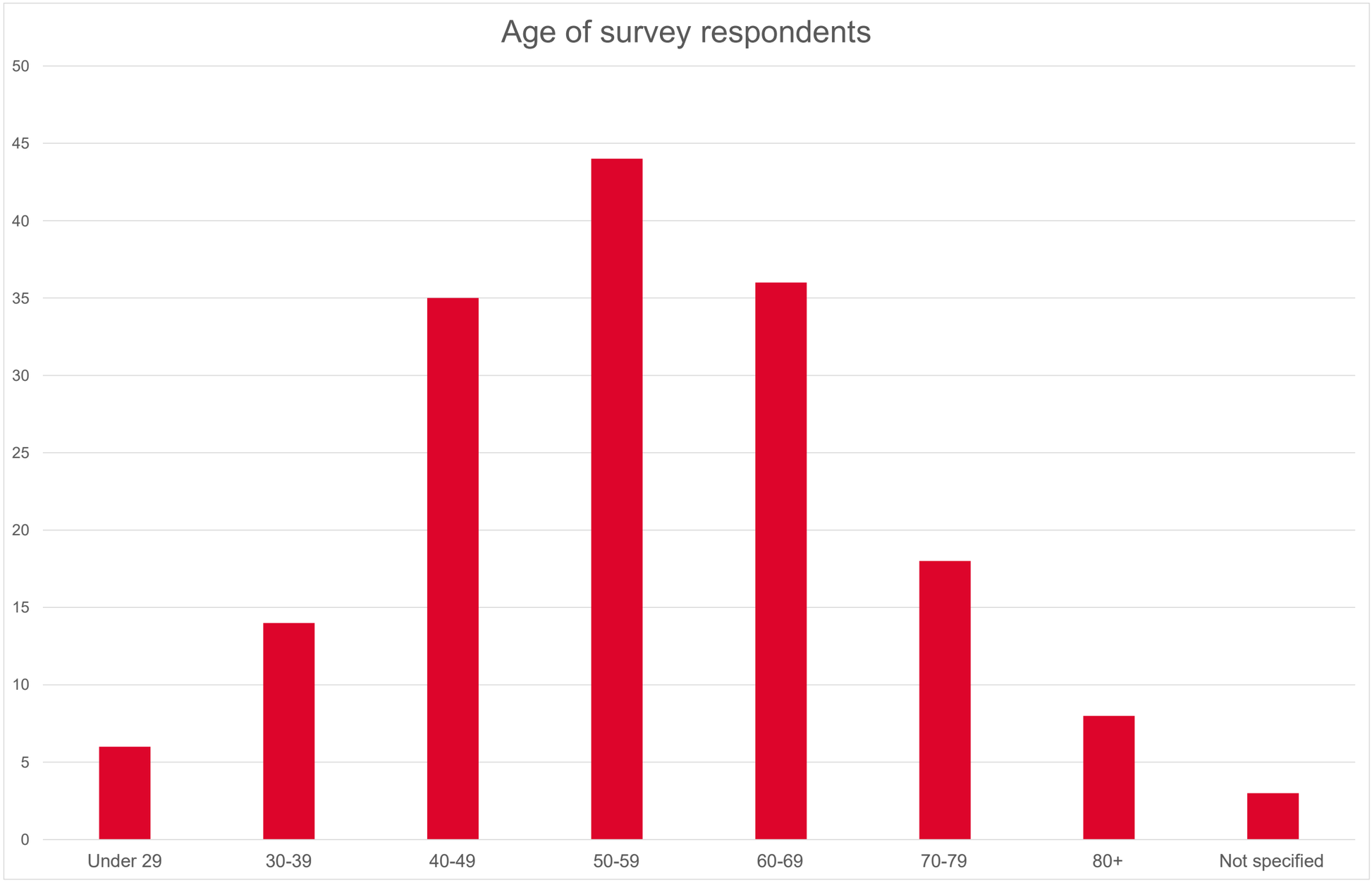
Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

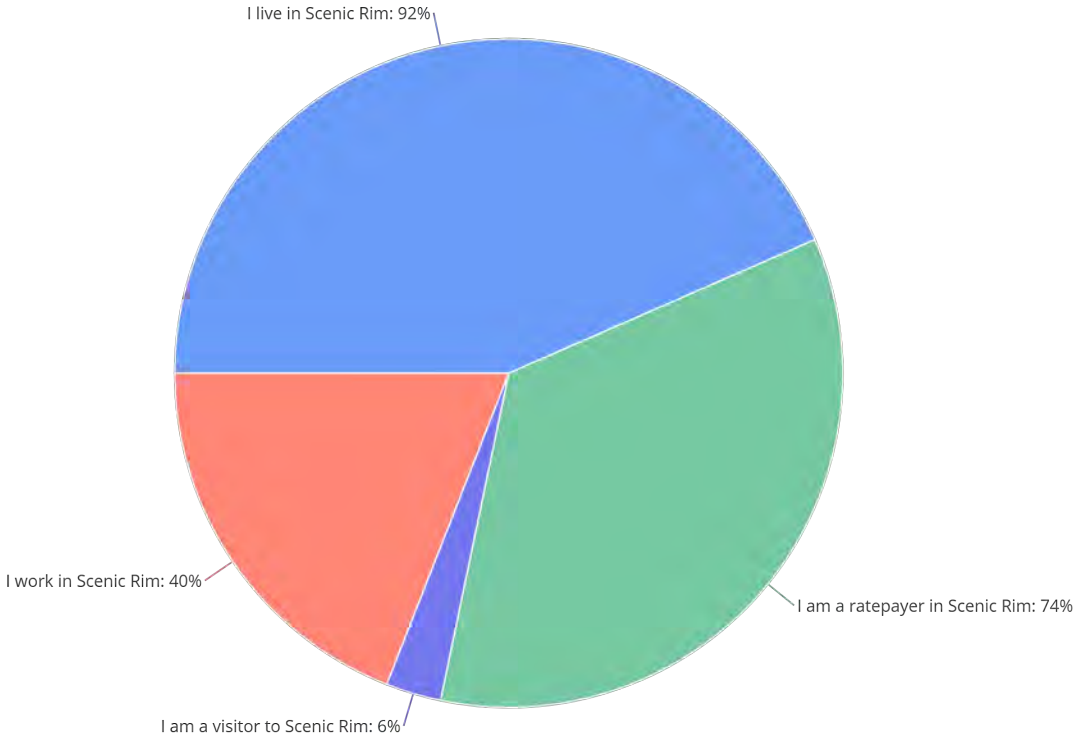
Appendix B: Engagement summary graphs


Visitors at drop-in events
D1 Beaudesert
D2 Boonah
D3 Canungra
D4 Harrisville
D5 Tamborine Mountain
Location
0
5
10
15
20
25
30
Count

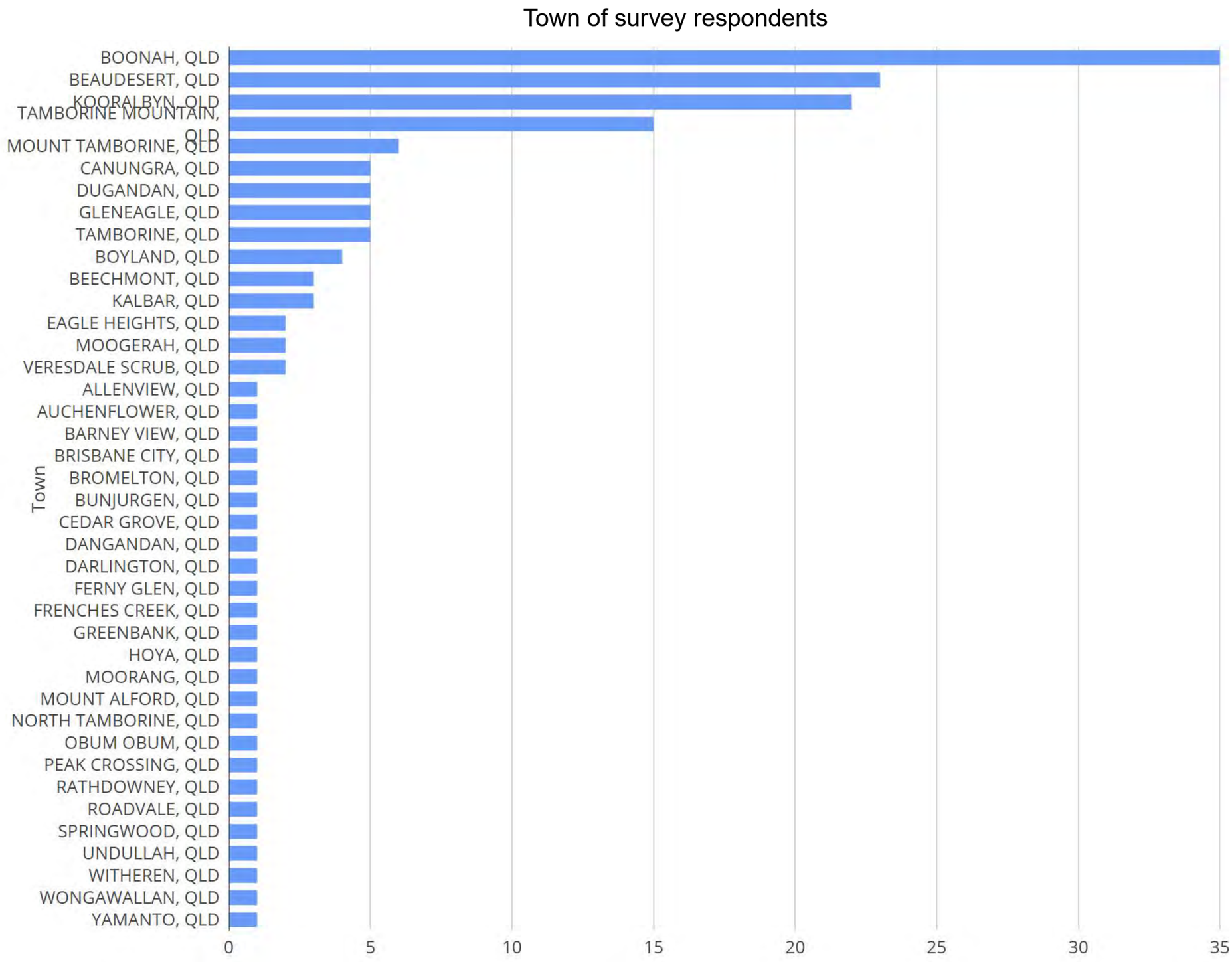

Sex of Survey Respondents
2, 1%
6, 4%
57, 35%
97, 60%
Female
Male
Non-binary
Prefer not to say


Age of survey respondents
50
45
40
35
30
25
20
15
10
5
0
Under 29
30-39
40-49
50-59
60-69
70-79
80+
Not specified

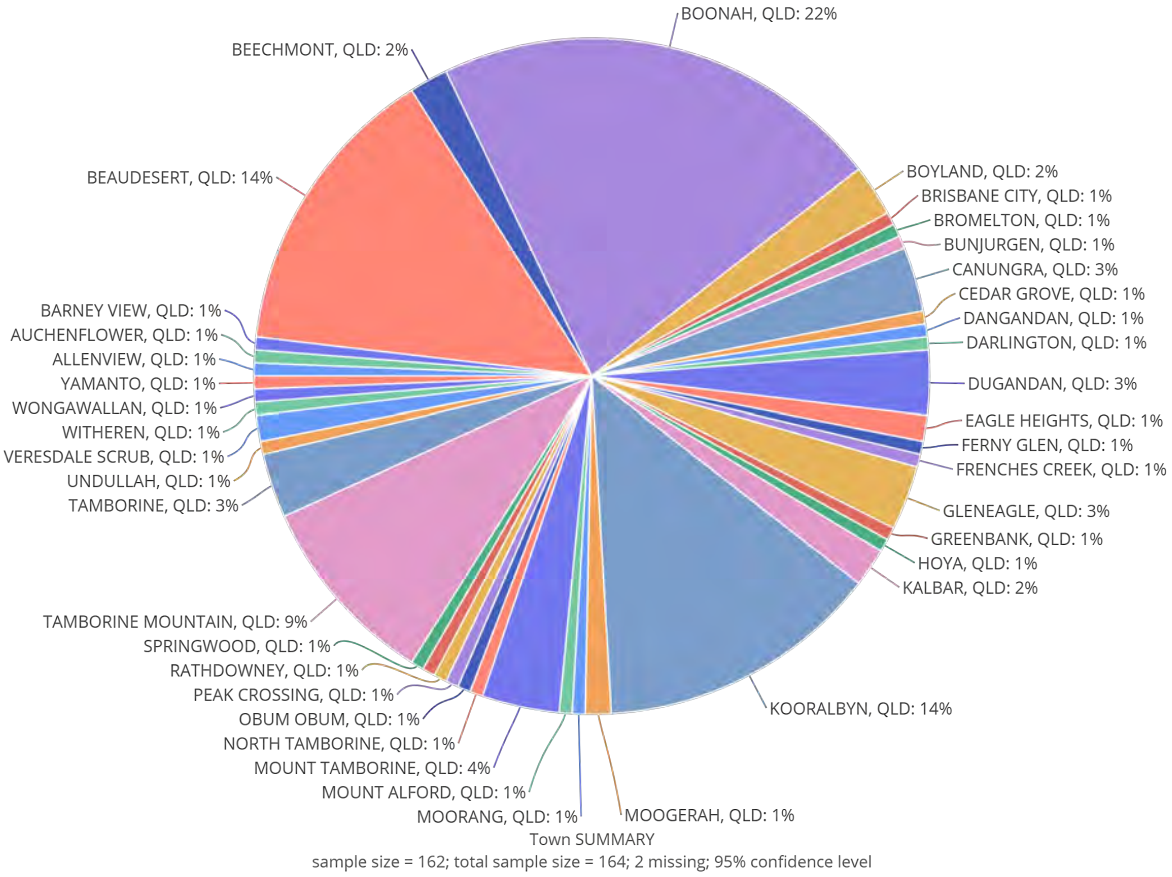
Relationship to Scenic Rim



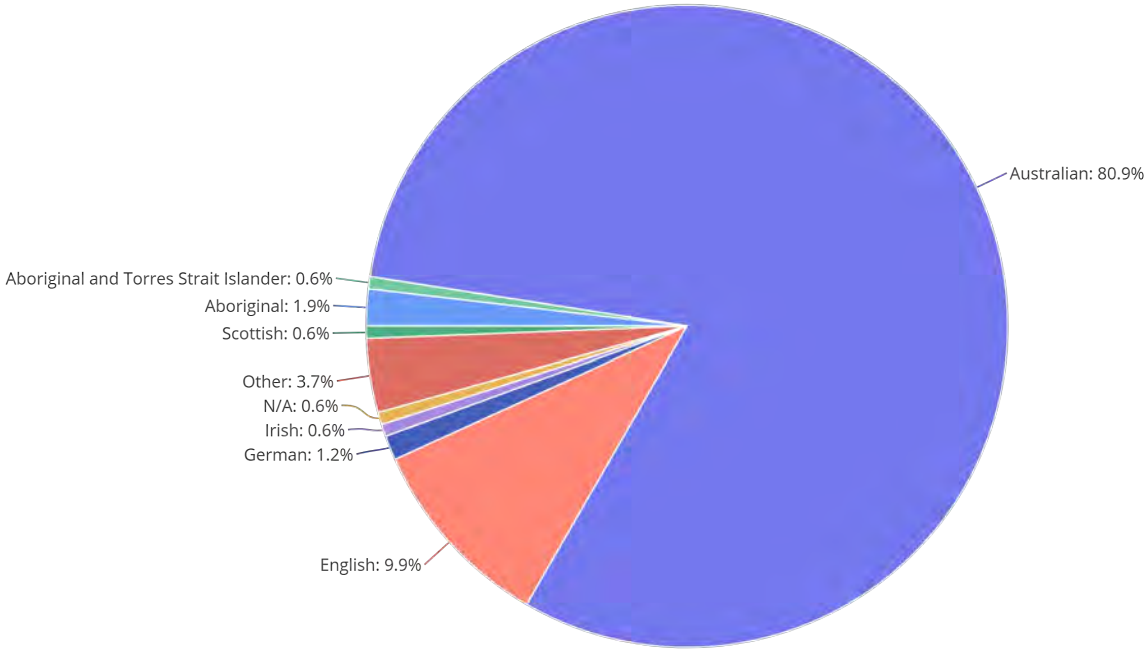
What is your relationship with Scenic Rim? - Categorized SUMMARY
sample size = 159; total sample size = 164; 5 missing; 95% confidence level


Town of survey respondents
Town
BOONAH, QLD
BEAUDESERT, QLD
KOORALBYN, QLD
TAMBORINE MOUNTAIN, QLD
MOUNT TAMBORINE, QLD
CANUNGRA, QLD
DUGANDAN, QLD
GLENEAGLE, QLD
TAMBORINE, QLD
BOYLAND, QLD
BEECHMONT, QLD
KALBAR, QLD
EAGLE HEIGHTS, QLD
MOOGERAH, QLD
VERESDALE SCRUB, QLD
ALLENVIEW, QLD
AUCHENFLOWER, QLD
BARNEY VIEW, QLD
BRISBANE CITY, QLD
BROMELTON, QLD
BUNJURGEN, QLD
CEDAR GROVE, QLD
DANGANDAN, QLD
DARLINGTON, QLD
FERNY GLEN, QLD
FRENCHES CREEK, QLD
GREENBANK, QLD
HOYA, QLD
MOORANG, QLD
MOUNT ALFORD, QLD
NORTH TAMBORINE, QLD
OBUM OBUM, QLD
PEAK CROSSING, QLD
RATHDOWNEY, QLD
ROADVALE, QLD
SPRINGWOOD, QLD
UNDULLAH, QLD
WITHEREN, QLD
WONGAWALLAN, QLD
YAMANTO, QLD
0
5
10
15
20
25
30
35

Location

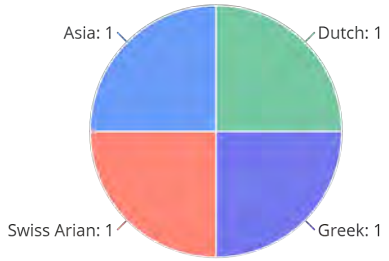

BOONAH, QLD: 22%
BEECHMONT, QLD: 2%
BEAUDESERT, QLD: 14%
BOYLAND, QLD: 2%
BRISBANE CITY, QLD: 1%
BROMELTON, QLD: 1%
BUNJURGEN, QLD: 1%
CANUNGRA, QLD: 3%
CEDAR GROVE, QLD: 1%
DANGANDAN, QLD: 1%
DARLINGTON, QLD: 1%
DUGANDAN, QLD: 3%
EAGLE HEIGHTS, QLD: 1%
FERNY GLEN, QLD: 1%
FRENCHES CREEK, QLD: 1%
GLENEAGLE, QLD: 3%
GREENBANK, QLD: 1%
HOYA, QLD: 1%
KALBAR, QLD: 2%
KOORALBYN, QLD: 14%
MOOGERAH, QLD: 1%
MOORANG, QLD: 1%
MOUNT ALFORD, QLD: 1%
MOUNT TAMBORINE, QLD: 4%
NORTH TAMBORINE, QLD: 1%
OBUM OBUM, QLD: 1%
PEAK CROSSING, QLD: 1%
RATHDOWNEY, QLD: 1%
SPRINGWOOD, QLD: 1%
TAMBORINE MOUNTAIN, QLD: 9%
TAMBORINE, QLD: 3%
UNDULLAH, QLD: 1%
VERESDALE SCRUB, QLD: 1%
WITHEREN, QLD: 1%
WONGAWALLAN, QLD: 1%
YAMANTO, QLD: 1%
ALLENVIEW, QLD: 1%
AUCHENFLOWER, QLD: 1%
BARNEY VIEW, QLD: 1%
Town SUMMARY
sample size = 162; total sample size = 164; 2 missing; 95% confidence level

Ethnicity



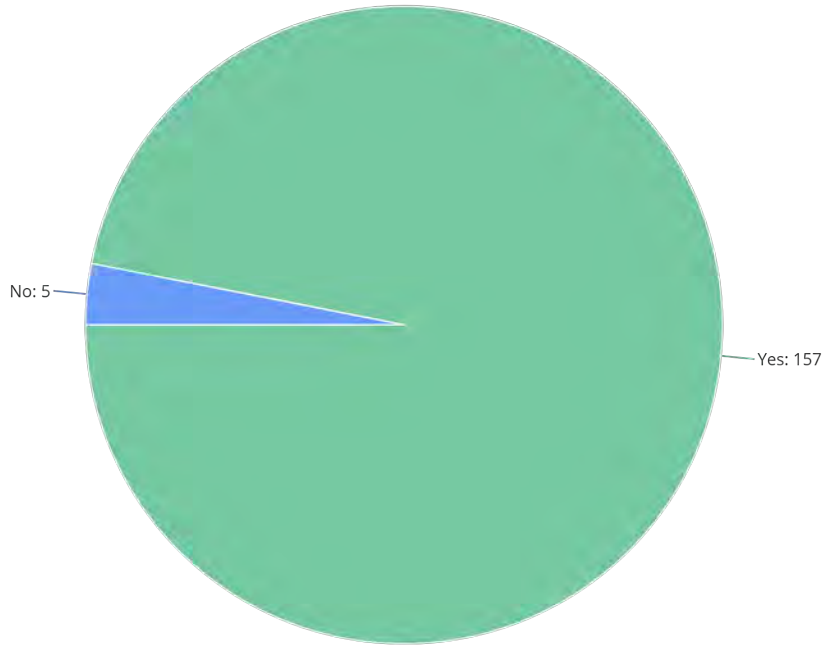
Which cultural background do you most identify with? SUMMARY
sample size = 162; total sample size = 164; 2 missing

Other:



If you answered 'Other', please tell us which cultural background you most identify with SUMMARY
sample size = 4; total sample size = 164; 160 missing; 95% confidence level

7. Do you have regular access to a motor vehicle?



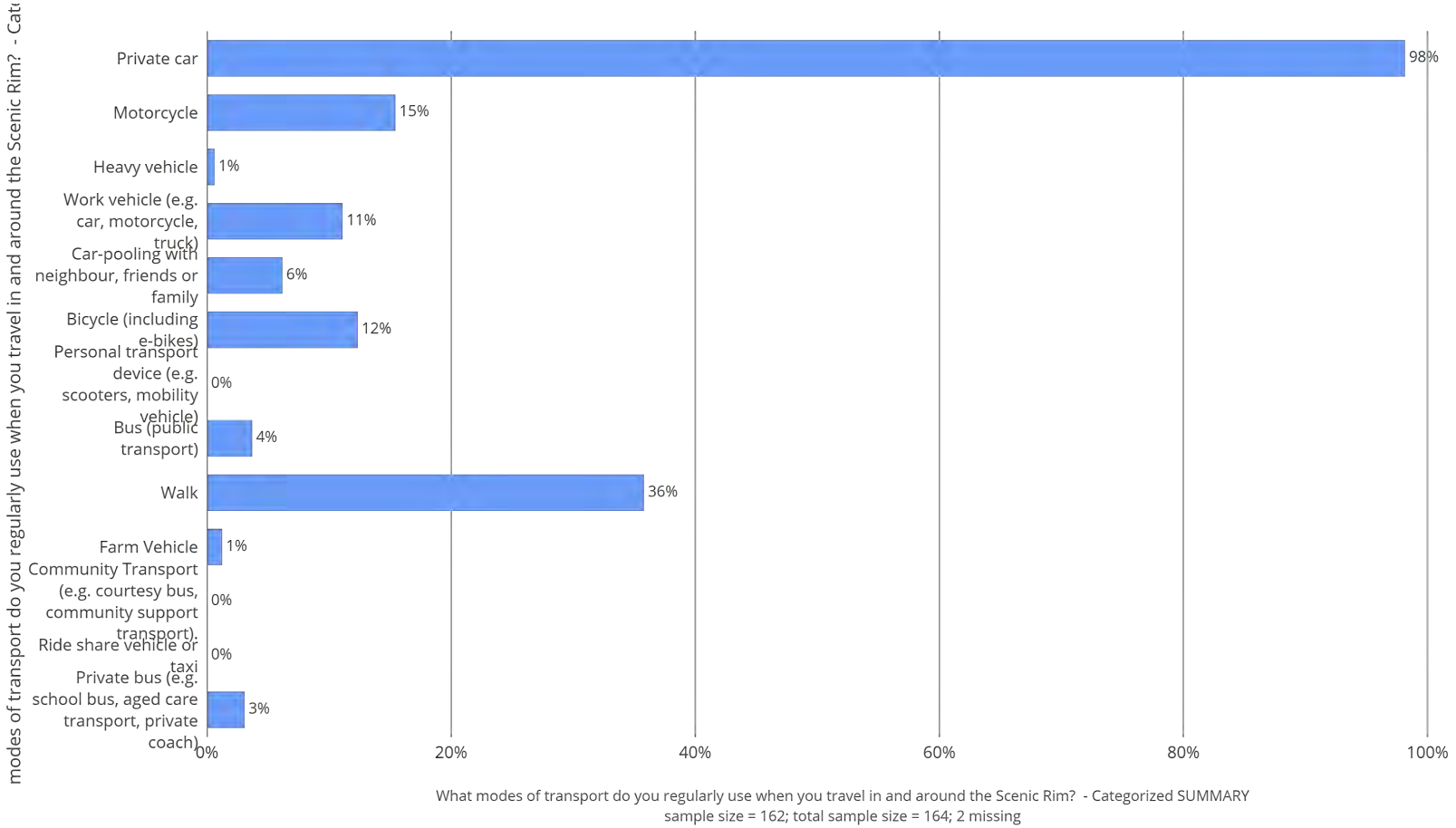
Do you have regular access to a motor vehicle? SUMMARY
sample size = 162; total sample size = 164; 2 missing

Q8: What modes of transport do you regularly use when you travel in and around the Scenic Rim? (Other - Please Specify)

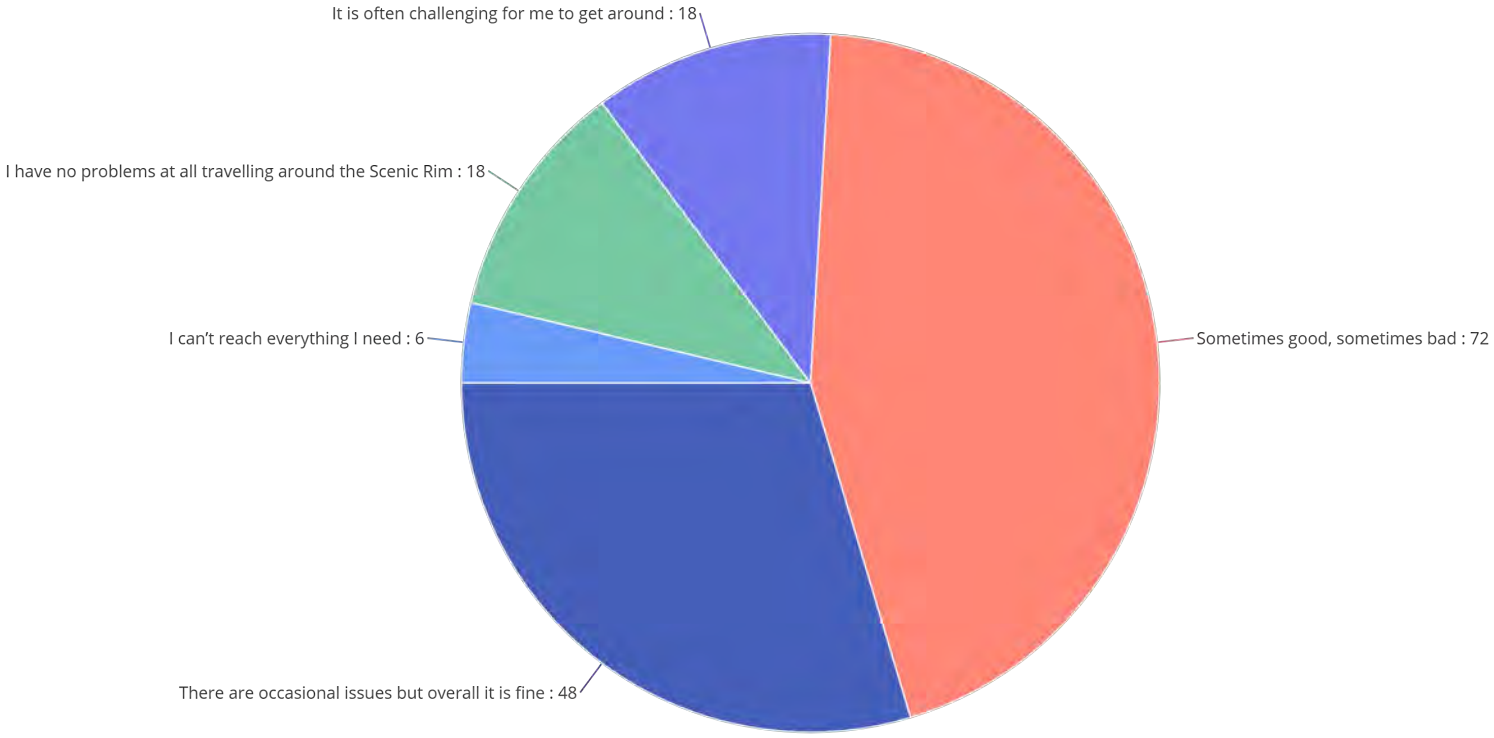
	Count
Chartered bus	1
Ride with friends	1
NET	2

What modes of transport do you regularly use when you travel in and around the Scenic Rim? (Other (please specify)) SUMMARY
sample size = 2; total sample size = 164; 162 missing; 95% confidence level

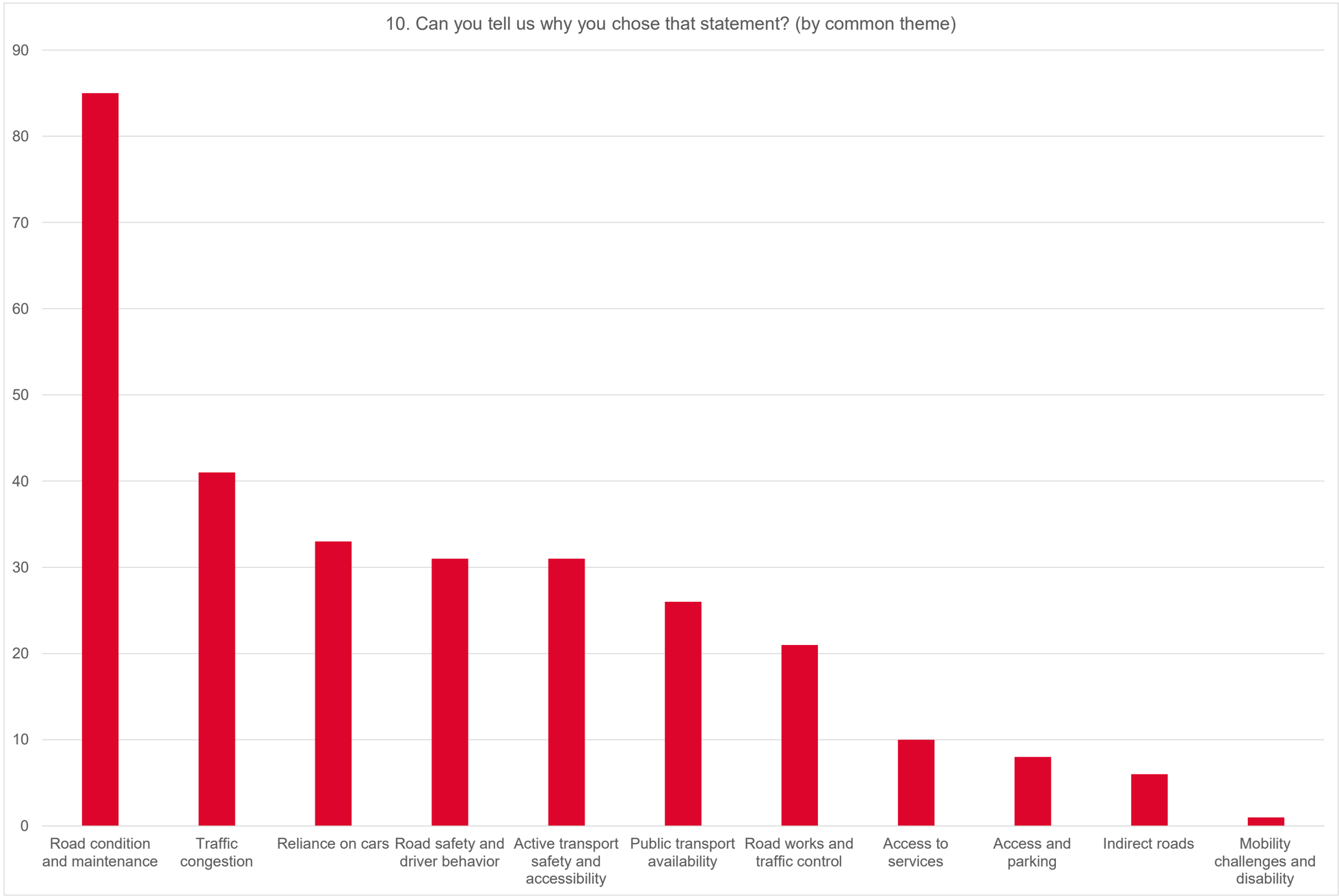
8. What modes of transport do you regularly use when you travel in and around the Scenic Rim?

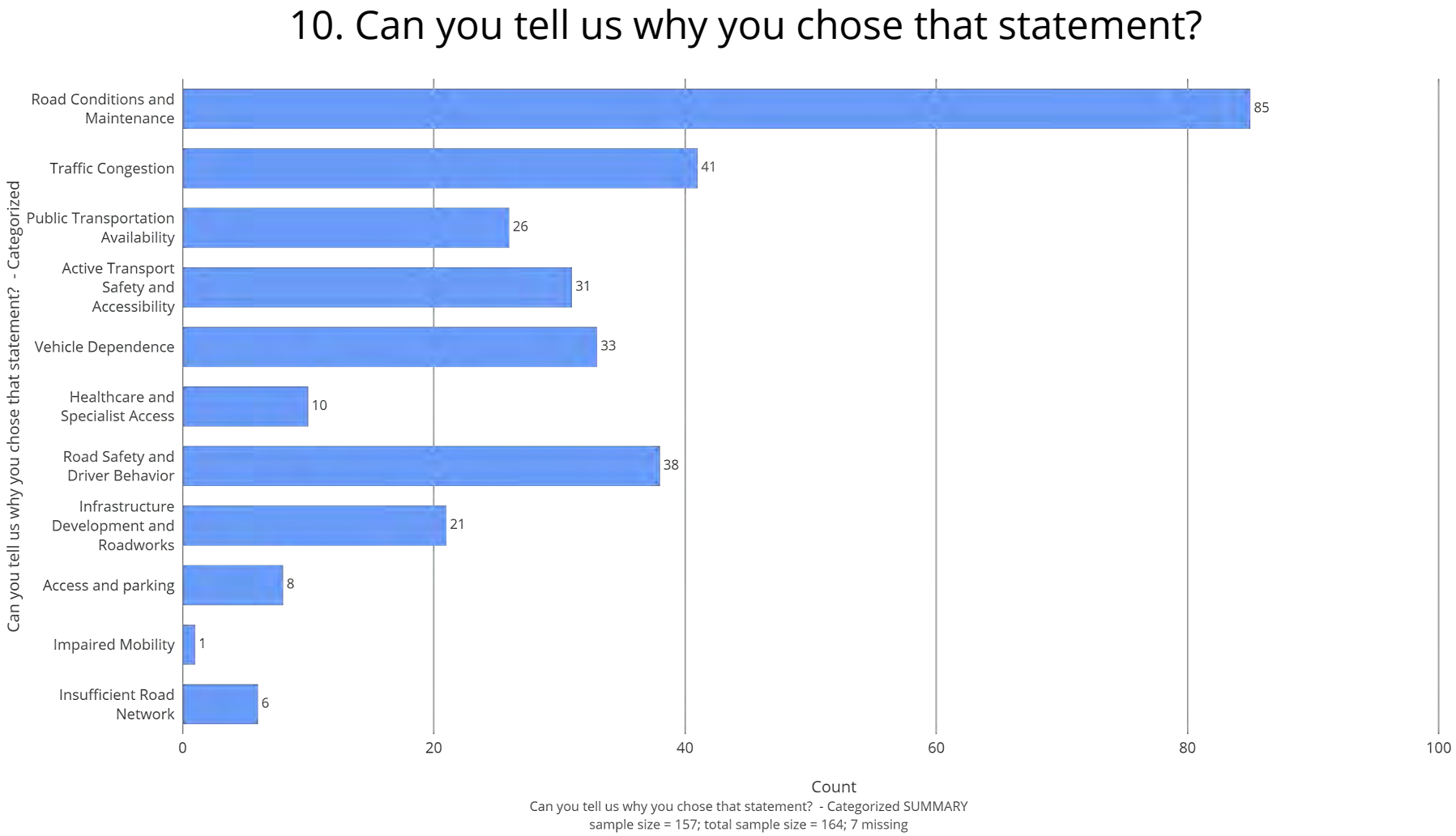


9. Select the statement which best describes your current experience of travelling in the Scenic Rim

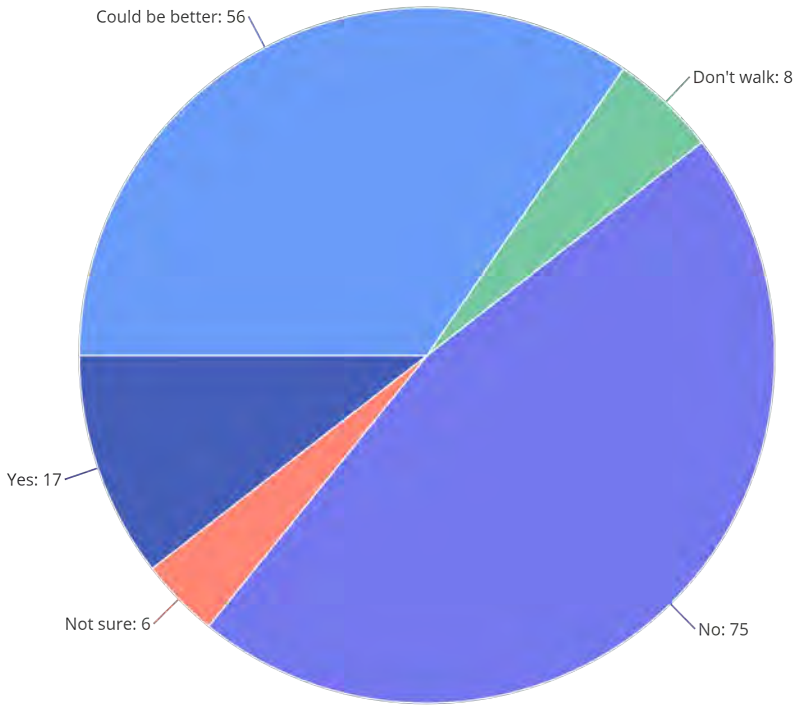


Select the statement which best describes your current experience of travelling in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing


10. Can you tell us why you chose that statement? (by common theme)
90
80
70
60
50
40
30
20
10
0
Road condition and maintenance
Traffic congestion
Reliance on cars
Road safety and driver behavior
Active transport safety and accessibility
Public transport availability
Road works and traffic control
Access to services
Access and parking
Indirect roads
Mobility challenges and disability

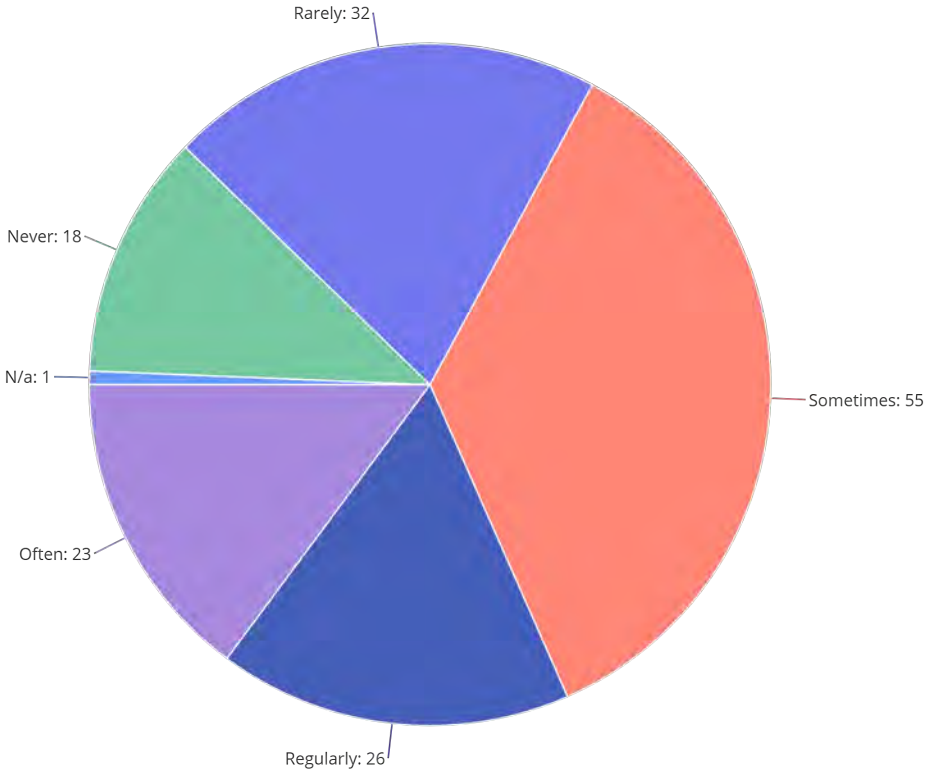

10. Can you tell us why you chose that statement?
Road Conditions and Maintenance
85
Traffic Congestion
41
Public Transportation Availability
26
Active Transport Safety and Accessibility
31
Vehicle Dependence
33
Healthcare and Specialist Access
10
Road Safety and Driver Behavior
38
Infrastructure Development and Roadworks
21
Access and parking
8
Impaired Mobility
1
Insufficient Road Network
6
Can you tell us why you chose that statement? - Categorized
0
20
40
60
80
100
Count
Can you tell us why you chose that statement? - Categorized SUMMARY
sample size = 157; total sample size = 164; 7 missing

11. Do you think that walking is well catered for in the Scenic Rim?



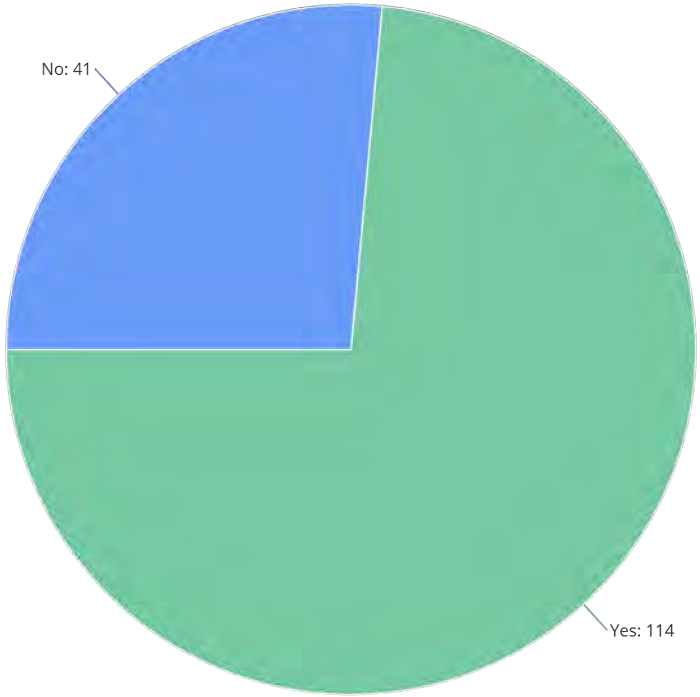
Do you think that walking is well catered for in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing

12. How often do you walk as a mode of transport?



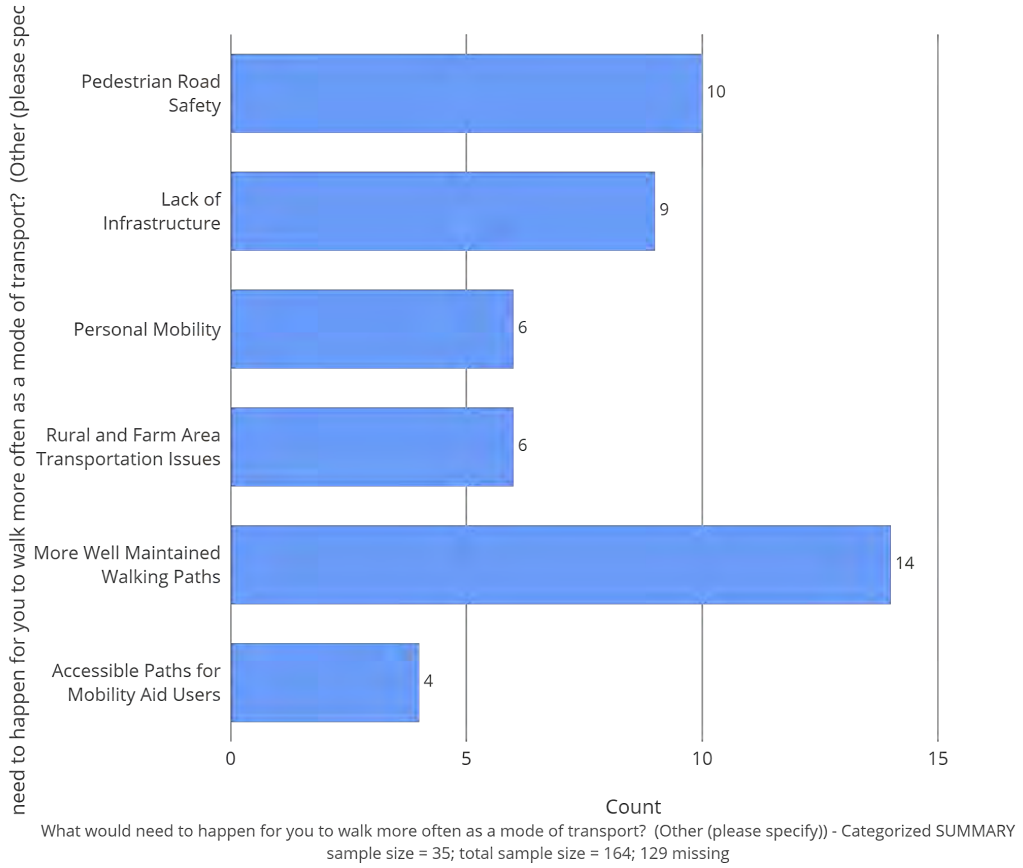
How often do you walk as a mode of transport? SUMMARY
sample size = 155; total sample size = 164; 9 missing

13. Would you like to walk more often as a mode of transport?



Would you like to walk more often as a mode of transport? SUMMARY
sample size = 155; total sample size = 164; 9 missing

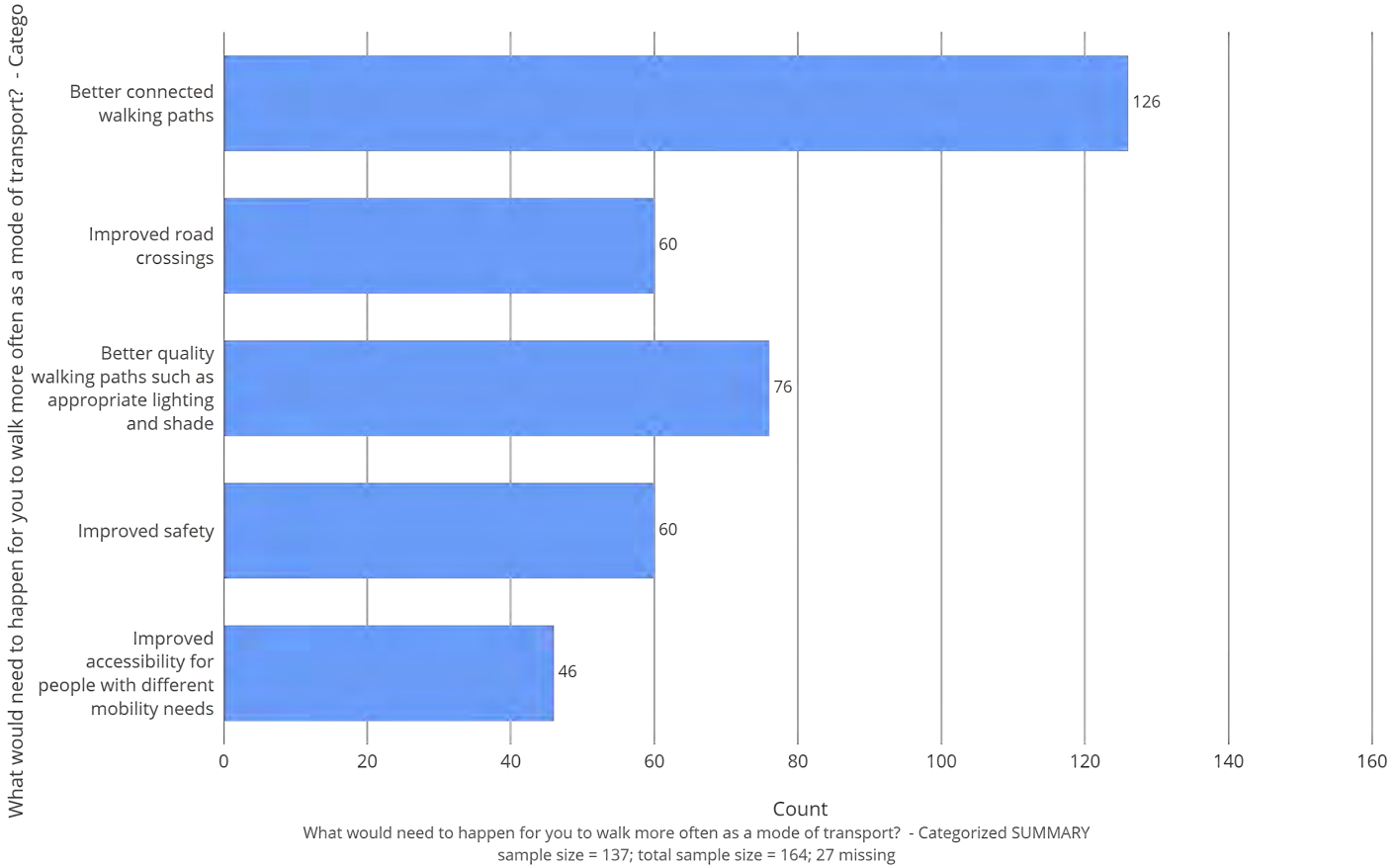
Q14: What would need to happen for you to talk more often as a mode of transport? (Other - Please specify)



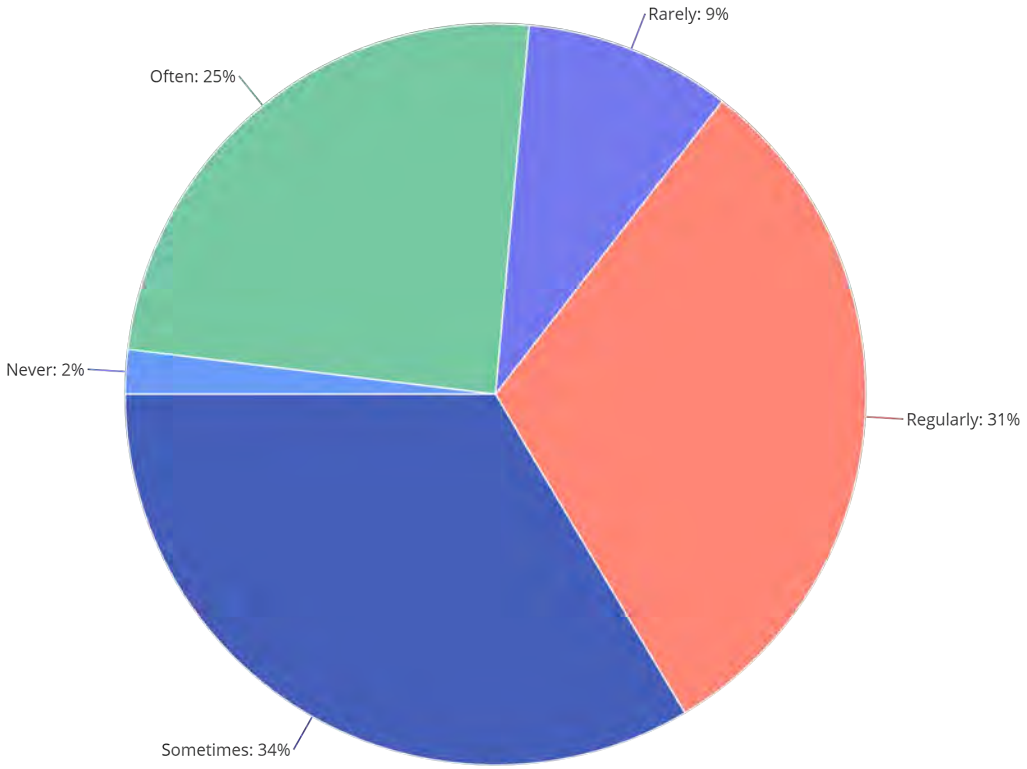
What would need to happen for you to walk more often as a mode of transport? (Other (please specify)) - Categorized SUMMARY
sample size = 35; total sample size = 164; 129 missing

70	
71	
72	
73	
74	The town footpaths are overgrown and council do nothing, can't even walk side by side in kalbar, so uneven they are unsafe, walking paths as in for fitness don't exist.
75	Live to far out of town to connect to public transport.
76	
77	

14. What would need to happen for you to walk more often as a mode of transport?

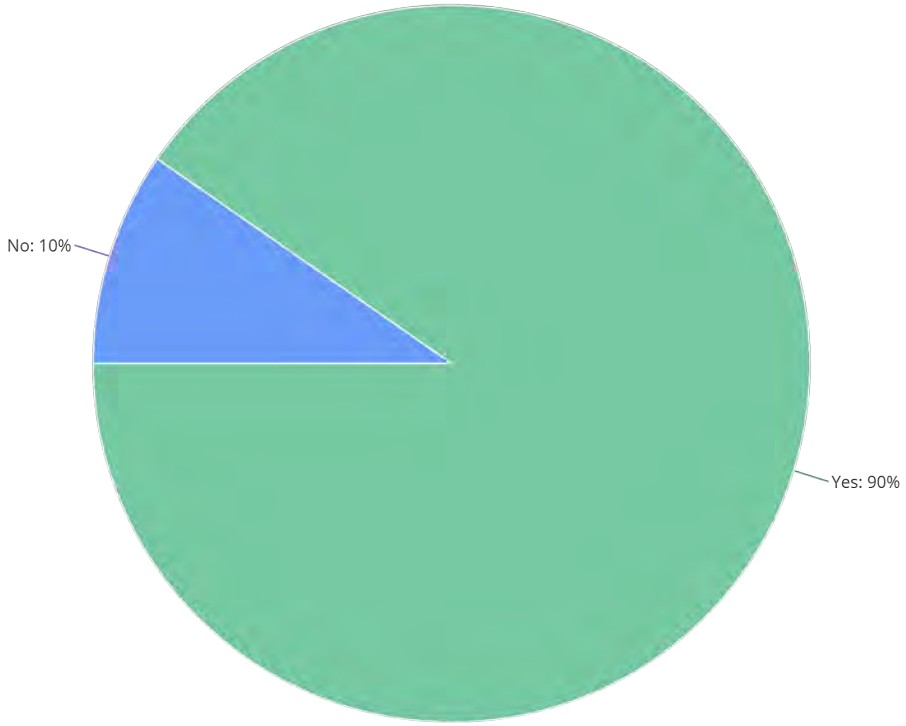


15. How often do you walk for recreation?



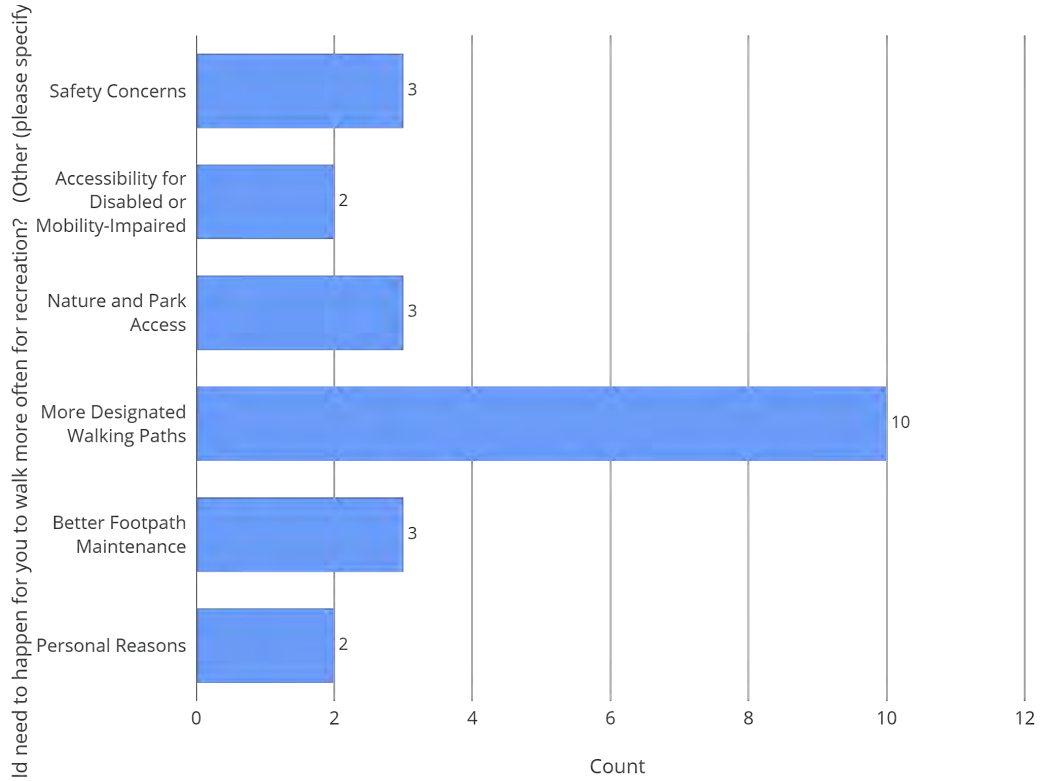
How often do you walk for recreation? SUMMARY
sample size = 155; total sample size = 164; 9 missing

16. Would you like to walk more for recreation?



Would you like to walk more often for recreation? SUMMARY
sample size = 155; total sample size = 164; 9 missing; 95% confidence level

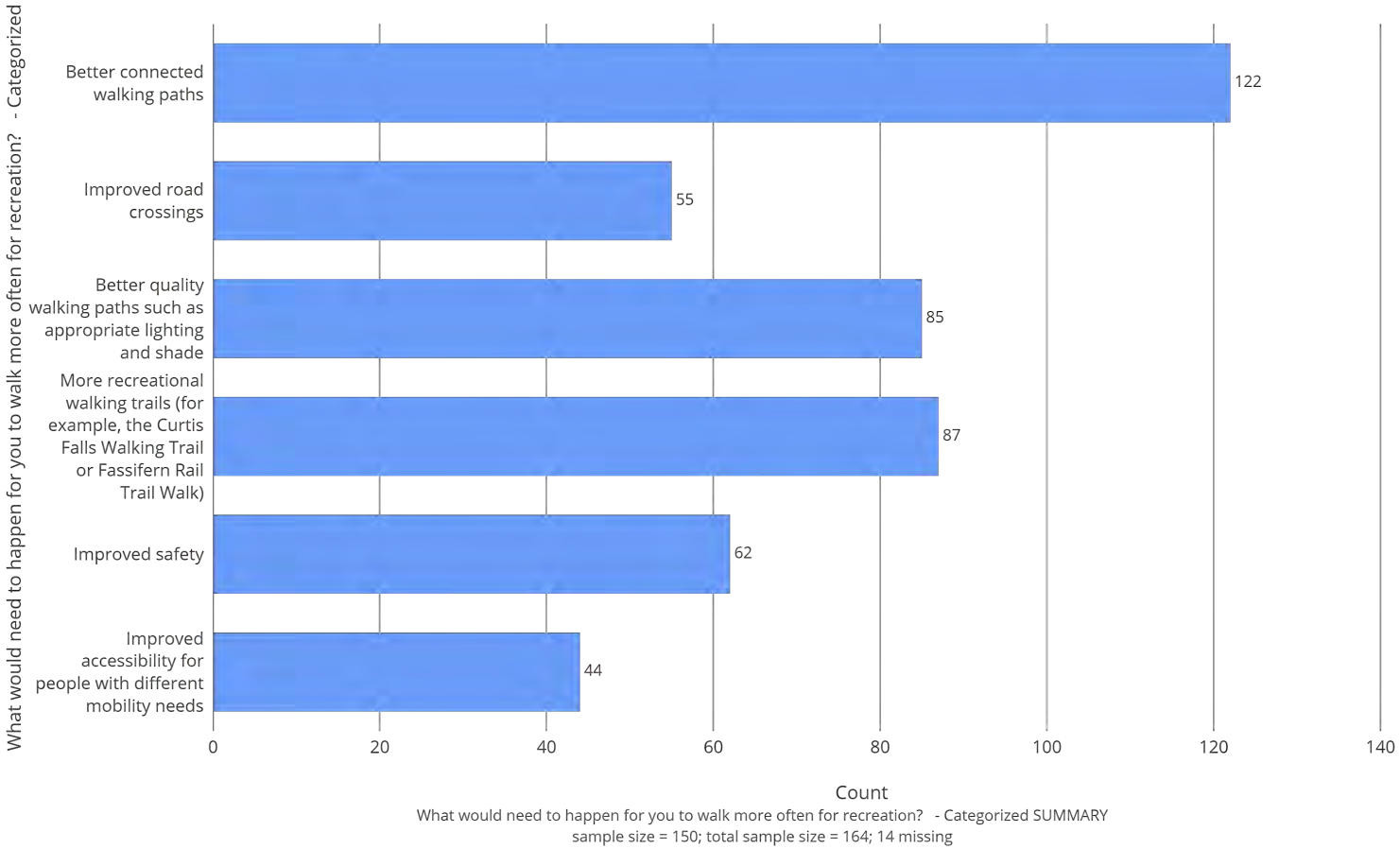
Q17: What would need to happen for you to walk more for recreation? Other: Please Specify



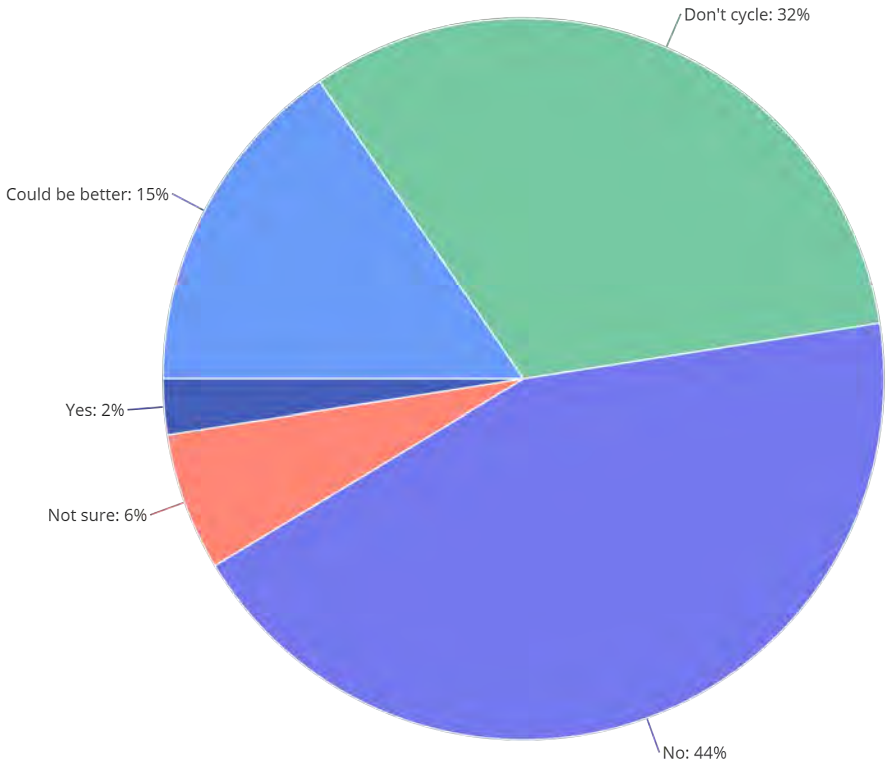
What would need to happen for you to walk more often for recreation? (Other (please specify)) - Categorized SUMMARY
sample size = 17; total sample size = 164; 147 missing

23	
24	
25	
26	
27	
28	Kooralbyn currently has one footpath located on Routley Drive. I currently walk twice per week from the top of Boomerang Drive to the intersection with Merton Close. This is one of the only areas in Kooralbyn that is relatively flat and provides a reasonable

17. What would need to happen for you to walk more often for recreation?

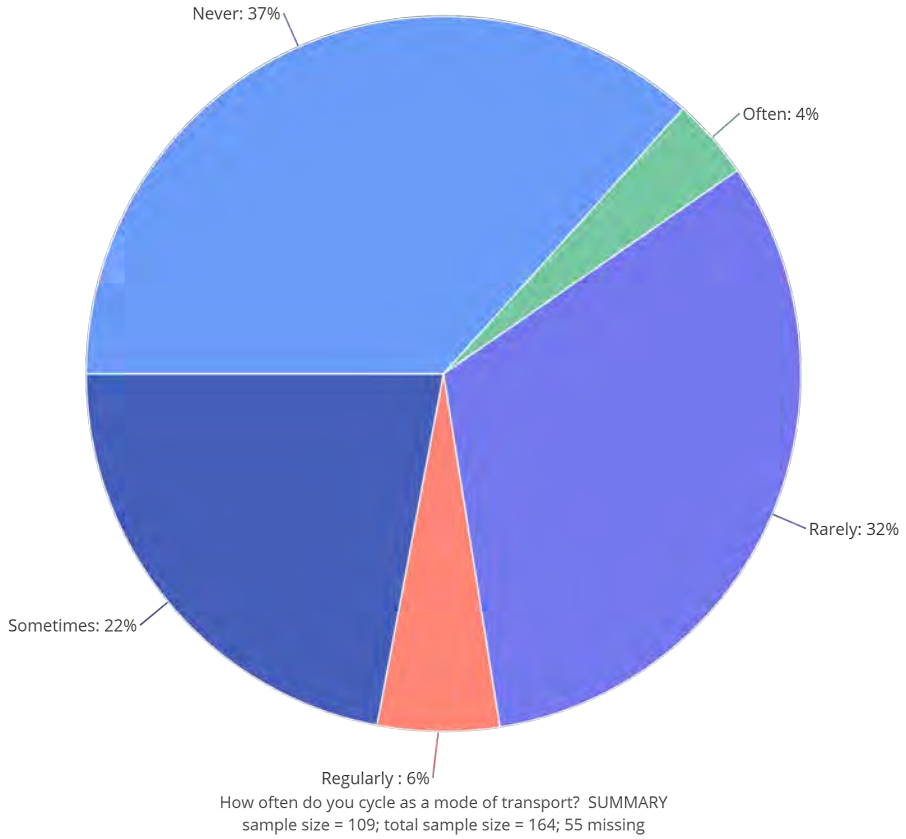


18. Do you think cycling is well catered for in the Scenic Rim?

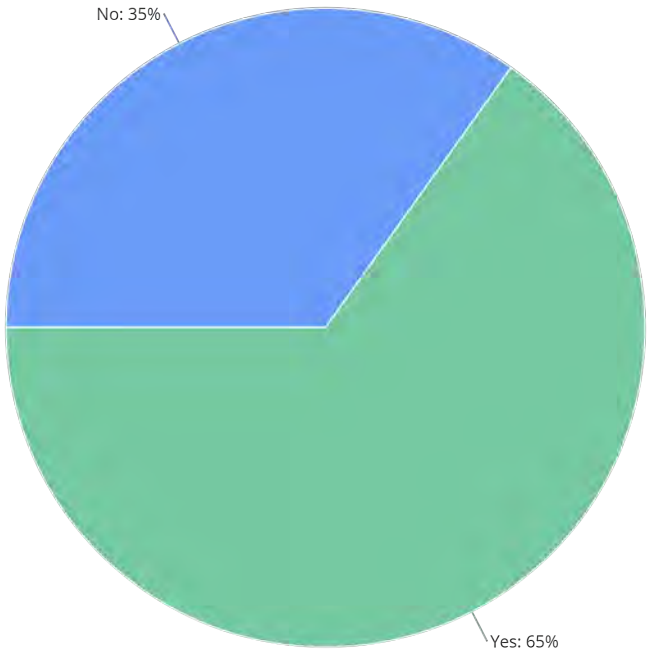


Do you think that cycling is well catered for in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing

19. How often do you cycle as a mode of transport?

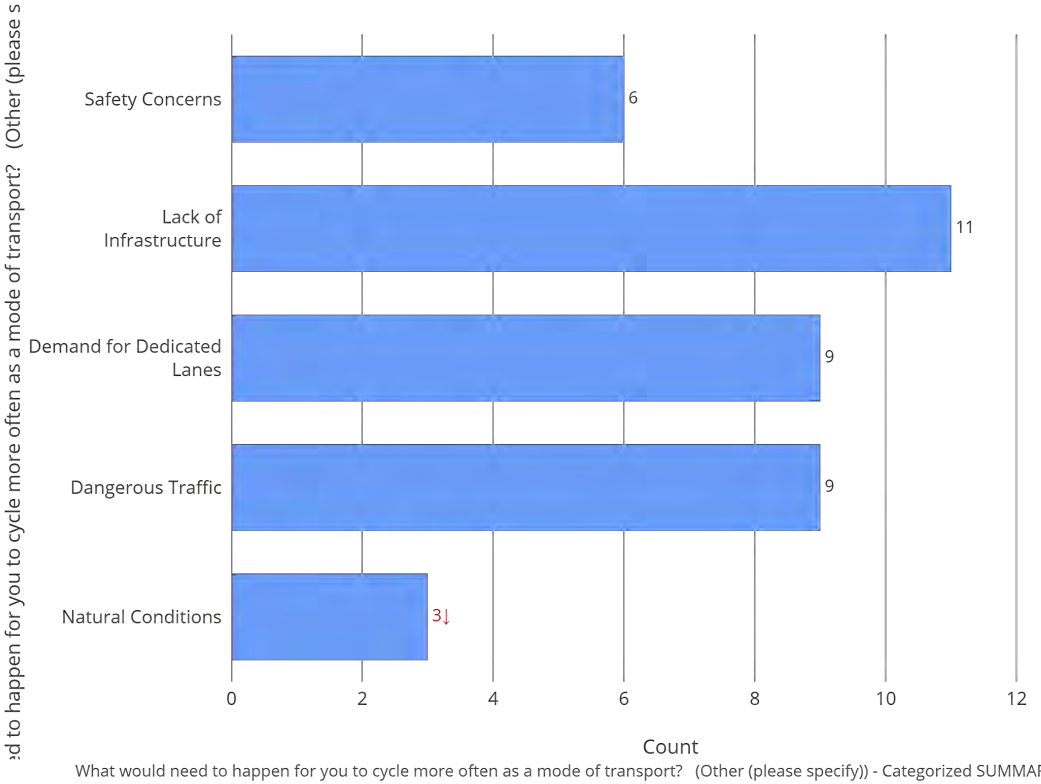


20. Would you like to cycle more often as a mode of transport?



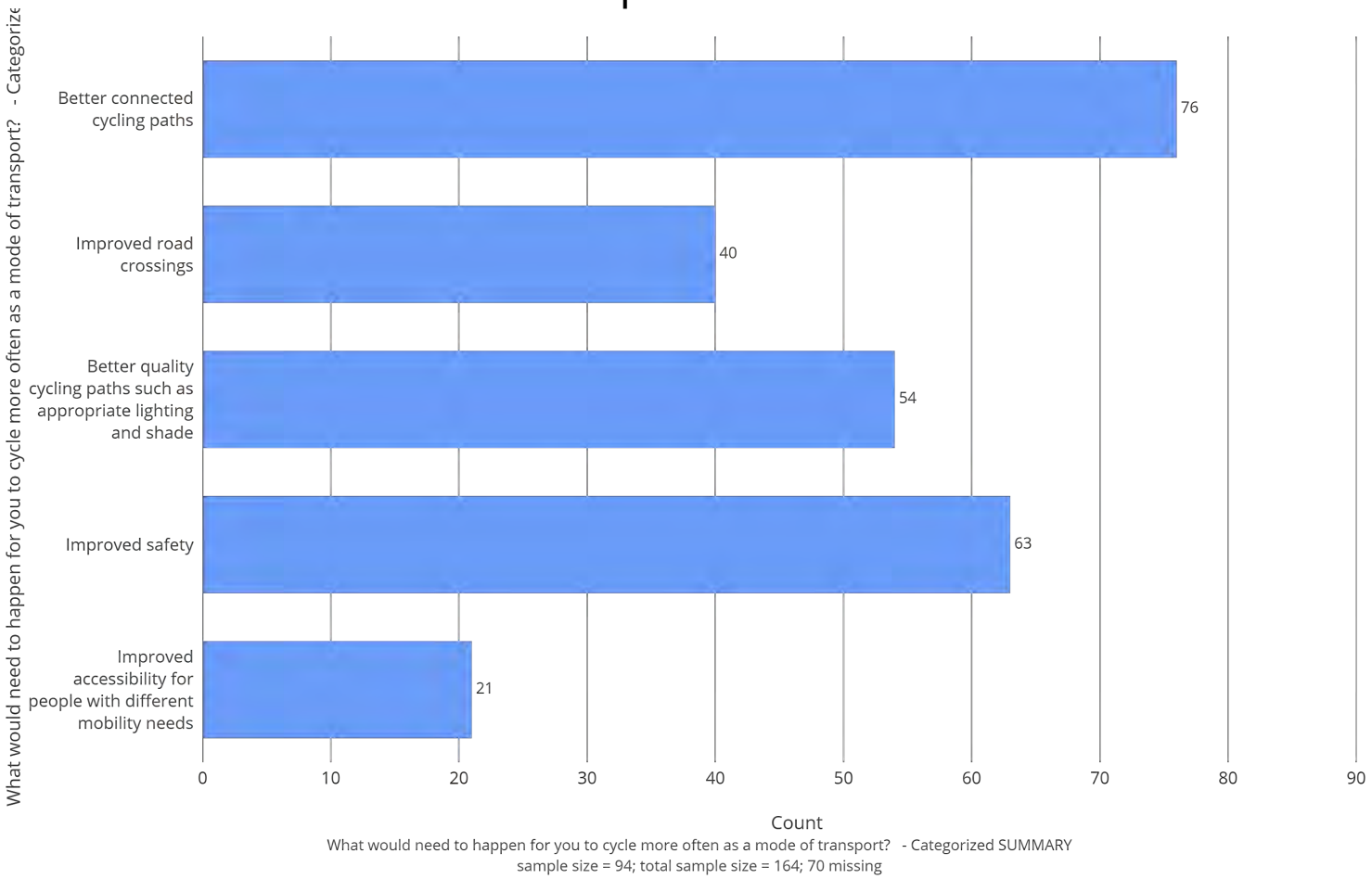
Would you like to cycle more often as a mode of transport? SUMMARY
sample size = 109; total sample size = 164; 55 missing

Q21: What would need to happen for you to cycle more often as a mode of transport? (Other, please specify)

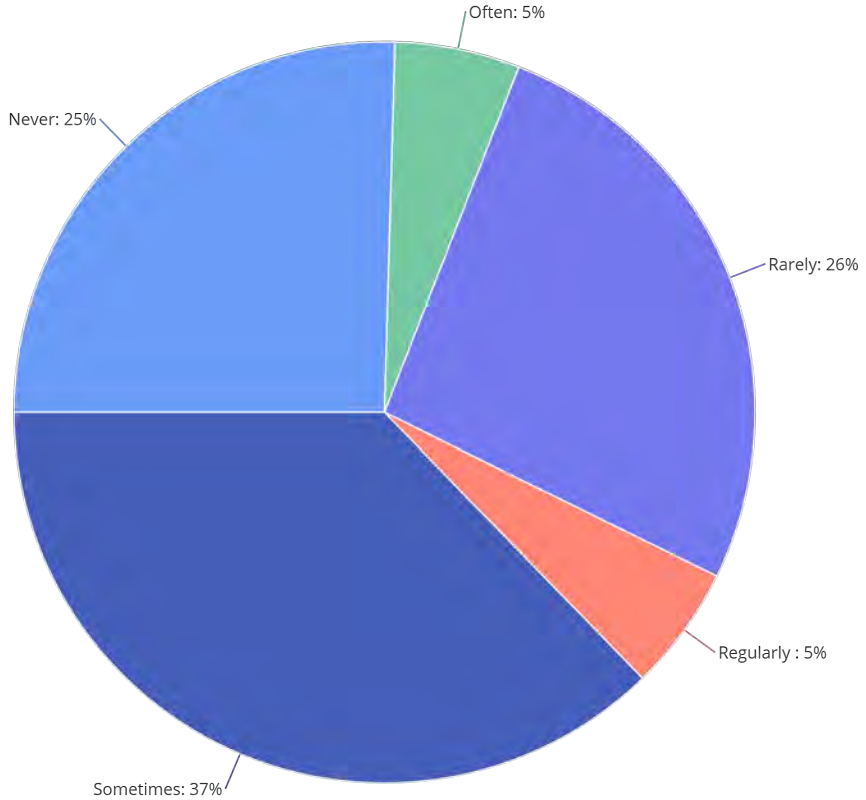


(please specify)) RAW DATA
sample size = 164

21. What would need to happen for you to cycle more often as a mode of transport?

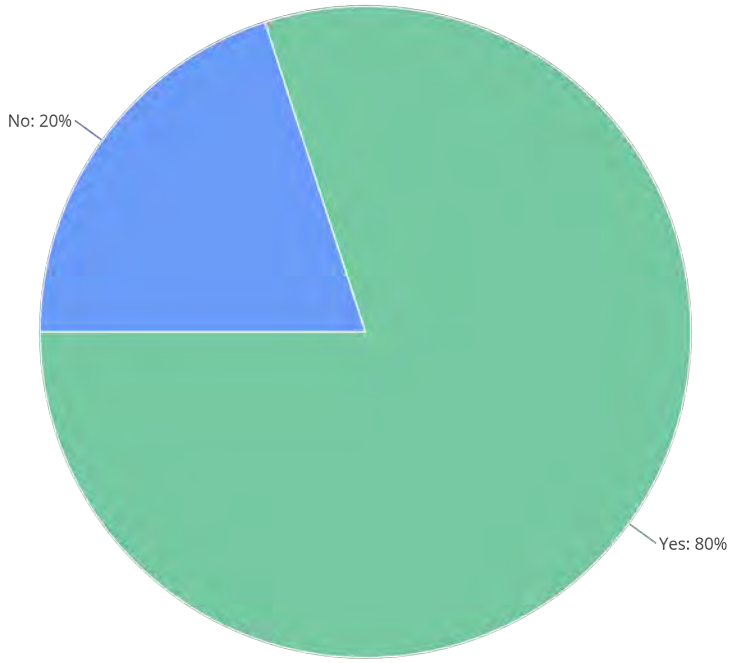


22. How often do you cycle for recreation?



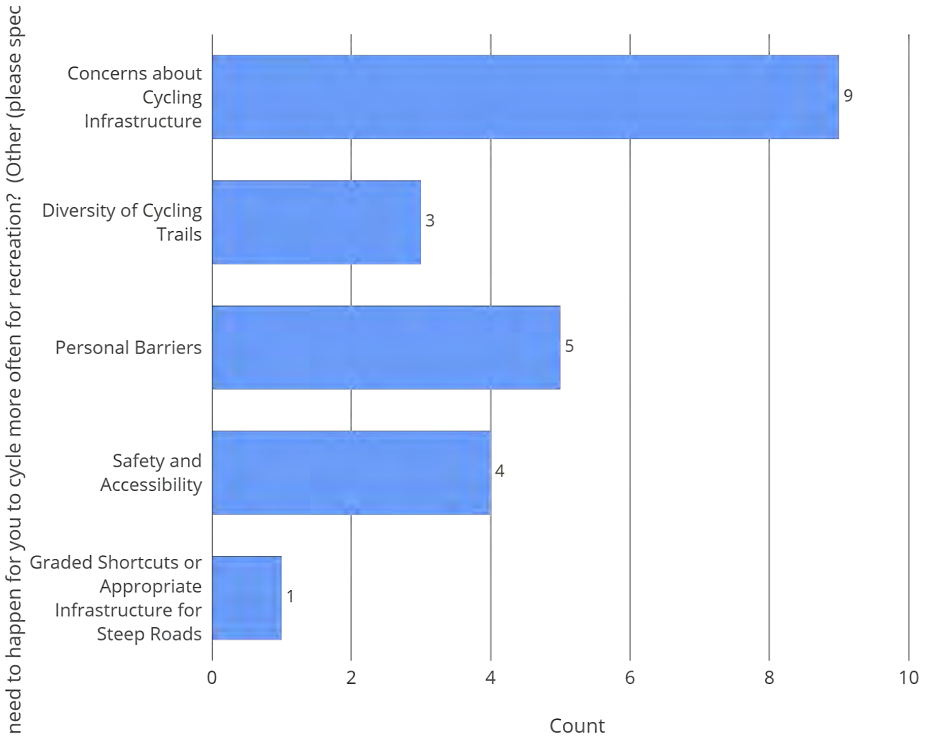
How often do you cycle for recreation? SUMMARY
sample size = 110; total sample size = 164; 54 missing

23. Would you like to cycle more often for recreation?



Would you like to cycle more often for recreation? SUMMARY
sample size = 110; total sample size = 164; 54 missing

Q24: What would need to happen for you to cycle more often for recreation? (Other: Please specify)

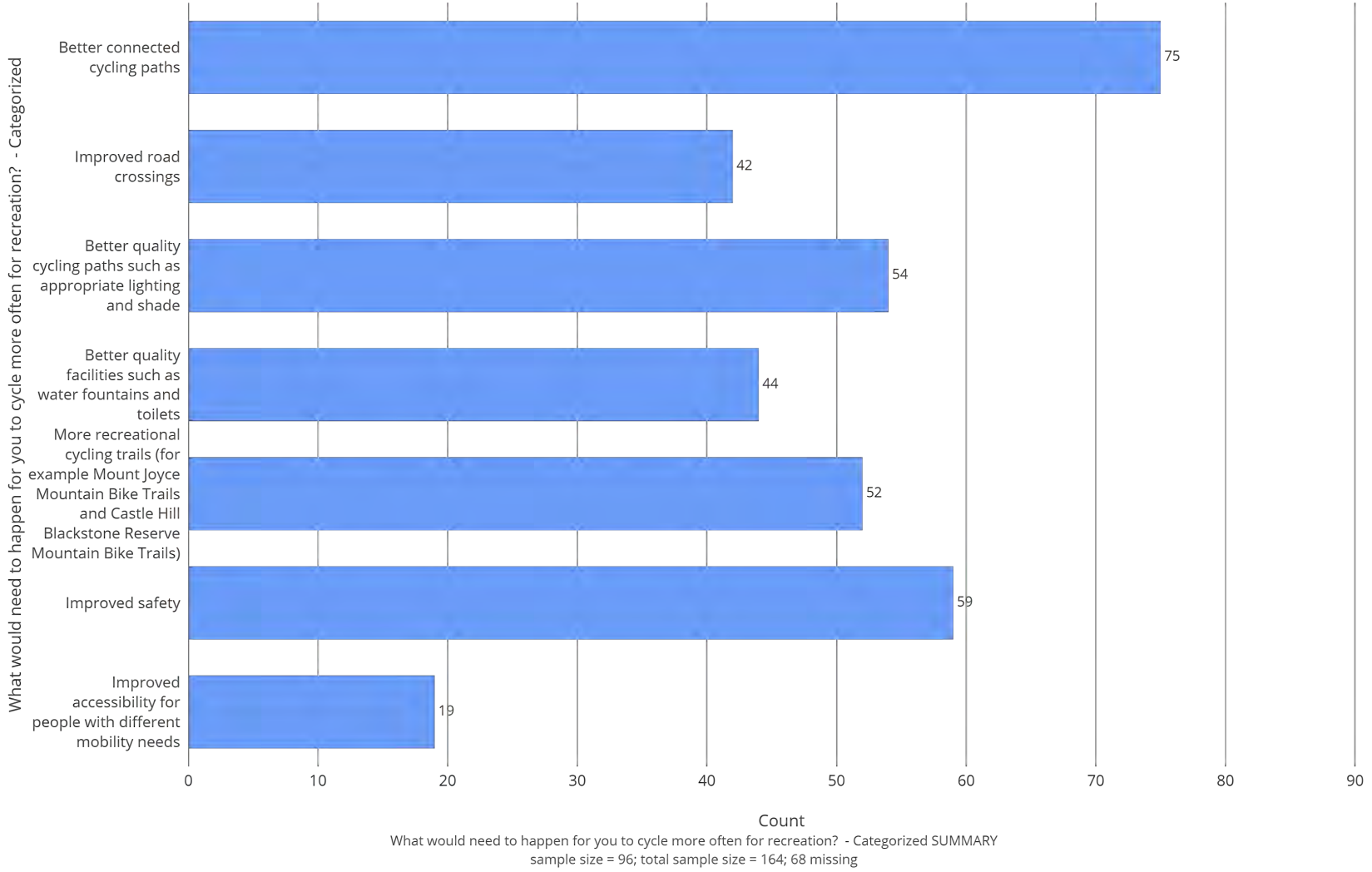


What would need to happen for you to cycle more often for recreation? (Other (please specify)) - Categorized SUMMARY
sample size = 17; total sample size = 164; 147 missing

58

What would need to happen for you to cycle more often for recreation? (Other (please specify)) RAW DATA
sample size = 164

24. What would need to happen for you to cycle more often for recreation?



Q25: Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? (Other, please specify)

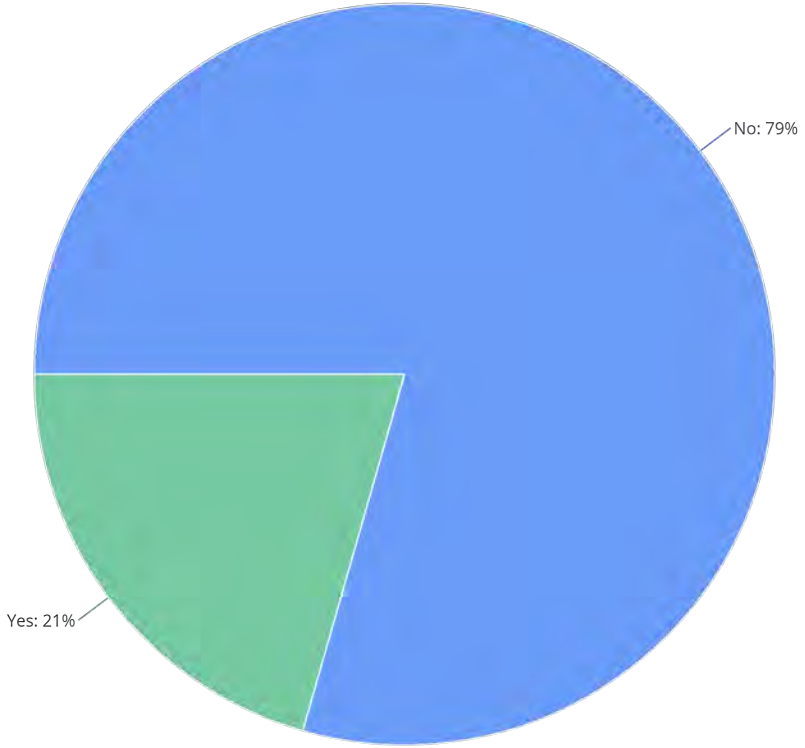
Key Themes:

- More Active Transport Infrastructure needed
- Road Maintenance
- Road Network Connectivity
- Need for Public Transport Options

91	A road from merry to tamrookum would be good
92	
93	

Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? (Other (please specify)) RAW DATA
sample size = 164

25. Do you think the ways in which people can travel in and around the Scenic Rim works well for the community?



Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? SUMMARY
sample size = 141; total sample size = 164; 23 missing

Q26: What are the biggest issues for you when travelling in and around the Scenic Rim? (Other - Please specify)

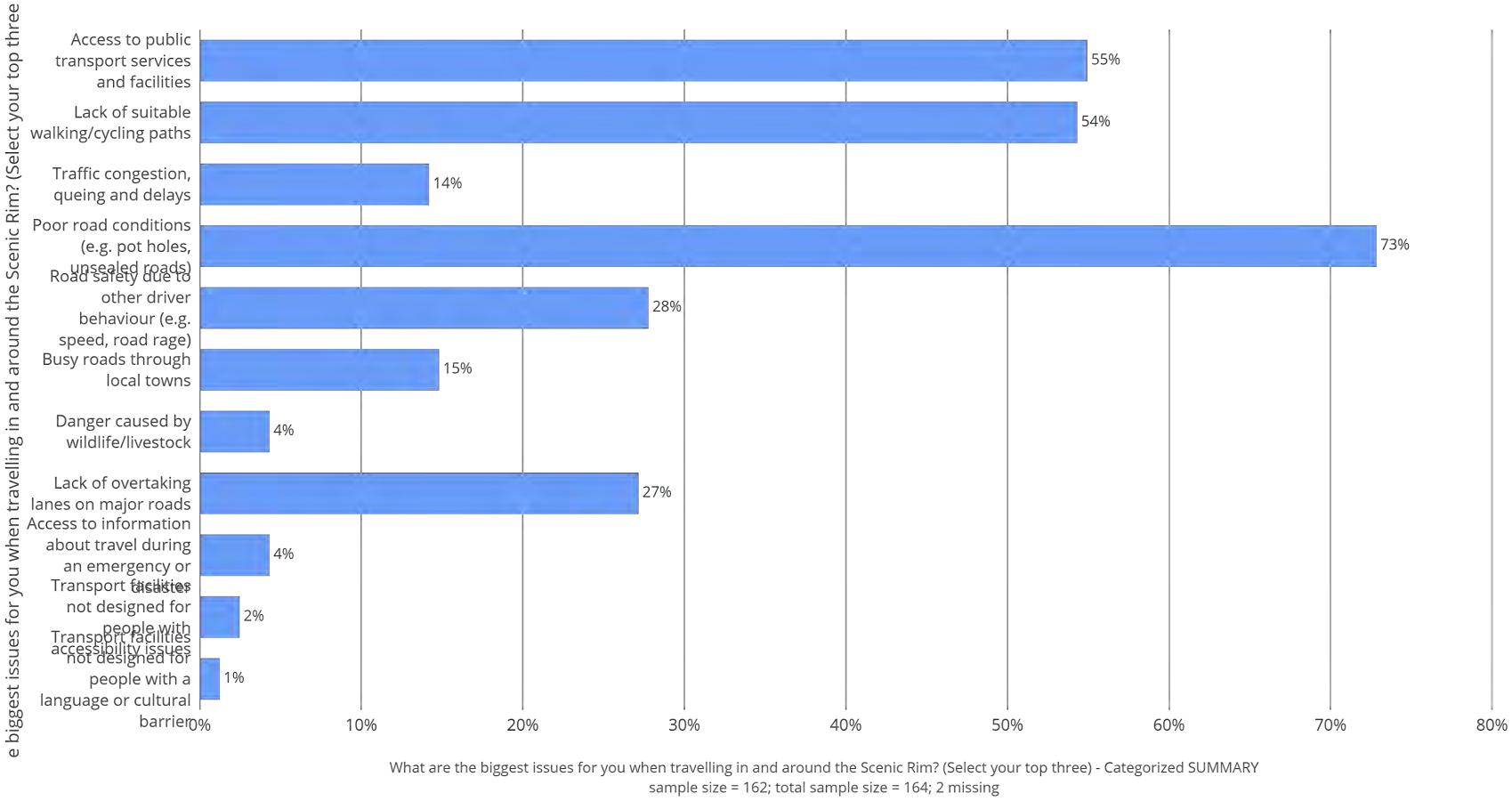
Key Themes:
- Mobility for the elderly or physically impaired
Lack of connecting infrastructure between suburbs

- Dangerous road conditions
- Active Transport infrastructure

- Lack of adequate facilities
- Protection of wildlife

What are the biggest issues for you when travelling in and around the Scenic Rim? (Select your top three) (Other (please specify)) RAW DATA
sample size = 164

26. What are the biggest issues for you when travelling in and around the Scenic Rim?



Q27: When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Other- please specify)

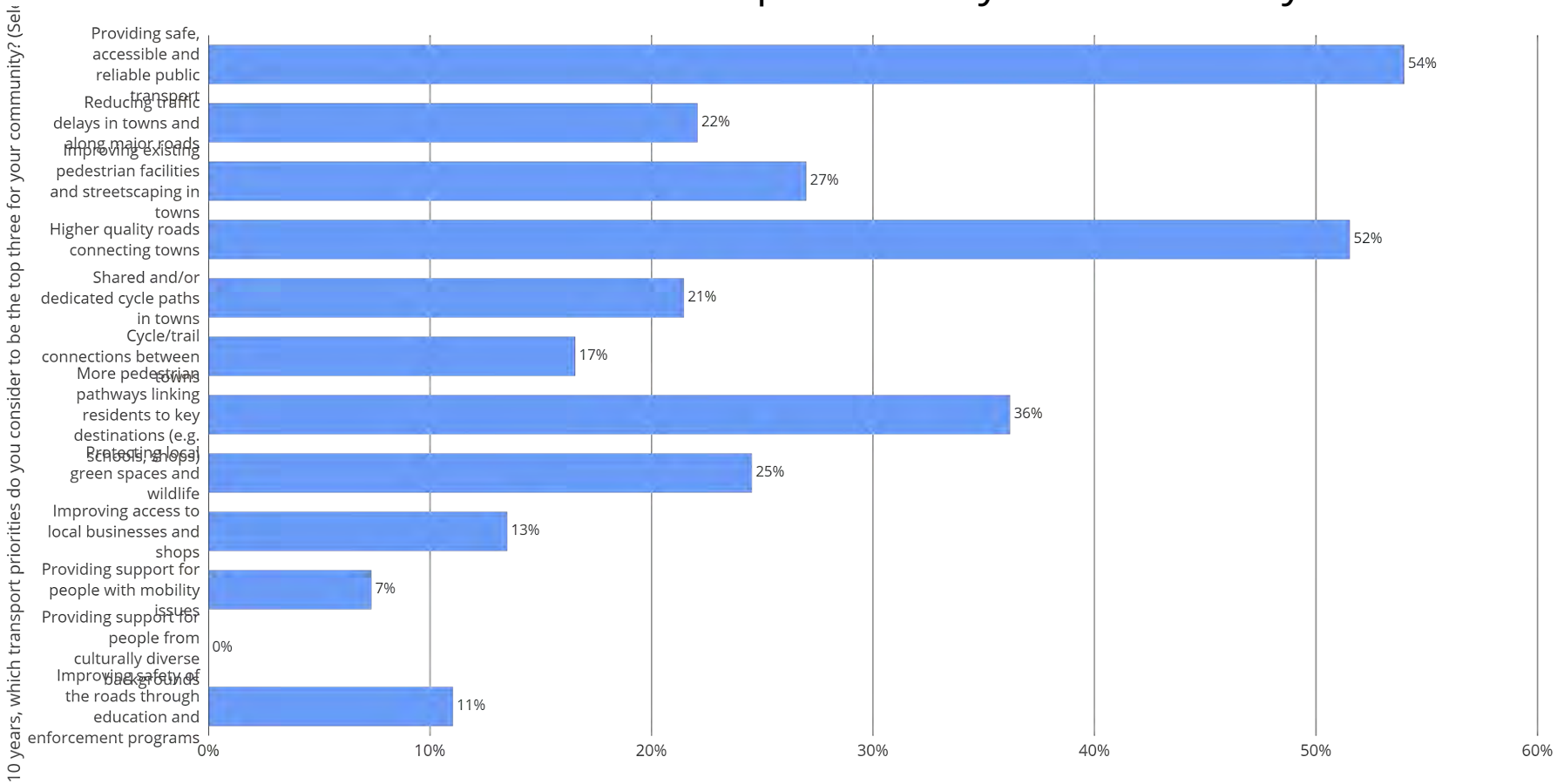
Key themes:

- Active Transport Infrastructure
- Public Transport options around the Scenic Rim and other cities such as Brisbane
- Pedestrian facilities
- Maintenance of Roads
- Strengthen the Road Network
- Protecting wildlife and the environment

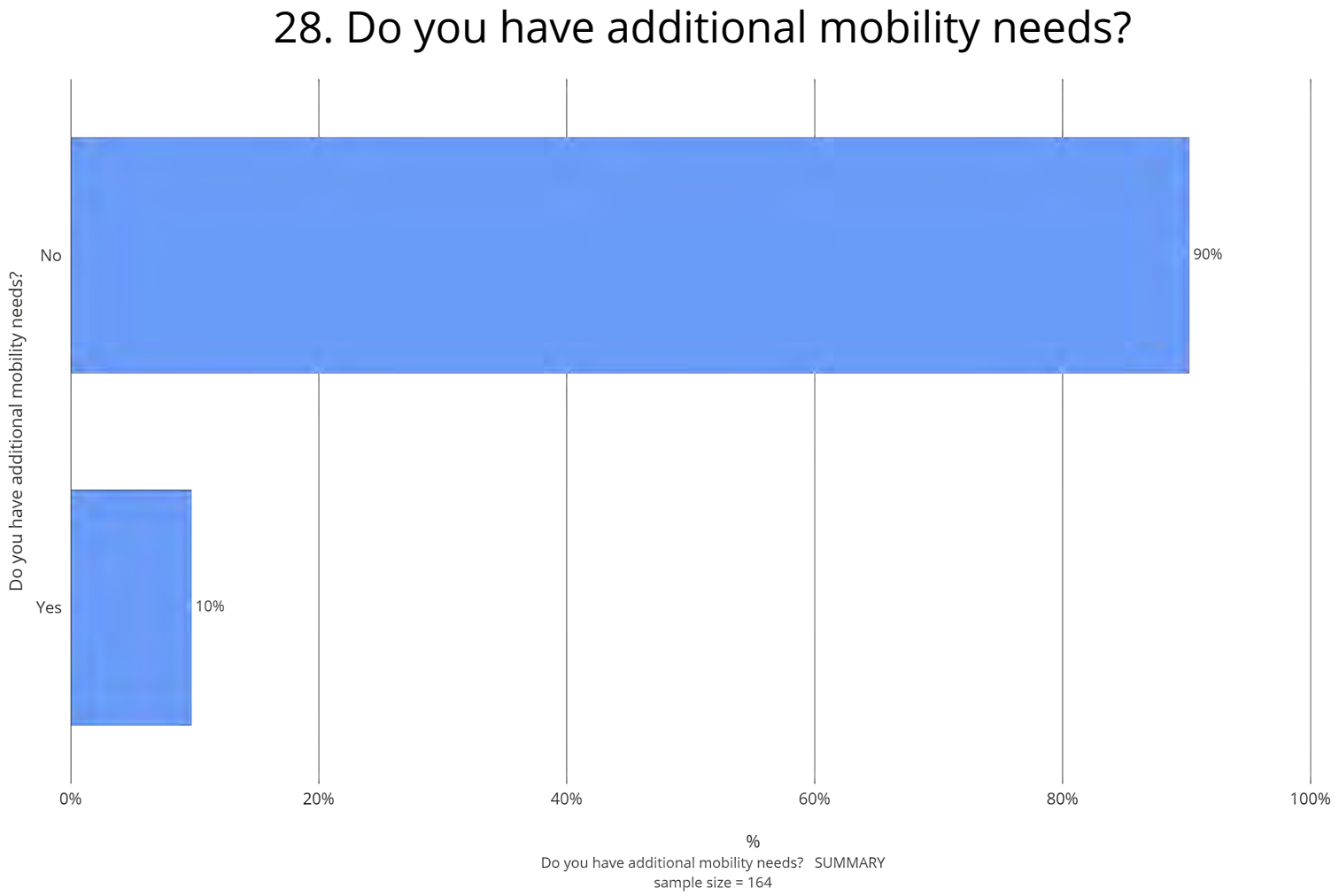
54
55
56
57

When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Select your top three). (Other (please specify)) RAW DATA
sample size = 164

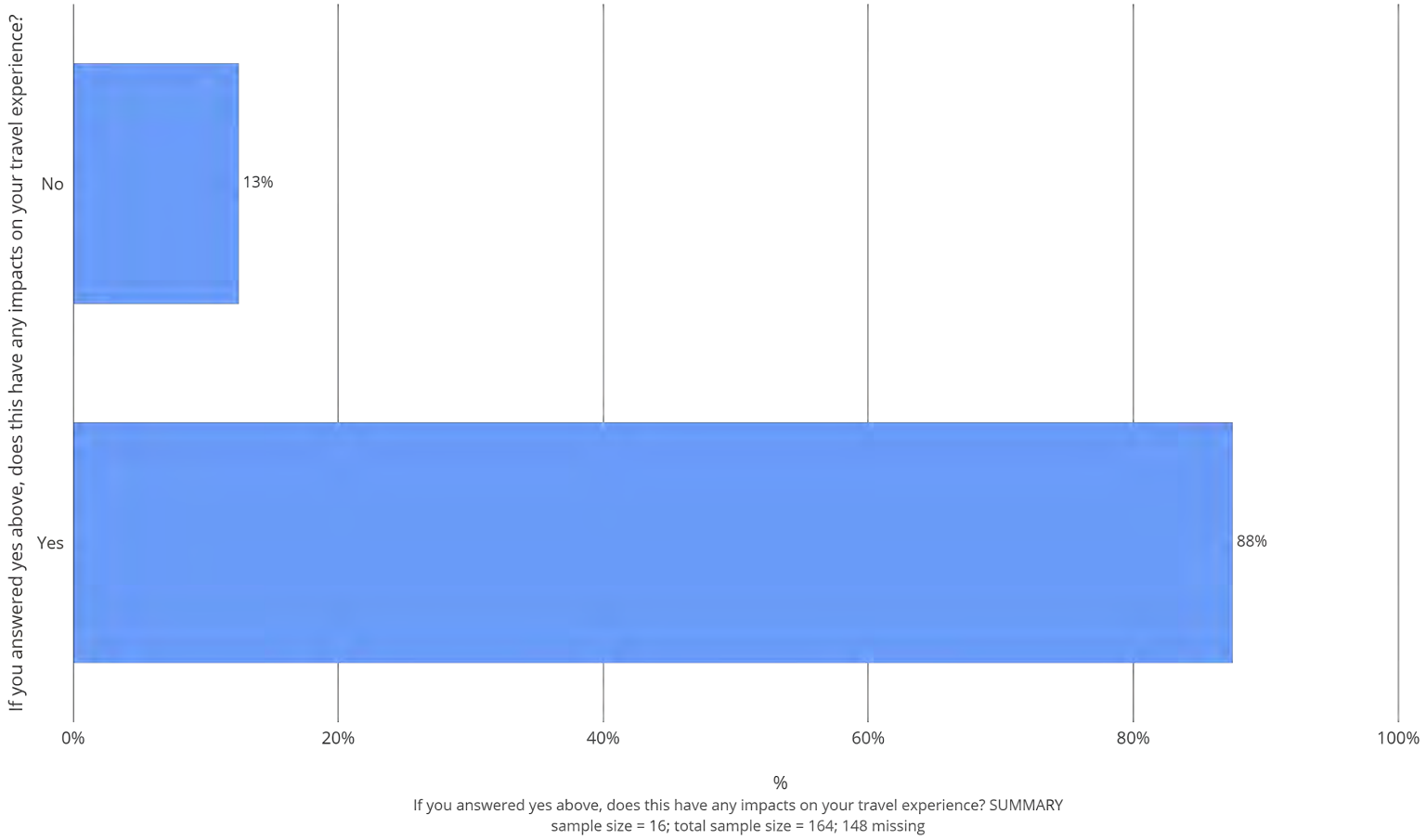
27. When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community?



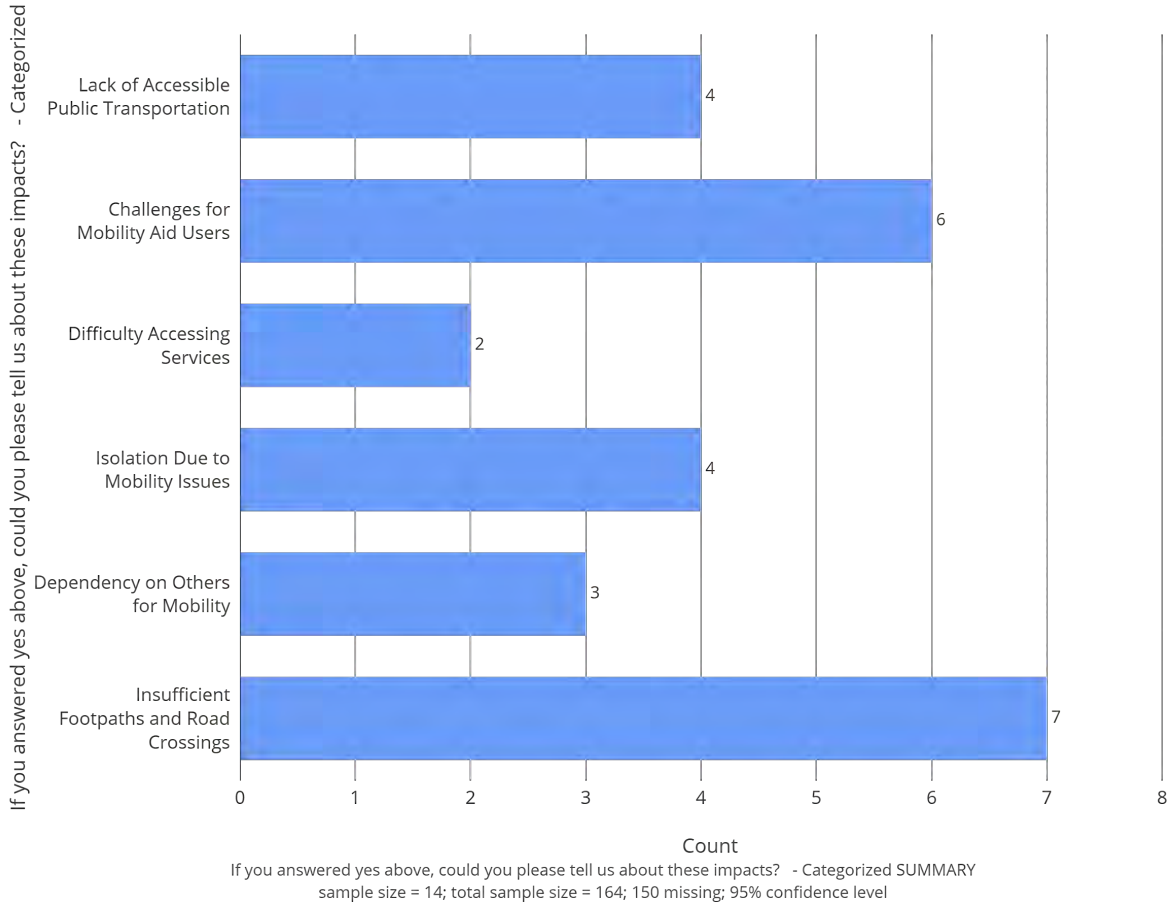
When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Select your top three). - Categorized SUMMARY
sample size = 163; total sample size = 164; 1 missing


28. Do you have additional mobility needs?
Do you have additional mobility needs?
No
Yes
90%
10%
0%
20%
40%
60%
80%
100%
%
Do you have additional mobility needs? SUMMARY
sample size = 164

29. If you answered yes above, does this have any impacts on your travel experience?



30. If you answered yes above, could you please tell us about these impacts?



21
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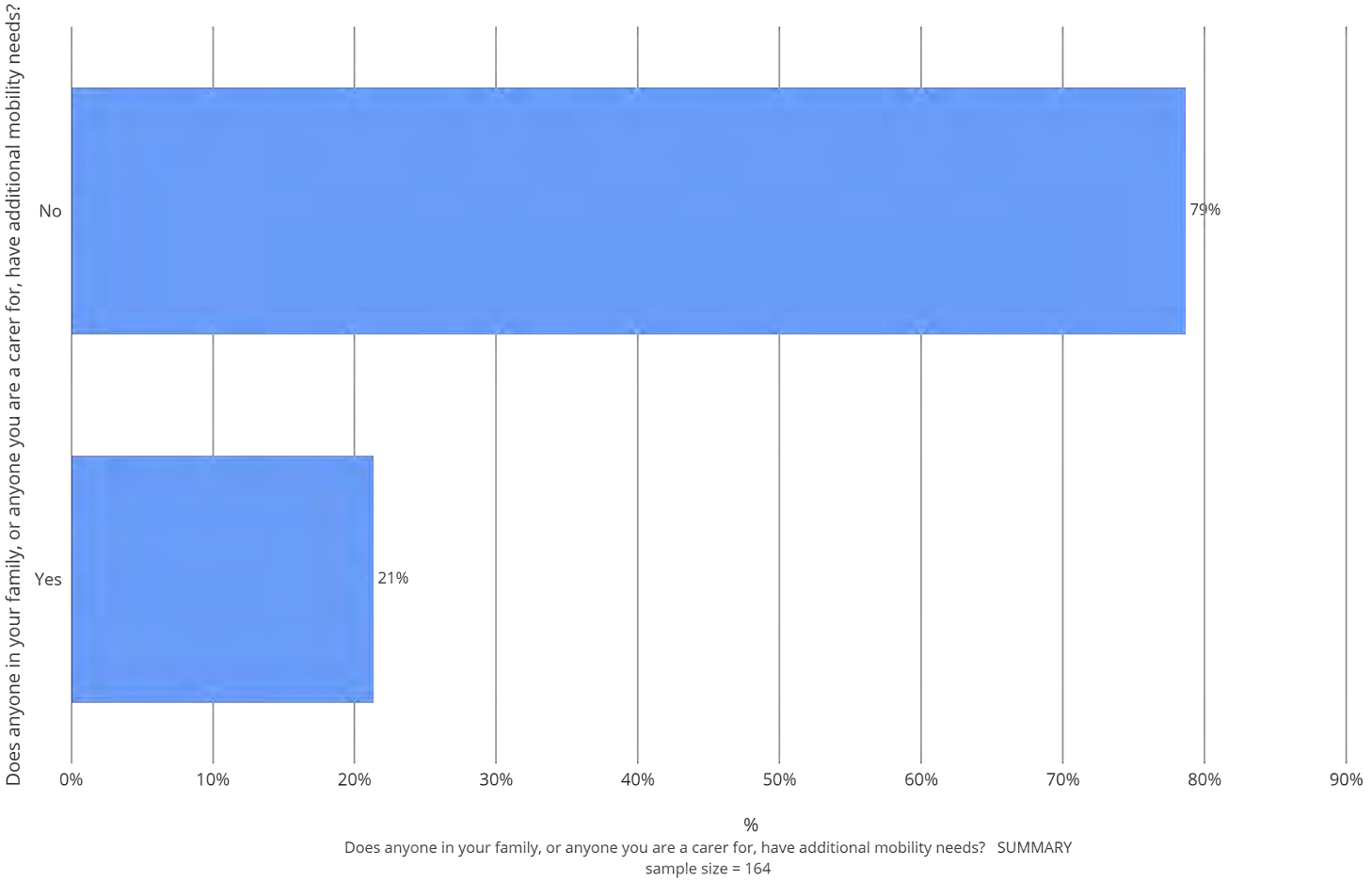
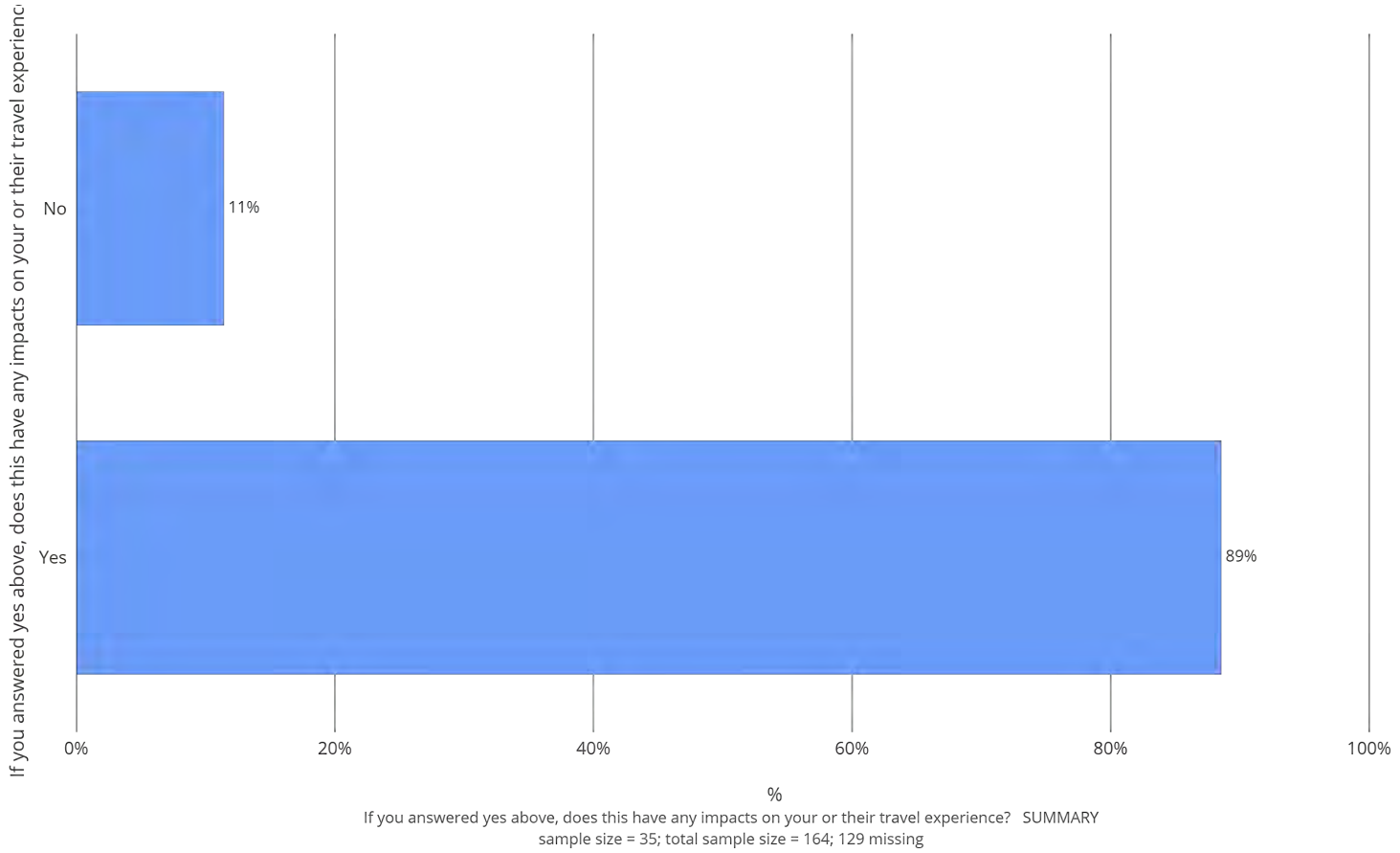
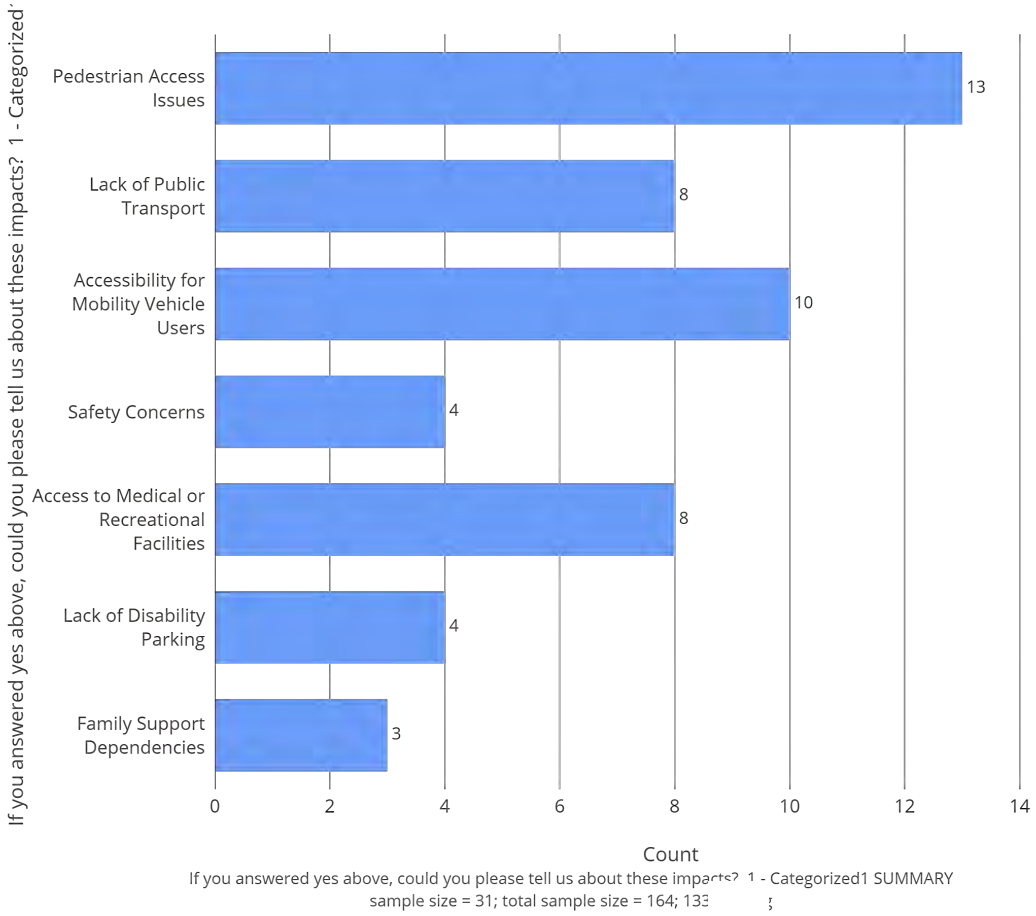
31. Does anyone from your family, or anyone you are a carer for, have any additional mobility needs?



32. If you answered yes above, does this have any impacts on your or their travel experience?

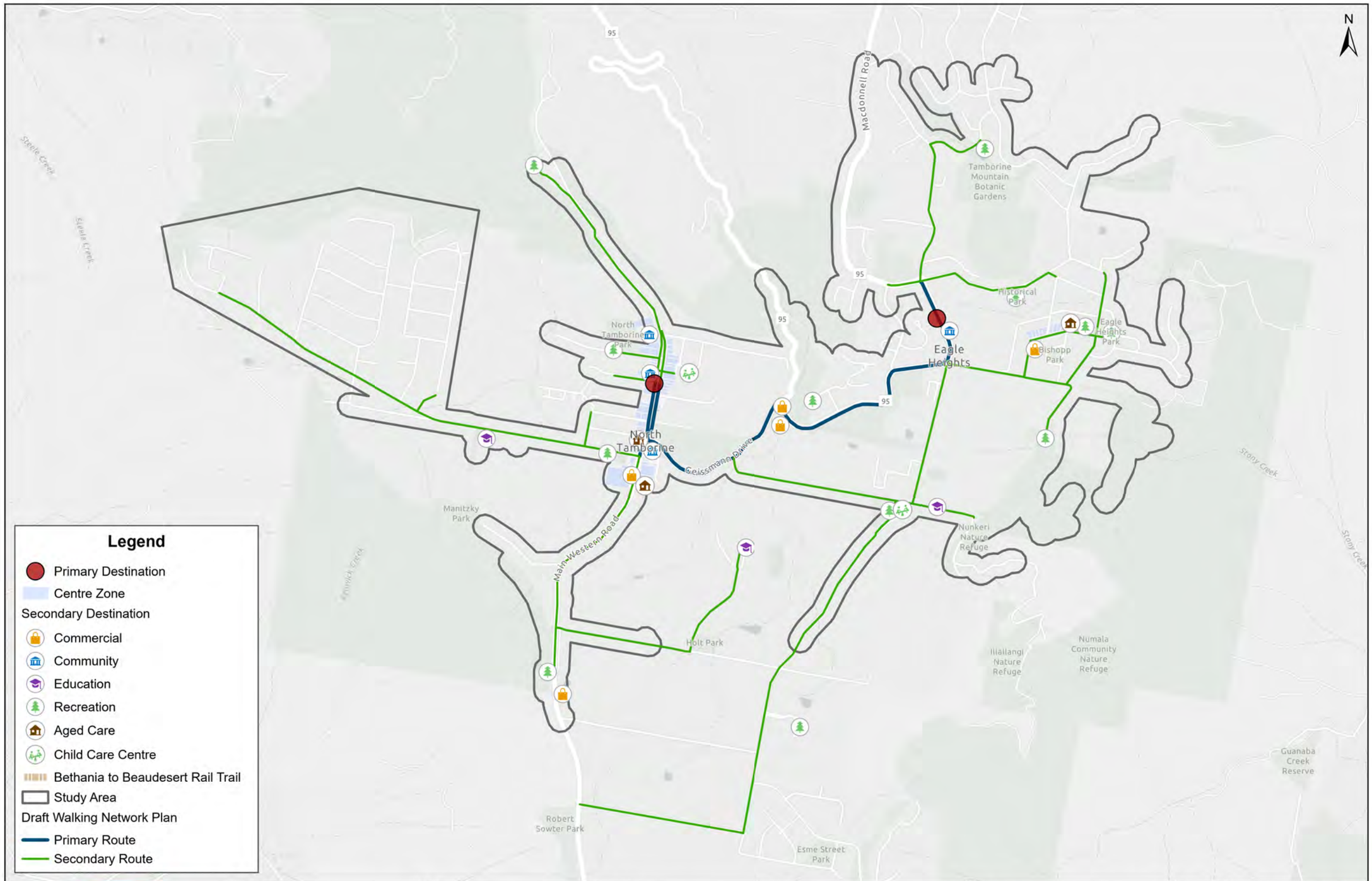


33. If you answered yes above, could you please tell us about these impacts?



16	
17	
18	
19	
20	
21	
22	
23	
24	Limited ability for my wife to walk safely around the village of Kooralbyn, no footpaths and uneven ground

Appendix J: Final Walking Network Plan Routes



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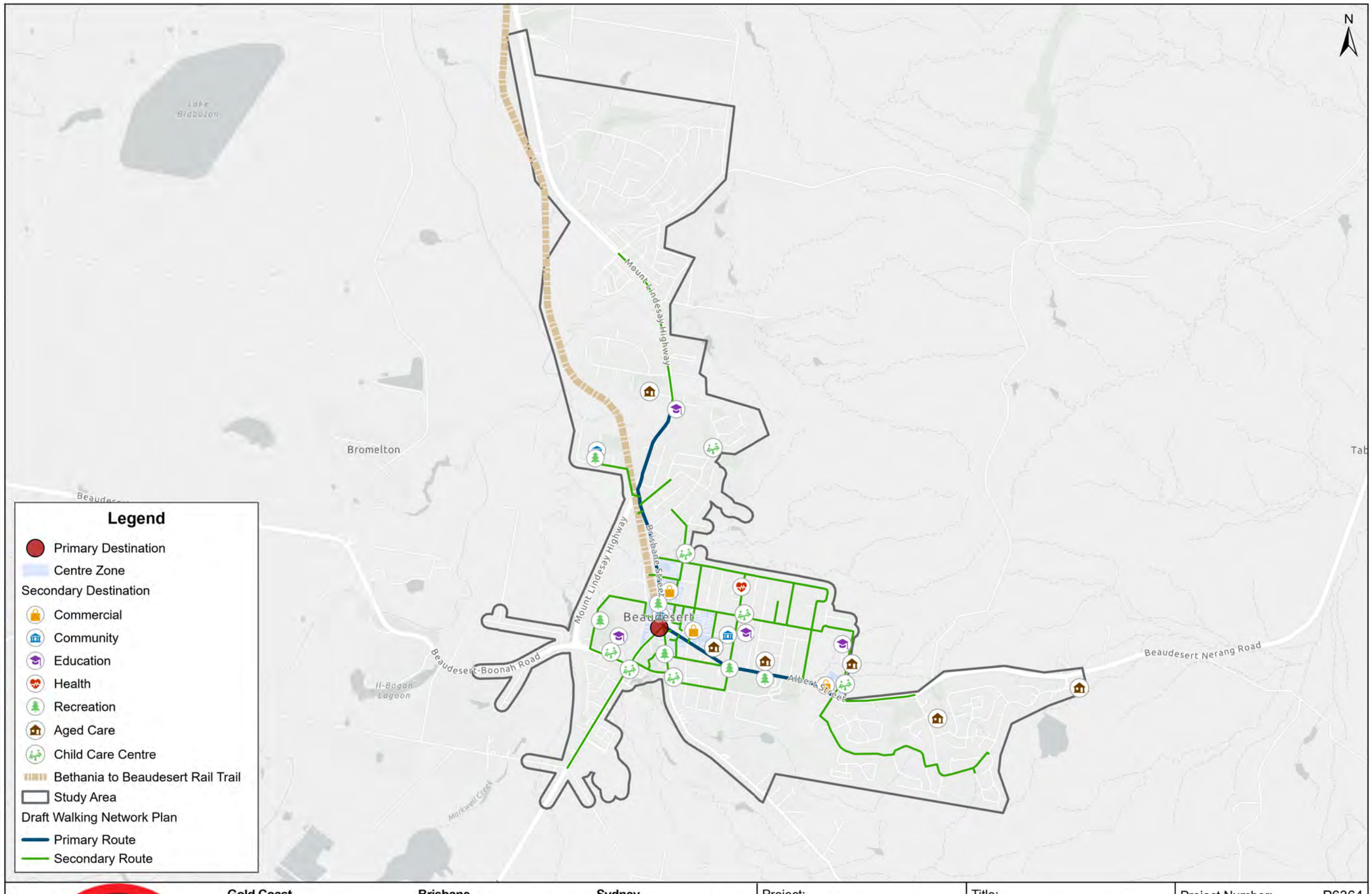
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Tamborine Mountain Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2



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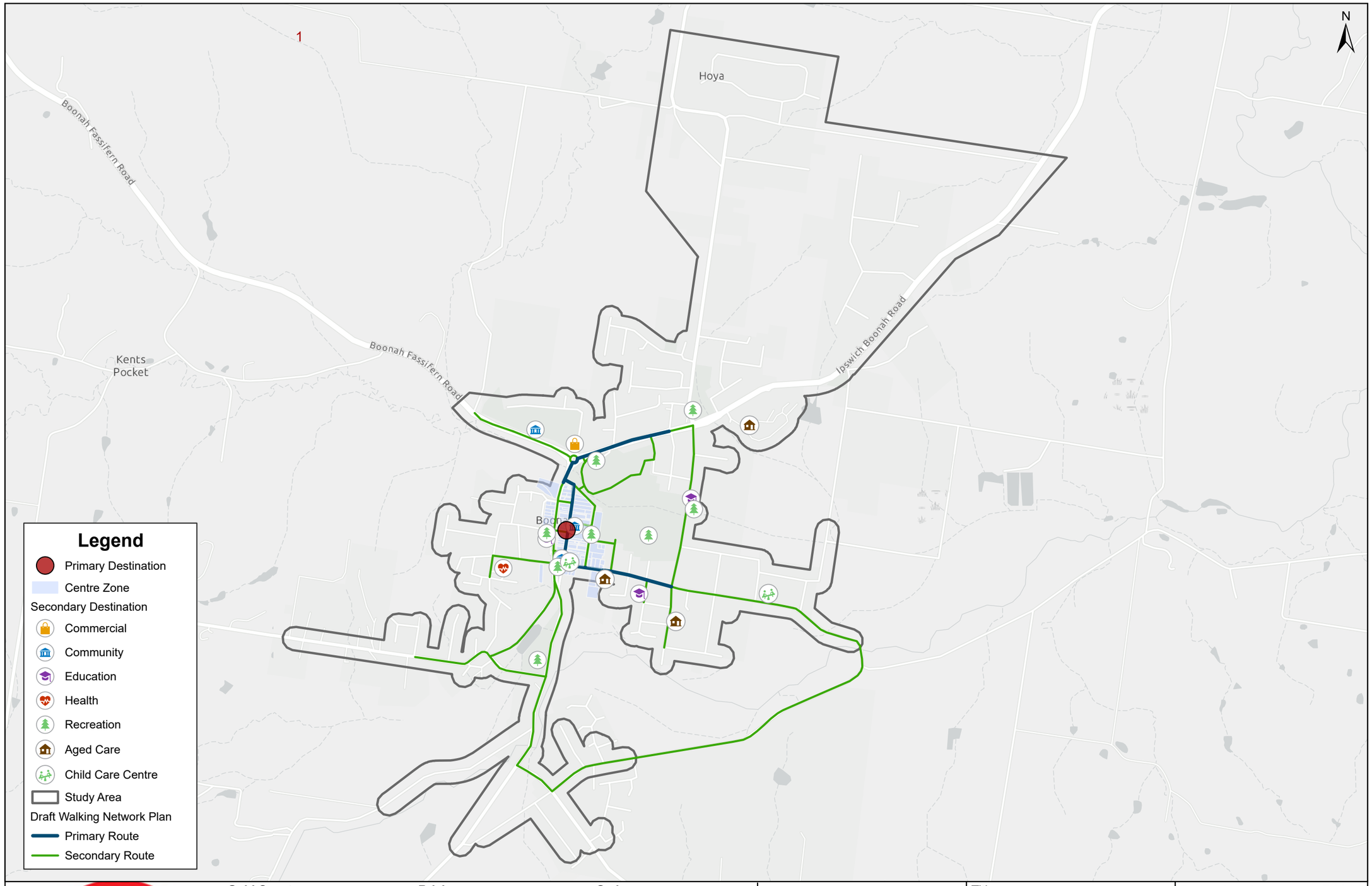
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Beaudesert Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2



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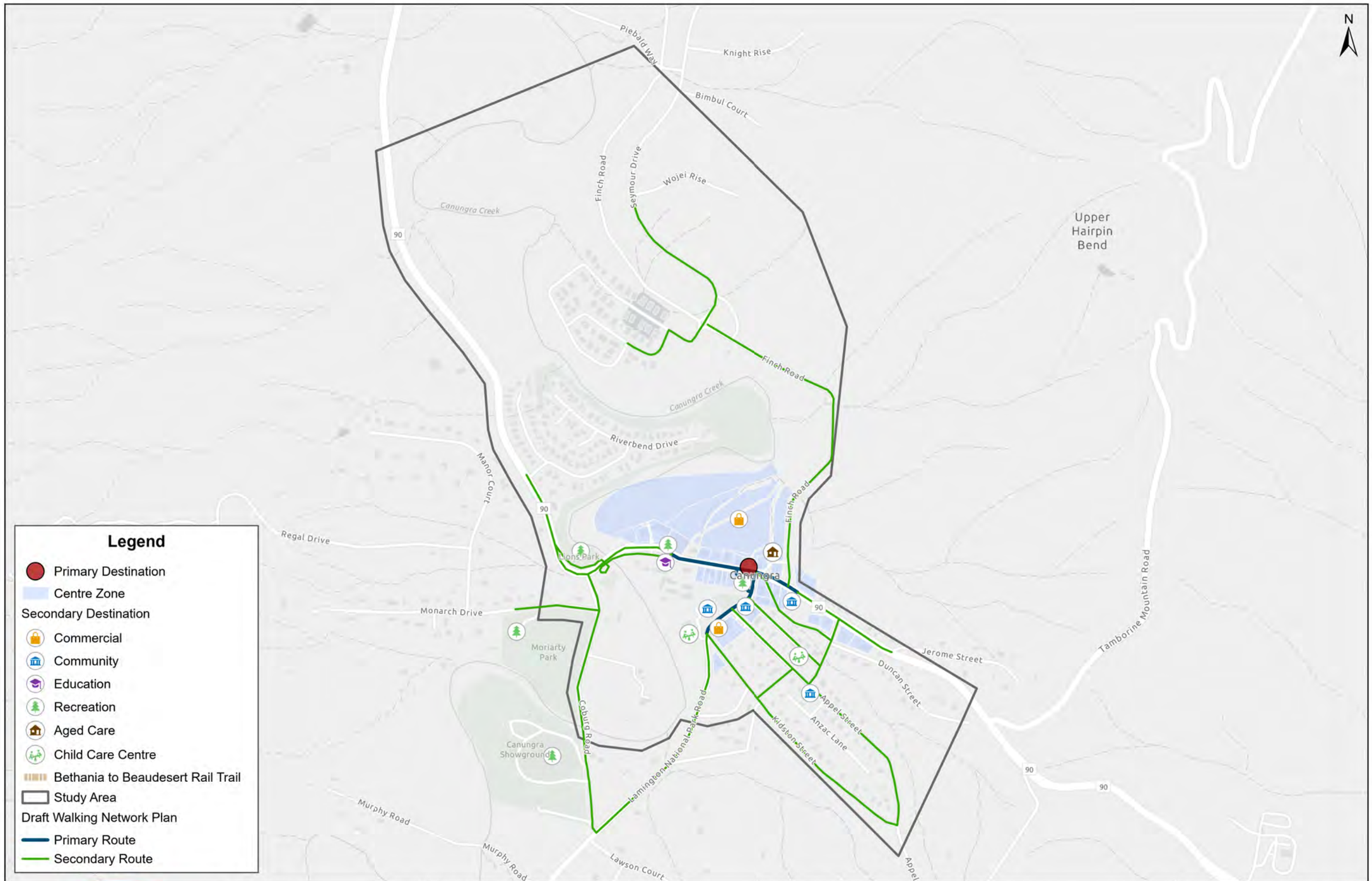
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Boonah Study Area
Project Number:	P6364
Date:	29/05/2025
Issue:	3



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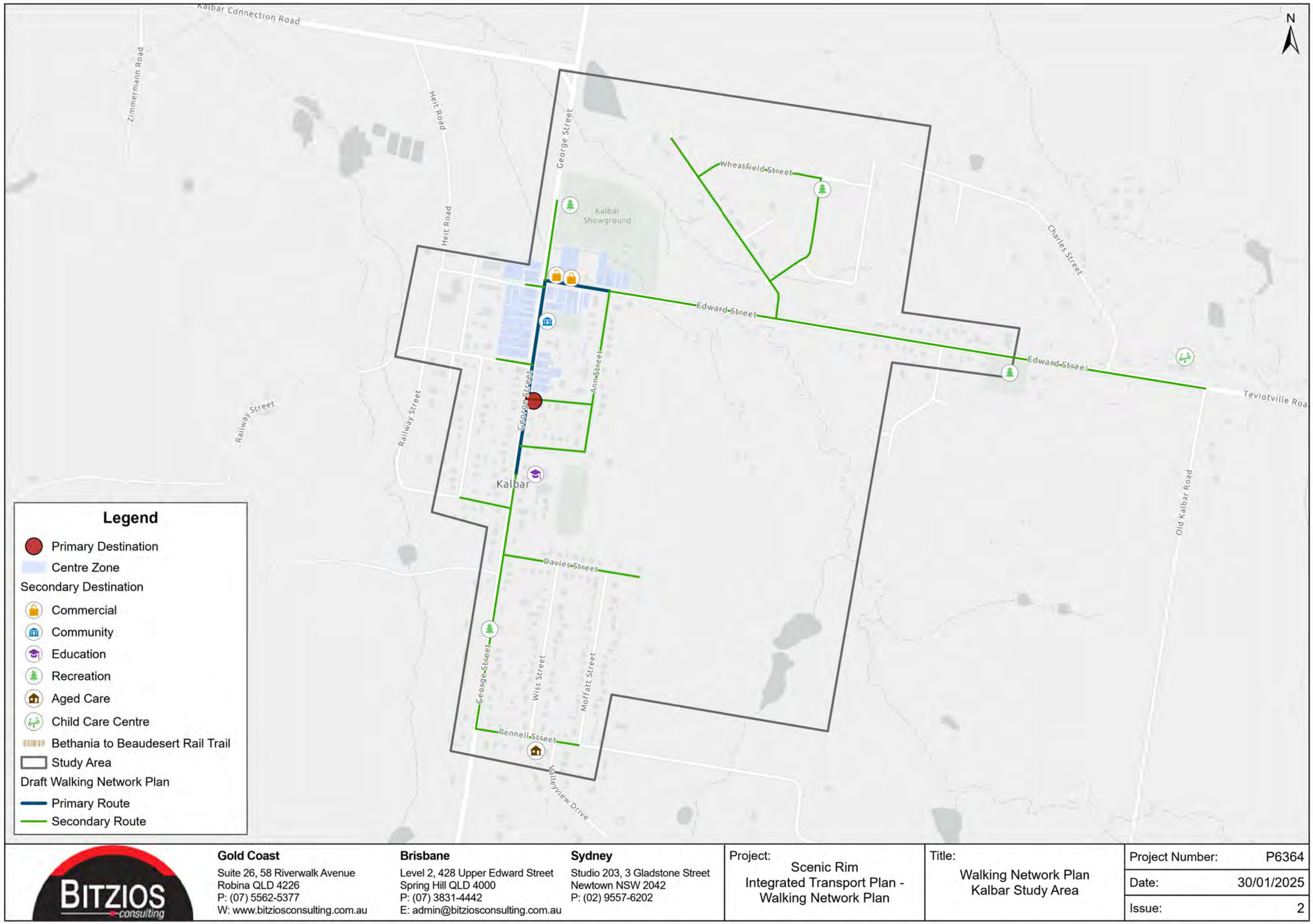
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Canungra Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2



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Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Kalbar Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2

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Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Peak Crossing Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2

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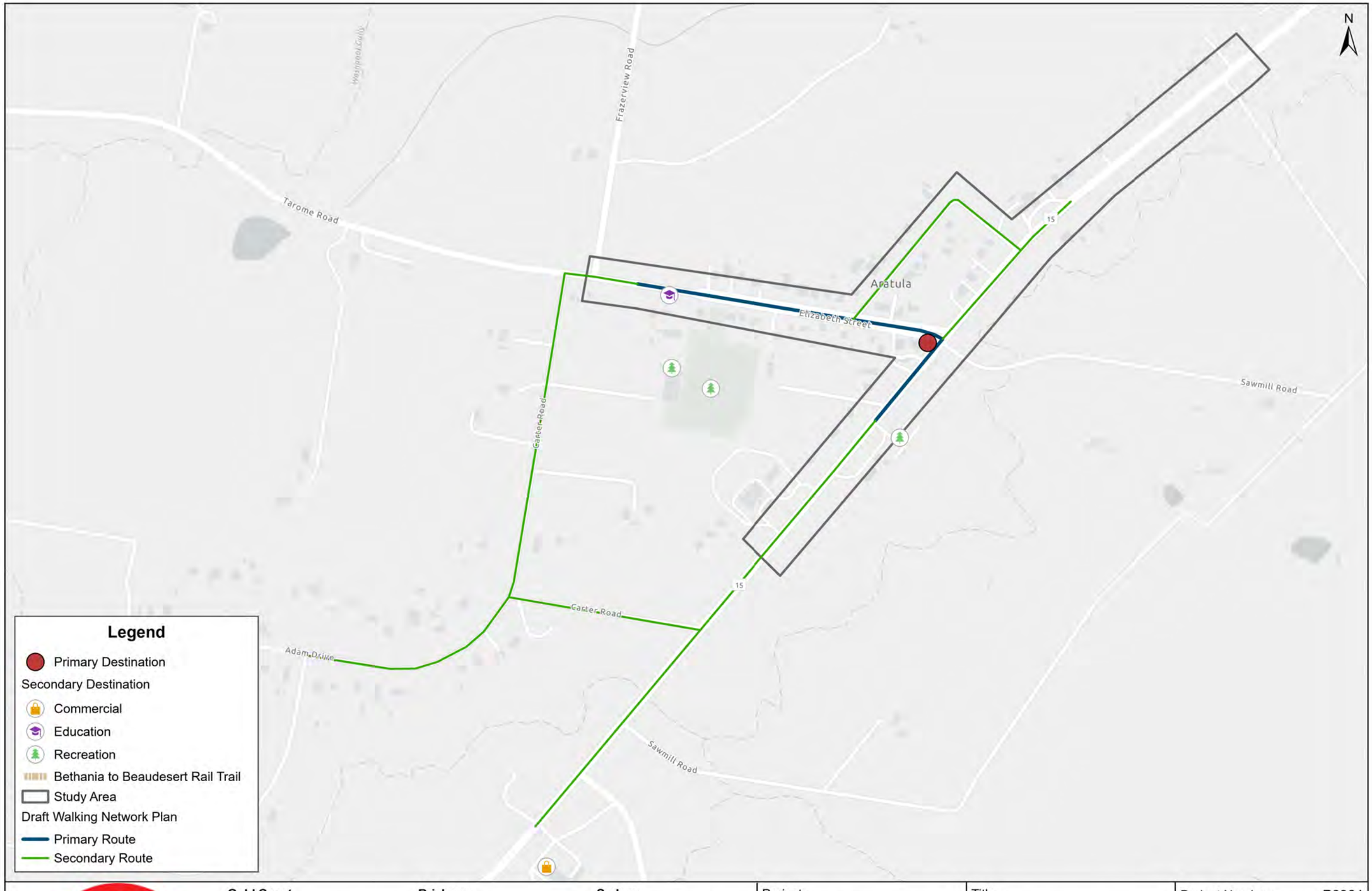
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Harrisville Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2



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Title:	Walking Network Plan Aratula Study Area
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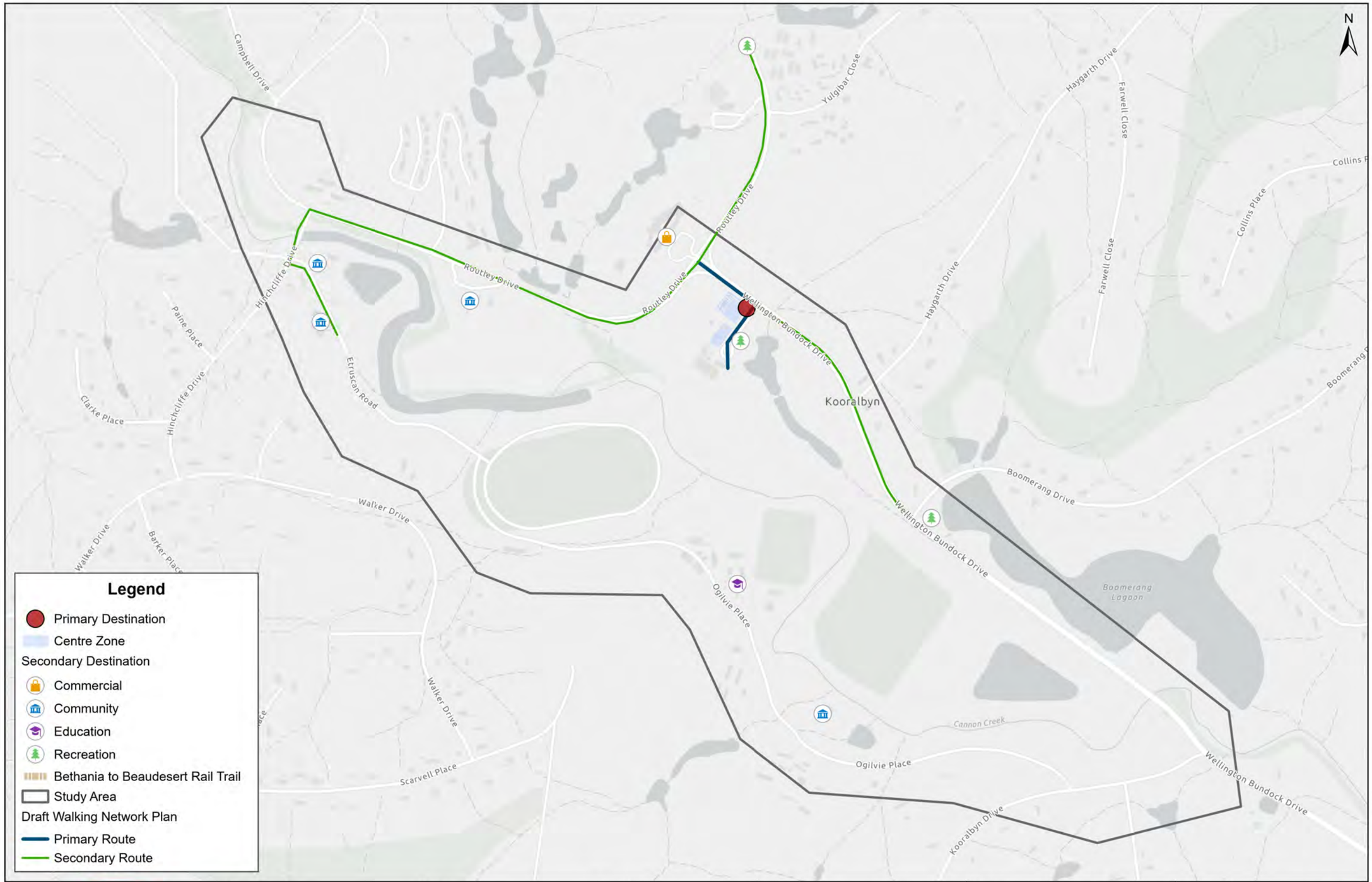

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Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Kooralbyn Study Area
Project Number:	P6364
Date:	30/01/2025
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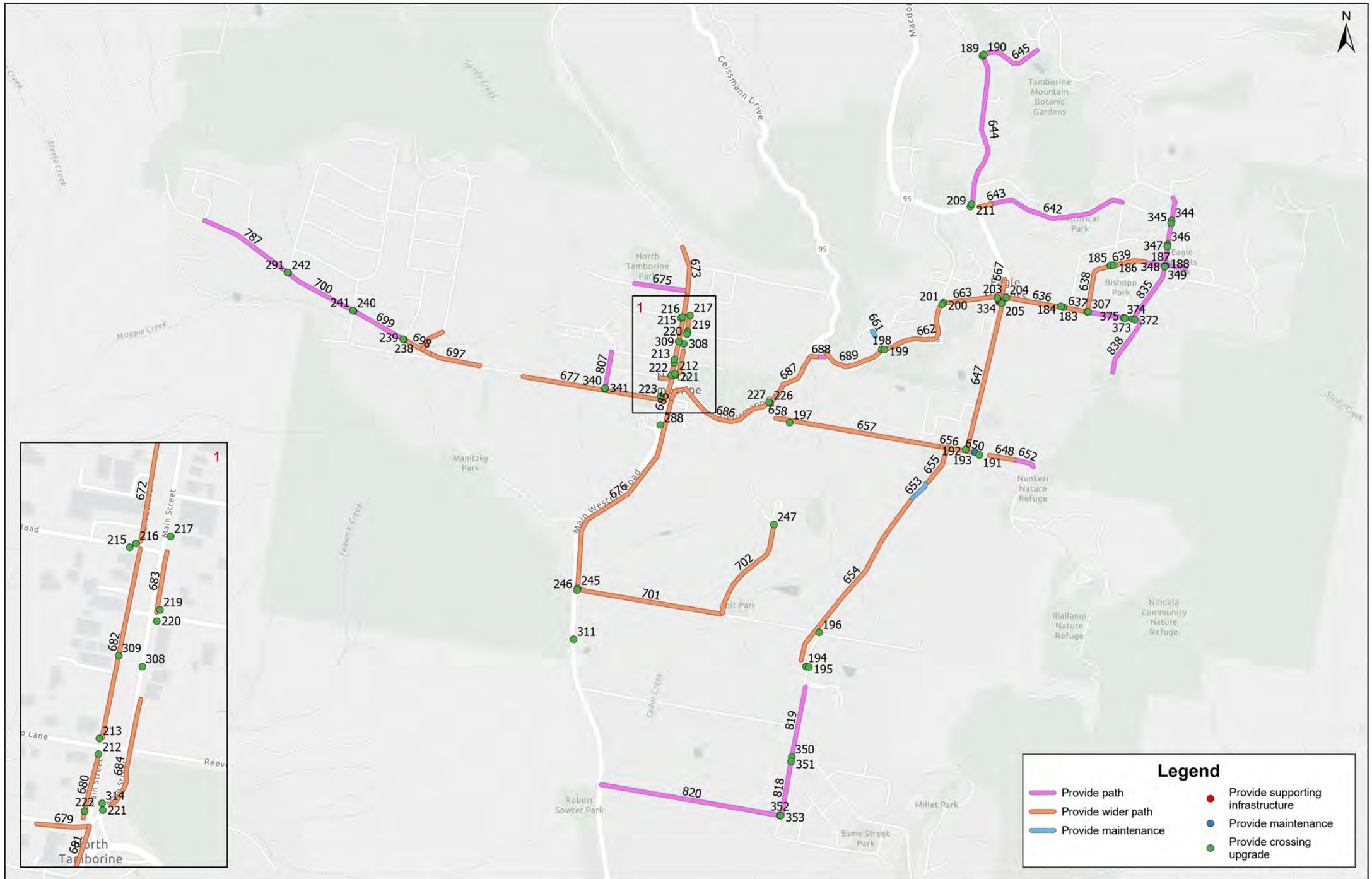
Project:	Scenic Rim Integrated Transport Plan - Walking Network Plan
Title:	Walking Network Plan Tamborine Study Area
Project Number:	P6364
Date:	30/01/2025
Issue:	2

Appendix K: Indicative Costs

Type	Rate
Path – 1.8m wide	Per meter
Path – 2.5m wide	Per meter
Kerb ramp	Per unit
Pedestrian refuge island	Per unit
Kerb build out	Per unit
Two aspect pedestrian signal	Per unit
Zebra crossing	Per unit
Wombat crossing (raised crossing)	Per unit
Bus stop shelter	Per unit
TGSI	Per unit
Bicycle parking	Per unit
Seating	Per unit
Tree planting	Per unit (tree)
Water bubbler	Per unit

Appendix L: Action Program



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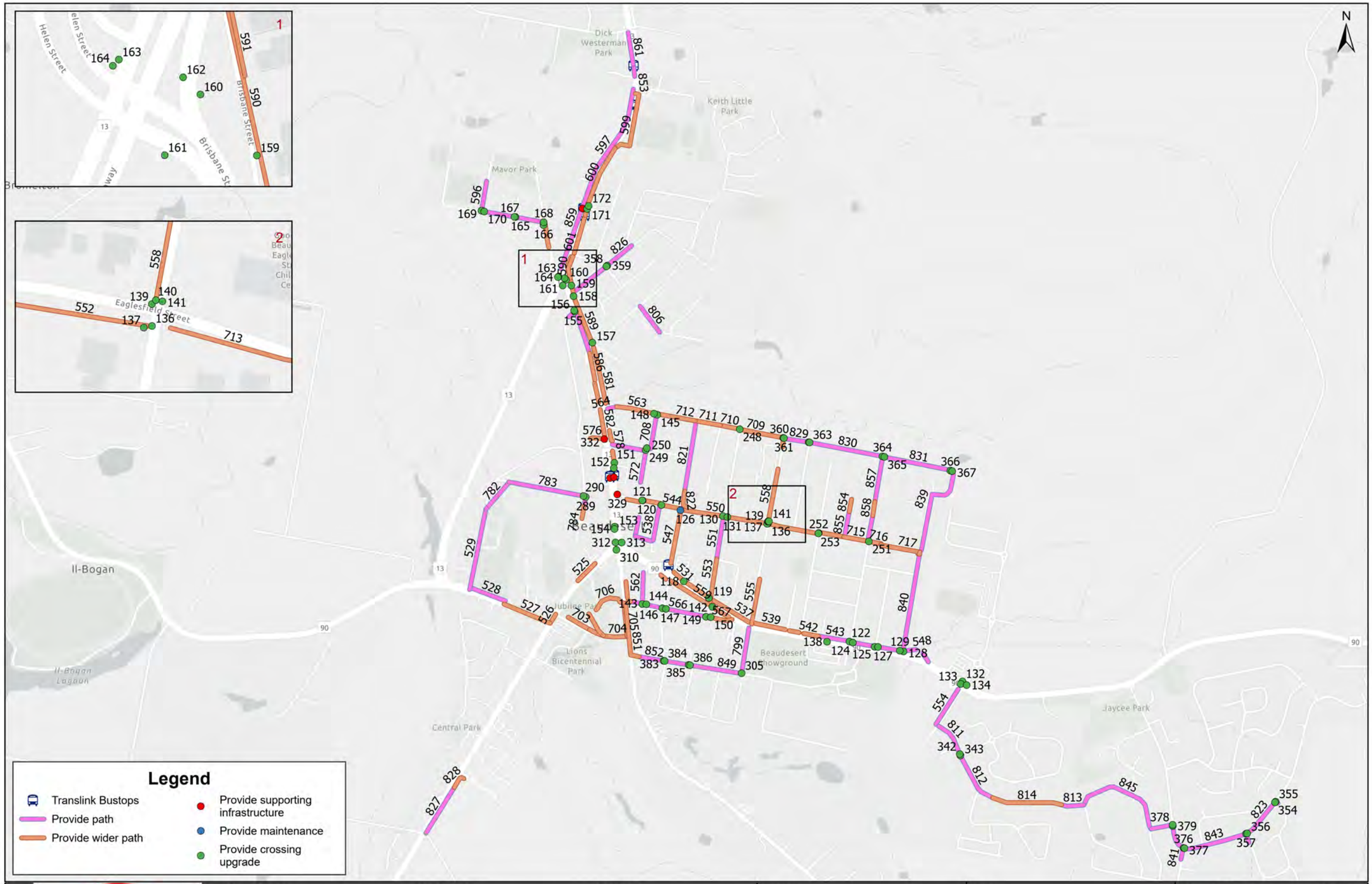
Project:	Scenic Rim Integrated Transport Plan
Title:	Tamborine Mountain Action Program
Project Number:	P6364
Date:	30/01/2025
Issue:	3



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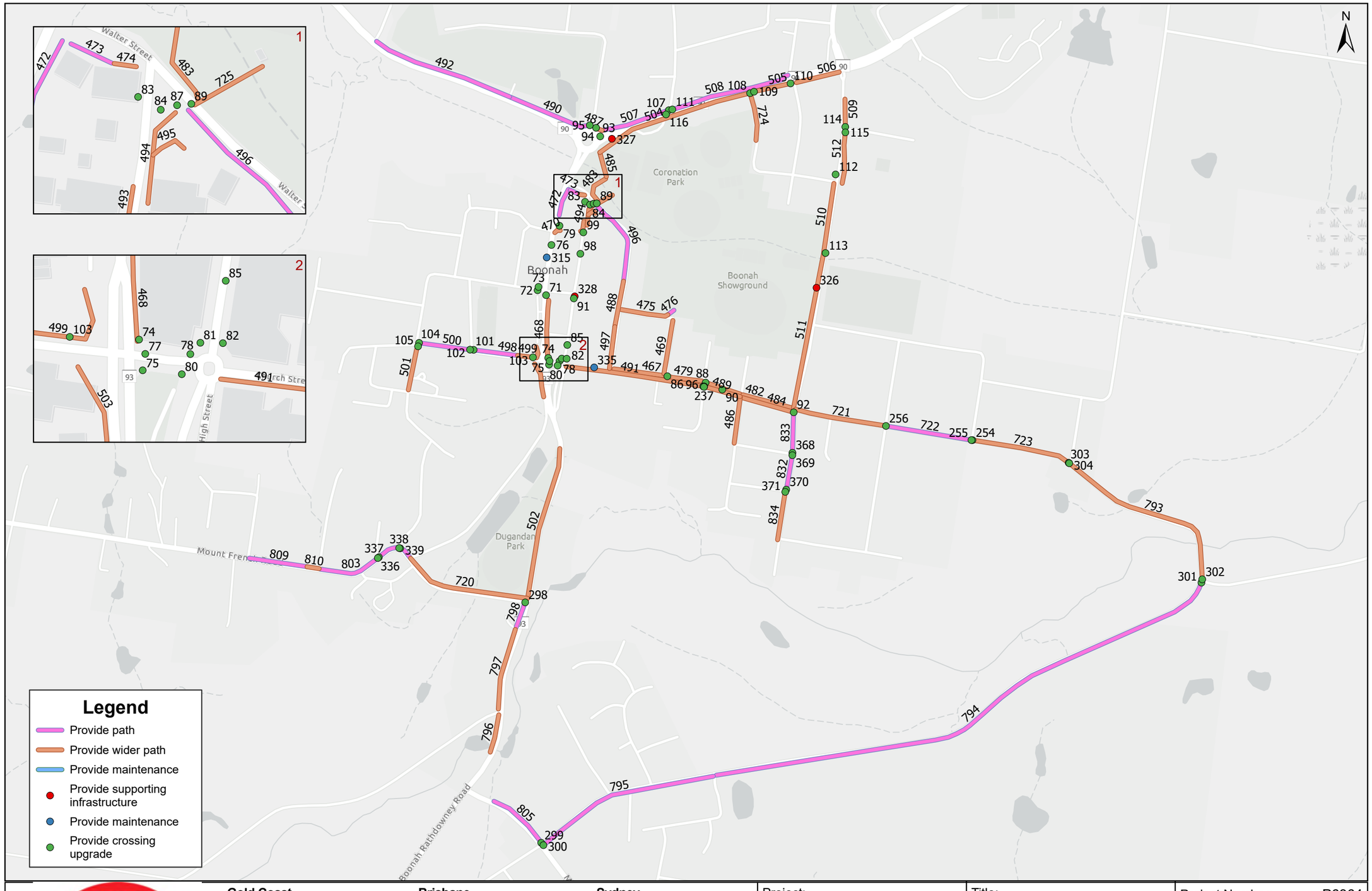
Project:	Scenic Rim Integrated Transport Plan
Title:	Beaudesert Action Program
Project Number:	P6364
Date:	30/01/2025
Issue:	3



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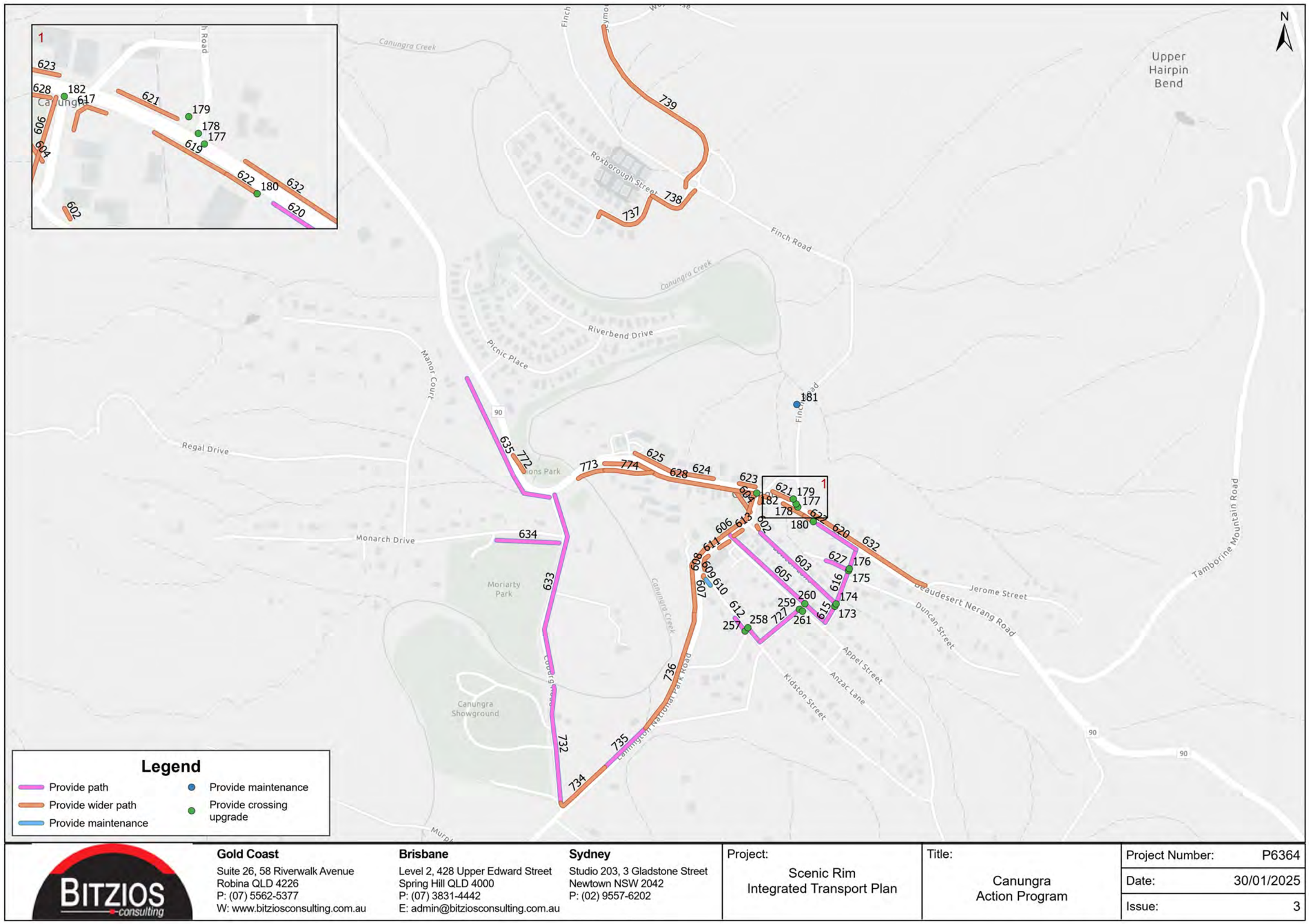
Project:	Scenic Rim Integrated Transport Plan
Title:	Boonah Action Program
Project Number:	P6364
Date:	27/05/2025
Issue:	3



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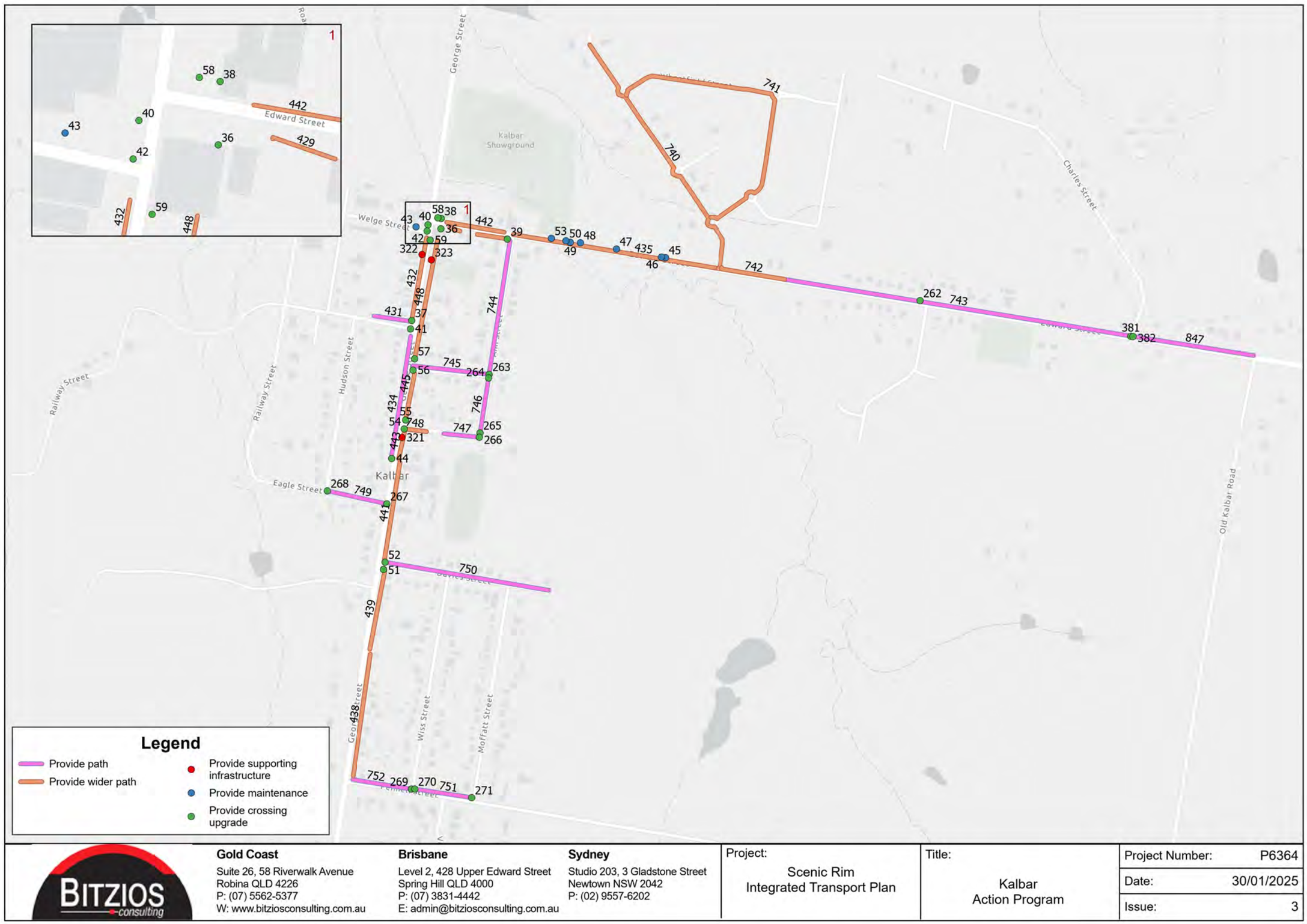
Project:	Scenic Rim Integrated Transport Plan
Title:	Canungra Action Program
Project Number:	P6364
Date:	30/01/2025
Issue:	3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Edward Street
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429
42
432
59
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George Street
Kalbar Showgroup
741
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Charles Street
Welge Street
39
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262
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847
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747
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266
321
443
44
Kalbar
Railway Street
Hudson Street
Eagle Street
268
749
267
441
52
51
750
439
438
Wiss Street
Moffatt Street
752
269
270
751
271
Old Kalbar Road
Legend
Provide path
Provide wider path
Provide supporting infrastructure
Provide maintenance
Provide crossing upgrade
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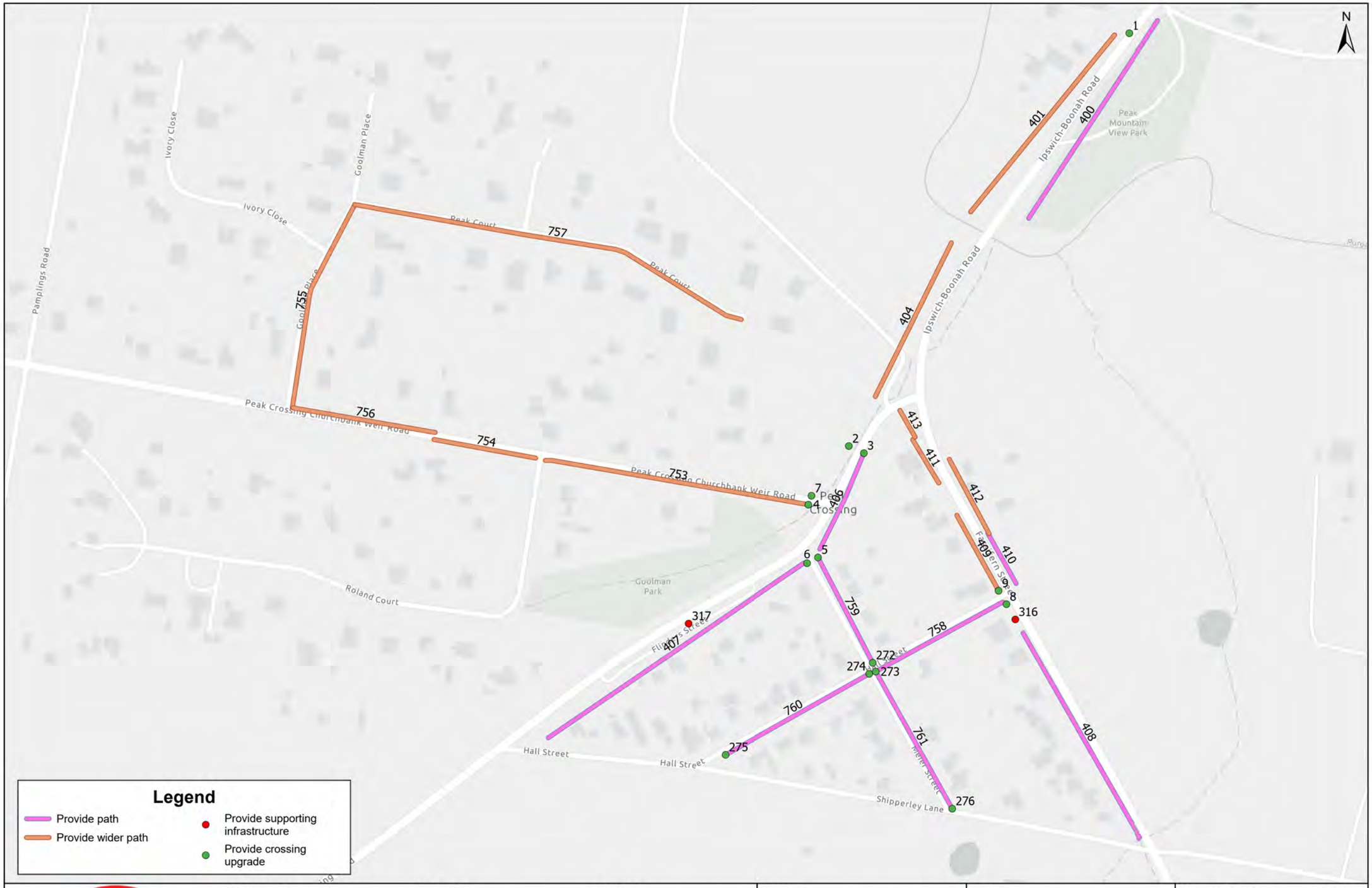
Project:
Scenic Rim
Integrated Transport Plan
Title:
Kalbar
Action Program
Project Number: P6364
Date: 30/01/2025
Issue: 3



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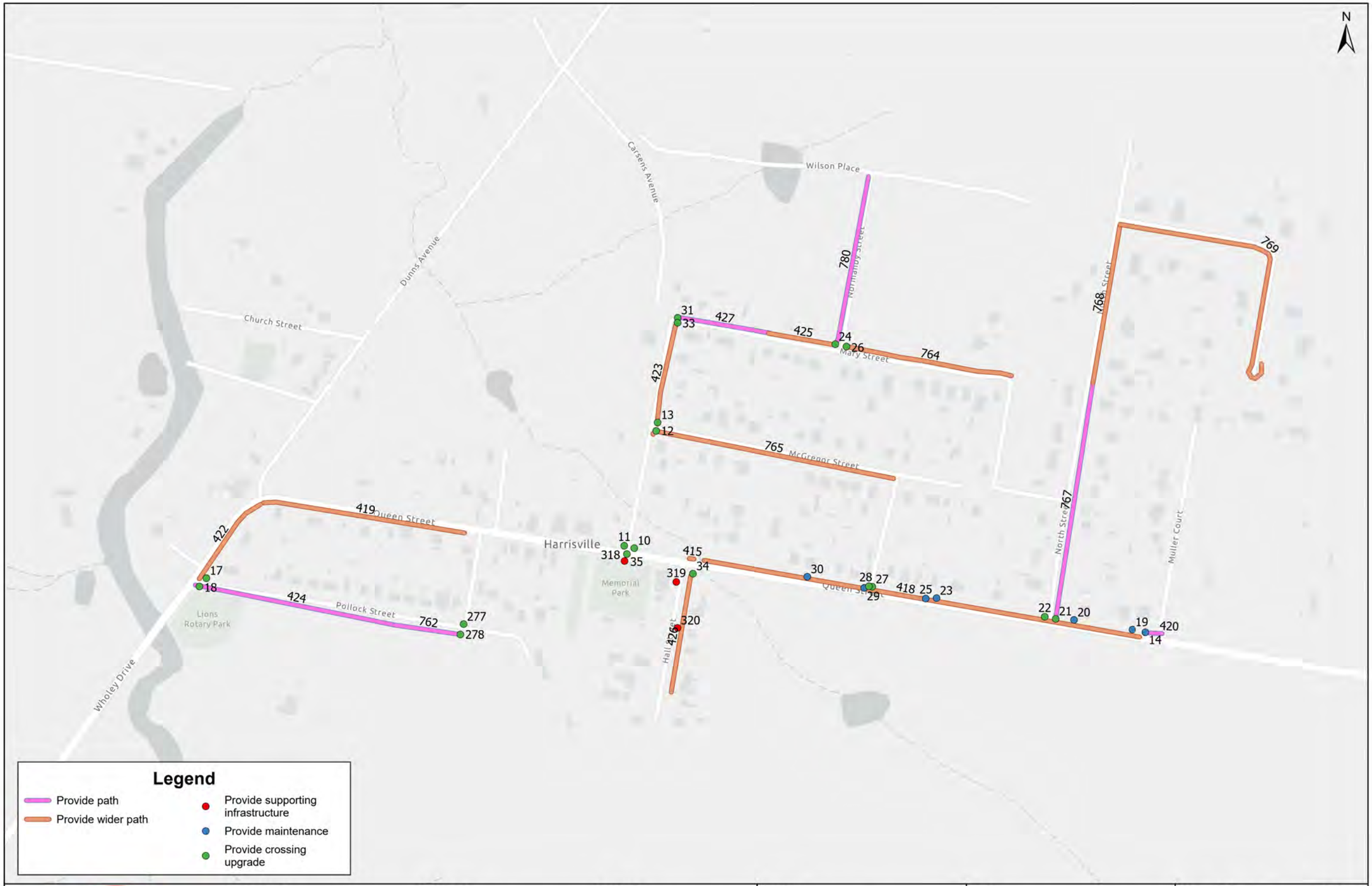
Project:	Scenic Rim Integrated Transport Plan
Title:	Peak Crossing Action Program
Project Number:	P6364
Date:	30/01/2025
Issue:	3



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Project:	Scenic Rim Integrated Transport Plan
Title:	Harrisville Action Program
Project Number:	P6364
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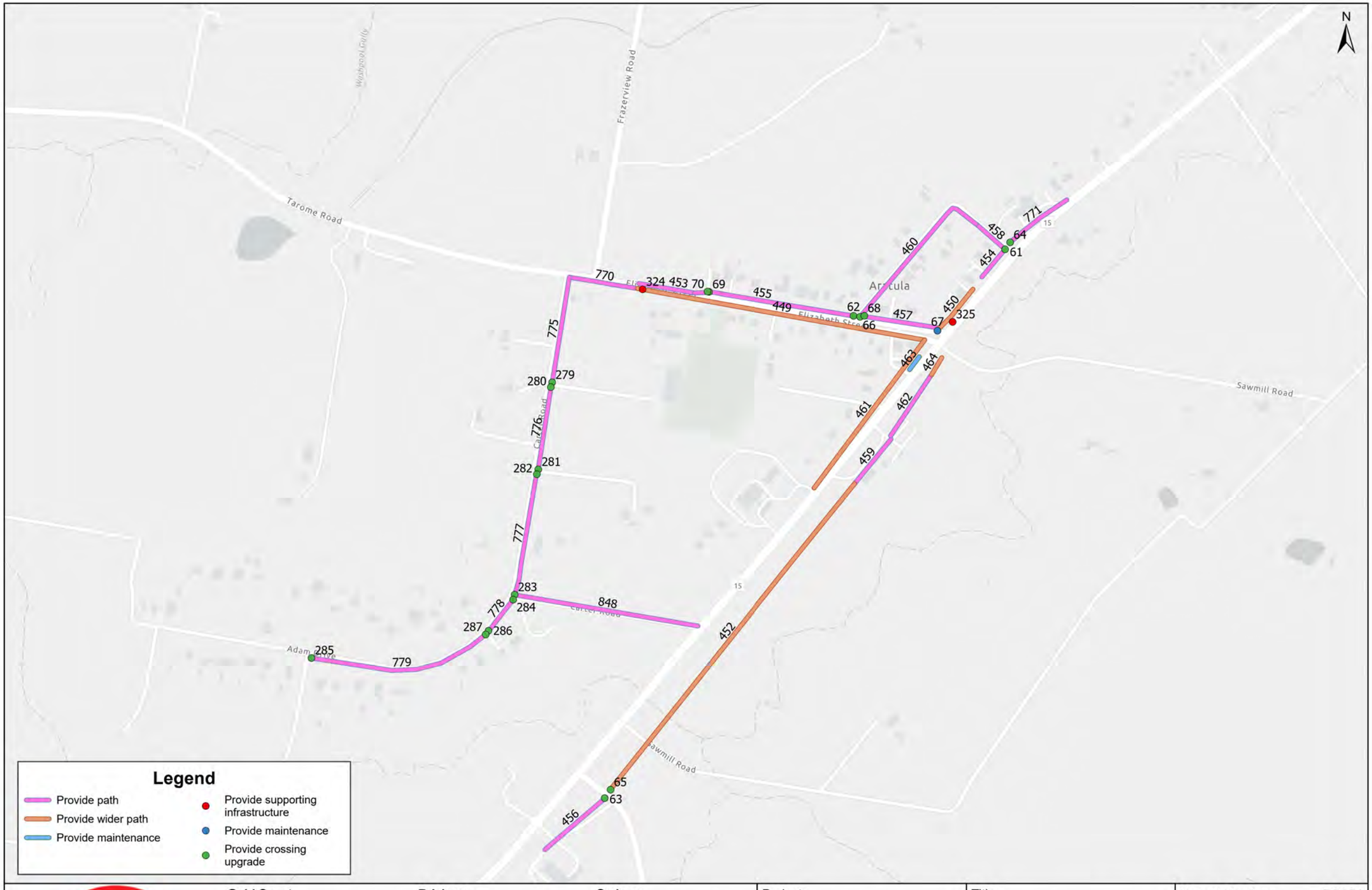

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Project:	Scenic Rim Integrated Transport Plan
Title:	Aratula Action Program
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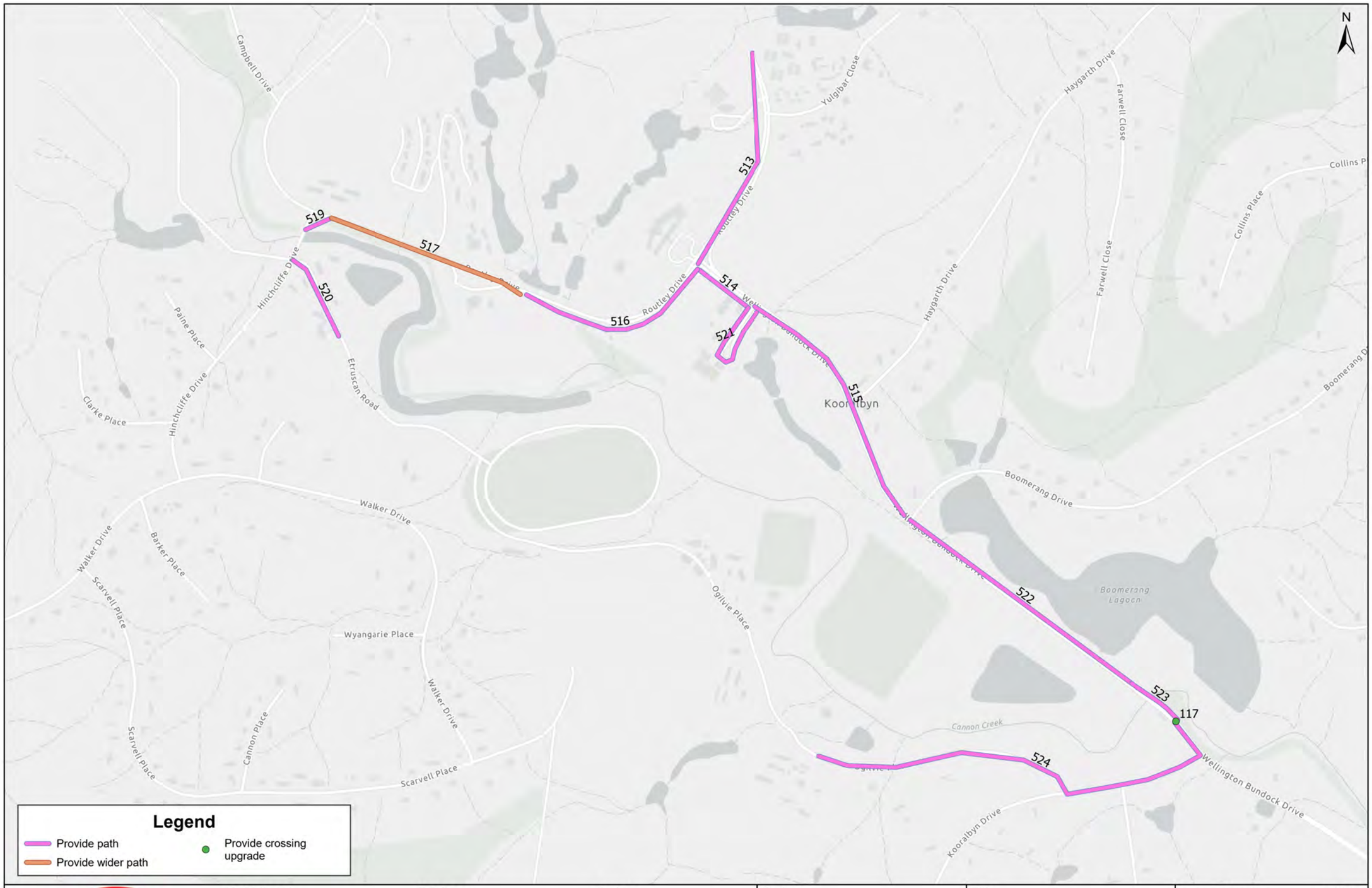

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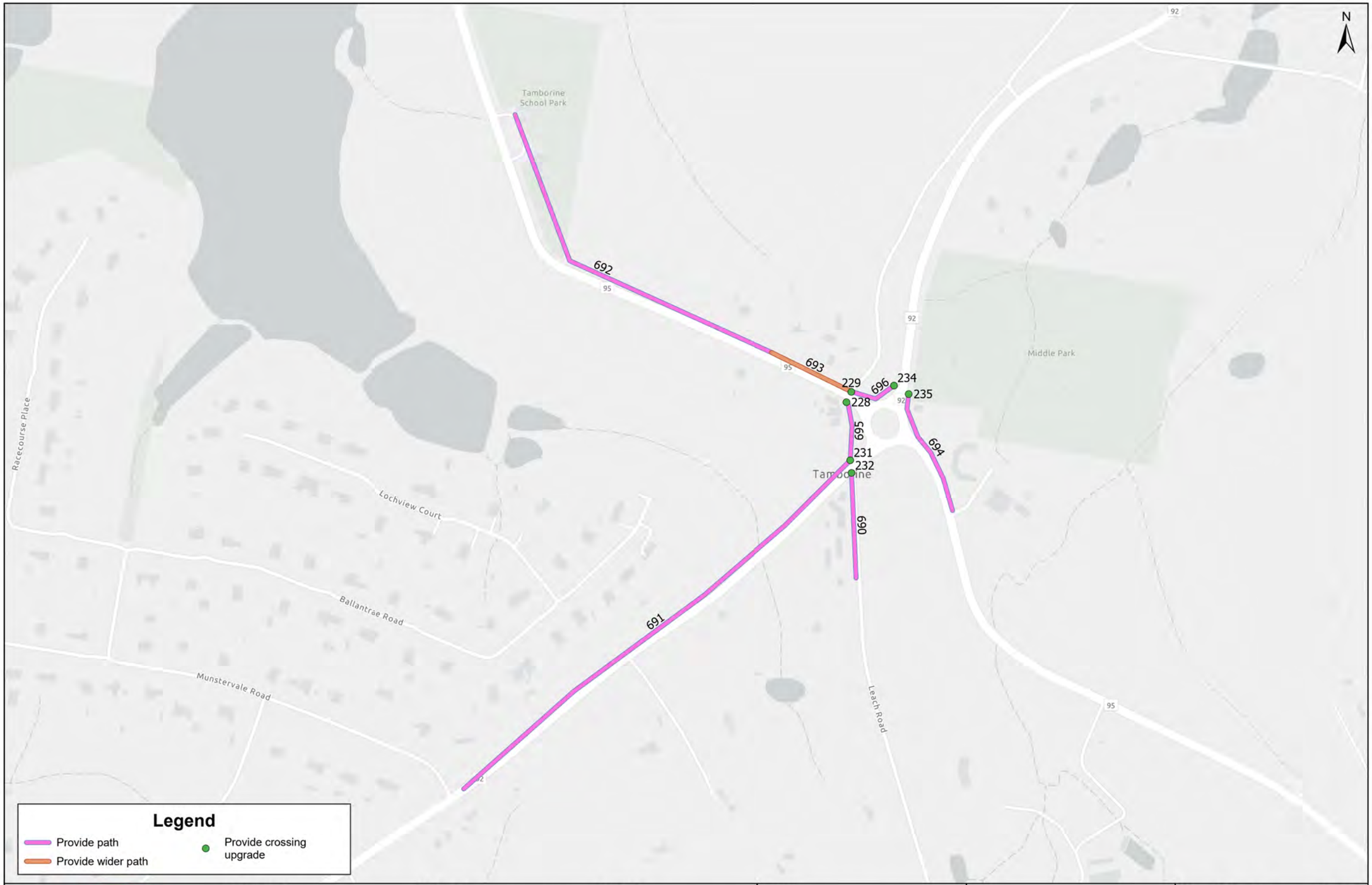

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Walking Trails Scoping Study

Scenic Rim Regional Council

Scenic Rim Regional Council
7 March 2025

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CONTENTS

Figures

1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Scenic Rim Regional Council (Council) to develop an Integrated Transport Plan (ITP), which is aimed at enhancing the efficiency, safety, and sustainability of transportation networks in the Scenic Rim. The ITP will serve as a strategic decision-making tool for Council and provide a long-term vision for improving transportation in the LGA. Additionally, it will equip Council with a solid technical foundation for engaging with other levels of government regarding the LGA's role within the region and the imperative to enhance transport outcomes.

The active transport component of the ITP is intended to guide Council's ongoing provision of the pedestrian and cyclist network for Scenic Rim residents and visitors. Pedestrians include people who are: walking or running; pushing a pram; in a wheelchair; using a mobility scooter; using a skateboard, foot scooter or rollerblades. Cyclists include people using road bikes, electric bikes, cargo bikes, mountain bikes, adaptive bicycles, etc.

The active transport component of the ITP will form the Scenic Rim Active Transport Plan, which includes:

- Walking Network Plans
- Cycle Network Plans
- Principal Cycle Network Assessment
- Bethania to Beaudesert Rail Trail
- **Walking Trails Scoping Study (this study).**

1.2 What is a Walking Trail

Walking trails are not wholly transport products; but rather they are generally recreational infrastructure provided by nature that provide experiences for the users whether it be for exercise, tourism, cultural, heritage or environmental purposes. Therefore, Walking Trails cannot be considered in isolation in a feasibility assessment, but they need to be considered in the context of activities to attract visitation to the area by locals and tourists alike.

Walking trails are established paths that generally traverse natural areas and are used by people for recreational purposes. Council recognise Walking trails as a valuable natural asset which supports service delivery and reduces the need for engineered infrastructure. Walking trails can vary significantly in length, from short walks (i.e. up to 1 hour) to multi-day trails. Walking trails also present different levels of difficulty that could range from Grade One (suitable for less abled bodies with assistance), to Grade Five (recommended only for very experienced bush walkers). The level of difficulty is not necessarily 'designed in' to the facility, but rather assessed based on the variety of factors each trail section provides.

Research from Australia and overseas shows walking trails provide significant tourism and economic benefits to the local areas, both direct and indirect. These benefits include money spent in rural and regional areas, return visits and increase in overnight stays (both for domestic and international tourists). Large scale, more popular trails have the potential to generate supporting business which directly leverage of the trails, such as transport, bike hire, accommodation, supplies, food and cultural experiences to name a few.

At present, Scenic Rim has multiple walking trails that vary in length and technical difficulty. An overview of walking trails within Scenic Rim is provided in Figure 1.1.

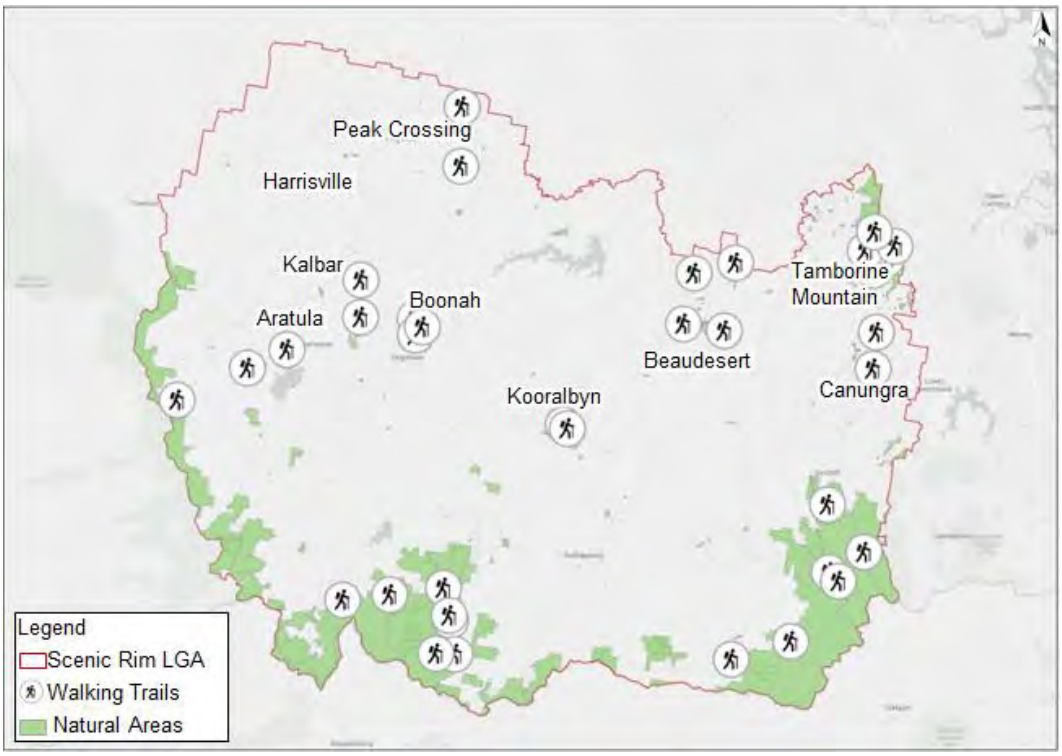


Figure 1.1: Scenic Rim Walking Trails Map

1.3 Purpose of this Report

The purpose of this report is to indicate potential locations for Council to further investigate the development of additional walking trails in the region, as well as provide an overview of supporting infrastructure that is usually provided surrounding walking trails. This report does not establish the feasibility of specification trails or alignment, since this needs to be a broad tourism-based study, which considers walking trails as part of a complete tourism package.

1.4 Principles of Walking Trail Planning

In accordance with the Tourism Victoria *Guidelines for Trail Planning, Desing and Management*, prior to planning for new walking rails, it is important to consider two aspects of walking trails: sustainability and accessibility.

For trails to be sustainable (socially, economically and environmentally) it is necessary that high quality experiences are provided in natural areas that are able to support them. This means that the trail design and appropriate location selection is vital. The development of walking trails must also account for local communities' individualities (such as cultural significant areas) for this a strong focus on community engagement prior to developing new trails is recommended.

Walking trails also need to be accessible and user focused. Walking trails should be developed focusing on accessibility to as many users as possible, and use Universal Design Principles (noting that some trails may have a higher range of difficulty due to natural terrain and local environment).

Generally, trails should be developed in proximity to local communities and visitor attractions, transport facilities (such as car parking), natural attraction, and have facilities to support them such as toilets, picnic facilities, information boards, cafes, etc. Consideration should also be given to whether walking trails should be point-to-point (i.e. trails start and end at different locations) or circuit trails (loops that start and end at the same place). Point-to-point trails generally are part of longer

hiking trips and require arrangement for pick-up / drop-off. Circuit trails are generally preferred by casual trail users, providing return to the same starting point.

In summary, the visitor experience is a key factor when considering the planning and design of walking trails.

1.5 Objectives

The objectives of this report are:

- To outline typical walking trails design considerations
- To provide an overview of supporting infrastructure to leverage walking trails usage.
- To provide a review of existing walking trails within the Scenic Rim
- To support Council in the identification for potential new / updated walking trails locations within the Scenic Rim.

2. DESIGN CONSIDERATIONS

2.1 Overview

When planning for walking trails, a key consideration is the design and the trail classification. The trail should be designed to cater for the largest number of users, considering the users level of fitness and mobility. In addition, the trails should be provided with supporting infrastructure to maximise the walking trail usage.

2.2 Universal Design Principles

Universal design refers to '*design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or of specialised design'.*

Specifically regarding the development of walking trails, universal design and the level to which it can be incorporated is depended on the context and physical setting of the trail and the type of experience the walking trail is aiming to offer.

In accordance with Tourism Victoria *Guidelines for Trail Planning, Desing and Management*, the Universal design principles and its relevance to walking trail planning and design are:

- The design should not disadvantage any group of users
- The design should accommodate a wide range of abilities
- The design should be easy to understand
- The design should communicate the necessary information effectively
- The design should minimises hazards
- The design should provide appropriate size and space regardless of the user's body size or mobility
- The design allows for efficient and comfortable use

This means that although multi-day trails, suitable for experienced bush walkers only are an important product of walking trails, it is also important to plan for walking trails that are accessible by all users.

2.3 Walking Track Classification

The Australian Walking Track Grading System (AWTGS) provides grades and classifications for walking tracks based on Australian Standard for walking track construction (AS 2156). The grading system assesses a walk's difficulty based on experience required, steps, gradient, path quality, signage, and etc.

The AWTGS classifies walking tracks into five grades, as shown in Figure 2.1.

Walking track descriptions		
	Grade 1	Flat, well formed track, no steps, 5km or less. Clearly signposted. Suitable for wheelchairs with assistance.
	Grade 2	Formed track. May have gentle hills and some steps. Clearly signposted. No experience required.
	Grade 3	Formed track, some obstacles, 20 km or less. May have short steep hills and many steps. Some experience recommended.
	Grade 4	Rough track. May be long and very steep with few directional signs. For experienced bushwalkers.
	Grade 5	Unformed track. Likely to be very rough, very steep and unmarked. For very experienced bushwalkers with specialised skills.

Source: Parks and Forests - Track and trail classification

Figure 2.1: Walking Track Classification

The walking track classification is an effective way to make users aware if the walking trail is suitable for their level of experience and fitness.

2.4 Supporting Infrastructure

A number of supporting infrastructures may be needed when developing walking trails. The level of infrastructure is depended on the trail classification, expected user groups, location of trail and etc. It is noted that if there are existing infrastructure surrounding the walking trail location, it is recommended to align the trail with the existing facilities.

Generally, the facilities to support walking trails are:

Car Parking

Car parking facilities are generally provided at the trail head. When planning for a car parking area, the following shall be considered:

- Sufficient car parking provision to cater for the expected car parking demand and turnover. This can be estimated by comparing car parking provision for similar trails (i.e. location, track classification, length etc), the average time spent on the trail and expected usage
- The car parking access from the external road network must be provided in a location with sufficient sight distances in accordance with Australia Standards (AS2890) requirements. In addition, the crossover shall be constructed generally in accordance with Institute of Public Works Engineering Australasia (IPWEA) standard drawings based on the parking area frontage road, number of car parking spaces provided, and type of vehicles expected
- The internal car parking layout shall be designed generally in accordance with Council's relevant standards and AS2890 requirements, including car parking bays width and circulation space
- Consideration shall also be given to passive surveillance and Crime Prevention Through Environmental Design (CPTED) when developing the car parking areas. On areas that cars are expected to be parked for long periods of time and a small turnover is expected, cameras may be provided to increase safety
- Car parking areas should be provided in an area that does not negatively impact surrounding land uses, and vice-versa. For example, walking trail car parking generally should not be provided within a Central Business District (CBD) or areas with competing car parking demands. That way the walking trail car parking areas caters majorly for its users, and there are no competing parking demands between different land uses, decrease the users experience.
- Time restriction should be used to deter trail users to park for extended periods of time. This means that trail users have a higher probability of finding a car parking space, particularly at popular walking trails. Consideration should also be given to restrict overnight parking / camping, when relevant.

Active Transport Connections

Active transport connectivity should be considered surrounding walking trails, particularly when in close proximity to urban and residential areas. High quality active transport facilities (such as paths and crossing points) have the potential increase walking trail usage, while reducing the demand for car parking provision. The active transport facilities should aim to connect the walking trail entry points to neighbouring facilities, such as commercial areas, retail shops, restaurants, tourist and cultural attractions etc.

In summary, the active transport network should provide a seamless connection from surrounding points of interest to and from the walking trail entry points. This includes shared paths, crossing points and consideration to accessibility. Bicycle parking should also be considered at key locations. Wayfinding signage may also be used to direction users to the walking trail.

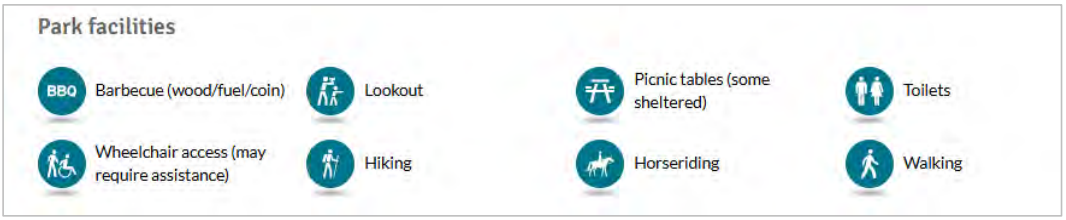
Additional Supporting Infrastructure

The provision of **toilets** should be provided based on the predicted number of trail users and its proximity to urban areas / other recreational attractions. Generally, toilets should be provided at the trail head in proximity to the car parking area.

Water points and drinking water may also be provided. Wayfinding signage can also direct trail users to business where water is available.

Shelters may also be provided with tables and seating area for users to rest.

Signage providing the trail classification in accordance with AWTGS (shown in Figure 2.1) should be provided at the entry points to the walking trails. In addition, trail markers and information's signs should also be provided along the trails, indicating the distance from the entry point and indicating the direction of travel / key points of interest along the trail.



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3. SCENIC RIM WALKING TRAILS

3.1 Overview

Known for its National Parks and diverse landscapes, including mountain peaks, forests, plans and water ways, Scenic Rim LGA covers an area of approximately 4,200km^2, which is predominantly natural, rural and low-density residential areas, with most of its commercial and retail land uses in the centres of Tamborine Mountain, Beaudesert and Boonah.

Numerous walking trails are provided within the national parks and natural areas within the Scenic Rim. A number of them are provided in proximity to towns and townships, such as Tamborine Mountain, Beaudesert, Kooralbyn and Boonah, whereas other are provided in more remote areas, such as Mount Barney and Lamington National Park.

The walking trails also vary in length, level of difficulty and accessibility. Generally, walking trails provided in close proximity to towns are more accessible, and as such, more popular. Whereas walking trails provided in remote areas have fewer facilities and are more suitable for experienced users.

3.2 Walking Trails

A non-comprehensive map of Scenic Rim Walking Trails and its level of difficulty is provided in Figure 3.1.

The map was developed through the use of Google and AllTrails app, and may support Council in developing a inventory of natural assets for Council.

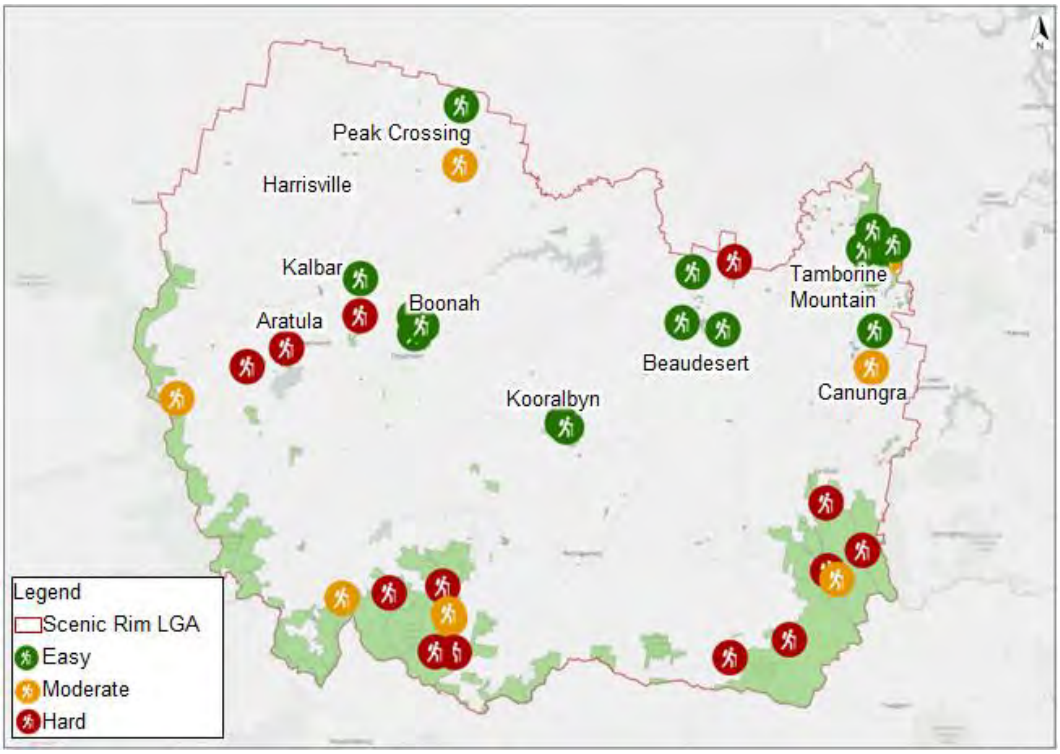

Figure 3.1: Scenic Rim Trails and Level of Difficulty

4. COMMUNITY ENGAGEMENT

4.1 Overview

As described in Section 1.1, this Walking Trail study forms part of the Scenic Rim ITP. A number of community and stakeholder engagement sessions have been undertaken as part of the ITP process.

The engagement activities were advertised in Let's Talk Scenic Rim website, social media, news outlets and through pamphlets distributed locally. The stakeholder and community engagement activities included the following:

- On-line survey
- On-line mapping
- Five in-person community drop in sessions
- Focused stakeholder engagement workshop.

The Let's Talk Scenic Rim website page advertising the community engagement activities is shown in Figure 4.1.

Figure 4.1: Let's Talk Scenic Rim Website

The summary key feedback related to walking trails during the engagement period is provided as follows:

Overview

- Scenic Rim is well serviced by a number of walking trails
- Lack of horse riding trails and dog friendly trails have been noted.

Fassifern Rail Trail

The Fassifern Rail Trail is an approximately 6km loop trail located in close proximity to Boonah. The trail follows sections of road along Hoya Road and Ipswich Boonah Road. This is a popular trail particularly for Boonah residents and visitors. Key feedback regarding the existing facilities are:

- To provide an extension to the Fassifern Rail Trail connecting to Boonah CBD and Dugandan Park
- To provide a car parking area, potentially adjacent to Boonah Fassifern Road / Red Bridge Road intersection or at Dungan Park
- To improve rail trail wayfinding signage, increasing the Trail awareness and usage.

Boonah to Ipswich Trail

The Boonah to Ipswich Trail is a 74 kilometre multi-use recreation trail connecting Ipswich to the north, to Boonah to the South, with sections still be to completed. The trail is understood to be used mostly by hikers and horse riders.

A draft Trail Plan was released in 2010, outlining the trail alignment and interaction with other trails. It is understood the community was consulted in the draft Trail Plan, however the commitment to construct / complete the missing sections of the trail are uncertain at this stage. During the Scenic

Rim ITP, community groups were particularly interested in the completion of the missing sections and tourism / business opportunities that the Trail may bring to the region. Key feedback are provided as follows:

- Completing the missing sections of the trail should be a priority
- Wayfinding signage should be improved, particularly at the Boonah Showgrounds

Bethania to Beaudesert Rail Trail

A separate study has been completed for the Bethania to Beaudesert Rail Trail as part of the ITP. The study aimed to identify the operational aspects of the rai trail corridor.

The Bethania to Beaudesert Rail Trail is a proposed walking and cycling trail along the former Beaudesert Rail Corridor connecting Scenic Rim Local Government Area (LGA) to Logan LGA. The 7.5km long Scenic Rim section of the Rail Trail connects the historic Beaudesert Railway Station and continue north towards Gleneagle on the western side of Mount Lindesay Highway.

The key feedback provided by the community is provided as follows:

- Community demonstrated significant interest in the development of the Bethani to Beaudesert Rail Trail
- Council should investigate potential connections from Fassifern Rail Trail via Wyaralong.

4.2 Additional Considerations

During the in-person community drop-in sessions and focused stakeholder engagement workshop, the project team queried the community specifically about walking trails. General feedback was that there are many walking trails in Scenic Rim, and no specific areas for new walking trails have been raised.

Specific interest on Rail Trails, particularly Boonah to Ipswich Trail was brough up by community groups.

5. RECOMMENDATIONS AND NEXT STEPS

5.1 Overview

As described in Section 1.2, walking trails are not specifically transport projects; they are generally recreational tourism infrastructure to support attractors and destinations. Walking trails should be considered in a wider context of tourism activities, with significant emphasis in community use and a supporting infrastructure to maximise participation and experience for all users.

5.2 Recommendations

The next steps on assessing the feasibility of new/updated trail facilities are recommended as follows:

- Council to develop a framework that can be used to incorporate and manage natural assets including but not limited to walking trails, parks, open spaces and ecological corridors
- Council to adopt ecological sustainability measures, environmental monitoring and protection strategies to support natural assets inventory
- Council to identify and catalogue all natural assets to create an inventory
- Council to investigate the feasibility of providing a car parking area in close proximity to Fassifern Rail Trail
- Council to investigate the feasibility to complete the missing Scenic Rim sections of Boonah to Ipswich Trail
- Council to liaise with TMR regarding the development of the Scenic Rim section of the Bethania to Beaudesert Rail Trail
- Council to investigate the provision of dog parks and/or walking trails that allow dogs, particularly in proximity to the key centres of Beaudesert, Boonah and Tamborine Mountain.
- Council to investigate the development of additional horse friendly trails and / or trail sections.

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Bethania to Beaudesert Rail Trail Corridor Study

Scenic Rim Regional Council

Scenic Rim Regional Council
25 October 2024

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1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by Scenic Rim Regional Council (Council) to develop an Integrated Transport Plan, which is aimed at enhancing the efficiency, safety, and sustainability of transportation networks in the Scenic Rim. This plan will serve as a strategic decision-making tool for Council and provide a long-term vision for improving transportation in the LGA. Additionally, it will equip Council with a solid technical foundation for engaging with other levels of government regarding the LGA's role within the region and the imperative to enhance transport outcomes

The active transport component of the ITP is intended to guide Council's ongoing provision of the pedestrian and cyclists network for Scenic Rim residents and visitors. Pedestrians include people who are: walking or running; pushing a pram; in a wheelchair; using a mobility scooter; using a skateboard, foot scooter or rollerblades. Cyclists include people using road bikes, electric bikes, cargo bikes, mountain bikes, adaptive bicycles, etc.

The active transport component of the ITP will form the Scenic Rim Active Transport Plan, which includes:

- Walking Network Plans
- Cycle Network Plans
- Principal Cycle Network Assessment
- Walking Trails Scoping Study
- **Bethania to Beaudesert Rail Trail (this study).**

1.2 Study Area

The Bethania to Beaudesert Rail Trail is a proposed walking and cycling trail along the former Beaudesert Rail Corridor connecting Scenic Rim Local Government Area (LGA) to Logan LGA. The 7.5km long Scenic Rim section of the Rail Trail connects the historic Beaudesert Railway Station and continue north towards Gleneagle on the western side of Mount Lindesay Highway. The Department of Transport and Main Roads (TMR) is in the process of removing redundant rail infrastructure along the Scenic Rim section of the Bethania to Beaudesert Rail Trail corridor.

The Rail Trail is expected to provide additional off-road active transport route for residents and visitors within the Scenic Rim LGA and is planned to connect to the Logan section of the Rail Trail (which has sections with planned construction due 2025).

It is noted that TMR is also assessing the option of retaining the rail corridor to develop the Salisbury to Beaudesert Rail project in the future. The Salisbury to Beaudesert Rail project is currently undergoing the strategic business case, and the planning underway will consider (specifically regarding active transport infrastructure and connections) a shared pedestrian and cycle track along much of the corridor, as identified within the South-East Queensland Principal Cycle Network.

The Scenic Rim LGA section of the Bethania to Beaudesert Rail Trail is shown in Figure 1.1.

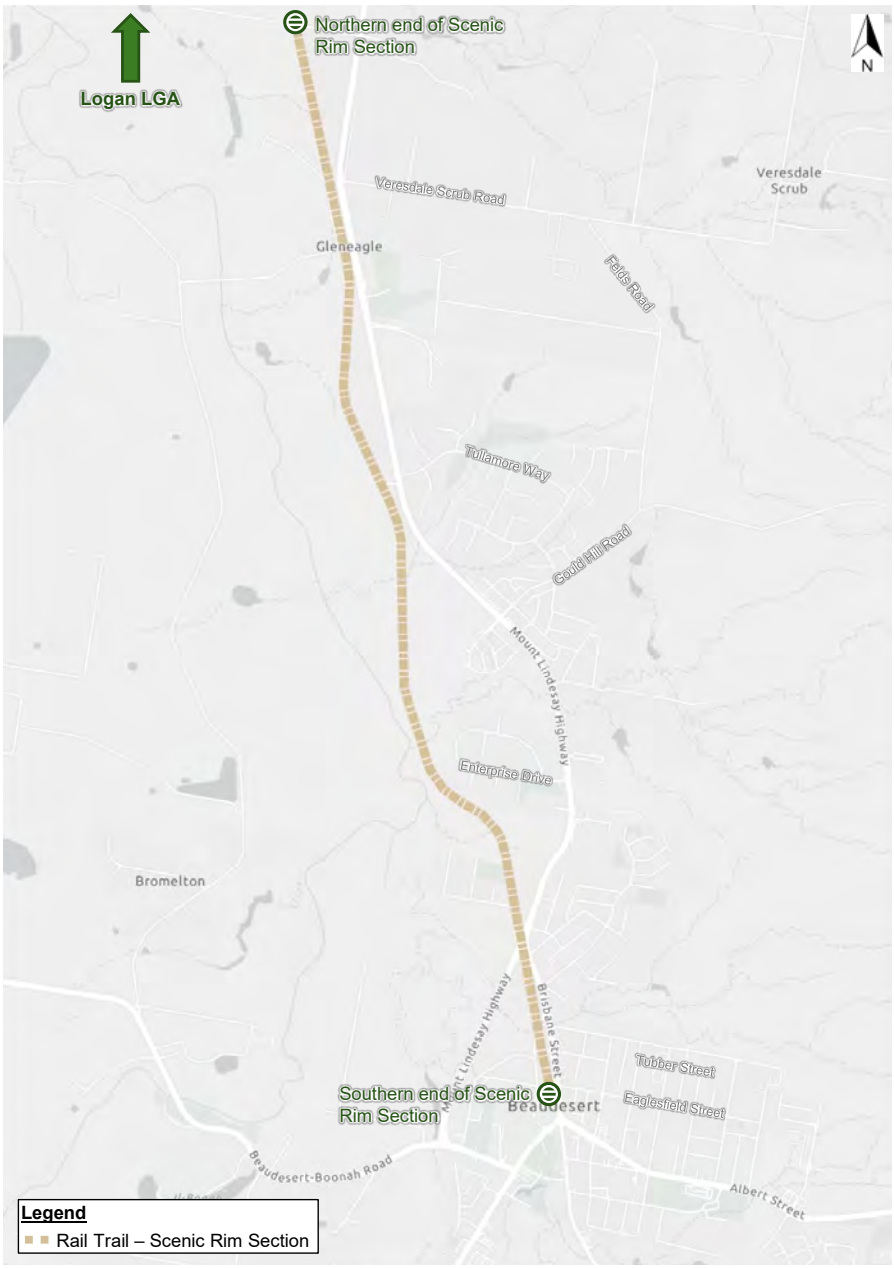


Figure 1.1: Bethania to Beaudesert Rail Trail – Scenic Rim Section

1.3 Purpose of this Report

The purpose of the Bethania to Beaudesert Rail Trail Corridor Study is to identify review the operational aspects of the rai trail corridor. This includes identifying needs, design considerations and potential safety risks typically associated with rail trails, particularly when interacting with the external road network, and recommend measures to maximise the safety and experience for all users.

In order to leverage and maximise the potential of the Bethania to Beaudesert Rail Trail corridor, the study also reviews and provides recommendations regarding safe and accessible connections from the wider active transport network.

Given the early stage of planning and limited information on the Salisbury to Beaudesert rail corridor requirements, no consideration has been given at this time on whether the Rail Trail design can accommodate heavy rail alongside, and this should be considered at later stages of planning.

It is however expected that future longer term strategies to provide a rail and active transport corridor would involve substantial infrastructure provisions to the rail trail, providing a high quality integrated transport corridor to serve different users and travel modes.

1.4 Rail Trail Objectives

There are over 180 rail trails in Australia, throughout all states and territories. Rail trails have been successfully utilised and repurposed for active transport use, and are generally considered a success from an economical, tourist and active transport uptake perspective.

Specifically, regarding the Scenic Rim section of the Bethania to Beaudesert Rail Trail, it is understood the objectives are:

- Increase walking, cycling and horse-riding opportunities
- Provide an off-road environment where all user groups are comfortable in using it (i.e. elderly, unexperienced users, etc).
- Attract residents and visitors for local shops, businesses and accommodation providers, boosting the local economy
- Connect the external network to the Rail Trail to leverage active transport usage, and make active transport a more viable and attractive transport mode.

Further, based on the information provided, it is understood that the trail will be delivered in stages and the ultimate layout in each section might not be delivered at concurrently.

2. BEST PRACTICE REVIEW

2.1 Safe System Approach

At its core, the Safe System Approach emphasises reducing the risk of fatal and serious injuries to all road users. Figure 2.1 displays the 4 core elements of the Safe System Approach sourced from *Austroads Guide to Road Safety Part 1.*

Source: Austroads Guide to Road Safety Part 1

Figure 2.1: Safe System Approach

Similar to Safe System Approach for roads and vehicles, when applying this approach to pedestrians and cyclists, it is crucial to prioritise safety, especially considering potential human error, among less experienced cyclists and path users.

Key considerations for a shared cycleway (i.e. Rail Trail) include:

- The safety of all path users particularly vulnerable users
- Reducing the risk of death or serious injures
- Implementing and designing safe infrastructure and safe paths
- Reducing travelling speeds particularly for electric bikes and other motorised equipment
- Interactions with the external road network
- Post-injury care is important to reduce the severity of the outcome.

Our design recommendations emphasise features that provide physical barriers, information, and guidance without introducing additional safety risks to users. These recommendations align with the fundamental principles of the Safe System Approach, focusing on understanding interactions between different elements and design features, especially in areas where conflicts between path users and vehicles or other path users may arise.

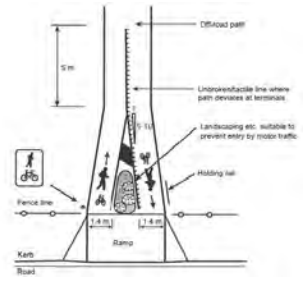
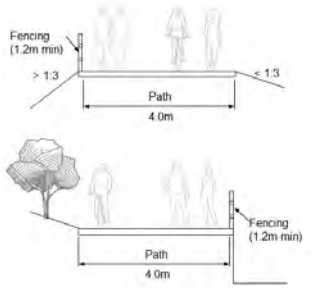
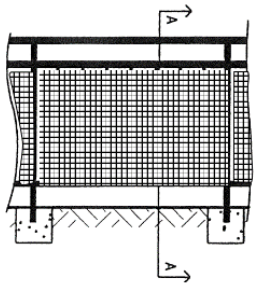
Further, our mitigation measures are proposed consistent with recognised guidelines such as:

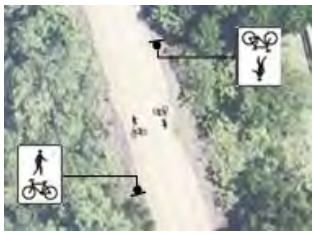
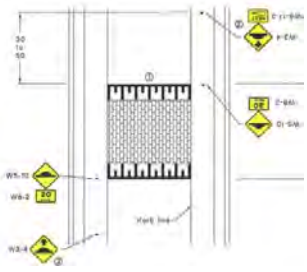
- Austroads Guide to Road Design Part 6A Cycling Aspects of Austroads Guides
- AS1742 MUTCD Part 9
- TMR Active Transport Investment Program Technical Guidance.

2.2 Design Considerations

Table 2.1 summarises design considerations for different 'best practice' treatment types that are suitable to be installed and implemented in the Beaudesert to Bethania Rail Trail.

Table 2.1: Recommendations Overview

Treatment Type	Comment	Example
Separate entry and exit treatment	Separate entry and exit treatments provides a slow point and channels movements particularly for cyclists when the Rail Trail intersects with the external road network. It provides guidance to cyclists that they are approaching a road and does not place an obstacle in the path of cyclists (which may create safety and crash hazards). The separate entry and exist treatment should be provided in accordance with Austroads Guide to Road Design Part 6a.	
Path width	It is difficult to infer the Rail Trail level of usage at this stage, however similar examples in Brisbane, Logan and Tweed Heads show these are popular and attract a large number of users. As per Austroads Guide to Road Design Part 6a and TMR's Active Transport Investment Program, it is recommended that the path is provided at 4m wide (3m minimum desirable).	
Cross-section	The cross-section design standards should be in accordance with Austroads Guide to Road Design Part 6a, and generally be provided as follows: ▪ Barriers / fencing should be provided when the slope grade adjacent to the path is 1 in 3 or less. ▪ Barriers / fencing should be provided when there is a drop of more than 2m within 5m of the path ▪ No fencing is required if the path is adjacent to a slope of up to 1 in 3.	
Bridge crossings	Bridge crossings should be provided with fence on both sides. The fence should be provided at a 1.4m height minimum. A cyclist deflection rail shall also be provided, to enable cyclists to deflect off the smooth horizontal rail and not get caught in the vertical components of the fence At the beginning and end of the bridges, the rail should be provided with a flared bicycle rail terminal, to reduce the likelihood of cyclist's collision. All the treatments should be provided generally in accordance with Austroads Guide to Road Design Part 6a.	

Treatment Type	Comment	Example
Existing timber bridges	Existing timber bridges should be individually assessed and potentially retained as a 'historical feature' (although this should be further assessed in later stages of planning). This historical timber bridges should be retained outside the Rail Trail track and protected with fencing, so users can view, but are not able to access it.	
Smooth surfacing	Smooth, debris free surfaces are a fundamental requirement for providing safe paths. The Rail Trail shall be regularly maintained to ensure the removal of any debris that could pose inconvenience or injury to cyclists or create hazardous conditions. Regularly monitor the growth of surrounding vegetation and implement a trimming / maintenance program.	
Surface condition	Sealed road surfaces are considered the best practice for cycleways and pedestrian path. However, it is considered acceptable to provide unsealed (compressed aggregate) surfaces on recreation routes. Irrespective of the above, the following is noted ▪ Sealed sections shall be provided on the approach and departure of critical curves, road intersection and conflict points to ensure users can slow down and manoeuvre ▪ Regular maintenance should be conducted to ensure no debris accumulates on the sides of the path, or on top of sealed sections.	
Pavement marking and signs	Pavement marking and signs shall be consistent with MUTCD 1742.9-2000 and include: ▪ Installation of pavement marking and bicycle symbols to remind path users to travel on the left-hand side of the path. This shall be installed every 100m ▪ Installation of shared path signage ▪ Provision of information signs reminding users of appropriate behaviours in using the path	
Speed management treatment	Speed management devices may be provided to manage speeds of both cyclists and motor vehicles, particularly at road crossings. Recommended speed management devices are described as follows: ▪ Speed humps - Speed humps should be installed to reduce motor vehicle speeds at road crossing points - The installation of speed humps shall be associated with adequate warning signage on the approach in accordance with MUTCD 1742.9-2000	

Treatment Type	Comment	Example
	▪ Alternative Pavement Treatment - Different materials and colours shall be used to increase awareness and reduce speeds - 'Slow Zone' areas where there is high pedestrian and cyclist activity (i.e., rest areas) ▪ Warning Signs - Warning signs shall be used in conjunction with other methods to advise on the need to reduce speeds and alert cyclists that they are approaching a hazard location	
Vehicular access control	Vehicular access to the Rail Trail should be controlled with measures such as fencing, bollards and locked gates to prevent access to non-authorised people and modes of transport. Council rangers, operators and authorised volunteers may also assist to control access to the Rail Trail. All maintenance, emergency and approved vehicles may be provided with a key to unlock bollards, fencing and gates to access the Rail Trail as needed. Contact / communication detail should be provided at all bollard locations	
Advance safety features	A User Safety Plan (USP) should be developed which outlines the infrastructure and operational requirements to be employed and maintained as part of the Rail Trail operations. The USP should be developed in consultation with Council services, emergency services and neighbouring Council's trat the greater Rail Trail extends. Aspects to incorporate and consider with the USP may include: ▪ Lighting ▪ Surveillance ▪ Safety markets ▪ Emergency response, etc.	
Sustainability Practices	Sustainability practices should be incorporated in the Rail Trail, including the following: ▪ Provision of general waste and recycling bins at key points at the trail ▪ Information board regarding sustainable practices along the trail	

Treatment Type	Comment	Example
Supporting Facilities	Council should consider the following supporting facilities along the Rail Trail: ▪ Drinking water fountains ▪ Seating areas ▪ Toilets ▪ Repair stations ▪ Safe storage areas ▪ Shelters and rest areas ▪ Horse float parking Where these facilities to be provided, a surrounding paved area shall be constructed, and bike racks shall be installed	
Other Treatments	Implement signage that demonstrates basic cycling and pedestrian rules and etiquette such as: ▪ Use your bell ▪ Keep left ▪ Share the path ▪ Cyclist be aware of pedestrians	

2.3 Connection to the External Road Network

Providing transport connections between the external road network to the Rail Trail will leverage both Rail Trail usage and active transport usage in the surrounding areas. This section highlights potential connections and challenges.

2.3.1 Public Transport

At present, only one public transport route service the Scenic Rim LGA, between Beaudesert and Browns Plains (Route 540). It is recommended that any future public transport considers the integration with the Rail Trail.

2.3.2 Roads

As described in Table 2.1, motor vehicle speeds need to be managed when crossing the Rail Trail. It is recommended raised and coloured pavements treatments are investigated to reduced vehicle speeds and also increase awareness of Rail Trail active transport traffic (refer to Figure 3.2).

It is not recommended to provide pedestrian / cyclists priority crossing points (i.e. wombat crossing), given the impact this may have on motor vehicle traffic, particularly at peak Rail Trail usage periods. However this should be further investigated during further stages of planning.

2.3.3 Active Transport

The Scenic Rim section of the Rail Trail provides a number of potential connections within Beaudesert and Gleneagle wider network. The connections to/from Beaudesert have been considered in the development of the Scenic Rim Walking Network Plan and Cycle Network Plan (as part of the wider Scenic Rim Active Transport Plan).

The active transport network should provide a seamless connection from Beaudesert CBD and points of interest to and from the Rail Trail entry point. This includes shared paths, crossing points and consideration to accessibility. Bicycle parking should also be considered at key locations.

2.4 Network Consistency

It is recommended that Scenic Rim Regional Council liaise with TMR and Logan City Council, so the treatments recommended in this assessment are incorporated in the other sections of the Bethani to Beaudesert Rail Trail, providing a seamless and connected network.

3. RECOMMENDATIONS

3.1 Overview

The Scenic Rim section of the Rail Trail alignment and its recommended supporting infrastructure, design consideration and connections to the external network is indicatively shown in Figure 3.1.

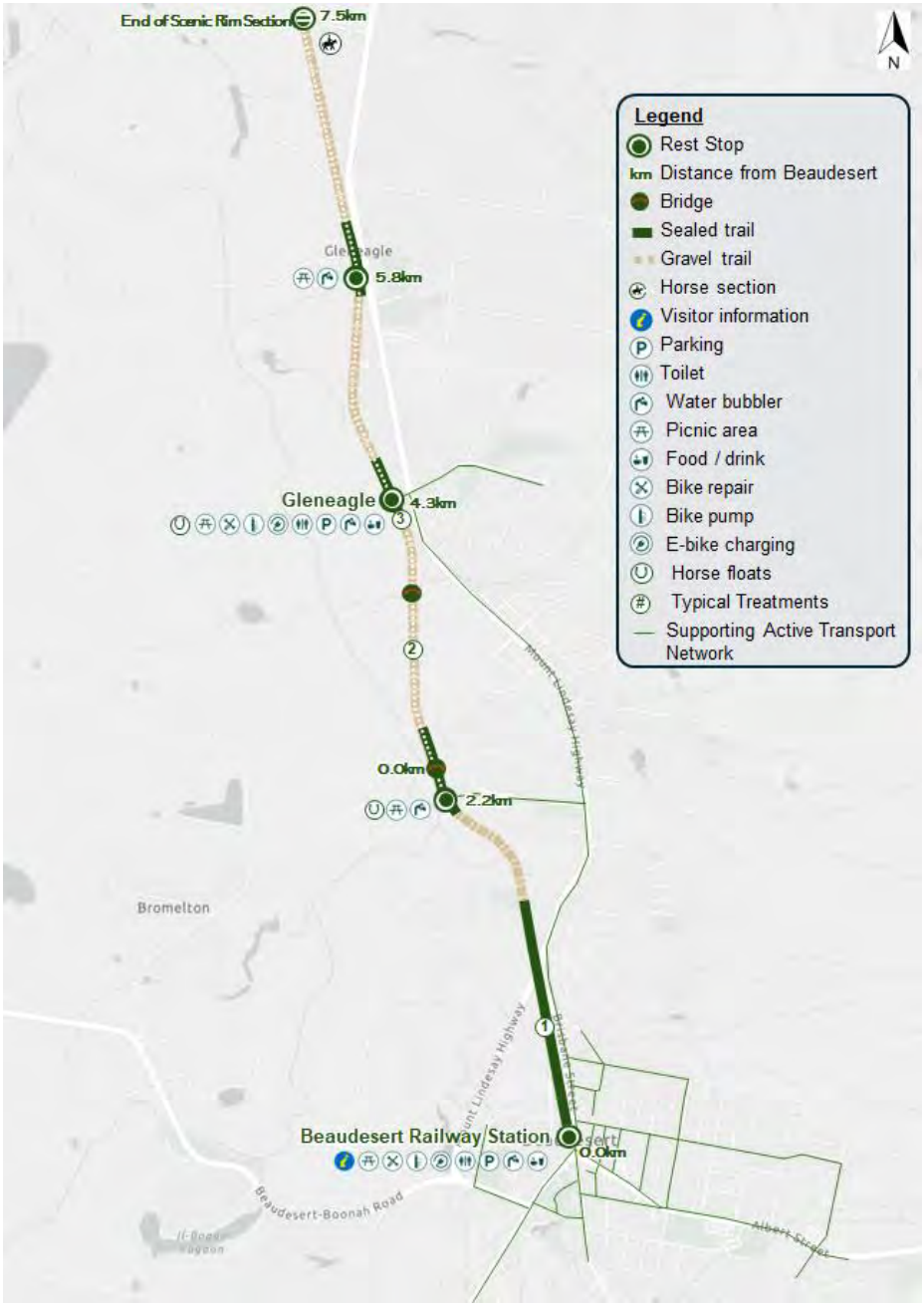


Figure 3.1: Scenic Rim Rail Trail Map

Typical recommended intersection treatment, mid-block design and rest areas are shown in Figure 3.2, Figure 3.3 and Figure 3.4 respectively.

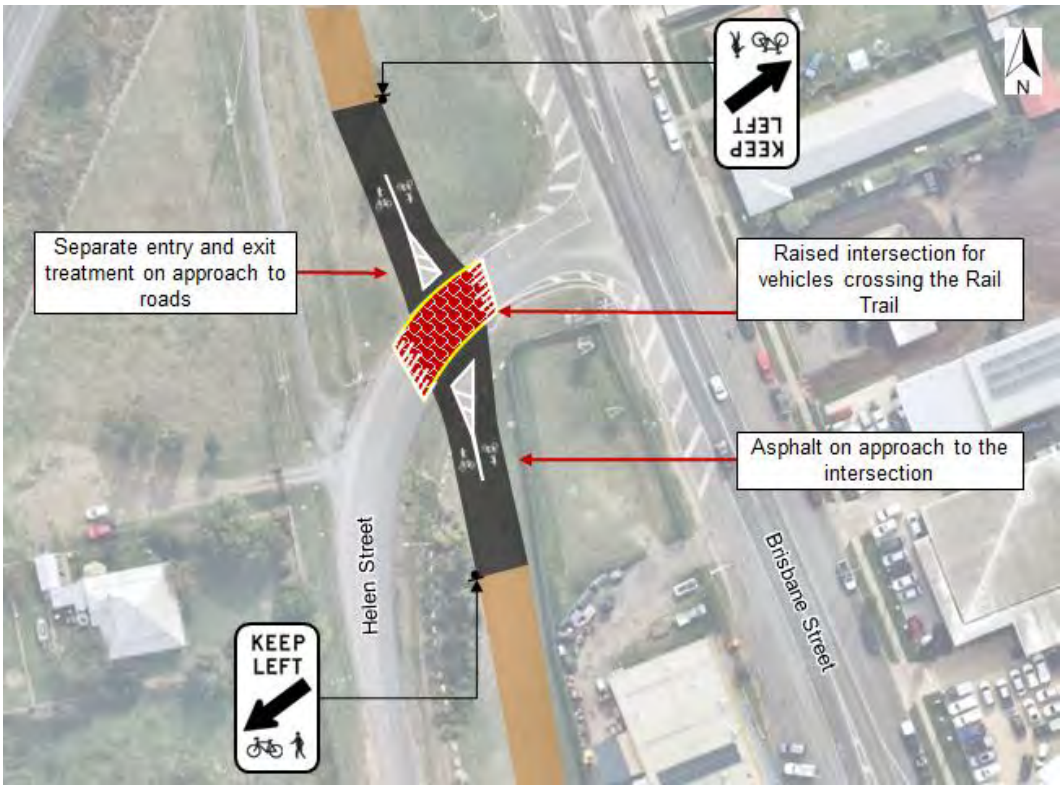


Figure 3.2: Recommended Typical Intersection Treatment Example

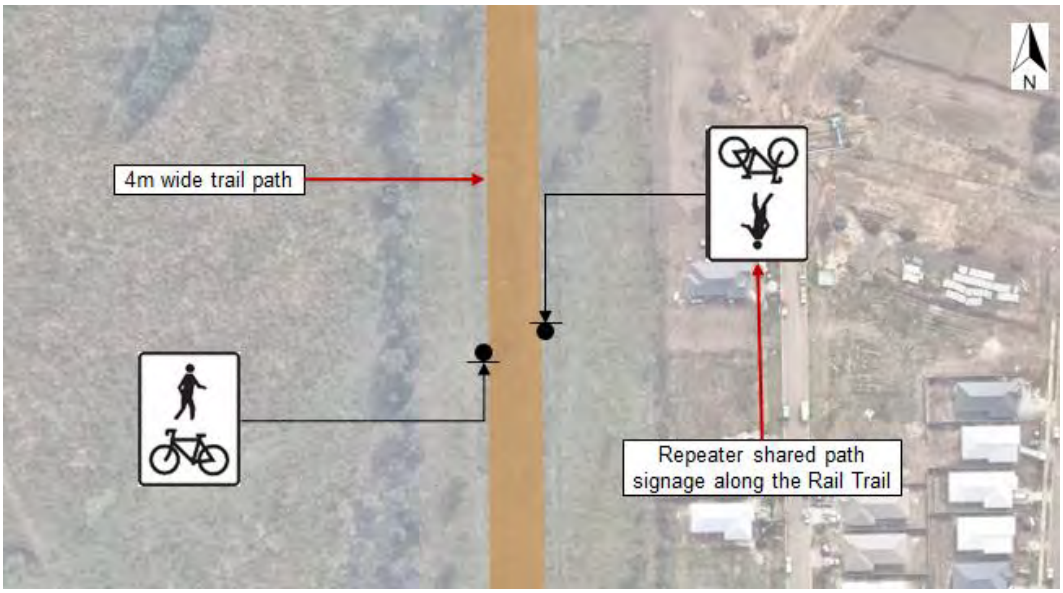


Figure 3.3: Recommended Typical Mid-Block Design Example

Figure 3.4: Recommended Rest Area Design Example

4. COSTS AND FUNDING

4.1 Costs

A cost estimate per meter for the Rail Trail construction has been sourced from similar rail trails development in Queensland and New South Wales.

Based on similar examples a cost of **$620** per meter of Rail Trail has been defined

Based on the above it is expected that the Scenic Rim section of the Bethania to Beaudesert Rail Trail is approximately **$4.6 million**.

4.2 Funding

Generally, Queensland Rail Trail projects are shared funded between TMR and local governments.

TMR has previously committed a $14 million between 2017 – 2018 and 2020-2021 through Rail Trail Government Grants program to deliver and manage rail trails in partnership with local governments.

Although it is unclear on next grants and stages of funding, the TMR's Queensland Cycling Strategy 2023 – 2025 outlines that TMR will '*Support local governments to plan, design and construct rail trails on disused rail corridors to increase regional trail riding experiences and associated economic opportunities*.'

It is recommended that Council liaise with TMR and apply for funding to plan, design and delivery the Rail Trail, when grants become available.

5. CONCLUSION AND NEXT STEPS

The next steps of the Bethania to Beaudesert Rail Trail project include Council liaising with TMR and organise funding to undertake the following:

- Feasibility study
- Community engagement
- Preliminary design
- Detailed design
- Start construction.

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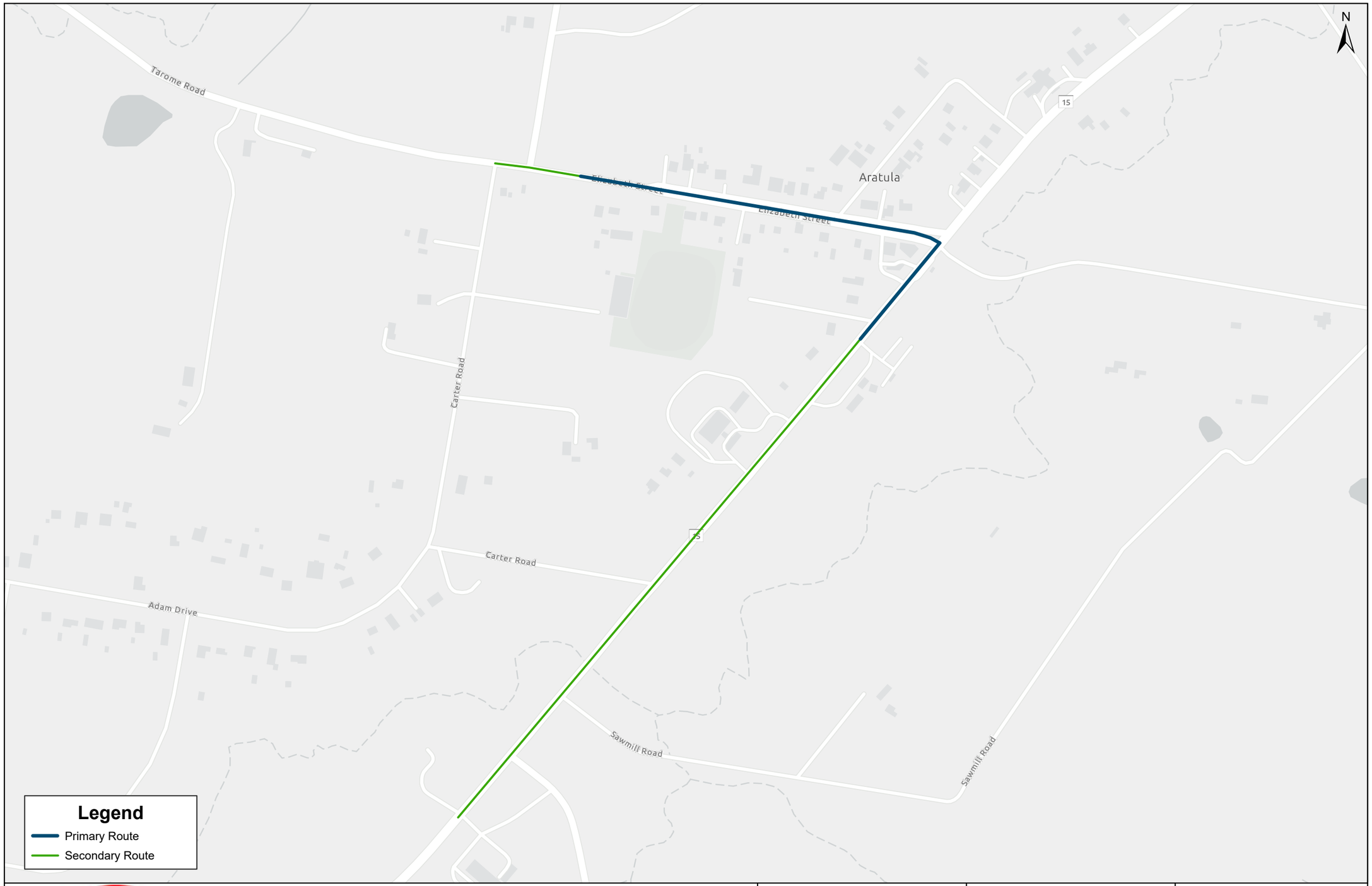

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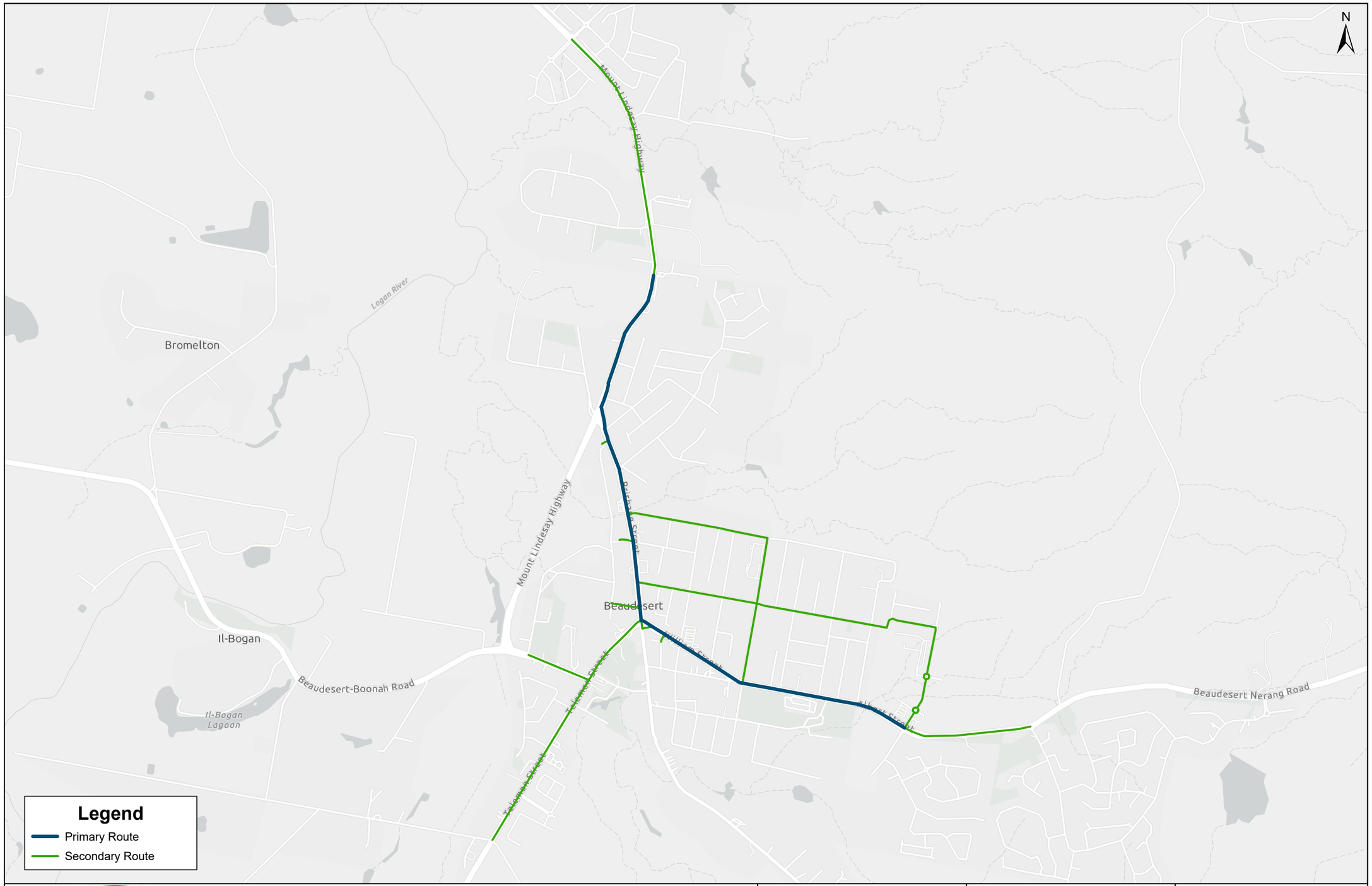

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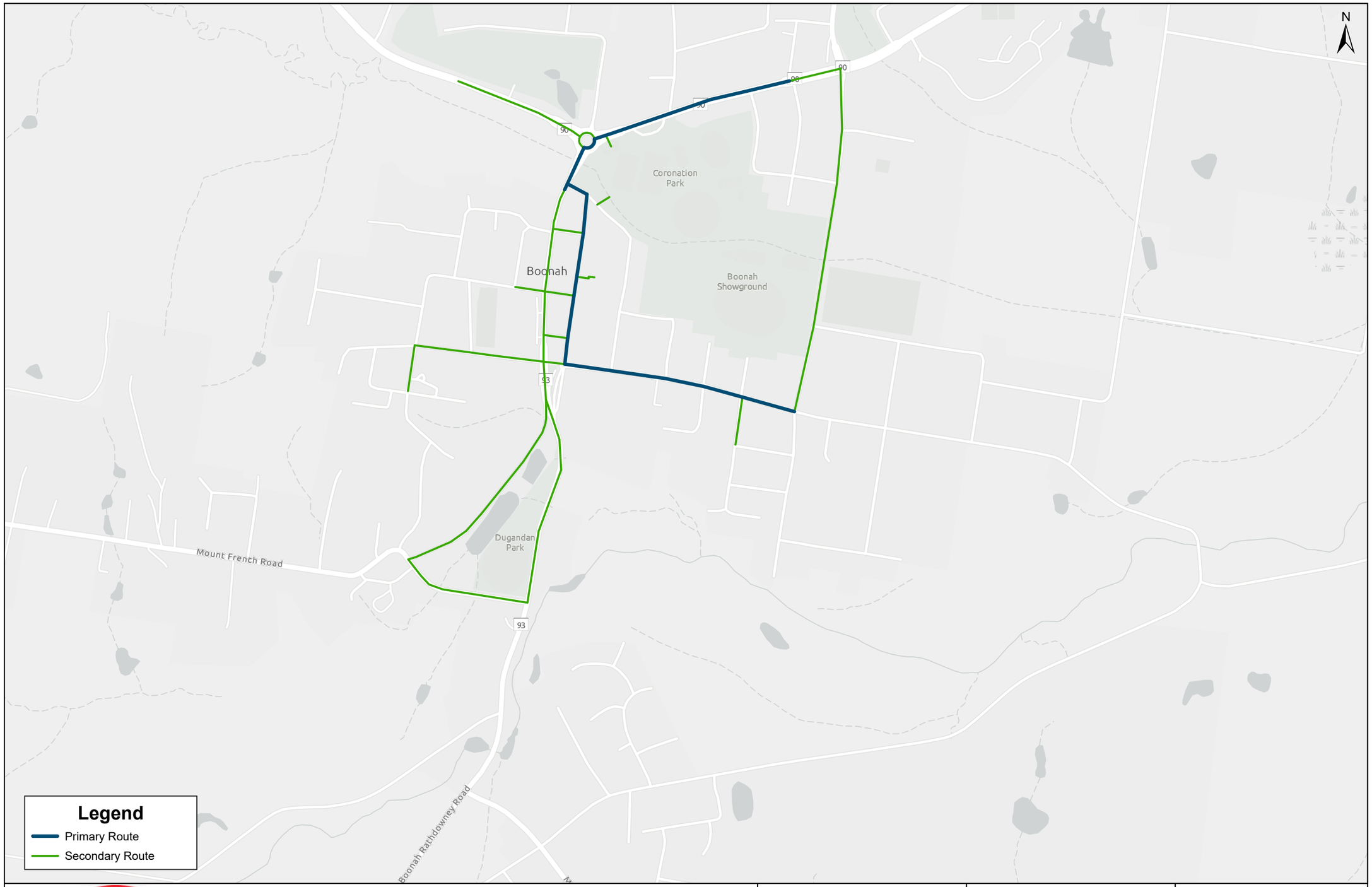

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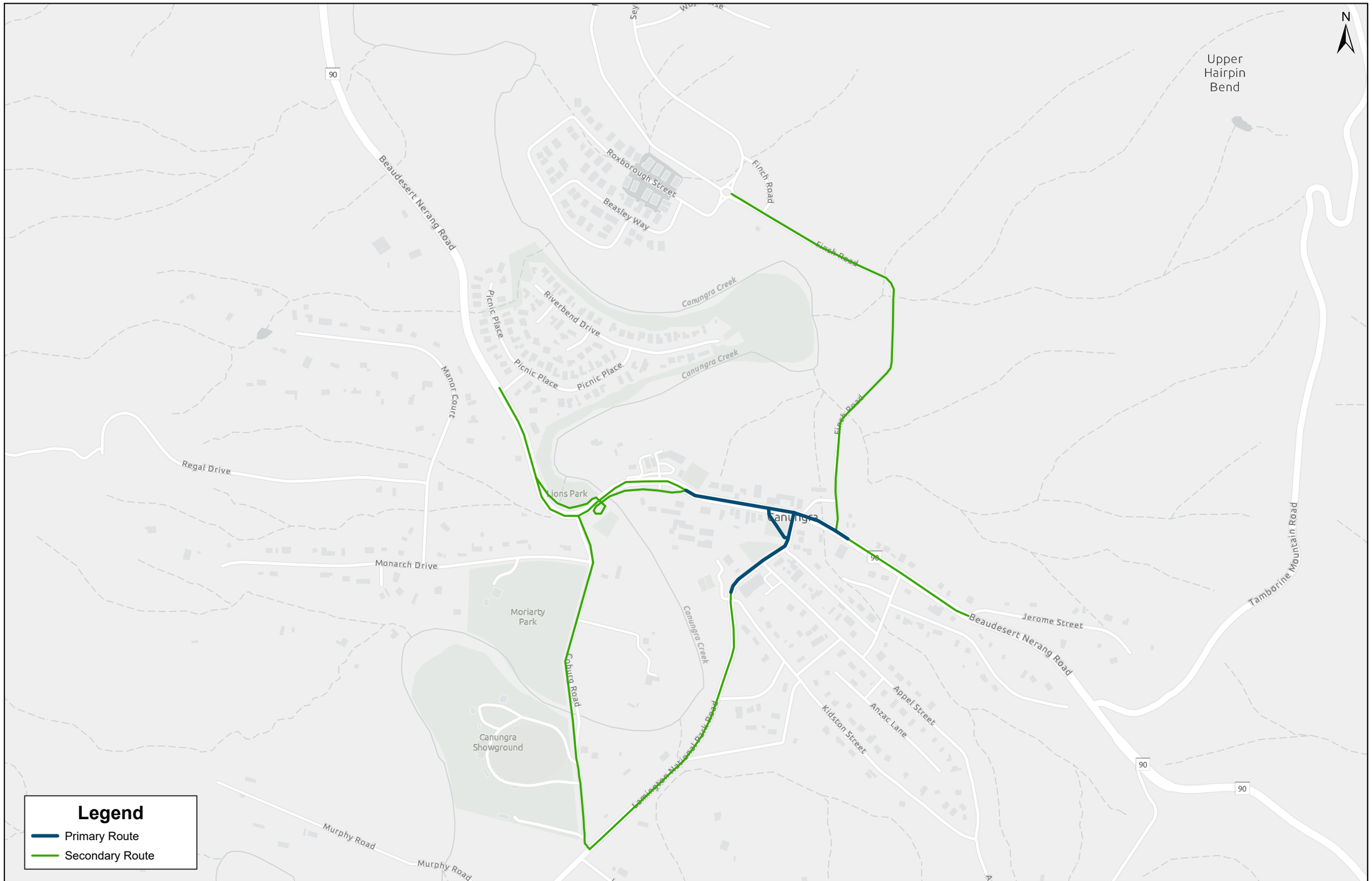
Project:	Scenic Rim Integrated Transport Plan
Title:	Boonah Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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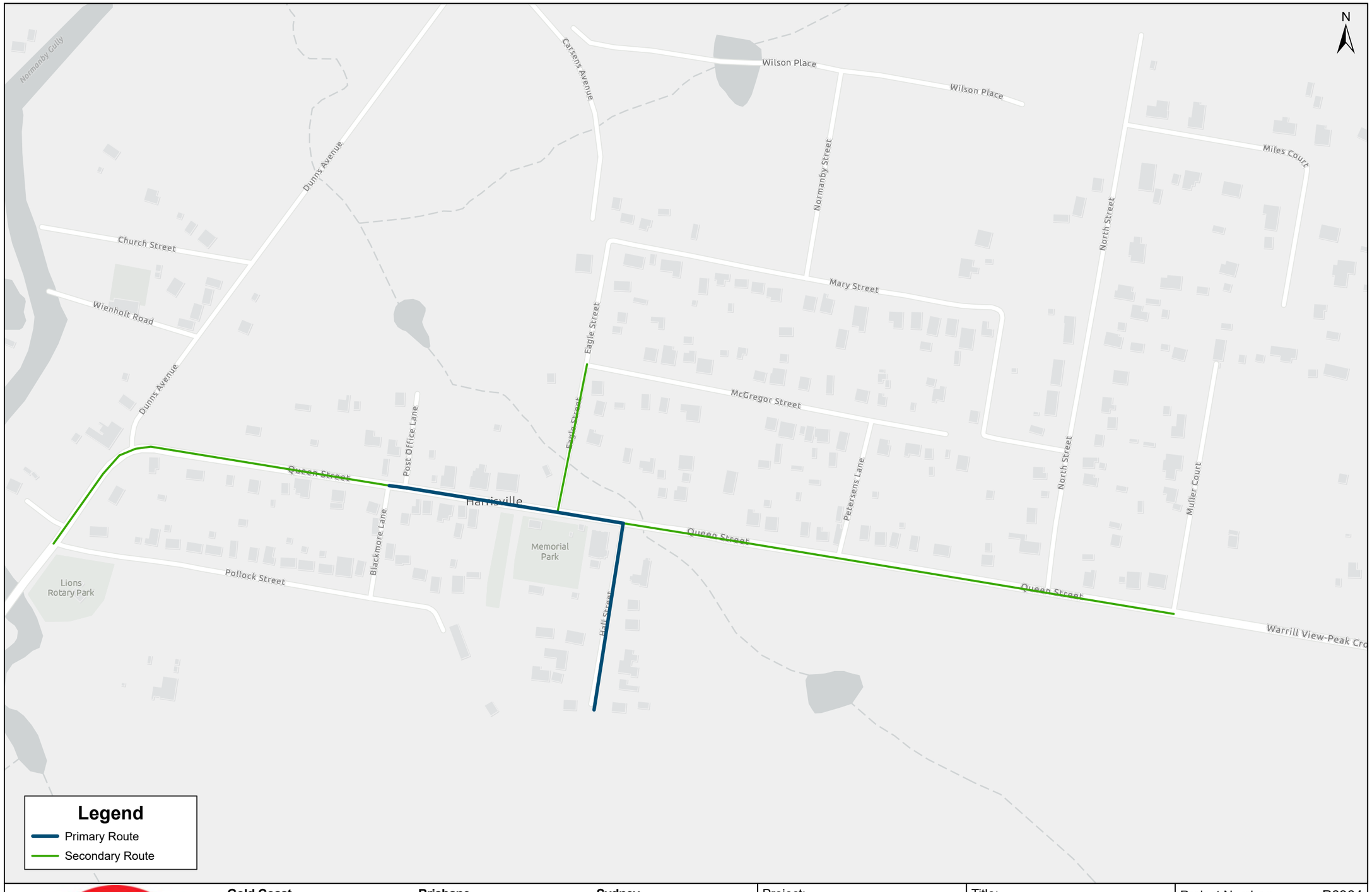
Project:	Scenic Rim Integrated Transport Plan
Title:	Canungra Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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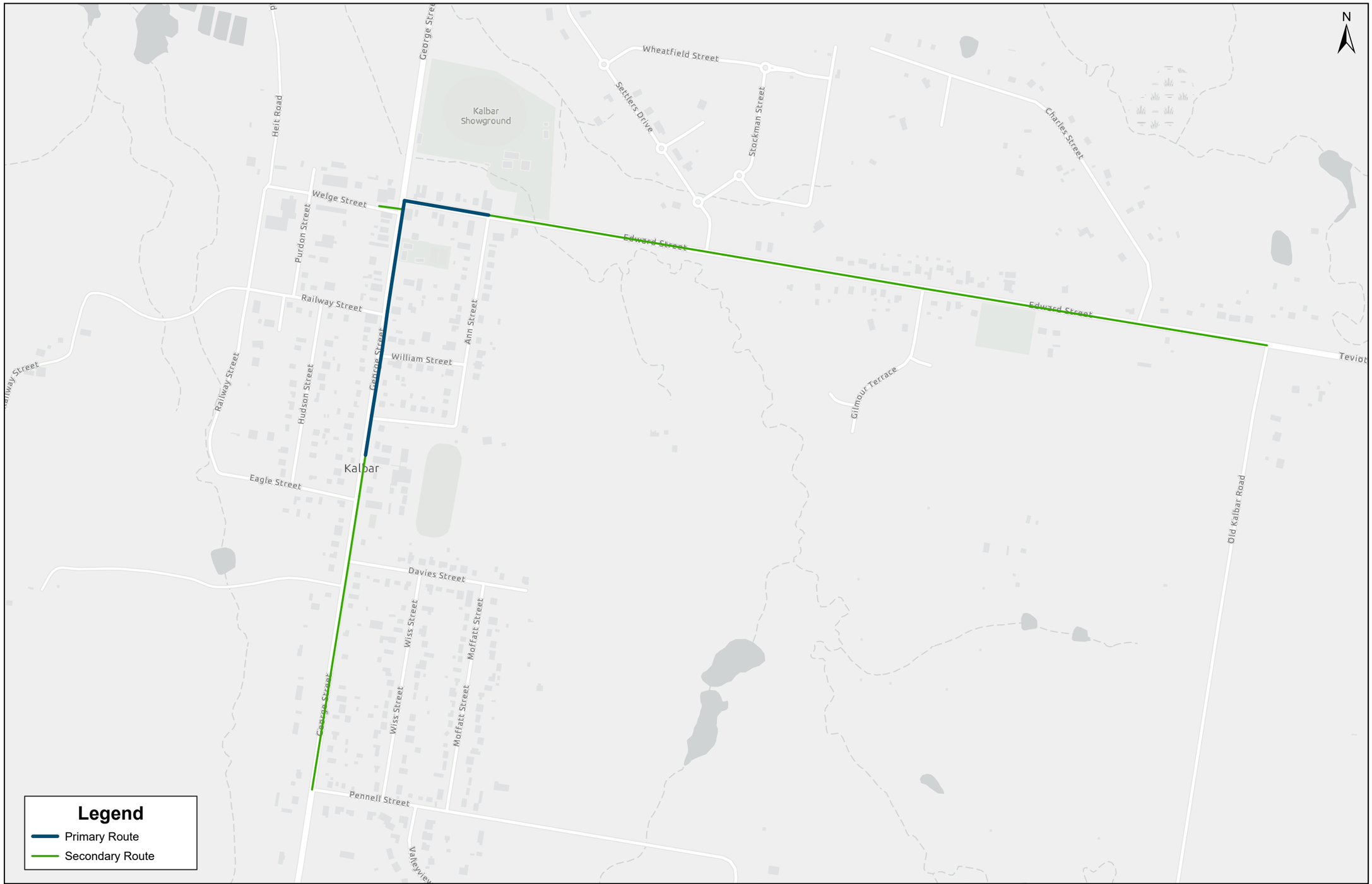
Project:	Scenic Rim Integrated Transport Plan
Title:	Harrisville Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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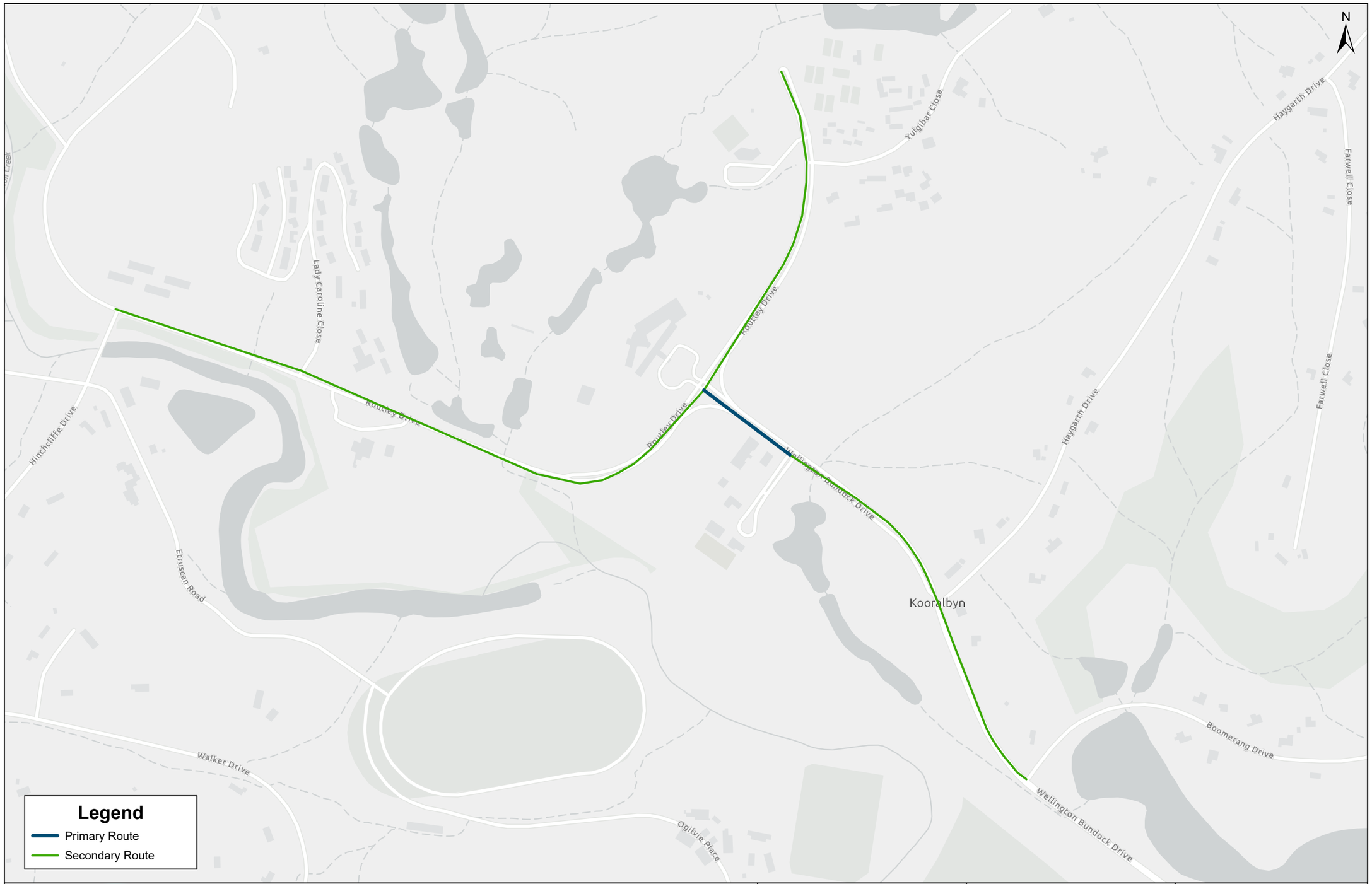
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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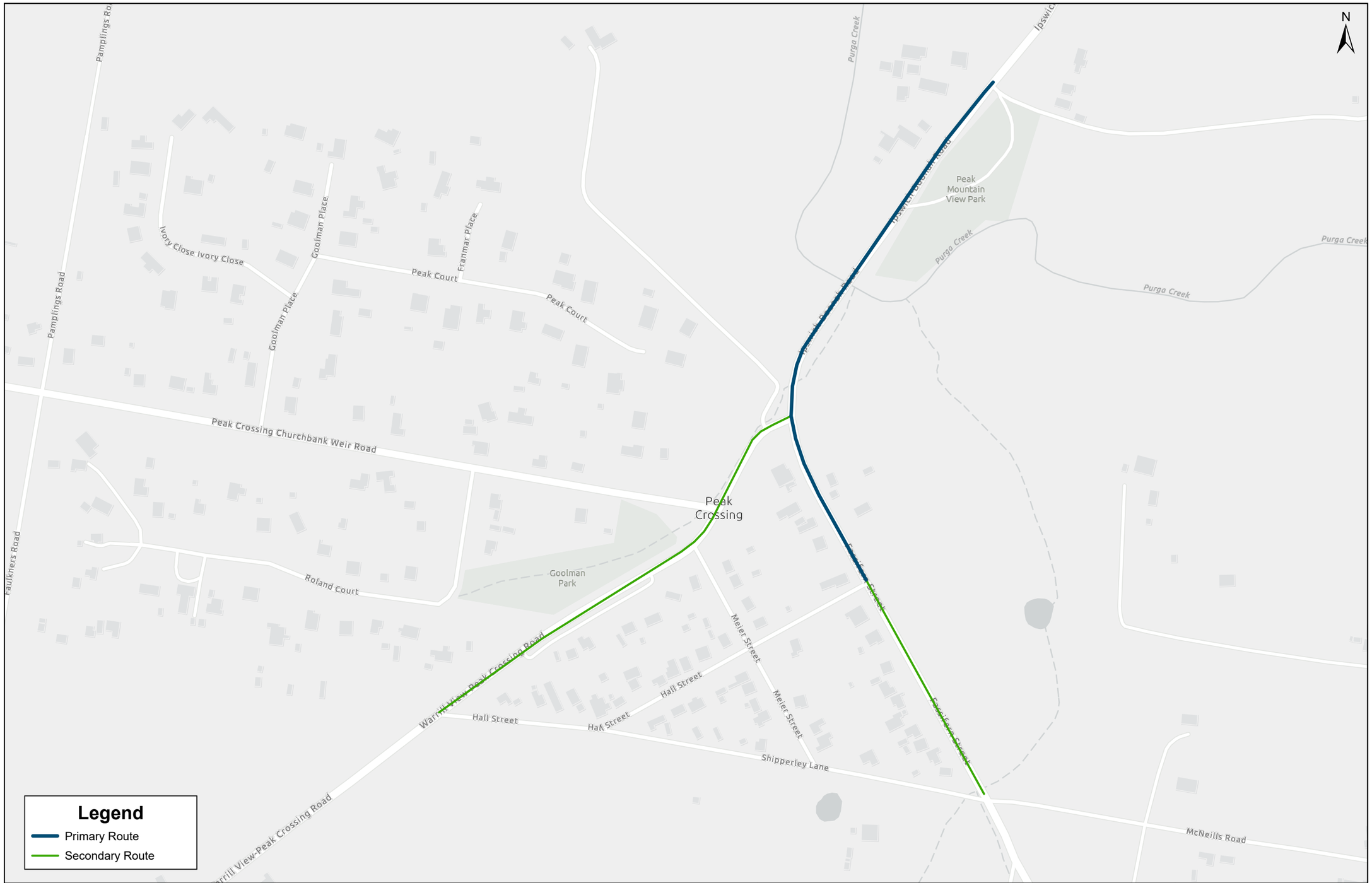
Project:	Scenic Rim Integrated Transport Plan
Title:	Kooralbyn Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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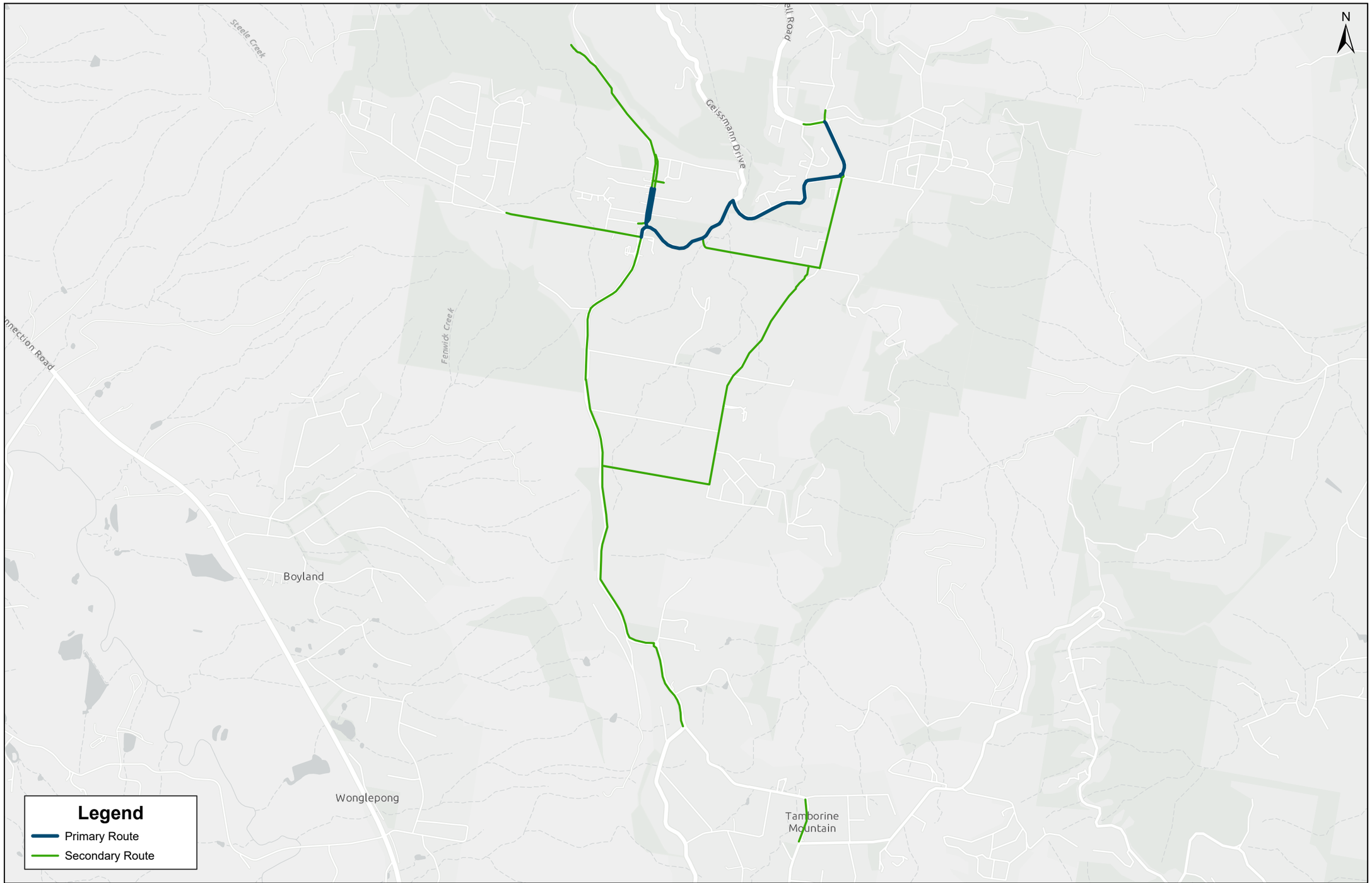
Project:	Scenic Rim Integrated Transport Plan
Title:	Peak Crossing Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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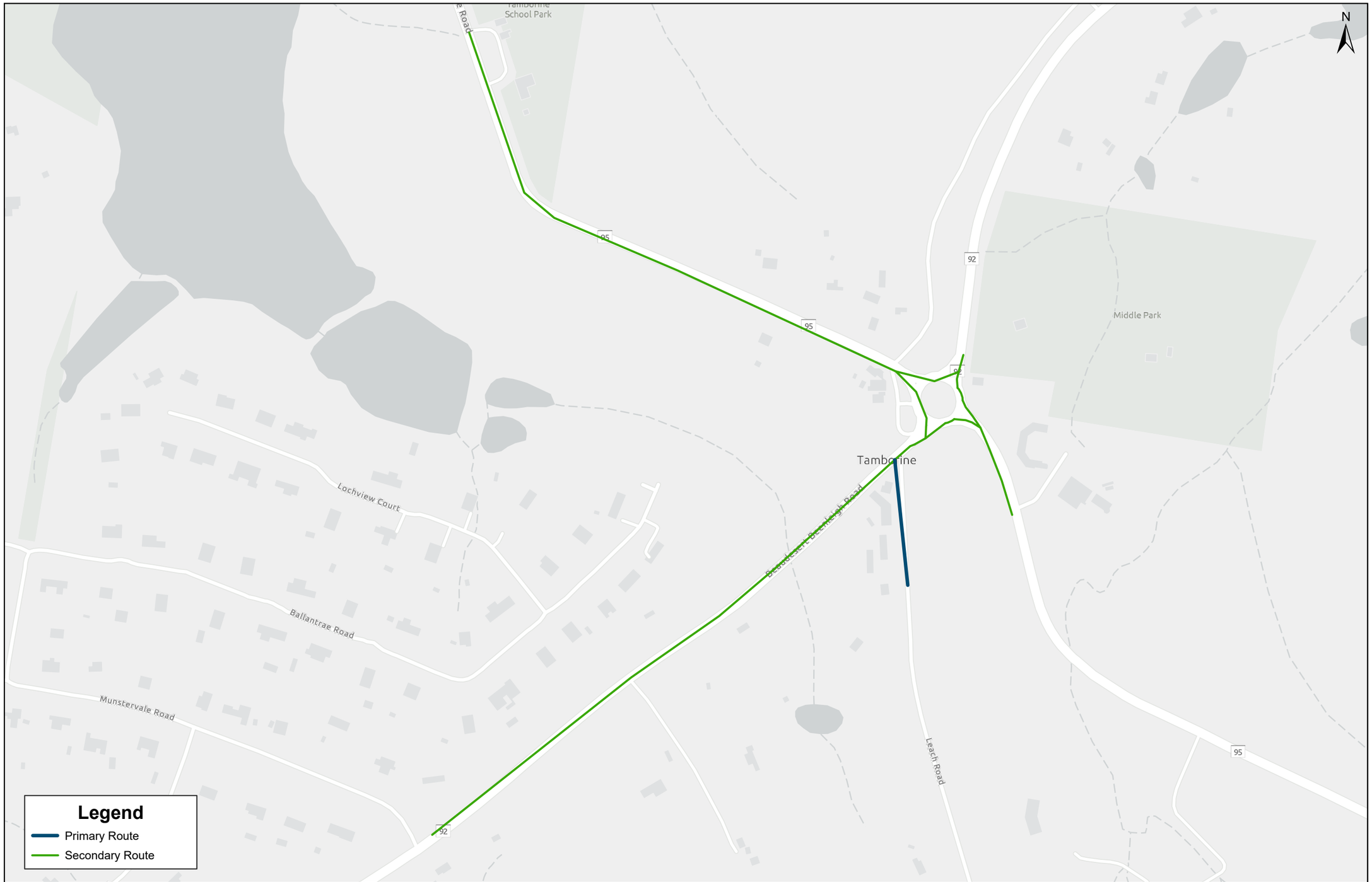
Project:	Scenic Rim Integrated Transport Plan
Title:	Tamborine Mountain Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1



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Project:	Scenic Rim Integrated Transport Plan
Title:	Tamborine Cycle Network Priority Map
Project Number:	P6364
Date:	05/06/2025
Issue:	1

SCENIC RIM INTEGTRATED TRANSPORT PLAN

Road Network Plan

consulting

Scenic Rim Regional Council

17 April 2025

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PART 1: INTRODUCTION

1. INTRODUCTION

1.1 Background

The Scenic Rim Regional Council (Council) has experienced a consistent annual population growth of 1.8% over the past two (2) decades, and projections indicate a further increase from 44,000 residents in 2022 to over 67,000 in 2041, a rate of 2.7% per annum. The anticipated growth is attributed to factors such as lifestyle change, and affordability compared to nearby areas on the Gold Coast and Logan.

Council has recently completed a review of its existing Local Government Infrastructure Plan (LGIP). The region's growth has not met the previous forecasts for the LGIP. To address this, Council has progressed the Scenic Rim Growth Management Strategy 2041 (GMS). The GMS aims to guide future growth based on community feedback, land use analysis and projected needs. Given the close connection between the GMS and infrastructure, there is a timely need to re-evaluate and prepare a new LGIP, especially concerning the transport infrastructure components. The current LGIP has not based its transport projects on any substantive network assessment, nor has it specifically considered active transport needs.

Despite concerns about this forecast growth in the region, the impact on Council's transport system is expected to be manageable, especially with the growth distributed across multiple centres like Beaudesert, Boonah, Kalbar, Canungra, and Aratula. However, this increase in growth will place pressure on key elements of the road network, including: 'Place' related elements such as intersection-safety, key movements through town centres and walking and cycling facilities; and 'Movement' related elements such as freight movement, corridor safety and network management.

Council has commenced the development of a new comprehensive Integrated Transport Plan (ITP), with a primary focus on freight, intersection growth, walking, cycling and various other active transport modes. The ITP has been developed as a 10-year plan; however, has given specific consideration to a 2041 horizon, in alignment with ShapingSEQ and given that SEQ strategic modelling includes this timeframe as a key horizon. The primary objectives for the ITP in the Scenic Rim region are:

- *'Integrated Active Transport Network Plan*
- *Integrated Road Network Plan*
- *Diverse Transport Options*
- *Community Involvement*
- *Align with State Strategies*
- *Sustainability and Accessibility*
- *Regional Collaboration'.*

Bitzios Consulting has been commissioned by Council to prepare the ITP for the Local Government Area (LGA). The ITP includes a collection of studies under the 'umbrella' of an ITP, including transport modelling, road network planning, active transport planning and community and stakeholder engagement.

The primary objective of the ITP is to enhance the efficiency, safety, and sustainability of transportation networks in the Scenic Rim. The ITP will provide a foundation for strategic decision-making by Council regarding transport infrastructure and services across the LGA, including for the Schedule of Works (SoW) to be included in the LGIP update. It will also provide Council the evidence base for its engagement with other levels of government regarding infrastructure needs and funding priorities.

1.2 Study Context

This report will form the **Road Network Plan**, which summarises key findings from the Community Engagement, Transport Modelling, Strategic Road Network Plans and Local Road Network Plans, and is ultimately a key component of the ITP. Figure 1.1 presents the ITP study documents 'map', illustrating the information flowchart location of this report.

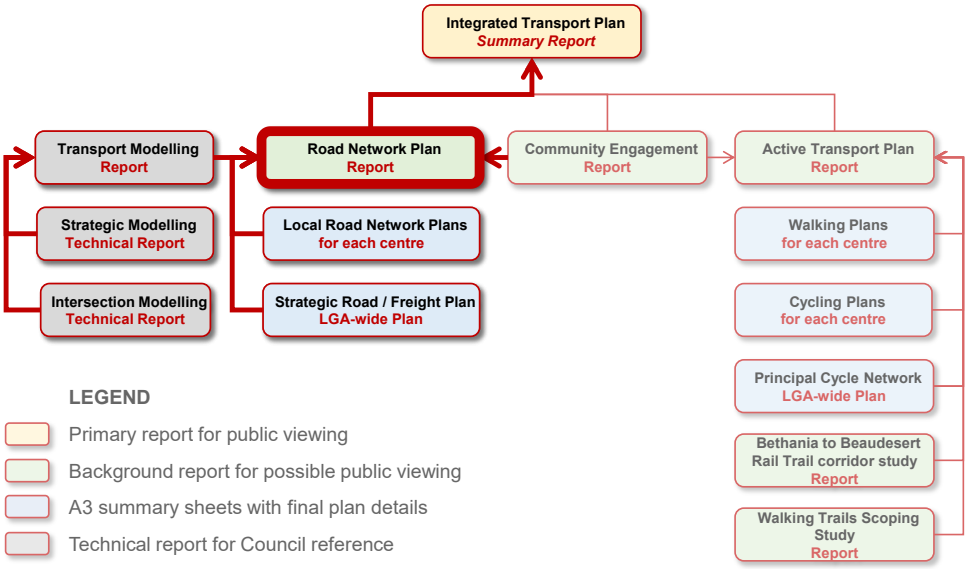
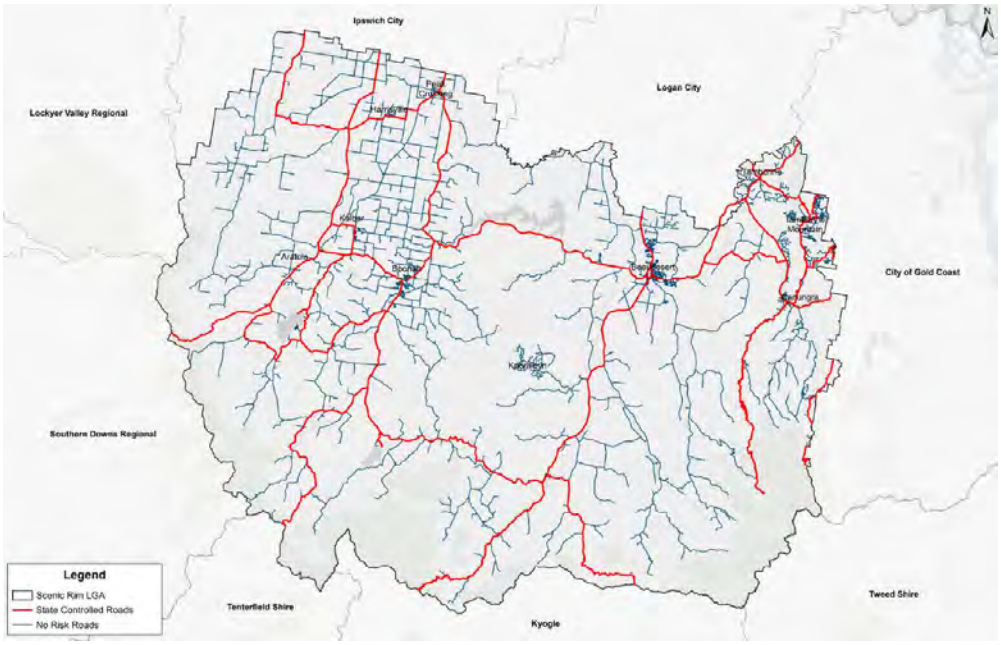


Figure 1.1: ITP Study Document and Information Flowchart

1.3 Study Area

The study area is the Scenic Rim LGA located in West Moreton region of South East Queensland. Figure 1.2 shows the key suburbs, major road network links and surrounding Councils. The region contains more than 30,000 hectares of parkland, including national parks and council-controlled parks. It also contains the three public dams of Lake Moogerah, Lake Maroon, and Lake Wyaralong.



Source: Scenic Rim Regional Council

Figure 1.2: Scenic Rim LGA

Key towns and villages within the LGA include Aratula, Beaudesert, Boonah, Canungra, Harrisville, Kalbar, Kooralbyn, Peak Crossing, Tamborine, and Tamborine Mountain.

1.4 Scope and Purpose

As noted above, the ITP will provide a foundation for strategic decision-making by Council regarding transport infrastructure and services across the LGA, including for the Schedule of Works (SoW) to be included in the LGIP update. This Road Network Plan report provides the blueprint for the LGA ITP and SoW to a 2041 design horizon by providing a data driven evidence base for the road network plans and improvements recommended.

This report compiles the following elements into a cohesive Plan with clear recommendations founded in the identified Principles & Policies for the ITP:

- Strategic Road Network Plan and Maps
- Local Road Network Plans and Maps
- Transport Modelling
- Desired Standards of Service
- Cost Estimation and Implementation Schedule.

This Plan does not include a detailed consideration of walking or cycling network plans, which are contained within the **Active Transport Plan**.

1.5 Transport Modelling

Transport modelling, through both strategic network modelling and more localised intersection modelling assessments, has been undertaken as part of the Road Network Plan to:

- Understand the impacts to traffic volumes due to the forecast growth across the region and also its neighbours including Logan, Ipswich, and the Gold Coast
- Test a series of potential upgrade configurations and changes to land use planning across the network to address congestion and accommodate future growth or deficiencies in the network
- Help identify and inform the transport infrastructure requirements across various modes and also their relationships to future growth areas across the region.

Transport modelling has been undertaken in coordination with other aspects of the ITP, including road network planning, active transport planning and consultation with stakeholders and the community.

1.5.1 Strategic EMME Model

A key component of this modelling is the use of the South East Queensland Strategic Transport Model - Multi-Modal (SEQSTM-MM, version 3.2309) for the purposes of strategic network planning. This strategic transport model (which is owned by the Department of Transport and Main Roads (TMR)) has been created in the EMME software and considers travel demands for private vehicles, public transport and active transport (walking and cycling).

The SEQSTM-MM has a base year of 2021 and future year projections for 2026, 2031, 2036, 2041 and 2046 for the following time periods:

- AM Peak | 07:00 – 09:00
- Daytime Off-peak | 09:00 – 15:00
- PM Peak | 15:00 – 18:00
- Night Off-peak | 18:00 – 07:00
- Daily | 24 hours.

Figure 1.3 shows the current links, zones, and zone connectors of the SEQSTM-MM for the Scenic Rim LGA. The 2021 Base SEQSTM-MM and the year 2031 and year 2041 models were sourced from TMR's Transport Analysis Unit (TAU). The year 2021 model was locally validated based on recent count data, with any adjustments made to the 2021 base model, such as trip generation factors, trip distribution factors or network parameters, replicated in the 2031 and 2041 models.

Localised refinement was also undertaken for the EMME Model to refine the base models for this particular study. The demographics in Council's growth strategy were provided by the Council's LGIP team, including GroMap data, available traffic counts and the most recent land use information. These datasets were then reviewed against the current 2031 and 2041 demographics in the SEQSTM-MM, with demographic inputs updated to reflect Council's growth forecasting more closely in greater detail.

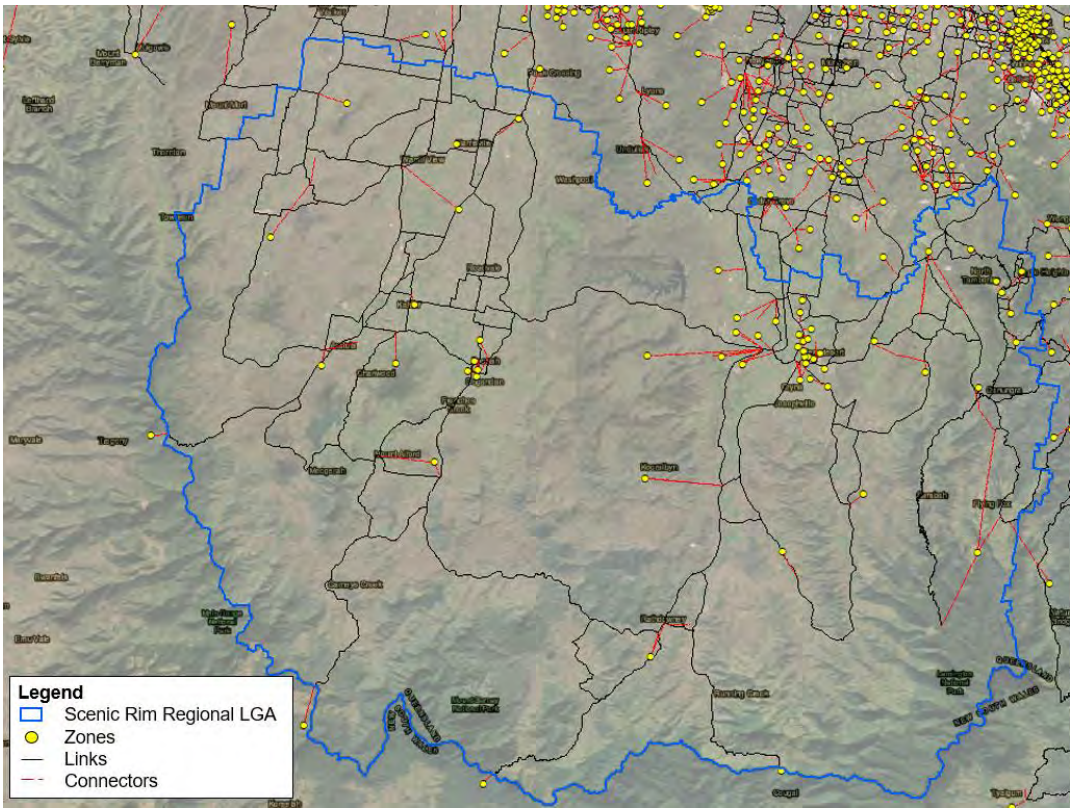


Figure 1.3: SEQSTM-MM for the Scenic Rim LGA

For further details regarding the modelling methodology, key inputs, findings, and recommendations, refer to the **Transport Modelling Report**.

1.6 Movement and Place

The 'Movement and Place Framework' is an internationally recognised methodology used for the planning and management of streets and roads. This framework focuses on creating successful streets and roads by balancing the movement of people and goods with the amenity and quality of places.

The *movement* side of the framework prioritises a connected transport network and ensures that people and freight can travel where they need to go via the most direct route. This ensures that higher traffic volumes are being placed on the correct hierarchy of road, minimising congestion, and traffic volumes on lower order roads.

The *place* side of the framework prioritises the retention and development of places such as green zones, parkland, and urban centres to ensure that excessive traffic volumes and congestion do not impact the safety and amenity of the area. Well-designed places

Source: Austroads, Integrating Safe Systems with Movement and Place for Vulnerable Road

make people want to interact there and can create a greater sense of community with an increased level of liveability.

This ITP has been prepared in alignment with the *Movement and Place Policy (2024)* prepared by TMR and adopts the key vision and principles of this Policy for the Region.

1.7 Reference Documents

The below is a list of documents reviewed and referenced as part of the Road Network Plan:

- Scenic Rim Regional Council Road Strategy 2015-2019
- Scenic Rim Planning Scheme 2020
- Scenic Rim Planning Scheme 2020 – Standard Drawings
- Scenic Rim Local Government Infrastructure Plan (LGIP)
- Scenic Rim Growth Management Strategy 2041
- Scenic Rim Nature-based Tourism Strategy 2023-2032
- Scenic Rim Tourism Strategy 2017-2021
- Bromelton State Development Area Development Scheme
- TMR's Movement and Place Policy
- TMR's QRSTUV: Guide to Speed Management
- TMR's West Mount Lindesay Highway Development Corridor – Major Road Network Study Update October 2018
- Austroads Guide to Road Safety Parts 1-7
- Austroads Guide to Road Design Parts 1-7
- Austroads Guide to Traffic Management Parts 1-13
- Austroads Network Design for Road Safety
- Australian Standards 1742 Manual of Uniform Traffic Control Devices
- ShapingSEQ 2023
- Australian Bureau of Statistics (ABS) Census Journey to Work
- ABS 2023 Estimated Resident Population
- CSIRO's TraNSIT Dashboard
- Australian Rail Track Corporation (ARTC) Inland Rail – Calvert to Kagaru
- QLD Government Salisbury to Beaudesert Passenger Rail Summary Report
- South East Queensland Strategic Transport Model - Multi-Modal (SEQSTM-MM, version 3.2309).

PART 2: PRINCIPLES & POLICIES

2. PRINCIPLES AND POLICIES

2.1 Overview

The ITP sets out key **Principles and Policies** which are used to guide the Plan and set common targets and goals to be achieved by the Plan. We have identified four (4) Principles and 12 Policies which aim to address the issues and opportunities facing the future transport network. The ITP Principles were formed considering several documents, including Council's Corporate Plan themes, DTMR's QLD Transport Strategy strategic outcomes and Connecting SEQ 2031 to ensure alignment with the Region's key Strategic documents, as well as the needs of the Scenic Rim LGA.

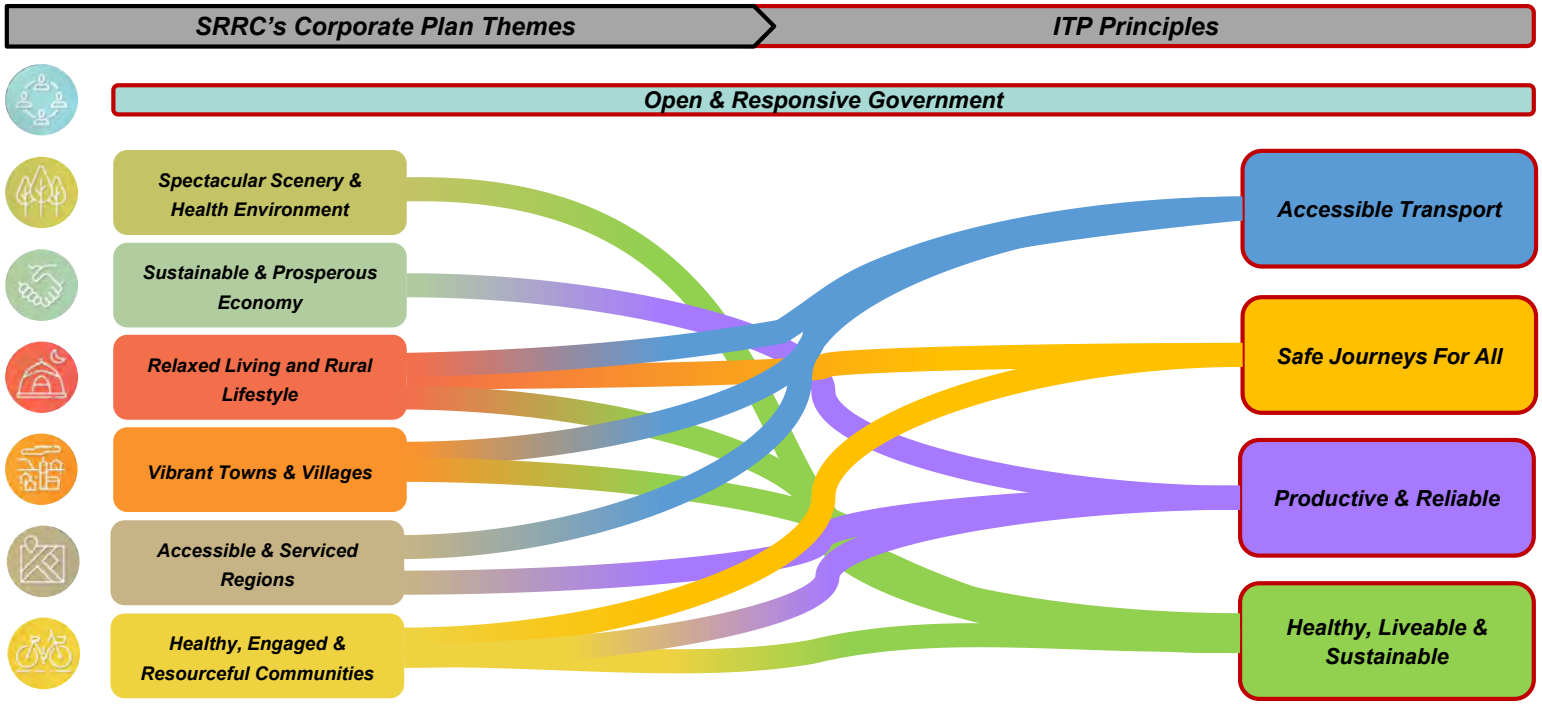


Figure 2.1: ITP Principles

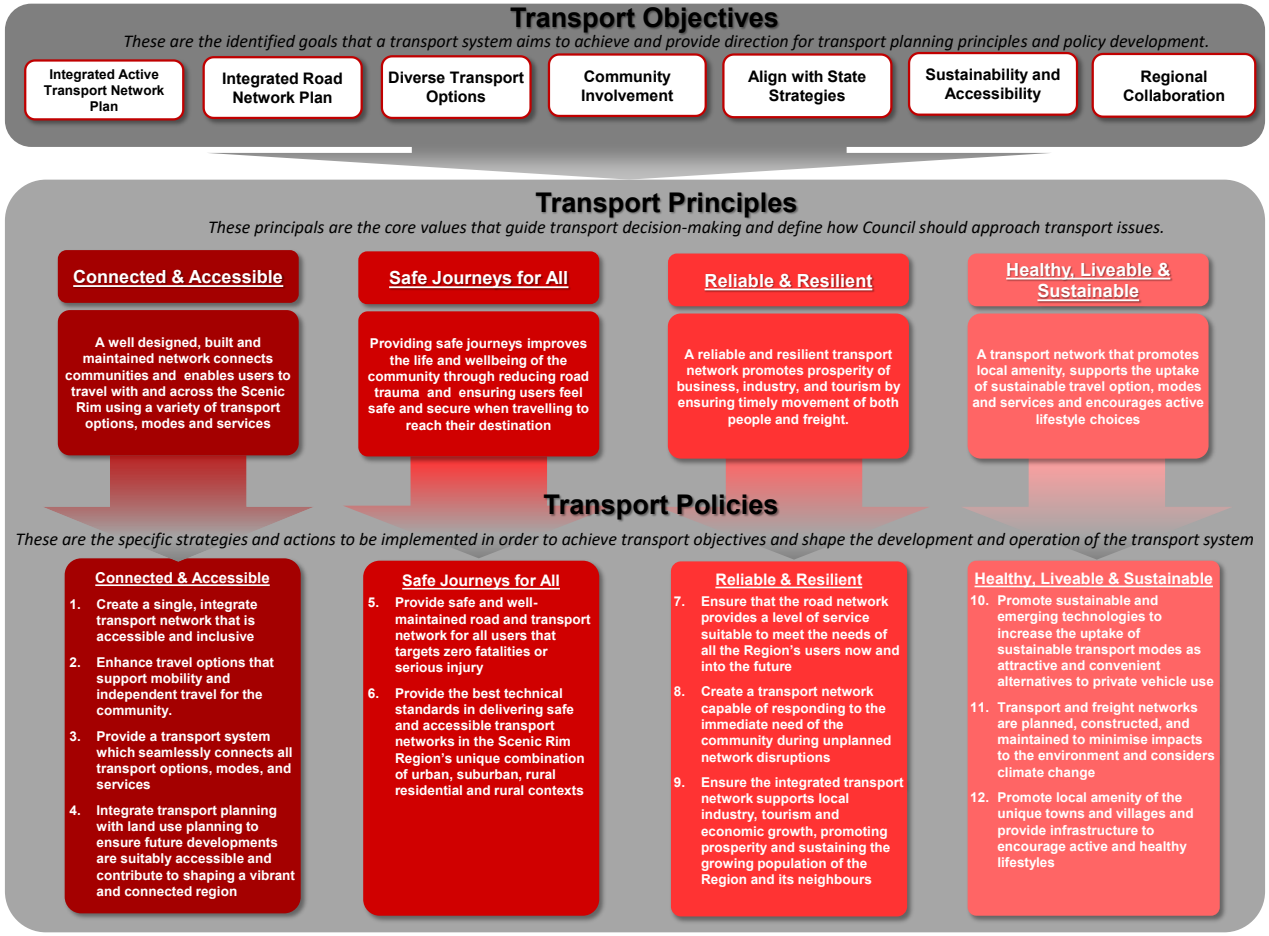


Figure 2.2: ITP Objectives, Principles and Policies

2.2 Connected and Accessible

A connected and accessible road system is the key to ensuring that people and goods are able to get where they need to be, when they need to be there. This is one of the most important roles that the transport network plays and is vital to the ongoing success of the Scenic Rim LGA.

A connected and accessible transport network considers both the “movement” and “place” aspects of the Movement and Place Framework and ensures that suitable options are provided to move people and goods efficiently between places and between transport modes. This will improve the viability of residential and commercial areas across the LGA by allowing quality access to the higher order road network and local towns and villages, as well as providing key tourist links to attractors. It also plays a key role in the uptake of alternative transport modes by ensuring that the “first mile and last mile” integrate with the rest of the transport network.

The ITP seeks to ensure that the transport network provides a high level of connectivity across geographical areas and accessibility across different travel modes to connect people and places.

2.3 Safe Journeys for All

Safety is the most important consideration when designing and implementing a transport system. Every year over 1,000 Australians lose their lives on roads, and Scenic Rim is not immune to this statistic. In fact, in the most recent five (5) years of data, 32 fatal crashes have occurred in Scenic Rim, at a rate of 14.14 per 100,000 population, which is 2.77x higher than the State average and 3.14x higher than the National average.

A safe transport network ensures that all people can undertake daily travel without experiencing trauma due to crashes, conflicts, or disruptions. Whilst this is a high aim, it is critical to the prosperity of the LGA that the road network is as safe as possible. This improves the lifespan and wellbeing of people within the LGA and reduces the ‘cost’ that the road network has on the community.

The ITP seeks to ensure that the transport network is safe for all modes of transport under all conditions to align with State, National and International targets related to road trauma.

2.4 Reliable and Resilient

A reliable and resilient road network is one that promotes business, industry and tourism as well as one that can respond to emergent needs faced and the long-term impacts of weather and climate events.

The transport network plays a vital role in the productivity of the Scenic Rim LGA, and needs to be reliable and resilient, meaning that people know how long a trip will take and know that the trip will not be constrained by significant delays. This includes during unplanned weather events where the road network needs to be capable of responding to critical needs and also be back online quickly to ensure disruptions to the LGA are minimised.

The ITP seeks to ensure that the transport network is reliable and resilient to provide certainty to its users and ensure that the LGA is always suitably serviced by the transport network.

2.5 Healthy, Liveable and Sustainable

A heathy and liveable LGA is one that caters for the needs and promotes the wellbeing of all residents. A well-planned and liveable transport network ensures that all people have convenient access to key services and employment, which is supported by alternative transport networks. This will result in an improvement in the overall wellbeing of the LGA, while also promoting a sense of place and creating prosperous towns and villages.

A sustainable transport network is one that considers and accommodates the current population, but also supports the future generations within the LGA to ensure that they benefit from a strong and enduring transport system.

The ITP seeks to ensure that the transport network promotes healthy living and will continue to be sustainable for all generations.

PART 3: EXISTING SITUATION

3. COMMUNITY CONSULTATION

3.1 Overview

A number of community and stakeholder engagement sessions have been undertaken as part of the ITP to inform and shape its considerations, focus and outcomes. Importantly, the community feedback was used to identify key links and priority areas, and to inform the multi-criteria analysis undertaken in Part 6.

The engagement activities were advertised on the Let's Talk Scenic Rim website and social media, by news outlets and through pamphlets distributed locally. The stakeholder and community engagement activities included the following:

- On-line survey
- On-line mapping
- Five in-person community drop in sessions
- Focused stakeholder engagement workshop.

The Let's Talk Scenic Rim website page advertising the community engagement activities is shown in Figure 3.1.

Figure 3.1: Let's Talk Scenic Rim Website

The community engagement report has been provided separately as part of the ITP.

3.2 Community Feedback

The key feedback related to the Road Network Plan is provided as follows:

- 79% of respondents think the current transport system does not work well for the community
- 85 respondents listed road maintenance as a key issue for the Region. This was the highest response for any item. Furthermore, broken up by each key area, it was noted that
  - 78% of Beaudesert residents noted poor road conditions as a priority
  - 71% of Boonah residents noted poor road conditions as a priority
  - 81% of Kooralbyn residents noted poor road conditions as a priority
  - 67% of Tamborine Mountain residents noted poor road conditions as a priority
- 28% of respondents listed road safety as a key issue. A number of respondents also selected particular locations on the interactive map. Figure 3.2 presents a heatmap of the pins placed relating to road safety. Several key locations for road safety were noted, including Boyland Road and Biddaddaba Road and local roads in Kooralbyn, Boonah and across Tamborine Mountain
- The width of sealed shoulders was raised as a concern on major roads, mainly in relation to providing suitable space for cyclists
- Congestion in Beaudesert, Canungra and Tamborine Mountain was raised as a concern, especially during peak seasons. Figure 3.3 presents a heatmap of the pins placed relating to congestion

- The community raised concerns regarding the level of freight travelling through towns, with 15% listing this as a priority concern
- Across the responses, 54% highlighted that providing safe, accessible and reliable public transport should be a key priority for the next 10 years
- Residents of Kooralbyn noted that it has a single road in and out, and sought investigations on a connection road to the west to Boonah to open up potential employment markets, and provide access in the event of a natural disaster
- Parking in Canungra was raised as a key concern, especially on weekends
- The provision of electric vehicle charging was raised by several respondents.

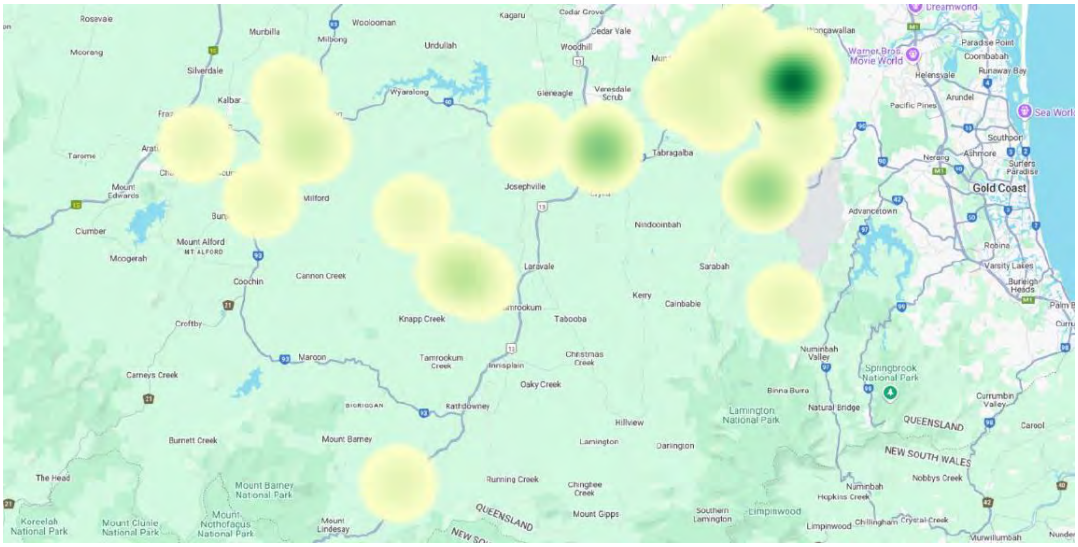


Figure 3.2: Community Consultation – Road Safety Heat Map

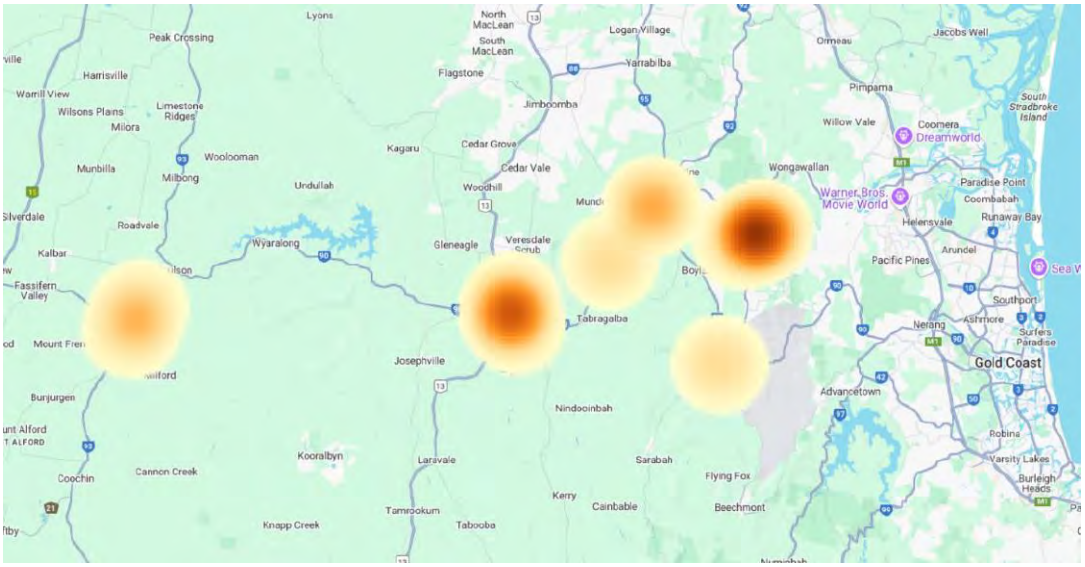


Figure 3.3: Community Consultation – Traffic Congestion Heat Map

3.3 Road Network Plan

Community consultation is vital to the development of a comprehensive and robust Road Network Plan. All of the responses have been reviewed and considered in the preparation of the Road Network Plan. In particular, refer to the below table for specific considerations or reference.

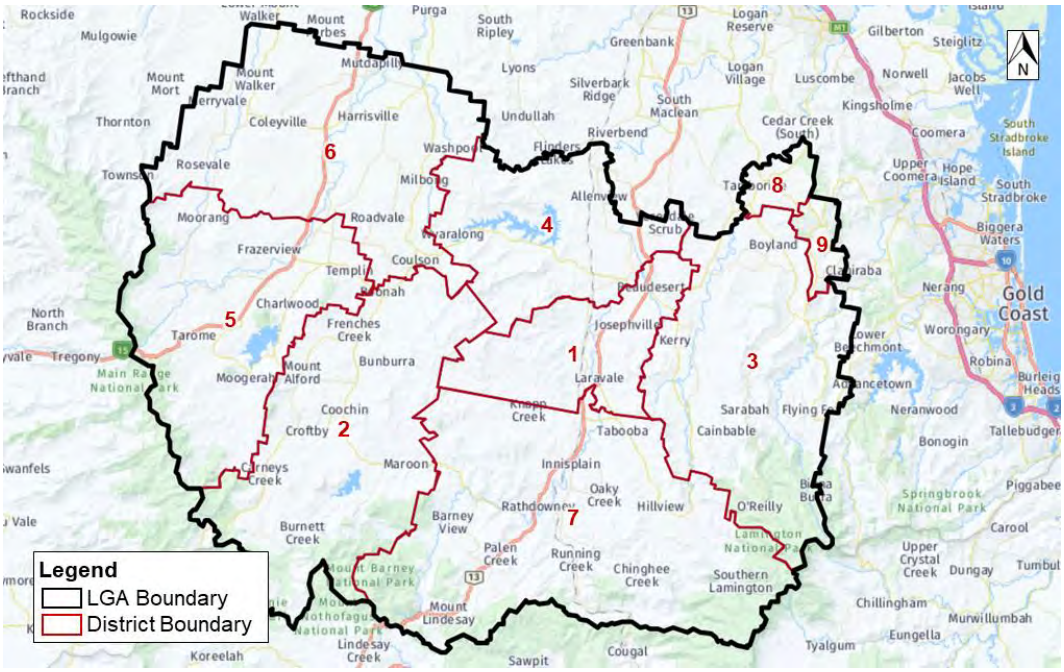
Table 3.1: Anticipated Residential Lot Growth Potential (2016-2041)

Item	How this was Considered in the RNP	Relevant Sections
Road Condition	This was a key consideration in the development of the desired standards of service for the Region, particularly in developing road standards which could be delivered to last a long time and require as minimal maintenance as possible. This was also considered in reviews undertaken across the Region to identify roads that have not been constructed to the appropriate standard. The specific locations raised were considered individually, as well as in part of the wider RNP and recommendations put forward as appropriate.	7.2 8.2 9.2 10
Road Maintenance	This was a key consideration in the development of the guiding Principles and Policies as well as the desired standards of service for the Region.	2 7.2
Road Safety	The comments raised were used in all aspects of the RNP, particularly in the development of the desired standards of service, and in reviewing the network. Detailed safety reviews were undertaken for all roads at both a Strategic and Local level to determine critical corridors based on historic crash occurrences. In addition, a review of the design standard of all roads across the Region was undertaken to identify locations where increased crash risk may occur (despite an absence of crash data). The specific locations raised were considered individually, as well as in part of the wider RNP and recommendations put forward as appropriate.	2 6.3 7.2 8.1 9.2 10
Safety for Cyclists	This has been considered more thoroughly in the Active Transport Plan but was also considered in the development of the desired standards of service.	7.2 9.2
Congestion	The comments raised were used in all aspects of the RNP. A detailed EMME model of the entire Region was developed to model existing and projected traffic volumes across the Region and at key locations. In addition to this, detailed individual investigations were undertaken at key intersections and centres to determine suitable upgrades and / or recommendations.	1.5 6.1 7.2 8 9.2 10
Freight Through Towns	The potential of freight vehicles travelling through towns was a key consideration of the RNP. The RNP adopted the principles of the Movement and Place Framework, which prioritises keeping freight traffic (and any through traffic in general) within “Movement” corridors, and seeking to separate these from “Place” locations, such as townships. A freight plan was developed, and several bypass / ring road recommendations were considered to reduce the interaction between “Movement” corridors and “Place” locations across the Region.	1.6 4.4 5.3 7.2 8.3 10
Public Transport	Whilst public transport was not a core component of the RNP, it was considered at a qualitative level for each local area. Relevant locations and markets were identified where advocacy for further public transport services is recommended.	5.4 8.4 10
Kooralbyn Accessibility	A separate model run was undertaken for Kooralbyn, testing the provision of a western connection. Recommendations were made in relation to this.	8.2
Parking	Whilst parking was not a core component of the RNP, it was considered at a qualitative level for each local area.	10

4. TRAVEL PATTERNS AND USERS

4.1 Districts

Figure 4.1 shows the nine (9) districts within the Scenic Rim LGA used for census and data purposes.



Source: Forecast.id

Figure 4.1: Scenic Rim Districts

The population forecasts for each district have been sourced from the 2023 Estimated Resident Population (ERP) in the Australian Bureau of Statistics (ABS) dataset. Table 4.1 provides the 2023 population for each district within the Scenic Rim LGA.

Table 4.1: Population by Area (2023)

ID	Area	Population	Area (km²)	Pop Density (pop/km²)
1	Beaudesert - Kooralbyn and District	9,533 (21%)	271.5	35.11
2	Boonah - Dugandan and District	4,768 (11%)	683.2	6.98
3	Canungra - Kerry and District	5,705 (13%)	628.7	9.07
4	Gleneagle - Allenview and District	3,459 (8%)	379.0	9.13
5	Kalbar - Aratula and District	3,241 (7%)	572.5	5.66
6	Peak Crossing - Harrisville and District	5,082 (11%)	666.5	7.62
7	Rathdowney and District	1,880 (4%)	955.5	1.97
8	Tamborine	3,035 (7%)	49.8	60.94
9	Tamborine Mountain	8,545 (19%)	42.56	200.8
Scenic Rim Regional Council		**45,248**	**4,249.26**	**10.65**

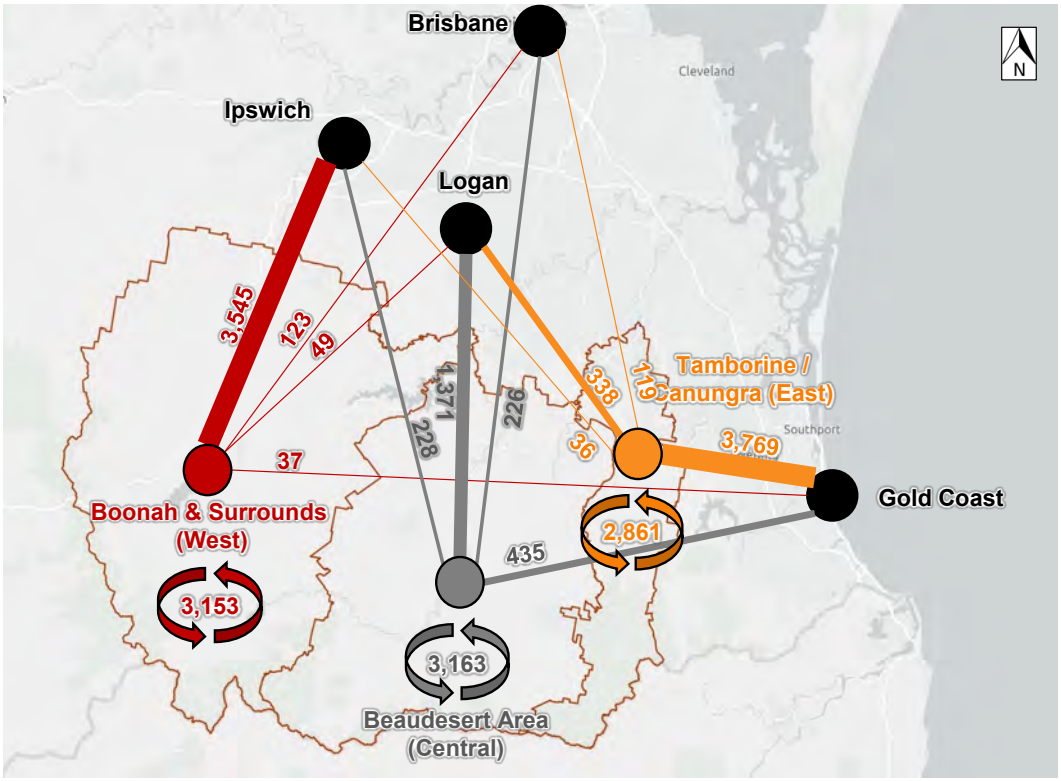
4.2 Journey to Work

The 2021 Australian Bureau of Statistics (ABS) Census Journey to Work data records the number of people employed within the Scenic Rim LGA as 19,968 in 2021. A detailed breakdown of the residential locations of employees working within the Scenic Rim LGA is listed in Table 4.2. Approximately 48% of workers live in the LGA.

Table 4.2: Residential Locations of Workers within Scenic Rim by LGA

		Place of Work			
	District / LGA	Tamborine – Canungra	Boonah	Beaudesert	TOTAL
Place of Residence	Tamborine – Canungra	2,861	5	188	**3,054**
	Boonah	4	3,153	129	**3,286**
	Beaudesert	114	75	3,163	**3,352**
	Brisbane	119	123	226	**468**
	Gold Coast	3,769	37	435	**4,241**
	Ipswich	36	3,545	228	**3,809**
	Logan	338	49	1,371	**1,758**
	TOTAL	**7,241**	**6,987**	**5,740**	**19,968**

Note: Table totals may differ from other tables due to randomisation of small numbers.



Source: Australian Bureau of Statistics (2021)

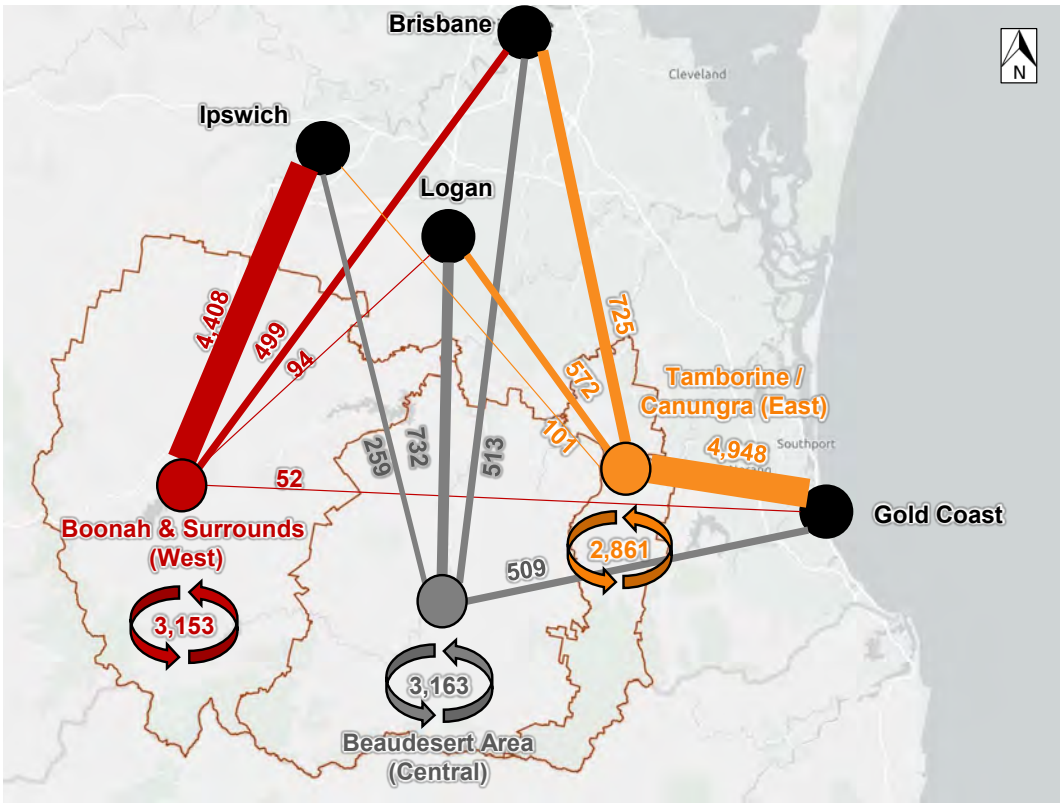
Figure 4.2: Journey to Work – Residential Location of Persons Working in Scenic Rim

The number of residents employed is recorded as 23,104 in 2021. A detailed breakdown of the employment locations of Scenic Rim residents by LGA is listed in Table 4.3.

Table 4.3: Residential Locations of Workers from Scenic Rim by LGA

		Place of Work							
	District / LGA	Tamborine – Canungra	Boonah	Beaudesert	Brisbane	Gold Coast	Ipswich	Logan	TOTAL
Place of Residence	Tamborine – Canungra	2,861	4	114	725	4,948	101	572	**9,325**
	Boonah	5	3,153	75	499	52	4,408	94	**8,286**
	Beaudesert	188	129	3,163	513	509	259	732	**5,493**
	TOTAL	**3,054**	**3,286**	**3,352**	**1,737**	**5,509**	**4,768**	**1,398**	**23,104**

Note: Table totals may differ from other tables due to randomisation of small numbers.



Source: Australian Bureau of Statistics (2021)

Figure 4.3: Journey to Work – Employment Location of Scenic Rim Residents

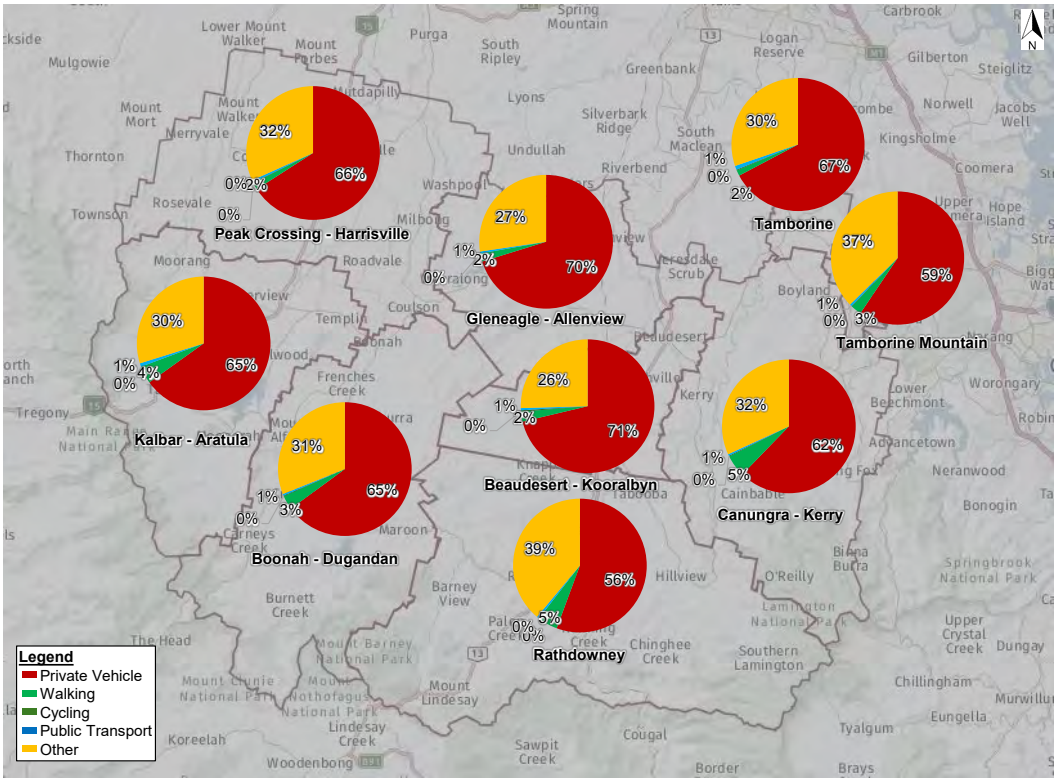
Key points from the above journey to work data are summarised below:

- Approximately 50% of all workers travel into Scenic Rim LGA to work each day
- Most of the external workforce is attracted from Ipswich and Gold Coast
- Approximately 60% of residents travel outside of the Scenic Rim LGA to work each day
- The most common external work locations were Ipswich and Gold Coast
- There is a significant number of intra-area trips within the LGA (e.g. Boonah to Boonah)
- There are minimal inter-area trips within the LGA (e.g. 75 trips from Boonah to Beaudesert)
- Scenic Rim Workforce:
  - A significant number of Gold Coast residents travel to Tamborine / Canungra
  - A significant number of Ipswich residents travel to Boonah.
- Scenic Rim Residents:
  - Tamborine / Canungra residents generally travel to the Gold Coast or stay within the catchment
  - Beaudesert residents generally stay within the catchment
  - Boonah residents generally travel to Ipswich or stay within the catchment.

4.3 Transport Mode Shares

The 2021 Australian Bureau of Statistics (ABS) Census Journey to Work data has been reviewed to determine the commuter travel patterns within the Scenic Rim LGA.

It shows that private vehicles are the main method of travelling to work within the study area, with only a small percentage of active transport users. Public transport use is low throughout the region, due to the limited availability of bus services and infrastructure.



Source: Australian Bureau of Statistics (2021)

Figure 4.4: Journey to Work Transport Mode Share

Table 4.4 provides a comparison between the mode distribution in the Scenic Rim LGA, compared to the South East Queensland (SEQ) and Queensland.

Table 4.4: Mode Share Comparison

Area	Mode Share		
	Vehicle	Active Transport	Public Transport
Scenic Rim	68%	3%	1%
Brisbane	53%	3%	9%
Logan	73%	1%	3%
Gold Coast	68%	3%	3%
Ipswich	71%	1%	4%
Queensland	65%	3%	4%

As shown, Scenic Rim LGA has a high percentage of private vehicle trips and very low percentage of active transport and public transport trips compared to surrounding LGAs and the Queensland average.

The above is evident in the significant private vehicle ownership, where only 3% of dwellings do not own a vehicle. The average vehicle ownership for Scenic Rim is two vehicles per household.

Based on data sourced from Forecsast.id (derived from the ABS Census of Population and Housing 2016 and 2021), it was found that 97% of households had access to at least one (1) car, with 69% of households having two (2) or more motor vehicles. This is above the Regional QLD average (62%).

Given the spread of dwellings across the LGA and limited alternative transport options, these results are not surprising. However, and quite importantly, there is room for improvement in public and active transport use to reduce car dependence.

4.4 Travel and Road User Markets

Roads across the LGA serve a wide range of road users and transport needs. The ITP acknowledges that the Region's roads broadly serve three different types of road use:

- **Economic:** The road network plays a pivotal role in facilitating the vital resource and agricultural sectors that thrive within the region. Maintaining a secure and efficient transportation network for the movement of goods is imperative to the overall economic strength of the LGA
- **Social and Community:** The road network also fulfils a crucial social and community function, by enabling access to homes, essential services, work, commercial establishments, leisure, and other attractors. Maintaining a safe and convenient road environment enables the community to thrive and engage in various aspects of daily life
- **Tourism:** The road network plays a vital role in ensuring that the LGA is accessible for tourists, being local (day trippers), interstate or international. Providing a road network well suited to tourist users will assist in the continued growth in this sector.

4.4.1 Economic Road User Market

On the economic side, the Scenic Rim generates over 790,000 tonnes of freight per year, across ~42,000 truck trips, at an estimated economic output of almost $2 billion per year (as per CSIRO's TraNSIT Dashboard). Key outbound commodities include coldfood (39%), livestock (30%) and horticulture (21%), with key inbound commodities being fuel, general household, and livestock. This does not consider the nearby LGA's where freight may travel through Scenic Rim along the Mount Lindesay Highway, or Cunningham Highway.

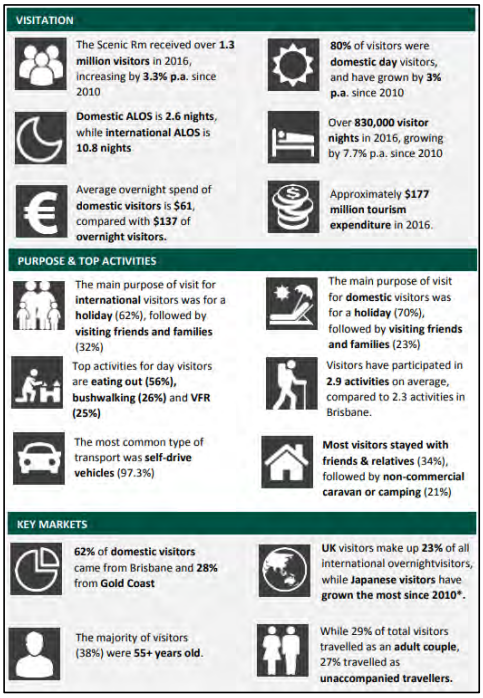
4.4.2 Tourism Road User Market

The Scenic Rim is known for its breathtaking scenery and boasts a wide selection of National Parks and nature-based opportunities, as well as many charming rural communities. Located in close proximity to Brisbane and Gold Coast, the Scenic Rim has become a popular and well-established destination for domestic day trippers seeking an escape from the city.

The Scenic Rim LGA is home to six National Parks, World Heritage listed rainforests and offers a wide range of outdoor activities and walking trails in remarkable natural settings. Apart from the picturesque natural environment, the Scenic Rim is also renowned for its high-quality local produce and its vibrant artistic community. The region is home to 17 wineries and offers a number of gourmet experiences, providing an opportunity for visitors to indulge in divine food and wine in great rural settings.

Tamborine Mountain is a focal point for tourism in the region (47% of visitations); however, significant growth in the Boonah-Rathdowney (25%) and Beaudesert (27%) sub-regions have been identified in recent years.

An extract of the Scenic Rim Tourism Strategy 2017-2021 is provided below to provide a further snapshot of the tourism condition of the LGA.



Source: Scenic Rim Tourism Strategy 2017-2021

Figure 4.5: Scenic Rim Tourism Snapshot

Tourism is a vital industry to the LGA, and the provision of attractive and convenient transport options in and around tourist destinations is important to support and ensure continued growth in this sector.

4.5 Growth

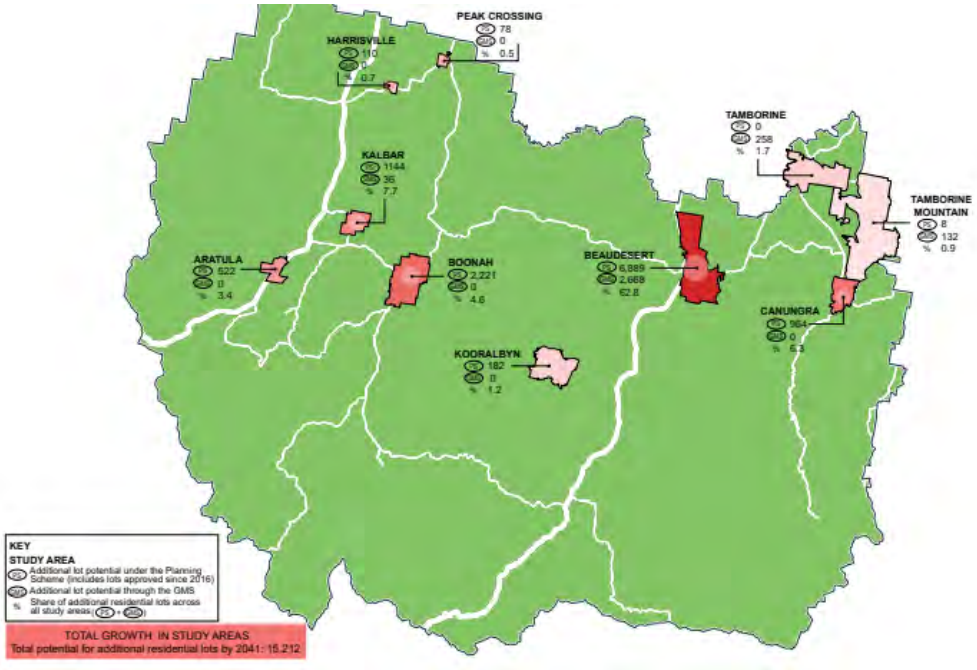
4.5.1 Residential

The Scenic Rim Growth Management Strategy 2041 presents the future demographic figures for Scenic Rim LGA. The Strategy has assumptions and objectives to reach over 67,000 residents by 2041. This represents a growth target of +22,000 persons or +48% of the current population.

The Scenic Rim Growth Management Strategy 2041 specifies the following anticipated residential lot growth potential. The majority of population growth is expected to be targeted at Beaudesert and Gleneagle, with smaller growth also predicted for Boonah, Canungra, and Kalbar.

Table 4.5: Anticipated Residential Lot Growth Potential (2016-2041)

Area	Residential lot growth potential (2016-2041)	% Share of residential lot potential across all study areas
Aratula	522	3.43%
Beaudesert and Gleneagle	9,557	62.83%
Boonah	2,221	14.60%
Canungra	964	6.34%
Harrisville	110	0.73%
Kalbar	1,180	7.76%
Kooralbyn	182	1.19%
Peak Crossing	78	0.51%
Tamborine	258	1.69%
Tamborine Mountain	140	0.92%
TOTAL	**15,212**	**100%**



Source: Scenic Rim Growth Management Strategy 2041

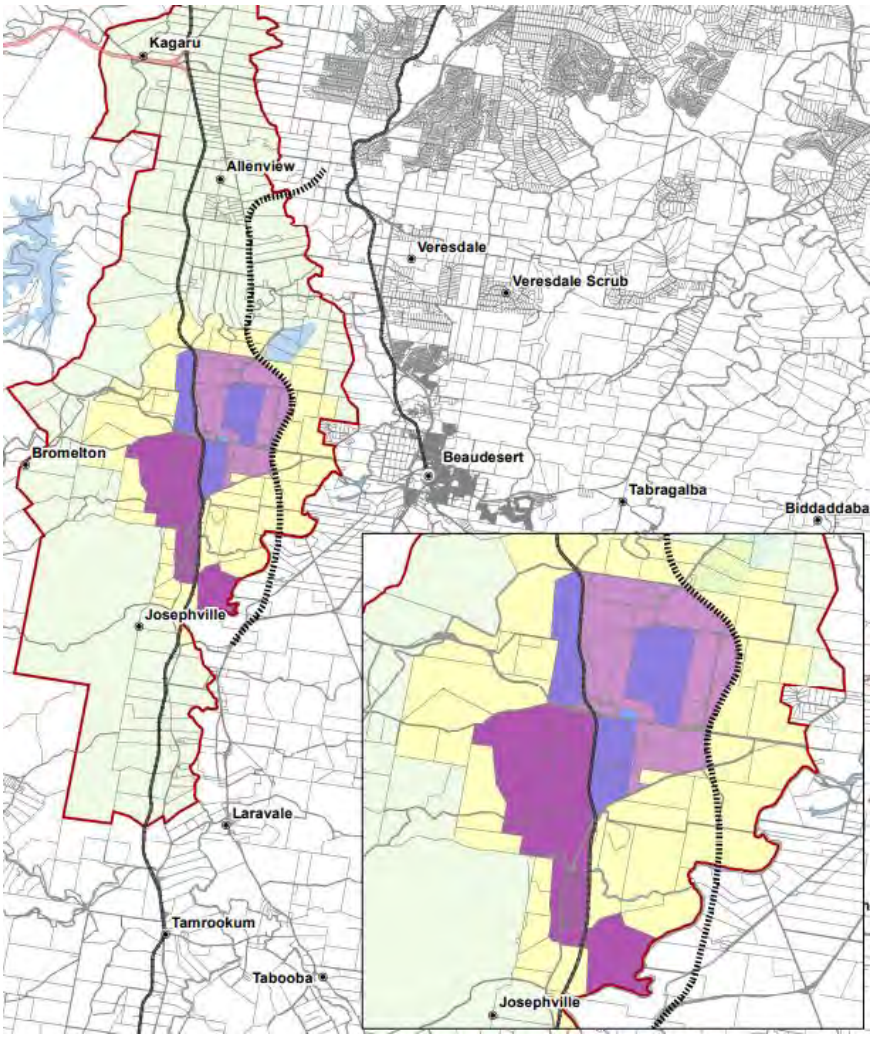
Figure 4.6: Scenic Rim Planned Additional Lots (2016-2041)

The ITP considers growth in alignment with the Scenic Rim Growth Management Strategy 2041. All future growth and planning assumptions are based on current planning thresholds and requirements. Whilst it is possible these may change in the future, this has not been considered as part of this ITP.

4.5.2 Employment

In addition to population / residential lot growth, the Scenic Rim Growth Management Strategy 2041 outlines projections to increase employment across the LGA by +6,000-7,000 jobs. The largest increase in potential employment across the LGA is within the Bromelton State Development Area (SDA), which is projected to provide up to 5,000 additional jobs by 2041. All other job growth is expected to be small values in line with the residential growth identified above.

The Bromelton SDA is 1,800 hectares of greenfield land which is suitable for medium to large scale industrial activities of regional, State and national significance. The intent of the SDA is to locate industries, such as freight and logistics operations, on this land which has convenient access to the national standard gauge rail network, and to the Mount Lindesay Highway, providing for road connectivity. Figure 4.7 illustrates the bounds of the Bromelton SDA.



Source: Bromelton State Development Area Development Scheme

Figure 4.7: Bromelton SDA Location

The above residential and employment growth has been specifically considered in the traffic modelling, with the **Traffic Modelling Report** providing further details. This growth has informed the Road Network Plan to ensure that Plan considers emerging and future impacts across the Region.

5. EXISTING ROAD NETWORK AND FACILITIES

5.1 Strategic Road Network

Figure 5.1 shows the road network and road hierarchy of the Scenic Rim LGA also distinguishes the state-controlled and council-controlled roads.

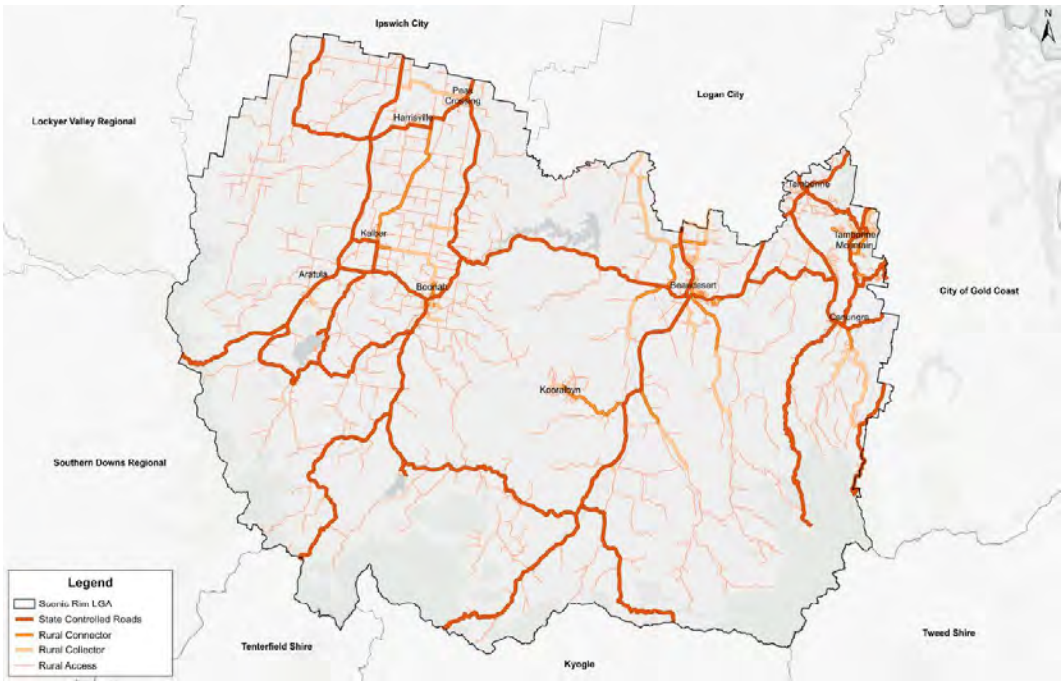


Figure 5.1: Road Hierarchy

The two major north-south roads that run through the Scenic Rim LGA are:

- Mount Lindesay Highway that travels through Beaudesert and Rathdowney
- Cunnigham Highway that travels past Harrisville, Kalbar and Aratula.

Table 5.1 summarises the approximate total length of each road type within the Scenic Rim LGA.

Table 5.1: Road Types and Network Lengths

Road Type	Jurisdiction	Total Length (km)
State Controlled Roads	TMR	532
Class 4 Roads	Council	284
Class 5 Roads	Council	1,534
Other	Council	3
TOTAL		**2,353**

5.2 Road Hierarchy

Figure 5.2 shows the road network and road hierarchy of the Scenic Rim LGA for council-controlled roads only. This map segregates between each sub-class of road (4A, 4B, etc.).

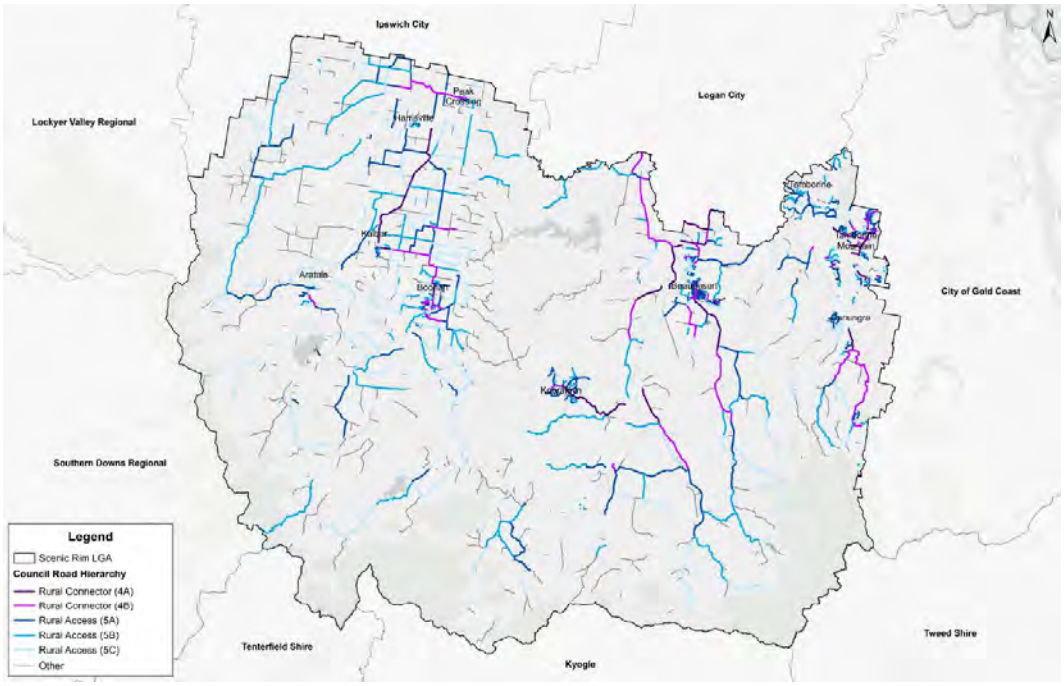


Figure 5.2: Road Hierarchy – Council Roads Only

Table 5.2 provides a summary of road cross sections as prescribed in Council's Planning Scheme.

Table 5.2: Road Cross Sections

Hierarchy	Traffic Volumes	Road Reserve	Pavement Width	Verge Width	Footpath
Trunk Collector Street	>3,000	20.3m	10.0m	2 x 5.15m	1.5m & 2.5m shared path
Collector Street	≤3,000	21.9m	11.6m	2 x 5.15m	1.5m & 2.5m shared path
Access Street	≤1,000	16.8m	8.5m	2 x 4.15m	1 x 1.5m
Access Place	≤300	14.3m	6.0m	2 x 4.15m	-
Rural Connector (4A)	1,000-3,000	9.0m	7.0m	-	-
Rural Collector (4B)	500-1,000	8.0m	7.0m	-	-
Rural Access (5A)	150-500	7.0m	7.0m	-	-
Rural Access (5B)	80-150	7.0m	6.0m	-	-
Rural Access (5C)	40-80	7.0m	7.0m unsealed	-	-
Rural Access (5D)	2-80	5.5m	5.5m unsealed	-	-

Generally, major roads within towns and villages are classified as Collector Streets. Given the large scale of the LGA, the majority of road length is classified as Rural Access (5 series), with varying levels of sealed and unsealed surfaces.

5.3 Heavy Vehicle Routes

Figure 5.3 shows the freight network across the Scenic Rim LGA, specifically highlighting roads currently gazetted for 26m B-Doubles. This map also highlights key industrial, agricultural and resource related areas, given the reliance on the freight network to operate effectively.

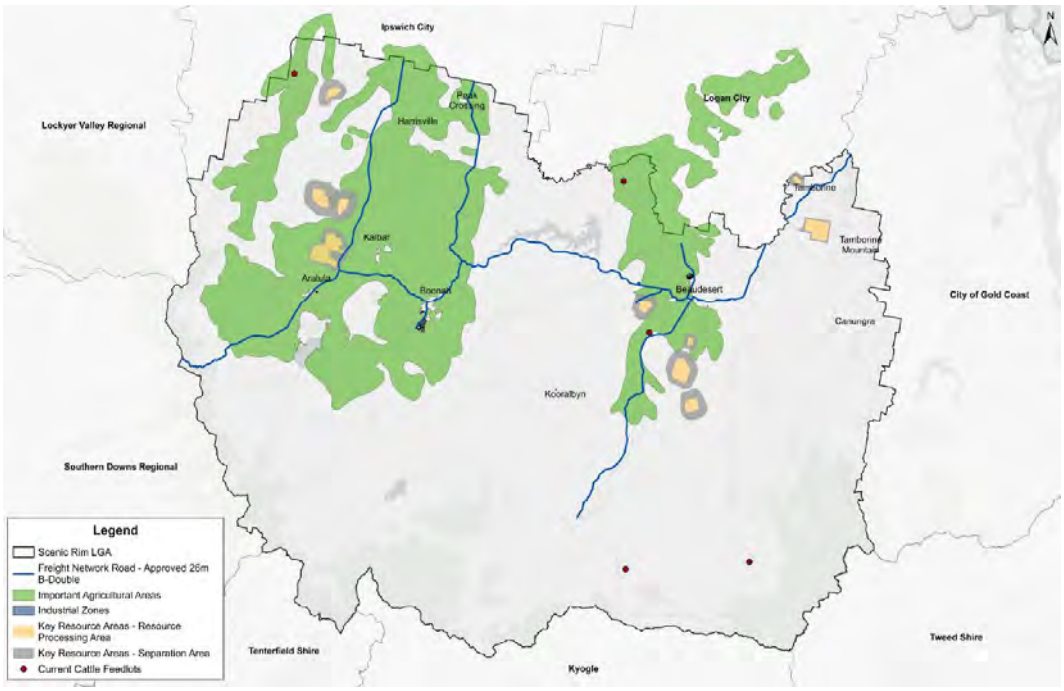


Figure 5.3: Freight Network

Key notes regarding the freight network include:

- There are several routes in and out of the Scenic Rim townships, including:
  - Mount Lindsay Highway running through Beaudesert and Rathdowney, providing a north-south connection through the LGA and into Logan and Brisbane
  - Beaudesert-Beenleigh Road / Beaudesert-Nerang Road, providing a connection between Beaudesert and the northern Gold Coast
  - Beaudesert-Boonah Road providing an east-west connection between Beaudesert and Ipswich-Boonah Road
  - Cunningham Highway, providing a north-south connection through the LGA, between Ipswich and the Southern Downs. Ultimately, this road connects to the Newell Highway, providing a key north-south route between Queensland and Victoria
- Beaudesert has quality connections in multiple directions, and areas on the western side of the LGA are well serviced by the Cunningham Highway
- The freight network generally provides high quality roads near key industrial, agricultural and resource related areas, although local connections are sometimes limited.

5.4 Bus and Rail Network

The current rail network is illustrated in Figure 5.4. The key north-south rail line is part of the Sydney–Brisbane rail corridor, which is a standard gauge line.

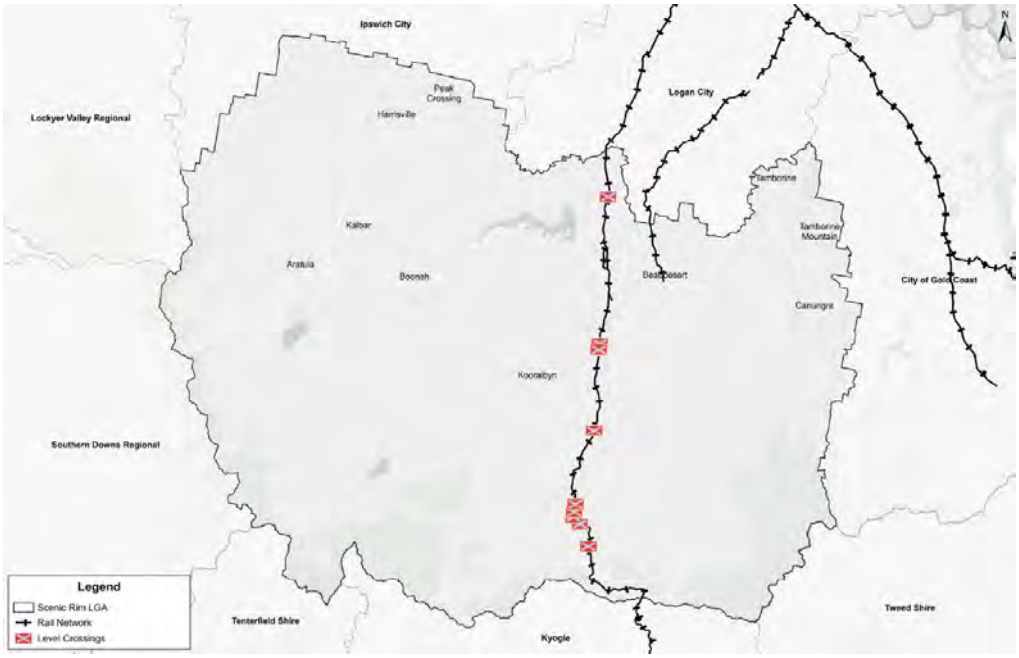
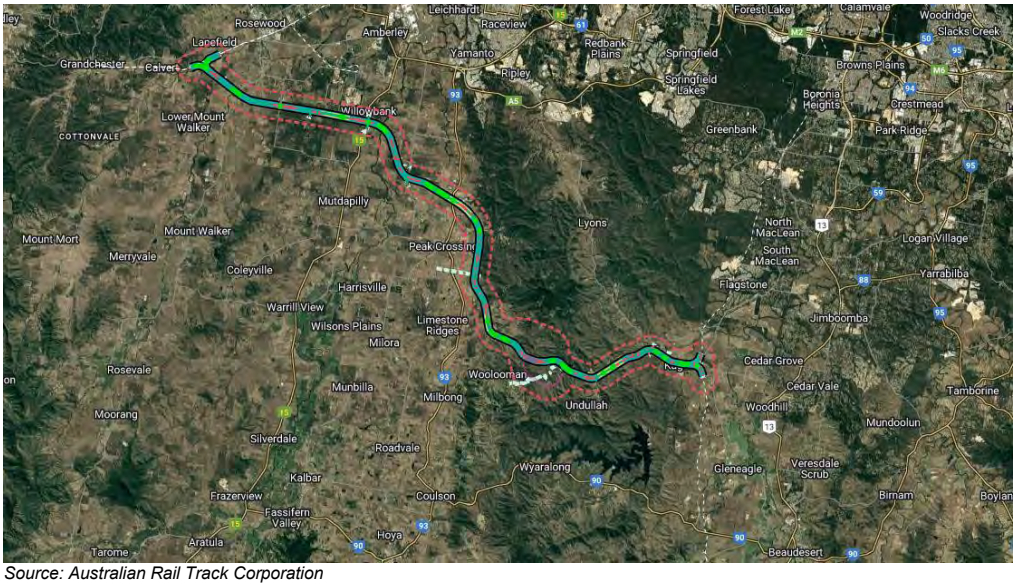


Figure 5.4: Existing Rail Network

The Inland Rail project is currently designed to connect with the Sydney–Brisbane rail corridor at Kagaru, which is partially located in the Scenic Rim LGA. Whilst the Inland Rail is not currently planned to traverse through the LGA (except for minorly on the northern boundary), the provision is expected to change key freight routes and terminal locations across the surrounding region.



Source: Australian Rail Track Corporation

Figure 5.5: Inland Rail – Current Alignment of Calvert to Kagaru Section

In addition to the inland Rail, the QLD Government has recently completed the Salisbury to Beaudesert Passenger Rail Summary Report (September 2024) which has the following key conclusions:

- The planning and analysis identified heavy rail as the optimal transport mode to address forecast passenger demand for the Salisbury to Beaudesert corridor
- Protecting the corridor from encroaching development is an immediate priority
- Passenger demand analysis suggests construction is not required in advance of the mid-2030s
- The section is 54km in length and may include up to 11 new stations
- All preferred rail options that were investigated allow for both passenger and freight rail operations and included similar provisions for rail station facilities, park 'n' ride and active transport. These aspects will be explored further during detailed assessments at a time closer to construction.

Whilst not specifically considered as part of the RNP, this highlights the future rail connectivity that may occur across the Region, which is a key consideration in reviewing potential road network provisions, and origin-destination distributions.

In addition to the rail network, there is a single bus route (Route 540) that currently operates within the Scenic Rim LGA, providing a direct connection to the Park Ridge and Browns Plains major bus interchanges from Beaudesert. The bus route and stops are shown in Figure 5.6. From Monday 16th December 2024, Translink announced an additional 76 services per week, highlighting the importance of the route.

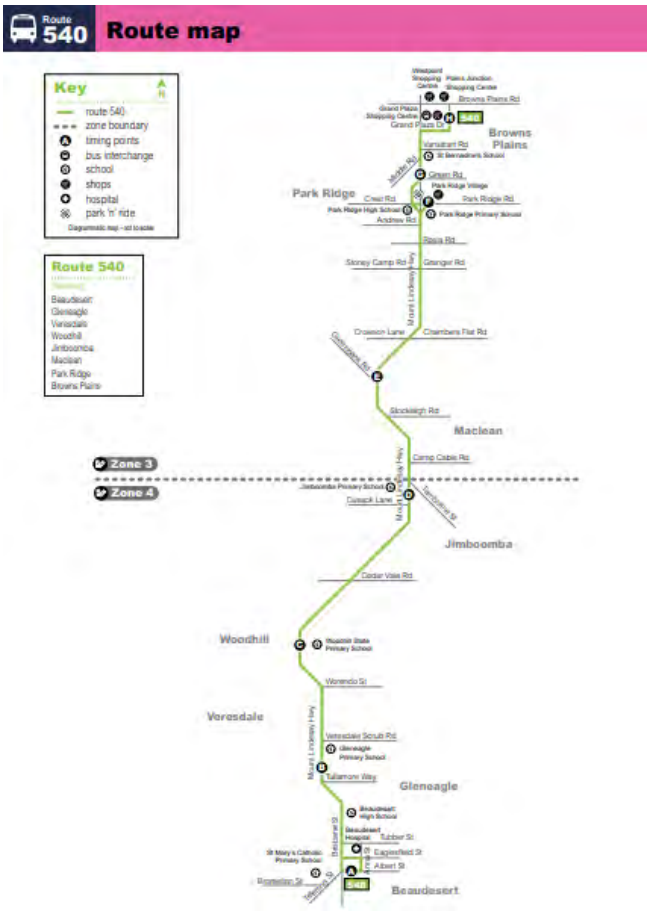


Figure 5.6: Existing Bus Network

6. EXISTING ROAD NETWORK OPERATIONS

6.1 Traffic Volumes and Composition

Figure 6.1 shows the existing traffic volume brackets of the higher order network for the LGA.

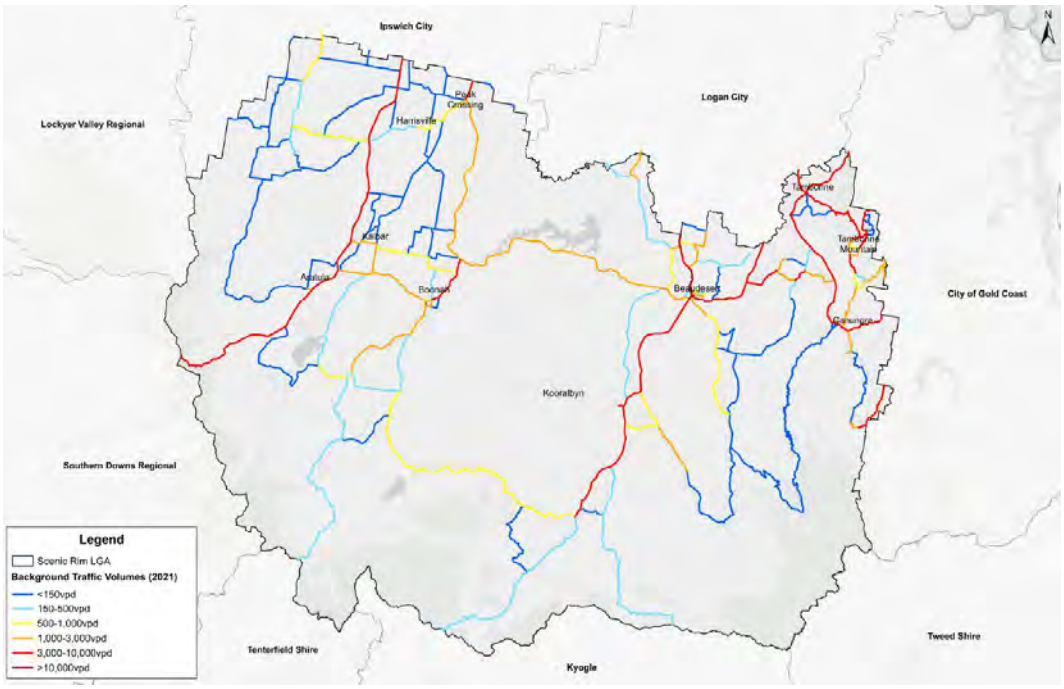


Figure 6.1: Existing Traffic Volumes (2021-2023 Data)

As shown, there are several corridors which contain >3,000 vpd, which are summarised in Table 6.1.

Table 6.1: Road Types and Network Lengths

Road	Authority	AADT	Heavy Vehicle Percentage
Mount Lindesay Highway (north of Beaudesert)	TMR	13,064	15%
Beaudesert Nerang Road (near Beaudesert)	TMR	7,470	15%
Beaudesert Nerang Road (near Canungra)	TMR	7,055	13%
Cunningham Highway	TMR	6,769	27%
Ipswich Boonah Road	TMR	6,541	16%
Mount Lindesay Highway (south of Beaudesert)	TMR	6,247	16%
Beaudesert Beenleigh Road	TMR	5,703	12%
Brisbane Street, Beaudesert	Council	5,509	9%
Tamborine Mountain Road	TMR	4,285	9%
Alpine Terrace, Tamborine Mountain	Council	3,960	4%
Long Street, Tamborine Mountain	TMR, Council	3,418	6%

As shown, the majority of roads carrying high volumes are State-controlled, with only several Council-controlled roads across the LGA carrying >3,000vpd (note, not all are listed above).

6.2 Road Network Performance

Transport modelling, using EMME software, was undertaken in coordination with other aspects of the ITP, including road network planning, active transport planning and detailed consultation activities with stakeholders and the community, in order to identify future volumes, noting the growth projects for the LGA.

This modelling adopted the South East Queensland Strategic Transport Model - Multi-Modal (SEQSTM-MM, version 3.2309) which was updated and refined for the purposes of this study. The updates and refinement to the SEQSTM-MM using localised data provides an opportunity for both Council and TMR to better understand the future transport needs across the region and ultimately help plan, fund and implement new infrastructure in years to come.

The modelling considered three (3) scenarios:

- Weekday AM peak period (07:00 to 09:00)
- Weekday PM peak period (15/;00 to 18:00
- Daily.

Modelling was undertaken across three (3) model years, being: 2021 (base year), 2031 and 2041. The intent of this was to understand the staged nature of road volume increases to inform the ITP.

Figure 6.2, Figure 6.3, Figure 6.4 and Figure 6.5 present the projected 2041 daily volumes, AM vehicle / capacity ratio, PM peak vehicle / capacity ratio and difference plots between 2021 and 2041, respectively.

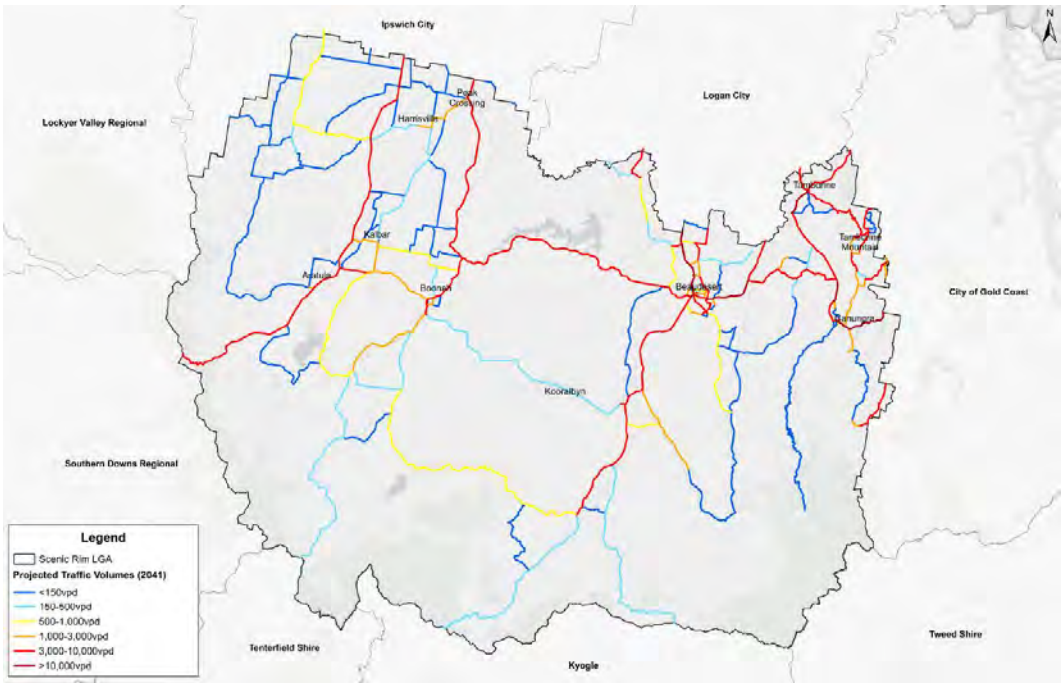


Figure 6.2: Projected 2041 Daily Volumes (Key Roads Only)

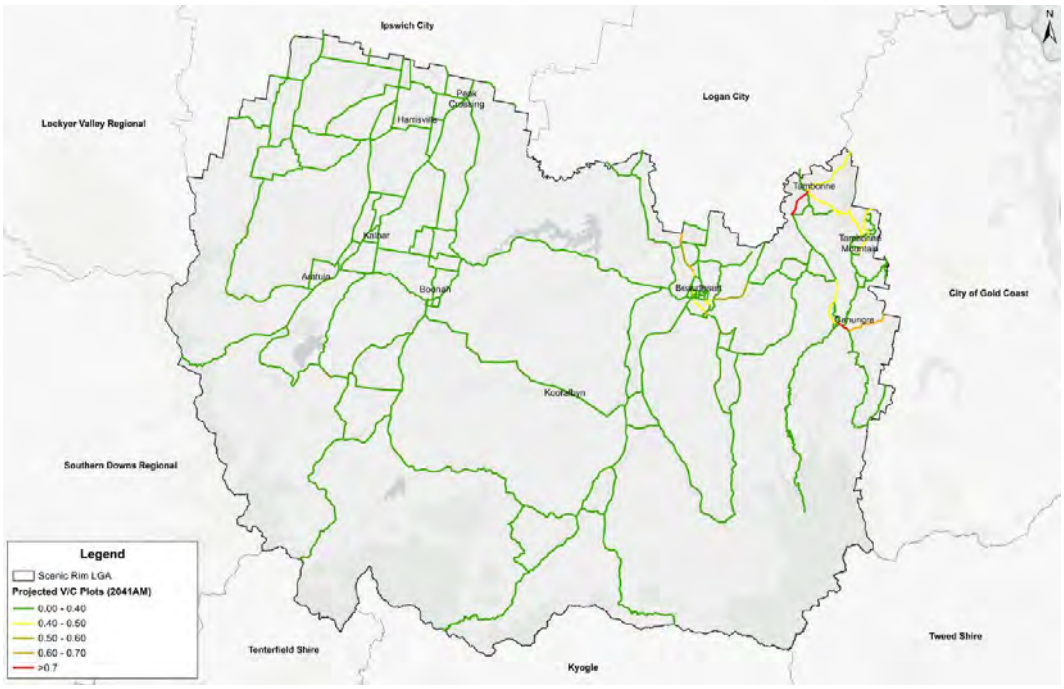


Figure 6.3: Projected 2041 AM Network Peak V/C (Key Roads Only)

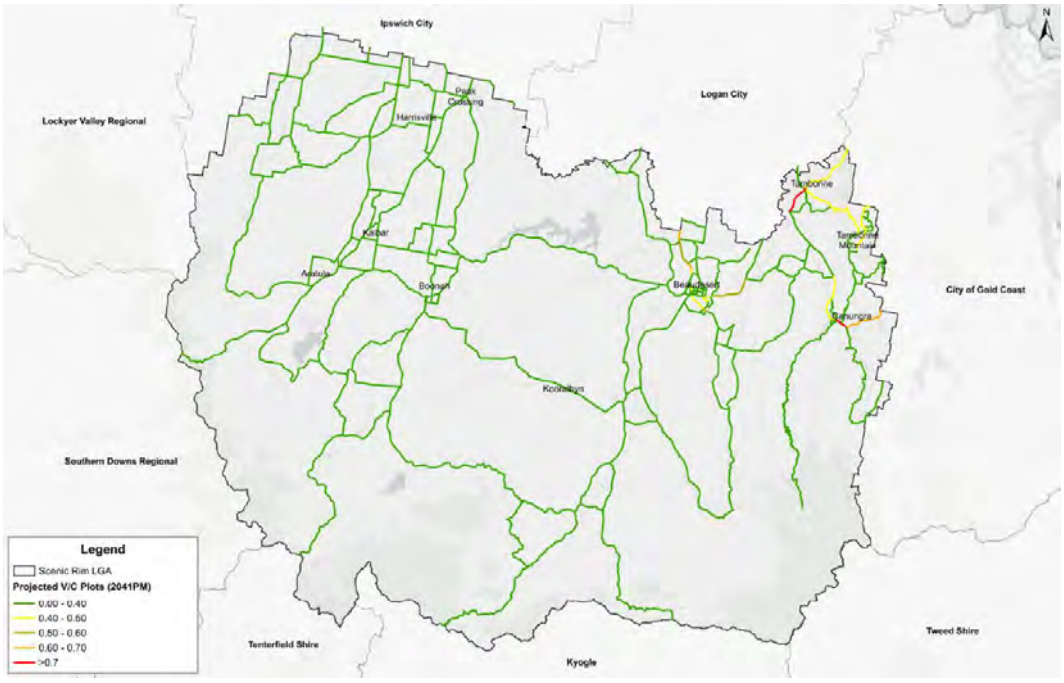


Figure 6.4: Projected 2041 PM Network Peak V/C (Key Roads Only)

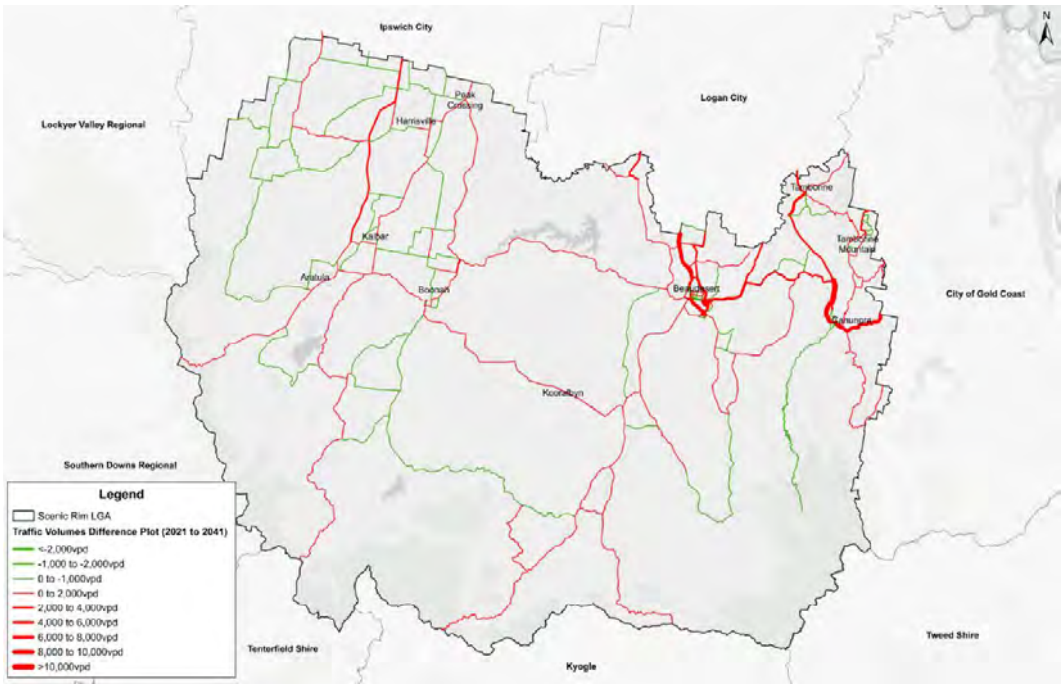


Figure 6.5: Projected 2041 Daily Volumes Difference Plots (From 2021 to 2041)

As shown in the above figures, several key hotspots were identified, which have been reviewed and considered further throughout the road network plan. Key hotspots include:

- Volumes in Tamborine Mountain and on Tamborine Mountain Road
- Volumes through Canungra, especially during network peak periods. Beaudesert Nerang Road though Canungra is predicted to have a significant increase in daily traffic volumes by 2041
- Volumes in and around Beaudesert. Kerry Road and Mount Lindesay Highway (north of Beaudesert) are both predicted to have a significant increase in daily traffic volumes by 2041
- The majority of roads a V/C <0.40 during peak periods. Only one (1) Council controlled road in the EMME model has a V/C >0.4, which is Long Road in Tamborine Mountain.

Refer to the **Traffic Modelling Report** for further details on road volumes and peak hour operations.

6.3 Road Safety

Figure 6.6 to Figure 6.8 illustrates an overview of the crashes recorded across the Scenic Rim LGA between 2018-2022 (latest available specific data). Key hotspots for the LGA are illustrated in Figure 6.9 to Figure 6.12. Key notes regarding the crash history include:

- A total of 705 crashes were recorded. 32 resulted in fatality (~5%) and 393 (~56%) resulted in hospitalisation. In total, 60% of crashes reported “Fatal” and “Serious Injury” (FSI) severity
- 19.8% of crashes occurred at intersections, and 80.2% of crashes occurred mid-block
- A total of 80% of all crashes reported included a car
- 26% of all FSI crashes reported involved a motorcycle. 20% of Council-controlled road crashes involved a motorcycle and 28% of State-controlled road crashes involved a motorcycle. Hotspot maps show concentrations at Beaudesert, Canungra, Tamborine Mountain and Boonah. This is a significant overrepresentation of motorcycle crashes in comparison to their user share on the roads. The *South East Queensland – Population, Housing, Jobs, Connectivity and Liveability (2016)* Report estimates that 1.0% of trips on the road network are via motorcycles. Interestingly, public consultation for this project found that 15% of respondents used motorcycles regularly,

highlighting that there is increased usage across Scenic Rim. Regardless, 26% of all crashes involving a motorcycle is very high and calls attention to the need for increased consideration of this crash type when reviewing the network

- 8% of all FSI crashes reported involved a heavy vehicle. 1% of Council-controlled road crashes involved a heavy vehicle and 10% of State-controlled road crashes involved a heavy vehicle. Heavy vehicle related crashes show a clear hotpot on the Cunningham Highway near Aratula, Cunninghams Gap and Harrisville.

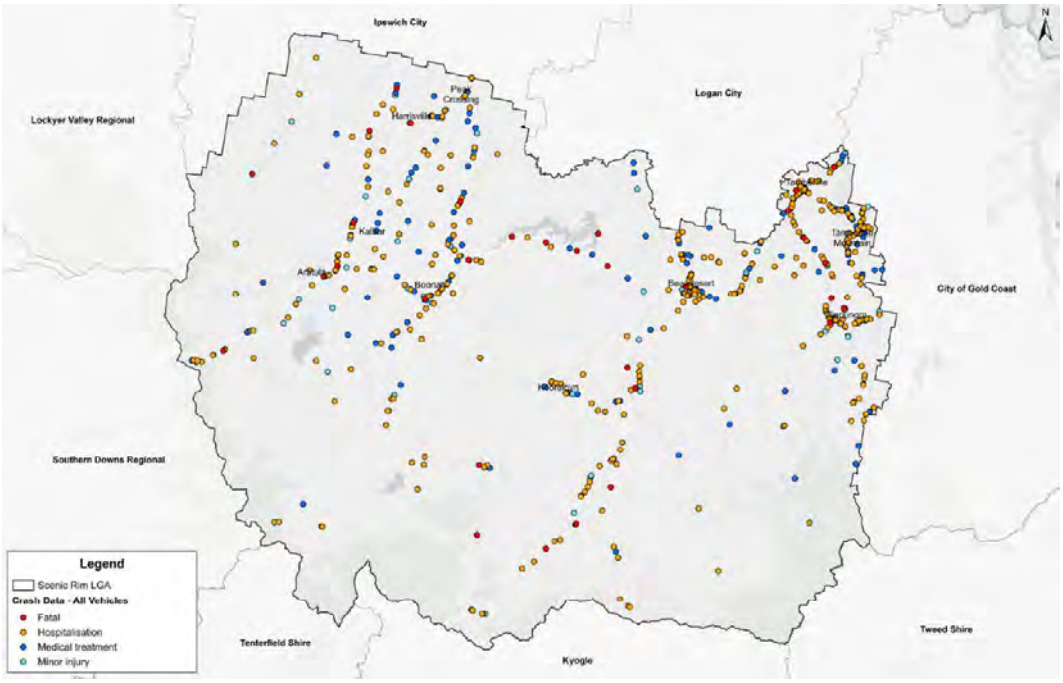


Figure 6.6: Crash History – LGA Overview

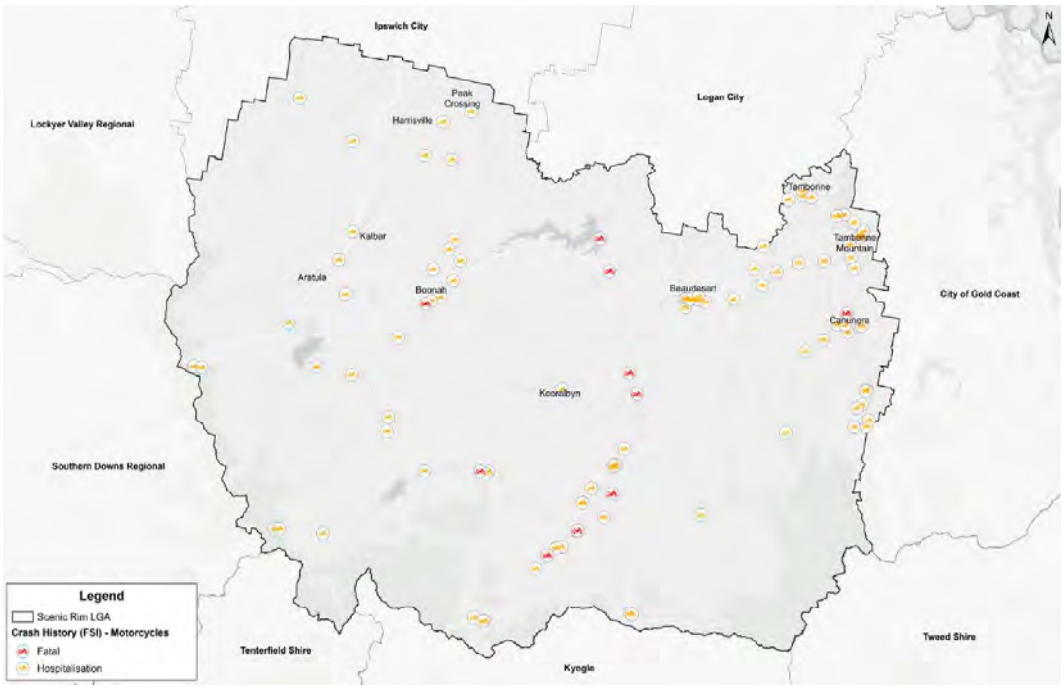


Figure 6.7: Crash History – Motorcycle Involved FSI Crash

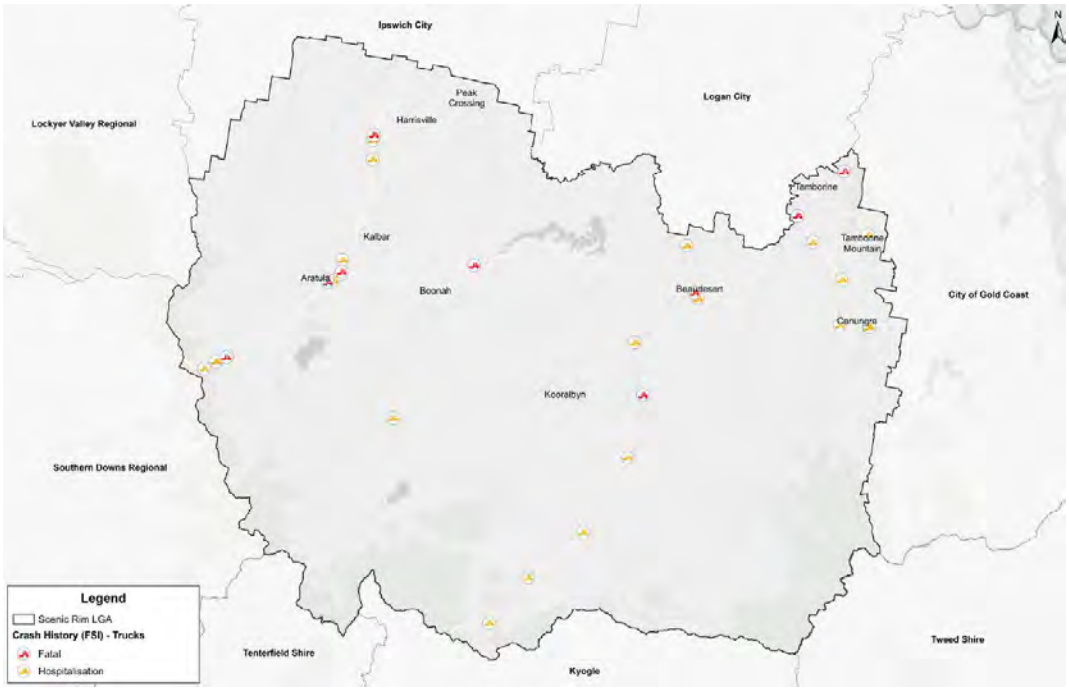


Figure 6.8: Crash History – Truck Involved

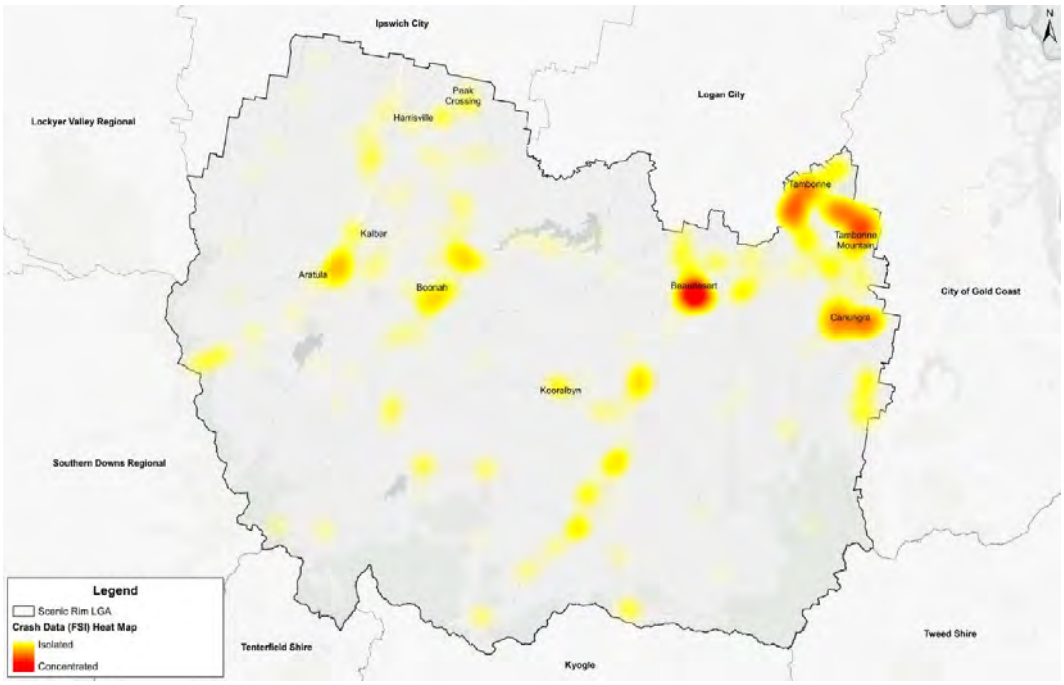


Figure 6.9: Crash Hotspots – LGA Overview

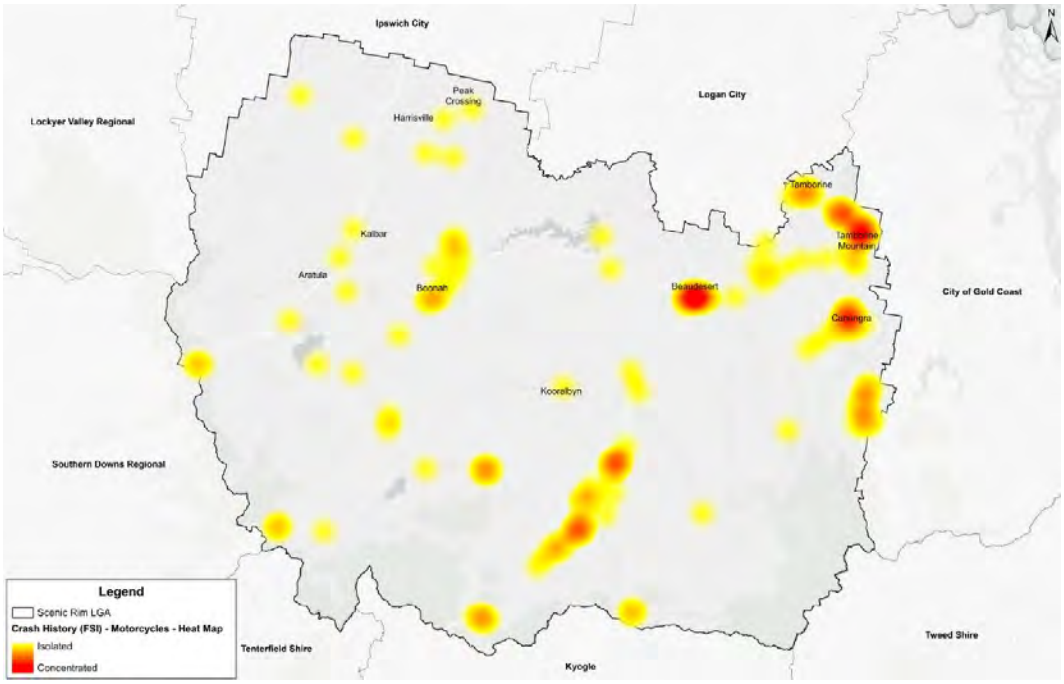
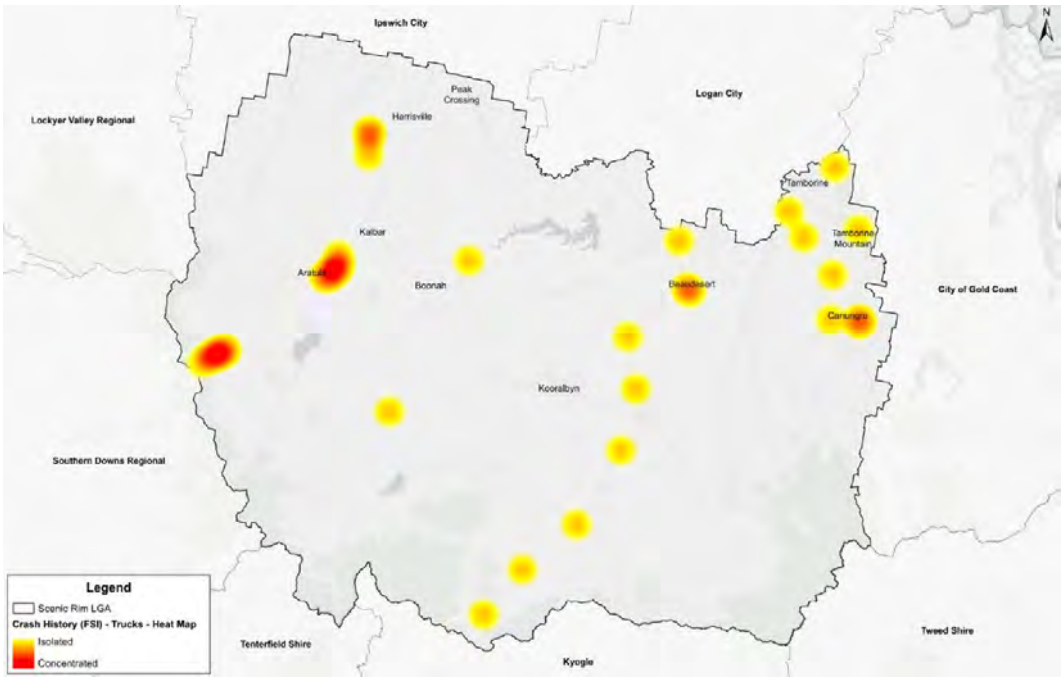


Figure 6.10: Crash Hotspots – Motorcycle Involved



6.4 Road Closure Impacts

The Scenic Rim LGA faces many challenges in relation to road closures, mainly due to the immediate and on-going effects of natural disasters (i.e. flooding and bushfires). This creates a significant challenge to keep many roads operable, with maintenance crews working constantly to address critical priority issues.

Natural disaster affected roads have been a key consideration of the Road Network Plan, with two key elements being considered:

- Where upgrades to roads are recommended, consideration of flood immunity has also been reviewed (where necessary). Whilst this may add significant costs, this can be worthwhile pending the importance of the road
- Freight routes, and general traffic routes, have been reviewed considering situations where roads may be closed due to the effects of natural disasters, ensuring that there are alternatives to keep traffic moving, and ensure the road network is resilient in these situations.

Figure 6.11 and Figure 6.12 present the LGA's flood and bushfire mapping, respectively.

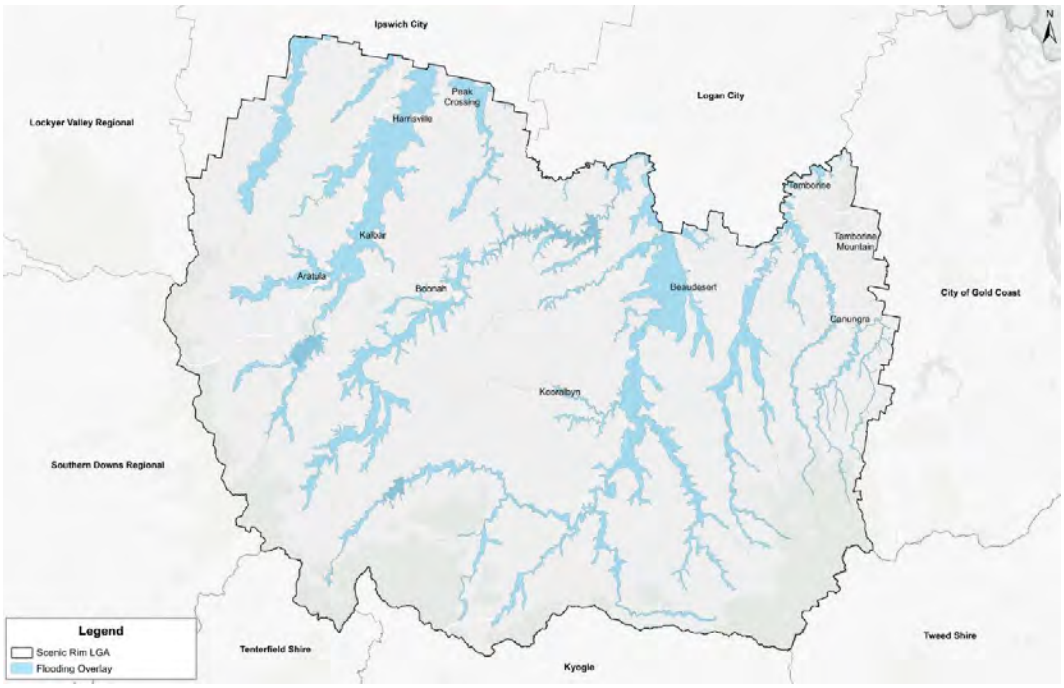


Figure 6.11: LGA Flood Mapping

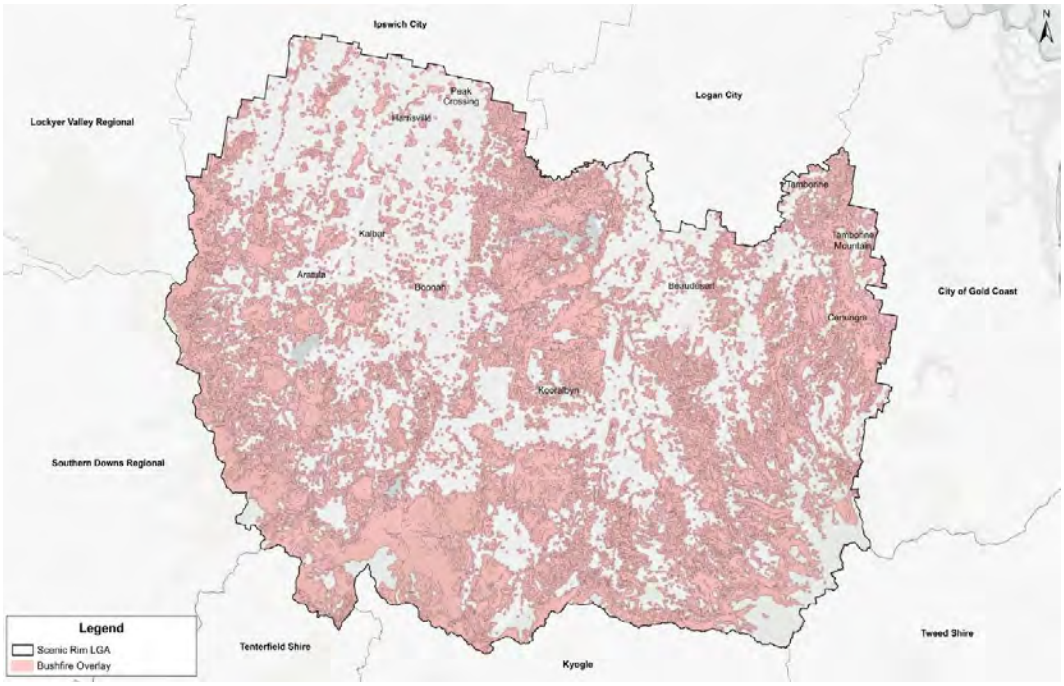


Figure 6.12: LGA Bushfire Overlay

PART 4: STRATEGIC ROAD NETWORK PLAN

7. OVERVIEW

7.1 Scope

The Strategic Road Network Plan provides a summary of the key background conditions, analysis and recommendations relevant to the strategic road network of the LGA. This is a key component of the Road Network Plan, and ultimately the ITP, given the strategic importance of road networks across the Region. Generally, the strategic road network plan considers the "movement" elements of the Movement and Place Framework for the Region.

The Strategic Road Network Plan is considered in four (4) parts:

- Safety
- Road Hierarchy and Capacity
- Freight
- Public Transport.

7.2 Desired Standards of Service

7.2.1 Principles and Policies

The development of the desired standards of service is a key component of the Road Network Plan, as it defines the goals for the road network across a long timespan. When developing the desired standards of service, the below ITP Principles and Polices were considered:

- **Connected and Accessible:** Ensuring that the road standards improve connection and accessibility for all road users, including freight and active transport
- **Safe Journeys for All:** Ensuring that the road standards are in accordance with contemporary design standards and best practice. This includes consideration of road widths, seal widths, active transport infrastructure, the unique users of the Region (such as agricultural vehicles) and ensuring that each road typology is suitable for the recommended volumes of traffic
- **Reliable and Resilient:** Ensuring that the standards present the best options in terms of maintenance and durability, to ensure long term benefits and use
- **Healthy, Liveable and Sustainable:** Ensuring the road standards cater for all road user markets (including local, tourists and freight) and promote the prosperity of the Region through improved connections and accessibility.

7.2.2 Reference Material

The development of the desired standards of service has utilised multiple standards and guidelines to produce the most up to date, detailed and personalised road hierarchy standards. The reviewed standards and guidelines are outlined below:

- Austroads Guide to Road Design Part 3: Geometric Design (AGRD3) (2021)
- Austroads Guide to Traffic Management: Part 3: Transport Study and Analysis Methods (AGTM3)
- Austroads Guide to Traffic Management Part 4: Network Management Strategies (AGTM4) (2020)
- Institute of Public Works Engineering Australia Queensland Division Inc (IPWEAQ) Complete Street Guidelines for Urban Street Design (2011)
- IPWEAQ Street Design Manual: Walkable Neighbourhoods (2020)
- IPWEAQ Lower Order Roads Design Manual (2024)
- Australian Road Research Boards Unsealed Roads Best Practice Guide (2020)
- Scenic Rim Regional Council's Design and Construction Guidelines.

7.2.3 Road Hierarchy

7.2.3.1 Review of Current Hierarchy Standards

As part of the development of the desired standards of service, a review was undertaken of the current road hierarchy. Key findings from this review are summarised below:

Urban Streets

- In general, the Urban Streets classification suitably addresses the needs within local towns and villages, and generally complies with industry standards
- Most road types include minimum 3.5m wide travel lanes – except for an Access Place which deliberately reduces width to reduce speeds (aligned with IPWEAQ's Complete Streets)
- The thresholds of 1,000 AADT and 3,000 AADT align with industry standards for an Access Street / Collector Road, respectively
- Footpath widths are recommended at 1.5m. This has been superseded by Austroads Guide to Road Design Part 6A (AGRD6A) which now recommends a minimum of 1.8m
- There is no classification for an Arterial Road
- There is no classification for a Laneway
- There is no classification for Industrial Streets.

Rural Roads

In general, the Rural Roads classification suitably addresses the needs of the Region and generally complies with minimum industry standards. Key findings and changes are noted below:

- The travel lane widths generally align with the guidance in AGRD3
- The shoulder widths align with the minimum shoulder widths set out in AGRD3
- All roads above 150 AADT include 7.0m travel lane width (i.e. 2 x 3.5m)
- Rural Access (5B) includes a 6.0m seal which is generally below industry best practice for sealed roads. The most common outcome is to seal at a minimum of 7.2m when undertaking sealing works, to ensure that 3.1m travel lanes + 0.5m shoulders are sealed in each direction
- There is no classification for an Arterial Road.

7.2.3.2 Recommended Road Hierarchy

Based on the ITPs' Principles and Policies, feedback from public consultation and a review of the Region's traffic network and operations, the recommended road hierarchy standards and road cross sections were developed as outlined in Table 7.1 and Table 7.2.

Table 7.1: Desired Standards of Service – Recommended Road Cross Sections – Urban

Hierarchy	Traffic Volumes	Road Reserve	Pavement / Carriageway	Travel Lanes	Verge	Parking / Shoulder	Active Transport
Urban Streets							
Arterial Road	>7,500	20.3m	10.0m	7.0m (2 x 3.5m)	5.15m	1.5m (breakdown lane)	Dedicated off-road cycle tracks 2.5m shared pathway 1.8m footpath
Trunk Collector (No Lot Access)	3,000-7,500	20.3m	10.0m	7.0m (2 x 3.5m)	5.15m	No	Dedicated off-road cycle tracks 2.5m shared pathway 1.8m footpath
Connector Street	1,000-3,000	21.9m	11.6m	6.6m (2 x 3.3m)	5.15m	2.5m both sides	2.5m shared pathway 1.8m footpath
Access / Collector Street	300-1,000	16.8m	8.5m	3.3m + 0.5m clearance to parked vehicles	4.15m	2.1m both sides	1.8m footpath
Access Place	≤ 300	14.3m	6.0m	3.4m + 0.5m clearance to parked vehicles	4.15m	2.1m one side	No
Laneway	N/A	14.3m	6.0m	6.0m	4.15m	No	No

Hierarchy	Traffic Volumes	Road Reserve	Carriageway	Travel Lanes	Verge	Parking / Shoulder	Active Transport
Industrial Streets							
Industrial Collector Street	3,500-7,500	22.0m	13.0m	7.0m (2 x 3.5m)	4.5m	3.0m both sides	2.5m shared pathway 1.8m footpath
Industrial Access Street	<3,000	21.0m	12.0m	7.0m (2 x 3.5m)	4.5m	2.5m both sides	1.8m footpath both sides

Shading indicates a change compared to the existing Road Hierarchy.

Table 7.2: Desired Standards of Service – Recommended Road Cross Sections – Rural

Hierarchy	Traffic Volumes	Carriageway	Pavement	Travel Lanes	Sealed Shoulder
Rural Roads					
Rural Arterial Road / State-controlled Road	>3,000	11.0m	11.0m	7.0m (2 x 3.5m)	2.0m
Rural Connector (4A)	1,000-3,000	9.0m	9.0m	7.0m (2 x 3.5m)	1.0m
Rural Collector (4B)	500-1,000	8.0m	8.0m	7.0m (2 x 3.5m)	0.5m
Rural Access (5A)	150-500	9.2m	7.2m	6.2m (2 x 3.1m)	0.5m sealed + 1.0m unsealed
Rural Access (5B)	80-150	7.2m	6.2m	6.2m (2 x 3.1m)	0.5m unsealed
Rural Access (5C)	40-80	8.2m unsealed	N/A	6.2m unsealed	1.0m unsealed
Rural Access (5D)	2-80	5.5m unsealed	N/A	5.5m unsealed	Nil

Shading indicates a change compared to the existing Road Hierarchy.

7.2.4 Use of Desired Standards of Service

It is recommended that the above desired standards of service are adopted at all times where practical. However, it is accepted that there will be situations where constraints or other elements may result in these standards being unachievable. In such cases, designers must ensure adherence to all relevant road safety and operational requirements and seek to achieve the highest possible standard of treatment.

If the desired service standards cannot be met, consultation with the Council is mandatory.

8. STRATEGIC ROAD NETWORK

8.1 Safety

8.1.1 Network Overview

A review of the crash history and data (summarised at Section 6.3) was undertaken for all road corridors in accordance with TMR's *Queensland Road Safety Technical Users Volumes: Guide to Speed Management* (QRSTUV) (2023). This assessment methodology considers the number of crashes, with a specific focus on FSI crashes, and the average daily volumes of the road section to determine the crash risk rating for each road and segment. This is then compared to the State-wide 'bands' outlined in the QRSTUV to determine if the crash rate is nil, low, medium or high.

A map of the key results is provided in Figure 8.1.

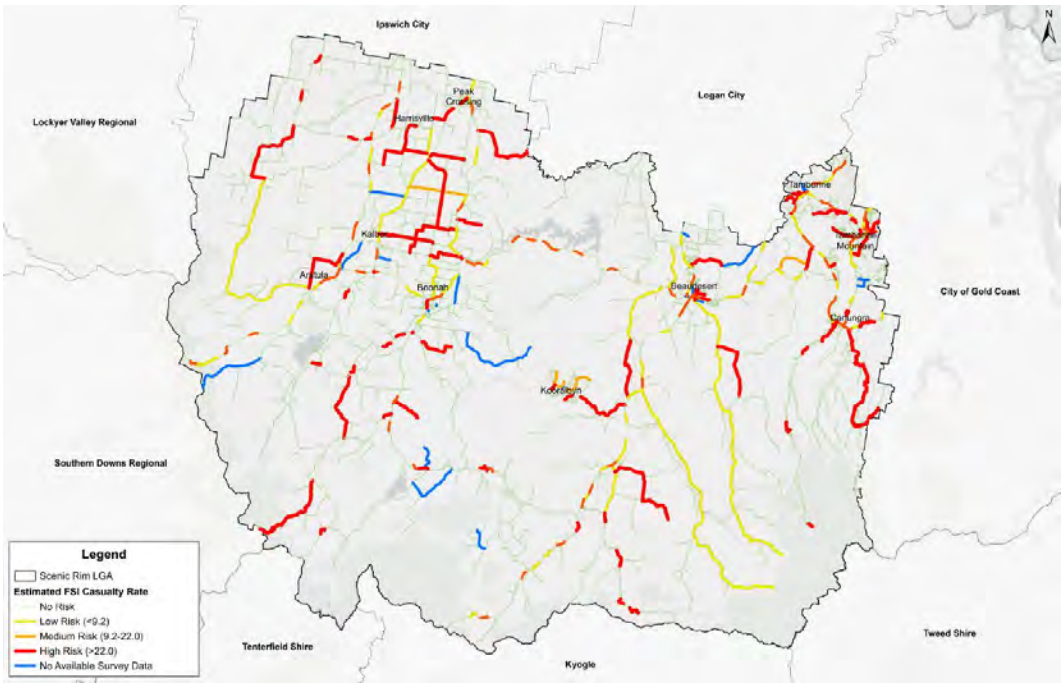


Figure 8.1: Corridor Crash Review – Region

As shown above, there are a number of key corridors that were identified across the Region, and clear locations where increased crash risks have been recorded. A review of these findings was undertaken to determine priority corridors and locations based on:

- Corridors containing a "high" FSI crash rate
- Any locations where a fatality was recorded
- Corridors with a high number of crashes over a sustained length.

A summary of the key corridors is provided in Table 8.1. For all corridors located within the key towns and villages within the LGA, refer to Part 5 of this document.

Table 8.1: QRSTUV Review – Region

	Road Corridor	Length (km)	Crashes		Predominant Crash Type	Other
			Total	KSI		
1	Rosevale Road / Rosewood Warrill View Road	22.6	5	4	Run off road (5)	One (1) fatality
2	Wilsons Plains Road	3.9	1	1	Run off road (1)	-
3	Ellis and Jackson Road	2.7	2	1	Run off road (2)	-
4	Beckwith Road / Old Warrick Road	4.1	2	2	Hit Animal (1)	-
5	Washpool Road	8.7	2	1	-	-
6	Roadvale Harrisville Road	4.7	3	2	Run off road (2)	-
7	Mocker Road	3.0	1	1	Run off road (1)	-
8	Kulgun Road	6.4	2	1	Intersection (1)	-
9	Roadvale Road	1.6	1	1	Run off road (1)	-
10	Stanfield Road	4.2	1	1	Run off road (1)	-
11	Sugarloaf Road	2.3	4	1	Run off road (1)	-
12	Mount Alford Road / Dwyer Ridges Road	4.9	8	6	Run off road (8)	Two (2) motorcycle crashes
13	Black Rock Road	1.5	1	1	Run off road (1)	-
14	Head Road	11.1	3	2	Run off road (3)	-
15	Boonah Rathdowney Road	11.6	7	6	Run off road (6)	One (1) fatality Six (6) motorcycle crashes
16	Mount Lindsay Highway (south of Innisplain)	28.7	31	28	Run off road (24)	Three (3) fatalities 17 motorcycle crashes
17	Round Mountain Road	4.7	2	2	Run off road (2)	One (1) fatality
18	Kooralbyn Road	7.2	8	4	Run off road (6)	-
19	Oaky Creek Road	11.2	2	1	Run off road (2)	-
20	Innisplain Road / Running Creek Road	21.1	9	8	Run off road (6)	One (1) fatality Four (4) motorcycle crashes
21	Gould Hill Road	2.5	8	6	Run off road (5)	-
22	Biddaddaba Road	2.9	1	1	Head on (1)	-
23	Nindooinbah Estate Road	7.6	1	1	Run off road (1)	-
24	Beechmont Road	22.6	15	12	Run off road (13)	Eight (8) motorcycle crashes
25	Seidenspinner Road	2.3	1	1	Run off road (1)	One (1) fatality

8.1.2 Discussion and Crash Reduction Methods

In total, 25 corridors were selected as being priority on the basis of safety. A key point to note in all corridors was a predominance of “Run-off road” type crashes. In 2016, The Australian Government funded research into “Run-off road” type crashes, and found:

- Between 2016 and 2020, the average annual number of road deaths in Australia was 1,187. Deaths from run-off road crashes averaged 458 deaths per year (39%)
- Over this five-year period, run-off road crashes accounted for 20% of all reported crashes and a significantly higher 39%of all fatal crashes
- Fatal run-off road crashes are almost always (96%) single-vehicle involved
- Almost 45% of reported run-off road crashes are recorded with hospitalised injuries, compared with only 33% of all crash types
- Over the five years, the number of fatal run-off road crashes remained steady while the number of other crashes decreased
- More than 50 per cent of fatal run-off road crashes happened in areas with a posted speed limit of at least 100 km/h.
- Almost two thirds of fatal run-off road crashes happened in regional Australia
- Curved alignment, insufficient natural lighting (between dawn and dusk) and rain (leading to slippery roads and limited visibility) are commonly reported with run-off road crashes
- While information on risky behaviours (including driving with excess alcohol or with drugs in their system, driving without wearing a restraint or driving without a valid licence) are often not all reported in crash data, where data is available it suggests that these are more common in fatal run-off road crashes than other crash types.

In summary, “Run-off road” type crashes have a much higher trauma rate and FSI rate compared to other crash types, and a prevalence of this crash type across the Scenic Rim is a key contributor to the Region having a fatality rate which is 2.77x higher than the State average and 3.14x higher than the National average.

Austroads *Guide to Road Safety Part 2: Safe Roads* acknowledges the significance of “Run-off road” type crashes across Australia and includes detailed guidance. Austroads recommends the following treatments, in order of preference, to reduce trauma related to high speed lane departure crashes:

1. Continuous flexible roadside barrier (or equally/better performing future equivalent)
2. Wide run-off areas or clear zones consisting of compacted roadside surfaces and very gentle to flat side slopes
3. Wide sealed shoulders with audio-tactile edge line
4. Non-flexible roadside barrier
5. Audio-tactile edge line
6. Consistent design along the route (i.e. no out-of-context curves)
7. Consistent delineation for route
8. Skid resistance improvement
9. Improved superelevation.

Each corridor has been specifically reviewed to consider the crashes that have occurred, and the most suitable treatment type relating to the crash nature of the corridor. In general, the recommendations relate to items 1-3 on the above list, as these are the preferred treatments, and all corridors have a “high” risk rating indicating a requirement for high quality measures. The provision of flexible barrier was only recommended where hazards could not be removed / related (such as large grade changes).

8.1.3 Identified Road Upgrades

The identified road upgrades to address safety issues identified is provided in Table 8.2.

Table 8.2: Identified Road Upgrades – Safety – Region

ID		Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.SA.1	1	Rosevale Road	918	Safety	10.6	Rosevale	5A	R	Rural Access	Upgrade to Rural Access Road (5A) standard	+1.0m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards (such as between Mount Walker West Road and Sellars Road) provide flexible roadside barrier.
S.SA.2		Rosewood Warrill View Road	State-Controlled	Safety	12	Mount Walker	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken by TMR at a corridor level to determine suitable crash reduction treatments.	
S.SA.3	2	Wilsons Plains Road	1167	Safety	6.5	Harrisville	5A	R	Rural Access	Upgrade to Rural Access Road (5A) standard	+1.2m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards.
S.SA.4	3	Ellis and Jackson Road	337	Safety	2.7	Wilsons Plains	5A	R	Rural Access	Nil. Works recently completed (2023) to improve Ellis and Jackson Road / Munbilla Road intersection which addresses the identified safety risks.	
S.SA.5	4	Beckwith Road / Old Warrick Road	809	Safety	8.4	Milora / Harrisville	5C / 5C	-	Rural Access / Rural Access	Provide warning signage for presence of animals on this corridor. Road standard meets volume and hierarchy standards.	
S.SA.6	5	Washpool Road	1130	Safety	8.7	Peak Crossing	5B	R	Rural Access	Upgrade to Rural Access Road (5B) standard and Rural Access Road (5C) standard	From Ipswich Boonah Road to Undullah (7.4km) upgrade sections to Rural Access Road (5B) standard which includes +7.2m pavement in locations From Undulla to Logan LGA boundary (1.3km) upgrade to Rural Access Road (5C) standard which includes +2.1m unsealed formation Include ATLM on sealed shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.SA.7	6 Roadvale Harrisville Road	909	Safety	8.9	Roadvale	5A	R	Rural Access	Road standard meets volume and hierarchy standards	Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.8	7 Mocker Road	717	Safety	3.0	Roadvale	5D	R	Rural Access	Upgrade to Rural Access (5D) standard	Provide minimum 5.5m formation from Wenzel Road to end of corridor and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.9	8 Kulgun Road	600	Safety	6.4	Kulgun	5B	R	Rural Access	Upgrade Kulgun Road / Obum Obum Road intersection	Improve sight lines at all approaches and include increased speed reduction and warning signage on Kulgun Road approaches.
S.SA.10	9 Roadvale Road	910	Safety	8.1	Roadvale	4B	R	Rural Collector	Road standard meets volume and hierarchy standards	Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.11	10 Stanfield Road	1001	Safety	4.2	Coulson	5C	R	Rural Access	Upgrade to Rural Access (5C) standard	+1.2m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards. Include appropriate speed reduction and warning signage for curves and bends.
S.SA.12	11 Sugarloaf Road	1024	Safety	4.6	Mutdapilly	5A	R	Rural Access	Upgrade to Rural Access (5C) standard	+7.2m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.13	12 Mount Alford Road	State-Controlled	Safety	4.9	Mount Alford	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken by TMR at a corridor level to determine suitable crash reduction treatments.	
S.SA.14	12 Dwyer Ridges Road	307	Safety	8.2	Mount Alford	5A	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.1m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.SA.15	13 Black Rock Road	94	Safety	3.4	Coochin	5D	R	Rural Access	Upgrade to Rural Access (5D) standard	Provide minimum 5.5m formation from Wenzel Road to end of corridor and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.16	14 Head Road	473	Safety	11.1	Carneys Creek	5B	R	Rural Access	Upgrade to Rural Access (5B) standard	Localised pavement widening as required. Include ATLM on shoulders. For final 6.0km of road (within forest) provide flexible barrier to trees and cliffs. Otherwise, ensure run off area is clear of hazards.
S.SA.17	15 Boonah Rathdowney Road	State-Controlled	Safety	11.6	Maroon	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken by TMR at a corridor level to determine suitable crash reduction treatments. Prevalence of Motorcycle crashes should be investigated.	
S.SA.18	16 Mount Lindsay Highway (south of Innisplain)	State-Controlled	Safety	28.7	Laravale to Mount Lindsey	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken by TMR at a corridor level to determine suitable crash reduction treatments. Prevalence of Motorcycle crashes should be investigated.	
S.SA.19	17 Round Mountain Road	921	Safety	7.1	Laravale	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.20	18 Kooralbyn Road	591	Safety	6.8	Laravale	4A	R	Rural Connector	Road standard meets volume and hierarchy standards	Include localised widening at curves to improve errant vehicle recovery. Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.21	19 Oaky Creek Road	793	Safety	0.3	Innisplain	5D	R	Rural Access	Upgrade Oaky Creek Road / Telemon Homestead Road intersection	Intersection operates as a non-standard priority T (Oaky Creek Road has priority but bends 90-degrees). Provide additional works to clearly delineate the travel path and priority controls.

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.SA.22	20 Innisplain Road / Running Creek Road	516, State-Controlled	Safety	21.1	Innisplain	4B / State-Controlled	R / -	Rural Collector / State-Controlled	Recommend further investigations are undertaken by TMR at a corridor level to determine suitable crash reduction treatments.	
S.SA.23	21 Gould Hill Road	425	Safety	4.2	Gleneagle	4A	R	Rural Connector	Upgrade to Rural Access (5A) standard	+7.2m pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.24	22 Biddaddaba Road	87	Safety	2.8	Boyland	4B	R	Rural Collector	Upgrade to Rural Collector (4B) standard	+1.7m pavement Include ATLM on shoulders and ensure run off area is clear of hazards. For areas containing unmoveable hazards provide flexible roadside barrier.
S.SA.25	23 Nindooinbah Estate Road	778	Safety	7.6	Kerry	5A	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m pavement Include ATLM on shoulders and ensure run off area is clear of hazards.
S.SA.26	24 Beechmont Road	72	Safety	15.5	Beechmont	4B	R	Rural Collector	Upgrade to Rural Connector (4A) standard	+1.8-3.0m pavement Include ATLM on shoulders. Where road is within rainforest provide flexible barrier to trees and cliffs. Otherwise, ensure run off area is clear of hazards.
S.SA.27	25 Seidenspinner Road	956	Safety	2.8	Mount Barney	5D	R	Rural Access	Upgrade to Rural Access (5D) standard	+0.5m formation width Ensure run off area is clear of hazards.

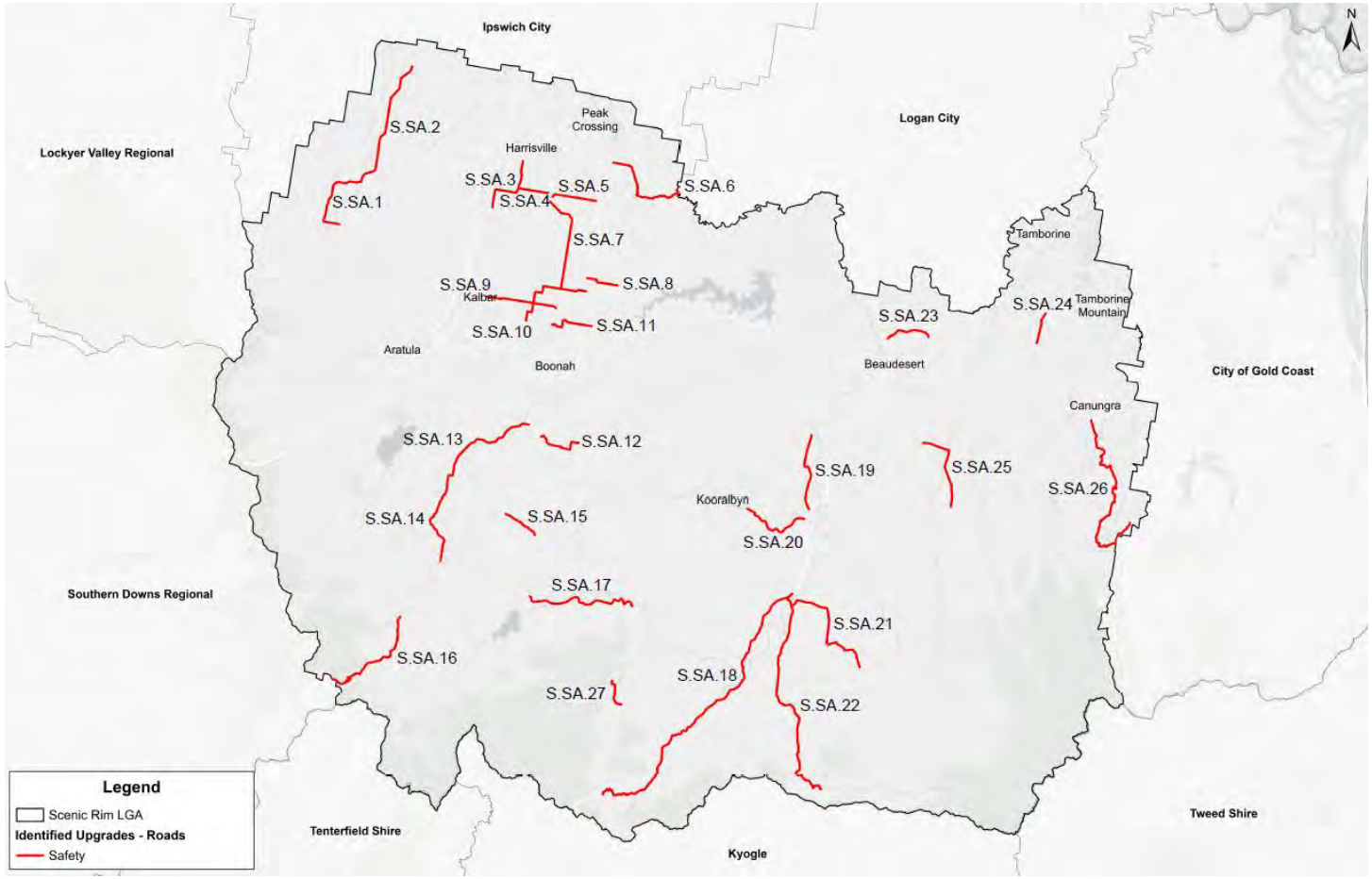


Figure 8.2: Identified Road Upgrades – Safety – Region

8.2 Road Hierarchy and Capacity

8.2.1 Network Overview

A capacity assessment has been undertaken for key Council roads across the Region. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 8.3.

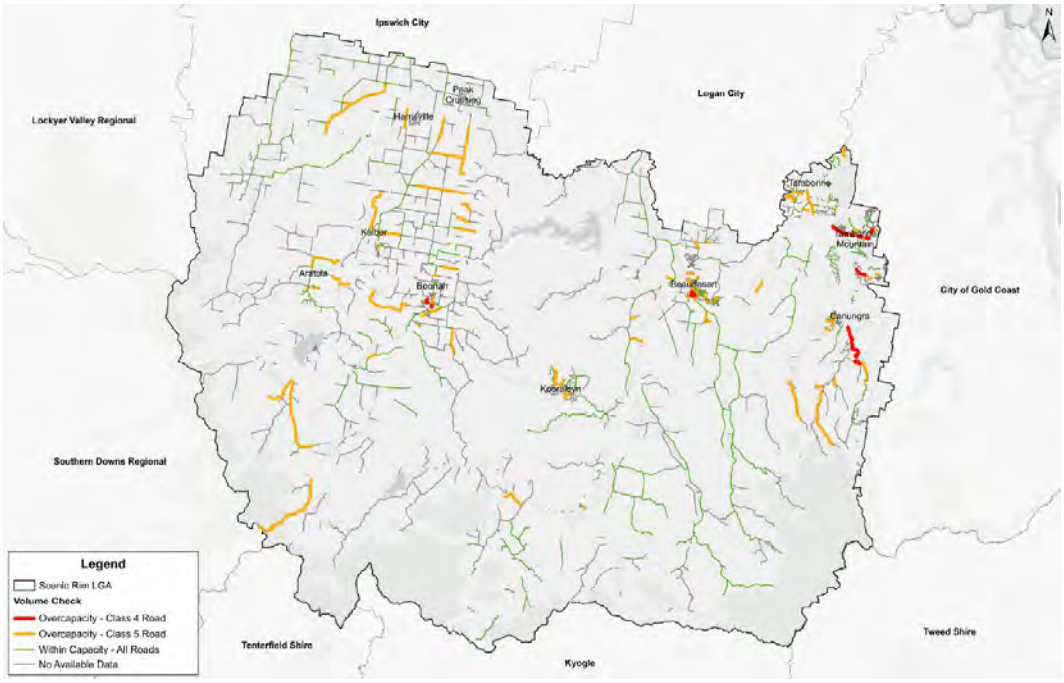


Figure 8.3: Corridor Capacity Review – Region

Table 8.3: Capacity Assessment – Region (2021)

	Road	Hierarchy	Capacity	AADT	Length (km)
1	Coleyville Road, Coleyville	5B	150	192	9.8
2.1	Beckwith Road, Milora	5C	80	102	4.1
2.2	Beckwith Road, Limestone Ridges	5C	80	146	
3	Limestone Ridges Road, Limestone Ridges	5B	150	221	5.8
4	Kents Lagoon Road, Kents Lagoon	5B	150	202	5.2
5.1	Milbong Road, Anthony	5B	150	214	6
5.2	Milbong Road, Milbong	5B	150	272	
7	Mocker Road, Roadvale	5D	40	99	1.6
8	Holz Road, Roadvale	5D	40	55	2.2
9	Frazerview Road, Frazerview	5C	80	84	6.7
10	Kulgun Road, Kalbar	5C	80	97	2.7
11	Stegert Road, Coulson	5B	150	172	2.1

Road		Hierarchy	Capacity	AADT	Length (km)
12.1	Morwincha Road, Fassifern Valley	5C	80	116	2.8
12.2	Morwinchan Road, Morwincha	5C	80	114	
13.1	Mount French Road, Boonah	5B	150	510	7
13.2	Mount French Road, Mount French	5B	150	176	
14	Cannon Creek Road, Milford	5B	150	222	3.0
15	Mount Greville Road, Moogerah	5D	40	49	4.1
16	Croftby Road, Moogerah	5C	80	80	8.4
17	Head Road, Carneys Creek	5B	150	159	25.5
18	Bigriggen Road, Rathdowney	5D	40	134	3.2
19	Spengler Road, Tabragalba	5D	40	46	1.5
20	Beechmont Road, Witheren	4B	1000	2079	15.7
21	Sarabah Road, Sarabah	5C	80	139	7.2
22	Illinbah Road, Illinbah	5B	150	222	7.8

As shown, the majority of Council roads are within acceptable operating capacity limits, as defined in Council's road hierarchy requirements. However, there are several Class 4 and Class 5 roads which have been identified.

All roads have also been considered based on assumed increases to traffic volumes, generally as per the EMME modelling outputs produced. This assumes growth in accordance with SEQSTM-MM, version 3.2309 and based on current planning assumptions for the LGA (i.e. lot sizes, yield thresholds etc.). This has been compared to the road hierarchy to identify where upgrades may be warranted based on future growth and traffic impacts.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards to ensure alignment with the appropriate road hierarchy requirements. Deficiencies were noted across the Region, with all Class 4 roads and selected Class 5 roads identified for upgrades. A full list of all deficiencies can be provided for information purposes.

Table 8.4: Built Standard Assessment – Region

Road		Hierarchy	Pavement Width		Length (km)
			Required	Built	
23	Mutdapilly-Churchbank Weir Road, Mutdapilly	Rural Collector (4B)	8.0	6.0	9.2
24	Teviotville Road, Kalbar	Rural Collector (4B)	8.0	6.7	6.1
	Teviotville Road, Teviotville	Rural Collector (4B)	8.0	6.8	
25	Brookland Road, Allenview	Rural Collector (4B)	8.0	6.0	7.1
	Brookland Road, Gleneagle	Rural Collector (4B)	8.0	6.0	
26	Veresdale Scrub Road, Gleneagle	Rural Connector (4A)	9.0	6.8	1.6
27	Biddaddaba Road, Boyland	Rural Collector (4B)	8.0	6.3	0.8
28	Wagonwheel Road, Boyland	Rural Collector (4B)	8.0	6.9	0.9
29	Bambling Road, Boyland	Rural Collector (4B)	8.0	6.1	0.7
30	Sandy Creek Road, Josephville	Rural Collector (4B)	8.0	6.9	3.8

	Road	Hierarchy	Pavement Width		Length (km)
			Required	Built	
31	Beechmont Road	Rural Connector (4A)	9.0	6.0	17.1
32	Upper Coomera Road, Witheren	Rural Collector (4B)	8.0	6.3	1.7
33	Christmas Creek Road, Christmas Creek	Rural Collector (4B)	8.0	6	3.5
34	Kerry Road, Darlington	Rural Access (5A)	7.2	6	13.3

8.2.2 Bromelton SDA

As detailed in Section 8.3, the addition of the Bromelton SDA will significantly impact and change volumes between Bromelton and the Mount Lindesay Highway. Whilst a large amount of new traffic will be freight, there is also expected to be a large amount of light vehicle trips associated with workforce etc.

The EMME modelling predicts that both Bromelton House Road and Allan Creek Road will ultimately carry in the order of 3,000vpd (see recommendations in Section 8.3 to ensure this does not include freight trips). As such, sections of both roads will require upgrades to ensure they are of a suitable standard to carry the volumes of traffic anticipated.

These roads will also need to be monitored in the future as the uptake of Bromelton increases to ensure they do not exceed capacity prior to the provision of the Bromelton North-South Arterial Road.

8.2.3 Beaudesert Eastern Ring Road

Modelling has been undertaken to understand the impacts and timing requirements for the Beaudesert Eastern Ring Road on the wider road network. Refer to Section 10.2 for details.

8.2.4 Canungra Bypass

Modelling has been undertaken to understand the impacts and timing requirements for the connections between Finch Road and Malgum Drive (Canungra Bypass) on the wider road network. Refer to Section 10.4 for details.

8.2.5 Kooralbyn Western Connection

Modelling has been undertaken to review the need and anticipated use of a connection from Kooralbyn to Boonah. This was requested as part of community consultation and also aligns with the “Reliable and Resilient” transport principles adopted for the ITP.

The results of the EMME modelling found that:

- This link would carry in the order of 300vpd
- This link would contain significant travel time savings for these movements, but at a network level, the overall travel time savings were negligible based on the low uptake / demands.

Further review of the potential connection was undertaken which found that the provision of a road connection between Kooralbyn and Boonah would require a significant level of construction, including a number of creek crossings, to cater for the anticipate levels of traffic. Based on this, the road connection would be considered a high-cost vs low utilisation and therefore not expected to be a high priority compared to other more critical road upgrades across the region. Whilst it would serve to improve network resilience and could be used in the event of a natural disaster, this connection would serve limited a limited catchment during day-to-day operations.

Therefore, this connection is not recommended as a priority road upgrade as part of the ITP. However, it is recommended that Council monitor the volumes and needs and include consideration in forward planning or through other justifications beyond traffic capacity.

8.2.6 Biddaddaba Road

Modelling found that increased trips were predicted to use the Beaudesert Nerang Road and Biddaddaba rat run route between Beaudesert Beenleigh Road and Mundoolun Connection Road. This behaviour should be discouraged.

Biddaddaba Road was found to have a high crash risk rating and upgrades have been identified in Section 8.1. It is recommended that this is supported by increased detour signage to ensure that this road does not become a priority rat run.

8.2.7 Identified Road Upgrades

The identified road upgrades to address road hierarchy and capacity issues identified is provided in Table 8.5.

Table 8.5: Identified Road Upgrades – Road Hierarchy and Capacity – Region

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.RC.1	Allan Creek Road	15	Capacity	4.3	Gleneagle	4A	R	Rural Connector	Upgrade to Rural Connector (4A) Standard	+3.0m wide pavement +1.2m formation width
S.RC.2	Bromelton House Road	133	Capacity	5.3	Bromelton	4A	R	Rural Connector	Upgrade to Rural Connector (4A) Standard	1.7m wide pavement
S.RC.3	Mundoolan Connection Road / Biddaddaba Road	State-Controlled, 86	Movement and Place	n/a	Biddaddaba	State-Controlled / 5A	- / R	State-Controlled / Rural Access	Install signage directing all non-local trips to remain Mundoolan Connection Road. Biddaddaba Road is restricted to local traffic only.	
S.RC.4	Coleyville Road, Coleyville	227	Capacity	11.4	Mutdapilly	5A	R	Rural Access	Upgrade to Rural Access (5A) standard	Provide as 7.2m wide pavement and 9.2m wide formation. Localised widening needed across corridor.
S.RC.5	Beckwith Road, Milora & Limestone Ridges	70	Capacity	4.1	Milora	5C	R	Rural Access	Change hierarchy to Rural Access (5B). No physical upgrades required.	
S.RC.6	Limestone Ridges Road, Limestone Ridges	631	Capacity	6.0	Peak Crossing	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width
S.RC.7	Kents Lagoon Road, Kents Lagoon	566	Capacity	6.7	Kents Lagoon	5A	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width
S.RC.8	Milbong Road, Anthony & Milbong	707	Capacity	6.7	Milbong	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.5m wide pavement, +0.7m formation width
S.RC.9	Mocker Road, Roadvale	717	Capacity	3.0	Roadvale	5D	R	Rural Access	Upgrade to Rural Access (5B) standard	Provide as 6.2m wide pavement and 7.2m wide formation
S.RC.10	Holz Road, Roadvale	495	Capacity	2.3	Roadvale	5D	R	Rural Access	Upgrade to Rural Access (5C) standard	Provide as 7.2m wide unsealed formation

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.RC.11	Frazerview Road, Aratula & Frazerview	391	Capacity	6.6	Aratula	5C	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m total formation width
S.RC.12	Kulgun Road, Kalbar	600	Capacity	6.4	Kalbar	5B	R	Rural Access	Upgrade to Rural Access (5B) standard	Provide as 6.2m wide pavement and 7.2m wide formation
S.RC.13	Stegert Road, Coulson	1004	Capacity	2.6	Coulson	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.9m wide pavement, +1.1m total formation width
S.RC.14	Morwincha Road, Fassifern Valley & Morwicha	730	Capacity	2.8	Morwincha	5C	R	Rural Access	Change hierarchy to Rural Access (5B). No physical upgrades required.	
S.RC.15	Mount French Road, Boonah & Mount French	737	Capacity	9.3	Boonah & Mount French	4B	R	Rural Collector	Upgrade to Rural Collector (4B) standard	+2.0m wide pavement, +0.2m total formation width
S.RC.16	Cannon Creek Road, Milford	165	Capacity	19.2	Milford	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width
S.RC.17	Mount Greville Road, Moogerah	739	Capacity	4.1	Moogerah	5D	R	Rural Access	Change hierarchy to Rural Access (5C). No physical upgrades required.	
S.RC.18	Croftby Road, Moogerah	253	Capacity	11.1	Moogerah	5C	R	Rural Access	Upgrade to Rural Access (5B) standard	Provide as 6.2m wide pavement and 7.2m wide formation
S.RC.19	Head Road, Carneys Creek	473	Capacity	11.1	Carneys Creek	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width
S.RC.20	Bigriggen Road, Rathdowney	88	Capacity	2.8	Rathdowney	5D	R	Rural Access	Upgrade to Rural Access (5B) standard	Provide as 6.2m wide pavement and 7.2m wide formation
S.RC.21	Spengler Road, Tabragalba	990	Capacity	1.4	Tabragalba	5D	R	Rural Access	Upgrade to Rural Access (5C) standard	Provide as minimum 7.2m wide unsealed formation
S.RC.22	Beechmont Road, Witheren & Beechmont	72	Capacity	15.5	Beechmont	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+3.0m wide pavement +1.2m formation width
S.RC.23	Sarabah Road, Sarabah	939	Capacity	6.5	Sarabah	5C	R	Rural Access	Upgrade to Rural Access (5B) standard	Provide as 6.2m wide pavement and 7.2m wide formation
S.RC.24	Illinbah Road, Illinbah	514	Capacity	8.2	Illinbah	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.RC.24	Mutdapilly-Churchbank Weir Road, Mutdapilly	764	Built Standard	9.2	Mutdapilly	4B	R	Rural Collector	Upgrade to Rural Collector (4B) standard	+2.0m wide pavement
S.RC.25	Teviotville Road, Kalbar	1056	Built Standard	4.3	Kalbar	4B	R	Rural Collector	Upgrade to Rural Collector (4B) standard	+1.3m wide pavement
S.RC.26	Teviotville Road, Teviotville	1056	Built Standard		Kalbar	4B	R	Rural Collector		+1.2m wide pavement
S.RC.27	Brookland Road, Allenview	137	Built Standard	7.9	Gleneagle	4B	R	Rural Collector	Upgrade to Rural Collector (4B) standard	+2.0m wide pavement
S.RC.28	Brookland Road, Gleneagle	137	Built Standard		Gleneagle	4B	R	Rural Collector		+2.0m wide pavement
S.RC.29	Veresdale Scrub Road, Gleneagle	1104	Built Standard	7.0	Gleneagle	4A	R	Rural Connector	Upgrade to Rural Connector (4A) Standard	+2.2m wide pavement
S.RC.30	Biddaddaba Road, Boyland	87	Built Standard	2.8	Boyland	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+1.7m wide pavement
S.RC.31	Wagonwheel Road, Boyland	1114	Built Standard	1.7	Boyland	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+1.1m wide pavement
S.RC.32	Bambling Road, Boyland	48	Built Standard	0.7	Boyland	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+1.9m wide pavement
S.RC.33	Sandy Creek Road, Josephville	938	Built Standard	8.4	Josephville	4A	R	Rural Connector	Upgrade to Rural Connector (4A) Standard	+1.1m wide pavement
S.RC.34	Beechmont Road	72	Built Standard	15.5	Beechmont	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+2.0m wide pavement
S.RC.35	Upper Coomera Road, Witheren	1099	Built Standard	6.8	Witheren	4B	R	Rural Collector	Upgrade to Rural Connector (4A) Standard	+1.7m wide pavement
S.RC.36	Christmas Creek Road, Christmas Creek	212	Built Standard	33.6	Laravale	4A	R	Rural Connector	Upgrade to Rural Connector (4A) Standard	+2.0m wide pavement
S.RC.37	Kerry Road, Darlington	570	Built Standard	36.2	Beaudesert	4A	R	Rural Connector	Upgrade to Rural Access (5A) standard	+1.2m wide pavement, +1.4m formation width
S.RC.38	Flagstone Creek Road, Birnam	370	Built Standard	4.9	Birnam	5A	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.2m-2.0m wide pavement, +1.2m-3.0m wide formation

ID	Corridor / Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.RC.39	Fields Road, Veresdale	367	Capacity	2.1	Veresdale	4B	R	Rural Collector	Upgrade to Rural Connector (4A) standard	+1.2m-2.4m wide pavement
S.RC.40	Veresdale Scrub School Road, Veresdale Scrub	1105	Capacity	3.6	Veresdale Scrub	5A	R	Rural Access	Upgrade to Rural Connector (4A) standard	+2.0m-3.0m wide pavement
S.RC.41	Tarome Road, Aratula	1047	Capacity	25.5	Aratula	5A	R	Rural Access	Upgrade to Rural Collector (4B) standard	+1.5m-2.4m wide pavement
S.RC.42	Degen Road, Dugandan	270	Capacity	0.4	Dugandan	5A	R	Rural Access	Upgrade to Rural Collector (4B) standard	+0.5m wide pavement
S.RC.43	Bruckner Hill Road, Dugandan	142	Capacity	1.9	Dugandan	5A	R	Rural Access	Upgrade to Rural Collector (4B) standard	+0.6m-0.8m wide pavement
S.RC.44	Fenwick Road, Boyland	364	Capacity	1.9	Boyland	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.2m-1.0m wide pavement, +0.4m-1.2m wide formation
S.RC.45	Mount French Road, Dugandan	737	Capacity	9.3	Dugandan	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.2m-0.8m wide pavement, +0.4m-1.0m wide formation
S.RC.46	Biddaddaba Creek Road, Biddaddaba	86	Capacity	9.8	Biddaddaba	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.7m-1.2m wide pavement, +0.4m-1.2m wide formation
S.RC.47	Boomerang Road, Tamborine	108	Capacity	3.0	Tamborine	5B	R	Rural Access	Upgrade to Rural Access (5A) standard	+0.2m-1.0m wide pavement, +0.9m-1.4m wide formation
S.RC.48	Saleyard Road, Dugandan	934	Capacity	0.6	Dugandan	5B	R	Rural Access	Change hierarchy to Rural Access (5A). No physical upgrades required.	-
S.RC.49	Tullamore Way, Gleneagle	1087	Built Standard	1.2	Gleneagle	4B	T	Rural Collector	Upgrade to Rural Collector (4B) standard	+0.5m-0.8m wide pavement
S.RC.50	Hinchcliffe Drive, Kooralbyn	488	Built Standard	0.7	Kooralbyn	4B	T	Rural Collector	Upgrade to Rural Collector (4B) standard	+1.2m-1.3m wide pavement

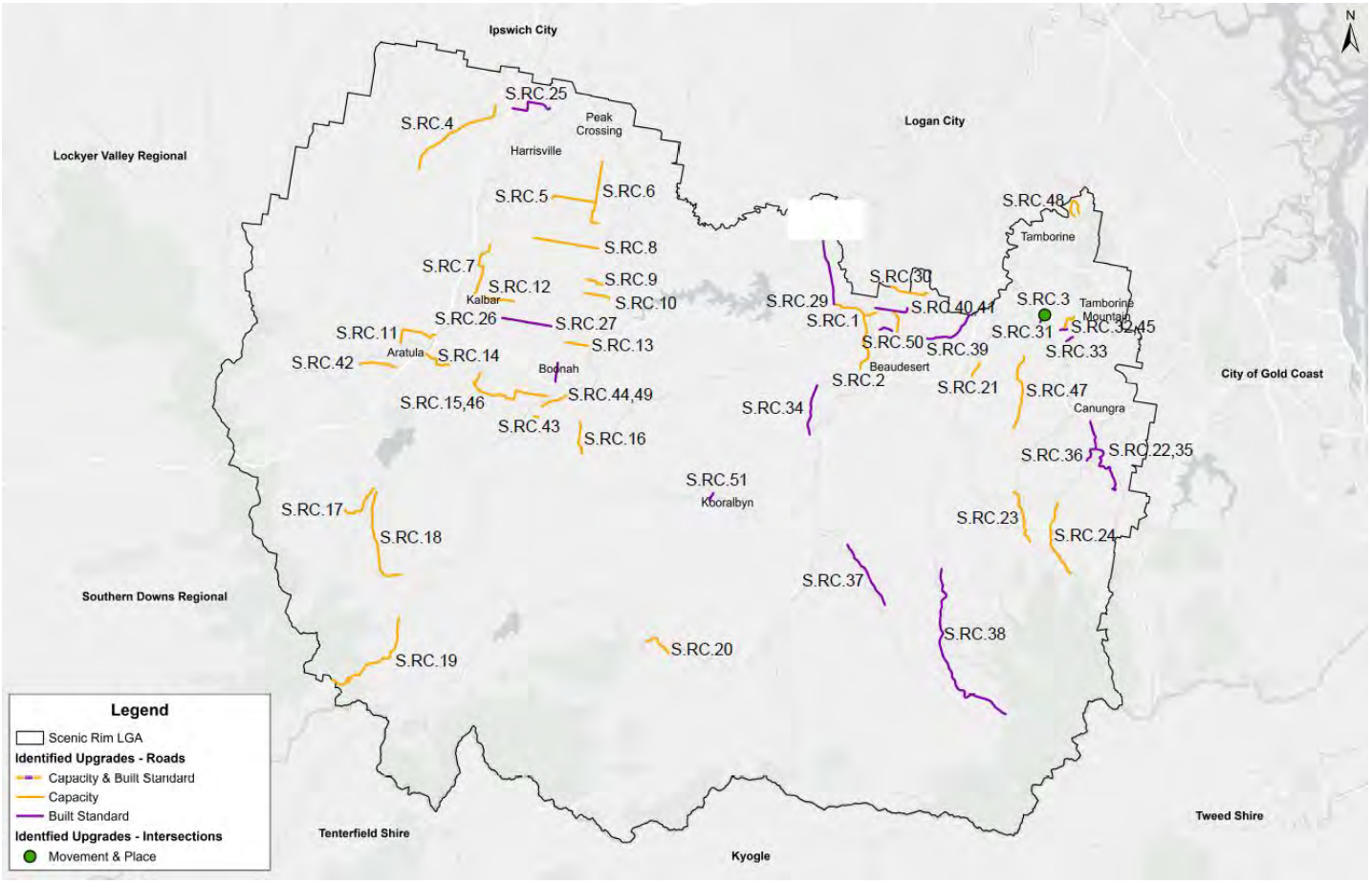


Figure 8.4: Identified Road Upgrades – Road Hierarchy and Capacity – Region

8.3 Freight

8.3.1 Overview

Roads across the LGA serve a wide range of road users and transport needs, with a key need being the transportation of freight. Freight travel generally occurs on the higher order, State-controlled road network; however, local destinations do require freight trips to use lower order roads to access key locations and areas, which can often result in conflicts between user classes. This can also occur on the higher order road network within towns and villages, with this considered in Part 5.

Key freight access locations considered in the Strategic Road Network Plan include:

- Industrial land uses zones across the LGA
- Key resource areas (KRAs) as mapped by QLD Government
- Important Agricultural Areas as mapped by QLD Government
- Cattle Feedlots
- The Bromelton State Development Area.

In line with the key commodities identified in Section 4.4, these represent the critical destinations for freight within the LGA.

The road network plays a pivotal role in facilitating the vital resource and agricultural sectors within the LGA and maintaining a secure and efficient transportation network for the movement of goods is imperative to the overall economic strength of the LGA. This section identifies a list of key freight roads and routes, with planning and upgrades to optimise functionality for the LGA.

A series of maps have been produced at **Appendix C,** to summarise the key findings of this section.

8.3.2 Existing Freight Network

Figure 8.5 presents the key freight locations, and the existing gazetted B-Double network.

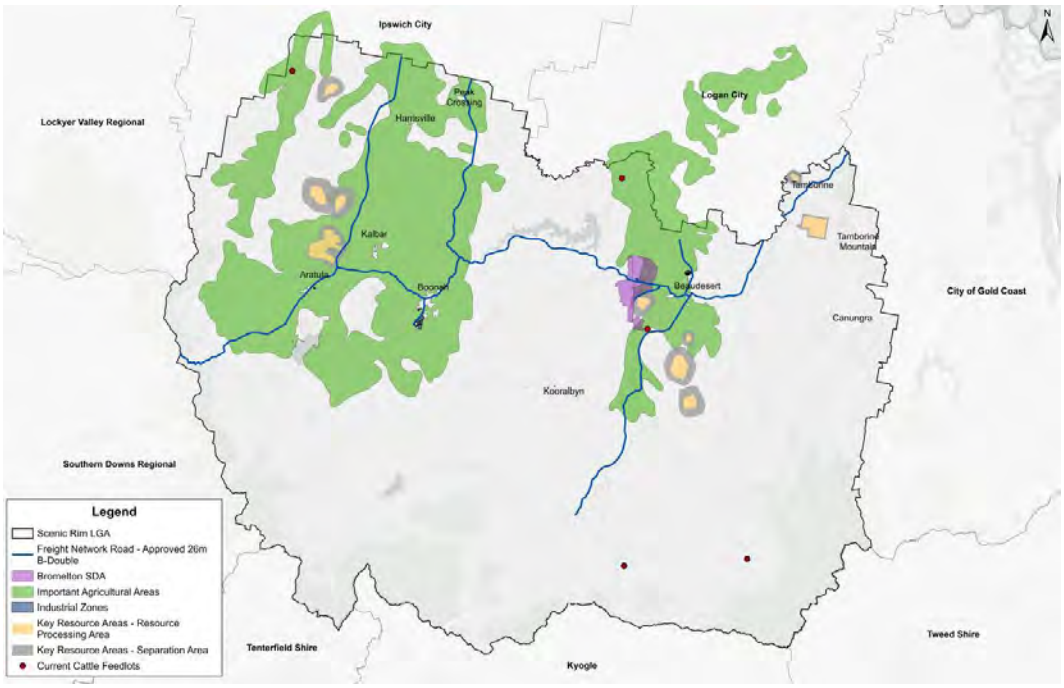


Figure 8.5: Freight Network and Key Areas

8.3.3 Review of Current Network for Current Use

As illustrated above, the current freight network is extensive and generally suitably covers the extents of the LGA. However, there are several key existing areas (such as feedlots) that have limited access to the higher order freight network. These destinations require freight to travel along local roads which may not be suitable to accommodate the demands / vehicle types.

In addition to the freight network, a review was undertaken of the local roads of regional significance (LRRS). LRRS provide a primary connecting function within a regional road network and are commonly located across LGA's and governed by inter-agency teams from relevant local Council's and TMR regions. Not all LRRS need to be included in the freight network; however, where there is a duplication of a freight important road along an LRRS, this is recommended to be included.

It is recommended that all roads providing a link to industrial zones, feedlots and any isolated important agricultural areas are included into the freight network. These recommendations are included below. It is important to note that several roads serving this function, but not included in the Freight Plan currently, are at a suitable standard, including:

- Sandy Creek Road, Bromelton (length: 3.2km)
- Cryna Road, Cryna (length: 2.4km)
- Bromelton House Road, Bromelton (length: 3.5km)
- Bromelton House Road, Gleneagle (length: 1.8km)
- Undullah Road, Kagaru (length: 3.6km)
- Christmas Creek Road, Laravale (length: 4.1km)
- Christmas Creek Road, Tabooba (length: 3.9km).

Other roads along the route will require upgrades or modifications, as outlined below.

8.3.4 Road Currently Carrying Freight Traffic

A review of existing roads carrying increased levels of freight traffic has been undertaken, to considers whether these roads may require upgrades due to the increased loads placed by freight traffic and/or due too the increased size (and passenger car equivalent units) heavy vehicle present.

For this review two scenarios have been considered, being:

- Roads carrying >50 heavy vehicles per day – which are freight important roads given the volume of heavy vehicles carried (see Figure 8.6)
- Roads with >10% heavy vehicle percentage (minimum 20 HVs per day) – which are freight important roads given the increased percentage of heavy vehicles carried (see Figure 8.7)

As shown in the maps, freight travel generally follows an artery system, combining a destination to the major State-controlled road network, generally via the most direct route. In a number of instances (such as near Kooralbyn and Canungra) these appear to be associated with local trips as necessary to service the catchment.

High heavy vehicle volumes are noted along Bromelton House Road and Allan Creek Road. Recommendations (see Table 8.7) seek to remove this traffic from the local roads, and shift this back to the higher order State-controlled road network.

The only other key outlier found in this assessment (that is not included in sub sections below) was Munbilla Road near Kalbar. This carries generally high volumes of heavy vehicle given the location, and may be being used as an alternative route to the Cunningham Highway. Whilst upgrades are recommended for this road on the basis of built standard (see Section 10.5) this is recommended to be supplemented by strategies to reduce unnecessary freight traffic.

All roads identified in these maps are considered to be freight relevant roads, with this included in priority scoring in Section 11 of the RNP. Some of the identified roads have been recommended for upgrades, based on their importance to the Regions freight traffic (see Table 8.7). Whilst not all of these roads have been identified for upgrades, any roads not included are recommended to be

monitored for the potential to have increased heavy vehicle trips, which may warrant additional upgrades in the future. This is included in the recommended policies within the implementation plan.

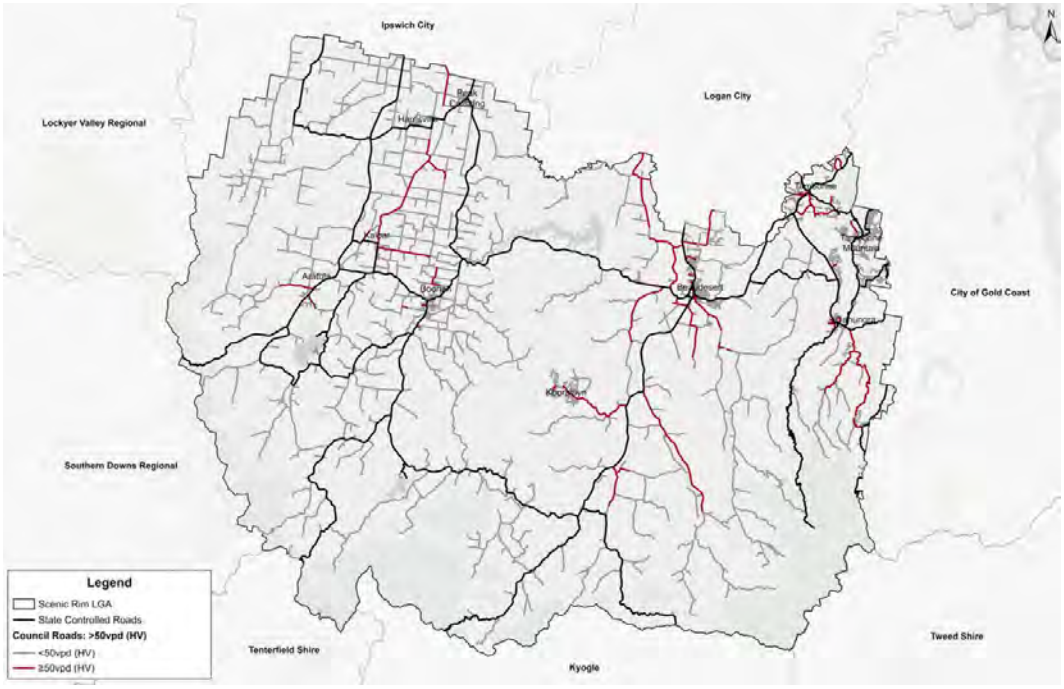


Figure 8.6: Roads Carrying >50 Heavy Vehicles Per Day

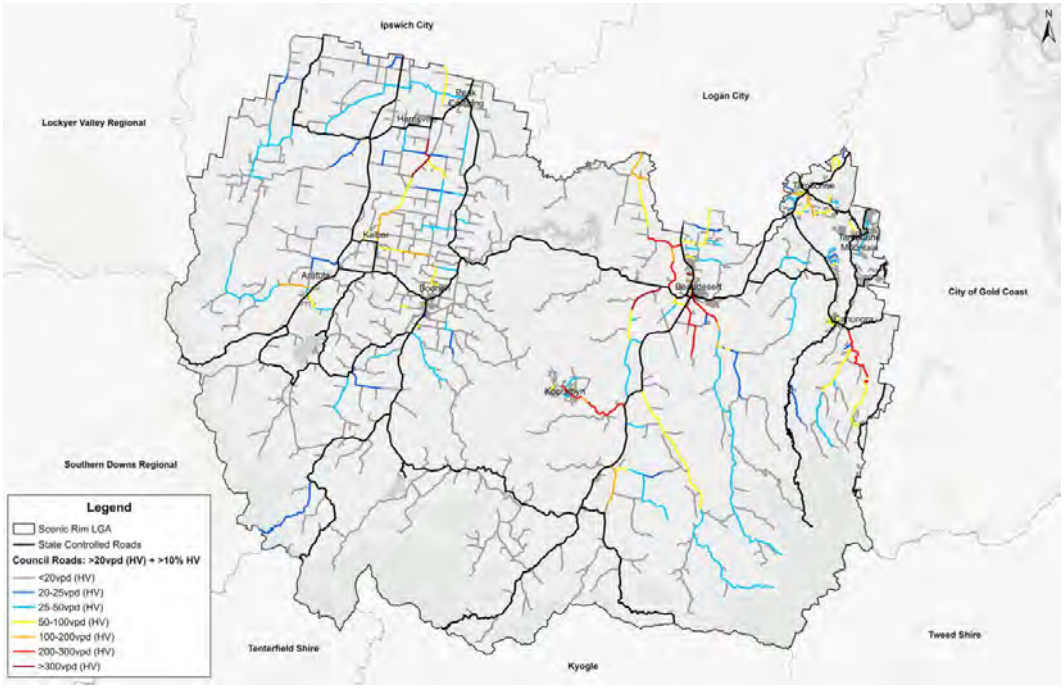


Figure 8.7: Roads With >10% Heavy Vehicles

8.3.5 Bromelton SDA

8.3.5.1 Overview

The Bromelton SDA is 1,800 hectares of greenfield land which is suitable for medium to large scale industrial activities of regional, State and national significance. The intent of the SDA is to locate industries, such as freight and logistics operations, on this land which has convenient access to the national standard gauge rail network, and to the Mount Lindesay Highway, providing for road connectivity. Given the importance of Bromelton to the Region, and the uses and operations on this land, a strong freight network connection is vital.

8.3.5.2 Bromelton North-South Arterial Road

TMR has identified the alignment of a new link road, the Bromelton North-South Arterial Road, connecting the Bromelton SDA and Mount Lindesay Highway at Woodhill. When constructed, the new road will reduce heavy freight and commuter traffic accessing Bromelton from the Mount Lindesay Highway south of Woodhill.

Discussions with TMR indicated that the timing and ultimate status of this road is largely dependent on the uptake of the SDA, and that the planned timing of this route (2041) is flexible to match the need for the road. Given this, modelling to 2041 has been undertaken to consider scenarios both with and without the Bromelton North-South Arterial Road.

Results of the modelling, and anticipated daily traffic volumes on key roads are provided in Figure 8.8 and Table 8.6.

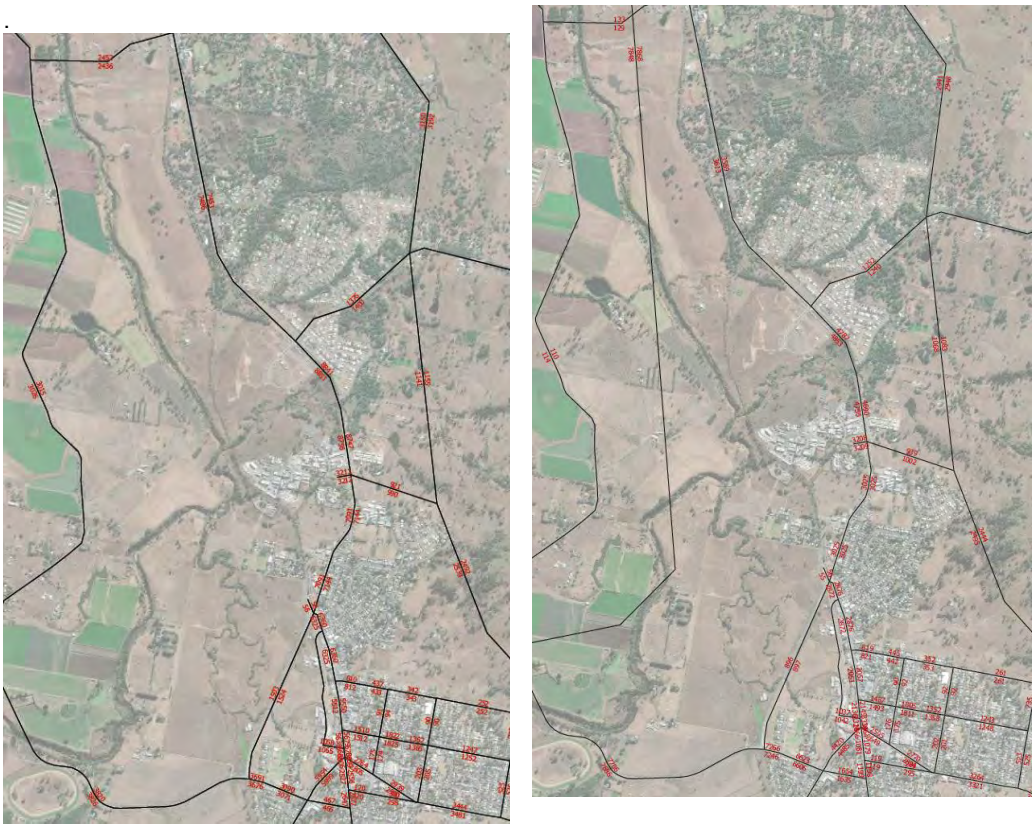


Figure 8.8: Daily Volume Plots – Bromelton – Without Bromelton North-South Arterial Road (Left) and With Bromelton North-South Arterial Road (Right)

Table 8.6: Capacity Assessment – Bromelton Freight Roads

Road	Hierarchy	Predicted AADT
2041 Capacity Assessment – Without Bromelton North-South Arterial Road		
Mount Lindesay Highway (north of Woodhill)	State-controlled	~18,400
Mount Lindesay Highway (south of Woodhill)	State-controlled	~20,200
Bromelton North-South Arterial Road	State-controlled	n/a
Allan Creek Road	Rural Connector	~4,900
Bromelton House Road	Rural Connector	~6,000
2041 Capacity Assessment – With Bromelton North-South Arterial Road		
Mount Lindesay Highway (north of Woodhill)	State-controlled	~20,200
Mount Lindesay Highway (south of Woodhill)	State-controlled	~7,800
Bromelton North-South Arterial Road	State-controlled	~15,700
Allan Creek Road	Rural Connector	~250
Bromelton House Road	Rural Connector	~250

As shown, once the Bromelton North-South Arterial Road is constructed, this will accommodate very high volumes of freight traffic, and traffic travelling from the west to north and vice versa. As such, this has been included in the freight network as a "Future Key Road", given the uncertainty around when this will be provided.

However, prior to this construction, modelling shows that Bromelton House Road and Allan Creek Road will form a key link for trips, carrying up to 6,000vpd, including 3,000 truck movements per day. The volume of truck movements on these roads **does not** align with the desired purpose and amenity of these roads and would have significant impacts on residents and on road conditions.

As such, the following is recommended:

- **Clear route and restriction signage** is provided at the Beaudesert Boonah Road / Bromelton House Road intersection, and the Mount Lindesay Highway / Allan Creek Road intersection, to ensure that trucks do not use this route, and instead stay on the State-controlled road network
- **Bromelton House Road** – parts of this road are built to a Rural Connector standard, however the northern section is required to be upgraded to include a 9.0m pavement width
- **Allan Creek Road** – is currently built to with a 6.0m wide pavement and is below the standard of a Rural Connector. This should be upgraded to include a 9.0m pavement width.

Ultimately, these roads may require upgrade to a Rural Arterial Road standard, pending increases in volumes and the provision of the Bromelton North-South Arterial Road. Regardless, Allan Creek Road warrants a higher priority upgrade to a Rural Connector Standard to accommodate current and short-term volume demands.

8.3.6 Review of Key Resource Areas

Across the LGA there are 12 mapped KRAs, generally located near Aratula and Kalbar or south of Beaudesert. KRA's have been identified as key resource areas which are protected by the QLD Government to ensure that resources are not impacted by urban expansion.

Roads to KRAs have also been identified by QLD Government, which generally follow existing road reserves and existing roads, although, in most cases, these roads are not suitable to accommodate resource related traffic. As part of this review, each of these routes has been reviewed, with "future freight networks" being identified. These roads should not be included in the freight network currently, however, if / when a KRA is developed, they will become important freight routes and links.

As such, this has been included in the freight network as a "Future Key Road", given the uncertainty around when this will be provided.

8.3.7 Identified Road Upgrades

Table 8.7 provides a summary list of the road upgrades that are required to facilitate the freight network. These include a range of new roads, upgraded roads, and gazettal requirements. The priority of these upgrades is included at Part 6.

Table 8.7: Identified Road Upgrades – Freight – Region

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.FR.1	Christensen Road, Mount Walker	209	Freight	3.5	Mount Walker	5B	R	Rural Access	Upgrade to Rural Connector	+1.0m wide pavement, +1.2m formation width
S.FR.2	Hinrichsen Road, Mount Walker (5G)	489	Freight	1.0	Mount Walker	5D	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.3	Vaucluse Road, Mount Walker	1284	Freight	0.1	Mount Walker	5D	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.4	Unformed Road Reserve between Vaucluse Road and Lot 14 on RP21535	N/A	Freight	3.1	Mount Walker	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.5	Unformed Road Reserve between Cunningham Highway and Lot 18 on RP50377	N/A	Freight	4.7	Silverdale	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.6	Lot 10 on SP337036	N/A	Freight	0.8	Kalbar	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.7	Frazerview Road, Frazerview	391	Freight	0.3	Aratula	5C	R	Rural Access	Upgrade to Rural Connector	+1.0m wide pavement, +1.2m formation width
S.FR.8	Unformed Road Reserve between Sandy Creek Road and Lot 2 on RP177490	N/A	Freight	0.3	Bromelton	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.9	Ferguson Road (Unformed Road Reserve) between Mount Lindesay Highway and Cryna Road	1247	Freight	1.6	Cryna	5G	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.10	Markwell Creek Road, Cryna	671	Freight	0.1	Cryna	5D	R	Rural Access	Upgrade to Rural Connector	+0.5m wide pavement, +0.7m formation width

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.FR.11	Markwell Creek Road, Cryna (5G)	671	Freight	1.6	Cryna	5D	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.12	Unformed Road Reserve between Markwell Creek Road and Lot 42 on SP246067	N/A	Freight	7.2	Kerry	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.13	Echo Hills Road, Laravale	319	Freight	3.6	Laravale	5D	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.14	Unformed Road Reserve between Echo Hills Drive and Lot 42 on SP246067	N/A	Freight	2.1	Kerry	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.15	Lot 7 on SP246353	N/A	Freight	0.7	Tamborine	4A	R	Rural Connector	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.16	Yore Road, Tamborine (5G)	1263	Freight	0.5	Tamborine	5D	R	Rural Access	Upgrade to Rural Connector	New road with 9.0m wide pavement
S.FR.17	Yore Road, Tamborine	1263	Freight	0.1	Tamborine	5D	R	Rural Access	Upgrade to Rural Connector	+0.6m wide pavement, +0.8m formation width
S.FR.18	Mount Walker West Road, Lower Mount Walker	748	Freight	0.9	Lower Mount Walker	5C	R	Rural Access	Upgrade to Rural Access	+0.2m wide pavement
S.FR.19	Ruhland Road, Lower Mount Walker	925	Freight	0.7	Lower Mount Walker	5D	R	Rural Access	Upgrade to Rural Access	New road with 7.2m wide pavement
S.FR.20	Stokes Crossing Road, Lower Mount Walker	1016	Freight	1.9	Mount Walker	5C	R	Rural Access	Upgrade to Rural Access	New road with 7.2m wide pavement
S.FR.21	Stacey Road, Darlington	998	Freight	0.9	Darlington	5D	R	Rural Access	Upgrade to Rural Access	New road with 7.2m wide pavement
S.FR.22	Cedar Glen Road, Darlington	189	Freight	1.4	Darlington	5D	R	Rural Access	Upgrade to Rural Access	New road with 7.2m wide pavement
S.FR.23	Kerry Road, Darlington	570	Freight	5.2	Beaudesert	4A	R	Rural Connector	Upgrade to Rural Access	+0.2m wide pavement
S.FR.24	Darlington Connection Road, Darlington	263	Freight	1.2	Darlington	5B	R	Rural Access	Upgrade to Rural Access	+0.2m wide pavement

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
S.FR.25	Darlington Connection Road, Hillview	263	Freight	1.2	Hillview	5B	R	Rural Access	Upgrade to Rural Access	+0.2m wide pavement
S.FR.26	Widgee Creek Road, Hillview	1153	Freight	2.5	Hillview	5B	R	Rural Access	Upgrade to Rural Access	+0.2m wide pavement
S.FR.27	Christmas Creek Road, Christmas Creek	212	Freight	8.3	Christmas Creek	4A	R	Rural Connector	Upgrade to Rural Access	+0.2m wide pavement
S.FR.28	Beaudesert Boonah Road / Bromelton House Road intersection	State-Controlled, 133	Freight	n/a	Bromelton	State-Controlled / 4A	- / R	State-Controlled / Rural Connector	Install signage directing all freight trips to remain on Beaudesert Boonah Road. Bromelton House Road is restricted to local freight traffic only.	
S.FR.29	Mount Lindesay Highway / Allan Creek Road intersection	State-Controlled, 15	Freight	n/a	Gleneagle	State-Controlled / 4A	- / R	State-Controlled / Rural Connector	Install signage directing all freight trips to remain on Mount Lindesay Highway. Allan Creek Road is restricted to local freight traffic only.	
S.FR.30	Allan Creek Road, Glenagle	15	Freight	n/a	Gleneagle	4A	R	Rural Connector	Install signage directing all freight trips to remain on Mount Lindesay Highway. Allan Creek Road is restricted to local freight traffic only.	
S.FR.31	Munbilla Road	754	Build Standard	16.2	Kalbar	4A	R	Rural Connector	Install signage and prepare a strategy to direct all non-local freight trips to remain on the Cunningham Highway. Munbilla Road is restricted to local freight traffic only.	

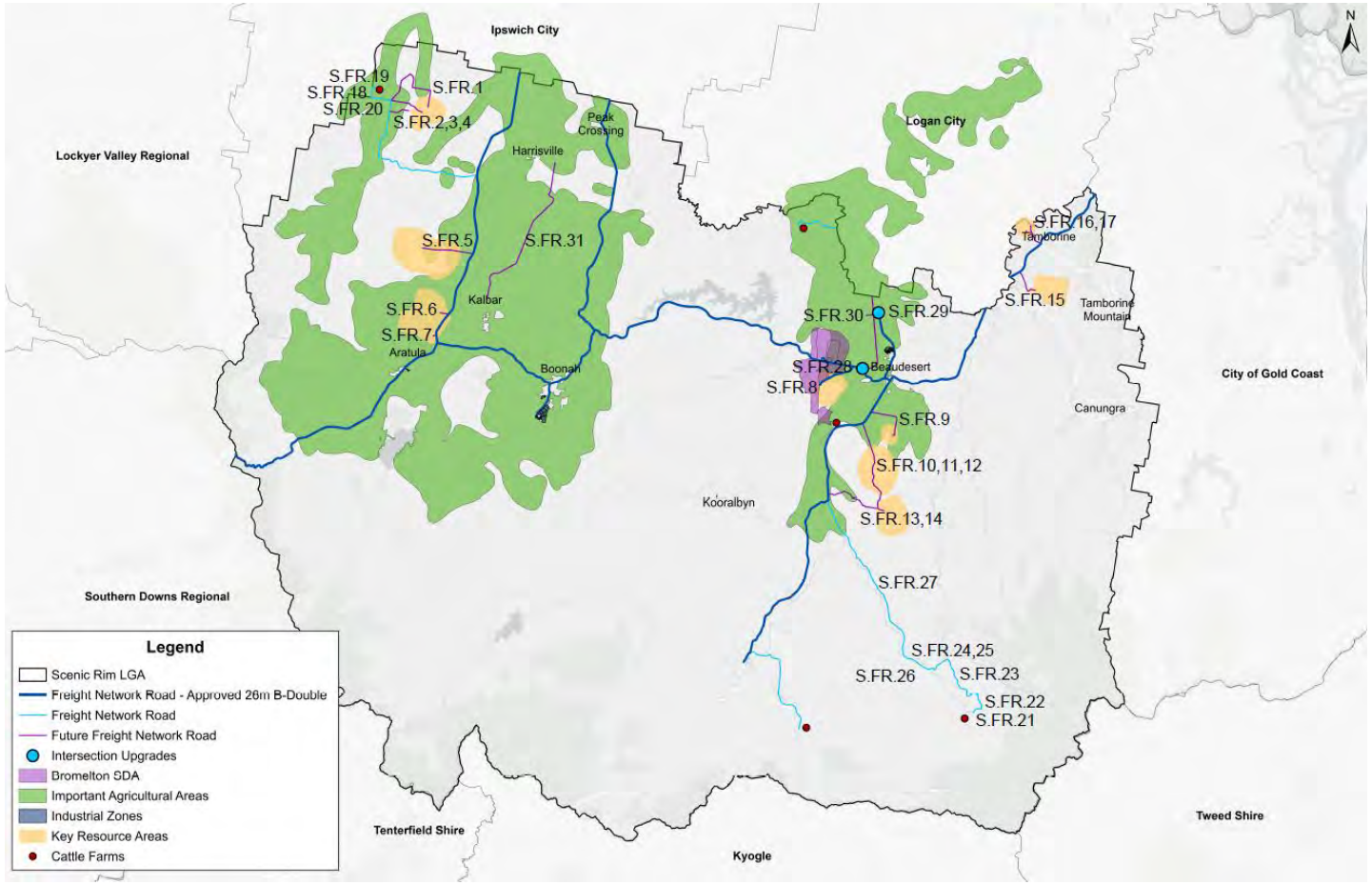


Figure 8.9: Identified Road Upgrades – Freight – Region

8.4 Public Transport

As identified above, the Scenic Rim LGA has very limited accessibility to the public transport network. There are three key user classes that this impacts:

- **Commuters:** Given the expected increase in residents in Beaudesert, and its connections to Logan and to Brisbane, providing an alternative mode of travel for commuters would be beneficial in reducing road volumes and further promoting the viability of Beaudesert
- **Tourists:** Given the high volume of tourist trade across the Region, particularly at Tamborine Mountain, Tamborine, Canungra and Beaudesert, and the intent to promote the area for interstate and international tourists (who may not have access to a car), it is recommended that the provision for public transport services and infrastructure is investigated to key centres for these users
- **Captive Users:** Not all public transport should cater to inter-LGA travel, as there are a number of captive users within the LGA who could benefit from local services. Whilst it may not be practical to provide services to all parts of the LGA, services around the larger centres and alternative options (such as mobility as a service) would provide increased accessibility.

Table 8.8 and Figure 8.10 present the recommended public transport links to be investigated.

Table 8.8: Identified Road Upgrades – Public Transport – Region

ID	Link	Associated Need	Recommended Actions
S.PT.1	Beaudesert to Logan and Brisbane	Commuters, Visitors	Advocate for improved commuter services and connections between Beaudesert to Logan and Brisbane, including to the Queensland Rail network. Investigations of journey to work data should be undertaken to determine desired trip origin/destination and what level of services and frequencies are required to service the Beaudesert catchment.
S.PT.2	Beaudesert to Salisbury	Commuters	Continue to advocate for a Salisbury to Beaudesert rail connection.
S.PT.3	Canungra to Gold Coast	Commuters, Visitors	Advocate for improved commuter and visitor services and connections between Canungra and Gold Coast. Investigations of journey to work data and tourism data should be undertaken to determine desired trip origin/destination and what level of services and frequencies are required to service the Canungra catchment.
S.PT.4	Tamborine Mountain to Brisbane and Gold Coast	Visitors	Advocate for improved visitor services and connections between Tamborine Mountain, Brisbane and Gold Coast. Investigations of tourism data should be undertaken to determine desired trip origin/destination and what level of services and frequencies are required to service the Tamborine Mountain catchment.
S.PT.5	Boonah to Ipswich	Commuters	Advocate for improved commuter services and connections between Boonah and Ipswich. Investigations of journey to work data should be undertaken to determine desired trip origin/destination and what level of services and frequencies are required to service the Boonah catchment.
S.PT.6	Region Wide	Commuters, Visitors	Advocate for improved local public transport services. Investigations of journey to work data should be undertaken to determine desired trip origin/destination and what level of services and frequencies are required.
S.PT.7	Internal connecting towns within the Scenic Rim	Local based trips between townships	Advocate for improved local public transport connections linking major towns across the Scenic Rim including Boonah, Beaudesert, Canungra and Tamborine Mountain.

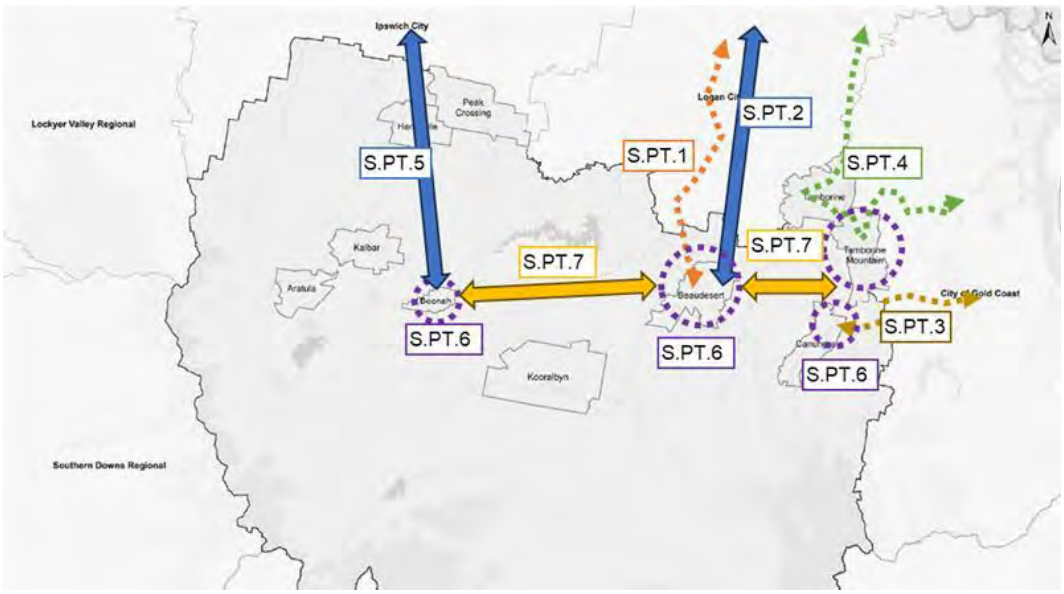


Figure 8.10: Recommended Public Transport Investigations

8.5 Parking

8.5.1 Occupancy

Parking is an issue of significant interest for local communities. Members of the public often raise concerns about parking supply, access to parking, traffic congestion and illegal parking. This can impact residents and tourists alike and can contribute to poor “Place” amenity within centres.

When an area regularly exceeds a parking occupancy level of 85% for extended periods, this is generally an indication that there are not enough car parks for the area and that further intervention is required.

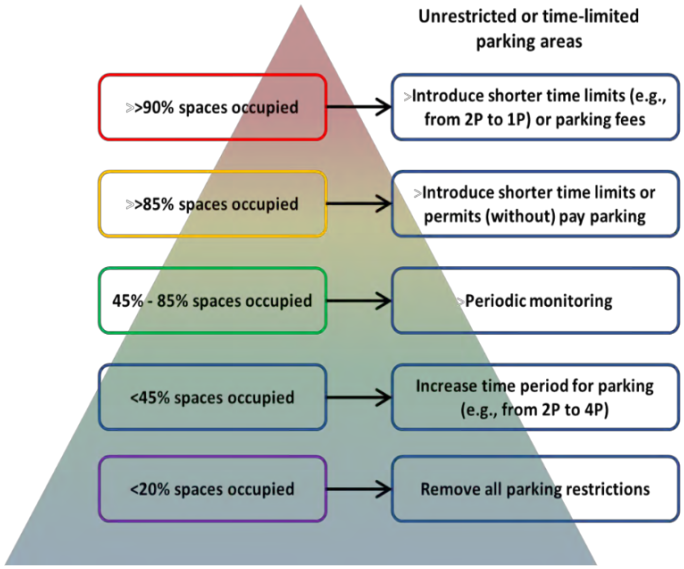


Figure 8.11: Parking Occupancy Considerations

Where 85% occupancy is achieved and maintained, there will typically be convenient and accessible parking spaces available for newly arriving vehicles. When occupancy levels are regularly exceeding 85% it becomes increasingly difficult to find a park and other issues such as congestion begin to emerge.

Alternatively, when demand is low (i.e. regular less than 45% occupancy), and time limits exist this is a sign that parking restrictions may be too restricted or not needed. As such opportunities may exist to allow for longer stay parking.

8.5.2 Policies

Parking policies can help achieve Council statutory obligations with respect to traffic regulation, parking enforcement, planning control and financing. The balance between long and short-stay parking is an important element within each centre. Regulations will be applied to recognise the highest value parking is closest to the centre which in turn should be used by those who would bring the most value to the business in the centre.

Regulations and pricing are often needed to enforce this hierarchy and should account for a person’s stay after they have parked. A 5-minute walk from a car park in the context of an eight-hour work day is vastly different to the needs of a 15-minute drop-in convenience trip where parking in close proximity is of much greater value.

Accordingly, a parking hierarchy approach seeks to promote high turnover customer parking nearest to the centres or businesses with longer-stay parking (typically staff parking) located further away.

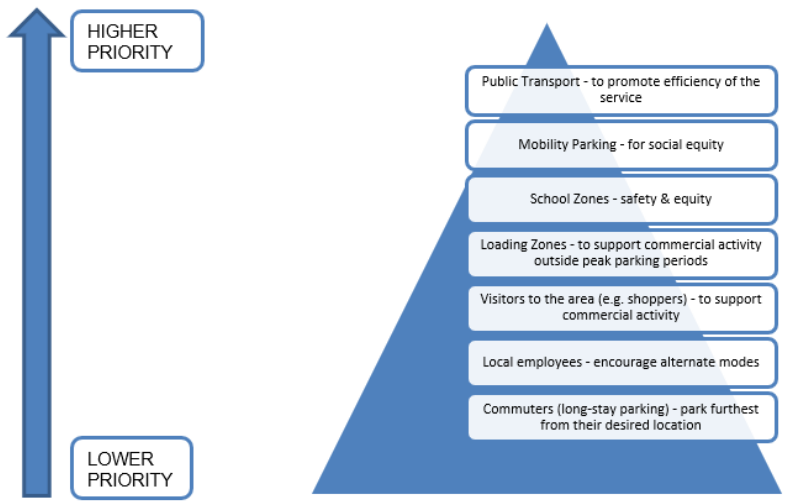


Figure 8.12: Parking Priority Considerations

Developing and implementing a parking management policy framework is critical to ensure the best and highest use is achieved consistently throughout the key centres of the Region. This approach will enable Council to maximise its parking space potential.

There are different tools that can be utilised to manage parking demands in centres. In certain locations with high parking demands the use of time limits alone may not prove effective to ensure the turnover and availability of parking.

As an alternate, the selective use of paid parking needs to be considered as part of our suite of parking management tools.

Actions to deliver on our Kerbside and Parking Management objectives in centres include:

Table 8.9: Identified Road Upgrades – Parking – Region

ID	Location	Associated Need	Recommended Actions
S.PA.1	All Centres	Commuters, Visitors	Adopt a guideline for parking management interventions where parking controls are introduced when parking regularly exceeds 85% of supply
S.PA.2	Tamborine Mountain, Beaudesert, Canungra,	Commuters, Visitors	Prepare and adopt a Parking Strategy to guide the use and allocation of parking based on a prioritisation approach
S.PA.3	All Centres	Commuters, Visitors	Investigate opportunities to improve management and provision of loading zones, disability parking and motorcycle parking

PART 5: LOCAL ROAD NETWORK PLAN

9. OVERVIEW

9.1 Extents

The Local Road Network Plan provides a summary of the key background conditions, analysis and recommendations relevant to the local road networks within towns and villages across the LGA. This is a key component of the Road Network Plan, and ultimately the ITP, given the importance of the road network located within each town and village to the community. Generally, the local road network plan considers “place” elements of the movement and place framework.

The Local Road Network Plan has been applied across 10 towns and villages, being:

- Tamborine Mountain
- Beaudesert
- Boonah
- Canungra
- Kalbar
- Peak Crossing
- Harrisville
- Aratula
- Kooralbyn
- Tamborine.

LRNP summary maps for each town and village are provided at **Appendix D to L**.

Figure 9.1 presents the location of each town and village.

Figure 9.1: Local Road Network Plan – Overview

9.2 Desired Standards of Service

9.2.1 Road Hierarchy

As per Part 4 of the Road Network Plan, a revised road hierarchy is being considered as the desired standard of service for the local road network. For each town and village, this hierarchy has been used to analyse each road segment to determine if:

- The road is currently under designed for the current / future volumes
- The road is currently built to a standard lower than desired (e.g. pavement width).

The details of this assessment are included in below sections.

9.2.2 Intersection Performance

Across the traffic engineering industry, there are identified thresholds nominated for Australian intersections. Importantly, these thresholds are typically designed with major metropolitan areas in mind. The Scenic Rim is characterised by a collection of towns and villages of varying sizes, with the road network primarily consisting of single Arterial routes between and through each town and village. Currently the Region does not experience major network disruptions, delays or queueing in line with major metropolitan centres.

Simply adopting the standard intersection thresholds may result in a situation where intersections operate suitably against measured thresholds; however, may not meet the expectations of the community, who are used to minimal network disruptions, delays or queueing. This aligns with guidance provided in Austroads GTTM Part 3 which states:

> *"The appropriate LOS for a particular jurisdiction will be determined in the context of the policies indicating what are regarded as acceptable levels"*
>
> *"Each jurisdiction would need to develop their own priorities through stakeholder engagement and consultation and assign relative LOS goals for different user types and places based on route type and time of day"*

Based on this, the nominated thresholds for each town and village have been personalised to account for their individual characteristics to ensure operation conditions match community expectations. This has generally been considered in three categories:

Table 9.1: Desired Standards of Service – Intersection Performance

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Lowest Threshold: Applies to Aratula, Harrisville, Kalbar, Kooralbyn and Peak Crossing				
Signalised & Roundabout	B	0.70	20	N/A
Priority-Controlled	B	0.70	15	25
Middle Threshold: Applies to Boonah, Canungra and Tamborine				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35
High Threshold: Applies to Beaudesert and Tamborine Mountain				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

These thresholds and individual performance criteria have been adopted in below sections.

10. TOWNS AND VILLAGES

10.1 Tamborine Mountain

10.1.1 Location & Road Network

Tamborine Mountain is a town located at the north eastern edge of the Scenic Rim LGA, bordering the City of Gold Coast LGA. Tamborine Mountain is characterised by the surrounding tropical rainforest environment, and unique tourist attractions. Due to this, Tamborine Mountain experiences a high level of day trip visits from Brisbane and Gold Coast.

The road network through Tamborine Mountain generally consists of Tamborine Mountain Road (state-controlled, also known as Geissmann Drive and Main Western Road) as the main north-south road for the area. To the north, Tamborine Mountain Road connects to the Tamborine township and through to the Logan LGA. In addition, Tamborine Oxenford Road (state-controlled, also known as Macdonnell Road) connects in from the east, providing a road connection to the Gold Coast LGA.

The Tamborine Mountain road network is shown in Figure 10.1.

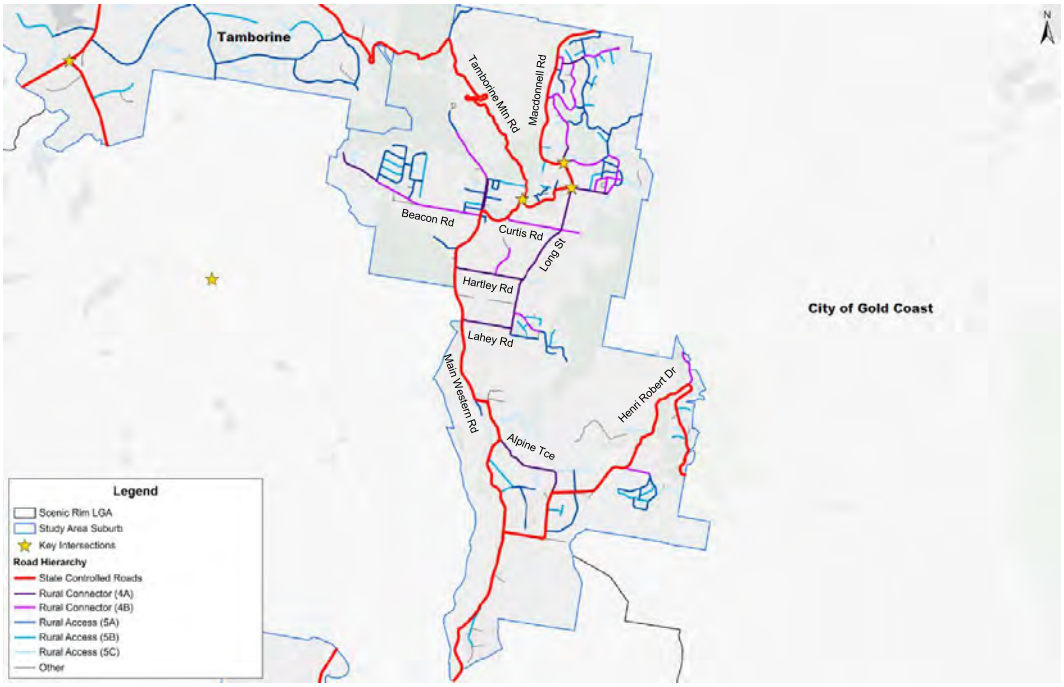


Figure 10.1: Road Network - Tamborine Mountain

Tamborine Mountain is a prominent tourist destination for the Scenic Rim LGA, with Tamborine Mountain and Tamborine attracting 47% of the region's visitors. This has been a key consideration of the Local Road Network Plan, noting that increased tourism affects driver behaviour (due to a high proportion of unfamiliar drivers) and intersection capacity during weekend / peak holiday periods.

Summary maps of the LRNP for Tamborine Mountain are provided at **Appendix D**.

10.1.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Tamborine Mountain.

Whilst there are several "Movement" corridors through Tamborine Mountain, most of these are state-controlled corridors generally related to the movement of people and goods directly associated with Tamborine Mountain (i.e. there is only a very small amount of through traffic).

Based on this, Tamborine Mountain would be characterised as having increased emphasis on "Place" when considering the Movement and Place Framework. The key location where "Place" is prevalent is near Gallery Walk and Main Street which is a focal point for the community, residents, and tourists.

Figure 10.2 presents the locations where key Movement corridors and Place elements of Tamborine Mountain interact, which have been considered throughout the local road network plan.

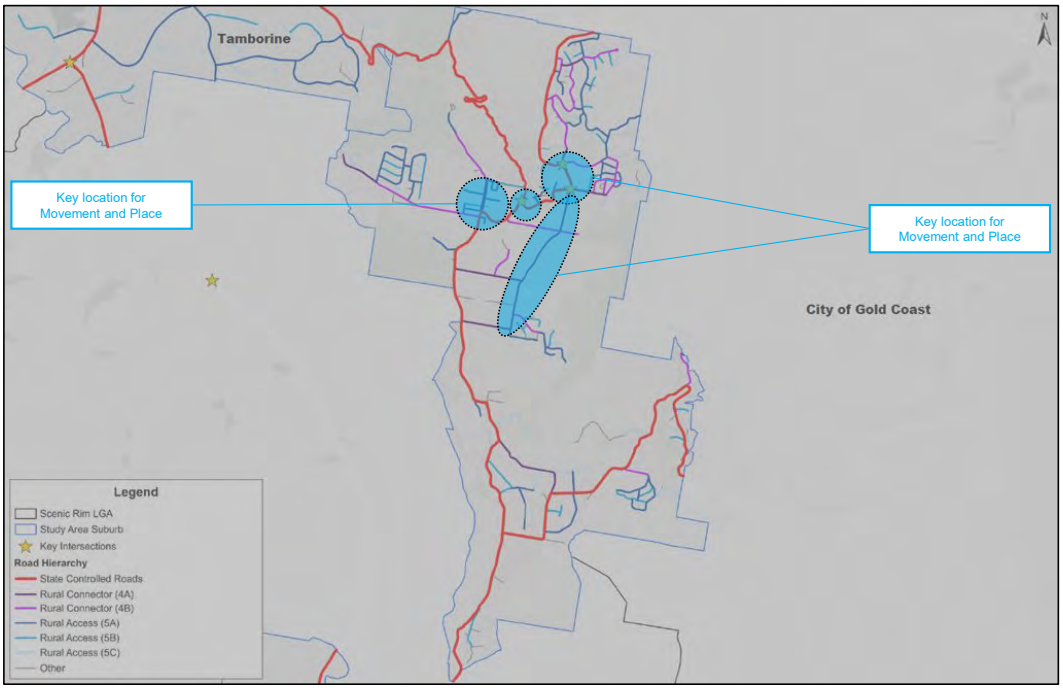


Figure 10.2: Movement and Place Framework - Tamborine Mountain

10.1.3 Safety

10.1.3.1 Crash Review

The crash history in Tamborine Mountain from 1st July 2018 to 30th June 2023 is shown in Figure 10.3.

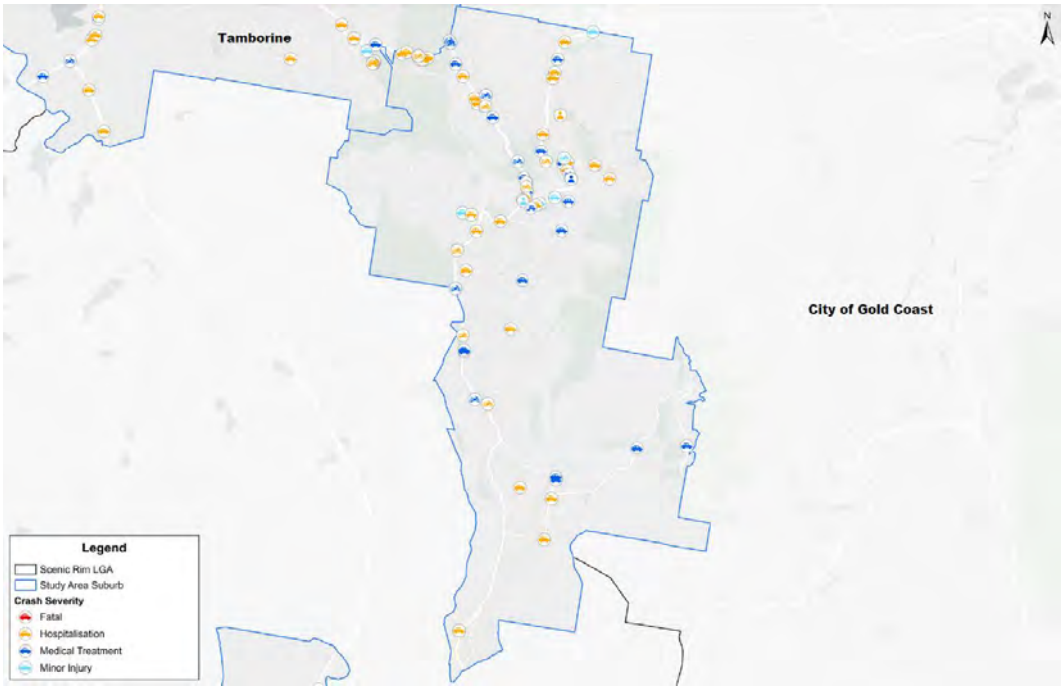


Figure 10.3: Crash History - Tamborine Mountain

Key findings of the crash review and analysis for Tamborine Mountain are as follows:

- A total of 87 crashes were recorded in the locality:
  - 41 crashes (47%) resulted in KSI
  - The predominant crash type was run off road crashes, accounting for 41 crashes (47%) of which 39 resulted in KSI
- A total of 21 crashes were recorded involving motorcycles
  - Ten (10) motorcycle crashes (48%) resulted in KSI
  - The predominant crash type was head-on (DCA 201) accounting for five (5) motorcycle crashes of which two (2) resulted in KSI
- A total of four (4) crashes (5%) were recorded involving active transport users, of which two (2) resulted in KSI.

The above results highlight the importance of considering run off road type crashes around Tamborine Mountain. There is a clear prevalence of this crash type, indicating drivers struggle with the mountainous topography of key roads.

In addition, there is a significant overrepresentation of motorcycle crashes in comparison to the mode share. This is consistent with the prominence of Tamborine Mountain as a destination for motorcyclists and highlights the importance of providing appropriate treatments to accommodate motorcyclists.

10.1.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Tamborine Mountain. A map of the key results is provided in Figure 10.4 and a summary of the key "High" risk rating corridors is provided in Table 10.1.

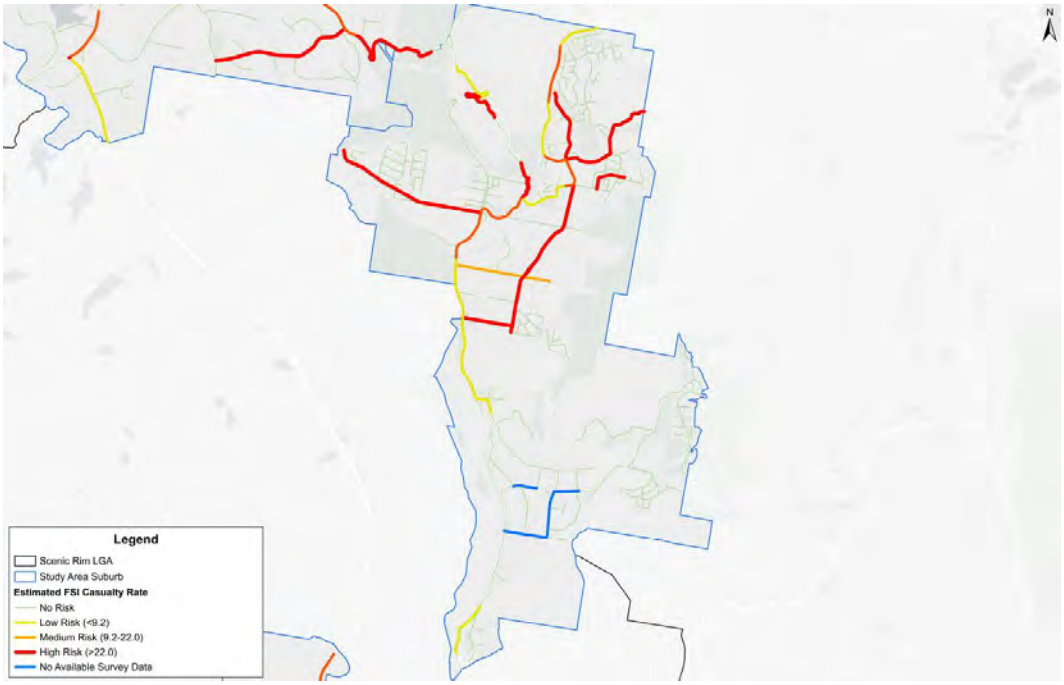


Figure 10.4: Corridor Crash Review - Tamborine Mountain

Table 10.1: QRSTUV Review – Tamborine Mountain

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Tamborine Mountain Road (near Curtis Falls)	14	6	Run off road (8)	Six (6) motorcycle crashes
Tamborine Mountain Road (near Tamborine Rain Forest Skywalk)	8	4	Run off road (7)	Two (2) motorcycle crashes
Long Road	14	4	Rear-end (3)	Two (2) pedestrian crashes
Wongawallan Road	2	2	-	-
Beacon Road	2	1	-	-

Tamborine Mountain Road was found to be a critical road across the wider LGA with a high KSI crash rate. Given this, upgrades are recommended with a specific focus to reduce run off road and motorcycle crashes.

In addition, Long Road is a critical road section, noting the high level of traffic and serving as a "Place" centre for the community. It is understood that Council has proposed improvements along Long Road targeting speed reduction and pedestrian safety, aligning with the key findings of this study.

10.1.4 Road Hierarchy

10.1.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Tamborine Mountain. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.5 and detailed in Table 10.2

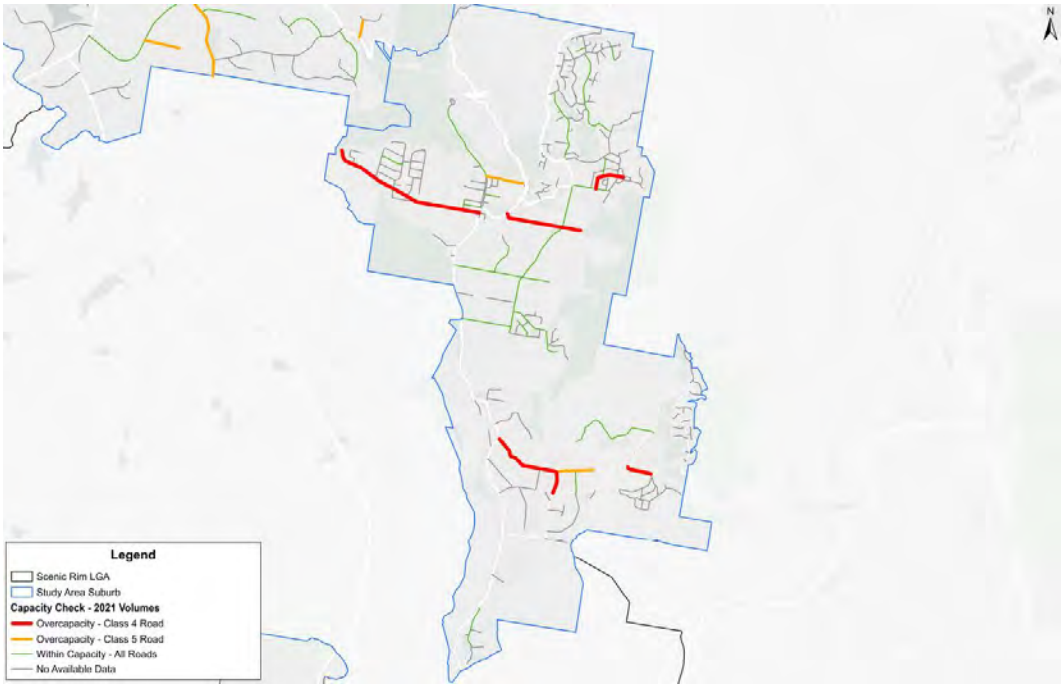


Figure 10.5: Corridor Capacity Review (2021) – Tamborine Mountain

Table 10.2: Capacity Assessment – Tamborine Mountain (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Alpine Terrace	Connector Street (Lot Access) (4A)	3,000	3,960
School Road			3,491
Beacon Road	Access / Collector Street (4B)	1,000	3,137
Southport Avenue			1,328
Golf Course Road			1,110
Curtis Road			1,095

As shown, Beacon Road is significantly over capacity for its defined road hierarchy and requires upgrades to accommodate the existing traffic volumes. It is noted Beacon Road has been identified as a road of concern in the above corridor review.

In addition, Alpine Terrace and School Road (north of Siganto Street) are overcapacity and provide a key link to Henri Robert Drive and Mount Nathan to the east.

Several other higher order roads are nearing capacity or overcapacity and may require hierarchy changes. Future considerations have also been undertaken to determine the level of impact that may be caused as a result of future population growth.

10.1.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Tamborine Mountain for 2041. The 2041 assessment has been based on the strategic modelling undertaken as part of the ITP and considers the planned growth across the LGA.

Results of the 2041 capacity assessment are provided in Table 10.3.

Table 10.3: Capacity Assessment – Tamborine Mountain (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Tamborine Mountain Road	State-controlled	>3,000	~7,000
Long Road (Galley Walk)			~7,500
Tamborine Oxenford Road			~8,000
Long Road (south of Eagle Heights Road)	Connector Street (4A)	3,000	~3,500
Alpine Terrace			~3,400 (no growth from 2021)

The above highlights that Long Road (south of Eagle Heights Road) is a critical corridor. This corridor received increased use during future scenarios, where it was used to avoid delays on Geissmann Drive. In the order of 1,500 veh/day used the Long Road corridor connecting back to the state-controlled network via Lahey Road.

Whilst rat running behaviour should not be encouraged, this route avoids critical “Place” locations, being the Geissman Drive / Eagle Heights Road intersection and the Geissman Drive / Main Road intersection and precinct. In accordance with the movement and place framework, there is a benefit to these trips using Long Road and ultimately Hartley Road to bypass these “Place” locations and still not impact the amenity of the area.

Additionally, Long Road provides access to Tamborine Mountain State School, meaning that some trips are related to the area, and not all trips are ‘rat running’ behaviour.

Therefore, it is recommended Long Road is upgraded to a Trunk Collector Road between Eagle Heights Road and Hartley Road, with this route being used to reduce impacts at key “Place” locations. At the southern end, it is recommended that the hierarchy remains the same, and treatments are provided to discourage the route as a ‘rat run’, ensuring Long Road (south of Hartley Road) and Lahey Road are only used for local trips.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards, to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies were noted on the higher order network, generally aligned with the above roads.

Maps of the deficiencies within Tamborine Mountain are included at **Appendix D**.

10.1.5 Intersection Capacity

Tamborine Mountain includes three (3) study intersections, being:

- Eagle Heights Road / Geissmann Drive (Tamborine Mountain Road)
- Eagle Heights Road / Long Road
- Macdonnell Road & Wongawallan Road / Long Road.

Tamborine Mountain has been considered under the ‘High Threshold’ for intersection operation, given high volumes during peak times, and the community understanding the Tamborine Mountain area being a prominent tourist location.

Furthermore, given the tourist demands on weekends, a scenario has been tested where the surveyed volumes have been factored to account for the increase in tourist traffic.

Detailed traffic analysis for the abovementioned intersections are included at **Appendix M**. The key findings of the detailed traffic analysis are as follows:

Table 10.4: Intersection Assessment – Tamborine Mountain

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
8	Long Road / Wongawallan Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
9	Eagle Heights Road / Long Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
10	Geissmann Drive / Eagle Heights Road	Intersection calibration was unable to replicate impacts and queueing at the intersection. Modelling found limited capacity issues.	Investigate safety enhancements at the intersection to retain as a low speed environment, with increased separation from pedestrian movements, and increased sight lines.		 Increased safety enhancements

10.1.6 Freight

Tamborine Mountain does not include any relevant freight overlays and is not connected to the B-Double Freight Network, given the locality and surrounding topography. The area does not warrant inclusion or connectivity to the freight network. Therefore, no further freight analysis has been undertaken.

10.1.7 Parking

Tamborine Mountain is a key tourist destination, and experiences high levels of weekend and peak holiday trade. As a result, key tourist attractions and parking areas can become busy leading to congestion, delays, and safety impacts.

It is recommended a parking strategy is undertaken for Tamborine Mountain to consider electric vehicle charging, time-limited parking, and alternative strategies for tourists.

10.1.8 Public Transport

There are currently no public transport services within Tamborine Mountain. Given the high volume of tourist trade and the intent to promote the area for interstate and international tourists (who may not have access to a car), it is recommended that the provision for public transport services and infrastructure is investigated for Tamborine Mountain.

10.1.9 Identified Road Upgrades

To address key issues related to Tamborine Mountain detailed herein, the road upgrades listed in Table 10.5 and shown in Figure 10.6 have been considered. The priority of upgrades is included in Part 6.

Table 10.5: Identified Road Upgrades – Tamborine Mountain

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.TM.1	Alpine Terrace	19	Capacity	1.9	Mount Tamborine	4A	T	Rural Connector	Upgrade to Connector Street	+4.9m wide pavement
L.TM.2	School Road	949	Capacity	0.4	Mount Tamborine	4A	T	Rural Connector	Upgrade to Connector Street	+4.9m wide pavement along southern 250m
L.TM.3	Beacon Rd	64	Safety, Capacity	4.4	Mount Tamborine	4B	T	Rural Collector	Upgrade to Trunk Collector Road	+1.0m wide pavement
L.TM.4	Long Road (south of Eagle Height Drive)	1271	Safety, Capacity	1.8	Mount Tamborine	4B	T	Rural Collector	Upgrade to Trunk Collector Road	+0.5-2.0m wide pavement
L.TM.5	Curtis Road	257	Capacity	1.3	Mount Tamborine	4B	T	Rural Collector	Upgrade to Connector Street	+2.6 wide pavement
L.TM.6	Long Road (south of Curtis Road)	1271	Movement and Place, Safety, Capacity	2	Mount Tamborine	4B	T	Rural Collector	No upgrade to hierarchy Install LATM treatments to reduce rat running on this road	
L.TM.7	Lahey Road	603	Movement and Place, Safety, Capacity	0.9	Mount Tamborine	4A	T	Rural Connector	No upgrade to hierarchy Install LATM treatments to reduce rat running on this road	
L.TM.8	Hartley Road	464	Movement and Place, Safety, Capacity	1.7	Mount Tamborine	4A	T	Rural Connector	Upgrade to Connector Street	+5.4m wide pavement
L.TM.9	Southport Avenue	986	Safey, Capacity	0.4	Mount Tamborine	4B	T	Rural Collector	Upgrade to Connector Street	+2.6m wide pavement
L.TM.10	Golf Course Road	418	Capacity	0.6	Mount Tamborine	5D	T	Rural Access	Upgrade to Connector Street	+5.6m wide pavement
L.TM.11	Long Road (North of MacDonnell Road)	1271	Built Standard	1.3	Mount Tamborine	4B	T	Rural Collector	Upgrade road standard to match Connector Street	+4.6m wide pavement
L.TM.12	Contour Road	234	Built Standard	1.5	Mount Tamborine	4B	T	Rural Collector	Upgrade road standard to match Collector Street	+2.5m wide pavement

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.TM.13	Magnetic Drive	658	Built Standard	1.1	Mount Tamborine	4A	T	Rural Connector	Upgrade road standard to match Connector Street	+4.6m wide pavement
L.TM.14	Knoll Road	587	Built Standard	1.4	Mount Tamborine	4B	T	Rural Collector	Upgrade road standard to match Collector Street	+2.3m wide pavement
L.TM.15	Tamborine Mountain Road	State-Controlled	Safety	4.2	Mount Tamborine	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L.TM.16	Eagle Heights Road	310	Safety	0.6	Mount Tamborine	4A	T	Rural Connector	Recommend investigating LATM measures near Geissman Drive	

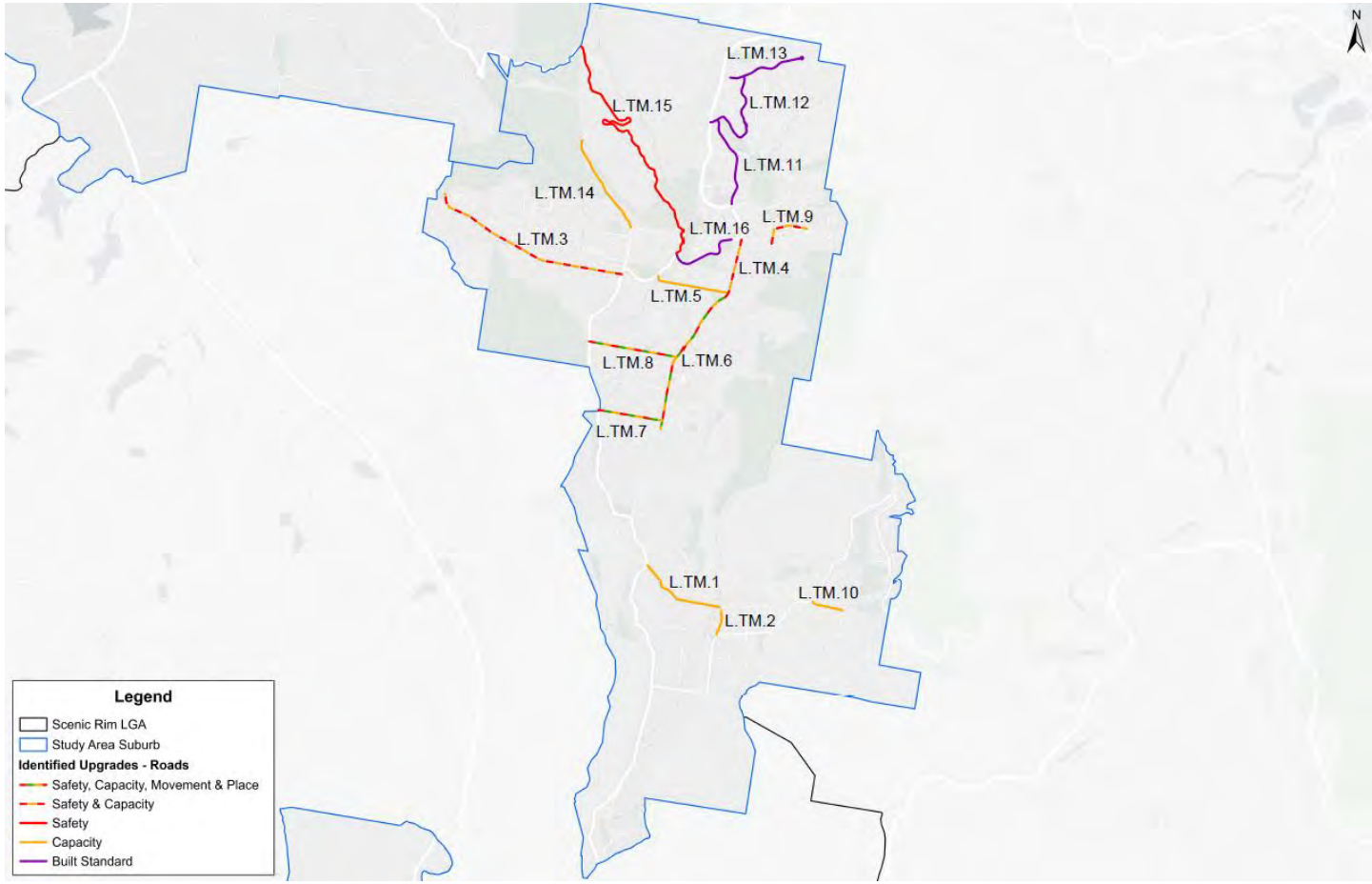


Figure 10.6: Identified Road Upgrades – Tamborine Mountain

10.2 Beaudesert

10.2.1 Location & Road Network

Beaudesert is the largest urban area of the Scenic Rim LGA, located approximately 70km south of Brisbane. Beaudesert serves as a hub for the surrounding townships and is considered the gateway to the Scenic Rim region, characterised by its agricultural heritage with cropping, farming and livestock.

Beaudesert is a key connection point for major routes, with Mount Lindsay Highway (state-controlled, also known as Brisbane Street) being the main north-south route connecting to the Logan LGA to the north. In addition, Beaudesert Boonah Road (state-controlled, also known as Bromelton Street) and Beaudesert Nerang Road (state-controlled, also known as Albert Street) are the main east-west routes.

The existing Beaudesert road network is shown in Figure 10.7.

Figure 10.7: Road Network – Beaudesert

As Scenic Rim's largest urban area with a continuing growth in population with new housing developments, land releases and Master planned communities, congestion in Beaudesert is expected to worsen particularly along Mount Lindsay Highway, being the primary route connecting Beaudesert to Brisbane.

There is a varied mix of traffic along key roads in and around Beaudesert, accommodating residents, tourists, and freight movements on major corridors. This highlights the importance of a strong transport network which segregates user classes where possible to maintain efficiency and safety in accordance with the principles and policies of the ITP.

Summary maps of the LRNP for Beaudesert are provided at **Appendix E**.

10.2.2 Movement & Place

The review undertaken as part of the Strategic Network Plan *did* highlight the need for new "Movement" corridors within Beaudesert as shown in Figure 10.8, which includes:

- The Bromelton Bypass – considered separately in Part 4
- Eastern Ring Road – as per works undertaken by Crossley Transport Planning in 2024.

Figure 10.8: Beaudesert Eastern Ring Road

The Eastern Ring Road connects directly to planned new residential allotments, as outlined in Council's *Growth Management Strategy 2041* (2022). The intent of the Eastern Ring Road aligns directly with the considerations of the Movement and Place Framework for Beaudesert.

Currently, Brisbane Road and William Street / Albert Street carry a large amount of through traffic that passes through Beaudesert. This limits the "Place" promotion within the centre of Beaudesert as these roads contain high volumes of traffic which reduce amenity. The intent of the Eastern Ring Road, in combination with other recently completed treatments, seeks to implement the following movement and place strategy:

- The recently built Beaudesert Bypass Road to the west carries higher order traffic travelling north / west (or vice versa), with approximately 1,000vpd (high proportion of heavy vehicles)
- The northern portion of the Eastern Ring Road (between Mount Lindesay Highway and Beaudesert Nerang Road) provides a direct connection for new development land, ensuring traffic does not travel through the Beaudesert town centre.
  - Although not a bypass for external traffic, it will accommodate up to 12,000 dwelling or up to 5,000vpd (along separate sections)
- The southern portion of the Eastern Ring Road (between Beaudesert Nerang Road, Kerry Road, and Mount Lindesay Highway) provides a direct connection for new development land south-east of Beaudesert, ensuring traffic does not travel through the Beaudesert town centre.
  - It is estimated to accommodate in the order of 5,000vpd to 7,000vpd.

The above reduces through traffic in the Beaudesert town centre, confining trips to the new "Movement" corridors. This will serve to increase the "Place" amenity of the Beaudesert town centre.

10.2.3 Safety

10.2.3.1 Crash Review

The crash history in Beaudesert from 1st July 2018 to 30th June 2023 is shown in Figure 10.9.

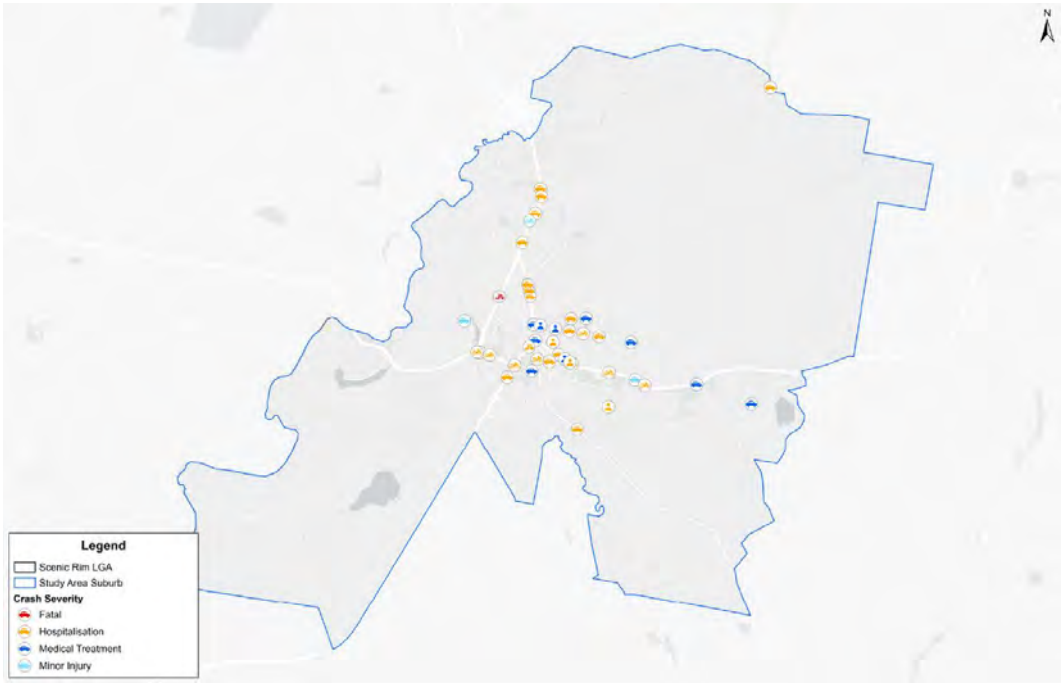


Figure 10.9: Crash History – Beaudesert

Key findings for the crash review and analysis for Beaudesert are:

- A total of 59 crashes were recorded in the locality:
  - 37 crashes (63%) resulted in KSI including one (1) fatality
  - The fatality crash occurred in 2020 along the Beaudesert Bypass Road and was recorded as head-on (DCA 201) between a truck and car resulting in two (2) fatalities
  - The predominant crash type was at intersections accounting for 23 crashes (39%) of which 16 resulted in KSI
- A total of nine (9) crashes (15%) were recorded involving motorcycles of which eight (8) resulted in KSI
  - Upgrade treatments in the Beaudesert area should actively consider motorcycle users
- A total of eight (8) crashes (14%) were recorded involving active transport users of which four (4) resulted in KSI.

The above results highlight the importance of considering intersection type crashes around Beaudesert. There is a clear prevalence of this crash type, indicating that drivers are not being cautious around key Beaudesert intersections.

In addition, there is an overrepresentation of motorcycle crashes in comparison to the standard mode share. This is consistent with the prominence of Beaudesert as a destination for motorcyclists and highlights the importance of providing appropriate treatments to accommodate motorcyclists.

10.2.3.2 Corridor Review

A review of the crash history and road corridors was undertaken TMR's QRSTUV Guide to Speed Management (2023) for Beaudesert. A map of the key results is provided in Figure 10.10 and a summary of the key "High" risk rating corridors is provided in Table 10.6.

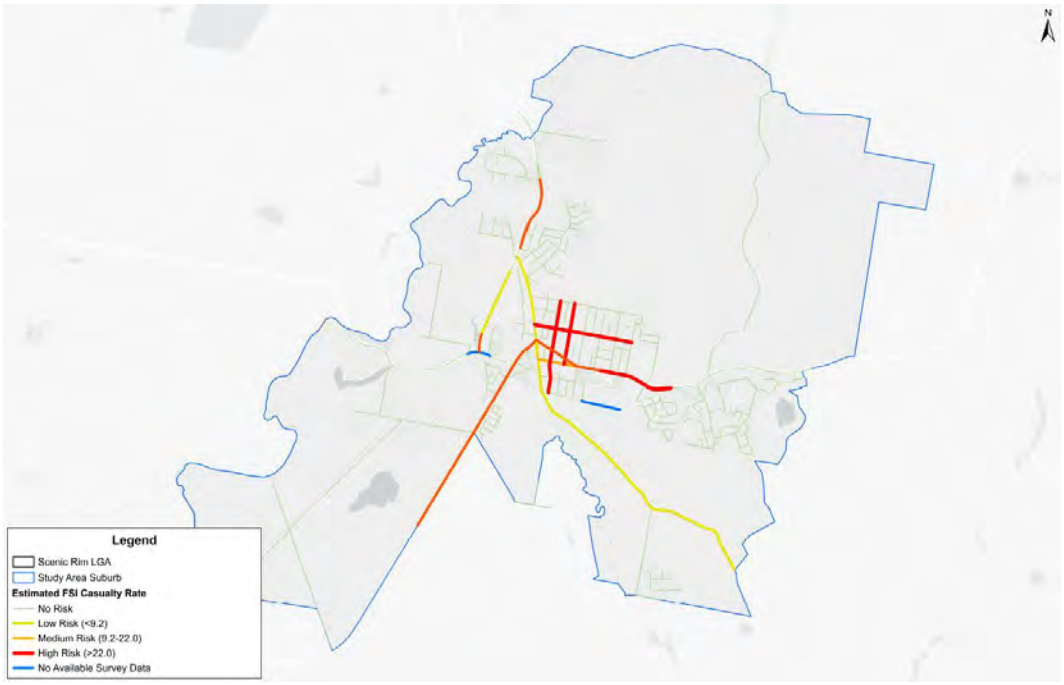


Figure 10.10: Corridor Crash Review - Beaudesert

Table 10.6: QRSTUV Review – Beaudesert

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Eaglesfield Street	9	4	Intersection (5)	Two (2) pedestrian crashes
Beaudesert Nerang Road (from Arthur Street to Oakland Way)	7	5	Intersection (4)	Two (2) motorcycle crashes
Anna Street	5	3	Intersection (3)	Two (2) pedestrian crashes
Duckett Street	4	2	Intersection (2)	-

A number of roads within Beaudesert were found to be critical, with a high occurrence of crashes and KSI crash rate. Given this, upgrades are recommended with a specific focus to reduce crashes at intersections and motorcycle crashes.

The key KSI crashes along Eaglesfield Street and Anna Street typically occur at uncontrolled four-way intersections. It is recommended these intersections be upgraded to roundabouts to increase safety in accordance with Safe Systems principles.

10.2.4 Road Hierarchy

10.2.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Beaudesert. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.11 and detailed in Table 10.7.

Figure 10.11: Corridor Capacity Review – Beaudesert (2021)

Table 10.7: Capacity Assessment – Beaudesert (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Brisbane Street	Trunk Collector (No Lot Access)	>3,000	4,522
Albert Street	Connector Street (4A)	3,000	3,263
McKee Street	Access / Collector Street (4B)	1,000	3,010
Short Street			1,650
Tubber Street			1,152
Kingsley Drive	Township Road (5A)	500	1,166
Duckett Street			733
Boundary Street			616
Helen Street			698

The above highlights that several streets are over capacity; however, generally, all roads are built to carry the volume of traffic they are carrying. Albert Street and McKee Street are over capacity given their current hierarchy, which is expected given their use as a pseudo southern bypass.

10.2.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Beaudesert for 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Scenarios were considered for: with and without the Bromelton Bypass and with and without the Eastern Ring Road, to understand the potential impacts either way, and identify key triggers and thresholds regarding the provision of the Eastern Ring Road.

Results of the 2041 capacity assessment are detailed in Table 10.8 and shown in Figure 10.12 and Figure 10.13.

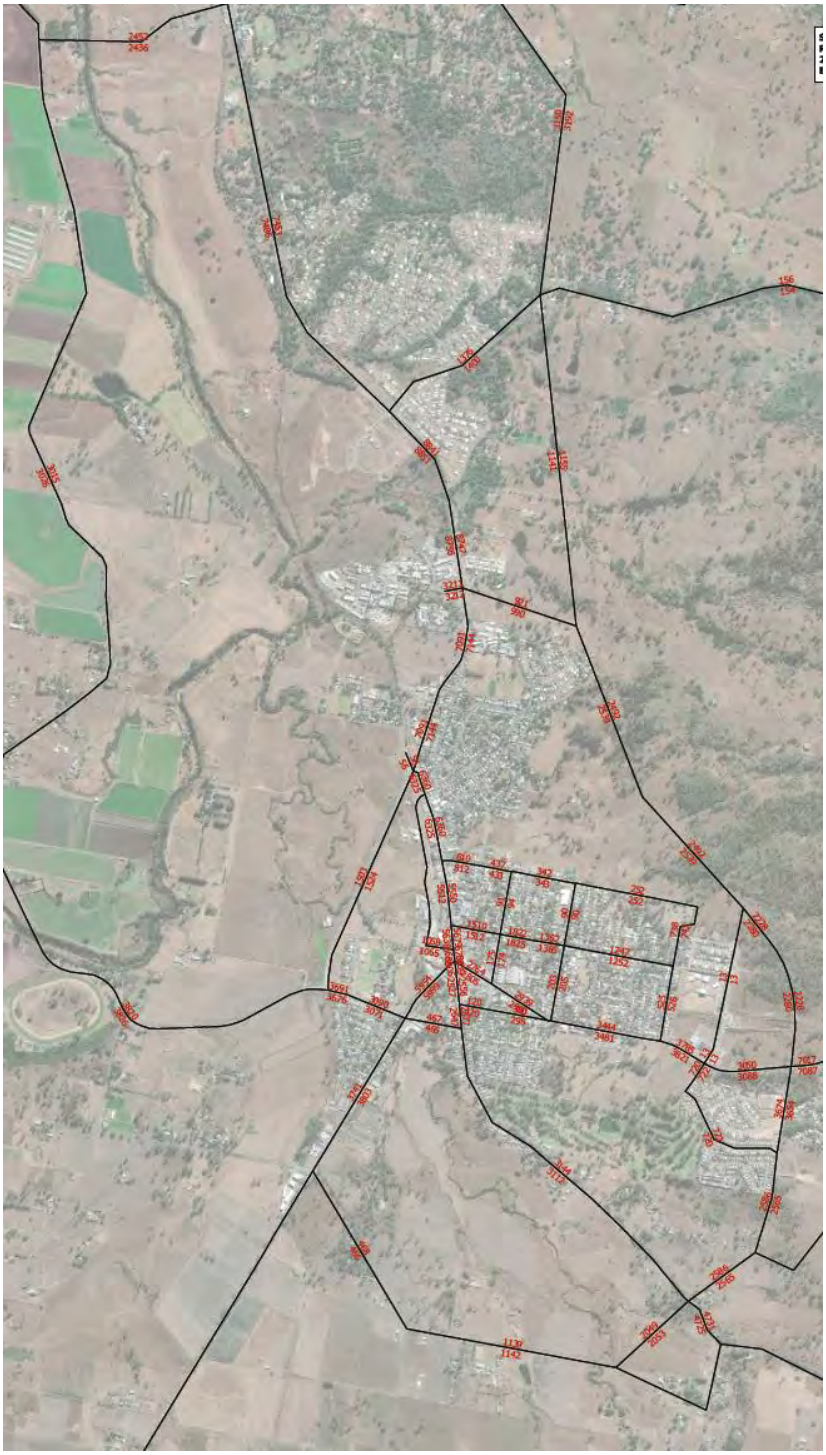


Figure 10.12: Daily Volume Plots – Beaudesert 2041 – Without Bromelton Bypass and With Eastern Ring Road

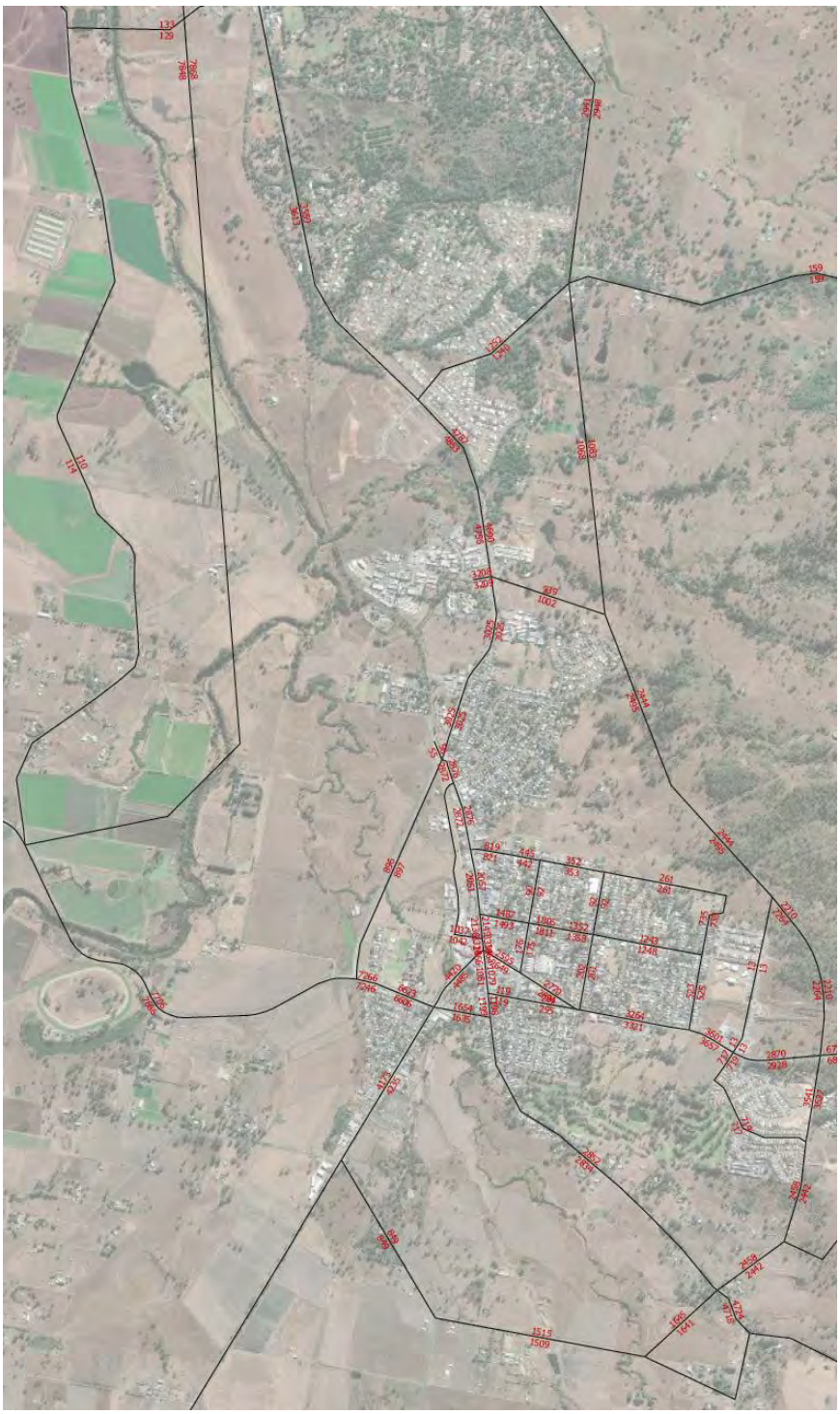


Figure 10.13: Daily Volume Plots – Beaudesert 2041 – With Bromelton Bypass and With Eastern Ring Road

Table 10.8: Capacity Assessment – Beaudesert (2041) – With Bromelton Bypass and Eastern Ring Road

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment – Assumes Eastern Ring Road is Constructed			
Beaudesert Boonah Road	State-controlled	-	~15,300
Beaudesert Nerang Road			~13,500
Mount Lindesay Highway (north of Brisbane Street)			~9,500
Mount Lindesay Highway (south of Brisbane Street)			~8,400
Brisbane Street	Trunk Collector (No Lot Access)	>3,000	~4,000-5,600
Kerry Road	Trunk Collector (Lot Access)	3,000	~5,700
Eaglesfield Street			~3,600
Eastern Ring Road (northern portion)	N/A	-	~5,000
Eastern Ring Road (southern portion)			~5,000
Eastern Ring Road (southern portion, Sullivan Road)	Rural Access	500	~3,000
Eastern Ring Road (southern portion, Cryna Road)			~1,700
McKee Street	Collector / Access Street	1,000	~3,200

As shown, the Bromelton Bypass is expected to carry in the order of 15,000vpd once constructed. Once the Bromelton SDA is operational, in combination with the Eastern Ring Road, this provides quality alternative options surrounding Beaudesert, therefore reducing volumes on Brisbane Street in the Beaudesert town centre and improving “Place” amenity.

The above highlights that several roads are expected to be overcapacity by 2041 with consideration to the bypasses being constructed, notably Kerry Road and McKee Street. The above also identifies the road hierarchy standards for the Eastern Ring Road to accommodate expected traffic demands.

In addition to capacity checks, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies were noted on the higher order network, generally aligned with the above roads.

10.2.4.3 Eastern Ring Road Sequencing

The above scenario testing identified several key thresholds which has informed the recommended sequencing for the Eastern Ring Road shown in Figure 10.14.

Key findings are as follows:

- Northern portion (Mount Lindesay Highway to Beaudesert Nerang Road) should be constructed in the short term, generally as per the ultimate alignment
  - The key change being at the connection with Beaudesert Nerang Road is recommended to be via Oakland Way until volumes exceed 3,000vpd. This should then be replaced with a new north-south link to Beaudesert Nerang Road with a new intersection
- Southern portion (Beaudesert Nerang Road to Kerry Rd) should be constructed in the short term
  - The existing roads of Kingsley Drive and Serena Drive should be used until volumes exceed 3,000vpd. This should then be replaced with a new north-south link to Beaudesert Nerang Road with a new intersection
- South-western portion (Kerry Road to Mount Lindesay Highway) should be constructed in the long term.

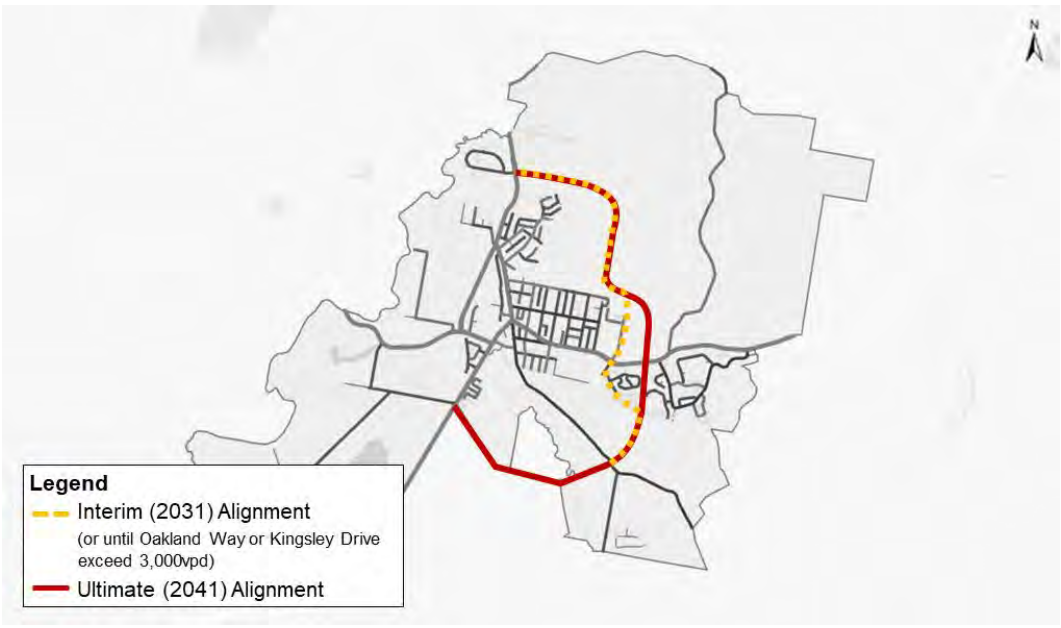


Figure 10.14: Eastern Ring Road Sequencing

10.2.5 Kerry Road, Beaudesert

Kerry Road provides an Arterial link to planned growth to the south of Beaudesert, which is anticipated to accommodate up to 9,500 additional lots. Based on EMME modelling completed across the LGA, Kerry Road is predicted to carry:

- ~6,000 vpd between township and Eastern Ring Road via Brisbane Street and Kerry Road
- ~10,000 vpd south of the Eastern Ring Road, to the edge of the PIA.

Kerry Road is not currently constructed to a standard capable of accommodating the high volumes of peak hourly and daily traffic anticipated in the future and it is recommended that the corridor is upgraded to an Arterial Road standard to accommodate the planned growth and ensure that road capacity constraints do not reduce the potential for development to occur (see Section 12.3).

10.2.6 Intersection Capacity

Beaudesert includes six (6) study intersections, being:

- Mount Lindsay Highway / Brisbane Street
- Mount Lindsay Highway / Enterprise Drive
- Telemon Street / Bromelton Street
- Brisbane Street / Tubber Street
- Beaudesert Nerang Road / Brooklands Drive (West)
- William Street / Albert Street
- Beaudesert Nerang Road / Brooklands Drive (West)
- Mount Lindesay Highway / Beaudesert Bypass Road.

Beaudesert has been considered under the 'High Threshold' for intersection operation, given high volumes during peak times, and Beaudesert being the main hub for the Scenic Rim region.

Detailed traffic analysis for the abovementioned intersections are included at **Appendix M**. The key findings of the detailed traffic analysis are as follows.

Table 10.9: Intersection Assessment – Beaudesert

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
2	Brisbane Street / William Street	N/A	N/A		
6	Mount Lindesay Highway / Enterprise Drive	Intersection predicted to operate above desired standards of service thresholds, but below practical operating thresholds in 2041 scenarios.	No upgrades recommended.		
7	Bromelton Street / Telemon Street	Intersection predicted to fail in 2041 scenarios due to movements along Bromelton Street. This is largely dependent on the development at Kerry Road and Bromelton SDA.	Investigate upgrades to a signalised layout, and possible combination with McKee Street intersection. Note, this will only be required if/when development occurs in key locations.		
12	Brisbane Street / Tubber Street	Intersection predicted to fail in 2041 scenarios – with movements on Tubber Street experiencing high delays.	Investigate upgrades to a left in / left out arrangement. This is expected to reduce 'rat running' with a suitable alternative provided 150m south at Selwyn Street.		 Left In / Left Out only
15	Beaudesert Nerang Road / Brooklands Drive (West)	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
16	William Street / Albert Street	Intersection predicted to fail in 2041 scenarios. However, modelling is expected to overstate potential impacts.	Investigate upgrades to a signalised layout, with pedestrian crossings.		
19	Mount Lindesay Highway / Beaudesert Bypass Road	Intersection is predicted to operate adequately in 2041, with moderate delays.	No upgrades recommended.		

10.2.7 Freight

Beaudesert is considered an important agricultural area with agricultural zoning on the western and southern outskirts of the town centre. A key industrial area for the region is located at the northern end of Beaudesert within the Enterprise Drive catchment.

Importantly, Beaudesert includes several B-Double Freight Network Roads as listed below:

- Mount Lindsay Highway / Telemon Street
- Beaudesert Boonah Road / Bromelton Street
- Beaudesert Nerang Road / William Street / Albert Street.

Refer to Part 4 of this document, which details freight network recommendations.

10.2.8 Parking

Beaudesert is a key employment centre and key tourist destination, resulting in increased parking demand within the Beaudesert town centre.

It is recommended a parking strategy is undertaken for Beaudesert, with a particular emphasis on Brisbane Street, William Street and surrounding local streets, to promote the “Place” amenity within the Beaudesert town centre. This should prioritise parking along key streets for short stay visitors, whilst also providing adequate connections to long stay parking provided on the fringes of the centre.

This should consider facilities such electric vehicle charging, time-limited parking and alternative strategies for tourists, in line with the above recommendations.

10.2.9 Public Transport

Currently, public transport services and infrastructure are limited within Beaudesert. Given the high volume of residents travelling to Logan, Brisbane and Ipswich for work and the increased growth expected in the area, it is recommended that the provision of public transport services and infrastructure is investigated for Beaudesert. This should include consideration of additional bus services, and ultimately a heavy rail line as per TMR’s *Salisbury to Beaudesert Passenger Rail Summary Report* (2024).

10.2.10 Identified Road Upgrades

To address key issues related to Beaudesert detailed herein, the road upgrades listed in Table 10.10 and shown in Figure 10.15 have been considered. The priority of the upgrades is included in Part 6.

Table 10.10: Identified Road Upgrades – Beaudesert

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.BE.1	Eastern Ring Road (northern portion – Mount Lindesay Highway to Beaudesert Nerang Road)	N/A	Movement and Place, Capacity	4.0-5.0 (incl. connections)	Beaudesert	Trunk Collector (No Lot Access)	-	Trunk Collector (No Lot Access)	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement
L.BE.2	Eastern Ring Road (southern portion – Beaudesert Nerang Road to Kerry Road)	N/A	Movement and Place, Capacity	1.7	Beaudesert	Trunk Collector (No Lot Access)	-	Trunk Collector (No Lot Access)	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement
L.BE.3	Eastern Ring Road (southern portion – Sullivan Road)	N/A	Movement and Place, Capacity	1.8	Beaudesert	Trunk Collector (No Lot Access)	-	Trunk Collector (No Lot Access)	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement
L.BE.4	Eastern Ring Road (southern portion – Cryna Road)	N/A	Movement and Place, Capacity	1.1	Beaudesert	Trunk Collector (No Lot Access)	-	Trunk Collector (No Lot Access)	Provide as Connector Street	New road with 11.6m wide pavement
L.BE.5	Brisbane Street	129	Movement and Place, Capacity	1.0	Beaudesert	4A	T	Rural Connector	Increase LATM to promote “Place” amenity	-
L.BE.6	McKee Street	692	Movement and Place, Capacity	0.3	Beaudesert	4B	T	Rural Collector	Upgrade to Trunk Collector (No Lot Access)	+1.2m wide pavement
L.BE.10	Eaglesfield Street / Duckett Street Intersection	316, 295	Safety	N/A	Beaudesert	4A & 5A	T / T	Rural Connector / Rural Access	Install roundabout	
L.BE.11	Eaglesfield Street / Tina Street Intersection	316, 1073	Safety	N/A	Beaudesert	4A & 4B	T / T	Rural Connector / Rural Collector	Install roundabout	

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.BE.12	Eaglesfield Street / Arthur Street Intersection	316, 34	Safety	N/A	Beaudesert	4A & 5A	T / T	Rural Connector / Rural Access	Install roundabout	
L.BE.13	Albert Street / Anna Street intersection	34, 25	Safety and Capacity	N/A	Beaudesert	5A & 5B	T / T	Rural Access	Install roundabout	
L.BE.14	Beaudesert Nerang Road / Eastern Ring Road intersection	N/A	Movement and Place, Capacity	N/A	Beaudesert	-	-	State-Controlled / State-Controlled	Install signals or roundabout	
L.BE.15	Short Street	969	Capacity	0.3	Beaudesert	5C	T	Rural Access	Upgrade hierarchy to Connector Street	No physical widening needed
L.BE.16	Kingsley Drive	581	Capacity	0.2	Beaudesert	5A	T	Rural Access	Upgrade to Connector Street	+1.8m wide pavement
L.BE.17	Duckett Street	295	Capacity	0.8	Beaudesert	5A	T	Rural Access	Upgrade to Connector Street	+1.1m wide pavement
L.BE.18	Boundary Street	111	Capacity	0.7	Beaudesert	5A	T	Rural Access	Upgrade to Connector Street	+1.9m wide pavement
L.BE.19	Helen Street	476	Capacity	1.5	Beaudesert	5C	T	Rural Access	Upgrade to Connector Street	+5.5m wide pavement
L.BE.20	Lupton Road	650	Built Standard	1.9	Beaudesert	5B	R	Rural Access	Upgrade road standard to match Rural Access (5B) hierarchy	+6.2m wide pavement, +2.1m formation width
L.BE.21	Kargorum Road	558	Built Standard	2.1	Beaudesert	5A	R	Rural Access	Upgrade road standard to match Rural Access (5A) hierarchy	+2.2m wide pavement
L.BE.22	Birnam Range Road	90	Built Standard	4.5	Beaudesert	5B	R	Rural Access	Upgrade road standard to match Rural Access (5B) hierarchy	+6.2m wide pavement, +2.1m formation width
L.BE.23	Tubber St	1085	Built Standard, Capacity	0.9	Beaudesert	5A	T	Rural Access	Upgrade road standard to match Collector Street hierarchy	+1.7m-2.5m wide pavement
L.BE.24	Brisbane Street / Tubber Street	129, 1085	Safety, Capacity	N/A	Beaudesert	4A & 5A	T	Rural Connector / Rural Access	Convert to left in / left out layout	

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.BE.25	Kerry Road	570	Safety, Capacity, Built Standard, Freight	5.0	Beaudesert	4A	R	Rural Connector	Upgrade to Arterial Road	+1.9m-3.2m wide pavement

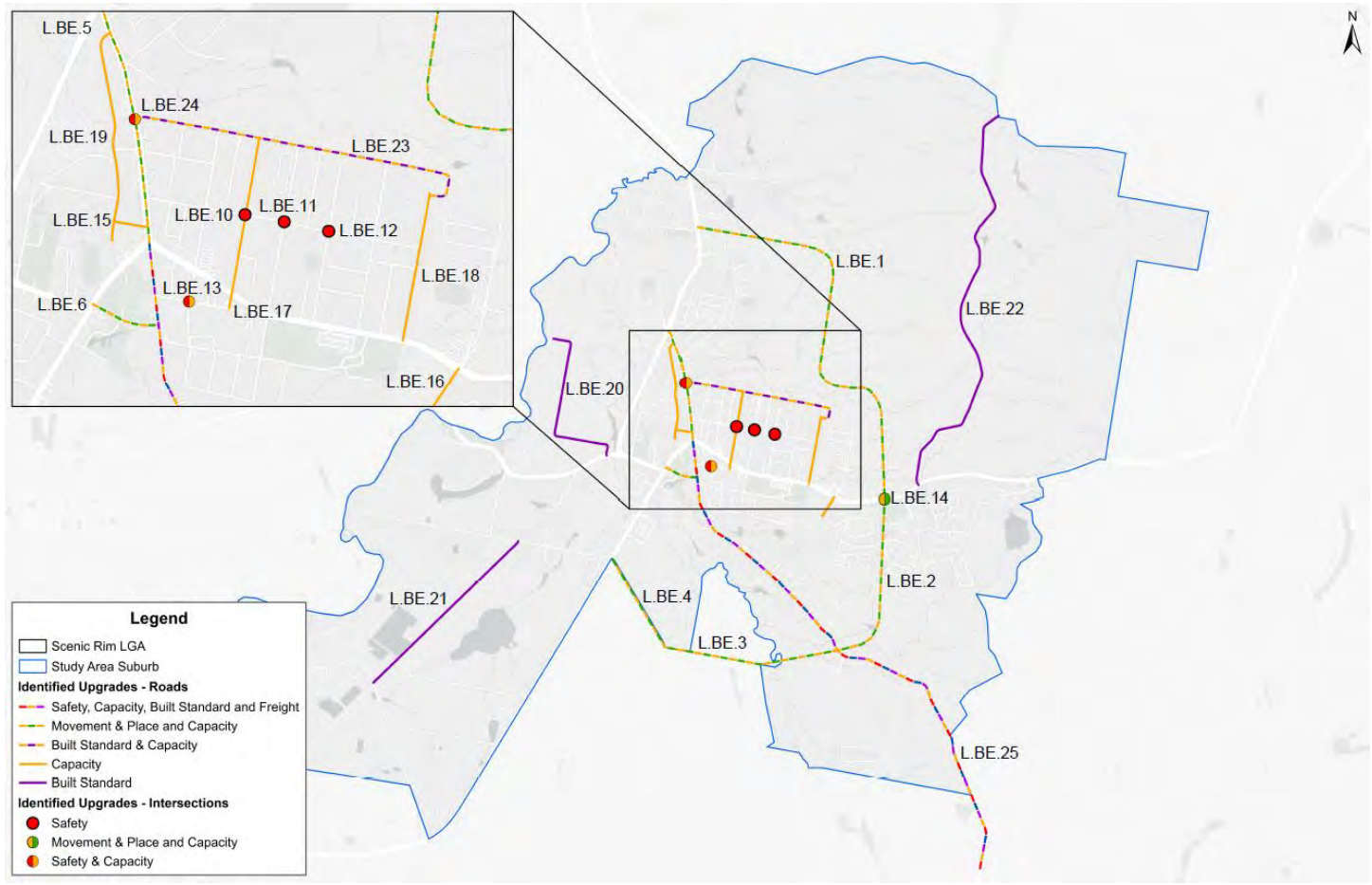


Figure 10.15: Identified Road Upgrades – Beaudesert

10.3 Boonah

10.3.1 Location & Road Network

Boonah is a small local centre, located in the western region of the Scenic Rim LGA, situated in the approximately 45km south of Ipswich, which is the nearest major centre. Closely located to the Main Range National Park, Boonah is known as the gateway to outdoor activities such as hiking, camping and wildlife watching.

Boonah Fassifern Road / Ipswich Boonah Road is the main east-west route (state-controlled, also known as Coronation Drive), providing a direct connection to the Cunningham Highway to the west. Boonah Rathdowney Road starts in Boonah and is the main north-south connection to the south.

The Boonah road network is shown in Figure 10.16.

Figure 10.16: Road Network - Boonah

Typically, Boonah has a higher percentage of heavy vehicles travelling through the town centre due to its location and being a key transportation route for agricultural goods.

Summary maps of the LRNP for Boonah are provided at **Appendix F**.

10.3.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Boonah.

Whilst there are two (2) main "Movement" corridors through Boonah, the state-controlled corridors are generally related to the movement of people and goods to / from or through the Boonah area (i.e. a large portion of traffic is through traffic). Based on this, Boonah would be characterised as having an increased emphasis on "Movement" when considering the Movement and Place Framework.

The key "Place" locations are south of the Boonah Fassifern Road / Ipswich Boonah Road & Boonah Rathdowney Road intersection in the Boonah town centre. This location is a focal point for residents and travellers heading south.

A key concern for Boonah is key attractors for active transport users being located along Boonah Rathdowney Road, with a high density of shops and businesses located along the state-controlled corridor. This conflicts with the “Movement” corridor, which has been considered below.

10.3.3 Safety

10.3.3.1 Crash Review

The crash history in Boonah from 1st July 2018 to 30th June 2023 is shown in Figure 10.17.

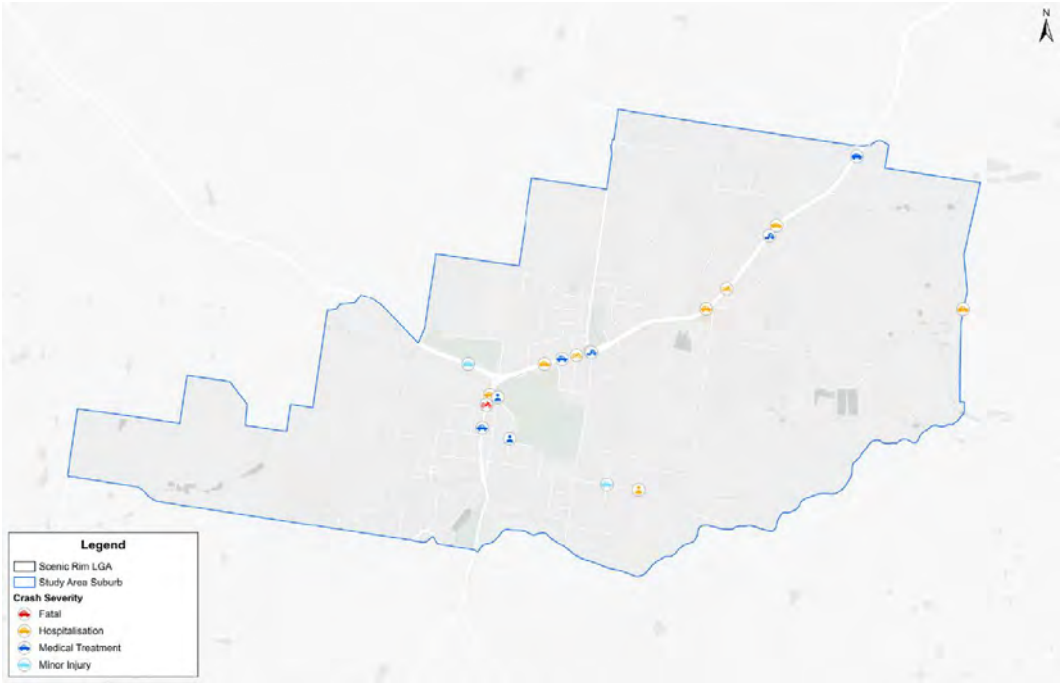


Figure 10.17: Crash History- Boonah

Key findings of the crash review and analysis for Boonah are as follows:

- A total of 19 crashes were recorded in the locality:
  - Nine (9) crashes (47%) resulted in KSI including one (1) fatality
  - The fatality crash occurred in 2022 along Boonah Rathdowney Road and was recorded as an overtaking head-on crash (DCA 501) between a car and motorcycle resulting in one (1) fatality
  - The predominant crash type was run off road crashes accounting for six (6) crashes (32%) of which five (5) resulted in KSI
- A total of three (3) crashes (16%) were recorded involving motorcycles and all resulted in KSI including the fatality crash
- A total of three (3) crashes (16%) were recorded involving active transport users of which one (1) resulted in KSI.

The above results highlight the importance of considering off road type crashes on the outskirts of Boonah and considering intersection and pedestrian type crashes near key “Place” locations.

10.3.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Boonah. A summary map of the key results is provided in Figure 10.18 and a summary of the key "High" risk rating corridors is provided in Table 10.11.

Figure 10.18: Corridor Crash Review - Boonah

Table 10.11: QRSTUV Review – Boonah

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Boonah Rathdowney Road	3	2	-	-
Ipswich Boonah Road / Coronation Drive	10	5	Run off road (5)	Two (2) motorcycle crashes

Boonah Rathdowney Road was found to be a critical road within Boonah with a very high crash and KSI rate. Boonah Rathdowney Road is a critical road section for Boonah, containing a high level of traffic as well as serving as a "Place" centre for the community. Given this, further investigations are recommended to identify crash reducing treatments on this road.

Ipswich Boonah Road / Coronation Drive has been noted in the assessment due to the high volume of crashes along this section of road despite being classed as medium risk.

10.3.4 Road Hierarchy

10.3.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Boonah. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.19 and detailed in Table 10.12.

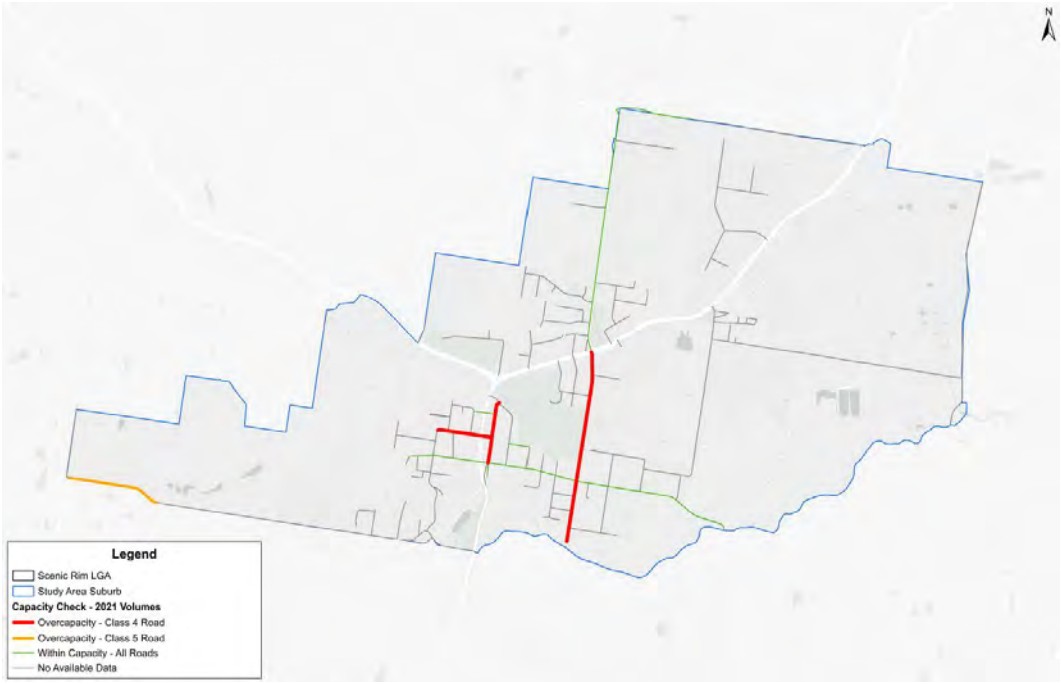


Figure 10.19: Corridor Capacity Review - Boonah (2021)

Table 10.12: Capacity Assessment – Boonah (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
High Street	Access / Collector Street	1,000	1,684
Macquarie Street			1,316
Park Street			1,067
Hoya Road	Rural Connector (4A)	3,000	1,869

The above highlights that the majority of the Council-controlled roads, including Hoya Road, are operating within acceptable capacity limits as defined in Council's road hierarchy requirements. However, there are several roads in Boonah that are overcapacity and future considerations may be warranted.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards to ensure alignment with the appropriate road hierarchy requirements. One deficiency of >1.0m was noted (Stacey Drive), which has been included as a recommendation.

10.3.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Boonah for 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the 2041 capacity assessment are provided in Table 10.13.

Table 10.13: Capacity Assessment – Boonah (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Boonah Rathdowney Road	State-controlled	-	~4,000
Ipswich Boonah Road / Coronation Drive			~5,400
Macquarie Street	Access / Collector Street	1,000	~1,600
Hoya Road	Connector Street	3,000	~4,000

Hoya Road is also ultimately expected to have an increase in traffic volumes due to the planned extension to the Priority Infrastructure Area (PIA) along this corridor. The project has been conditioned to undertake the construction of Hoya Road to a minimum urban collector standard, in accordance with Council Standard Drawing R-09 - Typical Cross Sections Residential Streets, from the proposed development's access(es) to Coronation Drive, inclusive of any ancillary stormwater works. Contributions have been requested to fund this work (included in DA conditions). Whilst this condition exists, upgrade costs would be high for a single developer to complete works. However, it is likely that upgrades to Hoya Road could be considered trunk works and have the potential to promote growth in the area. As such, recommendations for upgrades on Hoya Road have been included for Council to consider, to promote growth in Boonah and service the ultimate catchment.

Another key finding of the RNP was that there may also be an alternative access option providing a connection to Ipswich Boonah Road for vehicles to/from the east. Robson Road provides a direct intersection with Ipswich Boonah Road, with the corridor connecting to Hoya Road to the west. Robson Road provides access to rural properties to the north of Boonah and is currently an unsealed one-lane roadway that does not connect through from Hoya Road to Ipswich Boonah Road.

It is recommended that investigations to constructing Robson Road are undertaken, as this would:

- Reduce demands on Hoya Road, especially trips travelling to/from the east, ensuring that the approved cross section, and Coronation Drive / Hoya Road intersection operate to acceptable standards in future horizons
- Provide a contingency option in the event that Hoya Road is blocked, providing increased resilience for the catchment in alignment with ITP principles and policies.

Figure 10.20 illustrates the recommended Robson Road link.

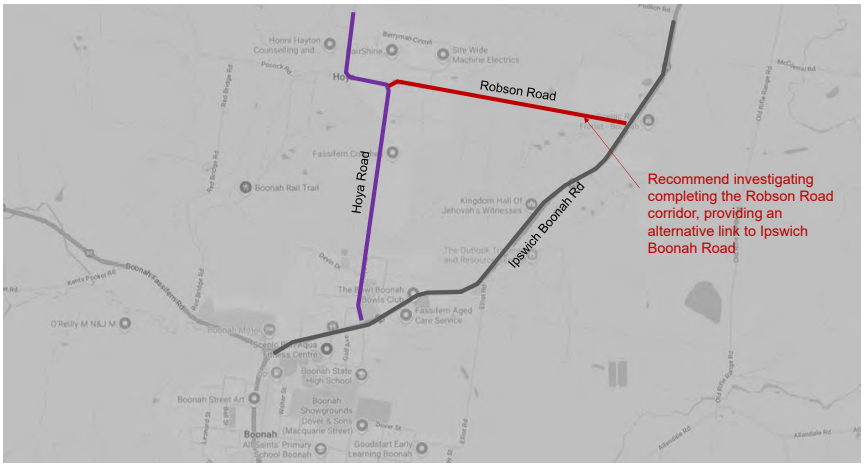


Figure 10.20: Robson Road Alternative Connection

10.3.5 Intersection Capacity

Boonah includes one (1) study intersection, being:

- Coronation Drive / Hoya Road / Macquarie Street

Boonah has been considered under the 'Middle Threshold' for intersection operation, given it's status within the region, and increased density to smaller towns and villages.

Detailed traffic analysis for the abovementioned intersections are included at **Appendix M**. The key findings of the detailed traffic analysis are as follows.

Table 10.14: Intersection Assessment – Boonah

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
21	Coronation Drive / Hoya Road / Macquarie Street	Intersection predicted to fail in 2031 and 2041 scenarios.	Investigate upgrades to a roundabout layout. Upgrades being warranted are understood to align with developer driven planning for the intersection. Both a roundabout layout and a signalised layout can be provided with effective improvement to operating conditions.		

10.3.6 Freight

Boonah is considered a key transport route for the Scenic Rim LGA, with agricultural zoning immediately surrounding Boonah's residential catchments and an industrial area to the south along Mount French Road.

Importantly, Boonah includes several B-Double Freight Network Roads as listed below:

- Boonah Fassifern Road / Ipswich Boonah Road
- Boonah Rathdowney Road.

No changes or upgrades to the local freight network are recommended for Boonah.

10.3.7 Identified Road Upgrades

To address the key issues related to Boonah detailed herein, the road upgrades listed in Table 10.15 and shown in Figure 10.21 have been considered. The priority of the upgrades is included in Part 6.

Table 10.15: Identified Road Upgrades – Boonah

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.BO.1	Macquarie Street	656	Capacity	1.3	Boonah	4B	T	Rural Collector	Upgrade to Connector Street	Localised widening, otherwise hierarchy change only
L.BO.2	High Street	482	Movement and Place, Capacity	n/a	Boonah	4B	T	Rural Collector	Change Hierarchy to Connector Street. No physical upgrades recommended.	-
L.BO.3	Stacey Drive	997	Built Standard	1.0	Boonah	5A	T	Rural Access	Upgrade road standard to match Access / Collector Street hierarchy	+2.0m wide pavement
L.BO.4	Boonah Rathdowney Road	State-Controlled	Safety	1.2	Boonah	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L.BO.5	Ipswich Boonah Road / Coronation Drive	State-Controlled	Safety	2.1	Boonah	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L.BO.6	Robson Road	914	Built Standard, Capacity	1.7	Boonah	5A	T	Rural Access	Recommend investigations to consider a new link to Ipswich Boonah Road. This would ultimately require a Connector Street standard.	Provide as Connector Street with 11.6m wide pavement
L.BO.7	Hoya Road, Boonah	501	Built Standard, Capacity	6.0	Boonah	4A	T	Rural Connector	Upgrade to Trunk Collector (No Lot Access)	+2.7 wide pavement
L.BO.8	Coronation Drive / Hoya Road & Macquarie Street Intersection	State-Controlled, 501, 656	Safety, Capacity	N/A	Boonah	State-Controlled, 4A, 4B	T	State-Controlled, Collector Street, Connector Street	Investigate upgrade to a roundabout layout.	

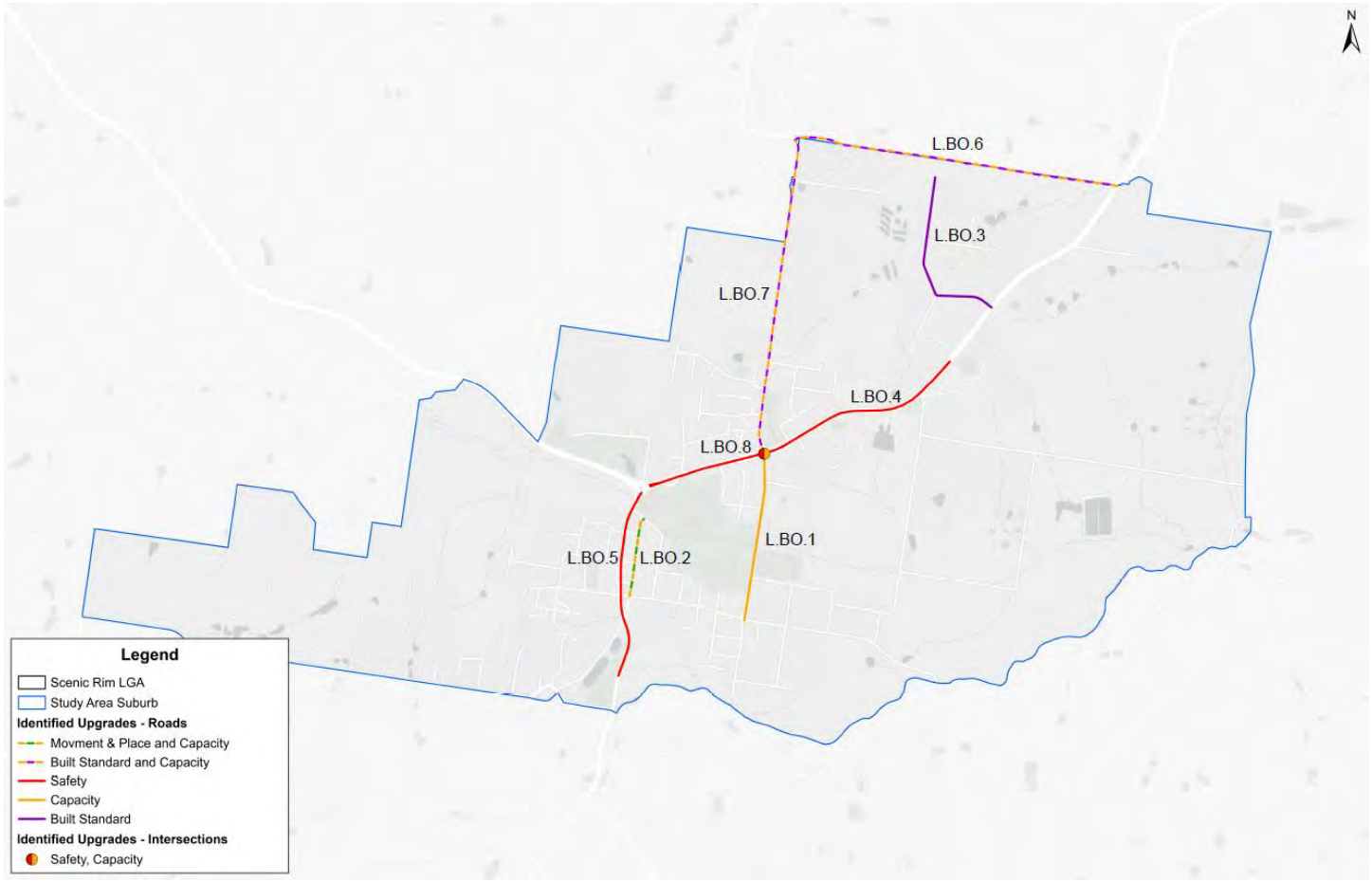


Figure 10.21: Identified Road Upgrades – Boonah

10.4 Canungra

10.4.1 Location & Road Network

Canungra is a key local centre and emerging tourist destination of the Scenic Rim LGA and is renowned for the surrounding hinterland. Canungra is popular amongst outdoor enthusiasts and day trippers as a popular 'drop in' destination given the nearby National Parks.

Beaudesert Nerang Road is the main east-west route (state-controlled, also known as Christie Street and Pine Street), with Lamington National Park Road beginning in Canungra and providing a connection to the south. Council has commenced discussions with the Department of Transport and Main Roads (DTMR) to investigate potential alternative route options, including a bypass, for the Canungra township. These discussions aim to assess the feasibility, benefits, and constraints of potential options that could reduce traffic volumes through the town centre. Any proposed solution will be subject to further technical investigations, stakeholder engagement, and funding considerations.

The Canungra road network is shown in Figure 10.22.

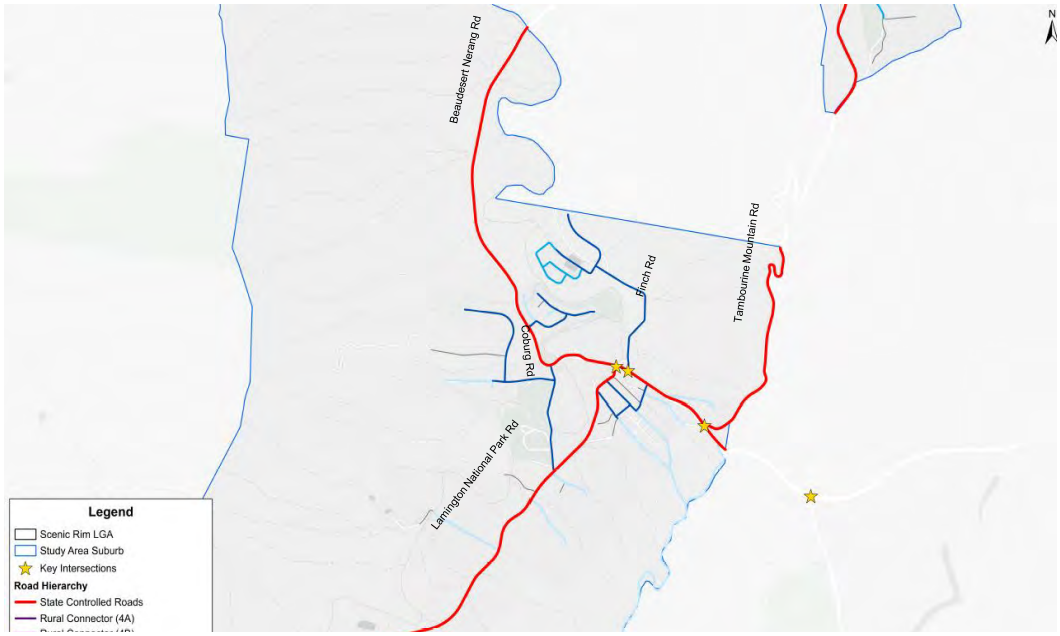


Figure 10.22: Road Network – Canungra

Summary maps of the LRNP for Canungra are provided at **Appendix G**.

10.4.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Canungra, although it is noted that the Finch Road / Malgum Drive connection to the north will create an alternative route past Canungra.

Canungra is known as a popular destination and 'drop in' spot for tourists to visit, particularly during weekends and holiday periods. Canungra attracts a high volume of motorcycle traffic, with motorcyclists using Canungra as a destination after crossing the mountain ranges, or visiting nearby destinations.

Whilst there are several "Movement" corridors through Canungra, mostly being state-controlled corridors, the major road network passes directly through the Canungra town centre where there is an increased emphasis on "Place". This creates a conflict between user groups, particularly along Beaudesert Nerang Road / Pine Street through the town centre as key "Movement" and "Place" elements interact with limited opportunity to shift either. This has the potential to create safety issues, especially related to crossing the road at peak times, parking and key turning movements. This

impacts local users and visitors alike, and results in undesirable outcome not in keeping with the intended nature of Canungra as a “Place”. This has been a key consideration of this review.

10.4.3 Safety

10.4.3.1 Crash Review

The crash history in Canungra from 1st July 2018 to 30th June 2023 is shown in Figure 10.23.

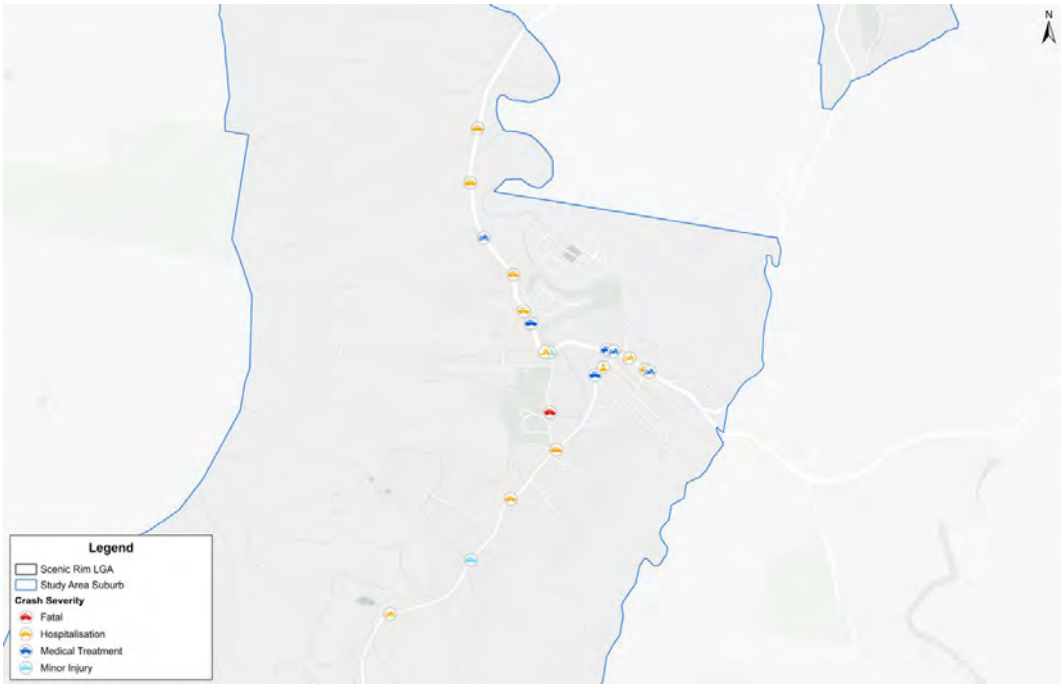


Figure 10.23: Crash History – Canungra

Key findings of the crash review and analysis for Canungra are as follows:

- A total of 23 crashes were recorded in the locality:
  - 13 crashes (57%) resulted in KSI including one (1) fatality crash
  - The fatality crash occurred in 2021 along Coburg Road and was recorded as hit temporary object (DCA 607) single vehicle crash resulting in one (1) fatality
  - The predominant crash type was run off road crashes accounting for ten (10) crashes (43%) of which seven (7) resulted in KSI
- A total of six (6) crashes (26%) were recorded involving motorcycles of which three (3) resulted in KSI
- A total of two (2) crashes (9%) were recorded involving active transport users and all resulted in KSI.

The above results highlight the importance of considering run off road type crashes around Canungra. There is a clear prevalence of this crash type, indicating the drivers can struggle with the mountainous topography of key roads.

In addition, there is a significant overrepresentation of motorcycle crashes in comparison to the standard mode share. This is consistent with the prominence of Canungra as a destination for motorcyclists and highlights the importance of providing appropriate treatments to accommodate motorcyclists.

10.4.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Canungra. A summary map of the key results is provided in Figure 10.24 and a summary of the key "High" risk rating corridors is provided in Table 10.16.

Figure 10.24: Corridor Crash Review – Canungra

Table 10.16: QRSTUV Review – Canungra

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Lamington National Park Road	10	6	Run off road (4) Intersection (3)	Four (4) motorcycle crashes
Coburg Road	3	2	Run off road (2)	-

Two (2) roads were found to be critical with a high occurrence of KSI crashes and high-risk crash rate, particularly with Lamington National Park Road being a critical road section for Canungra.

Run off road type crashes were the most prominent crash type, indicating a need for increased pavement to assist drivers in recovering errant vehicles, as well as potentially providing speed reduction treatments to encourage drivers to maintain control of vehicles.

10.4.4 Road Hierarchy

10.4.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Canungra. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.25.

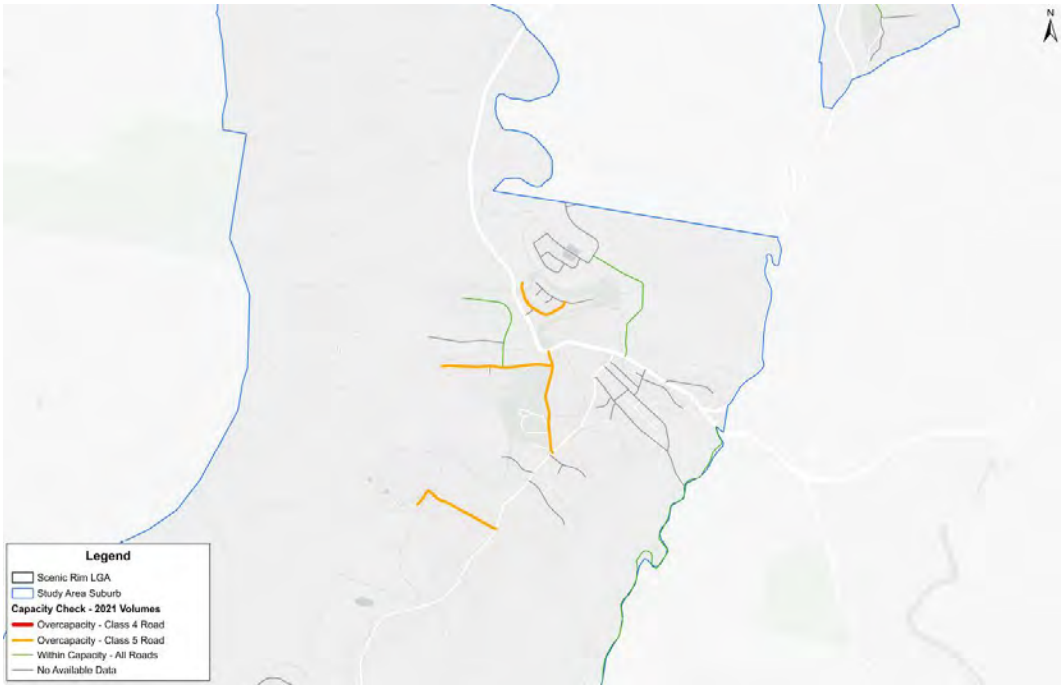


Figure 10.25: Corridor Capacity Review - Canungra (2021)

As shown, all key Council roads are within acceptable operating capacity limits, as defined in Council's road hierarchy requirements. However, there are a number of low order access roads in Canungra that are overcapacity and future considerations may be warranted.

10.4.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Canungra for 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

It is important to note that Council's *Growth Management Strategy 2041* (2021) indicates that Canungra can potentially support additional dwellings. It is understood additional dwellings may be provided to the north of Canungra, accessed via Finch Road and Malgum Drive.

These roads currently only connect to Beaudesert Nerang Road and are not interconnected, it is understood construction works are being undertaken to provide a continuous link.

Modelling suggests that this may accommodate:

- Malgum Drive (north): 2,900vpd
- Finch Road (south): 6,400vpd.

A key design consideration for this road is to ensure that it does not function as a "bypass" for Canungra. The connection has been built with direct lot frontage and has not been designed to accommodate high levels of through traffic. Instead, it is designed to cater for the immediate needs of the local residents within the catchment.

Results of the 2041 capacity assessment are provided in Table 10.17.

Table 10.17: Capacity Assessment – Canungra (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Beaudesert Nerang Road (east of Canungra)	State-controlled	-	~15,400
Beaudesert Nerang Road (west of Canungra)			~8,000
Malgum Drive	Access / Collector Street	1,000	~2,900
Finch Road			~6,400

The above highlights that the new Finch Road to Malgum Drive road connection is a critical consideration, given the opportunities for drivers to rat run to avoid the Canungra town centre.

In addition, Beaudesert Nerang Road to the east of Canungra is ultimately expected to accommodate high daily demands, nearing acceptable capacity limits for a two-lane road.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies were noted, on the higher order network, generally aligned with the above roads.

10.4.5 Intersection Capacity

Canungra includes four (4) study intersections, being:

1. Beaudesert Nerang Road / Lamington National Park Road
2. Beaudesert Nerang Road / Finch Road
3. Beaudesert Nerang Road / Tamborine Mountain Road
4. Beaudesert Nerang Road / Beechmont Road.

Canungra has been considered under the 'Middle Threshold' for intersection operation, given it's status as a tourist destination and location along Beaaudesert Nerang Road.

Detailed traffic analysis for the abovementioned intersections are included at **Appendix N**. The key findings of the detailed traffic analysis are as follows:

Table 10.18: Intersection Assessment – Canungra

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
3	Beaudesert Nerang Road / Finch Road	Intersection predicted to fail in 2041 scenarios – with movements on Finch Road unable to turn due to insufficient gaps.	Investigate upgrades to a signalised layout, with pedestrian crossings. This is understood to align with developer driven planning for the intersection. This should include pedestrian treatments to facilitate movements.		
4	Beaudesert Nerang Road / Tamborine Mountain Road	Intersection predicted to fail in 2041 scenarios – with movements on Tamborine Mountain Road unable to turn due to insufficient gaps.	Investigate upgrades to convert to a left in / left out layout. Combined with Intersection 14 to allow for U-turns for vehicles travelling north to west.		 Left In / Left Out only

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
5	Beaudesert Nerang Road / Kidston Street	Intersection predicted to fail in 2041 scenarios – with movements on Kidston Street unable to turn due to insufficient gaps.	Investigate upgrades to convert to a left out layout. Combined with nearby treatments in Canungra, this is expected to help mitigate critical issues.		 Left Out only
14	Beaudesert Nerang Road / Beechmont Road	Intersection predicted to fail in 2041 scenarios – with movements on Beechmont Road unable to turn due to insufficient gaps.	Investigate upgrades to a roundabout layout. This will allow for appropriate capacity, and provide a U-turn option for vehicles from all directions.		

10.4.6 Freight

Canungra does not include any relevant freight overlays and is not connected to the B-Double Freight Network, given the locality and surrounding topography. The area does not warrant inclusion or connectivity to the freight network. Therefore, no further freight analysis has been undertaken.

10.4.7 Parking

Canungra is a key tourist destination and experiences high levels of weekend and peak holiday trade. As a result, key tourist attractions and parking areas can become busy leading to congestion, delays, and safety impacts, particularly along Beaudesert Nerang Road through the town centre.

It is recommended that a local area parking study is undertaken to consider a range of parking related aspects to address future related impacts on the centre and its road network. This should consider facilities such as appropriate motorcycle facilities, electric vehicle charging, time-limited parking, and alternative strategies for tourists.

10.4.8 Public Transport

There are currently no public transport services within Canungra. Given the high volume of tourist trade and emerging centre for residential, retail and employment trips, it is recommended that the provision for public transport services and infrastructure is investigated for Canungra to provide sustainable transport options for Canungra and connect to the various trip generators across the Scenic Rim, Gold Coast and Brisbane.

10.4.9 Identified Road Upgrades

To address the key issues related to Canungra detailed herein, the road upgrades listed in Table 10.19 and shown in Figure 10.26 have been considered. The priority of the upgrades is included in Part 6.

Table 10.19: Identified Road Upgrades – Canungra

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.CA.1	Coburg Road	223	Safety, Capacity, Built Standard	0.7	Canungra	5A	T	Rural Access	Upgrade to Collector Street	+2.1m wide pavement
L.CA.2	Monarch Drive	721	Capacity, Built Standard	0.7	Canungra	5A	T	Rural Access	Upgrade to Collector Street	+2.5m wide pavement
L.CA.3	Finch Road	368	Capacity	0.9	Canungra	5A	T	Rural Access	Upgrade to Trunk Collector (No Lot Access)	+2.2m wide pavement
L.CA.4	Seymour Drive	1305	Movement and Place, Capacity	0.5	Canungra	5A	T	Rural Access	Upgrade to Connector Street Install LATM treatments to reduce rat running on these roads, and ensure only local access	+3.3m wide pavement
L.CA.5	Malgum Drive	N/A		2.4	Canungra	-	T	-	Upgrade to Connector Street Install LATM treatments to reduce rat running on these roads, and ensure only local access	
L.CA.6	Lamington National Park Road (North)	State-Controlled	Safety	6	Canungra	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L.CA.7	Beaudesert Nerang Road (east of Canungra)	State-Controlled	Capacity		Canungra	State-Controlled	-	State-Controlled	Recommend further investigations undertaken by TMR to identify capacity improvements for road	
L.CA.8	Beaudesert Nerang Road / Finch Road Intersection	State-Controlled, 368	Safety, Capacity	N/A	Canungra	State-Controlled, 5A	-, T	State-Controlled, Rural Access	Investigate upgrade to signals.	

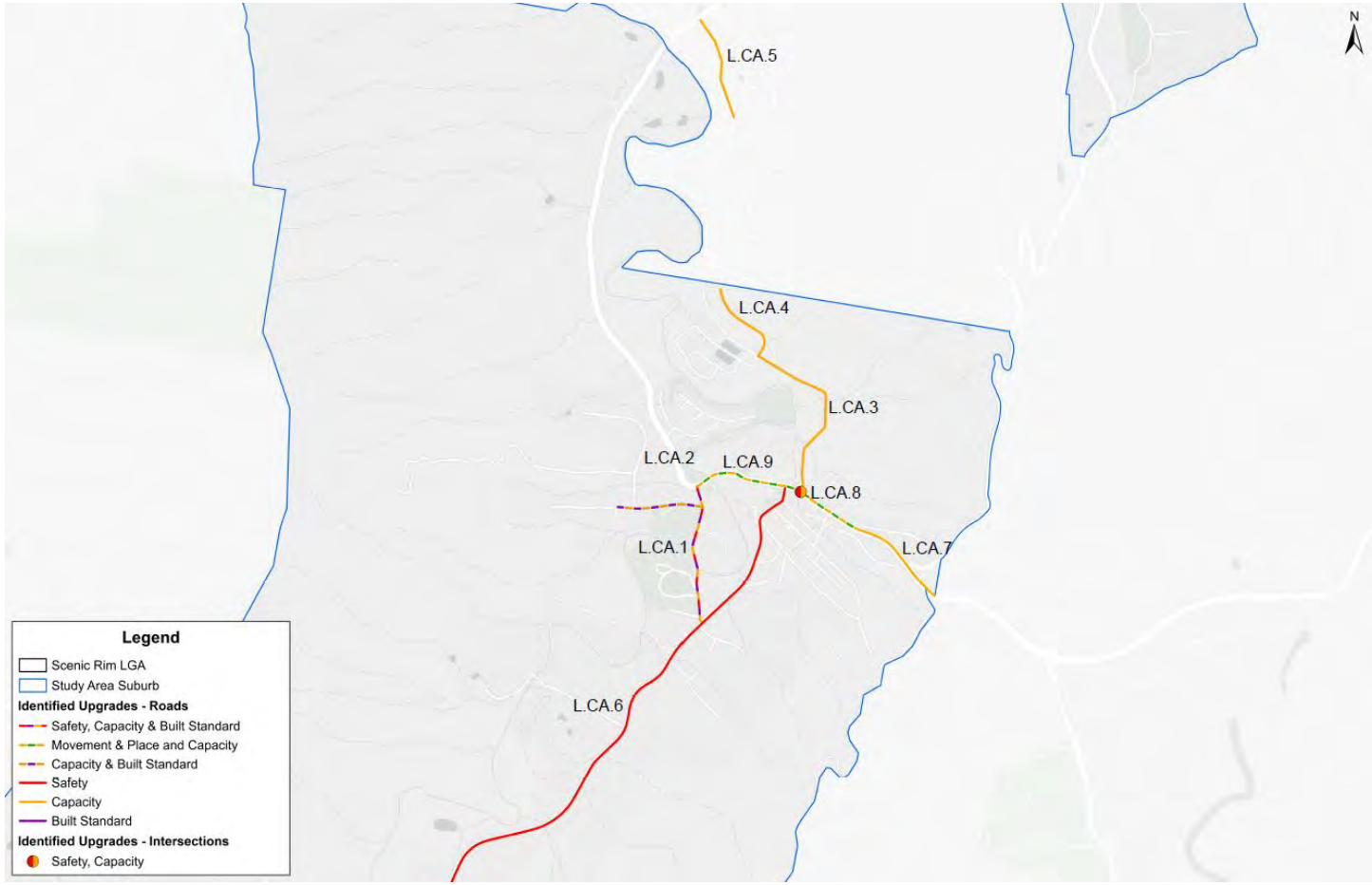


Figure 10.26: Identified Road Upgrades – Canungra

10.5 Kalbar

10.5.1 Location & Road Network

Kalbar is a rural town situated in the fertile Fassifern Valley, known for its magnificent views of the Scenic Rim. With its rich German history is reflected in many historic sites around town which provides a secondary commercial and service centre in the region, Kalbar offers shopping facilities, a civic centre, hotel, showgrounds, school, historical churches, a retirement village and parks and gardens.

The main north-south routes include the Cunningham Highway (state-controlled) to the west of the Kalbar town centre and George Street (state-controlled) providing an internal connection to the main town centre. Kalbar Connection Road (state-controlled) connects the Cunningham Highway and George Street whilst Boonah Fassifern Road provides an east-west connection to the south of the Kalbar Town Centre.

The Kalbar road network is shown in Figure 10.27.

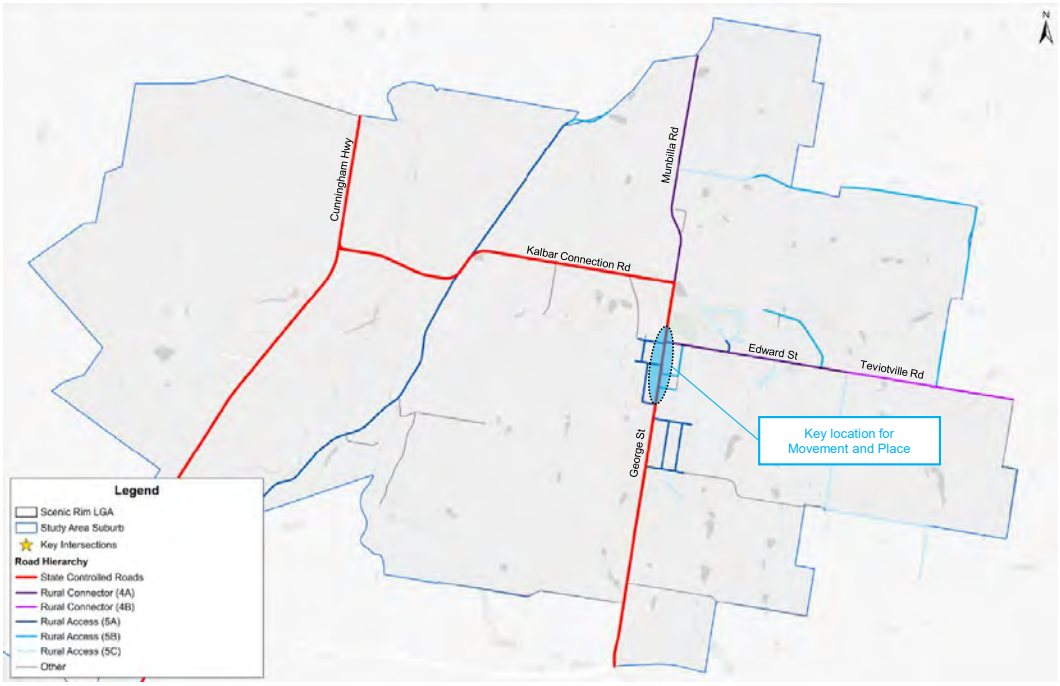


Figure 10.27: Road Network - Kalbar

Typically, traffic within Kalbar serves local residents, surrounding agricultural industry, and visitors whereas the Cunningham Highway is the key transportation of agricultural goods linking Kalbar to larger cities such as Brisbane and Ipswich.

Summary maps of the LRNP for Kalbar are provided at **Appendix H**.

10.5.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Kalbar.

Whilst there are three (3) main "Movement" corridors through and around Kalbar, the township itself is not located on a main through route and would be generally characterised with increased emphasis on "Place". The key "Place" locations are along George Street south of Edward Street in the Kalbar town centre, with this location a focal point for residents and visitors.

10.5.3 Safety

10.5.3.1 Crash Review

The crash history in Kalbar from 1st July 2018 to 30th June 2023 is shown in Figure 10.28.

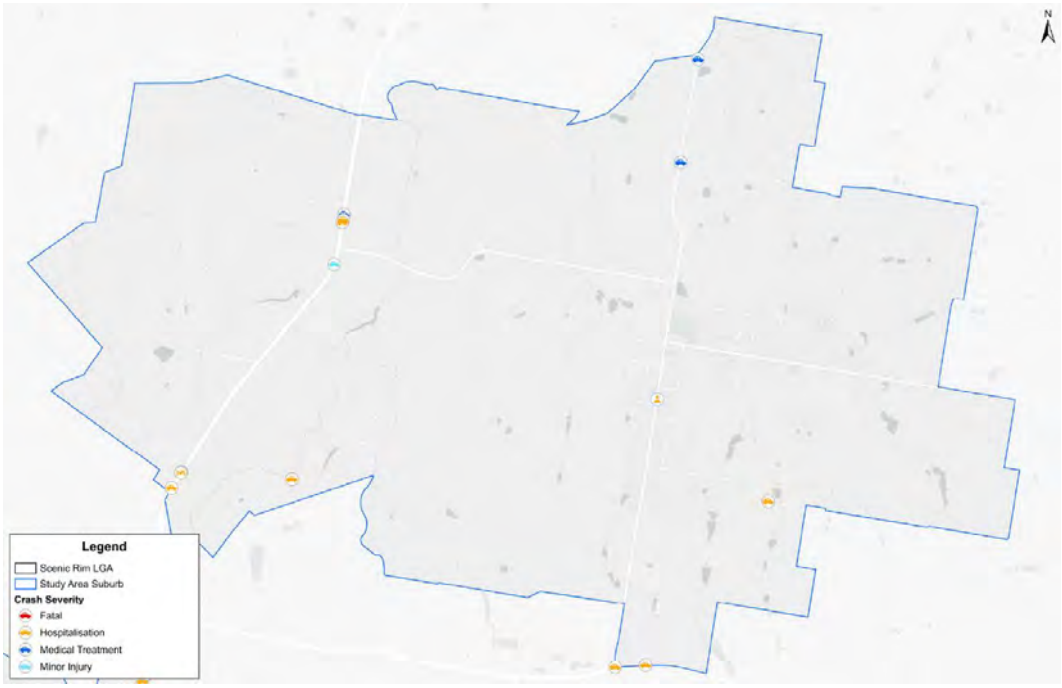


Figure 10.28: Crash History – Kalbar

Key findings of the crash review and analysis for Kalbar are as follows:

- A total of 15 crashes were recorded in the locality:
  - Ten (10) crashes (67%) resulted in KSI
  - The predominant crash type was run off road crashes accounting for ten (10) crashes (67%) of which five (5) resulted in KSI
- One (1) crash (7%) was recorded involving a motorcycle and resulted in KSI
- One (1) crash (7%) was recorded involving active transport users and resulted in KSI
- Only four (4) crashes were recorded on Council controlled roads, with single KSI crashes noted on Muller Road and Stibbe Road (both being single vehicle off road crashes).

The above results highlight the importance of considering off road type crashes in Kalbar.

10.5.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Kalbar. A summary map of the key results is provided in Figure 10.29 and a summary of the key "High" risk rating corridors is provided in Table 10.20.

Figure 10.29: Corridor Crash Review - Kalbar

Table 10.20: QRSTUV Review – Kalbar

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Cunningham Highway (south)	3	3	-	-
Muller Road	1	1	Run off road	
Stibbe Road	1	1	Run off road	

The southern section of the Cunningham Highway was found to be a critical road within Kalbar with a very high crash and KSI rate. Given this, further investigations are recommended to identify crash reducing treatments on this road.

Whilst data was not available for crashes on Muller Road and Stibbe Road, these crashes occurred where volumes are expected to be very low, increasing the KSI risk rating which would likely be recorded as "High".

10.5.4 Road Hierarchy

10.5.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Kalbar. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.30.

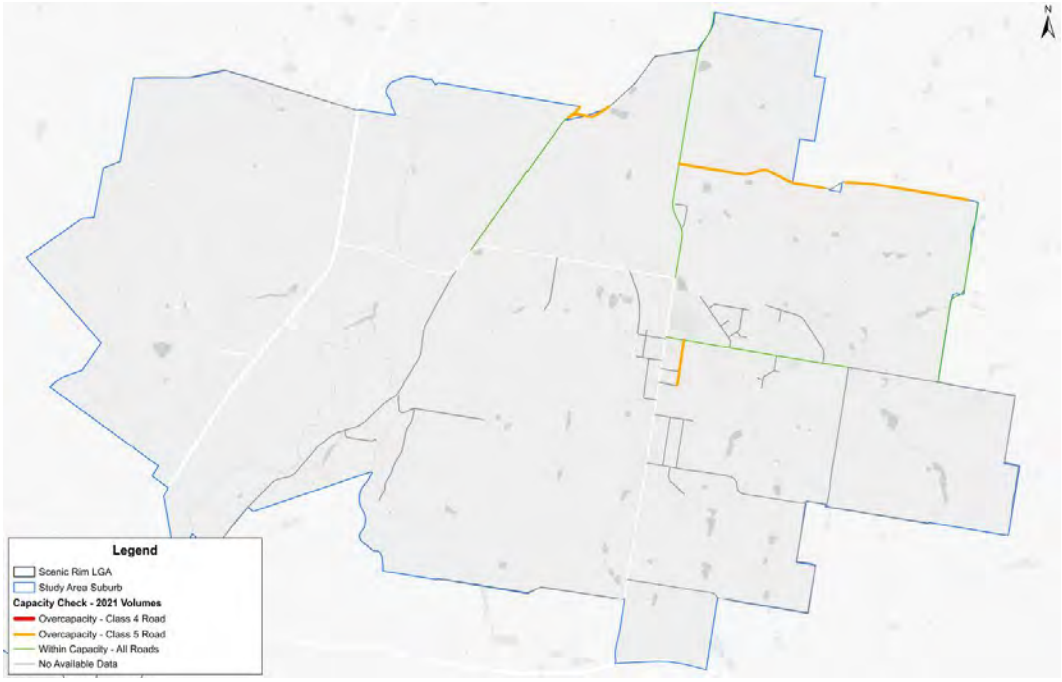


Figure 10.30: Corridor Capacity Review - Kalbar (2021)

Table 10.21: Capacity Assessment – Kalbar (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Kulgun Road, Kalbar	Rural Access (5C)	80	97
Ann Street	Rural Access (5D)	40	250

As shown, key Council roads are within acceptable operating capacity limits, as defined in Council's road hierarchy requirements. However, there are several low order access roads in Kalbar that are overcapacity and future considerations may be warranted. Where values are close to the hierarchy of a low order road (such as for Kulgan Road) with no obvious growth planned, no action has been recommended as this could be related to outlier data.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards, to ensure alignment with the appropriate road hierarchy requirements. Deficiencies were noted for Edward Street (1.4m reduction is desired pavement width) and Munbilla Road (1.9m reduction is desired pavement width), which have been included as a recommendation.

10.5.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Kalbar for 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the 2041 capacity assessment are provided in Table 10.22.

Table 10.22: Capacity Assessment – Kalbar (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Cunningham Highway	State-controlled	-	~8,600
Boonah Fassifern Road			~2,800
George Street			~2,300
Kalbar Connection Road			~1,900

George Street is expected to carry traffic in accordance with a Connector Street hierarchy (1,000-3,000vpd) and is currently designed to a suitable standard including travel lanes and parking lanes.

10.5.5 Freight

Kalbar is surrounded by key transport routes for the Scenic Rim LGA, with the majority of the township being agricultural zoning with a key resource area to the west of the Cunningham Highway. The Cunningham Highway is a B-Double Freight Network Road providing a connection to Brisbane and Ipswich.

No changes or upgrades to the local freight network are recommended for Kalbar.

10.5.6 Identified Road Upgrades

To address the key issues related to Kalbar detailed herein, the road upgrades listed in Table 10.23 and shown in Figure 10.31 have been considered. The priority of the upgrades is included in Part 6.

Table 10.23: Identified Road Upgrades – Kalbar

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.KA.1	Muller Road	753	Safety	4.1	Kalbar	5A	R	Rural Access	Upgrade to Rural Access (5A)	+1.2m wide pavement, +1.4m total formation width
L. KA.2	Stibbe Road	1010	Safety	1.4	Kalbar	5D	T	Rural Access	Upgrade to Access Place	Provide as 6.0m wide pavement
L. KA.3	Edward Street	381	Build Standard	0.3	Kalbar	5B	T	Rural Access	Upgrade road standard to match Collector Street hierarchy, as per volumes	+1.9m wide pavement seal
L. KA.4	Munbilla Road	754	Build Standard	16.2	Kalbar	4A	R	Rural Connector	Upgrade road standard to match Rural Connector (4A) hierarchy, as per volumes	+1.9m wide pavement seal
L. KA.5	Ann Street	24	Capacity	0.4	Kalbar	5D	T	Rural Access	Upgrade hierarchy to Access Place	No physical works
L. KA.6	Cunningham Highway	State-Controlled	Safety		Kalbar	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	-

Figure 10.31: Identified Road Upgrades – Kalbar

10.6 Peak Crossing & Harrisville

10.6.1 Location & Road Network

Peak Crossing and Harrisville are rural towns of the Scenic Rim, located approximately 20km south of Ipswich. The towns are is surrounded by prime agricultural land, which has been home to thriving farms since the mid 1800s, with small cropping practised right up to the edges of the townships.

The main north-south routes include the Cunningham Highway (state-controlled) and Ipswich Boonah Road (state-controlled, also known as Fassifern Street). Warill View Peak Crossing Road (state-controlled, also known as Flinders Street) starts in the Peak Crossing town centre and provides an east-west connection through Harrisville.

The Peak Crossing & Harrisville road network is shown in Figure 10.32.

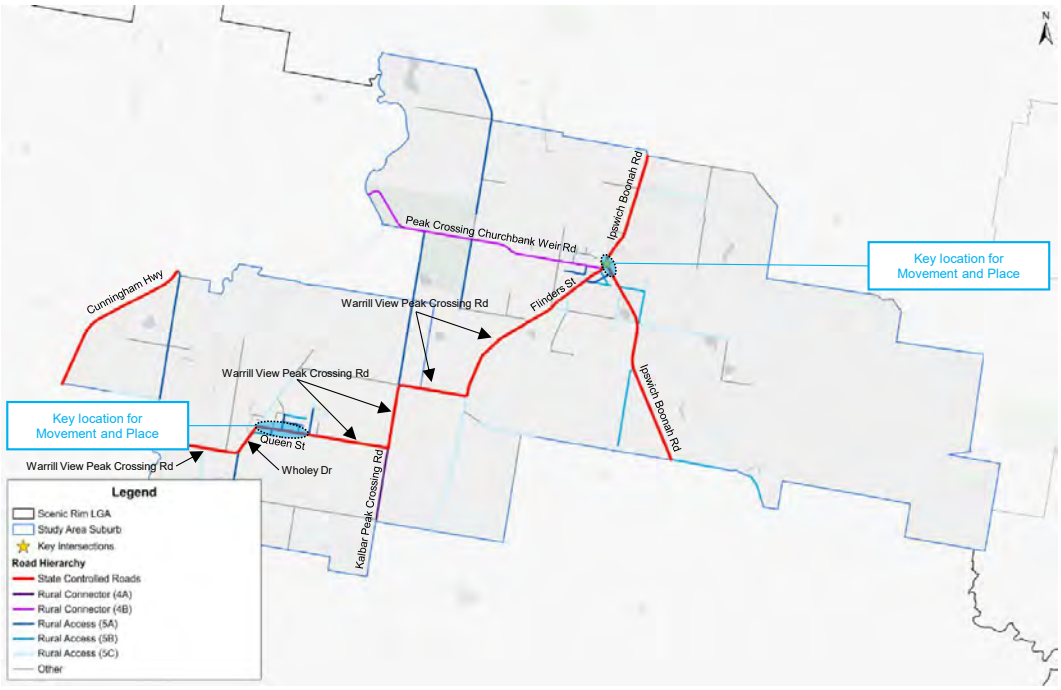


Figure 10.32: Road Network - Peak Crossing & Harrisville

Typically, traffic within Peak Crossing & Harrisville serves local residents and visitors whereas the Cunningham Highway is the key transportation of agricultural goods linking to larger cities such as Brisbane and Ipswich.

Summary maps of the LRNP for Peak Crossing & Harrisville are provided at **Appendix I**.

10.6.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Kalbar.

Whilst there are three (3) main "Movement" corridors through Peak Crossing & Harrisville, the townships themselves are not located on a main through route and would be generally characterised with increased emphasis on "Place". The key "Place" locations are along Ipswich Boonah Road / Fassifern Street south of Flinders Street in the Peak Crossing town centre and along Queen Street in the Harrisville town centre, with this location a focal point for residents and visitors.

10.6.3 Safety

10.6.3.1 Crash Review

The crash history in Peak Crossing & Harrisville from 1st July 2018 to 30th June 2023 is shown in Figure 10.33.

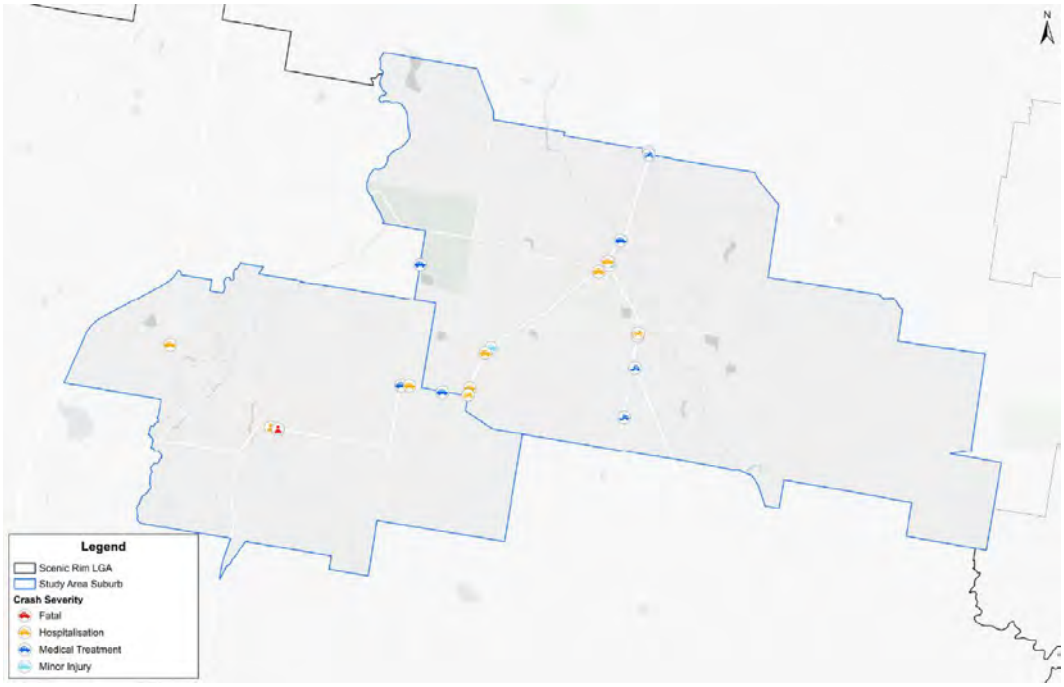


Figure 10.33: Crash History – Peak Crossing & Harrisville

Key findings of the crash review and analysis for Peak Crossing & Harrisville are as follows:

- A total of 21 crashes were recorded in the localities:
  - 12 crashes (57%) resulted in KSI including one (1) fatality
  - The fatality crash occurred in 2020 along Queen Street and was recorded as a near side pedestrian crash (DCA 001) between a car and pedestrian resulting in one (1) fatality
  - The predominant crash type was run off road crashes accounting for 11 crashes (52%) of which six (6) resulted in KSI
- A total of three (3) crashes (14%) were recorded involving motorcycles of which two (2) resulted in KSI
- A total of two (2) crashes (10%) were recorded involving active transport and all resulted in KSI including the fatality crash.

The above results highlight the importance of considering off road type crashes along key routes of Peak Crossing & Harrisville and considering pedestrian type crashes near key “Place” locations.

10.6.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Peak Crossing & Harrisville. A summary map of the key results is provided in Figure 10.34 and a summary of the key "High" risk rating corridors is provided in Table 10.24.

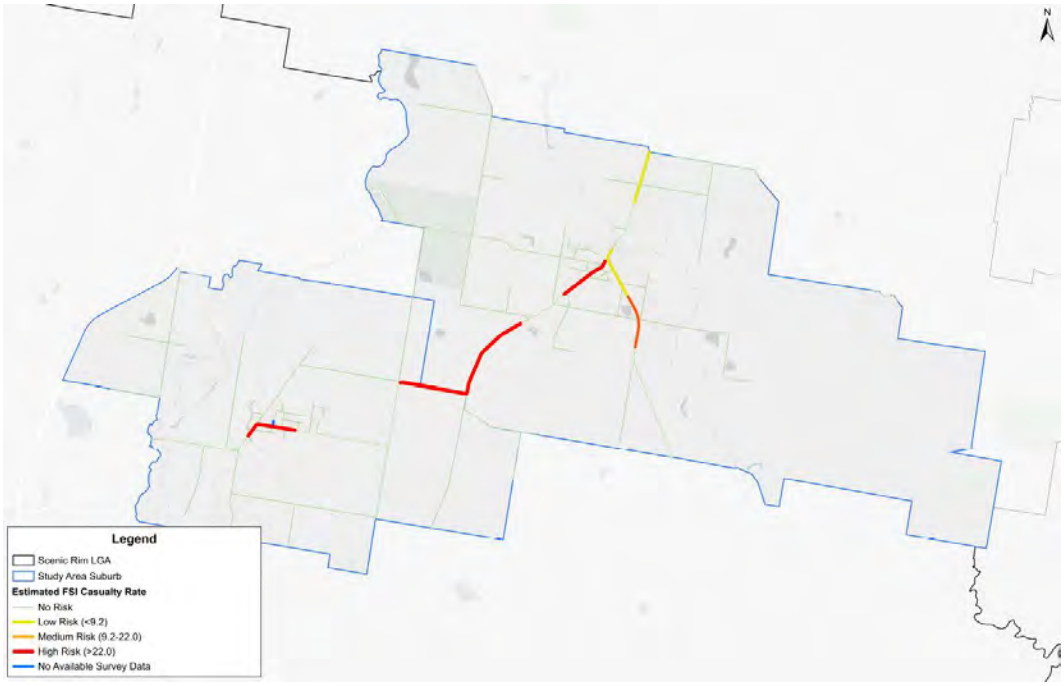


Figure 10.34: Corridor Crash Review - Peak Crossing & Harrisville

Table 10.24: QRSTUV Review – Peak Crossing & Harrisville

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Warill View Peak Crossing Road	7	4	Run off road (4)	-
Flinders Street	3	2	Run off road (2)	
Queen Street	2	2	-	-

A number of roads within Peak Crossing & Harrisville were found to be critical, with a high occurrence of KSI crashes and high-risk crash rate.

In addition, run off road type crashes were the most prominent crash type, indicating a need for increased pavement to assist drivers in recovering errant vehicles, as well as potentially providing speed reduction treatments to encourage drivers to maintain control of vehicles.

It is noted that all roads with a "High" classification are State-controlled roads.

10.6.4 Road Hierarchy

10.6.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Peak Crossing & Harrisville. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.35.

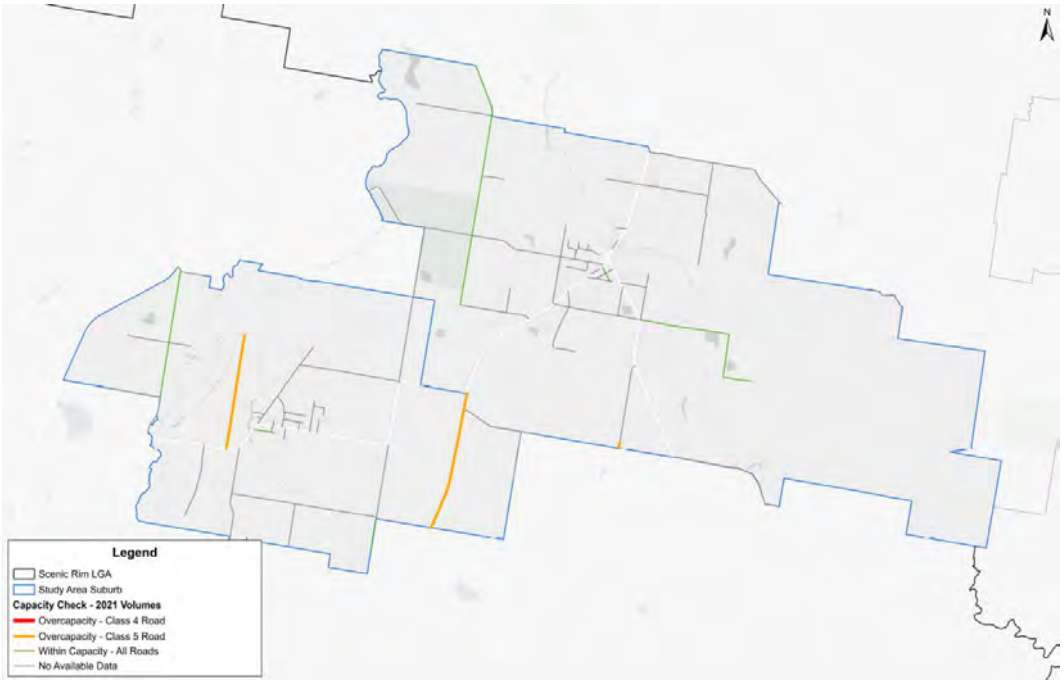


Figure 10.35: Corridor Capacity Review - Peak Crossing & Harrisville (2021)

Table 10.25: Capacity Assessment – Peak Crossing & Harrisville (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Alexander Lane	Rural Access (5D)	40	47
Old Warwick Road	Rural Access (5C)	80	91

As shown, key Council roads are within acceptable operating capacity limits, as defined in Council's road hierarchy requirements. Where values are close to the hierarchy of a low order road (such as both above) with no obvious growth planned, no action has been recommended as this could be related to outlier data.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards, to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies of >1.0m were noted, which have been included as a recommendation.

10.6.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Peak Crossing & Harrisville 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the 2041 capacity assessment are provided in Table 10.26.

Table 10.26: Capacity Assessment – Peak Crossing & Harrisville (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Cunningham Highway	State-ontrolled	-	~9,200
Ipswich Boonah Road			~5,500
Warrill View Peak Crossing Road			~2,300

10.6.5 Intersection Capacity

Peak Crossing & Harrisville includes one (1) study intersections, being:

1. Ipswich Boonah Road / Fassifern Street.

Detailed traffic analysis for the abovementioned intersection is included at **Appendix M**. The key findings of the detailed traffic analysis are as follows:

Table 10.27: Intersection Assessment – Peak Crossing & Harrisville

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
20	Ipswich Boonah Road / Flinders Street	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		

10.6.6 Freight

Peak Crossing & Harrisville is considered a key transport route for the Scenic Rim LGA, with agricultural zoning immediately surrounding the residential catchments.

Importantly, Boonah includes several B-Double Freight Network Roads as listed below:

- Cunningham Highway
- Ipswich Boonah Road.

No changes or upgrades to the local freight network are recommended for Peak Crossing & Harrisville.

10.6.7 Identified Road Upgrades

To address the key issues related to Peak Crossing & Harrisville detailed herein, the road upgrades listed in Table 10.28 and shown in Figure 10.36 have been considered. The priority of the upgrades is included in Part 6.

Table 10.28: Identified Road Upgrades – Peak Crossing & Harrisville

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.PH.1	Warill View Peak Crossing Road	State-Controlled	Safety	3.2	Warrill View	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L. PH.2	Flinders Street	375	Safety	0.2	Peak Crossing	5D	T	Rural Access	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L. PH.3	Queen Street	State-Controlled	Safety	0.9	Harrisville	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	
L. PH.4	Peak Crossing Churchbank Weir Road	764	Built Standard	4.3	Mutdapilly	4B	R	Rural Collector	Upgrade road standard to match Rural Collector (4B) hierarchy	8.0m wide pavement
L. PH.5	Willmotts Road Harrisville	1165	Built Standard	0.9	Harrisville	5C	R	Rural Access	Upgrade road standard to match Rural Access (5C) hierarchy	+1.9m formation width
L. PH.6	Middle Road Peak Crossing	706	Built Standard	4.6	Peak Crossing	5A	R	Rural Access	Upgrade road standard to match Rural Access (5A) hierarchy, as per volumes	+7.2m wide pavement, total +4.1m formation width
L. PH.7	McNeills Road Peak Crossing	695	Built Standard	1.1	Peak Crossing	5B	T	Rural Access	Upgrade road standard to Access Place	6.0m wide pavement, total +1.9m formation width
L. PH.8	Dwyers Road Peak Crossing	308	Built Standard	3.1	Peak Crossing	5C	R	Rural Access	Upgrade road standard to match Rural Access (5C) hierarchy	+1.9m in formation (unsealed) width
L. PH.9	Grounds Road Peak Crossing	441	Built Standard	0.3	Peak Crossing	5C	R	Rural Access	Upgrade road standard to match Rural Access (5C) hierarchy	+1.9m in formation (unsealed) width
L. PH.10	Mollenhauers Road Peak Crossing	719	Built Standard	0.5	Peak Crossing	5C	R	Rural Access	Upgrade road standard to match Rural Access (5C) hierarchy	+1.9m in formation (unsealed) width

Figure 10.36: Identified Road Upgrades – Peak Crossing & Harrisville

10.7 Aratula

10.7.1 Location & Road Network

Aratula is a rural village located along the Cunningham Highway at the base of Cunninghams Gap. Aratula offers commercial services, local produce, arts and crafts outlets, cafes, a bakery, service stations, a primary school, School of Arts hall, a hotel, motels, caravan park and camping grounds, and is home to the annual signature event, the Winter Harvest Festival.

Aratula is located along the Cunningham Highway (state-controlled) which is the main north-south connection to Ipswich and Brisbane.

The Aratula road network is shown in Figure 10.37.

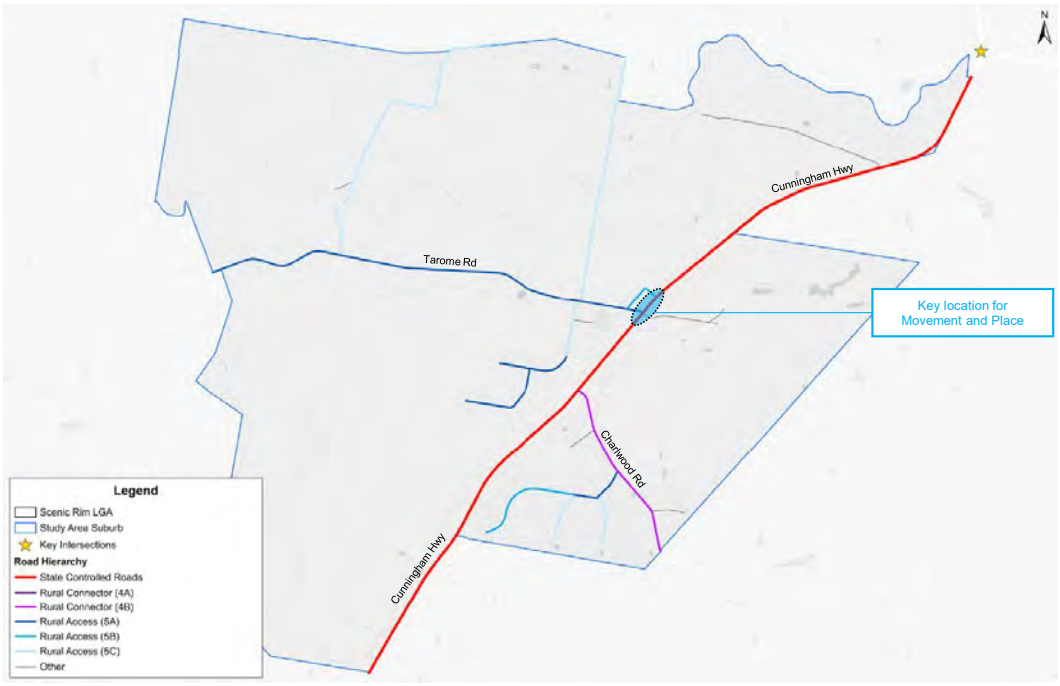


Figure 10.37: Road Network - Aratula

Typically, Aratula has a higher percentage of heavy vehicles travelling through due to its location on the Cunningham Highway, being a transportation route for agricultural goods.

Summary maps of the LRNP for Aratula are provided at **Appendix J**.

10.7.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Aratula.

Whilst there is only one (1) main "Movement" corridor through Aratula, Cunningham Highway is generally related to the movement of people and goods to/from or through the Aratula area (i.e. a large portion of traffic is through traffic). Based on this, Aratula would be characterised as having an increased emphasis on "Movement" when considering the movement and place framework.

The key "Place" locations are along the Cunningham Highway in the Aratula town centre, this location is a focal point for residents.

10.7.3 Safety

10.7.3.1 Crash Review

The crash history in Aratula from 1st July 2018 to 30th June 2023 is shown in Figure 10.38.

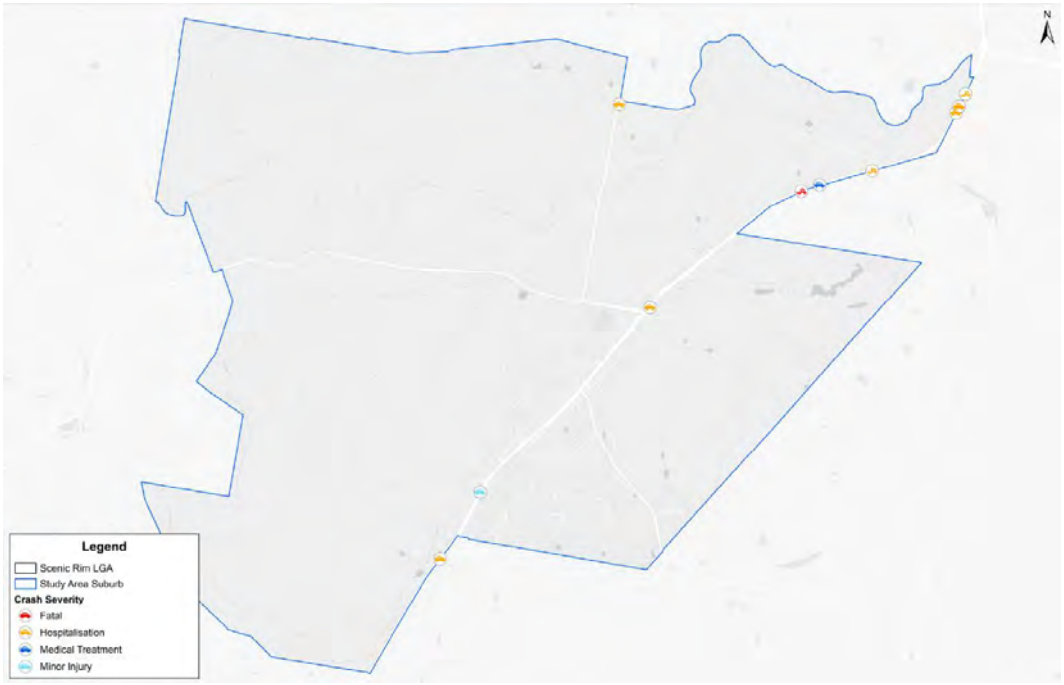


Figure 10.38: Crash History- Aratula

Key findings of the crash review and analysis for Aratula are as follows:

- A total of 11 crashes were recorded in the locality:
  - Nine (9) crashes (82%) resulted in KSI including one (1) fatality
  - The fatality crash occurred in 2022 along the Cunningham Highway and was recorded as head-on (DCA 201) between a truck and car resulting in one (1) fatality
  - The predominant crash type was rear-end crashes accounting for five (5) crashes (45%) of which four (4) resulted in KSI.
- No crashes were recorded involving motorcycles or active transport users.

The above results highlight the importance of considering rear-end type crashes along the Cunningham Highway, and ensuring that traffic is appropriately aware of any speed reductions, or the prevailing speed limit at all times.

10.7.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Aratula. A summary map of the key results is provided in Figure 10.39 and a summary of the key "High" risk rating corridors is provided in Table 10.24.

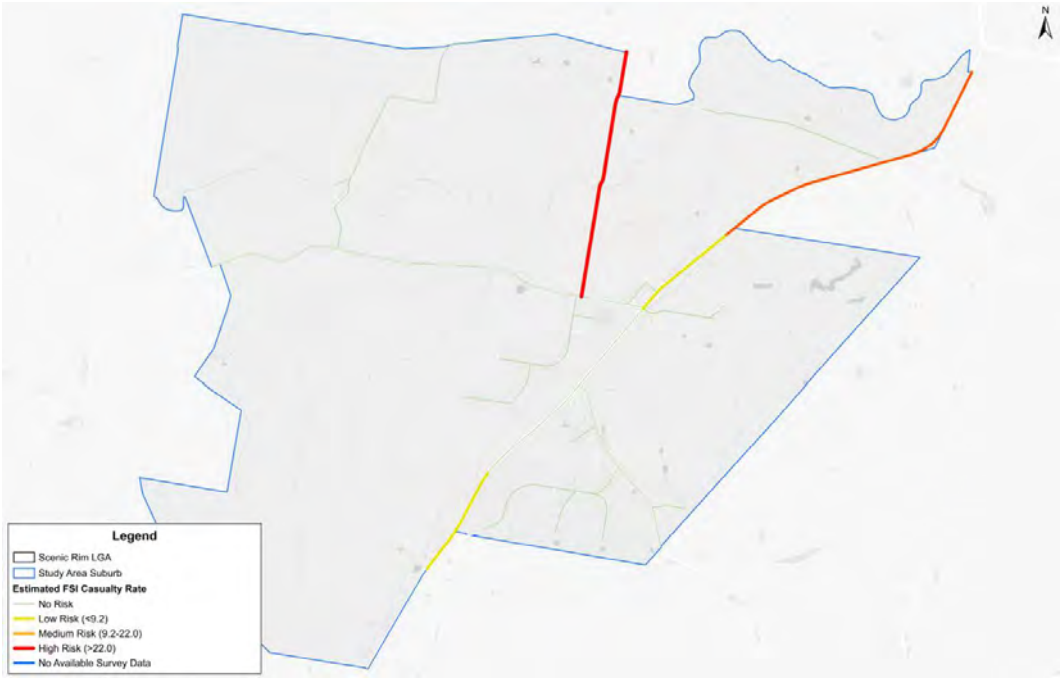


Figure 10.39: Corridor Crash Review - Aratula

Table 10.29: QRSTUV Review – Aratula

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Frazerview Road	1	1	-	-

Frazerview Road was found to be the only critical road with a high-risk crash rate due to the low number of volumes along this road. This crash was a single vehicle off road type crash.

10.7.4 Road Hierarchy

10.7.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Aratula. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.40.

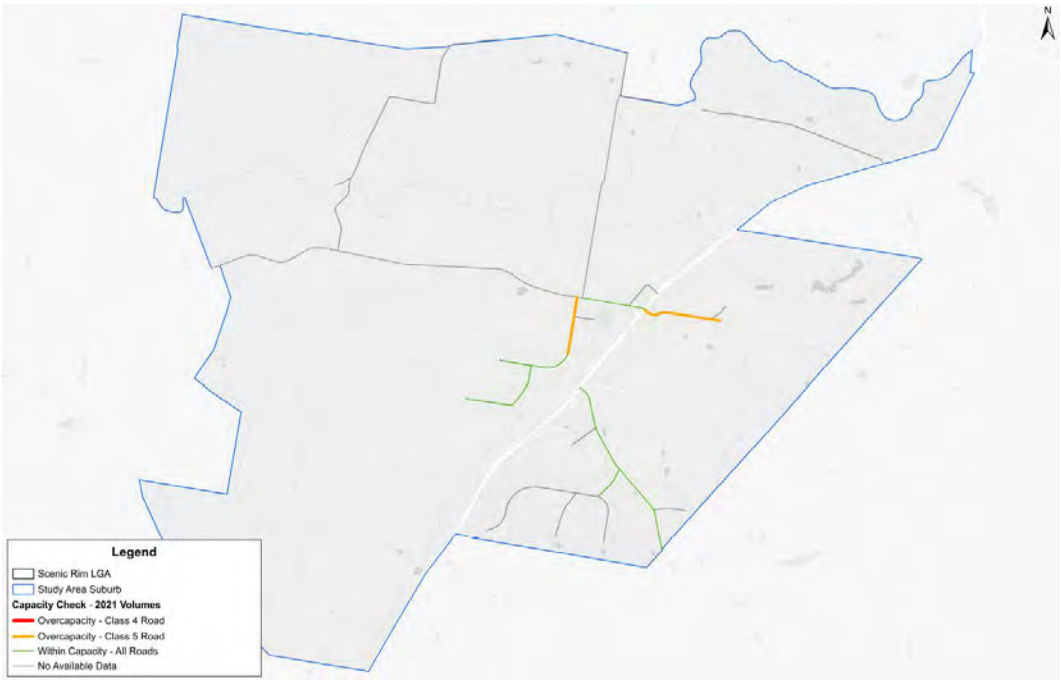


Figure 10.40: Corridor Capacity Review - Aratula (2021)

Table 10.30: Capacity Assessment – Aratula (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Carter Road	Rural Access (5C)	80	298
Sawmill Road	Rural Access (5D)	40	65

As shown, key Council roads are within acceptable operating capacity limits as defined in Council's road hierarchy requirements. However, there are several low order access roads in Aratula that are overcapacity and future considerations may be warranted. Where values are close to the hierarchy of a low order road (such as for Sawmill Road) with no obvious growth planned, no action has been recommended as this could be related to outlier data.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards, to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies of >1.0m were noted, which have been included as a recommendation.

10.7.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Aratula 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the capacity assessment are provided in Table 10.31.

Table 10.31: Capacity Assessment – Aratula (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Cunningham Highway	State-controlled	-	~8,000
Tarome Road / Elizabeth Street	Access / Collector Street	1,000	~2,300

10.7.5 Freight

Aratula is considered a key transport route for the Scenic Rim LGA with agricultural zoning immediately surrounding Aratula's residential catchments and an industrial area to the east along Sawmill Road. Importantly, Aratula includes the Cunningham Highway which is a B-Double Freight Network Road.

No changes or upgrades to the freight network are recommended for Aratula.

10.7.6 Identified Road Upgrades

To address the key issues related to Aratula detailed herein, the road upgrades listed in Table 10.32 and shown in Figure 10.41 have been considered. The priority of the upgrades is included in Part 6.

Table 10.32: Identified Road Upgrades – Aratula

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.AR.1	Frazerview Road	391	Safety	2.2	Aratula	5C	T	Rural Access	Upgrade to Rural Access (5A)	+0.5m wide pavement, +2.7m formation width
L.AR.2	Carter Road	177	Capacity	0.5	Aratula	5C	T	Rural Access	Upgrade to Collector Street	+2.2m wide pavement
L.AR.3	Matilda Street	678	Built Standard	1.2	Aratula	5A	T	Rural Access	Upgrade road standard to match Rural Access (5A) hierarchy	+0.2m wide pavement, total +2.3m formation width
L.AR.4	Surawski Drive	1034	Built Standard	0.3	Aratula	5A	T	Rural Access	Upgrade road standard to match Rural Access (5A) hierarchy	+0.5m wide pavement, total +2.7m formation width

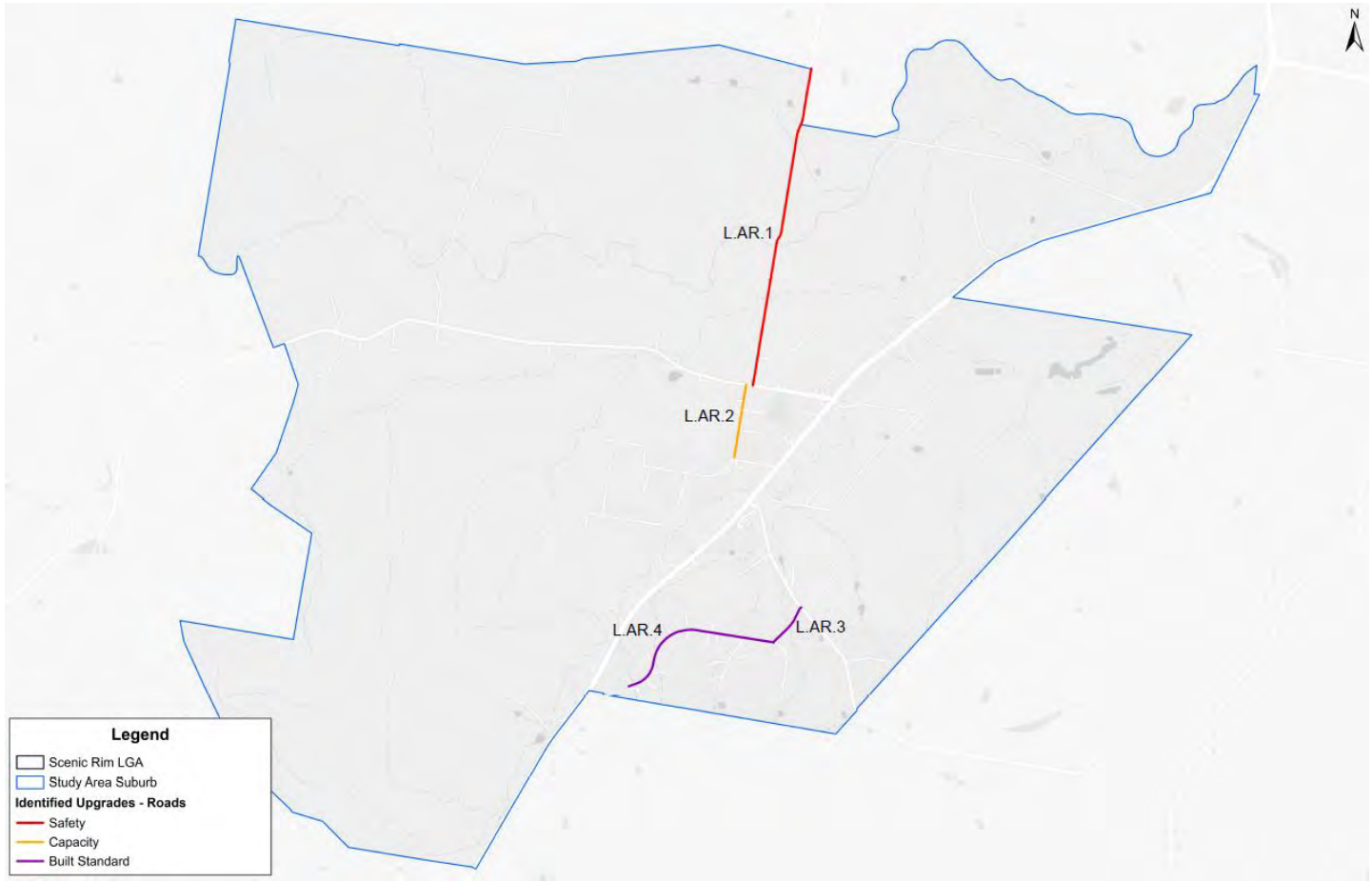


Figure 10.41: Identified Road Upgrades – Aratula

10.8 Kooralbyn

10.8.1 Location & Road Network

Kooralbyn is a rural town of Scenic Rim approximately 22km south of Beaudesert, whose name means 'The Place of the Copperhead Snake' in the local Aboriginal language. Kooralbyn has been settled since the mid 1800s; however, in 1980 the construction of the Kooralbyn Valley Integrated Resort started to attract a local, interstate, and international visitors, due to its premier facilities, golf course and location near a range of agricultural and natural attractions.

Uniquely, Kooralbyn has a single road in and out (Kooralbyn Road) which connects to the Mount Lindsay Highway (state-controlled), the main north-south connection in the area.

The Kooralbyn road network is shown in Figure 10.42.

Figure 10.42: Road Network - Kooralbyn

Summary maps of the LRNP for Kooralbyn are provided at **Appendix K**.

10.8.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new “Movement” corridors within Kooralbyn. It is noted there are no main “Movement” corridors through Kooralbyn, given its unique layout with no through traffic possible (refer to Part 4 for discussion on this point). As such, most streets in Kooralbyn function with “Place” amenity, which has been a key consideration of this review.

10.8.3 Safety

10.8.3.1 Crash Review

The crash history in Kooralbyn from 1st July 2018 to 30th June 2023 is shown in Figure 10.43.

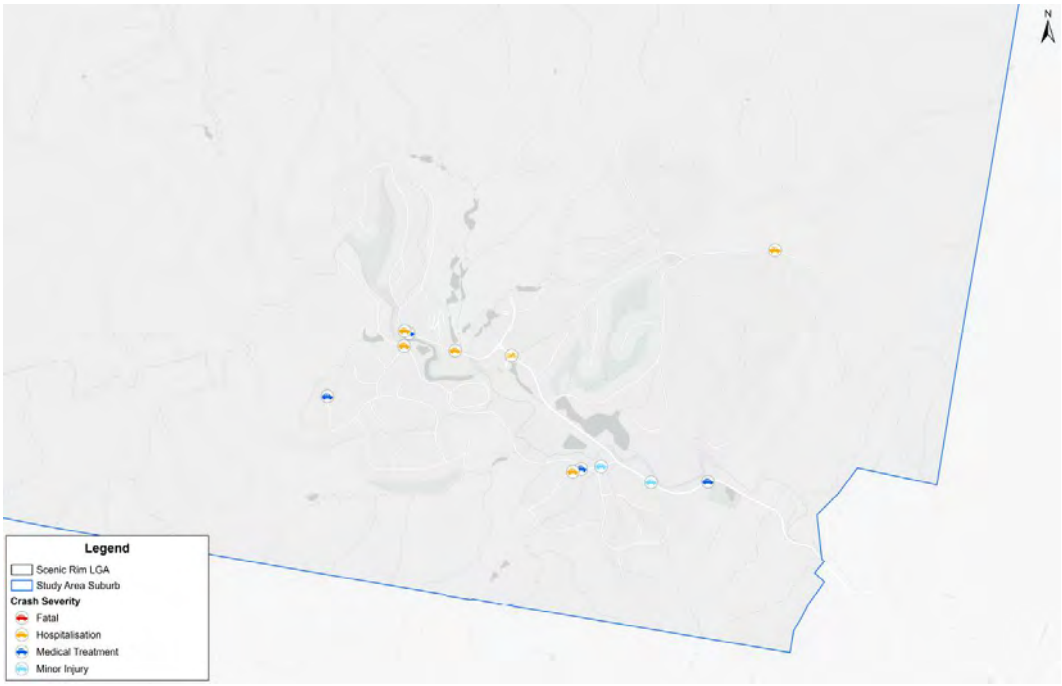


Figure 10.43: Crash History- Kooralbyn

Key findings of the crash review and analysis for Kooralbyn are as follows:

- A total of 12 crashes were recorded in the locality:
  - Six (6) crashes (50%) resulted in KSI
  - The predominant crash type was run off road crashes accounting for six (6) crashes (50%) of which four (4) resulted in KSI.
- No crashes were recorded involving motorcycles or active transport users.

The above results highlight the importance of considering run off road type crashes.

10.8.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Kooralbyn. A summary map of the key results is provided in Figure 10.44 and a summary of the key "High" risk rating corridors is provided in Table 10.33.

Figure 10.44: Corridor Crash Review - Kooralbyn

Table 10.33: QRSTUV Review – Kooralbyn

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Hinchcliffe Drive	2	1	-	-
Kooralbyn Drive	3	1		

The above roads were found to be the only critical roads with a high-risk crash rate due to the low number of volumes along these roads. Both of the above crashes were single vehicle off road type crashes.

10.8.4 Road Hierarchy

10.8.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Kooralbyn. The 2021 assessment has been based on available traffic survey data.

Results of the capacity assessment are shown in Figure 10.45 and detailed in Table 10.34.

Figure 10.45: Corridor Capacity Review - Kooralbyn (2021)

Table 10.34: Capacity Assessment – Kooralbyn (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Routley Drive	Rural Access (5A)	500	1,303
Kooralbyn Drive	Rural Access (5A)	500	704
Boomerang Drive	Rural Access (5A)	500	498
Ogilvy Place	Rural Access (5D)	40	364

The above highlights that the majority of the Council-controlled roads are operating within acceptable capacity limits, as defined in Council's road hierarchy requirements. However, Routley Drive is overcapacity and future considerations may be warranted.

In addition to capacity check, roads construction conditions (i.e. width and seal) were checked against the road hierarchy standards to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies of >1.0m were noted, which have been included as a recommendation.

10.8.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Kooralbyn 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the 2041 capacity assessment are provided in Table 10.35.

Table 10.35: Capacity Assessment – Kooralbyn (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Kooralbyn Road	Rural Connector (4A)	3,000	~5,600 Inaccurate – see below

This indicates that Kooralbyn Road may not be suitable to accommodate future volumes, with volumes growing from ~3,000vpd to ~5,600vpd between 2021 and 2041. However, this output is simply a limitation of the modelling and is not accurate. Volumes on Kooralbyn Road are predicted to remain generally consistent with current volumes, noting that the Scenic Rim Growth Management Plan does not indicate any significant growth for the closed catchment of Kooralbyn.

10.8.5 Freight

Kooralbyn does not include any relevant freight overlays and is not connected to the B-Double Freight Network, given the locality and surrounding topography. The area does not warrant inclusion or connectivity to the freight network; however, an industrial area is located along Etruscan Road Therefore, no further freight analysis has been undertaken.

10.8.6 Identified Road Upgrades

To address the key issues related to Kooralbyn detailed herein, the road upgrades listed in Table 10.36 and shown in Figure 10.46 have been considered. The priority of the upgrades is included in Part 6.

Table 10.36: Identified Road Upgrades – Kooralbyn

ID	Road Name	Road Asset ID	Associated Need	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.KO.1	Hinchcliffe Drive / Etruscan Rd intersection	488, 345	Safety	n/a	Kooralbyn	4B & 5D	T / T	Rural Collector / Rural Access	Provide LATM treatments to reduce speeds at the intersection	-
L.KO.2	Kooralbyn Drive	590	Safety, Capacity	1.0	Kooralbyn	5A	T	Rural Access	Upgrade to Collector Road and provide LATM treatments to reduce speeds on road.	+1.2m pavement width
L.KO.3	Routley Drive	922	Capacity	3.2	Kooralbyn	5A	T	Rural Access	Change hierarchy to Connector Street Recommend undertaking speed limit review to consider 50km/h speed limit	Localised widening required.
L.KO.4	Ogilvy Place	800	Capacity	0.7	Kooralbyn	5D	T	Rural Access	Change hierarchy to Collector Street	Localised widening required
L.KO.5	Walker Drive	1116	Built Standard	2.1	Kooralbyn	5A	T	Rural Access	Upgrade road standard to match Collector Street	+2.5m wide pavement
L.KO.6	Boomerang Drive	107	Capacity, Built Standard	3.9	Kooralbyn	5A	T	Rural Access	Upgrade to Collector Street	+2.2m wide pavement
L.KO.7	Wellington Bundock Drive	1142	Movement and Place	2.7	Kooralbyn	4A	T	Rural Connector	Recommend undertaking speed limit review to consider 50km/h speed limit Consider a threshold treatment near Boomerang Drive to inform motorists that they are entering Kooralbyn	-

Figure 10.46: Identified Road Upgrades – Kooralbyn

10.9 Tamborine

10.9.1 Location & Road Network

Tamborine is a town located at the north eastern edge of the Scenic Rim LGA, bordering the Logan and City of Gold Coast LGAs. Tamborine is characterised by the surrounding landscape and is part of the Scenic Rim Wine Trail, experiencing a high level of day trip visits from Brisbane and Gold Coast.

The road network through Tamborine generally consists of Beaudesert Beenleigh Road (state-controlled) that runs from the south-west to north-east, connecting Beaudesert to the City of Gold Coast LGA through Tamborine. In addition, Tamborine Mountain Road / Waterford Tamborine Road (state-controlled) runs from the south-east to the north-west, connecting Tamborine Mountain to the Logan LGA through Tamborine. Mundoolun Connection Road (state-controlled) runs to the south from Tamborine.

The Tamborine road network is shown in Figure 10.47.

Figure 10.47: Road Network – Tamborine

Tamborine is planned for redevelopment, with an increase in residential population anticipated through new subdivisions. As such, the review has focussed on road capacity, and where shortfalls may create additional issues in the future.

As previously mentioned, Tamborine Mountain and Tamborine attract 47% of the region's visitors. This has been a key consideration of the local road network plan, noting that increased tourism affects driver behaviour (due to a high proportion of unfamiliar drivers) and intersection capacity during weekend / peak holiday periods.

Summary maps of the LRNP for Tamborine are provided at **Appendix L**.

10.9.2 Movement & Place

The review undertaken as part of the Strategic Network Plan did not highlight the need for any new "Movement" corridors within Tamborine.

Whilst there are several "Movement" corridors through Tamborine, mostly being state-controlled corridors. There are no "Place" functions through Tamborine, therefore placing an increased emphasis on "Movement".

10.9.3 Safety

10.9.3.1 Crash Review

The crash history in Tamborine from 1st July 2018 to 30th June 2023 is shown in Figure 10.48.

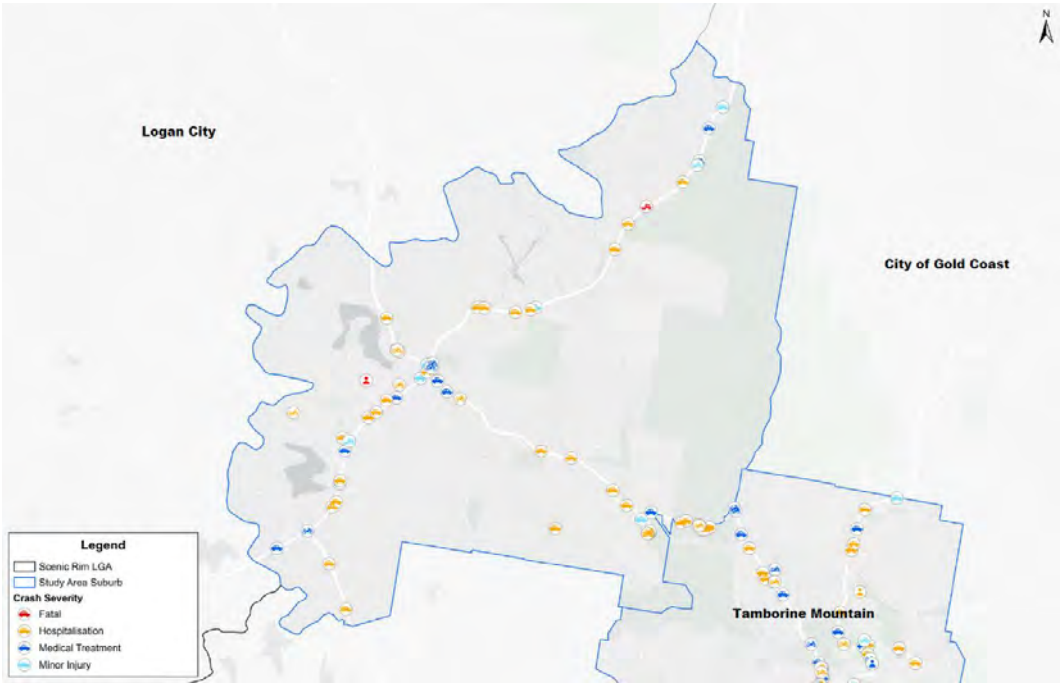


Figure 10.48: Crash History – Tamborine

Key findings of the crash review and analysis for Tamborine Mountain are as follows:

- A total of 73 crashes were recorded in the locality:
  - 46 crashes (63%) resulted in KSI including three (3) fatality crashes
  - A fatality crash occurred in 2022 at the Beaudesert Beenleigh Road / Mundoolun Connection Road intersection and was recorded as a thru-right intersection crash (DCA 104) between a truck and car resulting in one (1) fatality
  - A fatality crash occurred in 2022 along Ballantrae Road and was recorded as a walking with traffic pedestrian crash (DCA 005) between a pedestrian and car resulting in one (1) fatality
  - A fatality crash occurred in 2018 along Beaudesert Beenleigh Road and was recorded as a head-on crash (DCA 201) between a truck and two (2) cars resulting in one (1) fatality
  - The predominant crash type was run off road crashes accounting for 38 crashes (52%) of which 23 resulted in KSI.
- A total of 11 crashes (15%) were recorded involving motorcycles with seven (7) resulting in KSI
  - Upgrade treatments in the Tamborine area should actively consider motorcycle users.
- One (1) crash was recorded involving active transport users which resulted in a fatality.

The above results highlight the importance of considering run off road type crashes around Tamborine. There is a clear prevalence of this crash type, indicating drivers struggle with the mountainous topography of key roads.

In addition, there is a significant overrepresentation of motorcycle crashes in comparison to the standard mode share. This is consistent with the prominence of Tamborine Mountain as a destination for motorcyclists and highlights the importance of providing appropriate treatments to accommodate motorcyclists.

10.9.3.2 Corridor Review

A review of the crash history and road corridors was undertaken against TMR's QRSTUV Guide to Speed Management (2023) for Tamborine. A map of the key results is provided in Figure 10.49 and a summary of the key "High" risk rating corridors is provided in Table 10.37.

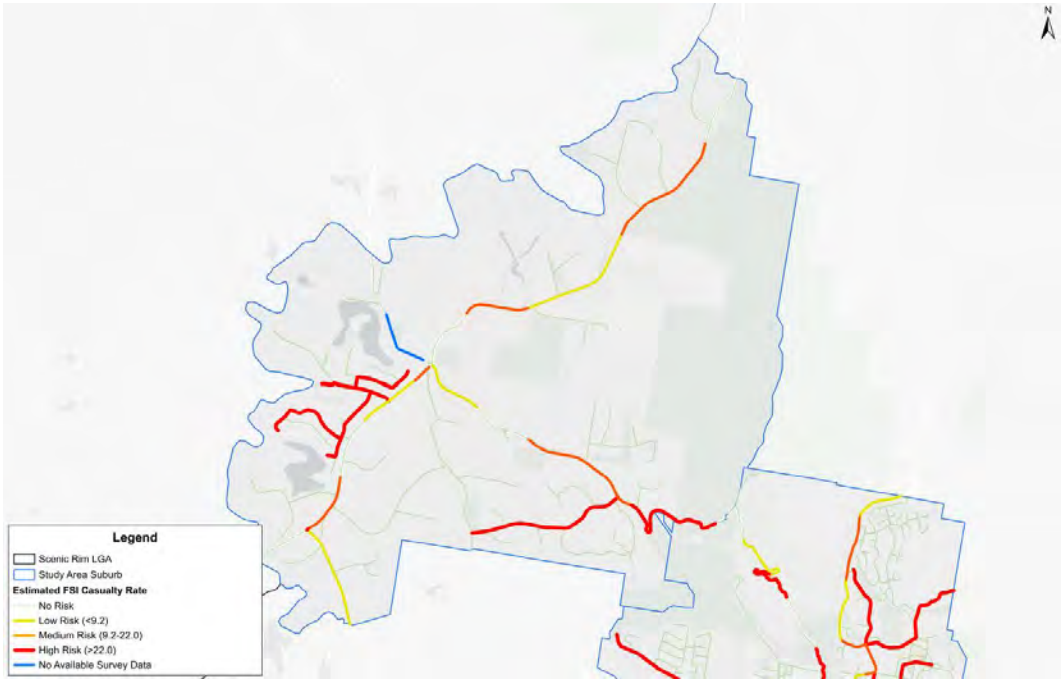


Figure 10.49: Corridor Crash Review - Tamborine

Table 10.37: QRSTUV Review – Tamborine

Road	Crashes		Predominant Crash Type	Other
	Total	KSI		
Tamborine Mountain Road	11	8	Run off road (8)	Three (3) motorcycle crashes
Ballantrae Road	2	2		One (1) pedestrian fatality One (1) motorcycle crash
Munstervale Road	1	1		

Tamborine Mountain Road was found to be a critical road across the wider LGA, with a high KSI crash rate. Given this, upgrades are recommended with a specific focus to reduce run off road and motorcycle crashes.

In addition, run off road type crashes were the most prominent crash type, indicating a need for increased pavement to assist drivers in recovering errant vehicles, as well as potentially providing speed reduction treatments to encourage drivers to maintain control of vehicles.

It is noted a number of lower order roads have been excluded from the assessment due to the high KSI crash rate being attributed to the low number of volumes along these roads.

10.9.4 Road Hierarchy

10.9.4.1 Current Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Tamborine. The 2021 assessment has been based on available traffic survey data.

Results of the 2021 capacity assessment are shown in Figure 10.50.

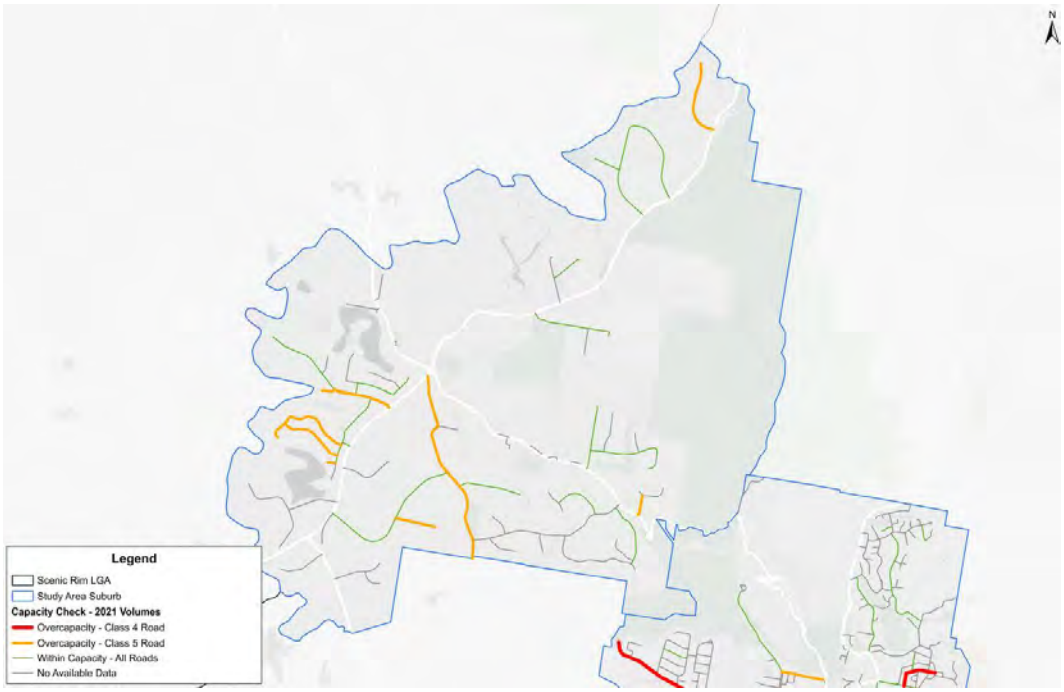


Figure 10.50: Corridor Capacity Review – Tamborine (2021)

Table 10.38: Capacity Assessment – Tamborine (2021)

Road	Hierarchy	Capacity	AADT
2021 Capacity Assessment			
Munstervale Road	Rural Access (5A)	500	1,030
Leach Road			665
Riemore Circuit	Rural Access (5C)	80	205
Ogilvy Place	Rural Access (5D)	40	364

As shown, all key Council roads are within acceptable operating capacity limits, as defined in Council's road hierarchy requirements. However, there are a number of low order access roads in Tamborine that are overcapacity and future considerations may be warranted.

In addition to capacity check, road construction conditions (i.e. width and seal) were checked against the road hierarchy standards, to ensure alignment with the appropriate road hierarchy requirements. Several deficiencies of >1.0m were noted, which have been included as a recommendation.

10.9.4.2 Future Capacity Assessment

A capacity assessment has been undertaken for key Council roads within Tamborine for 2041. This has been based on the strategic modelling undertaken as part of the ITP, and considers the growth planned for the LGA.

Results of the 2041 capacity assessment are provided in Table 10.39.

Table 10.39: Capacity Assessment – Tamborine (2041)

Road	Hierarchy	Capacity	Predicted AADT
2041 Capacity Assessment			
Beaudesert Beenleigh Road (south)	State-controlled	-	~13,400
Tamborine Mountain Road			~9,200
Beaudesert Beenleigh Road (north)			~9,000
Waterford Tamborine Road			~8,200
Mundoolun Connection Road			~7,400

The above highlights that Beaudesert Beenleigh Road to the south of Tamborine is ultimately expected to accommodate high daily demands.

10.9.5 Intersection Capacity

Tamborine includes two (2) study intersections, being:

1. Beaudesert Beenleigh Road / Tamborine Mountain Road & Waterford Tamborine Road
2. Beaudesert Beenleigh Road / Mundoolun Connection Road.

Detailed traffic analysis for the abovementioned intersections are included at **Appendix M** The key findings of the detailed traffic analysis are as follows:

Table 10.40: Intersection Assessment – Tamborine

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
1	Beaudesert Beenleigh Road / Waterford Tamborine Road	Intersection predicted to fail in 2041 PM scenario.	Investigate upgrade to provide second circulating lane to accommodate right turn from Waterford Tamborine Road to Beaudesert Beenleigh Road (south).		
11	Beaudesert Beenleigh Road / Mundoolun Connection Road	Intersection predicted to be failing in current conditions, with drivers selecting reduced gaps to turn from Mundoolan Connection Road.	Investigate upgrades to a signalised layout.		

10.9.6 Freight

Tamborine is considered a key transport route for the Scenic Rim LGA, with key resource areas along Waterford Tamborine Road and Mundoolun Connection Road. Beaudesert Beenleigh Road is a B-Double Freight Network Road providing a connection to Brisbane and Ipswich.

No changes or upgrades to the freight network are recommended for Tamborine.

10.9.7 Public Transport

There are currently no public transport services within Tamborine. Given the high volume of tourist trade, and the intent to promote the area for interstate and international tourists (who may not have access to a car), it is recommended that the provision for public transport services and infrastructure is investigated for Tamborine.

10.9.8 Identified Road Upgrades

To address the key issues related to Tamborine detailed herein, the road upgrades listed in Table 10.41 and shown in Figure 10.51 have been considered. The priority of the upgrades is included in Part 6.

Table 10.41: Identified Road Upgrades – Tamborine

ID	Road Name	Road Asset ID	Associated Item	Length (km)	Locality	Hierarchy	R_T	Function	Recommended Upgrade	Indicative Works
L.TA.1	Ballantrae Road	47	Safety	1.1	Tamborine	5A	T	Rural Access	No upgrade to hierarchy Install LATM treatments to reduce speeds.	
L.TA.2	Munstervale Road	759	Safety, Capacity, Built Standard	1.1	Tamborine	5A	T	Rural Access	Upgrade to Connector Street	+5.2m wide pavement
L.TA.3	Leach Road	619	Capacity	3.1	Tamborine	5A	T	Rural Access	Upgrade to Connector Street	+2.0m wide pavement
L.TA.4	Riemore Road	1203	Capacity	1.6	Tamborine	5C	T	Rural Access	Change hierarchy to Access Place	Localised widening may be required.
L.TA.5	Walnut Road	1119	Built Standard	0.8	Tamborine	5A	T	Rural Access	Upgrade road standard to match Collector Street	+1.9m wide pavement, total +2.7m formation width
L.TA.6	Murray Grey Road	761	Built Standard	1.5	Tamborine	5A	R	Rural Access	Upgrade road standard to match Rural Access (5A) hierarchy	+1.2m wide pavement, total +1.4m formation width
L.TA.7	Tamborine Mountain Road	State-Controlled	Safety	5.4	Tamborine	State-Controlled	-	State-Controlled	Recommend further investigations are undertaken at a corridor level to determine suitable crash reduction treatments	

Figure 10.51: Identified Road Upgrades – Tamborine

PART 6: IMPLEMENTATION PLAN

11. UPGRADE ACTION PLAN

11.1 Prioritisation Methodology

A prioritisation list of the identified road and intersection upgrades has been developed based on a multi criteria analysis (MCA) scoring system to evaluate and prioritise the recommended upgrades.

The MCA scoring system allows the relative importance of each upgrade to be measured based a broad range of impacts and benefits to be considered. A total of six (6) criteria were selected, aligning with the Policies and Principles of the Integrated Transport Plan.

The Scoring Matrix criteria is described in Table 11.1. The MCA Scoring System Technical Note is provided at **Appendix N**.

Table 11.1: Scoring Matrix Criteria Assessment

Criteria	Description	Measurement and Scoring Method	Weighting
Cost	Estimated infrastructure costs	Measured in foreseeable infrastructure cost $ (2024). Scored based on 1 to 5 scale High cost (>$5,000,000) = 1 Low cost (<$50,000) = 5	40%
Safety	The level of benefit the recommended upgrade will have on road user safety	Measured based on an assessment of fatal and seriously injured (FSI) crash rate. Scored based on 0 to 5 scale	20%
Movement & Place	The importance of the corridor to achieving sound movement and place principles and the level of benefit the recommended upgrade will have in improving movement and place	Measured based on assessment of the importance to achieving the movement and place framework in key areas. Scored based on 0 to 5 scale	15%
Capacity	The level of benefit the recommended upgrade will have in improving capacity	Measured based on an assessment of capacity, with higher volumes roads receiving higher levels of importance. Scored based on 0 to 5 scale	10%
Freight	The level of benefit the recommended upgrade will have in improving the freight network	Measured based on an assessment of the importance to the freight network. Scored based on 0 to 5 scale	10%
Built Standard	The level of benefit the recommended upgrade will have in improving built standard	Measured based on an assessment of built standard, with higher volumes / hierarchy roads receiving higher levels of importance. Scored based on 0 to 5 scale	5%

A volume adjustment factor was also applied to the final scores for each of the upgrades based on the daily volumes along each of the roads (where data was available) as shown in Table 11.2. This provides a factor to ensure that benefits are measured based on the number of motorists impacted.

Table 11.2: Volume Adjustment Factor

Volume	Adjustment Factor
>3,000vpd	**1.5**
150vpd – 1,000vpd	**1**
<150vpd	**0.75**
No Data	**1**

11.2 Cost Estimation

A list of cost estimates for the identified upgrades were estimated based on Council resources and previous experience with similar projects as shown in Table 11.3. The costs were then calculated for each of the recommended treatments.

Each upgrade cost was also given a 50% construction contingency given the level of planning (this contingency factor is **not** shown in the below cost values).

Table 11.3: Cost Estimates

Upgrade	Cost	Unit	Source
Physical Road Upgrades			
Pavement Widening (<2.0m)	Unit rate	km	Council - Typical 2 lane collector road unit rates (002)
Pavement Widening (>2.0m)	Unit rate		
Formation Widening (<2.0m)	Unit rate		
Formation Widening (>2.0m)	Unit rate		
Road Hierarchy Upgrades			
Urban Street			
Trunk Collector (No Lot Access)	Unit rate	km	Council Rate
Connector Street	Unit rate		
Collector Street	Unit rate		
Rural Roads			
Rural Connector (4A)	Unit rate	km	Council Rate
Rural Collector (4B)	Unit rate		
Rural Access (5A)	Unit rate		
Rural Access (5B)	Unit rate		
Rural Access (5C)	Unit rate		
Rural Access (5D)	Unit rate		
Industrial Roads			
Industrial Collector Street	Unit rate	km	Council Rate
Industrial Access Street	Unit rate		
Traffic Devices			
ATLM	Unit rate	km	Unit Cost
LATM	Unit rate		
Flexible Barriers	Unit rate		
Signage	Unit rate	each	
Construction			
New Bridge	Sum	each	Council Rate
New Signals	Sum		Unit Cost
New Roundabout	Sum		
Studies			
Speed Reduction (SLR)	Sum	each	Unit Cost
Crash Investigations	Sum		

It is important to note that highly accurate costing is not critical to the accuracy of the project, with relative costs (e.g. the relative cost of upgrading a road vs providing widening) much more important to the accuracy of the MCA scoring system.

11.3 Priority List

The priority list outlining the recommended road and intersection upgrades from highest to lowest score is provided in Table 11.4 and Table 11.5, respectively.

The detailed priority list has been provided an **Appendix O** (in MS Excel format).

This list does not include any roads that have been identified for further monitoring (i.e. roads which do not currently require upgrade, but may should conditions change). A list of these roads is also included at **Appendix O**.

Furthermore, State-controlled roads have not been given a priority rating as works on these is subject to input from TMR. All recommendations on State-controlled roads are based on investigation of further treatments and upgrades.

Table 11.4: Priority List – Road Upgrades

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
1	Long Road (south of Curtis Road)	Mount Tamborine	1271	2	116
2	Lahey Road	Mount Tamborine	603	0.9	113
3	Long Road (south of Eagle Height Drive)	Mount Tamborine	1271	1.8	111
4	Brisbane Street	Beaudesert	129	1.0	104
5	Eagle Heights Road	Mount Tamborine	310	0.6	101
6	Beckwith Road / Old Warrick Road	Milora / Harrisville	809	8.4	87
7	Wellington Bundock Drive	Kooralbyn	1142	2.7	83
8	Southport Avenue	Mount Tamborine	986	0.4	81
9	Kerry Road	Beaudesert	570	5.2	81
10	Hartley Road	Mount Tamborine	464	1.7	80
11	Munstervale Road	Tamborine	759	1.1	80
12	Roadvale Harrisville Road	Roadvale	909	8.9	78
13	Beacon Rd	Mount Tamborine	64	4.4	69
14	Allan Creek Road, Gleneagle	Gleneagle	15	n/a	69
15	Munbilla Road	Kalbar	754	16.15	69
16	Seymour Drive	Canungra	1305	0.5	68
17	Macquarie Street	Boonah	656	1.3	63
18	School Road	Mount Tamborine	949	0.4	63
19	Malgum Drive	Canungra	N/A	2.4	62
20	Flinders Street	Peak Crossing	375	0.2	60
21	Ballantrae Road	Tamborine	47	1.1	60

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
22	Magnetic Drive	Mount Tamborine	658	1.1	59
23	Yore Road, Tamborine	Tamborine	1263	0.1	59
24	Vaucluse Road, Mount Walker	Mount Walker	1284	0.1	59
25	Stibbe Road	Kalbar	1010	1.4	59
26	Kingsley Drive	Beaudesert	581	0.2	57
27	Routley Drive	Kooralbyn	922	3.2	57
28	Mollenhauers Road Peak Crossing	Peak Crossing	719	0.5	56
29	Ruhland Road, Lower Mount Walker	Lower Mount Walker	925	0.7	56
30	Stacey Road, Darlington	Darlington	998	0.9	56
31	Coburg Road	Canungra	223	0.7	55
32	Eastern Ring Road (southern portion – Cryna Road)	Beaudesert	N/A	1.1	53
33	Curtis Road	Mount Tamborine	257	1.3	53
34	Grounds Road Peak Crossing	Peak Crossing	441	0.3	53
35	Roadvale Road	Roadvale	910	8.1	52
36	Golf Course Road	Mount Tamborine	418	0.6	51
37	Duckett Street	Beaudesert	295	0.8	50
38	McKee Street	Beaudesert	692	0.3	50
39	Head Road	Carneys Creek	473	11.1	49
40	Wagonwheel Road, Boyland	Boyland	1114	1.7	49
41	Beechmont Road	Beechmont	72	15.5	49
42	Finch Road	Canungra	368	0.9	48
43	Alpine Terrace	Mount Tamborine	19	1.9	47
44	Seidenspinner Road	Mount Barney	956	2.8	47
45	Tubber Street	Beaudesert	1085	1.7	47
46	Allan Creek Road	Gleneagle	15	4.3	44
47	Hinchcliffe Drive, Kooralbyn	Kooralbyn	488	0.7	44
48	Tullamore Way, Gleneagle	Gleneagle	1087	1.2	44
49	Brookland Road, Gleneagle	Gleneagle	137	7.9	44
50	Cedar Glen Road, Darlington	Darlington	189	1.4	44
51	Muller Road	Kalbar	753	4.1	44
52	Bromelton House Road	Bromelton	133	5.3	42
53	Kooralbyn Drive	Kooralbyn	590	1.0	42
54	Unformed Road Reserve between Sandy Creek Road and Lot 2 on RP177490	Bromelton	N/A	0.3	42
55	Yore Road, Tamborine (5G)	Tamborine	1263	0.5	42

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
56	Lot 7 on SP246353	Tamborine	N/A	0.7	42
57	Lot 10 on SP337036	Kalbar	N/A	0.8	42
58	Kooralbyn Road	Laravale	591	6.8	42
59	Gould Hill Road	Gleneagle	425	4.2	42
60	Biddaddaba Road	Boyland	87	2.8	42
61	Long Road (North of MacDonnell Road)	Mount Tamborine	1271	1.3	41
62	Willmotts Road Harrisville	Harrisville	1165	0.9	41
63	Stacey Drive	Boonah	997	1.0	41
64	Eastern Ring Road (northern portion – Mount Lindesay Highway to Beaudesert Nerang Road)	Beaudesert	N/A	4.5	41
65	Eastern Ring Road (southern portion – Beaudesert Nerang Road to Kerry Road)	Beaudesert	N/A	1.7	41
66	Eastern Ring Road (southern portion – Sullivan Road)	Beaudesert	N/A	1.8	41
67	Fields Road, Veresdale	Veresdale	367	2	39
68	Ogilvy Place	Kooralbyn	800	0.7	38
69	Riemore Road	Tamborine	1203	1.6	38
70	Degen Road, Dugandan	Dugandan	270	0	38
71	High Street	Boonah	482	n/a	38
72	Mocker Road	Roadvale	717	3.0	38
73	Edward Street	Kalbar	381	0.3	37
74	Christmas Creek Road, Christmas Creek	Laravale	212	33.6	35
75	Bambling Road, Boyland	Boyland	48	0.7	35
76	Hinrichsen Road, Mount Walker (5G)	Mount Walker	489	1.0	35
77	Hoya Road, Boonah	Boonah	501	6.0	32
78	Contour Road	Mount Tamborine	234	1.5	32
79	Monarch Drive	Canungra	721	0.7	31
80	Sugarloaf Road	Mutdapilly	1024	4.6	31
81	Frazerview Road	Aratula	391	2.2	31
82	Boundary Street	Beaudesert	111	0.7	30
83	Carter Road	Aratula	177	0.5	30
84	Bruckner Hill Road, Dugandan	Dugandan	142	2	30
85	Ferguson Road (Unformed Road Reserve) between Mount Lindesay Highway and Cryna Road	Cryna	1247	1.6	30
86	Milbong Road, Anthony & Milbong	Milbong	707	6.7	29

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
87	Wilsons Plains Road	Harrisville	1167	6.5	29
88	Round Mountain Road	Laravale	921	7.1	29
89	Nindooinbah Estate Road	Kerry	778	7.6	29
90	Murray Grey Road	Tamborine	761	1.5	29
91	McNeills Road Peak Crossing	Peak Crossing	695	1.1	29
92	Walker Drive	Kooralbyn	1116	2.1	29
93	Matilda Street	Aratula	678	1.2	29
94	Stegert Road, Coulson	Coulson	1004	2.6	28
95	Rosevale Road	Rosevale	918	10.6	28
96	Mount Walker West Road, Lower Mount Walker	Lower Mount Walker	748	0.9	28
97	Stanfield Road	Coulson	1001	4.2	28
98	Surawski Drive	Aratula	1034	0.3	27
99	Walnut Road	Tamborine	1119	0.8	27
100	Black Rock Road	Coochin	94	3.4	27
101	Kerry Road, Darlington	Beaudesert	570	5.2	27
102	Upper Coomera Road, Witheren	Witheren	1099	6.8	27
103	Markwell Creek Road, Cryna	Cryna	671	0.1	27
104	Kulgun Road, Kalbar	Kalbar	600	6.4	26
105	Munbilla Road	Kalbar	754	16.2	26
106	Beckwith Road, Milora & Limestone Ridges	Milora	70	4.1	25
107	Dwyer Ridges Road	Mount Alford	307	8.2	23
108	Washpool Road	Peak Crossing	1130	8.7	23
109	Helen Street	Beaudesert	476	1.5	23
110	Spengler Road, Tabragalba	Tabragalba	990	1.4	23
111	Fenwick Road, Boyland	Boyland	364	2	22
112	Stokes Crossing Road, Lower Mount Walker	Mount Walker	1016	1.9	22
113	Veresdale Scrub School Road, Veresdale Scrub	Veresdale Scrub	1105	4	21
114	Frazerview Road, Frazerview	Aratula	391	0.3	21
115	Knoll Road	Mount Tamborine	587	1.4	21
116	Peak Crossing Churchbank Weir Road	Mutdapilly	764	4.3	21
117	Teviotville Road, Teviotville	Kalbar	1056	4.3	21

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
118	Head Road, Carneys Creek	Carneys Creek	473	11.1	20
119	Ellis and Jackson Road	Wilsons Plains	337	2.7	20
120	Flagstone Creek Road, Birnam	Birnam	370	4.9	20
121	Birnam Range Road	Beaudesert	90	4.5	20
122	Sandy Creek Road, Josephville	Josephville	938	8.4	20
123	Mount French Road, Boonah & Mount French	Boonah & Mount French	737	9.3	19
124	Robson Road	Boonah	914	1.7	19
125	Cannon Creek Road, Milford	Milford	165	19.2	19
126	Biddaddaba Road, Boyland	Boyland	87	2.8	19
127	Kargorum Road	Beaudesert	558	2.1	19
128	Teviotville Road, Kalbar	Kalbar	1056	4.3	19
129	Boomerang Drive	Kooralbyn	107	3.9	19
130	Unformed Road Reserve between Echo Hills Drive and Lot 42 on SP246067	Kerry	N/A	2.1	18
131	Unformed Road Reserve between Vaucluse Road and Lot 14 on RP21535	Mount Walker	N/A	3.1	18
132	Unformed Road Reserve between Cunningham Highway and Lot 18 on RP50377	Silverdale	N/A	4.7	18
133	Christmas Creek Road, Christmas Creek	Christmas Creek	212	8.3	18
134	Unformed Road Reserve between Markwell Creek Road and Lot 42 on SP246067	Kerry	N/A	7.2	18
135	Sarabah Road, Sarabah	Sarabah	939	6.5	17
136	Short Street	Beaudesert	969	0.3	17
137	Holz Road, Roadvale	Roadvale	495	2.3	17
138	Lupton Road	Beaudesert	650	1.9	17
139	Kerry Road, Darlington	Beaudesert	570	36.2	17
140	Limestone Ridges Road, Limestone Ridges	Peak Crossing	631	6.0	15
141	Kents Lagoon Road, Kents Lagoon	Kents Lagoon	566	6.7	15
142	Markwell Creek Road, Cryna (5G)	Cryna	671	1.6	15
143	Illinbah Road, Illinbah	Illinbah	514	8.2	14
144	Darlington Connection Road, Darlington	Darlington	263	1.2	14

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
145	Widgee Creek Road, Hillview	Hillview	1153	2.5	14
146	Boomerang Road, Tamborine	Tamborine	108	3	14
147	Leach Road	Tamborine	619	3.1	14
148	Mount French Road, Dugandan	Dugandan	737	9	14
149	Biddaddaba Creek Road, Biddaddaba	Biddaddaba	86	10	14
150	Coleyville Road, Coleyville	Mutdapilly	227	11.4	14
151	Tarome Road, Aratula	Aratula	1047	25	14
152	Frazerview Road, Aratula & Frazerview	Aratula	391	6.6	14
153	Darlington Connection Road, Hillview	Hillview	263	1.2	14
154	Brookland Road, Allenview	Gleneagle	137	7.9	13
155	Mutdapilly-Churchbank Weir Road, Mutdapilly	Mutdapilly	764	9.2	13
156	Veresdale Scrub Road, Gleneagle	Gleneagle	1104	7.0	13
157	Middle Road Peak Crossing	Peak Crossing	706	4.6	13
158	Bigriggen Road, Rathdowney	Rathdowney	88	2.8	13
159	Croftby Road, Moogerah	Moogerah	253	11.1	13
160	Echo Hills Road, Laravale	Laravale	319	3.6	11
161	Mocker Road, Roadvale	Roadvale	717	3.0	11
162	Christensen Road, Mount Walker	Mount Walker	209	3.5	10
163	Dwyers Road Peak Crossing	Peak Crossing	308	3.1	10
164	Saleyard Road, Dugandan	Dugandan	934	1	6
165	Ann Street	Kalbar	24	0.4	6
166	Morwincha Road, Fassifern Valley & Morwicha	Morwincha	730	2.8	5
167	Mount Greville Road, Moogerah	Moogerah	739	4.1	5
168	Beechmont Road, Witheren & Beechmont	Beechmont	72	15.5	0
169	Beechmont Road	Beechmont	72	15.5	0
170	Rosewood Warrill View Road	Mount Walker	State-Controlled	12	0
171	Ipswich Boonah Road / Coronation Drive	Boonah	State-Controlled	2.1	0
172	Mount Alford Road	Mount Alford	State-Controlled	4.9	0
173	Boonah Rathdowney Road	Maroon	State-Controlled	11.6	0

Rank	Corridor / Road Name	Suburb / Locality	Road ID	Length (km)	Score
174	Mount Lindsay Highway (south of Innisplain)	Laravale to Mount Lindsey	State-Controlled	28.7	0
175	Innisplain Road / Running Creek Road	Innisplain	516, State-Controlled	21.1	0
176	Tamborine Mountain Road	Mount Tamborine	State-Controlled	4.2	0
177	Boonah Rathdowney Road	Boonah	State-Controlled	1.2	0
178	Lamington National Park Road (North)	Canungra	State-Controlled	6	0
179	Beaudesert Nerang Road (east of Canungra)	Canungra	State-Controlled		0
180	Beaudesert Nerang Road	Canungra	State-Controlled	0.9	0
181	Cunningham Highway	Kalbar	State-Controlled		0
182	Warill View Peak Crossing Road	Warrill View	State-Controlled	3.2	0
183	Queen Street	Harrisville	State-Controlled	0.9	0
184	Tamborine Mountain Road	Tamborine	State-Controlled	5.4	0

Table 11.5: Priority List – Intersection Upgrades

Rank	Corridor / Road Name	Suburb	Road ID	Length (km)	Score
1	Hinchcliffe Drive / Etruscan Rd intersection	Kooralbyn	488, 345	n/a	90
2	Brisbane Street / Tubber Street Intersection	Beaudesert	129 ,1085	N/A	89
3	Albert Street / Anna Street intersection	Beaudesert	34, 25	N/A	81
4	Eaglesfield Street / Duckett Street Intersection	Beaudesert	316, 295	N/A	68
5	Eaglesfield Street / Tina Street Intersection	Beaudesert	316, 1073	N/A	68
6	Eaglesfield Street / Arthur Street Intersection	Beaudesert	316, 34	N/A	68
7	Oaky Creek Road	Innisplain	793	0.3	60
8	Kulgun Road	Kulgun	600	6.4	39
9	Beaudesert Boonah Road / Bromelton House Road intersection	Bromelton	State-Controlled, 133	n/a	0
10	Mount Lindesay Highway / Allan Creek Road intersection	Gleneagle	State-Controlled, 15	n/a	0
11	Beaudesert Nerang Road / Finch Road Intersection	Canungra	State-Controlled, 368	N/A	0
12	Beaudesert Nerang Road / Eastern Ring Road intersection	Beaudesert	State-Controlled	N/A	0
13	Mundoolan Connection Road / Biddaddiba Road	Biddaddaba	State-Controlled, 86	n/a	0
14	Coronation Drive / Hoya Road & Macquarie Street Intersection	Boonah	State-Controlled, 501, 656	N/A	0

12. TRUNK ROAD PROJECTS

12.1 Overview

A review of priority and recommended upgrades has been undertaken against relevance to the Local Government Infrastructure Plan (LGIP). While this RNP does not explicitly identify all roads that would qualify for inclusion in the LGIP (as this scope of works requires other criteria that have not been considered in this assessment) it identifies corridors where existing and/or future growth is a key driver. These corridors have been reviewed in greater detail to identify potential timing requirements for upgrades, to provide greater information on the importance of the works in the short, medium or long term.

Growth across the Scenic Rim is generally focussed at several key locations, specifically northern Boonah, Beaudesert, and north of Canungra. These areas are predicted to contain concentrated growth which has a high impact on the surrounding road network. Several roads are planned for construction / upgrade to support this growth and connect new residential areas to the state-controlled road network. Each area has been reviewed below.

12.2 Boonah

The Scenic Rim GMS 2041 identifies a further 2,200 lots at Boonah by 2041, with much of this growth planned to the north of the Boonah township. Based on information available, there is expected to be potential for ~500 new residential lots located directly off Hoya Road (between Robson Road and Coronation Drive). This level of residential growth is required to be supported by adequate trunk infrastructure, to ensure that the growth is promoted and sustainable once completed.

The following recommended upgrades outlined in Table 12.1 are considered to align with trunk road properties and should be considered for inclusion within future versions of LGIP.

Table 12.1: Trunk Road Projects - Boonah

ID	Road Name	Road Asset ID	Length (km)	Current AADT	Recommended Upgrade	Indicative Works
L.BO.1	Macquarie Street	656	1.3	1,316	Upgrade to Connector Street	Localised widening, otherwise hierarchy change only
L.BO.6	Robson Road	914	1.7	357	Recommend investigations to consider a new link to Ipswich Boonah Road. This would ultimately require a Connector Street standard.	Provide as Connector Street with 11.6m wide pavement
L.BO.7	Hoya Road, Boonah	501	6.0	942	Upgrade to Trunk Collector (No Lot Access)	+2.7m wide pavement
L.BO.8	Coronation Drive / Hoya Road & Macquarie Street Intersection	State-Controlled 501 656	N/A	N/A	Investigate upgrade to a roundabout layout.	

Macquarie Road, Boonah (L.BO.1)

Macquarie Road provides a key north-south link between Hoya Road and the eastern side of Boonah. Given its current hierarchy as a Collector Street, it is expected to have increased utilisation as growth occurs on the fringes of Boonah. A review of current data and modelling results shows volumes of:

- Current (2015 surveys): 1,316 vpd
- Planned 2031: ~1,350 vpd
- Planned 2041: ~1,600 vpd

On this basis, the recommendation to upgrade to a Connector Street should be considered in the **Short Term**, to ensure that capacity constraints do not impact safety or efficiency along the corridor.

Robson Road, Boonah (L.BO.6)

Robson Road provides access to rural properties to the north of Boonah and is currently an unsealed one-lane roadway that does not connect through from Hoya Road to Ipswich Boonah Road. It is expected to become a key corridor for planned residential growth in the area providing a connection to/from Ipswich Boonah Road reducing traffic demands along Hoya Road and at the Coronation Drive / Hoya Road & Macquarie Street intersection.

This link was not specifically modelled; however, a review of surrounding links was undertaken to determine predicted future volumes. A review of current data and modelling shows volumes of:

- Current (2022 surveys): 357vpd
- Planned 2041: ~1,000-2,000 vpd

On this basis, the recommendation to extend the link to Ipswich Boonah Road and upgrade to a Connector Street should be considered in the **Long Term (2041)**, to ensure that capacity constraints do not impact safety or efficiency along the surrounding road corridors. This link would also reduce pressure on Hoya Road in an ultimate scenario, aligning with ITP principles and policies.

Hoya Road, Boonah (L.BO.7)

Hoya Road provides a key north-south link between Ipswich Boonah Road and will provide a direct connection to approved and planned residential growth on the northern side of Boonah. Given its current hierarchy as a Collector Street, it is expected to have increased utilisation as growth occurs on the fringes of Boonah. A review of current data and modelling results shows volumes of:

- Current (2015 surveys): 942vpd
- Planned 2031: ~2,000 vpd
- Planned 2041: ~4,000 vpd.

On this basis, the recommendation to upgrade to a Trunk Collector (No Lot Access) should be considered in the **Medium Term (2031)**, to ensure that capacity constraints do not impact safety or efficiency along the corridor.

It is noted that the timing of these upgrades is dependent on planned development. Whilst upgrades to Hoya Road have been conditioned of developers, it is likely that the provision of these upgrades as trunk infrastructure will promote development. Therefore, this road may not be 'overcapacity' prior to needing to be built, as construction will promote planned growth in the area.

It is further noted that the upgrades to Robson Road (L.BO.6) are directly tied to the effectiveness of Hoya Road in the long term. If these upgrades are not provided, Hoya Road may need to be upgraded to a higher standard, and additional investigations should be undertaken.

Coronation Drive / Hoya Road & Macquarie Street Intersection, Boonah (L.BO.8)

The Coronation Drive / Hoya Road & Macquarie Street intersection serves as a key intersection for vehicles travelling to/from the east along Ipswich Boonah Road as well as to the residential catchments to the north and south via Hoya Road and Macquarie Street. The intersection is expected to have increased utilisation as growth occurs on the fringes of Boonah.

This intersection was identified to need upgrades by 2041.

Further testing was conducted to confirm if upgrades are warranted by 2031. The testing results are provided at **Appendix M** and reproduced below for reference.

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)
2031	AM	DESIGN	969	0.770	44.9	D	36
2031	PM	DESIGN	1,008	0.826	56.4	D	42

As shown, DOS exceeds acceptable and desired standards for a priority-controlled intersection. Furthermore, critical delays exceed acceptable and desired standards of service. On this basis, the

recommendation to upgrade to a Roundabout configuration should be considered in the **Medium Term (2031)**, to ensure that capacity constraints do not impact safety or efficiency along the corridor.

Summary

Figure 12.1 illustrates the recommended staging for trunk road considerations.

Figure 12.1: Trunk Road Projects - Boonah

12.3 Beaudesert

The Scenic Rim GMS 2041 identifies a further 9,600 lots at Beaudesert by 2041. This level of residential growth is required to be supported by adequate trunk infrastructure, to ensure that the growth is promoted and sustainable once completed.

The following recommended upgrades outlined in Table 12.2 are considered to align with trunk road properties and should be considered for inclusion within future versions of LGIP.

Table 12.2: Trunk Road Projects - Beaudesert

ID	Road Name	Road Asset ID	Length (km)	AADT	Recommended Upgrade	Indicative Works
L.BE.1	Eastern Ring Road (northern portion – Mount Lindesay Highway to Beaudesert Nerang Road)	N/A	4.0-5.0	-	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement
L.BE.2	Eastern Ring Road (southern portion –Beaudesert Nerang Road to Kerry Road)	N/A	1.7	-	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement
L.BE.3	Eastern Ring Road (southern portion –Sullivan Road)	N/A	1.8	-	Provide as Trunk Collector (No Lot Access)	New road with 10.0m wide pavement

ID	Road Name	Road Asset ID	Length (km)	AADT	Recommended Upgrade	Indicative Works
L.BE.4	Eastern Ring Road (southern portion –Cryna Road)	N/A	1.1	-	Provide as Connector Street	New road with 11.6m wide pavement
L.BE.5	Brisbane Street	129	1.0	5,509	Increase LATM to promote "Place" amenity	-
L.BE.6	McKee Street	692	0.3	3,010	Upgrade to Trunk Collector (No Lot Access)	+1.2m wide pavement
L.BE.14	Beaudesert Nerang Road / Eastern Ring Road intersection	N/A	N/A	6,702	Install signals or roundabout	
L.BE.23	Tubber St	1085	0.9	1,152	Upgrade road standard to match Collector Street hierarchy	+1.7m-2.5m wide pavement
L.BE.25	Kerry Road	570	5.0	2,004	Upgrade to Arterial Road	+1.9m-3.2m wide pavement

Eastern Ring Road (Mount Lindsay Highway to Beaudesert Nerang Road) (L.BE.1)

The Eastern Ring Road is a key strategic road corridor providing a bypass around Beaudesert and a direct connection between planned residential growth to the north and south of Beaudesert without needing to travel through the main township. The bypass will support growth and improved traffic and transport amenity within Beaudesert.

The northern portion of the Ring Road is expected to ultimately carry approximately 5,000 vpd.

Given the status of the road and planned growth, it is recommended that this portion of the Ring Road is considered in the **Medium Term (2031)**. This will ensure it is fit to accommodate initial growth.

It is noted that there may be an opportunity for this road to connect to Beaudesert Nerang Road via Oakland Way in the interim, before a larger and more permanent connection is provided to the east (see L.BE.14).

Eastern Ring Road (Beaudesert Nerang Road to Kerry Road) (L.BE.2)

The south-eastern portion of the Ring Road is expected to ultimately carry approximately 5,000-7,000 vpd. Given the status of the road and planned growth, it is recommended that this portion of the Ring Road is considered in the **Long Term (2041)**. This will ensure it is fit to accommodate growth.

It is noted that there may be an opportunity for this road to connect to Beaudesert Nerang Road via Kingsley Drive and Serena Drive in the interim, before a larger and more permanent connection is provided to the east (see L.BE.14).

Eastern Ring Road (Kerry Road to Mount Lindesay Highway) (L.BE.3 and L.BE.4)

The southern portion of the Ring Road is expected to ultimately carry approximately 3,000-4,000 vpd.

Given the status of the road and planned growth, it is recommended that this portion of the Ring Road is considered **beyond a 2041 horizon**. This will ensure it is fit to accommodate growth. Should planned growth occur faster than anticipated, there may be merit in bringing this work forward.

Brisbane Street, Beaudesert (L.BE.5)

Brisbane Street is the main street that runs north-south through the Beaudesert township. Given the Beaudesert Bypass Road and future Eastern Ring Road seek to reduce trips within the township, it is expected to undergo a change in use, where "Place" related trips become more prominent. This in combination with recommended upgrades will improve local amenity for users within the Beaudesert

township as surrounding areas of Beaudesert continue to develop. A review of current data and modelling results shows volumes of:

- Current (2024 surveys): 5,509vpd
- Planned 2031: 3,000 vpd
- Planned 2041: 2,000 vpd (with Bromelton Bypass) or ~5,000 vpd (without Bromelton Bypass)

The recommendation to upgrade provide LATM devices to promote "Place" amenity should be considered in the **Medium Term (2031)**, to align with the first stages of the Eastern Ring Road. This will provide a high amenity street for the growing population of Beaudesert, and encourage further growth in the Region.

McKee Street, Beaudesert (L.BE.6)

McKee Street provides an east-west link between Mount Lindsay Highway (Telemon Street), Ipswich Boonah Road and Brisbane Street. Given its current hierarchy as a Collector Street, it is expected to have increased utilisation as growth occurs in Beaudesert and vehicles avoid travelling through the Beaudesert township to travel east-west. A review of current data and modelling results shows volumes of:

- Current (2016 surveys): 3,010 vpd
- Planned 2041: ~3,000 vpd

On this basis, the recommendation to upgrade to a Trunk Collector (No Lot Access) should be considered in the **Short Term**, to ensure that capacity constraints do not impact safety or efficiency along the corridor.

Beaudesert Nerang Road / Eastern Ring Road Intersection, Beaudesert (L.BE.14)

The Beaudesert Nerang Road / Eastern Ring Road intersection is expected to serve as a key intersection for vehicles travelling to/from the east via the Eastern Ring Road. The intersection is expected to have a large volume of traffic and utilisation to facilitate the predicted growth within Beaudesert and provide access to the east without travelling through the Beaudesert township.

This intersection forms the key link for the northern and southern portions of the Eastern Ring Road and should be provided at the same time scale. On this basis, the recommendation to provide the controlled intersection should be considered in the **Medium Term (2031)**, to ensure that traffic volumes on local interim roads (Oakland Way, Kingsley Drive) do not cause significant impacts.

Tubber Street, Beaudesert (L.BE.23)

Tubber Street provides an east-west link between Brisbane Street and the northern residential area of the Beaudesert township. It is planned that Tubber Street will provide an interim connection to the northern portion of the Eastern Ring Road, to provide improved traffic connections in initial stages. Given its current hierarchy as a Collector Street, it is expected to have increased utilisation once this connection is provided. A review of current data and modelling results shows volumes of:

- Current (2015 surveys): 1,152vpd
- Planned 2031: 2,600 vpd
- Planned 2041: 1,600 (vpd (once link is removed to Eastern Ring Road)

On this basis, the recommendation to upgrade to a Connector Street should be considered in the **Short Term**, to ensure that capacity constraints do not impact safety or efficiency along the corridor, and that the corridor is suited to the connection to the Eastern Ring Road.

Kerry Road / Brisbane Street (L.BE.25)

Kerry Road provides an Arterial link to planned growth to the south of Beaudesert. The Scenic Rim GMS 2041 identifies land bordered by Kerry Road for Low and Medium density residential development, with growth expected to be high (Beaudesert and Gleneagle are predicted to provide an additional 9,500 lots by 2041). Kerry Road is predicted to carry:

- ~6,000 vpd between township and Eastern Ring Road via Brisbane Street and Kerry Road

- ~10,000 vpd south of the Eastern Ring Road, to the edge of the PIA.

Kerry Road is not currently constructed to a standard capable of accommodating the high volumes of peak hourly and daily traffic anticipated in the future. Recommendation include upgrade to an Arterial Road from the edge of the PIA (approximately at Yore Road) into the south of Beaudesert township to accommodate the volumes expected.

Based on this, these works are recommended to be split as follows:

- L.BE.25 (between township and Eastern Ring Road): **Medium Term (2031)**, to align with anticipated inner south growth and allow connection to the Eastern Ring Road ultimately
- L.BE.25 (between Eastern Ring Road and edge of PIA): **Long Term (2041)**, to align with anticipated outer south growth and allow connection to the Eastern Ring Road ultimately.

Summary

Figure 12.2 illustrates the recommended staging for trunk road considerations.

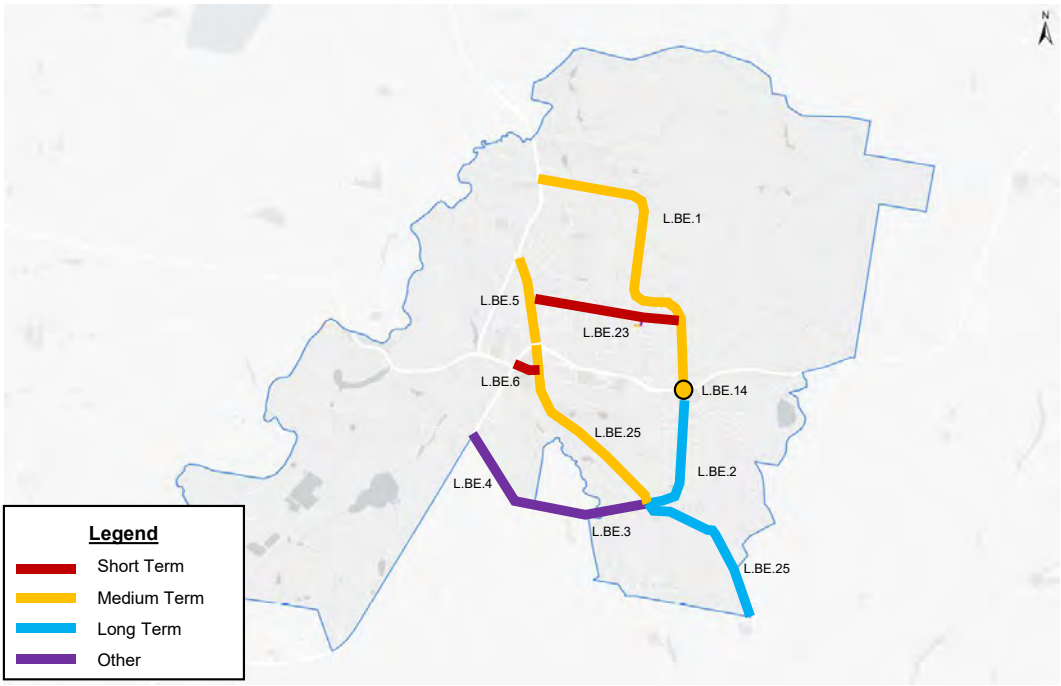


Figure 12.2: Trunk Road Projects – Beaudesert

12.4 Canungra

The Scenic Rim GMS 2041 identifies a further 1,000 lots at Canungra by 2041, with the majority of this growth planned to the north of the Canungra township. This level of residential growth is required to be supported by adequate trunk infrastructure, to ensure that the growth is promoted and sustainable once completed.

The following recommended upgrades outlined in Table 12.3 are considered to align with trunk road properties and should be considered for inclusion within future versions of LGIP.

Table 12.3: Trunk Road Projects - Canungra

ID	Road Name	Road Asset ID	Length (km)	Current AADT	Recommended Upgrade	Indicative Works
L.CA.3	Finch Road	368	0.9	470	Upgrade to Trunk Collector (No Lot Access)	+2.2m wide pavement
L.CA.4	Seymour Drive	1305	0.5	-	Upgrade to Connector Street Install LATM treatments to reduce rat running on these roads, and ensure only local access	+3.3m wide pavement
L.CA.5	Malgum Drive	N/A	2.4	-	Upgrade to Connector Street Install LATM treatments to reduce rat running on these roads, and ensure only local access	
L.CA.8	Beaudesert Nerang Road / Finch Road Intersection	State-Controlled 368	N/A	- 470	State-Controlled, Rural Access	Investigate upgrade to signals.

Finch Road, Seymour Drive, Malgum Drive Canungra (L.CA.3)

Finch Road, Seymour Drive and Malgum Drive provide direct access to planned and recently constructed residential growth to the north of Canungra. These roads serve the planned growth area ensuring convenient and direct access to the higher order strategic regional road network being Beaudesert Nerang Road. These roads are required to support the planned growth and ensure traffic is effectively managed. A review of current data and modelling results shows volumes of:

Malgum Drive

- Planned 2031: ~1,700
- Planned 2041: ~2,800

Finch Road

- Current (2018 surveys): 470vpd
- Planned 2031: ~4,000
- Planned 2041: ~6,400

On this basis, the recommendation to upgrade these roads should be considered in the **Medium Term (2031)**, to ensure that capacity constraints do not impact safety or efficiency along the surrounding road corridors.

It is noted that the timing of these upgrades is dependent on planned development and it is possible that planned development will not occur until the road works are provided (hence recommendation for consideration as trunk infrastructure). Therefore, this road may not be 'overcapacity' prior to needing to be built, as construction may drive planned growth in the area.

Beaudesert Nerang Road / Finch Road Intersection, Boonah (L.CA.8)

The Beaudesert Nerang Road / Finch Road intersection serves as a key intersection for vehicles travelling from the constructed and planned growth to the north of Canungra. The intersection is expected to have increased utilisation as growth occurs in Canungra.

This intersection was identified to need upgrades by 2041.

Further testing was conducted to confirm if upgrades are warranted by 2031. The testing results are provided at **Appendix M** and reproduced below for reference.

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)
2031	AM	DESIGN	1,429	0.868	80.4	F	39
2031	PM	DESIGN	1,828	1.601	599.0	F	260

As shown, DOS exceeds acceptable and desired standards for a priority controlled intersection. Furthermore, critical delays exceed acceptable and desired standards of service. On this basis, the recommendation to investigate upgrades to a signalised configuration should be considered in the **Medium Term (2031)**, to ensure that capacity constraints do not impact safety or efficiency along the corridor.

Summary

Figure 12.3 illustrates the recommended staging for trunk road considerations.

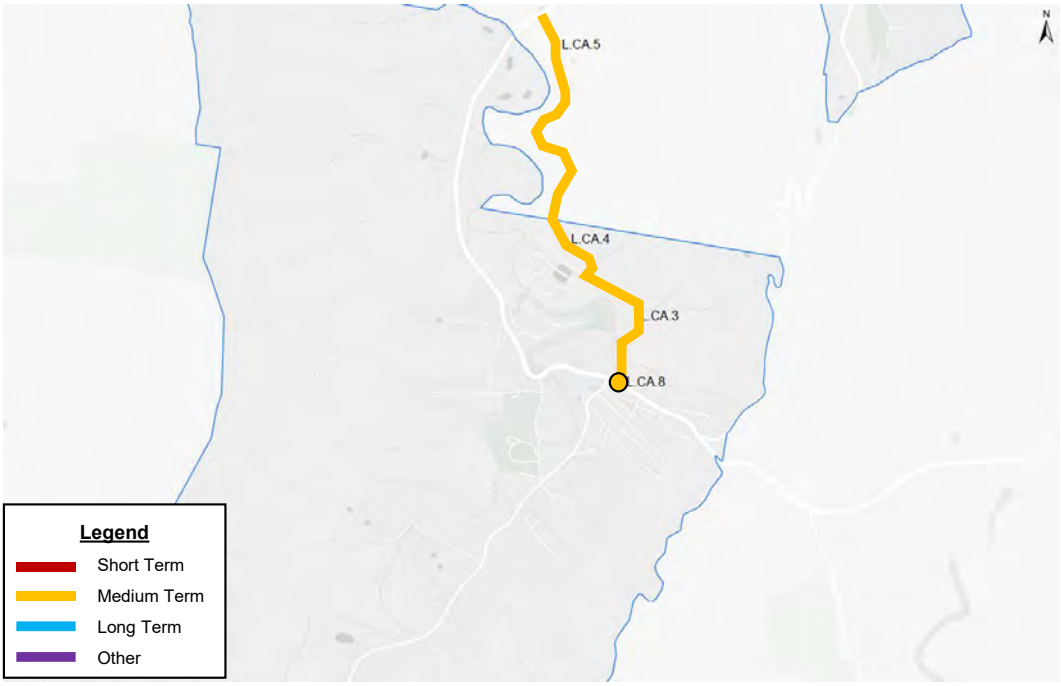


Figure 12.3: Trunk Road Projects - Canungra

13. Implementation, Monitoring And Review

13.1 Key Conclusions

The Scenic Rim is home to three growing markets:

- The **population and residential density** of the Scenic Rim is on the rise, with the population expected to increase by approximately 48% by 2041. This growth is predominately predicted to occur around major townships of Beaudesert, Canungra and Boonah
- **Employment opportunities** are increasing across the Region, with an additional 6,000-7,000 jobs predicted prior to 2041. The largest increase in potential employment is within the Bromelton State Development Area, which is projected to provide up to 5,000 additional jobs by 2041
- **Tourism** is a vital industry to the Scenic Rim, and local, interstate and international tourists are continually attracted by the scenery, National Parks, nature-based opportunities, and charming rural character.

The Scenic Rim is located near major metropolitan and urban centres of Brisbane, Gold Coast, Ipswich and Logan, and provides a unique lifestyle in south-east Queensland, that is increasingly attracting residents, workers and tourists alike.

The Scenic Rim's road network was originally established as a series of connections between its towns and villages. As the population has increased, travel demands for private cars and freight have increased, creating a conflict as regional roads become increasingly busier and local roads are attempting to accommodate both components of the movement and place framework. These conflicts are expected to further increase with the growing population and employment base, and reliance on private vehicle travel.

The Road Network Plan has been considered at two scales:

- **Strategic Road Network:** Which carries traffic across the Scenic Rim and borders, and is key to supporting regional growth and economic sectors, such as agriculture and tourism
- **Local Road Network:** Which carries people around their local township and must put the needs of people first, providing high quality amenity, recreation opportunities and connections to community.

The Road Network Plan recognises the importance of the road network as part of the transport system, which is vital to the continued success and prosperity of the Scenic Rim. The Road Network Plan proposes a series of recommendations and strategies to create a more **Connected and Accessible**, **Safe**, and **Reliable and Resilient** network, to ultimately create a more **Healthy, Liveable and Sustainable** community. Considerable investment in the road network is required to ensure that the Region continues to grow in a way to meet the strategic vision of the Scenic Rim.

13.2 Implementation Plan

13.2.1 Recommended Policies

13.2.1.1 Road Safety

The Scenic Rim has an above average fatality and casualty rate, with an average of six (6) fatalities per year due to road trauma.

In striving towards the national and international goals of zero fatalities or serious injures by 2050, a multi-faceted approach is required to ensure that road trauma is targeted from all relevant angles. This includes the consideration of road design, driver behaviour, education, vulnerable road users, children, and key crash hotspots within the Scenic Rim.

The safe systems methodology will also be applied to the design of future roads, and upgrades of existing transport infrastructure. This approach considers key road users and how people, vehicles, speeds, and roads work together to create a safe system.

Table 13.1 provides a summary of the safety policies to support the Road Network Plan.

Table 13.1: Road Network Policies – Safety

ID	Action	Timing
1.1	Develop and deliver effective road safety education programs to the community of the Cessnock LGA.	Ongoing
1.2	Deliver road and transport network infrastructure planning which is safe, efficient and complies with contemporary industry standards and best practice	Ongoing
1.3	Survey any that contain a Fatal or Seriously Injured crash severity so that the crash rate can be determined. In some instances this may warrant surveys on roads that have not been previously surveyed	Ongoing
1.4	Set evidence-based targets for key performance measures across transport modes to deliver zero trauma by 2050 and regularly monitor progress.	Short Term
1.5	Undertake an annual Road Safety Audit program to review the safety of the existing road network and identify future improvements.	Short Term
1.6	Adopt the principles of the Safe Systems Approach as default safety requirements in the planning and design stages of all transport projects	Short Term
1.7	Develop targeted community engagement and messaging for motorcycle users, promoting safe behaviours.	Short Term
1.8	Undertake an annual Speed Limit Review program to review the appropriateness of speeds across key roads across the Scenic Rim	Medium Term

13.2.1.2 Movement and Place

To promote the prosperity and local amenity of townships a greater focus should be applied to the movement and place framework. This identifies the township as the “Place” and the connections to this as “Movement”. Connections need to be provided to a high standard for all modes of transport, to ensure the township is easily accessible for visitors of all ages and abilities. Whereas the heart of the township should provide a place function with a focus on local amenity such as: reduced noise, increased safety, increased walkability, and convenient access to shops and services.

Within the Scenic Rim, one of the key challenges is providing suitable connections between townships and neighbouring centres, without directing traffic through the townships. By developing a well-connected road network, options to avoid central areas of townships can result in more direct and efficient connections as well as making townships more community focussed and liveable.

Table 13.2 provides a summary of the movement and place policies to support the Road Network Plan.

Table 13.2: Road Network Policies – Movement and Place

ID	Action	Timing
2.1	Through planning controls and zoning, encourage new development in close proximity to townships or close to employment to reduce trip lengths and encourage more sustainable transport options	Short Term
2.2	Advocate for increased public transport coverage and service of the Scenic Rim, for both local and inter-region trips	Short Term
2.3	Manage/introduce access controls on the arterial road network to reduce delays and improve safety for road users.	Short Term
2.4	Develop a warrants and implementation policy for Local Area Traffic Management (LATM) within centres in accordance with the Movement and Place Framework	Short Term
2.5	Investigate the implementation of lower speed limits within townships	Medium Term
2.6	Develop policies to manage access to local roads from new developments, ensuring that access points are safe and do not create congestion	Medium Term
2.7	Ensure suitable off-street parking is provided on the fringe of CBDs to adequately support long stay demands (such as workforce) whilst ensuring that desirable parking near businesses is accessible for visitors.	Long Term
2.8	Audit kerbside parking allocation in key centres and revise allocation to meet the needs and demands of the centre. Monitor parking occupancy levels in centres and expand time-limited parking area when occupancy levels exceed 85% capacity at peak times	Long Term

13.2.1.3 Freight

The efficiency of the freight system is closely linked to the location and land use relative to highly accessible transport infrastructure. Providing freight-based land uses to the high order road network and freight network will minimise delays and promote productivity. This also provides improved separation between freight-based trips and the community, aligning with the movement and place principles detailed above.

Table 13.3 provides a summary of the freight policies to support the Road Network Plan.

Table 13.3: Road Network Policies – Freight

ID	Action	Timing
3.1	Develop a heavy vehicle management plan to better manage heavy vehicle movements on Scenic Rim roads, including designated routes, weight restrictions, and rest area provision	Short Term
3.2	Through planning controls and zoning, encourage new freight based development in close proximity to the existing and future freight network.	Medium Term

13.2.1.4 Road Condition and Planning

Road condition and planning considers the physical infrastructure of roads, with an intent to maintain these to the highest quality possible, whilst also planning ahead to reduce life-cycle costs and gain efficiencies where possible from the network. A high quality road network is one that promotes business, industry and tourism and accommodates the workforce necessary to sustain these. The transport network also plays a vital role in the productivity of the Scenic Rim and is responsible for delivering the efficient movement of freight and people

Table 13.4 provides a summary of the road condition and planning policies to support the Road Network Plan.

Table 13.4: Road Network Policies – Road Condition and Planning

ID	Action	Timing
4.1	Regularly collect data on traffic movements across the whole year to ensure that the road network can be managed to support not only	Ongoing
4.2	Continue and extend the monitoring of pavement condition, to better manage rehabilitation where it is most needed	Ongoing
4.3	Develop a strong partnership with the Department of Transport and Main Roads to formalise the 'one network' approach to road planning and management	Short Term
4.4	Incorporate climate resilience measures in the planning and design of all transport infrastructure and services aligned with the principles of disaster management.	Short Term
4.5	Establish a clear pipeline of maintenance projects to improve resilience with a focus on adaptability and 'building back better' after a disruption.	Short Term
4.6	Undertake regular review and update of the developed EMME strategic model for the Scenic Rim to ensure any changed assumptions are reflected. This can then be used to better guide future works	Medium Term
4.7	Investigate opportunities to improve regional network resilience and recovery, through planning controls and zoning.	Medium Term
4.8	Update land development guidelines to match the desired standards of service developed for the Road Network plan	Medium Term

13.2.2 Key Road Upgrade Projects

Key projects have been identified for further review and investigation based on their relevance to the principles and policies developed for the ITP. Whilst a priority scoring was provided above, this section seeks to identify projects which are of importance and may need to be considered in combination with other projects.

In alignment with sections below regarding funding, it is important to consider that high-cost projects identified should not be dismissed based on their priority ranking. These projects may still be vital to the Scenic Rim, despite being relatively unfeasible for Council to deliver on their own. Such project require continued investigation and advocacy through relevant funding programs and mechanisms to ensure that these are included as early as possible.

13.2.2.1 Safety

The following safety based projects have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
S.SA.26	Beechmont Road	Beechmont	72	Upgrade
S.SA.18	Mount Lindsay Highway (south of Innisplain)	Laravale	State Controlled	Investigation
S.SA.22	Innisplain Road / Running Creek Road	Innisplain	516, State-Controlled	Upgrade & Investigation
S.SA.23	Gould Hill Road	Gleneagle	425	Upgrade
S.SA.17	Boonah Rathdowney Road	Maroon	State Controlled	Investigation
S.SA.13 **S.SA.14**	Mount Alford Road / Dwyer Ridges Road	Mount Alford	307, State-Controlled	Upgrade & Investigation
L.TM.15	Tamborine Mountain Road	Mount Tamborine	State-Controlled	Investigation
L.CA.6	Lamington National Park Road	Canungra	State-Controlled	Investigation

13.2.2.2 Freight

The following freight based projects have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
S.FR.28	Bromelton House Road	Bromelton	133	Management
S.FR.30	Allan Creek Road	Gleneagle	15	Management
S.FR.31	Munbilla Road	Kalbar	754	Management

13.2.2.3 Tamborine Mountain

The following projects at Tamborine Mountain have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.TM.3	Beacon Rd	Tamborine Mountain	64	Upgrade
L.TM.4 **L.TM.6**	Long Road	Tamborine Mountain	1271	Upgrade
L.TM.7	Lahey Road	Tamborine Mountain	603	Upgrade
L.TM.8	Hartley Road	Tamborine Mountain	464	Upgrade

13.2.2.4 Beaudesert

The following projects at Beaudesert have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.BE.1	Eastern Ring Road (northern portion – Mount Lindesay Highway to Beaudesert Nerang Road)	Beaudesert	N/A	Investigation & Upgrade
L.BE.2	Eastern Ring Road (southern portion – Beaudesert Nerang Road to Kerry Road)	Beaudesert	N/A	Investigation & Upgrade
L.BE.5	Brisbane Street	Beaudesert	129	Upgrade
L.BE.6	McKee Street	Beaudesert	692	Upgrade
L.BE.10 **L.BE.11** **L.BE.12**	Eaglesfield Street	Beaudesert	316	Upgrade
L.BE.23	Tubber St	Beaudesert	1085	Upgrade
L.BE.25	Kerry Road	Beaudesert	570	Upgrade

13.2.2.5 Boonah

The following projects at Boonah have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.BO.1	Macquarie Street	Boonah	656	Upgrade
L.BO.6	Robson Road	Boonah	914	Upgrade
L.BO.7	Hoya Road, Boonah	Boonah	501	Upgrade
L.BO.8	Coronation Drive / Hoya Road & Macquarie Street Intersection	Boonah	State-Controlled, 501, 656	Investigation & Upgrade

13.2.2.6 Canungra

The following projects at Canungra have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.CA.1	Coburg Road	Canungra	223	Upgrade
L.CA.3	Finch Road	Canungra	368	Upgrade
L.CA.4	Seymour Drive	Canungra	1305	Upgrade
L.CA.5	Malgum Drive	Canungra	N/A	Upgrade
L.CA.8	Beaudesert Nerang Road / Finch Road Intersection	Canungra	State-Controlled, 368	Investigation & Upgrade

13.2.2.7 Kalbar

The following projects at Kalbar have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L. KA.4	Munbilla Road	Kalbar	754	Upgrade

13.2.2.8 Peak Crossing and Harrisville

The following projects at Peak Crossing and Harrisville have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.PH.1	Warill View Peak Crossing Road	Peak Crossing	State-Controlled	Investigate
L. PH.2	Flinders Street	Peak Crossing	375	Investigate
L. PH.3	Queen Street	Harrisville	State-Controlled	Investigate

13.2.2.9 Aratula

The following projects at Aratula have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.AR.1	Frazerview Road	Aratula	391	Upgrade

13.2.2.10 Kooralbyn

The following projects at Kooralbyn have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.KO.1	Hinchcliffe Drive / Etruscan Rd intersection	Kooralbyn	488, 345	Upgrade
L.KO.2	Kooralbyn Drive	Kooralbyn	590	Upgrade
L.KO.3	Routley Drive	Kooralbyn	922	Investigate
L.KO.7	Wellington Bundock Drive	Kooralbyn	1142	Investigate

13.2.2.11 Tamborine

The following projects at Tamborine have been identified for priority implementation:

ID	Road Name	Locality	Road Asset ID	Works
L.TA.1	Ballantrae Road	Tamborine	47	Upgrade
L.TA.2	Munstervale Road	Tamborine	759	Upgrade
L.TA.4	Riemore Road	Tamborine	1203	Upgrade

13.3 Responsibilities

Responsibility for road network policy, infrastructure and services in the Scenic Rim is shared between the two levels of government, being State Government and Council. In addition to regulators, the development sector and community play a pivotal role in the management and ongoing development of the road network. The key responsibilities for each body are described below.

Scenic Rim Regional Council

- Responsible for the provision and maintenance of local roads, and contributing resources to delivering transport infrastructure and services
- Responsible for the control and management of the planning scheme to support development that complements the intent of the transport strategy
- Responsible for making local laws to regulate roads and parking
- Responsible for development, delivery and maintenance of active transport infrastructure on local roads.

State Government

- Plays a major role in the planning, delivery, management and regulation of regional transport network in partnership with Council's and other service providers
- Responsible for the planning, provision, maintenance and management of the state-controlled road network. Has a strategic interest in integrating roads within the overall transport system.
- TMR coordinates and delivers bus and train services across South East Queensland. TMR is also responsible for providing customer information, ticketing and public transport infrastructure.

The Community

- Engage in dialogue with Council as to what the future needs and issues are, and understanding the implications of doing 'more of the same' as the Region continues to grow and diversify
- Being prepared to consider more sustainable transport options for some trips and addressing inefficient travel habits where there is a realistic alternative to car travel.

Development Sector

- Understanding the role of townships and ensuring their business is developed with appropriate transport services. For example, industry requiring broad areas and good road access should locate in enterprise precincts near major roads, and should not be located in commercial centres that are managing the supply of parking
- Understanding the need to balance car and alternative transport access in townships and locate car parking in areas that reduce through traffic from main street areas and encourage active transport modes.
- Create urban environments that reduce car-dependence
- Ensure new residential development provides the required density and diversity to support efficient public transport operations and, through good design principles and supportive development, supports walking and cycling trips

13.4 Investment Framework

Without adequate planning and funding the Scenic Rim faces a future of increased levels of traffic congestion, reduced road safety and amenity for its residents and visitors. The current reality of reduced levels of funding presents a significant challenge for government investment in infrastructure to keep pace with growth, especially given the extensive road network across the Scenic Rim.

Providing a more sustainable, robust and planned transport system will reduce the endless requirement to maintain roads, which uses the bulk of current transport funding. A more balanced level of investment in transport infrastructure and an increased level of investment in public and active transport is required to meet the transport needs of the Region.

The Road Network plan is not intended to be a fully funded Plan, however preliminary costings estimate that the implementation of all recommendations would be in the order of **$1.234 billion**. It is not feasible for Council to bear the full costs, and therefore implementing the recommendations of the Plan requires strong partnerships with the Queensland government (and potentially Federal government).

The Road Network Plan is intended to function as a vision to guide transport policy and prioritise investment in the transport network. The Plan will be used to assess funding needs and underpin bids for funding from all levels of government. The projects outlined in the Plan represent achievable plan outcomes by containing a balance of:

- Low-cost, short-term actions that get the most out of our existing infrastructure and address immediate needs where possible
- Medium cost, high priority actions which address critical parts of the road network
- Major infrastructure projects that will require substantial investment from the State and Federal governments once funding becomes available in the medium-to-long term.

13.5 Funding

Responsibility for funding the major transport infrastructure required to deliver the Plan is shared under existing funding arrangements to be in line with government priorities, a corridor management approach, and a broader approach to how the network is managed. Elements achieved by present elements are:

- Local government to fund local infrastructure such as local roads, and active transport facilities
- Queensland Government has primary responsibility for funding strategic transport infrastructure improvements including roads, public transport and principal cycleways
- Private operators to fund public transport vehicles and supporting technological improvements
- Developers to provide local road infrastructure, pedestrian and cycle infrastructure and public transport rights of way in areas of their development

Increased levels of Queensland Government funding for arterial road network will be an essential element of appropriate investment levels across the Plan.

To meet need, opportunity and acceptability of raising new revenue for transport services, future funding sources should also be investigated. These may include broader infrastructure charges or value capture schemes to fund transport projects that provide material benefit to development.

13.6 Monitoring and Review

The RNP is a policy document, not a statutory plan. The RNP provides guidance and proposes necessary actions for achieving a connected, accessible, safe, reliable, resilient and sustainable road network. This implies that the Plan will only be implemented if it provides useful and timely guidance for day-to-day decisions, and has the support of the community and the various key agencies involved in its delivery. To ensure it meets these requirements, implementation arrangements for the Road Network Plan will incorporate needs for:

- Obtaining broad community support for the directions and key actions in the Plan
- Institutional coordination and liaison
- Monitoring of progress towards implementing the actions in the Plan
- Monitoring of progress towards achievement of key criteria and goals
- A predictable and repeatable process for reviewing and revising the Plan
- An agreed action plan revised regularly.

Implementing the RNP requires two tiers of government to work within a consistent action planning and monitoring framework. Council will work to maintain strong partnerships with the Queensland government (and potentially Federal government) to maximise the benefits of working together and leveraging shared outcomes. The most immediate opportunity is the upcoming Olympic Games 2032 in Brisbane which requires coordinated action from all governments, and presents a rare opportunity to showcase the Scenic Rim on an international stage, especially to tourists, and to demonstrate how partnerships can continue to deliver transport benefits to the Scenic Rim community.

It is recommended that RNP is continually monitored, with a comprehensive review undertaken every **five (5) years** in order to achieve the targets set out in the Plan. These targets will also be monitored through regular system measurements, including the national census, accident reports, traffic counts, travel time surveys, annual public transport patronage, customer and user satisfaction surveys and other methods.

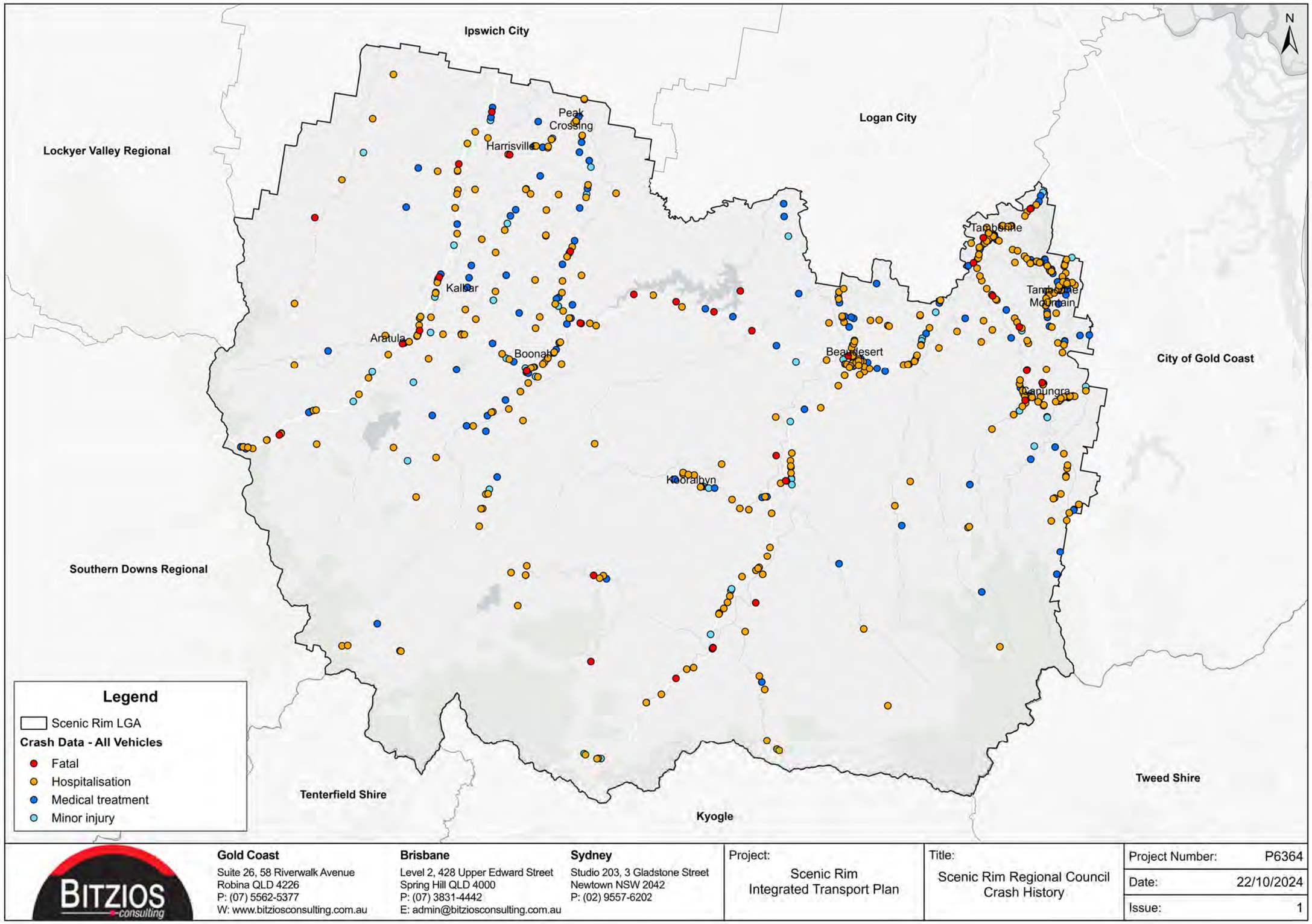
The first major review of the RNP is recommended for 2030. This will coincide with the key planning horizon of 2031 and also would be expected to occur prior to the implementation of any new Planning Scheme for the Region. Where major variations to the Plan are proposed outside the review process, there should be consultation with the public and stakeholders, consistent with the processes used to prepare the Plan. Where minor amendments are proposed, there may be no need for a formal amendment to the published plan.

Table 13.5 presents the recommended monitoring and review framework for the RNP.

Table 13.5: RNP Monitoring and Review Framework

ID	Action
1	Formal review of the road network plan should be undertaken every five (5) years
2	Routine updates to the developed EMME model to maintain accuracy and adapt to changes in planning, development, policy and infrastructure changes. It is recommended that the EMME model is reviewed every five (5) years to ensure it remains relevant to the Scenic Rim
3	Routine review of all roads across the Scenic Rim and regular updates to the developed GIS database of roads, to confirm the road conditions. It is recommended that this is completed sequentially, with all roads being reviewed every 3-5 years
4	A list of performance indicators for the Region should be prepared and should include the below elements (at a minimum): ▪ Crash rates on key roads. The crash rate scoring system outlined in TMR's *Queensland Road Safety Technical Users Volumes: Guide to Speed Management* (QRSTUV) (2023) ▪ Traffic volume and congestion levels ▪ Travel times on key routes ▪ Road condition (e.g., percentage of roads in good condition) ▪ Community satisfaction with the road network ▪ Expenditure on road maintenance and construction ▪ Progress on implementation of specific projects ▪ Resilience of the network. The performance measures identified above should be included as part of an annual Evaluation Report ("Report Card") to monitor performance on implementation of the ITP. This list should be reviewed on an ongoing basis, to ensure relevance and account for new challenges and opportunities in the Region.

Appendix A: Strategic Network Maps – Safety



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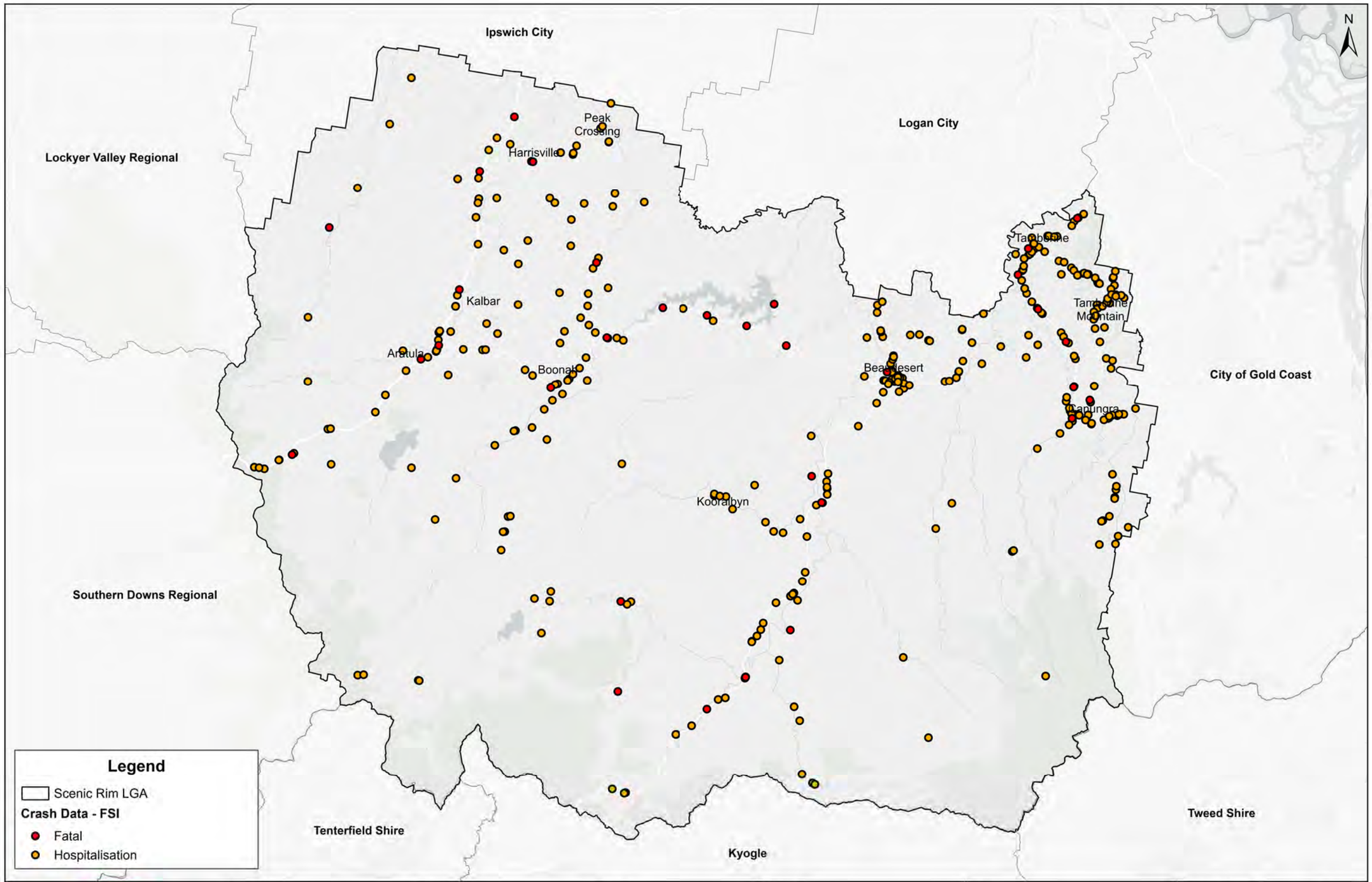
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash History
Project Number:	P6364
Date:	22/10/2024
Issue:	1



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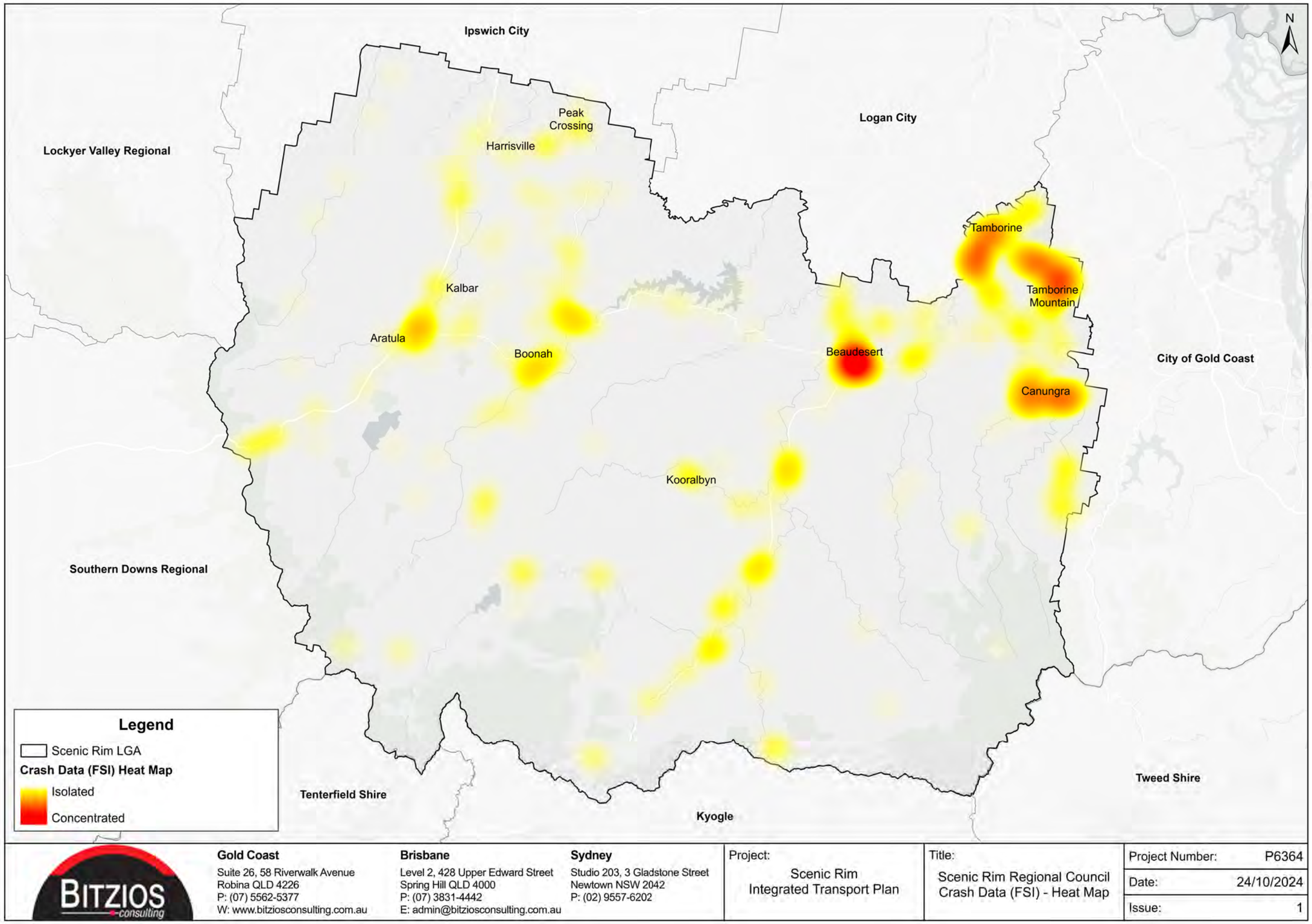
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash History - FSI
Project Number:	P6364
Date:	23/10/2024
Issue:	1



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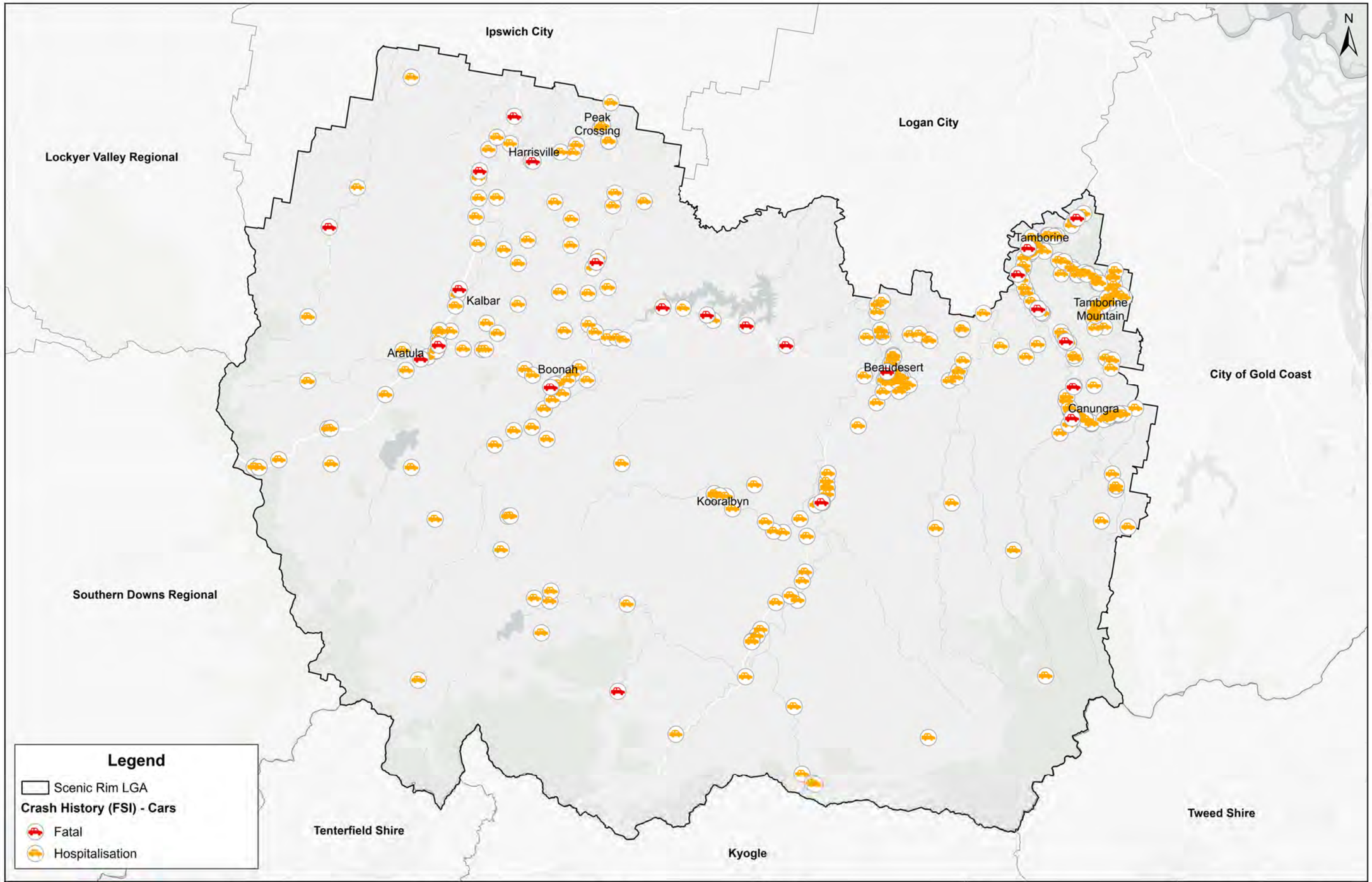
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash Data (FSI) - Heat Map
Project Number:	P6364
Date:	24/10/2024
Issue:	1



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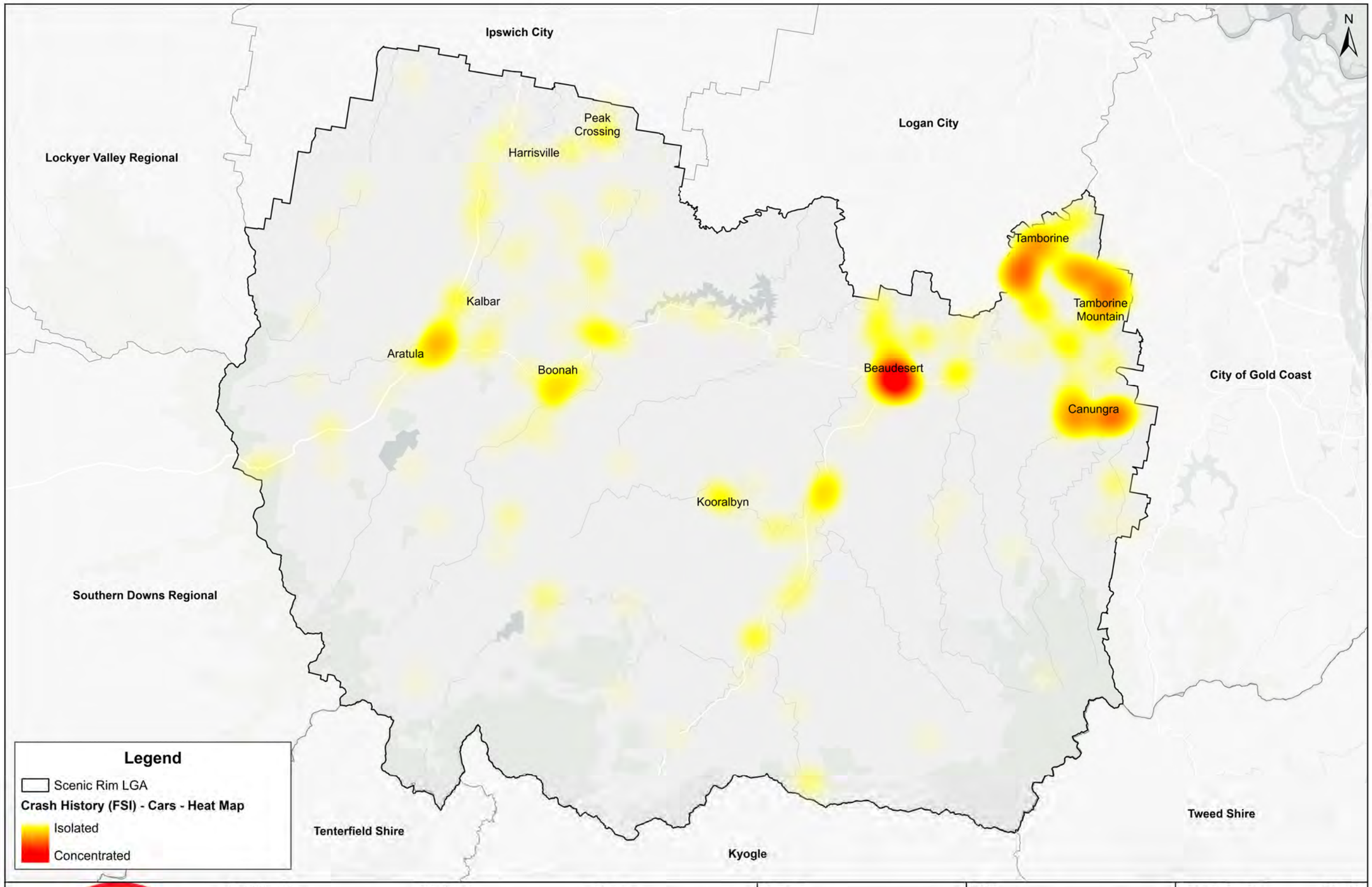
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash History (FSI) - Cars
Project Number:	P6364
Date:	23/10/2024
Issue:	1



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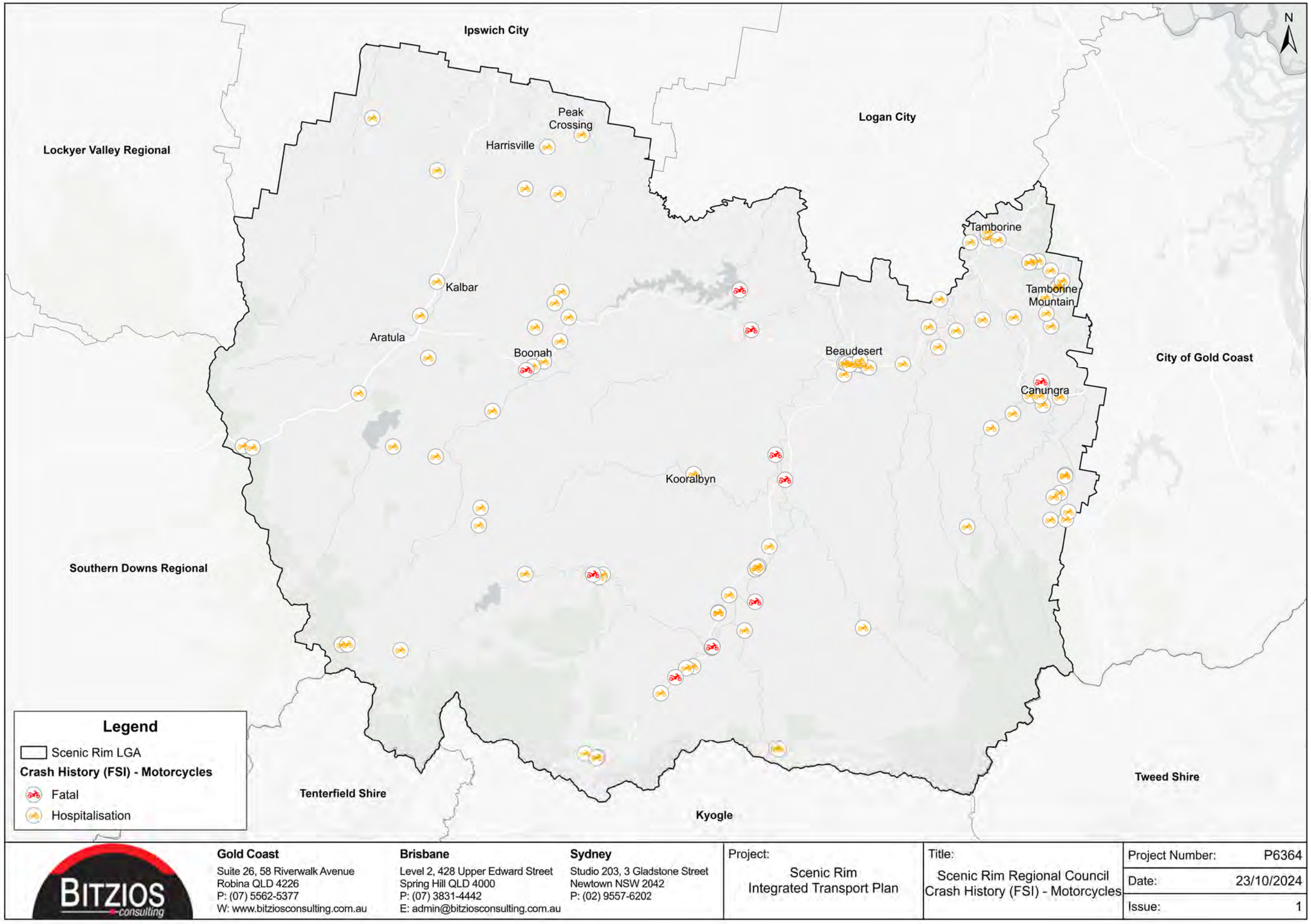
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash Data (FSI) - Cars Heat Map
Project Number:	P6364
Date:	24/10/2024
Issue:	1



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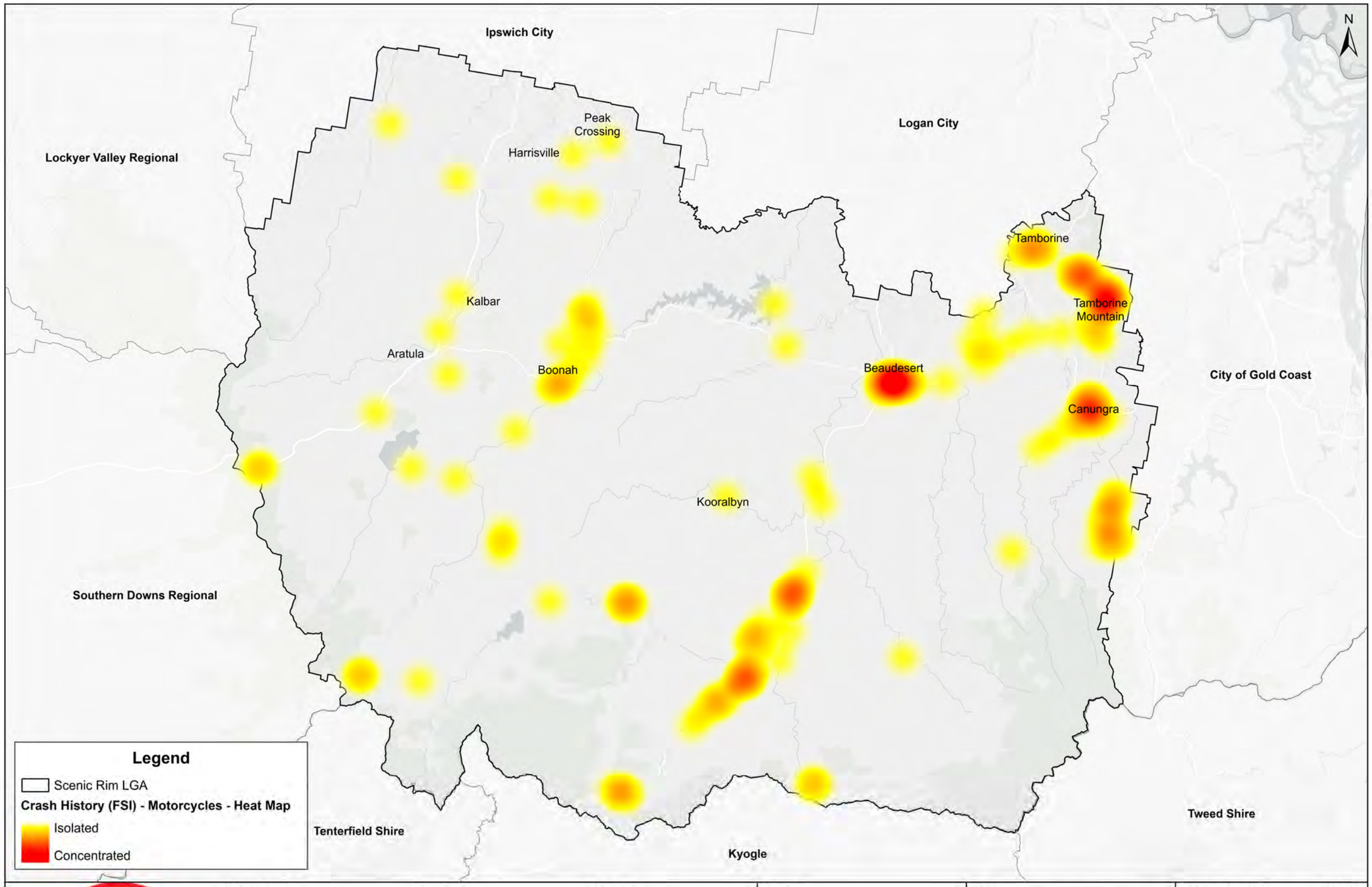
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash History (FSI) - Motorcycles
Project Number:	P6364
Date:	23/10/2024
Issue:	1



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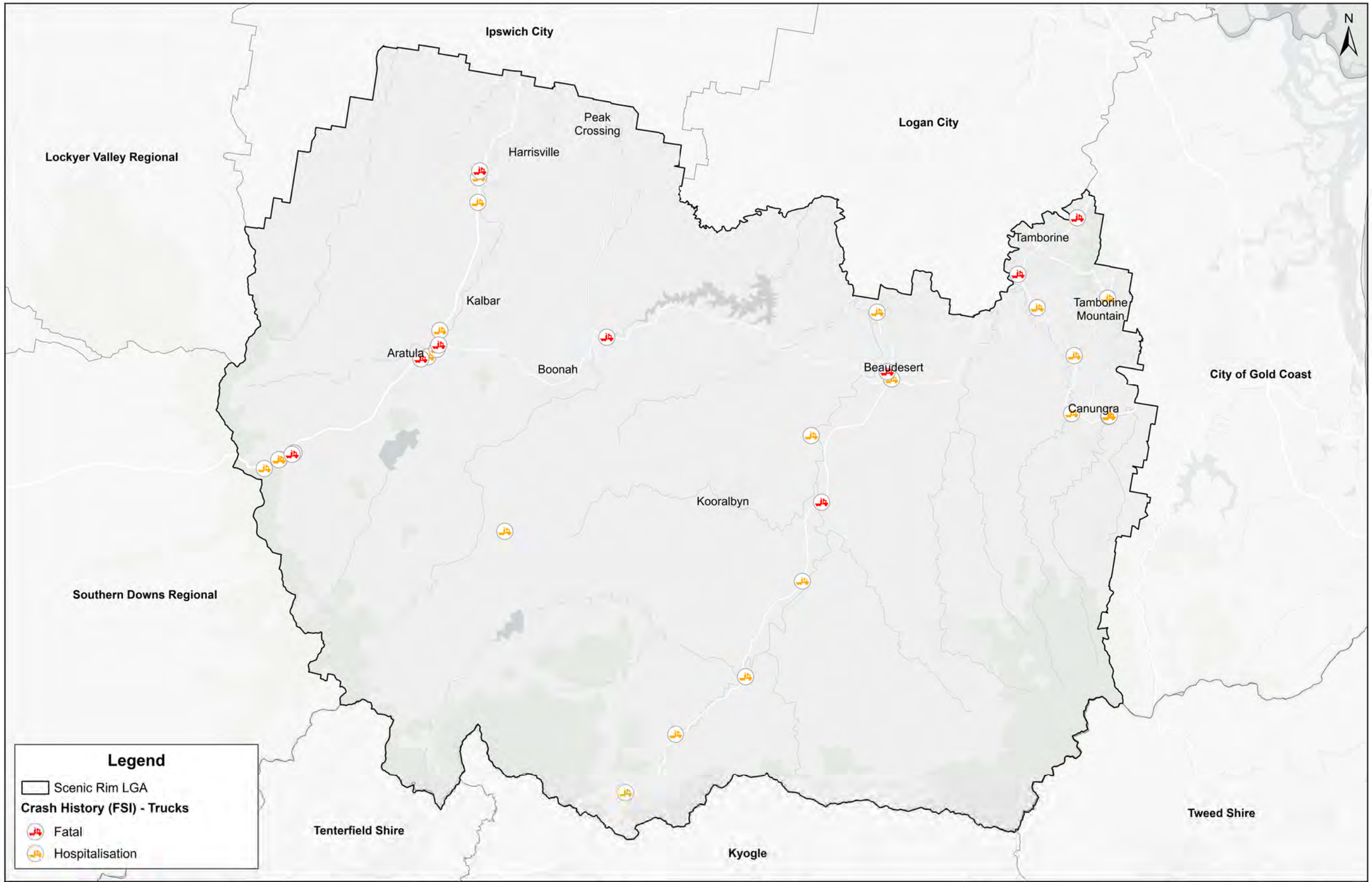
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash Data (FSI) - Motorcycles Heat Map
Project Number:	P6364
Date:	24/10/2024
Issue:	1



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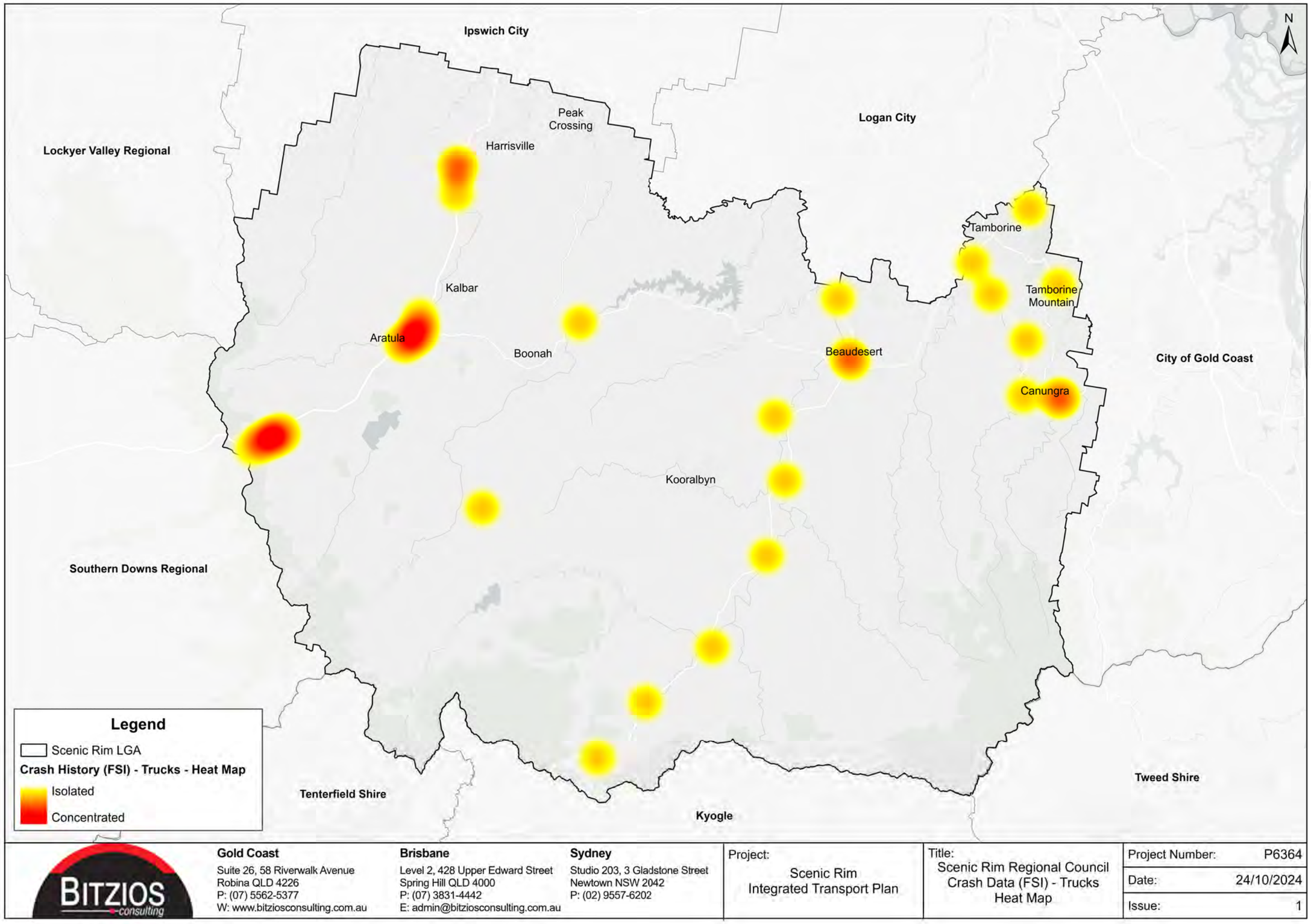
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash History (FSI) - Trucks
Project Number:	P6364
Date:	23/10/2024
Issue:	1



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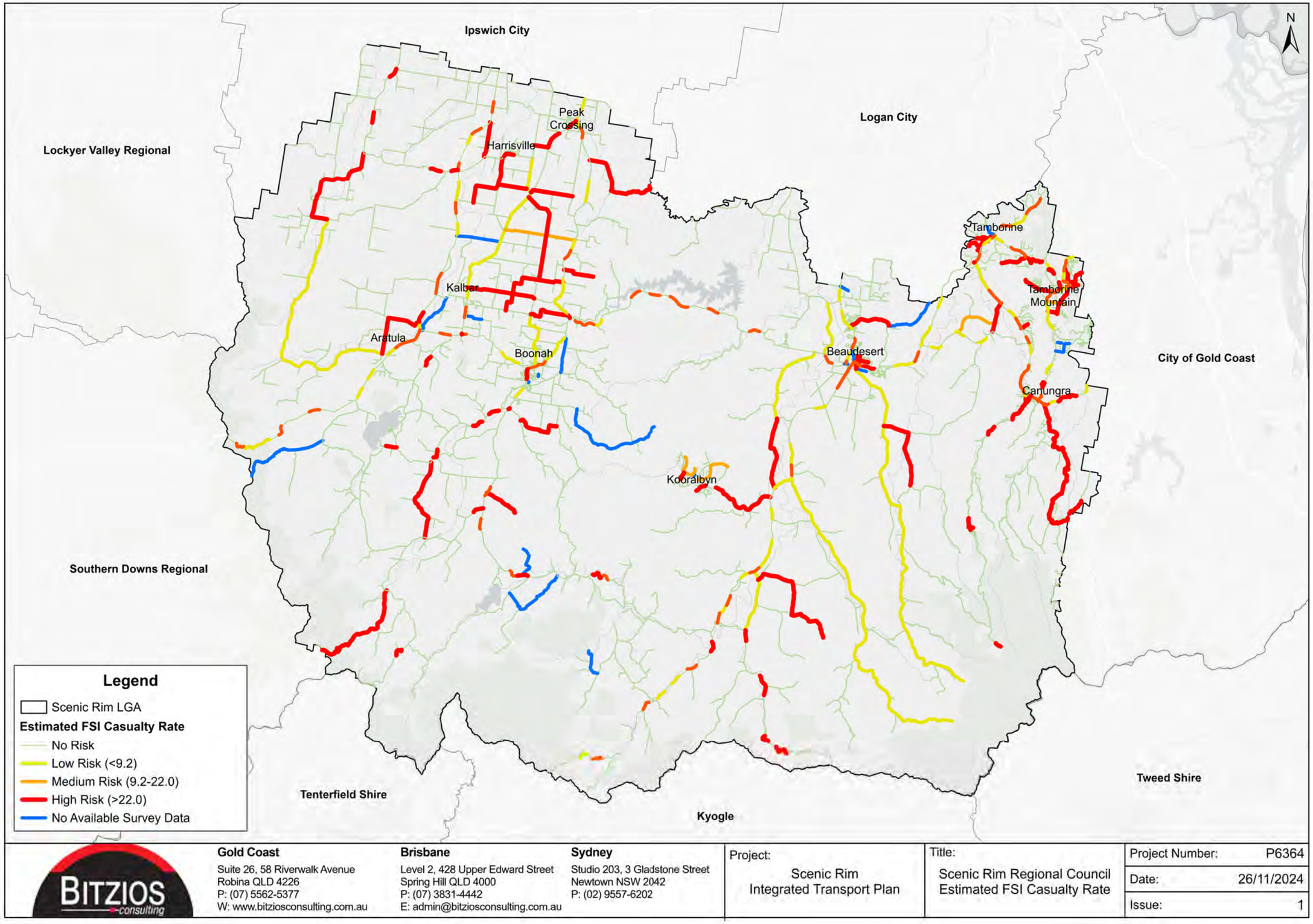
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Crash Data (FSI) - Trucks Heat Map
Project Number:	P6364
Date:	24/10/2024
Issue:	1



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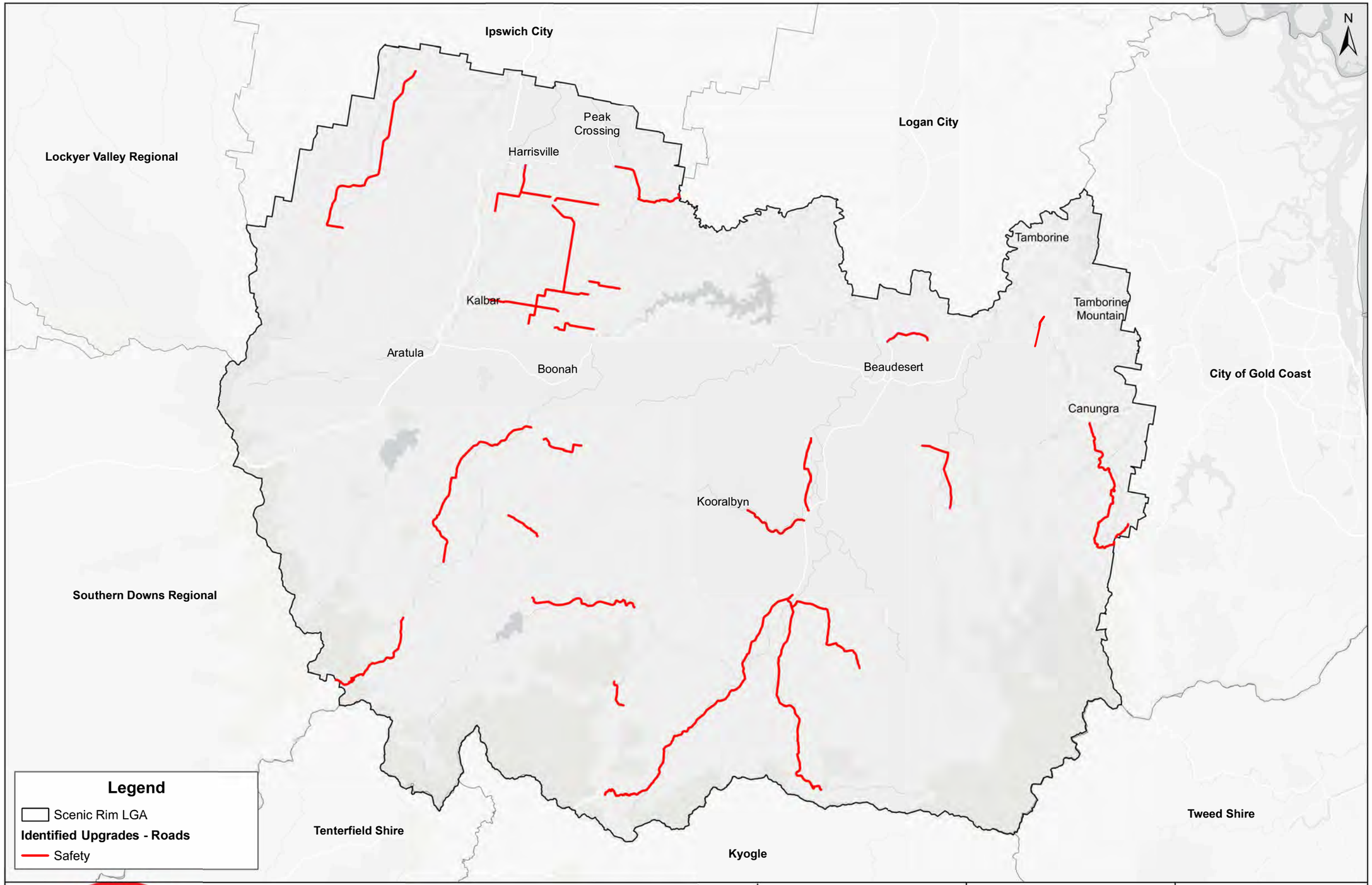
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Estimated FSI Casualty Rate
Project Number:	P6364
Date:	26/11/2024
Issue:	1



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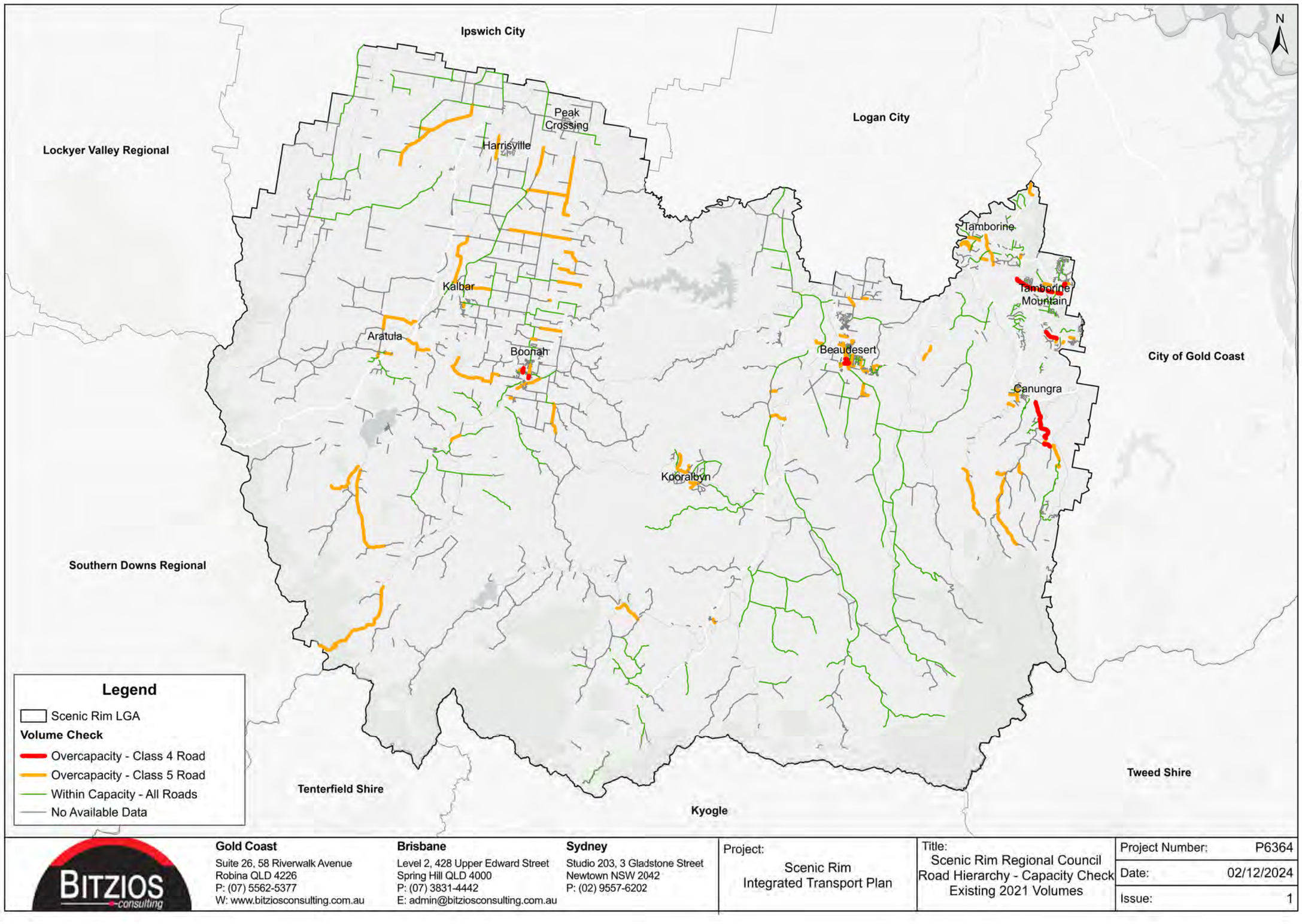
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Identified Road Upgrades - Safety
Project Number:	P6364
Date:	17/12/2024
Issue:	1

Appendix B: Strategic Network Maps – Capacity and Road Hierarchy



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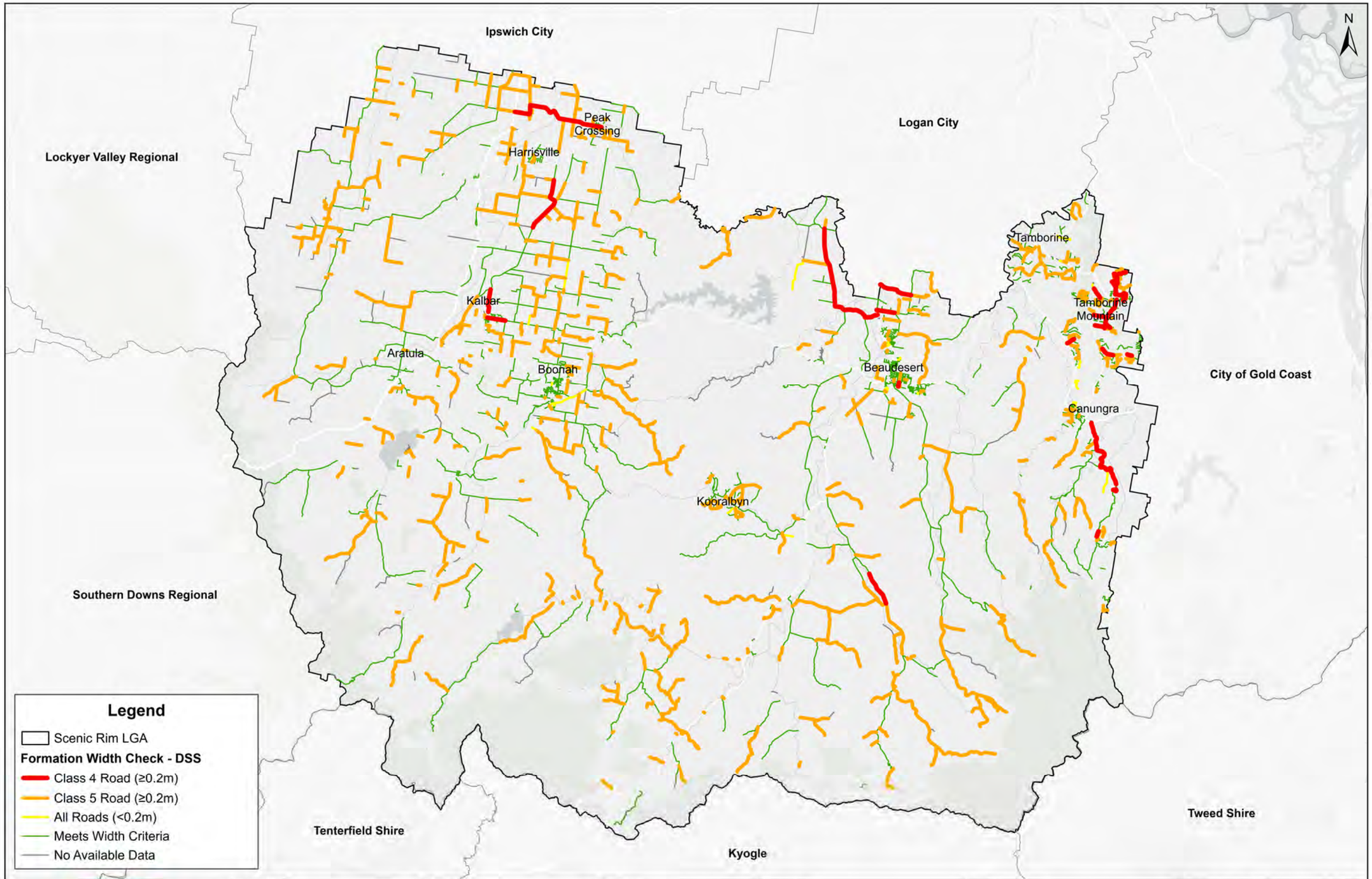
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Road Hierarchy - Capacity Check Existing 2021 Volumes
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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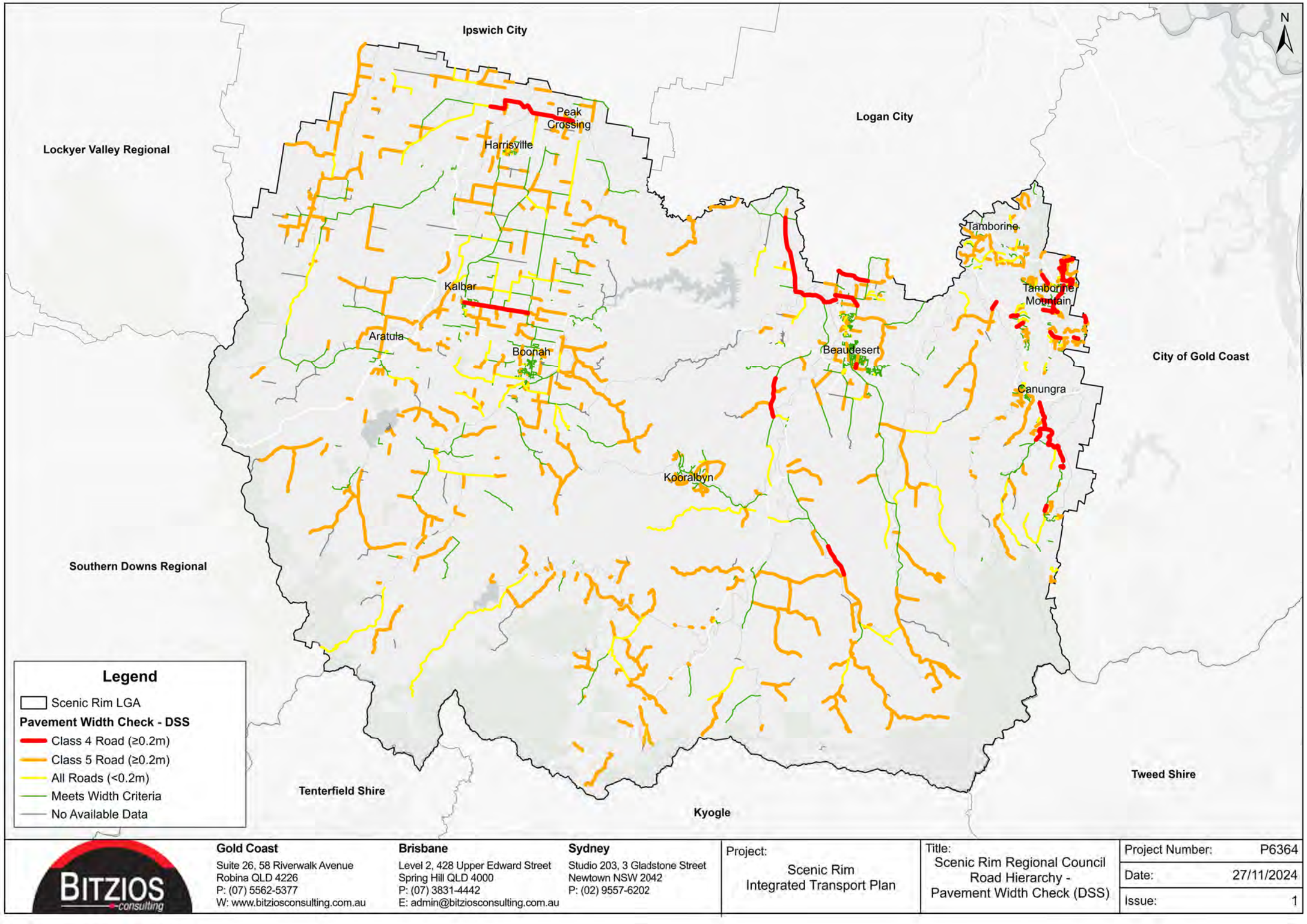
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Road Hierarchy - Formation Width Check (DSS)
Project Number:	P6364
Date:	27/11/2024
Issue:	1



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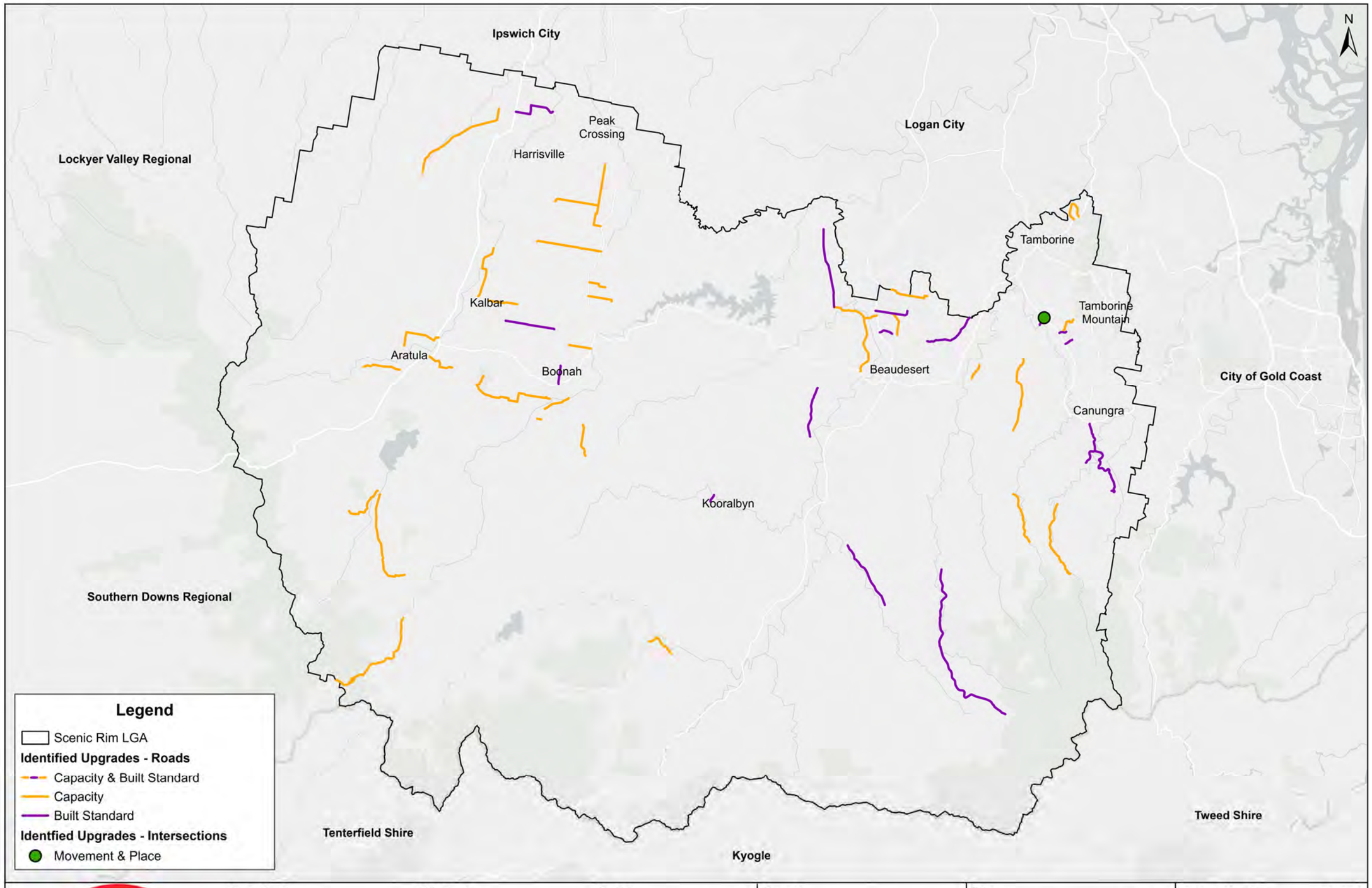
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Road Hierarchy - Pavement Width Check (DSS)
Project Number:	P6364
Date:	27/11/2024
Issue:	1



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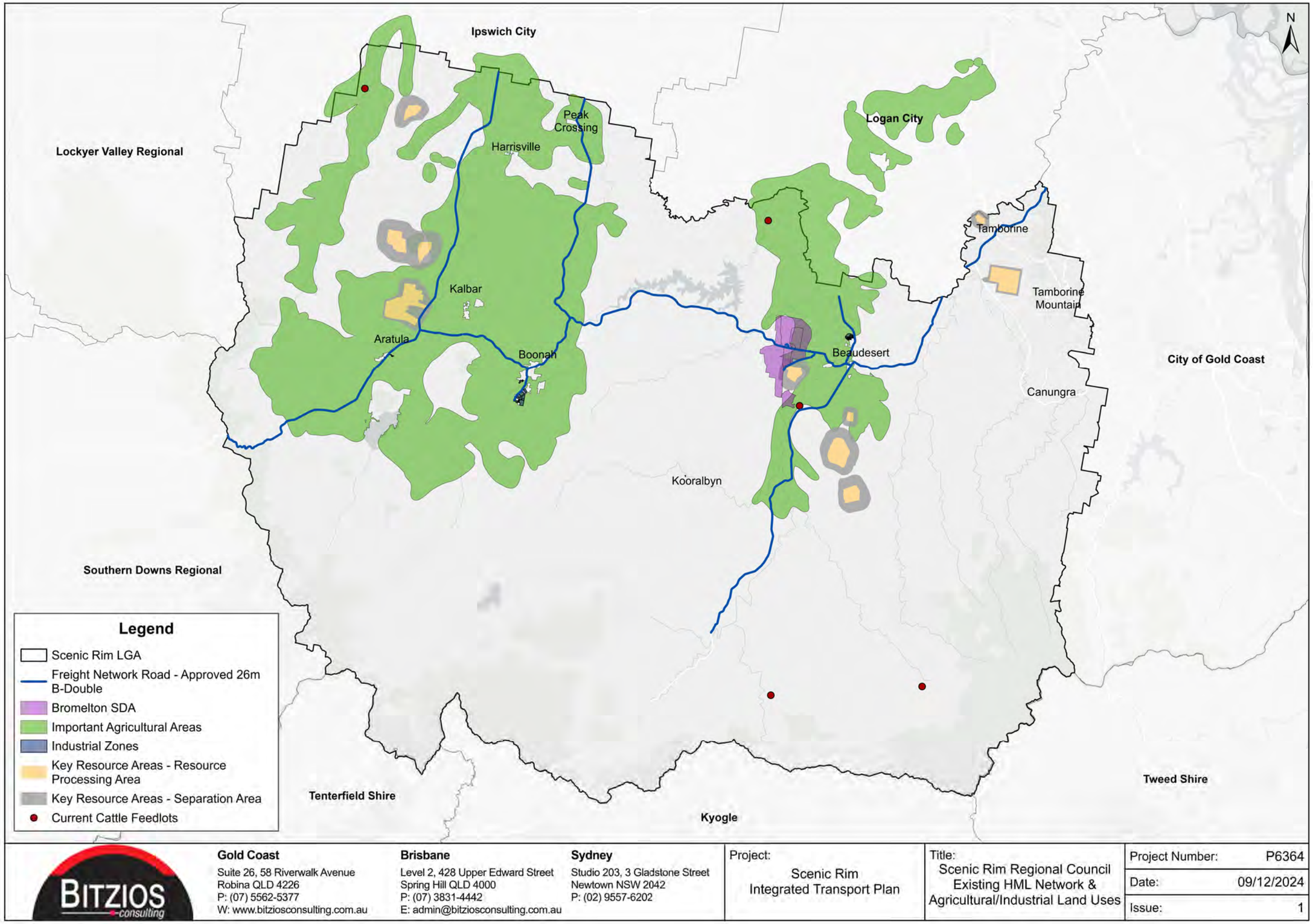
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Identified Road Upgrades - Road Hierarchy & Capacity
Project Number:	P6364
Date:	04/04/2025
Issue:	1

Appendix C: Strategic Network Maps – Freight Network Plan



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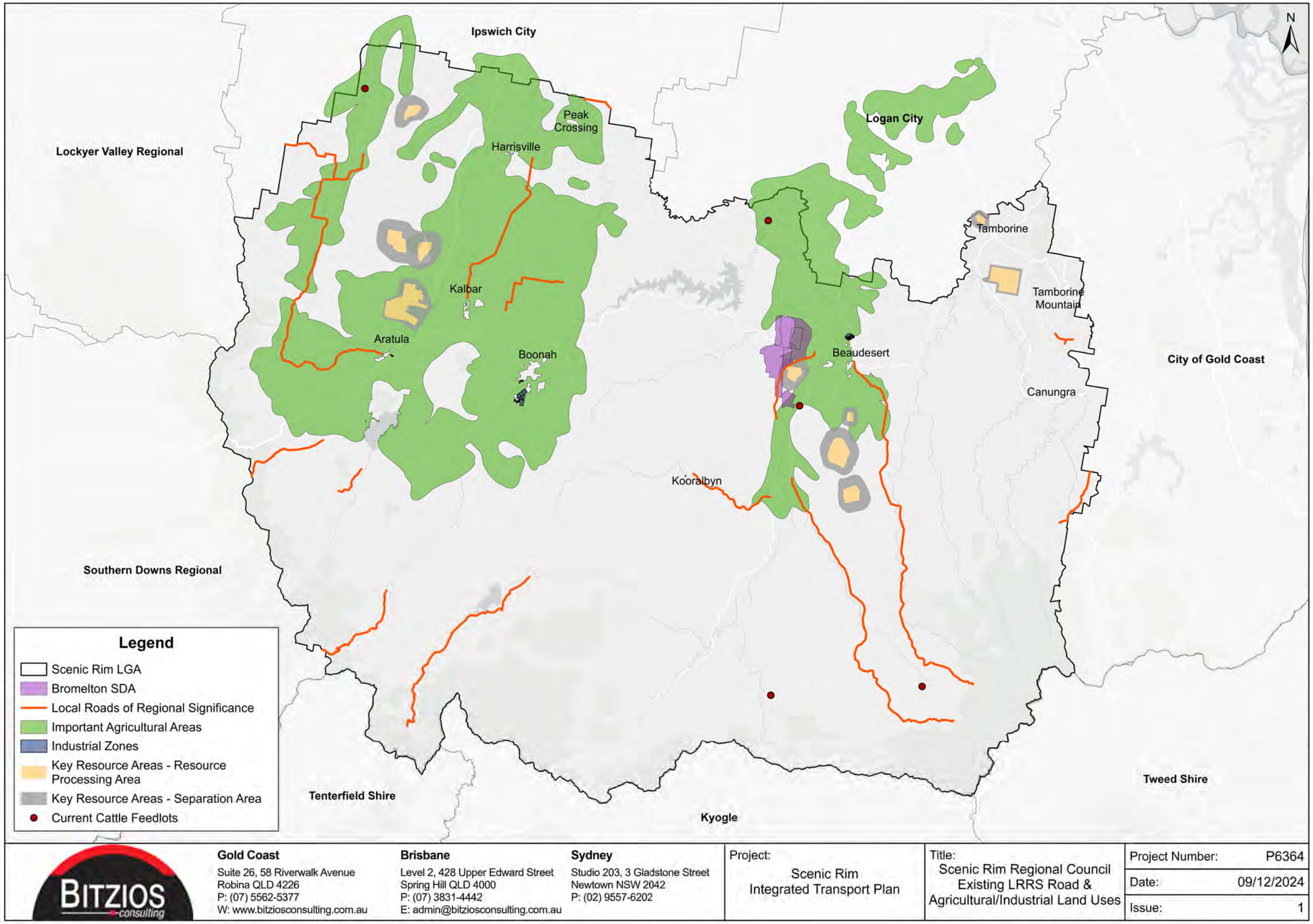
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Existing HML Network & Agricultural/Industrial Land Uses
Project Number:	P6364
Date:	09/12/2024
Issue:	1



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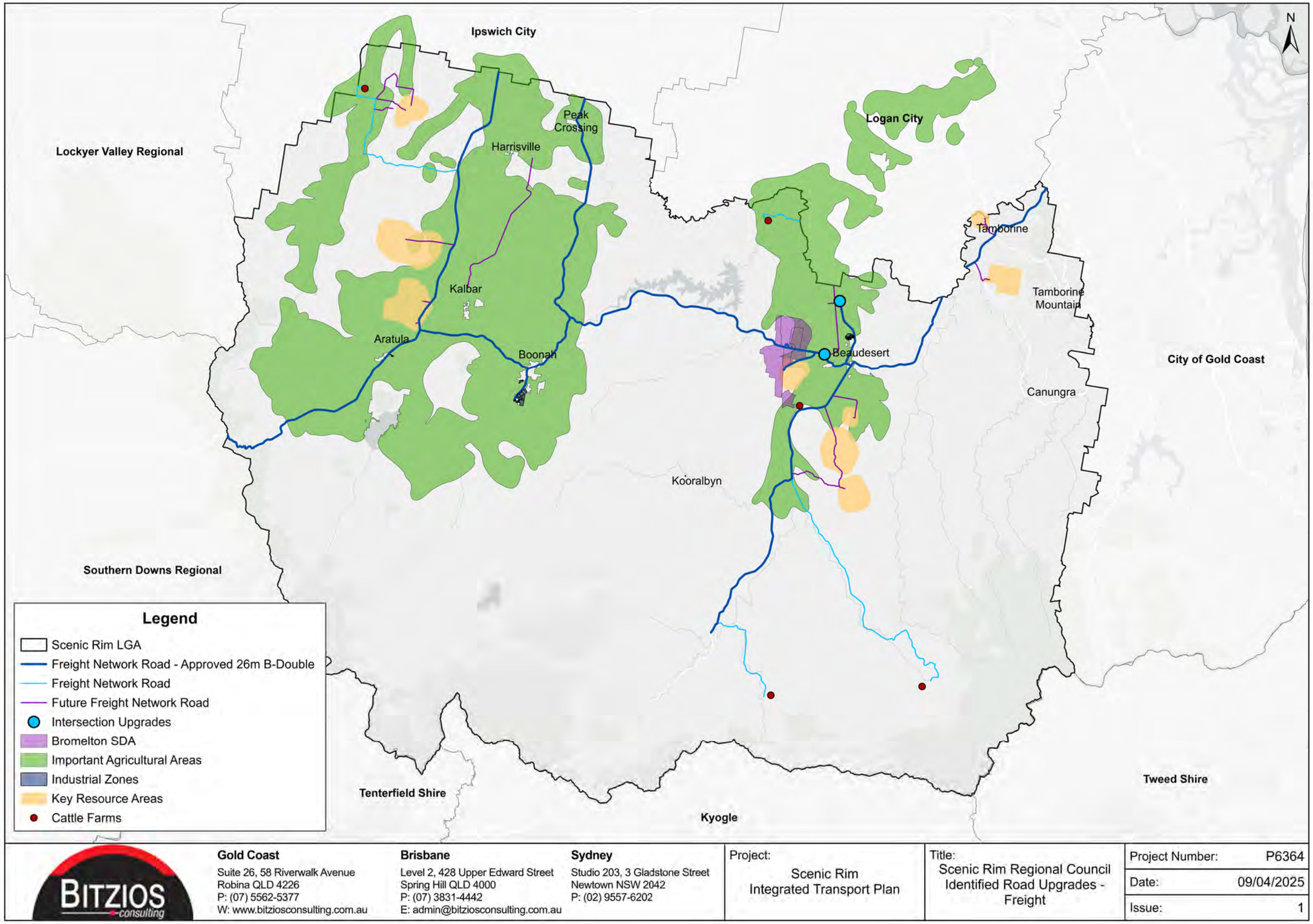
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Existing LRRS Road & Agricultural/Industrial Land Uses
Project Number:	P6364
Date:	09/12/2024
Issue:	1



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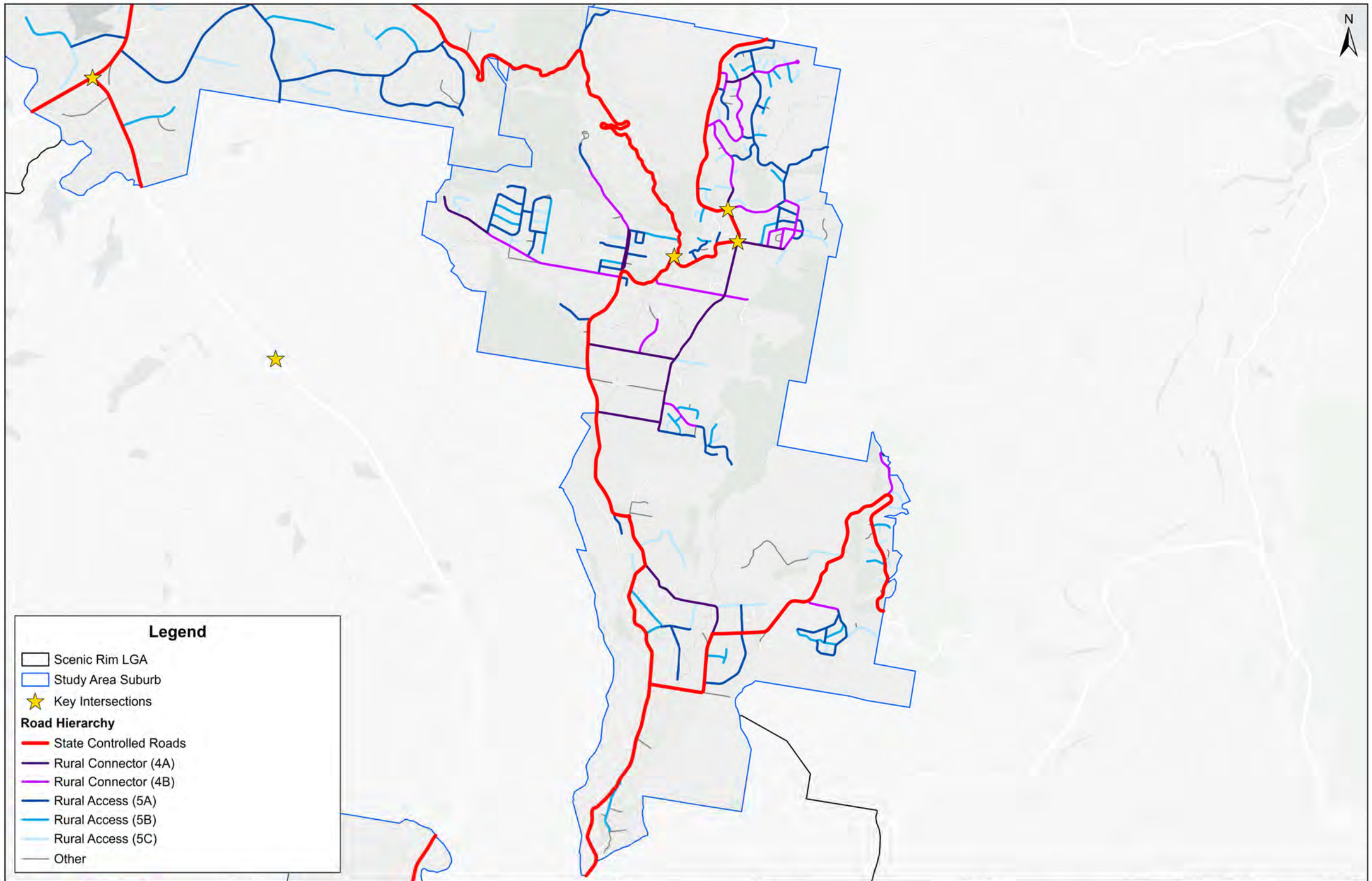
Project:	Scenic Rim Integrated Transport Plan
Title:	Scenic Rim Regional Council Identified Road Upgrades - Freight
Project Number:	P6364
Date:	09/04/2025
Issue:	1

Appendix D: Local Area Maps – Tamborine Mountain



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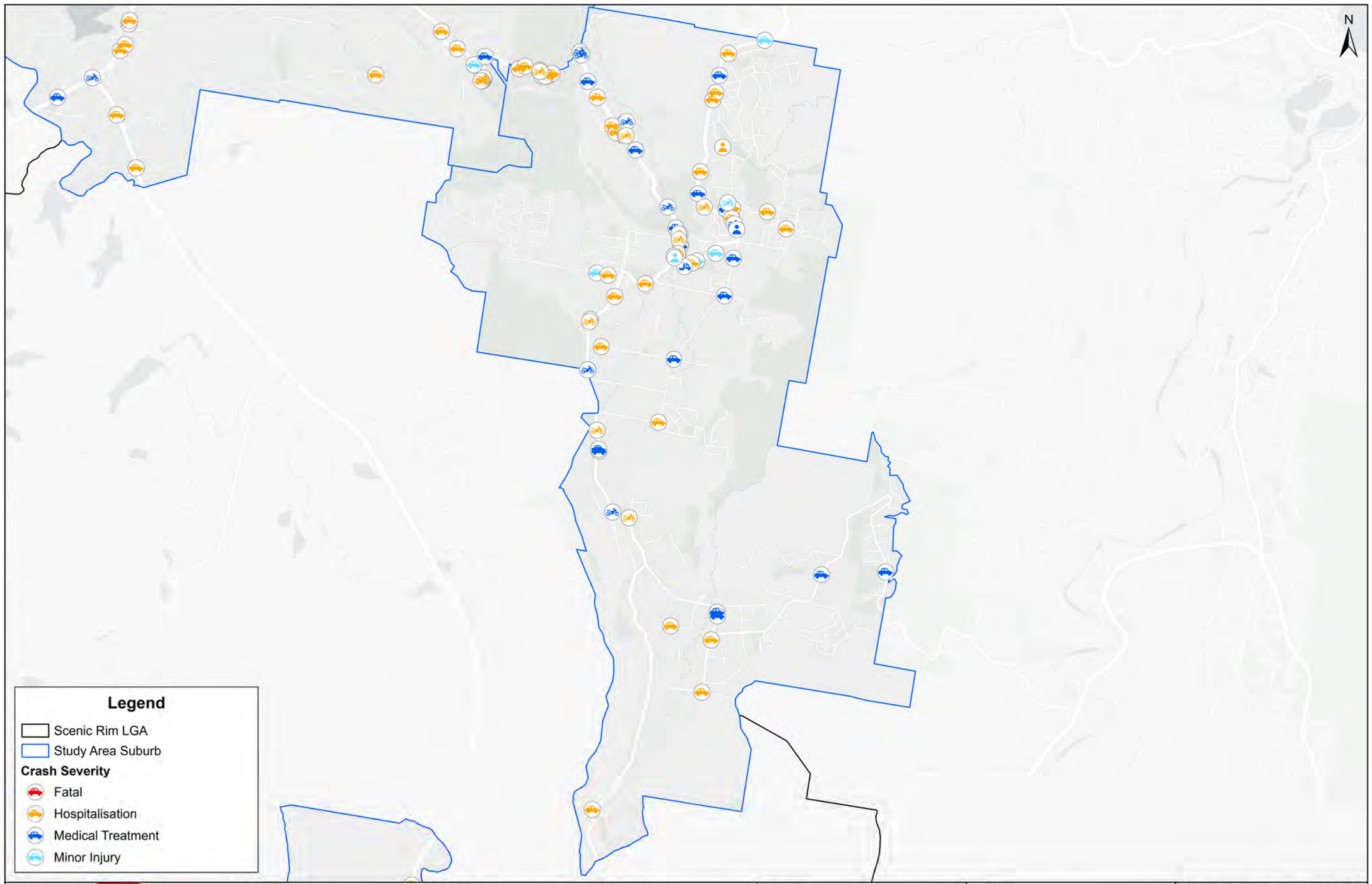
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Tamborine Mountain

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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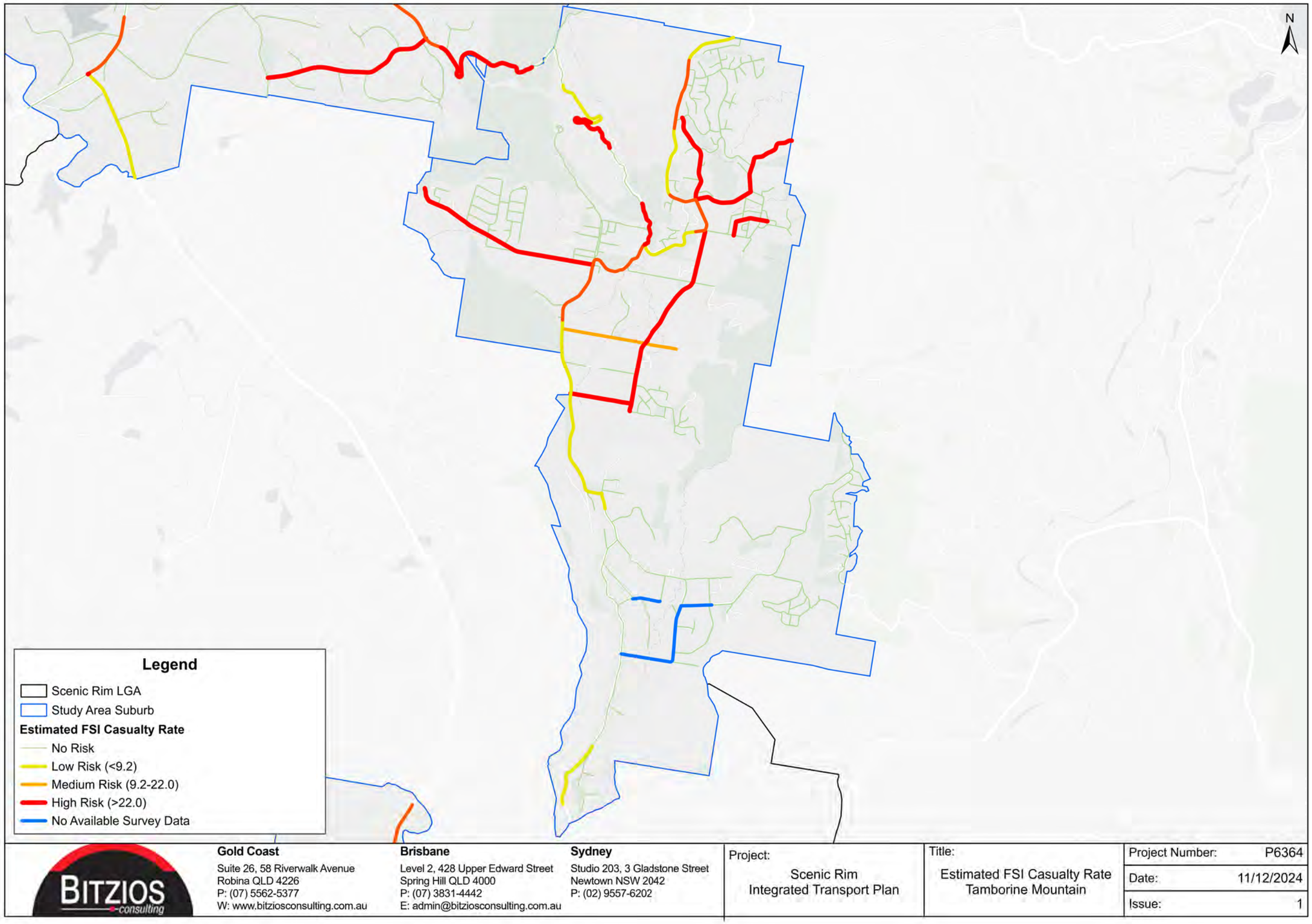
Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Tamborine Mountain
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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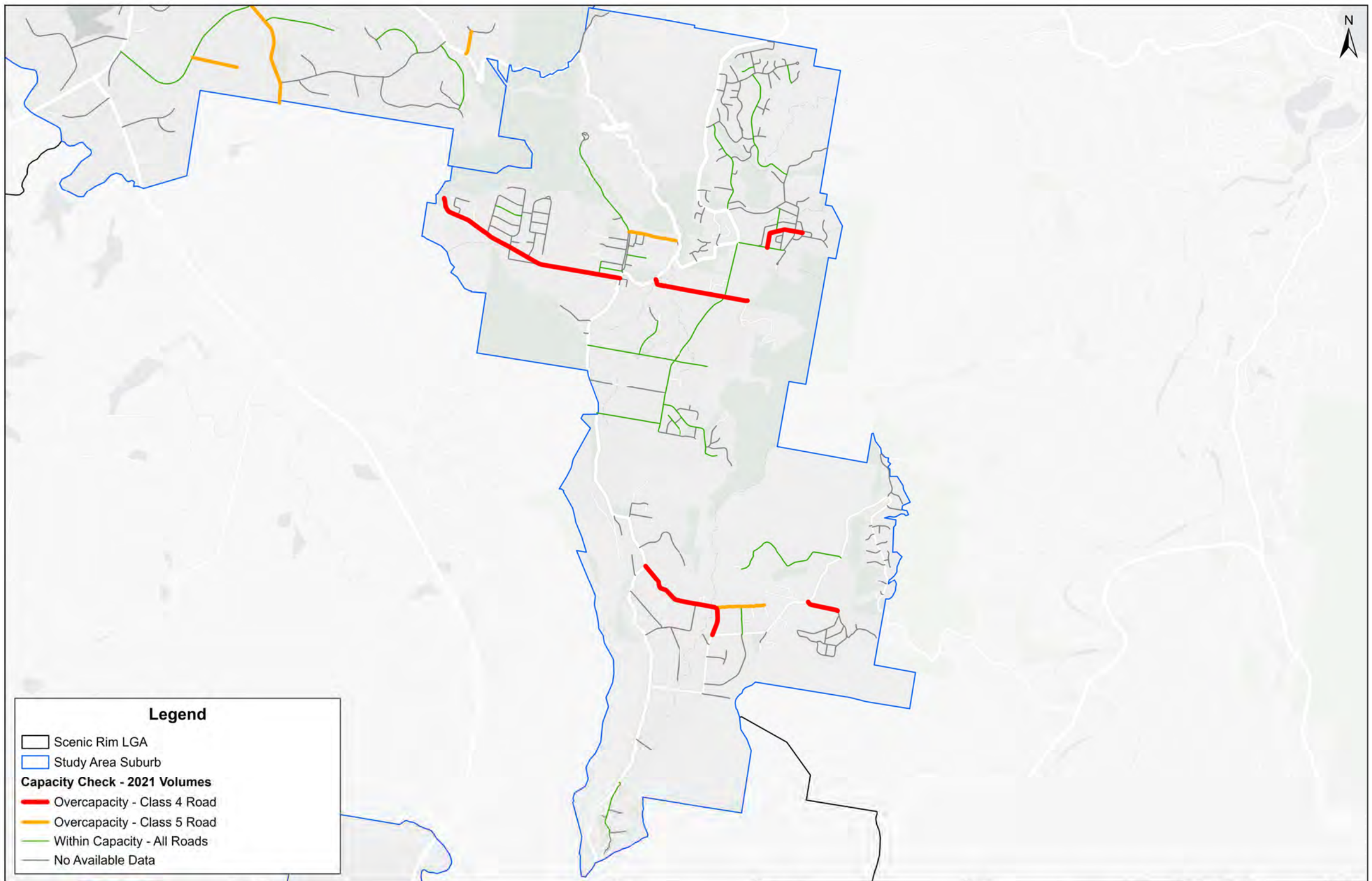
Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Tamborine Mountain
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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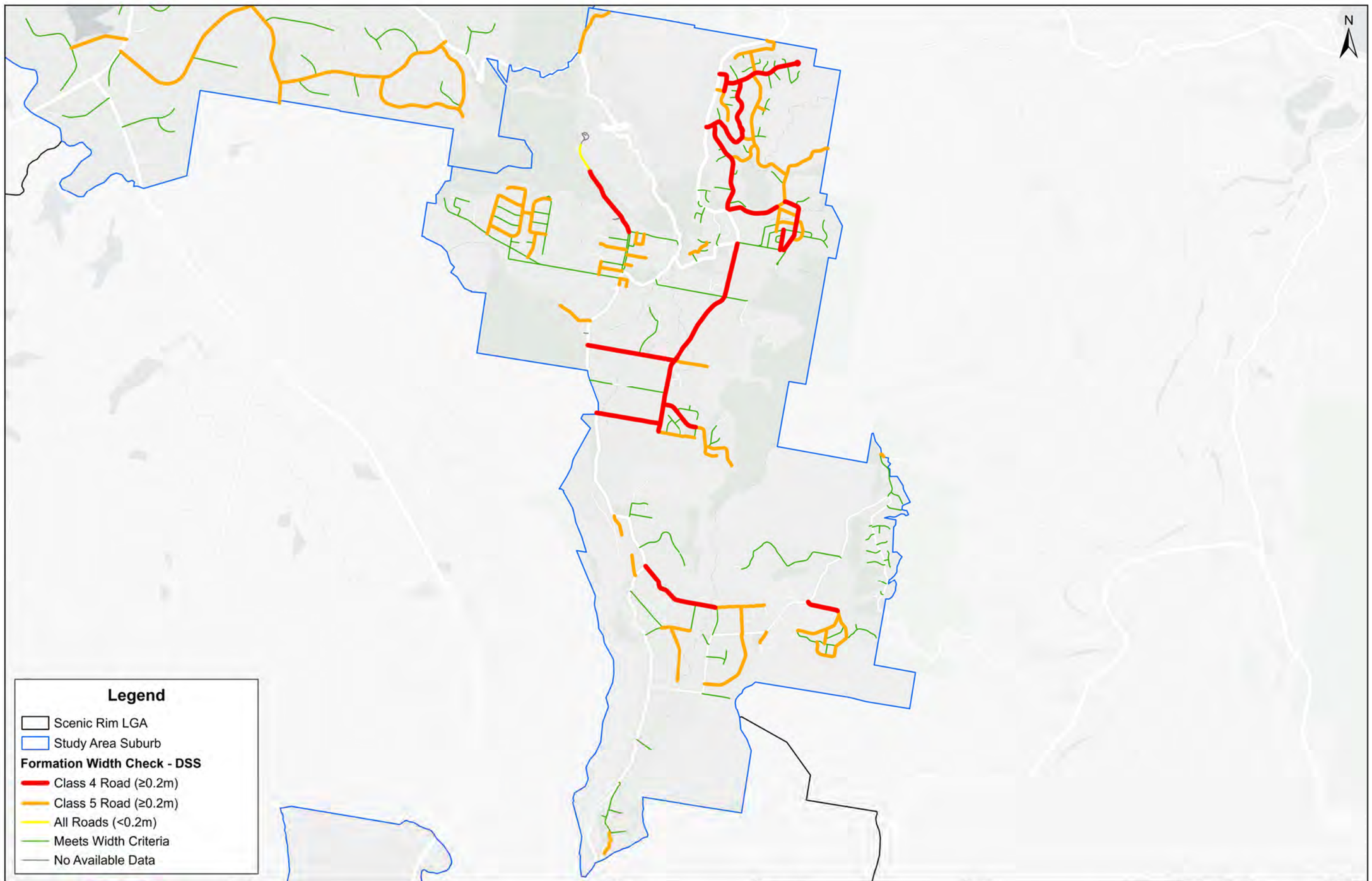
Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
2021 Volumes
Tamborine Mountain

Project Number:	P6364
Date:	11/12/2024
Issue:	1



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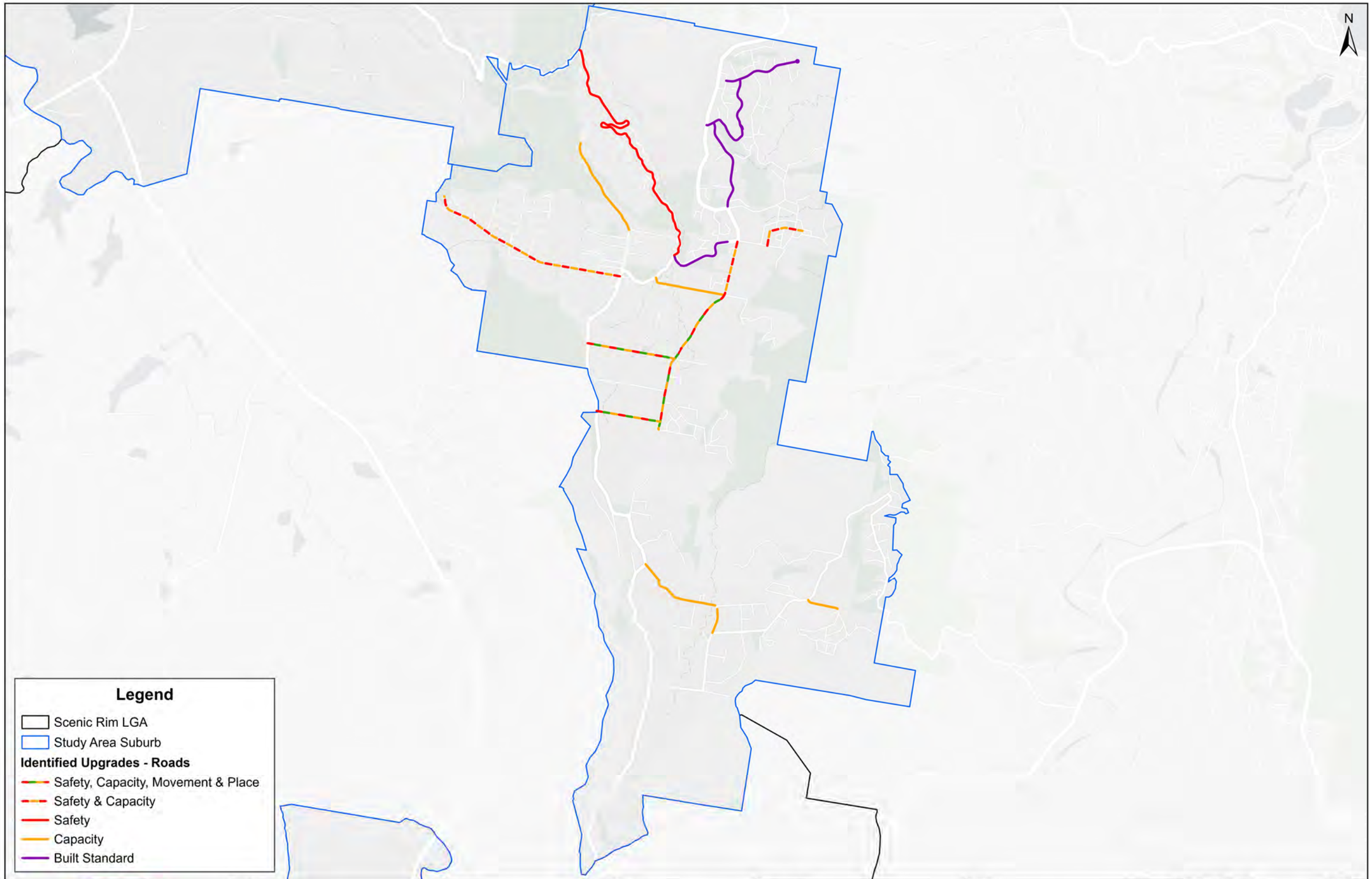
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Tamborine Mountain
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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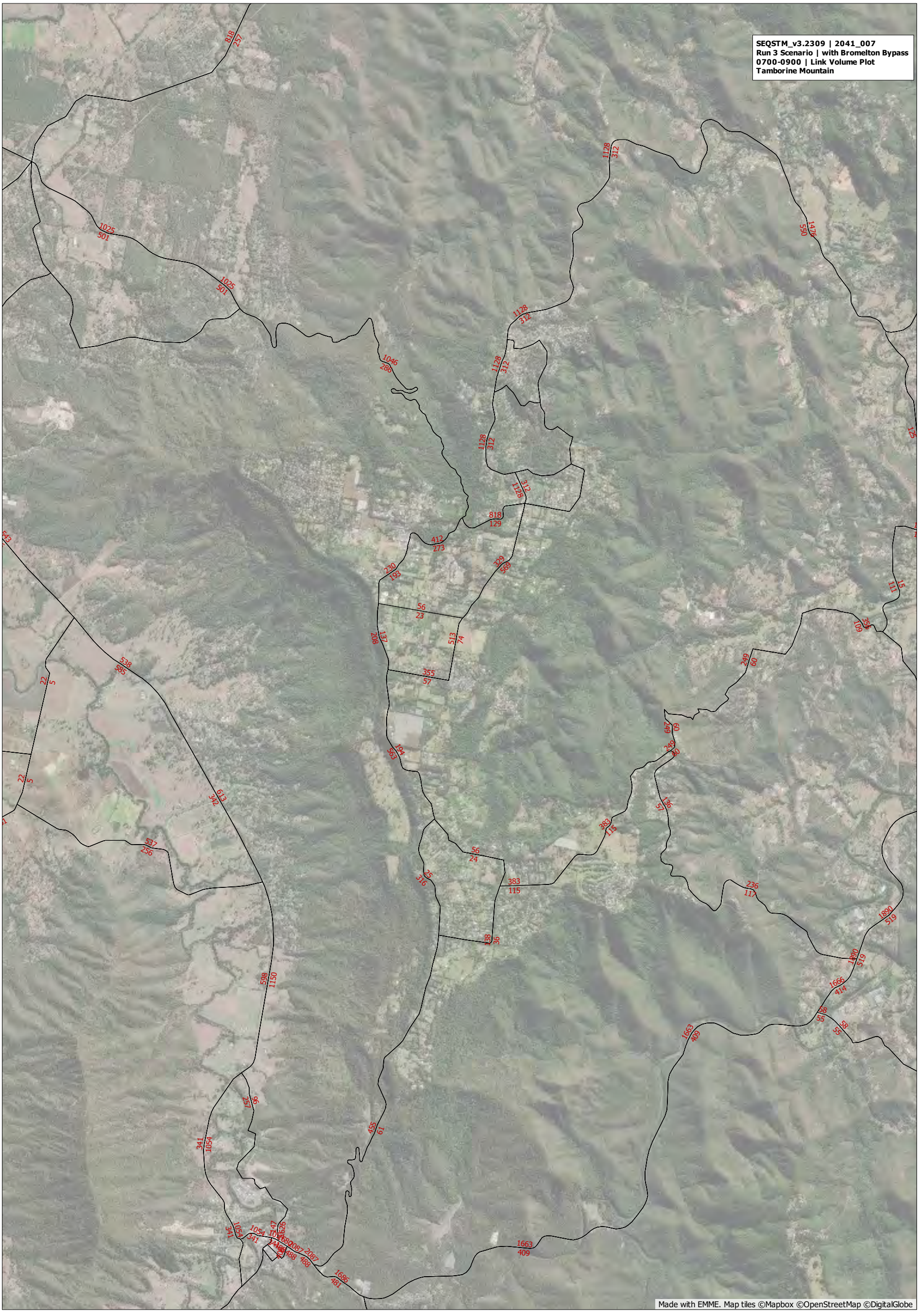
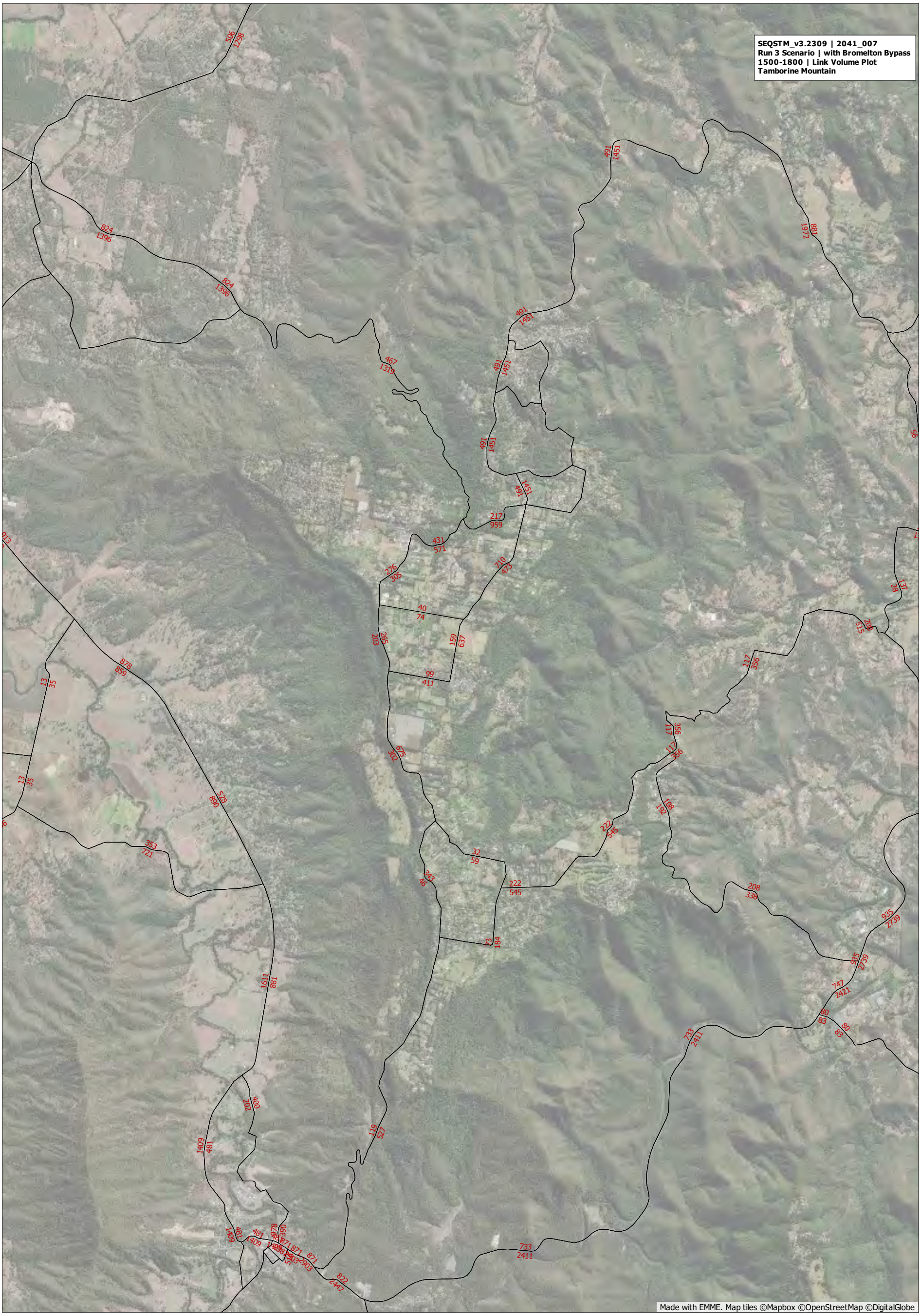
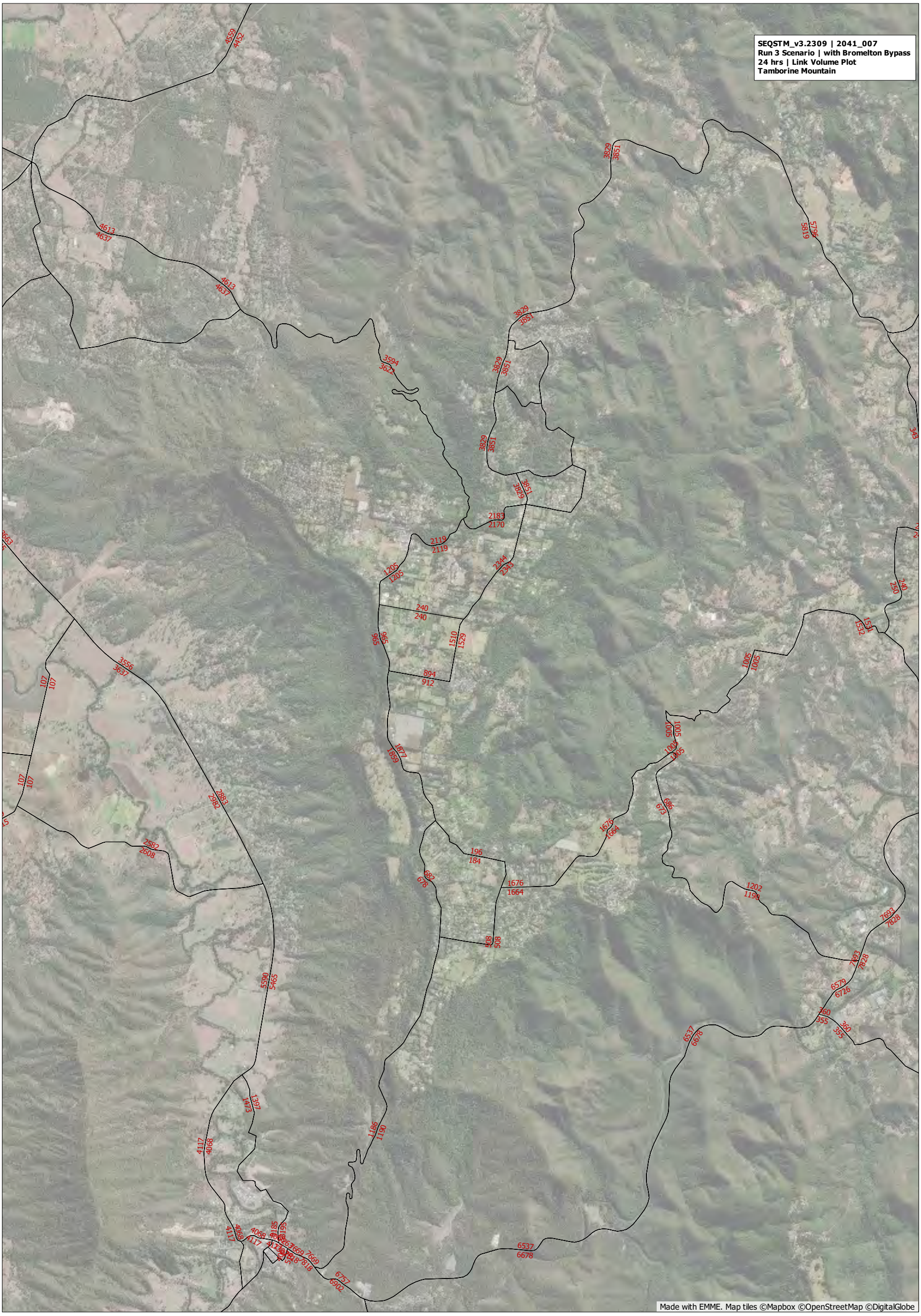
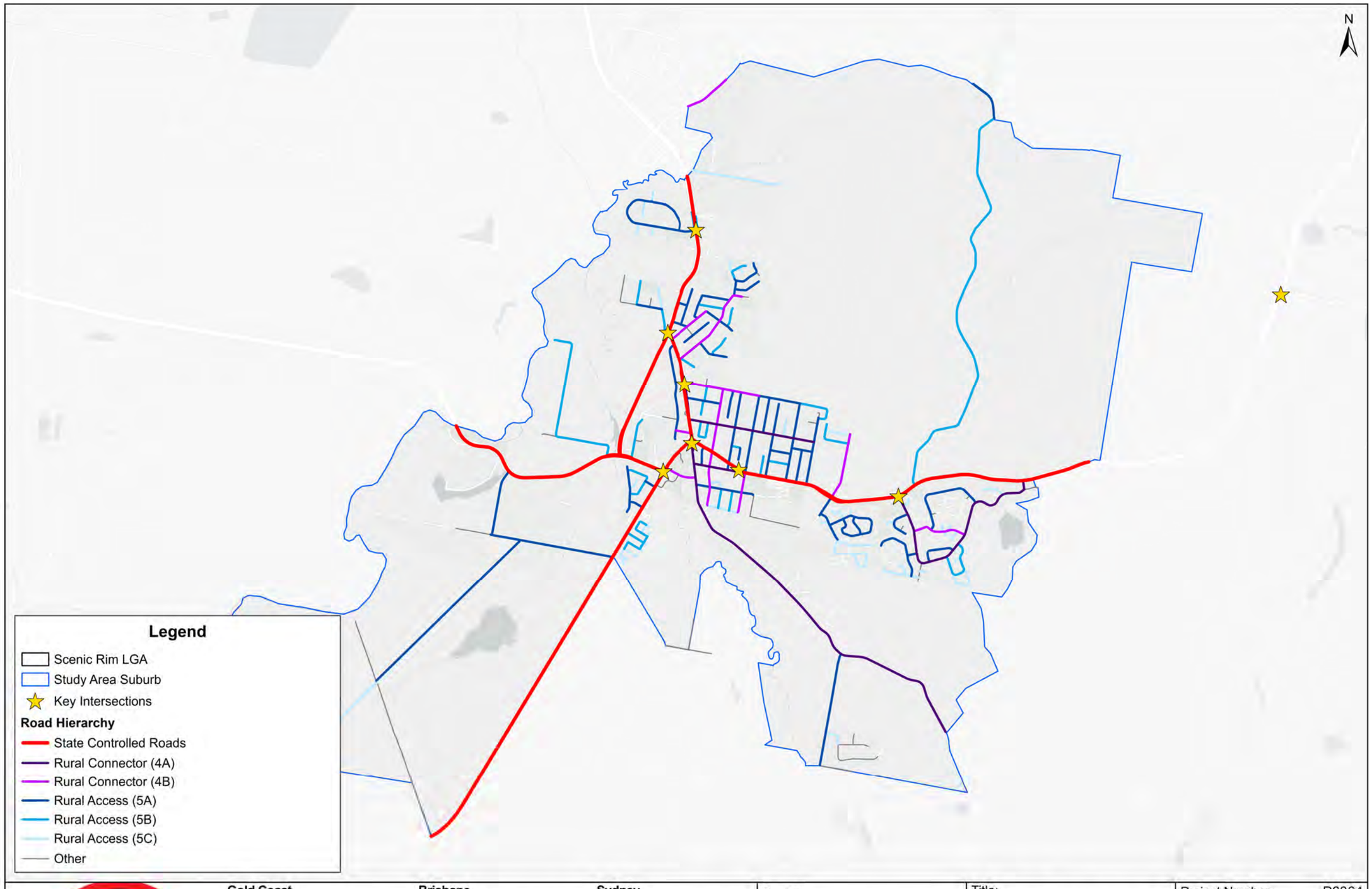
Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Tamborine Mountain
Project Number:	P6364
Date:	19/12/2024
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Tamborine Mountain
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Tamborine Mountain
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Tamborine Mountain
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe

Appendix E: Local Area Maps – Beaudesert



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Newtown NSW 2042
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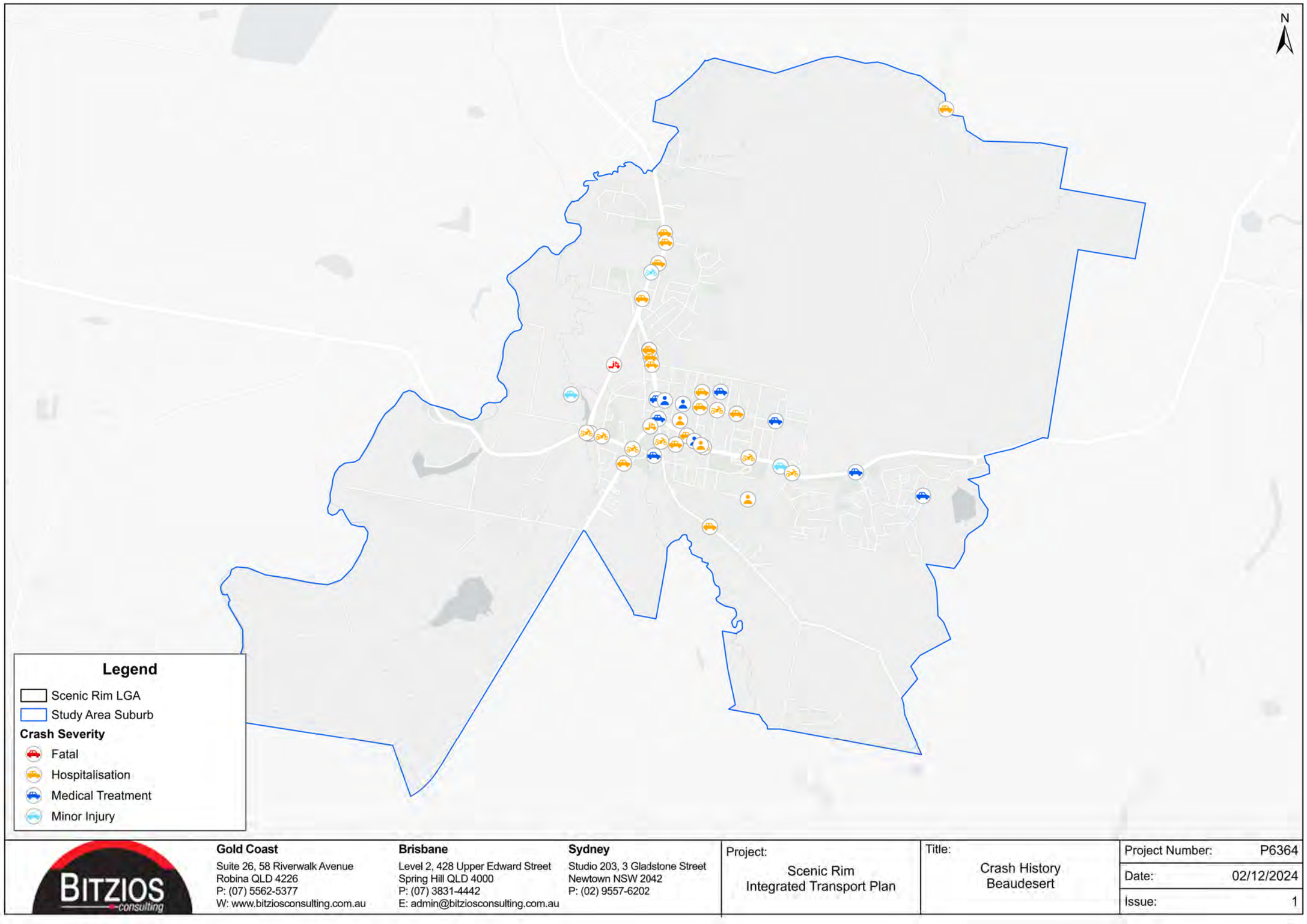
Project:	Scenic Rim Integrated Transport Plan
Title:	Existing Road Hierarchy & Key Intersections Beaudesert
Project Number:	P6364
Date:	04/12/2024
Issue:	1



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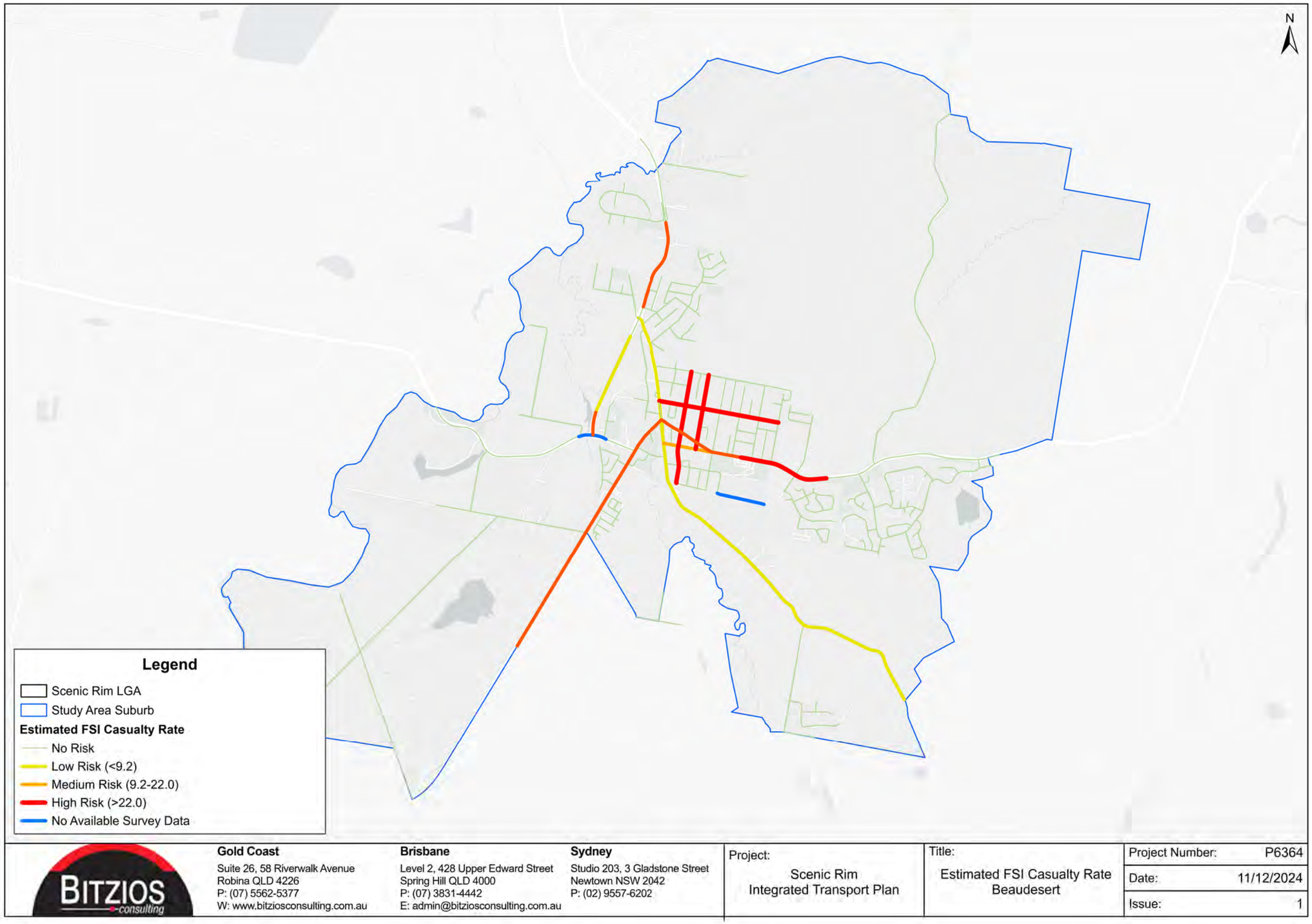
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Beaudesert
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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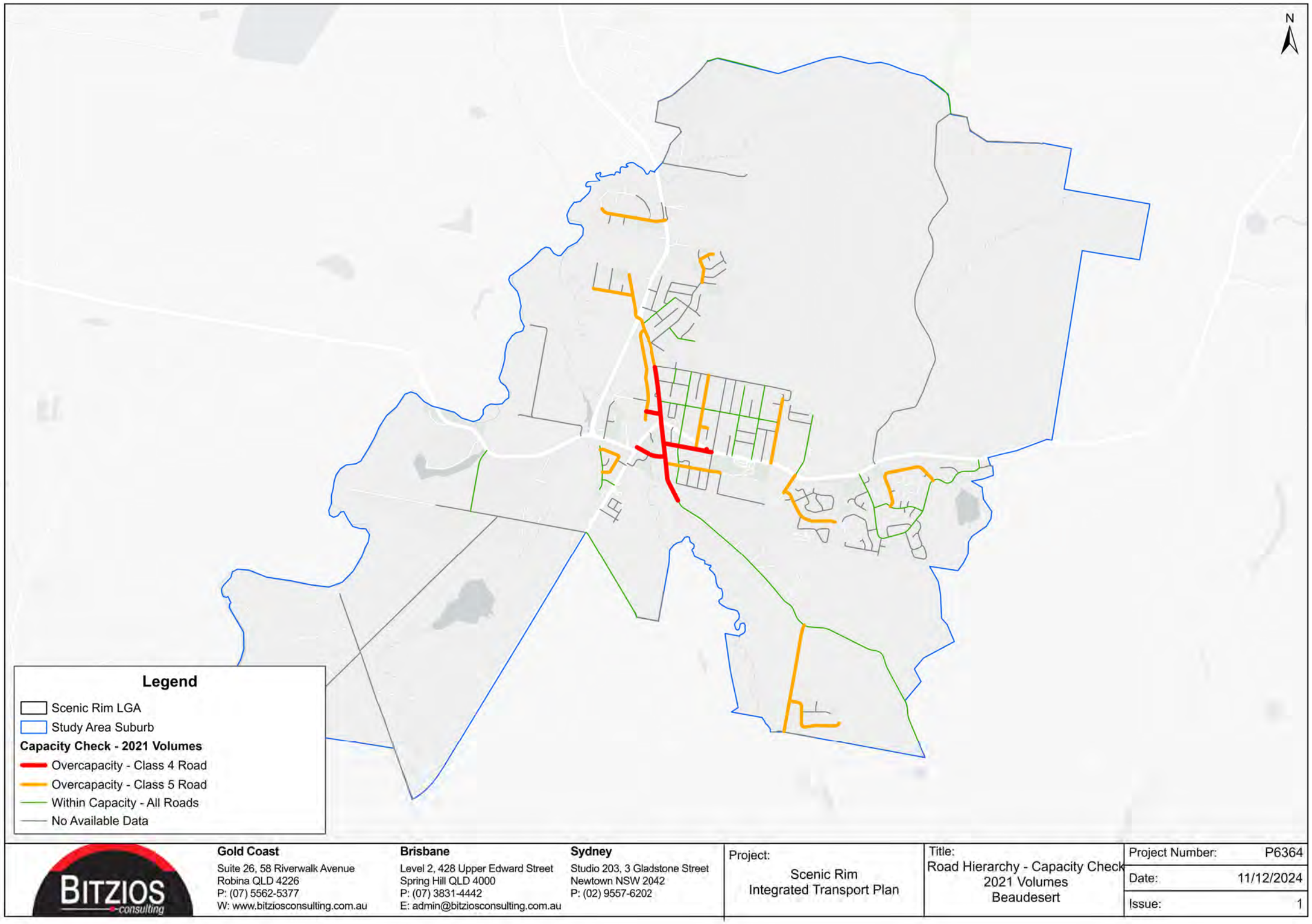
P: (07) 3831-4442
E: admin@bitziosconsulting.com.au

Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Beaudesert
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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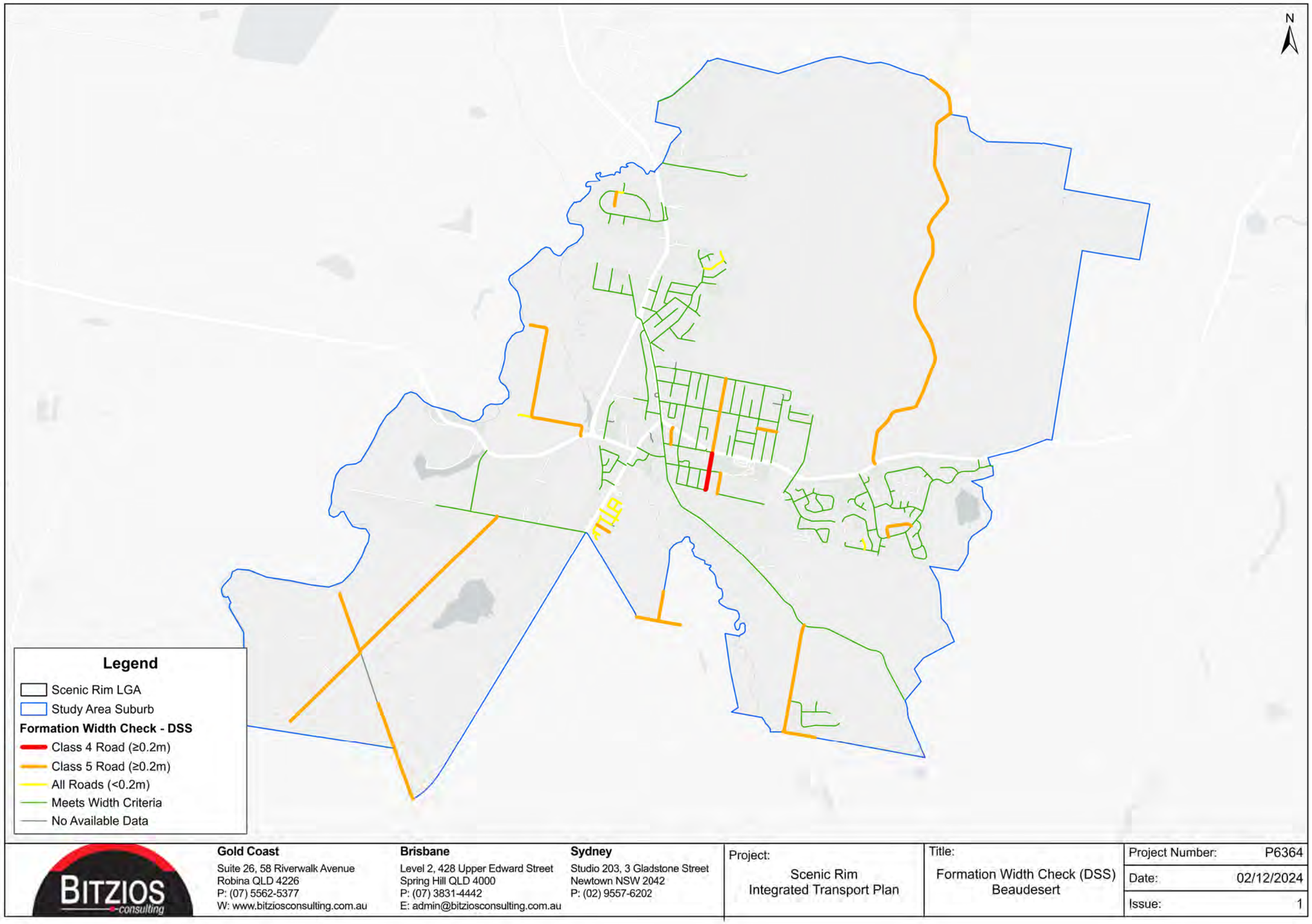
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Road Hierarchy - Capacity Check 2021 Volumes Beaudesert
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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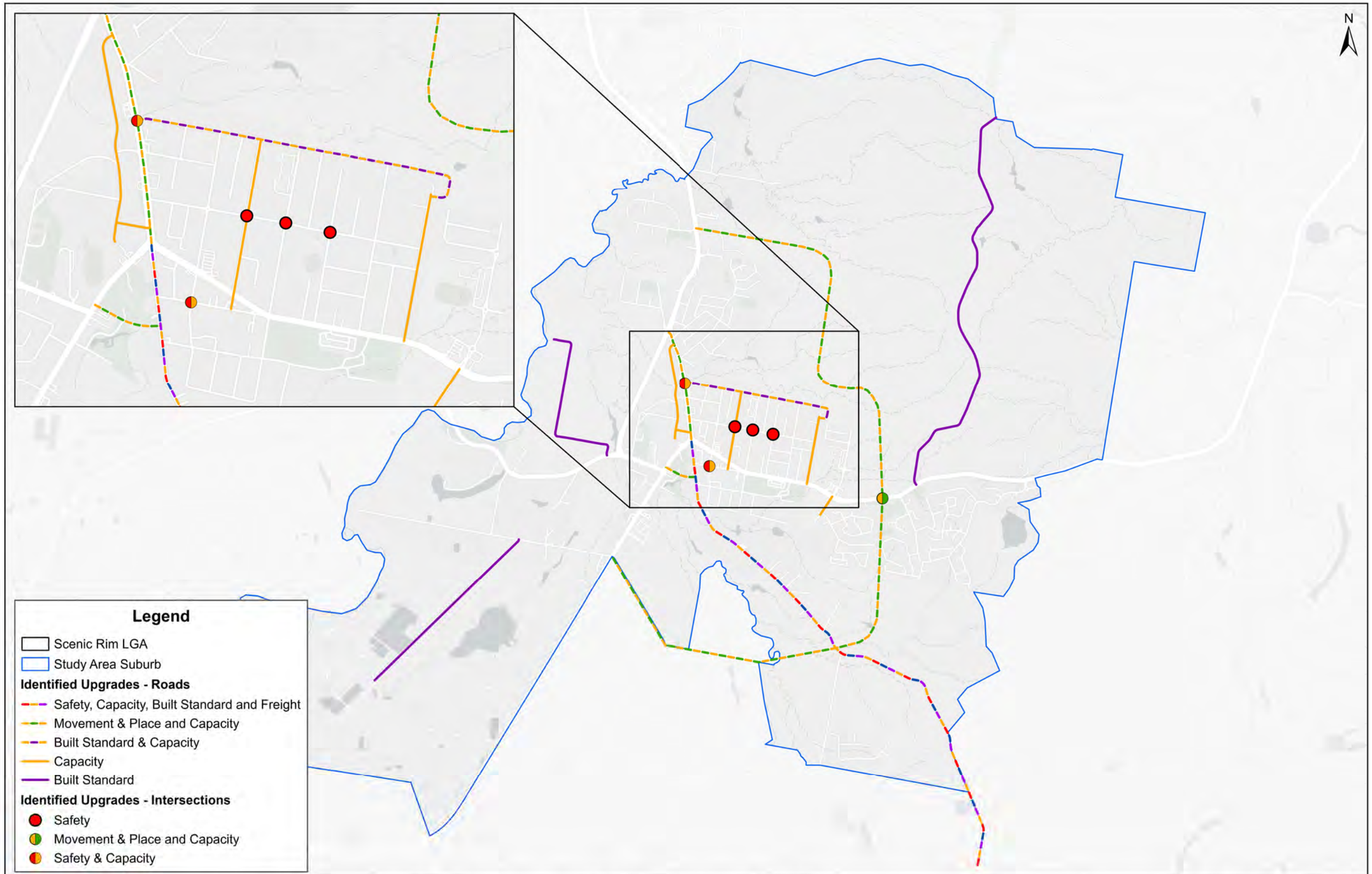
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Beaudesert
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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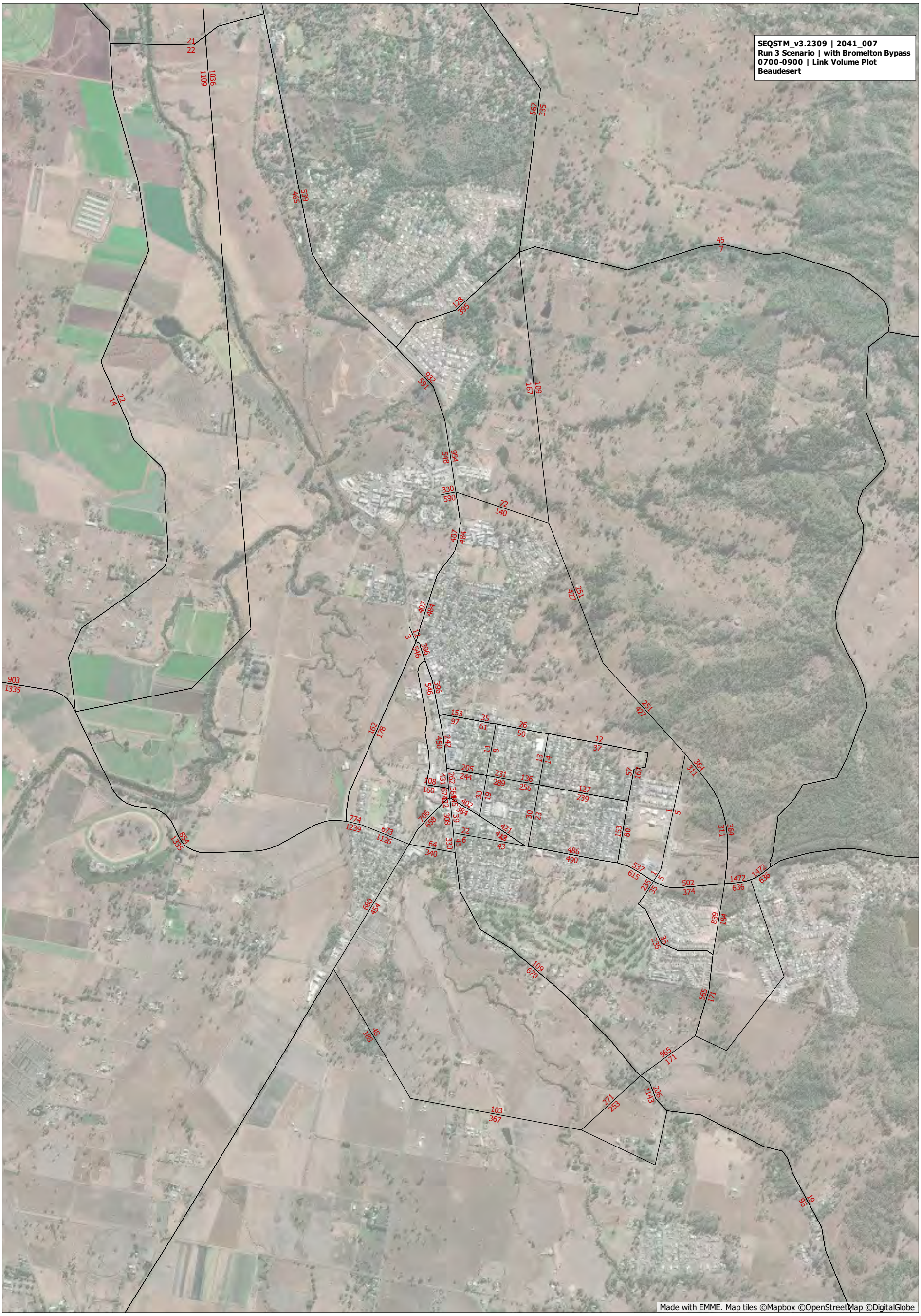
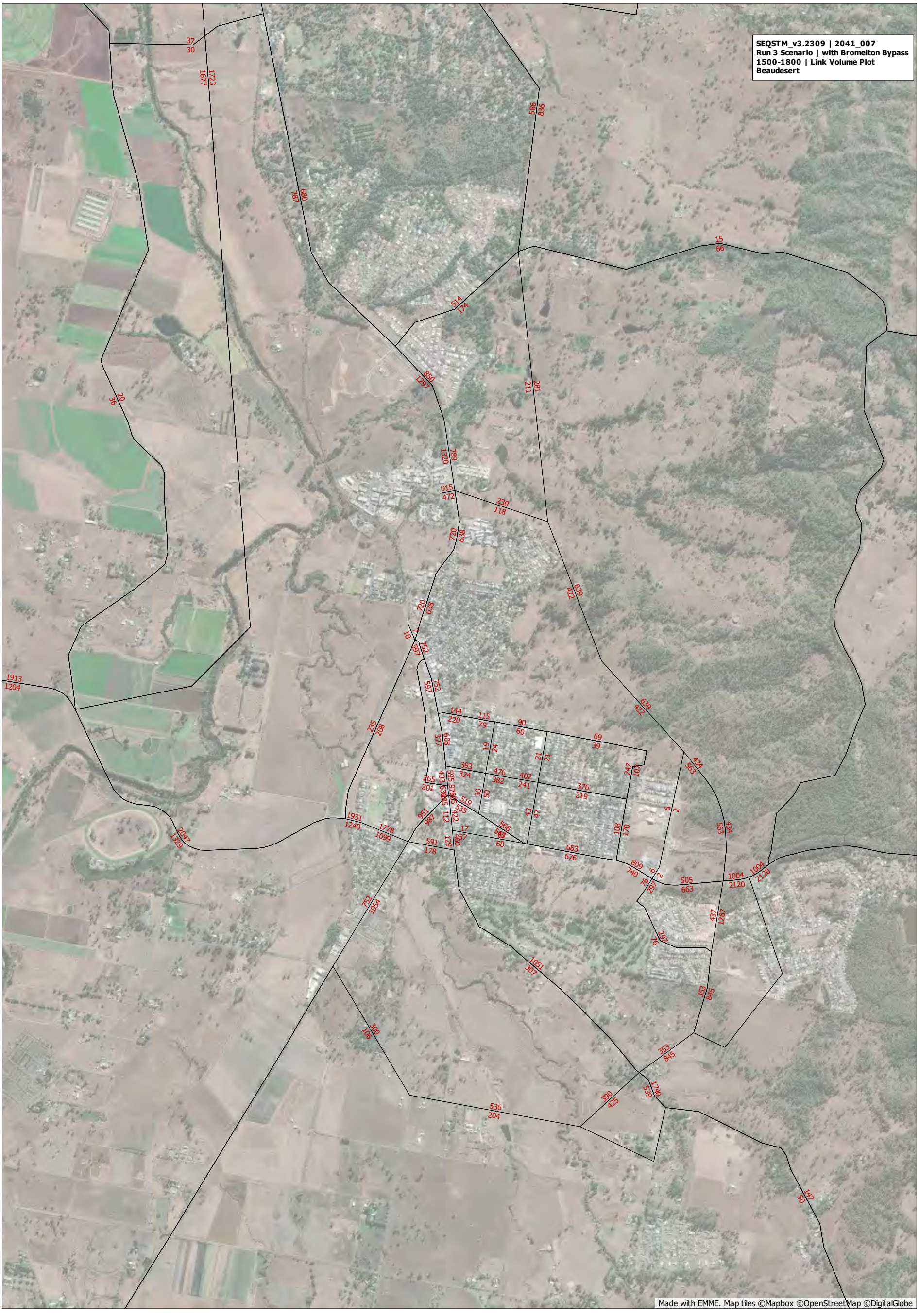
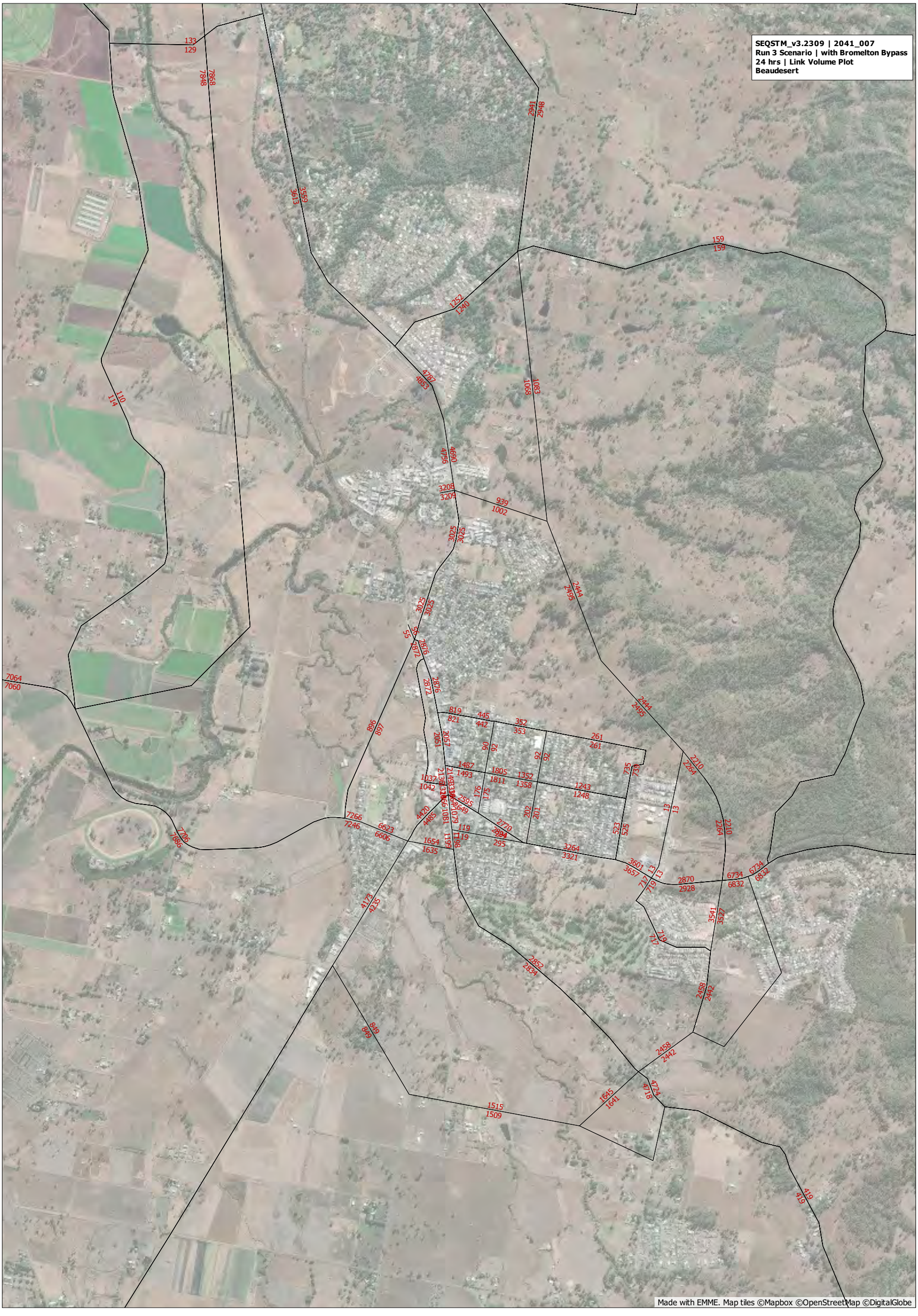
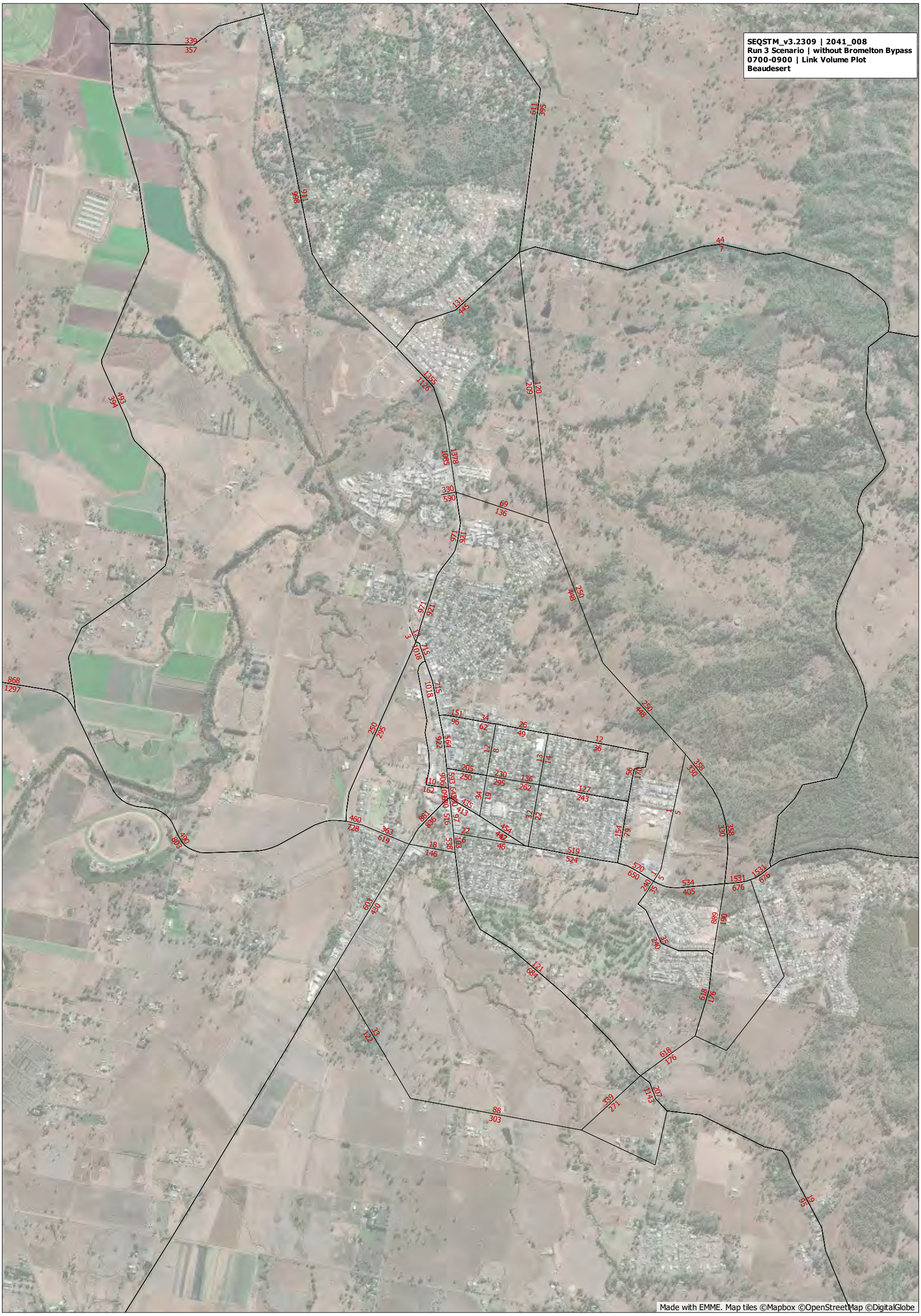
P: (02) 9557-6202

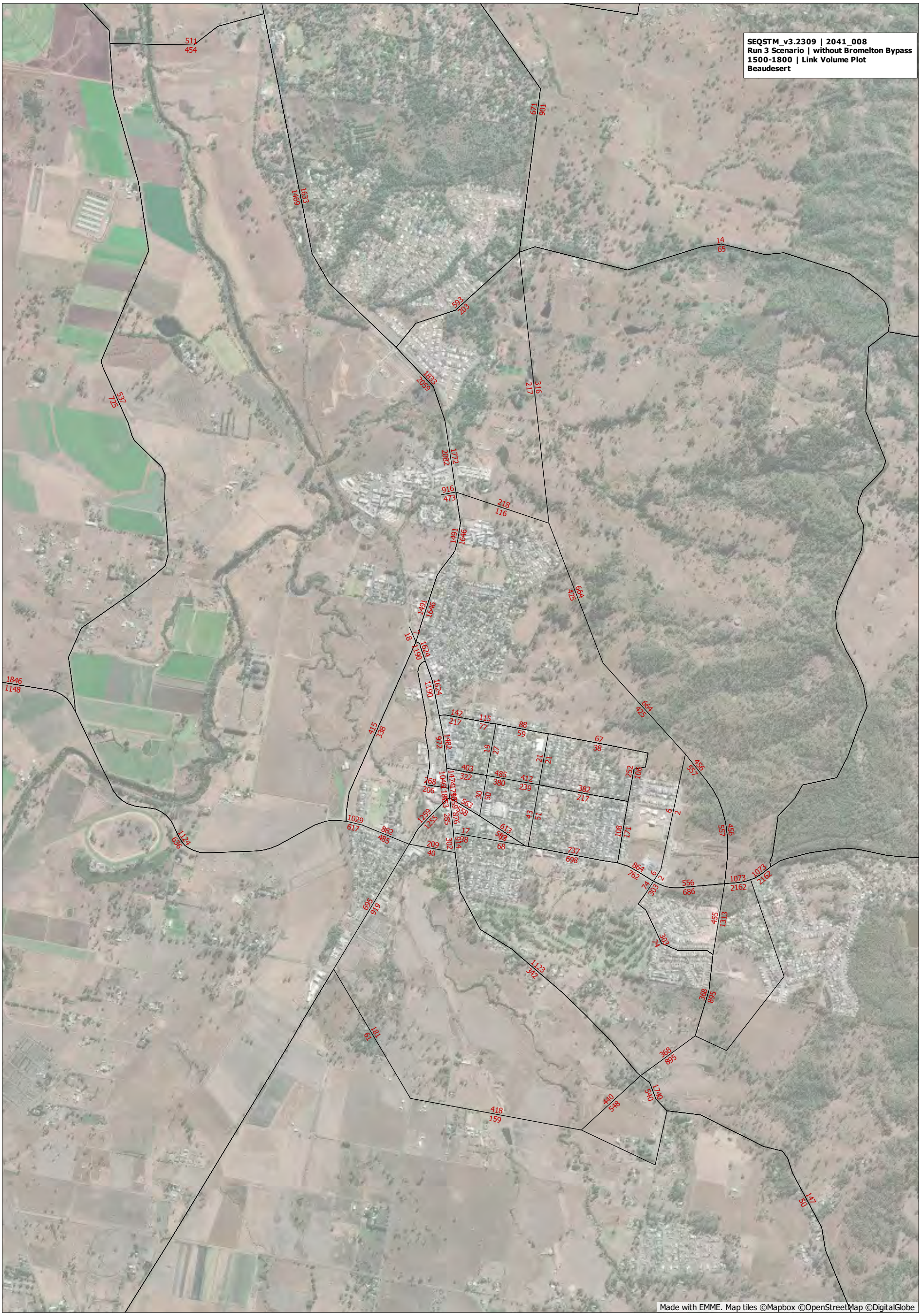
Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Beaudesert
Project Number:	P6364
Date:	15/04/2025
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Beaudesert
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Beaudesert
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Beaudesert
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_008
Run 3 Scenario | without Bromelton Bypass
0700-0900 | Link Volume Plot
Beaudesert
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_008
Run 3 Scenario | without Bromelton Bypass
1500-1800 | Link Volume Plot
Beaudesert
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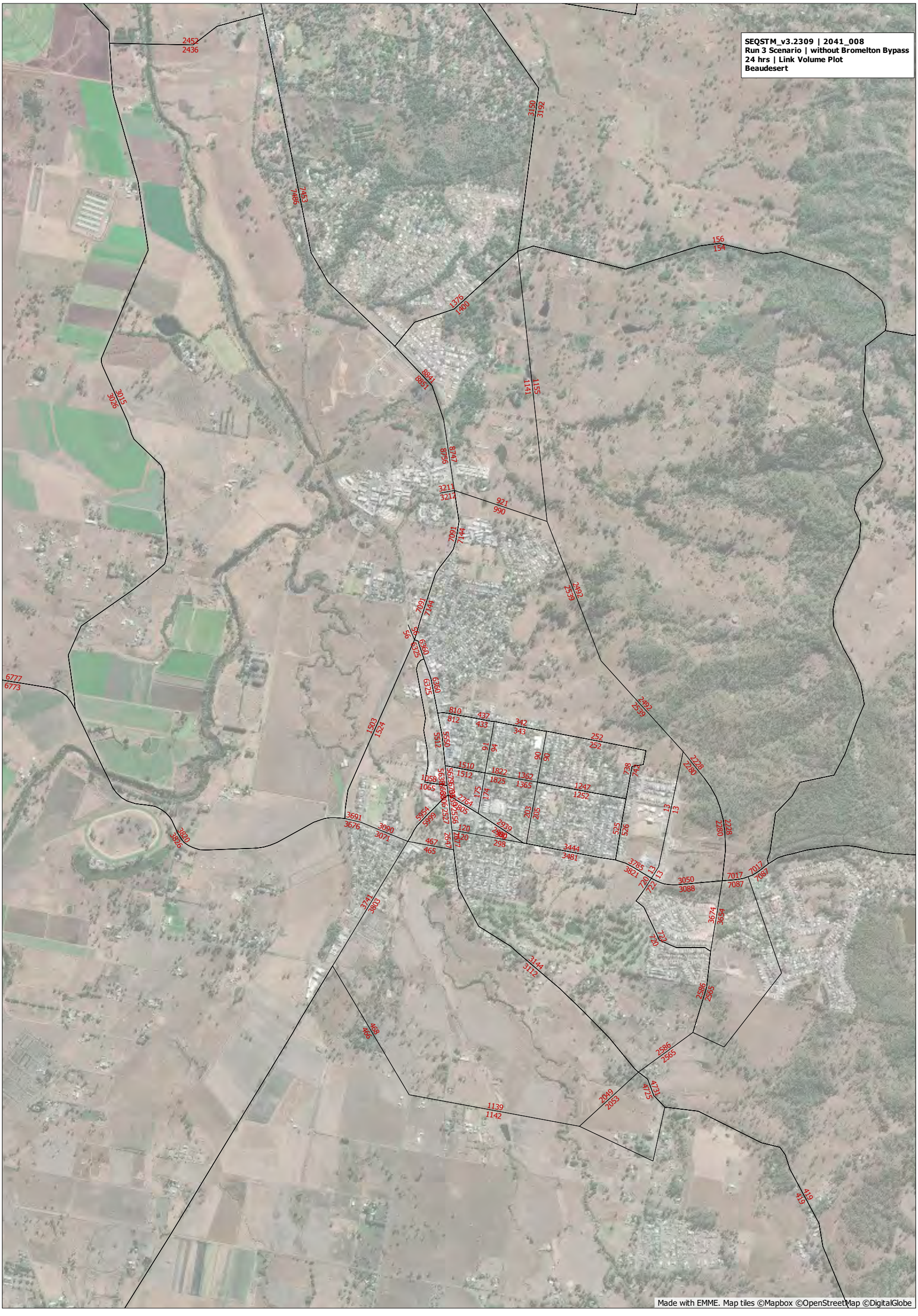
SEQSTM_v3.2309 | 2041_008
Run 3 Scenario | without Bromelton Bypass
24 hrs | Link Volume Plot
Beaudesert
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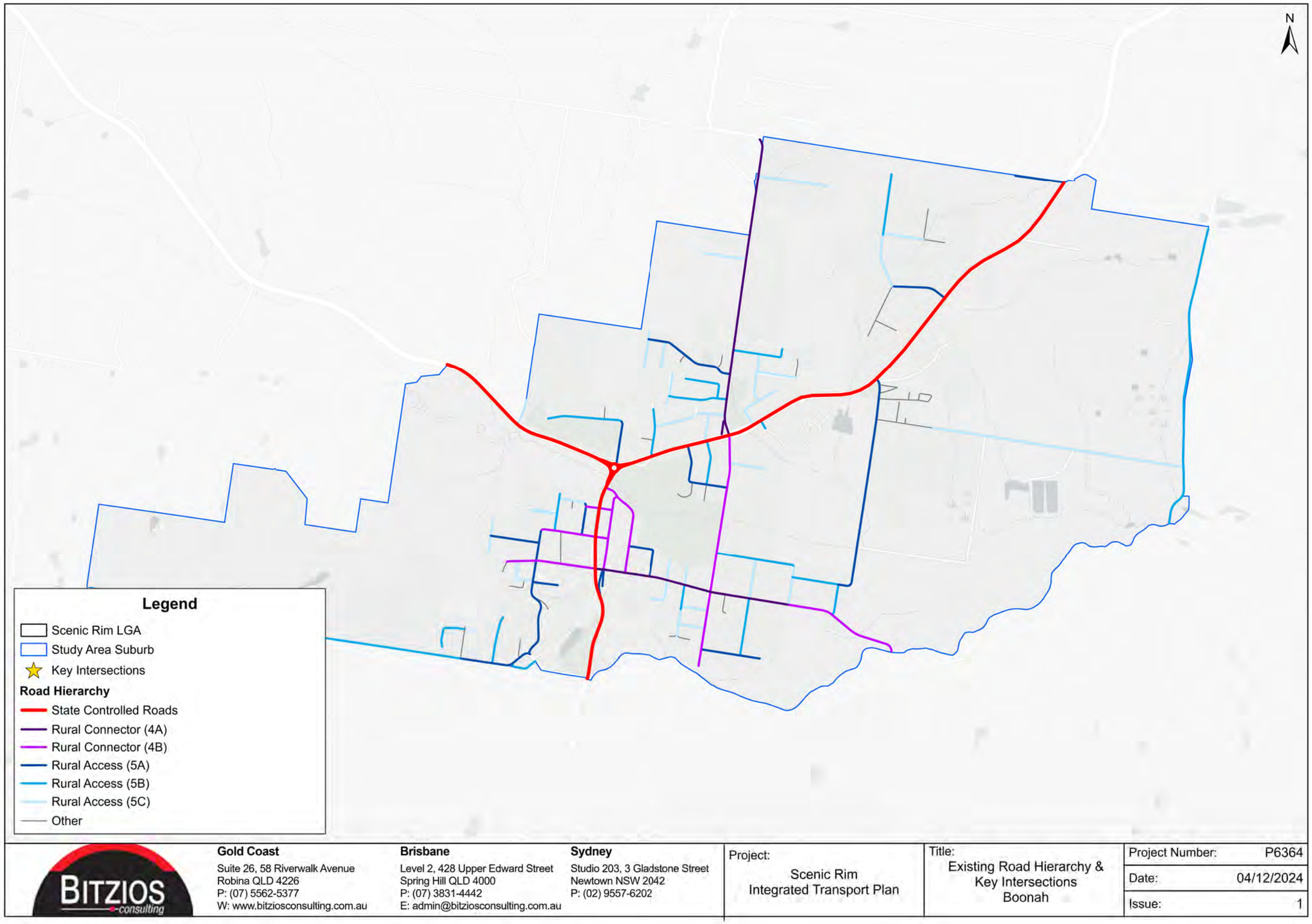
Appendix F: Local Area Maps – Boonah



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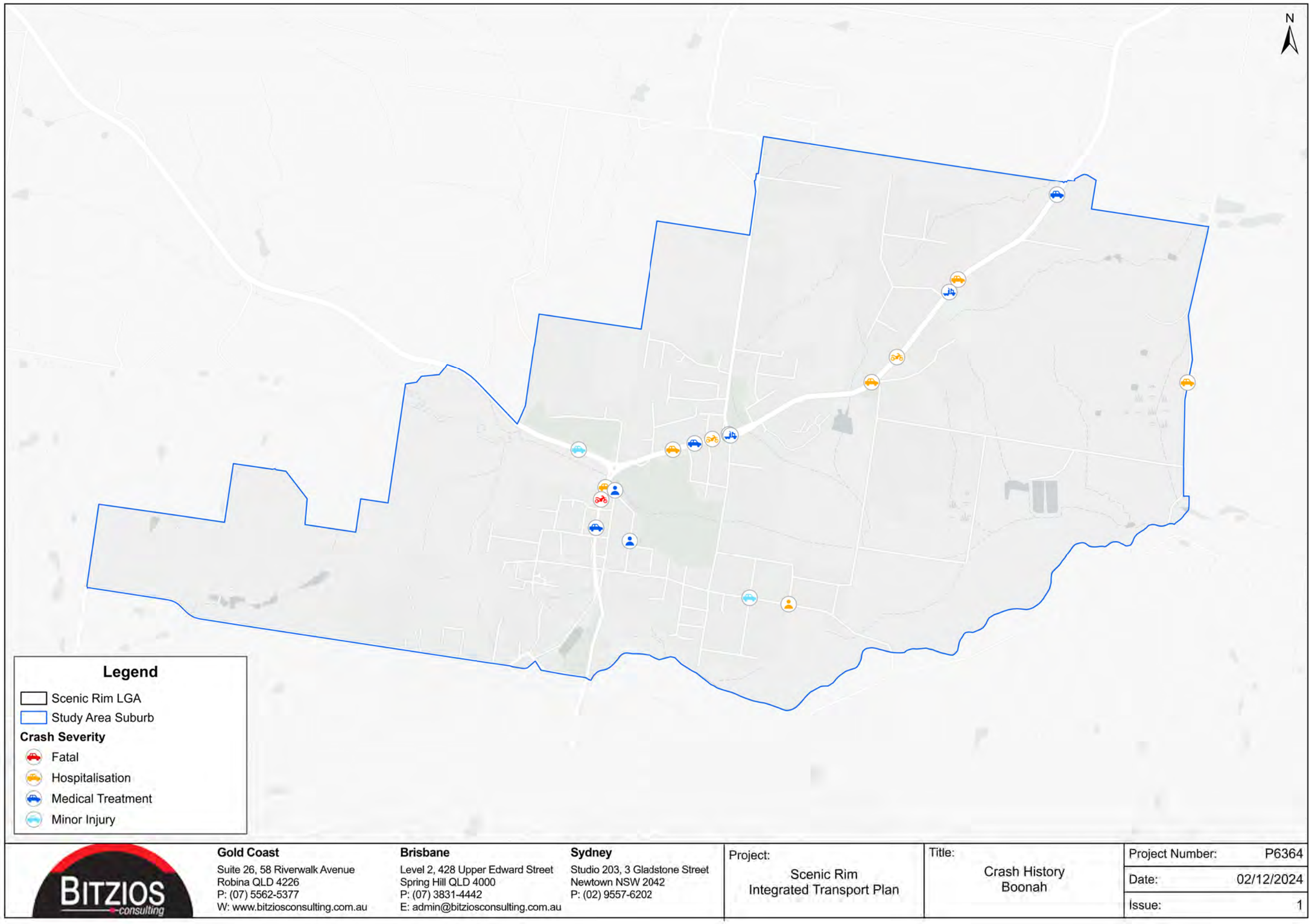
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project: Scenic Rim Integrated Transport Plan

Title: Existing Road Hierarchy & Key Intersections Boonah

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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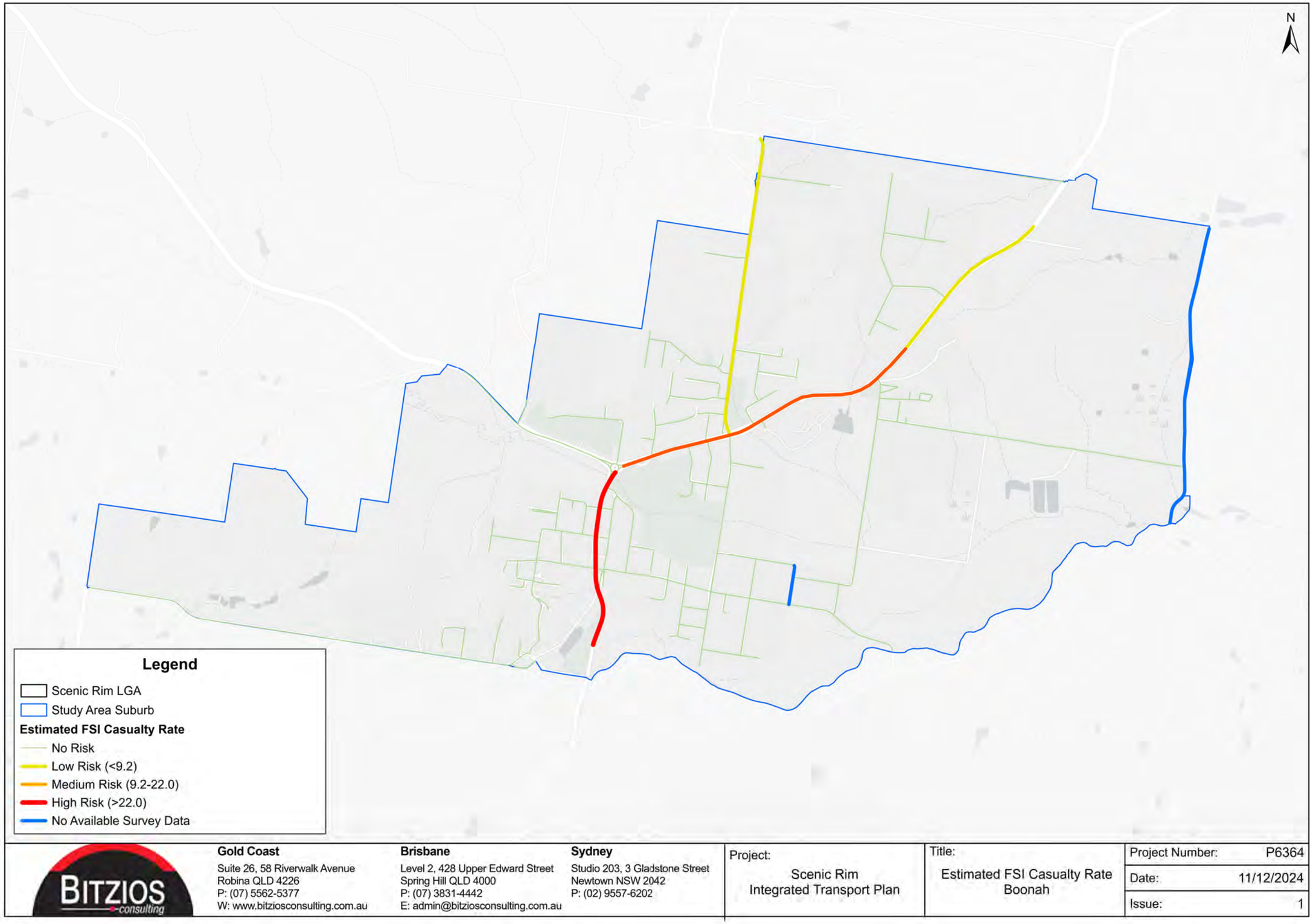
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Boonah
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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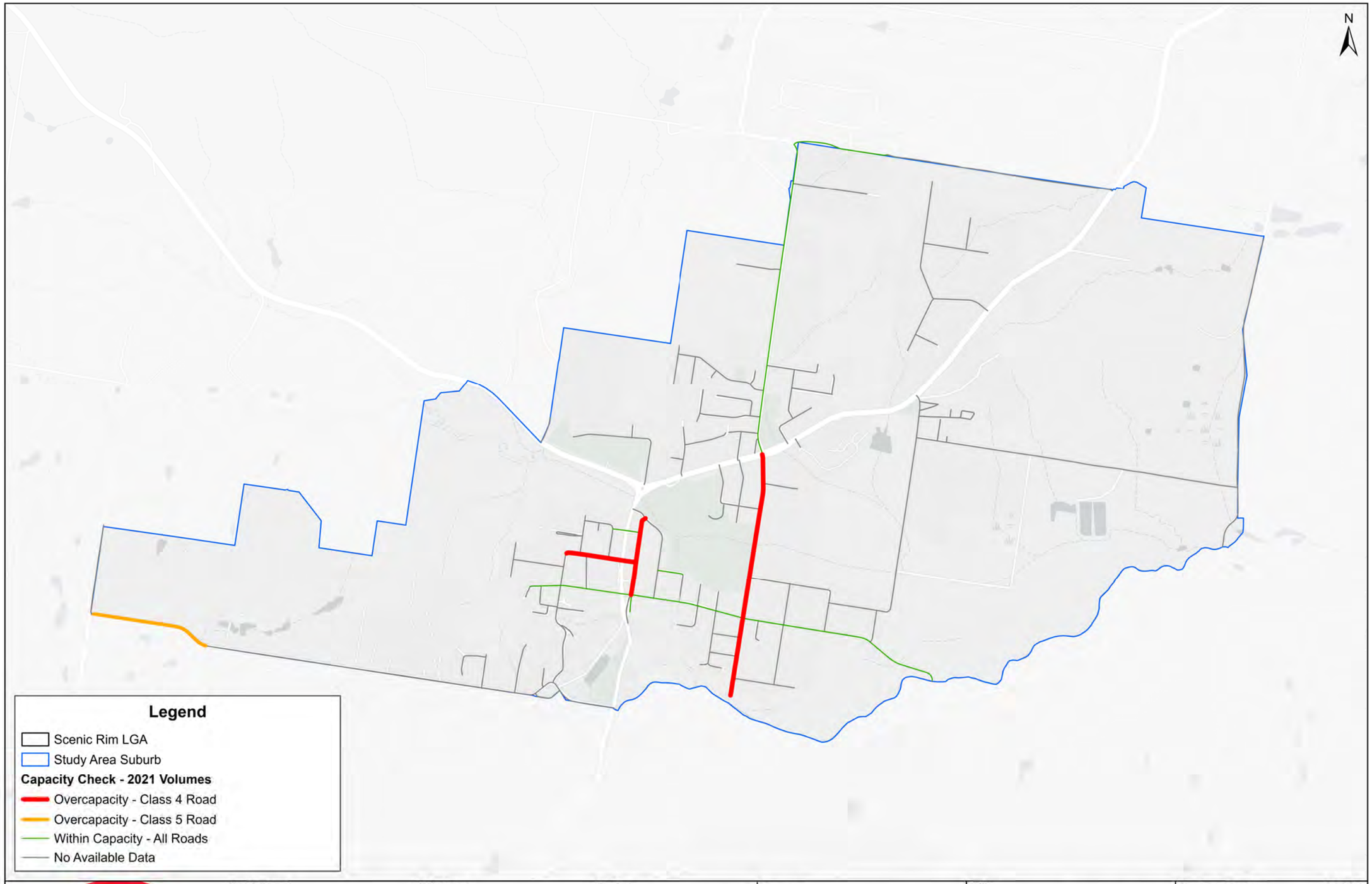
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Boonah
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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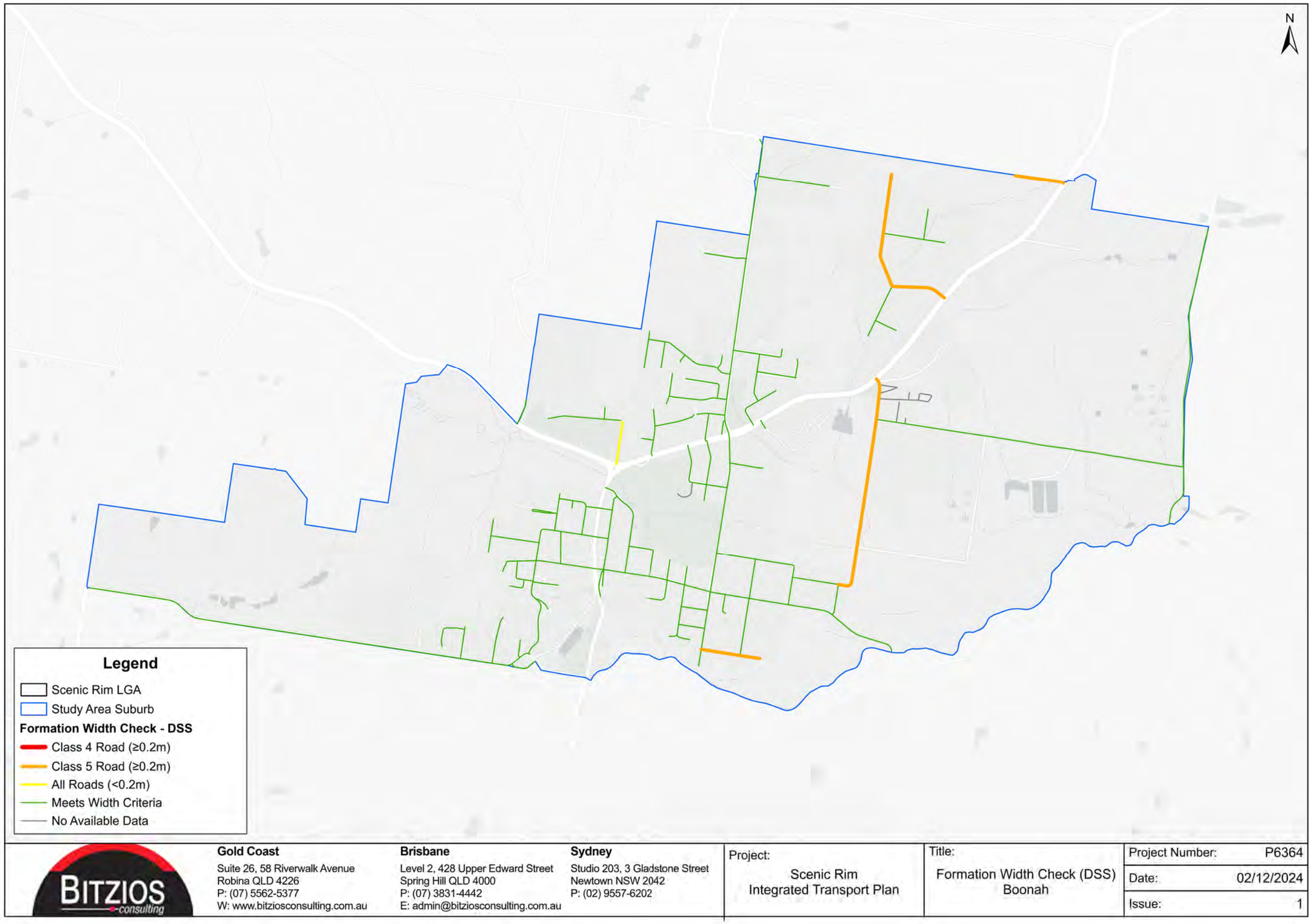
Project:	Scenic Rim Integrated Transport Plan
Title:	Road Hierarchy - Capacity Check 2021 Volumes Boonah
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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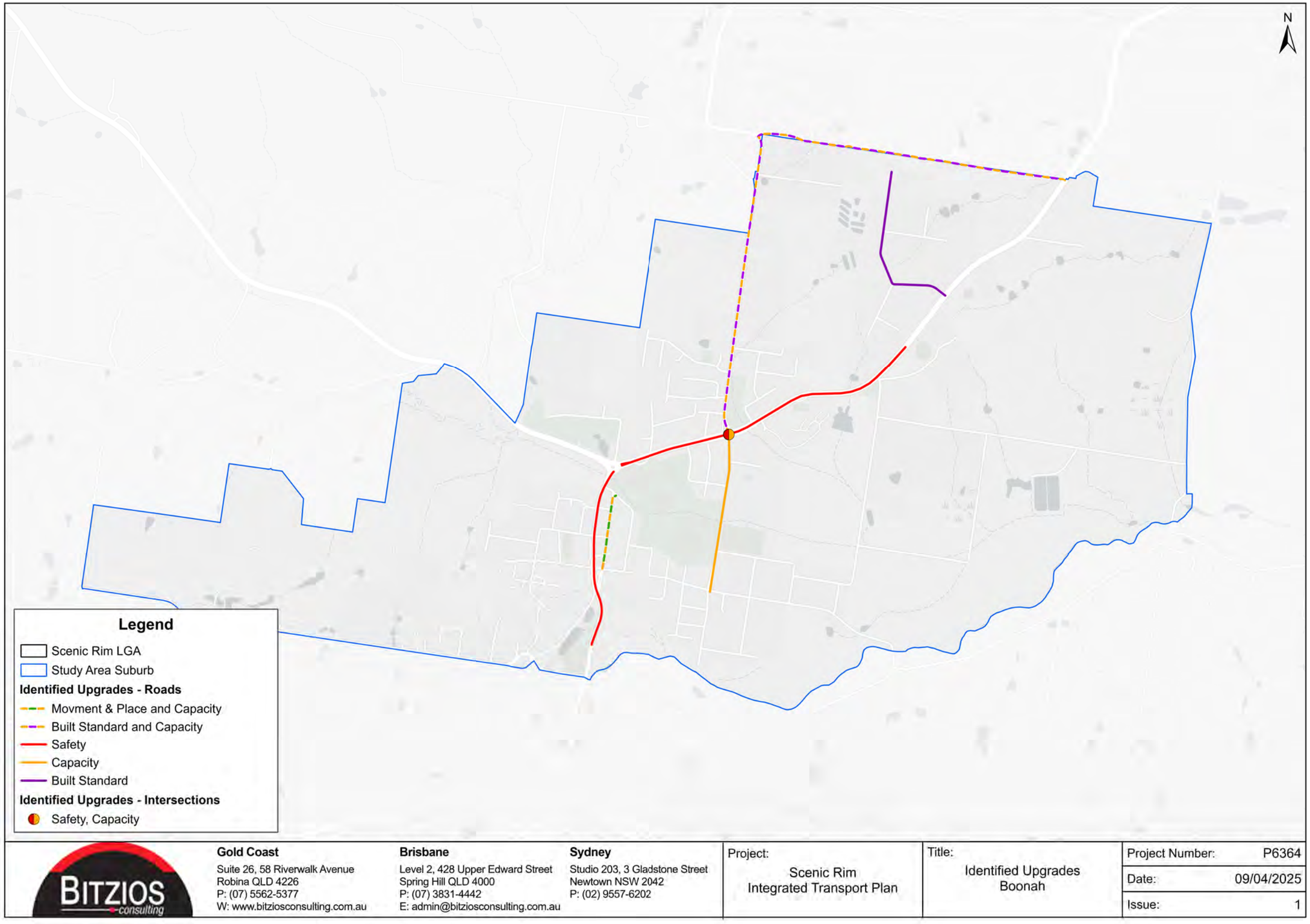
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Boonah
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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Newtown NSW 2042
P: (02) 9557-6202

Project: Scenic Rim Integrated Transport Plan

Title: Identified Upgrades Boonah

Project Number:	P6364
Date:	09/04/2025
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Boonah
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Boonah
87
51
87
51
52
88
473
336
841
654
88
52
113
144
247
293
54
26
728
509
728
509
247
233
111
43
87
44
413
370
574
442
344
101
121
331
344
101
384
530
464
279
188
149
188
149
188
149
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Boonah
281
280
281
280
284
285
1683
1632
285
284
322
3265
518
516
1387
1394
163
163
2704
2749
2704
2749
320
320
1387
1394
278
278
1871
1918
206
2100
2061
2100
801
800
865
868
801
800
1927
1974
1576
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725
771
725
771
725
771
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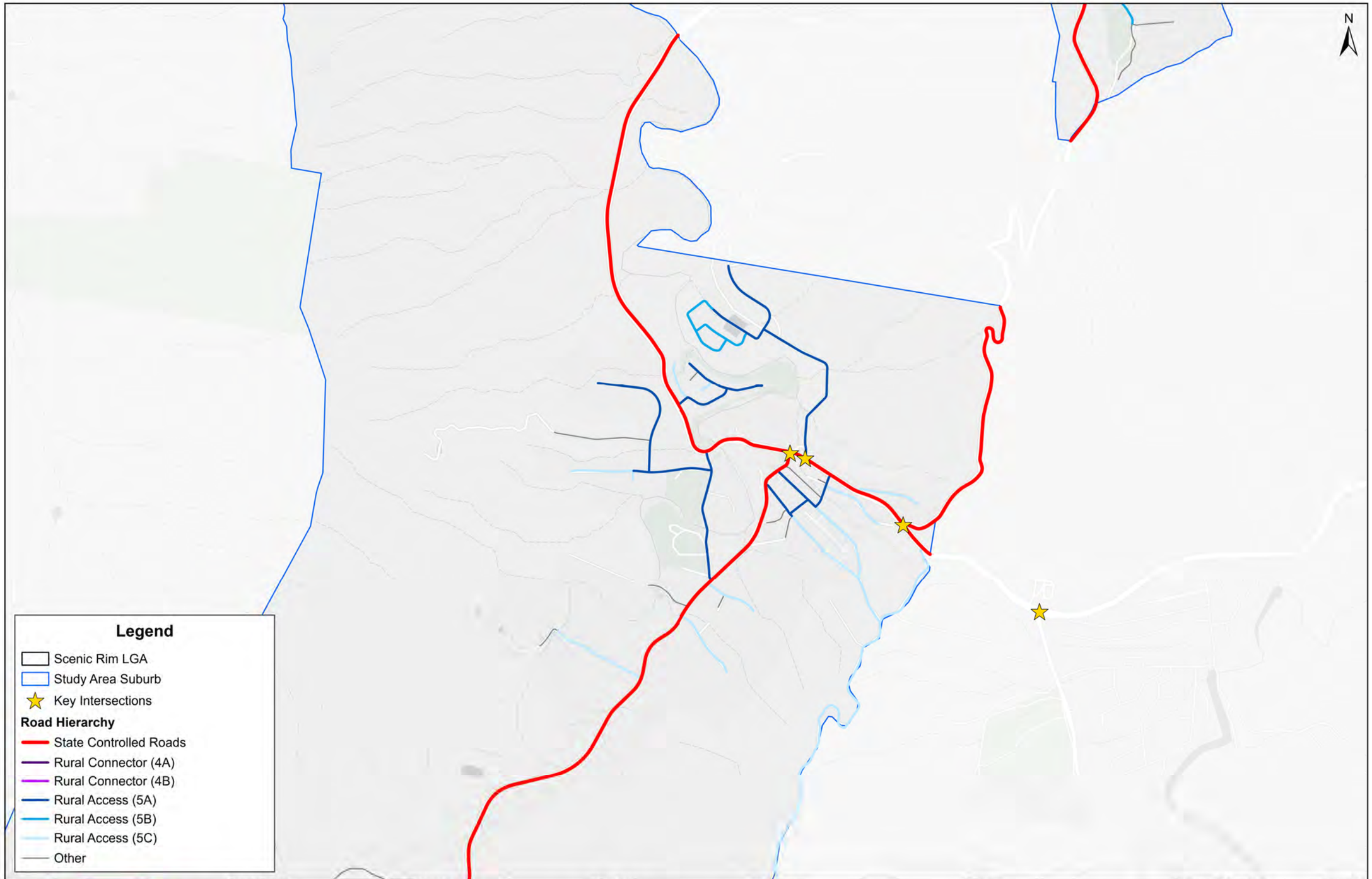
Appendix G: Local Area Maps – Canungra



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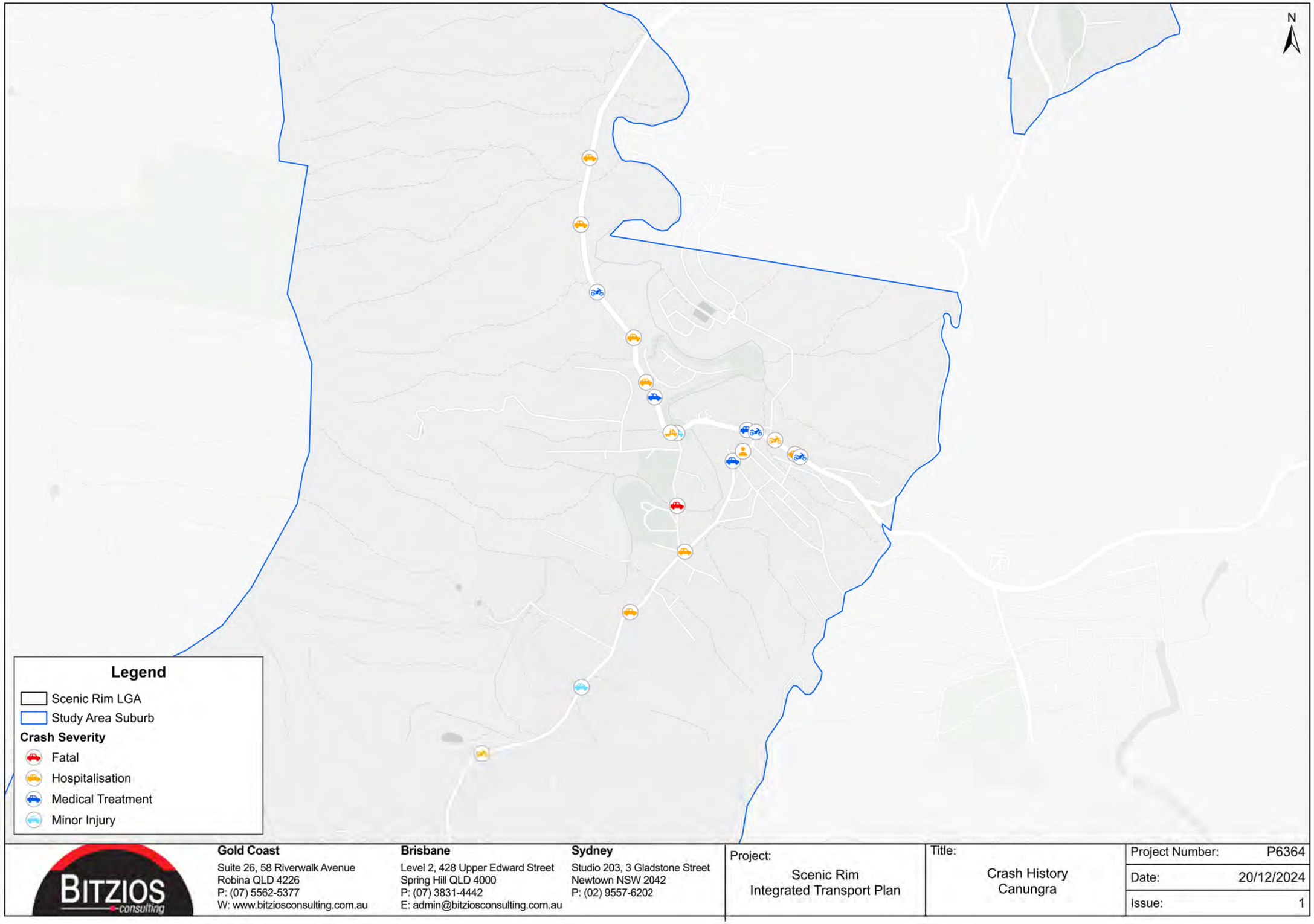
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Canungra

Project Number:	P6364
Date:	20/12/2024
Issue:	1



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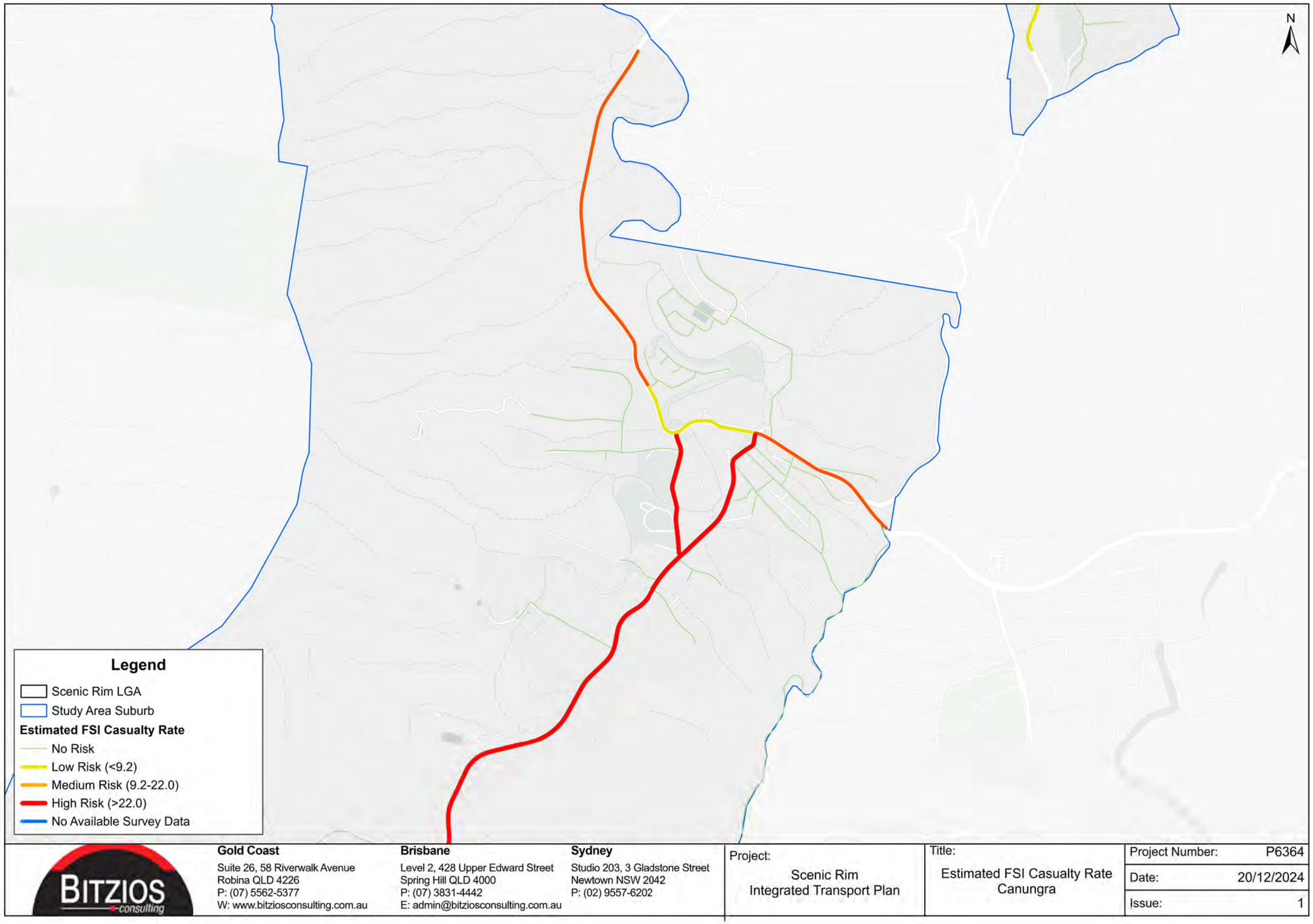
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Canungra
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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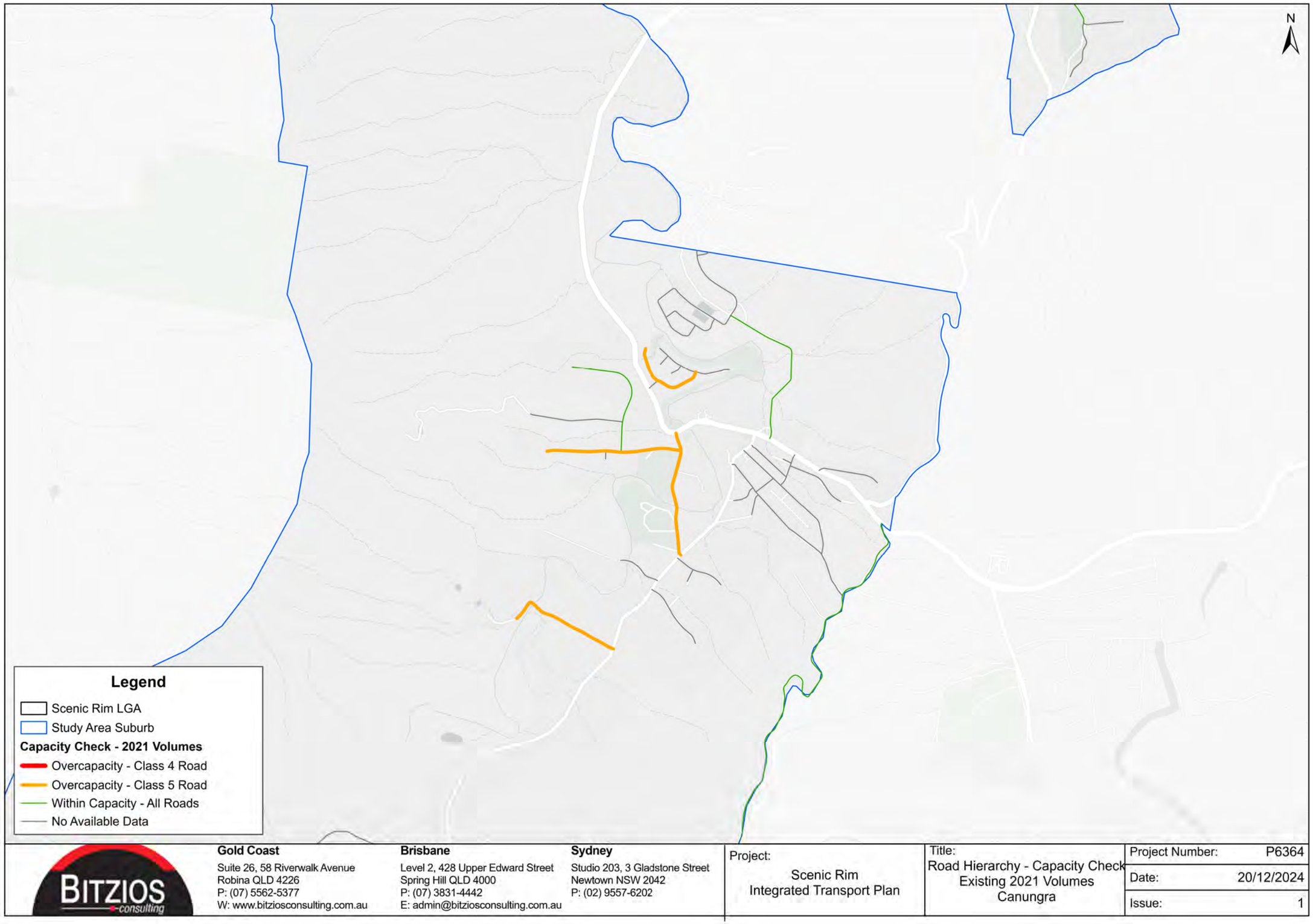
Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Canungra
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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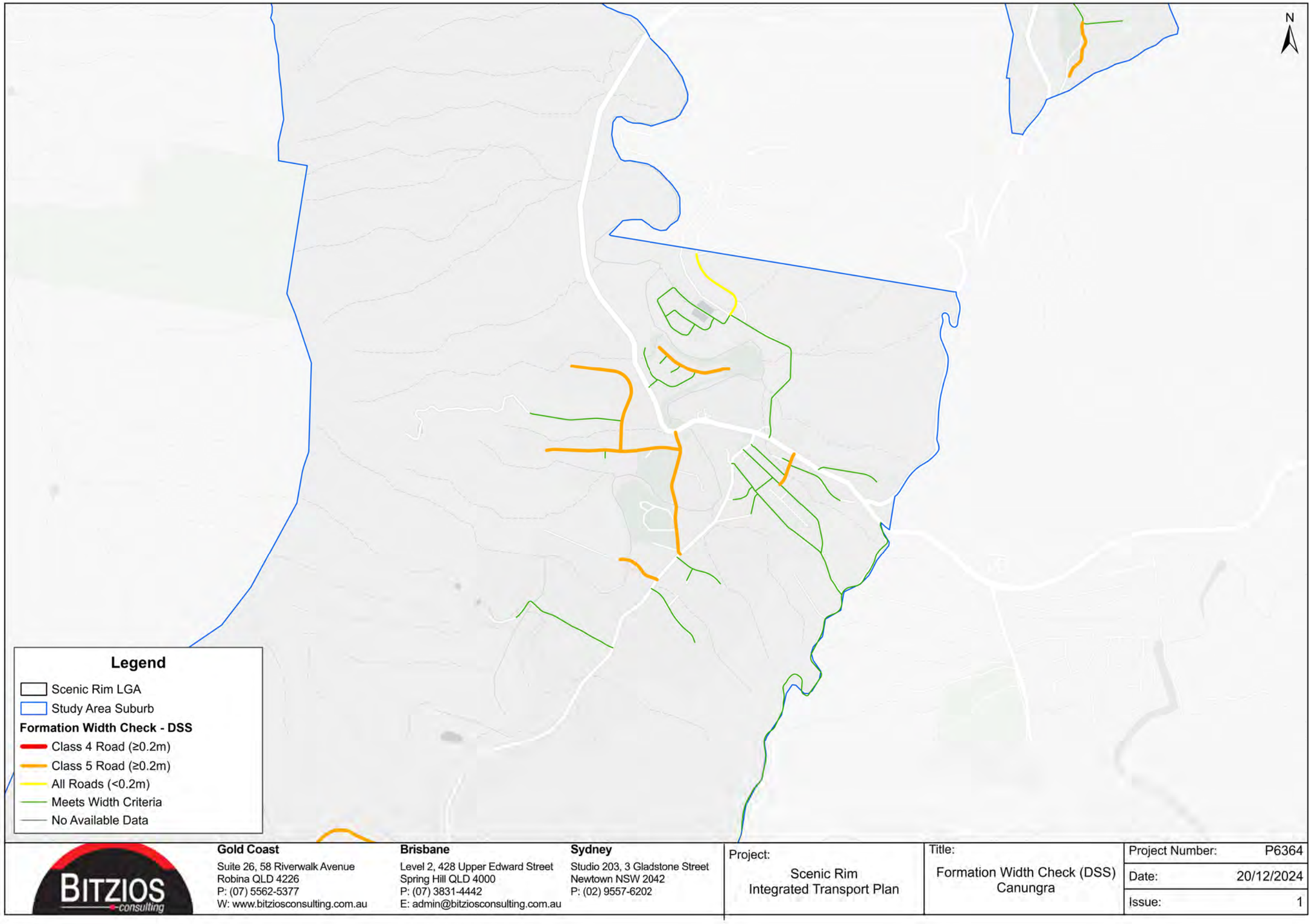
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
Existing 2021 Volumes
Canungra

Project Number:	P6364
Date:	20/12/2024
Issue:	1



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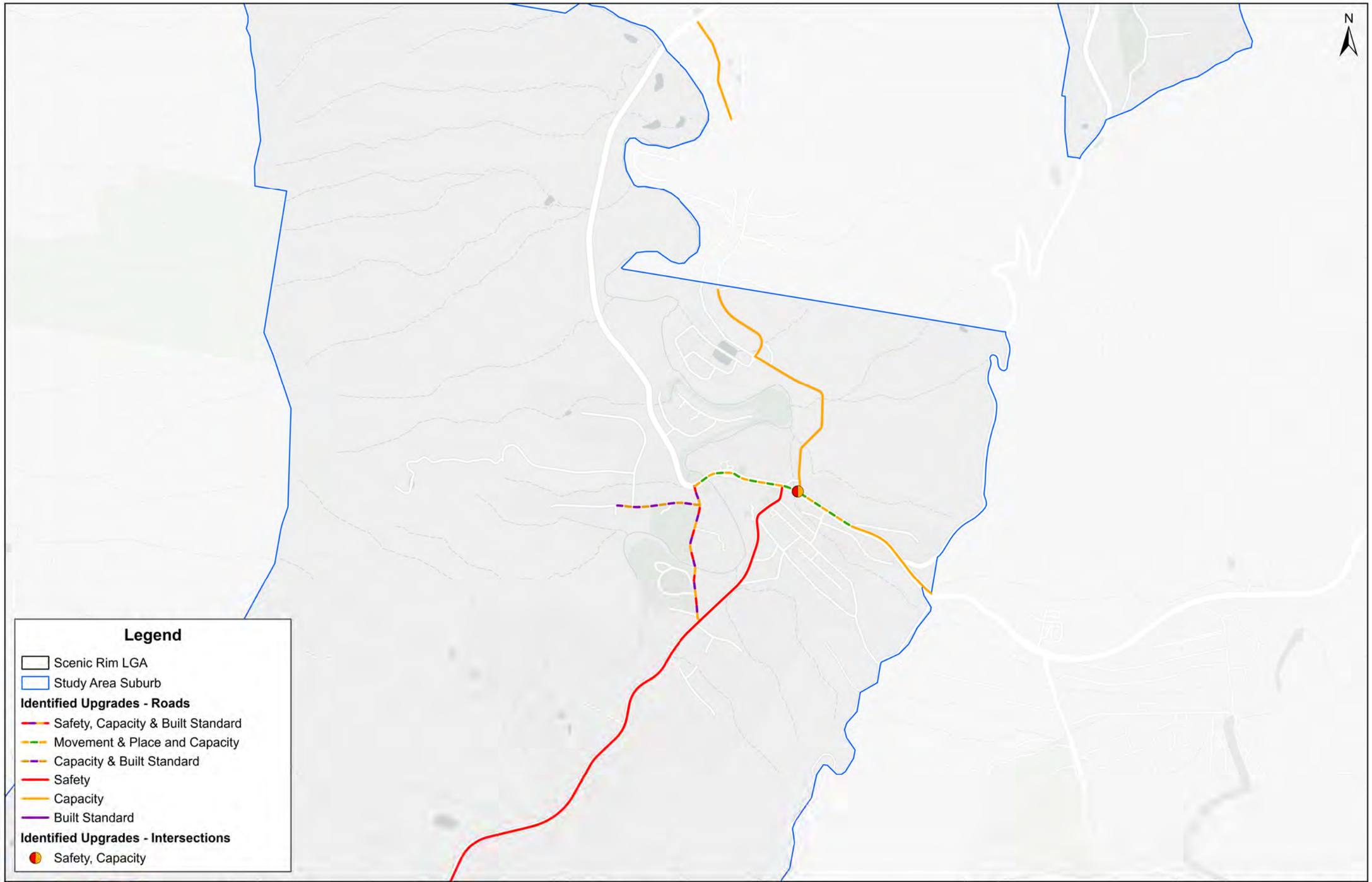
P: (02) 9557-6202

Project: Scenic Rim Integrated Transport Plan

Title: Formation Width Check (DSS) Canungra

Project Number:	P6364
Date:	20/12/2024
Issue:	1



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Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Canungra
Project Number:	P6364
Date:	10/04/2025
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Canungra
257
96
341
1054
455
61
1054
341
147
626
1054
341
1054
341
1680
488
406
2087
488
2087
488
1686
481
60
109
106
47
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Canungra
400
202
1409
481
119
527
481
1409
978
390
481
1409
481
1409
871
2387
871
2903
516
871
2903
822
2447
167
113
95
163
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Canungra
1397
1473
4117
4068
1186
1190
4068
4117
3195
3195
4068
4117
7263
7302
7669
7818
405
516
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634
638
613
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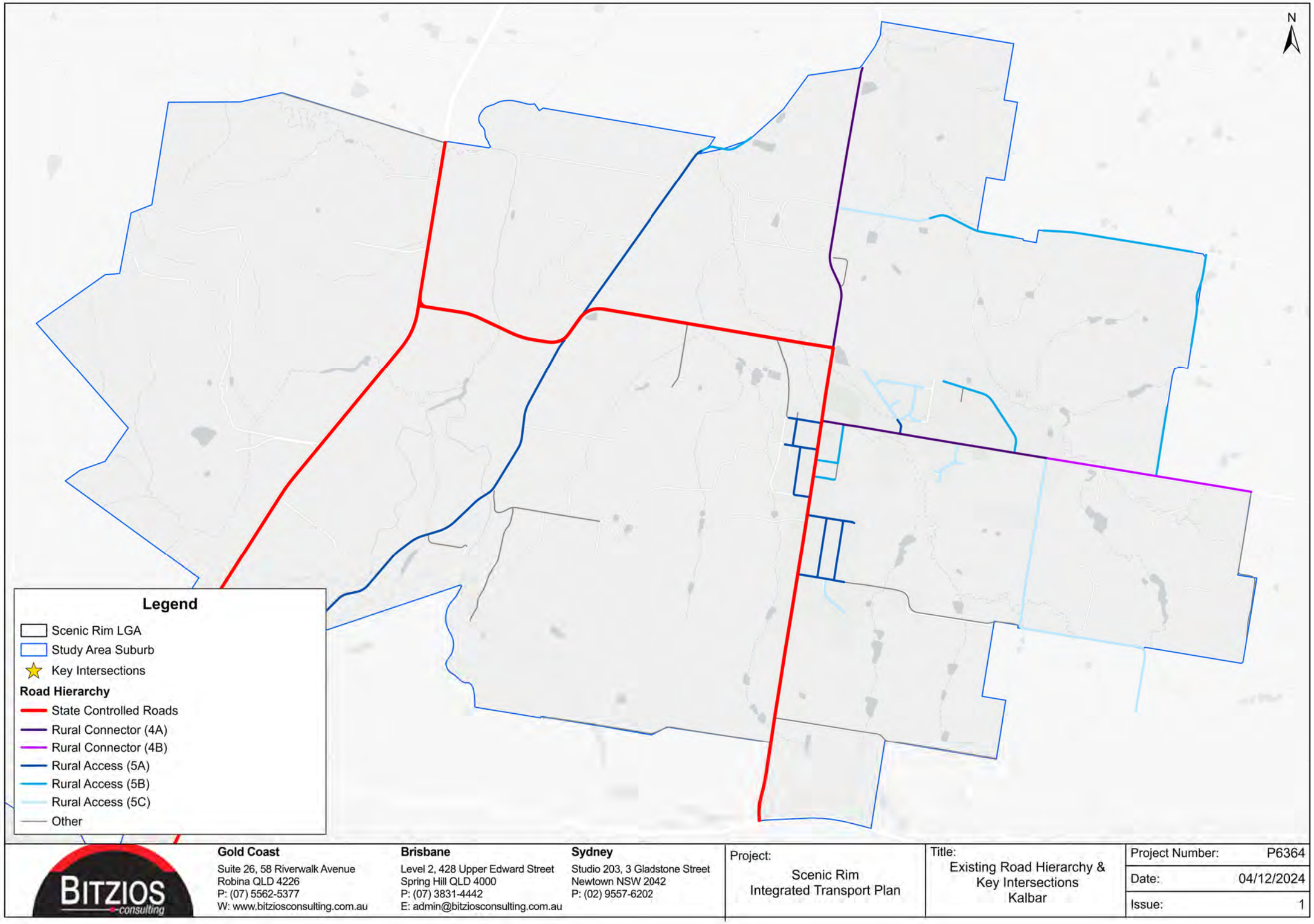
Appendix H: Local Area Maps – Kalbar



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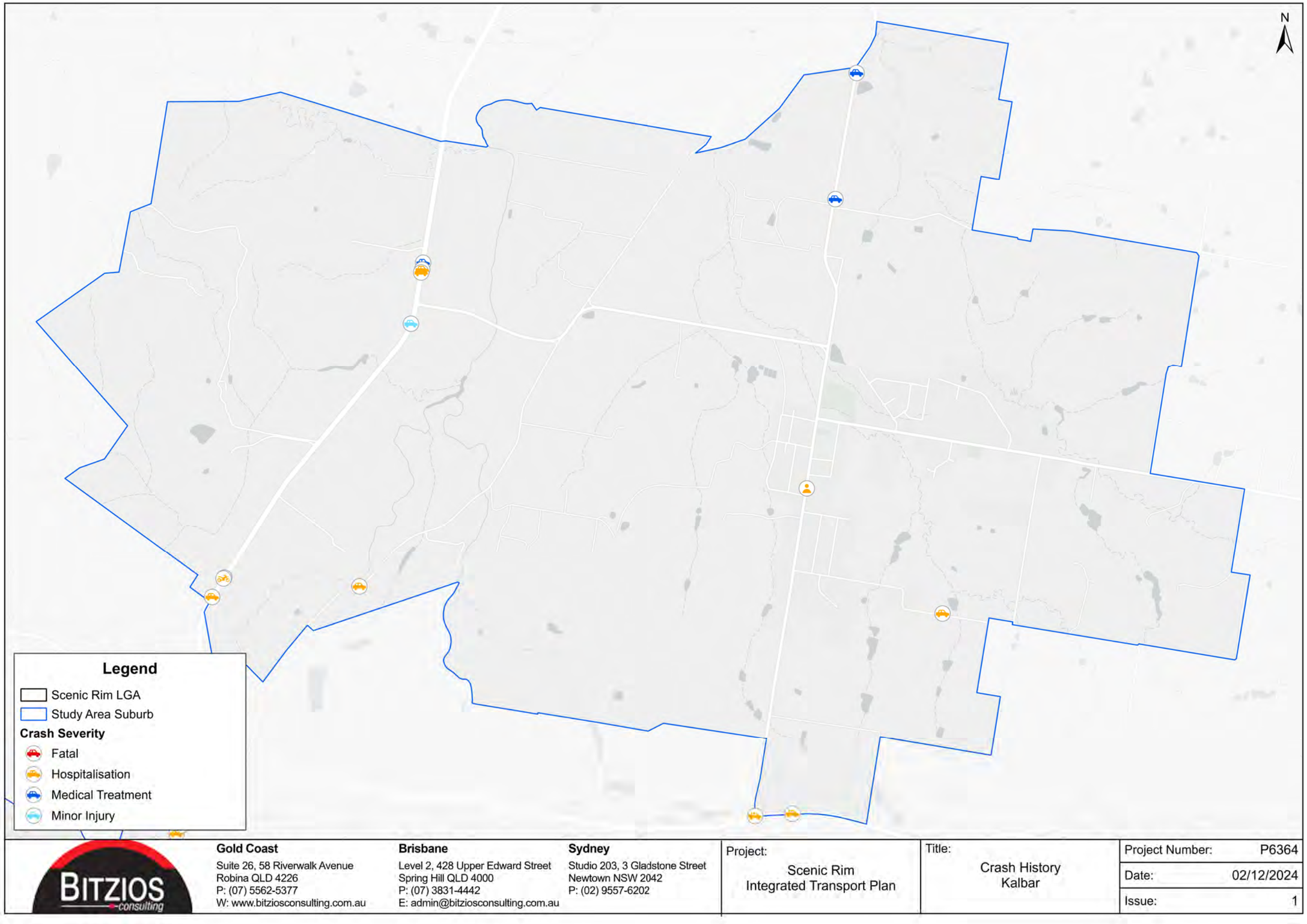
Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Kalbar

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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Sydney
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Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Kalbar
Project Number:	P6364
Date:	02/12/2024
Issue:	1

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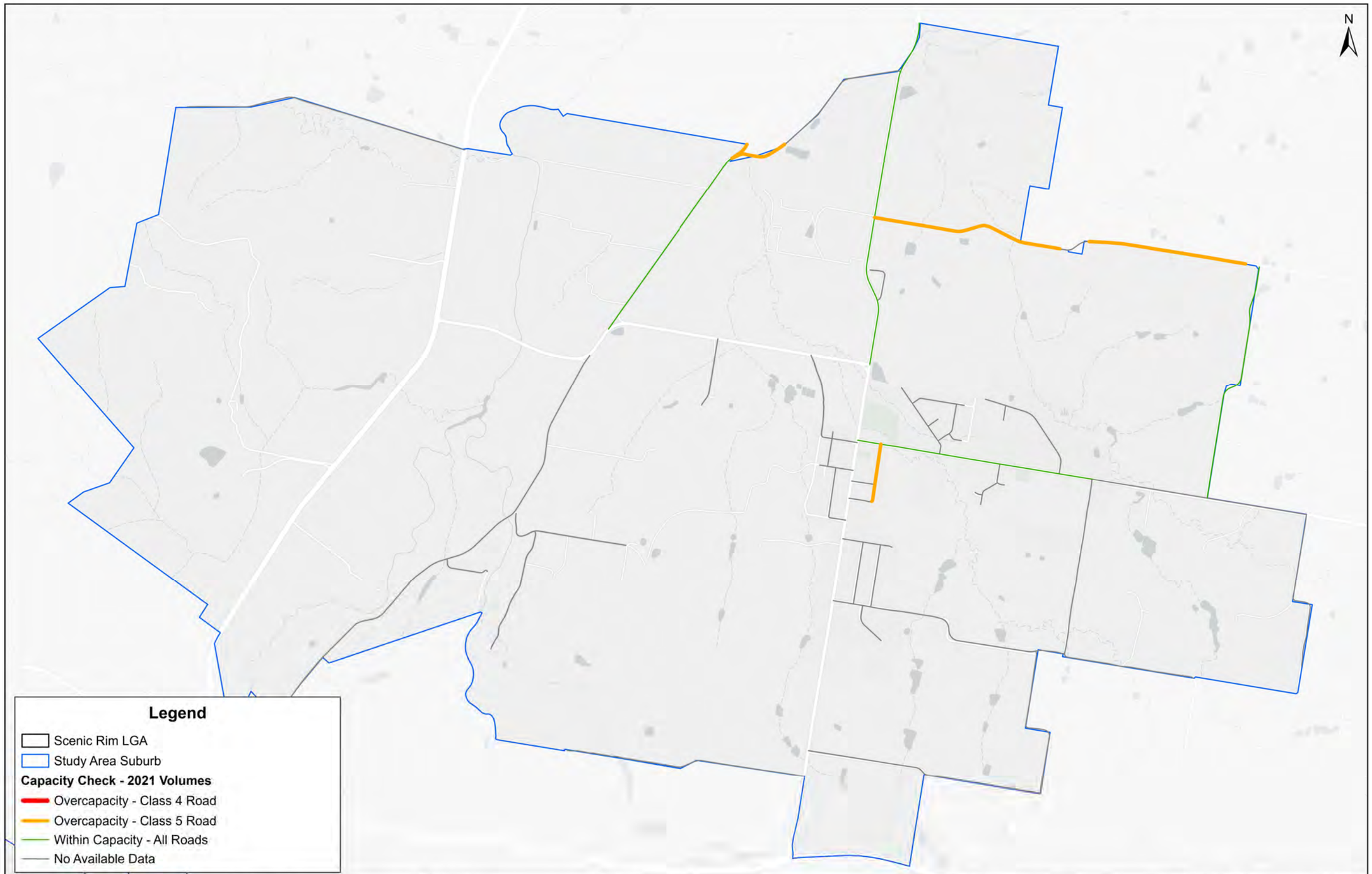
Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Kalbar
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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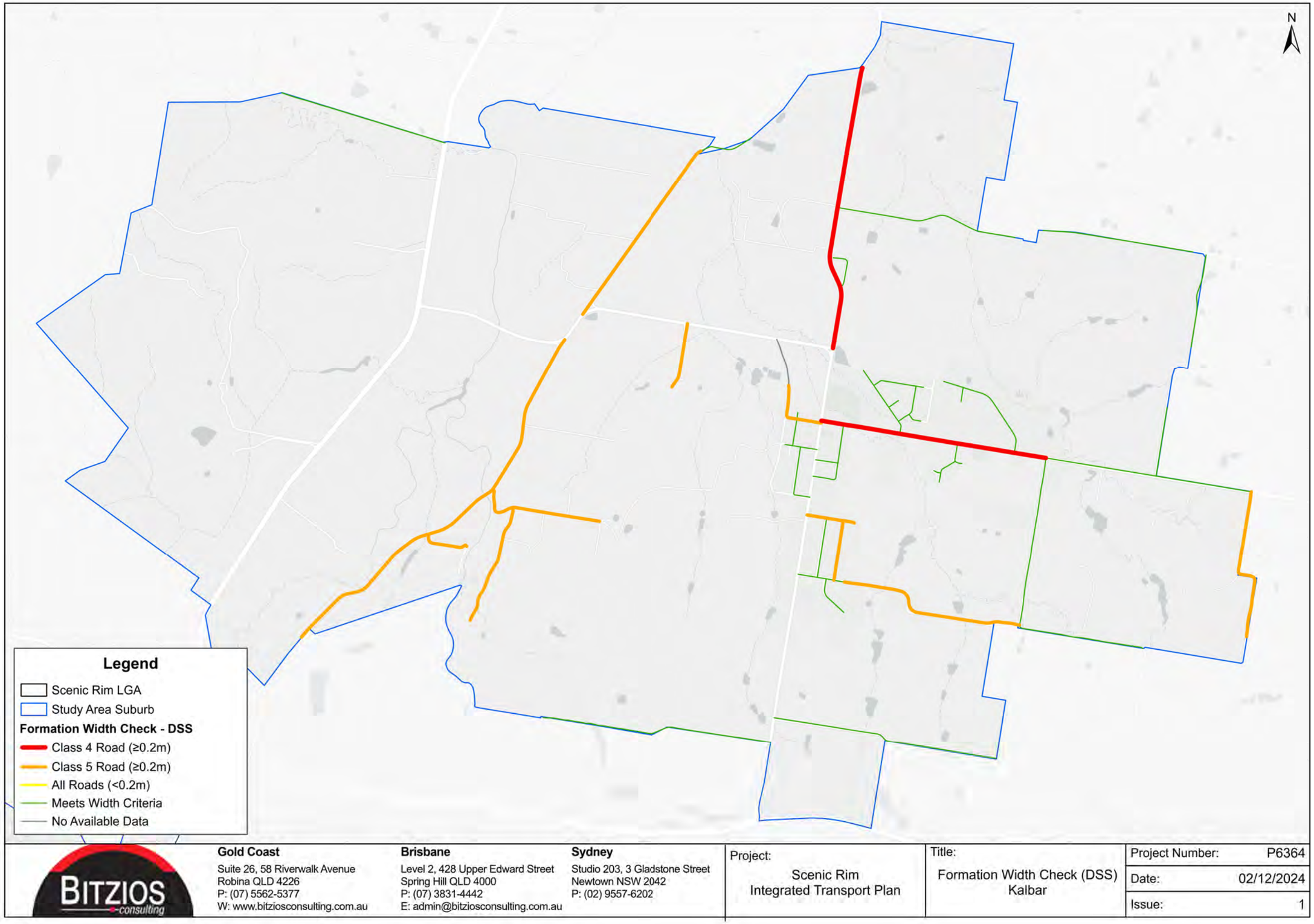
E: admin@bitziosconsulting.com.au

Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
2021 Volumes
Kalbar

Project Number:	P6364
Date:	11/12/2024
Issue:	1



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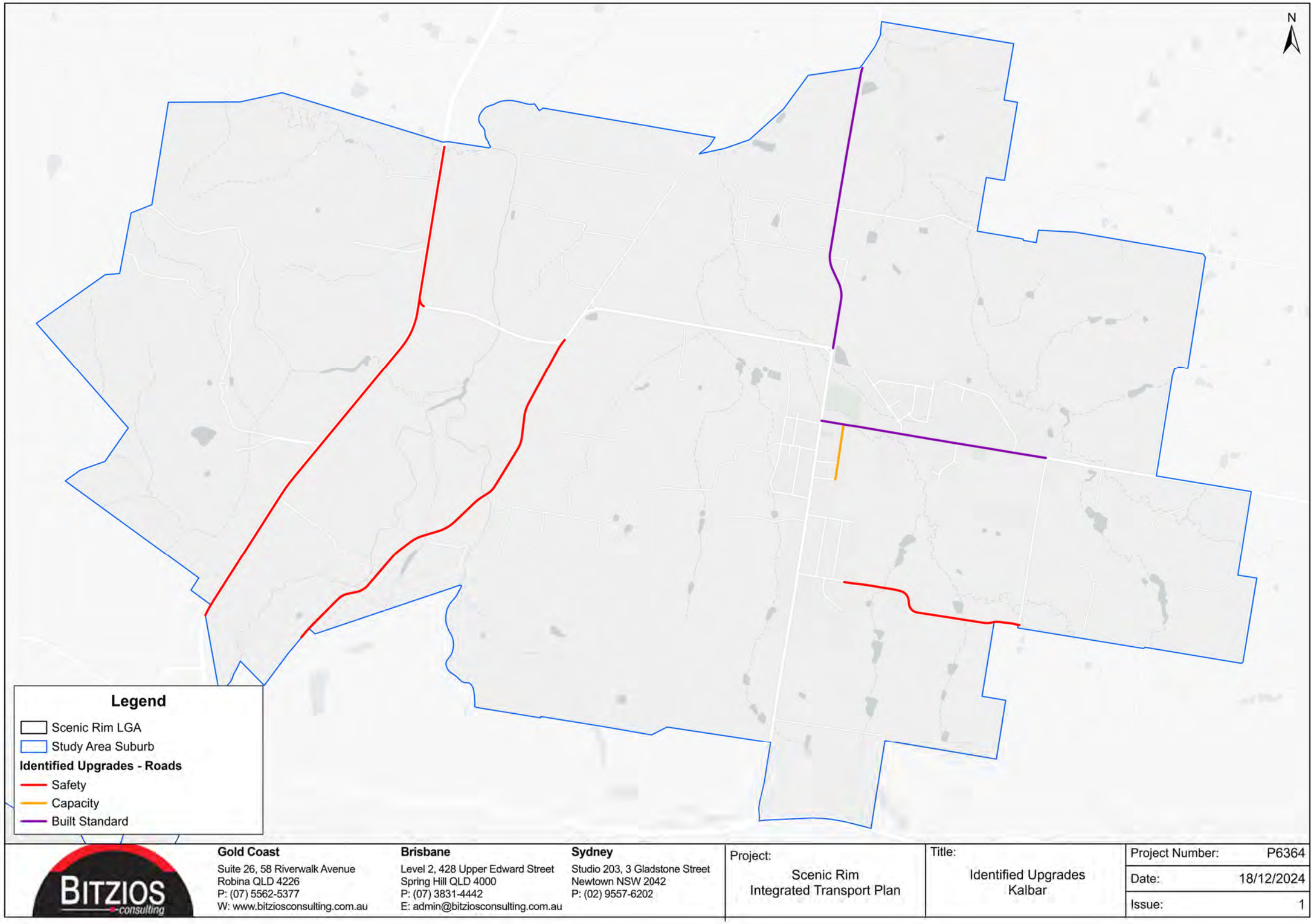
Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Kalbar
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Kalbar
Project Number:	P6364
Date:	18/12/2024
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Kalbar
564
558
13
36
13
36
98
151
98
151
98
151
98
151
13
36
151
98
172
154
172
154
25
60
413
460
413
460
209
241
209
241
200
173
113
129
223
181
78
46
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Kalbar
735
825
58
8
58
8
55
8
280
153
280
153
280
153
280
153
153
280
234
325
234
325
87
51
582
545
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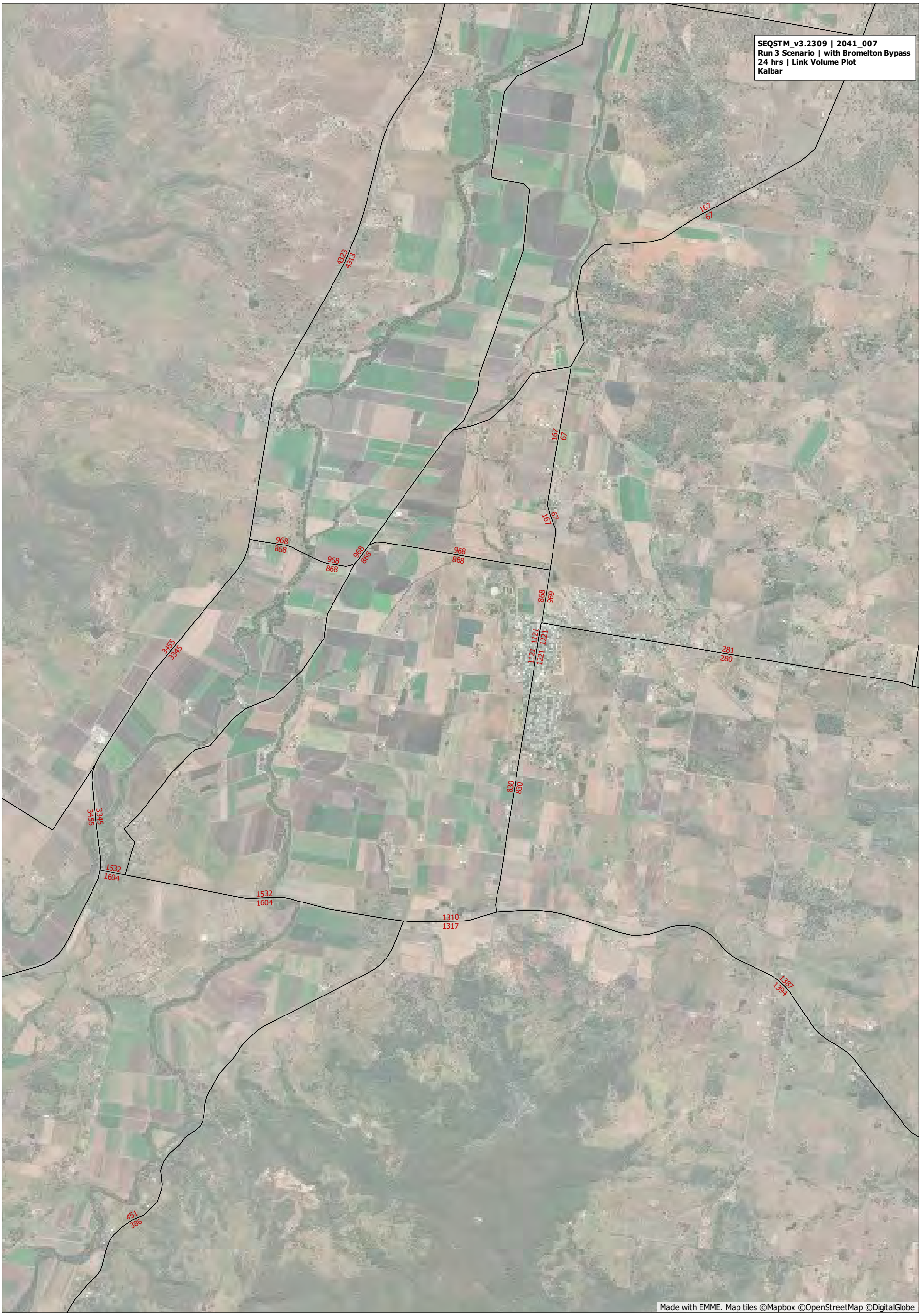
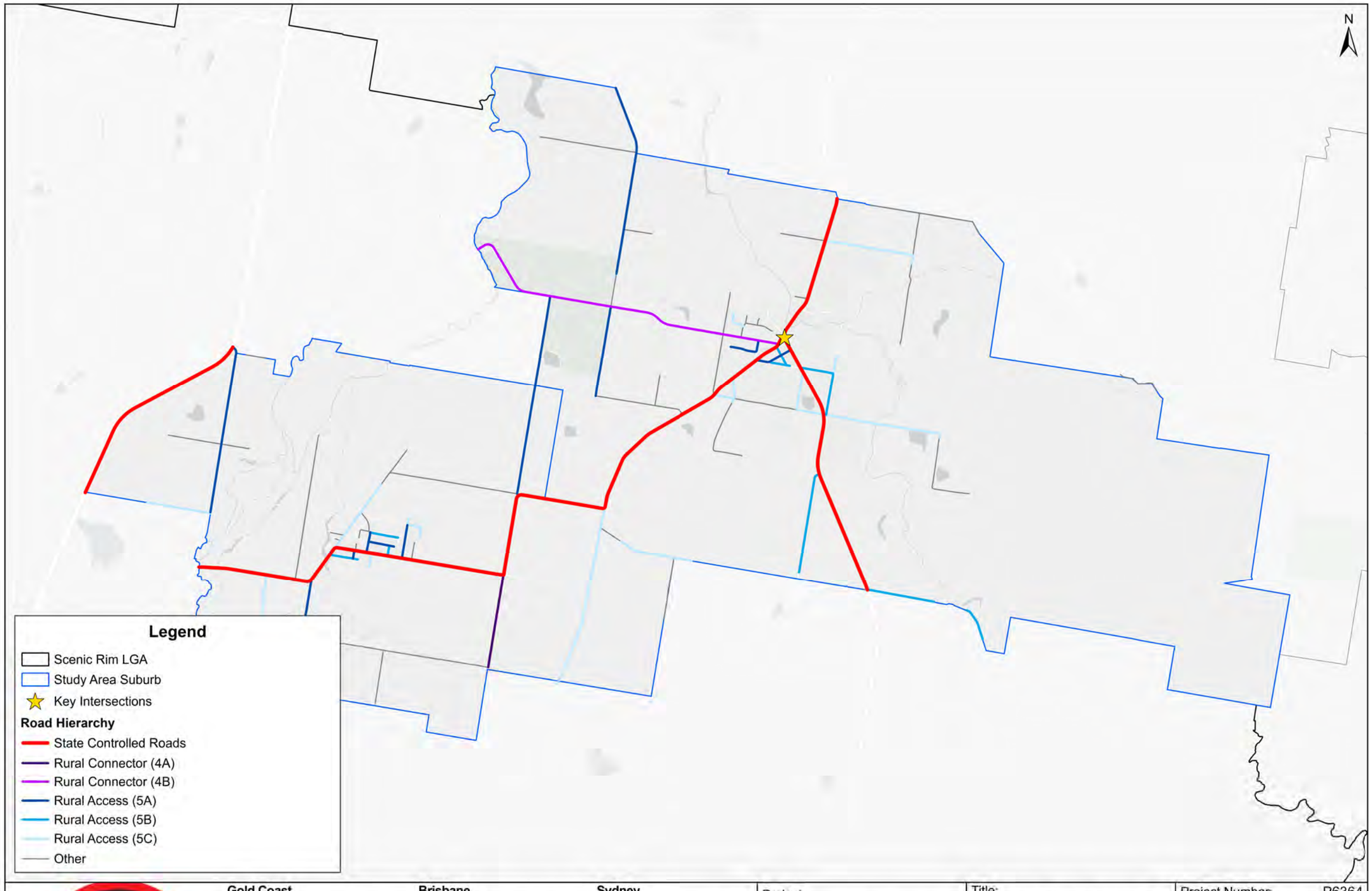
266
147
293
86
97
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Kalbar
4323
4313
167
67
968
868
3455
3345
1532
1604
1310
1317
830
1121
1221
281
280
1387
1394
451
386
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe

Appendix I: Local Area Maps – Peak Crossing & Harrisville



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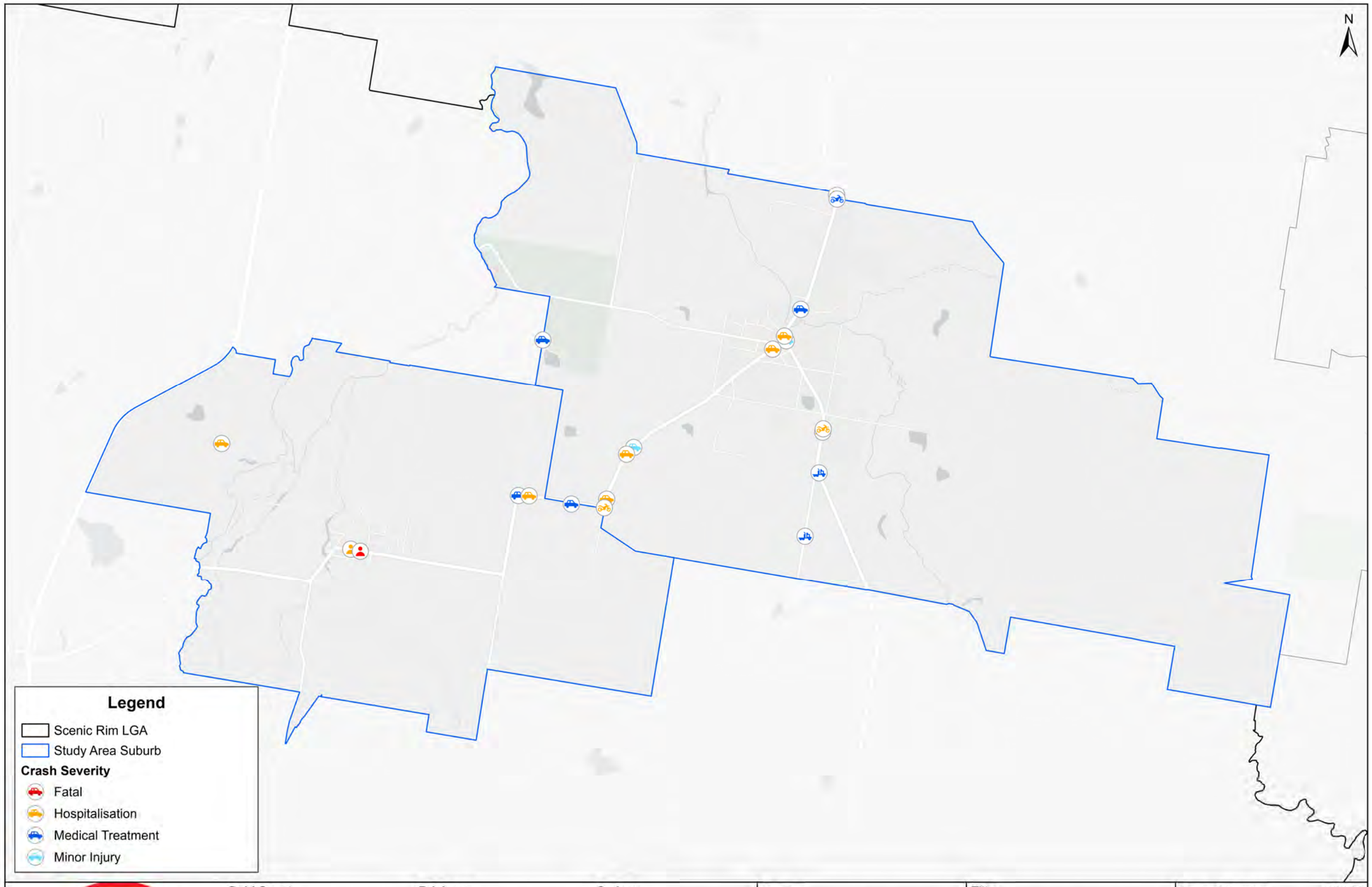
Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project: Scenic Rim Integrated Transport Plan

Title: Existing Road Hierarchy & Key Intersections Peak Crossing & Harrisville

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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Sydney
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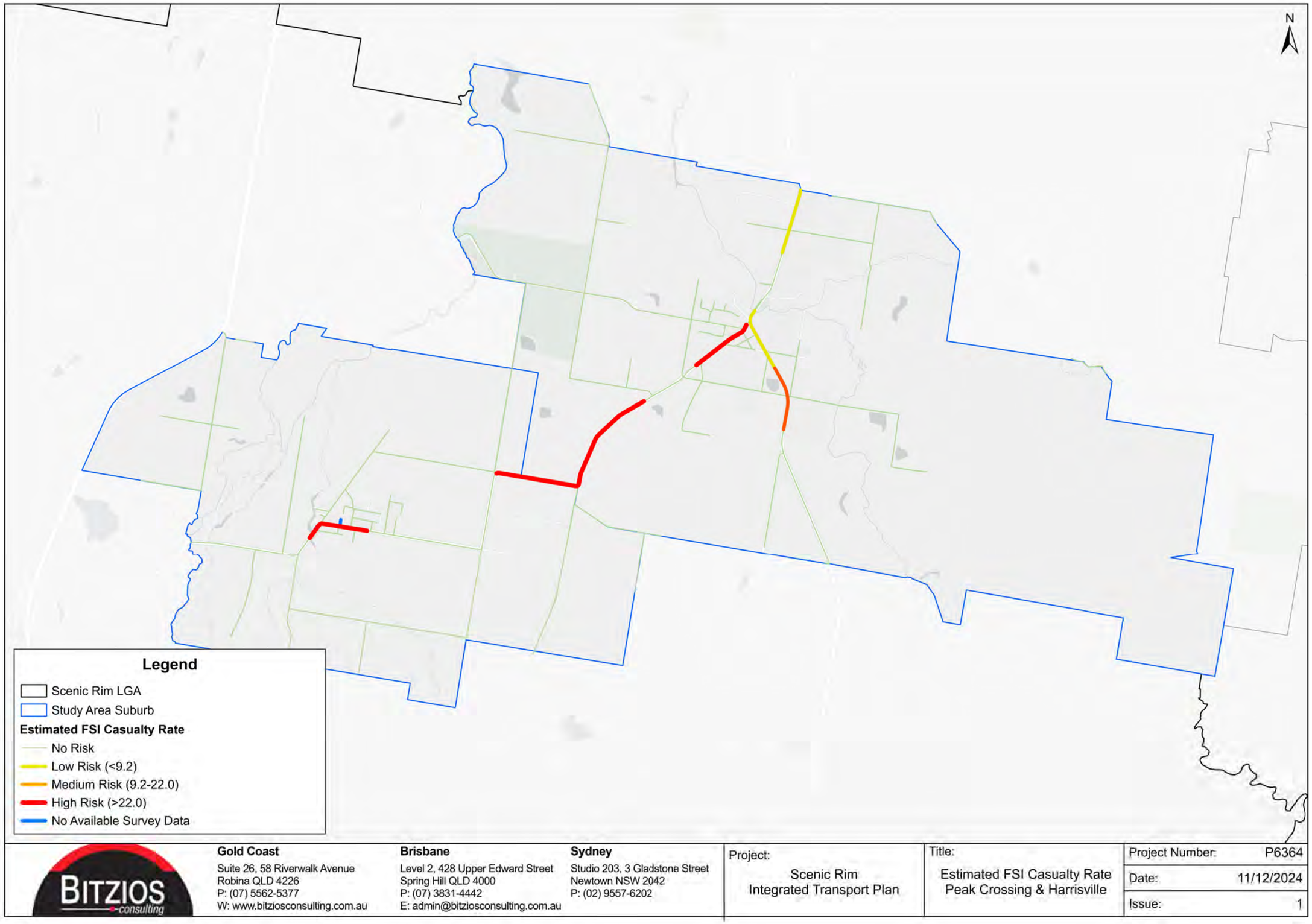
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Peak Crossing & Harrisville
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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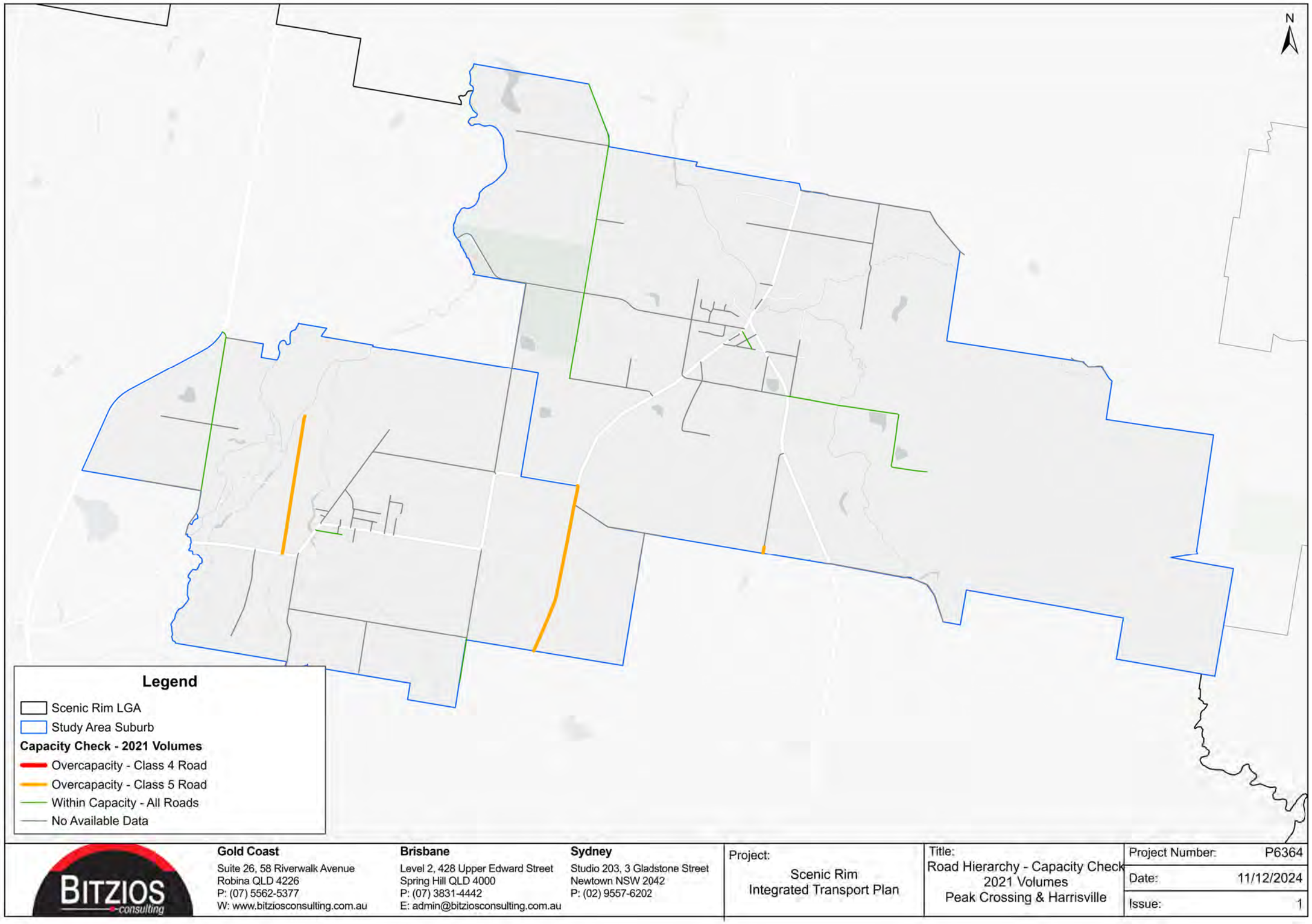
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Peak Crossing & Harrisville
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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Sydney
Studio 203, 3 Gladstone Street
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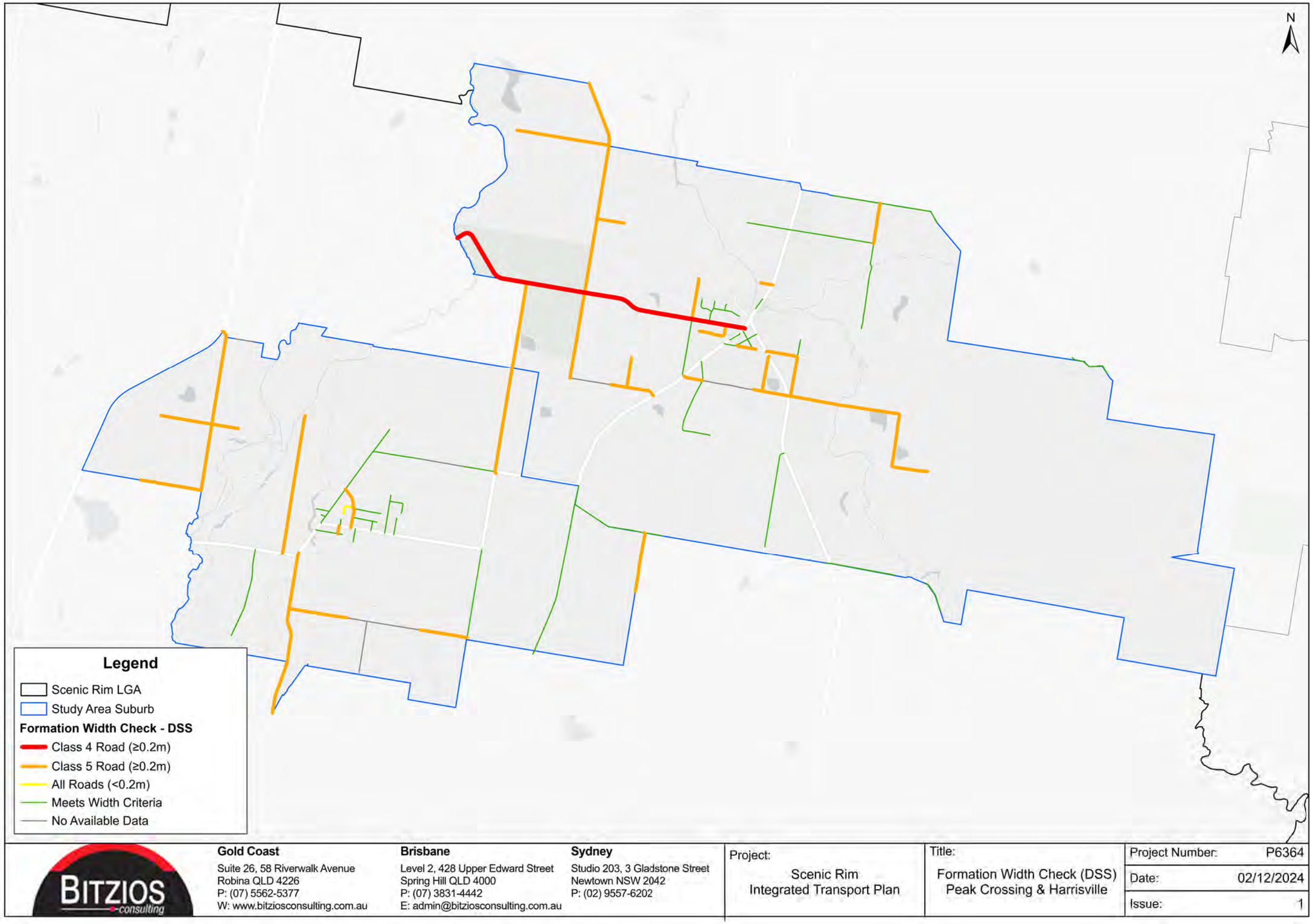
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
2021 Volumes
Peak Crossing & Harrisville

Project Number:	P6364
Date:	11/12/2024
Issue:	1



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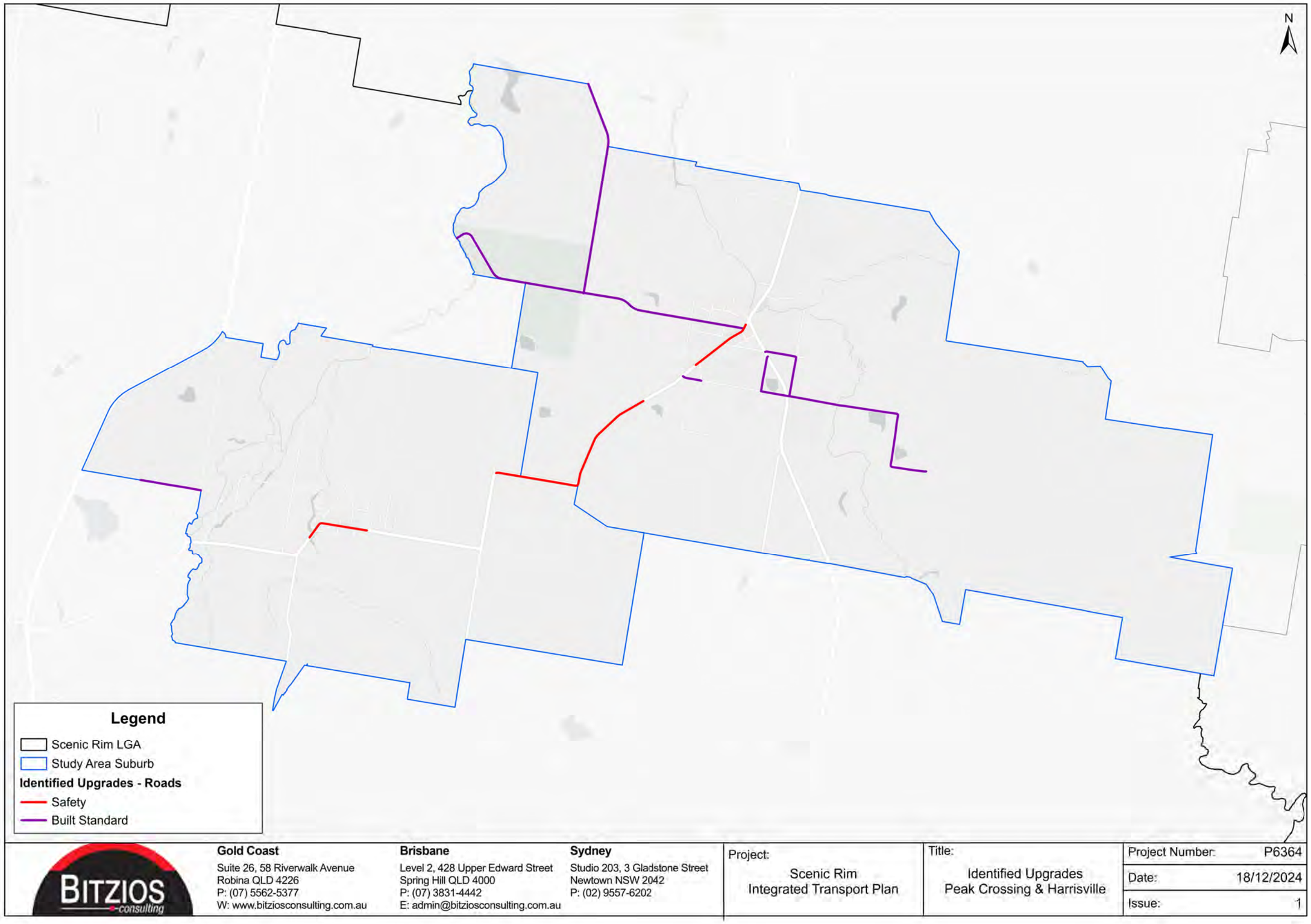
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Peak Crossing & Harrisville
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Peak Crossing & Harrisville
Project Number:	P6364
Date:	18/12/2024
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Peak Crossing
465
400
2
196
209
109
106
17
46
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Harrisville
642 582
642 582
642 582
2
642 580
6 12
636 568
6 12
29 15
29 15
113 80
2
2
2
196 209
109 106
109 106
109 106
109 106
17 46
17 46
17 46
18 9
66 44
570 567
564 558
13 36
4 10
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe

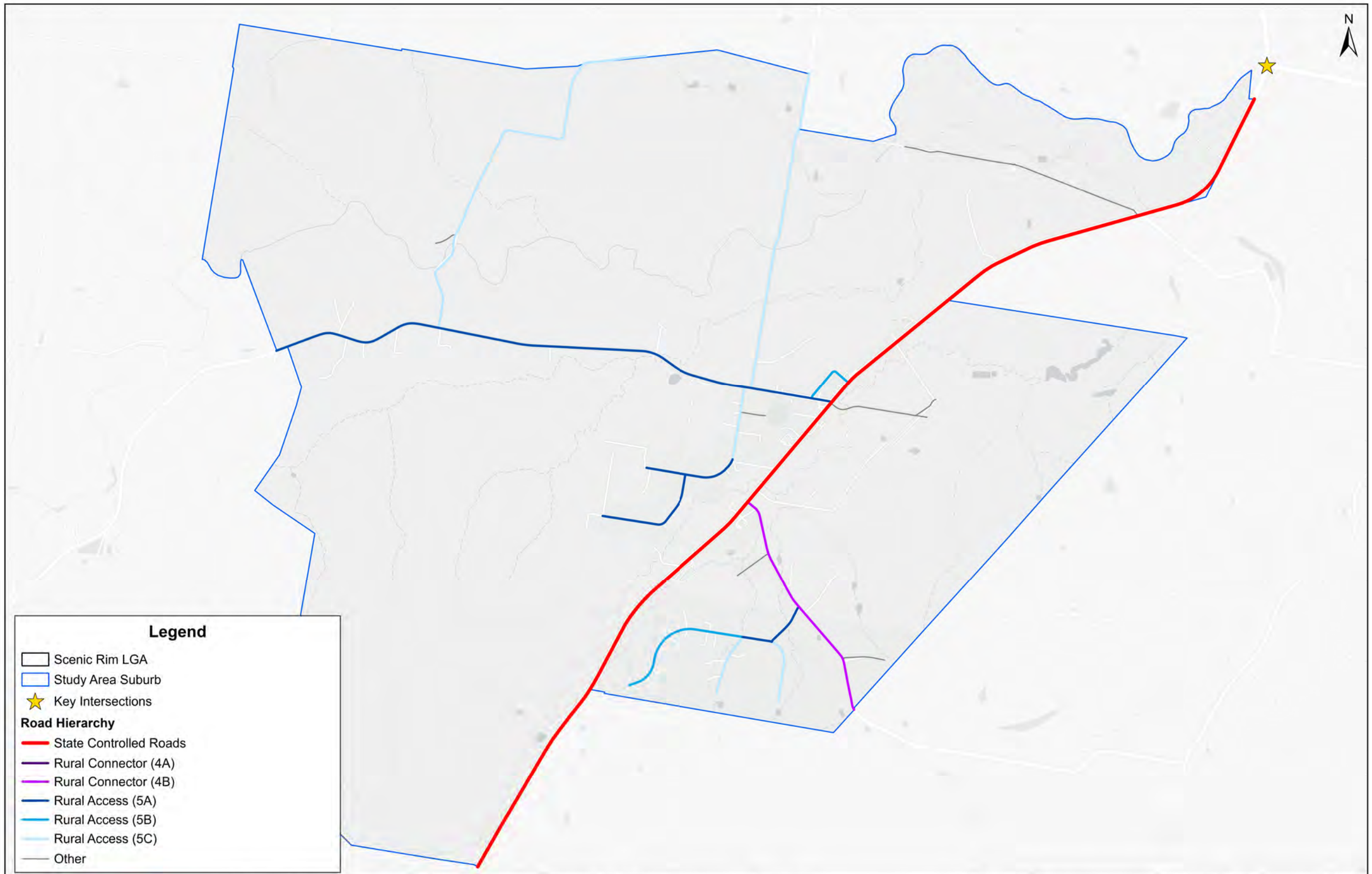

SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Peak Crossing
613
758
3
302
304
166
161
70
14
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Harrisville
782 948
782 948
781 948
3
779 947
611
3
3
3
304 302
304
166 161
166 161
166 161
166 161
16 11
16 11
163 936
25 40
25 40
126 176
166 161
70 14
70 14
14 24
74 99
828 628
70 14
735 825
58 8
12 6
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Peak Crossing
2786
2735
6
6
1232
1730
1235
1133
703
603
200
100
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Harrisville
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe

Appendix J: Local Area Maps – Aratula



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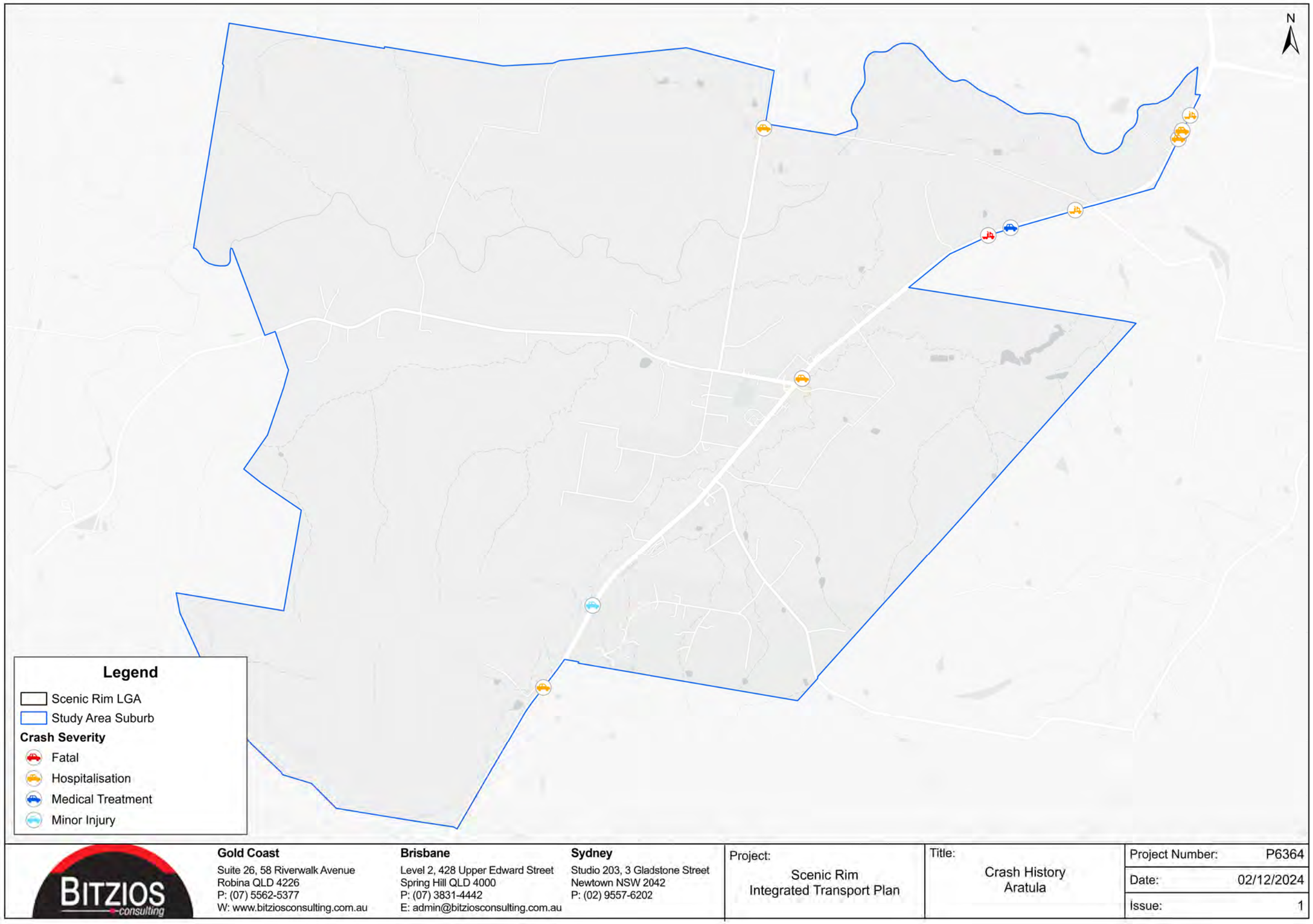
Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Aratula

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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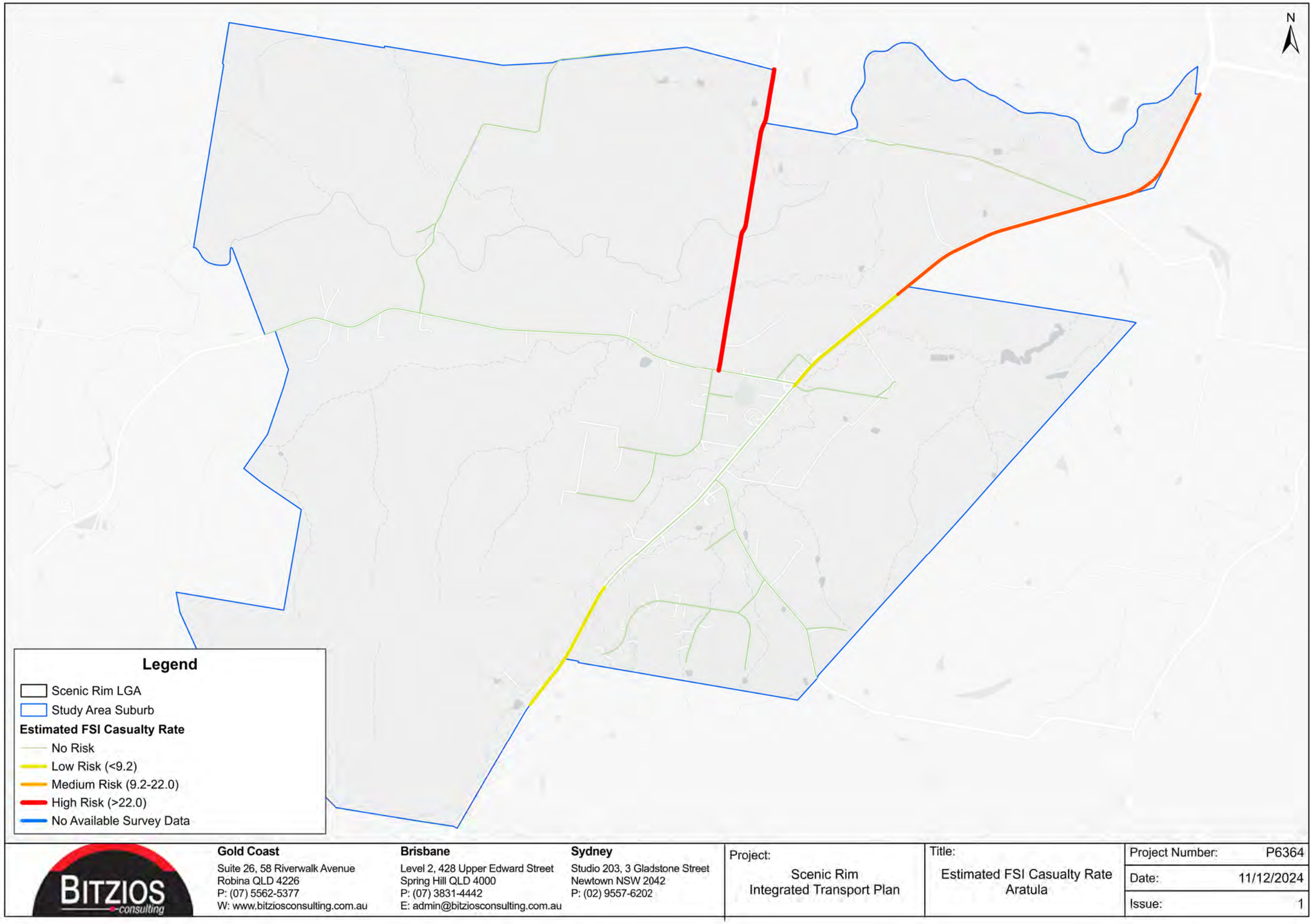
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Aratula
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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Sydney
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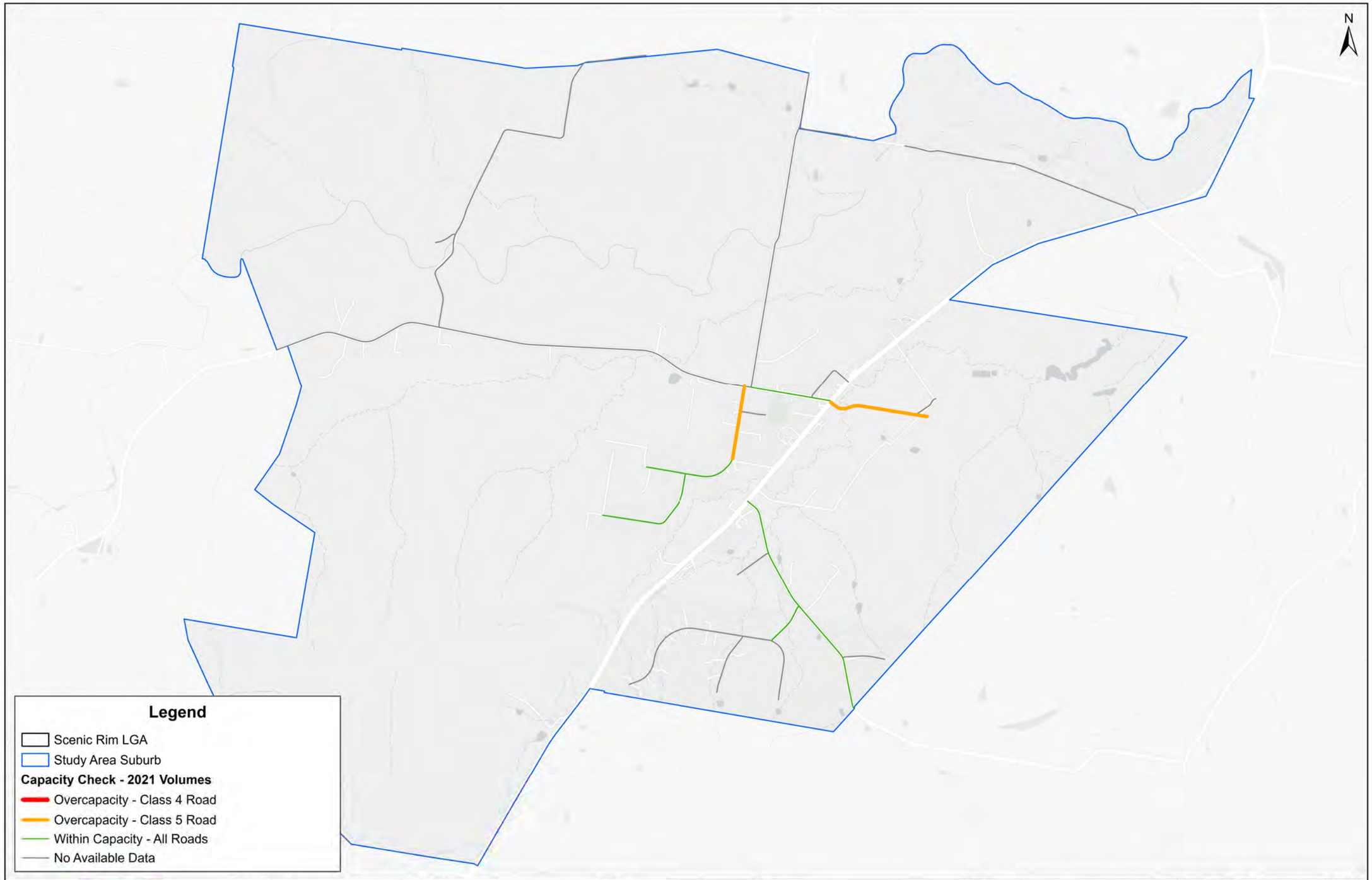
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Aratula
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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Sydney
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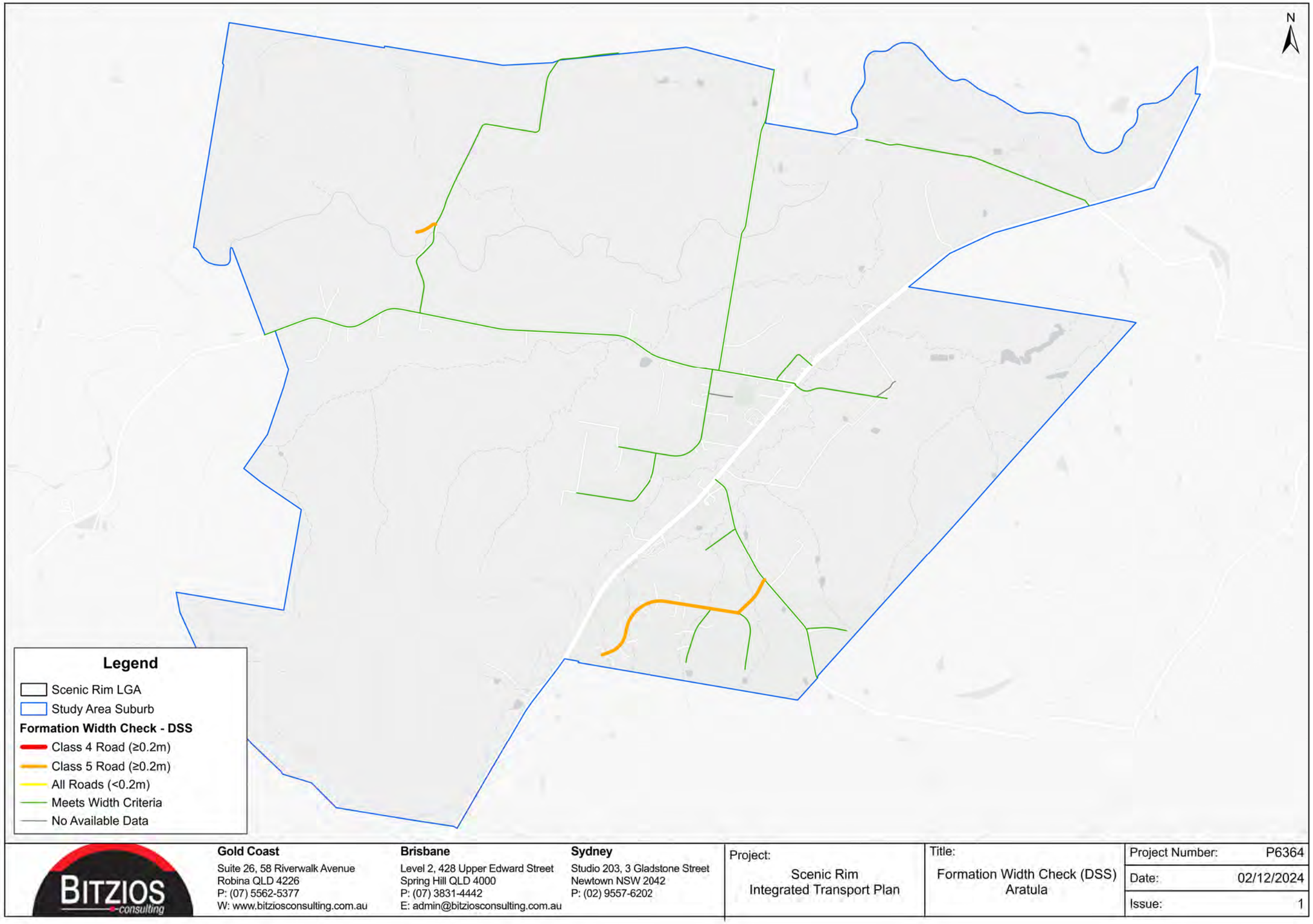
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
2021 Volumes
Aratula

Project Number:	P6364
Date:	11/12/2024
Issue:	1



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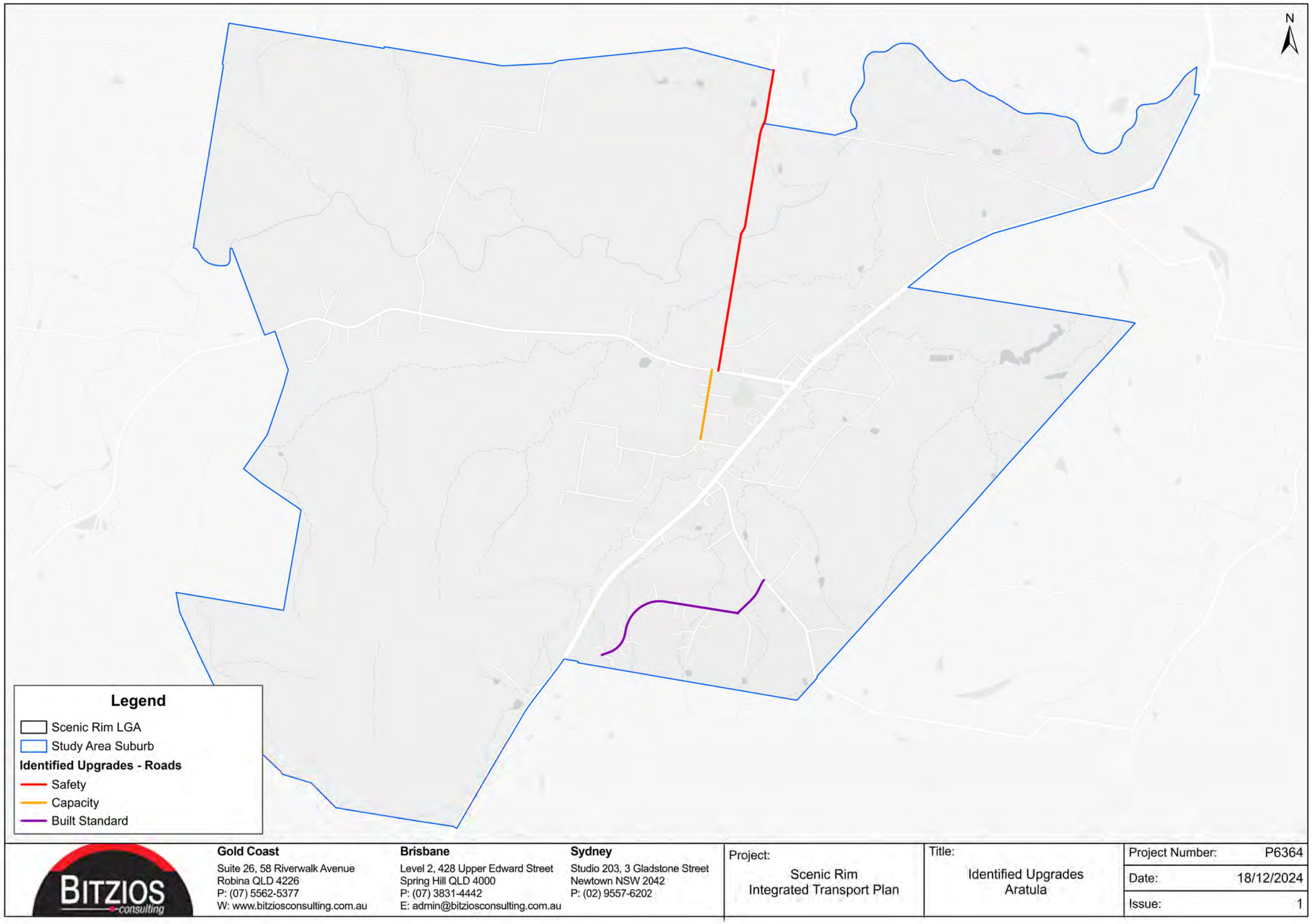
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Aratula
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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Sydney
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Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Aratula
Project Number:	P6364
Date:	18/12/2024
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Aratula
564
558
98
151
98
151
98
151
413
460
413
460
209
241
209
241
468
548
185
156
294
403
78
48
78
48
78
48
78
48
78
48
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Aratula
735
825
280
153
280
153
280
153
582
545
582
545
314
294
314
294
675
618
249
299
445
338
86
97
86
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97
86
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86
97
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Aratula
4323
4313
968
868
968
868
968
868
3455
3345
3345
3455
1532
1604
1532
1604
4020
3983
1158
1159
2943
2906
451
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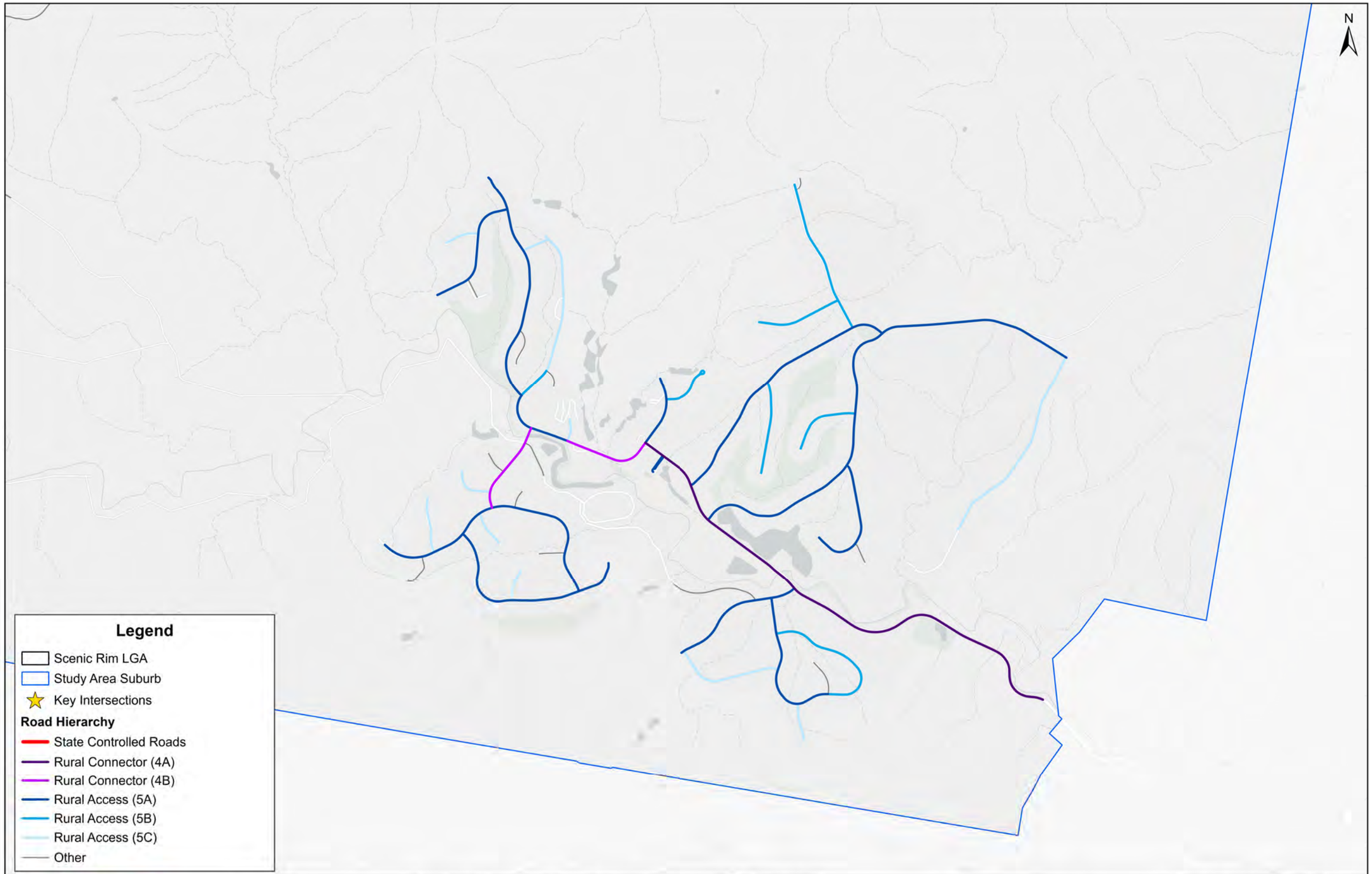
Appendix K: Local Area Maps – Kooralbyn



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Sydney
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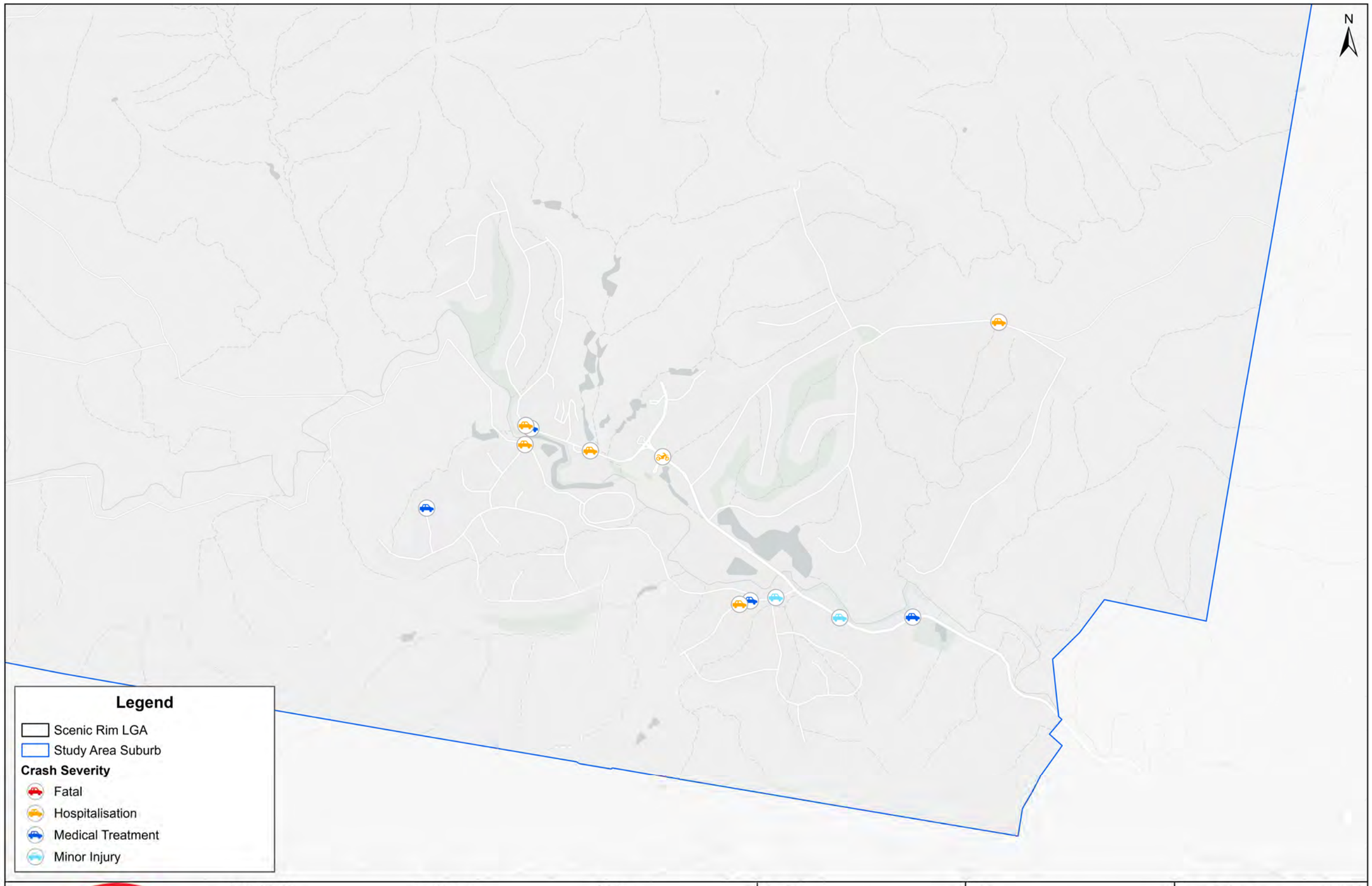
Newtown NSW 2042
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Kooralbyn

Project Number:	P6364
Date:	20/12/2024
Issue:	1



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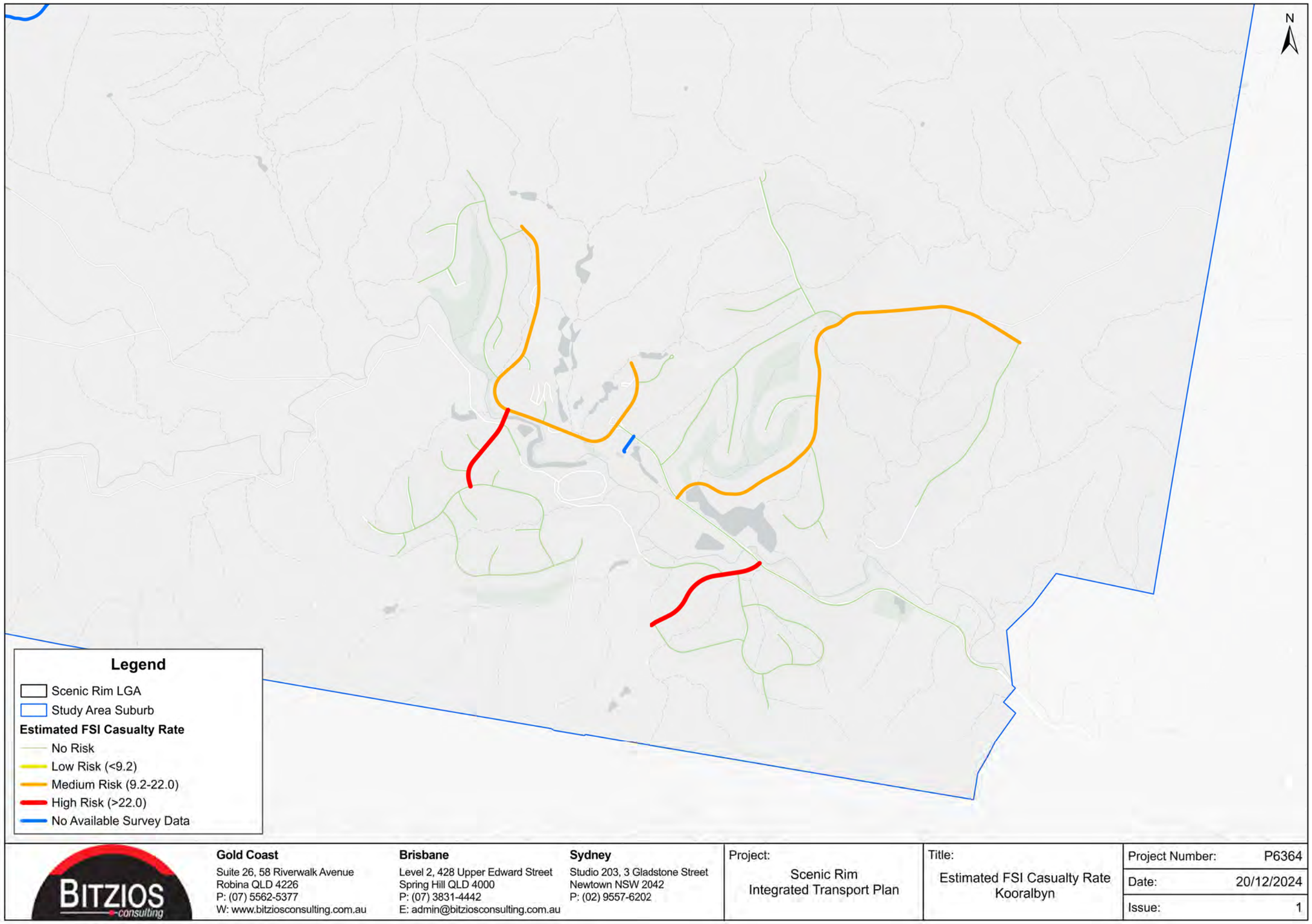
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Kooralbyn
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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Sydney
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Newtown NSW 2042
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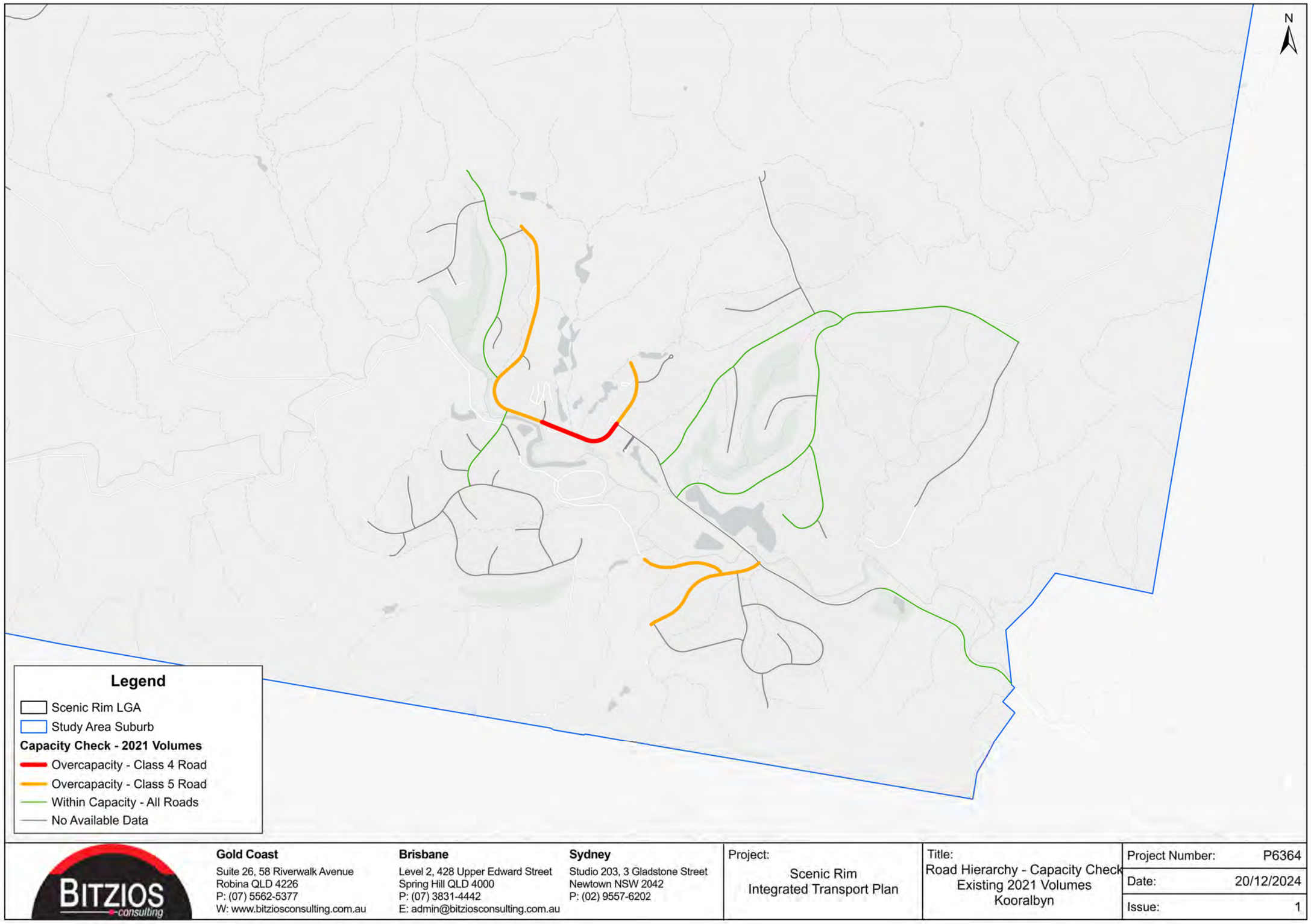
Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Kooralbyn
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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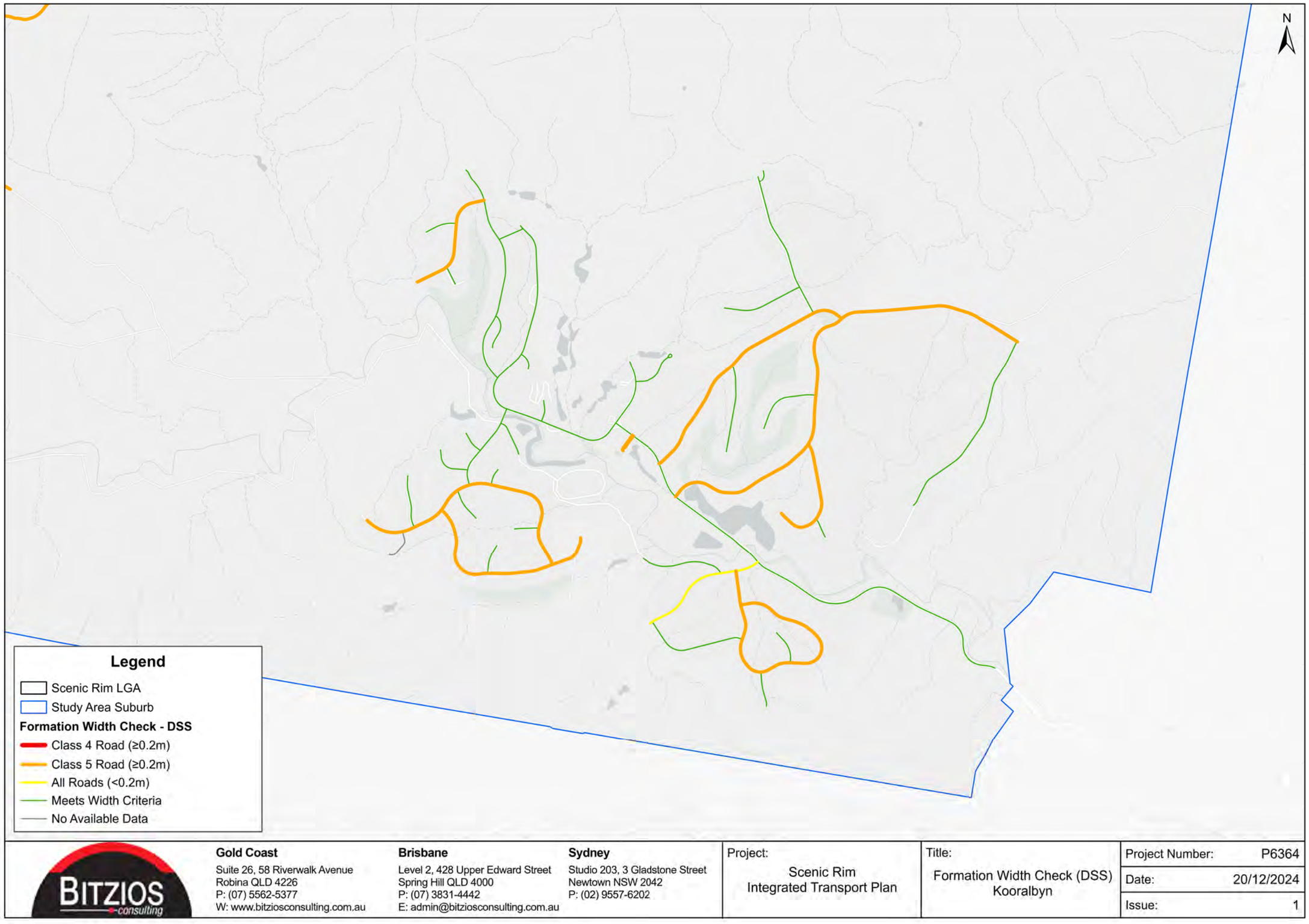
Sydney
Studio 203, 3 Gladstone Street
Newtown NSW 2042
P: (02) 9557-6202

Project:	Scenic Rim Integrated Transport Plan
Title:	Road Hierarchy - Capacity Check Existing 2021 Volumes Kooralbyn
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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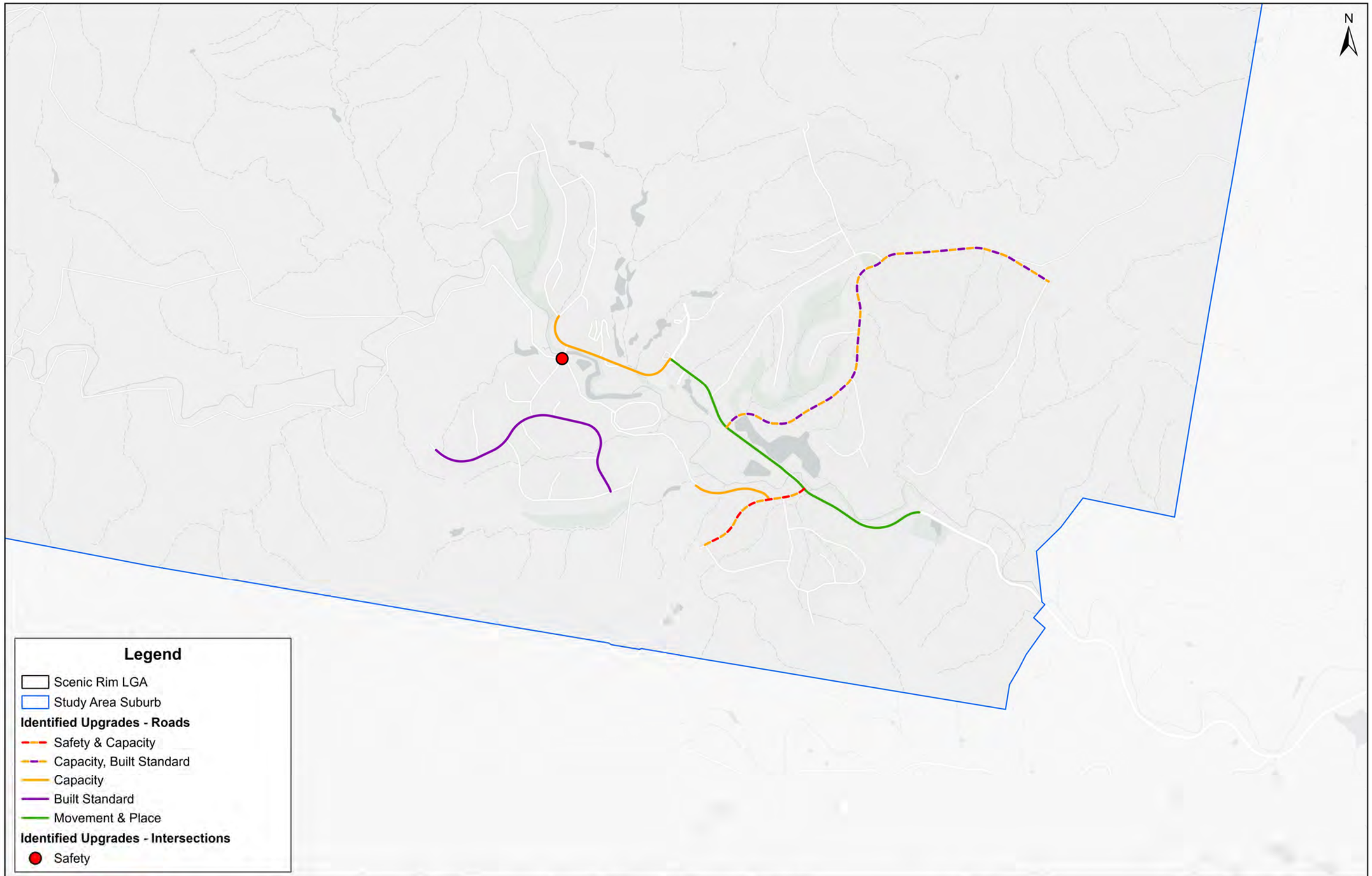
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Kooralbyn
Project Number:	P6364
Date:	20/12/2024
Issue:	1



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Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Kooralbyn
Project Number:	P6364
Date:	09/04/2025
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Kooralbyn
903
1335
51
32
598
513
7
13
82
51
508
440
558
472
469
371
73
91
317
328
55
61
298
316
265
296
13
20
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Kooralbyn
1913
1204
45
74
809
916
20
15
74
45
696
776
741
850
584
702
140
113
475
496
86
77
460
443
441
409
19
34
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Kooralbyn
7064
7060
271
272
3955
4017
75
272
271
3409
3471
3681
3743
2810
2813
545
546
2177
2236
316
316
2119
2178
1925
1919
259
1641
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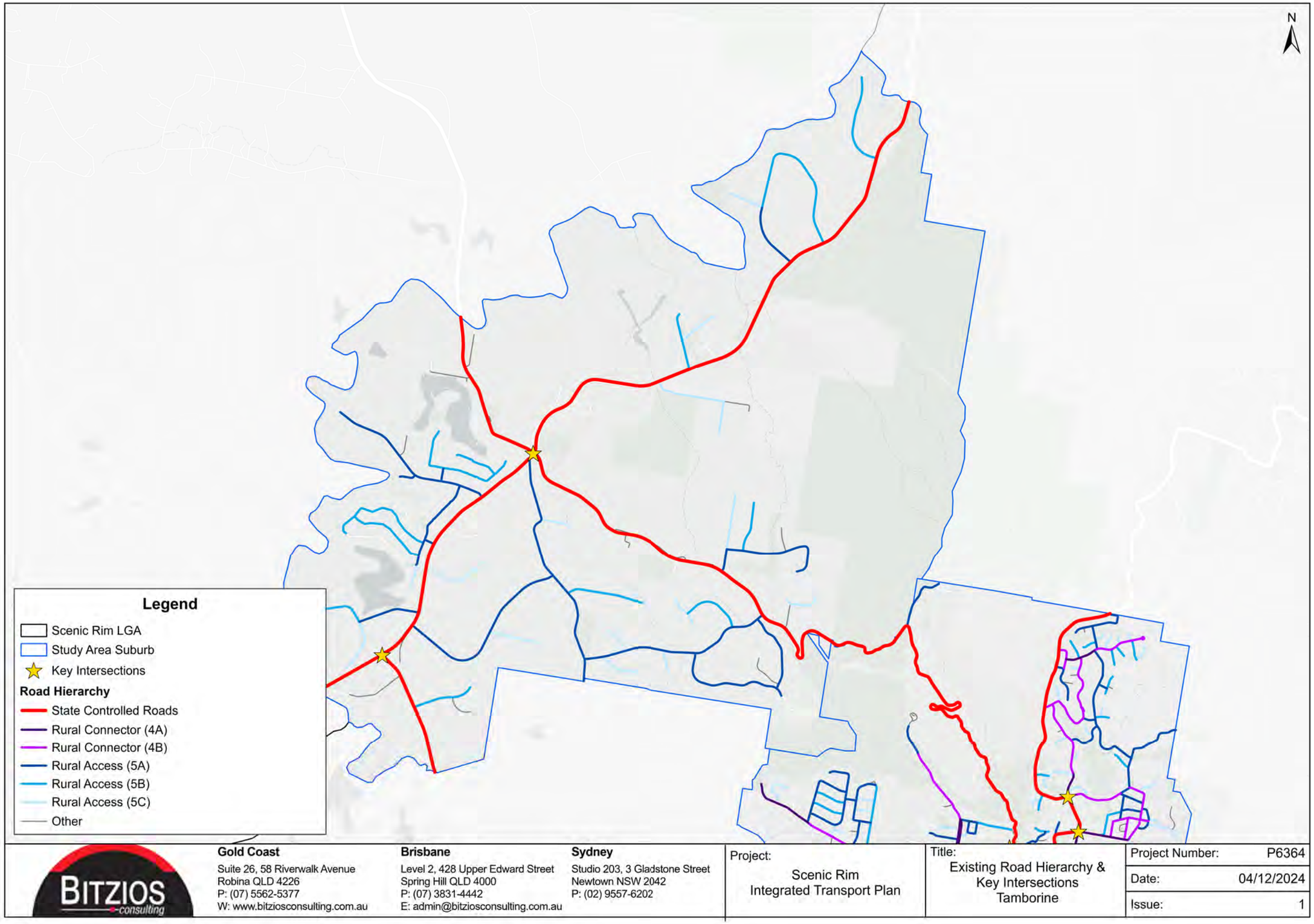
Appendix L: Local Area Maps – Tamborine



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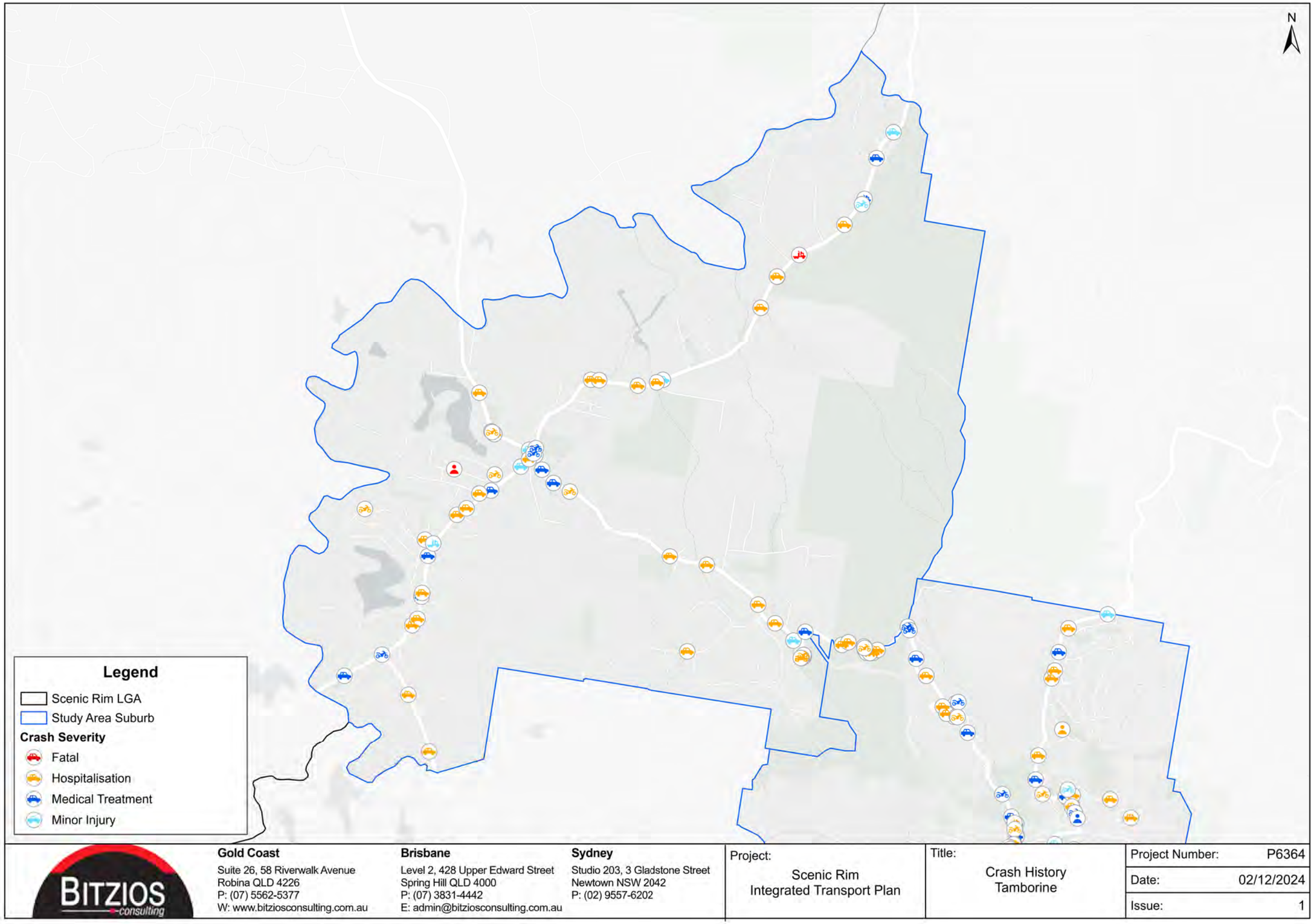
Project:
Scenic Rim
Integrated Transport Plan

Title:
Existing Road Hierarchy &
Key Intersections
Tamborine

Project Number:	P6364
Date:	04/12/2024
Issue:	1



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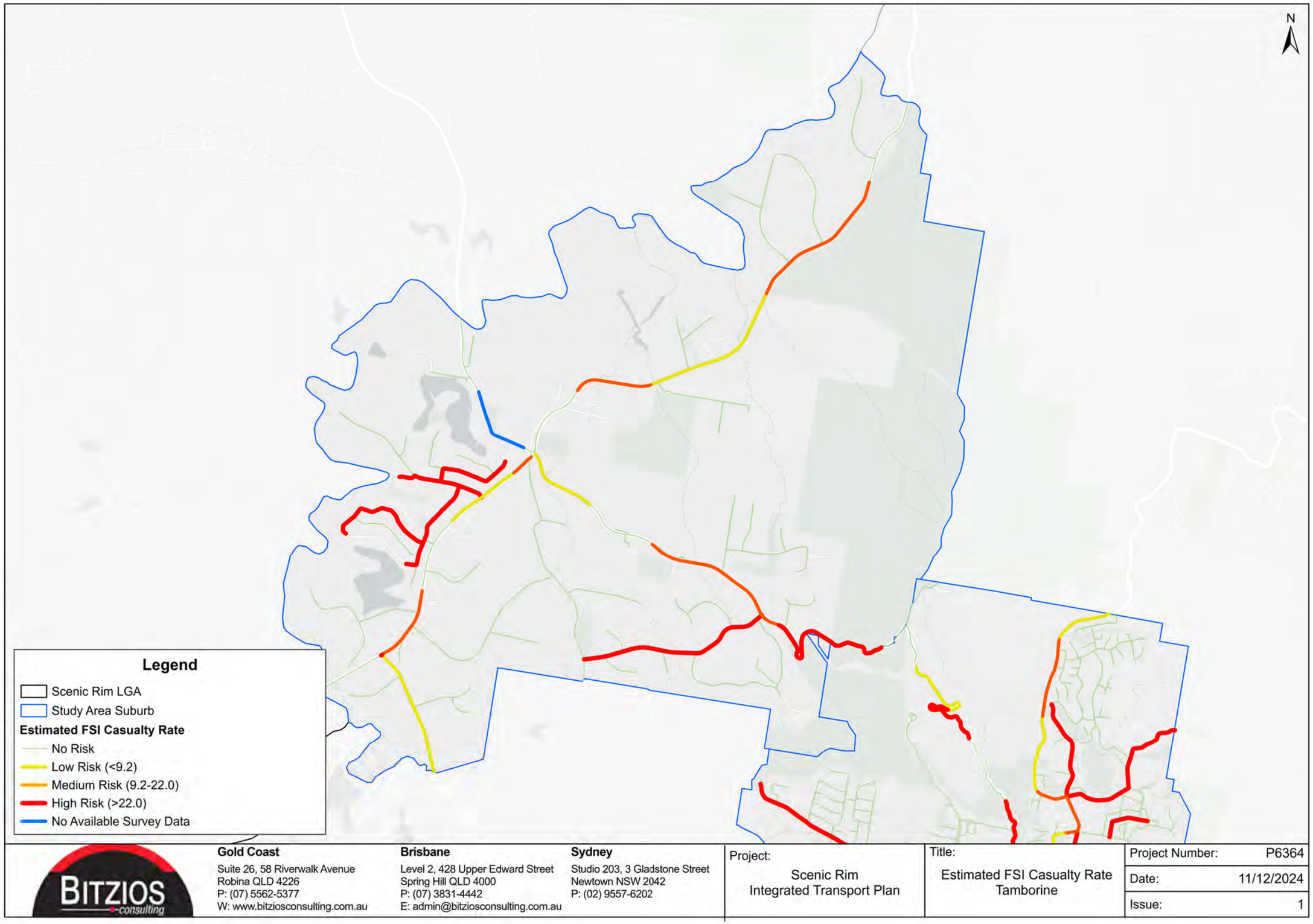
Project:	Scenic Rim Integrated Transport Plan
Title:	Crash History Tamborine
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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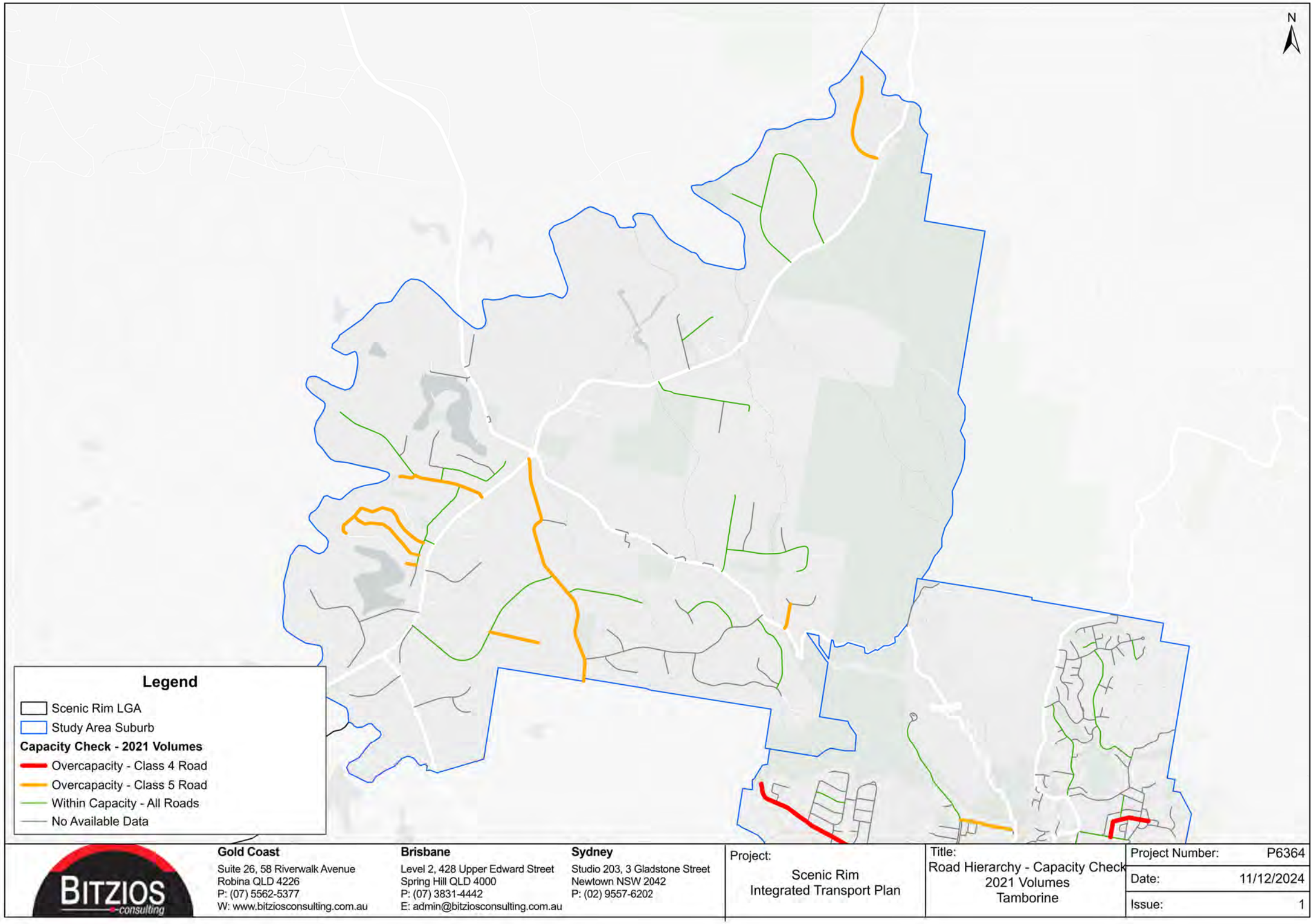
Project:	Scenic Rim Integrated Transport Plan
Title:	Estimated FSI Casualty Rate Tamborine
Project Number:	P6364
Date:	11/12/2024
Issue:	1



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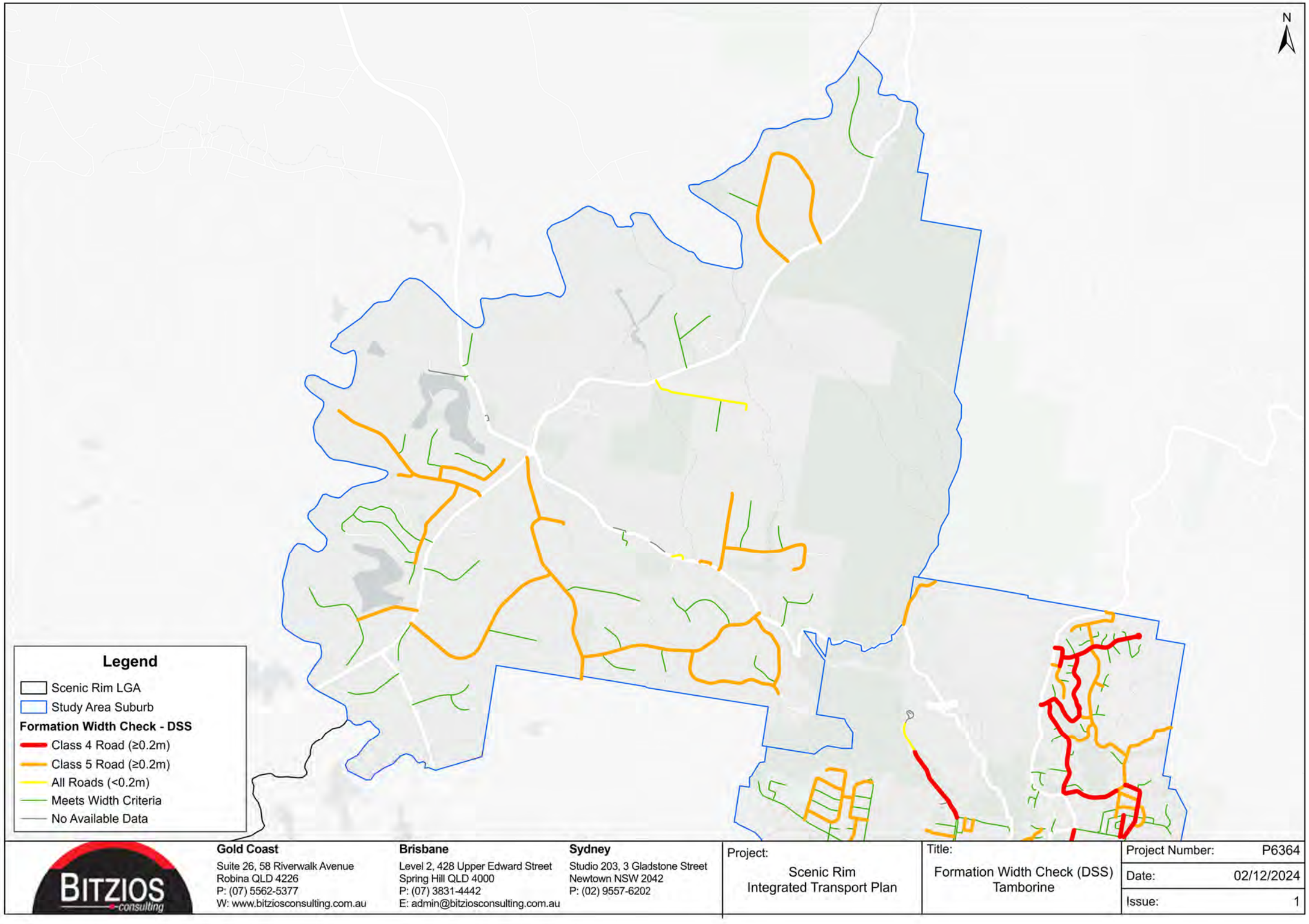
P: (02) 9557-6202

Project:
Scenic Rim
Integrated Transport Plan

Title:
Road Hierarchy - Capacity Check
2021 Volumes
Tamborine

Project Number:	P6364
Date:	11/12/2024
Issue:	1



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Sydney
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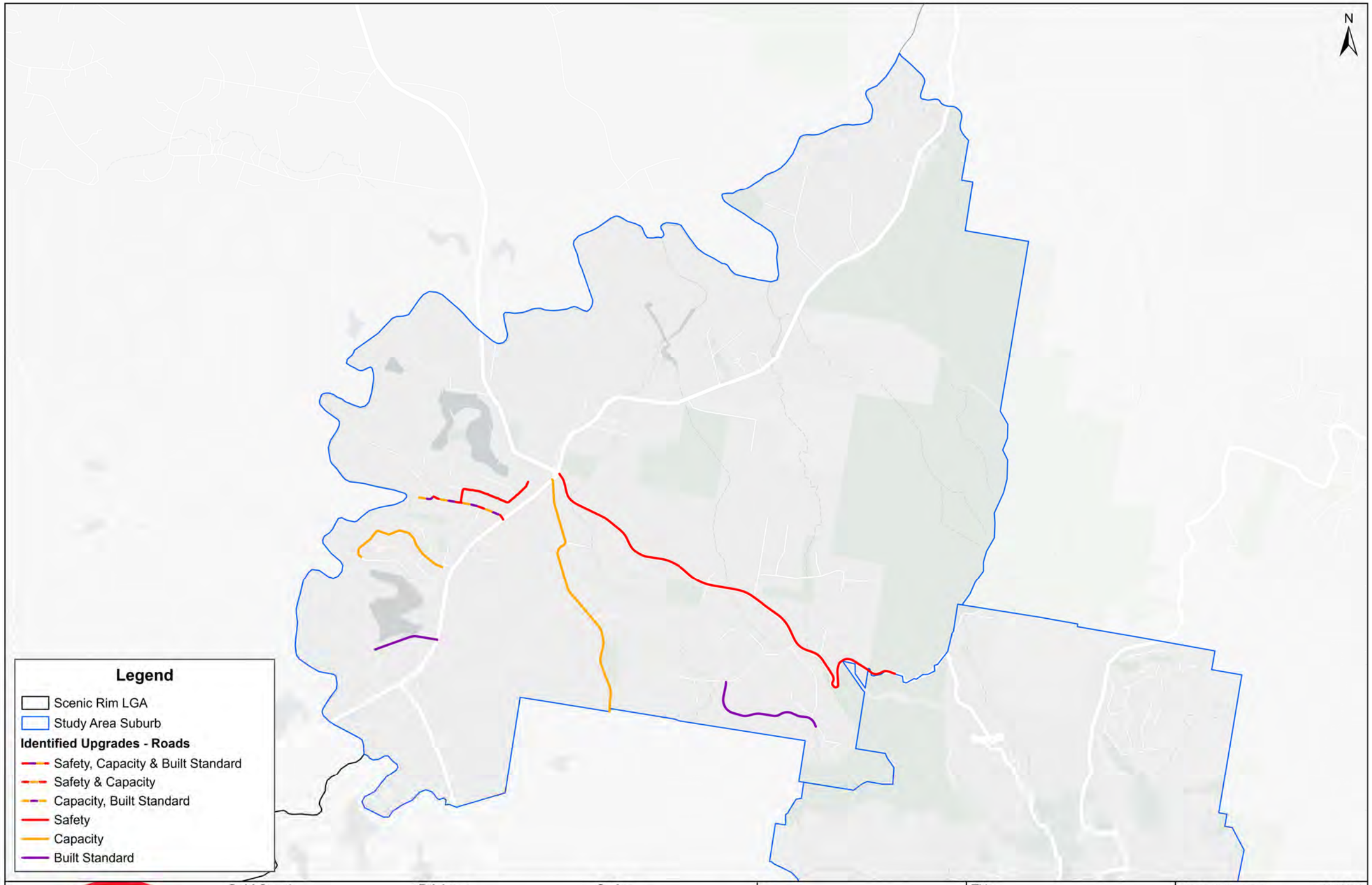
Project:	Scenic Rim Integrated Transport Plan
Title:	Formation Width Check (DSS) Tamborine
Project Number:	P6364
Date:	02/12/2024
Issue:	1



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Project:	Scenic Rim Integrated Transport Plan
Title:	Identified Upgrades Tamborine
Project Number:	P6364
Date:	19/12/2024
Issue:	1


SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
0700-0900 | Link Volume Plot
Tamborine
927
1079
153
431
1353
320
520
744
1172
972
783
807
818
257
807
783
1564
503
1025
501
1025
501
1564
503
1516
518
543
606
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
1500-1800 | Link Volume Plot
Tamborine
1525
1363
731
323
614
2068
1004
817
1420
1627
1092
1111
1111
1092
917
2301
824
1396
924
1396
917
2301
914
2257
913
678
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SEQSTM_v3.2309 | 2041_007
Run 3 Scenario | with Bromelton Bypass
24 hrs | Link Volume Plot
Tamborine
5719
5634
2245
2113
5892
5773
3609
3600
5900
5987
4082
4160
4559
4452
4160
4082
6721
6717
4613
4637
4613
4637
6721
6717
6265
6342
3603
3745
Made with EMME. Map tiles ©Mapbox ©OpenStreetMap ©DigitalGlobe

Appendix M: Review of Key Intersections

Issue History Table

File Name	Version	Prepared	Reviewed	Date Issued	Issued to
P6364.001T Review of Key Intersections Across LGA	001	M. Davidson	M. Davidson	05/02/2024	Scenic Rim Regional Council
P6364.002T Review of Key Intersections Across LGA	002	M. Davidson	M. Davidson	11/04/2024	Scenic Rim Regional Council

REVIEW OF KEY INTERSECTIONS ACROSS LGA

Road Network Plan

1. Introduction

1.1 Background

Bitzios Consulting has been engaged by Scenic Rim Regional Council (Council) to prepare an Integrated Transport Plan for the Region. A key component of this Plan is the development of a Road Network Plan, which includes a detailed assessment of key intersection across the LGA.

Across the Scenic Rim Region there are both Council-controlled and State-controlled intersection with significantly different operating conditions (from major 4-way signalised intersections to low order T-intersections). As identified in the modelling comment of the ITP, there are no major capacity issues anticipated across the LGA across future horizons to 2041, and as such, this review focuses on the identified 'top 20' intersections.

1.2 Subject Intersections

Traffic analysis has been undertaken at the following intersections:

ID	Roads	Suburb	Existing Control	Authority
1	Beaudesert Beenleigh Road / Waterford Tamborine Road	Tamborine		State
2	Brisbane Street / William Street	Beaudesert		State
3	Beaudesert Nerang Road / Finch Road	Canungra		State
4	Beaudesert Nerang Road / Tamborine Mountain Road	Canungra		State
5	Beaudesert Nerang Road / Kidston Street	Canungra		State
6	Mount Lindesay Highway / Enterprise Drive	Beaudesert		State
7	Bromelton Street / Telemon Street	Beaudesert		State
8	Long Road / Wongawallan Road	Tamborine Mountain		State
9	Eagle Heights Road / Long Road	Tamborine Mountain		State
10	Geissmann Drive / Eagle Heights Road	Tamborine Mountain		State
11	Beaudesert Beenleigh Road / Mundoolun Connection Road	Tamborine		State
12	Brisbane Street / Tubber Street	Beaudesert		Council
13	Cunningham Highway / Boonah Fassifern Road	Fassifern		State
14	Beaudesert Nerang Road / Beechmont Road	Witheren		State
15	Beaudesert Nerang Road / Brooklands Drive (West)	Beaudesert		State

ID	Roads	Suburb	Existing Control	Authority
16	William Street / Albert Street	Beaudesert		State
17	Beaudesert Beenleigh Road / Beaudesert Nerang Road	Tabragalba		State
18	Mundoolun Connection Road / Biddaddaba Road	Boyland		State
19	Mount Lindesay Highway / Beaudesert Bypass Road	Beaudesert		State
20	Ipswich Boonah Road / Flinders Street	Peak Crossing		State
21	Coronation Drive / Hoya Road / Macquarie Street	Boonah		State

Note: Intersection 2 could not be assessed as the intersection was under construction during the traffic surveys, and therefore volumes were not accurate.

1.3 Scope of this Technical Memorandum

As part of this assessment, the following scope was undertaken:

- Traffic surveys were undertaken across all intersection on typical weekdays in late 2024
- Traffic surveys were processed and reviewed
- SIDRA models were developed for the 'base' (2024) intersection operations, based on the existing configuration and traffic volumes
- Growth ratios for the AM and PM peak hours were obtained from the strategic modelling undertaken for the ITP, with base 2024 volumes factored up to a 2041 design horizon
- Tourist factors were also identified based on hourly volumes across a typical week (to determine the difference between peak hours and maximum weekly hour peak) on nearby State-controlled roads. These were used to further factor up the 2041 design volumes for a 'tourist peak' scenario
- Each intersection was modelled using SIDRA Intersection software. Operations across the 2041 peak hour and 'tourist' peak scenarios were reviewed and where necessary potential upgrade configurations were investigated.

2. Data Inputs and Methodology

2.1 Traffic Data

Turning movement counts were undertaken at Intersections 1-20 on Wednesday 13th November 2024. The data collected included vehicle composition, and counts across the following periods:

- AM Period: 06:00 – 09:00
- PM Period: 15:00 – 18:00.

Individual peak hours were identified from the data.

Base traffic volumes for Intersection 21 were sourced from the traffic impact assessment submitted as part of the development application for RAL23/040 [Reconfiguration of a Lot 2 into 171, Street Address: Stages 2-7, 71 Coronation Drive BOONAH].

A copy of all traffic data in included at **Attachment B**.

2.2 Growth Rate

The growth rate was adapted from the strategic (EMME) modelling undertaken for the ITP. This was found by comparing modelled volumes at each intersection leg for 2021 and 2041 scenarios, and identifying the growth factor. This factor was then applied to base 2024 traffic volumes.

Several minor legs were not included in the EMME model. These legs were typically given a growth rate of 0% as they are generally related to small local catchment that will not have any background growth (e.g. northern approach of Intersection 8).

2.3 Tourist Factor

To consider the unique operating conditions across the region, six (6) intersections were reviewed during 'tourist peaks', which was taken to be the highest volume hour of the weekend. The following intersections were considered:

ID	Roads	Suburb	Existing Control
3	Beaudesert Nerang Road / Finch Road	Canungra	
4	Beaudesert Nerang Road / Tamborine Mountain Road	Canungra	
5	Beaudesert Nerang Road / Kidston Street	Canungra	
8	Long Road / Wongawallan Road	Tamborine Mountain	
9	Eagle Heights Road / Long Road	Tamborine Mountain	
10	Geissmann Drive / Eagle Heights Road	Tamborine Mountain	

The highest volume hour of the week was determined based on TMR's "Queensland traffic data Averaged by hour of day and day of week" resource, which includes an hourly breakdown of vehicle volumes across a typical week (Source: https://www.data.qld.gov.au/dataset/queensland-traffic-data-averaged-by-hour-of-day-and-day-of-week).

2.4 SIDRA Inputs

SIDRA Intersection layouts were adopted for intersections based on aerial imagery (Google Earth, Nearmap). All standard SIDRA parameters (gap acceptance, pedestrian crossing times, acceleration rates, etc.) were left to defaults, unless specified otherwise (e.g. intersection 10).

Where an intersection was signalised, phasing and timing was adopted based on available imagery and the survey videos, to understand typical operations.

A copy of all SIDRA results are included at **Attachment C**.

2.5 Assessment Criteria

2.5.1 Overview

The key performance indicators (KPI) used to assess the SIDRA model outcomes include:

- Degree of Saturation (DoS)
- Level of Service (LoS)
- Back of Queue Distance.

The KPIs are further described below.

All KPIs were assessed against the desired standards of service identified as part of the ITP.

2.5.2 Degree of Saturation

Degree of Saturation (DoS) is generally used to measure the performance of isolated intersections. It identifies whether an intersection is operating below, at or above its practical operating capacity.

The DOS thresholds identified in the "Desired Standards of Service" technical memorandum were adopted where appropriate. In some cases, operation exceeded the desired standards of service, and where that occurred, the following metrics were used:

- DoS < 0.9 – Intersection is operating below practical operating capacity
- DoS ≥ 0.9 – Intersection is operating at or above practical operating capacity
- DoS ≥ 1.0 – Intersection is operating above theoretical operating capacity

It is important to note that queue lengths and delays increase rapidly as DoS approaches theoretical capacity when DoS ≥ 1.0.

2.5.3 Level of Service and Delays

Level of Service (LoS) describes the operational performance at an intersection and is directly related to the delay in seconds experienced at each approach. Again, the delay thresholds identified in the "Desired Standards of Service" technical memorandum were adopted where appropriate

2.5.4 Queue Length

The 95th percentile queue lengths were analysed to understand the probabilities of queues on intersection approaches extending back to a nearby intersection. This is the value for which 95% of queue lengths fall. The 95th percentile queue length also represents the storage length required of a lane to accommodate the queue.

2.6 Upgrade Methodology

Where an intersection exceeded the identified performance thresholds, upgrades were considered. This was undertaken on a case by case basis with consideration to the following elements:

- Appropriate upgrades to mitigate capacity issues identified
- Upgrades aligning with current best practice and safe design
- Nearby intersection and/or impacts where located in a town or village
- Strategic movement impacts (such as the potential to increase U-turns)
- Practical upgrades, based on a high level review of the site
- Recommendations from the Road Network plan and Active Transport Plan.

It is important to note that a detailed review of each site has not been undertaken, and all recommended upgrades are subject to further investigation.

3. Intersection Performance Results

3.1 Detailed Results

Detailed assessment sheets for each intersection are contained within **Attachment A**.

3.2 Summary of Results

A brief summary of the findings and recommendations are included in Table 3.1 below.

Table 3.1: Summary of Intersection Testing Results

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
1	Beaudesert Beenleigh Road / Waterford Tamborine Road	Intersection predicted to fail in 2041 PM scenario.	Investigate upgrade to provide second circulating lane to accommodate right turn from Waterford Tamborine Road to Beaudesert Beenleigh Road (south).		
2	Brisbane Street / William Street	N/A	N/A		
3	Beaudesert Nerang Road / Finch Road	Intersection predicted to fail in 2041 scenarios – with movements on Finch Road unable to turn due to insufficient gaps. Further testing was also conducted which found that this intersection fails by 2031.	Investigate upgrades to a signalised layout, with pedestrian crossings. This is understood to align with developer driven planning for the intersection. This should include pedestrian treatments to facilitate movements.		
4	Beaudesert Nerang Road / Tamborine Mountain Road	Intersection predicted to fail in 2041 scenarios – with movements on Tamborine Mountain Road unable to turn due to insufficient gaps.	Investigate upgrades to convert to a left in / left out layout. Combined with Intersection 14 to allow for U-turns for vehicles travelling north to west.		 Left In / Left Out only
5	Beaudesert Nerang Road / Kidston Street	Intersection predicted to fail in 2041 scenarios – with movements on Kidston Street unable to turn due to insufficient gaps.	Investigate upgrades to convert to a left out layout. Combined with nearby treatments in Canungra, this is expected to help mitigate critical issues.		 Left Out only
6	Mount Lindesay Highway / Enterprise Drive	Intersection predicted to operate above desired standards of service thresholds, but below practical operating thresholds in 2041 scenarios.	No upgrades recommended.		
7	Bromelton Street / Telemon Street	Intersection predicted to fail in 2041 scenarios due to movements along Bromelton Street. This is largely dependent on the development at Kerry Road and Bromelton SDA.	Investigate upgrades to a signalised layout, and possible combination with McKee Street intersection. Note, this will only be required if/when development occurs in key locations.		
8	Long Road / Wongawallan Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
9	Eagle Heights Road / Long Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		

ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
10	Geissmann Drive / Eagle Heights Road	Intersection calibration was unable to replicate impacts and queueing at the intersection. Modelling found limited capacity issues.	Investigate safety enhancements at the intersection to retain as a low speed environment, with increased separation from pedestrian movements, and increased sight lines.		 Increased safety enhancements
11	Beaudesert Beenleigh Road / Mundoolun Connection Road	Intersection predicted to be failing in current conditions, with drivers selecting reduced gaps to turn from Mundoolan Connection Road.	Investigate upgrades to a signalised layout.		
12	Brisbane Street / Tubber Street	Intersection predicted to fail in 2041 scenarios – with movements on Tubber Street experiencing high delays.	Investigate upgrades to a left in / left out arrangement. This is expected to reduce 'rat running' with a suitable alternative provided 150m south at Selwyn Street.		 Left In / Left Out only
13	Cunningham Highway / Boonah Fassifern Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
14	Beaudesert Nerang Road / Beechmont Road	Intersection predicted to fail in 2041 scenarios – with movements on Beechmont Road unable to turn due to insufficient gaps.	Investigate upgrades to a roundabout layout. This will allow for appropriate capacity, and provide a U-turn option for vehicles from all directions.		
15	Beaudesert Nerang Road / Brooklands Drive (West)	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
16	William Street / Albert Street	Intersection predicted to fail in 2041 scenarios. However, modelling is expected to overstate potential impacts.	Investigate upgrades to a signalised layout, with pedestrian crossings.		
17	Beaudesert Beenleigh Road / Beaudesert Nerang Road	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		
18	Mundoolun Connection Road / Biddaddaba Road	Intersection is predicted to fail in the PM peak period for 2041, with right turn movements from Biddaddaba Road having significant delays due to insufficient gaps.	Investigate upgrades to convert to a left out layout. This would need to be combined with regional level wayfinding.		 Left Out only
19	Mount Lindesay Highway / Beaudesert Bypass Road	Intersection is predicted to operate adequately in 2041, with moderate delays.	No upgrades recommended.		
20	Ipswich Boonah Road / Flinders Street	Intersection is predicted to operate adequately in 2041, with low delays.	No upgrades recommended.		

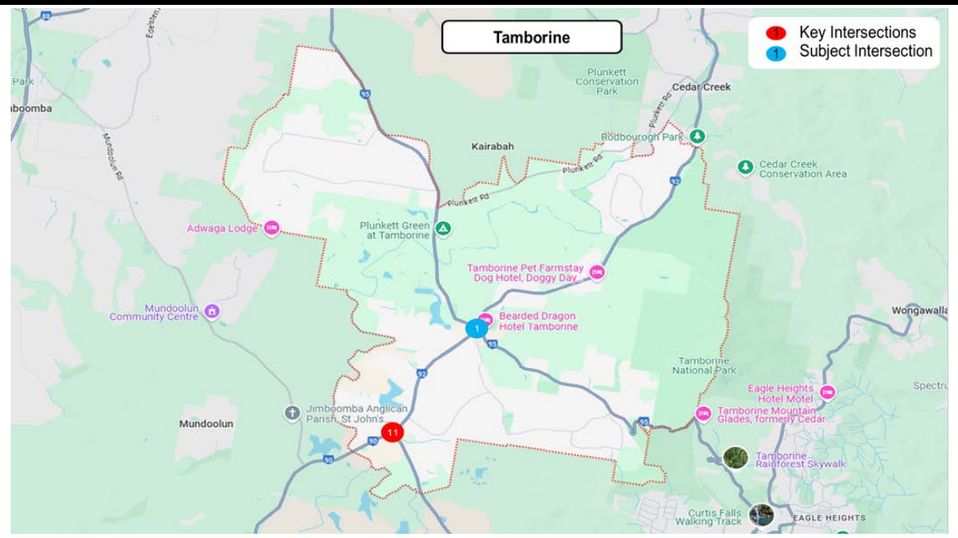
ID	Roads	Testing Results	Recommendations	Current Control	Recommended Control
21	Coronation Drive / Hoya Road / Macquarie Street	Intersection predicted to fail in 2041 scenarios. Further testing was also conducted which found that this intersection fails by 2031.	Investigate upgrades to a roundabout layout. Upgrades being warranted are understood to align with developer driven planning for the intersection. Both a roundabout layout and a signalised layout can be provided with effective improvement to operating conditions.		

Attachment A:

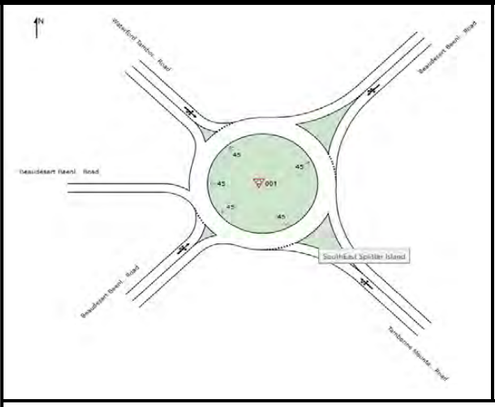
Intersection Assessment Sheets

INTERSECTION: #1 - BEAUDESERT BEENLEIGH ROAD / WATERFORD TAMBORINE ROAD

LOCALITY



GEOMETRY



SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,142	0.311	5.8	A	15.2	
2024	PM	SURVEY	1,605	0.542	8.5	A	35.6	
2041	AM	FUTURE	1,716	0.612	7.8	A	44.6	
2041	PM	FUTURE	2,327	1.074	52.9	D	270.2	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,142	0.310	5.6	A	14.8	
2024	PM	SURVEY	1,605	0.568	7.6	A	27.9	
2041	AM	DESIGN	1,716	0.473	6.6	A	28.0	
2041	PM	DESIGN	2,327	0.692	10.9	A	45.3	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Tamborine				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

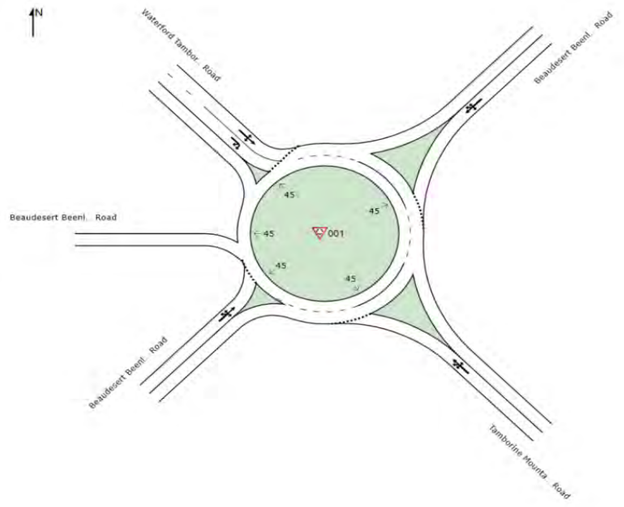
SUMMARY NOTES:

1 This intersection is operating adequately now, with moderate delays.

2 The intersection fails in the PM 2041 scenarios due to high volumes from the Waterford Tamborine Road (NW) leg. This is primarily due to the volume for right turning trips

3 Given the low volumes associated with numerous legs, it is recommended that a dual lane is investigated to accommodate the right turn from Waterford Tamborine Road to Beasudesert Bennleigh Road (south)

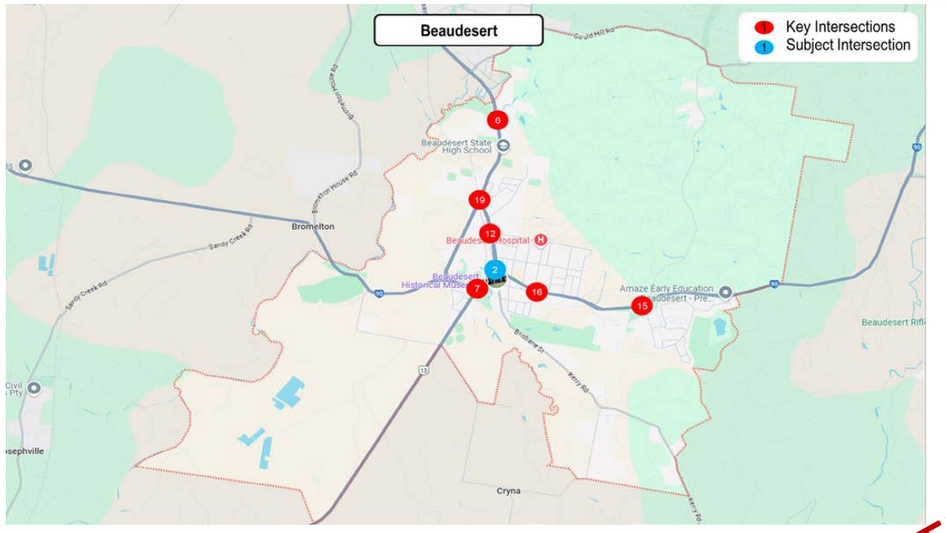
Recommendation:



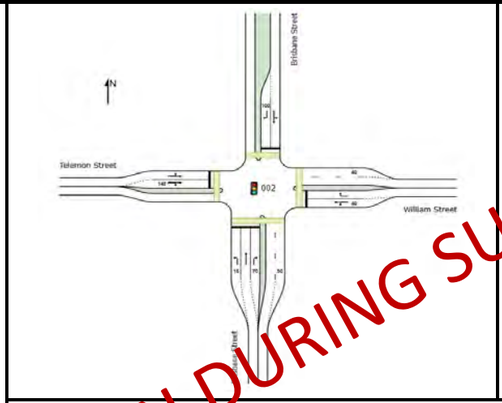
4 The recommended configuration operates in accordance with DSS with LoS A. The recommended configuration should be further investigated.

INTERSECTION: #2 - BRISBANE STREET / WILLIAM STREET

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY						
2024	PM	SURVEY						
2041	AM	DESIGN						
2041	PM	DESIGN						

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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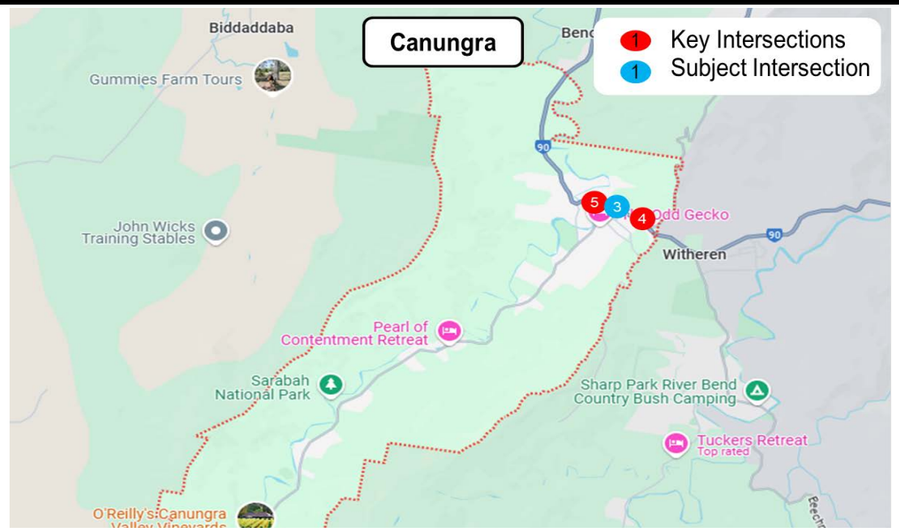
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

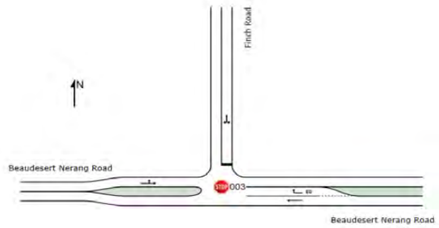
1
2
3
4
5
6 **Recommendation:** UPGRADED GEOMETRY IF REQUIRED

INTERSECTION: #3 - BEAUDESERT NERANG ROAD / FINCH ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,026	0.293	16.8	B	8.4	
2024	PM	SURVEY	1,396	0.397	30.1	D	10.2	
2031	AM	DESIGN	1,429	0.868	80.4	F	39	
2031	PM	DESIGN	1,828	1.601	599.0	F	260	
2041	AM	DESIGN	2,006	5.974	530.5	F	900.2	
2041	PM	DESIGN	2,448	12.880	996.3	F	961.6	
2041	TOURIST	DESIGN	2,726	14.952	1047.2	F	969.8	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,026	0.772	15.6	B	98.2	50
2024	PM	SURVEY	1,396	0.835	15.9	B	162.9	60
2041	AM	DESIGN	2,006	0.913	26.5	B	542.9	150
2041	PM	DESIGN	2,448	0.883	21.9	B	327.1	90
2041	TOURIST	DESIGN	2,726	0.910	24.5	B	540.4	150

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Canungra				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	15/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	15/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with moderate delays.

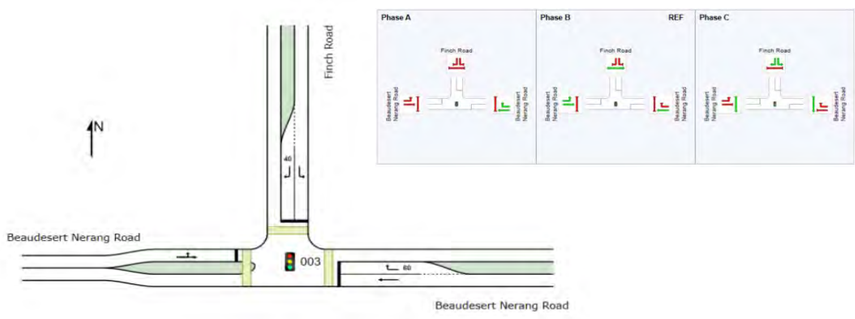
2 The intersection fails in all three (3) 2041 scenarios.

3 It is understood that the intersection is going to be signalised (developer driven) based on development to the north

4 Given the existing road reserve aviailability and existing developments adjacent to the intersection, a roundabout is unlikely to be feasible.

5 We recommend to investigate a signalised configuration with three (3) signalised pedestrian crosssings.

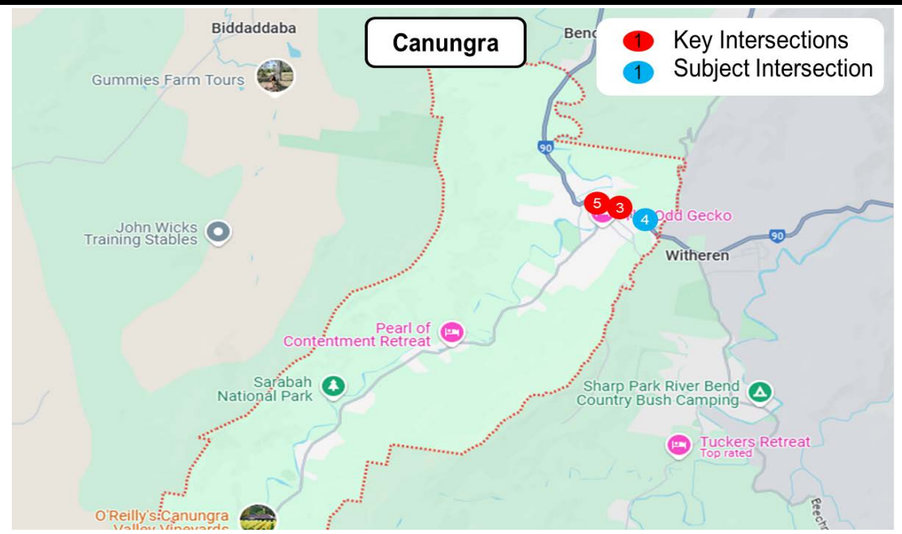
Recommendation:



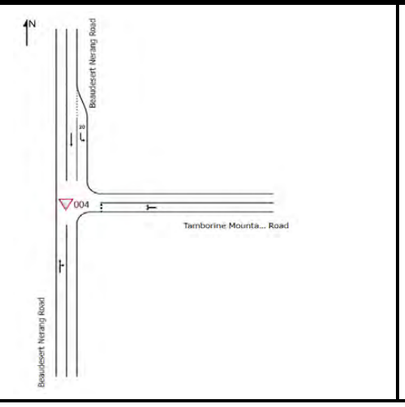
6 It is noted that the signalisation signifcantly improves the intersection performance, however the DOS is above the desired standard of service in the AM Peak and Tourist peak. Given the volumes, and horizon, this is considered acceptable, however may need to be subject to further review in the future.

INTERSECTION: #4 - BEAUDESERT NERANG ROAD / TAMBORINE MOUNTAIN ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,031	0.336	0.8	B	2.2	
2024	PM	SURVEY	1,393	0.396	1.6	C	7.2	
2041	AM	DESIGN	2,239	5.457	103.8	F	276.3	
2041	PM	DESIGN	3,024	10.835	380.6	F	1499.0	
2041	TOURIST	DESIGN	3,422	12.486	1452.8	F	5838.5	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,057	0.336	0.4	A	0.0	
2024	PM	SURVEY	1,441	0.396	0.5	A	0.0	
2041	AM	DESIGN	2,274	0.893	2.9	F	0.0	
2041	PM	DESIGN	3,124	0.915	1.8	A	0.0	
2041	TOURIST	DESIGN	3,521	0.906	20.6	F	0.0	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Canungra				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.

2 The intersection fails in the 2041 scenarios due to high through volumes on Beaudesert Nerang Road.

3 Two scenarios have been tested including:

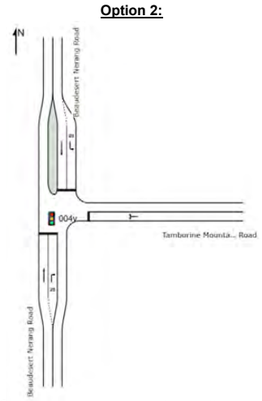
1. Priority-controlled - ban right turns (in / out of Tamborine Mountain Road) - Recommended

2. Signalisation - no changes to permitted movements

Recommendation:

Option 1:

Option 2:



4 Both options perform above the desired standards of service in all 2041 scenarios, however Option 2 (signals) has signficant queues and delays / DOS above 100%). It is important to note that these options do not consider recommended upgrades at Intersection #4, which would add bunching to the intersection, thus providing better

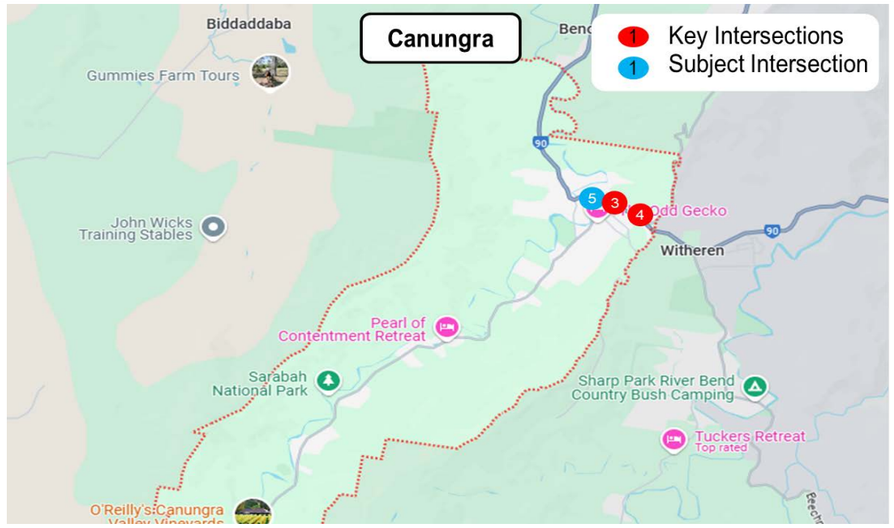
5 It is recommended that Option 1 is considered and investgated further.

6 U-turns can be accomodated for motorists turning right from Tamborne Mountain Road via Beaudesert Nerang Road / Beechmont Road (Intersection 14) as per our recommendation to provide a roundabout configuration.

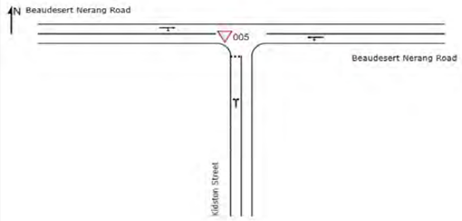
7 If right turns are deemed required at this intersection, then signalisation (and further lane improvements) will be required (i.e. Option 2).

INTERSECTION: #5 - BEAUDESERT NERANG ROAD / KIDSTON STREET

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,082	0.341	1.4	A	4.9	
2024	PM	SURVEY	1,501	0.484	2.5	B	13.7	
2041	AM	DESIGN	1,933	0.910	5.4	F	53.3	
2041	PM	DESIGN	2,451	3.239	242.1	F	1350.5	
2041	TOURIST	DESIGN	2,766	7.123	470.4	F	2313.9	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,082	0.337	1.3	A	5.5	
2024	PM	SURVEY	1,501	0.475	1.9	A	14.9	
2041	AM	DESIGN	1,933	0.786	3.2	A	70.4	
2041	PM	DESIGN	2,451	0.873	30.3	F	382.4	
2041	TOURIST	DESIGN	2,766	1.123	89.7	F	1152.4	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Canungra				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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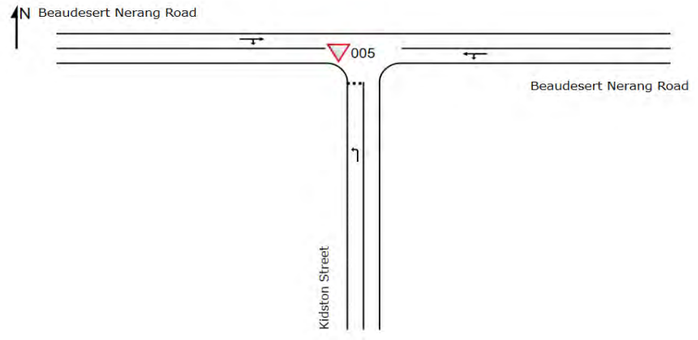
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.
2 The intersection fails in all three (3) 2041 scenarios.
3 The southern approach does not have suitable gaps for right turn movements.
4 The intersection is constrained with minimal opportunity for physical upgrades to increase capacity.
5 A roundabout treatment is not feasible, and it is noted that a single lane rounabout fails in 2041 (PM and Tourist peaks).
6 It is recommended that further investigations are undertaken considering the banning of right turns from the Kidston Street approach.

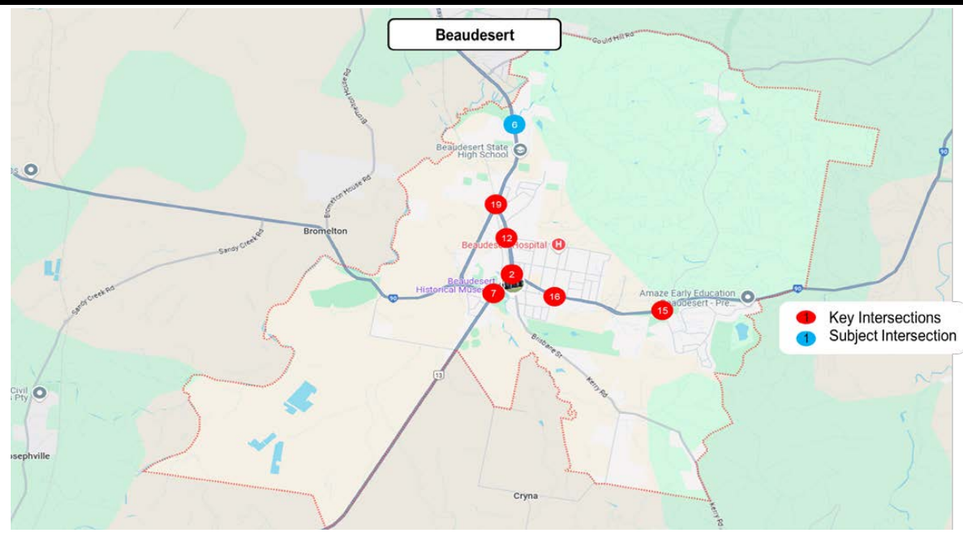
Recommendation:



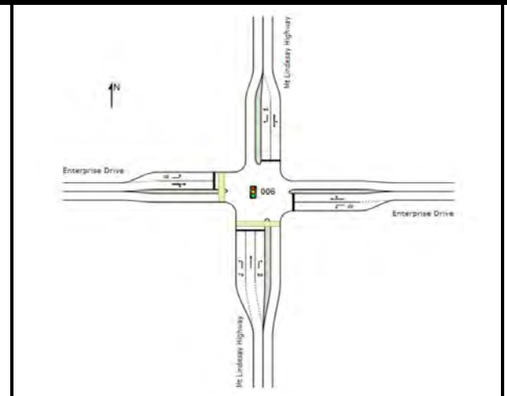
7 It is noted that right turns will need to be accommodated within the network elsewhere. Investigation of a roundabout at the western end of Canungra should be undertaken
8 The intersection performs above the desirable standard of service, however, below at typically adopted thresholds. The only other upgrade to improve operation would be a right turn lane on Beaudesert Nerang Road, which would have large spatial impacts and is not considered feasible.
9 This operation considers the provision of signals at Finch Road. This will create gaps. However, to the west there is no gaps being created. Further investigation to a potential signalised pedestrain crossing should be undertaken.

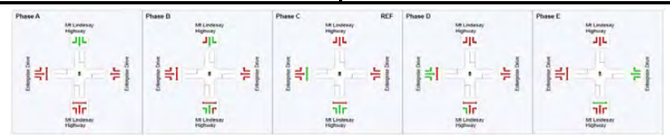
INTERSECTION: #6 - MOUNT LINDESAY HIGHWAY / ENTERPRISE DRIVE

LOCALITY



GEOMETRY





EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,609	0.854	32.3	C	280.6	100
2024	PM	SURVEY	1,525	0.800	29.4	C	212.7	90
2041	AM	DESIGN	1,631	0.897	42.3	C	394.2	120
2041	PM	DESIGN	1,551	0.912	38.6	C	240.2	90

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with moderate delays.

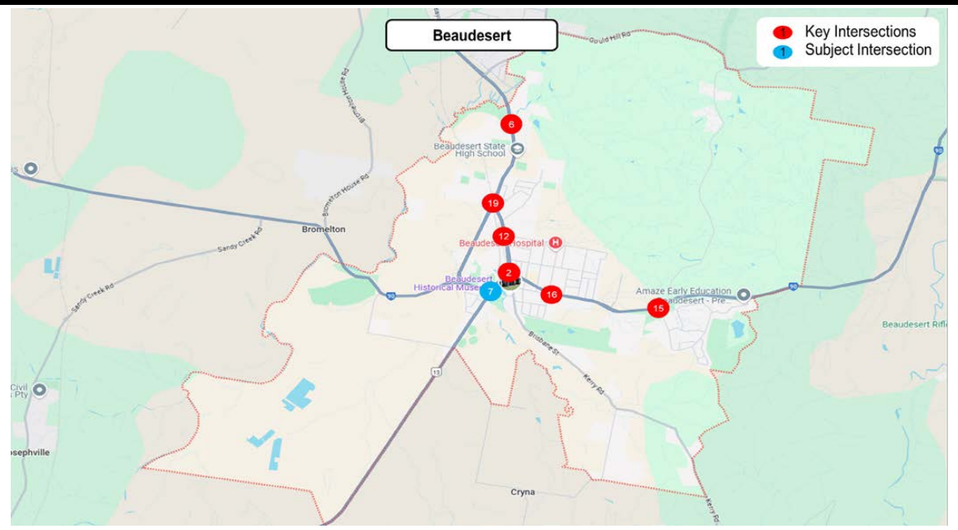
2 The western leg will be connected to the Eastern Ring Road in future scenarios. Nominal values of turning movements have been adopted based on EMME outputs for all scenarios (to take worst case).

3 This intersection is predicted to operate slightly above the desired standards of service in 2041.

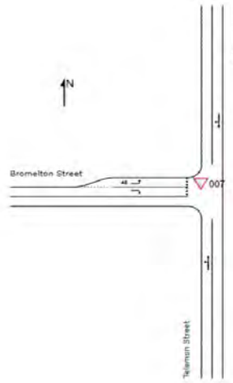
4 However, given the recent upgrades, and that the intersection operates wihtin acceptable thresholds for a major signalised intersection, no intersection upgrades are recommended at this stage.

INTERSECTION: #7 - BROMELTON STREET / TELEMON STREET

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,358	0.450	5.6	A	25.0	
2024	PM	SURVEY	1,293	0.384	4.7	A	15.3	
2041	AM	DESIGN	2,849	1.230	121.9	F	1325.5	
2041	PM	DESIGN	3,820	1.852	518.4	F	4586.7	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,358	0.720	18.6	B	60.9	50
2024	PM	SURVEY	1,293	0.826	16.2	B	44.1	40
2041	AM	DESIGN	2,849	0.914	22.1	B	99.4	50
2041	PM	DESIGN	3,820	1.234	190.0	F	1149.3	150

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
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File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.

2 The intersection fails in the AM and PM 2041 scenarios due to high volumes expected on Bromelton Street.

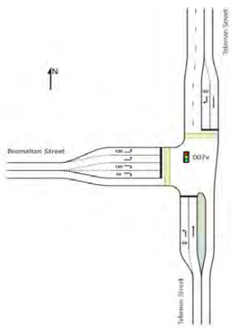
3 The Telemon Street and Bromelton Street road reserves have an approximate width of 30m.

4 It is noted that a key movement occurs to / from McKee Street. Given the proximity of these intersections, this is expected to pose a safety risk (i.e. queuing / conflicting movements, gaps less than 5s before 2041)

5 It is important to note that the volumes modelled in the 2041 strategic model assume levels of development will occur along the Kerry Road corridor and within the Bromelton SDA. However, the modelling is coarse, and assumes that the Bromelton Street approach will grown by up to 750%. This may occur if the highest estimates are reached, but it is likely an overestimate of impacts by 2041.

6 The intersection was reviewed - with findings considered under the above context.

7 The below intersection was tested and found that even with dual left turns, the operation significantly exceeded acceptable performance parameters.

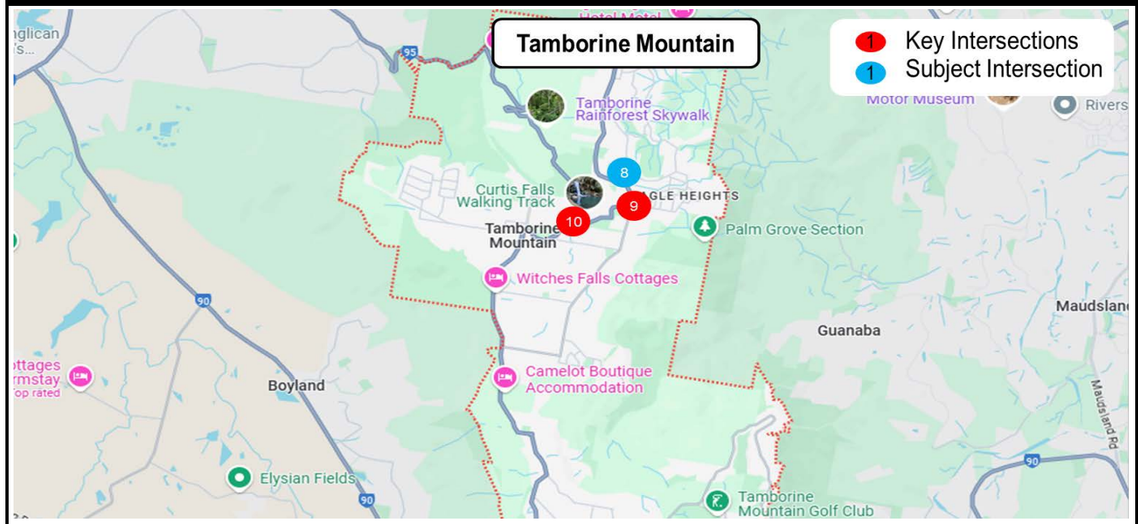


Recommendation:

8 It is recommended that further investigations considering McKee Street are continued, with investigations to re-align Bromelton Street to align with McKee Street. This is the likely only solution for the area.

INTERSECTION: #8 - LONG ROAD / WONGAWALLAN ROAD

LOCALITY



GEOMETRY

EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	774	0.266	6.9	A	11.4	
2024	PM	SURVEY	951	0.394	6.3	A	21.6	
2041	AM	DESIGN	865	0.268	7.0	A	11.5	
2041	PM	DESIGN	1,015	0.419	6.4	A	23.7	
2041	TOURIST	DESIGN	1,057	0.428	6.5	A	24.4	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Tamborine Mountain				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
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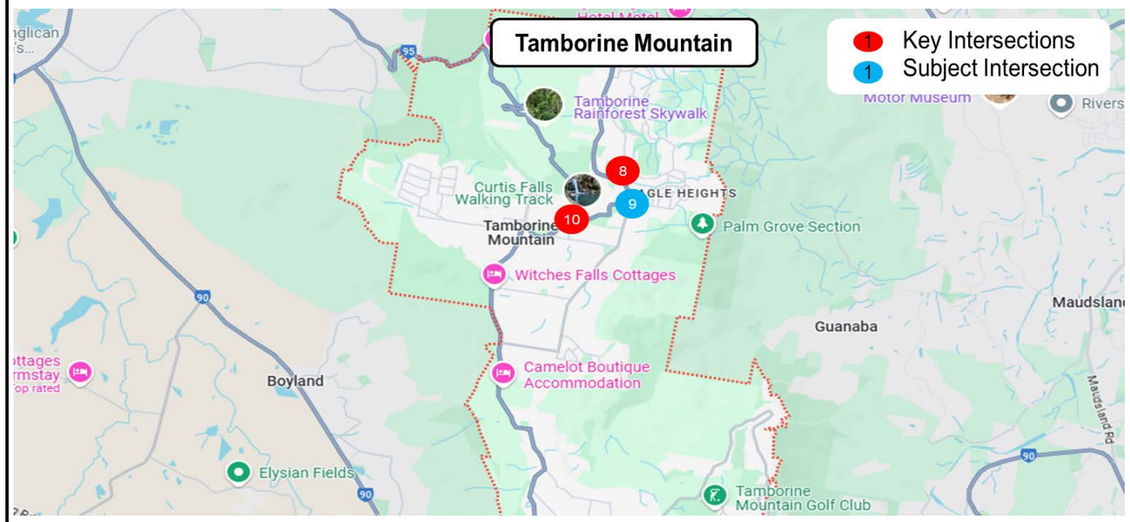
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

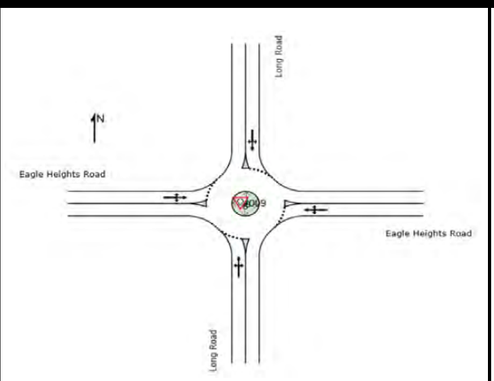
1 This intersection is operating adequately now, with low delays.
2 This intersection is predicted to operate adequately in 2041, with low delays.
3 This intersection is predicted to operate adequately in 2041 tourist peaks, with low delays.
4 No upgrades are recommended at this intersection.

INTERSECTION: #9 - EAGLE HEIGHTS ROAD / LONG ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,076	0.387	7.5	A	19.1	
2024	PM	SURVEY	1,285	0.454	7.9	A	23.6	
2041	AM	DESIGN	1,417	0.566	8.1	A	34.5	
2041	PM	DESIGN	1,639	0.645	9.2	A	45.2	
2041	TOURIST	DESIGN	1,905	0.794	11.2	A	87.3	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Tamborine Mountain				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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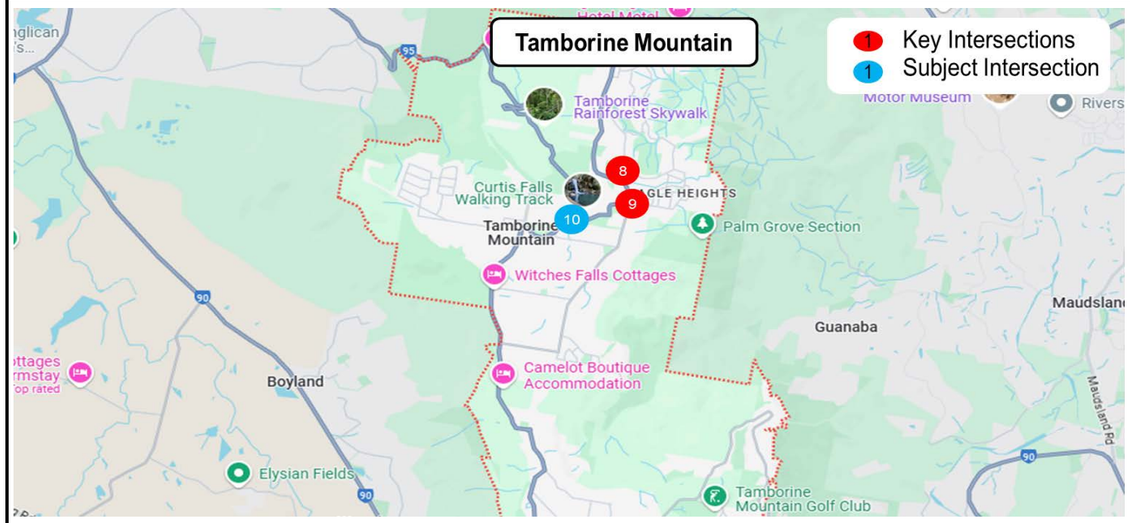
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

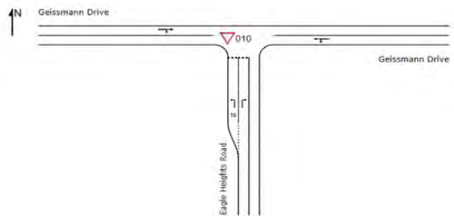
1 This intersection is operating adequately now, with low delays.
2 This intersection is predicted to operate adequately in 2041, with low delays.
3 This intersection is predicted to operate adequately in 2041 tourist peaks, with low delays.
4 No upgrades are recommended at this intersection.

INTERSECTION: #10 - GEISSMANN DRIVE / EAGLE HEIGHTS ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	879	0.296	3.2	A	7.8	
2024	PM	SURVEY	1,076	0.403	4.0	A	14.3	
2041	AM	DESIGN	1,097	0.477	3.7	A	19.9	
2041	PM	DESIGN	1,233	0.544	4.5	A	10.6	
2041	TOURIST	DESIGN	1,418	0.544	5.2	A	16.8	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Tamborine Mountain				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
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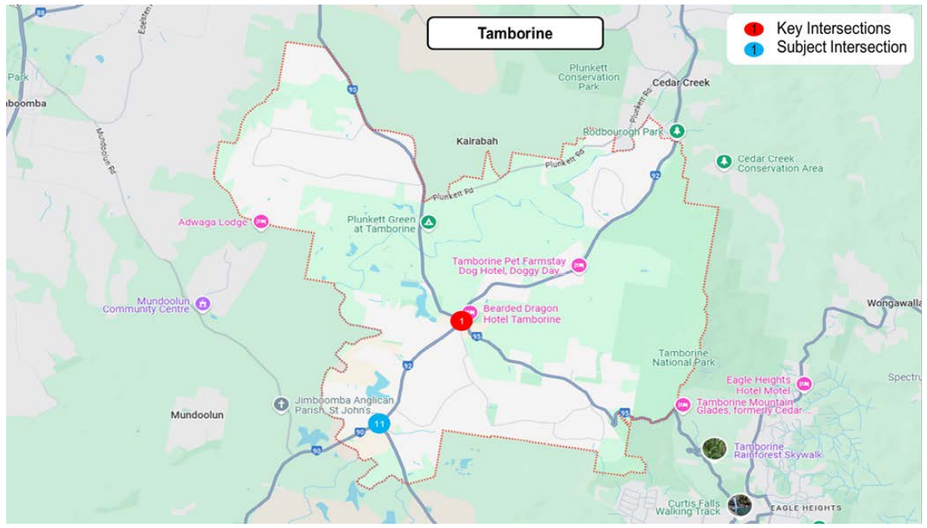
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

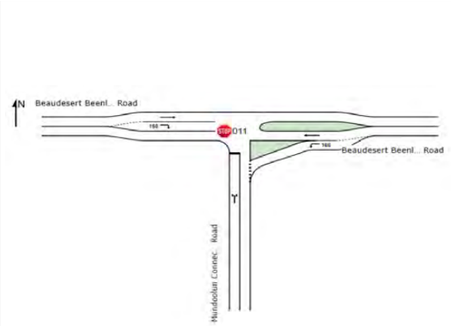
1. Given the constrained nature of this intersection, edits were made to defaukt values in SIDRA. These included adjusting the saturstion flow rate fro 1,950 pcu/hr to 900pcu/hr, and increasing gap acceptance to 8 seconds.
2. With these adjustements, modelling shows that based on the avaiable data, the intersection is operating adequately with moderate delays in all scenarios
3. These findings do not align with Bitzios' understanding and knowledge of the intersection, which is known to result in queueing during peak periods. The results indicate that weekday volumes may be significantly lower than weekends due to local knowledge (and avoidance) of the intersection occurring.
   The intersection has significant geometrical constraints, as well as increased impedance as a result of nearby land uses and "Place" activities.
   Based on the above findings, further investigation is required at the intersection. However, it is not likely that capacity upgrades will be a key recommendation. Instead, recommendations will likely be safety-based, in order to retain the intersection as a low speed location, aiming to reduce pedestrian activity near manoeuvres, and to improve sight lines and visibility in the area.

INTERSECTION: #11 - BEAUDESERT BEENLEIGH ROAD / MUNDOOLUN CONNECTION ROAD

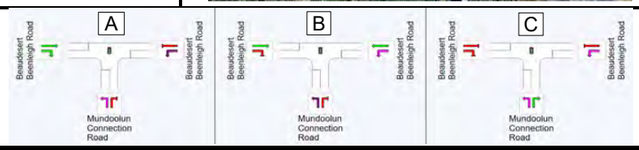
LOCALITY



GEOMETRY



Upgraded Geometry Phasing:



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,324	0.579	7.0	C	35.2	
2024	PM	SURVEY	1,773	1.346	90.0	F	585.6	
2041	AM	DESIGN	2,161	2.661	288.8	F	1179.4	
2041	PM	DESIGN	2,955	12.530	3091.9	F	3669.6	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,324	0.577	13.6	A	36.5	40
2024	PM	SURVEY	1,773	0.768	15.8	B	51.0	40
2041	AM	DESIGN	2,161	0.726	16.0	B	68.7	50
2041	PM	DESIGN	2,955	0.886	25.7	B	148.8	70

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Tamborine				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

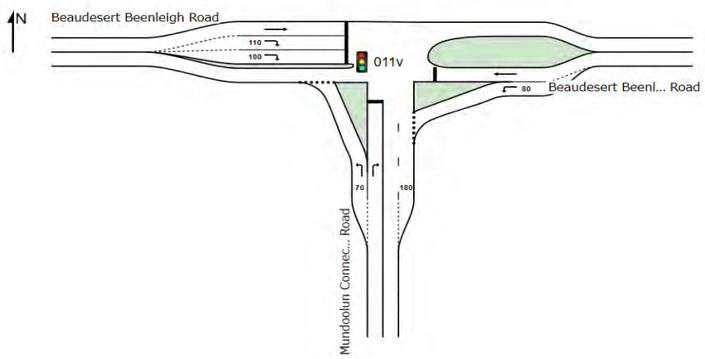
SUMMARY NOTES:

1 The intersection fails in the in the survey year during the PM Peak.

2 The intersection has not been calibrated in the survey year as it is understood that the intersection is currently performing above its capacity. It is expected that motorists are accepting of shorter gaps.

3 It is recommended that further investigations are undertaken to consider signalisation to improve motorist safety.

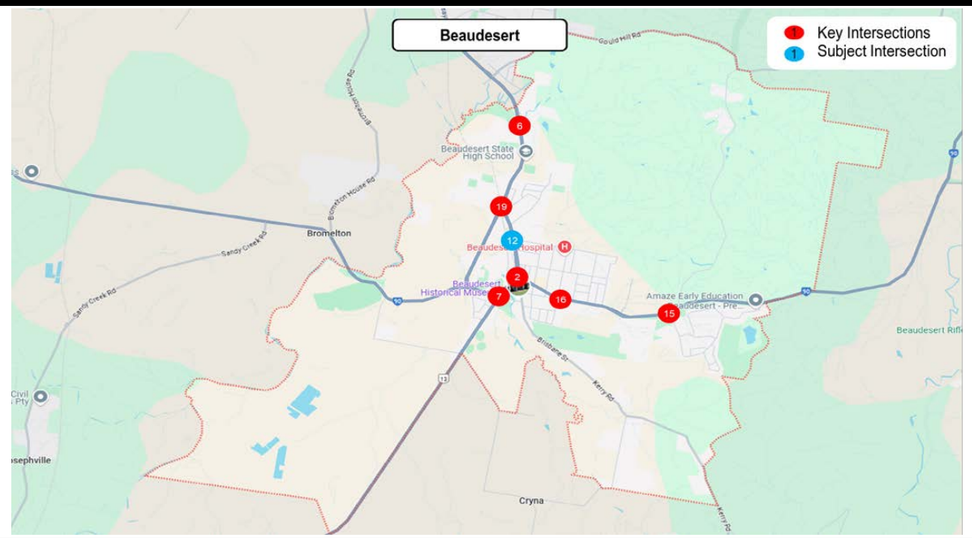
Recommendation



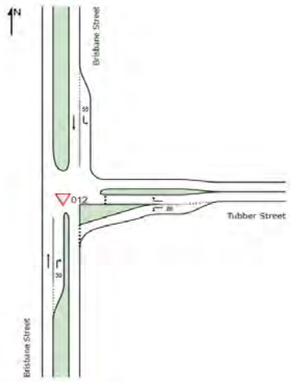
4 With upgrades, the intersection is predicted to operate well. Operation will be slightly above the desired standard of service, but below typically adopted maximum thresholds, which is apropriate for a major state-controlled intersection.

INTERSECTION: #12 - BRISBANE STREET / TUBBER STREET

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,455	0.577	4.0	C	17.6	
2024	PM	SURVEY	1,488	0.549	3.6	C	16.1	
2041	AM	DESIGN	1,592	1.329	63.5	F	373.6	
2041	PM	DESIGN	1,483	0.848	7.7	D	41.7	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,455	0.309	1.9	A	4.8	
2024	PM	SURVEY	1,480	0.308	1.6	A	5.5	
2041	AM	DESIGN	1,592	0.462	3.6	A	22.1	
2041	PM	DESIGN	1,482	0.343	2.6	A	13.0	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.

2 The intersection fails in the AM and PM 2041 scenarios due to high volumes turning right from Tubber Street.

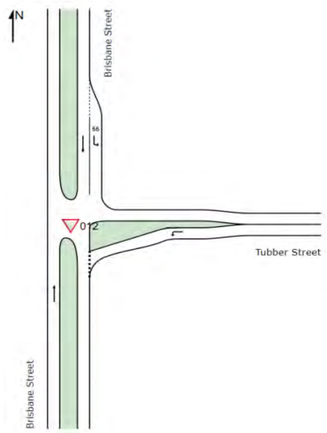
3 It is noted that there are low volumes of traffic entering Tubber Street from Brisbane Street (south). It is expected

4 that the current arrangements encourage rat running from the east to north (and vice versa).

5 There is a recently constructed roundabout 150m to the south at Swelwyn Street. This intersection design is more appropriate for right turn movements to / from the eastern catchment off Brisbane Street

6 It is recommended that the intersection is configured to be left-in / left-out.

Recommendation:



6 The recommended configuration operates adequately with low delays in 2041.

INTERSECTION: #13 - CUNNINGHAM HIGHWAY / BOONAH FASSIFERN ROAD

LOCALITY

GEOMETRY

EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	501	0.088	3.0	A	2.1	
2024	PM	SURVEY	555	0.099	3.0	A	2.5	
2041	AM	DESIGN	651	0.120	3.4	A	3.6	
2041	PM	DESIGN	733	0.121	3.2	A	3.3	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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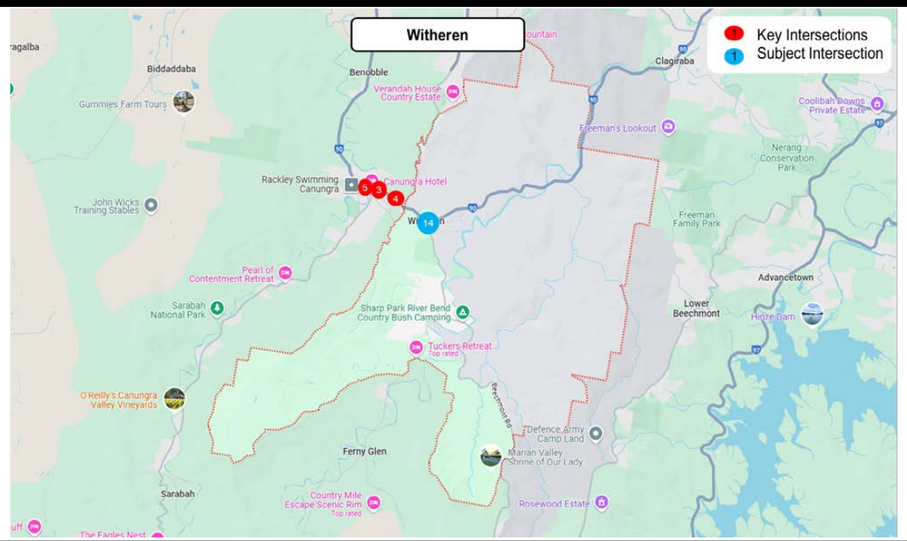
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

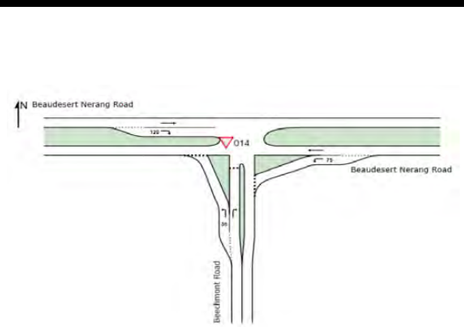
1 This intersection is operating adequately now, with low delays.
2 This intersection is operating adequately in 2041, with low delays.
3 No upgrades are recommended at this intersection.

INTERSECTION: #14 - BEAUDESERT NERANG ROAD / BEECHMONT ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,121	0.292	2.2	B	4.1	
2024	PM	SURVEY	1,455	0.469	3.4	C	12.4	
2041	AM	DESIGN	2,451	4.737	44.3	F	118.1	
2041	PM	DESIGN	2,792	15.088	437.7	F	399.9	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,121	0.313	4.7	A	12.9	
2024	PM	SURVEY	1,455	0.375	5.0	A	17.3	
2041	AM	DESIGN	2,451	0.821	7.5	A	110.5	
2041	PM	DESIGN	2,792	0.768	6.8	A	62.1	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Canungra				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

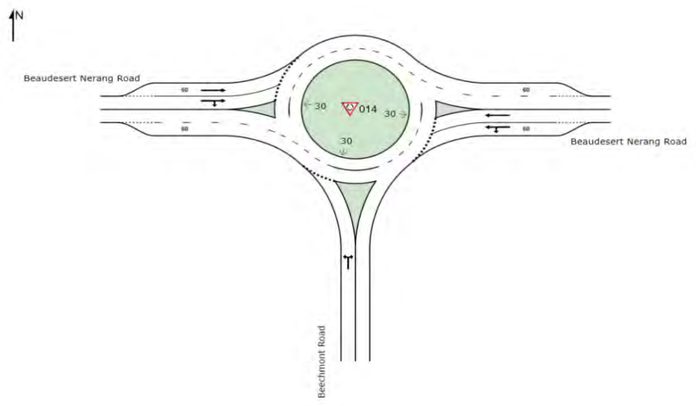
1 This intersection is operating adequately now, with low delays.

2 The intersection fails in the 2041 scenarios. Vehicles on Beechmont Road do not have suitable gaps to turn right.

3 Given the available road reserve, and the benefit of continual flow, it is recommended that a roundabout configuration is investigated.

4 Roundabout configuration can suitably accommodate u-turn volumes associated with Intersection 4 (to the west) creating a combined solution

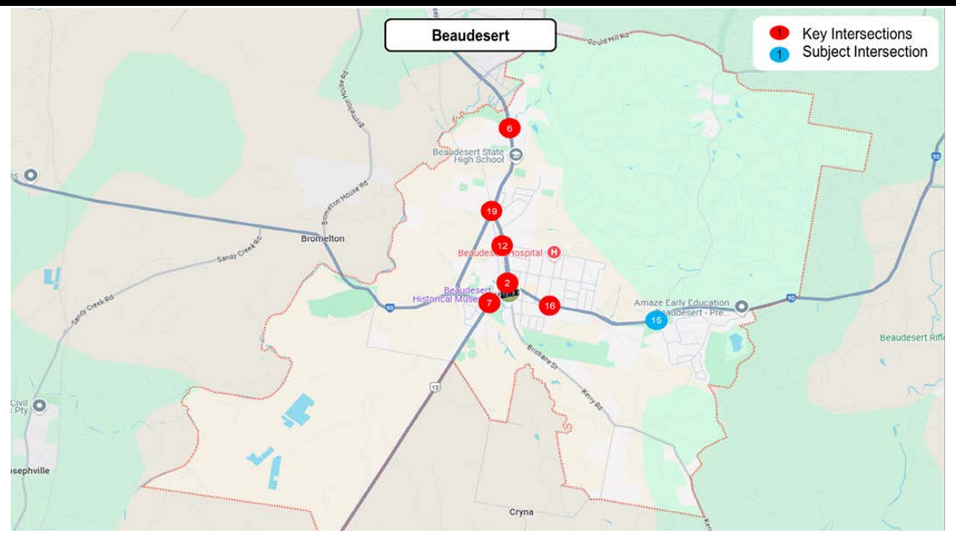
Recommendation:



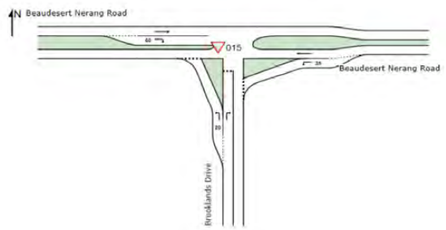
5 The recommended configuration (to be further investigated), operates adequately with moderate delays.

INTERSECTION: #15 - BEAUDESERT NERANG ROAD / BROOKLANDS DRIVE (WEST)

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,116	0.270	2.2	B	5.5	
2024	PM	SURVEY	1,239	0.297	2.2	B	4.9	
2041	AM	DESIGN	1,576	0.381	2.4	C	6.3	
2041	PM	DESIGN	1,693	0.399	2.9	D	8.6	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
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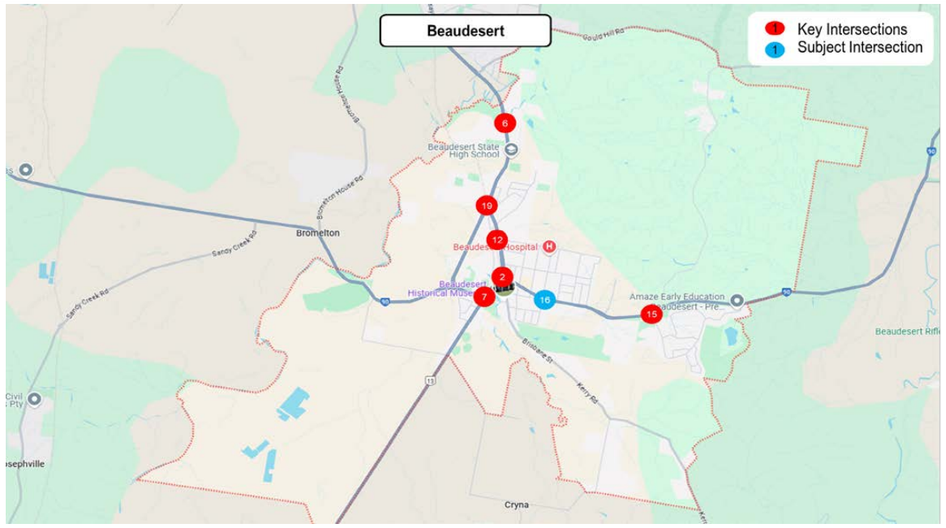
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.
2 EMME modelling found that trips preferred to utilise Kingsley Drive to access Beaudesert Nerang Road prior to the implementation of the Eastern Ring Road.
3 This intersection is operating adequately in 2041, with low delays.
4 No upgrades are recommended at this intersection.

INTERSECTION: #16 - WILLIAM STREET / ALBERT STREET

LOCALITY



GEOMETRY

EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,069	0.251	1.5	A	5.3	
2024	PM	SURVEY	1,078	0.332	2.0	A	8.4	
2041	AM	DESIGN	2,501	3.412	952.1	F	3500.1	
2041	PM	DESIGN	2,823	5.070	1925.2	F	5387.1	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,069	0.627	13.7	A	82.7	60
2024	PM	SURVEY	1,078	0.603	13.9	A	74.4	50
2041	AM	DESIGN	2,501	1.209	240.7	F	1105.4	150
2041	PM	DESIGN	2,823	1.487	406.0	F	2003.6	150

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
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File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

1 This intersection is operating adequately now, with low delays.

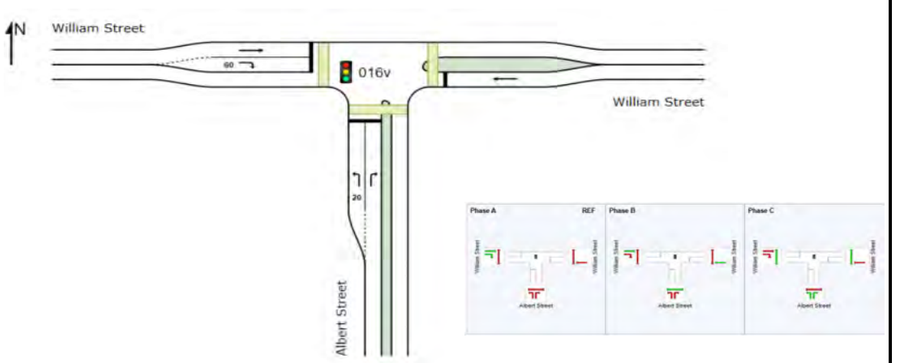
2 The intersection fails in the 2041 scenarios. Vehicles on Albert Street do not have suitable gaps to turn right.

3 Volumes on Albert Street are predicted to increase by 1000%, which is significant. It is likely that EMME is overestimating the increase for these movements (due to coarseness) - so results must be reviewed in this context.

3 Given the presence of a nearby school crossing, there is merit to investigating a signalised layout, co-located with pedestrian signals.

6 Signals still perform above the desired standards of service in all 2041 scenarios. It is noted that further investigations are required. However, operation may be suitable noting the coarsness of model output estimates.

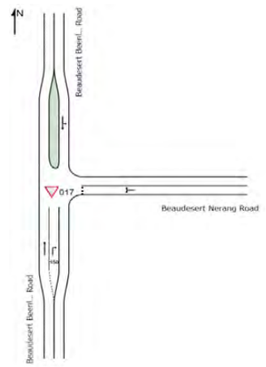
Recommendation:



INTERSECTION: #17 - BEAUDESERT BEENLEIGH ROAD / BEAUDESERT NERANG ROAD

LOCALITY

GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	809	0.224	1.1	A	2.4	
2024	PM	SURVEY	909	0.257	1.0	B	1.6	
2041	AM	DESIGN	1,302	0.334	1.1	C	2.6	
2041	PM	DESIGN	1,428	0.356	1.5	C	5.0	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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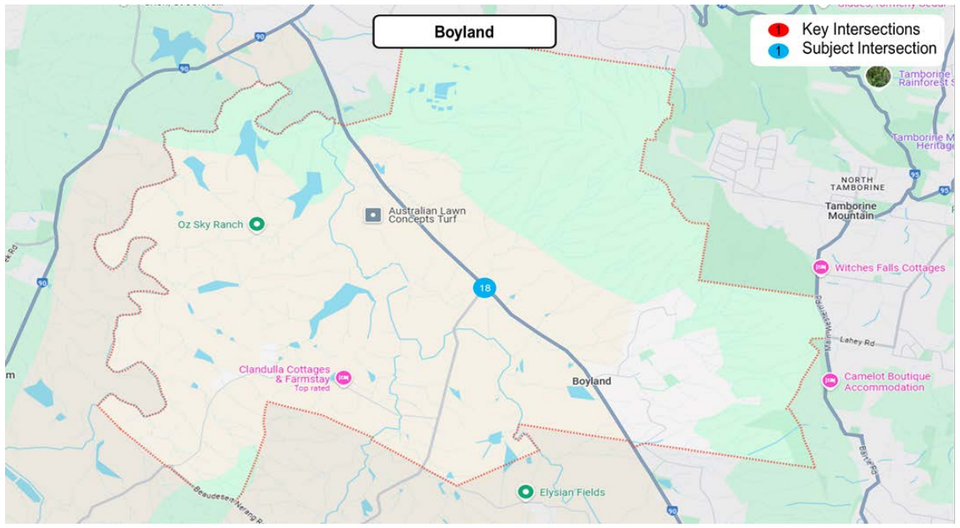
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

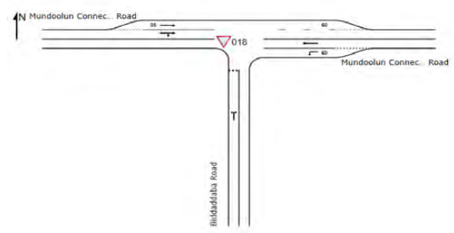
1 This intersection is operating adequately now, with low delays.
2 This intersection is operating adequately in 2041, with moderate delays.
3 No upgrades are recommended at this intersection.

INTERSECTION: #18 - MUNDOOLUN CONNECTION ROAD / BIDDADDABA ROAD

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	802	0.185	1.0	B	1.9	
2024	PM	SURVEY	1,125	0.284	0.7	B	1.6	
2041	AM	DESIGN	1,420	0.405	2.2	D	9.0	
2041	PM	DESIGN	1,676	0.418	1.4	F	5.1	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	802	0.185	0.8	A	1	
2024	PM	SURVEY	1,125	0.284	0.5	A	1.2	
2041	AM	DESIGN	1,420	0.405	1.1	A	2.7	
2041	PM	DESIGN	1,676	0.418	0.8	A	3.2	

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Canungra				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

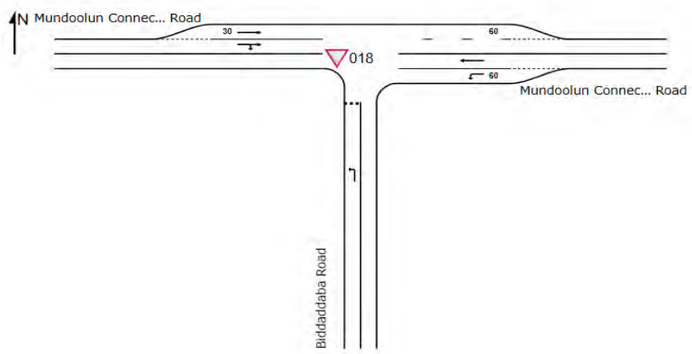
1 This intersection is operating adequately now, with moderate delays.

2 This intersection is operating adequately in 2041, with moderate delays.

3 However, it is noted that the right turn delays from Biddaddaba Road are ~90 seconds, which exceeds thresholds for delays. This may result in motorists accepting short gaps, increasing crash risks.

4 Therefore, it is recommended that restricting right turns is investigated. This may also require regional level wayfinding signage.

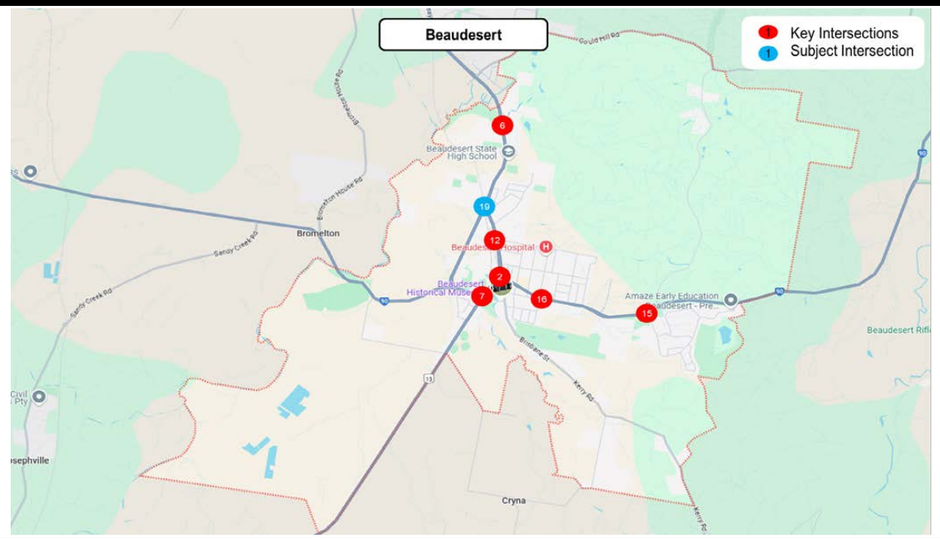
Recommendation



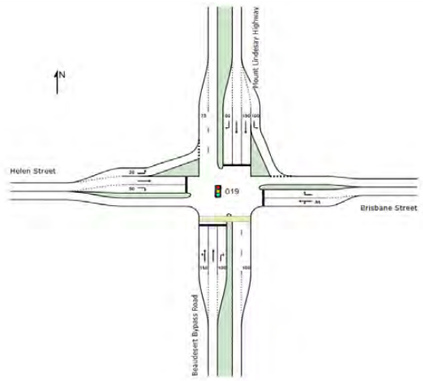
5 The recommended configuration (to be investigated), operates adequately with low delays.

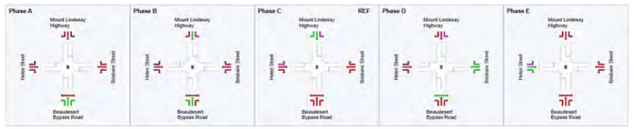
INTERSECTION: #19 - MOUNT LINDESAY HIGHWAY / BEAUDESERT BYPASS ROAD

LOCALITY



GEOMETRY





EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	1,742	0.884	22.8	B	117.5	60
2024	PM	SURVEY	1,638	0.826	23.9	B	133.2	70
2041	AM	DESIGN	1,786	0.778	22.5	B	113.9	70
2041	PM	DESIGN	1,709	0.877	27.3	B	150.7	70

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Beaudesert				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.80	25	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

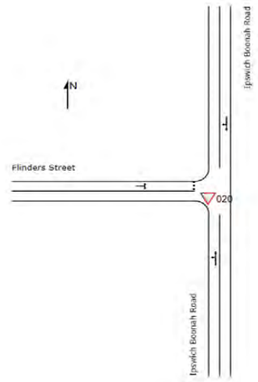
1 This intersection is operating adequately now, with moderate delays. It is noted that DOS is slightly above the desire

2 This intersection is operating adequately in 2041, with moderate delays. It is noted that the PM model is slightly above the desired standard of service, but within typically adopted maximum trhesholds. Given thie status as a major state-controlled intersection, this is considered appropriate.

INTERSECTION: #20 - IPSWICH BOONAH ROAD / FLINDERS STREET

LOCALITY

GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY	620	0.162	3.1	A	5.0	
2024	PM	SURVEY	775	0.278	3.1	A	9.8	
2041	AM	DESIGN	934	0.266	3.4	A	8.4	
2041	PM	DESIGN	1,185	0.475	3.9	B	25.1	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)

DESIRED STANDARD OF SERVICE

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Peak Crossing				
Signalised & Roundabout	B	0.70	20	N/A
Priority-Controlled	B	0.70	15	25

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
Reviewed By:	Mark Davidson
Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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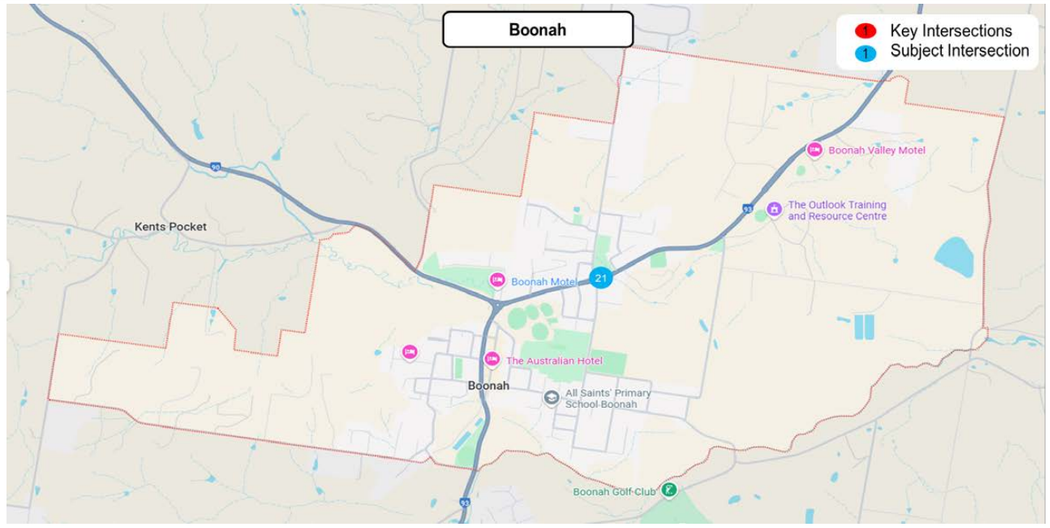
SIDRA RESULTS SUMMARY

SUMMARY NOTES:

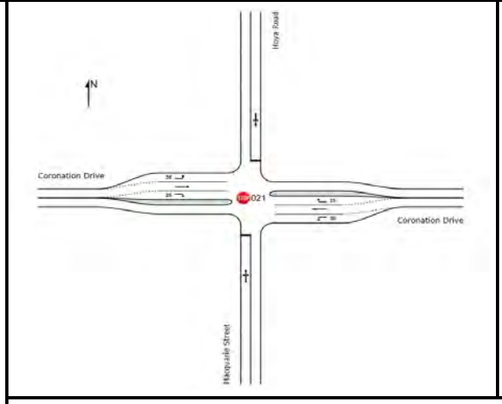
1 This intersection is operating adequately now, with low delays.
2 This intersection is operating adequately in 2041, with low delays.
3 No upgrades are recommended at this intersection.

INTERSECTION: #21 - CORONATION DRIVE / HOYA ROAD / MACQUARIE STREET

LOCALITY



GEOMETRY



EXISTING CONFIGURATION - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2022	AM	SURVEY (TIA)	827	0.553	7.8	C	21.1	
2022	PM	SURVEY (TIA)	878	0.558	7.8	C	20.1	
2031	AM	DESIGN	969	0.770	44.9	D	36	
2031	PM	DESIGN	1,008	0.826	56.4	D	42	
2041	AM	DESIGN	1,167	1.228	43.9	F	187.2	
2041	PM	DESIGN	1,275	1.766	117.3	F	403.5	

UPGRADED GEOMETRY - SIDRA RESULTS

YEAR	PEAK	SCENARIO	DEMAND (VEHS)	DOS	DELAY (SECS)	LOS	QUEUE (M)	CYCLE TIME (S)
2024	AM	SURVEY (TIA)	827	0.248	6.2	A	11.3	
2024	PM	SURVEY (TIA)	878	0.282	5.9	A	13.2	
2041	AM	DESIGN	1,167	0.372	6.6	A	19.8	
2041	PM	DESIGN	1,275	0.400	6.5	A	20.1	

Intersection Type	Minimum LOS	Maximum DOS	Maximum Control Delay (seconds)	Maximum Movement Delay (seconds)
Boonah				
Signalised & Roundabout	C	0.85	35	N/A
Priority-Controlled	C	0.70	20	35

DOCUMENT CONTROL

Job Number:	P6364
Job Name:	Scenic Rim Integrated Transport Plan
Prepared By:	John Kirkham
Prepared Date:	14/04/2025
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Reviewed Date:	14/04/2025
File Path:	P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\

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SIDRA RESULTS SUMMARY

SUMMARY NOTES:

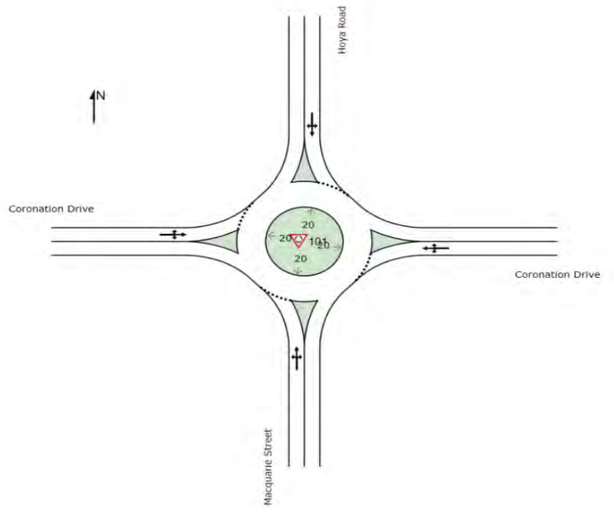
1 This intersection is operating adequately now, with moderate delays.

2 The intersection fails in the PM 2041 scenarios, however it is understood that the intersection is planned to be upgraded / signalised as part of a developer led upgrade.

3 It is understood that signals are generally less appealing to local residents.

4 As such, we have tested how the intersection performs if a roundabout is provided in place of signals.

Recommendation:



5 This intersection is operating adequately in 2041 with a roundabout configuration.

6 It is noted that a roundabout or a signalised configuration would be suitable in 2041.

Attachment B:

Survey Data

Site ID: 1
Location: Beaudesert Beenleigh Rd & Waterford Tamborine Rd, Tamborine
Date: 18/05/2023
Surveyed Time (AM): 6:00 AM to 9:00 AM
Surveyed Time (PM): 3:00 PM to 6:00 PM
Weather: Fine
Observed AM Peak Hour: 8:00 AM (hour ending)
Observered PM Peak Hour: 4:30 PM (hour ending)

The unnamed road on the western side of the roundabout is an entrance only. No data recorded exiting through this access.

Beaudesert Beenleigh Rd (Southbound) – AM

15 minute increments starting from	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	BEAR RIGHT Light Vehicles	BEAR RIGHT Heavy Vehicles	BEAR RIGHT Bicycles	HARD RIGHT Light Vehicles	HARD RIGHT Heavy Vehicles	HARD RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
6:00 AM	4	0	0	19	0	0	0	0	0	4	0	0	0	0	0
6:15 AM	2	0	0	30	0	0	1	0	0	2	0	0	0	0	0
6:30 AM	7	0	0	35	0	0	1	0	0	3	0	0	1	0	0
6:45 AM	6	0	0	37	0	0	2	0	0	1	0	0	1	0	0
7:00 AM	11	0	0	33	0	0	0	0	0	2	0	0	0	0	0
7:15 AM	14	0	0	39	0	0	0	0	0	4	0	0	0	0	0
7:30 AM	15	0	0	54	0	0	0	0	0	3	0	0	0	0	0
7:45 AM	7	0	0	46	0	0	0	0	0	5	0	0	0	0	0
8:00 AM	13	0	0	30	0	0	0	0	0	6	0	0	0	0	0
8:15 AM	6	0	0	29	0	0	1	0	0	4	0	0	0	0	0
8:30 AM	8	0	0	26	0	0	5	0	0	0	0	0	0	0	0
8:45 AM	18	0	0	30	0	0	1	0	0	2	0	0	0	0	0
3HR Total	111	0	0	408	0	0	11	0	0	36	0	0	2	0	0
Peak Hour Total	49	0	0	169	0	0	0	0	0	18	0	0	0	0	0

Tamborine Mountain Rd (Westbound) – AM

15 minute increments starting from	BEAR LEFT Light Vehicles	BEAR LEFT Heavy Vehicles	BEAR LEFT Bicycles	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
6:00 AM	5	0	0	0	0	0	23	0	0	13	0	0	0	0	0
6:15 AM	9	0	0	0	0	0	22	0	0	10	0	0	0	0	0
6:30 AM	5	0	0	0	0	0	13	0	0	9	0	0	0	0	0
6:45 AM	12	0	0	1	0	0	15	0	0	8	0	0	0	0	0
7:00 AM	7	0	0	1	0	0	12	0	0	10	0	0	0	0	0
7:15 AM	10	0	0	1	0	0	18	0	0	13	0	0	0	0	0
7:30 AM	11	0	0	1	0	0	18	0	0	19	0	0	0	0	0
7:45 AM	25	0	0	1	0	0	13	0	0	12	0	0	0	0	0
8:00 AM	14	0	0	0	0	0	13	0	0	15	0	0	0	0	0
8:15 AM	11	0	0	2	0	0	14	0	0	13	0	0	0	0	0
8:30 AM	20	0	0	1	0	0	21	0	0	10	0	0	0	0	0
8:45 AM	18	0	0	1	0	0	20	0	0	15	0	0	0	0	0
3HR Total	147	0	0	9	0	0	202	0	0	147	0	0	0	0	0
Peak Hour Total	60	0	0	3	0	0	62	0	0	59	0	0	0	0	0

Beaudesert Beenleigh Rd (Northbound) – AM

15 minute increments starting from	BEAR LEFT Light Vehicles	BEAR LEFT Heavy Vehicles	BEAR LEFT Bicycles	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
6:00 AM	2	0	0	41	0	0	72	0	0	9	0	0	2	0	0
6:15 AM	4	0	0	39	0	0	53	0	0	7	0	0	2	0	0
6:30 AM	2	0	0	40	0	0	66	0	0	8	0	0	1	0	0
6:45 AM	7	0	0	32	0	0	53	0	0	11	0	0	1	0	0
7:00 AM	3	0	0	29	0	0	54	0	0	5	0	0	1	0	0
7:15 AM	6	0	0	30	0	0	65	0	0	16	0	0	1	0	0
7:30 AM	3	0	0	51	0	0	21	0	0	5	0	0	1	0	0
7:45 AM	2	0	0	28	0	0	53	0	0	15	0	0	0	0	0
8:00 AM	3	0	0	38	0	0	45	0	0	25	0	0	2	0	0
8:15 AM	3	0	0	33	0	0	52	0	0	16	0	0	2	0	0
8:30 AM	2	0	0	14	0	0	39	0	0	23	0	0	2	0	0
8:45 AM	3	0	0	36	0	0	35	0	0	9	0	0	1	0	0
3HR Total	40	0	0	411	0	0	608	0	0	149	0	0	16	0	0
Peak Hour Total	14	0	0	147	0	0	184	0	0	61	0	0	4	0	0

Waterford Tamborine Rd (Eastbound) – AM, Hourly Total and Pedestrians

15 minute increments starting from	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	HARD RIGHT Light Vehicles	HARD RIGHT Heavy Vehicles	HARD RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles	Hourly Total	Pedestrians Southbound	Pedestrians Westbound	Pedestrians Northbound	Pedestrians Northwestboun	Pedestrians Eastbound
6:00 AM	2	0	0	8	0	0	21	0	0	0	0	0	0	0	0		0	0	0	0	0
6:15 AM	5	0	0	14	0	0	34	0	0	0	0	0	0	0	0		0	0	0	0	0
6:30 AM	6	0	0	20	0	0	23	0	0	0	0	0	0	0	0		0	0	0	0	0
6:45 AM	2	0	0	18	0	0	42	0	0	0	0	0	0	0	0	948	0	0	0	0	0
7:00 AM	8	0	0	18	0	0	32	0	0	1	0	0	0	0	0	950	0	0	0	0	0
7:15 AM	4	0	0	10	0	0	40	0	0	0	0	0	0	0	0	987	0	0	0	0	0
7:30 AM	6	0	0	15	0	0	55	0	0	0	0	0	1	0	0	1026	0	0	0	0	0
7:45 AM	5	0	0	16	0	0	28	0	0	1	0	0	0	0	0	1034	0	0	0	0	0
8:00 AM	6	0	0	28	0	0	38	0	0	1	0	0	0	0	0	1084	0	0	0	0	0
8:15 AM	2	0	0	24	0	0	42	0	0	1	0	0	0	0	0	1068	0	0	0	0	0
8:30 AM	5	0	0	24	0	0	31	0	0	3	0	0	0	0	0	1023	0	0	0	0	0
8:45 AM	5	0	0	12	0	0	26	0	0	0	0	0	0	0	0	998	0	0	0	0	0
3HR Total	56	0	0	207	0	0	412	0	0	7	0	0	1	0	0		0	0	0	0	0
Peak Hour Total	21	0	0	69	0	0	161	0	0	2	0	0	1	0	0		0	0	0	0	0

Beaudesert Beenleigh Rd (Southbound) – PM

15 minute increments starting from	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	BEAR RIGHT Light Vehicles	BEAR RIGHT Heavy Vehicles	BEAR RIGHT Bicycles	HARD RIGHT Light Vehicles	HARD RIGHT Heavy Vehicles	HARD RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
3:00 PM	22	0	0	78	0	0	1	0	0	2	0	0	0	0	0
3:15 PM	14	0	0	68	0	0	3	0	0	2	0	0	1	0	0
3:30 PM	25	0	0	73	0	0	1	0	0	4	0	0	0	0	0
3:45 PM	19	0	0	89	0	0	2	0	0	4	0	0	0	0	0
4:00 PM	25	0	0	75	0	0	0	0	0	6	0	0	0	0	0
4:15 PM	23	0	0	98	0	0	0	0	0	4	0	0	0	0	0
4:30 PM	29	0	0	126	0	0	1	0	0	2	0	0	0	0	0
4:45 PM	21	0	0	109	0	0	1	0	0	4	0	0	0	0	0
5:00 PM	22	0	0	75	0	0	4	0	0	3	0	0	0	0	0
5:15 PM	11	0	0	88	0	0	0	0	0	3	0	0	0	0	0
5:30 PM	26	0	0	49	0	0	0	0	0	2	0	0	0	0	0
5:45 PM	9	0	0	44	0	0	1	0	0	5	0	0	0	0	0
4HR Total	246	0	0	972	0	0	14	0	0	41	0	0	1	0	0
Peak Hour Total	96	0	0	388	0	0	3	0	0	16	0	0	0	0	0

Tamborine Mountain Rd (Westbound) – PM

15 minute increments starting from	BEAR LEFT Light Vehicles	BEAR LEFT Heavy Vehicles	BEAR LEFT Bicycles	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
3:00 PM	34	0	0	1	0	0	27	0	0	19	0	0	0	0	0
3:15 PM	38	0	0	1	0	0	33	0	0	21	0	0	0	0	0
3:30 PM	25	0	0	0	0	0	18	0	0	17	0	0	0	0	0
3:45 PM	23	0	0	1	0	0	27	0	0	14	0	0	0	0	0
4:00 PM	21	0	0	2	0	0	13	0	0	10	0	0	0	0	0
4:15 PM	11	0	0	1	0	0	20	0	0	11	0	0	0	0	0
4:30 PM	16	0	0	3	0	0	10	0	0	7	0	0	0	0	0
4:45 PM	20	0	0	3	0	0	8	0	0	7	0	0	0	0	0
5:00 PM	8	0	0	1	0	0	18	0	0	11	0	0	0	0	0
5:15 PM	16	0	0	1	0	0	14	0	0	6	0	0	0	0	0
5:30 PM	9	0	0	1	0	0	9	0	0	9	0	0	0	0	0
5:45 PM	12	0	0	0	0	0	7	0	0	5	0	0	0	0	0
4HR Total	233	0	0	15	0	0	204	0	0	137	0	0	0	0	0
Peak Hour Total	71	0	0	7	0	0	70	0	0	42	0	0	0	0	0

Beaudesert Beenleigh Rd (Northbound) – PM

15 minute increments starting from	BEAR LEFT Light Vehicles	BEAR LEFT Heavy Vehicles	BEAR LEFT Bicycles	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles
3:00 PM	4	0	0	37	0	0	49	0	0	16	0	0	1	0	0
3:15 PM	2	0	0	48	0	0	44	0	0	15	0	0	2	0	0
3:30 PM	5	0	0	53	0	0	46	0	0	24	0	0	0	0	0
3:45 PM	4	0	0	39	0	0	44	0	0	15	0	0	2	0	0
4:00 PM	5	0	0	32	0	0	35	0	0	16	0	0	1	0	0
4:15 PM	3	0	0	36	0	0	32	0	0	18	0	0	1	0	0
4:30 PM	2	0	0	43	0	0	33	0	0	12	0	0	5	0	0
4:45 PM	3	0	0	35	0	0	26	0	0	16	0	0	2	0	0
5:00 PM	2	0	0	37	0	0	21	0	0	15	0	0	0	0	0
5:15 PM	1	0	0	38	0	0	22	0	0	13	0	0	2	0	0
5:30 PM	3	0	0	33	0	0	25	0	0	10	0	0	0	0	0
5:45 PM	2	0	0	37	0	0	14	0	0	9	0	0	0	0	0
4HR Total	36	0	0	468	0	0	391	0	0	179	0	0	16	0	0
Peak Hour Total	14	0	0	150	0	0	144	0	0	61	0	0	9	0	0

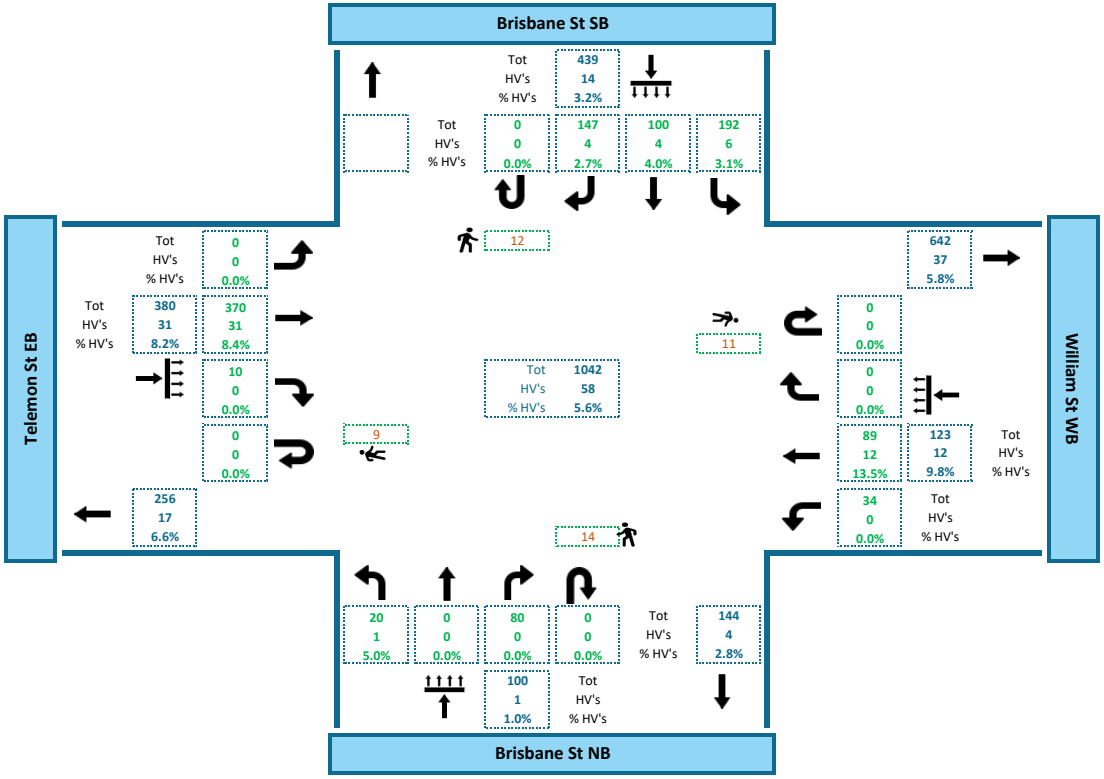
Waterford Tamborine Rd (Eastbound) – PM, Hourly Total and Pedestrians

15 minute increments starting from	LEFT Light Vehicles	LEFT Heavy Vehicles	LEFT Bicycles	THRU Light Vehicles	THRU Heavy Vehicles	THRU Bicycles	RIGHT Light Vehicles	RIGHT Heavy Vehicles	RIGHT Bicycles	HARD RIGHT Light Vehicles	HARD RIGHT Heavy Vehicles	HARD RIGHT Bicycles	UTURN Light Vehicles	UTURN Heavy Vehicles	UTURN Bicycles	Hourly Total	Pedestrians Southbound	Pedestrians Westbound	Pedestrians Northbound	Pedestrians Northwestboun	Pedestrians Eastbound
3:00 PM	3	0	0	28	0	0	61	0	0	0	0	0	0	0	0	383	0	0	0	0	0
3:15 PM	4	0	0	23	0	0	55	0	0	0	0	0	0	0	0	374	0	0	0	0	0
3:30 PM	8	0	0	38	0	0	60	0	0	1	0	0	0	0	0	398	0	0	0	0	0
3:45 PM	4	0	0	26	0	0	67	0	0	1	0	0	0	0	0	381	0	0	0	0	0
4:00 PM	8	0	0	40	0	0	72	0	0	0	0	0	0	0	0	361	0	0	0	0	0
4:15 PM	6	0	0	35	0	0	76	0	0	0	0	0	0	0	0	375	0	0	0	0	0
4:30 PM	2	0	0	39	0	0	77	0	0	0	0	0	0	0	0	407	0	0	0	0	0
4:45 PM	6	0	0	33	0	0	67	0	0	0	0	0	0	0	0	361	0	0	0	0	0
5:00 PM	3	0	0	27	0	0	96	0	0	1	0	0	0	0	0	344	0	0	0	0	0
5:15 PM	2	0	0	39	0	0	78	0	0	1	0	0	0	0	0	335	0	0	0	0	0
5:30 PM	9	0	0	23	0	0	56	0	0	0	0	0	0	0	0	264	0	0	0	0	0
5:45 PM	6	0	0	20	0	0	40	0	0	0	0	0	0	0	0	211	0	0	0	0	0
4HR Total	61	0	0	371	0	0	805	0	0	4	0	0	0	0	0		0	0	0	0	0
Peak Hour Total	20	0	0	140	0	0	292	0	0	1	0	0	0	0	0		0	0	0	0	0

TDC Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	2	AM Peak:	8:00 AM to 9:00 AM
Location:	Brisbane St & William St/Telemon St, Beaudesert	PM Peak:	3:00 PM to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	8:00 AM to 9:00 AM	<=== Select start of one hour to be presented	
Weather:	Fine		
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.	

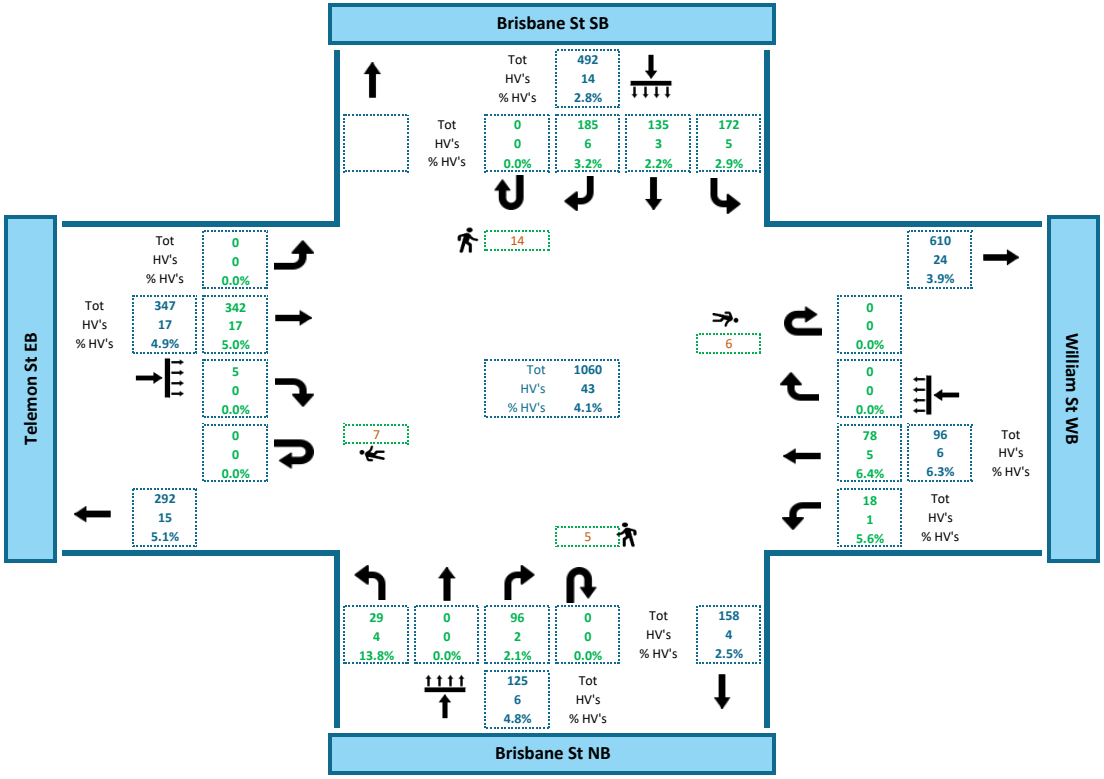


2_T2399.01 Brisbane St & William St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	2		AM Peak:	8:00 AM	to 9:00 AM
Location:	Brisbane St & William St/Telemon St, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	to 4:00 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			



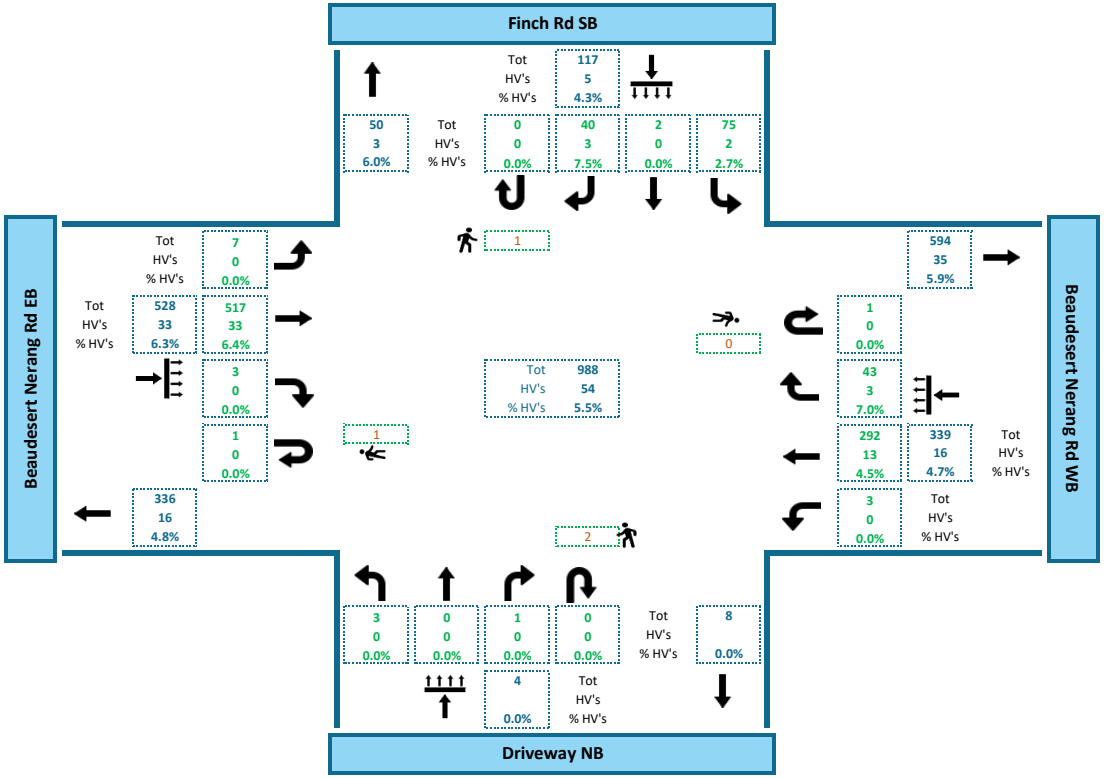
2_T2399.01 Brisbane St & William St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID: 3
Location: Beaudesert Nerang Rd & Finch Rd, Canungra
Date: 13/11/2024
Duration: 06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period: 7:00 AM to 8:00 AM <=== Select start of one hour to be presented
Weather: Fine
Vehicle Class: ALL VEHICLES <=== Vehicle Class data can be changed to any vehicle class by selecting it here.

AM Peak: 7:00 AM to 8:00 AM
PM Peak: 4:00 PM to 5:00 PM

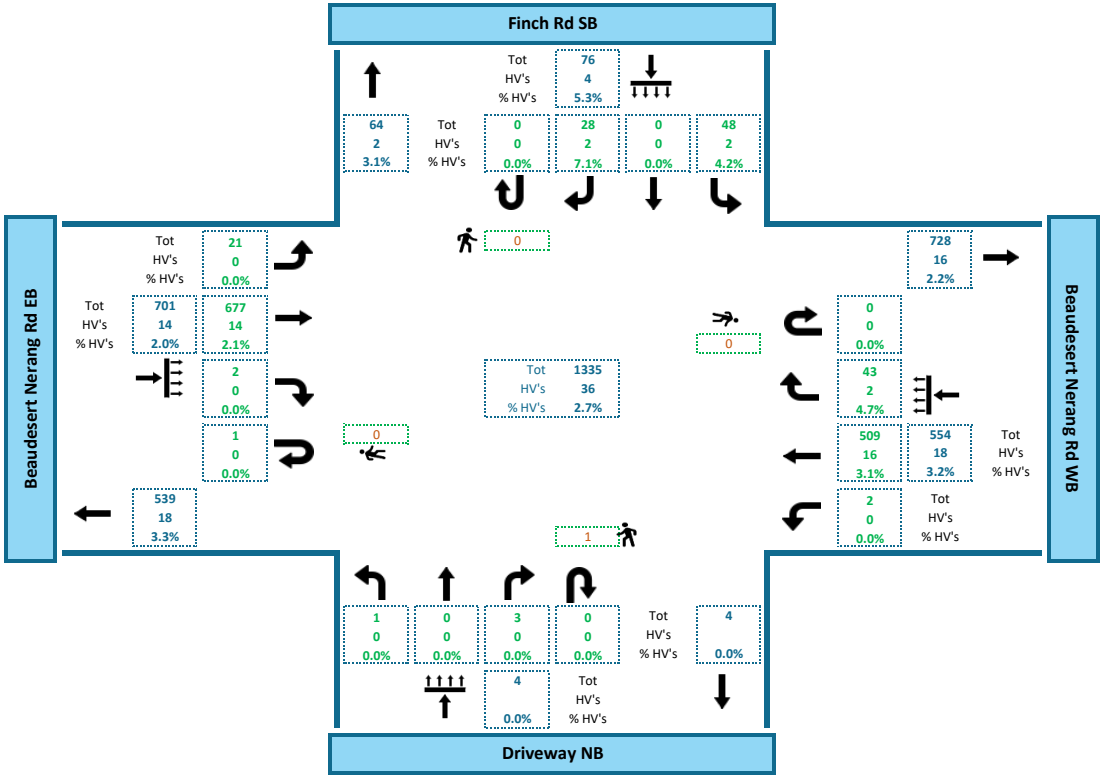


3_T2399.01 Beaudesert Nerang Rd & Finch Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	3		AM Peak:	7:00 AM	to 8:00 AM
Location:	Beaudesert Nerang Rd & Finch Rd, Canungra		PM Peak:	4:00 PM	to 5:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	4:00 PM	to 5:00 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

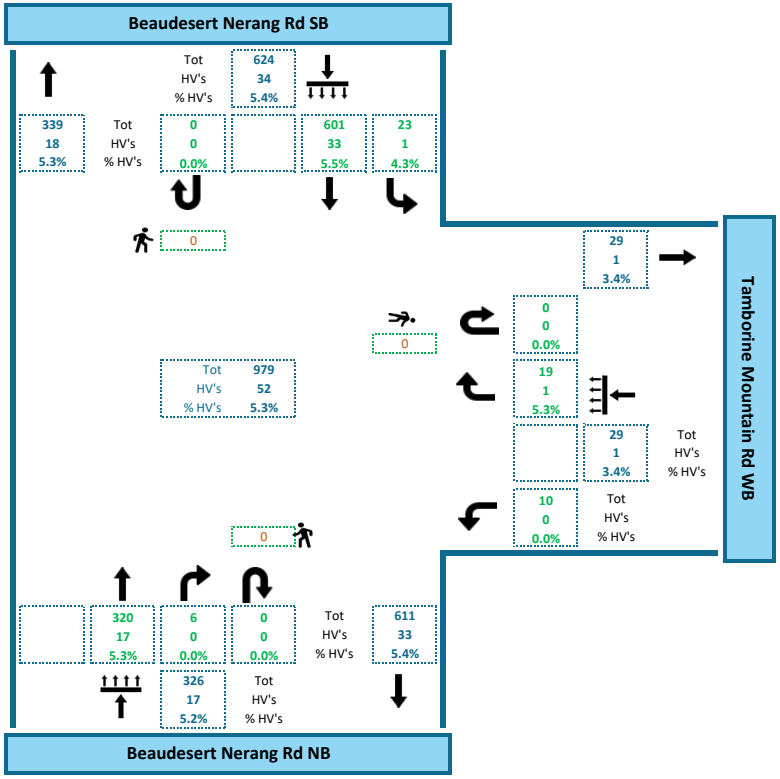


3_T2399.01 Beaudesert Nerang Rd & Finch Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	4		*AM Peak:*	*7:00 AM*	*to* *8:00 AM*
Location:	Beaudesert Nerang Rd & Tamborine Mt Rd, Canungra		*PM Peak:*	*3:30 PM*	*to* *4:30 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	7:00 AM	to 8:00 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

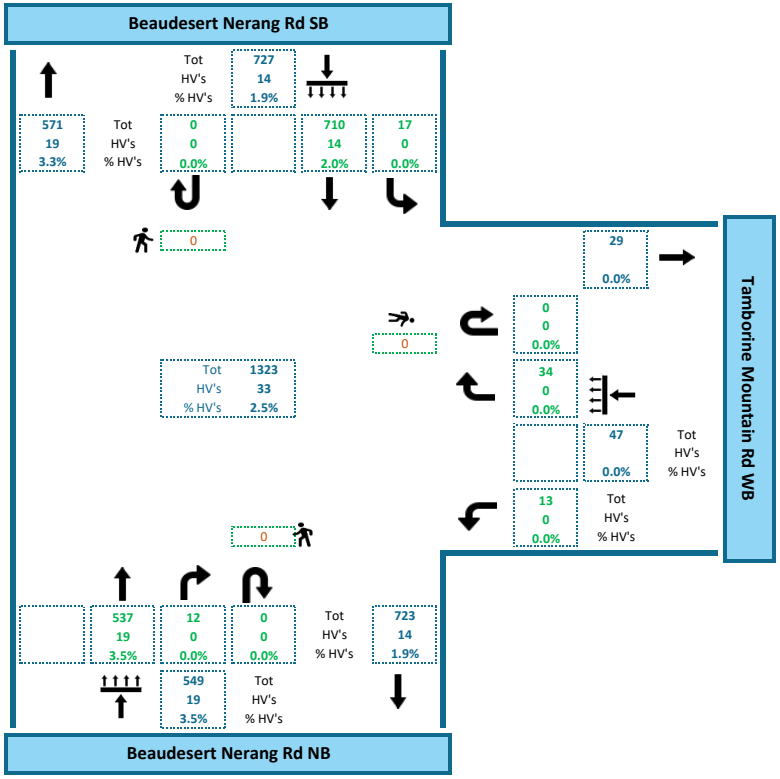


4_T2399.01 Beaudesert Nerang Rd & Tamborine Mountain Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	4		AM Peak:	7:00 AM	to 8:00 AM
Location:	Beaudesert Nerang Rd & Tamborine Mt Rd, Canungra		PM Peak:	3:30 PM	to 4:30 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:30 PM	to 4:30 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

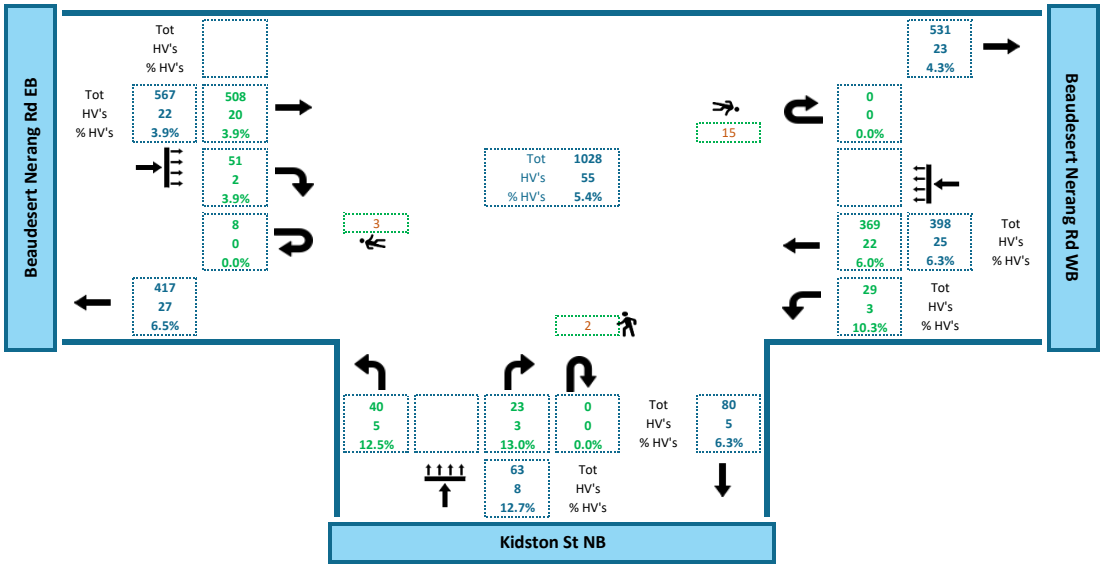


4_T2399.01 Beaudesert Nerang Rd & Tamborine Mountain Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	5		*AM Peak:*	*7:30 AM*	*to* *8:30 AM*
Location:	Beaudesert Nerang Rd & Kidston St, Canungra		*PM Peak:*	*4:00 PM*	*to* *5:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	7:30 AM	**to** 8:30 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

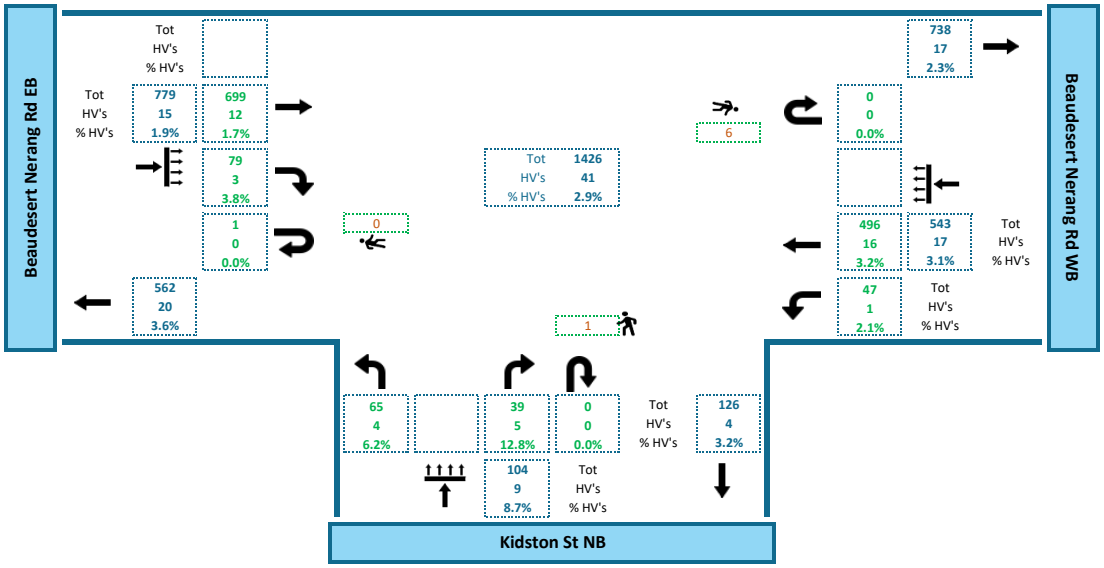


5_T2399.01 Beaudesert Nerang Rd & Kidston St Interection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	5	*AM Peak:*	*7:30 AM*	*to*	*8:30 AM*
Location:	Beaudesert Nerang Rd & Kidston St, Canungra	*PM Peak:*	*4:00 PM*	*to*	*5:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	4:00 PM to 5:00 PM	*<=== Select start of one hour to be presented*			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

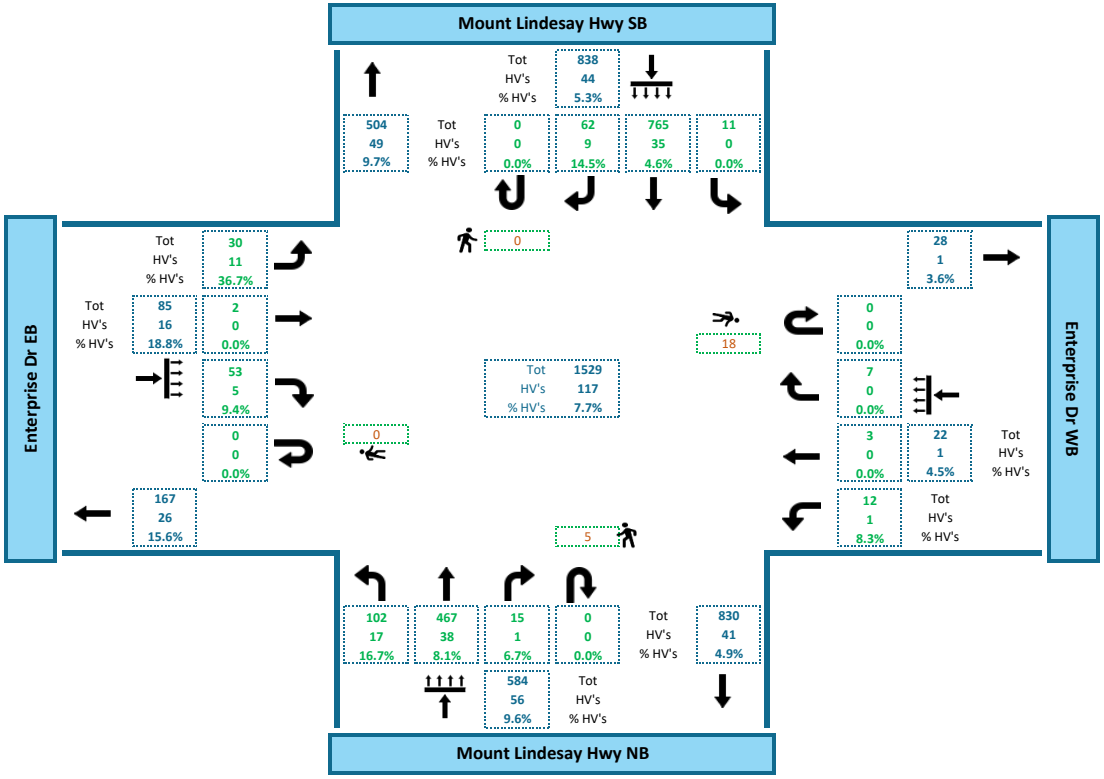


5_T2399.01 Beaudesert Nerang Rd & Kidston St Interection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	6		AM Peak:	8:00 AM	to 9:00 AM
Location:	Mount Lindesay Hwy & Enterprise Dr, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	8:00 AM to 9:00 AM	<=== Select start of one hour to be presented			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

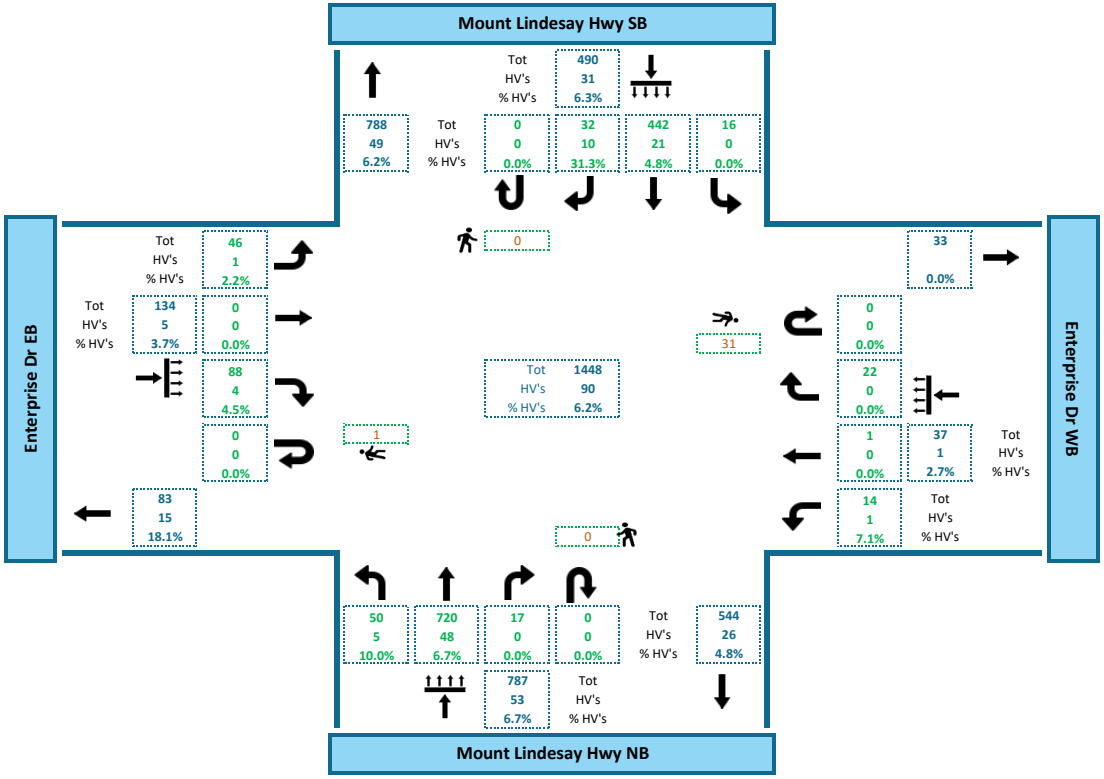


6_T2399.01 Mt Lindesay Hwy & Enterprise Dr Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	6		AM Peak:	8:00 AM	to 9:00 AM
Location:	Mount Lindesay Hwy & Enterprise Dr, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM to 4:00 PM	<=== Select start of one hour to be presented			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

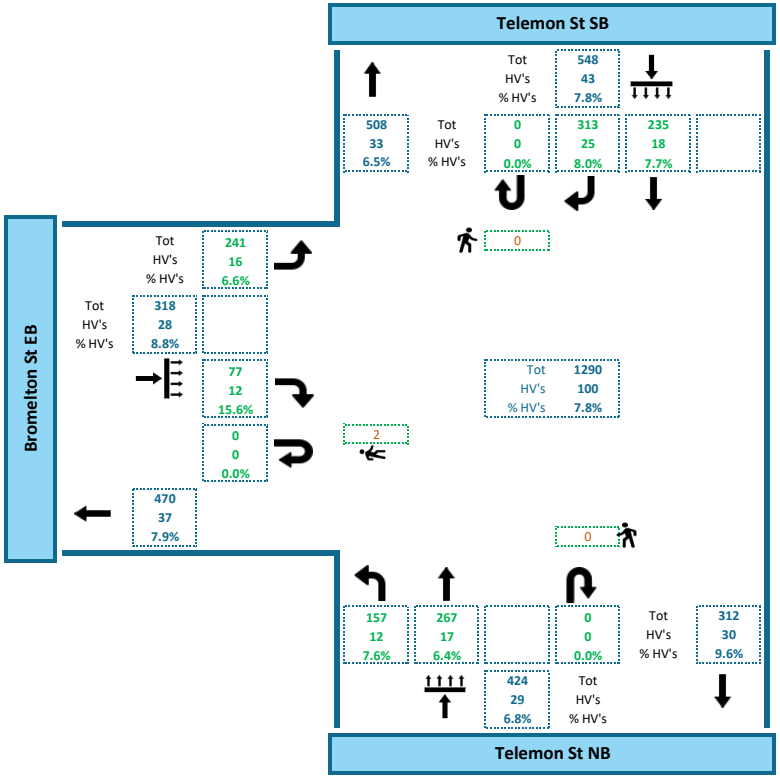


6_T2399.01 Mt Lindesay Hwy & Enterprise Dr Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	7		*AM Peak:*	*7:45 AM*	*to* *8:45 AM*
Location:	Bromelton St & Telemon St, Beaudesert		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	7:45 AM	**to** 8:45 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

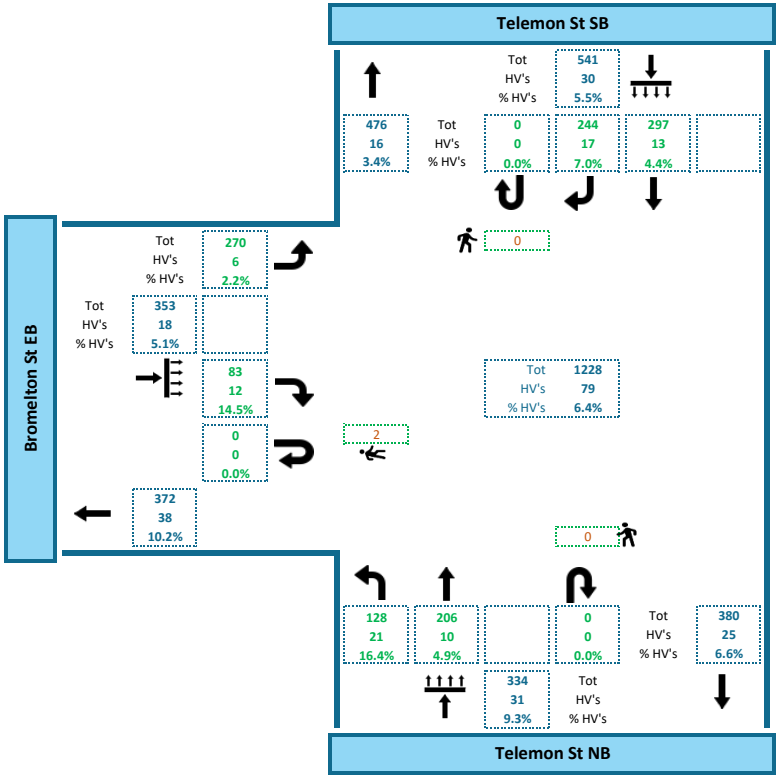


7_T2399.01 Bromelton St & Telemon St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	7		*AM Peak:*	*7:45 AM*	*to* *8:45 AM*
Location:	Bromelton St & Telemon St, Beaudesert		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	**to** 4:00 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

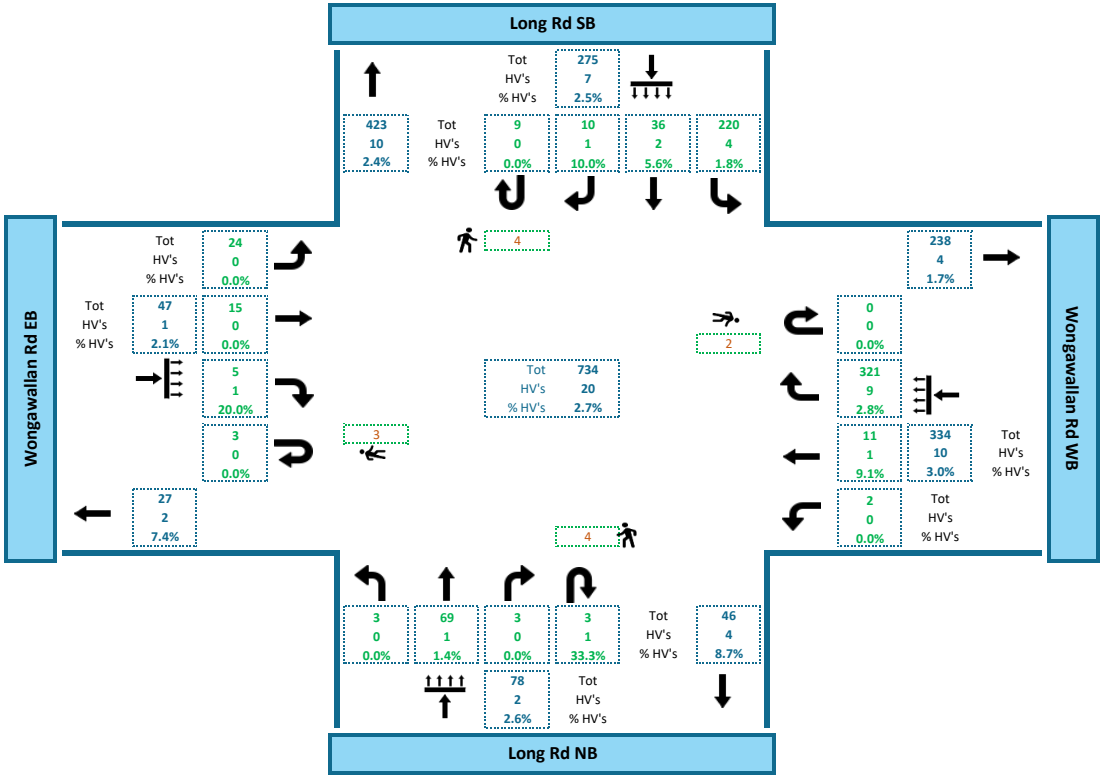


7_T2399.01 Bromelton St & Telemon St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	8	AM Peak:	7:45 AM to 8:45 AM
Location:	Long Rd & Wongawallan Rd, Tamborine Mountain	PM Peak:	3:00 PM to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	7:45 AM to 8:45 AM	<=== Select start of one hour to be presented	
Weather:	Fine		
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.	

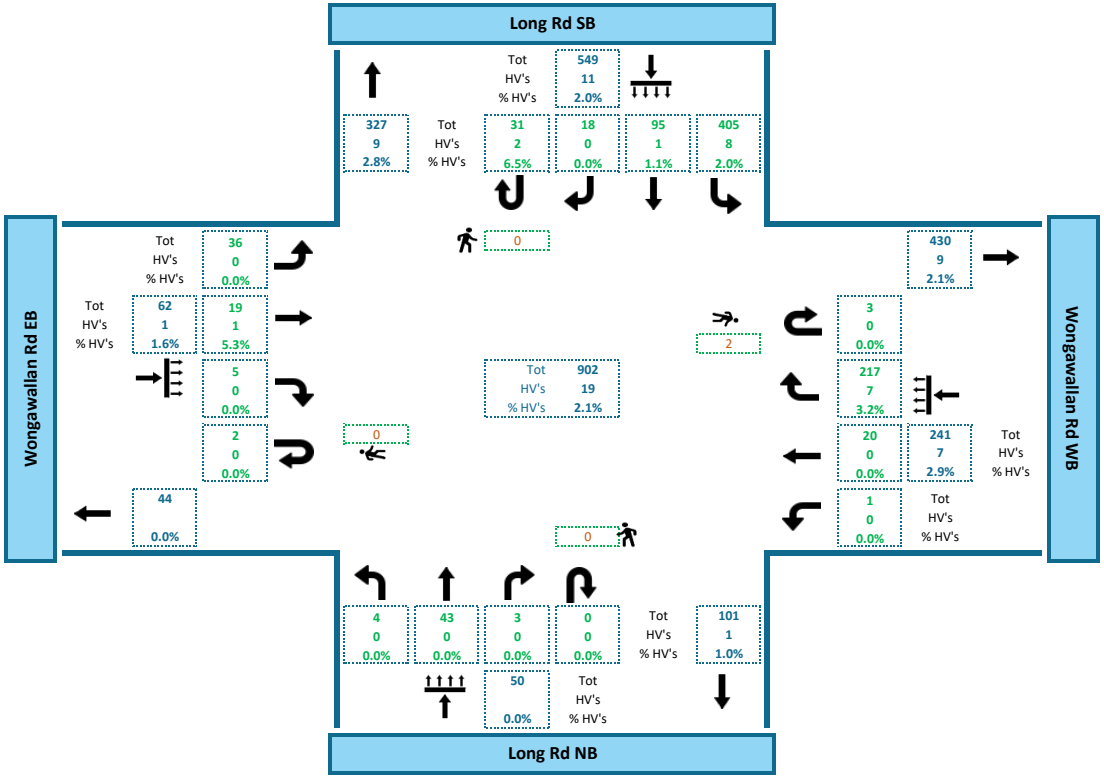


8_T2399.01 Long Rd & Wongawallan Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	8		AM Peak:	7:45 AM	to 8:45 AM
Location:	Long Rd & Wongawallan Rd, Tamborine Mountain		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	to 4:00 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			



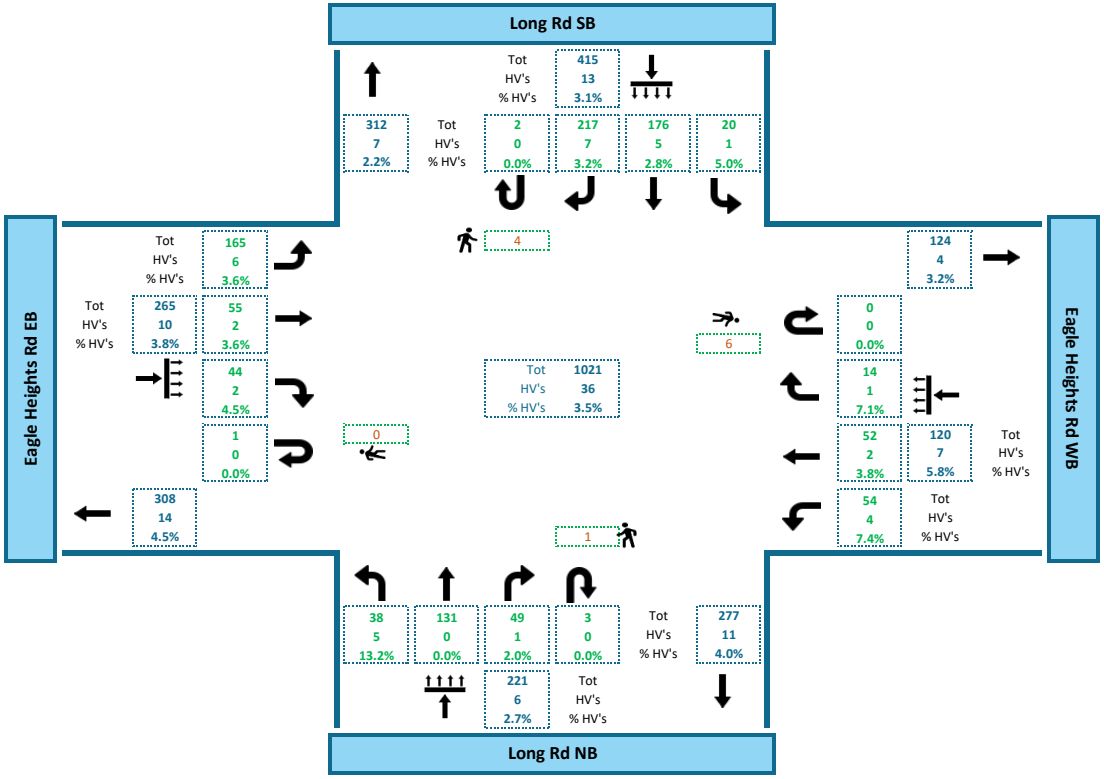
8_T2399.01 Long Rd & Wongawallan Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID: 9
Location: Eagle Heights Rd & Long Rd, Tamborine Mountain
Date: 13/11/2024
Duration: 06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period: 8:00 AM to 9:00 AM <=== Select start of one hour to be presented
Weather: Fine
Vehicle Class: ALL VEHICLES <=== Vehicle Class data can be changed to any vehicle class by selecting it here.

AM Peak: 8:00 AM to 9:00 AM
PM Peak: 3:00 PM to 4:00 PM

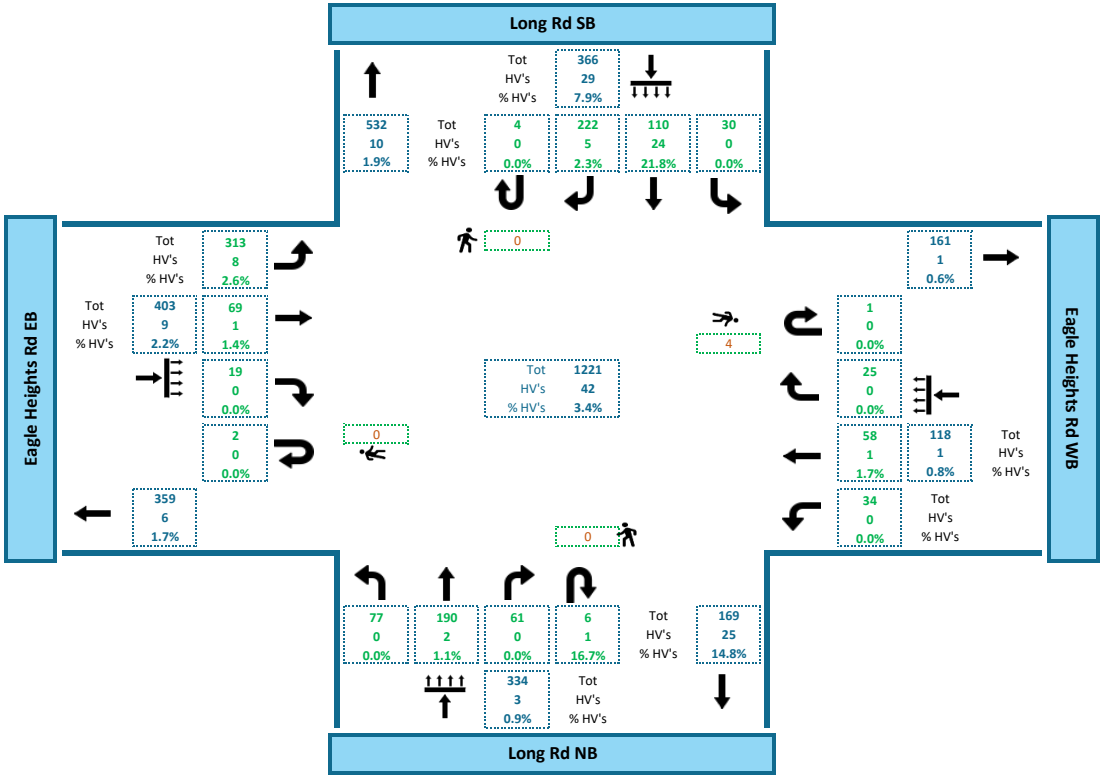


9_T2399.01 Eagle Heights Rd & Long Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	9		AM Peak:	8:00 AM	to 9:00 AM
Location:	Eagle Heights Rd & Long Rd, Tamborine Mountain		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	to 4:00 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

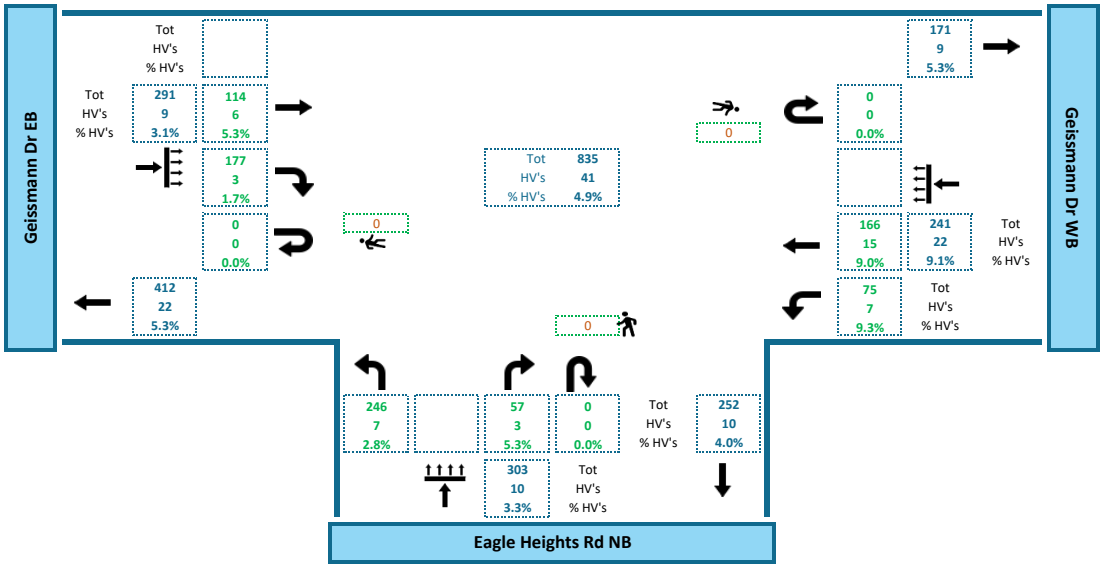


9_T2399.01 Eagle Heights Rd & Long Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	10	*AM Peak:*	*8:00 AM to 9:00 AM*
Location:	Geissmann Dr & Eagle Heights Rd, Tamborine Mountain	*PM Peak:*	*3:00 PM to 4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	8:00 AM to 9:00 AM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

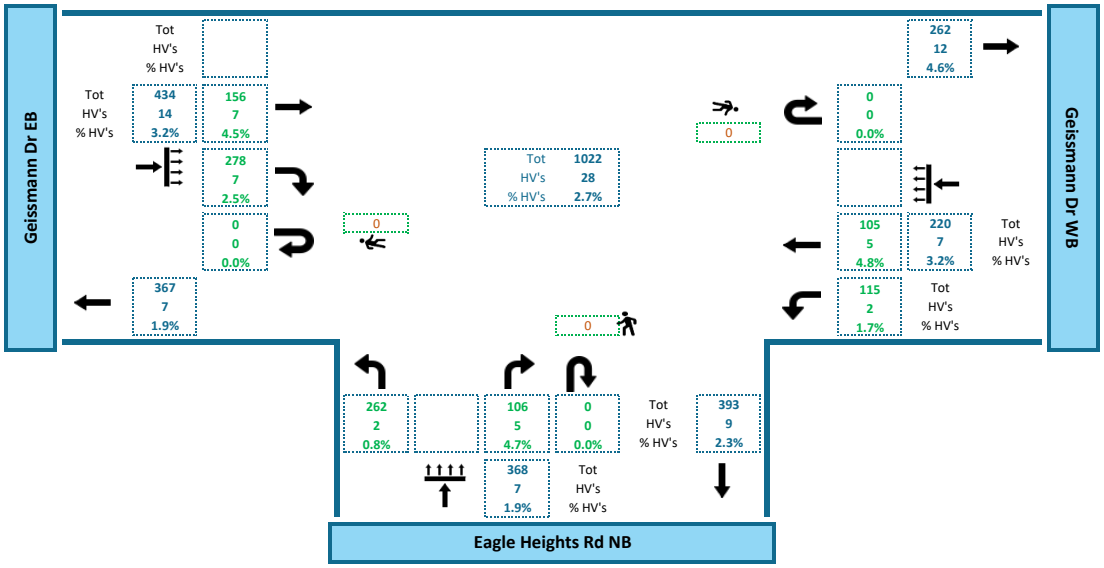


10_T2399.01 Geissmann Dr & Eagle Heights Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	10		*AM Peak:*	*8:00 AM*	*to* *9:00 AM*
Location:	Geissmann Dr & Eagle Heights Rd, Tamborine Mountain		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	**to** 4:00 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

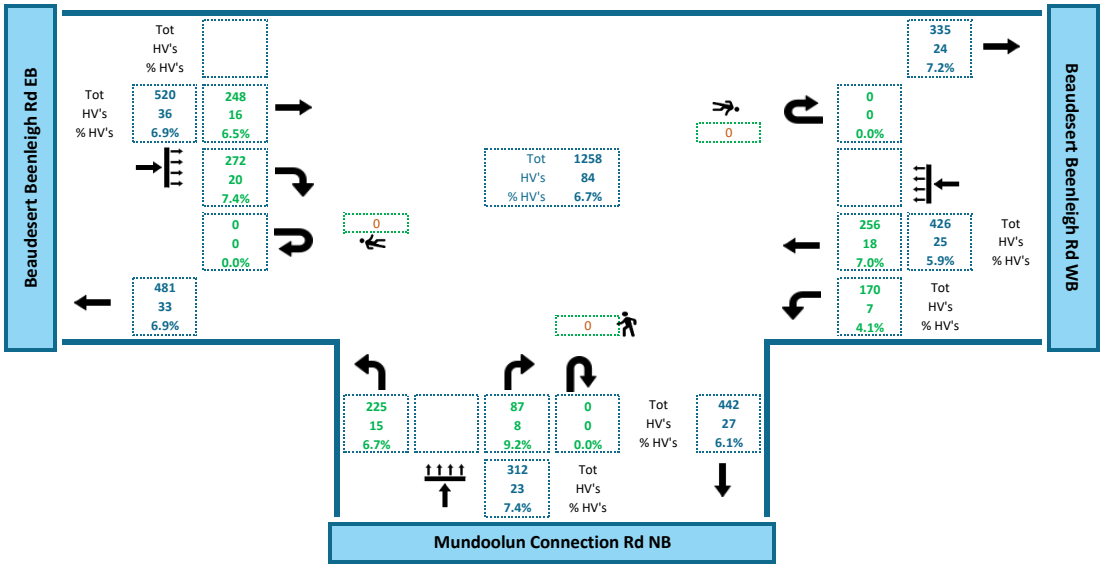


10_T2399.01 Geissmann Dr & Eagle Heights Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	11	*AM Peak:*	*7:15 AM to 8:15 AM*
Location:	Beaudesert Beenleigh Rd & Mundoolun Connection Rd, Tamborine	*PM Peak:*	*3:15 PM to 4:15 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	7:15 AM to 8:15 AM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

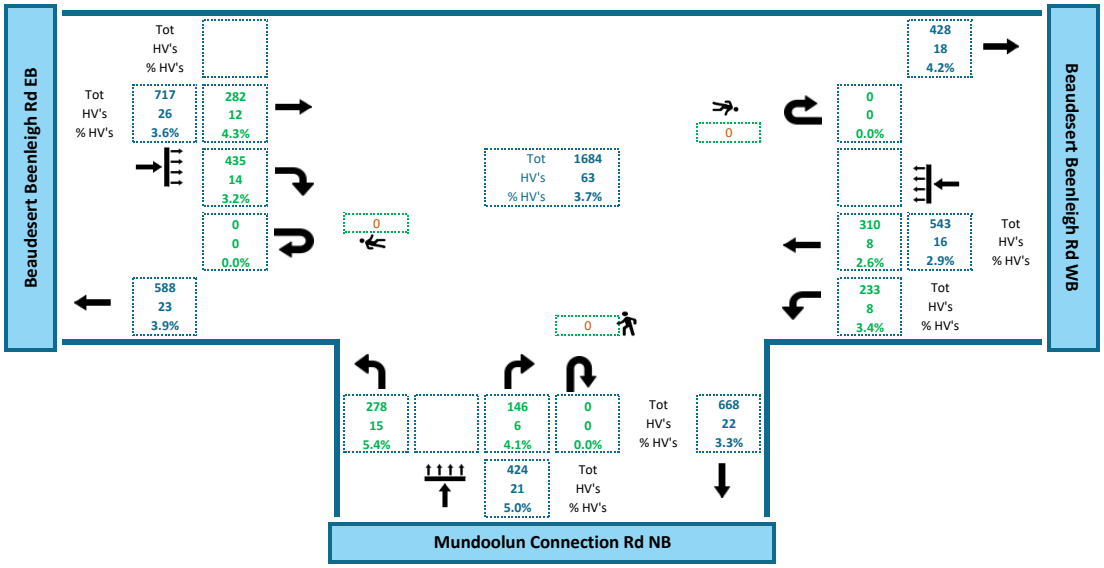


11_T2399.01 Beaudesert Beenleigh Rd & Mundoolun Connection Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	11	*AM Peak:*	*7:15 AM to 8:15 AM*
Location:	Beaudesert Beenleigh Rd & Mundoolun Connection Rd, Tamborine	*PM Peak:*	*3:15 PM to 4:15 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	3:15 PM to 4:15 PM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

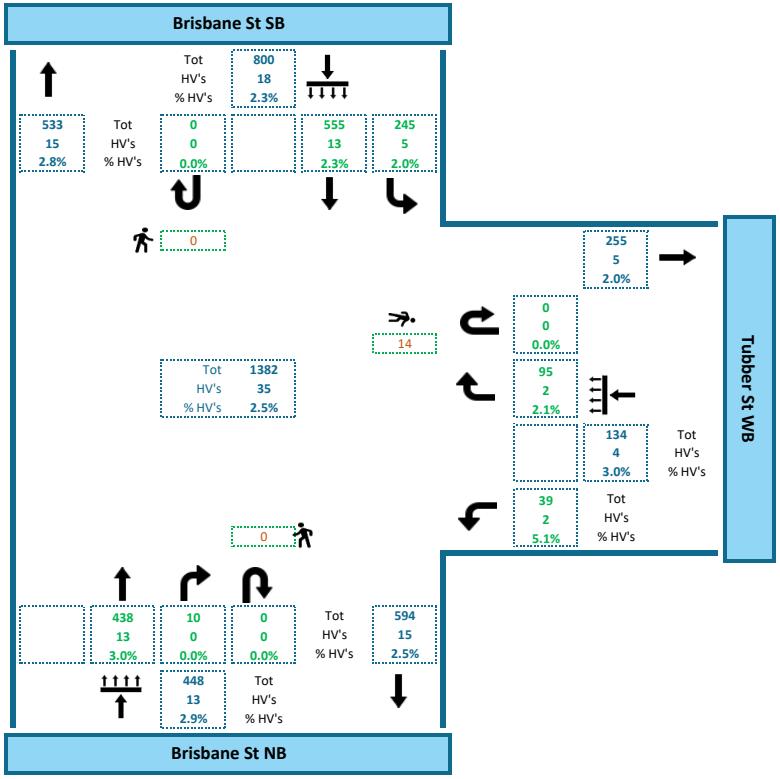


11_T2399.01 Beaudesert Beenleigh Rd & Mundoolun Connection Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	12		AM Peak:	8:00 AM	to 9:00 AM
Location:	Brisbane St & Tubber St, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	8:00 AM	to 9:00 AM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

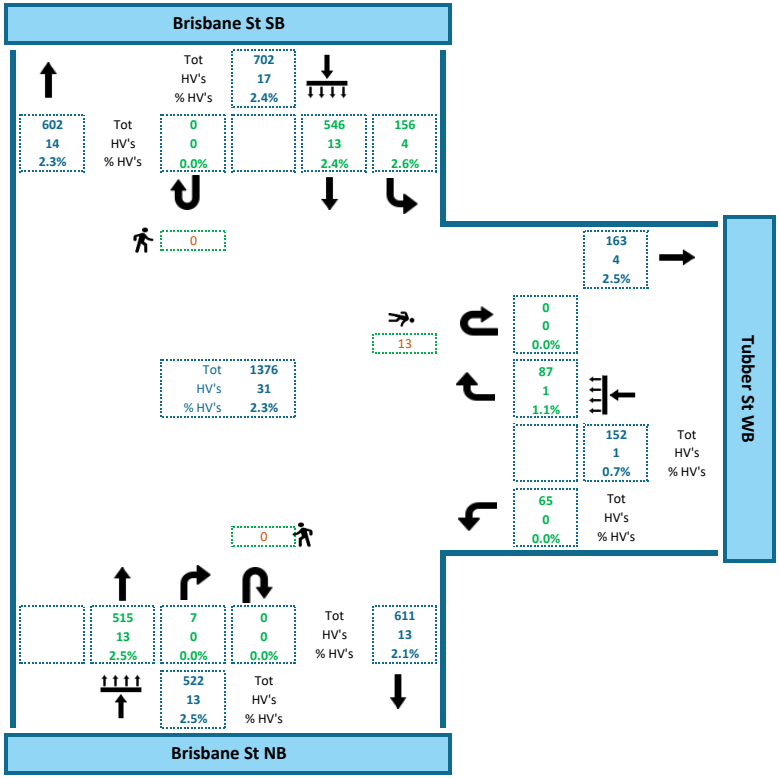


12_T2399.01 Brisbane St & Tubber St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	12		AM Peak:	8:00 AM	to 9:00 AM
Location:	Brisbane St & Tubber St, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	to 4:00 PM	<=== Select start of one hour to be presented		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

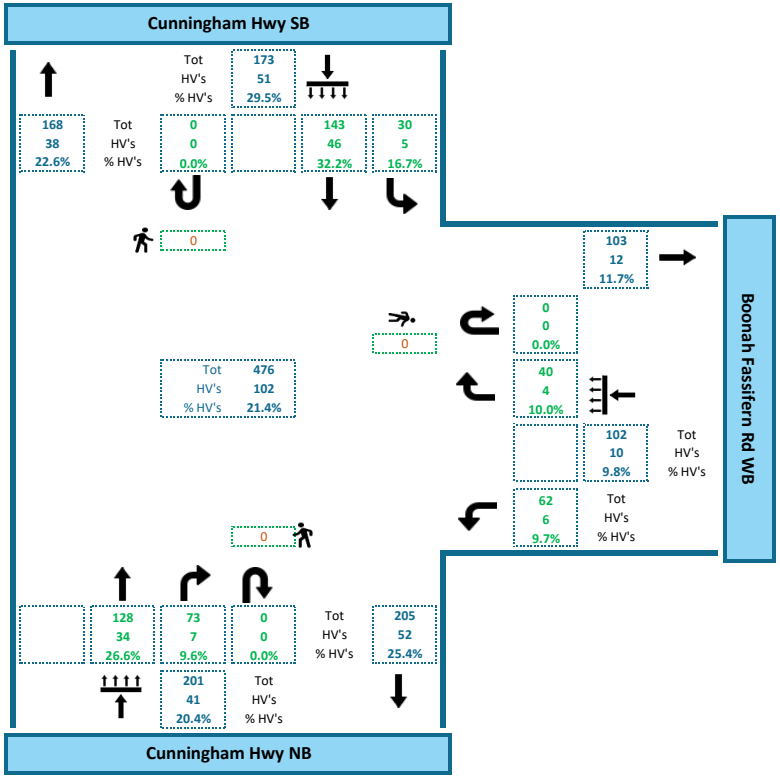


12_T2399.01 Brisbane St & Tubber St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	13		*AM Peak:*	*8:00 AM*	*to* *9:00 AM*
Location:	Cunningham Hwy & Boonah Fassifern Rd, Fassifern		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	8:00 AM	**to** 9:00 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

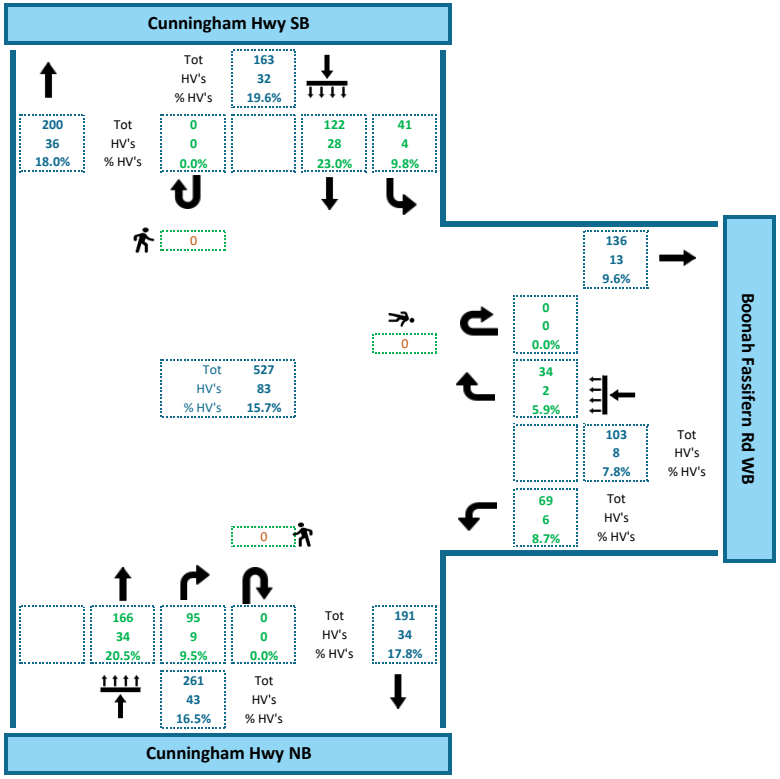


13_T2399.01 Cunningham Hwy & Boonah Fassifern Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	13		*AM Peak:*	*8:00 AM*	*to* *9:00 AM*
Location:	Cunningham Hwy & Boonah Fassifern Rd, Fassifern		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	**to** 4:00 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

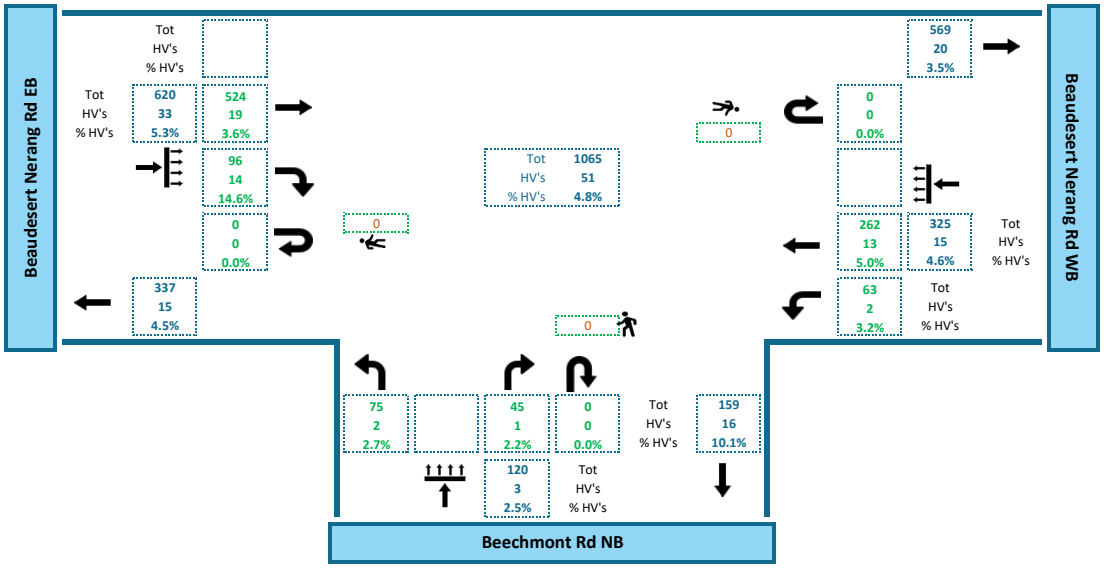


13_T2399.01 Cunningham Hwy & Boonah Fassifern Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	14	*AM Peak:*	*7:00 AM*	*to* *8:00 AM*
Location:	Beaudesert Nerang Rd & Beechmont Rd, Witheren	*PM Peak:*	*3:15 PM*	*to* *4:15 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)	
Data Period:	7:00 AM to 8:00 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine			
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

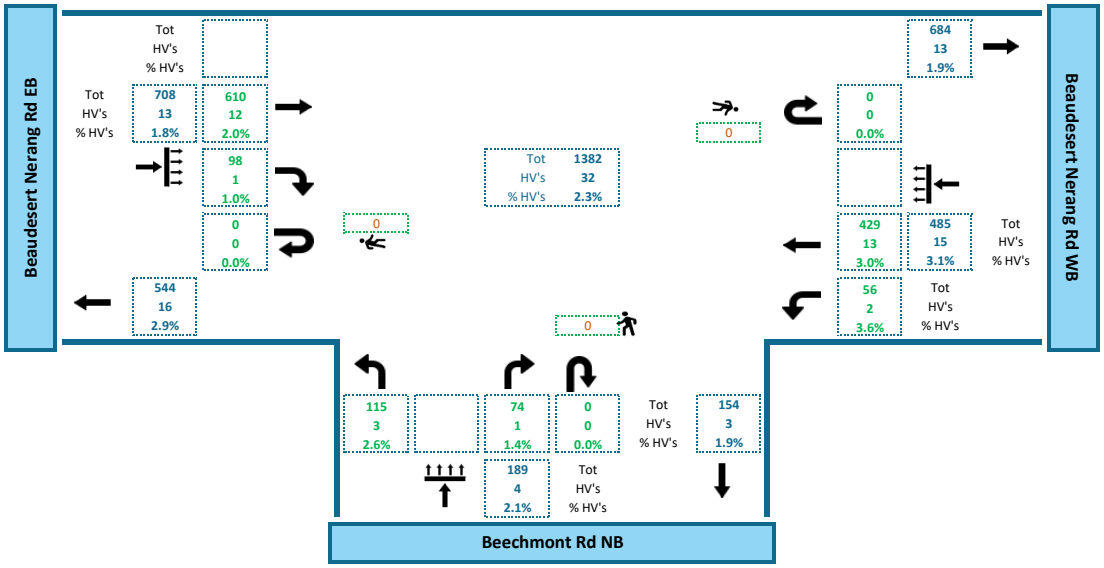


14_T2399.01 Beaudesert Nerang Rd & Beechmont Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	14	*AM Peak:*	*7:00 AM*	*to* *8:00 AM*
Location:	Beaudesert Nerang Rd & Beechmont Rd, Witheren	*PM Peak:*	*3:15 PM*	*to* *4:15 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)	
Data Period:	3:15 PM to 4:15 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine			
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

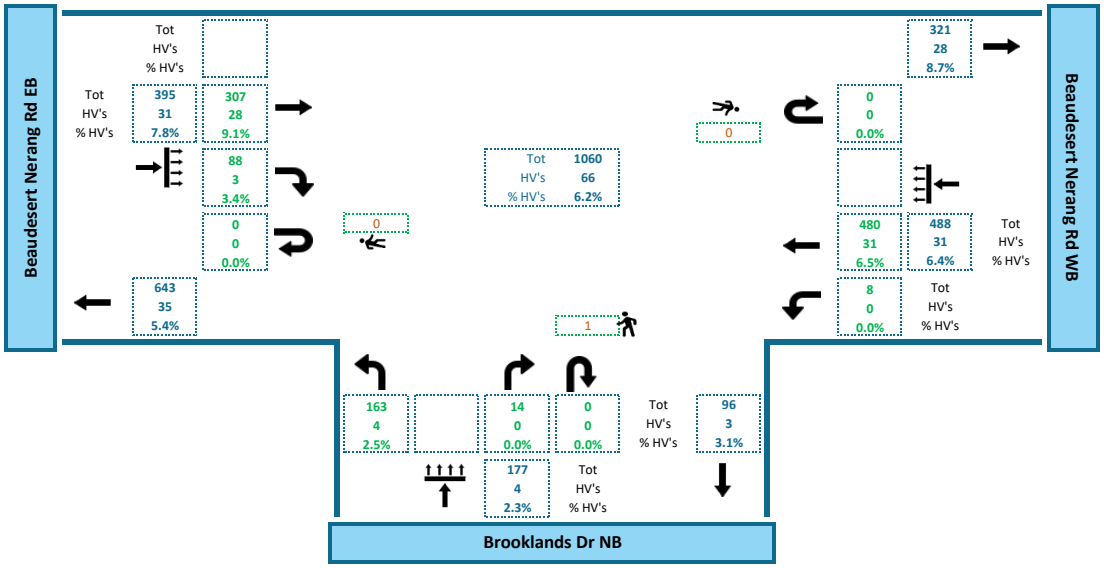


14_T2399.01 Beaudesert Nerang Rd & Beechmont Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	15	*AM Peak:*	*7:45 AM*	*to* *8:45 AM*
Location:	Beaudesert Nerang Rd & Brooklands Dr (west), Beaudesert	*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)	
Data Period:	7:45 AM to 8:45 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine			
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

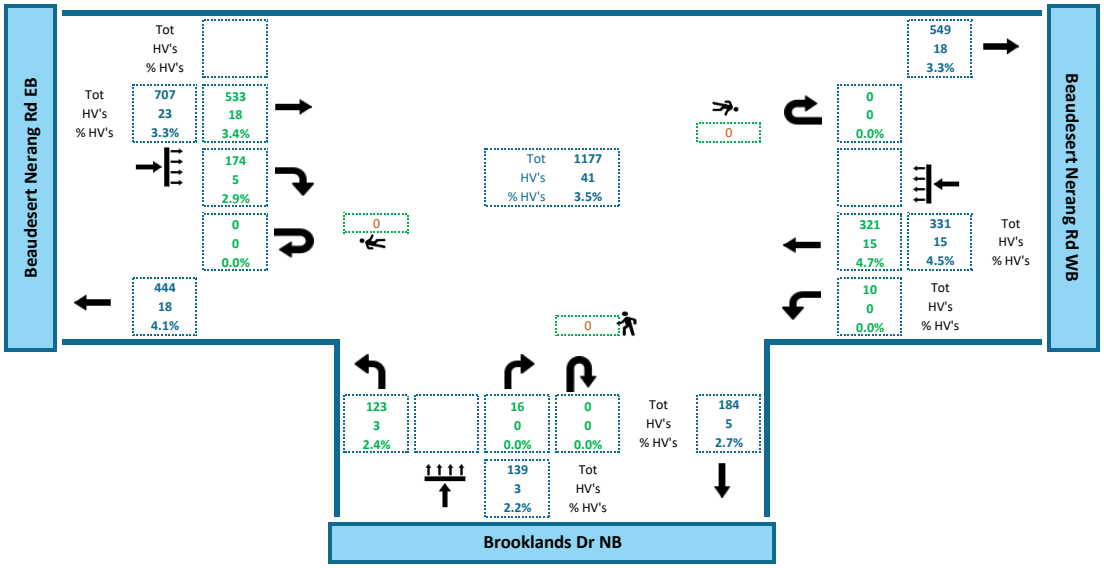


15_T2399.01 Beaudesert Nerang Rd & Brooklands Dr Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	15	*AM Peak:*	*7:45 AM to 8:45 AM*
Location:	Beaudesert Nerang Rd & Brooklands Dr (west), Beaudesert	*PM Peak:*	*3:00 PM to 4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	3:00 PM to 4:00 PM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

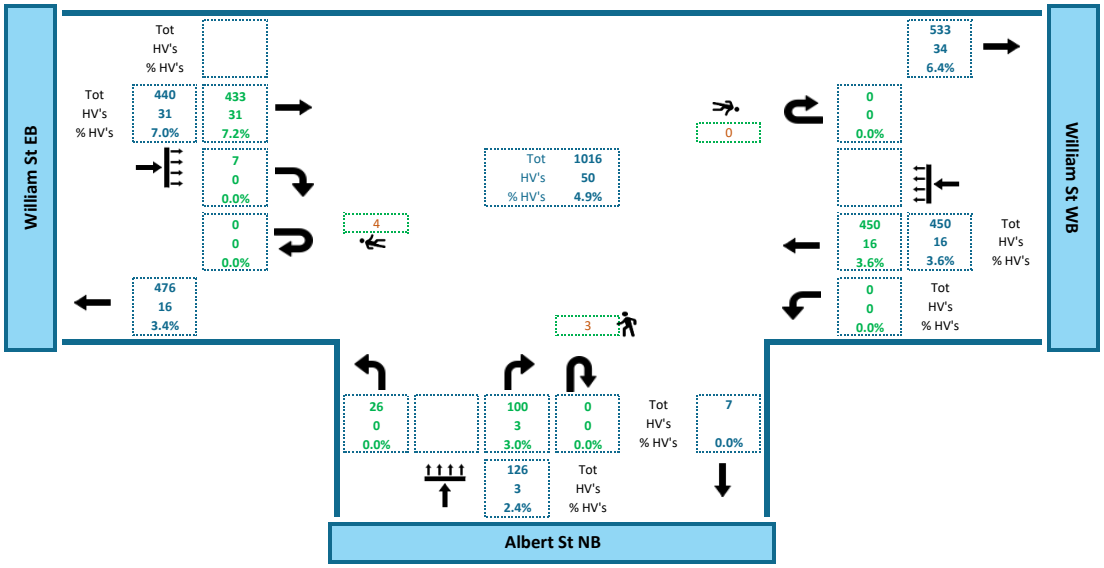


15_T2399.01 Beaudesert Nerang Rd & Brooklands Dr Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	16	*AM Peak:*	*8:00 AM to 9:00 AM*
Location:	William St & Albert St, Beaudesert	*PM Peak:*	*3:00 PM to 4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	8:00 AM to 9:00 AM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

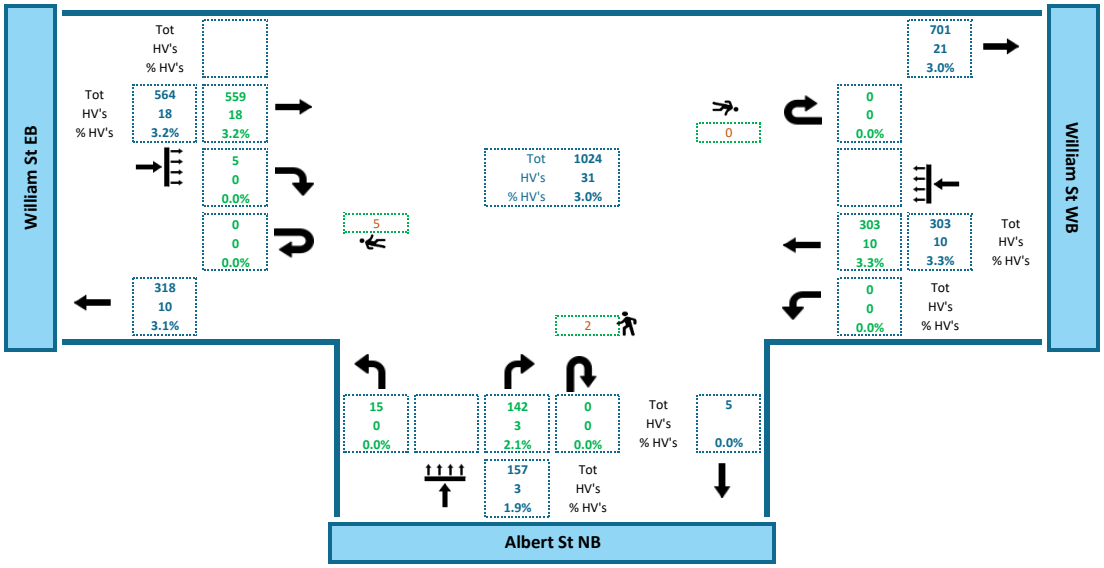


16_T2399.01 William St & Albert St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	16	*AM Peak:*	*8:00 AM to 9:00 AM*
Location:	William St & Albert St, Beaudesert	*PM Peak:*	*3:00 PM to 4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)
Data Period:	3:00 PM to 4:00 PM		*<=== Select start of one hour to be presented*
Weather:	Fine		
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*

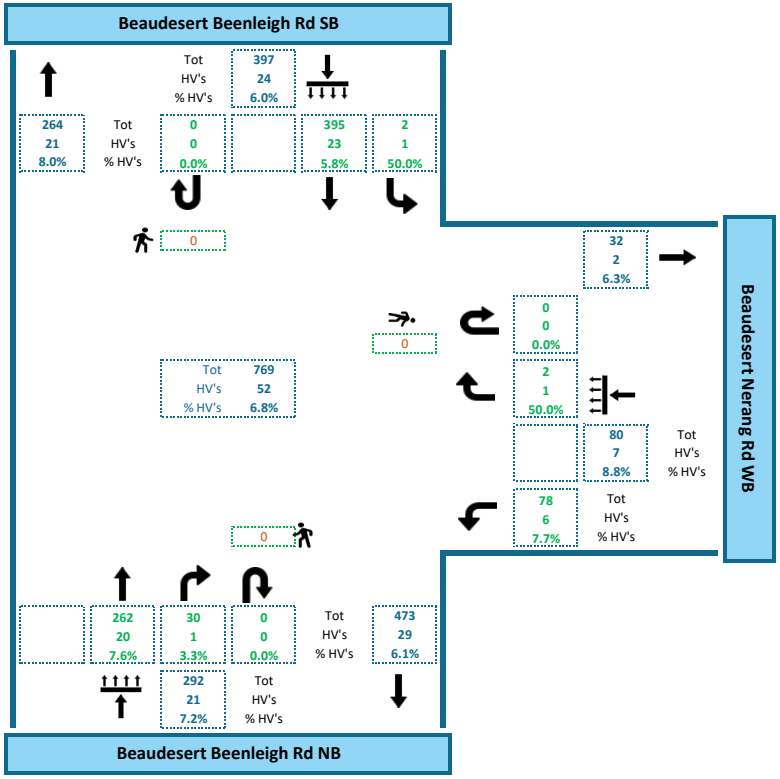


16_T2399.01 William St & Albert St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	17		AM Peak:	7:30 AM	to 8:30 AM
Location:	Beaudesert Beenleigh Rd & Beaudesert Nerang Rd, Tabragalba		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	7:30 AM to 8:30 AM	<=== Select start of one hour to be presented			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

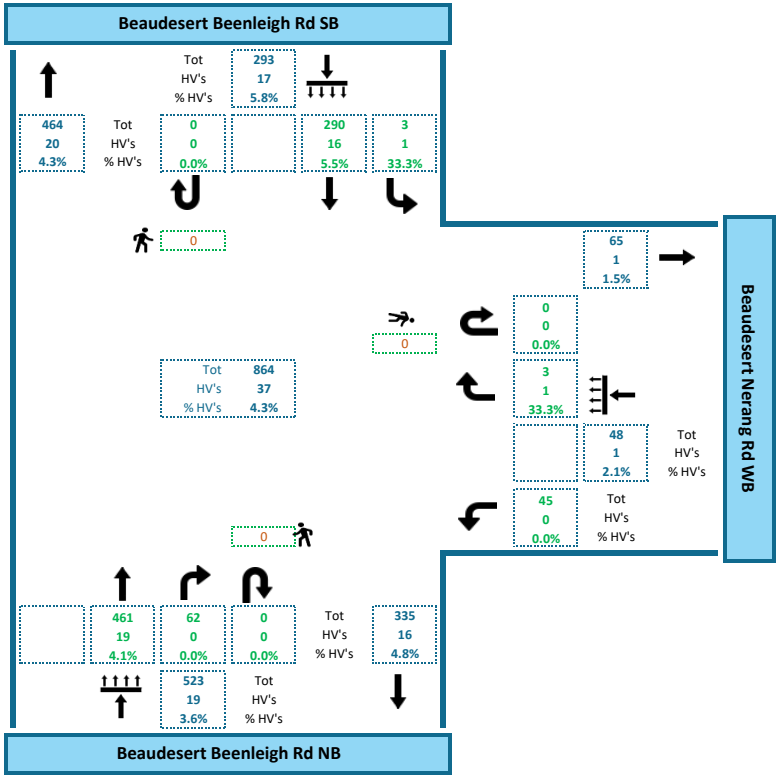


17_T2399.01 Beaudesert Beenleigh Rd & Beaudesert Nerang Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	17		*AM Peak:*	*7:30 AM*	*to* *8:30 AM*
Location:	Beaudesert Beenleigh Rd & Beaudesert Nerang Rd, Tabragalba		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM	to 4:00 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*			

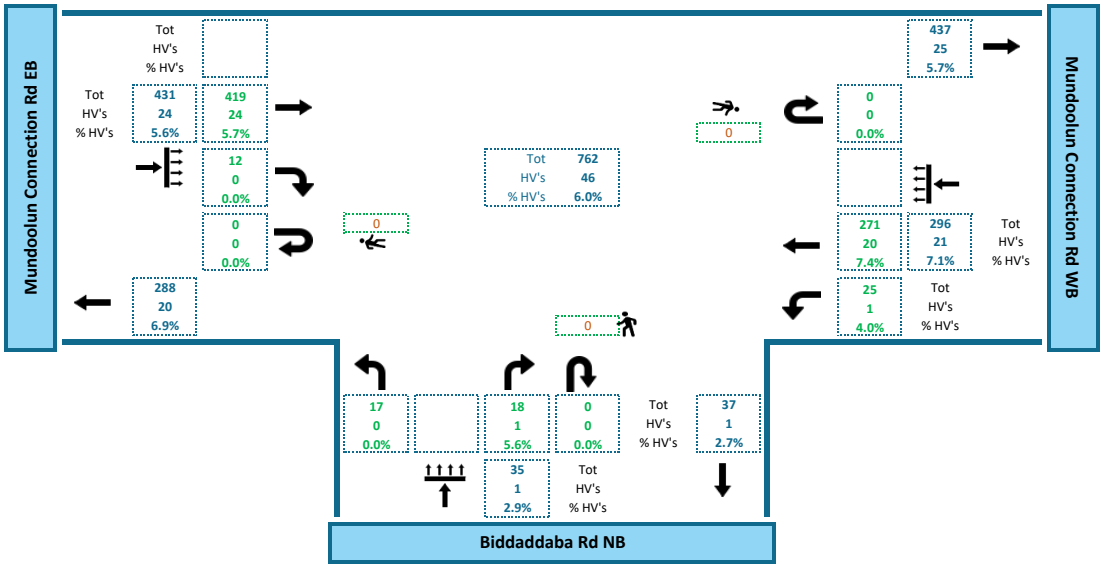


17_T2399.01 Beaudesert Beenleigh Rd & Beaudesert Nerang Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	18	*AM Peak:*	*7:15 AM* to	*8:15 AM*
Location:	Mundoolun Connection Rd & Biddaddaba Rd, Tamborine	*PM Peak:*	*4:00 PM* to	*5:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)	
Data Period:	7:15 AM to 8:15 AM	*<=== Select start of one hour to be presented*		
Weather:	Fine			
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

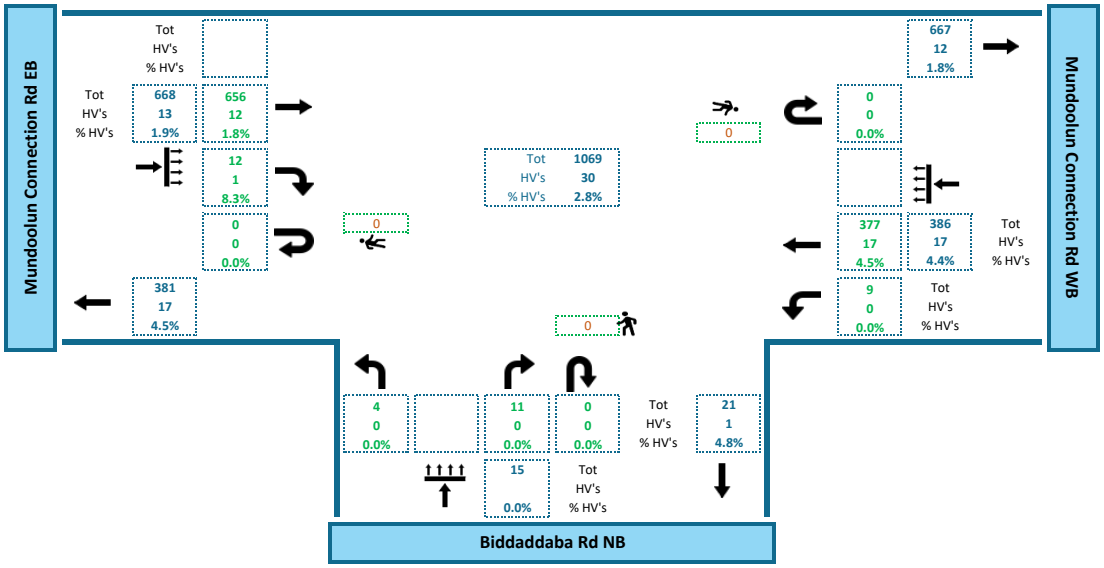


18_T2399.01 Mundoolun Connection Rd & Biddaddaba Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	18	*AM Peak:*	*7:15 AM* to	*8:15 AM*
Location:	Mundoolun Connection Rd & Biddaddaba Rd, Tamborine	*PM Peak:*	*4:00 PM* to	*5:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)	
Data Period:	4:00 PM to 5:00 PM	*<=== Select start of one hour to be presented*		
Weather:	Fine			
Vehicle Class:	ALL VEHICLES	*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

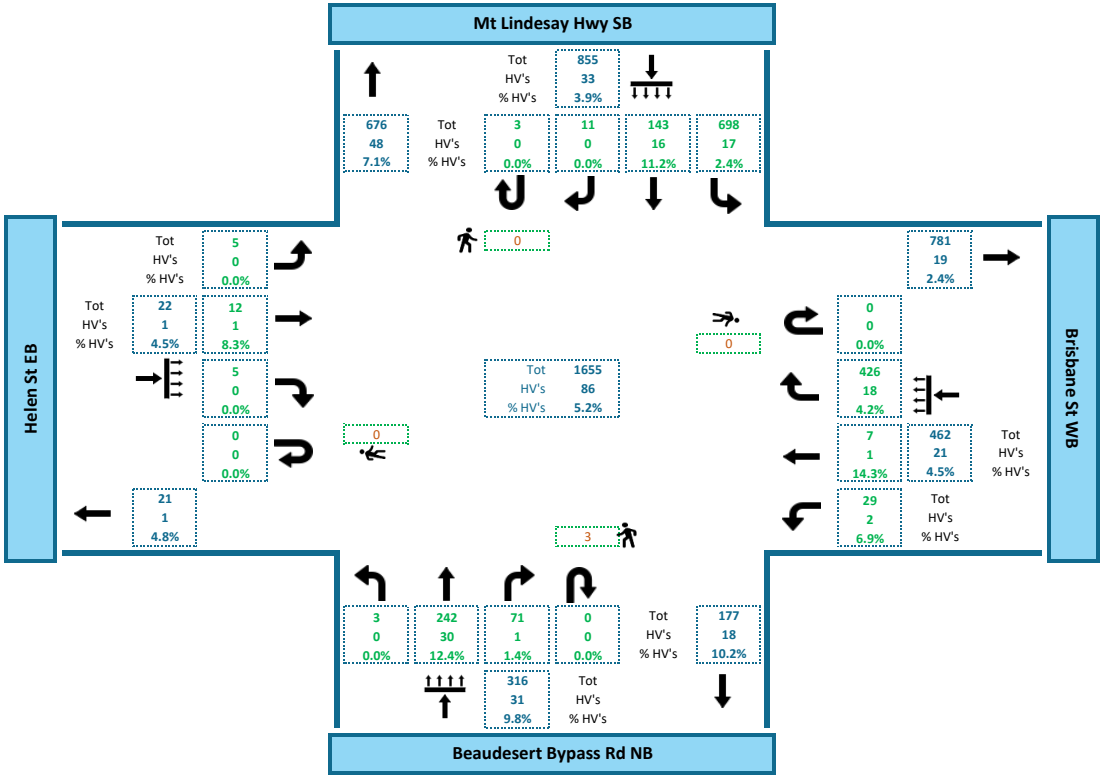


18_T2399.01 Mundoolun Connection Rd & Biddaddaba Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	19		AM Peak:	8:00 AM	to 9:00 AM
Location:	Mount Lindsay Hwy & Beaudesert Bypass Rd, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	8:00 AM to 9:00 AM	<=== Select start of one hour to be presented			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

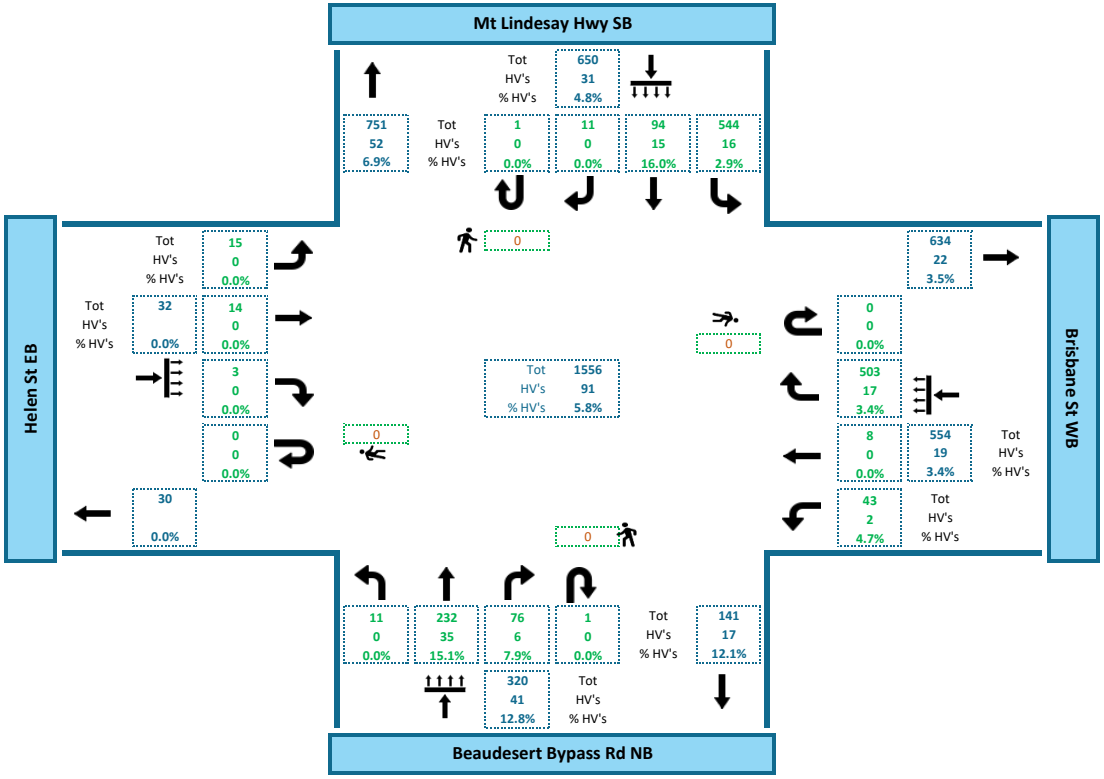


19_T2399.01 Mt Lindesay Hwy & Beaudesert Bypass Rd Intersection Report.xlsm

TDC Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	19		AM Peak:	8:00 AM	to 9:00 AM
Location:	Mount Lindsay Hwy & Beaudesert Bypass Rd, Beaudesert		PM Peak:	3:00 PM	to 4:00 PM
Date:	13/11/2024	Duration:	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM to 4:00 PM	<=== Select start of one hour to be presented			
Weather:	Fine				
Vehicle Class:	ALL VEHICLES	<=== Vehicle Class data can be changed to any vehicle class by selecting it here.			

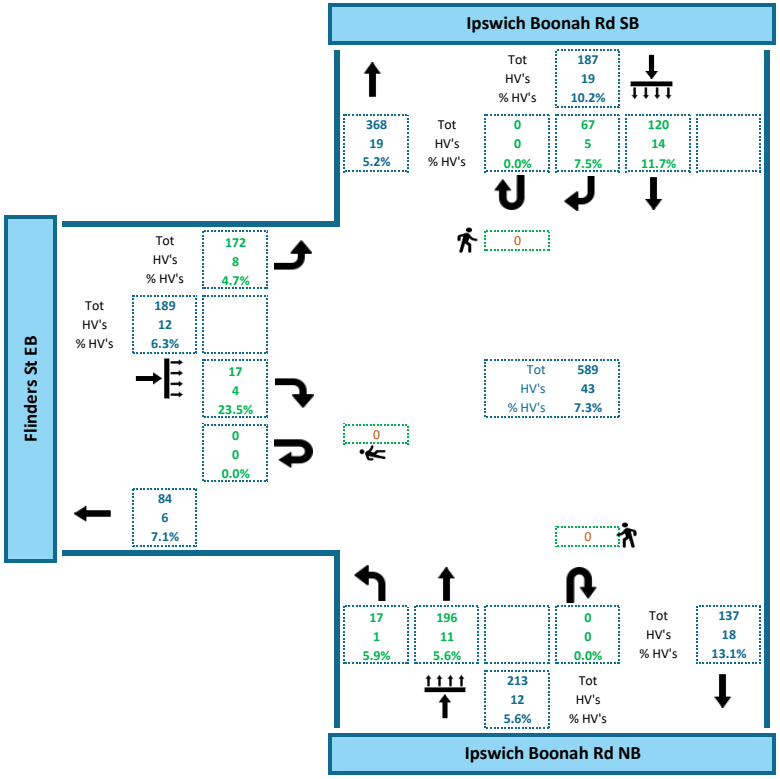


19_T2399.01 Mt Lindesay Hwy & Beaudesert Bypass Rd Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

Site ID:	20		*AM Peak:*	*7:15 AM*	*to* *8:15 AM*
Location:	Ipswich Boonah Rd & Flinders St, Peak Crossing		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	7:15 AM to 8:15 AM		*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		

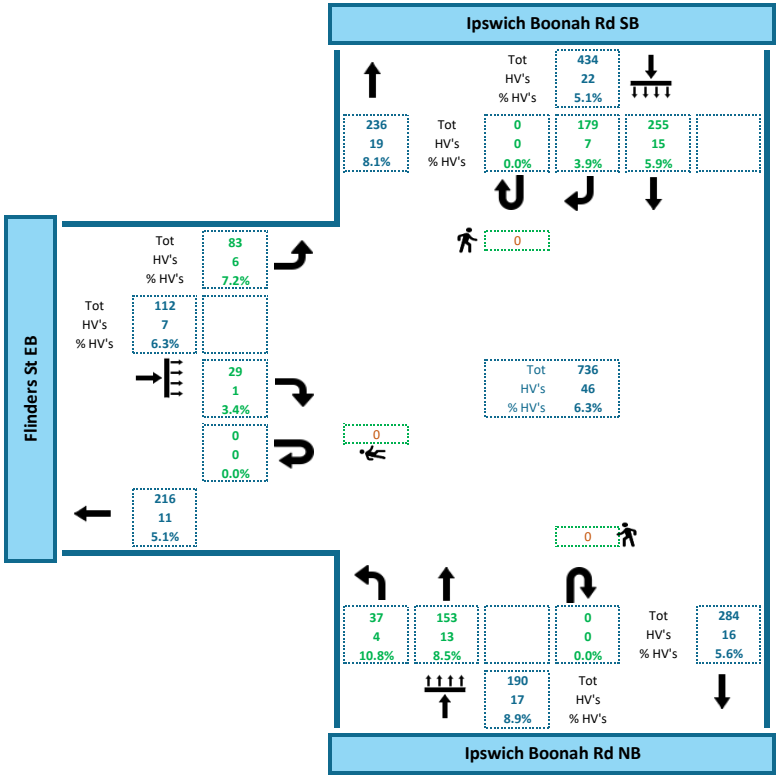


20_T2399.01 Ipswich Boonah Rd & Flinders St Intersection Report.xlsm

TDC
Traffic Data & Control

One Hour Turning Movement Count Summary

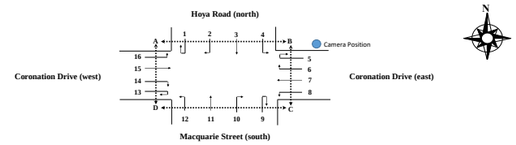
Site ID:	20		*AM Peak:*	*7:15 AM*	*to* *8:15 AM*
Location:	Ipswich Boonah Rd & Flinders St, Peak Crossing		*PM Peak:*	*3:00 PM*	*to* *4:00 PM*
Date:	13/11/2024	**Duration:**	06:00 AM to 09:00 AM (3 hours) and 03:00 PM to 06:00 PM (3 hours)		
Data Period:	3:00 PM to 4:00 PM		*<=== Select start of one hour to be presented*		
Weather:	Fine				
Vehicle Class:	ALL VEHICLES		*<=== Vehicle Class data can be changed to any vehicle class by selecting it here.*		



20_T2399.01 Ipswich Boonah Rd & Flinders St Intersection Report.xlsm

AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Coronation Drive/Hoya Road/Macquarie Street, Boonah
Day/Date: Thursday, 21 April 2022
AM Peak: *Hour ending - 9:00 AM*
PM Peak: *Hour ending - 3:30 PM*

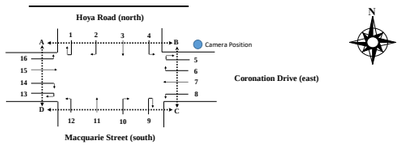


TIME (1/4 hr end)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8			
	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists
7:15 AM	0	0	**0**	0	3	0	**3**	0	3	1	**4**	0	3	0	**3**	0	0	0	**0**	0	1	0	**1**	0	23	6	**29**	0	1	0	**1**	0
7:30 AM	0	0	**0**	0	15	1	**16**	0	4	0	**4**	0	3	0	**3**	0	0	0	**0**	0	1	0	**1**	0	25	1	**26**	0	0	1	**1**	0
7:45 AM	0	0	**0**	0	13	0	**13**	0	3	0	**3**	0	4	1	**5**	0	0	0	**0**	0	2	0	**2**	0	27	4	**31**	0	4	0	**4**	0
8:00 AM	0	0	**0**	0	22	0	**22**	0	5	0	**5**	0	2	0	**2**	0	0	0	**0**	0	0	0	**0**	0	34	3	**37**	0	9	0	**9**	0
8:15 AM	0	0	**0**	0	17	0	**17**	0	8	0	**8**	0	2	0	**2**	0	0	0	**0**	0	3	0	**3**	0	43	0	**43**	0	11	0	**11**	0
8:30 AM	0	0	**0**	0	21	0	**21**	1	19	1	**20**	0	1	0	**1**	0	0	0	**0**	0	2	0	**2**	0	37	6	**43**	0	21	0	**21**	0
8:45 AM	0	0	**0**	0	19	0	**19**	0	6	1	**7**	0	4	0	**4**	0	0	0	**0**	0	2	0	**2**	0	50	5	**55**	0	16	0	**16**	0
9:00 AM	0	0	**0**	0	25	2	**27**	0	8	0	**8**	0	0	0	**0**	0	0	0	**0**	0	3	0	**3**	0	42	3	**45**	0	7	0	**7**	0
2 hr Total	**0**	**0**	**0**	**0**	**135**	**3**	**138**	**1**	**58**	**3**	**59**	**0**	**19**	**1**	**20**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**14**	**0**	**281**	**28**	**309**	**0**	**69**	**1**	**70**	**0**
AM Peak	**0**	**0**	**0**	**0**	**82**	**2**	**84**	**1**	**41**	**2**	**43**	**0**	**7**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**10**	**0**	**172**	**14**	**186**	**0**	**55**	**0**	**55**	**0**

TIME (1/4 hr end)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8			
	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists
2:15 PM	0	0	**0**	0	8	1	**9**	0	2	0	**2**	0	2	2	**4**	0	0	0	**0**	0	2	0	**2**	0	27	2	**29**	0	3	1	**4**	0
2:30 PM	0	0	**0**	0	9	0	**9**	0	1	1	**2**	0	1	0	**1**	0	0	0	**0**	0	2	0	**2**	0	33	5	**38**	0	3	0	**3**	0
2:45 PM	0	0	**0**	0	16	0	**16**	0	4	0	**4**	0	3	0	**3**	0	0	0	**0**	0	3	1	**4**	0	43	6	**49**	0	7	0	**7**	0
3:00 PM	0	0	**0**	0	20	0	**20**	0	10	0	**10**	0	2	0	**2**	0	0	0	**0**	0	3	0	**3**	0	52	4	**56**	0	7	0	**7**	0
3:15 PM	0	0	**0**	0	18	1	**19**	0	9	9	**18**	0	3	1	**4**	0	0	0	**0**	0	2	0	**2**	0	37	10	**47**	0	7	0	**7**	0
3:30 PM	0	0	**0**	0	16	0	**16**	0	2	0	**2**	0	3	1	**4**	0	0	0	**0**	0	4	0	**4**	0	49	5	**54**	0	8	0	**8**	0
3:45 PM	0	0	**0**	0	9	0	**9**	0	3	0	**3**	0	3	0	**3**	0	0	0	**0**	0	2	0	**2**	0	49	2	**51**	0	7	1	**8**	0
4:00 PM	0	0	**0**	0	10	0	**10**	0	4	0	**4**	0	4	0	**4**	0	0	0	**0**	0	1	0	**1**	0	40	3	**43**	0	5	1	**6**	0
2 hr Total	**0**	**0**	**0**	**0**	**106**	**2**	**108**	**0**	**38**	**10**	**45**	**0**	**21**	**4**	**25**	**0**	**0**	**0**	**0**	**0**	**19**	**1**	**20**	**0**	**335**	**37**	**367**	**0**	**47**	**3**	**50**	**0**
PM Peak	**0**	**0**	**0**	**0**	**70**	**1**	**71**	**0**	**25**	**9**	**34**	**0**	**11**	**2**	**13**	**0**	**0**	**0**	**0**	**0**	**12**	**1**	**13**	**0**	**181**	**25**	**206**	**0**	**25**	**0**	**29**	**0**

AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Coronation Drive/Hoya Road/Macquarie Street, Boonah
Day/Date: Thursday, 21 April 2022
AM Peak: *Hour ending - 9:00 AM*
PM Peak: *Hour ending - 3:30 PM*



TIME (1/4 hr end)	Movement 9				Movement 10				Movement 11				Movement 12				Movement 13				Movement 14				Movement 15				Movement 16				Pedestrian Movements													
																																	A - B		B - A		B - C		C - B		C - D		D - C		D - A		A - D	
	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists
7:15 AM	0	0	0	0	2	0	2	0	3	0	3	0	2	0	2	0	0	0	0	0	5	0	5	0	38	2	40	0	4	1	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	3	1	4	0	1	0	1	0	1	0	1	0	0	0	0	0	3	0	3	0	30	4	34	0	10	1	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	4	2	6	0	1	0	1	0	1	0	1	0	0	0	0	0	6	0	6	0	30	7	37	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	1	0	1	0	1	0	2	0	2	0	0	0	0	0	8	0	8	0	27	0	27	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	7	0	7	0	1	0	1	0	3	0	3	0	0	0	0	0	14	0	14	0	44	9	53	0	8	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	4	0	4	0	2	0	2	0	12	1	13	0	0	0	0	0	22	5	27	0	29	3	32	0	12	2	14	0	0	0	0	0	2	0	0	0	1	0	1	0	0	0
8:45 AM	0	0	0	0	5	0	5	0	4	0	4	0	5	1	6	0	0	0	0	0	32	4	36	0	36	6	42	0	25	7	32	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	4	2	6	0	2	1	3	0	8	1	9	0	0	0	0	0	11	0	11	0	50	3	53	0	14	2	16	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2 hr Total	0	0	0	0	30	5	35	0	15	1	16	0	34	3	37	0	0	0	0	0	101	9	110	0	264	34	310	0	88	14	102	0	0	0	1	0	5	0	1	0	2	0	4	0	1	0	0	0
AM Peak	0	0	0	0	20	2	22	0	9	1	10	0	28	3	31	0	0	0	0	0	79	9	88	0	159	21	180	0	59	11	70	0	0	0	1	0	5	0	1	0	1	0	3	0	1	0	0	0

TIME (1/4 hr end)	Movement 9				Movement 10				Movement 11				Movement 12				Movement 13				Movement 14				Movement 15				Movement 16				Pedestrian Movements													
																																	A - B		B - A		B - C		C - B		C - D		D - C		D - A		A - D	
	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists	Pedestrians	Cyclists
2:15 PM	0	0	0	0	1	0	1	0	3	0	3	0	5	0	5	0	0	0	0	0	6	1	7	0	58	8	66	0	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	1	2	3	0	1	0	1	0	5	1	6	0	0	0	0	0	4	0	4	0	44	5	49	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	4	0	4	0	1	0	1	0	7	1	8	0	0	0	0	0	8	0	8	0	50	7	57	0	20	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	4	0	4	0	3	0	3	0	3	0	3	0	0	0	0	0	10	0	10	0	34	4	38	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	5	0	5	0	14	1	15	0	23	0	23	0	0	0	0	0	29	2	31	0	66	5	71	0	25	0	25	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	6	1	7	0	7	0	7	0	16	0	16	0	0	0	0	0	10	1	11	0	60	8	68	0	23	1	24	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0
3:45 PM	0	0	0	0	9	1	10	0	3	1	4	0	8	0	8	0	0	0	0	0	2	2	4	0	43	2	45	0	13	1	14	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4:00 PM	0	0	0	0	4	0	4	0	5	0	5	0	3	0	3	0	0	0	0	0	2	0	2	0	42	2	44	0	24	1	25	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2 hr Total	0	0	0	0	34	4	38	0	37	2	39	0	70	2	72	0	0	0	0	0	70	7	77	0	397	41	438	0	133	4	137	0	0	0	0	0	0	0	17	0	0	1	0	1	0	0
PM Peak	0	0	0	0	19	1	20	0	26	1	26	0	49	1	50	0	0	0	0	0	57	3	60	0	210	24	234	0	77	1	78	0	0	0	0	0	0	0	16	0	0	0	0	1	0	0

Attachment C:

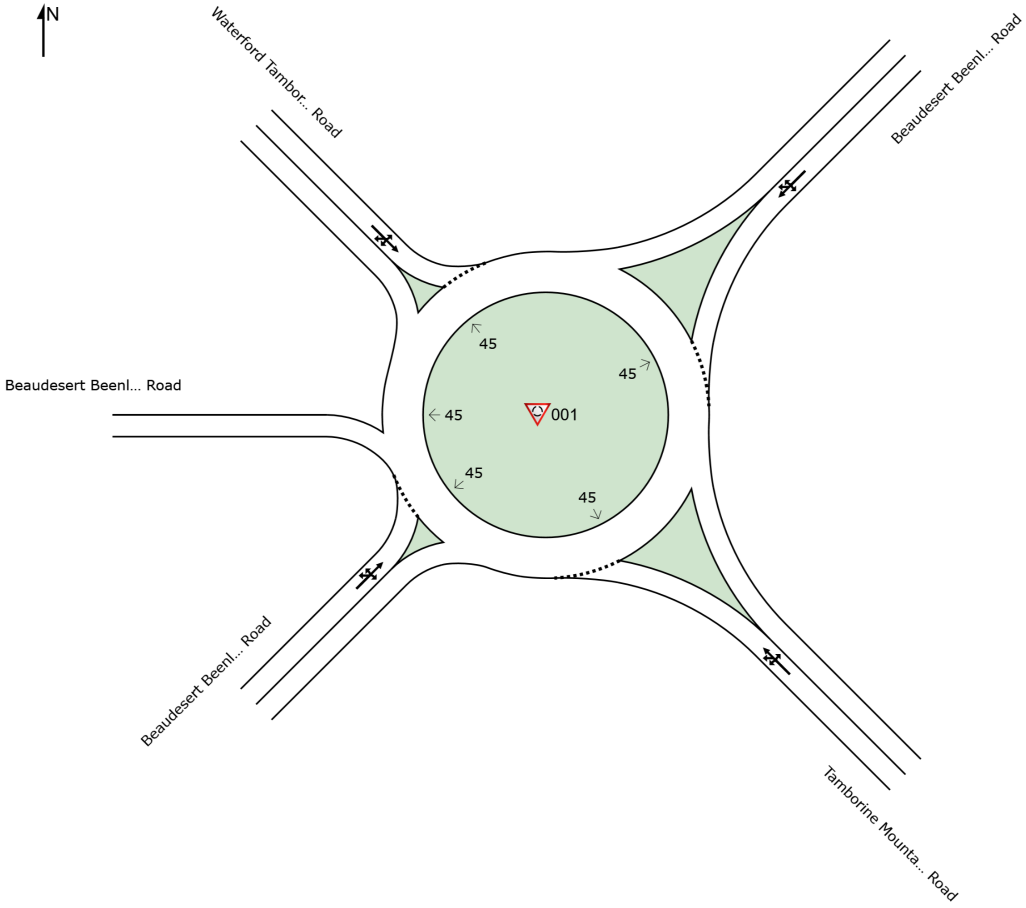
SIDRA Outputs

SITE LAYOUT

Site: 001 [2024AM_Survey (Site Folder: Existing)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 11:54:20 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2024AM_Survey (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	63	5.0	63	5.0	0.167	4.6	LOS A	1.0	7.0	0.51	0.54	0.51	53.0
21a	L1	All MCs	3	5.0	3	5.0	0.167	3.7	LOS A	1.0	7.0	0.51	0.54	0.51	33.5
22	T1	All MCs	65	5.0	65	5.0	0.167	4.0	LOS A	1.0	7.0	0.51	0.54	0.51	53.4
23	R2	All MCs	62	5.0	62	5.0	0.167	11.2	LOS A	1.0	7.0	0.51	0.54	0.51	52.3
Approach			194	5.0	194	5.0	0.167	6.5	LOS A	1.0	7.0	0.51	0.54	0.51	52.7
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	52	5.0	52	5.0	0.208	4.3	LOS A	1.3	9.2	0.50	0.45	0.50	54.0
25	T1	All MCs	178	5.0	178	5.0	0.208	3.8	LOS A	1.3	9.2	0.50	0.45	0.50	54.4
26a	R1	All MCs	1	5.0	1	5.0	0.208	9.7	LOS A	1.3	9.2	0.50	0.45	0.50	37.3
26	R2	All MCs	19	5.0	19	5.0	0.208	11.0	LOS A	1.3	9.2	0.50	0.45	0.50	53.3
Approach			249	5.0	249	5.0	0.208	4.5	LOS A	1.3	9.2	0.50	0.45	0.50	54.2
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	22	5.0	22	5.0	0.224	4.4	LOS A	1.3	9.8	0.51	0.58	0.51	51.7
28	T1	All MCs	73	5.0	73	5.0	0.224	3.8	LOS A	1.3	9.8	0.51	0.58	0.51	52.1
29	R2	All MCs	169	5.0	169	5.0	0.224	11.1	LOS A	1.3	9.8	0.51	0.58	0.51	51.1
29b	R3	All MCs	3	5.0	3	5.0	0.224	12.4	LOS A	1.3	9.8	0.51	0.58	0.51	34.6
Approach			267	5.0	267	5.0	0.224	8.6	LOS A	1.3	9.8	0.51	0.58	0.51	51.3
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	15	5.0	15	5.0	0.311	3.9	LOS A	2.1	15.2	0.39	0.42	0.39	36.0
30	L2	All MCs	155	5.0	155	5.0	0.311	3.6	LOS A	2.1	15.2	0.39	0.42	0.39	54.2
31	T1	All MCs	194	5.0	194	5.0	0.311	3.1	LOS A	2.1	15.2	0.39	0.42	0.39	54.6
32	R2	All MCs	68	5.0	68	5.0	0.311	10.3	LOS A	2.1	15.2	0.39	0.42	0.39	53.5
Approach			432	5.0	432	5.0	0.311	4.4	LOS A	2.1	15.2	0.39	0.42	0.39	53.8
All Vehicles			1142	5.0	1142	5.0	0.311	5.8	LOS A	2.1	15.2	0.46	0.48	0.46	53.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 8:52:44 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2024PM_Survey (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	75	5.0	75	5.0	0.284	9.2	LOS A	2.1	15.2	0.88	0.73	0.88	50.8
21a	L1	All MCs	7	5.0	7	5.0	0.284	8.4	LOS A	2.1	15.2	0.88	0.73	0.88	31.8
22	T1	All MCs	74	5.0	74	5.0	0.284	8.7	LOS A	2.1	15.2	0.88	0.73	0.88	51.2
23	R2	All MCs	44	5.0	44	5.0	0.284	15.9	LOS B	2.1	15.2	0.88	0.73	0.88	50.2
Approach			200	5.0	200	5.0	0.284	10.5	LOS A	2.1	15.2	0.88	0.73	0.88	50.2
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	101	5.0	101	5.0	0.542	7.5	LOS A	4.9	35.6	0.82	0.71	0.92	52.4
25	T1	All MCs	408	5.0	408	5.0	0.542	6.9	LOS A	4.9	35.6	0.82	0.71	0.92	52.8
26a	R1	All MCs	3	5.0	3	5.0	0.542	12.8	LOS A	4.9	35.6	0.82	0.71	0.92	35.9
26	R2	All MCs	17	5.0	17	5.0	0.542	14.1	LOS A	4.9	35.6	0.82	0.71	0.92	51.8
Approach			529	5.0	529	5.0	0.542	7.3	LOS A	4.9	35.6	0.82	0.71	0.92	52.7
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	1	5.0	1	5.0	0.386	4.4	LOS A	2.7	19.8	0.55	0.63	0.55	49.7
28	T1	All MCs	1	5.0	1	5.0	0.386	3.8	LOS A	2.7	19.8	0.55	0.63	0.55	50.0
29	R2	All MCs	307	5.0	307	5.0	0.386	11.0	LOS A	2.7	19.8	0.55	0.63	0.55	49.1
29b	R3	All MCs	168	5.0	168	5.0	0.386	12.3	LOS A	2.7	19.8	0.55	0.63	0.55	33.4
Approach			478	5.0	478	5.0	0.386	11.5	LOS A	2.7	19.8	0.55	0.63	0.55	44.2
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	15	5.0	15	5.0	0.333	4.8	LOS A	2.2	15.9	0.55	0.51	0.55	35.4
30	L2	All MCs	158	5.0	158	5.0	0.333	4.5	LOS A	2.2	15.9	0.55	0.51	0.55	53.4
31	T1	All MCs	152	5.0	152	5.0	0.333	4.0	LOS A	2.2	15.9	0.55	0.51	0.55	53.9
32	R2	All MCs	74	5.0	74	5.0	0.333	11.2	LOS A	2.2	15.9	0.55	0.51	0.55	52.7
Approach			398	5.0	398	5.0	0.333	5.6	LOS A	2.2	15.9	0.55	0.51	0.55	52.9
All Vehicles			1605	5.0	1605	5.0	0.542	8.5	LOS A	4.9	35.6	0.68	0.64	0.71	49.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 8:52:45 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2041AM_Design (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	47	5.0	47	5.0	0.159	5.9	LOS A	1.0	7.6	0.70	0.64	0.70	52.2
21a	L1	All MCs	2	5.0	2	5.0	0.159	5.1	LOS A	1.0	7.6	0.70	0.64	0.70	32.9
22	T1	All MCs	49	5.0	49	5.0	0.159	5.4	LOS A	1.0	7.6	0.70	0.64	0.70	52.6
23	R2	All MCs	46	5.0	46	5.0	0.159	12.6	LOS A	1.0	7.6	0.70	0.64	0.70	51.5
Approach			145	5.0	145	5.0	0.159	7.8	LOS A	1.0	7.6	0.70	0.64	0.70	51.8
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	48	5.0	48	5.0	0.291	7.0	LOS A	2.2	15.7	0.83	0.68	0.83	52.3
25	T1	All MCs	165	5.0	165	5.0	0.291	6.5	LOS A	2.2	15.7	0.83	0.68	0.83	52.7
26a	R1	All MCs	1	5.0	1	5.0	0.291	12.4	LOS A	2.2	15.7	0.83	0.68	0.83	35.8
26	R2	All MCs	18	5.0	18	5.0	0.291	13.7	LOS A	2.2	15.7	0.83	0.68	0.83	51.7
Approach			233	5.0	233	5.0	0.291	7.2	LOS A	2.2	15.7	0.83	0.68	0.83	52.5
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	54	5.0	54	5.0	0.612	7.5	LOS A	6.1	44.6	0.81	0.76	0.93	50.1
28	T1	All MCs	177	5.0	177	5.0	0.612	6.9	LOS A	6.1	44.6	0.81	0.76	0.93	50.5
29	R2	All MCs	414	5.0	414	5.0	0.612	14.1	LOS A	6.1	44.6	0.81	0.76	0.93	49.5
29b	R3	All MCs	7	5.0	7	5.0	0.612	15.4	LOS B	6.1	44.6	0.81	0.76	0.93	33.2
Approach			652	5.0	652	5.0	0.612	11.6	LOS A	6.1	44.6	0.81	0.76	0.93	49.7
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	23	5.0	23	5.0	0.476	3.8	LOS A	4.0	29.0	0.43	0.41	0.43	35.9
30	L2	All MCs	246	5.0	246	5.0	0.476	3.6	LOS A	4.0	29.0	0.43	0.41	0.43	54.0
31	T1	All MCs	308	5.0	308	5.0	0.476	3.0	LOS A	4.0	29.0	0.43	0.41	0.43	54.5
32	R2	All MCs	108	5.0	108	5.0	0.476	10.3	LOS A	4.0	29.0	0.43	0.41	0.43	53.3
Approach			686	5.0	686	5.0	0.476	4.4	LOS A	4.0	29.0	0.43	0.41	0.43	53.6
All Vehicles			1716	5.0	1716	5.0	0.612	7.8	LOS A	6.1	44.6	0.65	0.60	0.70	51.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2041PM_Design (Site Folder: Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	132	5.0	132	5.0	1.074	166.2	LOS F	37.0	270.2	1.00	2.37	4.55	16.4
21a	L1	All MCs	13	5.0	13	5.0	1.074	165.4	LOS F	37.0	270.2	1.00	2.37	4.55	9.2
22	T1	All MCs	129	5.0	129	5.0	1.074	165.7	LOS F	37.0	270.2	1.00	2.37	4.55	16.4
23	R2	All MCs	78	5.0	78	5.0	1.074	172.9	LOS F	37.0	270.2	1.00	2.37	4.55	16.3
Approach			352	5.0	352	5.0	1.074	167.5	LOS F	37.0	270.2	1.00	2.37	4.55	16.1
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	88	5.0	88	5.0	1.005	86.9	LOS F	30.6	223.6	1.00	2.05	3.65	25.1
25	T1	All MCs	359	5.0	359	5.0	1.005	86.4	LOS F	30.6	223.6	1.00	2.05	3.65	25.2
26a	R1	All MCs	3	5.0	3	5.0	1.005	92.3	LOS F	30.6	223.6	1.00	2.05	3.65	15.1
26	R2	All MCs	15	5.0	15	5.0	1.005	93.6	LOS F	30.6	223.6	1.00	2.05	3.65	25.0
Approach			465	5.0	465	5.0	1.005	86.7	LOS F	30.6	223.6	1.00	2.05	3.65	25.1
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	1	5.0	1	5.0	0.848	12.6	LOS A	16.0	116.8	1.00	1.00	1.45	45.8
28	T1	All MCs	2	5.0	2	5.0	0.848	12.1	LOS A	16.0	116.8	1.00	1.00	1.45	46.1
29	R2	All MCs	591	5.0	591	5.0	0.848	19.3	LOS B	16.0	116.8	1.00	1.00	1.45	45.3
29b	R3	All MCs	323	5.0	323	5.0	0.848	20.6	LOS B	16.0	116.8	1.00	1.00	1.45	30.2
Approach			917	5.0	917	5.0	0.848	19.7	LOS B	16.0	116.8	1.00	1.00	1.45	40.6
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	22	5.0	22	5.0	0.621	8.9	LOS A	6.6	47.9	0.88	0.79	1.06	33.6
30	L2	All MCs	236	5.0	236	5.0	0.621	8.7	LOS A	6.6	47.9	0.88	0.79	1.06	51.2
31	T1	All MCs	226	5.0	226	5.0	0.621	8.1	LOS A	6.6	47.9	0.88	0.79	1.06	51.6
32	R2	All MCs	109	5.0	109	5.0	0.621	15.3	LOS B	6.6	47.9	0.88	0.79	1.06	50.6
Approach			594	5.0	594	5.0	0.621	9.7	LOS A	6.6	47.9	0.88	0.79	1.06	50.7
All Vehicles			2327	5.0	2327	5.0	1.074	52.9	LOS D	37.0	270.2	0.97	1.36	2.26	30.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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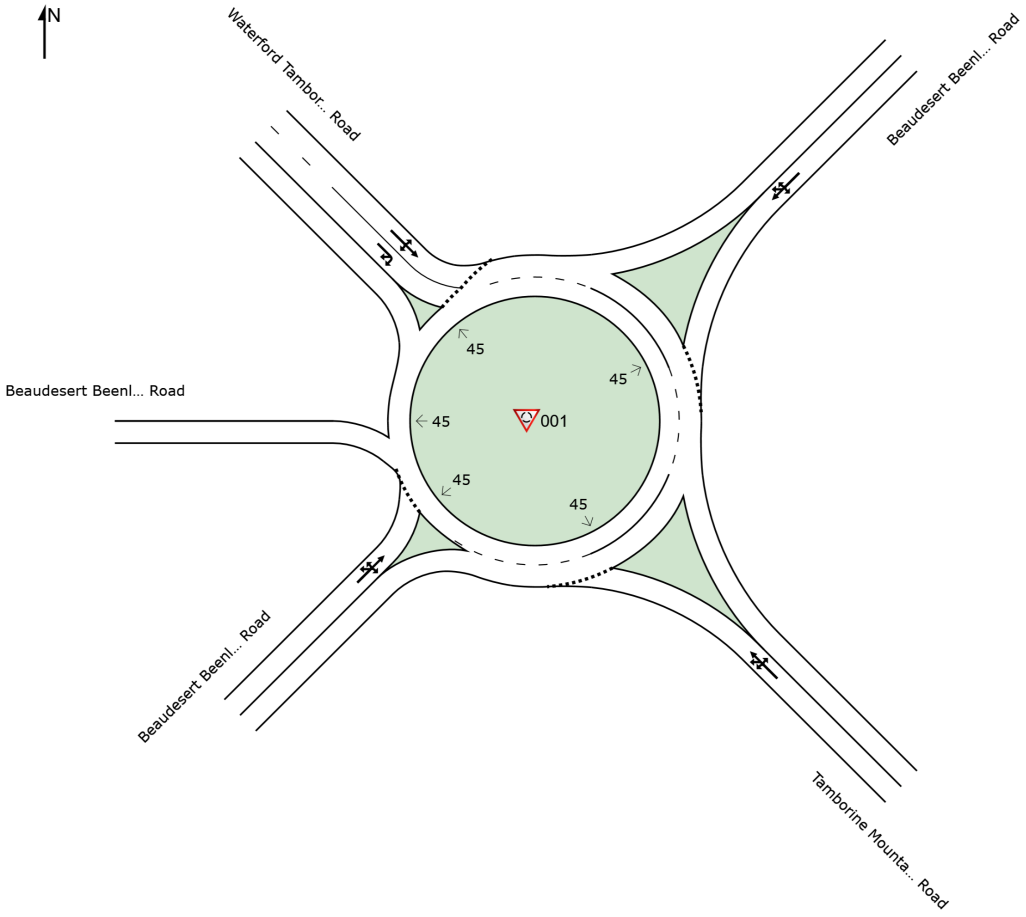
SITE LAYOUT

Site: 001 [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 001 [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	63	5.0	63	5.0	0.185	4.2	LOS A	0.8	5.6	0.42	0.54	0.42	53.4
21a	L1	All MCs	3	5.0	3	5.0	0.185	3.4	LOS A	0.8	5.6	0.42	0.54	0.42	33.8
22	T1	All MCs	65	5.0	65	5.0	0.185	3.6	LOS A	0.8	5.6	0.42	0.54	0.42	53.8
23	R2	All MCs	62	5.0	62	5.0	0.185	10.9	LOS A	0.8	5.6	0.42	0.54	0.42	52.7
Approach			194	5.0	194	5.0	0.185	6.1	LOS A	0.8	5.6	0.42	0.54	0.42	53.0
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	52	5.0	52	5.0	0.233	4.1	LOS A	1.0	7.6	0.42	0.43	0.42	54.3
25	T1	All MCs	178	5.0	178	5.0	0.233	3.5	LOS A	1.0	7.6	0.42	0.43	0.42	54.8
26a	R1	All MCs	1	5.0	1	5.0	0.233	9.5	LOS A	1.0	7.6	0.42	0.43	0.42	37.6
26	R2	All MCs	19	5.0	19	5.0	0.233	10.8	LOS A	1.0	7.6	0.42	0.43	0.42	53.6
Approach			249	5.0	249	5.0	0.233	4.2	LOS A	1.0	7.6	0.42	0.43	0.42	54.6
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	22	5.0	22	5.0	0.083	4.4	LOS A	0.4	3.2	0.46	0.42	0.46	54.4
28	T1	All MCs	73	5.0	73	5.0	0.083	3.7	LOS A	0.4	3.2	0.46	0.42	0.46	54.9
29	R2	All MCs	169	5.0	169	5.0	0.115	10.5	LOS A	0.7	4.9	0.45	0.61	0.45	49.6
29b	R3	All MCs	3	5.0	3	5.0	0.115	11.9	LOS A	0.7	4.9	0.45	0.61	0.45	44.7
Approach			267	5.0	267	5.0	0.115	8.2	LOS A	0.7	4.9	0.45	0.54	0.45	51.2
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	15	5.0	15	5.0	0.310	3.9	LOS A	2.0	14.8	0.38	0.42	0.38	36.1
30	L2	All MCs	155	5.0	155	5.0	0.310	3.6	LOS A	2.0	14.8	0.38	0.42	0.38	54.2
31	T1	All MCs	194	5.0	194	5.0	0.310	3.1	LOS A	2.0	14.8	0.38	0.42	0.38	54.7
32	R2	All MCs	68	5.0	68	5.0	0.310	10.3	LOS A	2.0	14.8	0.38	0.42	0.38	53.5
Approach			432	5.0	432	5.0	0.310	4.4	LOS A	2.0	14.8	0.38	0.42	0.38	53.8
All Vehicles			1142	5.0	1142	5.0	0.310	5.6	LOS A	2.0	14.8	0.42	0.47	0.42	53.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	75	5.0	75	5.0	0.253	5.9	LOS A	1.1	8.3	0.64	0.68	0.64	52.8
21a	L1	All MCs	7	5.0	7	5.0	0.253	5.1	LOS A	1.1	8.3	0.64	0.68	0.64	33.2
22	T1	All MCs	74	5.0	74	5.0	0.253	5.3	LOS A	1.1	8.3	0.64	0.68	0.64	53.2
23	R2	All MCs	44	5.0	44	5.0	0.253	12.5	LOS A	1.1	8.3	0.64	0.68	0.64	52.1
Approach			200	5.0	200	5.0	0.253	7.1	LOS A	1.1	8.3	0.64	0.68	0.64	52.2
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	101	5.0	101	5.0	0.568	6.5	LOS A	3.8	27.9	0.68	0.70	0.80	53.2
25	T1	All MCs	408	5.0	408	5.0	0.568	5.9	LOS A	3.8	27.9	0.68	0.70	0.80	53.6
26a	R1	All MCs	3	5.0	3	5.0	0.568	11.8	LOS A	3.8	27.9	0.68	0.70	0.80	36.5
26	R2	All MCs	17	5.0	17	5.0	0.568	13.1	LOS A	3.8	27.9	0.68	0.70	0.80	52.5
Approach			529	5.0	529	5.0	0.568	6.3	LOS A	3.8	27.9	0.68	0.70	0.80	53.4
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	1	5.0	1	5.0	0.109	4.3	LOS A	0.6	4.4	0.45	0.62	0.45	50.3
28	T1	All MCs	1	5.0	1	5.0	0.109	3.5	LOS A	0.6	4.4	0.45	0.62	0.45	50.7
29	R2	All MCs	307	5.0	307	5.0	0.231	10.6	LOS A	1.5	10.9	0.45	0.61	0.45	49.5
29b	R3	All MCs	168	5.0	168	5.0	0.231	11.8	LOS A	1.5	10.9	0.46	0.61	0.46	44.3
Approach			478	5.0	478	5.0	0.231	11.0	LOS A	1.5	10.9	0.45	0.61	0.45	48.1
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	15	5.0	15	5.0	0.330	4.8	LOS A	2.1	15.4	0.53	0.51	0.53	35.4
30	L2	All MCs	158	5.0	158	5.0	0.330	4.5	LOS A	2.1	15.4	0.53	0.51	0.53	53.5
31	T1	All MCs	152	5.0	152	5.0	0.330	4.0	LOS A	2.1	15.4	0.53	0.51	0.53	53.9
32	R2	All MCs	74	5.0	74	5.0	0.330	11.2	LOS A	2.1	15.4	0.53	0.51	0.53	52.8
Approach			398	5.0	398	5.0	0.330	5.6	LOS A	2.1	15.4	0.53	0.51	0.53	53.0
All Vehicles			1605	5.0	1605	5.0	0.568	7.6	LOS A	3.8	27.9	0.57	0.62	0.61	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	47	5.0	47	5.0	0.165	4.9	LOS A	0.7	5.4	0.55	0.61	0.55	52.8
21a	L1	All MCs	2	5.0	2	5.0	0.165	4.1	LOS A	0.7	5.4	0.55	0.61	0.55	33.4
22	T1	All MCs	49	5.0	49	5.0	0.165	4.4	LOS A	0.7	5.4	0.55	0.61	0.55	53.2
23	R2	All MCs	46	5.0	46	5.0	0.165	11.6	LOS A	0.7	5.4	0.55	0.61	0.55	52.1
Approach			145	5.0	145	5.0	0.165	6.9	LOS A	0.7	5.4	0.55	0.61	0.55	52.5
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	48	5.0	48	5.0	0.276	5.3	LOS A	1.3	9.4	0.61	0.57	0.61	53.4
25	T1	All MCs	165	5.0	165	5.0	0.276	4.7	LOS A	1.3	9.4	0.61	0.57	0.61	53.8
26a	R1	All MCs	1	5.0	1	5.0	0.276	10.7	LOS A	1.3	9.4	0.61	0.57	0.61	36.8
26	R2	All MCs	18	5.0	18	5.0	0.276	12.0	LOS A	1.3	9.4	0.61	0.57	0.61	52.7
Approach			233	5.0	233	5.0	0.276	5.5	LOS A	1.3	9.4	0.61	0.57	0.61	53.6
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	54	5.0	54	5.0	0.226	5.5	LOS A	1.4	10.2	0.61	0.52	0.61	53.6
28	T1	All MCs	177	5.0	177	5.0	0.226	4.7	LOS A	1.4	10.2	0.61	0.52	0.61	54.1
29	R2	All MCs	414	5.0	414	5.0	0.309	11.4	LOS A	2.2	16.1	0.62	0.65	0.62	49.0
29b	R3	All MCs	7	5.0	7	5.0	0.309	12.7	LOS A	2.2	16.1	0.62	0.65	0.62	43.8
Approach			652	5.0	652	5.0	0.309	9.1	LOS A	2.2	16.1	0.62	0.60	0.62	50.6
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	23	5.0	23	5.0	0.473	3.8	LOS A	3.8	28.0	0.42	0.41	0.42	36.0
30	L2	All MCs	246	5.0	246	5.0	0.473	3.6	LOS A	3.8	28.0	0.42	0.41	0.42	54.1
31	T1	All MCs	308	5.0	308	5.0	0.473	3.0	LOS A	3.8	28.0	0.42	0.41	0.42	54.5
32	R2	All MCs	108	5.0	108	5.0	0.473	10.3	LOS A	3.8	28.0	0.42	0.41	0.42	53.4
Approach			686	5.0	686	5.0	0.473	4.4	LOS A	3.8	28.0	0.42	0.41	0.42	53.7
All Vehicles			1716	5.0	1716	5.0	0.473	6.6	LOS A	3.8	28.0	0.53	0.52	0.53	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

MOVEMENT SUMMARY

Site: 001 [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Waterford Tamborine Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
SouthEast: Tamborine Mountain Road															
21	L2	All MCs	132	5.0	132	5.0	0.557	9.1	LOS A	3.4	24.6	0.82	0.93	1.05	50.9
21a	L1	All MCs	13	5.0	13	5.0	0.557	8.3	LOS A	3.4	24.6	0.82	0.93	1.05	31.8
22	T1	All MCs	129	5.0	129	5.0	0.557	8.5	LOS A	3.4	24.6	0.82	0.93	1.05	51.3
23	R2	All MCs	78	5.0	78	5.0	0.557	15.8	LOS B	3.4	24.6	0.82	0.93	1.05	50.3
Approach			352	5.0	352	5.0	0.557	10.3	LOS A	3.4	24.6	0.82	0.93	1.05	50.3
NorthEast: Beaudesert Beenleigh Road															
24	L2	All MCs	88	5.0	88	5.0	0.692	10.8	LOS A	5.5	40.0	0.88	0.97	1.24	50.7
25	T1	All MCs	359	5.0	359	5.0	0.692	10.2	LOS A	5.5	40.0	0.88	0.97	1.24	51.1
26a	R1	All MCs	3	5.0	3	5.0	0.692	16.2	LOS B	5.5	40.0	0.88	0.97	1.24	34.4
26	R2	All MCs	15	5.0	15	5.0	0.692	17.5	LOS B	5.5	40.0	0.88	0.97	1.24	50.1
Approach			465	5.0	465	5.0	0.692	10.6	LOS A	5.5	40.0	0.88	0.97	1.24	50.9
NorthWest: Waterford Tamborine Road															
27	L2	All MCs	1	5.0	1	5.0	0.238	5.2	LOS A	1.5	11.3	0.63	0.66	0.63	49.6
28	T1	All MCs	2	5.0	2	5.0	0.238	4.5	LOS A	1.5	11.3	0.63	0.66	0.63	50.1
29	R2	All MCs	591	5.0	591	5.0	0.503	11.6	LOS A	4.4	32.1	0.69	0.66	0.69	48.7
29b	R3	All MCs	323	5.0	323	5.0	0.503	12.8	LOS A	4.4	32.1	0.73	0.66	0.73	43.0
Approach			917	5.0	917	5.0	0.503	12.0	LOS A	4.4	32.1	0.70	0.66	0.70	47.2
SouthWest: Beaudesert Beenleigh Road															
30b	L3	All MCs	22	5.0	22	5.0	0.609	8.9	LOS A	6.2	45.3	0.86	0.79	1.04	33.7
30	L2	All MCs	236	5.0	236	5.0	0.609	8.7	LOS A	6.2	45.3	0.86	0.79	1.04	51.3
31	T1	All MCs	226	5.0	226	5.0	0.609	8.1	LOS A	6.2	45.3	0.86	0.79	1.04	51.7
32	R2	All MCs	109	5.0	109	5.0	0.609	15.3	LOS B	6.2	45.3	0.86	0.79	1.04	50.6
Approach			594	5.0	594	5.0	0.609	9.7	LOS A	6.2	45.3	0.86	0.79	1.04	50.8
All Vehicles			2327	5.0	2327	5.0	0.692	10.9	LOS A	6.2	45.3	0.79	0.80	0.95	49.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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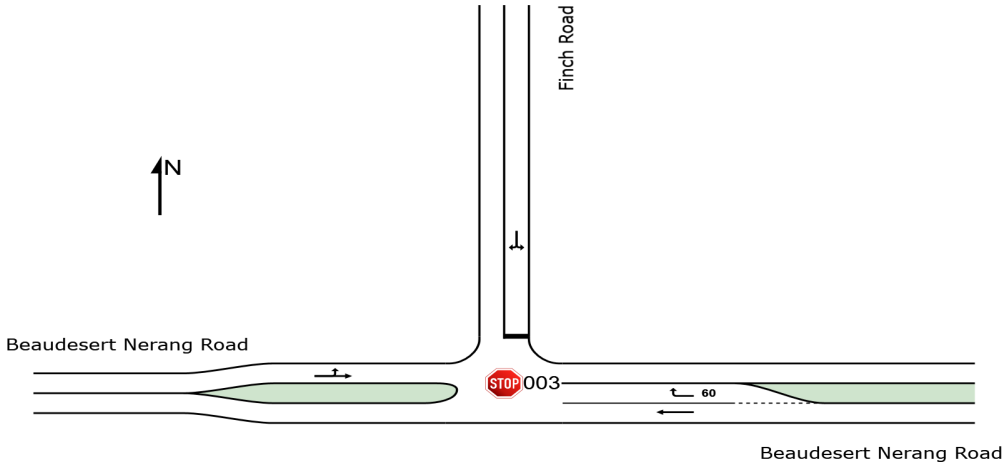
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\1_Beaudesert Beenleigh Rd & Waterford Tamborine Rd.sip9

SITE LAYOUT

Site: 003 [2024AM_Survey (Site Folder: 3-leg)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:01:36 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2024AM_Survey (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	307	5.5	307	5.5	0.163	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	46	5.5	46	5.5	0.049	8.0	LOS A	0.2	1.4	0.54	0.71	0.54	50.6
Approach			354	5.5	354	5.5	0.163	1.1	NA	0.2	1.4	0.07	0.09	0.07	58.5
North: Finch Road															
7	L2	All MCs	79	5.5	79	5.5	0.284	12.7	LOS A	1.1	8.4	0.69	1.04	0.81	46.3
9	R2	All MCs	42	5.5	42	5.5	0.284	24.5	LOS B	1.1	8.4	0.69	1.04	0.81	46.2
Approach			121	5.5	121	5.5	0.284	16.8	LOS B	1.1	8.4	0.69	1.04	0.81	46.2
West: Beaudesert Nerang Road															
10	L2	All MCs	7	5.5	7	5.5	0.293	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
11	T1	All MCs	544	5.5	544	5.5	0.293	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach			552	5.5	552	5.5	0.293	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1026	5.5	1026	5.5	0.293	2.4	NA	1.1	8.4	0.11	0.16	0.12	57.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2024PM_Survey (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	536	5.0	536	5.0	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
6	R2	All MCs	45	5.0	45	5.0	0.064	9.7	LOS A	0.2	1.8	0.61	0.80	0.61	49.5
Approach			581	5.0	581	5.0	0.284	0.8	NA	0.2	1.8	0.05	0.06	0.05	58.9
North: Finch Road															
7	L2	All MCs	51	5.0	51	5.0	0.397	17.4	LOS B	1.4	10.2	0.86	1.07	1.12	39.7
9	R2	All MCs	29	5.0	29	5.0	0.397	51.8	LOS D	1.4	10.2	0.86	1.07	1.12	39.7
Approach			80	5.0	80	5.0	0.397	30.1	LOS C	1.4	10.2	0.86	1.07	1.12	39.7
West: Beaudesert Nerang Road															
10	L2	All MCs	22	5.0	22	5.0	0.390	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	56.9
11	T1	All MCs	713	5.0	713	5.0	0.390	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Approach			735	5.0	735	5.0	0.390	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.5
All Vehicles			1396	5.0	1396	5.0	0.397	2.2	NA	1.4	10.2	0.07	0.10	0.08	57.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:21:24 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2031AM_Design (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	362	5.5	362	5.5	0.192	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	54	5.5	54	5.5	0.096	11.3	LOS A	0.3	2.5	0.69	0.88	0.69	48.4
Approach			416	5.5	416	5.5	0.192	1.5	NA	0.3	2.5	0.09	0.11	0.09	58.1
North: Finch Road															
7	L2	All MCs	108	5.5	108	5.5	0.865	44.7	LOS D	5.3	38.7	0.97	1.45	2.63	30.8
9	R2	All MCs	58	5.5	58	5.5	0.865	80.4	LOS F	5.3	38.7	0.97	1.45	2.63	30.7
Approach			166	5.5	166	5.5	0.865	57.2	LOS E	5.3	38.7	0.97	1.45	2.63	30.7
West: Beaudesert Nerang Road															
10	L2	All MCs	12	5.5	12	5.5	0.450	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	56.9
11	T1	All MCs	836	5.5	836	5.5	0.450	0.2	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach			847	5.5	847	5.5	0.450	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
All Vehicles			1429	5.5	1429	5.5	0.865	7.2	NA	5.3	38.7	0.14	0.21	0.33	53.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 14 April 2025 5:02:14 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2031PM_Design (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	816	5.0	816	5.0	0.432	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
6	R2	All MCs	68	5.0	68	5.0	0.111	10.7	LOS A	0.4	3.0	0.66	0.87	0.66	48.8
Approach			884	5.0	884	5.0	0.432	1.0	NA	0.4	3.0	0.05	0.07	0.05	58.7
North: Finch Road															
7	L2	All MCs	88	5.0	88	5.0	1.601	568.2	LOS F	35.7	260.6	1.00	3.58	10.65	5.5
9	R2	All MCs	52	5.0	52	5.0	1.601	652.5	LOS F	35.7	260.6	1.00	3.58	10.65	5.5
Approach			140	5.0	140	5.0	1.601	599.3	LOS F	35.7	260.6	1.00	3.58	10.65	5.5
West: Beaudesert Nerang Road															
10	L2	All MCs	24	5.0	24	5.0	0.427	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	56.8
11	T1	All MCs	780	5.0	780	5.0	0.427	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.5
Approach			804	5.0	804	5.0	0.427	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.4
All Vehicles			1828	5.0	1828	5.0	1.601	46.5	NA	35.7	260.6	0.10	0.31	0.84	33.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 14 April 2025 5:02:13 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2041AM_Design (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	440	5.5	440	5.5	0.234	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	65	5.5	65	5.5	0.392	32.8	LOS C	1.2	8.8	0.93	1.02	1.14	37.6
Approach			505	5.5	505	5.5	0.392	4.3	NA	1.2	8.8	0.12	0.13	0.15	55.6
North: Finch Road															
7	L2	All MCs	152	5.5	152	5.5	5.974	4521.1	LOS F	122.8	900.2	1.00	3.27	10.96	0.8
9	R2	All MCs	81	5.5	81	5.5	5.974	4641.2	LOS F	122.8	900.2	1.00	3.27	10.96	0.8
Approach			233	5.5	233	5.5	5.974	4562.9	LOS F	122.8	900.2	1.00	3.27	10.96	0.8
West: Beaudesert Nerang Road															
10	L2	All MCs	17	5.5	17	5.5	0.674	6.0	LOS A	0.0	0.0	0.00	0.01	0.00	56.5
11	T1	All MCs	1252	5.5	1252	5.5	0.674	0.4	LOS A	0.0	0.0	0.00	0.01	0.00	59.1
Approach			1268	5.5	1268	5.5	0.674	0.5	NA	0.0	0.0	0.00	0.01	0.00	59.0
All Vehicles			2006	5.5	2006	5.5	5.974	530.5	NA	122.8	900.2	0.15	0.42	1.31	6.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:21:24 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2041PM_Design (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	1216	5.0	1216	5.0	0.644	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	59.3
6	R2	All MCs	103	5.0	103	5.0	0.205	12.7	LOS A	0.8	5.5	0.75	0.91	0.78	47.5
Approach			1319	5.0	1319	5.0	0.644	1.3	NA	0.8	5.5	0.06	0.07	0.06	58.1
North: Finch Road															
7	L2	All MCs	142	5.0	142	5.0	12.880	10710.6	LOS F	131.7	961.6	1.00	2.15	5.59	0.3
9	R2	All MCs	83	5.0	83	5.0	12.880	11004.9	LOS F	131.7	961.6	1.00	2.15	5.59	0.3
Approach			225	5.0	225	5.0	12.880	10819.3	LOS F	131.7	961.6	1.00	2.15	5.59	0.3
West: Beaudesert Nerang Road															
10	L2	All MCs	27	5.0	27	5.0	0.480	5.8	LOS A	0.0	0.0	0.00	0.02	0.00	56.8
11	T1	All MCs	877	5.0	877	5.0	0.480	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.5
Approach			904	5.0	904	5.0	0.480	0.4	NA	0.0	0.0	0.00	0.02	0.00	59.4
All Vehicles			2448	5.0	2448	5.0	12.880	996.3	NA	131.7	961.6	0.12	0.24	0.55	3.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:21:25 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2041PM_Tourist Design (Site Folder: 3-leg)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	1156	5.0	1156	5.0	0.612	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	59.4
6	R2	All MCs	98	5.0	98	5.0	0.525	33.6	LOS C	1.8	13.2	0.94	1.06	1.30	37.3
Approach			1254	5.0	1254	5.0	0.612	2.9	NA	1.8	13.2	0.07	0.08	0.10	56.7
North: Finch Road															
7	L2	All MCs	142	5.0	142	5.0	14.952	12603.8	LOS F	132.9	969.8	1.00	2.05	5.66	0.3
9	R2	All MCs	83	5.0	83	5.0	14.952	12741.1	LOS F	132.9	969.8	1.00	2.05	5.66	0.3
Approach			225	5.0	225	5.0	14.952	12654.4	LOS F	132.9	969.8	1.00	2.05	5.66	0.3
West: Beaudesert Nerang Road															
10	L2	All MCs	38	5.0	38	5.0	0.662	5.9	LOS A	0.0	0.0	0.00	0.02	0.00	56.4
11	T1	All MCs	1209	5.0	1209	5.0	0.662	0.4	LOS A	0.0	0.0	0.00	0.02	0.00	59.0
Approach			1247	5.0	1247	5.0	0.662	0.6	NA	0.0	0.0	0.00	0.02	0.00	59.0
All Vehicles			2726	5.0	2726	5.0	14.952	1047.2	NA	132.9	969.8	0.12	0.22	0.51	3.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

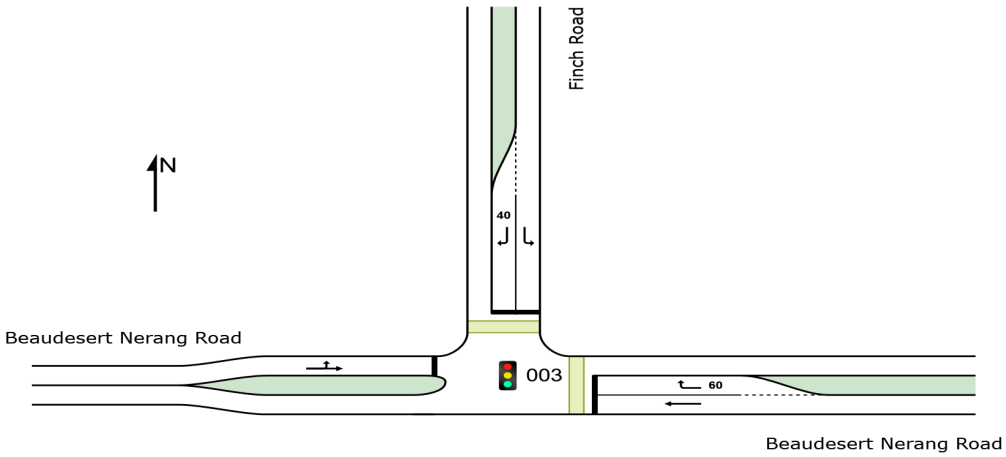
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 28 January 2025 2:19:40 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

SITE LAYOUT

Site: 003 [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:01:53 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	307	5.5	307	5.5	0.263	4.7	LOS A	3.4	25.1	0.48	0.41	0.48	55.7
6	R2	All MCs	46	5.5	46	5.5	*0.216	28.6	LOS C	1.1	8.1	0.94	0.73	0.94	39.4
Approach			354	5.5	354	5.5	0.263	7.8	LOS A	3.4	25.1	0.54	0.45	0.54	52.9
North: Finch Road															
7	L2	All MCs	79	5.5	79	5.5	*0.316	28.0	LOS B	1.9	13.7	0.94	0.75	0.94	39.8
9	R2	All MCs	42	5.5	42	5.5	0.168	27.3	LOS B	1.0	7.1	0.91	0.72	0.91	40.0
Approach			121	5.5	121	5.5	0.316	27.7	LOS B	1.9	13.7	0.93	0.74	0.93	39.9
West: Beaudesert Nerang Road															
10	L2	All MCs	7	5.5	7	5.5	0.772	23.4	LOS B	13.4	98.2	0.94	0.91	1.08	44.7
11	T1	All MCs	544	5.5	544	5.5	*0.772	17.8	LOS B	13.4	98.2	0.94	0.91	1.08	46.4
Approach			552	5.5	552	5.5	0.772	17.9	LOS B	13.4	98.2	0.94	0.91	1.08	46.4
All Vehicles			1026	5.5	1026	5.5	0.772	15.6	LOS B	13.4	98.2	0.80	0.73	0.87	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Beaudesert Nerang Road												
P2	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
North: Finch Road												
P3	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
All Pedestrians		20	21	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 11:41:31 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	536	5.0	536	5.0	0.426	5.0	LOS A	7.3	53.3	0.50	0.44	0.50	55.4
6	R2	All MCs	45	5.0	45	5.0	* 0.252	34.5	LOS C	1.3	9.6	0.96	0.73	0.96	37.1
Approach			581	5.0	581	5.0	0.426	7.3	LOS A	7.3	53.3	0.54	0.47	0.54	53.4
North: Finch Road															
7	L2	All MCs	51	5.0	51	5.0	* 0.211	32.0	LOS C	1.4	10.2	0.93	0.73	0.93	38.2
9	R2	All MCs	29	5.0	29	5.0	0.123	31.5	LOS C	0.8	5.8	0.91	0.71	0.91	38.3
Approach			80	5.0	80	5.0	0.211	31.8	LOS C	1.4	10.2	0.92	0.73	0.92	38.2
West: Beaudesert Nerang Road															
10	L2	All MCs	22	5.0	22	5.0	0.835	26.5	LOS B	22.3	162.9	0.94	0.96	1.11	43.1
11	T1	All MCs	713	5.0	713	5.0	* 0.835	20.9	LOS B	22.3	162.9	0.94	0.96	1.11	44.6
Approach			735	5.0	735	5.0	0.835	21.0	LOS B	22.3	162.9	0.94	0.96	1.11	44.5
All Vehicles			1396	5.0	1396	5.0	0.835	15.9	LOS B	22.3	162.9	0.77	0.74	0.86	47.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Beaudesert Nerang Road												
P2	Full	10	11	24.3	LOS C	0.0	0.0	0.90	0.90	178.2	200.0	1.12
North: Finch Road												
P3	Full	10	11	24.3	LOS C	0.0	0.0	0.90	0.90	178.2	200.0	1.12
All Pedestrians		20	21	24.3	LOS C	0.0	0.0	0.90	0.90	178.2	200.0	1.12

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 11:42:19 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

MOVEMENT SUMMARY

Site: 003 [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	440	5.5	440	5.5	0.285	3.3	LOS A	7.3	53.7	0.25	0.23	0.25	56.9
6	R2	All MCs	65	5.5	65	5.5	* 0.913	98.8	LOS F	5.5	40.4	1.00	0.96	1.47	22.4
Approach			505	5.5	505	5.5	0.913	15.6	LOS B	7.3	53.7	0.35	0.32	0.41	47.5
North: Finch Road															
7	L2	All MCs	152	5.5	152	5.5	* 0.906	101.0	LOS F	12.6	92.4	1.00	0.98	1.34	23.3
9	R2	All MCs	81	5.5	81	5.5	0.454	84.2	LOS F	5.8	42.2	0.99	0.78	0.99	26.1
Approach			233	5.5	233	5.5	0.906	95.1	LOS F	12.6	92.4	1.00	0.91	1.22	23.0
West: Beaudesert Nerang Road															
10	L2	All MCs	17	5.5	17	5.5	0.911	23.7	LOS B	74.1	542.9	0.88	0.81	0.89	44.5
11	T1	All MCs	1252	5.5	1252	5.5	* 0.911	18.1	LOS B	74.1	542.9	0.88	0.81	0.89	46.2
Approach			1268	5.5	1268	5.5	0.911	18.2	LOS B	74.1	542.9	0.88	0.81	0.89	46.2
All Vehicles			2006	5.5	2006	5.5	0.913	26.5	LOS B	74.1	542.9	0.76	0.70	0.81	41.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Beaudesert Nerang Road												
P2	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
North: Finch Road												
P3	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
West: Beaudesert Nerang Road												
P4	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
All Pedestrians		30	32	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 003 [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	1216	5.0	1216	5.0	* 0.883	19.5	LOS B	44.8	327.1	0.79	0.78	0.87	48.1
6	R2	All MCs	103	5.0	103	5.0	0.740	58.9	LOS E	4.9	35.9	1.00	0.88	1.21	30.8
Approach			1319	5.0	1319	5.0	0.883	22.6	LOS B	44.8	327.1	0.80	0.79	0.89	43.6
North: Finch Road															
7	L2	All MCs	142	5.0	142	5.0	* 0.792	54.2	LOS D	6.8	49.8	1.00	0.92	1.26	31.0
9	R2	All MCs	83	5.0	83	5.0	0.464	49.1	LOS D	3.6	26.6	0.99	0.77	0.99	32.3
Approach			225	5.0	225	5.0	0.792	52.3	LOS D	6.8	49.8	0.99	0.86	1.16	31.5
West: Beaudesert Nerang Road															
10	L2	All MCs	27	5.0	27	5.0	0.771	18.8	LOS B	28.6	208.9	0.79	0.73	0.79	47.3
11	T1	All MCs	877	5.0	877	5.0	0.771	13.2	LOS A	28.6	208.9	0.79	0.73	0.79	49.2
Approach			904	5.0	904	5.0	0.771	13.4	LOS A	28.6	208.9	0.79	0.73	0.79	49.1
All Vehicles			2448	5.0	2448	5.0	0.883	21.9	LOS B	44.8	327.1	0.82	0.78	0.88	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Beaudesert Nerang Road												
P2	Full	10	11	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
North: Finch Road												
P3	Full	10	11	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
West: Beaudesert Nerang Road												
P4	Full	10	11	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
All Pedestrians		30	32	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 003 [2041PM_Tourist Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Finch Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Beaudesert Nerang Road															
5	T1	All MCs	1156	5.0	1156	5.0	0.780	10.6	LOS A	40.2	293.4	0.54	0.49	0.54	54.1
6	R2	All MCs	98	5.0	98	5.0	* 0.910	100.3	LOS F	8.2	59.8	1.00	0.97	1.41	22.8
Approach			1254	5.0	1254	5.0	0.910	17.6	LOS B	40.2	293.4	0.57	0.53	0.60	46.4
North: Finch Road															
7	L2	All MCs	142	5.0	142	5.0	* 0.880	93.9	LOS F	11.5	84.2	1.00	0.96	1.30	23.8
9	R2	All MCs	83	5.0	83	5.0	0.497	81.5	LOS F	6.0	43.6	0.99	0.78	0.99	25.8
Approach			225	5.0	225	5.0	0.880	89.3	LOS F	11.5	84.2	1.00	0.89	1.19	23.9
West: Beaudesert Nerang Road															
10	L2	All MCs	38	5.0	38	5.0	0.910	25.1	LOS B	74.0	540.4	0.89	0.82	0.90	43.7
11	T1	All MCs	1209	5.0	1209	5.0	* 0.910	19.5	LOS B	74.0	540.4	0.89	0.82	0.90	45.3
Approach			1247	5.0	1247	5.0	0.910	19.7	LOS B	74.0	540.4	0.89	0.82	0.90	45.3
All Vehicles			2726	5.0	2726	5.0	0.910	24.5	LOS B	74.0	540.4	0.75	0.69	0.79	42.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Beaudesert Nerang Road												
P2	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
North: Finch Road												
P3	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
West: Beaudesert Nerang Road												
P4	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
All Pedestrians		30	32	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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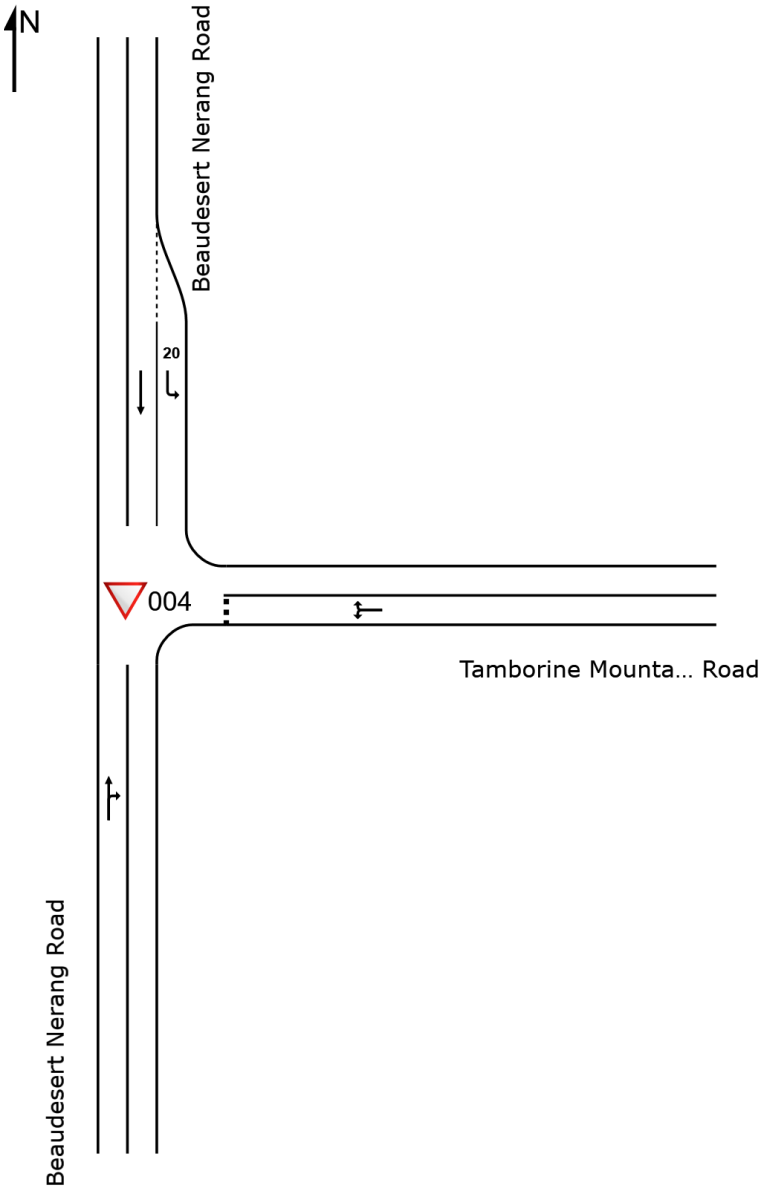
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\3_Beaudesert Nerang Rd & Finch Rd.sip9

SITE LAYOUT

Site: 004 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:08:56 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	337	5.3	337	5.3	0.189	0.2	LOS A	0.1	0.9	0.04	0.05	0.04	59.6
3	R2	All MCs	6	5.3	6	5.3	0.189	10.5	LOS A	0.1	0.9	0.04	0.05	0.04	56.5
Approach			343	5.3	343	5.3	0.189	0.4	NA	0.1	0.9	0.04	0.05	0.04	59.6
East: Tamborine Mountain Road															
4	L2	All MCs	11	5.3	11	5.3	0.092	8.8	LOS A	0.3	2.2	0.73	0.89	0.73	46.1
6	R2	All MCs	20	5.3	20	5.3	0.092	19.0	LOS B	0.3	2.2	0.73	0.89	0.73	46.0
Approach			31	5.3	31	5.3	0.092	15.5	LOS B	0.3	2.2	0.73	0.89	0.73	46.0
North: Beaudesert Nerang Road															
7	L2	All MCs	24	5.3	24	5.3	0.014	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	633	5.3	633	5.3	0.336	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			657	5.3	657	5.3	0.336	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.5
All Vehicles			1031	5.3	1031	5.3	0.336	0.8	NA	0.3	2.2	0.03	0.06	0.03	59.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	565	5.0	565	5.0	0.325	0.4	LOS A	0.3	2.3	0.06	0.07	0.06	59.3
3	R2	All MCs	13	5.0	13	5.0	0.325	12.6	LOS A	0.3	2.3	0.06	0.07	0.06	56.3
Approach			578	5.0	578	5.0	0.325	0.7	NA	0.3	2.3	0.06	0.07	0.06	59.3
East: Tamborine Mountain Road															
4	L2	All MCs	14	5.0	14	5.0	0.313	13.0	LOS A	1.0	7.2	0.89	1.00	1.05	38.2
6	R2	All MCs	36	5.0	36	5.0	0.313	39.1	LOS C	1.0	7.2	0.89	1.00	1.05	38.1
Approach			49	5.0	49	5.0	0.313	31.9	LOS C	1.0	7.2	0.89	1.00	1.05	38.2
North: Beaudesert Nerang Road															
7	L2	All MCs	18	5.0	18	5.0	0.010	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	747	5.0	747	5.0	0.396	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			765	5.0	765	5.0	0.396	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
All Vehicles			1393	5.0	1393	5.0	0.396	1.6	NA	1.0	7.2	0.05	0.07	0.06	58.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	441	5.3	441	5.3	0.788	103.8	LOS F	37.8	276.3	0.56	0.57	0.56	21.9
3	R2	All MCs	8	5.3	8	5.3	0.788	192.8	LOS F	37.8	276.3	0.56	0.57	0.56	21.5
Approach			449	5.3	449	5.3	0.788	105.5	NA	37.8	276.3	0.56	0.57	0.56	21.9
East: Tamborine Mountain Road															
4	L2	All MCs	15	5.3	15	5.3	5.457	4193.5	LOS F	23.6	172.9	1.00	1.43	3.10	0.8
6	R2	All MCs	27	5.3	27	5.3	5.457	4382.3	LOS F	23.6	172.9	1.00	1.43	3.10	0.8
Approach			42	5.3	42	5.3	5.457	4316.3	LOS F	23.6	172.9	1.00	1.43	3.10	0.8
North: Beaudesert Nerang Road															
7	L2	All MCs	64	5.3	64	5.3	0.036	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	1683	5.3	1683	5.3	0.893	1.7	LOS A	0.0	0.0	0.00	0.00	0.00	56.8
Approach			1747	5.3	1747	5.3	0.893	1.9	NA	0.0	0.0	0.00	0.02	0.00	56.7
All Vehicles			2239	5.3	2239	5.3	5.457	103.8	NA	37.8	276.3	0.13	0.16	0.17	21.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:24:33 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1628	5.0	1628	5.0	1.148	208.5	LOS F	205.3	1499.0	1.00	1.03	6.16	13.3
3	R2	All MCs	37	5.0	37	5.0	1.148	394.3	LOS F	205.3	1499.0	1.00	1.03	6.16	13.1
Approach			1665	5.0	1665	5.0	1.148	212.6	NA	205.3	1499.0	1.00	1.03	6.16	13.3
East: Tamborine Mountain Road															
4	L2	All MCs	24	5.0	24	5.0	10.835	9035.5	LOS F	51.9	378.6	1.00	1.57	3.76	0.4
6	R2	All MCs	64	5.0	64	5.0	10.835	8992.9	LOS F	51.9	378.6	1.00	1.57	3.76	0.4
Approach			88	5.0	88	5.0	10.835	9004.6	LOS F	51.9	378.6	1.00	1.57	3.76	0.4
North: Beaudesert Nerang Road															
7	L2	All MCs	29	5.0	29	5.0	0.016	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	1241	5.0	1241	5.0	0.657	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	59.2
Approach			1271	5.0	1271	5.0	0.657	0.5	NA	0.0	0.0	0.00	0.01	0.00	59.0
All Vehicles			3024	5.0	3024	5.0	10.835	380.6	NA	205.3	1499.0	0.58	0.62	3.50	8.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:24:34 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041PM_Tourist (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1546	5.0	1546	5.0	3.507	2551.6	LOS F	799.8	5838.5	1.00	1.01	3.85	1.4
3	R2	All MCs	35	5.0	35	5.0	3.507	2673.7	LOS F	799.8	5838.5	1.00	1.01	3.85	1.4
Approach			1581	5.0	1581	5.0	3.507	2554.3	NA	799.8	5838.5	1.00	1.01	3.85	1.4
East: Tamborine Mountain Road															
4	L2	All MCs	24	5.0	24	5.0	12.486	10954.3	LOS F	52.5	383.3	1.00	1.48	3.46	0.3
6	R2	All MCs	64	5.0	64	5.0	12.486	10344.3	LOS F	52.5	383.3	1.00	1.48	3.46	0.3
Approach			88	5.0	88	5.0	12.486	10511.3	LOS F	52.5	383.3	1.00	1.48	3.46	0.3
North: Beaudesert Nerang Road															
7	L2	All MCs	41	5.0	41	5.0	0.023	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	1712	5.0	1712	5.0	0.906	2.0	LOS A	0.0	0.0	0.00	0.00	0.00	56.4
Approach			1753	5.0	1753	5.0	0.906	2.0	NA	0.0	0.0	0.00	0.01	0.00	56.3
All Vehicles			3422	5.0	3422	5.0	12.486	1452.8	NA	799.8	5838.5	0.49	0.51	1.87	2.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

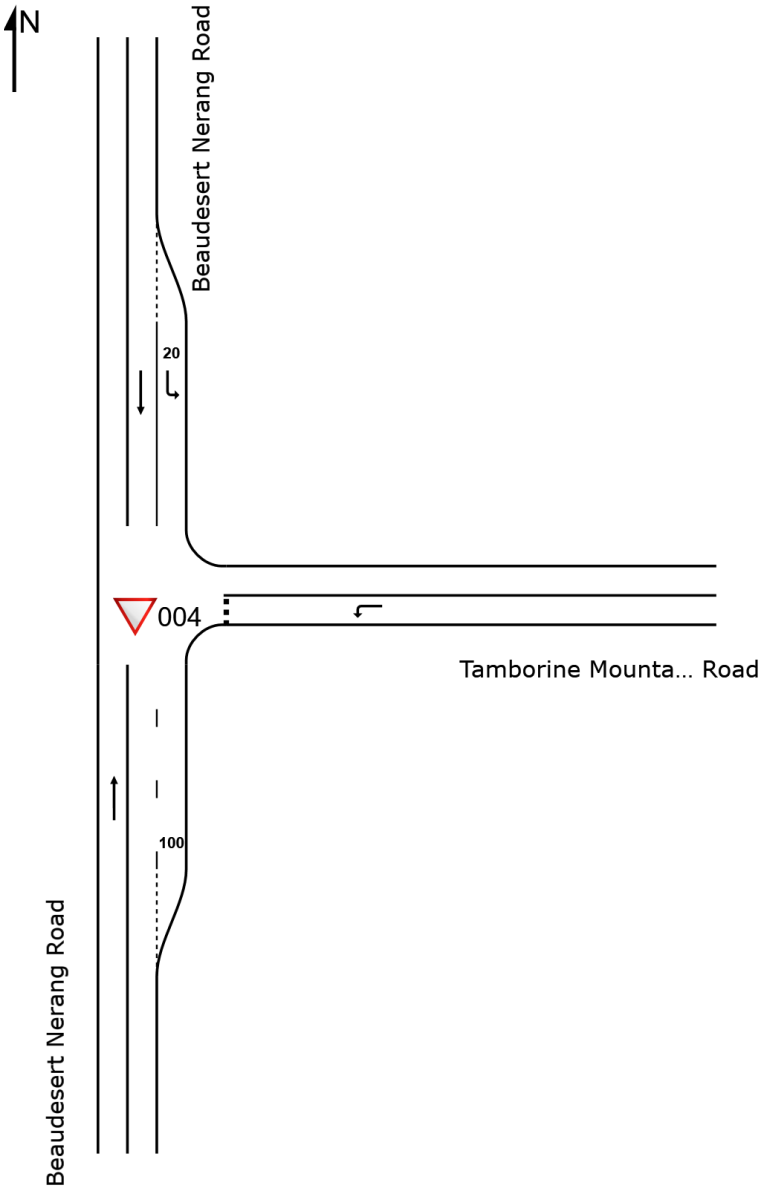
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 28 January 2025 2:21:46 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

SITE LAYOUT

Site: 004 [2024AM_Survey_Op 1 (Site Folder: OPTION 1)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:09:33 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2024AM_Survey_Op 1 (Site Folder: OPTION 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	363	5.3	363	5.3	0.193	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			363	5.3	363	5.3	0.193	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Tamborine Mountain Road															
4	L2	All MCs	31	5.3	31	5.3	0.019	7.1	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
Approach			31	5.3	31	5.3	0.019	7.1	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
North: Beaudesert Nerang Road															
7	L2	All MCs	31	5.3	31	5.3	0.017	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	633	5.3	633	5.3	0.336	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			663	5.3	663	5.3	0.336	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.4
All Vehicles			1057	5.3	1057	5.3	0.336	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:47:32 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2024PM_Survey_Op 1 (Site Folder: OPTION 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	614	5.0	614	5.0	0.325	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			614	5.0	614	5.0	0.325	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
East: Tamborine Mountain Road															
4	L2	All MCs	49	5.0	49	5.0	0.031	7.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
Approach			49	5.0	49	5.0	0.031	7.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
North: Beaudesert Nerang Road															
7	L2	All MCs	31	5.0	31	5.0	0.017	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	747	5.0	747	5.0	0.396	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			778	5.0	778	5.0	0.396	0.4	NA	0.0	0.0	0.00	0.02	0.00	59.4
All Vehicles			1441	5.0	1441	5.0	0.396	0.5	NA	0.0	0.0	0.00	0.03	0.00	59.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:47:47 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041AM_Design_Op 1 (Site Folder: OPTION 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	477	5.3	477	5.3	0.253	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			477	5.3	477	5.3	0.253	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Tamborine Mountain Road															
4	L2	All MCs	41	5.3	41	5.3	0.026	81.9	LOS F	0.0	0.0	0.00	0.58	0.00	52.7
Approach			41	5.3	41	5.3	0.026	81.9	LOS F	0.0	0.0	0.00	0.58	0.00	52.7
North: Beaudesert Nerang Road															
7	L2	All MCs	73	5.3	73	5.3	0.041	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	1683	5.3	1683	5.3	0.893	1.7	LOS A	0.0	0.0	0.00	0.00	0.00	56.8
Approach			1756	5.3	1756	5.3	0.893	1.9	NA	0.0	0.0	0.00	0.02	0.00	56.6
All Vehicles			2274	5.3	2274	5.3	0.893	2.9	NA	0.0	0.0	0.00	0.03	0.00	57.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:41:36 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041PM_Design_Op 1 (Site Folder: OPTION 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1728	5.0	1728	5.0	0.915	2.2	LOS A	0.0	0.0	0.00	0.00	0.00	56.0
Approach			1728	5.0	1728	5.0	0.915	2.2	NA	0.0	0.0	0.00	0.00	0.00	56.0
East: Tamborine Mountain Road															
4	L2	All MCs	88	5.0	88	5.0	0.055	12.9	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
Approach			88	5.0	88	5.0	0.055	12.9	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
North: Beaudesert Nerang Road															
7	L2	All MCs	66	5.0	66	5.0	0.037	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	1241	5.0	1241	5.0	0.657	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	59.2
Approach			1307	5.0	1307	5.0	0.657	0.7	NA	0.0	0.0	0.00	0.03	0.00	58.8
All Vehicles			3124	5.0	3124	5.0	0.915	1.8	NA	0.0	0.0	0.00	0.03	0.00	57.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:45:07 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004 [2041PM_Tourist_Op 1 (Site Folder: OPTION 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1645	5.0	1645	5.0	0.871	1.4	LOS A	0.0	0.0	0.00	0.00	0.00	57.4
Approach			1645	5.0	1645	5.0	0.871	1.4	NA	0.0	0.0	0.00	0.00	0.00	57.4
East: Tamborine Mountain Road															
4	L2	All MCs	88	5.0	88	5.0	0.055	749.7	LOS F	0.0	0.0	0.00	0.58	0.00	52.7
Approach			88	5.0	88	5.0	0.055	749.7	LOS F	0.0	0.0	0.00	0.58	0.00	52.7
North: Beaudesert Nerang Road															
7	L2	All MCs	76	5.0	76	5.0	0.042	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	1712	5.0	1712	5.0	0.906	2.0	LOS A	0.0	0.0	0.00	0.00	0.00	56.4
Approach			1787	5.0	1787	5.0	0.906	2.1	NA	0.0	0.0	0.00	0.02	0.00	56.2
All Vehicles			3521	5.0	3521	5.0	0.906	20.6	NA	0.0	0.0	0.00	0.03	0.00	56.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

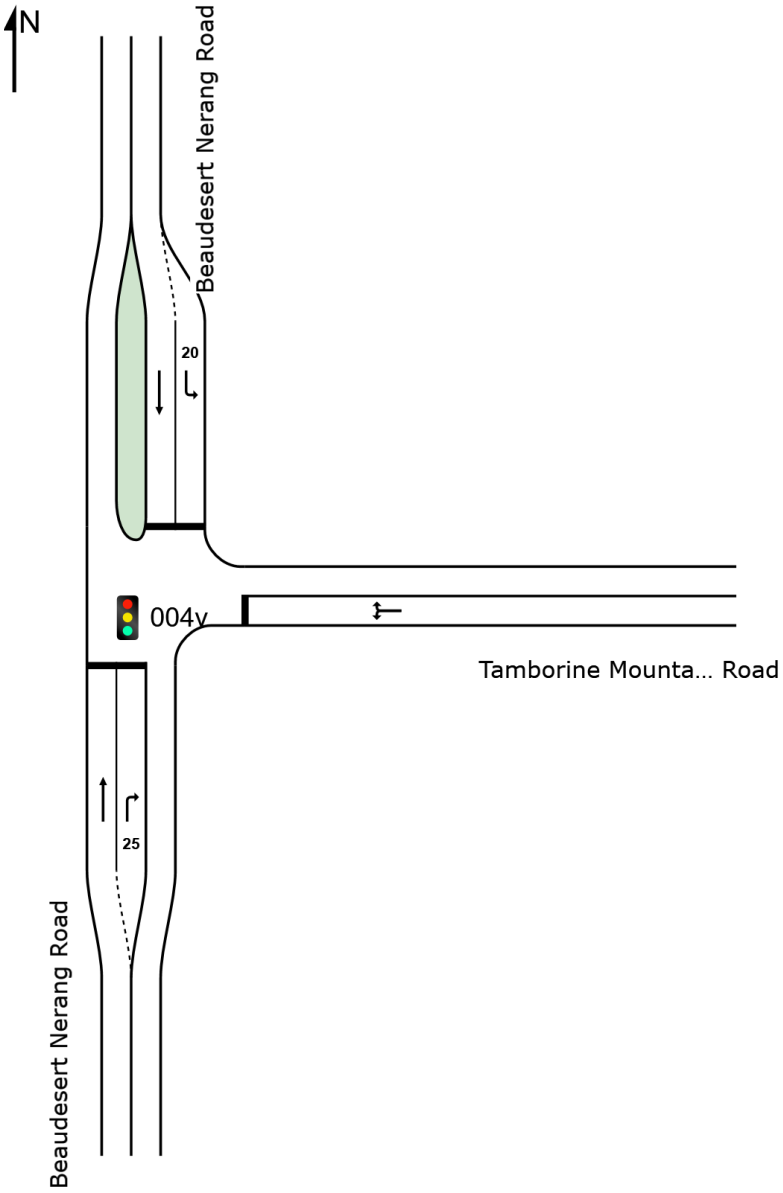
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:46:07 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

SITE LAYOUT

Site: 004v [2024AM_Survey_Op 2 (Site Folder: OPTION 2)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:09:45 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004v [2024AM_Survey_Op 2 (Site Folder: OPTION 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	337	5.3	337	5.3	0.279	4.3	LOS A	3.6	26.5	0.47	0.40	0.47	56.1
3	R2	All MCs	6	5.3	6	5.3	* 0.029	27.5	LOS B	0.1	1.0	0.91	0.65	0.91	39.8
Approach			343	5.3	343	5.3	0.279	4.7	LOS A	3.6	26.5	0.48	0.41	0.48	55.6
East: Tamborine Mountain Road															
4	L2	All MCs	11	5.3	11	5.3	0.142	28.3	LOS B	0.7	5.2	0.93	0.71	0.93	39.7
6	R2	All MCs	20	5.3	20	5.3	* 0.142	28.3	LOS B	0.7	5.2	0.93	0.71	0.93	39.7
Approach			31	5.3	31	5.3	0.142	28.3	LOS B	0.7	5.2	0.93	0.71	0.93	39.7
North: Beaudesert Nerang Road															
7	L2	All MCs	24	5.3	24	5.3	0.034	24.5	LOS B	0.4	2.6	0.63	0.67	0.63	46.1
8	T1	All MCs	633	5.3	633	5.3	* 0.861	32.0	LOS C	18.1	132.6	0.98	1.06	1.29	43.5
Approach			657	5.3	657	5.3	0.861	31.8	LOS C	18.1	132.6	0.97	1.04	1.26	39.3
All Vehicles			1031	5.3	1031	5.3	0.861	22.6	LOS B	18.1	132.6	0.80	0.82	0.99	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:36:03 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004v [2024PM_Survey_Op 2 (Site Folder: OPTION 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	565	5.0	565	5.0	0.429	4.7	LOS A	7.1	51.8	0.46	0.41	0.46	56.2
3	R2	All MCs	13	5.0	13	5.0	*0.070	34.0	LOS C	0.4	2.6	0.93	0.68	0.93	37.4
Approach			578	5.0	578	5.0	0.429	5.4	LOS A	7.1	51.8	0.47	0.42	0.47	55.1
East: Tamborine Mountain Road															
4	L2	All MCs	14	5.0	14	5.0	0.276	34.6	LOS C	1.4	10.6	0.96	0.74	0.96	37.2
6	R2	All MCs	36	5.0	36	5.0	*0.276	34.6	LOS C	1.4	10.6	0.96	0.74	0.96	37.2
Approach			49	5.0	49	5.0	0.276	34.6	LOS C	1.4	10.6	0.96	0.74	0.96	37.2
North: Beaudesert Nerang Road															
7	L2	All MCs	18	5.0	18	5.0	0.020	22.9	LOS B	0.3	1.9	0.52	0.65	0.52	47.2
8	T1	All MCs	747	5.0	747	5.0	*0.806	26.7	LOS B	20.9	152.6	0.90	0.89	1.01	46.6
Approach			765	5.0	765	5.0	0.806	26.6	LOS B	20.9	152.6	0.89	0.89	1.00	41.7
All Vehicles			1393	5.0	1393	5.0	0.806	18.1	LOS B	20.9	152.6	0.72	0.69	0.78	46.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:36:20 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004v [2041AM_Design_Op 2 (Site Folder: OPTION 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	441	5.3	441	5.3	0.266	1.5	LOS A	4.9	35.8	0.17	0.15	0.17	58.6
3	R2	All MCs	8	5.3	8	5.3	* 0.118	84.4	LOS F	0.6	4.6	0.99	0.67	0.99	24.5
Approach			449	5.3	449	5.3	0.266	3.0	LOS A	4.9	35.8	0.18	0.16	0.18	57.1
East: Tamborine Mountain Road															
4	L2	All MCs	15	5.3	15	5.3	0.588	88.0	LOS F	3.3	24.0	1.00	0.77	1.06	24.1
6	R2	All MCs	27	5.3	27	5.3	* 0.588	88.0	LOS F	3.3	24.0	1.00	0.77	1.06	24.1
Approach			42	5.3	42	5.3	0.588	88.0	LOS F	3.3	24.0	1.00	0.77	1.06	24.1
North: Beaudesert Nerang Road															
7	L2	All MCs	64	5.3	64	5.3	0.045	23.5	LOS B	0.9	6.9	0.22	0.62	0.22	50.3
8	T1	All MCs	1683	5.3	1683	5.3	* 1.159	185.8	LOS F	210.7	1541.6	1.00	1.69	1.87	15.7
Approach			1747	5.3	1747	5.3	1.159	179.8	LOS F	210.7	1541.6	0.97	1.65	1.81	15.1
All Vehicles			2239	5.3	2239	5.3	1.159	142.6	LOS F	210.7	1541.6	0.81	1.34	1.47	17.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:58:08 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004v [2041PM_Design_Op 2 (Site Folder: OPTION 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1628	5.0	1628	5.0	* 1.017	60.9	LOS E	149.2	1089.0	1.00	1.19	1.24	32.5
3	R2	All MCs	37	5.0	37	5.0	0.514	96.7	LOS F	2.8	20.7	1.00	0.74	1.01	24.1
Approach			1665	5.0	1665	5.0	1.017	61.7	LOS E	149.2	1089.0	1.00	1.18	1.23	29.7
East: Tamborine Mountain Road															
4	L2	All MCs	24	5.0	24	5.0	0.925	99.2	LOS F	7.5	54.8	1.00	0.99	1.46	22.4
6	R2	All MCs	64	5.0	64	5.0	* 0.925	99.2	LOS F	7.5	54.8	1.00	0.99	1.46	22.5
Approach			88	5.0	88	5.0	0.925	99.2	LOS F	7.5	54.8	1.00	0.99	1.46	22.4
North: Beaudesert Nerang Road															
7	L2	All MCs	29	5.0	29	5.0	0.021	18.7	LOS B	0.4	3.3	0.23	0.62	0.23	50.1
8	T1	All MCs	1241	5.0	1241	5.0	0.855	20.4	LOS B	57.6	420.5	0.71	0.65	0.71	50.8
Approach			1271	5.0	1271	5.0	0.855	20.4	LOS B	57.6	420.5	0.70	0.65	0.70	44.8
All Vehicles			3024	5.0	3024	5.0	1.017	45.5	LOS D	149.2	1089.0	0.88	0.95	1.02	34.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 3 February 2025 9:57:49 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

MOVEMENT SUMMARY

Site: 004v [2041PM_Tourist_Op 2 (Site Folder: OPTION 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Tamborine Mountain Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Nerang Road															
2	T1	All MCs	1546	5.0	1546	5.0	0.958	24.0	LOS B	95.1	694.2	0.86	0.82	0.91	46.8
3	R2	All MCs	35	5.0	35	5.0	* 0.484	93.9	LOS F	2.7	19.5	1.00	0.74	1.00	24.1
Approach			1581	5.0	1581	5.0	0.958	25.5	LOS B	95.1	694.2	0.86	0.82	0.91	42.2
East: Tamborine Mountain Road															
4	L2	All MCs	24	5.0	24	5.0	1.057	157.4	LOS F	9.3	68.0	1.00	1.13	1.83	16.5
6	R2	All MCs	64	5.0	64	5.0	* 1.057	157.4	LOS F	9.3	68.0	1.00	1.13	1.83	16.5
Approach			88	5.0	88	5.0	1.057	157.4	LOS F	9.3	68.0	1.00	1.13	1.83	16.5
North: Beaudesert Nerang Road															
7	L2	All MCs	41	5.0	41	5.0	0.029	24.2	LOS B	0.6	4.5	0.22	0.62	0.22	50.2
8	T1	All MCs	1712	5.0	1712	5.0	* 1.170	196.0	LOS F	218.1	1591.9	1.00	1.73	1.92	15.1
Approach			1753	5.0	1753	5.0	1.170	191.9	LOS F	218.1	1591.9	0.98	1.70	1.88	14.4
All Vehicles			3422	5.0	3422	5.0	1.170	114.2	LOS F	218.1	1591.9	0.93	1.28	1.43	20.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

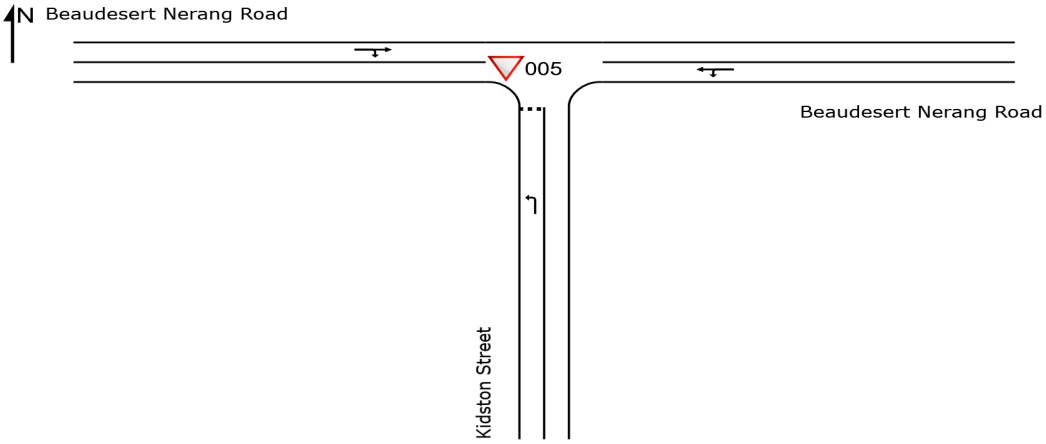
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 12:29:52 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\4_Beaudesert Nerang Rd & Tamborine Mountain Rd.sip9

SITE LAYOUT

Site: 005 [2024AM_SUrvey (Site Folder: UPGRADE 2)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:11:58 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	42	5.4	42	5.4	0.105	7.2	LOS A	0.3	2.6	0.55	0.74	0.55	49.8
3	R2	All MCs	24	5.4	24	5.4	0.105	13.8	LOS A	0.3	2.6	0.55	0.74	0.55	49.5
Approach			66	5.4	66	5.4	0.105	9.6	LOS A	0.3	2.6	0.55	0.74	0.55	49.7
East: Beaudesert Nerang Road															
4	L2	All MCs	31	5.4	31	5.4	0.223	5.7	LOS A	0.0	0.0	0.00	0.04	0.00	56.8
5	T1	All MCs	388	5.4	388	5.4	0.223	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach			419	5.4	419	5.4	0.223	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
West: Beaudesert Nerang Road															
11	T1	All MCs	535	5.4	535	5.4	0.341	0.4	LOS A	0.7	4.9	0.14	0.17	0.14	58.8
12	R2	All MCs	62	5.4	62	5.4	0.341	7.8	LOS A	0.7	4.9	0.14	0.17	0.14	55.8
Approach			597	5.4	597	5.4	0.341	1.2	NA	0.7	4.9	0.14	0.17	0.14	58.5
All Vehicles			1082	5.4	1082	5.4	0.341	1.4	NA	0.7	4.9	0.11	0.16	0.11	58.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:28:54 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	68	5.0	68	5.0	0.300	9.1	LOS A	1.1	7.7	0.72	0.93	0.88	46.0
3	R2	All MCs	41	5.0	41	5.0	0.300	26.6	LOS B	1.1	7.7	0.72	0.93	0.88	45.8
Approach			109	5.0	109	5.0	0.300	15.6	LOS B	1.1	7.7	0.72	0.93	0.88	45.9
East: Beaudesert Nerang Road															
4	L2	All MCs	49	5.0	49	5.0	0.304	5.7	LOS A	0.0	0.0	0.00	0.05	0.00	56.7
5	T1	All MCs	522	5.0	522	5.0	0.304	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	59.4
Approach			572	5.0	572	5.0	0.304	0.6	NA	0.0	0.0	0.00	0.05	0.00	59.1
West: Beaudesert Nerang Road															
11	T1	All MCs	736	5.0	736	5.0	0.484	1.2	LOS A	1.9	13.7	0.18	0.23	0.27	58.1
12	R2	All MCs	84	5.0	84	5.0	0.484	9.7	LOS A	1.9	13.7	0.18	0.23	0.27	55.2
Approach			820	5.0	820	5.0	0.484	2.0	NA	1.9	13.7	0.18	0.23	0.27	57.7
All Vehicles			1501	5.0	1501	5.0	0.484	2.5	NA	1.9	13.7	0.15	0.21	0.21	57.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:28:56 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	42	5.4	42	5.4	0.910	46.4	LOS D	3.1	22.9	1.00	1.40	2.28	25.2
3	R2	All MCs	24	5.4	24	5.4	0.910	140.9	LOS F	3.1	22.9	1.00	1.40	2.28	25.2
Approach			66	5.4	66	5.4	0.910	80.9	LOS F	3.1	22.9	1.00	1.40	2.28	25.2
East: Beaudesert Nerang Road															
4	L2	All MCs	36	5.4	36	5.4	0.263	5.7	LOS A	0.0	0.0	0.00	0.04	0.00	56.7
5	T1	All MCs	458	5.4	458	5.4	0.263	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach			494	5.4	494	5.4	0.263	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
West: Beaudesert Nerang Road															
11	T1	All MCs	1229	5.4	1229	5.4	0.797	2.6	LOS A	7.3	53.3	0.21	0.27	0.59	56.7
12	R2	All MCs	143	5.4	143	5.4	0.797	11.7	LOS A	7.3	53.3	0.21	0.27	0.59	53.9
Approach			1373	5.4	1373	5.4	0.797	3.5	NA	7.3	53.3	0.21	0.27	0.59	56.4
All Vehicles			1933	5.4	1933	5.4	0.910	5.4	NA	7.3	53.3	0.18	0.25	0.50	54.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:28:56 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	68	5.0	68	5.0	3.239	2046.4	LOS F	49.5	361.1	1.00	2.69	8.32	1.7
3	R2	All MCs	41	5.0	41	5.0	3.239	2214.5	LOS F	49.5	361.1	1.00	2.69	8.32	1.7
Approach			109	5.0	109	5.0	3.239	2109.5	LOS F	49.5	361.1	1.00	2.69	8.32	1.7
East: Beaudesert Nerang Road															
4	L2	All MCs	116	5.0	116	5.0	0.709	6.0	LOS A	0.0	0.0	0.00	0.05	0.00	56.0
5	T1	All MCs	1217	5.0	1217	5.0	0.709	0.5	LOS A	0.0	0.0	0.00	0.05	0.00	58.6
Approach			1333	5.0	1333	5.0	0.709	1.0	NA	0.0	0.0	0.00	0.05	0.00	58.3
West: Beaudesert Nerang Road															
11	T1	All MCs	905	5.0	905	5.0	1.273	354.4	LOS F	185.0	1350.5	1.00	1.22	9.95	8.7
12	R2	All MCs	103	5.0	103	5.0	1.273	388.9	LOS F	185.0	1350.5	1.00	1.22	9.95	8.6
Approach			1008	5.0	1008	5.0	1.273	357.9	NA	185.0	1350.5	1.00	1.22	9.95	8.7
All Vehicles			2451	5.0	2451	5.0	3.239	242.1	NA	185.0	1350.5	0.46	0.65	4.47	12.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:28:57 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041PM_Tourist (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	68	5.0	68	5.0	7.123	5533.2	LOS F	60.6	442.6	1.00	2.06	5.58	0.6
3	R2	All MCs	41	5.0	41	5.0	7.123	5717.4	LOS F	60.6	442.6	1.00	2.06	5.58	0.6
Approach			109	5.0	109	5.0	7.123	5602.3	LOS F	60.6	442.6	1.00	2.06	5.58	0.6
East: Beaudesert Nerang Road															
4	L2	All MCs	109	5.0	109	5.0	0.673	6.0	LOS A	0.0	0.0	0.00	0.05	0.00	56.1
5	T1	All MCs	1156	5.0	1156	5.0	0.673	0.4	LOS A	0.0	0.0	0.00	0.05	0.00	58.7
Approach			1265	5.0	1265	5.0	0.673	0.9	NA	0.0	0.0	0.00	0.05	0.00	58.5
West: Beaudesert Nerang Road															
11	T1	All MCs	1248	5.0	1248	5.0	1.488	490.1	LOS F	317.0	2313.9	1.00	1.37	15.58	6.6
12	R2	All MCs	143	5.0	143	5.0	1.488	523.6	LOS F	317.0	2313.9	1.00	1.37	15.58	6.5
Approach			1392	5.0	1392	5.0	1.488	493.6	NA	317.0	2313.9	1.00	1.37	15.58	6.6
All Vehicles			2766	5.0	2766	5.0	7.123	470.4	NA	317.0	2313.9	0.54	0.79	8.06	6.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 28 January 2025 2:23:41 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2024AM_Survey (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	66	5.4	66	5.4	0.058	7.2	LOS A	0.3	2.0	0.43	0.60	0.43	51.4
Approach			66	5.4	66	5.4	0.058	7.2	LOS A	0.3	2.0	0.43	0.60	0.43	51.4
East: Beaudesert Nerang Road															
4	L2	All MCs	31	5.4	31	5.4	0.223	5.7	LOS A	0.0	0.0	0.00	0.04	0.00	56.8
5	T1	All MCs	388	5.4	388	5.4	0.223	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach			419	5.4	419	5.4	0.223	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
West: Beaudesert Nerang Road															
11	T1	All MCs	535	5.4	535	5.4	0.337	0.4	LOS A	0.8	6.2	0.16	0.17	0.16	58.8
12	R2	All MCs	62	5.4	62	5.4	0.337	7.8	LOS A	0.8	6.2	0.16	0.17	0.16	55.8
Approach			597	5.4	597	5.4	0.337	1.2	NA	0.8	6.2	0.16	0.17	0.16	58.5
All Vehicles			1082	5.4	1082	5.4	0.337	1.3	NA	0.8	6.2	0.11	0.15	0.11	58.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:51:14 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2024PM_Survey (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	109	5.0	109	5.0	0.111	8.0	LOS A	0.5	3.8	0.52	0.67	0.52	50.9
Approach			109	5.0	109	5.0	0.111	8.0	LOS A	0.5	3.8	0.52	0.67	0.52	50.9
East: Beaudesert Nerang Road															
4	L2	All MCs	49	5.0	49	5.0	0.304	5.7	LOS A	0.0	0.0	0.00	0.05	0.00	56.7
5	T1	All MCs	522	5.0	522	5.0	0.304	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	59.4
Approach			572	5.0	572	5.0	0.304	0.6	NA	0.0	0.0	0.00	0.05	0.00	59.1
West: Beaudesert Nerang Road															
11	T1	All MCs	736	5.0	736	5.0	0.475	1.1	LOS A	2.0	14.9	0.19	0.22	0.25	58.1
12	R2	All MCs	84	5.0	84	5.0	0.475	9.6	LOS A	2.0	14.9	0.19	0.22	0.25	55.2
Approach			820	5.0	820	5.0	0.475	2.0	NA	2.0	14.9	0.19	0.22	0.25	57.8
All Vehicles			1501	5.0	1501	5.0	0.475	1.9	NA	2.0	14.9	0.14	0.19	0.17	57.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:51:15 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041AM_Design (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	66	5.4	66	5.4	0.063	7.5	LOS A	0.3	2.1	0.47	0.63	0.47	51.2
Approach			66	5.4	66	5.4	0.063	7.5	LOS A	0.3	2.1	0.47	0.63	0.47	51.2
East: Beaudesert Nerang Road															
4	L2	All MCs	36	5.4	36	5.4	0.263	5.7	LOS A	0.0	0.0	0.00	0.04	0.00	56.7
5	T1	All MCs	458	5.4	458	5.4	0.263	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach			494	5.4	494	5.4	0.263	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
West: Beaudesert Nerang Road															
11	T1	All MCs	1229	5.4	1229	5.4	0.786	3.0	LOS A	9.6	70.4	0.21	0.24	0.55	56.3
12	R2	All MCs	143	5.4	143	5.4	0.786	12.1	LOS A	9.6	70.4	0.21	0.24	0.55	53.6
Approach			1373	5.4	1373	5.4	0.786	4.0	NA	9.6	70.4	0.21	0.24	0.55	56.0
All Vehicles			1933	5.4	1933	5.4	0.786	3.2	NA	9.6	70.4	0.16	0.21	0.41	56.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:51:15 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041PM_Design (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	109	5.0	109	5.0	0.334	20.6	LOS B	1.4	10.5	0.85	0.99	1.05	43.3
Approach			109	5.0	109	5.0	0.334	20.6	LOS B	1.4	10.5	0.85	0.99	1.05	43.3
East: Beaudesert Nerang Road															
4	L2	All MCs	116	5.0	116	5.0	0.709	6.0	LOS A	0.0	0.0	0.00	0.05	0.00	56.0
5	T1	All MCs	1217	5.0	1217	5.0	0.709	0.5	LOS A	0.0	0.0	0.00	0.05	0.00	58.6
Approach			1333	5.0	1333	5.0	0.709	1.0	NA	0.0	0.0	0.00	0.05	0.00	58.3
West: Beaudesert Nerang Road															
11	T1	All MCs	905	5.0	905	5.0	0.873	68.2	LOS E	52.4	382.4	0.46	0.57	2.95	27.8
12	R2	All MCs	103	5.0	103	5.0	0.873	85.7	LOS F	52.4	382.4	0.46	0.57	2.95	27.2
Approach			1008	5.0	1008	5.0	0.873	70.0	NA	52.4	382.4	0.46	0.57	2.95	27.8
All Vehicles			2451	5.0	2451	5.0	0.873	30.3	NA	52.4	382.4	0.23	0.31	1.26	39.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:51:15 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

MOVEMENT SUMMARY

Site: 005 [2041PM_Tourist (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Kidston St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Kidston Street															
1	L2	All MCs	109	5.0	109	5.0	0.293	17.9	LOS B	1.3	9.2	0.82	0.96	0.96	44.7
Approach			109	5.0	109	5.0	0.293	17.9	LOS B	1.3	9.2	0.82	0.96	0.96	44.7
East: Beaudesert Nerang Road															
4	L2	All MCs	109	5.0	109	5.0	0.673	6.0	LOS A	0.0	0.0	0.00	0.05	0.00	56.1
5	T1	All MCs	1156	5.0	1156	5.0	0.673	0.4	LOS A	0.0	0.0	0.00	0.05	0.00	58.7
Approach			1265	5.0	1265	5.0	0.673	0.9	NA	0.0	0.0	0.00	0.05	0.00	58.5
West: Beaudesert Nerang Road															
11	T1	All MCs	1248	5.0	1248	5.0	1.123	173.0	LOS F	157.9	1152.4	1.00	1.23	8.73	15.4
12	R2	All MCs	143	5.0	143	5.0	1.123	203.8	LOS F	157.9	1152.4	1.00	1.23	8.73	15.1
Approach			1392	5.0	1392	5.0	1.123	176.2	NA	157.9	1152.4	1.00	1.23	8.73	15.3
All Vehicles			2766	5.0	2766	5.0	1.123	89.7	NA	157.9	1152.4	0.54	0.68	4.43	24.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

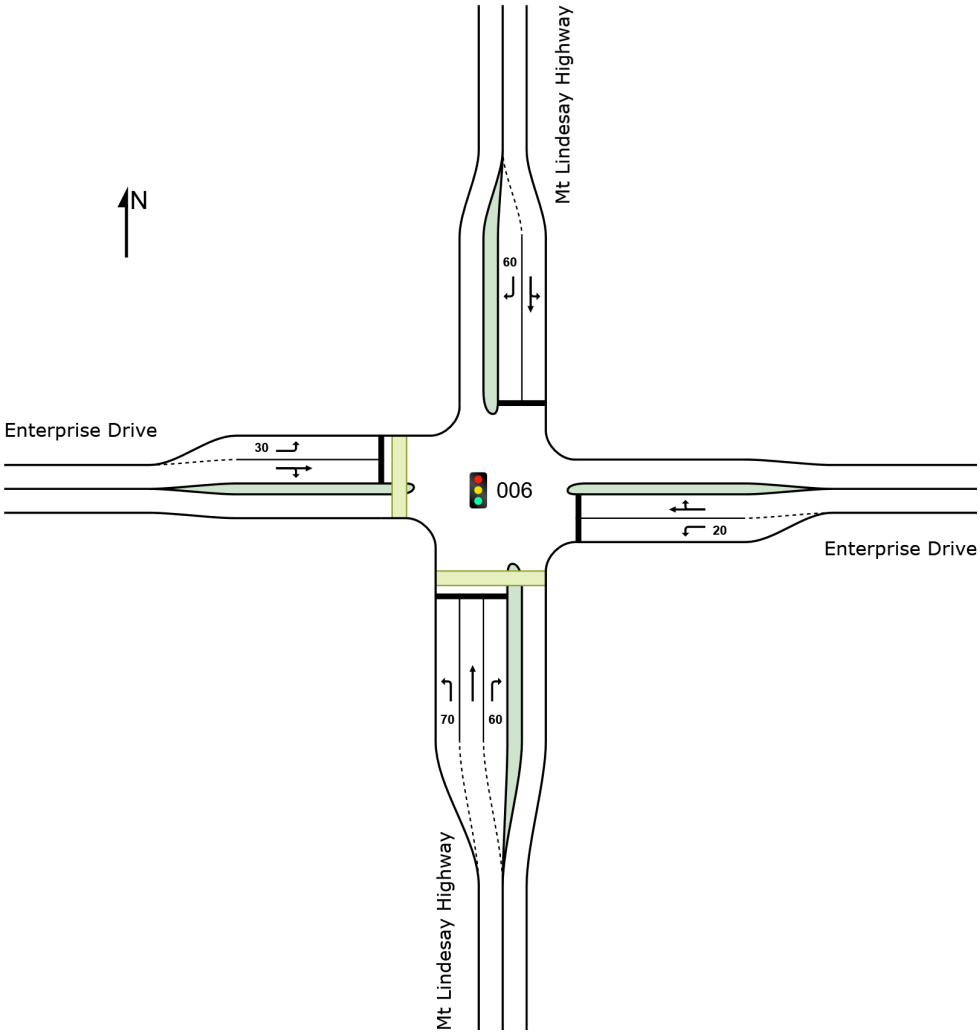
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:51:16 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\5_Beaudesert Nerang Rd & Kidston St.sip9

SITE LAYOUT

Site: 006 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Enterprise Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:14:18 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\6_Mt Lindesay Hwy & Enterprise Dr.sip9

MOVEMENT SUMMARY

Site: 006 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Enterprise Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mt Lindesay Highway															
1	L2	All MCs	107	7.7	107	7.7	0.092	12.1	LOS A	1.9	13.9	0.38	0.67	0.38	48.1
2	T1	All MCs	492	7.7	492	7.7	0.491	16.2	LOS B	14.9	111.0	0.67	0.60	0.67	47.9
3	R2	All MCs	16	7.7	16	7.7	*0.112	54.6	LOS D	0.7	5.6	0.96	0.69	0.96	31.1
Approach			615	7.7	615	7.7	0.491	16.5	LOS B	14.9	111.0	0.63	0.61	0.63	46.9
East: Enterprise Drive															
4	L2	All MCs	13	7.7	13	7.7	*0.090	53.5	LOS D	0.6	4.4	0.95	0.68	0.95	31.1
5	T1	All MCs	3	7.7	3	7.7	0.074	47.7	LOS D	0.5	3.7	0.95	0.67	0.95	32.5
6	R2	All MCs	7	7.7	7	7.7	0.074	53.3	LOS D	0.5	3.7	0.95	0.67	0.95	31.7
Approach			23	7.7	23	7.7	0.090	52.7	LOS D	0.6	4.4	0.95	0.68	0.95	31.5
North: Mt Lindesay Highway															
7	L2	All MCs	12	7.7	12	7.7	0.854	43.5	LOS D	37.6	280.6	0.92	0.91	1.00	40.3
8	T1	All MCs	805	7.7	805	7.7	*0.854	37.9	LOS C	37.6	280.6	0.92	0.91	1.00	41.7
9	R2	All MCs	65	7.7	65	7.7	0.463	67.1	LOS E	3.2	24.2	1.00	0.76	1.00	30.5
Approach			882	7.7	882	7.7	0.854	40.1	LOS C	37.6	280.6	0.93	0.90	1.00	36.1
West: Enterprise Drive															
10	L2	All MCs	32	7.7	32	7.7	0.299	57.6	LOS E	1.6	11.8	0.99	0.72	0.99	30.1
11	T1	All MCs	2	7.7	2	7.7	*0.547	53.4	LOS D	3.0	22.3	1.00	0.77	1.04	30.6
12	R2	All MCs	56	7.7	56	7.7	0.547	59.1	LOS E	3.0	22.3	1.00	0.77	1.04	29.9
Approach			89	7.7	89	7.7	0.547	58.4	LOS E	3.0	22.3	1.00	0.75	1.02	30.0
All Vehicles			1609	7.7	1609	7.7	0.854	32.3	LOS C	37.6	280.6	0.82	0.78	0.86	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mt Lindesay Highway												
P1	Full	5	5	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01

West: Enterprise Drive											
P4 Full	5	5	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01
All Pedestrians	10	11	44.2	LOS E	0.0	0.0	0.94	0.94	198.0	200.0	1.01

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:32:07 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\6_Mt Lindesay Hwy & Enterprise Dr.sip9

MOVEMENT SUMMARY

Site: 006 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Enterprise Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mt Lindesay Highway															
1	L2	All MCs	53	6.2	53	6.2	0.046	19.0	LOS B	0.8	6.1	0.38	0.65	0.38	48.3
2	T1	All MCs	758	6.2	758	6.2	*0.800	30.3	LOS C	28.9	212.7	0.89	0.84	0.93	44.3
3	R2	All MCs	18	6.2	18	6.2	0.113	56.8	LOS E	0.8	5.6	0.95	0.70	0.95	32.7
Approach			828	6.2	828	6.2	0.800	30.1	LOS C	28.9	212.7	0.86	0.83	0.90	40.0
East: Enterprise Drive															
4	L2	All MCs	15	6.2	15	6.2	0.093	48.0	LOS D	0.6	4.6	0.95	0.69	0.95	32.7
5	T1	All MCs	1	6.2	1	6.2	*0.153	42.8	LOS D	1.0	7.6	0.96	0.71	0.96	33.5
6	R2	All MCs	23	6.2	23	6.2	0.153	48.4	LOS D	1.0	7.6	0.96	0.71	0.96	32.6
Approach			39	6.2	39	6.2	0.153	48.1	LOS D	1.0	7.6	0.95	0.70	0.95	32.7
North: Mt Lindesay Highway															
7	L2	All MCs	17	6.2	17	6.2	0.528	22.9	LOS B	14.5	107.2	0.74	0.66	0.74	45.1
8	T1	All MCs	465	6.2	465	6.2	0.528	17.3	LOS B	14.5	107.2	0.74	0.66	0.74	46.8
9	R2	All MCs	34	6.2	34	6.2	*0.284	52.1	LOS D	1.5	11.1	0.98	0.72	0.98	31.6
Approach			516	6.2	516	6.2	0.528	19.8	LOS B	14.5	107.2	0.76	0.66	0.76	45.1
West: Enterprise Drive															
10	L2	All MCs	48	6.2	48	6.2	0.408	52.4	LOS D	2.2	16.2	1.00	0.74	1.00	31.4
11	T1	All MCs	1	6.2	1	6.2	*0.790	51.2	LOS D	4.6	33.8	1.00	0.91	1.31	31.1
12	R2	All MCs	93	6.2	93	6.2	0.790	56.9	LOS E	4.6	33.8	1.00	0.91	1.31	30.4
Approach			142	6.2	142	6.2	0.790	55.3	LOS D	4.6	33.8	1.00	0.85	1.20	30.8
All Vehicles			1525	6.2	1525	6.2	0.800	29.4	LOS C	28.9	212.7	0.84	0.77	0.88	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mt Lindesay Highway												
P1	Full	5	5	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

West: Enterprise Drive											
P4 Full	5	5	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
All Pedestrians	10	11	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\6_Mt Lindesay Hwy & Enterprise Dr.sip9

MOVEMENT SUMMARY

Site: 006 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Enterprise Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mt Lindesay Highway															
1	L2	All MCs	95	7.7	95	7.7	0.079	12.3	LOS A	1.8	13.5	0.35	0.66	0.35	48.0
2	T1	All MCs	433	7.7	433	7.7	0.405	14.9	LOS B	13.8	102.9	0.60	0.53	0.60	48.2
3	R2	All MCs	105	7.7	105	7.7	* 0.897	78.7	LOS F	7.1	53.2	1.00	0.99	1.45	25.6
Approach			633	7.7	633	7.7	0.897	25.2	LOS B	13.8	102.9	0.63	0.62	0.70	42.0
East: Enterprise Drive															
4	L2	All MCs	53	7.7	53	7.7	0.448	67.2	LOS E	3.1	23.5	1.00	0.75	1.00	27.9
5	T1	All MCs	3	7.7	3	7.7	* 0.474	61.7	LOS E	3.3	24.9	1.00	0.75	1.00	28.6
6	R2	All MCs	53	7.7	53	7.7	0.474	67.3	LOS E	3.3	24.9	1.00	0.75	1.00	27.9
Approach			108	7.7	108	7.7	0.474	67.1	LOS E	3.3	24.9	1.00	0.75	1.00	27.9
North: Mt Lindesay Highway															
7	L2	All MCs	105	7.7	105	7.7	0.891	48.8	LOS D	52.8	394.2	0.93	0.92	1.01	38.9
8	T1	All MCs	845	7.7	845	7.7	* 0.891	43.1	LOS D	52.8	394.2	0.93	0.92	1.01	40.2
9	R2	All MCs	68	7.7	68	7.7	0.389	76.0	LOS F	3.9	29.1	0.98	0.76	0.98	29.0
Approach			1019	7.7	1019	7.7	0.891	45.9	LOS D	52.8	394.2	0.93	0.91	1.01	34.0
West: Enterprise Drive															
10	L2	All MCs	49	7.7	49	7.7	0.482	68.7	LOS E	3.0	22.4	1.00	0.75	1.00	27.6
11	T1	All MCs	3	7.7	3	7.7	* 0.880	72.1	LOS F	6.1	45.2	1.00	0.97	1.43	26.5
12	R2	All MCs	87	7.7	87	7.7	0.880	77.8	LOS F	6.1	45.2	1.00	0.97	1.43	25.9
Approach			140	7.7	140	7.7	0.880	74.4	LOS F	6.1	45.2	1.00	0.89	1.28	26.5
All Vehicles			1900	7.7	1900	7.7	0.897	42.3	LOS C	52.8	394.2	0.84	0.80	0.92	35.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mt Lindesay Highway												
P1	Full	5	5	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96

West: Enterprise Drive											
P4 Full	5	5	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
All Pedestrians	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:08:47 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\6_Mt Lindesay Hwy & Enterprise Dr.sip9

MOVEMENT SUMMARY

Site: 006 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Enterprise Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mt Lindesay Highway															
1	L2	All MCs	52	6.2	52	6.2	0.045	19.4	LOS B	0.8	6.0	0.38	0.65	0.38	48.3
2	T1	All MCs	735	6.2	735	6.2	*0.858	38.6	LOS C	32.6	240.2	0.95	0.96	1.07	40.6
3	R2	All MCs	105	6.2	105	6.2	0.666	61.8	LOS E	4.9	35.9	1.00	0.84	1.11	31.5
Approach			892	6.2	892	6.2	0.858	40.2	LOS C	32.6	240.2	0.92	0.93	1.04	36.0
East: Enterprise Drive															
4	L2	All MCs	53	6.2	53	6.2	0.333	49.6	LOS D	2.3	17.0	0.98	0.74	0.98	32.2
5	T1	All MCs	1	6.2	1	6.2	*0.339	44.0	LOS D	2.3	17.3	0.98	0.75	0.98	33.1
6	R2	All MCs	53	6.2	53	6.2	0.339	49.6	LOS D	2.3	17.3	0.98	0.75	0.98	32.3
Approach			106	6.2	106	6.2	0.339	49.5	LOS D	2.3	17.3	0.98	0.75	0.98	32.3
North: Mt Lindesay Highway															
7	L2	All MCs	105	6.2	105	6.2	0.640	29.2	LOS C	18.3	134.7	0.82	0.75	0.82	43.2
8	T1	All MCs	442	6.2	442	6.2	0.640	23.5	LOS B	18.3	134.7	0.82	0.75	0.82	44.8
9	R2	All MCs	32	6.2	32	6.2	*0.266	55.6	LOS D	1.4	10.4	0.98	0.72	0.98	31.6
Approach			579	6.2	579	6.2	0.640	26.3	LOS B	18.3	134.7	0.83	0.75	0.83	41.6
West: Enterprise Drive															
10	L2	All MCs	75	6.2	75	6.2	0.473	50.3	LOS D	3.3	24.5	0.99	0.76	0.99	32.0
11	T1	All MCs	1	6.2	1	6.2	*0.912	57.6	LOS E	7.7	56.4	1.00	1.06	1.55	29.5
12	R2	All MCs	143	6.2	143	6.2	0.912	63.3	LOS E	7.7	56.4	1.00	1.06	1.55	28.9
Approach			219	6.2	219	6.2	0.912	58.8	LOS E	7.7	56.4	1.00	0.96	1.36	29.9
All Vehicles			1796	6.2	1796	6.2	0.912	38.6	LOS C	32.6	240.2	0.90	0.86	1.01	36.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mt Lindesay Highway												
P1	Full	5	5	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

West: Enterprise Drive											
P4 Full	5	5	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04
All Pedestrians	10	11	39.2	LOS D	0.0	0.0	0.93	0.93	193.1	200.0	1.04

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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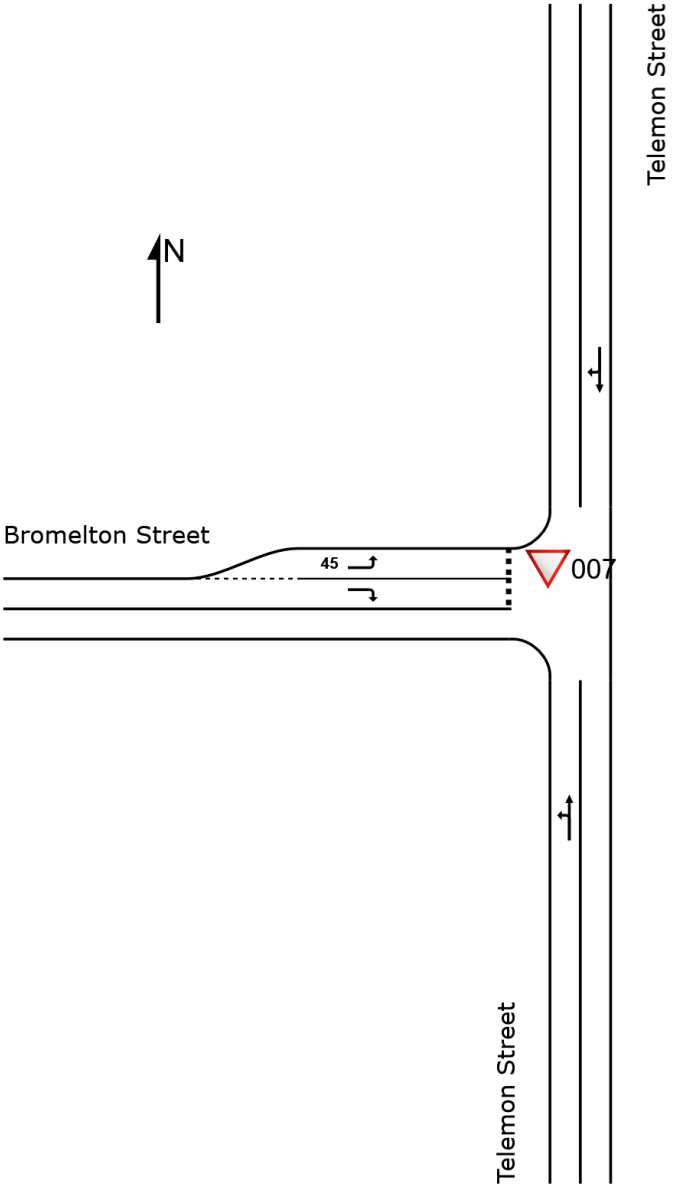
SITE LAYOUT

Site: 007 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:16:20 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	165	7.8	165	7.8	0.245	5.7	LOS A	0.0	0.0	0.00	0.22	0.00	55.2
2	T1	All MCs	281	7.8	281	7.8	0.245	0.1	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
Approach			446	7.8	446	7.8	0.245	2.2	NA	0.0	0.0	0.00	0.22	0.00	56.9
North: Telemon Street															
8	T1	All MCs	247	7.8	247	7.8	0.450	3.1	LOS A	3.3	25.0	0.52	0.68	0.69	54.2
9	R2	All MCs	329	7.8	329	7.8	0.450	9.1	LOS A	3.3	25.0	0.52	0.68	0.69	51.7
Approach			577	7.8	577	7.8	0.450	6.5	NA	3.3	25.0	0.52	0.68	0.69	52.8
West: Bromelton Street															
10	L2	All MCs	254	7.8	254	7.8	0.213	6.9	LOS A	0.9	7.0	0.41	0.63	0.41	51.3
12	R2	All MCs	81	7.8	81	7.8	0.198	13.1	LOS A	0.6	4.7	0.70	0.89	0.73	47.2
Approach			335	7.8	335	7.8	0.213	8.4	LOS A	0.9	7.0	0.48	0.69	0.49	50.3
All Vehicles			1358	7.8	1358	7.8	0.450	5.6	NA	3.3	25.0	0.34	0.53	0.41	53.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:35:08 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	135	6.4	135	6.4	0.192	5.7	LOS A	0.0	0.0	0.00	0.23	0.00	55.3
2	T1	All MCs	217	6.4	217	6.4	0.192	0.1	LOS A	0.0	0.0	0.00	0.23	0.00	57.9
Approach			352	6.4	352	6.4	0.192	2.2	NA	0.0	0.0	0.00	0.23	0.00	56.9
North: Telemon Street															
8	T1	All MCs	313	6.4	313	6.4	0.384	1.5	LOS A	2.1	15.3	0.40	0.49	0.42	56.0
9	R2	All MCs	257	6.4	257	6.4	0.384	7.6	LOS A	2.1	15.3	0.40	0.49	0.42	53.5
Approach			569	6.4	569	6.4	0.384	4.2	NA	2.1	15.3	0.40	0.49	0.42	54.8
West: Bromelton Street															
10	L2	All MCs	284	6.4	284	6.4	0.220	6.5	LOS A	1.0	7.3	0.35	0.60	0.35	51.6
12	R2	All MCs	87	6.4	87	6.4	0.183	11.6	LOS A	0.6	4.3	0.65	0.86	0.65	48.2
Approach			372	6.4	372	6.4	0.220	7.7	LOS A	1.0	7.3	0.42	0.66	0.42	50.7
All Vehicles			1293	6.4	1293	6.4	0.384	4.7	NA	2.1	15.3	0.30	0.47	0.31	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:35:09 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	202	7.8	202	7.8	0.300	5.7	LOS A	0.0	0.0	0.00	0.22	0.00	55.2
2	T1	All MCs	343	7.8	343	7.8	0.300	0.1	LOS A	0.0	0.0	0.00	0.22	0.00	57.9
Approach			545	7.8	545	7.8	0.300	2.2	NA	0.0	0.0	0.00	0.22	0.00	56.9
North: Telemon Street															
8	T1	All MCs	218	7.8	218	7.8	0.437	4.0	LOS A	3.2	23.6	0.57	0.76	0.79	53.5
9	R2	All MCs	289	7.8	289	7.8	0.437	10.1	LOS A	3.2	23.6	0.57	0.76	0.79	51.0
Approach			507	7.8	507	7.8	0.437	7.5	NA	3.2	23.6	0.57	0.76	0.79	52.1
West: Bromelton Street															
10	L2	All MCs	1362	7.8	1362	7.8	1.230	221.9	LOS F	177.5	1325.5	1.00	6.19	13.84	12.8
12	R2	All MCs	435	7.8	435	7.8	1.057	92.4	LOS F	27.1	202.4	1.00	2.92	7.79	23.4
Approach			1797	7.8	1797	7.8	1.230	190.6	LOS F	177.5	1325.5	1.00	5.40	12.38	14.3
All Vehicles			2849	7.8	2849	7.8	1.230	121.9	NA	177.5	1325.5	0.73	3.58	7.94	19.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:35:09 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	199	6.4	199	6.4	0.284	5.7	LOS A	0.0	0.0	0.00	0.23	0.00	55.2
2	T1	All MCs	321	6.4	321	6.4	0.284	0.1	LOS A	0.0	0.0	0.00	0.23	0.00	57.8
Approach			520	6.4	520	6.4	0.284	2.2	NA	0.0	0.0	0.00	0.23	0.00	56.8
North: Telemon Street															
8	T1	All MCs	281	6.4	281	6.4	0.393	2.9	LOS A	2.5	18.6	0.49	0.62	0.60	54.9
9	R2	All MCs	232	6.4	232	6.4	0.393	9.2	LOS A	2.5	18.6	0.49	0.62	0.60	52.4
Approach			513	6.4	513	6.4	0.393	5.7	NA	2.5	18.6	0.49	0.62	0.60	53.7
West: Bromelton Street															
10	L2	All MCs	2132	6.4	2132	6.4	1.852	779.0	LOS F	621.2	4586.7	1.00	12.62	29.65	4.3
12	R2	All MCs	656	6.4	656	6.4	1.511	481.0	LOS F	143.9	1062.9	1.00	7.93	25.32	6.7
Approach			2787	6.4	2787	6.4	1.852	708.9	LOS F	621.2	4586.7	1.00	11.52	28.63	4.7
All Vehicles			3820	6.4	3820	6.4	1.852	518.4	NA	621.2	4586.7	0.79	8.52	20.97	6.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

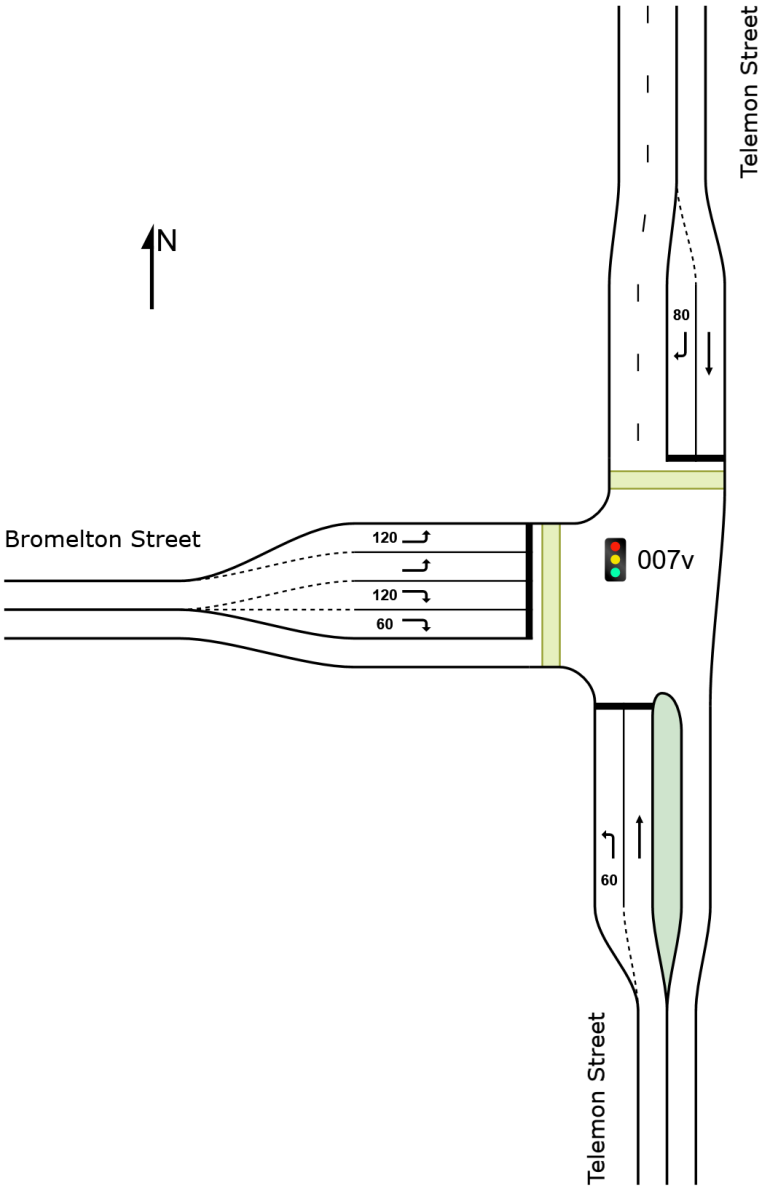
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:35:10 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

SITE LAYOUT

Site: 007v [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:16:35 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007v [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	165	7.8	165	7.8	0.427	24.7	LOS B	3.7	27.4	0.91	0.79	0.91	41.3
2	T1	All MCs	281	7.8	281	7.8	*0.688	21.5	LOS B	6.9	51.7	0.97	0.86	1.08	44.4
Approach			446	7.8	446	7.8	0.688	22.7	LOS B	6.9	51.7	0.95	0.83	1.02	43.2
North: Telemon Street															
8	T1	All MCs	247	7.8	247	7.8	0.222	5.0	LOS A	2.8	20.9	0.49	0.41	0.49	55.5
9	R2	All MCs	329	7.8	329	7.8	*0.720	26.4	LOS B	8.1	60.9	0.97	0.90	1.10	40.7
Approach			577	7.8	577	7.8	0.720	17.2	LOS B	8.1	60.9	0.76	0.69	0.84	45.9
West: Bromelton Street															
10	L2	All MCs	254	7.8	254	7.8	0.134	11.8	LOS A	1.5	11.5	0.52	0.70	0.52	48.3
12	R2	All MCs	81	7.8	81	7.8	*0.240	26.5	LOS B	1.5	11.4	0.90	0.73	0.90	40.5
Approach			335	7.8	335	7.8	0.240	15.4	LOS B	1.5	11.5	0.61	0.71	0.61	46.1
All Vehicles			1358	7.8	1358	7.8	0.720	18.6	LOS B	8.1	60.9	0.79	0.74	0.84	45.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: Telemon Street												
P3	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
West: Bromelton Street												
P4	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
All Pedestrians		0	21	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:12:27 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007v [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	135	6.4	135	6.4	0.379	21.6	LOS B	2.4	18.0	0.91	0.77	0.91	42.8
2	T1	All MCs	217	6.4	217	6.4	*0.579	17.0	LOS B	4.2	30.7	0.95	0.79	0.99	47.0
Approach			352	6.4	352	6.4	0.579	18.7	LOS B	4.2	30.7	0.93	0.78	0.96	45.3
North: Telemon Street															
8	T1	All MCs	313	6.4	313	6.4	0.318	6.0	LOS A	3.6	26.3	0.61	0.51	0.61	54.7
9	R2	All MCs	257	6.4	257	6.4	*0.826	28.5	LOS B	6.0	44.1	1.00	1.02	1.47	39.8
Approach			569	6.4	569	6.4	0.826	16.1	LOS B	6.0	44.1	0.78	0.74	0.99	46.8
West: Bromelton Street															
10	L2	All MCs	284	6.4	284	6.4	0.160	11.6	LOS A	1.5	11.4	0.57	0.71	0.57	48.5
12	R2	All MCs	87	6.4	87	6.4	*0.234	21.9	LOS B	1.3	9.7	0.89	0.73	0.89	42.7
Approach			372	6.4	372	6.4	0.234	14.0	LOS A	1.5	11.4	0.65	0.71	0.65	47.0
All Vehicles			1293	6.4	1293	6.4	0.826	16.2	LOS B	6.0	44.1	0.79	0.75	0.89	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: Telemon Street												
P3	Full	10	11	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
West: Bromelton Street												
P4	Full	10	11	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
All Pedestrians		0	21	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:12:19 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007v [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	202	7.8	202	7.8	0.522	25.2	LOS B	4.6	34.3	0.93	0.80	0.93	41.0
2	T1	All MCs	343	7.8	343	7.8	* 0.840	26.7	LOS B	9.8	72.9	1.00	1.04	1.37	41.8
Approach			545	7.8	545	7.8	0.840	26.1	LOS B	9.8	72.9	0.97	0.95	1.21	41.5
North: Telemon Street															
8	T1	All MCs	218	7.8	218	7.8	0.226	7.1	LOS A	2.9	21.8	0.58	0.48	0.58	53.8
9	R2	All MCs	289	7.8	289	7.8	* 0.914	40.5	LOS C	9.5	70.6	1.00	1.18	1.71	35.2
Approach			507	7.8	507	7.8	0.914	26.2	LOS B	9.5	70.6	0.82	0.88	1.22	41.3
West: Bromelton Street															
10	L2	All MCs	1362	7.8	1362	7.8	0.717	16.0	LOS B	13.3	99.4	0.81	0.85	0.85	45.7
12	R2	All MCs	435	7.8	435	7.8	* 0.858	31.4	LOS C	10.6	79.4	0.97	0.98	1.32	38.4
Approach			1797	7.8	1797	7.8	0.858	19.8	LOS B	13.3	99.4	0.85	0.88	0.96	43.7
All Vehicles			2849	7.8	2849	7.8	0.914	22.1	LOS B	13.3	99.4	0.87	0.89	1.05	42.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: Telemon Street												
P3	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
West: Bromelton Street												
P4	Full	10	11	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15
All Pedestrians		0	21	19.4	LOS B	0.0	0.0	0.88	0.88	173.2	200.0	1.15

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 4 February 2025 3:12:09 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\7_Bromelton St & Telemon St.sip9

MOVEMENT SUMMARY

Site: 007v [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Bromelton St & Telemon St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Telemon Street															
1	L2	All MCs	199	6.4	199	6.4	0.672	94.6	LOS F	13.9	102.6	0.99	0.83	1.00	27.4
2	T1	All MCs	321	6.4	321	6.4	* 1.208	293.9	LOS F	44.5	329.0	1.00	1.69	2.21	11.1
Approach			520	6.4	520	6.4	1.208	217.6	LOS F	44.5	329.0	1.00	1.36	1.75	13.1
North: Telemon Street															
8	T1	All MCs	281	6.4	281	6.4	0.375	33.7	LOS C	14.3	105.5	0.75	0.65	0.75	38.7
9	R2	All MCs	232	6.4	232	6.4	0.674	66.6	LOS E	15.9	117.2	0.98	0.84	0.98	28.2
Approach			513	6.4	513	6.4	0.674	48.5	LOS D	15.9	117.2	0.86	0.73	0.86	33.1
West: Bromelton Street															
10	L2	All MCs	2132	6.4	2132	6.4	* 1.234	262.3	LOS F	155.6	1149.3	1.00	1.49	2.21	11.5
12	R2	All MCs	656	6.4	656	6.4	0.645	43.9	LOS D	27.9	205.7	0.74	0.81	0.74	38.3
Approach			2787	6.4	2787	6.4	1.234	210.9	LOS F	155.6	1149.3	0.94	1.33	1.86	13.3
All Vehicles			3820	6.4	3820	6.4	1.234	190.0	LOS F	155.6	1149.3	0.94	1.26	1.71	14.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: Telemon Street												
P3	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
West: Bromelton Street												
P4	Full	10	11	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90
All Pedestrians		0	21	69.2	LOS F	0.0	0.0	0.96	0.96	223.0	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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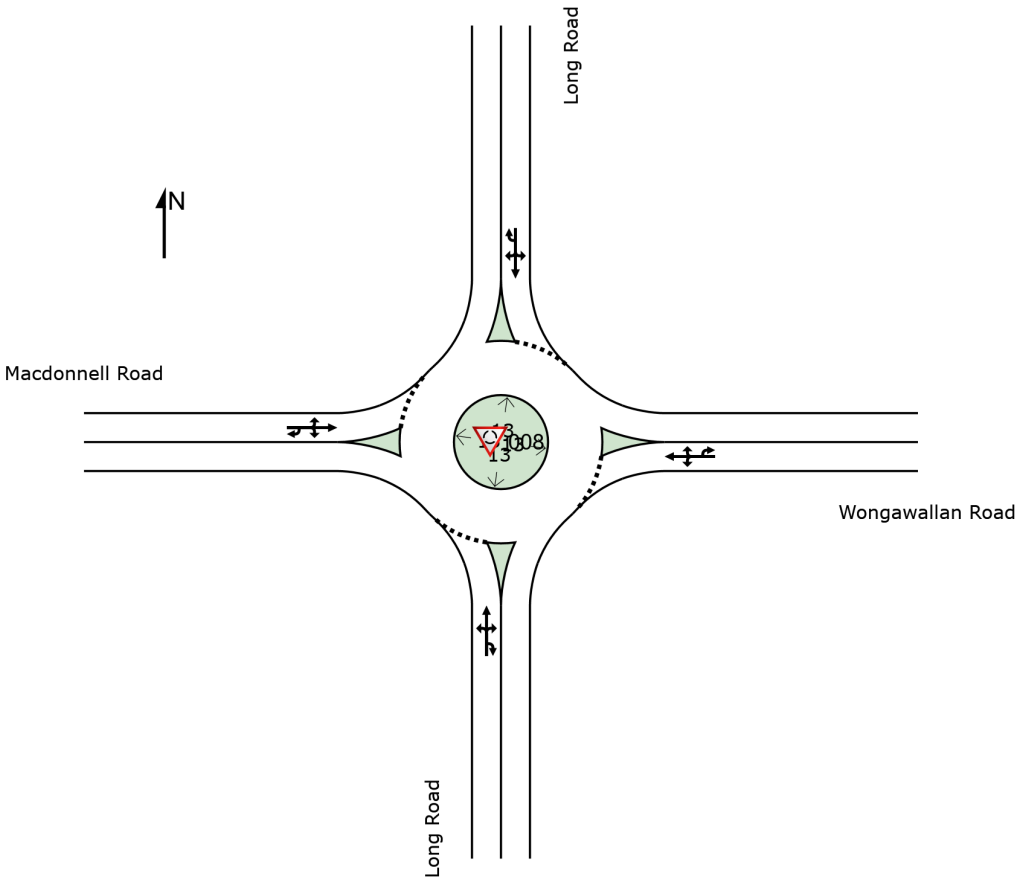
SITE LAYOUT

Site: 008 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\8_Long Rd & Wongawallan Rd.sip9

MOVEMENT SUMMARY

Site: 008 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	3	5.0	3	5.0	0.088	6.4	LOS A	0.5	3.3	0.51	0.58	0.51	51.7
2	T1	All MCs	73	5.0	73	5.0	0.088	6.7	LOS A	0.5	3.3	0.51	0.58	0.51	52.1
3	R2	All MCs	3	5.0	3	5.0	0.088	10.4	LOS A	0.5	3.3	0.51	0.58	0.51	51.2
3u	U	All MCs	3	5.0	3	5.0	0.088	12.2	LOS A	0.5	3.3	0.51	0.58	0.51	51.2
Approach			82	5.0	82	5.0	0.088	7.0	LOS A	0.5	3.3	0.51	0.58	0.51	52.0
East: Wongawallan Road															
4	L2	All MCs	2	5.0	2	5.0	0.266	4.7	LOS A	1.6	11.4	0.24	0.60	0.24	50.7
5	T1	All MCs	12	5.0	12	5.0	0.266	5.0	LOS A	1.6	11.4	0.24	0.60	0.24	51.0
6	R2	All MCs	338	5.0	338	5.0	0.266	8.7	LOS A	1.6	11.4	0.24	0.60	0.24	50.3
6u	U	All MCs	1	5.0	1	5.0	0.266	10.5	LOS A	1.6	11.4	0.24	0.60	0.24	50.3
Approach			353	5.0	353	5.0	0.266	8.6	LOS A	1.6	11.4	0.24	0.60	0.24	50.3
North: Long Road															
7	L2	All MCs	232	5.0	232	5.0	0.204	4.5	LOS A	1.2	9.0	0.16	0.50	0.16	53.3
8	T1	All MCs	38	5.0	38	5.0	0.204	4.7	LOS A	1.2	9.0	0.16	0.50	0.16	53.7
9	R2	All MCs	11	5.0	11	5.0	0.204	8.5	LOS A	1.2	9.0	0.16	0.50	0.16	52.9
9u	U	All MCs	9	5.0	9	5.0	0.204	10.3	LOS A	1.2	9.0	0.16	0.50	0.16	52.9
Approach			289	5.0	289	5.0	0.204	4.8	LOS A	1.2	9.0	0.16	0.50	0.16	53.3
West: Macdonnell Road															
10	L2	All MCs	25	5.0	25	5.0	0.056	6.7	LOS A	0.3	2.0	0.53	0.63	0.53	51.5
11	T1	All MCs	16	5.0	16	5.0	0.056	6.9	LOS A	0.3	2.0	0.53	0.63	0.53	51.9
12	R2	All MCs	5	5.0	5	5.0	0.056	10.7	LOS A	0.3	2.0	0.53	0.63	0.53	51.1
12u	U	All MCs	3	5.0	3	5.0	0.056	12.5	LOS A	0.3	2.0	0.53	0.63	0.53	51.1
Approach			49	5.0	49	5.0	0.056	7.6	LOS A	0.3	2.0	0.53	0.63	0.53	51.6
All Vehicles			774	5.0	774	5.0	0.266	6.9	LOS A	1.6	11.4	0.26	0.56	0.26	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 008 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	4	5.0	4	5.0	0.055	6.0	LOS A	0.3	2.0	0.46	0.56	0.46	51.9
2	T1	All MCs	45	5.0	45	5.0	0.055	6.2	LOS A	0.3	2.0	0.46	0.56	0.46	52.3
3	R2	All MCs	3	5.0	3	5.0	0.055	9.9	LOS A	0.3	2.0	0.46	0.56	0.46	51.5
3u	U	All MCs	1	5.0	1	5.0	0.055	11.7	LOS A	0.3	2.0	0.46	0.56	0.46	51.5
Approach			54	5.0	54	5.0	0.055	6.5	LOS A	0.3	2.0	0.46	0.56	0.46	52.2
East: Wongawallan Road															
4	L2	All MCs	1	5.0	1	5.0	0.224	5.3	LOS A	1.3	9.1	0.37	0.61	0.37	50.4
5	T1	All MCs	21	5.0	21	5.0	0.224	5.6	LOS A	1.3	9.1	0.37	0.61	0.37	50.8
6	R2	All MCs	228	5.0	228	5.0	0.224	9.3	LOS A	1.3	9.1	0.37	0.61	0.37	50.0
6u	U	All MCs	3	5.0	3	5.0	0.224	11.1	LOS A	1.3	9.1	0.37	0.61	0.37	50.0
Approach			254	5.0	254	5.0	0.224	9.0	LOS A	1.3	9.1	0.37	0.61	0.37	50.1
North: Long Road															
7	L2	All MCs	426	5.0	426	5.0	0.394	4.5	LOS A	3.0	21.6	0.20	0.49	0.20	53.1
8	T1	All MCs	100	5.0	100	5.0	0.394	4.8	LOS A	3.0	21.6	0.20	0.49	0.20	53.5
9	R2	All MCs	19	5.0	19	5.0	0.394	8.5	LOS A	3.0	21.6	0.20	0.49	0.20	52.6
9u	U	All MCs	33	5.0	33	5.0	0.394	10.3	LOS A	3.0	21.6	0.20	0.49	0.20	52.6
Approach			578	5.0	578	5.0	0.394	5.0	LOS A	3.0	21.6	0.20	0.49	0.20	53.1
West: Macdonnell Road															
10	L2	All MCs	38	5.0	38	5.0	0.067	6.0	LOS A	0.3	2.5	0.47	0.59	0.47	52.1
11	T1	All MCs	20	5.0	20	5.0	0.067	6.3	LOS A	0.3	2.5	0.47	0.59	0.47	52.5
12	R2	All MCs	5	5.0	5	5.0	0.067	10.0	LOS A	0.3	2.5	0.47	0.59	0.47	51.7
12u	U	All MCs	2	5.0	2	5.0	0.067	11.8	LOS A	0.3	2.5	0.47	0.59	0.47	51.7
Approach			65	5.0	65	5.0	0.067	6.6	LOS A	0.3	2.5	0.47	0.59	0.47	52.2
All Vehicles			951	5.0	951	5.0	0.394	6.3	LOS A	3.0	21.6	0.28	0.54	0.28	52.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\8_Long Rd & Wongawallan Rd.sip9

MOVEMENT SUMMARY

Site: 008 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	6	5.0	6	5.0	0.187	6.6	LOS A	1.0	7.5	0.54	0.59	0.54	51.5
2	T1	All MCs	155	5.0	155	5.0	0.187	6.9	LOS A	1.0	7.5	0.54	0.59	0.54	51.9
3	R2	All MCs	6	5.0	6	5.0	0.187	10.6	LOS A	1.0	7.5	0.54	0.59	0.54	51.1
3u	U	All MCs	6	5.0	6	5.0	0.187	12.4	LOS A	1.0	7.5	0.54	0.59	0.54	51.1
Approach			174	5.0	174	5.0	0.187	7.2	LOS A	1.0	7.5	0.54	0.59	0.54	51.9
East: Wongawallan Road															
4	L2	All MCs	2	5.0	2	5.0	0.268	4.8	LOS A	1.6	11.5	0.25	0.60	0.25	50.6
5	T1	All MCs	12	5.0	12	5.0	0.268	5.0	LOS A	1.6	11.5	0.25	0.60	0.25	51.0
6	R2	All MCs	338	5.0	338	5.0	0.268	8.7	LOS A	1.6	11.5	0.25	0.60	0.25	50.2
6u	U	All MCs	1	5.0	1	5.0	0.268	10.5	LOS A	1.6	11.5	0.25	0.60	0.25	50.2
Approach			353	5.0	353	5.0	0.268	8.6	LOS A	1.6	11.5	0.25	0.60	0.25	50.3
North: Long Road															
7	L2	All MCs	232	5.0	232	5.0	0.208	4.5	LOS A	1.2	9.1	0.17	0.50	0.17	53.3
8	T1	All MCs	38	5.0	38	5.0	0.208	4.8	LOS A	1.2	9.1	0.17	0.50	0.17	53.7
9	R2	All MCs	11	5.0	11	5.0	0.208	8.5	LOS A	1.2	9.1	0.17	0.50	0.17	52.8
9u	U	All MCs	9	5.0	9	5.0	0.208	10.3	LOS A	1.2	9.1	0.17	0.50	0.17	52.8
Approach			289	5.0	289	5.0	0.208	4.9	LOS A	1.2	9.1	0.17	0.50	0.17	53.3
West: Macdonnell Road															
10	L2	All MCs	25	5.0	25	5.0	0.059	7.3	LOS A	0.3	2.2	0.58	0.65	0.58	51.2
11	T1	All MCs	16	5.0	16	5.0	0.059	7.6	LOS A	0.3	2.2	0.58	0.65	0.58	51.6
12	R2	All MCs	5	5.0	5	5.0	0.059	11.3	LOS A	0.3	2.2	0.58	0.65	0.58	50.8
12u	U	All MCs	3	5.0	3	5.0	0.059	13.1	LOS A	0.3	2.2	0.58	0.65	0.58	50.8
Approach			49	5.0	49	5.0	0.059	8.2	LOS A	0.3	2.2	0.58	0.65	0.58	51.2
All Vehicles			865	5.0	865	5.0	0.268	7.0	LOS A	1.6	11.5	0.30	0.57	0.30	51.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\8_Long Rd & Wongawallan Rd.sip9

MOVEMENT SUMMARY

Site: 008 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	4	5.0	4	5.0	0.057	6.0	LOS A	0.3	2.1	0.46	0.56	0.46	51.9
2	T1	All MCs	47	5.0	47	5.0	0.057	6.2	LOS A	0.3	2.1	0.46	0.56	0.46	52.3
3	R2	All MCs	3	5.0	3	5.0	0.057	9.9	LOS A	0.3	2.1	0.46	0.56	0.46	51.5
3u	U	All MCs	1	5.0	1	5.0	0.057	11.8	LOS A	0.3	2.1	0.46	0.56	0.46	51.5
Approach			56	5.0	56	5.0	0.057	6.5	LOS A	0.3	2.1	0.46	0.56	0.46	52.2
East: Wongawallan Road															
4	L2	All MCs	1	5.0	1	5.0	0.226	5.4	LOS A	1.3	9.4	0.39	0.61	0.39	50.4
5	T1	All MCs	21	5.0	21	5.0	0.226	5.6	LOS A	1.3	9.4	0.39	0.61	0.39	50.8
6	R2	All MCs	228	5.0	228	5.0	0.226	9.3	LOS A	1.3	9.4	0.39	0.61	0.39	50.0
6u	U	All MCs	3	5.0	3	5.0	0.226	11.1	LOS A	1.3	9.4	0.39	0.61	0.39	50.0
Approach			254	5.0	254	5.0	0.226	9.0	LOS A	1.3	9.4	0.39	0.61	0.39	50.0
North: Long Road															
7	L2	All MCs	426	5.0	426	5.0	0.419	4.7	LOS A	3.2	23.7	0.29	0.49	0.29	52.8
8	T1	All MCs	100	5.0	100	5.0	0.419	5.0	LOS A	3.2	23.7	0.29	0.49	0.29	53.2
9	R2	All MCs	19	5.0	19	5.0	0.419	8.7	LOS A	3.2	23.7	0.29	0.49	0.29	52.4
9u	U	All MCs	33	5.0	33	5.0	0.419	10.5	LOS A	3.2	23.7	0.29	0.49	0.29	52.4
Approach			578	5.0	578	5.0	0.419	5.2	LOS A	3.2	23.7	0.29	0.49	0.29	52.8
West: Macdonnell Road															
10	L2	All MCs	74	5.0	74	5.0	0.131	6.2	LOS A	0.7	5.1	0.49	0.59	0.49	52.0
11	T1	All MCs	39	5.0	39	5.0	0.131	6.4	LOS A	0.7	5.1	0.49	0.59	0.49	52.4
12	R2	All MCs	11	5.0	11	5.0	0.131	10.1	LOS A	0.7	5.1	0.49	0.59	0.49	51.6
12u	U	All MCs	4	5.0	4	5.0	0.131	11.9	LOS A	0.7	5.1	0.49	0.59	0.49	51.6
Approach			127	5.0	127	5.0	0.131	6.8	LOS A	0.7	5.1	0.49	0.59	0.49	52.1
All Vehicles			1015	5.0	1015	5.0	0.419	6.4	LOS A	3.2	23.7	0.35	0.54	0.35	52.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 10:04:48 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\8_Long Rd & Wongawallan Rd.sip9

MOVEMENT SUMMARY

Site: 008 [2041PM_Tourist (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Long Rd & Wongawallan Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	5	5.0	5	5.0	0.075	6.0	LOS A	0.4	2.8	0.47	0.56	0.47	51.9
2	T1	All MCs	62	5.0	62	5.0	0.075	6.3	LOS A	0.4	2.8	0.47	0.56	0.47	52.3
3	R2	All MCs	4	5.0	4	5.0	0.075	10.0	LOS A	0.4	2.8	0.47	0.56	0.47	51.5
3u	U	All MCs	1	5.0	1	5.0	0.075	11.8	LOS A	0.4	2.8	0.47	0.56	0.47	51.5
Approach			73	5.0	73	5.0	0.075	6.5	LOS A	0.4	2.8	0.47	0.56	0.47	52.2
East: Wongawallan Road															
4	L2	All MCs	1	5.0	1	5.0	0.228	5.4	LOS A	1.3	9.5	0.40	0.62	0.40	50.4
5	T1	All MCs	21	5.0	21	5.0	0.228	5.6	LOS A	1.3	9.5	0.40	0.62	0.40	50.7
6	R2	All MCs	228	5.0	228	5.0	0.228	9.4	LOS A	1.3	9.5	0.40	0.62	0.40	50.0
6u	U	All MCs	3	5.0	3	5.0	0.228	11.2	LOS A	1.3	9.5	0.40	0.62	0.40	50.0
Approach			254	5.0	254	5.0	0.228	9.1	LOS A	1.3	9.5	0.40	0.62	0.40	50.0
North: Long Road															
7	L2	All MCs	426	5.0	426	5.0	0.428	4.8	LOS A	3.3	24.4	0.32	0.50	0.32	52.7
8	T1	All MCs	100	5.0	100	5.0	0.428	5.1	LOS A	3.3	24.4	0.32	0.50	0.32	53.1
9	R2	All MCs	19	5.0	19	5.0	0.428	8.8	LOS A	3.3	24.4	0.32	0.50	0.32	52.3
9u	U	All MCs	33	5.0	33	5.0	0.428	10.6	LOS A	3.3	24.4	0.32	0.50	0.32	52.3
Approach			578	5.0	578	5.0	0.428	5.3	LOS A	3.3	24.4	0.32	0.50	0.32	52.7
West: Macdonnell Road															
10	L2	All MCs	88	5.0	88	5.0	0.159	6.3	LOS A	0.9	6.3	0.51	0.60	0.51	51.9
11	T1	All MCs	46	5.0	46	5.0	0.159	6.6	LOS A	0.9	6.3	0.51	0.60	0.51	52.3
12	R2	All MCs	13	5.0	13	5.0	0.159	10.3	LOS A	0.9	6.3	0.51	0.60	0.51	51.5
12u	U	All MCs	5	5.0	5	5.0	0.159	12.1	LOS A	0.9	6.3	0.51	0.60	0.51	51.5
Approach			153	5.0	153	5.0	0.159	6.9	LOS A	0.9	6.3	0.51	0.60	0.51	52.0
All Vehicles			1057	5.0	1057	5.0	0.428	6.5	LOS A	3.3	24.4	0.38	0.55	0.38	51.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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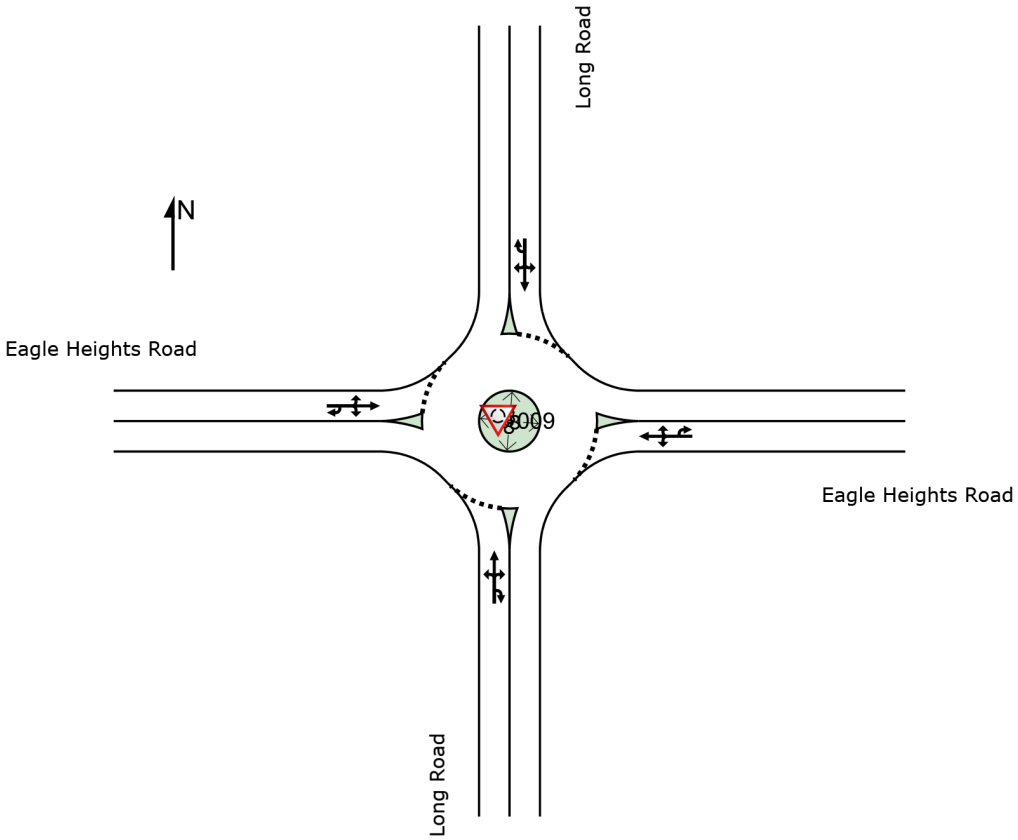
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\8_Long Rd & Wongawallan Rd.sip9

SITE LAYOUT

Site: 009 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:21:12 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\9_Eagle Heights Rd & Long Rd.sip9

MOVEMENT SUMMARY

Site: 009 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	40	5.0	40	5.0	0.248	7.0	LOS A	1.4	10.5	0.53	0.61	0.53	51.0
2	T1	All MCs	138	5.0	138	5.0	0.248	6.9	LOS A	1.4	10.5	0.53	0.61	0.53	51.4
3	R2	All MCs	52	5.0	52	5.0	0.248	9.9	LOS A	1.4	10.5	0.53	0.61	0.53	50.7
3u	U	All MCs	3	5.0	3	5.0	0.248	11.5	LOS A	1.4	10.5	0.53	0.61	0.53	50.7
Approach			233	5.0	233	5.0	0.248	7.7	LOS A	1.4	10.5	0.53	0.61	0.53	51.2
East: Eagle Heights Road															
4	L2	All MCs	57	5.0	57	5.0	0.158	7.9	LOS A	0.9	6.4	0.61	0.66	0.61	50.8
5	T1	All MCs	55	5.0	55	5.0	0.158	7.9	LOS A	0.9	6.4	0.61	0.66	0.61	51.2
6	R2	All MCs	15	5.0	15	5.0	0.158	10.9	LOS A	0.9	6.4	0.61	0.66	0.61	50.5
6u	U	All MCs	1	5.0	1	5.0	0.158	12.5	LOS A	0.9	6.4	0.61	0.66	0.61	50.5
Approach			127	5.0	127	5.0	0.158	8.3	LOS A	0.9	6.4	0.61	0.66	0.61	50.9
North: Long Road															
7	L2	All MCs	21	5.0	21	5.0	0.387	6.1	LOS A	2.6	19.1	0.45	0.59	0.45	50.9
8	T1	All MCs	185	5.0	185	5.0	0.387	6.1	LOS A	2.6	19.1	0.45	0.59	0.45	51.3
9	R2	All MCs	228	5.0	228	5.0	0.387	9.1	LOS A	2.6	19.1	0.45	0.59	0.45	50.6
9u	U	All MCs	2	5.0	2	5.0	0.387	10.7	LOS A	2.6	19.1	0.45	0.59	0.45	50.6
Approach			437	5.0	437	5.0	0.387	7.7	LOS A	2.6	19.1	0.45	0.59	0.45	50.9
West: Eagle Heights Road															
10	L2	All MCs	174	5.0	174	5.0	0.274	6.3	LOS A	1.7	12.2	0.48	0.58	0.48	51.5
11	T1	All MCs	58	5.0	58	5.0	0.274	6.3	LOS A	1.7	12.2	0.48	0.58	0.48	52.0
12	R2	All MCs	46	5.0	46	5.0	0.274	9.3	LOS A	1.7	12.2	0.48	0.58	0.48	51.2
12u	U	All MCs	1	5.0	1	5.0	0.274	10.9	LOS A	1.7	12.2	0.48	0.58	0.48	51.2
Approach			279	5.0	279	5.0	0.274	6.9	LOS A	1.7	12.2	0.48	0.58	0.48	51.5
All Vehicles			1076	5.0	1076	5.0	0.387	7.5	LOS A	2.6	19.1	0.49	0.60	0.49	51.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 4:19:10 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\9_Eagle Heights Rd & Long Rd.sip9

MOVEMENT SUMMARY

Site: 009 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	81	5.0	81	5.0	0.383	7.5	LOS A	2.5	17.9	0.61	0.64	0.61	50.8
2	T1	All MCs	200	5.0	200	5.0	0.383	7.5	LOS A	2.5	17.9	0.61	0.64	0.61	51.2
3	R2	All MCs	64	5.0	64	5.0	0.383	10.5	LOS A	2.5	17.9	0.61	0.64	0.61	50.5
3u	U	All MCs	6	5.0	6	5.0	0.383	12.0	LOS A	2.5	17.9	0.61	0.64	0.61	50.5
Approach			352	5.0	352	5.0	0.383	8.1	LOS A	2.5	17.9	0.61	0.64	0.61	50.9
East: Eagle Heights Road															
4	L2	All MCs	36	5.0	36	5.0	0.143	7.3	LOS A	0.8	5.7	0.56	0.64	0.56	50.9
5	T1	All MCs	61	5.0	61	5.0	0.143	7.3	LOS A	0.8	5.7	0.56	0.64	0.56	51.3
6	R2	All MCs	26	5.0	26	5.0	0.143	10.3	LOS A	0.8	5.7	0.56	0.64	0.56	50.6
6u	U	All MCs	1	5.0	1	5.0	0.143	11.8	LOS A	0.8	5.7	0.56	0.64	0.56	50.6
Approach			124	5.0	124	5.0	0.143	7.9	LOS A	0.8	5.7	0.56	0.64	0.56	51.1
North: Long Road															
7	L2	All MCs	32	5.0	32	5.0	0.347	6.1	LOS A	2.3	16.6	0.45	0.60	0.45	50.7
8	T1	All MCs	116	5.0	116	5.0	0.347	6.1	LOS A	2.3	16.6	0.45	0.60	0.45	51.2
9	R2	All MCs	234	5.0	234	5.0	0.347	9.1	LOS A	2.3	16.6	0.45	0.60	0.45	50.5
9u	U	All MCs	4	5.0	4	5.0	0.347	10.6	LOS A	2.3	16.6	0.45	0.60	0.45	50.5
Approach			385	5.0	385	5.0	0.347	7.9	LOS A	2.3	16.6	0.45	0.60	0.45	50.7
West: Eagle Heights Road															
10	L2	All MCs	329	5.0	329	5.0	0.454	7.4	LOS A	3.2	23.6	0.65	0.63	0.65	51.2
11	T1	All MCs	73	5.0	73	5.0	0.454	7.4	LOS A	3.2	23.6	0.65	0.63	0.65	51.6
12	R2	All MCs	20	5.0	20	5.0	0.454	10.4	LOS A	3.2	23.6	0.65	0.63	0.65	50.9
12u	U	All MCs	2	5.0	2	5.0	0.454	12.0	LOS A	3.2	23.6	0.65	0.63	0.65	50.9
Approach			424	5.0	424	5.0	0.454	7.6	LOS A	3.2	23.6	0.65	0.63	0.65	51.2
All Vehicles			1285	5.0	1285	5.0	0.454	7.9	LOS A	3.2	23.6	0.57	0.62	0.57	51.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 4:19:11 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\9_Eagle Heights Rd & Long Rd.sip9

MOVEMENT SUMMARY

Site: 009 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	43	5.0	43	5.0	0.272	7.0	LOS A	1.6	12.0	0.56	0.62	0.56	50.9
2	T1	All MCs	148	5.0	148	5.0	0.272	7.0	LOS A	1.6	12.0	0.56	0.62	0.56	51.4
3	R2	All MCs	56	5.0	56	5.0	0.272	10.0	LOS A	1.6	12.0	0.56	0.62	0.56	50.6
3u	U	All MCs	3	5.0	3	5.0	0.272	11.6	LOS A	1.6	12.0	0.56	0.62	0.56	50.6
Approach			251	5.0	251	5.0	0.272	7.8	LOS A	1.6	12.0	0.56	0.62	0.56	51.1
East: Eagle Heights Road															
4	L2	All MCs	57	5.0	57	5.0	0.171	8.4	LOS A	1.0	7.2	0.66	0.69	0.66	50.4
5	T1	All MCs	55	5.0	55	5.0	0.171	8.4	LOS A	1.0	7.2	0.66	0.69	0.66	50.8
6	R2	All MCs	15	5.0	15	5.0	0.171	11.4	LOS A	1.0	7.2	0.66	0.69	0.66	50.1
6u	U	All MCs	1	5.0	1	5.0	0.171	13.0	LOS A	1.0	7.2	0.66	0.69	0.66	50.1
Approach			127	5.0	127	5.0	0.171	8.8	LOS A	1.0	7.2	0.66	0.69	0.66	50.5
North: Long Road															
7	L2	All MCs	21	5.0	21	5.0	0.465	7.3	LOS A	3.4	24.5	0.64	0.65	0.64	50.2
8	T1	All MCs	189	5.0	189	5.0	0.465	7.3	LOS A	3.4	24.5	0.64	0.65	0.64	50.6
9	R2	All MCs	233	5.0	233	5.0	0.465	10.3	LOS A	3.4	24.5	0.64	0.65	0.64	49.9
9u	U	All MCs	2	5.0	2	5.0	0.465	11.8	LOS A	3.4	24.5	0.64	0.65	0.64	49.9
Approach			445	5.0	445	5.0	0.465	8.9	LOS A	3.4	24.5	0.64	0.65	0.64	50.2
West: Eagle Heights Road															
10	L2	All MCs	369	5.0	369	5.0	0.566	7.0	LOS A	4.7	34.5	0.65	0.61	0.65	51.0
11	T1	All MCs	123	5.0	123	5.0	0.566	7.0	LOS A	4.7	34.5	0.65	0.61	0.65	51.5
12	R2	All MCs	99	5.0	99	5.0	0.566	10.0	LOS A	4.7	34.5	0.65	0.61	0.65	50.7
12u	U	All MCs	2	5.0	2	5.0	0.566	11.5	LOS A	4.7	34.5	0.65	0.61	0.65	50.7
Approach			594	5.0	594	5.0	0.566	7.5	LOS A	4.7	34.5	0.65	0.61	0.65	51.1
All Vehicles			1417	5.0	1417	5.0	0.566	8.1	LOS A	4.7	34.5	0.63	0.63	0.63	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 009 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	86	5.0	86	5.0	0.515	10.9	LOS A	4.1	30.2	0.82	0.79	0.94	48.6
2	T1	All MCs	212	5.0	212	5.0	0.515	10.9	LOS A	4.1	30.2	0.82	0.79	0.94	49.0
3	R2	All MCs	68	5.0	68	5.0	0.515	13.9	LOS A	4.1	30.2	0.82	0.79	0.94	48.3
3u	U	All MCs	6	5.0	6	5.0	0.515	15.5	LOS B	4.1	30.2	0.82	0.79	0.94	48.3
Approach			373	5.0	373	5.0	0.515	11.6	LOS A	4.1	30.2	0.82	0.79	0.94	48.7
East: Eagle Heights Road															
4	L2	All MCs	36	5.0	36	5.0	0.208	10.2	LOS A	1.3	9.5	0.79	0.75	0.79	49.0
5	T1	All MCs	61	5.0	61	5.0	0.208	10.2	LOS A	1.3	9.5	0.79	0.75	0.79	49.4
6	R2	All MCs	26	5.0	26	5.0	0.208	13.2	LOS A	1.3	9.5	0.79	0.75	0.79	48.7
6u	U	All MCs	1	5.0	1	5.0	0.208	14.8	LOS B	1.3	9.5	0.79	0.75	0.79	48.7
Approach			124	5.0	124	5.0	0.208	10.9	LOS A	1.3	9.5	0.79	0.75	0.79	49.1
North: Long Road															
7	L2	All MCs	61	5.0	61	5.0	0.645	6.6	LOS A	6.2	45.2	0.63	0.60	0.63	50.3
8	T1	All MCs	224	5.0	224	5.0	0.645	6.6	LOS A	6.2	45.2	0.63	0.60	0.63	50.7
9	R2	All MCs	454	5.0	454	5.0	0.645	9.6	LOS A	6.2	45.2	0.63	0.60	0.63	50.0
9u	U	All MCs	8	5.0	8	5.0	0.645	11.2	LOS A	6.2	45.2	0.63	0.60	0.63	50.0
Approach			747	5.0	747	5.0	0.645	8.5	LOS A	6.2	45.2	0.63	0.60	0.63	50.2
West: Eagle Heights Road															
10	L2	All MCs	306	5.0	306	5.0	0.442	7.5	LOS A	3.2	23.2	0.68	0.65	0.68	51.1
11	T1	All MCs	67	5.0	67	5.0	0.442	7.5	LOS A	3.2	23.2	0.68	0.65	0.68	51.5
12	R2	All MCs	19	5.0	19	5.0	0.442	10.5	LOS A	3.2	23.2	0.68	0.65	0.68	50.8
12u	U	All MCs	2	5.0	2	5.0	0.442	12.1	LOS A	3.2	23.2	0.68	0.65	0.68	50.8
Approach			395	5.0	395	5.0	0.442	7.7	LOS A	3.2	23.2	0.68	0.65	0.68	51.1
All Vehicles			1639	5.0	1639	5.0	0.645	9.2	LOS A	6.2	45.2	0.70	0.67	0.72	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 10:16:30 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\9_Eagle Heights Rd & Long Rd.sip9

MOVEMENT SUMMARY

Site: 009 [2041PM_Tourist (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Eagle Heights Rd & Long Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Long Road															
1	L2	All MCs	86	5.0	86	5.0	0.596	13.9	LOS A	5.6	40.6	0.93	0.89	1.17	46.8
2	T1	All MCs	212	5.0	212	5.0	0.596	13.9	LOS A	5.6	40.6	0.93	0.89	1.17	47.1
3	R2	All MCs	68	5.0	68	5.0	0.596	16.9	LOS B	5.6	40.6	0.93	0.89	1.17	46.5
3u	U	All MCs	6	5.0	6	5.0	0.596	18.4	LOS B	5.6	40.6	0.93	0.89	1.17	46.5
Approach			373	5.0	373	5.0	0.596	14.5	LOS B	5.6	40.6	0.93	0.89	1.17	46.9
East: Eagle Heights Road															
4	L2	All MCs	36	5.0	36	5.0	0.273	12.2	LOS A	1.9	13.6	0.90	0.80	0.90	47.8
5	T1	All MCs	61	5.0	61	5.0	0.273	12.2	LOS A	1.9	13.6	0.90	0.80	0.90	48.2
6	R2	All MCs	26	5.0	26	5.0	0.273	15.2	LOS B	1.9	13.6	0.90	0.80	0.90	47.5
6u	U	All MCs	1	5.0	1	5.0	0.273	16.7	LOS B	1.9	13.6	0.90	0.80	0.90	47.5
Approach			124	5.0	124	5.0	0.273	12.8	LOS A	1.9	13.6	0.90	0.80	0.90	47.9
North: Long Road															
7	L2	All MCs	74	5.0	74	5.0	0.794	9.2	LOS A	12.0	87.3	0.86	0.67	0.95	49.0
8	T1	All MCs	269	5.0	269	5.0	0.794	9.2	LOS A	12.0	87.3	0.86	0.67	0.95	49.4
9	R2	All MCs	544	5.0	544	5.0	0.794	12.2	LOS A	12.0	87.3	0.86	0.67	0.95	48.7
9u	U	All MCs	9	5.0	9	5.0	0.794	13.7	LOS A	12.0	87.3	0.86	0.67	0.95	48.7
Approach			897	5.0	897	5.0	0.794	11.0	LOS A	12.0	87.3	0.86	0.67	0.95	48.9
West: Eagle Heights Road															
10	L2	All MCs	398	5.0	398	5.0	0.570	8.5	LOS A	5.1	37.1	0.77	0.69	0.82	50.5
11	T1	All MCs	87	5.0	87	5.0	0.570	8.5	LOS A	5.1	37.1	0.77	0.69	0.82	50.9
12	R2	All MCs	24	5.0	24	5.0	0.570	11.5	LOS A	5.1	37.1	0.77	0.69	0.82	50.2
12u	U	All MCs	2	5.0	2	5.0	0.570	13.0	LOS A	5.1	37.1	0.77	0.69	0.82	50.2
Approach			512	5.0	512	5.0	0.570	8.6	LOS A	5.1	37.1	0.77	0.69	0.82	50.5
All Vehicles			1905	5.0	1905	5.0	0.794	11.2	LOS A	12.0	87.3	0.85	0.72	0.95	48.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

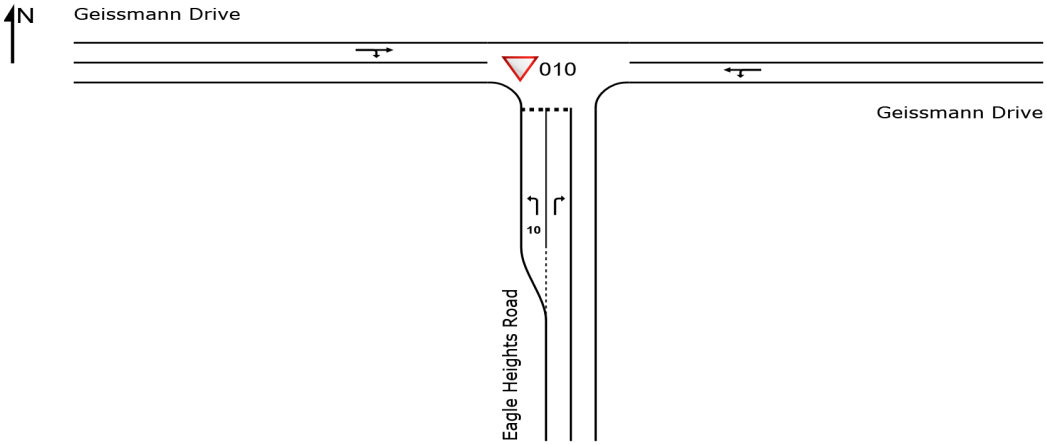
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Tuesday, 28 January 2025 2:30:19 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\9_Eagle Heights Rd & Long Rd.sip9

SITE LAYOUT

Site: 010 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:22:46 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

MOVEMENT SUMMARY

Site: 010 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Eagle Heights Road															
1	L2	All MCs	259	5.0	259	5.0	0.190	4.1	LOS A	0.8	6.2	0.30	0.49	0.30	37.6
3	R2	All MCs	60	5.0	60	5.0	0.123	7.9	LOS A	0.4	2.6	0.50	0.75	0.50	36.3
Approach			319	5.0	319	5.0	0.190	4.8	LOS A	0.8	6.2	0.34	0.54	0.34	37.4
East: Geissmann Drive															
4	L2	All MCs	79	5.0	79	5.0	0.296	3.7	LOS A	0.0	0.0	0.00	0.14	0.00	38.9
5	T1	All MCs	175	5.0	175	5.0	0.296	0.3	LOS A	0.0	0.0	0.00	0.14	0.00	39.3
Approach			254	5.0	254	5.0	0.296	1.3	NA	0.0	0.0	0.00	0.14	0.00	39.2
West: Geissmann Drive															
11	T1	All MCs	120	5.0	120	5.0	0.278	0.9	LOS A	1.1	7.8	0.33	0.44	0.33	38.5
12	R2	All MCs	186	5.0	186	5.0	0.278	4.7	LOS A	1.1	7.8	0.33	0.44	0.33	38.0
Approach			306	5.0	306	5.0	0.278	3.2	NA	1.1	7.8	0.33	0.44	0.33	38.2
All Vehicles			879	5.0	879	5.0	0.296	3.2	NA	1.1	7.8	0.24	0.39	0.24	38.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:33:12 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

MOVEMENT SUMMARY

Site: 010 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Eagle Heights Road															
1	L2	All MCs	276	5.0	276	5.0	0.191	3.9	LOS A	0.9	6.3	0.23	0.46	0.23	37.7
3	R2	All MCs	112	5.0	112	5.0	0.274	10.6	LOS A	0.9	6.7	0.63	0.85	0.73	35.3
Approach			387	5.0	387	5.0	0.274	5.8	LOS A	0.9	6.7	0.35	0.57	0.38	37.0
East: Geissmann Drive															
4	L2	All MCs	121	5.0	121	5.0	0.273	3.6	LOS A	0.0	0.0	0.00	0.24	0.00	38.6
5	T1	All MCs	111	5.0	111	5.0	0.273	0.2	LOS A	0.0	0.0	0.00	0.24	0.00	39.0
Approach			232	5.0	232	5.0	0.273	2.0	NA	0.0	0.0	0.00	0.24	0.00	38.8
West: Geissmann Drive															
11	T1	All MCs	164	5.0	164	5.0	0.403	1.1	LOS A	2.0	14.3	0.37	0.47	0.39	38.4
12	R2	All MCs	293	5.0	293	5.0	0.403	4.8	LOS A	2.0	14.3	0.37	0.47	0.39	37.9
Approach			457	5.0	457	5.0	0.403	3.5	NA	2.0	14.3	0.37	0.47	0.39	38.1
All Vehicles			1076	5.0	1076	5.0	0.403	4.0	NA	2.0	14.3	0.28	0.46	0.30	37.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:33:12 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

MOVEMENT SUMMARY

Site: 010 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Eagle Heights Road															
1	L2	All MCs	282	5.0	282	5.0	0.202	4.0	LOS A	0.9	6.7	0.28	0.48	0.28	37.7
3	R2	All MCs	65	5.0	65	5.0	0.188	11.5	LOS A	0.6	4.0	0.66	0.84	0.68	35.0
Approach			347	5.0	347	5.0	0.202	5.4	LOS A	0.9	6.7	0.35	0.54	0.35	37.1
East: Geissmann Drive															
4	L2	All MCs	66	5.0	66	5.0	0.248	3.6	LOS A	0.0	0.0	0.00	0.14	0.00	38.9
5	T1	All MCs	146	5.0	146	5.0	0.248	0.2	LOS A	0.0	0.0	0.00	0.14	0.00	39.4
Approach			213	5.0	213	5.0	0.248	1.3	NA	0.0	0.0	0.00	0.14	0.00	39.2
West: Geissmann Drive															
11	T1	All MCs	211	5.0	211	5.0	0.477	1.2	LOS A	2.7	19.9	0.37	0.47	0.42	38.5
12	R2	All MCs	326	5.0	326	5.0	0.477	5.0	LOS A	2.7	19.9	0.37	0.47	0.42	38.0
Approach			537	5.0	537	5.0	0.477	3.5	NA	2.7	19.9	0.37	0.47	0.42	38.2
All Vehicles			1097	5.0	1097	5.0	0.477	3.7	NA	2.7	19.9	0.29	0.43	0.32	38.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:33:13 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

MOVEMENT SUMMARY

Site: 010 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Eagle Heights Road															
1	L2	All MCs	328	5.0	328	5.0	0.253	4.4	LOS A	1.2	8.6	0.36	0.52	0.36	37.5
3	R2	All MCs	133	5.0	133	5.0	0.328	11.2	LOS A	1.2	8.6	0.65	0.89	0.80	35.1
Approach			461	5.0	461	5.0	0.328	6.4	LOS A	1.2	8.6	0.45	0.63	0.49	36.8
East: Geissmann Drive															
4	L2	All MCs	241	5.0	241	5.0	0.544	4.1	LOS A	0.0	0.0	0.00	0.24	0.00	38.2
5	T1	All MCs	220	5.0	220	5.0	0.544	0.8	LOS A	0.0	0.0	0.00	0.24	0.00	38.6
Approach			461	5.0	461	5.0	0.544	2.5	NA	0.0	0.0	0.00	0.24	0.00	38.4
West: Geissmann Drive															
11	T1	All MCs	112	5.0	112	5.0	0.319	2.2	LOS A	1.5	10.6	0.47	0.63	0.53	38.0
12	R2	All MCs	199	5.0	199	5.0	0.319	6.2	LOS A	1.5	10.6	0.47	0.63	0.53	37.5
Approach			311	5.0	311	5.0	0.319	4.7	NA	1.5	10.6	0.47	0.63	0.53	37.7
All Vehicles			1233	5.0	1233	5.0	0.544	4.5	NA	1.5	10.6	0.29	0.48	0.32	37.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:33:13 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

MOVEMENT SUMMARY

Site: 010 [2041PM_Tourist (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Geissmann Dr & Eagle Heights Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Eagle Heights Road															
1	L2	All MCs	394	5.0	394	5.0	0.303	4.5	LOS A	1.5	10.7	0.38	0.53	0.38	37.5
3	R2	All MCs	159	5.0	159	5.0	0.459	14.7	LOS B	1.8	13.4	0.75	1.00	1.07	34.0
Approach			553	5.0	553	5.0	0.459	7.4	LOS A	1.8	13.4	0.49	0.66	0.58	36.4
East: Geissmann Drive															
4	L2	All MCs	241	5.0	241	5.0	0.544	4.1	LOS A	0.0	0.0	0.00	0.24	0.00	38.2
5	T1	All MCs	220	5.0	220	5.0	0.544	0.8	LOS A	0.0	0.0	0.00	0.24	0.00	38.6
Approach			461	5.0	461	5.0	0.544	2.5	NA	0.0	0.0	0.00	0.24	0.00	38.4
West: Geissmann Drive															
11	T1	All MCs	145	5.0	145	5.0	0.415	2.8	LOS A	2.3	16.8	0.50	0.69	0.65	37.8
12	R2	All MCs	259	5.0	259	5.0	0.415	6.7	LOS A	2.3	16.8	0.50	0.69	0.65	37.3
Approach			404	5.0	404	5.0	0.415	5.3	NA	2.3	16.8	0.50	0.69	0.65	37.5
All Vehicles			1418	5.0	1418	5.0	0.544	5.2	NA	2.3	16.8	0.33	0.53	0.41	37.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

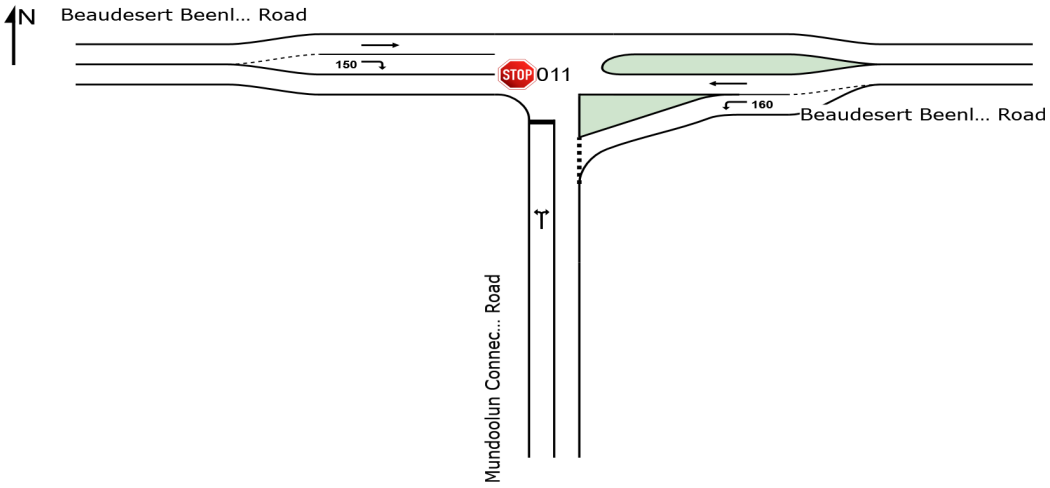
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 11:33:13 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\10_Geissmann Dr & Eagle Heights Rd.sip9

SITE LAYOUT

Site: 011 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:27:32 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	237	6.7	237	6.7	0.579	13.4	LOS A	4.8	35.2	0.76	1.06	1.30	45.3
3	R2	All MCs	92	6.7	92	6.7	0.579	31.9	LOS C	4.8	35.2	0.76	1.06	1.30	45.4
Approach			328	6.7	328	6.7	0.579	18.6	LOS B	4.8	35.2	0.76	1.06	1.30	45.4
East: Beaudesert Beenleigh Road															
4	L2	All MCs	179	6.7	179	6.7	0.150	6.9	LOS A	0.6	4.6	0.39	0.61	0.39	51.6
5	T1	All MCs	269	6.7	269	6.7	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			448	6.7	448	6.7	0.150	2.8	LOS A	0.6	4.6	0.16	0.24	0.16	56.3
West: Beaudesert Beenleigh Road															
11	T1	All MCs	261	6.7	261	6.7	0.140	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	286	6.7	286	6.7	0.216	6.7	LOS A	1.1	7.8	0.42	0.63	0.42	51.2
Approach			547	6.7	547	6.7	0.216	3.5	NA	1.1	7.8	0.22	0.33	0.22	55.1
All Vehicles			1324	6.7	1324	6.7	0.579	7.0	NA	4.8	35.2	0.33	0.48	0.47	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:39:40 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	293	5.0	293	5.0	1.346	331.0	LOS F	80.2	585.6	1.00	5.56	13.84	9.0
3	R2	All MCs	154	5.0	154	5.0	1.346	373.2	LOS F	80.2	585.6	1.00	5.56	13.84	9.0
Approach			446	5.0	446	5.0	1.346	345.5	LOS F	80.2	585.6	1.00	5.56	13.84	9.0
East: Beaudesert Beenleigh Road															
4	L2	All MCs	245	5.0	245	5.0	0.248	7.9	LOS A	1.0	7.6	0.52	0.71	0.52	51.2
5	T1	All MCs	326	5.0	326	5.0	0.173	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			572	5.0	572	5.0	0.248	3.4	LOS A	1.0	7.6	0.22	0.30	0.22	55.8
West: Beaudesert Beenleigh Road															
11	T1	All MCs	297	5.0	297	5.0	0.157	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	458	5.0	458	5.0	0.363	7.3	LOS A	2.1	15.1	0.51	0.68	0.53	51.1
Approach			755	5.0	755	5.0	0.363	4.4	NA	2.1	15.1	0.31	0.41	0.32	54.2
All Vehicles			1773	5.0	1773	5.0	1.346	90.0	NA	80.2	585.6	0.46	1.67	3.69	24.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:39:41 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	289	6.7	289	6.7	2.661	1508.4	LOS F	159.3	1179.4	1.00	8.42	22.01	2.3
3	R2	All MCs	112	6.7	112	6.7	2.661	1610.9	LOS F	159.3	1179.4	1.00	8.42	22.01	2.3
Approach			401	6.7	401	6.7	2.661	1536.9	LOS F	159.3	1179.4	1.00	8.42	22.01	2.3
East: Beaudesert Beenleigh Road															
4	L2	All MCs	253	6.7	253	6.7	0.314	9.6	LOS A	1.4	10.7	0.60	0.83	0.71	50.1
5	T1	All MCs	380	6.7	380	6.7	0.203	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			633	6.7	633	6.7	0.314	3.9	LOS A	1.4	10.7	0.24	0.33	0.28	55.5
West: Beaudesert Beenleigh Road															
11	T1	All MCs	538	6.7	538	6.7	0.288	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	589	6.7	589	6.7	0.507	8.9	LOS A	4.2	31.2	0.61	0.81	0.83	50.0
Approach			1127	6.7	1127	6.7	0.507	4.7	NA	4.2	31.2	0.32	0.42	0.44	54.2
All Vehicles			2161	6.7	2161	6.7	2.661	288.8	NA	159.3	1179.4	0.42	1.88	4.39	10.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:39:41 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	574	5.0	574	5.0	12.530	10388.7	LOS F	502.7	3669.6	1.00	6.84	19.92	0.3
3	R2	All MCs	301	5.0	301	5.0	12.530	10502.0	LOS F	502.7	3669.6	1.00	6.84	19.92	0.3
Approach			875	5.0	875	5.0	12.530	10427.7	LOS F	502.7	3669.6	1.00	6.84	19.92	0.3
East: Beaudesert Beenleigh Road															
4	L2	All MCs	378	5.0	378	5.0	0.571	13.4	LOS A	3.5	25.4	0.76	1.05	1.28	47.7
5	T1	All MCs	502	5.0	502	5.0	0.266	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			880	5.0	880	5.0	0.571	5.8	LOS A	3.5	25.4	0.33	0.45	0.55	53.9
West: Beaudesert Beenleigh Road															
11	T1	All MCs	472	5.0	472	5.0	0.250	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	728	5.0	728	5.0	0.720	12.7	LOS A	8.6	62.9	0.77	1.14	1.58	47.5
Approach			1200	5.0	1200	5.0	0.720	7.7	NA	8.6	62.9	0.47	0.69	0.96	51.7
All Vehicles			2955	5.0	2955	5.0	12.530	3091.9	NA	502.7	3669.6	0.58	2.44	6.45	1.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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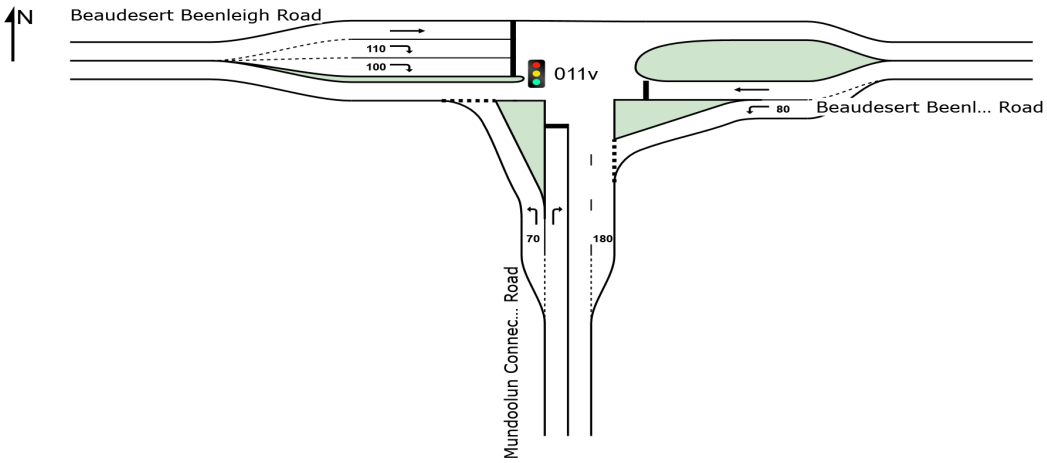
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

SITE LAYOUT

Site: 011v [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:28:02 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011v [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	293	5.0	293	5.0	0.276	8.7	LOS A	2.2	15.7	0.54	0.69	0.54	50.6
3	R2	All MCs	154	5.0	154	5.0	*0.571	24.6	LOS B	3.1	22.6	0.97	0.81	1.04	41.6
Approach			446	5.0	446	5.0	0.571	14.2	LOS A	3.1	22.6	0.69	0.73	0.71	47.1
East: Beaudesert Beenleigh Road															
4	L2	All MCs	245	5.0	245	5.0	0.214	8.5	LOS A	1.5	10.8	0.47	0.67	0.47	51.2
5	T1	All MCs	326	5.0	326	5.0	*0.768	19.2	LOS B	7.0	51.0	0.99	0.95	1.25	45.6
Approach			572	5.0	572	5.0	0.768	14.6	LOS B	7.0	51.0	0.77	0.83	0.92	47.9
West: Beaudesert Beenleigh Road															
11	T1	All MCs	297	5.0	297	5.0	0.286	5.3	LOS A	3.2	23.0	0.57	0.48	0.57	55.2
12	R2	All MCs	458	5.0	458	5.0	*0.742	25.8	LOS B	5.0	36.6	1.00	0.91	1.24	40.9
Approach			755	5.0	755	5.0	0.742	17.7	LOS B	5.0	36.6	0.83	0.74	0.98	45.5
All Vehicles			1773	5.0	1773	5.0	0.768	15.8	LOS B	7.0	51.0	0.77	0.77	0.89	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 4:09:40 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011v [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	289	6.7	289	6.7	0.272	9.3	LOS A	2.7	20.1	0.52	0.69	0.52	50.2
3	R2	All MCs	112	6.7	112	6.7	* 0.525	30.1	LOS C	2.8	20.7	0.98	0.78	1.01	39.2
Approach			401	6.7	401	6.7	0.525	15.0	LOS B	2.8	20.7	0.65	0.72	0.65	46.5
East: Beaudesert Beenleigh Road															
4	L2	All MCs	253	6.7	253	6.7	0.225	9.4	LOS A	2.0	15.1	0.46	0.67	0.46	50.8
5	T1	All MCs	380	6.7	380	6.7	* 0.726	19.9	LOS B	9.3	68.7	0.96	0.88	1.08	45.2
Approach			633	6.7	633	6.7	0.726	15.7	LOS B	9.3	68.7	0.76	0.80	0.83	47.3
West: Beaudesert Beenleigh Road															
11	T1	All MCs	538	6.7	538	6.7	0.450	4.9	LOS A	6.7	49.6	0.54	0.48	0.54	55.5
12	R2	All MCs	589	6.7	589	6.7	* 0.705	26.9	LOS B	7.4	54.9	0.96	0.87	1.08	40.4
Approach			1127	6.7	1127	6.7	0.705	16.4	LOS B	7.4	54.9	0.76	0.68	0.82	46.4
All Vehicles			2161	6.7	2161	6.7	0.726	16.0	LOS B	9.3	68.7	0.74	0.72	0.79	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 4:09:49 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

MOVEMENT SUMMARY

Site: 011v [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd & Mundoolun Connection Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Mundoolun Connection Road															
1	L2	All MCs	574	5.0	574	5.0	0.533	13.9	LOS A	8.6	62.5	0.63	0.81	0.63	47.4
3	R2	All MCs	301	5.0	301	5.0	* 0.839	41.8	LOS C	11.6	84.6	1.00	0.99	1.29	34.8
Approach			875	5.0	875	5.0	0.839	23.5	LOS B	11.6	84.6	0.76	0.87	0.86	42.2
East: Beaudesert Beenleigh Road															
4	L2	All MCs	378	5.0	378	5.0	0.319	11.6	LOS A	4.7	34.2	0.46	0.68	0.46	50.0
5	T1	All MCs	502	5.0	502	5.0	* 0.886	36.1	LOS C	20.4	148.8	1.00	1.09	1.32	37.7
Approach			880	5.0	880	5.0	0.886	25.6	LOS B	20.4	148.8	0.77	0.91	0.95	42.2
West: Beaudesert Beenleigh Road															
11	T1	All MCs	472	5.0	472	5.0	0.397	6.9	LOS A	7.9	58.0	0.53	0.47	0.53	53.9
12	R2	All MCs	728	5.0	728	5.0	* 0.851	40.5	LOS C	14.4	104.8	1.00	0.96	1.26	35.3
Approach			1200	5.0	1200	5.0	0.851	27.3	LOS B	14.4	104.8	0.82	0.77	0.97	40.8
All Vehicles			2955	5.0	2955	5.0	0.886	25.7	LOS B	20.4	148.8	0.78	0.84	0.93	41.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

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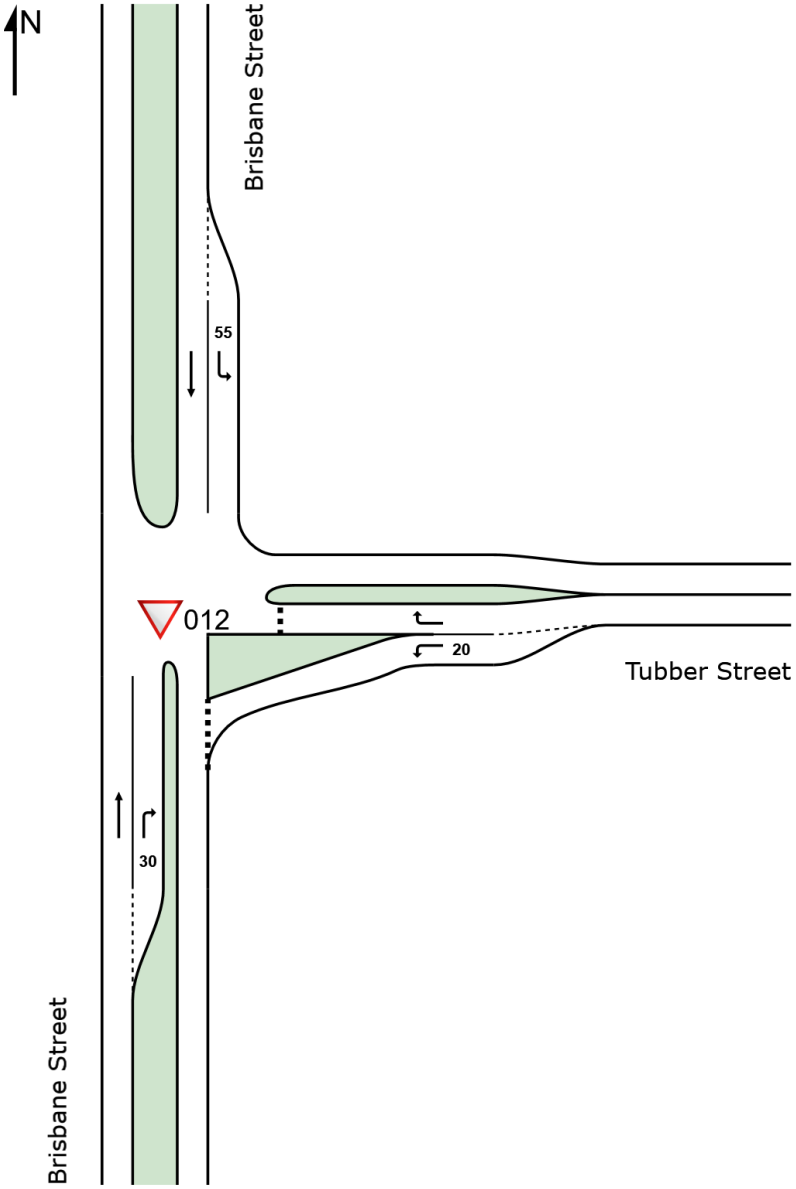
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\11_Beaudesert Beenleigh Rd & Mundoolun Connection Rd.sip9

SITE LAYOUT

Site: 012 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:30:37 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	461	5.0	461	5.0	0.244	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	11	5.0	11	5.0	0.020	11.1	LOS A	0.1	0.5	0.63	0.75	0.63	48.8
Approach			472	5.0	472	5.0	0.244	0.3	NA	0.1	0.5	0.01	0.02	0.01	59.6
East: Tubber Street															
4	L2	All MCs	41	5.0	41	5.0	0.062	9.2	LOS A	0.2	1.6	0.53	0.73	0.53	50.4
6	R2	All MCs	100	5.0	100	5.0	0.577	38.1	LOS C	2.4	17.6	0.92	1.09	1.41	36.0
Approach			141	5.0	141	5.0	0.577	29.7	LOS C	2.4	17.6	0.80	0.99	1.15	39.3
North: Brisbane Street															
7	L2	All MCs	258	5.0	258	5.0	0.144	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
8	T1	All MCs	584	5.0	584	5.0	0.309	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			842	5.0	842	5.0	0.309	1.8	NA	0.0	0.0	0.00	0.18	0.00	57.4
All Vehicles			1455	5.0	1455	5.0	0.577	4.0	NA	2.4	17.6	0.08	0.20	0.12	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:07:33 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	542	5.0	542	5.0	0.287	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	7	5.0	7	5.0	0.012	10.0	LOS A	0.0	0.3	0.57	0.69	0.57	49.6
Approach			549	5.0	549	5.0	0.287	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.7
East: Tubber Street															
4	L2	All MCs	68	5.0	68	5.0	0.102	9.2	LOS A	0.4	2.6	0.53	0.75	0.53	50.4
6	R2	All MCs	92	5.0	92	5.0	0.549	38.2	LOS C	2.2	16.1	0.92	1.08	1.36	36.0
Approach			160	5.0	160	5.0	0.549	25.8	LOS B	2.2	16.1	0.75	0.94	1.00	41.0
North: Brisbane Street															
7	L2	All MCs	164	5.0	164	5.0	0.092	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	575	5.0	575	5.0	0.304	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			739	5.0	739	5.0	0.304	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
All Vehicles			1448	5.0	1448	5.0	0.549	3.6	NA	2.2	16.1	0.09	0.17	0.11	56.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:07:33 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	368	5.0	368	5.0	0.195	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	8	5.0	8	5.0	0.015	10.6	LOS A	0.0	0.4	0.60	0.72	0.60	49.2
Approach			377	5.0	377	5.0	0.195	0.3	NA	0.0	0.4	0.01	0.02	0.01	59.6
East: Tubber Street															
4	L2	All MCs	121	5.0	121	5.0	0.175	9.3	LOS A	0.6	4.7	0.54	0.76	0.54	50.4
6	R2	All MCs	294	5.0	294	5.0	1.329	335.3	LOS F	51.2	373.6	1.00	3.96	12.03	9.2
Approach			415	5.0	415	5.0	1.329	240.2	LOS F	51.2	373.6	0.87	3.03	8.68	12.1
North: Brisbane Street															
7	L2	All MCs	245	5.0	245	5.0	0.137	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
8	T1	All MCs	555	5.0	555	5.0	0.294	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			800	5.0	800	5.0	0.294	1.8	NA	0.0	0.0	0.00	0.18	0.00	57.4
All Vehicles			1592	5.0	1592	5.0	1.329	63.5	NA	51.2	373.6	0.23	0.88	2.27	29.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:07:34 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	428	5.0	428	5.0	0.227	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	6	5.0	6	5.0	0.011	10.1	LOS A	0.0	0.3	0.58	0.69	0.58	49.5
Approach			435	5.0	435	5.0	0.227	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.7
East: Tubber Street															
4	L2	All MCs	126	5.0	126	5.0	0.192	9.6	LOS A	0.7	5.2	0.56	0.78	0.56	50.1
6	R2	All MCs	168	5.0	168	5.0	0.848	54.2	LOS D	5.7	41.7	0.96	1.40	2.53	31.1
Approach			295	5.0	295	5.0	0.848	35.1	LOS C	5.7	41.7	0.79	1.13	1.69	37.1
North: Brisbane Street															
7	L2	All MCs	167	5.0	167	5.0	0.093	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	586	5.0	586	5.0	0.310	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			754	5.0	754	5.0	0.310	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
All Vehicles			1483	5.0	1483	5.0	0.848	7.7	NA	5.7	41.7	0.16	0.29	0.34	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

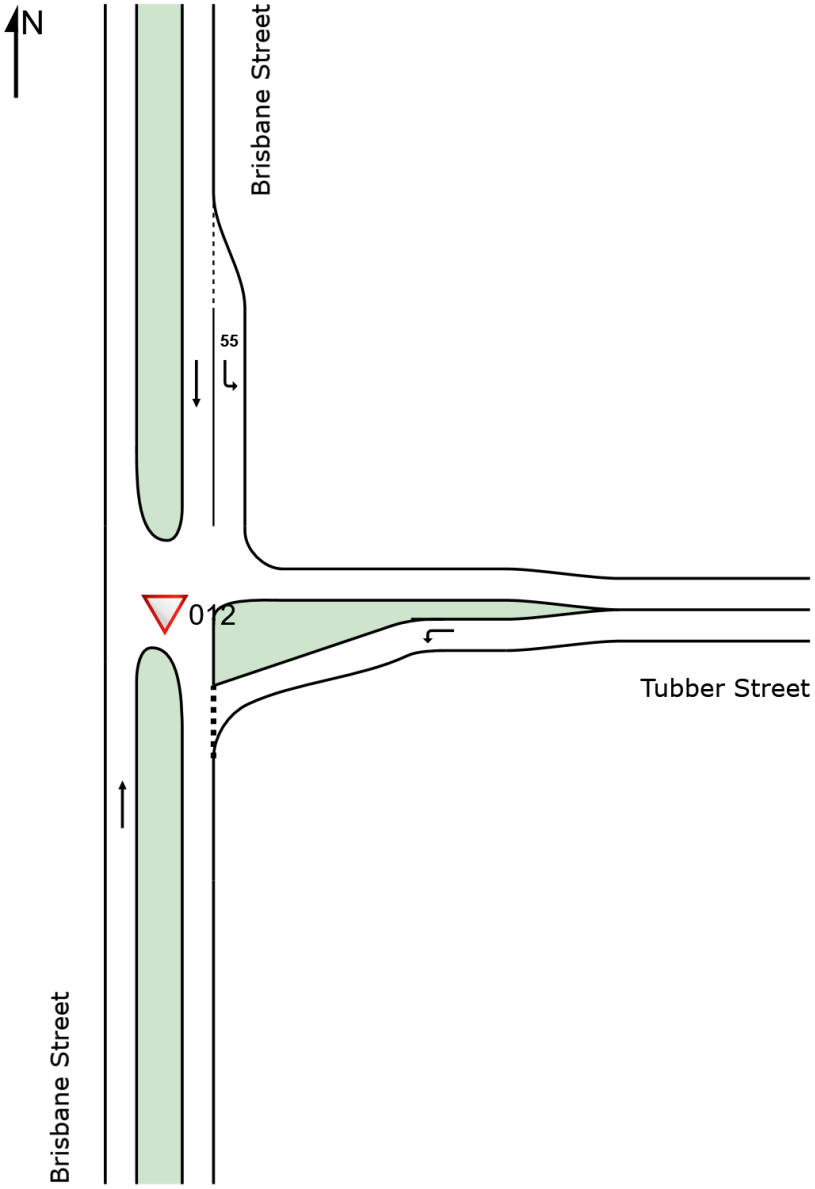
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:07:34 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

SITE LAYOUT

Site: 012 [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:30:46 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	472	5.0	472	5.0	0.250	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			472	5.0	472	5.0	0.250	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Tubber Street															
4	L2	All MCs	141	5.0	141	5.0	0.164	8.6	LOS A	0.7	4.8	0.55	0.74	0.55	50.8
Approach			141	5.0	141	5.0	0.164	8.6	LOS A	0.7	4.8	0.55	0.74	0.55	50.8
North: Brisbane Street															
7	L2	All MCs	258	5.0	258	5.0	0.144	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
8	T1	All MCs	584	5.0	584	5.0	0.309	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			842	5.0	842	5.0	0.309	1.8	NA	0.0	0.0	0.00	0.18	0.00	57.4
All Vehicles			1455	5.0	1455	5.0	0.309	1.9	NA	0.7	4.8	0.05	0.17	0.05	57.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 5:03:57 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	581	5.0	581	5.0	0.308	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			581	5.0	581	5.0	0.308	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
East: Tubber Street															
4	L2	All MCs	160	5.0	160	5.0	0.183	8.6	LOS A	0.7	5.5	0.56	0.74	0.56	50.9
Approach			160	5.0	160	5.0	0.183	8.6	LOS A	0.7	5.5	0.56	0.74	0.56	50.9
North: Brisbane Street															
7	L2	All MCs	164	5.0	164	5.0	0.092	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	575	5.0	575	5.0	0.304	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			739	5.0	739	5.0	0.304	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
All Vehicles			1480	5.0	1480	5.0	0.308	1.6	NA	0.7	5.5	0.06	0.14	0.06	57.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 5:04:19 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	377	5.0	377	5.0	0.200	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			377	5.0	377	5.0	0.200	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Tubber Street															
4	L2	All MCs	415	5.0	415	5.0	0.462	10.2	LOS A	3.0	22.1	0.64	0.88	0.90	49.8
Approach			415	5.0	415	5.0	0.462	10.2	LOS A	3.0	22.1	0.64	0.88	0.90	49.8
North: Brisbane Street															
7	L2	All MCs	245	5.0	245	5.0	0.137	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
8	T1	All MCs	555	5.0	555	5.0	0.294	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			800	5.0	800	5.0	0.294	1.8	NA	0.0	0.0	0.00	0.18	0.00	57.4
All Vehicles			1592	5.0	1592	5.0	0.462	3.6	NA	3.0	22.1	0.17	0.32	0.24	55.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

MOVEMENT SUMMARY

Site: 012 [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Brisbane St & Tubber St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brisbane Street															
2	T1	All MCs	434	5.0	434	5.0	0.230	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			434	5.0	434	5.0	0.230	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
East: Tubber Street															
4	L2	All MCs	295	5.0	295	5.0	0.343	9.5	LOS A	1.8	13.0	0.61	0.82	0.73	50.2
Approach			295	5.0	295	5.0	0.343	9.5	LOS A	1.8	13.0	0.61	0.82	0.73	50.2
North: Brisbane Street															
7	L2	All MCs	167	5.0	167	5.0	0.093	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
8	T1	All MCs	586	5.0	586	5.0	0.310	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			754	5.0	754	5.0	0.310	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.1
All Vehicles			1482	5.0	1482	5.0	0.343	2.6	NA	1.8	13.0	0.12	0.23	0.15	56.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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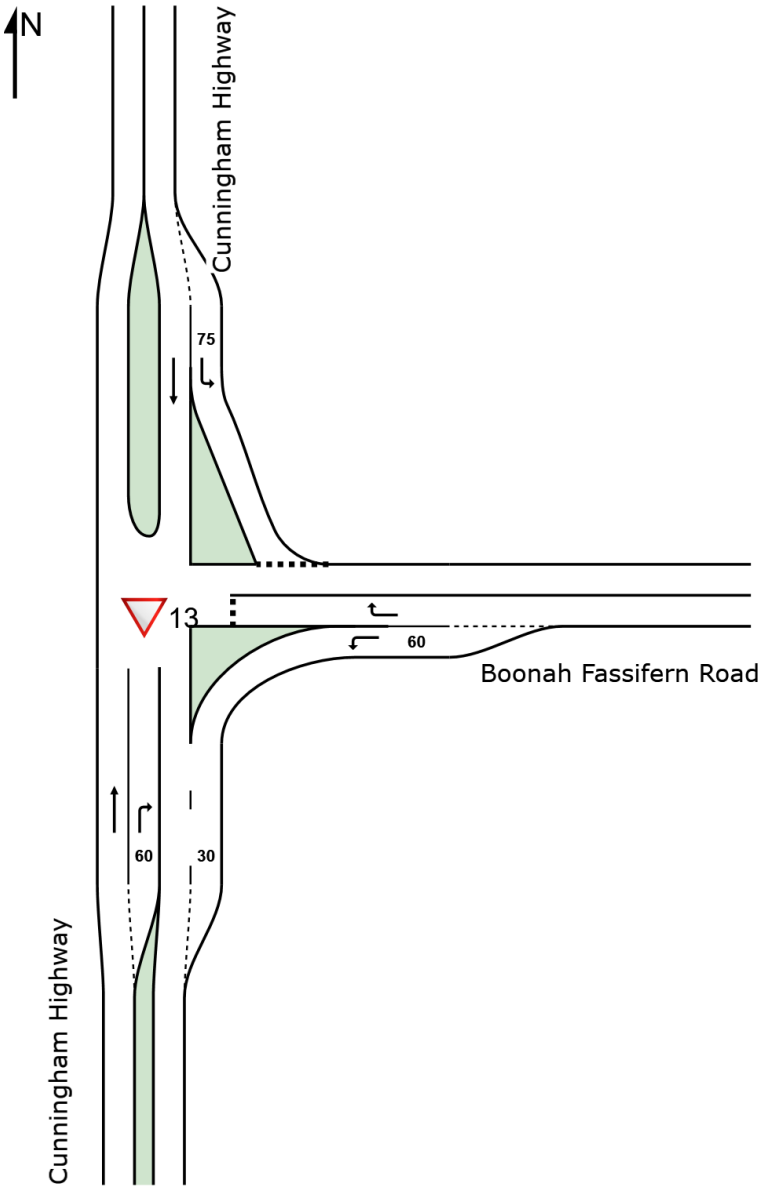
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\12_Brisbane St & Tubber St .sip9

SITE LAYOUT

Site: 13 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Cunningham Hwy & Boonah Fassifern Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:32:24 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\13_Cunningham Hwy & Boonah Fassifern Rd.sip9

MOVEMENT SUMMARY

Site: 13 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Cunningham Hwy & Boonah Fassifern Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Cunningham Highway															
2	T1	All MCs	135	21.4	135	21.4	0.079	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	77	21.4	77	21.4	0.056	6.4	LOS A	0.3	2.1	0.29	0.55	0.29	51.1
Approach			212	21.4	212	21.4	0.079	2.4	NA	0.3	2.1	0.11	0.20	0.11	56.4
East: Boonah Fassifern Road															
4	L2	All MCs	65	21.4	65	21.4	0.041	6.2	LOS A	0.0	0.0	0.00	0.52	0.00	52.7
6	R2	All MCs	42	21.4	42	21.4	0.068	9.3	LOS A	0.3	2.1	0.50	0.69	0.50	49.6
Approach			107	21.4	107	21.4	0.068	7.4	LOS A	0.3	2.1	0.19	0.59	0.19	51.5
North: Cunningham Highway															
7	L2	All MCs	32	21.4	32	21.4	0.023	6.1	LOS A	0.1	0.8	0.18	0.51	0.18	51.8
8	T1	All MCs	151	21.4	151	21.4	0.088	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			182	21.4	182	21.4	0.088	1.1	LOS A	0.1	0.8	0.03	0.09	0.03	58.3
All Vehicles			501	21.4	501	21.4	0.088	3.0	NA	0.3	2.1	0.10	0.24	0.10	55.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\13_Cunningham Hwy & Boonah Fassifern Rd.sip9

MOVEMENT SUMMARY

Site: 13 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Cunningham Hwy & Boonah Fassifern Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Cunningham Highway															
2	T1	All MCs	175	15.7	175	15.7	0.099	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	100	15.7	100	15.7	0.069	6.2	LOS A	0.3	2.5	0.26	0.55	0.26	51.5
Approach			275	15.7	275	15.7	0.099	2.3	NA	0.3	2.5	0.10	0.20	0.10	56.5
East: Boonah Fassifern Road															
4	L2	All MCs	73	15.7	73	15.7	0.043	6.0	LOS A	0.0	0.0	0.00	0.52	0.00	52.9
6	R2	All MCs	36	15.7	36	15.7	0.059	9.4	LOS A	0.2	1.7	0.51	0.70	0.51	49.7
Approach			108	15.7	108	15.7	0.059	7.1	LOS A	0.2	1.7	0.17	0.58	0.17	51.8
North: Cunningham Highway															
7	L2	All MCs	43	15.7	43	15.7	0.031	6.1	LOS A	0.1	1.0	0.21	0.51	0.21	51.9
8	T1	All MCs	128	15.7	128	15.7	0.073	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			172	15.7	172	15.7	0.073	1.6	LOS A	0.1	1.0	0.05	0.13	0.05	57.7
All Vehicles			555	15.7	555	15.7	0.099	3.0	NA	0.3	2.5	0.10	0.25	0.10	55.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:04:59 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\13_Cunningham Hwy & Boonah Fassifern Rd.sip9

MOVEMENT SUMMARY

Site: 13 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Cunningham Hwy & Boonah Fassifern Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Cunningham Highway															
2	T1	All MCs	177	21.4	177	21.4	0.103	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	101	21.4	101	21.4	0.076	6.6	LOS A	0.3	2.8	0.32	0.57	0.32	51.0
Approach			278	21.4	278	21.4	0.103	2.4	NA	0.3	2.8	0.12	0.21	0.12	56.4
East: Boonah Fassifern Road															
4	L2	All MCs	97	21.4	97	21.4	0.060	6.3	LOS A	0.0	0.0	0.00	0.52	0.00	52.7
6	R2	All MCs	63	21.4	63	21.4	0.120	10.7	LOS A	0.4	3.6	0.56	0.77	0.56	48.6
Approach			160	21.4	160	21.4	0.120	8.0	LOS A	0.4	3.6	0.22	0.62	0.22	51.0
North: Cunningham Highway															
7	L2	All MCs	37	21.4	37	21.4	0.028	6.2	LOS A	0.1	0.9	0.21	0.51	0.21	51.7
8	T1	All MCs	176	21.4	176	21.4	0.103	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			213	21.4	213	21.4	0.103	1.1	LOS A	0.1	0.9	0.04	0.09	0.04	58.3
All Vehicles			651	21.4	651	21.4	0.120	3.4	NA	0.4	3.6	0.12	0.27	0.12	55.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:04:59 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\13_Cunningham Hwy & Boonah Fassifern Rd.sip9

MOVEMENT SUMMARY

Site: 13 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Cunningham Hwy & Boonah Fassifern Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Cunningham Highway															
2	T1	All MCs	215	15.7	215	15.7	0.121	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	123	15.7	123	15.7	0.091	6.5	LOS A	0.4	3.3	0.33	0.57	0.33	51.2
Approach			338	15.7	338	15.7	0.121	2.4	NA	0.4	3.3	0.12	0.21	0.12	56.4
East: Boonah Fassifern Road															
4	L2	All MCs	92	15.7	92	15.7	0.055	6.2	LOS A	0.0	0.0	0.00	0.52	0.00	52.9
6	R2	All MCs	45	15.7	45	15.7	0.093	11.4	LOS A	0.3	2.6	0.58	0.79	0.58	48.4
Approach			137	15.7	137	15.7	0.093	7.9	LOS A	0.3	2.6	0.19	0.61	0.19	51.3
North: Cunningham Highway															
7	L2	All MCs	65	15.7	65	15.7	0.049	6.2	LOS A	0.2	1.5	0.24	0.52	0.24	51.8
8	T1	All MCs	193	15.7	193	15.7	0.109	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			258	15.7	258	15.7	0.109	1.6	LOS A	0.2	1.5	0.06	0.13	0.06	57.6
All Vehicles			733	15.7	733	15.7	0.121	3.2	NA	0.4	3.3	0.11	0.26	0.11	55.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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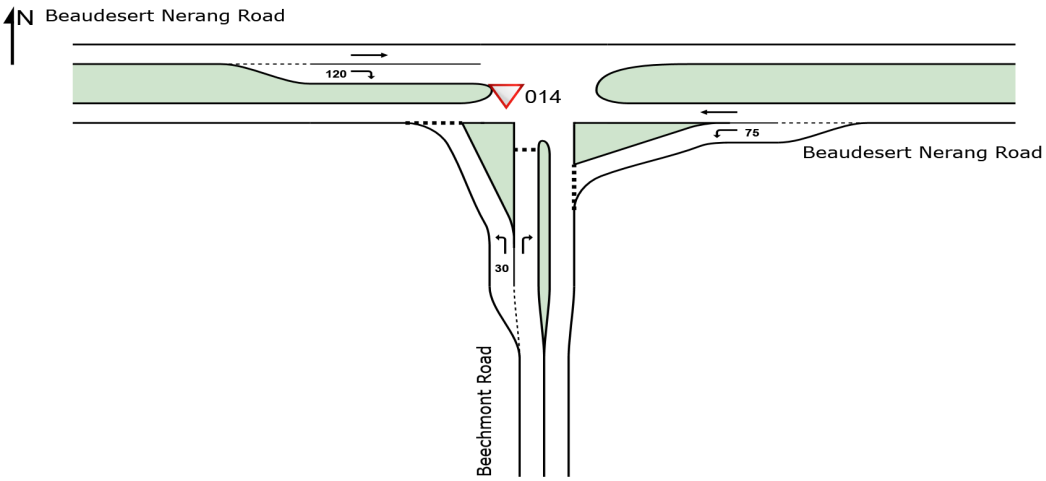
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\13_Cunningham Hwy & Boonah Fassifern Rd.sip9

SITE LAYOUT

Site: 014 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:34:22 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	79	5.0	79	5.0	0.064	6.7	LOS A	0.3	1.8	0.36	0.58	0.36	51.8
3	R2	All MCs	47	5.0	47	5.0	0.169	18.0	LOS B	0.6	4.1	0.78	0.90	0.78	44.9
Approach			126	5.0	126	5.0	0.169	10.9	LOS A	0.6	4.1	0.52	0.70	0.52	49.0
East: Beaudesert Nerang Road															
4	L2	All MCs	66	5.0	66	5.0	0.045	6.0	LOS A	0.2	1.3	0.20	0.52	0.20	52.3
5	T1	All MCs	276	5.0	276	5.0	0.146	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			342	5.0	342	5.0	0.146	1.2	LOS A	0.2	1.3	0.04	0.10	0.04	58.3
West: Beaudesert Nerang Road															
11	T1	All MCs	552	5.0	552	5.0	0.292	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	101	5.0	101	5.0	0.076	6.6	LOS A	0.3	2.4	0.38	0.59	0.38	51.6
Approach			653	5.0	653	5.0	0.292	1.1	NA	0.3	2.4	0.06	0.09	0.06	58.4
All Vehicles			1121	5.0	1121	5.0	0.292	2.2	NA	0.6	4.1	0.10	0.16	0.10	57.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	121	5.0	121	5.0	0.121	7.7	LOS A	0.5	3.4	0.48	0.68	0.48	51.4
3	R2	All MCs	78	5.0	78	5.0	0.469	35.2	LOS C	1.7	12.4	0.91	1.04	1.23	37.1
Approach			199	5.0	199	5.0	0.469	18.4	LOS B	1.7	12.4	0.65	0.82	0.77	44.7
East: Beaudesert Nerang Road															
4	L2	All MCs	59	5.0	59	5.0	0.040	6.0	LOS A	0.2	1.2	0.20	0.52	0.20	52.3
5	T1	All MCs	452	5.0	452	5.0	0.239	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			511	5.0	511	5.0	0.239	0.8	LOS A	0.2	1.2	0.02	0.06	0.02	58.9
West: Beaudesert Nerang Road															
11	T1	All MCs	642	5.0	642	5.0	0.340	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	103	5.0	103	5.0	0.095	7.6	LOS A	0.4	3.0	0.50	0.68	0.50	51.2
Approach			745	5.0	745	5.0	0.340	1.1	NA	0.4	3.0	0.07	0.09	0.07	58.4
All Vehicles			1455	5.0	1455	5.0	0.469	3.4	NA	1.7	12.4	0.13	0.18	0.15	56.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2041AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	47	5.0	47	5.0	0.046	7.4	LOS A	0.2	1.3	0.45	0.63	0.45	51.5
3	R2	All MCs	28	5.0	28	5.0	4.737	3652.4	LOS F	16.2	118.1	1.00	1.32	2.58	1.0
Approach			76	5.0	76	5.0	4.737	1374.3	LOS F	16.2	118.1	0.66	0.89	1.25	2.6
East: Beaudesert Nerang Road															
4	L2	All MCs	103	5.0	103	5.0	0.085	6.7	LOS A	0.3	2.5	0.37	0.59	0.37	51.7
5	T1	All MCs	431	5.0	431	5.0	0.228	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			534	5.0	534	5.0	0.228	1.4	LOS A	0.3	2.5	0.07	0.11	0.07	58.1
West: Beaudesert Nerang Road															
11	T1	All MCs	1556	5.0	1556	5.0	0.824	1.0	LOS A	0.0	0.0	0.00	0.00	0.00	58.1
12	R2	All MCs	285	5.0	285	5.0	0.257	7.7	LOS A	1.2	8.8	0.53	0.70	0.53	51.1
Approach			1841	5.0	1841	5.0	0.824	2.0	NA	1.2	8.8	0.08	0.11	0.08	56.9
All Vehicles			2451	5.0	2451	5.0	4.737	44.3	NA	16.2	118.1	0.10	0.13	0.12	34.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2041PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	140	5.0	140	5.0	0.801	199.4	LOS F	3.4	24.7	0.97	1.24	2.00	32.8
3	R2	All MCs	91	5.0	91	5.0	15.088	13065.4	LOS F	54.8	399.9	1.00	1.38	2.85	0.3
Approach			231	5.0	231	5.0	15.088	5251.8	LOS F	54.8	399.9	0.98	1.29	2.34	0.7
East: Beaudesert Nerang Road															
4	L2	All MCs	163	5.0	163	5.0	0.118	6.2	LOS A	0.5	3.6	0.27	0.54	0.27	52.1
5	T1	All MCs	1251	5.0	1251	5.0	0.662	0.4	LOS A	0.0	0.0	0.00	0.00	0.00	59.2
Approach			1414	5.0	1414	5.0	0.662	1.1	LOS A	0.5	3.6	0.03	0.06	0.03	58.3
West: Beaudesert Nerang Road															
11	T1	All MCs	988	5.0	988	5.0	0.523	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.5
12	R2	All MCs	159	5.0	159	5.0	0.863	58.6	LOS E	4.5	32.9	0.98	1.35	2.44	29.9
Approach			1147	5.0	1147	5.0	0.863	8.3	NA	4.5	32.9	0.14	0.19	0.34	52.3
All Vehicles			2792	5.0	2792	5.0	15.088	437.7	NA	54.8	399.9	0.15	0.22	0.35	7.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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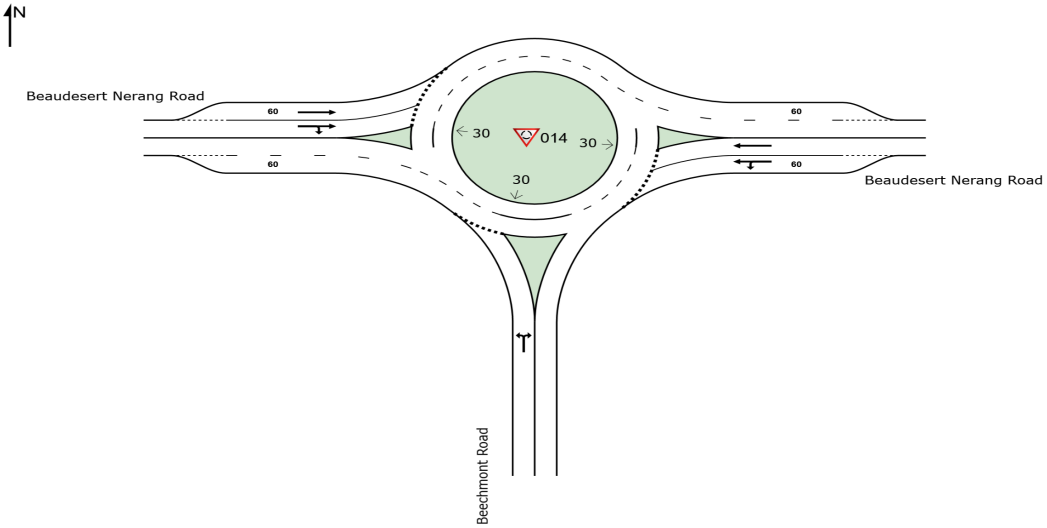
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

SITE LAYOUT

Site: 014 [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:34:34 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	79	5.0	79	5.0	0.124	5.1	LOS A	0.5	3.8	0.38	0.58	0.38	52.7
3	R2	All MCs	47	5.0	47	5.0	0.124	10.3	LOS A	0.5	3.8	0.38	0.58	0.38	52.1
Approach			126	5.0	126	5.0	0.124	7.1	LOS A	0.5	3.8	0.38	0.58	0.38	52.5
East: Beaudesert Nerang Road															
4	L2	All MCs	66	5.0	66	5.0	0.088	4.2	LOS A	0.4	2.7	0.24	0.43	0.24	54.4
5	T1	All MCs	276	5.0	276	5.0	0.181	3.8	LOS A	0.8	6.0	0.22	0.37	0.22	55.0
Approach			342	5.0	342	5.0	0.181	3.9	LOS A	0.8	6.0	0.23	0.38	0.23	54.9
West: Beaudesert Nerang Road															
11	T1	All MCs	552	5.0	552	5.0	0.313	3.9	LOS A	1.8	12.9	0.17	0.39	0.17	54.7
12	R2	All MCs	101	5.0	101	5.0	0.313	9.3	LOS A	1.8	12.9	0.18	0.42	0.18	53.3
Approach			653	5.0	653	5.0	0.313	4.7	LOS A	1.8	12.9	0.17	0.40	0.17	54.5
All Vehicles			1121	5.0	1121	5.0	0.313	4.7	LOS A	1.8	12.9	0.21	0.41	0.21	54.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	121	5.0	121	5.0	0.218	6.3	LOS A	1.0	7.0	0.50	0.64	0.50	52.3
3	R2	All MCs	78	5.0	78	5.0	0.218	11.2	LOS A	1.0	7.0	0.50	0.64	0.50	51.6
Approach			199	5.0	199	5.0	0.218	8.2	LOS A	1.0	7.0	0.50	0.64	0.50	52.0
East: Beaudesert Nerang Road															
4	L2	All MCs	59	5.0	59	5.0	0.130	4.3	LOS A	0.6	4.2	0.25	0.41	0.25	54.3
5	T1	All MCs	452	5.0	452	5.0	0.268	4.0	LOS A	1.4	10.1	0.25	0.38	0.25	54.8
Approach			511	5.0	511	5.0	0.268	4.0	LOS A	1.4	10.1	0.25	0.38	0.25	54.8
West: Beaudesert Nerang Road															
11	T1	All MCs	642	5.0	642	5.0	0.375	4.2	LOS A	2.4	17.3	0.25	0.40	0.25	54.4
12	R2	All MCs	103	5.0	103	5.0	0.375	9.5	LOS A	2.4	17.3	0.26	0.42	0.26	53.1
Approach			745	5.0	745	5.0	0.375	4.9	LOS A	2.4	17.3	0.26	0.41	0.26	54.2
All Vehicles			1455	5.0	1455	5.0	0.375	5.0	LOS A	2.4	17.3	0.29	0.43	0.29	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	47	5.0	47	5.0	0.084	6.0	LOS A	0.4	2.7	0.47	0.63	0.47	52.4
3	R2	All MCs	28	5.0	28	5.0	0.084	10.9	LOS A	0.4	2.7	0.47	0.63	0.47	51.8
Approach			76	5.0	76	5.0	0.084	7.9	LOS A	0.4	2.7	0.47	0.63	0.47	52.2
East: Beaudesert Nerang Road															
4	L2	All MCs	103	5.0	103	5.0	0.161	5.4	LOS A	0.7	5.4	0.44	0.53	0.44	53.6
5	T1	All MCs	431	5.0	431	5.0	0.332	4.8	LOS A	1.9	13.7	0.46	0.48	0.46	53.8
Approach			534	5.0	534	5.0	0.332	4.9	LOS A	1.9	13.7	0.46	0.49	0.46	53.8
West: Beaudesert Nerang Road															
11	T1	All MCs	1556	5.0	1556	5.0	0.821	8.0	LOS A	15.1	110.5	0.29	0.38	0.29	54.1
12	R2	All MCs	285	5.0	285	5.0	0.821	9.5	LOS A	15.1	110.5	0.35	0.40	0.35	52.6
Approach			1841	5.0	1841	5.0	0.821	8.2	LOS A	15.1	110.5	0.30	0.38	0.30	53.9
All Vehicles			2451	5.0	2451	5.0	0.821	7.5	LOS A	15.1	110.5	0.34	0.41	0.34	53.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

MOVEMENT SUMMARY

Site: 014 [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Beechmont Rd
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beechmont Road															
1	L2	All MCs	140	5.0	140	5.0	0.485	20.0	LOS B	3.1	23.0	0.87	0.95	1.09	47.2
3	R2	All MCs	91	5.0	91	5.0	0.485	18.9	LOS B	3.1	23.0	0.87	0.95	1.09	46.7
Approach			231	5.0	231	5.0	0.485	19.6	LOS B	3.1	23.0	0.87	0.95	1.09	47.0
East: Beaudesert Nerang Road															
4	L2	All MCs	163	5.0	163	5.0	0.373	4.9	LOS A	2.1	15.4	0.41	0.47	0.41	53.6
5	T1	All MCs	1251	5.0	1251	5.0	0.768	5.8	LOS A	8.5	62.1	0.61	0.49	0.61	53.1
Approach			1414	5.0	1414	5.0	0.768	5.7	LOS A	8.5	62.1	0.59	0.48	0.59	53.1
West: Beaudesert Nerang Road															
11	T1	All MCs	988	5.0	988	5.0	0.588	4.8	LOS A	5.6	40.9	0.39	0.42	0.39	53.8
12	R2	All MCs	159	5.0	159	5.0	0.588	9.7	LOS A	5.6	40.9	0.42	0.44	0.42	52.4
Approach			1147	5.0	1147	5.0	0.588	5.5	LOS A	5.6	40.9	0.39	0.42	0.39	53.6
All Vehicles			2792	5.0	2792	5.0	0.768	6.8	LOS A	8.5	62.1	0.53	0.50	0.55	52.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

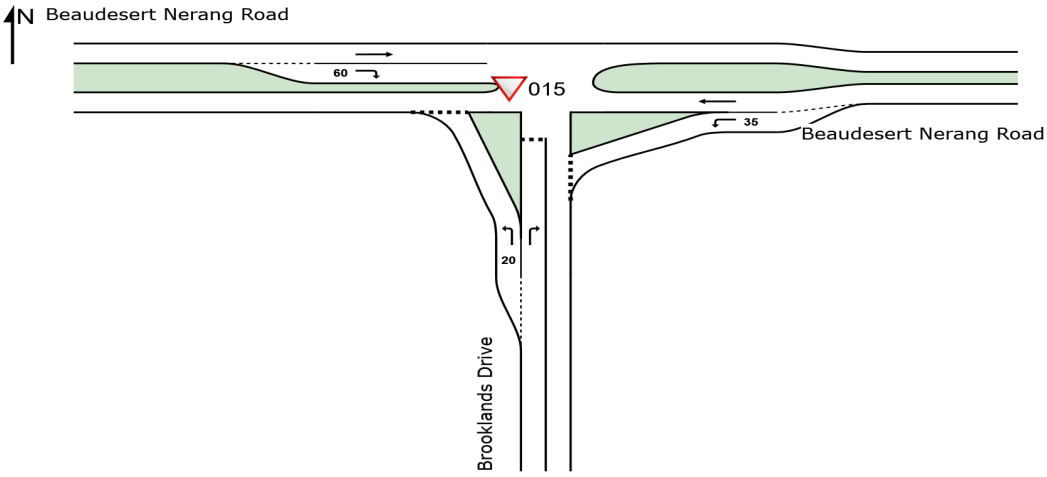
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 5:28:18 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\14_Beaudesert Nerang Rd & Beechmont Rd.sip9

SITE LAYOUT

Site: 015 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Brooklands Dr
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:36:13 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\15_Beaudesert Nerang Rd & Brooklands Dr.sip9

MOVEMENT SUMMARY

Site: 015 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Brooklands Dr
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brooklands Drive															
1	L2	All MCs	172	6.2	172	6.2	0.187	8.2	LOS A	0.7	5.5	0.53	0.73	0.53	51.1
3	R2	All MCs	15	6.2	15	6.2	0.050	16.6	LOS B	0.2	1.2	0.74	0.89	0.74	45.6
Approach			186	6.2	186	6.2	0.187	8.9	LOS A	0.7	5.5	0.54	0.74	0.54	50.6
East: Beaudesert Nerang Road															
4	L2	All MCs	8	6.2	8	6.2	0.006	5.9	LOS A	0.0	0.2	0.18	0.51	0.18	52.3
5	T1	All MCs	505	6.2	505	6.2	0.270	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			514	6.2	514	6.2	0.270	0.2	LOS A	0.0	0.2	0.00	0.01	0.00	59.7
West: Beaudesert Nerang Road															
11	T1	All MCs	323	6.2	323	6.2	0.172	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	93	6.2	93	6.2	0.093	7.9	LOS A	0.4	2.9	0.53	0.71	0.53	50.8
Approach			416	6.2	416	6.2	0.172	1.8	NA	0.4	2.9	0.12	0.16	0.12	57.6
All Vehicles			1116	6.2	1116	6.2	0.270	2.2	NA	0.7	5.5	0.14	0.19	0.14	57.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 10:58:29 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\15_Beaudesert Nerang Rd & Brooklands Dr.sip9

MOVEMENT SUMMARY

Site: 015 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Brooklands Dr
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brooklands Drive															
1	L2	All MCs	129	5.0	129	5.0	0.113	7.0	LOS A	0.5	3.3	0.41	0.62	0.41	51.6
3	R2	All MCs	17	5.0	17	5.0	0.074	20.6	LOS B	0.2	1.7	0.81	0.92	0.81	43.4
Approach			146	5.0	146	5.0	0.113	8.6	LOS A	0.5	3.3	0.46	0.66	0.46	50.5
East: Beaudesert Nerang Road															
4	L2	All MCs	11	5.0	11	5.0	0.008	6.2	LOS A	0.0	0.2	0.27	0.52	0.27	52.1
5	T1	All MCs	338	5.0	338	5.0	0.179	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			348	5.0	348	5.0	0.179	0.2	LOS A	0.0	0.2	0.01	0.02	0.01	59.6
West: Beaudesert Nerang Road															
11	T1	All MCs	561	5.0	561	5.0	0.297	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	183	5.0	183	5.0	0.147	7.0	LOS A	0.7	4.9	0.44	0.64	0.44	51.3
Approach			744	5.0	744	5.0	0.297	1.8	NA	0.7	4.9	0.11	0.16	0.11	57.5
All Vehicles			1239	5.0	1239	5.0	0.297	2.2	NA	0.7	4.9	0.12	0.18	0.12	57.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:42:36 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\15_Beaudesert Nerang Rd & Brooklands Dr.sip9

MOVEMENT SUMMARY

Site: 015 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Brooklands Dr
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brooklands Drive															
1	L2	All MCs	180	6.2	180	6.2	0.184	7.9	LOS A	0.7	5.4	0.50	0.70	0.50	51.3
3	R2	All MCs	16	6.2	16	6.2	0.138	36.6	LOS C	0.4	2.8	0.90	0.96	0.90	36.5
Approach			196	6.2	196	6.2	0.184	10.2	LOS A	0.7	5.4	0.53	0.72	0.53	49.6
East: Beaudesert Nerang Road															
4	L2	All MCs	7	6.2	7	6.2	0.006	6.3	LOS A	0.0	0.2	0.29	0.52	0.29	52.0
5	T1	All MCs	455	6.2	455	6.2	0.243	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			462	6.2	462	6.2	0.243	0.2	LOS A	0.0	0.2	0.00	0.01	0.00	59.7
West: Beaudesert Nerang Road															
11	T1	All MCs	714	6.2	714	6.2	0.381	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	204	6.2	204	6.2	0.192	7.8	LOS A	0.9	6.3	0.53	0.71	0.53	51.0
Approach			918	6.2	918	6.2	0.381	1.8	NA	0.9	6.3	0.12	0.16	0.12	57.5
All Vehicles			1576	6.2	1576	6.2	0.381	2.4	NA	0.9	6.3	0.14	0.18	0.14	57.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 10:59:09 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\15_Beaudesert Nerang Rd & Brooklands Dr.sip9

MOVEMENT SUMMARY

Site: 015 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Nerang Rd & Brooklands Dr
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Brooklands Drive															
1	L2	All MCs	152	5.0	152	5.0	0.239	10.8	LOS A	0.9	6.7	0.66	0.86	0.71	49.4
3	R2	All MCs	20	5.0	20	5.0	0.227	49.1	LOS D	0.6	4.5	0.93	0.99	1.00	32.5
Approach			172	5.0	172	5.0	0.239	15.2	LOS B	0.9	6.7	0.69	0.88	0.74	46.6
East: Beaudesert Nerang Road															
4	L2	All MCs	23	5.0	23	5.0	0.017	6.2	LOS A	0.1	0.5	0.27	0.53	0.27	52.1
5	T1	All MCs	754	5.0	754	5.0	0.399	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			777	5.0	777	5.0	0.399	0.3	LOS A	0.1	0.5	0.01	0.02	0.01	59.5
West: Beaudesert Nerang Road															
11	T1	All MCs	561	5.0	561	5.0	0.297	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	183	5.0	183	5.0	0.269	10.9	LOS A	1.2	8.6	0.68	0.89	0.76	48.9
Approach			744	5.0	744	5.0	0.297	2.7	NA	1.2	8.6	0.17	0.22	0.19	56.7
All Vehicles			1693	5.0	1693	5.0	0.399	2.9	NA	1.2	8.6	0.15	0.19	0.16	56.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

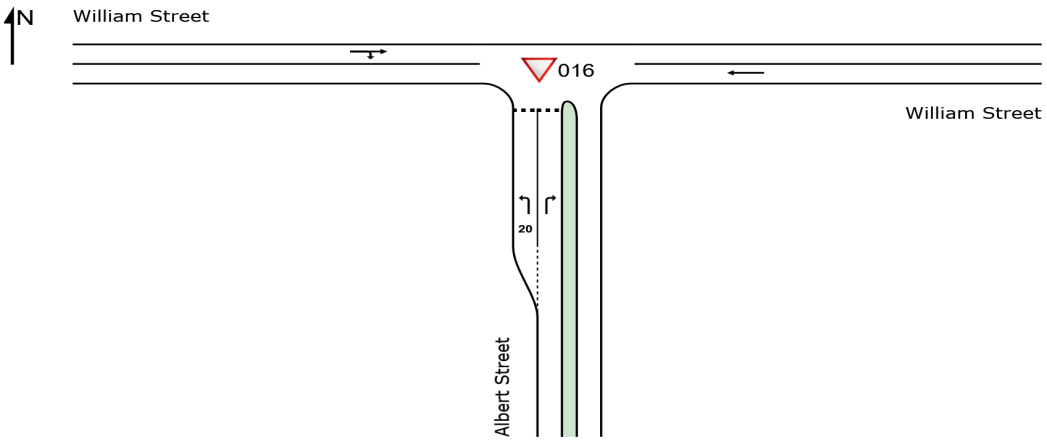
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:42:37 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\15_Beaudesert Nerang Rd & Brooklands Dr.sip9

SITE LAYOUT

Site: 016 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:38:04 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	27	5.0	27	5.0	0.028	7.5	LOS A	0.1	0.7	0.42	0.64	0.42	51.3
3	R2	All MCs	105	5.0	105	5.0	0.234	12.6	LOS A	0.7	5.3	0.69	0.89	0.75	47.7
Approach			133	5.0	133	5.0	0.234	11.5	LOS A	0.7	5.3	0.64	0.84	0.68	48.4
East: William Street															
5	T1	All MCs	474	5.0	474	5.0	0.251	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			474	5.0	474	5.0	0.251	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: William Street															
11	T1	All MCs	456	5.0	456	5.0	0.249	0.1	LOS A	0.1	0.6	0.02	0.03	0.02	59.8
12	R2	All MCs	7	5.0	7	5.0	0.249	7.7	LOS A	0.1	0.6	0.02	0.03	0.02	57.1
Approach			463	5.0	463	5.0	0.249	0.2	NA	0.1	0.6	0.02	0.03	0.02	59.8
All Vehicles			1069	5.0	1069	5.0	0.251	1.5	NA	0.7	5.3	0.09	0.12	0.09	58.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:49:41 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	16	5.0	16	5.0	0.014	6.7	LOS A	0.0	0.3	0.34	0.58	0.34	51.7
3	R2	All MCs	149	5.0	149	5.0	0.332	13.4	LOS A	1.2	8.4	0.72	0.93	0.88	47.2
Approach			165	5.0	165	5.0	0.332	12.8	LOS A	1.2	8.4	0.68	0.90	0.83	47.6
East: William Street															
5	T1	All MCs	319	5.0	319	5.0	0.169	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			319	5.0	319	5.0	0.169	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: William Street															
11	T1	All MCs	588	5.0	588	5.0	0.316	0.0	LOS A	0.0	0.4	0.01	0.01	0.01	59.9
12	R2	All MCs	5	5.0	5	5.0	0.316	6.1	LOS A	0.0	0.4	0.01	0.01	0.01	57.1
Approach			594	5.0	594	5.0	0.316	0.1	NA	0.0	0.4	0.01	0.01	0.01	59.9
All Vehicles			1078	5.0	1078	5.0	0.332	2.0	NA	1.2	8.4	0.11	0.14	0.13	57.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:49:43 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	282	5.0	282	5.0	0.282	12.7	LOS A	1.1	8.3	0.47	0.73	0.49	51.0
3	R2	All MCs	1083	5.0	1083	5.0	3.412	2195.1	LOS F	479.5	3500.1	1.00	12.44	44.46	1.6
Approach			1365	5.0	1365	5.0	3.412	1744.1	LOS F	479.5	3500.1	0.89	10.03	35.38	2.0
East: William Street															
5	T1	All MCs	451	5.0	451	5.0	0.239	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			451	5.0	451	5.0	0.239	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
West: William Street															
11	T1	All MCs	675	5.0	675	5.0	0.367	0.1	LOS A	0.1	0.8	0.02	0.03	0.02	59.8
12	R2	All MCs	11	5.0	11	5.0	0.367	7.5	LOS A	0.1	0.8	0.02	0.03	0.02	57.1
Approach			685	5.0	685	5.0	0.367	0.2	NA	0.1	0.8	0.02	0.03	0.02	59.8
All Vehicles			2501	5.0	2501	5.0	3.412	952.1	NA	479.5	3500.1	0.49	5.48	19.32	3.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:49:43 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	156	5.0	156	5.0	0.208	15.1	LOS B	0.7	5.3	0.58	0.82	0.58	50.0
3	R2	All MCs	1473	5.0	1473	5.0	5.070	3689.0	LOS F	738.0	5387.1	1.00	13.19	48.05	1.0
Approach			1628	5.0	1628	5.0	5.070	3337.5	LOS F	738.0	5387.1	0.96	12.01	43.51	1.1
East: William Street															
5	T1	All MCs	654	5.0	654	5.0	0.346	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			654	5.0	654	5.0	0.346	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
West: William Street															
11	T1	All MCs	536	5.0	536	5.0	0.290	0.1	LOS A	0.1	0.5	0.02	0.02	0.02	59.9
12	R2	All MCs	5	5.0	5	5.0	0.290	8.7	LOS A	0.1	0.5	0.02	0.02	0.02	57.1
Approach			541	5.0	541	5.0	0.290	0.1	NA	0.1	0.5	0.02	0.02	0.02	59.8
All Vehicles			2823	5.0	2823	5.0	5.070	1925.2	NA	738.0	5387.1	0.56	6.93	25.10	1.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

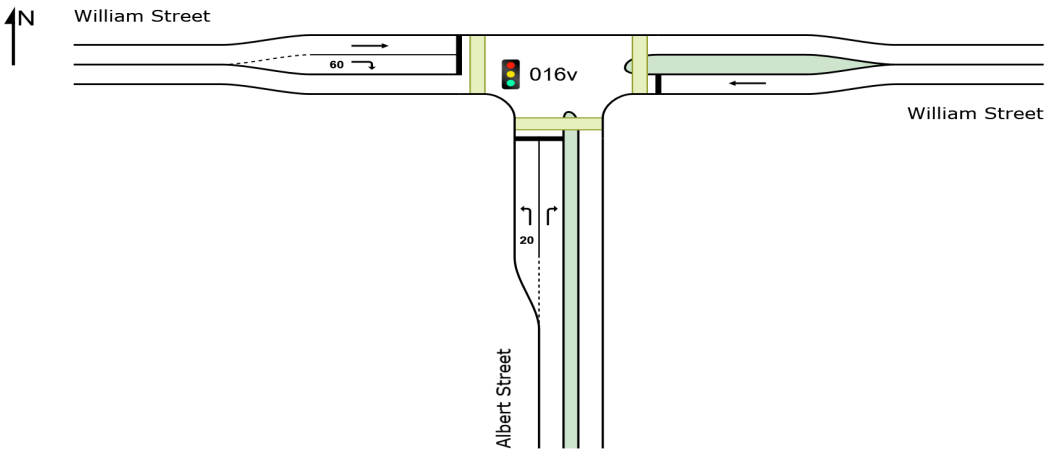
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:49:43 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

SITE LAYOUT

Site: 016v [2024AM_Survey (Site Folder: Option 1)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:38:15 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016v [2024AM_Survey (Site Folder: Option 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	27	5.0	27	5.0	0.076	27.2	LOS B	0.7	4.9	0.84	0.70	0.84	40.2
3	R2	All MCs	105	5.0	105	5.0	* 0.294	28.5	LOS B	2.7	20.0	0.89	0.76	0.89	39.6
Approach			133	5.0	133	5.0	0.294	28.2	LOS B	2.7	20.0	0.88	0.75	0.88	39.7
East: William Street															
5	T1	All MCs	474	5.0	474	5.0	* 0.627	15.8	LOS B	11.3	82.7	0.86	0.75	0.86	47.6
Approach			474	5.0	474	5.0	0.627	15.8	LOS B	11.3	82.7	0.86	0.75	0.86	47.6
West: William Street															
11	T1	All MCs	456	5.0	456	5.0	0.402	6.8	LOS A	7.1	51.5	0.56	0.49	0.56	53.9
12	R2	All MCs	7	5.0	7	5.0	* 0.041	33.3	LOS C	0.2	1.5	0.93	0.66	0.93	37.7
Approach			463	5.0	463	5.0	0.402	7.3	LOS A	7.1	51.5	0.57	0.50	0.57	53.6
All Vehicles			1069	5.0	1069	5.0	0.627	13.7	LOS A	11.3	82.7	0.74	0.64	0.74	48.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Albert Street												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
East: William Street												
P2	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: William Street												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		0	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:25:18 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016v [2024PM_Survey (Site Folder: Option 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	16	5.0	16	5.0	0.037	21.7	LOS B	0.3	2.2	0.79	0.68	0.79	42.8
3	R2	All MCs	149	5.0	149	5.0	* 0.347	23.3	LOS B	3.2	23.1	0.87	0.77	0.87	41.9
Approach			165	5.0	165	5.0	0.347	23.2	LOS B	3.2	23.1	0.86	0.77	0.86	42.0
East: William Street															
5	T1	All MCs	319	5.0	319	5.0	* 0.603	17.6	LOS B	7.1	51.5	0.92	0.78	0.92	46.6
Approach			319	5.0	319	5.0	0.603	17.6	LOS B	7.1	51.5	0.92	0.78	0.92	46.6
West: William Street															
11	T1	All MCs	588	5.0	588	5.0	0.599	9.2	LOS A	10.2	74.4	0.75	0.66	0.75	52.1
12	R2	All MCs	5	5.0	5	5.0	* 0.024	27.5	LOS B	0.1	0.9	0.90	0.64	0.90	40.0
Approach			594	5.0	594	5.0	0.599	9.3	LOS A	10.2	74.4	0.75	0.66	0.75	52.0
All Vehicles			1078	5.0	1078	5.0	0.603	13.9	LOS A	10.2	74.4	0.82	0.71	0.82	48.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Albert Street												
P1	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
East: William Street												
P2	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: William Street												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		0	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:25:19 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016v [2041AM_Design (Site Folder: Option 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	282	5.0	282	5.0	1.001	142.5	LOS F	32.1	234.2	1.00	1.23	1.56	20.4
3	R2	All MCs	1083	5.0	1083	5.0	* 1.209	267.9	LOS F	151.4	1105.4	1.00	1.44	2.12	12.0
Approach			1365	5.0	1365	5.0	1.209	241.9	LOS F	151.4	1105.4	1.00	1.40	2.00	11.9
East: William Street															
5	T1	All MCs	451	5.0	451	5.0	1.084	162.5	LOS F	50.9	371.4	1.00	1.49	1.72	16.4
Approach			451	5.0	451	5.0	1.084	162.5	LOS F	50.9	371.4	1.00	1.49	1.72	16.4
West: William Street															
11	T1	All MCs	675	5.0	675	5.0	* 1.204	292.3	LOS F	92.9	678.3	1.00	1.86	2.13	11.6
12	R2	All MCs	11	5.0	11	5.0	0.147	123.2	LOS F	0.8	5.7	0.99	0.68	0.99	24.6
Approach			685	5.0	685	5.0	1.204	289.7	LOS F	92.9	678.3	1.00	1.84	2.11	10.4
All Vehicles			2501	5.0	2501	5.0	1.209	240.7	LOS F	151.4	1105.4	1.00	1.54	1.98	12.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Albert Street												
P1	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
East: William Street												
P2	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: William Street												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		0	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:25:19 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

MOVEMENT SUMMARY

Site: 016v [2041PM_Design (Site Folder: Option 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: William St & Albert St
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Albert Street															
1	L2	All MCs	156	5.0	156	5.0	0.373	50.2	LOS D	5.6	41.1	0.54	0.72	0.54	43.0
3	R2	All MCs	1473	5.0	1473	5.0	* 1.487	513.0	LOS F	274.5	2003.6	1.00	1.79	2.99	6.7
Approach			1628	5.0	1628	5.0	1.487	468.8	LOS F	274.5	2003.6	0.96	1.69	2.76	6.9
East: William Street															
5	T1	All MCs	654	5.0	654	5.0	* 1.483	504.9	LOS F	121.6	887.8	1.00	2.53	3.01	6.5
Approach			654	5.0	654	5.0	1.483	504.9	LOS F	121.6	887.8	1.00	2.53	3.01	6.5
West: William Street															
11	T1	All MCs	536	5.0	536	5.0	0.911	97.4	LOS F	42.9	312.8	1.00	1.05	1.16	28.6
12	R2	All MCs	5	5.0	5	5.0	* 0.073	114.4	LOS F	0.4	2.8	0.99	0.65	0.99	24.7
Approach			541	5.0	541	5.0	0.911	97.6	LOS F	42.9	312.8	1.00	1.04	1.16	23.1
All Vehicles			2823	5.0	2823	5.0	1.487	406.0	LOS F	274.5	2003.6	0.97	1.76	2.51	7.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Albert Street												
P1	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
East: William Street												
P2	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: William Street												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		0	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

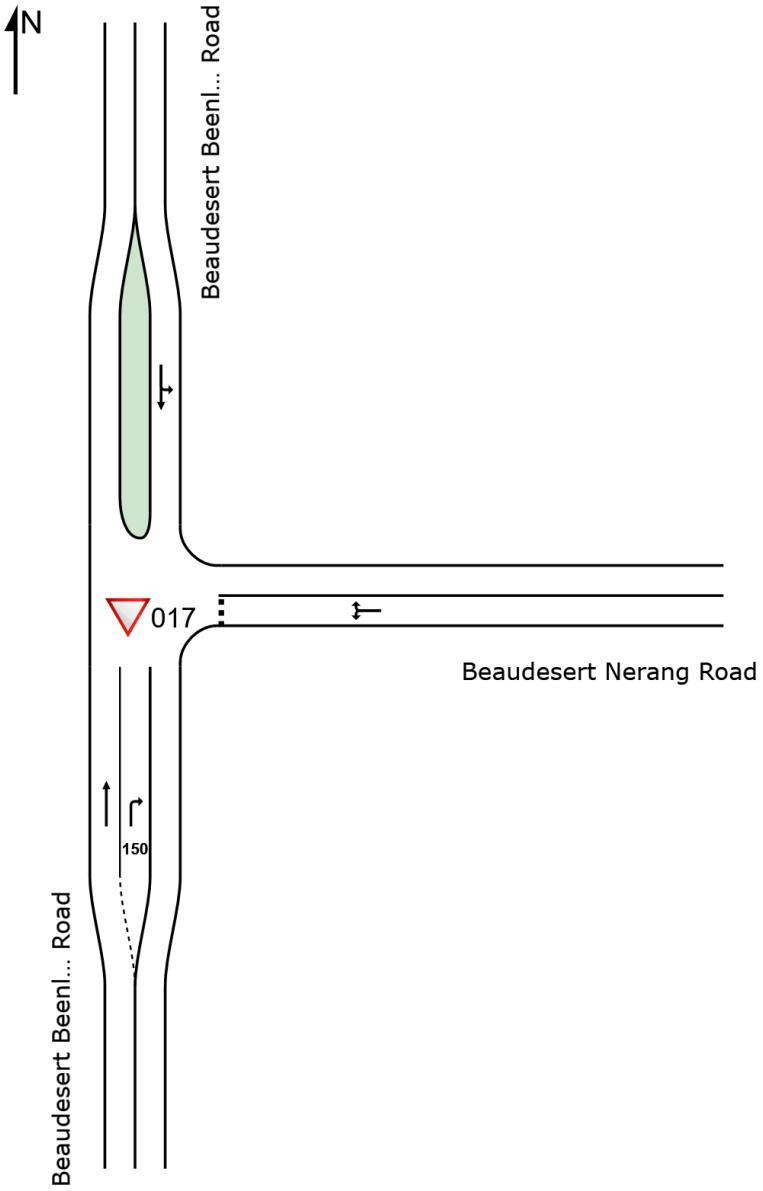
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:25:19 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\16_William St & Albert St.sip9

SITE LAYOUT

Site: 017 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd / Beaudesert Nerang Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:40:04 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\17_Beaudesert Beenleigh Rd_Beaudesert Nerang Rd.sip9

MOVEMENT SUMMARY

Site: 017 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd / Beaudesert Nerang Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Beenleigh Road															
2	T1	All MCs	276	6.8	276	6.8	0.148	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	32	6.8	32	6.8	0.029	7.2	LOS A	0.1	0.9	0.47	0.64	0.47	51.1
Approach			307	6.8	307	6.8	0.148	0.8	NA	0.1	0.9	0.05	0.07	0.05	58.9
East: Beaudesert Nerang Road															
4	L2	All MCs	82	6.8	82	6.8	0.085	7.4	LOS A	0.3	2.4	0.46	0.67	0.46	51.2
6	R2	All MCs	2	6.8	2	6.8	0.085	13.1	LOS A	0.3	2.4	0.46	0.67	0.46	51.1
Approach			84	6.8	84	6.8	0.085	7.6	LOS A	0.3	2.4	0.46	0.67	0.46	51.2
North: Beaudesert Beenleigh Road															
7	L2	All MCs	2	6.8	2	6.8	0.224	5.7	LOS A	0.0	0.0	0.00	0.00	0.00	57.0
8	T1	All MCs	416	6.8	416	6.8	0.224	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			418	6.8	418	6.8	0.224	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicles			809	6.8	809	6.8	0.224	1.1	NA	0.3	2.4	0.07	0.10	0.07	58.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:02:38 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\17_Beaudesert Beenleigh Rd_Beaudesert Nerang Rd.sip9

MOVEMENT SUMMARY

Site: 017 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd / Beaudesert Nerang Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Beenleigh Road															
2	T1	All MCs	485	5.0	485	5.0	0.257	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	65	5.0	65	5.0	0.051	6.6	LOS A	0.2	1.6	0.40	0.61	0.40	51.4
Approach			551	5.0	551	5.0	0.257	0.9	NA	0.2	1.6	0.05	0.07	0.05	58.7
East: Beaudesert Nerang Road															
4	L2	All MCs	47	5.0	47	5.0	0.049	6.7	LOS A	0.2	1.4	0.41	0.61	0.41	51.5
6	R2	All MCs	3	5.0	3	5.0	0.049	15.0	LOS B	0.2	1.4	0.41	0.61	0.41	51.3
Approach			51	5.0	51	5.0	0.049	7.2	LOS A	0.2	1.4	0.41	0.61	0.41	51.4
North: Beaudesert Beenleigh Road															
7	L2	All MCs	3	5.0	3	5.0	0.163	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
8	T1	All MCs	305	5.0	305	5.0	0.163	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			308	5.0	308	5.0	0.163	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles			909	5.0	909	5.0	0.257	1.0	NA	0.2	1.6	0.05	0.08	0.05	58.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 2:57:02 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\17_Beaudesert Beenleigh Rd_Beaudesert Nerang Rd.sip9

MOVEMENT SUMMARY

Site: 017 [2041AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd / Beaudesert Nerang Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Beenleigh Road															
2	T1	All MCs	623	6.8	623	6.8	0.334	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	72	6.8	72	6.8	0.076	8.1	LOS A	0.3	2.3	0.54	0.72	0.54	50.5
Approach			695	6.8	695	6.8	0.334	0.9	NA	0.3	2.3	0.06	0.07	0.06	58.7
East: Beaudesert Nerang Road															
4	L2	All MCs	74	6.8	74	6.8	0.097	8.2	LOS A	0.4	2.6	0.54	0.74	0.54	50.3
6	R2	All MCs	2	6.8	2	6.8	0.097	29.5	LOS C	0.4	2.6	0.54	0.74	0.54	50.2
Approach			76	6.8	76	6.8	0.097	8.8	LOS A	0.4	2.6	0.54	0.74	0.54	50.3
North: Beaudesert Beenleigh Road															
7	L2	All MCs	3	6.8	3	6.8	0.285	5.7	LOS A	0.0	0.0	0.00	0.00	0.00	57.0
8	T1	All MCs	528	6.8	528	6.8	0.285	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			532	6.8	532	6.8	0.285	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicles			1302	6.8	1302	6.8	0.334	1.1	NA	0.4	2.6	0.06	0.08	0.06	58.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\17_Beaudesert Beenleigh Rd_Beaudesert Nerang Rd.sip9

MOVEMENT SUMMARY

Site: 017 [2041PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Beaudesert Beenleigh Rd / Beaudesert Nerang Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Beenleigh Road															
2	T1	All MCs	567	5.0	567	5.0	0.300	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
3	R2	All MCs	77	5.0	77	5.0	0.098	9.1	LOS A	0.4	2.8	0.60	0.80	0.60	49.8
Approach			644	5.0	644	5.0	0.300	1.2	NA	0.4	2.8	0.07	0.10	0.07	58.4
East: Beaudesert Nerang Road															
4	L2	All MCs	104	5.0	104	5.0	0.195	9.4	LOS A	0.7	5.0	0.64	0.85	0.64	48.9
6	R2	All MCs	7	5.0	7	5.0	0.195	34.1	LOS C	0.7	5.0	0.64	0.85	0.64	48.8
Approach			112	5.0	112	5.0	0.195	11.0	LOS A	0.7	5.0	0.64	0.85	0.64	48.9
North: Beaudesert Beenleigh Road															
7	L2	All MCs	7	5.0	7	5.0	0.356	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
8	T1	All MCs	665	5.0	665	5.0	0.356	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			673	5.0	673	5.0	0.356	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1428	5.0	1428	5.0	0.356	1.5	NA	0.7	5.0	0.08	0.11	0.08	58.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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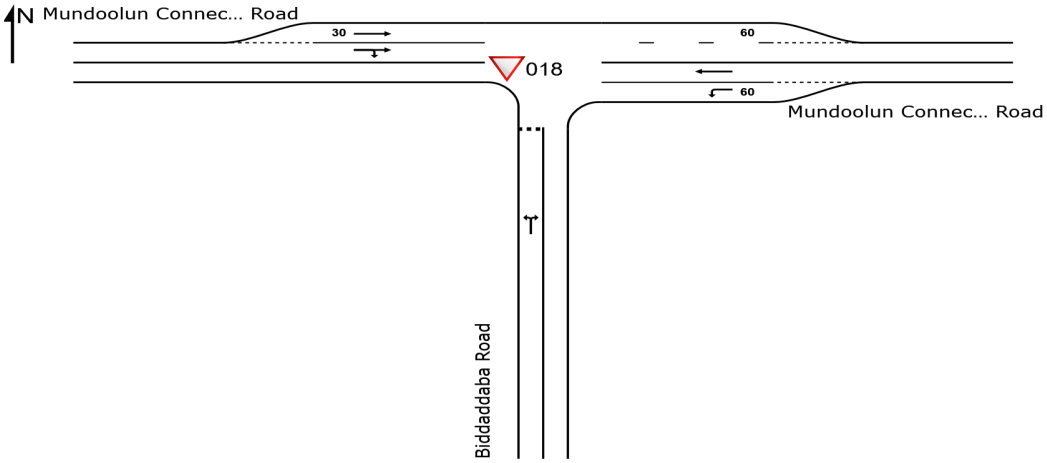
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\17_Beaudesert Beenleigh Rd_Beaudesert Nerang Rd.sip9

SITE LAYOUT

Site: 018 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:41:53 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	18	6.0	18	6.0	0.074	7.0	LOS A	0.3	1.9	0.56	0.72	0.56	48.8
3	R2	All MCs	19	6.0	19	6.0	0.074	14.9	LOS B	0.3	1.9	0.56	0.72	0.56	48.7
Approach			37	6.0	37	6.0	0.074	11.0	LOS A	0.3	1.9	0.56	0.72	0.56	48.8
East: Mundoolun Connection Road															
4	L2	All MCs	26	6.0	26	6.0	0.015	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
5	T1	All MCs	285	6.0	285	6.0	0.152	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			312	6.0	312	6.0	0.152	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
West: Mundoolun Connection Road															
11	T1	All MCs	441	6.0	441	6.0	0.185	0.3	LOS A	0.1	1.0	0.03	0.04	0.03	59.7
12	R2	All MCs	13	6.0	13	6.0	0.185	7.3	LOS A	0.1	1.0	0.05	0.05	0.05	56.5
Approach			454	6.0	454	6.0	0.185	0.5	NA	0.1	1.0	0.03	0.04	0.03	59.6
All Vehicles			802	6.0	802	6.0	0.185	1.0	NA	0.3	1.9	0.05	0.07	0.05	58.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	4	5.0	4	5.0	0.072	7.6	LOS A	0.2	1.6	0.76	0.90	0.76	43.2
3	R2	All MCs	12	5.0	12	5.0	0.072	25.7	LOS B	0.2	1.6	0.76	0.90	0.76	43.1
Approach			16	5.0	16	5.0	0.072	20.9	LOS B	0.2	1.6	0.76	0.90	0.76	43.1
East: Mundoolun Connection Road															
4	L2	All MCs	9	5.0	9	5.0	0.005	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	397	5.0	397	5.0	0.210	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			406	5.0	406	5.0	0.210	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
West: Mundoolun Connection Road															
11	T1	All MCs	691	5.0	691	5.0	0.284	0.4	LOS A	0.2	1.2	0.03	0.03	0.03	59.8
12	R2	All MCs	13	5.0	13	5.0	0.284	8.1	LOS A	0.2	1.2	0.04	0.04	0.04	56.6
Approach			703	5.0	703	5.0	0.284	0.6	NA	0.2	1.2	0.03	0.03	0.03	59.7
All Vehicles			1125	5.0	1125	5.0	0.284	0.7	NA	0.2	1.6	0.03	0.04	0.03	59.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 3:02:32 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2041AM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	28	6.0	28	6.0	0.368	10.9	LOS A	1.2	9.0	0.84	0.99	1.09	37.8
3	R2	All MCs	29	6.0	29	6.0	0.368	54.1	LOS D	1.2	9.0	0.84	0.99	1.09	37.7
Approach			58	6.0	58	6.0	0.368	32.9	LOS C	1.2	9.0	0.84	0.99	1.09	37.8
East: Mundoolun Connection Road															
4	L2	All MCs	32	6.0	32	6.0	0.018	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
5	T1	All MCs	342	6.0	342	6.0	0.182	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			374	6.0	374	6.0	0.182	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
West: Mundoolun Connection Road															
11	T1	All MCs	961	6.0	961	6.0	0.405	0.8	LOS A	0.4	2.7	0.04	0.05	0.04	59.6
12	R2	All MCs	27	6.0	27	6.0	0.405	8.2	LOS A	0.4	2.7	0.06	0.07	0.06	56.4
Approach			988	6.0	988	6.0	0.405	1.0	NA	0.4	2.7	0.04	0.05	0.04	59.5
All Vehicles			1420	6.0	1420	6.0	0.405	2.2	NA	1.2	9.0	0.06	0.09	0.08	58.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2041PM_Design (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	4	5.0	4	5.0	0.286	18.8	LOS B	0.7	5.1	0.95	1.00	1.04	27.5
3	R2	All MCs	12	5.0	12	5.0	0.286	87.2	LOS F	0.7	5.1	0.95	1.00	1.04	27.5
Approach			16	5.0	16	5.0	0.286	68.9	LOS E	0.7	5.1	0.95	1.00	1.04	27.5
East: Mundoolun Connection Road															
4	L2	All MCs	19	5.0	19	5.0	0.011	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	789	5.0	789	5.0	0.418	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			808	5.0	808	5.0	0.418	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
West: Mundoolun Connection Road															
11	T1	All MCs	836	5.0	836	5.0	0.356	0.9	LOS A	0.4	3.2	0.05	0.06	0.05	59.4
12	R2	All MCs	16	5.0	16	5.0	0.356	13.5	LOS A	0.4	3.2	0.07	0.08	0.07	56.1
Approach			852	5.0	852	5.0	0.356	1.1	NA	0.4	3.2	0.05	0.06	0.05	59.3
All Vehicles			1676	5.0	1676	5.0	0.418	1.4	NA	0.7	5.1	0.04	0.05	0.04	58.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

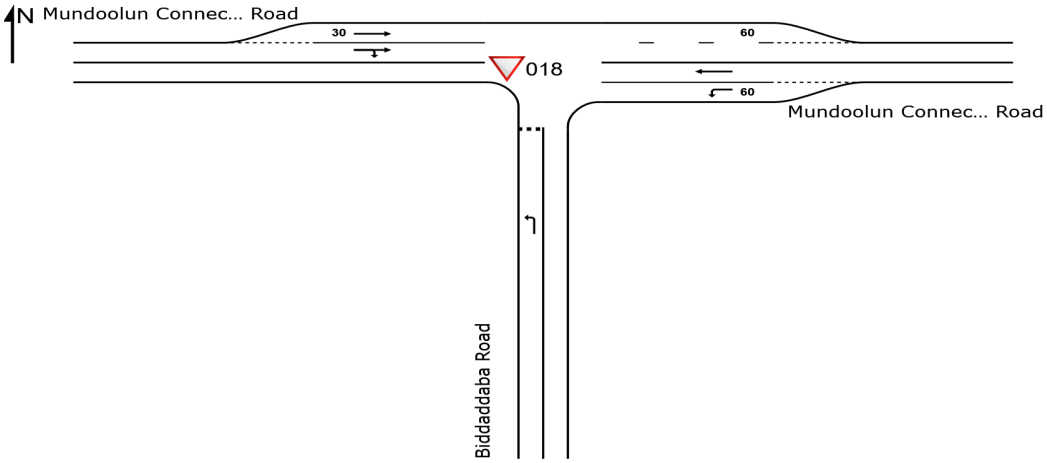
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 20 January 2025 3:02:33 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

SITE LAYOUT

Site: 018 [2024AM_Survey (Site Folder: UPGRADE)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:42:10 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2024AM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	37	6.0	37	6.0	0.039	6.9	LOS A	0.1	1.0	0.36	0.61	0.36	51.6
Approach			37	6.0	37	6.0	0.039	6.9	LOS A	0.1	1.0	0.36	0.61	0.36	51.6
East: Mundoolun Connection Road															
4	L2	All MCs	26	6.0	26	6.0	0.015	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
5	T1	All MCs	285	6.0	285	6.0	0.152	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			312	6.0	312	6.0	0.152	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
West: Mundoolun Connection Road															
11	T1	All MCs	441	6.0	441	6.0	0.185	0.3	LOS A	0.1	1.0	0.03	0.04	0.03	59.7
12	R2	All MCs	13	6.0	13	6.0	0.185	7.3	LOS A	0.1	1.0	0.05	0.05	0.05	56.5
Approach			454	6.0	454	6.0	0.185	0.5	NA	0.1	1.0	0.03	0.04	0.03	59.6
All Vehicles			802	6.0	802	6.0	0.185	0.8	NA	0.1	1.0	0.04	0.07	0.04	59.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:42:25 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2024PM_Survey (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	16	5.0	16	5.0	0.019	7.6	LOS A	0.1	0.5	0.43	0.63	0.43	51.2
Approach			16	5.0	16	5.0	0.019	7.6	LOS A	0.1	0.5	0.43	0.63	0.43	51.2
East: Mundoolun Connection Road															
4	L2	All MCs	9	5.0	9	5.0	0.005	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	397	5.0	397	5.0	0.210	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			406	5.0	406	5.0	0.210	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
West: Mundoolun Connection Road															
11	T1	All MCs	691	5.0	691	5.0	0.284	0.4	LOS A	0.2	1.2	0.03	0.03	0.03	59.8
12	R2	All MCs	13	5.0	13	5.0	0.284	8.1	LOS A	0.2	1.2	0.04	0.04	0.04	56.6
Approach			703	5.0	703	5.0	0.284	0.6	NA	0.2	1.2	0.03	0.03	0.03	59.7
All Vehicles			1125	5.0	1125	5.0	0.284	0.5	NA	0.2	1.2	0.02	0.03	0.02	59.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:42:25 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2041AM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	58	6.0	58	6.0	0.065	7.3	LOS A	0.2	1.7	0.41	0.64	0.41	51.4
Approach			58	6.0	58	6.0	0.065	7.3	LOS A	0.2	1.7	0.41	0.64	0.41	51.4
East: Mundoolun Connection Road															
4	L2	All MCs	32	6.0	32	6.0	0.018	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.6
5	T1	All MCs	342	6.0	342	6.0	0.182	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			374	6.0	374	6.0	0.182	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
West: Mundoolun Connection Road															
11	T1	All MCs	961	6.0	961	6.0	0.405	0.8	LOS A	0.4	2.7	0.04	0.05	0.04	59.6
12	R2	All MCs	27	6.0	27	6.0	0.405	8.2	LOS A	0.4	2.7	0.06	0.07	0.06	56.4
Approach			988	6.0	988	6.0	0.405	1.0	NA	0.4	2.7	0.04	0.05	0.04	59.5
All Vehicles			1420	6.0	1420	6.0	0.405	1.1	NA	0.4	2.7	0.05	0.07	0.05	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:42:26 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

MOVEMENT SUMMARY

Site: 018 [2041PM_Design (Site Folder: UPGRADE)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mundoolun Connection Rd & Biddaddaba Rd
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Biddaddaba Road															
1	L2	All MCs	16	5.0	16	5.0	0.037	12.1	LOS A	0.1	0.8	0.67	0.85	0.67	48.2
Approach			16	5.0	16	5.0	0.037	12.1	LOS A	0.1	0.8	0.67	0.85	0.67	48.2
East: Mundoolun Connection Road															
4	L2	All MCs	19	5.0	19	5.0	0.011	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	789	5.0	789	5.0	0.418	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
Approach			808	5.0	808	5.0	0.418	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
West: Mundoolun Connection Road															
11	T1	All MCs	836	5.0	836	5.0	0.356	0.9	LOS A	0.4	3.2	0.05	0.06	0.05	59.4
12	R2	All MCs	16	5.0	16	5.0	0.356	13.5	LOS A	0.4	3.2	0.07	0.08	0.07	56.1
Approach			852	5.0	852	5.0	0.356	1.1	NA	0.4	3.2	0.05	0.06	0.05	59.3
All Vehicles			1676	5.0	1676	5.0	0.418	0.8	NA	0.4	3.2	0.03	0.05	0.03	59.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

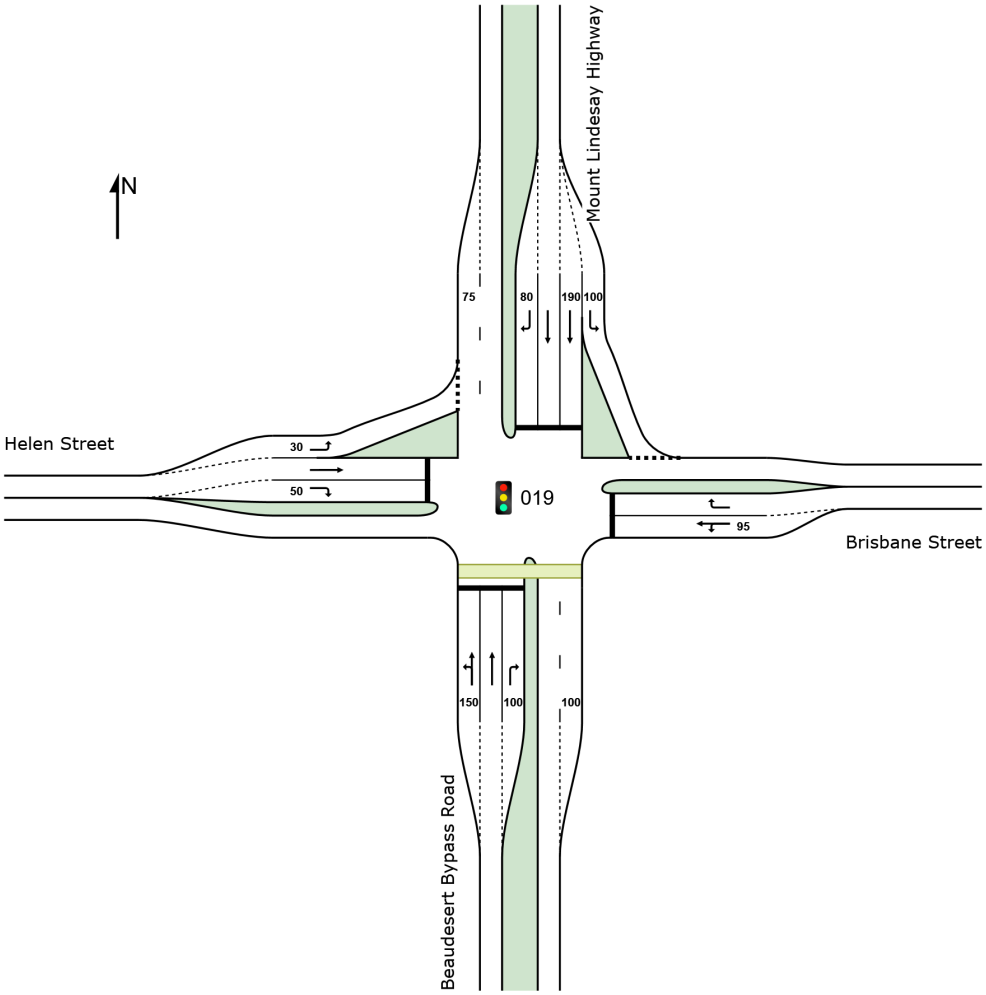
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 5 February 2025 10:42:26 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\18_Mundoolun Connection Rd & Biddaddaba Rd.sip9

SITE LAYOUT

Site: 019 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Beaudesert Bypass Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:43:51 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\19_Mt Lindesay Hwy & Beaudesert Bypass Rd.sip9

MOVEMENT SUMMARY

Site: 019 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Beaudesert Bypass Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Bypass Road															
1	L2	All MCs	3	5.2	3	5.2	0.361	33.8	LOS C	2.3	16.8	0.96	0.74	0.96	39.7
2	T1	All MCs	255	5.2	255	5.2	* 0.811	32.4	LOS C	5.9	43.3	0.99	0.90	1.24	39.4
3	R2	All MCs	75	5.2	75	5.2	0.417	35.3	LOS C	2.2	16.3	0.98	0.76	0.98	37.0
Approach			333	5.2	333	5.2	0.811	33.0	LOS C	5.9	43.3	0.99	0.86	1.18	38.8
East: Brisbane Street															
4	L2	All MCs	31	5.2	31	5.2	0.074	23.0	LOS B	0.8	6.0	0.76	0.68	0.76	42.8
5	T1	All MCs	7	5.2	7	5.2	0.074	17.2	LOS B	0.8	6.0	0.76	0.68	0.76	44.3
6	R2	All MCs	448	5.2	448	5.2	* 0.884	38.6	LOS C	16.1	117.5	1.00	1.06	1.39	35.9
Approach			486	5.2	486	5.2	0.884	37.3	LOS C	16.1	117.5	0.98	1.03	1.34	36.4
North: Mount Lindesay Highway															
7	L2	All MCs	735	5.2	735	5.2	0.538	7.3	LOS A	5.2	37.7	0.43	0.69	0.43	51.5
8	T1	All MCs	151	5.2	151	5.2	0.437	28.2	LOS B	2.8	20.6	0.96	0.73	0.96	41.1
9	R2	All MCs	15	5.2	15	5.2	* 0.082	33.7	LOS C	0.4	3.0	0.93	0.68	0.93	37.7
Approach			900	5.2	900	5.2	0.538	11.2	LOS A	5.2	37.7	0.53	0.69	0.53	49.2
West: Helen Street															
10	L2	All MCs	5	5.2	5	5.2	0.006	13.1	LOS A	0.1	0.5	0.53	0.61	0.53	48.8
11	T1	All MCs	13	5.2	13	5.2	* 0.067	27.8	LOS B	0.4	2.6	0.93	0.64	0.93	41.3
12	R2	All MCs	5	5.2	5	5.2	0.029	33.2	LOS C	0.1	1.1	0.92	0.64	0.92	37.8
Approach			23	5.2	23	5.2	0.067	25.7	LOS B	0.4	2.6	0.84	0.63	0.84	41.9
All Vehicles			1742	5.2	1742	5.2	0.884	22.8	LOS B	16.1	117.5	0.74	0.82	0.88	42.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Beaudesert Bypass Road												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

All Pedestrians	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:09:41 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\19_Mt Lindesay Hwy & Beaudesert Bypass Rd.sip9

MOVEMENT SUMMARY

Site: 019 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Beaudesert Bypass Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Bypass Road															
1	L2	All MCs	12	5.8	12	5.8	0.368	38.4	LOS C	2.6	19.3	0.96	0.74	0.96	37.5
2	T1	All MCs	244	5.8	244	5.8	*0.826	37.9	LOS C	6.8	50.3	0.99	0.91	1.25	37.1
3	R2	All MCs	81	5.8	81	5.8	0.398	38.6	LOS C	2.7	20.1	0.97	0.76	0.97	35.8
Approach			337	5.8	337	5.8	0.826	38.1	LOS C	6.8	50.3	0.98	0.87	1.17	36.8
East: Brisbane Street															
4	L2	All MCs	45	5.8	45	5.8	0.080	21.1	LOS B	1.2	8.7	0.68	0.68	0.68	43.6
5	T1	All MCs	8	5.8	8	5.8	0.080	15.4	LOS B	1.2	8.7	0.68	0.68	0.68	45.2
6	R2	All MCs	529	5.8	529	5.8	*0.799	31.1	LOS C	18.1	133.2	0.96	0.92	1.08	38.8
Approach			583	5.8	583	5.8	0.799	30.1	LOS C	18.1	133.2	0.93	0.90	1.05	39.2
North: Mount Lindesay Highway															
7	L2	All MCs	573	5.8	573	5.8	0.410	6.9	LOS A	3.6	26.1	0.32	0.65	0.32	51.9
8	T1	All MCs	99	5.8	99	5.8	*0.392	34.9	LOS C	2.2	16.2	0.98	0.73	0.98	38.2
9	R2	All MCs	13	5.8	13	5.8	0.083	39.3	LOS C	0.4	3.1	0.95	0.68	0.95	35.6
Approach			684	5.8	684	5.8	0.410	11.5	LOS A	3.6	26.1	0.43	0.66	0.43	48.9
West: Helen Street															
10	L2	All MCs	16	5.8	16	5.8	0.020	15.3	LOS B	0.2	1.8	0.55	0.64	0.55	47.6
11	T1	All MCs	15	5.8	15	5.8	*0.091	33.6	LOS C	0.5	3.6	0.95	0.65	0.95	38.8
12	R2	All MCs	3	5.8	3	5.8	0.021	38.6	LOS C	0.1	0.8	0.94	0.62	0.94	35.8
Approach			34	5.8	34	5.8	0.091	25.5	LOS B	0.5	3.6	0.76	0.64	0.76	42.1
All Vehicles			1638	5.8	1638	5.8	0.826	23.9	LOS B	18.1	133.2	0.73	0.79	0.81	42.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Beaudesert Bypass Road												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

All Pedestrians	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:09:42 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\19_Mt Lindesay Hwy & Beaudesert Bypass Rd.sip9

MOVEMENT SUMMARY

Site: 019 [2041AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Beaudesert Bypass Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Bypass Road															
1	L2	All MCs	4	5.2	4	5.2	0.325	35.1	LOS C	3.0	22.3	0.93	0.73	0.93	39.1
2	T1	All MCs	308	5.2	308	5.2	*0.730	32.9	LOS C	7.7	56.4	0.98	0.84	1.08	39.2
3	R2	All MCs	91	5.2	91	5.2	0.393	37.6	LOS C	3.0	22.0	0.96	0.77	0.96	36.2
Approach			403	5.2	403	5.2	0.730	33.9	LOS C	7.7	56.4	0.97	0.83	1.05	38.5
East: Brisbane Street															
4	L2	All MCs	32	5.2	32	5.2	0.066	23.2	LOS B	0.9	6.7	0.71	0.67	0.71	42.6
5	T1	All MCs	7	5.2	7	5.2	0.066	17.4	LOS B	0.9	6.7	0.71	0.67	0.71	44.2
6	R2	All MCs	458	5.2	458	5.2	*0.778	32.0	LOS C	15.6	113.9	0.96	0.91	1.08	38.4
Approach			497	5.2	497	5.2	0.778	31.2	LOS C	15.6	113.9	0.94	0.89	1.05	38.7
North: Mount Lindesay Highway															
7	L2	All MCs	705	5.2	705	5.2	0.508	7.2	LOS A	5.5	40.1	0.39	0.67	0.39	51.7
8	T1	All MCs	144	5.2	144	5.2	0.427	32.8	LOS C	3.1	22.8	0.96	0.74	0.96	39.1
9	R2	All MCs	15	5.2	15	5.2	*0.096	39.4	LOS C	0.5	3.6	0.95	0.68	0.95	35.6
Approach			864	5.2	864	5.2	0.508	12.0	LOS A	5.5	40.1	0.49	0.68	0.49	48.7
West: Helen Street															
10	L2	All MCs	5	5.2	5	5.2	0.006	14.1	LOS A	0.1	0.5	0.52	0.61	0.52	48.3
11	T1	All MCs	12	5.2	12	5.2	*0.072	33.4	LOS C	0.4	2.8	0.95	0.64	0.95	38.9
12	R2	All MCs	5	5.2	5	5.2	0.034	38.8	LOS C	0.2	1.3	0.94	0.64	0.94	35.8
Approach			22	5.2	22	5.2	0.072	30.1	LOS C	0.4	2.8	0.84	0.63	0.84	39.9
All Vehicles			1786	5.2	1786	5.2	0.778	22.5	LOS B	15.6	113.9	0.73	0.77	0.78	42.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Beaudesert Bypass Road												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

All Pedestrians	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\19_Mt Lindesay Hwy & Beaudesert Bypass Rd.sip9

MOVEMENT SUMMARY

Site: 019 [2041PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Mt Lindesay Hwy & Beaudesert Bypass Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Beaudesert Bypass Road															
1	L2	All MCs	16	5.8	16	5.8	0.369	35.3	LOS C	3.5	25.4	0.94	0.74	0.94	38.8
2	T1	All MCs	337	5.8	337	5.8	*0.828	35.7	LOS C	9.3	68.7	0.98	0.92	1.20	38.0
3	R2	All MCs	112	5.8	112	5.8	0.398	35.6	LOS C	3.6	26.4	0.94	0.78	0.94	36.9
Approach			464	5.8	464	5.8	0.828	35.7	LOS C	9.3	68.7	0.97	0.88	1.13	37.8
East: Brisbane Street															
4	L2	All MCs	44	5.8	44	5.8	0.089	23.3	LOS B	1.3	9.2	0.72	0.69	0.72	42.5
5	T1	All MCs	8	5.8	8	5.8	0.089	17.6	LOS B	1.3	9.2	0.72	0.69	0.72	44.0
6	R2	All MCs	514	5.8	514	5.8	*0.877	39.8	LOS C	20.5	150.7	1.00	1.02	1.29	35.5
Approach			566	5.8	566	5.8	0.877	38.2	LOS C	20.5	150.7	0.97	0.99	1.24	36.1
North: Mount Lindesay Highway															
7	L2	All MCs	538	5.8	538	5.8	0.397	7.0	LOS A	3.7	27.0	0.34	0.66	0.34	51.8
8	T1	All MCs	93	5.8	93	5.8	*0.367	34.8	LOS C	2.1	15.1	0.97	0.72	0.97	38.2
9	R2	All MCs	12	5.8	12	5.8	0.076	39.2	LOS C	0.4	2.8	0.95	0.67	0.95	35.7
Approach			642	5.8	642	5.8	0.397	11.6	LOS A	3.7	27.0	0.44	0.66	0.44	48.9
West: Helen Street															
10	L2	All MCs	18	5.8	18	5.8	0.023	16.6	LOS B	0.3	2.1	0.58	0.65	0.58	47.0
11	T1	All MCs	16	5.8	16	5.8	*0.098	33.6	LOS C	0.5	3.9	0.95	0.66	0.95	38.8
12	R2	All MCs	3	5.8	3	5.8	0.021	38.6	LOS C	0.1	0.8	0.94	0.62	0.94	35.8
Approach			37	5.8	37	5.8	0.098	25.8	LOS B	0.5	3.9	0.77	0.65	0.77	42.1
All Vehicles			1709	5.8	1709	5.8	0.877	27.3	LOS B	20.5	150.7	0.77	0.83	0.90	40.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Beaudesert Bypass Road												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

All Pedestrians	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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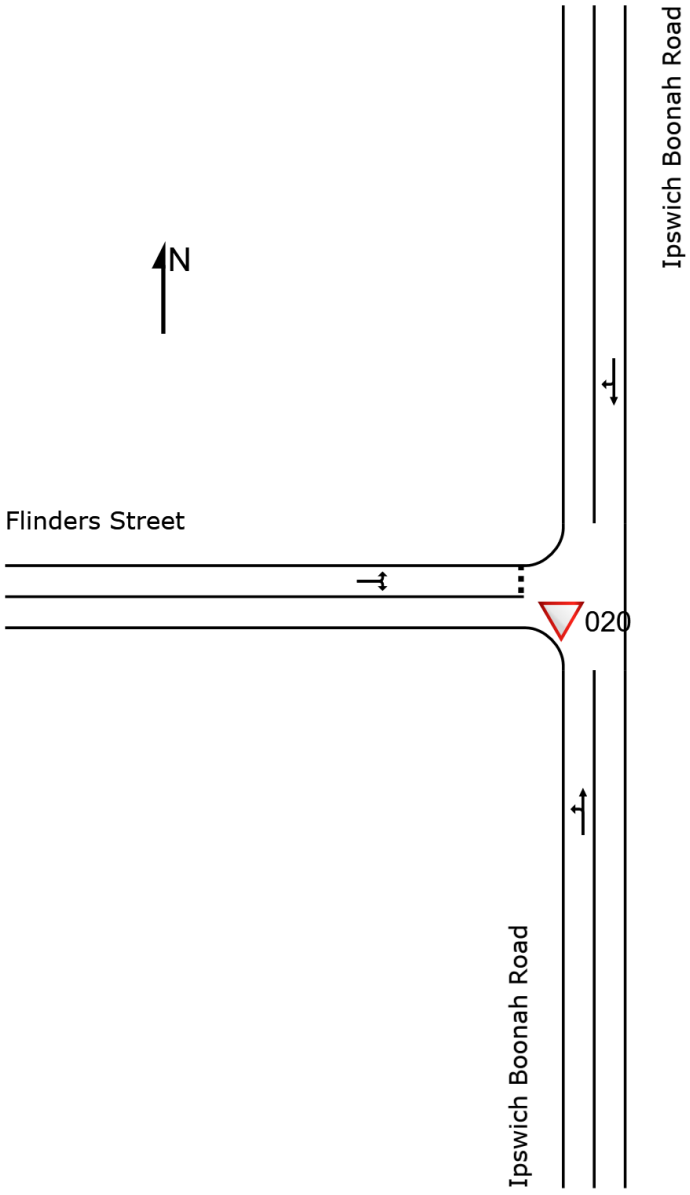
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\19_Mt Lindesay Hwy & Beaudesert Bypass Rd.sip9

SITE LAYOUT

Site: 020 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Ipswich Boonah Rd & Flinders St
Site Category: (None)
Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:45:42 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\20_Ipswich Boonah Rd & Flinders St.sip9

MOVEMENT SUMMARY

Site: 020 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Ipswich Boonah Rd & Flinders St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ipswich Boonah Road															
1	L2	All MCs	18	7.3	18	7.3	0.121	5.7	LOS A	0.0	0.0	0.00	0.05	0.00	56.7
2	T1	All MCs	206	7.3	206	7.3	0.121	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	59.5
Approach			224	7.3	224	7.3	0.121	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.3
North: Ipswich Boonah Road															
8	T1	All MCs	126	7.3	126	7.3	0.120	0.5	LOS A	0.5	3.5	0.26	0.31	0.26	57.2
9	R2	All MCs	71	7.3	71	7.3	0.120	6.4	LOS A	0.5	3.5	0.26	0.31	0.26	54.2
Approach			197	7.3	197	7.3	0.120	2.6	NA	0.5	3.5	0.26	0.31	0.26	56.1
West: Flinders Street															
10	L2	All MCs	181	7.3	181	7.3	0.162	6.5	LOS A	0.7	5.0	0.34	0.60	0.34	51.6
12	R2	All MCs	18	7.3	18	7.3	0.162	7.7	LOS A	0.7	5.0	0.34	0.60	0.34	51.3
Approach			199	7.3	199	7.3	0.162	6.6	LOS A	0.7	5.0	0.34	0.60	0.34	51.6
All Vehicles			620	7.3	620	7.3	0.162	3.1	NA	0.7	5.0	0.19	0.31	0.19	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:15:25 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\20_Ipswich Boonah Rd & Flinders St.sip9

MOVEMENT SUMMARY

Site: 020 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Ipswich Boonah Rd & Flinders St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ipswich Boonah Road															
1	L2	All MCs	39	6.3	39	6.3	0.108	5.6	LOS A	0.0	0.0	0.00	0.12	0.00	56.2
2	T1	All MCs	161	6.3	161	6.3	0.108	0.0	LOS A	0.0	0.0	0.00	0.12	0.00	58.9
Approach			200	6.3	200	6.3	0.108	1.1	NA	0.0	0.0	0.00	0.12	0.00	58.4
North: Ipswich Boonah Road															
8	T1	All MCs	268	6.3	268	6.3	0.278	0.6	LOS A	1.3	9.8	0.30	0.34	0.30	56.8
9	R2	All MCs	188	6.3	188	6.3	0.278	6.4	LOS A	1.3	9.8	0.30	0.34	0.30	53.9
Approach			457	6.3	457	6.3	0.278	3.0	NA	1.3	9.8	0.30	0.34	0.30	55.6
West: Flinders Street															
10	L2	All MCs	87	6.3	87	6.3	0.113	6.2	LOS A	0.4	3.2	0.34	0.59	0.34	51.6
12	R2	All MCs	31	6.3	31	6.3	0.113	9.5	LOS A	0.4	3.2	0.34	0.59	0.34	51.3
Approach			118	6.3	118	6.3	0.113	7.0	LOS A	0.4	3.2	0.34	0.59	0.34	51.5
All Vehicles			775	6.3	775	6.3	0.278	3.1	NA	1.3	9.8	0.23	0.32	0.23	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:15:26 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\20_Ipswich Boonah Rd & Flinders St.sip9

MOVEMENT SUMMARY

Site: 020 [2041AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Ipswich Boonah Rd & Flinders St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ipswich Boonah Road															
1	L2	All MCs	33	7.3	33	7.3	0.221	5.7	LOS A	0.0	0.0	0.00	0.05	0.00	56.6
2	T1	All MCs	378	7.3	378	7.3	0.221	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	59.4
Approach			411	7.3	411	7.3	0.221	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
North: Ipswich Boonah Road															
8	T1	All MCs	165	7.3	165	7.3	0.174	1.2	LOS A	0.8	5.7	0.38	0.43	0.38	56.7
9	R2	All MCs	93	7.3	93	7.3	0.174	7.5	LOS A	0.8	5.7	0.38	0.43	0.38	53.8
Approach			258	7.3	258	7.3	0.174	3.4	NA	0.8	5.7	0.38	0.43	0.38	55.6
West: Flinders Street															
10	L2	All MCs	241	7.3	241	7.3	0.266	7.5	LOS A	1.1	8.4	0.50	0.70	0.50	51.0
12	R2	All MCs	24	7.3	24	7.3	0.266	10.2	LOS A	1.1	8.4	0.50	0.70	0.50	50.7
Approach			265	7.3	265	7.3	0.266	7.8	LOS A	1.1	8.4	0.50	0.70	0.50	51.0
All Vehicles			934	7.3	934	7.3	0.266	3.4	NA	1.1	8.4	0.25	0.34	0.25	55.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:15:27 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\20_Ipswich Boonah Rd & Flinders St.sip9

MOVEMENT SUMMARY

Site: 020 [2041PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Ipswich Boonah Rd & Flinders St
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ipswich Boonah Road															
1	L2	All MCs	55	6.3	55	6.3	0.151	5.6	LOS A	0.0	0.0	0.00	0.12	0.00	56.2
2	T1	All MCs	225	6.3	225	6.3	0.151	0.0	LOS A	0.0	0.0	0.00	0.12	0.00	58.9
Approach			280	6.3	280	6.3	0.151	1.1	NA	0.0	0.0	0.00	0.12	0.00	58.3
North: Ipswich Boonah Road															
8	T1	All MCs	440	6.3	440	6.3	0.475	1.4	LOS A	3.4	25.1	0.41	0.46	0.47	56.3
9	R2	All MCs	309	6.3	309	6.3	0.475	7.5	LOS A	3.4	25.1	0.41	0.46	0.47	53.5
Approach			749	6.3	749	6.3	0.475	3.9	NA	3.4	25.1	0.41	0.46	0.47	55.1
West: Flinders Street															
10	L2	All MCs	116	6.3	116	6.3	0.209	6.5	LOS A	0.8	5.7	0.49	0.64	0.49	50.2
12	R2	All MCs	40	6.3	40	6.3	0.209	16.0	LOS B	0.8	5.7	0.49	0.64	0.49	49.9
Approach			156	6.3	156	6.3	0.209	9.0	LOS A	0.8	5.7	0.49	0.64	0.49	50.1
All Vehicles			1185	6.3	1185	6.3	0.475	3.9	NA	3.4	25.1	0.33	0.40	0.36	55.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

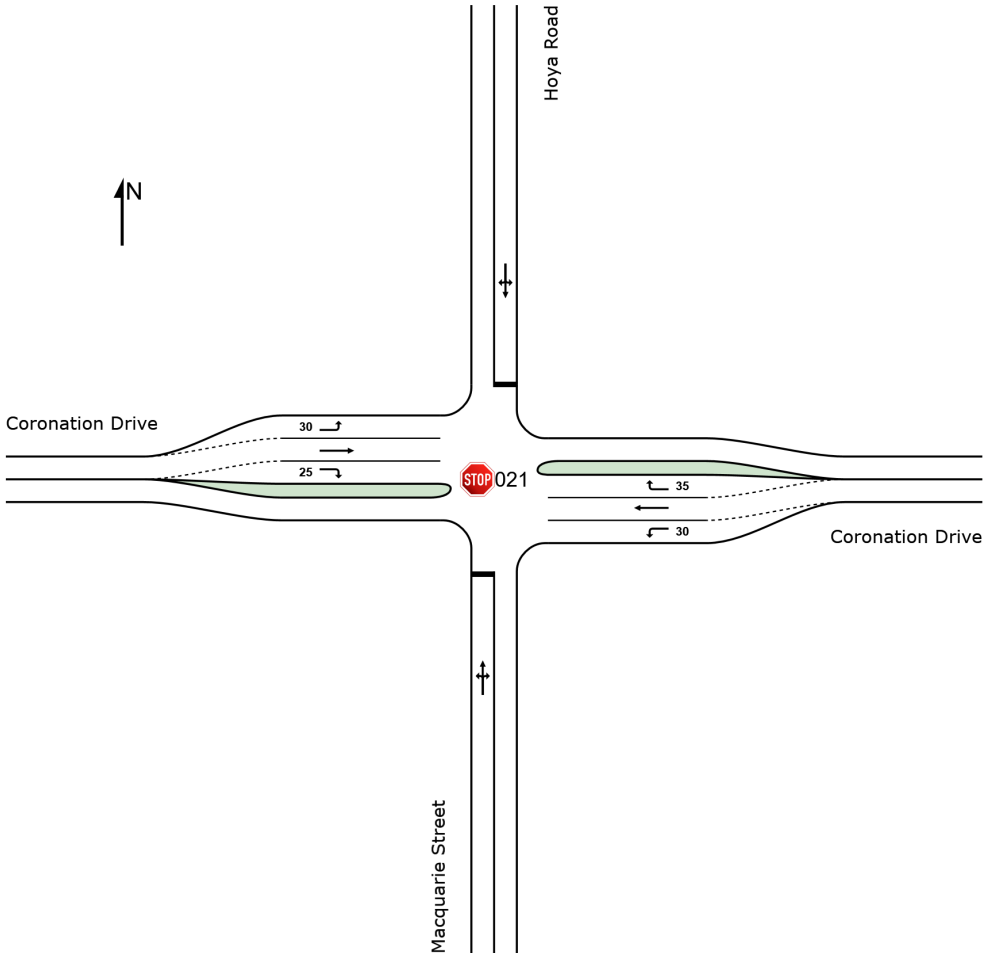
Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Wednesday, 22 January 2025 11:15:27 AM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\20_Ipswich Boonah Rd & Flinders St.sip9

SITE LAYOUT

Site: 021 [2024AM_Survey (Site Folder: General)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Wednesday, 5 February 2025 12:46:55 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 021 [2024AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	33	5.0	33	5.0	0.174	9.4	LOS A	0.6	4.4	0.57	0.91	0.57	46.8
2	T1	All MCs	11	5.0	11	5.0	0.174	21.0	LOS B	0.6	4.4	0.57	0.91	0.57	46.8
3	R2	All MCs	23	5.0	23	5.0	0.174	22.3	LOS B	0.6	4.4	0.57	0.91	0.57	46.9
Approach			66	5.0	66	5.0	0.174	15.7	LOS B	0.6	4.4	0.57	0.91	0.57	46.8
East: Coronation Drive															
4	L2	All MCs	58	5.0	58	5.0	0.032	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	196	5.0	196	5.0	0.104	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	11	5.0	11	5.0	0.010	6.6	LOS A	0.0	0.3	0.35	0.57	0.35	51.5
Approach			264	5.0	264	5.0	0.104	1.5	NA	0.0	0.3	0.01	0.15	0.01	57.8
North: Hoya Road															
7	L2	All MCs	7	5.0	7	5.0	0.553	14.4	LOS A	2.9	21.1	0.79	1.15	1.30	40.6
8	T1	All MCs	45	5.0	45	5.0	0.553	27.6	LOS B	2.9	21.1	0.79	1.15	1.30	40.6
9	R2	All MCs	88	5.0	88	5.0	0.553	29.4	LOS C	2.9	21.1	0.79	1.15	1.30	40.7
Approach			141	5.0	141	5.0	0.553	28.1	LOS B	2.9	21.1	0.79	1.15	1.30	40.7
West: Coronation Drive															
10	L2	All MCs	74	5.0	74	5.0	0.041	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
11	T1	All MCs	189	5.0	189	5.0	0.100	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	93	5.0	93	5.0	0.086	6.7	LOS A	0.3	2.5	0.36	0.61	0.36	51.5
Approach			356	5.0	356	5.0	0.100	2.9	NA	0.3	2.5	0.09	0.28	0.09	56.0
All Vehicles			827	5.0	827	5.0	0.553	7.8	NA	2.9	21.1	0.23	0.44	0.31	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 021 [2024PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	53	5.0	53	5.0	0.272	10.1	LOS A	1.1	7.9	0.63	0.94	0.70	46.0
2	T1	All MCs	27	5.0	27	5.0	0.272	24.5	LOS B	1.1	7.9	0.63	0.94	0.70	46.0
3	R2	All MCs	21	5.0	21	5.0	0.272	25.7	LOS B	1.1	7.9	0.63	0.94	0.70	46.1
Approach			101	5.0	101	5.0	0.272	17.2	LOS B	1.1	7.9	0.63	0.94	0.70	46.0
East: Coronation Drive															
4	L2	All MCs	31	5.0	31	5.0	0.017	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	217	5.0	217	5.0	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	14	5.0	14	5.0	0.014	7.0	LOS A	0.1	0.4	0.40	0.60	0.40	51.4
Approach			261	5.0	261	5.0	0.115	1.0	NA	0.1	0.4	0.02	0.10	0.02	58.5
North: Hoya Road															
7	L2	All MCs	14	5.0	14	5.0	0.558	15.7	LOS B	2.7	20.1	0.82	1.15	1.34	39.2
8	T1	All MCs	36	5.0	36	5.0	0.558	29.5	LOS C	2.7	20.1	0.82	1.15	1.34	39.2
9	R2	All MCs	75	5.0	75	5.0	0.558	35.2	LOS C	2.7	20.1	0.82	1.15	1.34	39.3
Approach			124	5.0	124	5.0	0.558	31.4	LOS C	2.7	20.1	0.82	1.15	1.34	39.2
West: Coronation Drive															
10	L2	All MCs	82	5.0	82	5.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
11	T1	All MCs	246	5.0	246	5.0	0.130	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	63	5.0	63	5.0	0.058	6.7	LOS A	0.2	1.7	0.35	0.60	0.35	51.5
Approach			392	5.0	392	5.0	0.130	2.3	NA	0.2	1.7	0.06	0.22	0.06	56.8
All Vehicles			878	5.0	878	5.0	0.558	7.8	NA	2.7	20.1	0.22	0.40	0.30	52.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 021 [2031AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	39	5.0	39	5.0	0.252	10.1	LOS A	0.9	6.9	0.66	0.95	0.72	45.0
2	T1	All MCs	13	5.0	13	5.0	0.252	26.7	LOS B	0.9	6.9	0.66	0.95	0.72	44.9
3	R2	All MCs	27	5.0	27	5.0	0.252	28.3	LOS B	0.9	6.9	0.66	0.95	0.72	45.0
Approach			79	5.0	79	5.0	0.252	19.1	LOS B	0.9	6.9	0.66	0.95	0.72	45.0
East: Coronation Drive															
4	L2	All MCs	68	5.0	68	5.0	0.038	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	229	5.0	229	5.0	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	13	5.0	13	5.0	0.013	6.9	LOS A	0.0	0.3	0.39	0.59	0.39	51.4
Approach			311	5.0	311	5.0	0.122	1.5	NA	0.0	0.3	0.02	0.15	0.02	57.8
North: Hoya Road															
7	L2	All MCs	8	5.0	8	5.0	0.770	25.4	LOS B	4.9	36.0	0.91	1.32	2.06	34.3
8	T1	All MCs	49	5.0	49	5.0	0.770	44.2	LOS D	4.9	36.0	0.91	1.32	2.06	34.3
9	R2	All MCs	97	5.0	97	5.0	0.770	46.9	LOS D	4.9	36.0	0.91	1.32	2.06	34.4
Approach			155	5.0	155	5.0	0.770	44.9	LOS D	4.9	36.0	0.91	1.32	2.06	34.4
West: Coronation Drive															
10	L2	All MCs	88	5.0	88	5.0	0.049	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
11	T1	All MCs	226	5.0	226	5.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	111	5.0	111	5.0	0.108	7.0	LOS A	0.4	3.2	0.40	0.64	0.40	51.4
Approach			425	5.0	425	5.0	0.120	3.0	NA	0.4	3.2	0.10	0.29	0.10	55.9
All Vehicles			969	5.0	969	5.0	0.770	10.5	NA	4.9	36.0	0.25	0.46	0.44	50.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 14 April 2025 4:17:58 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 021 [2031PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	62	5.0	62	5.0	0.352	11.2	LOS A	1.6	11.6	0.68	0.99	0.88	44.5
2	T1	All MCs	32	5.0	32	5.0	0.352	29.1	LOS C	1.6	11.6	0.68	0.99	0.88	44.5
3	R2	All MCs	24	5.0	24	5.0	0.352	30.8	LOS C	1.6	11.6	0.68	0.99	0.88	44.6
Approach			118	5.0	118	5.0	0.352	20.0	LOS B	1.6	11.6	0.68	0.99	0.88	44.5
East: Coronation Drive															
4	L2	All MCs	68	5.0	68	5.0	0.038	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	229	5.0	229	5.0	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	13	5.0	13	5.0	0.013	6.9	LOS A	0.0	0.3	0.39	0.59	0.39	51.4
Approach			311	5.0	311	5.0	0.122	1.5	NA	0.0	0.3	0.02	0.15	0.02	57.8
North: Hoya Road															
7	L2	All MCs	8	5.0	8	5.0	0.826	31.8	LOS C	5.7	41.9	0.94	1.40	2.39	31.9
8	T1	All MCs	49	5.0	49	5.0	0.826	50.6	LOS D	5.7	41.9	0.94	1.40	2.39	31.9
9	R2	All MCs	97	5.0	97	5.0	0.826	56.4	LOS D	5.7	41.9	0.94	1.40	2.39	31.9
Approach			155	5.0	155	5.0	0.826	53.2	LOS D	5.7	41.9	0.94	1.40	2.39	31.9
West: Coronation Drive															
10	L2	All MCs	88	5.0	88	5.0	0.049	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
11	T1	All MCs	226	5.0	226	5.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	111	5.0	111	5.0	0.108	7.0	LOS A	0.4	3.2	0.40	0.64	0.40	51.4
Approach			425	5.0	425	5.0	0.120	3.0	NA	0.4	3.2	0.10	0.29	0.10	55.9
All Vehicles			1008	5.0	1008	5.0	0.826	12.2	NA	5.7	41.9	0.27	0.50	0.52	49.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Monday, 14 April 2025 4:17:57 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 021 [2041AM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	48	5.0	48	5.0	0.425	13.3	LOS A	1.8	13.3	0.77	1.08	1.10	40.8
2	T1	All MCs	16	5.0	16	5.0	0.425	40.3	LOS C	1.8	13.3	0.77	1.08	1.10	40.8
3	R2	All MCs	34	5.0	34	5.0	0.425	42.5	LOS C	1.8	13.3	0.77	1.08	1.10	40.8
Approach			98	5.0	98	5.0	0.425	27.7	LOS B	1.8	13.3	0.77	1.08	1.10	40.8
East: Coronation Drive															
4	L2	All MCs	82	5.0	82	5.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	278	5.0	278	5.0	0.147	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	15	5.0	15	5.0	0.016	7.3	LOS A	0.1	0.4	0.43	0.62	0.43	51.2
Approach			375	5.0	375	5.0	0.147	1.5	NA	0.1	0.4	0.02	0.15	0.02	57.8
North: Hoya Road															
7	L2	All MCs	9	5.0	9	5.0	1.228	240.3	LOS F	25.6	187.2	1.00	2.70	7.41	11.1
8	T1	All MCs	55	5.0	55	5.0	1.228	268.4	LOS F	25.6	187.2	1.00	2.70	7.41	11.1
9	R2	All MCs	107	5.0	107	5.0	1.228	273.1	LOS F	25.6	187.2	1.00	2.70	7.41	11.1
Approach			172	5.0	172	5.0	1.228	269.8	LOS F	25.6	187.2	1.00	2.70	7.41	11.1
West: Coronation Drive															
10	L2	All MCs	108	5.0	108	5.0	0.060	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
11	T1	All MCs	279	5.0	279	5.0	0.148	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	136	5.0	136	5.0	0.143	7.4	LOS A	0.6	4.2	0.45	0.68	0.45	51.1
Approach			523	5.0	523	5.0	0.148	3.1	NA	0.6	4.2	0.12	0.30	0.12	55.8
All Vehicles			1167	5.0	1167	5.0	1.228	43.9	NA	25.6	187.2	0.27	0.67	1.24	34.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 021 [2041PM_Survey (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	75	5.0	75	5.0	0.707	22.5	LOS B	4.0	29.0	0.88	1.30	1.82	35.8
2	T1	All MCs	39	5.0	39	5.0	0.707	57.9	LOS E	4.0	29.0	0.88	1.30	1.82	35.7
3	R2	All MCs	29	5.0	29	5.0	0.707	63.2	LOS E	4.0	29.0	0.88	1.30	1.82	35.8
Approach			143	5.0	143	5.0	0.707	40.5	LOS C	4.0	29.0	0.88	1.30	1.82	35.8
East: Coronation Drive															
4	L2	All MCs	51	5.0	51	5.0	0.028	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
5	T1	All MCs	362	5.0	362	5.0	0.192	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	23	5.0	23	5.0	0.026	7.6	LOS A	0.1	0.7	0.46	0.64	0.46	51.0
Approach			436	5.0	436	5.0	0.192	1.1	NA	0.1	0.7	0.02	0.10	0.02	58.4
North: Hoya Road															
7	L2	All MCs	21	5.0	21	5.0	1.766	708.6	LOS F	55.3	403.5	1.00	3.88	11.94	4.5
8	T1	All MCs	55	5.0	55	5.0	1.766	739.8	LOS F	55.3	403.5	1.00	3.88	11.94	4.5
9	R2	All MCs	115	5.0	115	5.0	1.766	755.2	LOS F	55.3	403.5	1.00	3.88	11.94	4.5
Approach			191	5.0	191	5.0	1.766	745.6	LOS F	55.3	403.5	1.00	3.88	11.94	4.5
West: Coronation Drive															
10	L2	All MCs	106	5.0	106	5.0	0.059	5.6	LOS A	0.0	0.0	0.00	0.57	0.00	52.7
11	T1	All MCs	318	5.0	318	5.0	0.168	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	81	5.0	81	5.0	0.092	7.7	LOS A	0.4	2.6	0.47	0.69	0.47	50.9
Approach			505	5.0	505	5.0	0.168	2.4	NA	0.4	2.6	0.08	0.23	0.08	56.7
All Vehicles			1275	5.0	1275	5.0	1.766	117.3	NA	55.3	403.5	0.29	0.85	2.03	20.4

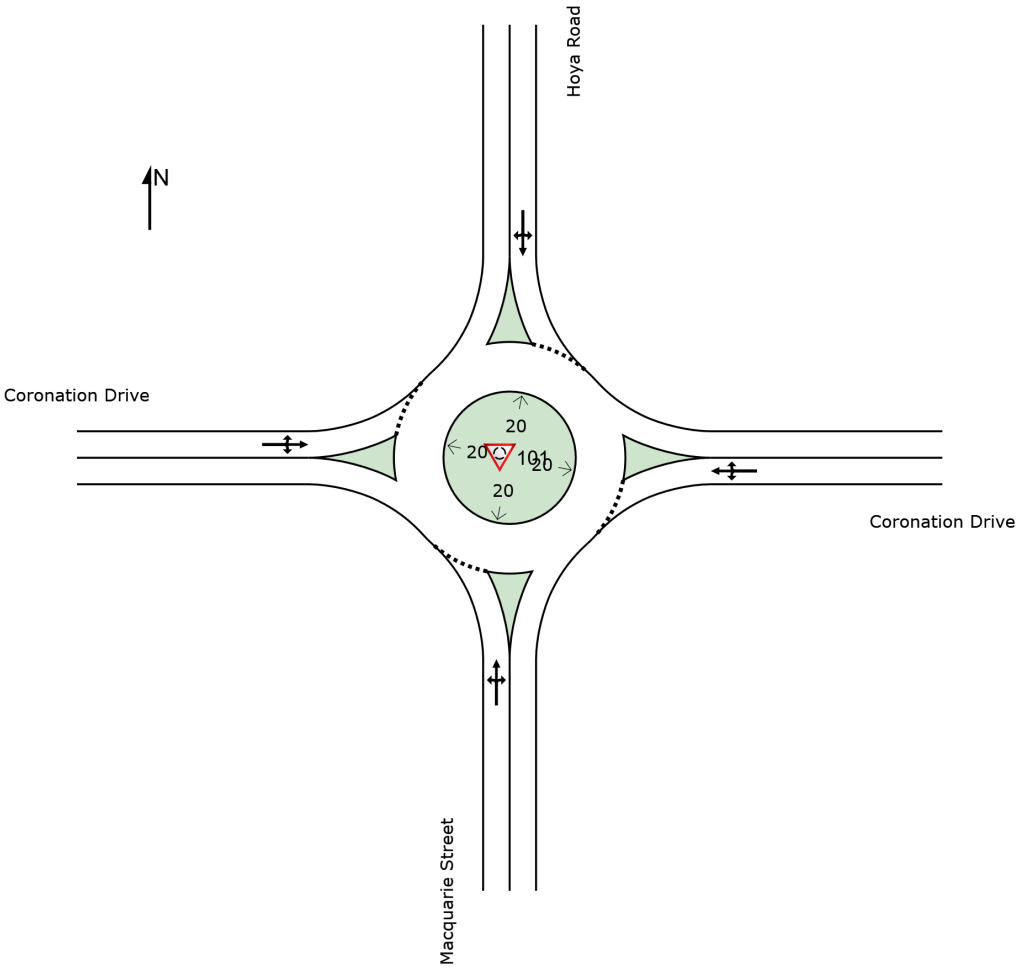
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

SITE LAYOUT

Site: 101 [2024AM_Survey (Site Folder: UPGRADE 1)]

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 101 [2024AM_Survey (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	33	5.0	33	5.0	0.064	5.4	LOS A	0.3	2.4	0.45	0.59	0.45	52.1
2	T1	All MCs	11	5.0	11	5.0	0.064	5.6	LOS A	0.3	2.4	0.45	0.59	0.45	52.5
3	R2	All MCs	23	5.0	23	5.0	0.064	10.2	LOS A	0.3	2.4	0.45	0.59	0.45	51.6
Approach			66	5.0	66	5.0	0.064	7.1	LOS A	0.3	2.4	0.45	0.59	0.45	52.0
East: Coronation Drive															
4	L2	All MCs	58	5.0	58	5.0	0.240	5.3	LOS A	1.4	10.1	0.45	0.51	0.45	52.7
5	T1	All MCs	196	5.0	196	5.0	0.240	5.5	LOS A	1.4	10.1	0.45	0.51	0.45	53.1
6	R2	All MCs	11	5.0	11	5.0	0.240	10.1	LOS A	1.4	10.1	0.45	0.51	0.45	52.2
Approach			264	5.0	264	5.0	0.240	5.6	LOS A	1.4	10.1	0.45	0.51	0.45	53.0
North: Hoya Road															
7	L2	All MCs	7	5.0	7	5.0	0.136	5.6	LOS A	0.7	5.2	0.47	0.62	0.47	51.1
8	T1	All MCs	45	5.0	45	5.0	0.136	5.8	LOS A	0.7	5.2	0.47	0.62	0.47	51.5
9	R2	All MCs	88	5.0	88	5.0	0.136	10.4	LOS A	0.7	5.2	0.47	0.62	0.47	50.6
Approach			141	5.0	141	5.0	0.136	8.7	LOS A	0.7	5.2	0.47	0.62	0.47	50.9
West: Coronation Drive															
10	L2	All MCs	74	5.0	74	5.0	0.248	4.1	LOS A	1.5	11.3	0.19	0.48	0.19	53.1
11	T1	All MCs	189	5.0	189	5.0	0.248	4.3	LOS A	1.5	11.3	0.19	0.48	0.19	53.5
12	R2	All MCs	93	5.0	93	5.0	0.248	9.0	LOS A	1.5	11.3	0.19	0.48	0.19	52.5
Approach			356	5.0	356	5.0	0.248	5.5	LOS A	1.5	11.3	0.19	0.48	0.19	53.2
All Vehicles			827	5.0	827	5.0	0.248	6.2	LOS A	1.5	11.3	0.34	0.52	0.34	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 101 [2024PM_Survey (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	53	5.0	53	5.0	0.098	5.5	LOS A	0.5	3.8	0.47	0.57	0.47	52.4
2	T1	All MCs	27	5.0	27	5.0	0.098	5.7	LOS A	0.5	3.8	0.47	0.57	0.47	52.8
3	R2	All MCs	21	5.0	21	5.0	0.098	10.3	LOS A	0.5	3.8	0.47	0.57	0.47	51.9
Approach			101	5.0	101	5.0	0.098	6.6	LOS A	0.5	3.8	0.47	0.57	0.47	52.4
East: Coronation Drive															
4	L2	All MCs	31	5.0	31	5.0	0.224	4.9	LOS A	1.3	9.5	0.39	0.48	0.39	52.9
5	T1	All MCs	217	5.0	217	5.0	0.224	5.1	LOS A	1.3	9.5	0.39	0.48	0.39	53.3
6	R2	All MCs	14	5.0	14	5.0	0.224	9.7	LOS A	1.3	9.5	0.39	0.48	0.39	52.3
Approach			261	5.0	261	5.0	0.224	5.3	LOS A	1.3	9.5	0.39	0.48	0.39	53.2
North: Hoya Road															
7	L2	All MCs	14	5.0	14	5.0	0.123	5.7	LOS A	0.6	4.7	0.49	0.62	0.49	51.1
8	T1	All MCs	36	5.0	36	5.0	0.123	5.9	LOS A	0.6	4.7	0.49	0.62	0.49	51.5
9	R2	All MCs	75	5.0	75	5.0	0.123	10.5	LOS A	0.6	4.7	0.49	0.62	0.49	50.6
Approach			124	5.0	124	5.0	0.123	8.6	LOS A	0.6	4.7	0.49	0.62	0.49	50.9
West: Coronation Drive															
10	L2	All MCs	82	5.0	82	5.0	0.282	4.3	LOS A	1.8	13.2	0.24	0.45	0.24	53.2
11	T1	All MCs	246	5.0	246	5.0	0.282	4.4	LOS A	1.8	13.2	0.24	0.45	0.24	53.6
12	R2	All MCs	63	5.0	63	5.0	0.282	9.1	LOS A	1.8	13.2	0.24	0.45	0.24	52.6
Approach			392	5.0	392	5.0	0.282	5.1	LOS A	1.8	13.2	0.24	0.45	0.24	53.4
All Vehicles			878	5.0	878	5.0	0.282	5.9	LOS A	1.8	13.2	0.35	0.50	0.35	52.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 101 [2041AM_Design (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	48	5.0	48	5.0	0.104	6.1	LOS A	0.6	4.2	0.55	0.62	0.55	51.8
2	T1	All MCs	16	5.0	16	5.0	0.104	6.2	LOS A	0.6	4.2	0.55	0.62	0.55	52.1
3	R2	All MCs	34	5.0	34	5.0	0.104	10.9	LOS A	0.6	4.2	0.55	0.62	0.55	51.2
Approach			98	5.0	98	5.0	0.104	7.8	LOS A	0.6	4.2	0.55	0.62	0.55	51.6
East: Coronation Drive															
4	L2	All MCs	82	5.0	82	5.0	0.362	5.9	LOS A	2.3	17.0	0.56	0.56	0.56	52.2
5	T1	All MCs	278	5.0	278	5.0	0.362	6.1	LOS A	2.3	17.0	0.56	0.56	0.56	52.6
6	R2	All MCs	15	5.0	15	5.0	0.362	10.8	LOS A	2.3	17.0	0.56	0.56	0.56	51.7
Approach			375	5.0	375	5.0	0.362	6.3	LOS A	2.3	17.0	0.56	0.56	0.56	52.5
North: Hoya Road															
7	L2	All MCs	9	5.0	9	5.0	0.187	6.6	LOS A	1.1	7.7	0.59	0.66	0.59	50.5
8	T1	All MCs	55	5.0	55	5.0	0.187	6.7	LOS A	1.1	7.7	0.59	0.66	0.59	50.9
9	R2	All MCs	107	5.0	107	5.0	0.187	11.4	LOS A	1.1	7.7	0.59	0.66	0.59	50.0
Approach			172	5.0	172	5.0	0.187	9.6	LOS A	1.1	7.7	0.59	0.66	0.59	50.3
West: Coronation Drive															
10	L2	All MCs	108	5.0	108	5.0	0.372	4.3	LOS A	2.7	19.8	0.28	0.48	0.28	52.8
11	T1	All MCs	279	5.0	279	5.0	0.372	4.5	LOS A	2.7	19.8	0.28	0.48	0.28	53.2
12	R2	All MCs	136	5.0	136	5.0	0.372	9.1	LOS A	2.7	19.8	0.28	0.48	0.28	52.3
Approach			523	5.0	523	5.0	0.372	5.7	LOS A	2.7	19.8	0.28	0.48	0.28	52.9
All Vehicles			1167	5.0	1167	5.0	0.372	6.6	LOS A	2.7	19.8	0.44	0.54	0.44	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

MOVEMENT SUMMARY

Site: 101 [2041PM_Design (Site Folder: UPGRADE 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Project No.: P6364
Project Name: Scenic Rim Integrated Transport Plan
Intersection Name: Coronation Drive / Hoya Road / Macquarie Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Macquarie Street															
1	L2	All MCs	75	5.0	75	5.0	0.166	6.9	LOS A	1.0	7.1	0.63	0.65	0.63	51.6
2	T1	All MCs	39	5.0	39	5.0	0.166	7.0	LOS A	1.0	7.1	0.63	0.65	0.63	52.0
3	R2	All MCs	29	5.0	29	5.0	0.166	11.7	LOS A	1.0	7.1	0.63	0.65	0.63	51.1
Approach			143	5.0	143	5.0	0.166	7.9	LOS A	1.0	7.1	0.63	0.65	0.63	51.6
East: Coronation Drive															
4	L2	All MCs	51	5.0	51	5.0	0.400	5.7	LOS A	2.7	20.0	0.55	0.54	0.55	52.2
5	T1	All MCs	362	5.0	362	5.0	0.400	5.8	LOS A	2.7	20.0	0.55	0.54	0.55	52.6
6	R2	All MCs	23	5.0	23	5.0	0.400	10.5	LOS A	2.7	20.0	0.55	0.54	0.55	51.7
Approach			436	5.0	436	5.0	0.400	6.1	LOS A	2.7	20.0	0.55	0.54	0.55	52.5
North: Hoya Road															
7	L2	All MCs	21	5.0	21	5.0	0.205	6.5	LOS A	1.2	8.6	0.59	0.66	0.59	50.6
8	T1	All MCs	55	5.0	55	5.0	0.205	6.6	LOS A	1.2	8.6	0.59	0.66	0.59	51.0
9	R2	All MCs	115	5.0	115	5.0	0.205	11.3	LOS A	1.2	8.6	0.59	0.66	0.59	50.1
Approach			191	5.0	191	5.0	0.205	9.4	LOS A	1.2	8.6	0.59	0.66	0.59	50.4
West: Coronation Drive															
10	L2	All MCs	106	5.0	106	5.0	0.378	4.5	LOS A	2.8	20.1	0.34	0.47	0.34	52.8
11	T1	All MCs	318	5.0	318	5.0	0.378	4.7	LOS A	2.8	20.1	0.34	0.47	0.34	53.2
12	R2	All MCs	81	5.0	81	5.0	0.378	9.3	LOS A	2.8	20.1	0.34	0.47	0.34	52.3
Approach			505	5.0	505	5.0	0.378	5.4	LOS A	2.8	20.1	0.34	0.47	0.34	53.0
All Vehicles			1275	5.0	1275	5.0	0.400	6.5	LOS A	2.8	20.1	0.48	0.54	0.48	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Processed: Thursday, 30 January 2025 5:47:59 PM
Project: P:\P6364 Scenic Rim Integrated Transport Plan\Technical\3 Road Network Plan\Top 20 Intersections Review\SIDRA\21_Coronation Dr & Hoya Rd & Macquarie St.sip9

Appendix N: Priority Scoring Technical Note

Issue History Table

File Name	Version	Prepared	Reviewed	Date	Issued to
P6364.001T Multi Criteria Analysis Scoring System	001	R. Tuputala	M. Davidson	16/04/2025	Scenic Rim Regional Council

MULTI CRITERIA ANALYSIS SCORING SYSTEM
Road Network Plan

1. Introduction

1.1 Background

Bitzios Consulting (Bitzios) has been engaged by Scenic Rim Regional Council (Council) to prepare an Integrated Transport Plan for the Region. A key component of this Plan is the development of a Road Network Plan, which includes a Priority List of recommended upgrades.

Across the Scenic Rim there are a number of Council-controlled and State-controlled roads that have been identified to require upgrades, based on a range of criteria. In order to classify the importance of each upgrade, a multi criteria scoring system was devised to score each upgrade and identify a priority ranking based on the results. The Multi Criteria Analysis (MCA) scoring system seeks to quantify the level of importance for recommended upgrades identified in the Road Network Plan (RNP), allowing Council to classify which works need immediate investigation, and which are lower priority.

1.2 Purpose of this Technical Memorandum

This technical memorandum documents the criteria, methodology and process for scoring each road segment, including variables used with descriptions. Section 2 provides a detailed summary of the MCA scoring system and inputs. The intent is to allow Council to use this scoring system in the future, to identify the priority of any upgrades that may be warranted beyond the Road Network Plan.

2. Multi Criteria Analysis Scoring System

2.1 Overview

The MCA scoring system allows the relative importance of each upgrade to be measured based a broad range of impacts and benefits to be considered. A total of six (6) criteria were selected, aligning with the Policies and Principles of the Integrated Transport Plan.

The criterion used within the Scoring Matrix is described in Table 2.1.

Table 2.1: Scoring Matrix Criteria Assessment

Criteria	Description	Weighting
Cost	Estimated infrastructure costs	40%
Safety	The level of benefit the recommended upgrade will have on road user safety	20%
Movement & Place	The importance of the corridor to achieving sound movement and place principles and the level of benefit the recommended upgrade will have in improving movement and place	15%
Capacity	The level of benefit the recommended upgrade will have in improving capacity	10%
Freight	The level of benefit the recommended upgrade will have in improving the freight network	10%
Built Standard	The level of benefit the recommended upgrade will have in improving built standard	5%

Each criterion is directly related to the key Policies and Principles of the Integrated Transport Plan to create a more **Connected and Accessible**, **Safe**, and **Reliable and Resilient** network, and to ultimately create a more **Healthy, Liveable and Sustainable** community.

The weighting of each criterion is also based on the Policies and Principles and aligns with the weighting adopted within the Active Transport Plan. This weighting seeks to balance the cost of the project, with the benefits it will provide the community, with increased weighting given to criteria directly tied to the health and prosperity of the community.

From a scoring perspective, the weighting acts as a multiplier based on 5.0% increments (i.e. Cost score is multiplied by 8, Freight score is multiplied by 2). This allows for an easy-to-use system with whole numbers.

2.2 Cost

The 'Cost' criteria of the MCA scoring system is outlined in Table 2.2 and has been applied based on the estimated infrastructure cost for each individual recommended upgrade. The costs for each upgrade were sourced though consultation with Council, with a detailed list provided within the RNP. Furthermore, each cost has been applied a 50% contingency rate given the preliminary level of planning for each project. Importantly, the intent of the Cost criteria is to provide a relative assessment of each upgrade – it is not intended to be a detailed quantity survey of the project.

Scoring was separated into five (5) brackets with high-cost upgrades (>$5,000,000) scoring a 5 and low-cost upgrades scoring a 1 (≤$50,000). The broad range of brackets was devised based on the broad nature of upgrade projects identified, and a need to classify the differences between low scale works (such as line marking) and capital expenditure works. This ensures that upgrades with higher cost are appropriately classified, given the cost required to undertake these projects.

Table 2.2: Scoring Matrix – Cost

Score	Description
5	≤$50,000
4	$50,001 - $500,000
3	$500,001 - $2,500,000
2	$2,500,001 - $5,000,000
1	>$5,000,000

2.3 Safety

The 'Safety' criteria of the MCA scoring system is outlined in Table 2.3 and has been applied based on the calculated Fatal and Serious Injury (FSI) crash rate for each applicable road in accordance with TMR's *Queensland Road Safety Technical Users Volumes: Guide to Speed Management* (QRSTUV) (2023). It is noted roads where traffic survey volumes could not be sourced, these roads were not scored under the 'Safety' criteria.

This assessment methodology considers the number of crashes, with a specific focus on FSI crashes, and the average daily volumes of the road section to determine the crash risk rating for each road and segment. This is then compared to the State-wide 'bands' outlined in the QRSTUV to determine if the crash rate is nil, low, medium, or high.

The associated crash rate was directly applied to the scoring system with a high crash rate scoring a 5, a medium crash rate scoring a 3 and a low crash rate scoring a 1. This ensures that roads with higher crash rates are given priority in the scoring system as they are currently causing higher rates of road trauma in the community.

Table 2.3: Scoring Matrix – Safety

Score	Description
5	"High" FSI Crash Rate: >22 crashes per 100 million vehicles kilometres travelled (VKT)
4	-
3	"Medium" FSI Crash Rate: 9.2 - 22 crashes per 100 million VKT

Score	Description
2	-
1	“Low” FSI Crash Rate: <9.2 crashers per 100 million VKT
0	*Not Relevant*

2.4 Movement & Place

The ‘Movement & Place’ criteria of the MCA scoring system is outlined in Table 2.4 and has been applied based on an assessment of the importance of achieving the ‘Movement and Place Framework’ in key areas.

The ‘Movement and Place Framework’ is an internationally recognised methodology used for the planning and management of streets and roads. This framework focuses on creating successful streets and roads by balancing the movement of people and goods with the amenity and quality of places.

Scoring was separated into two (2) brackets with upgrades focused on improving Movement & Place scoring a 5 and upgrades that improve Movement & Place as secondary item scoring a 3 (for example, a safety upgrade that has the secondary benefit of making pedestrian travel easier on the network).

Table 2.4: Scoring Matrix – Movement & Place

Score	Description
5	Recommended upgrade is focused on improving Movement & Place
4	-
3	Recommended upgrade improves Movement & Place as a secondary item
2	-
1	-
0	*Not Relevant*

2.5 Capacity

The ‘Capacity’ criteria of the MCA scoring system is outlined in Table 2.5 and has been applied based on an assessment of capacity, with higher volume roads receiving higher levels of importance. It is noted roads where traffic survey volumes could not be sourced did not score under the ‘Capacity’ criteria, although this was only a limited number of roads.

Scoring was separated into two (2) brackets with Class 4 hierarchy roads and some Class 5 hierarchy roads (based on merit) scoring a 5 and the remaining Class 5 hierarchy roads scoring a 3. This ensures that roads with higher hierarchy are given priority in the scoring system as they are more highly utilised by the community. Where an upgrade proposed to increase the Class of road, the higher value is taken.

Table 2.5: Scoring Matrix – Capacity

Score	Description
5	Class 4 & Class 5 (based on merit) roads that are overcapacity based on road hierarchy
4	-
3	Class 5 roads that are overcapacity based on road hierarchy
2	-
1	-
0	*Not Relevant*

2.6 Freight

The 'Freight criteria of the MCA system is outlined in Table 2.6 and has been applied based on an assessment of the importance to the freight network.

Scoring was separated into three (3) brackets with upgrades associated with the current freight network scoring a 5, upgrades on an important road with high heavy vehicle usage scoring a 3 and upgrades associated with the future freight network scoring a 1. This ensures that roads with higher freight importance and use are given priority in the scoring system as they are more highly utilised by the heavy vehicles and freight producing commodities across the Region.

Table 2.6: Scoring Matrix – Freight

Score	Description
5	Recommended upgrade is part of the current freight network
4	-
3	Recommended upgrade is on a freight important road (road with higher % or volumes of HV traffic)
2	Recommended upgrade is part of the future freight network
1	-
0	*Not Relevant*

2.7 Built Standard

The 'Built Standard' criteria of the MCA scoring system is outlined in Table 2.7 and has been applied based on an assessment of built standard, with higher volume roads receiving higher levels of importance.

Scoring was separated into three (3) brackets with important roads such as Class 4 hierarchy roads and some Class 5 hierarchy roads (based on merit) requiring widening >0.2m scoring a 5, Class 5 hierarchy roads requiring widening by >0.2m scoring a 3 and all roads requiring widening by ≤0.2m scoring a 1. This ensures that roads with higher hierarchy are given priority in the scoring system as they are more highly utilised by the community, and also ensure that low levels of widening is given a lower priority, given that this provides lesser benefits for the works required.

Table 2.7: Scoring Matrix – Built Standard

Score	Description
5	Class 4 & Class 5 (based on merit) roads that require widening by >0.2m
4	-
3	Class 5 roads that require widening by >0.2m
2	-
1	Class 4 & 5 roads that require widening by ≤0.2m
0	*Not Relevant*

2.8 Volume Adjustment Factor

A volume adjustment factor was also applied to the final scores for each of the upgrades based on the daily volumes along each of the roads (where data was available) as shown in Table 3.1. This provides a factor to ensure that benefits are measured based on the number of motorists impacted, with higher volumes roads given an increased priority as they have larger impacts on the community.

Table 2.8: Volume Adjustment Factor

Adjustment Factor	Volume
1.5	>1,000vpd
1	150vpd – 1,000vpd
0.75	<150vpd
1	No Data

3. Example

An example of the Multi Criteria Analysis Scoring System applied to the highest scoring recommended upgrade is shown in Table 3.1.

Table 3.1: MCA Scoring System Example

ID	Road	AADT	Cost	MCA Scoring System							Score
				Cost	Safety	Movement & Place	Capacity	Freight	Built Standard	Volume Adjustment	
L.TM.6	Long Road (south of Curtis Road)	2,827	$90,000	**4**	**5**	**5**	**0**	**0**	**4**	**1.5**	**116**
Score				*32*	*25*	*15*	*0*	*0*	*5*	*x 1.5*	*116*

4. Summary

Using the above scoring matrix and criteria, the MCA scoring system was adopted for all recommended upgrades identified across the Scenic Rim (~200 upgrade projects). This was used to create a priority ranking of each upgrade, with a list generated in order of importance based on the Policies and Principles of the Integrated Transport Plan.

The detailed list is provided within the Road Network Plan (Section 11).

A copy of the MCA scoring system and priority ranking has also been provided to Council (in Microsoft Excel format) to allow Council to review the system and utilise in the future. This system can also be adjusted as considered relevant for projects not related to the Integrated Transport Plan.

Appendix O: Recommended Road Upgrade Priority (MS Excel)

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SCENIC RIM INTEGRATED TRANPORT PLAN

Beaudesert Principal Network Plan Development

1. Introduction

1.1 Overview

Bitzios Consulting (Bitzios) has been engaged by Scenic Rim Regional Council (Council) to develop an Integrated Transport Plan (ITP), which is a multi-modal transport study of the region comprising of a Road Network Assessment, an Active Transport Assessment and encapsulating an extensive community engagement component to inform outcomes of the plan.

The active transport component of the ITP is intended to guide Council's ongoing provision of the pedestrian and cyclist network for Scenic Rim residents and visitors. Pedestrians include people who are: walking or running; pushing a pram; in a wheelchair; using a mobility scooter; using a skateboard, foot scooter or rollerblades. Cyclists include people using road bikes, electric bikes, cargo bikes, mountain bikes, adaptive bicycles, etc.

The active transport component of the ITP will form the Scenic Rim Active Transport Plan, which includes:

- Walking Network Plans
- Cycle Network Plans
- **Beaudesert Principal Cycle Network Assessment (this study)**
- Walking Trails Scoping Study
- Bethania to Beaudesert Rail Trail.

1.2 Background

BG&E has recently completed the Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway - Options Analysis Report (BG&E Report). The report encompasses the Principal Cycle Network (PCN) Route Priority A, along sections of Mount Lindesay Highway, Brisbane Street, Telemon Street, William Street, Albert Street, and Beaudesert-Nerang Road.

The BG&E Report contains the components of a typical OA report, including detailed flooding, environmental, cultural heritage, geotechnical, PUP assessment etc; options assessment, strengths weakness, opportunities and threats (SWOT), cost considerations, multi criteria assessment, etc. It also includes a preferred option / recommendation, which mostly consists of off-road shared paths. The BG&A Report is provided in **Attachment A**.

The extent of the BG&E Report assessment is shown in Figure 1.1.

Source: Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway - Options Analysis Report (2023)

Figure 1.1: BG&E Report Extent of Assessment

1.3 Purpose of this Report

The purpose of this report is to recommend a preferred infrastructure and alignment option for the remainder of the PCN in Beaudesert. Rather than undertaking a detailed OA for the extensions of the PCN area, this report focusses on providing concept plans and building on the BG&E Report recommendations to develop a uniform cycle facility along the identified PCN routes.

1.4 Study Area

The study area encompasses the remainder of the PCN in Beaudesert, extending off from the BG&E assessment to the north, south, south-east and south-west, as follows:

- Mount Lindesay Highway (Enterprise Drive to Allan Creek Road).
- Brisbane Street / Kerry Road (Albert Street to entry to Spring Creek Precinct)
- Telemon Street (Brisbane Street to Spring Creek)
- Bromelton Street / Beaudesert Boonah Road (Telemon Street to Lupton Road).

It is noted, the remainder network consists of Route Priority B, C and D, these sections fall under a medium to long term planning and construction timeline. This categorisation reduces the need for a detailed level of assessment typically undertaken for more shorter term works planning.

The study area assessment is shown in Figure 1.2.

Figure 1.2: Study Area Extents

1.5 Report Structure

This report includes the following:

- A review of BG&E Report for the previously completed sections
- A review of key trip attractors and generators along the study area
- An assessment of BG&E Report's recommendations and their relevance to the study area
- A recommendation for the infrastructure type and alignment for cycle infrastructure along the study area
- Concept plans for the recommended cycle network and integration to the BG&E Report recommended network.

2. Background

2.1 Project Objectives

The project objectives outlined in the BG&E Report are still relevant to this study. However, due to the study area extension, one of the project objectives have been updated to include connections to Brisbane Street, Beaudesert Boonah Road, Beaudesert-Nerang Road and Mount Lindesay Highway

The project objectives are:

- Provide a continuous PCN facility extending from BG&E study area through Beaudesert, connecting Brisbane Street, Beaudesert Boonah Road, Beaudesert-Nerang Road and Mount Lindesay Highway
- Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.
- Provide a facility that addresses the following strategic objectives:
  - Connected
  - Direct
  - Coherent/Legible
  - Safe
  - Practical
  - Accessible
  - Economical
  - Receives positive public reception
- Maintain existing flood immunity, and
- Identify a solution that can be split into construction staging.

2.2 Strategic Intent

The strategic intent of the BG&E Report is still relevant to this study, and is aligned to a number of TMR's strategies, policies and guidelines. These include the Queensland Cycling Strategy, Active Transport Investment Program and the South-East Queensland Principal Cycle Network Plan, amongst other. The study alignment in relation to relevant TMR documents and policies is shown in Table 2.1.

Table 2.1: Study Alignment to TMR Documents

TMR Document	Objectives / Principals	Study Alignment
Queensland Cycle Strategy 2017 - 2027	Building and connecting infrastructure to grow participation	✓
	Encouraging more people to ride	✓
	Sharing our roads and public spaces	✓
South-East Queensland Principal Cycle Network Plan	Follows the PCN routes	✓
	Origin / destination	✓
	End user focus	✓
	Coverage	✓
	Connected / direct / coherent / safe	✓
	Considers available space	✓
Active Transport Investment Program	Accessible cycling facilities	✓
	Competitive facilities	✓
	Safety is paramount	✓
	Transport-oriented facilities	✓

2.3 Cycling Demands

Although no detailed cyclists' counts have been undertaken as part of this study, cyclists levels are expected to be similar to the key findings outlined in the BG&E Report, which demonstrated minimum cycling demands along the corridors.

3. Desktop Investigations

3.1 Overview

Desktop investigations have been undertaken where relevant to build on BG&E Report and identify potential constraints, opportunities and project risks.

3.1.1 Zoning

The study area mostly comprises of rural, residential, mixed use and recreation land uses, with sections still to be developed. Figure 3.1 shows the zoning map surrounding the study area.

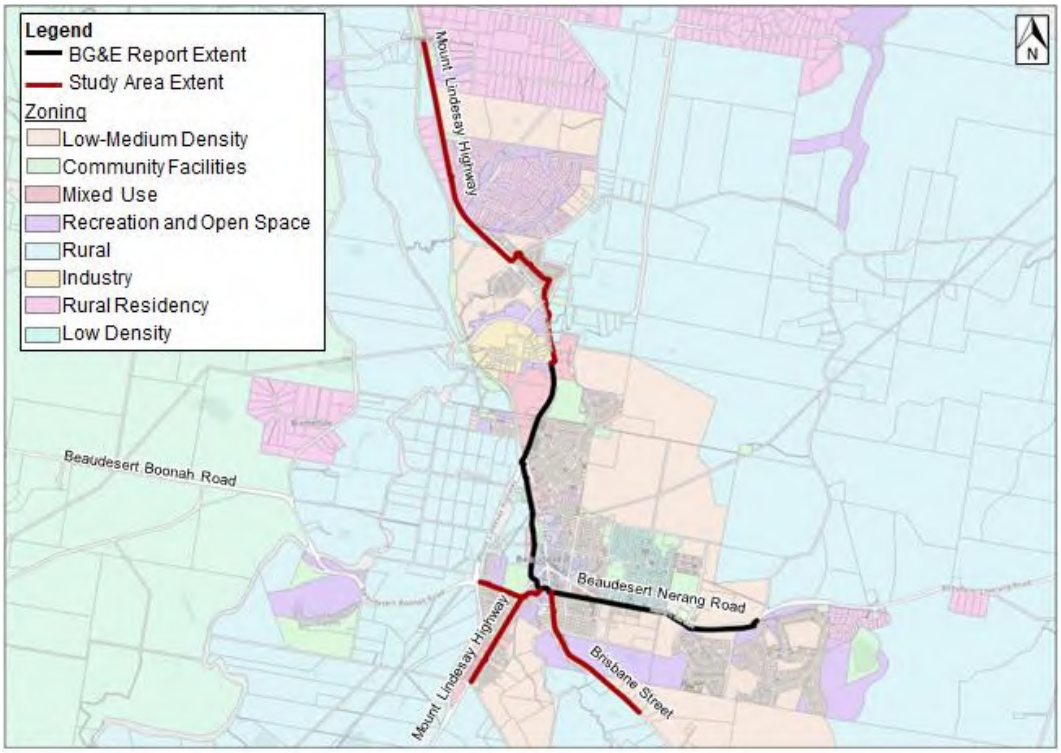

Figure 3.1: Study Area Zoning Map

3.2 Crash Data

Crash data for Scenic Rim LGA was sourced for the period from April 2018 to April 2023 (most recent five years). The crash data was further disaggregated to only include pedestrian and cyclists related crashes to identify any trends and crash clusters.

The crash data demonstrates no pedestrian or cyclists related crashes occurred along study area roads. Although this represents a good trend, it could also mean minimum active transport usage.

Figure 3.2 illustrates the crash data location surrounding the study area.

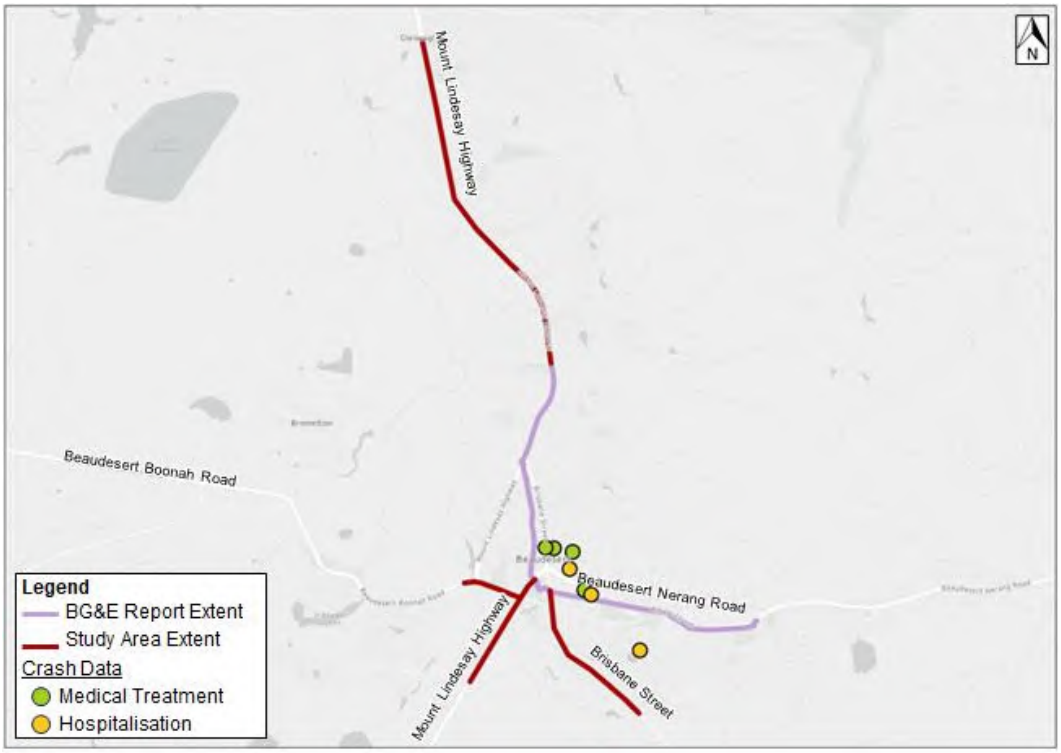

Figure 3.2: Crash Data

3.3 Existing Grades

The study area terrain grades demonstrate that a number of roads are provided at significant slopes. In accordance with TMR Supplement to Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling, the ideal threshold for cyclists to ride comfortably is 5% maximum.

Figure 3.3 shows the areas that exceed a 5% slope.

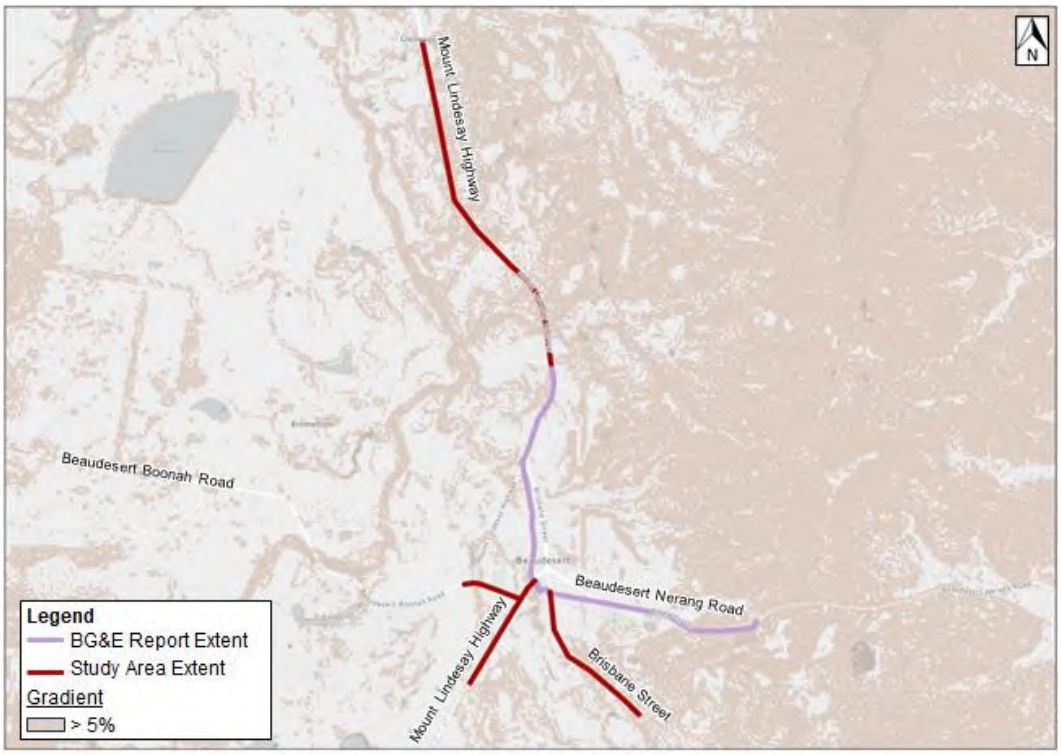

Figure 3.3: Study Area Terrain

3.4 Existing Active Transport Infrastructure

The study area is mostly provided with non-connected shared paths, providing links to commercial and residential areas. No separated cycle facility (on-road or off-road) is provided in the study area.

The existing active transport network along the PCN is shown in Figure 3.4.

Figure 3.4: Existing Active Transport Network

3.5 Civil Engineering, Environment and Cultural Assessment

As discussed in Section 1.4, the study area consists of PCN route Priority B, C and D, meaning that they fall under a medium to long term planning and construction timeline. This reduces the need for a detailed level of assessment typically undertaken for short term works planning.

Irrespective, consistent with the BG&E Report, a high-level assessment of hydraulics and drainage, environmental and cultural heritage and geotechnical have been undertaken.

Key findings are provided as follows:

- The majority of the study area is located outside Flood Hazard Areas, with the exception of sections of Brisbane Street, Beaudesert-Boonah Road and Mount Lindesay Highway, at the southern end of the study area.
- The study area does not significantly impact environmental and / or cultural significant areas
- There is 'low risk' of encountering Acid Sulphate Soils (ASS) within the study area.
- No PUP assessment has been undertaken for the study area, however it is expected the majority of PUP will be similar to the described in the BG&E report, being overhead lines, water conduits and telecommunication conduits.

4. Constraints and Opportunities

4.1 Overview

A review of potential opportunities and constraints have been undertaken along the study area, to understand if the study can benefit from any future planned development, or of there any key constraints.

4.2 Bridge / Causeway Crossings

One bridge crossing and one causeway are located in the study area along Mount Lindesay Highway, north of Beaudesert CBD.

The bridge is located north of Mount Lindesay Highway / Enterprise Drive signalised intersection and have a shoulder width of approximately 0.5m. A separated 2.5m shared path is provided on the eastern side of Mount Lindesay Highway.

The causeway extends for approximately 700m between Gould Hill Road and Tullamore Way and have a shoulder width of approximately 2m.

Two other bridges are provided within the study area. One bridge is located at Mount Lindesay Highway between Brisbane Street and Beaudesert Boonah Road. This bridge crossing is provided with a 2.5m wide shared path on its western side. Another bridge is located at Brisbane Street, and although not being provided with an active transport path, there is an approximately 4m wide shoulder on both sides of the road.

Figure 4.1 shows the location of the bridges and causeway along Mount Lindesay Highway.

Figure 4.1: Bridge and Causeway Crossings within the Study Area

4.3 Future Developments

Councils has provided a list of future planned developments in the area, a number of these developments either front or are provided surrounding the study area. There is an opportunity to tie-in the construction of the PCN to the construction of the future planned developments.

Figure 4.2: Future Developments Surrounding the Study Area

4.4 Kerbside Car Parking

Unrestricted kerbside parking is allowed at a number of sections within the study area. It is noted however that, generally, the study area does not have a significant demand for kerbside car parking.

5. Basis of Design

5.1 Overview

Relevant standards considered as part of the study include a range of Australian and Queensland standards. Some of the reference documents include (but not limited to):

- Queensland Guide to Traffic Management Part 10: Bicycle Lane Separation Devices
- Queensland Manual of Uniform Traffic Control Devices – Part 9
- TMR Active Transport Investment Program Technical Guidance
- TMR Technical Notes and Cyclists and Pedestrian Guidelines
- TMR Planning for Safe Transport Infrastructure at Schools
- Australian Standards AS1428.4.1: 2009 Design for Access and Mobility
- Austroads Guide to Road Design Part 3: Geometric Design (AGRD3)
- Austroads Guide to Road Design Part 6A: Pedestrian and Cycle Paths (AGRD6a)
- Australian Standards AS1428.1: 2009 Design for Access and Mobility.

5.2 User Groups

TMR's Selector and Design of Cycle Tracks Guideline divides cyclists in four main categories. The cyclist categories and the typical proportion of the community that populates these are shown in Figure 5.1.

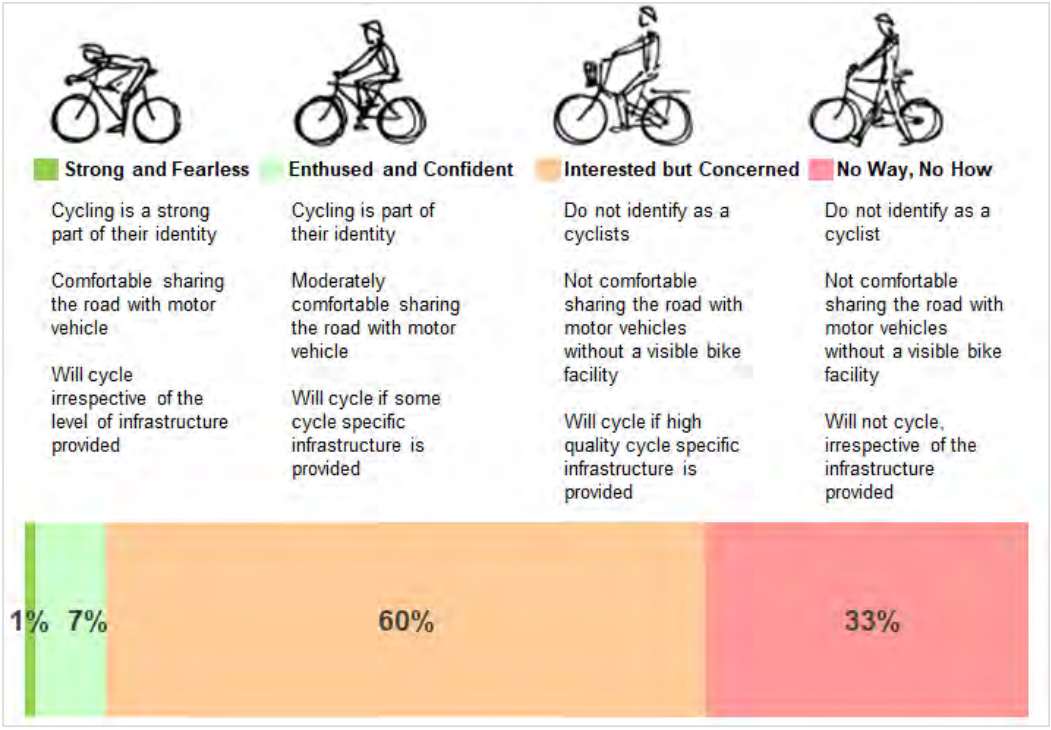

Figure 5.1: Typical Cycling User Groups

For cycling to be a viable mode of choice, the 'interested but concern' (typically the largest groups) is a key demographic to be considered, and the barriers for this group generally consist of a fear of mixing with motor vehicle traffic.

5.3 Design Standards

The design standards adopted to this study included adopting the principles of Universal Design and Safe Systems Approach, which aim to provide all-inclusive access that eliminates the need for adaptation and specialised design for mobility-impaired community members. The design standards generally follow TMR's Active Transport Investment Program Technical Guidance and are summarised in Table 5.1.

Table 5.1: Design Standards

Design Item	Recommended	Minimum
Shared path	3.0m wide	2.0m wide
Off-road cycleway	2.0m wide	N/A
On-road cycleway (50km/h speed road)	2.0m wide (possible physical separation)	N/A
On-road cycleway (60km/h to 70km/h speed road)	2.0m wide with physical separation	N/A
On-road cycleway (80km/h or higher speed road)	2.0m wide with physical separation	N/A
Vertical Grades (slope)	5% maximum	Retrofit, as required
Clerance from hazardous object	1.0m	N/A

5.4 Design Assumptions

Due to the long-term planning and construction guideline associated with this study, a number of design elements have not been assessed and reviewed in detail. As such, the design assumptions have been drawn from the BG&E Report, in conjunction with our industry expertise and assessment of the study area.

The key design assumptions have been provided in Table 5.2.

Table 5.2: Design Assumptions

Design Item	Assumptions
Pavement type	Bicycle path is assumed to be paved
Drainage and flooding	Any on-road infrastructure or off-road infrastructure adjacent to the road are assumed to achieve flood immunity (matching the existing road)

Additional design elements such as signals, lighting, wayfinding signage and fencing are expected to form part of the detailed design stage.

6. Stakeholder and Community Engagement

6.1 Community Engagement

6.1.1 Overview

As described in Section 1.1, this study forms part of the Scenic Rim ITP. A number of community and stakeholder engagement sessions have been undertaken as part of the ITP.

The engagement activities were advertised in Let's Talk Scenic Rim website, social media, news outlets and through pamphlets distributed locally. The Let's Talk Scenic Rim was open for submissions between 22 July and 2 September 2024.

The stakeholder and community engagement activities included the following:

- On-line survey
- On-line mapping
- Five in-person community drop in sessions
- Focused community engagement workshop.

The Let's Talk Scenic Rim website page advertising the community engagement activities is shown in Figure 6.1.

Figure 6.1: Let's Talk Scenic Rim Website

The key findings of the community engagement are presented as follows:

- Cycling is not well catered for in Scenic Rim and residents would like to walk more often as a method of transport
- Better connected cycling paths / shared paths are needed for people to cycle more often
- The lack of suitable cycling paths is a big issue when traveling in and around scenic Rim
- The biggest issue for people with additional mobility needs is the lack of unmaintained footpaths / shared paths, need for additional active transport crossing and difficulty in using mobility devices
- Cycling connection should be provided to a standard that all users could benefit from it, including inexperienced users and people with decreased mobility
- More shared paths / dedicated cycle facilities should be provided in towns, and in recreation/rail trails areas.

The interim community engagement report has been provided in **Attachment B**.

6.2 Focused Stakeholder Meetings

6.2.1 Overview

In addition, to the community engagement sessions, focused stakeholder meetings have been undertaken with Council, TMR South Coast and TMR Active Transport Team, with key findings as follows:

- TMR South Coast advised that the BG&E Report was a 'long term' planning and was not yet indorsed at this stage, but rather used as a Masterplan to inform the corridor planning
  - TMR Southcoast also provided in general agreement for the type and level of assessment of this additional report as an extension and supplement to the precious BG&E Report
- TMR Active Transport Team was consulted at different stages during the project. Initially the Active Transport Team (specifically the Cycling Team) was consulted in the methodology to be undertaken during this assessment.

  Further, it was consulted in the key findings, options development and recommendation and provided an in-principle agreement for the recommended preferred options (discussed in Section 11).

7. Option Development Review

7.1 Overview

A review of the recommended preferred infrastructure type outlined in BG&E Report has been undertaken to:

1. Review if the recommendation is relevant to this study extents
2. Confirm if the recommendation is suitable to this study area extents.

7.2 Infrastructure Type Review

BG&E have considered different route alignments and infrastructure types along PCN. The infrastructure considered includes on-road one-way cycle lanes with separation devices, on-road two-way cycle lanes with separation devices and off-road shared-use paths.

Initially, the series of route alignments and infrastructure types underwent a subsequent review and consultation with relevant stakeholders (including a Strengths, Opportunities, Threats and Strengths (SWOT) analysis) to determine a shortlist of potential candidates for the PCN. Table 7.1 shows the combination of route alignments and infrastructures was shortlisted for further investigation in the BG&E Report:

Table 7.1: BG&E Shortlisted Options

Section	Id	Description
North	N1	On-road one-way cycle lane with separation device (on both sides of the carriageway)
	N2	On-road two-way cycle lane with separation device (on northbound side of the carriageway)
	N3	On-road two-way cycle lane with separation device (on southbound side of the carriageway)
	N4	Off-road shared-use path within the western verge
	N5	Off-road shared-use path within the eastern verge
	N6	Off-road shared path using the old rail alignment
Central	C1	On-road one-way cycle lane with separation device (on both sides of the carriageway)
	C2	On-road two-way cycle lane with separation device (on northbound side of the carriageway)
	C3	On-road two-way cycle lane with separation device (on southbound side of the carriageway)
	C4	Shared-use path along Helen Street and on-road Albert Street
	C5	Shared-use path along Helen Street and within the verge of Albert Street
East	E1	On-road one-way cycle lane with separation device (on both sides of the carriageway)
	E2	On-road two-way cycle lane with separation device (on northbound side of the carriageway)
	E3	On-road two-way cycle lane with separation device (on southbound side of the carriageway)
	E4	Existing off-road path

The shortlisted options were further investigated using a Multi Criteria Assessment (MCA), which developed by TMR and BG&E. The MCA criteria is shown in Figure 7.1.

Category	Criterion	Indicator
Economic Data	Implementation and Construction Costs*	Estimated cost of construction and procurement (outturn estimate)
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors, and generators)
	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	Number or density of instances requiring cycleway to give-way to road or driveway
Environmental Impact	Flora/ Fauna / Cultural Heritage	Impact on vegetation and / or sites of environmental importance or Cultural Heritage
Social Factors	Long-term impact on residents and businesses	Long-term impact to local land, property access, businesses, and kerbside (available) parking
Construction and Constructability	Constructability / Impacts of construction / TTM	Potential construction challenges including Traffic management) / Impact on property owners during construction
Traffic and Safety	Safety	Ability to incorporate positive impact on safety in regard to CPTED, number of heavy vehicle interactions, and driveway crossings
Future Planning	Compatibility with future land uses	Degree of alignment to future land uses and town planning objectives
	Strategic fit to planned infrastructure	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)
Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section
	Rideability - Grades	Grades, lengths >3% (DDA) and >5% (Rideability)
	Comfort - Stress Level	Stress level - LTS 1-4

Source: Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway - Options Analysis Report (2023)

Figure 7.1: MCA Criteria from BG&E Report

An MCA workshop was undertaken with relevant stakeholders, including Council's internal stakeholders, different TMR divisions and BG&E staff to identify a preferred option to be developed in the business case study.

The MCA results showed that the recommended option consists mainly of 3m wide off-road shared paths. The recommended options are shown in Table 7.2.

Table 7.2: BG&E Preferred Option

Section	Identifier	Recommended option
North section	N4	Off-road shared-use path within the western verge
Central section	C4 / C5[1]	Shared-use path along Helen Street and on-road Albert Street / Shared-Use Path Using Helen Street and Off-Road Albert Street within the Verge
East section	E4	Existing off-road path

Note 1: The report notes that workshop discussions led to the desire to further investigate the central section to include an off-road shared-use path along Albert Street.

7.3 Relevance to this Study

A review of the BG&E Report preferred option has been undertaken to determine if the recommendation is relevant and suitable for this study area extents. The aim was to gather the reason on the BG&E Report recommended for 'off-road shared paths' and the main reason other options have not been selected.

The key findings of the review are provided as follows:

- Generally shared paths provided a cheaper option, since it does not require road widening
- Shared paths provided opportunity for off-line construction, causing minimal disruption to general traffic
- Shared paths provided more comfort and less stress for cyclists, when compared to on-road options
- Shared paths have been considered more accessible, providing for a wide range of users
- Shared paths have been considered safer, since there are less conflict points, including interactions with driveways, through traffic and heavy vehicles
- It is noted however that shared paths generally require more cut and fill, but less temporary traffic management, during the construction stage
- Shared paths also provided less impacts to the on-streetcar parking provision.

Bitzios Consulting is of the view that the key findings and recommended infrastructure type from the BG&E Report are relevant and should be pursuit for this study.

As described in Section 2 to Section 5, much of the area wide assessment and facility options analysis undertaken by BG&E are consistent and relevant for the this study. In addition, the recommendation of a shared path aligns with the stakeholder and community engagement feedback described in Section 6.

Further, providing an infrastructure to the same level of the recommended in the BG&E Report means a uniform network throughout the PCN, improving legibility, accessibility, connectivity and safety for all users along the network.

Based on the above, it is understood that a 3m shared path should be provided where practical along the remaining PCN routes.

8. Route Alignment

8.1 Overview

A number of route alignment options have been developed, to meet the project objectives, strategic intent and also the cycling demands along the study area. The options were developed considering site visits, desktop reviews, stakeholder and community engagement outcomes, future planned developments, as well as consultation with Council.

Given the study area is and extension of the BGE&E Report, the project corridor was divided into four sections, as follows:

- North Section
- West Section
- South-West Section
- South-East Section.

The four sections are shown in Figure 8.1.

Figure 8.1: Study Area Sections

8.2 North Section

Three route alignment options have been developed for the North Section. The alignment details are described as follows:

- **Option N1 – Eastern Shared Path**, runs along the eastern side of Mount Lindesay Highway and uses the existing 2.5m wide shared path from Enterprise Drive to Gould Hill Drive, along Phoebe Way. Requires the provision of a shared path along the causeway

- **Option N2 – Western Shared Path**, runs along the western side of Mount Lindesay Highway. Requires one bridge crossing and a shared path along the causeway.
- **Option N3 – Rail Trail**, follows the potential Beaudesert to Bethania Rail Trail alignment, connecting from Mount Lindesay Highway via Enterprise Drive. Requires two bridge crossings and an easement through private land.

The alignment of the routes is shown in Figure 8.2.

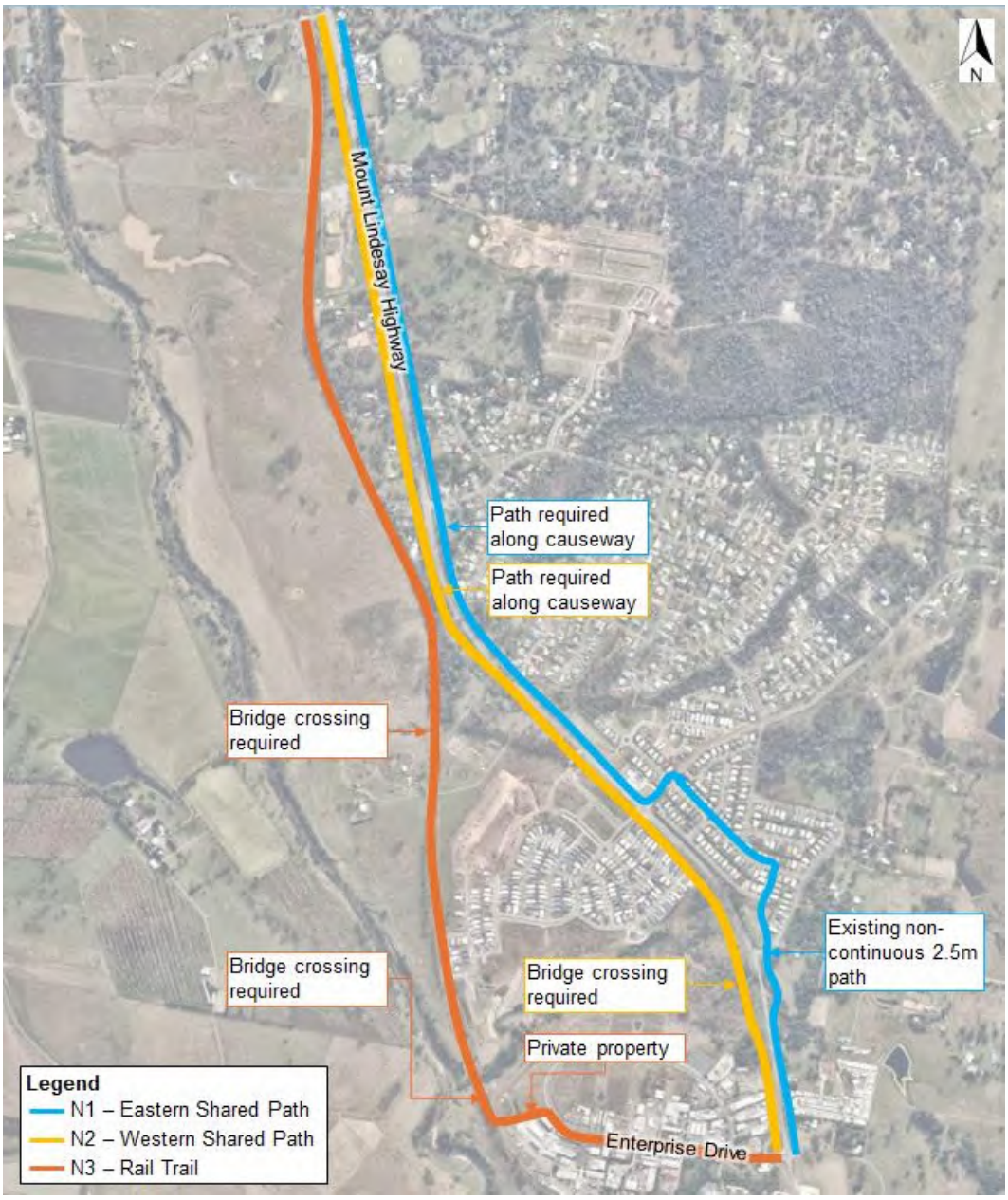

Figure 8.2: North Section Route Alignment Options

8.3 West Section

Two route alignment options have been developed for the West Section. The alignment details are described as follows:

- **Option W1 – Northern Shared Path**, runs along the northern side of Beaudesert Boonah Road. It is noted that is a non-continuous 1.5m shared path along this section of Beaudesert Boonah Road.
- **Option W2 – Southern Shared Path**, runs along the northern side of Beaudesert Boonah Road.

The alignment of the route is shown in Figure 8.3.

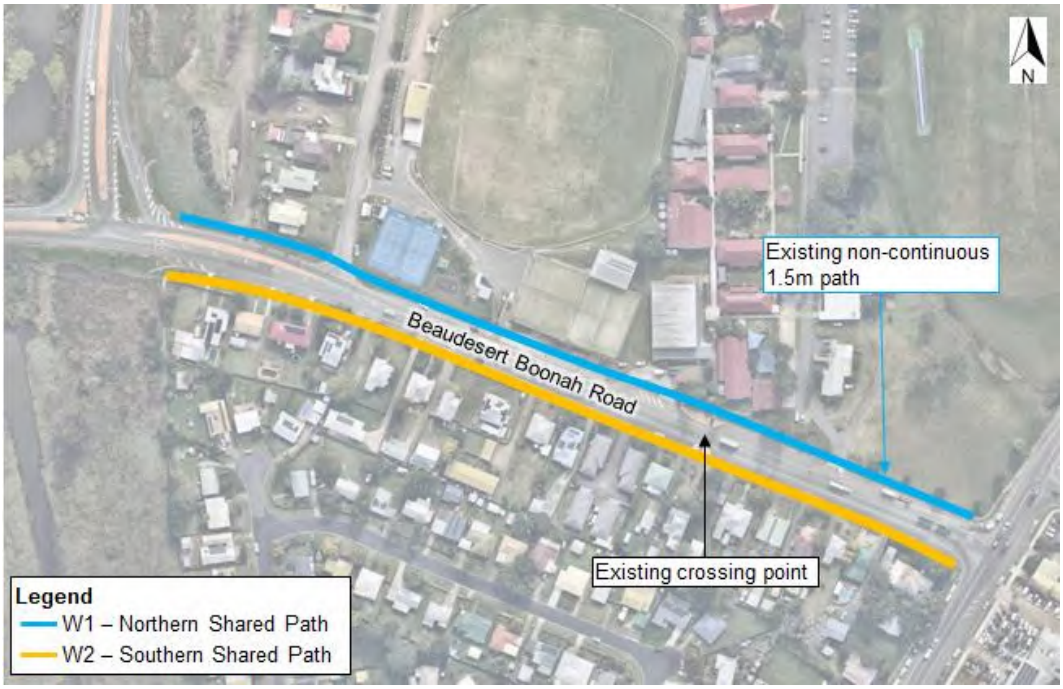

Figure 8.3: West Section Route Alignment Options

8.4 South-west Section

Two route alignment options have been developed for the South-west Section. The alignment details are described as follows:

- **Option SW1 – Western Shared Path**, runs along the western side of Mount Lindesay Highway, benefiting from an existing 2.5m wide path (noting there is a short section of missing path north of Thieke Road).
- **Option SW2 – Eastern Shared Path,** runs along the eastern side of Mount Lindesay Highway, following the alignment of a non-continuous 1.5m path.

The alignment of the route is shown in Figure 8.4.

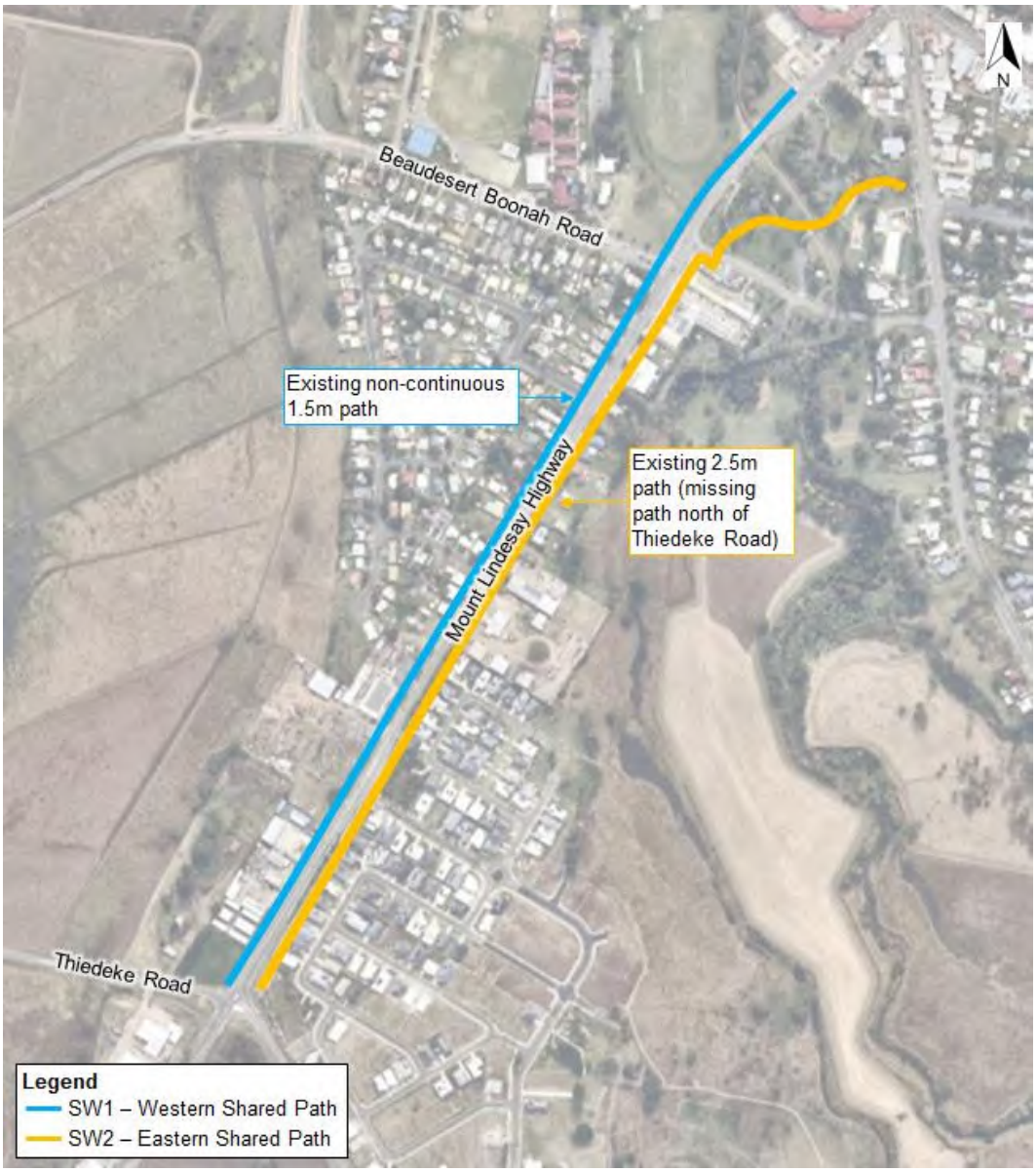

Figure 8.4: South-west Route Alignment Options

8.5 South-east Section

Two route alignment options have been developed for the South-east Section. The alignment details are described as follows:

- **Option SE1 – Eastern Shared Path**, runs along the eastern side of Brisbane Street, following the alignment of a non-continuous 1.5m path
- **Option SE2 – Western Shared Path,** runs along the western side of Brisbane Street, following the alignment of a non-continuous 1.5m path

The alignment of the routes is shown in Figure 8.5.

Figure 8.5: South-east Route Alignment Options

9. Strengths, Weaknesses, Opportunities and Threats

9.1 Overview

A Strengths, Weakness, Opportunities and Threats (SWOT) assessment has been undertaken for all route alignment options, with details presented in Table 9.1.

Table 9.1: SWOT Analysis

Route Segment	Option	Strengths	Weaknesses	Opportunities	Threats
North Section	N1 – Eastern Shared Path	▪ Connects to majority of residential land uses ▪ Potentially cheaper construction due to sections with existing 2.5m path ▪ Connects to Gleneagle State School	▪ Follows the opposite side of road compared to BG&E recommended option ▪ Sections with grades >5% ▪ Requires roads and driveway crossings	▪ Connects to future planned growth areas ▪ Potentially uses the existing 2.5m path	▪ Significant works required for causeway path (subject to detail design)
	N2 – Western Shared Path	▪ Follows the same alignment and side of the road of BG&E recommended option	▪ Does not connect to majority of residential land uses ▪ Sections with grades >5% ▪ Less direct route ▪ Requires roads and driveway crossings	▪ Potential connections with Beaudesert to Bethania Rail Trail	▪ Significant works required for: causeway path and bridge crossing (subject to detail design)
	N3 – Rail Trail	▪ Gentler grades ▪ Offline construction ▪ Less interaction with motor vehicles	▪ Minimal connections opportunities ▪ Less direct route ▪ May not be desirable as its away from most residential and commercial catchment	▪ Aligns with TMR and Council's future planning ▪ Provides benefits as a tourist route	▪ Relies on the use of private land to connect to Mount Lindesay Highway ▪ Relies on future passenger rail planning for the area ▪ More costly compared to other options ▪ Sections of route are impacted by flood hazard areas

West Section	W1 – Northern Shared Path	▪ Connects to St Mary's Catholic Primary School ▪ Connects to small residential catchment at Hopkins Street ▪ Existing path demonstrates active transport demand	▪ Does not connect residential catchment on the southern side of Beaudesert Boonah Road	▪ Benefits from existing active transport crossing point to / from residential catchment ▪ Provides high quality active transport connections to and from a school	▪ N/A
	W2 – Southern Shared Path	▪ Connects small residential catchment	▪ Does not connect to St Mary's Catholic Primary School ▪ Limited expected active transport demand	▪ Benefits from existing active transport crossing point to / from St Marys Catholic Primary School	▪ N/A
South-west Section	SW1 – Western Shared Path	▪ Connects residential catchment	▪ Requires roads and driveway crossings ▪ Requires crossing to connect to Jubilee Park	▪ Connects to St Mary's Catholic Primary School	▪ N/A
	SW2 – Eastern Shared Path	▪ Connects a number of commercial land uses, Jubilee Park and small residential catchment ▪ Potentially cheaper construction due to sections with existing 2.5m path	▪ Requires roads and driveway crossings ▪ Requires crossing to connect to St Mary's Catholic Primary School	▪ Connects to future planned growth areas ▪ Connects to Jubilee Park ▪ Potentially uses the existing 2.5m path	▪ N/A
South-east Section	SE1 – Eastern Shared Path	▪ Connects to residential catchment, showground and golf club	▪ Limited connections throughout the majority of route ▪ Sections with grades >5%	▪ Connects to future planned growth areas	▪ Small sections of route are adjacent to flood hazard area
	SE2 – Western Shared Path	▪ Small catchment connections	▪ Limited connections throughout the majority of route ▪ Sections with grades >5%	▪ N/A	▪ Northern end of route is adjacent to flood hazard area

10. Multi Criteria Assessment

10.1 Overview

A Multi Criteria Assessment (MCA) has also been undertaken to identify the preferred WNP option to be progressed to the next stages of planning.

The criteria were based on BG&E Report MCA criteria (when relevant to the route alignment only), as well as considering the project objectives and strategic intent. The scoring criteria is shown in Table 10.1.

Table 10.1: MCA Criterion Description

Criterion	Description
Implementation and construction costs	Ability to provide an economically viable outcome, including implementation and construction costs
Network connectivity to existing catchments	Ability to provide connectivity to existing residential catchments and key trip attractors and generators
Safety	Ability to provide safe active transport connection
Constructability	Ability to decrease construction impacts to all road users
Compatibility with future planning	Ability to accommodate future planning
Rideability / grades	Ability to provide a path that does not present grades that impact rideability
Directness / travel time	Ability to provide a direct connection with improved travel times

The scoring process comprised of determine the degree to which option met each evaluation criterion, on a one to five scale, combining to give a total score out of 35.

10.2 Scoring

The MCA scoring has been pre-populated to provide a scoring baseline. A workshop was then undertaken with representative from Council and TMR to present the MCA results.

The results of the MCA are shown in Table 10.2 to Table 10.5.

Table 10.2: MCA North Section Scoring

Option		Implementation and construction costs	Network connectivity to existing catchments	Safety	Constructability	Compatibility with future planning	Rideability / grades	Directness / travel time	Total Score
N1 – Eastern Shared Path	**Comment**	Potentially uses sections of already built shared path Requires path along causeway	Connects to majority of residential catchment	Path interacts with three road crossings and 10 driveways	Potential relocation of power poles	Connects to future planned growth areas	Sections with grades >5%	Provide the most direct route, however travel times can be impacted by three road crossings	**24**
	Score	4	4	3	3	5	2	3	
N2 – Western Shared Path	**Comment**	Requires path to be built along the whole section Requires path along causeway and one bridge	Connects to a limited number of residential and commercial catchments	Path interacts with one road crossings and 11 driveways	Potential relocation of power poles	Does not provide a direct connection to future planned growth areas	Sections with grades >5%	Provide a somewhat direct route, however travel times can be impacted by one road crossing	**20**
	Score	3	3	4	3	2	2	3	
N3 – Rail Trail	**Comment**	Requires path to be built along the whole section Construction needs to be tied in with other sections of the Beaudesert to Bethania Rail Trail Requires two bridge crossings bridge	Provides limited connection opportunities to residential and commercial catchments	Completely off-road path with one driveway conflict	Relies on other future passenger rail planning Relies on the development of other Rail Trail Sections Completely offline construction	Does not provide a direct connection to future planned growth areas	Gentler grades, however, section have grades >5%	Does not provide a direct route and there are limited connections to residentials and commercial catchments	**20**
	Score	3	2	5	2	2	4	2	

Table 10.3: MCA West Section Scoring

Option		Implementation and construction costs	Network connectivity to existing catchments	Safety	Constructability	Compatibility with future planning	Rideability / grades	Directness / travel time	Total Score
W1 – Northern Shared Path	Comment	Existing path needs to be rebuilt	Connects to St Mary's Catholic Primary School and small residential catchment on Hopkins Street	Path interacts with one road crossing and 4 driveways	Follows the same alignment of existing path Potential relocation of power poles	Does not impact future growth areas	Generally flat	Provide the most direct route, however travel times can be impacted by one road crossing	25
	Score	3	4	3	3	3	5	4	
W2 – Southern Shared Path	Comment	Requires path to be built along the whole section	Connects to a limited number of residential catchment	Path interacts with 19 driveways	Potential relocation of power poles	Does not impact future growth areas	Generally flat	Provide the most direct route	23
	Score	3	2	2	3	3	5	5	

Table 10.4: MCA South-west Section Scoring

Option		Implementation and construction costs	Network connectivity to existing catchments	Safety	Constructability	Compatibility with future planning	Rideability / grades	Directness / travel time	Total Score
SW1 – Western Shared Path	Comment	Requires path to be built along the whole section	Connects existing residential catchment to the east	Path interacts with two road crossing and 29 driveways	Potential relocation of power poles	Does not provide a direct connection to future planned growth areas	Generally flat	Provide the most direct route, however travel times can be impacted by two road crossings	23
	Score	3	4	2	3	2	5	4	

SW2 – Eastern Shared Path	**Comment**	Potentially uses sections of already built shared path for the majority of section	Connects to a limited number of residential catchments Connects to Jubilee Park	Path interacts with one road crossing and 19 driveways	Minimal construction works required	Connects to future planned growth areas	Generally flat	Provide the most direct route, however travel times can be impacted by one road crossing	**29**
	Score	5	3	3	4	5	5	4	

Table 10.5: MCA South-east Section Scoring

Option		**Implementation and construction costs**	**Network connectivity to existing catchments**	**Safety**	**Constructability**	**Compatibility with future planning**	**Rideability / grades**	**Directness / travel time**	**Total Score**
SE1 – Western Shared Path	**Comment**	Requires path to be built along the whole section (or existing sections to be rebuilt)	Connects existing residential catchment to the east	Path interacts with one road crossing and 23 driveways	Potential relocation of power poles	Connects to future planned growth areas	Sections with grades >5%	Provide the most direct route, however travel times can be impacted by one road crossing	**24**
	Score	3	4	3	3	5	2	4	
SE2 – Eastern Shared Path	**Comment**	Requires path to be built along the whole section	Connects to a limited number of residential catchments	Path interacts with one road crossing and 34 driveways	Potential relocation of power poles	Does not provide a direct connection to future planned growth areas	Sections with grades >5%	Provide the most direct route, however travel times can be impacted by one road crossing	**19**
	Score	3	3	2	3	2	2	4	

10.3 Preferred Option

The MCA scoring resulted in the following preferred options:

- North Section: N1 – Eastern Shared Path
- West Section: W1 – Northern Shared Path
- South-west Section: SW2 – Eastern Shared Path
- South-east Section: SE1 – Western Shared Path.

The preferred option alignment is shown in Figure 10.1, with each detailed section provided in Figure 10.2 to Figure 10.5.

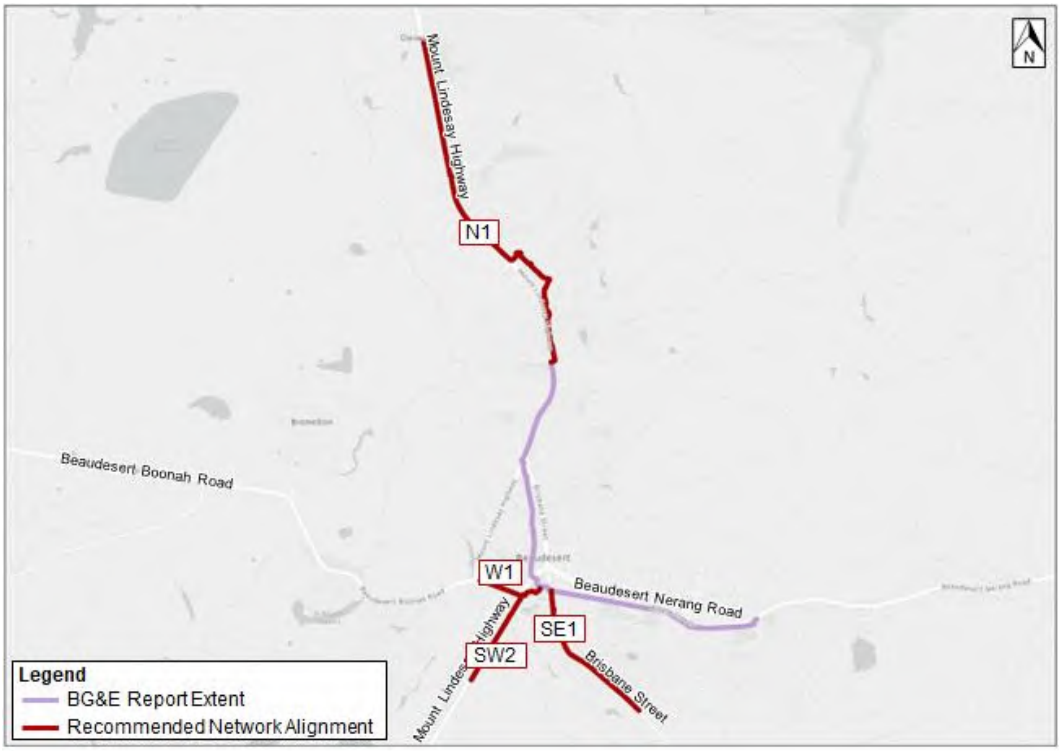

Figure 10.1: Preferred Alignment

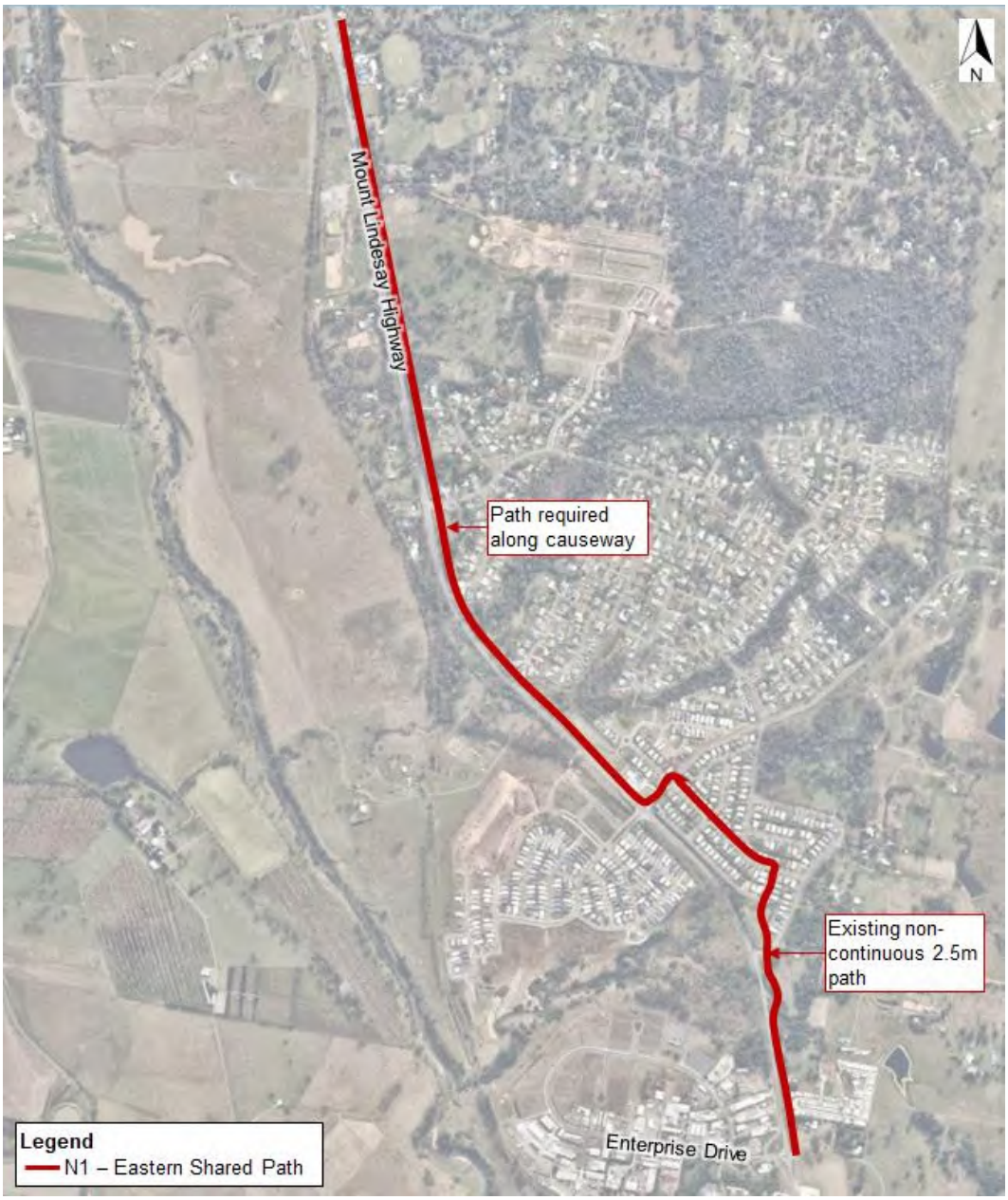

Figure 10.2: Preferred Alignment North Section

Figure 10.3: Preferred Alignment West Section

Figure 10.4: Preferred Alignment South-West Section

Figure 10.5: Preferred Alignment South-East Section

11. Concept Plans Development

11.1 Typical Cross-Sections

The typical shared path cross-section should be designed in accordance with Austroads Guide to Road Design Part 6a, and generally be provided as follows:

- Barriers / fencing should be provided when the slope grade adjacent to the path is 1 in 3 or less.
- Barriers / fencing should be provided when there is a drop of more than 2m within 5m of the path
- No fencing is required if the path is adjacent to a slope of up to 1 in 3
- When there is a fence adjacent to a shared path, a 1m offset should be provided (0.5m absolute minimum).

Figure 11.1 shows the indicative cross-section design/

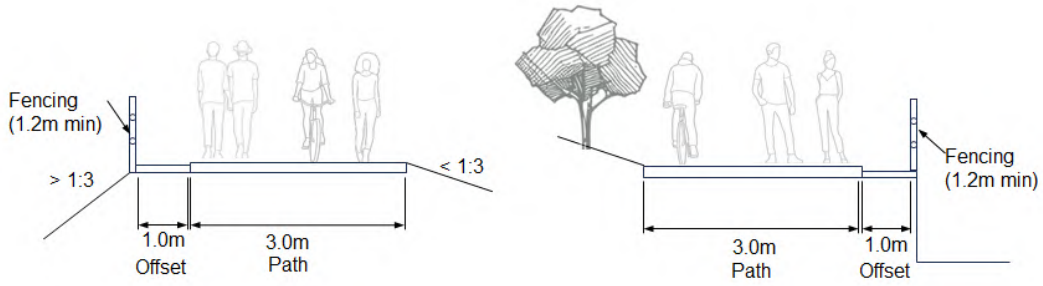

Figure 11.1: Cross Section Design

It is noted that for the purposes of this assessment, all recommended paths adjacent fences have been provided with a minimum 0.5m off-set, which in some instances resulted in the path being provided at a width less than 3m.

The exact cross-section and path off-set from fences should be further investigated by Council during the Detail Design (DD) stage of the project.

11.2 Intersection Design

Although no intersection design detail is provided as part of the BG&E Report, a high-level assessment and recommendation for intersection design have been provided. The intersections have been designed generally as follows:

- One lane roundabouts: Priority crossing provided
- One lane road crossing (adjacent to intersections): Priority crossing provided
- Multiple lane road crossings (adjacent to intersections): Non-priority crossing
- Mid-block crossing: Assessed on a case-by-case basis

Irrespective of the above, it is recommended that the intersections treatments are revised and further assessed during the DD stage of the project.

11.3 Driveway Crossing

The recommended PCN alignment crosses a number of high trafficable driveways. It is recommended that these driveways are treated with active transport supporting infrastructure, generally in accordance with TMR's *Treatment options to improve safety of pedestrians, bicycle riders and other path users at driveways Guideline (2021).*

A risk assessment for driveways should be undertaken during the DD stage to identify and incorporate treatment and mitigation measures.

Indicative driveways requiring further assessment have been included in the concept plans.

11.4 Areas with Limited Road Reserve

A number of sections along the PCN have been identified with limited road reserve to provide for a 3m wide path, plus a 1m minimum offset from any vertical obstruction (i.e. fence). For the purpose of this assessment, the 1m minimum offset from vertical obstruction has been maintained, resulting in a narrower path in some sections.

It is recommended that the design and minimum clearances are revisited and further investigated during the DD stage.

11.5 High Speed Limit Roads

Sections of Mount Lindesay Highway are provided with a posted speed limit of 80km/h. With the development of the PCN, it is recommended that a speed limit review is undertaken, particularly adjacent to Gleneagle State Primary School, due to the expected high level of traffic (both active transport and motor vehicle), and vulnerable road users.

Council may also investigate alternatives to provide further physical separation from the path and the road, such as safety barrier.

It is recommended that both assessments are undertaken as part of the DD stage of the project.

11.6 Operational Use and Demands

Investigations have been undertaken for potential wider / separated off-road paths, as follows:

Paths fronting Schools: In line with TMR's Planning for Safe Transport Infrastructure at Schools and Active Transport Investment Program Technical Guidance, the paths are recommended to be 3m wide shared paths, as per the remainder of the study area.

Due to the limited school enrolment numbers at all Schools within the study area and expected active transport infrastructure usage, the 3m wide shared path is considered suitable to cater for the demands.

Jubilee Park: Jubilee Park forms part of the BG&E Report study area. BG&E Report notes the following: '*Crossing details and connection through Jubilee Park to be confirmed in subsequent design stages'.*

Irrespective of the above, a 3m wide share path has been designed through Jubilee Park, as part of this report. Based on Jubilee Park level of usage to date, a 3m wide share path is considered suitable to cater for the active transport demands. It is recommended that, when this project progresses to the DD stage, the concept is revisited, including a review of expected number of users in Jubilee Park to confirm if the recommendations are still suitable.

Telemon Street: Telemon Street provides access to a number of commercial sites (including vehicle dealerships and a Motel). It is recommended that vehicle crossing details and alternative path widths are further investigated in this area during the DD stage.

12. Recommendation

The detailed recommended option alignment and infrastructure type is provided in **Attachment C**. The concept designs also show the integration with the recommended BG&E Report network.

The following is also noted:

- A few sections along the study area have existing 2.5m wide shared paths. These paths are recommended to remain at 2.5m wide and Council / TMR further investigate the provision of a 3m wide path in the event the roads are upgraded
- Given the early stages of planning, indicative crossing types / treatments have been proposed. Further investigation is recommended to be undertaken by Council / TMR, to confirm the crossing alignment and types during the detailed design stage
- Council/TMR are to further investigate potential driveway treatments along the study area during the detailed design stage

- For areas of environmental significance, rigid concrete pavement may compromise established trees. Alternative environmentally friendly design solutions may be considered, such as timbe boardwalks
- The proposed design and alignment of the preferred option aims to reduce impacts to established trees and power poles, however further investigations are recommended during the design stage.

13. Next Steps

It is recommended to progress the preferred options to the business case phase.

Attachment A:

BG&E Report

Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway - Options Analysis

FINAL

Prepared for TMR

October 2023

Project Number B22081

OPPORTUNITIES THROUGH EXCELLENCE

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BG&E

Contents

Document Control				
Revision	Date	Prepared	Reviewed	Approved
DRAFT	June 2023	Jessica Wolbers Matt Downing	An Boc	An Boc
FINAL	October 2023	Mardi Blanch	An Boc	An Boc

Report for TMR | Project Number B22081

1. Introduction

BG&E were engaged by the Department of Transport and Main Roads (TMR) in August 2022 to undertake an Options Analysis and Business Case for the Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway (the Project). The Project includes investigations to support delivery of a fit-for-purpose, safe, functional, and continuous cycle path between Beaudesert State High School, Bromelton Street, and Brooklands Drive.

This report documents the investigations and optioneering processes undertaken for the Project.

1.1 Project Location

The Project follows the current Principal Cycle Network along sections of Mount Lindesay Highway, Brisbane Street, Telemon Street, William Street, Albert Street, and Beaudesert-Nerang Road as illustrated in Figure 1.

Generally, the Project extents include:

- Northern limit being Beaudesert State High School on Mount Lindesay Highway (25A);
- Western limit being Bromelton Street on Mount Lindesay Highway (25B); and
- Eastern limit to the first of the Brooklands Drives on Beaudesert-Nerang Road (202).

The Project length is approximately 4.8km.

Figure 1: Project Location

1.2 Project Need

The Project Need is summarised as follows:

- Beaudesert-Nerang Rd and Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network (PCN) Plan – SEQ;
- The existing PCN cycling route is not continuous, lacks signage and sections have no facilities;
- Traffic surveys indicate a low cyclist count;

- There are high percentages of heavy vehicles along the route;
- There is a need to improve safety for cyclists;
- TMR's desire to provide a facility that encourages more people cycling more often; and
- TMR's desire to provide a facility that is suitable for riders of all ages and ability.

1.3 Project Objectives

The Project objectives include:

- Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Road and Mount Lindesay Highway
- Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.
- Provide a facility that addresses the following strategic objectives:
  - Connected
  - Direct
  - Coherent/Legible
  - Safe
  - Practical
  - Accessible
  - Economical
  - Receives positive public reception
- Maintain existing flood immunity, and
- Identify a solution that can be split into construction staging.

1.4 Project Governance

The key project management roles for the Project are shown below in Table 1.

Table 1: Project Roles

Project Role	Description
Project Customer	TMR
Project Customer Representative	TMR South Coast Region
Project Sponsor	TMR
Project Sponsor Representative	TMR South Coast Region
Program Manager	
Project Director	John McCormack
Project Manager	Robert Mitchell

1.5 Assumptions and Limitations

The Project outcomes have been derived based on information provided by TMR, readily available open-source data and site visits undertaken by BG&E specialists. Specific assumptions are outlined in the various sections of this report. The Options provide project information on a broad high-level scale for planning and community consultation purposes. The design is not intended to be final and as the phase of the Project progresses and more detailed analysis is undertaken it may be modified or change.

The concept is generally based on photogrammetry survey, Survey DTM, aerial background and DCD Boundaries provided by TMR.

1.6 Definitions

Table 2: Definitions

Reference	Definition
AGRD	Austroads Guide to Road Design
AGTM	Austroads Guide to Traffic Management
ASD	Approach Sight Distance
ATIP	Active Transport Investment Program (TMR)
BC	Business Case
BYDA	Before You Dig Australia
CPTED	Crime Prevention Through Engineering Design
MCA	Multi-Criteria Analysis
NOF	Network Optimisation Framework
PCNP	Principal Cycle Network Plans
The Project	Beaudesert-Nerang Road and Mount Lindesay Highway Cycleway Options Analysis
OnQ	TMR Project Management framework
RPDM	Road Planning and Design Manual
RSA	Road Safety Audit
SEQPCNP	South East Queensland Principal Cycle Network Plan
SiD	Safety in Design
SISD	Safe Intersection Sight Distance
SRRC	Scenic Rim Regional Council
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TMR	Transport and Main Road

2. Strategic Intent

The Department of Transport and Main Roads (TMR) encourages active transport as part of an integrated land use and transport system for Queensland. Active transport incorporates cycling, walking and other physically active ways of travelling that can be undertaken alone or combined with public transport.

The Queensland Government is investing in cycling because when people ride it contributes to a more sustainable transport system, a healthier environment and more active lifestyles, the vitality of our cities and towns, and reduced congestion. By delivering well-planned cycling infrastructure, the Queensland Government helps make cycling in Queensland safer, better connected and a more attractive transport choice. This planning study is aligned to several policies, strategies, and guidelines which form part of TMR's strategy for advancing cycling and walking in Queensland.

2.1 Queensland Cycling Strategy 2017-2027

The *Queensland Cycling Strategy 2017-2027* sets the strategic direction for cycling in Queensland over the next ten years. The Queensland Government's vision for cycling is for 'more cycling, more often', on safe, direct, and connected routes. To achieve this, TMR have identified five (5) priorities:

1. Building and connecting infrastructure to grow participation,
2. Encouraging more people to ride,
3. Sharing our roads and public spaces,
4. Powering the economy, and
5. Using research and data in decision making.

Table 3 shows how this Project aligns with these priorities.

Table 3: Project Alignment with Queensland Cycling Strategy

Strategy Objective	Project Alignment
Building and connecting infrastructure to grow participation	• The project will introduce dedicated, safe facilities which connects Beaudesert-Nerang Road and Mount Lindesay Highway as a continuous PCNP facility. • The project will connect key attractors in a logical, direct manner. • The project will assist to address 'gaps' in the network.
Sharing roads and public spaces and encouraging more people to ride.	• Safety is the main reason Queenslanders choose not to ride. The project will provide facilities with a distinct space for cyclists to feel safe by reducing the level of required interaction with motor traffic, and therefore reducing the potential for incidents. • The aim of The Project is to provide high quality facilities which, as well as catering for those already cycling, which will draw additional cyclists onto the network, helping to maximise the benefits of cycling.

2.2 South East Queensland Principal Cycle Network Plan (SEQPCNP)

The South East Queensland Principal Cycle Network Plan (SEQPCNP or plan) provides a vision for the principal cycle network in the region to support, guide, and inform practitioners involved in the planning, design, and construction of the region's transport network.

The principal routes shown represent cycling desire lines. They indicate the most important routes and known missing links for cycling within the region.

2.3 ATIP Guidelines

Table 4 shows the Principals of ATIP Guidelines relevant to the Project.

Table 4: Principals of ATIP Guidelines

ATIP Principal	Definition
Accessible Cycling Facilities	Facilities that encourage more people of all ages and abilities to cycle more often.
Competitive Facilities	Facilities need to be comfortable, low-stress, convenient, direct, safe, and competitive with other modes of travel.
Safety Is Paramount	Incorporate physical separation from motorized traffic to maintain safety and attractiveness.
Transport-Oriented Facilities	To allow people using bicycles to comfortably access meaningful destinations.
Efficient Geometry	Focusing on transitions between on-road and off-road facilities on-street parking and share path methods to protect cyclists from moving traffic.

2.4 SEQPCNP Addendum

Table 5 shows the Principals of SEQPCNP Addendum relevant to the Project.

Table 5: Principals of SEQPCNP Addendum

SEQPCNP Addendum Principal	Definition
Origin/Destination	Connect major existing and future origin/destination points.
End User Focused	Focus on commuter, utility, and education related trips, with a supplementary focus on recreational cycling
Coverage	Ensure coverage of network is proportionate to surrounding demand and urban density.
Connected/Direct/Coherent/Safe	Provide a network that is connected, direct, coherent, and safe.
Consider Available Space	Consider all transport and public open space corridors as potential cycling corridors, including state or local government lands.

2.5 Other Related Strategic Policies

In addition to TMR's current bike riding policies and guidelines, the following strategic documents have been considered in developing and assessing options for the Beaudesert cycleway:

Queensland Walking Strategy 2019–2029

The Queensland Walking Strategy 2019–2029 is part of a holistic approach adopted by the Queensland Government to encourage Queenslanders to enjoy and participate in regular physical activity to improve their health and wellbeing. It sets the direction to make walking an easy choice for everyone, every day over the next 10 years.

Getting more people walking will help to achieve the objectives of *Our Future State: Advancing Queensland's Priorities* to keep Queenslanders healthy, keep communities safe and give all our children a great start.

Accessibility and Inclusion Strategy (2020)

The Accessibility and Inclusion Strategy (AIS) will ensure that TMR's approach to accessibility and inclusion aligns with the *Queensland Government's Advancing Queensland Priorities*. TMR will embed accessibility and inclusion in all that we do. TMR principles of accessibility and inclusion are:

1. Design with me – "nothing about us, without us",

2. Make me feel welcome and independent – customers who use our infrastructure should feel confident that we are meeting their needs,

3. Listen and improve – by asking for feedback and taking action, and

4. Inclusion is our culture – by providing greater accessibility and being more inclusive. This project will align with the AIS by apply its key principles to the design and delivery of the preferred cycling facilities.

Personal Mobility Device Safety Action Plan (PMDSAP)

In recent years, there has been an increase in the use of Personal Mobility Devices (PMDs) across Queensland. PMDs include a range of new and innovative devices, including e-scooters, e-skateboards, and self-balancing devices. These devices present the potential for great benefits for improved mobility, reduced traffic congestion, greener commuting, tourism, and recreation.

The Personal Mobility Device Safety Action Plan indicates that within 3-6 months of its release, all levels of government should be advocating to accelerate the roll out of physically separated bike path infrastructure in Queensland (Paragraph 13, Page 6, PMDSAP).

The Beaudesert Cycleway project does not exclude the use of PMDs and has proposed the implementation of a separated facility for a number of options.

3. Existing Situation

3.1 Principal Cycle Network

The Beaudesert cycleway is identified as a Principal Route on the Department of Transport and Main Roads (TMR) Principal Cycle Network Plan (PCNP). Sections of the route are identified as a Priority A Route (focus for delivery in the next 10 years) on the Priority Route Maps Addendum.

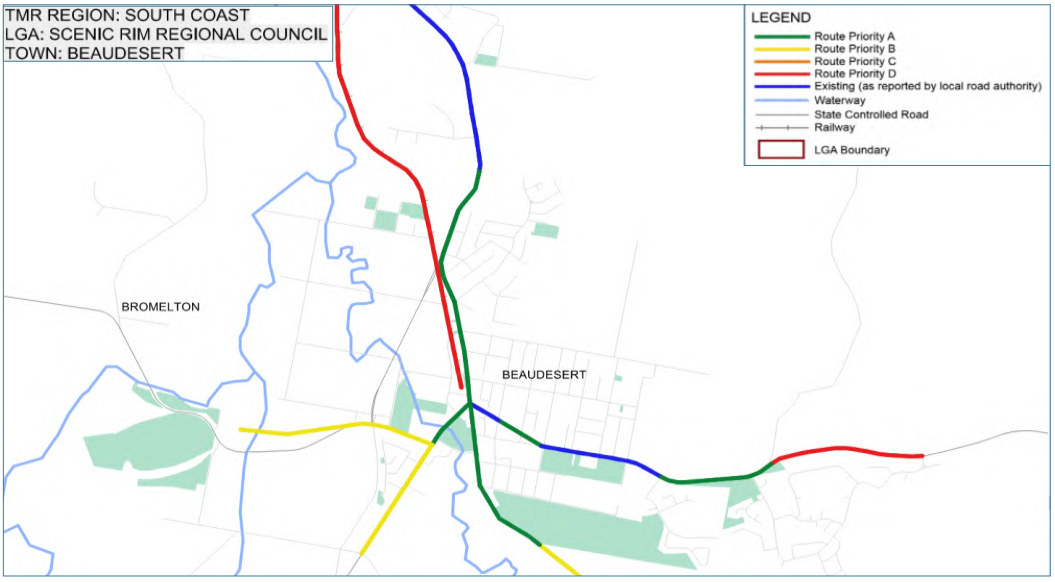


Figure 2: Principal Cycle Network Plan

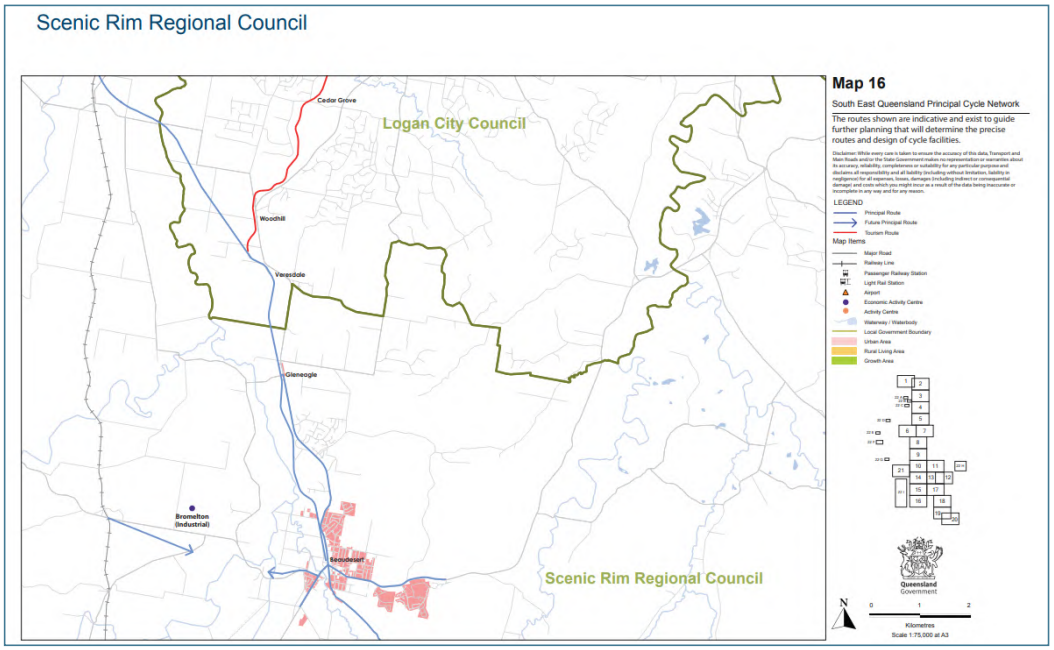


Figure 3: South East Queensland Principal Cycle Network Plan, Department of Transport and Main Roads, 2016

3.2 Existing Active Transport Infrastructure

Figure 4 below maps the existing pathways around the project area.

Scenic Rim Regional Council (SRRC) constructed an off-road footpath on Beaudesert-Nerang Road, between Kingsley Drive and Brooklands Drive. The footpath consists of a 3.0 m wide shared pathway with ample shade, lighting, and drainage. However, the pathway reaches a grade of 10% which makes it non-compliant with current Austroads requirements for cycleways and quite difficult for the average bicycle user to traverse.

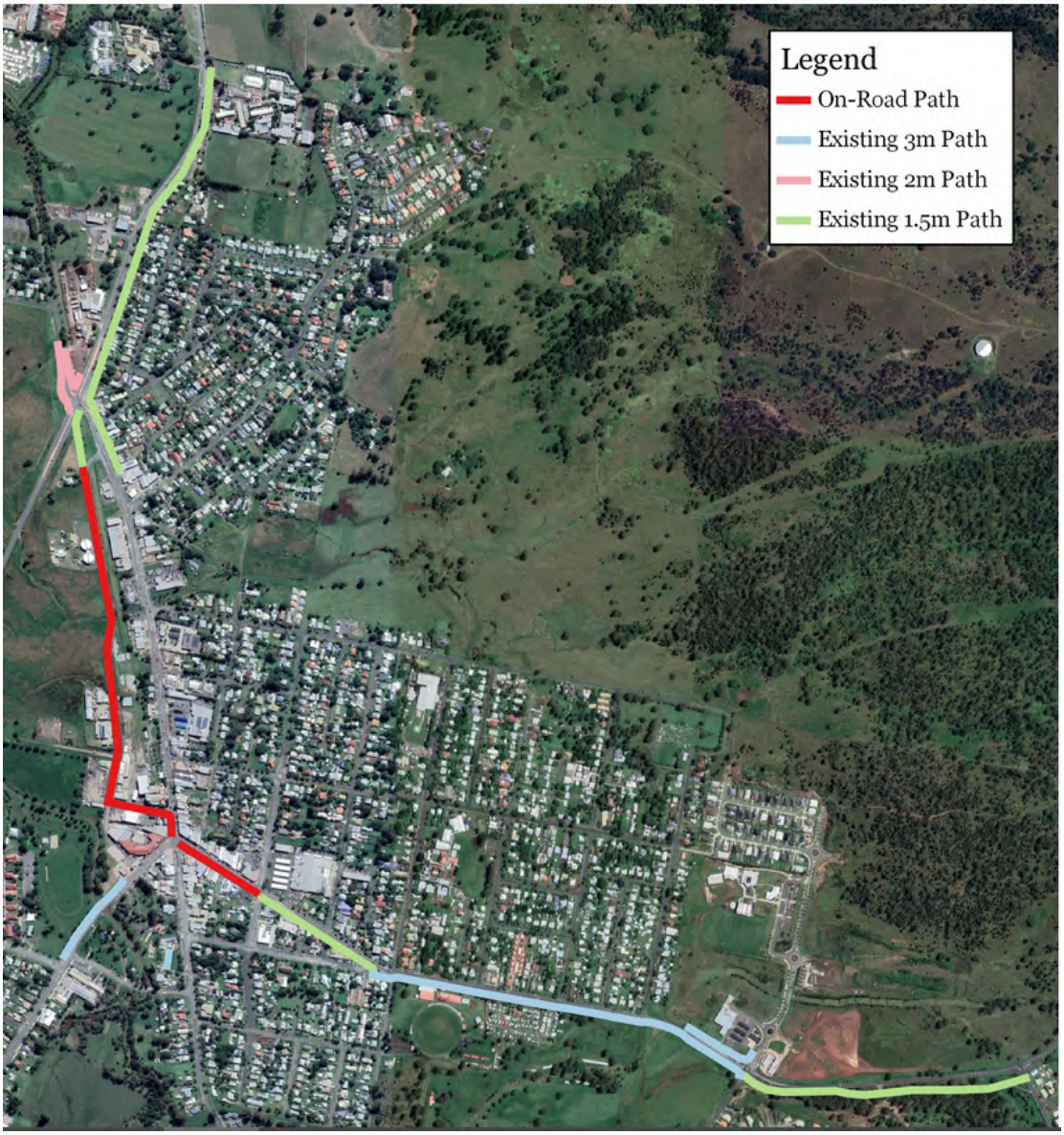


Figure 4: Map of existing infrastructure

3.3 PCNP Network Deficiencies

The PCNP that runs through the project area can be seen in Figure 5

A comparison of the PCNP and the existing infrastructure in Figure 5 shows that there are a number of sections of the PCNP that have inadequate infrastructure.

Figure 5: Map of PCNP

3.4 Current Cycleway Demands

Traffic surveys were undertaken on Thursday 1st December and Saturday 3rd December, 2022 to identify current cycling demands along the PCN route (attached in - Appendix A). The survey results show minimal cycle demands (one counted), however the survey only counted cyclists using the road – it did not include cyclists using existing footpaths.

Due to the lack of on-road existing infrastructure and the heavy vehicle traffic volumes (over 200 heavy vehicles on Brisbane St during the 12-hour survey period), the results may not adequately reflect the current demands.

4. Site Visit

A site visit was held on 21st September 2022.

Attendees of the site visit are shown in Table 6.

Please refer to Appendix B for site photos.

Table 6: Site Visit Attendees

Attendee	Role
An Boc	BG&E Project Manager
Jeremy Duxfield	BG&E Senior Civil Designer
Laura Miranda	BG&E Civil Designer
Matt Downing	BG&E Civil Engineer

5. Desktop Investigations

Desktop investigations were undertaken to identify constraints, opportunities, Project risks, and aid in development of Project options as described in the sections below.

5.1 SRRC Zoning

As per SRRC Planning Scheme 2020, The project area is a mix of mostly low and low-medium residential zoning with some community facilities, recreation, major centre, and mixed-use zonings. A significant portion of the residential area around the project area is currently undeveloped. Figure 6 below shows a zoning map of the project area.

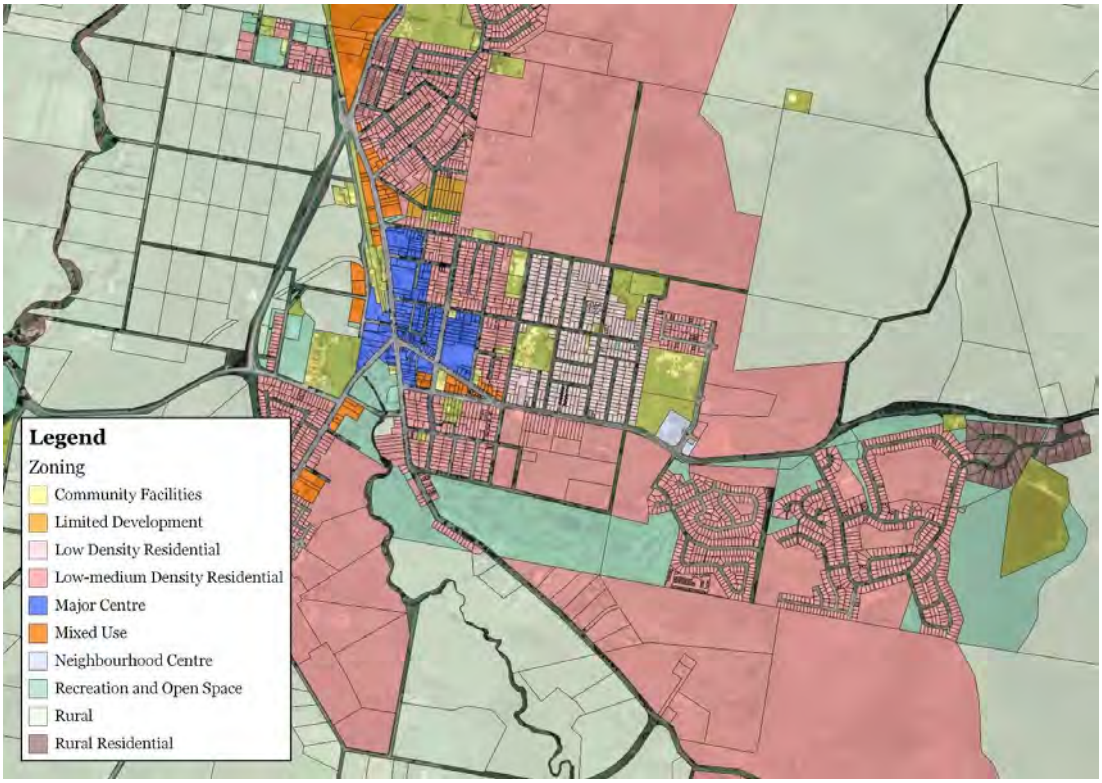


Figure 6: Zoning map as per SRRC Planning Scheme 2020

5.2 Traffic Volumes

Intersection traffic counts were recorded on Thursday 1st December 2022 and Saturday 3rd December 2022 at both the Beaudesert Bypass Road – Brisbane Street – Helen Street intersection and the Brisbane Street – Mount Lindesay Highway – William Street intersection. Figure 7 shows a summary of the intersection traffic volumes. Refer to Appendix A for further details.

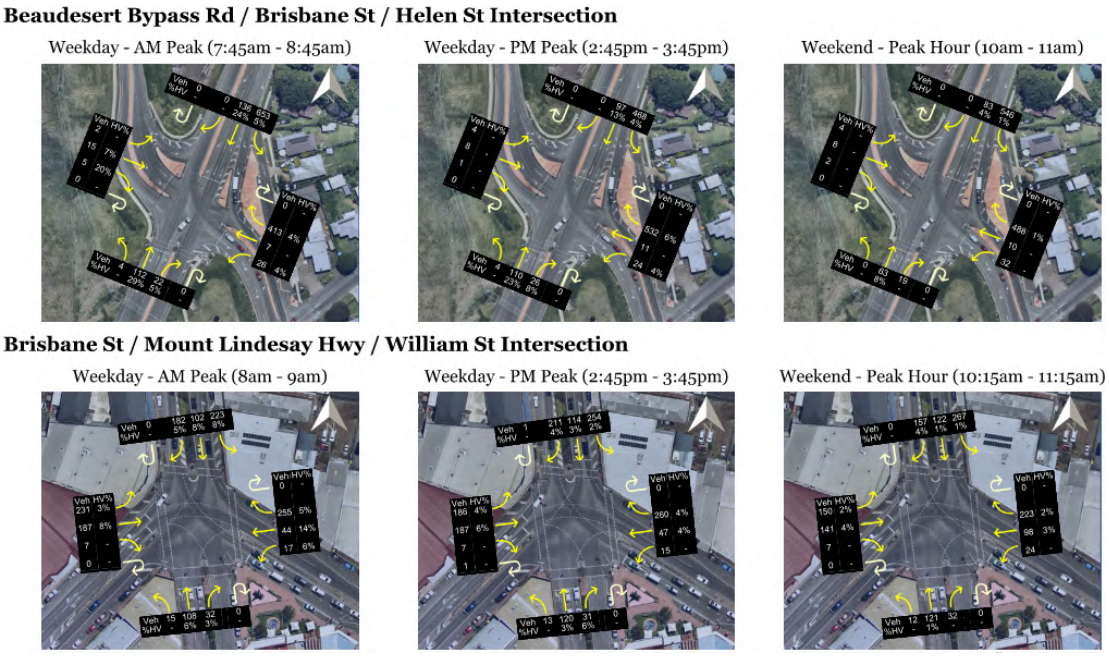


Figure 7: Intersection Traffic Volume Count Summary

5.3 B-Double Route

The PCN route through Beaudesert is located on a B-Double route as shown in Figure 8 below.

Figure 8: B-Double Route

5.4 Beaudesert Future Road Network

Figure 9 depicts the future transport network planned for Beaudesert, including:

- Beaudesert eastern ring road;
- Southern extension of the Beaudesert town centre bypass; and
- Bromelton north south arterial road (from Woodhill to Josephville)

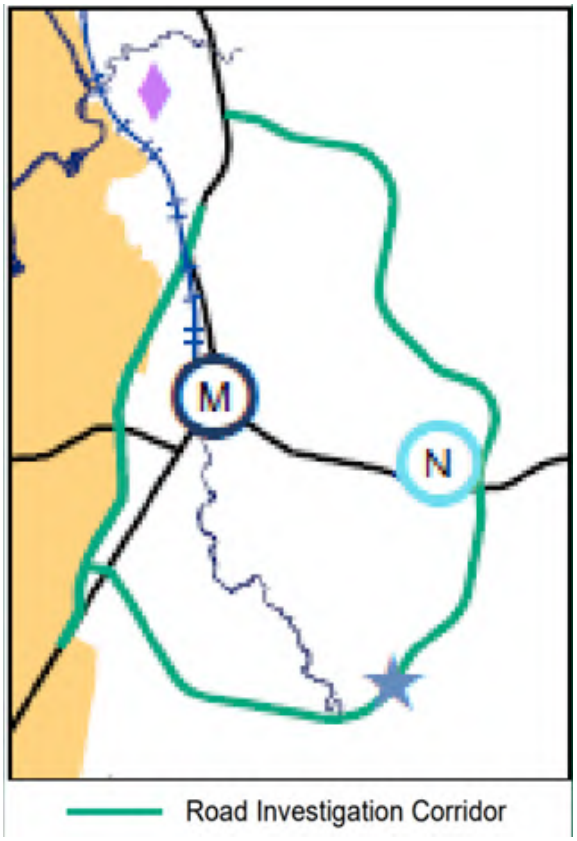


Figure 9: Future Road Network

5.5 Crash History

Crash data from the project area for the past 5 years was collated, sorted by category, and analysed. The data contains information for fatal, hospitalisation, medical treatment and minor injury whilst documenting if a pedestrian or bicyclist were involved in the incident.

There were 33 reported incidences over the study area. Of all the recorded incidents, only one involved a cyclist and that was due to the interactions between road users and angled parking bays; there were nine other incidents that occurred due to the angled parking bays. Several incidents have occurred on the Brisbane Street – William Street link. No incidents having occurred on Helen Street and only two along Albert Street. Lower traffic volumes on Helen Street and Albert Street correspond with the smaller number of incidents.

Figure 10 displays the locations of crashes whilst Table 7 provides a breakdown of the crash types at the intersection. Fourteen individual crash types were identified as follows:

- Crash Type 003: Pedestrian on foot or in toy/pram colliding with vehicle from far side of road
- Crash Type 101: Two vehicles traveling though the intersection from adjacent approaches colliding
- Crash Type 102: Vehicles from adjacent approaches colliding as one travels left and the other through
- Crash Type 104: Vehicles from adjacent approaches colliding as one travels through and the other right

- Crash Type 105: Vehicles from adjacent approaches colliding as vehicles travel right from minor and major road
- Crash Type 201: Vehciles traveling from opposite approaches colliding head on
- Crash Type 202: Vehicles from opposite approaches traveling through and right colliding
- Crash Type 301: Vehcles travelling one direction rear end
- Crash Type 303: Vehicles travelling one direction rear end as the front vehicle turns right
- Crash Type 400: Collision due to various manouver
- Crash Type 406: Collision due to manouver of leaving driveway
- Crash Type 408: Collision due to manouver from footway
- Crash Type 609: On path collision with animal
- Crrash Type 804: collision off path on left bend into object

Figure 10: Crash History Map

Table 7: Crash History

DCA Code	Severity	Type	Street	Intersecting Street	Involving Cyclist	Involving Pedestrian
003	Medical treatment	Hit pedestrian	William St	Duckett St		✓
101	Hospitalisation	Multi-Vehicle - Angle	Albert St	Anna St		
	Hospitalisation	Multi-Vehicle - Angle	Albert St	Anna St		
	Minor injury	Multi-Vehicle - Angle	Brisbane St	Eaglesfield St		
	Minor injury	Multi-Vehicle - Angle	Albert St	Anna St		
102	Medical treatment	Multi-Vehicle - Angle	Brisbane St	Eaglesfield St		
104	Hospitalisation	Multi-Vehicle - Angle	Albert St	Tina St		
	Hospitalisation	Multi-Vehicle - Angle	Albert St	William St		
105	Minor injury	Multi-Vehicle - Angle	William St	Duckett St		
201	Hospitalisation	Head-on	Brisbane St	Helen St		
202	Medical treatment	Multi-Vehicle - Angle	Brisbane St	Telemon St		
	Hospitalisation	Multi-Vehicle - Angle	Albert St	Brisbane St		
	Hospitalisation	Multi-Vehicle - Angle	Brisbane St			
	Medical treatment	Multi-Vehicle - Angle	Telemon St	Wattle St		
	Hospitalisation	Multi-Vehicle - Angle	Beaudesert - Nerang Rd	Kingsley Dr		
	Hospitalisation	Head-on	Beaudesert - Nerang Rd	Kingsley Dr		
	Hospitalisation	Multi-Vehicle - Angle	Beaudesert - Nerang Rd	Kingsley Dr		
301	Medical treatment	Rear-end	Mt Lindesay Hwy			
303	Hospitalisation	Rear-end	Albert St	Hart St		
	Hospitalisation	Rear-end	Albert St	Hart St		
	Hospitalisation	Rear-end	Telemon St			
400	Medical treatment	Single Vehicle - Hit parked vehicle	Brisbane St	Eaglesfield St	✓	
	Medical treatment	Multi-Vehicle - Angle	Albert St	Brisbane St		
	Medical treatment	Multi-Vehicle - Angle	Telemon St	Wattle St		
406	Medical treatment	Multi-Vehicle - Angle	Brisbane St			
	Hospitalisation	Multi-Vehicle - Angle	Brisbane St			
	Medical treatment	Multi-Vehicle - Angle	Brisbane St			
	Hospitalisation	Multi-Vehicle - Angle	Brisbane St			
	Hospitalisation	Multi-Vehicle - Angle	Brisbane St			
408	Hospitalisation	Multi-Vehicle - Angle	William St			
	Minor injury	Sideswipe	Beaudesert - Nerang Rd			
609	Hospitalisation	Hit animal	Beaudesert - Nerang Rd			
804	Hospitalisation	Single Vehicle - Hit object	Mt Lindesay Hwy			

5.6 Hydraulics and Drainage

A key Project objective is to maintain the existing flood immunity.

Three segments of the cycleway are within a 'high' flood hazard zone as per SRRC's Planning Scheme 2015, Figure 11. Each segment has a corresponding culvert crossing as pictured in Figure 12. A risk for current and potential cycleway users is being washed away due to all three locations being prone to flooding.

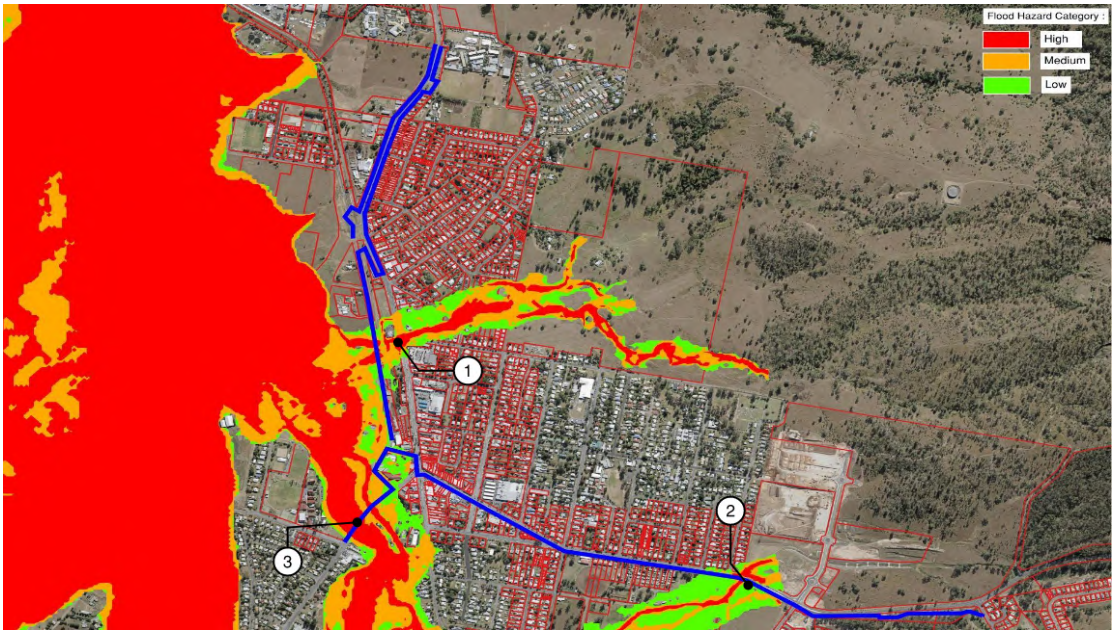


Figure 11: Flood Hazard Map

Figure 12: Culvert crossings

5.7 Environment and Cultural Heritage

The environmental constraints within and around the project area can be seen in Figure 13 below.

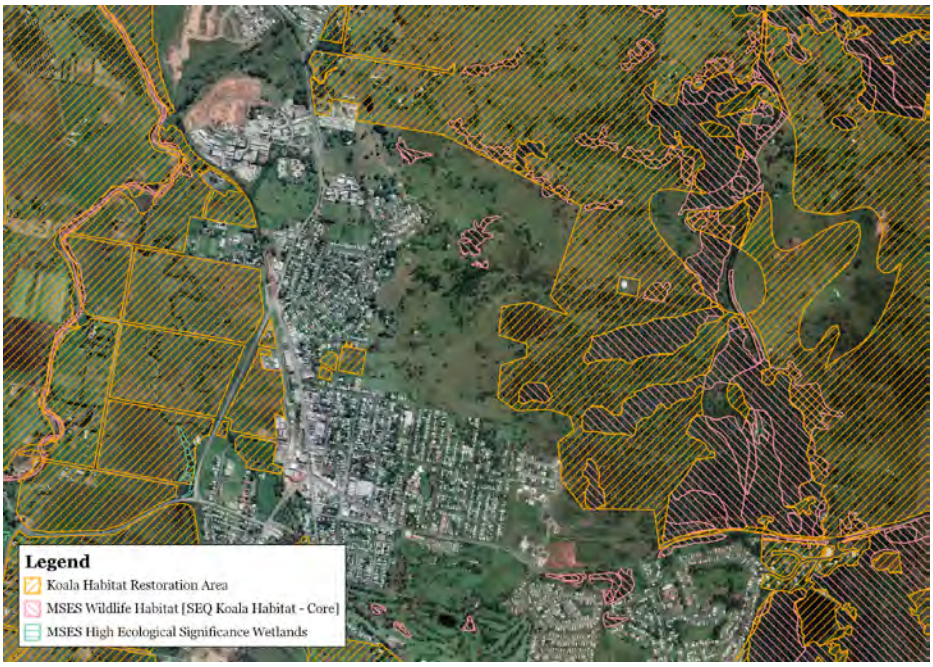


Figure 13: Environmental Constraints Map

An Environmental Scoping Report (ESR) has been prepared for this Options Analysis study. Please refer to Appendix F for more details.

5.8 Geotechnical

Geotechnical desktop investigations identified that there is a “Low Risk” or “Extremely Low Risk” of encountering Acid Sulfate Soils (ASS) within the study area. Further geotechnical assessment to be carried out in the next planning stage.

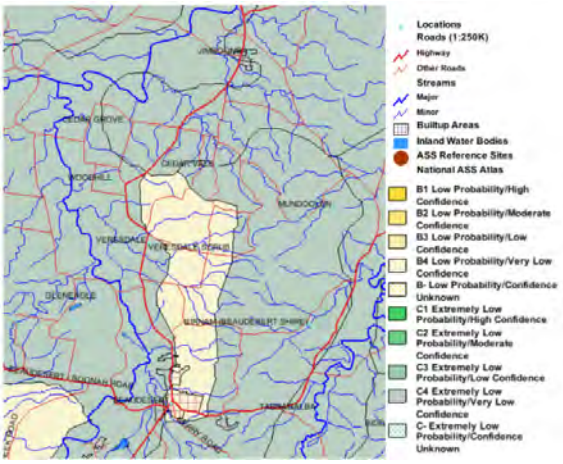


Figure 14: Acid Sulfate Soil Map (Source: CSIRO)

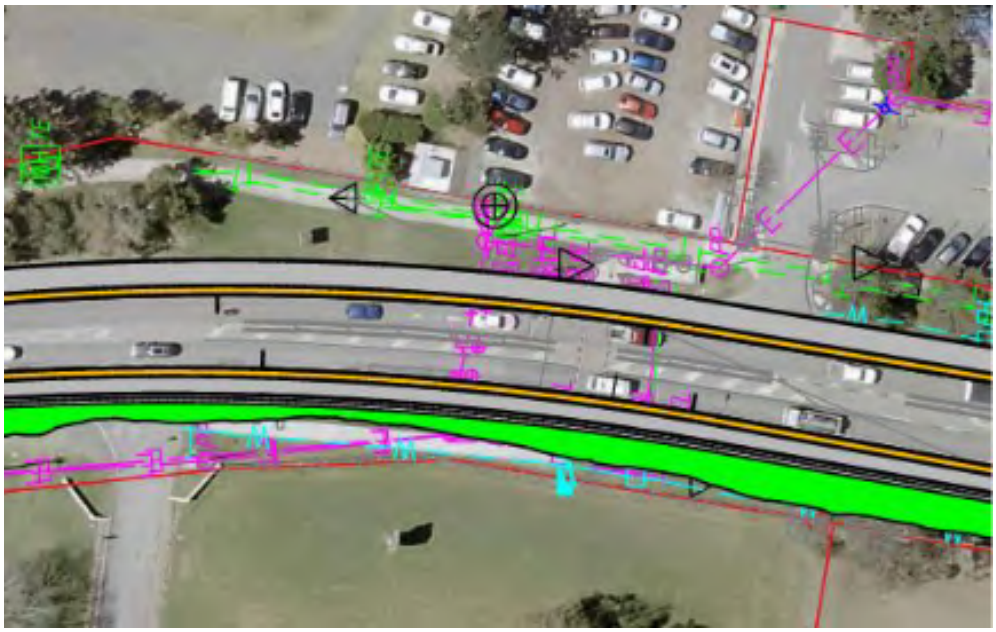
5.9 PUP

A BYDA search was completed to determine PUP conflicts within the project area. PUP conflicts have been compiled in Table 8 below.

Table 8: PUP Conflict Register

North Section
• Water conduits, telecommunication conduits, and overhead lines within the western verge of Mount Lindesay Highway between Enterprise Drive and Helen Street. • Water conduits, telecommunication conduits, and overhead lines within the eastern verge of Mount Lindesay Highway between Beaudesert State High School and Helen Street. 

- Overhead lines cross Mount Lindesay Highway adjacent to Beaudesert State High School



Central Section

- Overhead lines within the western verge of Brisbane Street between Mount Lindesay Highway and William Street.
- Overhead lines within the eastern verge of Brisbane Street between William Street and Albert Street.
- Overhead lines cross all legs of Brisbane Street – William Street intersection except for eastern William Street.
- Overhead lines within the western verge of Helen Street between Brisbane Street and southern end street.

- Overhead lines within the northern verge of William Street between Brisbane Street and Albert Street.
- Overhead lines within the northern verge of Albert Street between Brisbane Street and transition into Beaudesert-Nerang Road.
- Overhead lines within the southern verge of Albert Street between Mitchell Street and transition into Beaudesert-Nerang Road.

East Section

- Overhead lines within the northern verge of Beaudesert-Nerang Road between transition from Albert Street and approximately Chainage 350.
- Overhead crossing on Beaudesert-Nerang Road at approximately Chainage 350.
- Overhead lines within the southern verge of Beaudesert-Nerang Road between approximately Chainage 350 and Brooklands Drive.

5.10 Bicycle Wayfinding

AP-R492-15 Bicycle Wayfinding (September 2015) defines the importance of signage for bicycles and provides guidance on appropriate treatments. Directional and wayfinding signs are critical elements of any transport system to help people find their way around the network and make full use of cycle infrastructure. Signs can indicate the

legal status of a facility (bike lane signs, shared path signs), regulate safe use (Stop, Give Way and parking signs), warn of potential hazards (steep descent, slippery when wet, road ahead signs), and guide cyclists to their destinations (cycle route directional and wayfinding signs). An effective system of bicycling directional signs can facilitate and legitimise the many and varied trips which cyclists make daily within our cities and towns.

Directional and wayfinding sign projects have in the past been carried out on a per-route basis. Bicycle routes can be located on-road in lanes or mixed traffic streets, off-road on bicycle paths or shared paths, or on a mixture of the two. The signing of complex routes is particularly important to facilitate connections between on- and off-road cycle facilities improving overall route cohesion.

As road authorities and local councils develop their bicycle facilities into region-wide networks, signs become an essential element in facilitating trips across a whole city, town or urban region. Signs for cycling networks can also inform bicycle riders of routes which are more direct or less heavily trafficked. Cycling network signs can help raise community awareness of the many route possibilities for bicycle travel other than single routes or the general street system.

The first task in signing a cycle route is to create a focal point map for the network. The map identifies destinations and decision points and coordinates signing across multiple routes. The only places listed on directional signs are focal points, terminal focal points, city/town centres and destinations shown on the focal point maps. On routes from large metropolitan areas to a city centre, the destination 'City', 'CBD' or 'Town Centre', should continually feature in signage along the route. A concept wayfinding focal point map has been developed for the Beaudesert Cycleway as per Figure 15. Consultation with stakeholders and SRRC is recommended during future design phases to finalise the identified focal points.

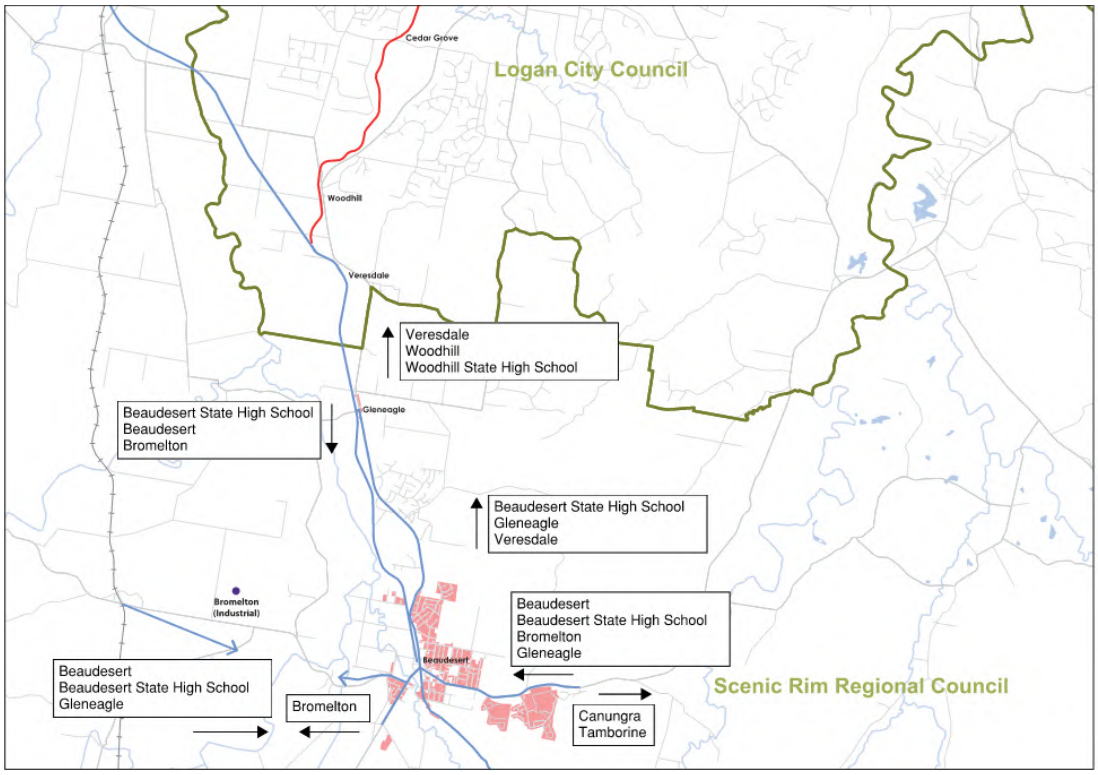


Figure 15: Concept Wayfinding Focal Points

6. Constraints and Opportunities

Following the site investigation and desktop investigations, further assessments were undertaken to flesh out Project risks, issues, constraints, and opportunities. The following sections highlight additional Project constraints and opportunities.

6.1 Brisbane Street Revitalisation Program

SRRC is currently undertaking a revitalisation program of Brisbane Street, between Selwyn Street and the intersection of Telemon Street and William Street. The program consists of a lowering of the speed limit and consequential narrowing of the lanes, an additional road connection between Selwyn Street and Helen Street, the alteration of two intersections to roundabouts, and the general beautification of the area.

Brisbane Street currently forms part of the region's PCNP however does not currently include, nor does the revitalisation scheme provide any provisions for on- or off-road cycle paths. Consultation with Scenic Rim Regional Council (SRRC) was undertaken and revealed:

- Consideration was given to bike riders as part of the development of the scheme.
- The aim of the revitalisation scheme is to lower traffic volumes (and speeds) and extend the available footpath width for pedestrians and shop users.
- To create a low-speed traffic environment the road was narrowed using wide central medians with vegetation (beautification) and parking was removed.
- The inclusion of on-road cycling lanes were not favoured.
- Cyclists will be able to use the traffic lane (noting the intended speed environment is 30kph), or use the footpath.
- The revitalisation scheme has been approved by Council and is funded for construction.

Figure 16 below illustrates the extents of the program.

Figure 16: Brisbane Street Revitalisation Program (as of 18/10/22)

6.2 Spring Creek Masterplan

Scenic Rim Regional Council's Spring Creek Masterplan is a live and visionary document that is intended to guide future growth and developments for Beaudesert. This document is relevant to the Options Analysis because it covers the Jubilee Park where the cycleway alignment has an option of going through it. Should this option make it to the next planning stage, there is an opportunity for council to incorporated it into the masterplan. Refer to Figure 17 for the masterplan.

Figure 17: Spring Creek Masterplan

6.3 Kerbside Parking

Beaudesert town centre offers a combination of parallel parking and reverse angled parking. Existing kerbside parking and approximate number of bays within the project area can be seen in Figure 18 and Figure 19.

Figure 18: Existing kerbside parking along William Street and Telemon Street

Figure 19: Existing kerbside parking along Brisbane Street

6.4 Bridge Crossing on Albert Street

Albert Street bridge crossing near Boundary Street narrows to a shoulder width of approximately 0.5m as shown in Figure 20.

Figure 20: Bridge Crossing on Albert Street near Boundary Street

6.5 Disused Railway Alignment

Beaudesert previously had a railway connection that terminated just north of Short Street. The railway land between Brisbane Street and Helen Street is currently disused. Due to the design of railways, the disused land has a very gentle grade that would be desirable for a cycleway. Figure 21 overleaf shows the extents of the disused railway alignment.

Figure 21: Disused Rail Alignment

6.6 Site Appreciation Map

The key Project constraints and opportunities are depicted on the site appreciation map shown in Figure 22.

Figure 22: Site Appreciation Map

7. Basis of Design

7.1 Design Standards

Relevant Australian and Queensland standards considered as part of the design development process:

- Austroads Guide to Road Design
- Austroads Guide to Traffic Management
- Austroads Guide to Traffic Management
- Cycling Aspects of Austroads Guides (Jun 2017)
- ATIP Techcal Requirements (Oct 2022)
- Including Provisions for Bicycles in Road Pavement Rehabilitation and Resurfacing Projects (Jan 2019)
- AP-R492-15 Bicycle Wayfinding (Sept 2015)
- Raised priority crossings for pedestrians and cycle paths (Jan 2019)
- Bicycles and heavy vehicles (Feb 2019)
- Selection and design of cycle tracks (Oct 2019)
- Speed management on shared paths (Aug 2020)
- Bicycle awareness zones (Nov 2021)
- Bicycle lane separation devices (Nov 2021)
- Coloured surface treatments for bicycle lanes (Nov 2021)

7.2 Users

The following user groups have been identified as potential users of the proposed bikeway/ shared path:

- Commuter Cyclists – full length
- Recreational Cyclists – full length
- Recreational Walkers and Joggers – full length
- Children and Parents – predominantly northern section
- People with accessibility requirements – exclusively where in proximity (or not to preclude) access to bus stops.

7.3 Basis of Design

A Basis of Design was developed for the Project to determine the criteria governing the alignment design. The Project design criteria was selected based on TMR's current performance and technical requirements along with the relevant industry standards, policies, and guidelines as. A summary of this criteria is outlined in the following tables.

Table 9: Pedestrian and Cyclists

Design Item	Desirable	Minimum	Absolute Minimum	Project Adopted Standard	Design Reference
Path Designation – Off Road					
Bicycle Speed 30kmh – Off Road	3.0m Shared	2.5m Shared	1.8m Shared (where obstructions present)	3.0m Shared	AGRD part 6A – Section 5.1
On Road Cyclist Provisions					
Clearance to cyclist envelope – Up to 60kmh	1.5m	1.0m		1.0m	AGRD Part 3 – Section 4.9.4
Horizontal Clearance	1.0m	0.5m	0.3m (smooth)	1.0m	AGRD Part 6A – Section 4
Vertical Clearance		2.5m		2.5m	AGRD Part 6A – Section 4

Design Item	Desirable	Minimum	Absolute Minimum	Project Adopted Standard	Design Reference
Crossfall	2.0%	2.5%		2.5%	AGRD Part 6A – Section 5.6
Horizontal Curves				As per Table 5.6/5.7	AGRD Part 6A – Section 5.3
Vertical Grades	3%	5%	Retrofit, as required with caution	5%*	AGRD Part 6A – Section 5.4 RPDM Part 6A – Section 5.4

7.4 Design Assumptions

Due to the concept level of the design and limited site data, various design elements have not been assessed in sufficient detail to fully understand the extent of influence on the overall design outcome. As such, engineering judgement, previous design experience and best practice was adopted to inform the design during the optioneering phase of the Project. Various design assumptions were made as outlined in Table 10 below.

Table 10: Design Assumptions

Design Element	Assumptions
Drainage and flooding (including aquaplaning)	- Any tie-ins with existing roads where levels are matched are assumed to be free draining and achieve desired flood immunity. - Barrier drainage and kerb & channel yet to be determined. - Overland flows are assumed to be channelised via table drains and outlet to an appropriate area, yet to be determined. - Drainage of structures, bridges and retaining walls is undetermined
Pavement and Surface Treatments	- Pavement will be free draining - Subsoil drainage will be required at kerb and channel - Bicycle path assumed to be concrete
Signals and Lighting	- No design has been undertaken at this stage
Signage, wayfinding and ITS	- No design has been undertaken at this stage.
Fencing and road furniture	- No design has been undertaken at this stage - Fencing will be required along the corridor between the path and either residential or commercial properties and roadways
Public Transport and Active Transport requirements	- Consideration of the network planning studies and future desire lines - Consideration of existing facilities
PUP and underground services	- Consideration of existing underground PUP based on site appreciate mapping, DBYD and ground survey provided. - PUP in conflict with the proposed works is assumed to be either relocated, protected or abandoned.

8. Stakeholder Engagement

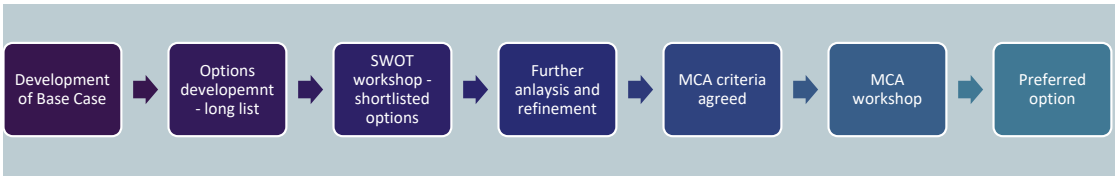
During the optioneering phase of the Project, the Project team (BG&E and TMR) undertook liaison with the following stakeholders:

- TMR Divisions
- Scenic Rim Regional Council

In addition to the above, stakeholder input from SRRC and relevant TMR Divisions was captured during the Strengths, Weaknesses, Opportunities and Threats (SWOT) workshop, and the Multi-Criteria Assessment (MCA) workshop.

9. Option Development

The optioneering process adopted for the Project is summarised below and detailed in the following Sections.



BG&E utilised Autodesks digital engineering tool, InfraWorks® to develop the concept options for this Project.

A custom template was created to match the agreed typical cross sections and a 3D alignment was designed for each of the proposed options, including vertical grading, intersection design, and earthworks cut & fill. The options were exported as visual renders to help inform the decision-making process and were presented during workshops.

9.1 Long List of Options

A long list of options was developed based on the Project objectives, the outcomes of the site visit, desktop investigations and constraints and opportunities mapping exercises, and discussions with TMR. Various options were generated within the designated Project corridor, however, due to the Project objective of *getting more people cycling more often*, consideration was given to the inclusion of route options outside the original Project extents to include local roads in the vicinity of the mapped PCN.

9.1.1 Development of Base Case

The Project initially investigated a low-cost on-road cycleway to meet the requirements of the PCN (Base Case). A space proofing exercise had been completed prior to this project, which looked at fitting a 2.0m on-road separated cycle lane within the existing corridor. The project team were instructed to explore this option in more detail and provide a concept design for this on-road arrangement. In addition, two (2) other options were developed using similar parameters as alternatives.

Initially the following options were developed to determine the Base Case concept to carry forward into additional planning:

- Option 1 – On-Road cycle lanes with separation device
- Option 2 – Combined On-Road and Off-Road facility
- Option 3 – On-Road painted cycle lanes with no separation device

A visual overview of Option 1 and 2 can be seen in Figure 23. General Arrangements of Option 1, Option 2, and Option 3 are provided in Appendix C. Note that Option 3 follows the same alignment as Option 1.

Figure 23: Alignment Options Overview

9.1.1.1 Option 1 – On-Road Cycle Lanes with Separation Device

Option 1 starts at the intersection of Enterprise Drive and Mount Lindesay Highway then finishes at the intersection of Brooklands Drive and Beaudesert-Nerang Road. The alignment is a 2.0m on-road separated cycle lane in both directions, utilising the existing shoulder width where practical to minimise widening. There are several areas along the alignment where widening of the existing carriageway is required and includes impacts to existing kerb and kerbside drainage, signal posts and lighting, the removal of on street parking and changes to the existing line marking and intersection treatments, in order to fit the new infrastructure. The most congested and constrained site along the corridor is from the Helen Street/Brisbane Street intersection to the William Street/Telemon Dr intersection in the heart of the Beaudesert CBD. This section has multiple access points and driveways to existing business and shops that the option would be interact with, creating multiple conflict points that will need to be managed.

9.1.1.2 Option 2 – Combined On-Road and Off-Road Facility

Option 2 utilises the existing off-road facilities and wide road reserve to provide a predominantly off-road alternative. This alignment also takes advantage of the discussed rail corridor that runs parallel to Brisbane Street along Helen Street.

9.1.1.3 Option 3 – On Road Painted Cycle Lane with No Separation Device

Option 3 follows the same alignment as Option 1 as an on-road painted cycleway. This option does not include the installation of a separation device and is considered the minimum required to meet the PCN brief.

Following discussion with TMR, it was agreed Option 3 would be taken forward as the 'Base Case' for comparison purposes at is constituted the minimum criteria for a PCN facility. Options 1 and 2 were subsequently included in a 'long list' of options for consideration as described in the following section. Option 3 is shown in Figure 24 below.

Figure 24: Option 3 – Adopted 'Base Case'

9.2 Options Developed

The project team developed several high-level concept options that met the project's criteria and brief as well as the overarching objectives of TMR's active transport departments. These options are known as the "long list". The long list options were developed taking into consideration the outcomes of the site visit, gap analysis, constraints and opportunities mapping, future land use planning, discussions around user group and in consultation with TMR and Scenic Rim Council representatives.

Stage-ability was a key project objective, as such the Project corridor was split into three (3) distinct zones (sections) that would align with construction staging, including:

1. North section
2. Central section
3. East section

Various options were developed for each section as shown below.

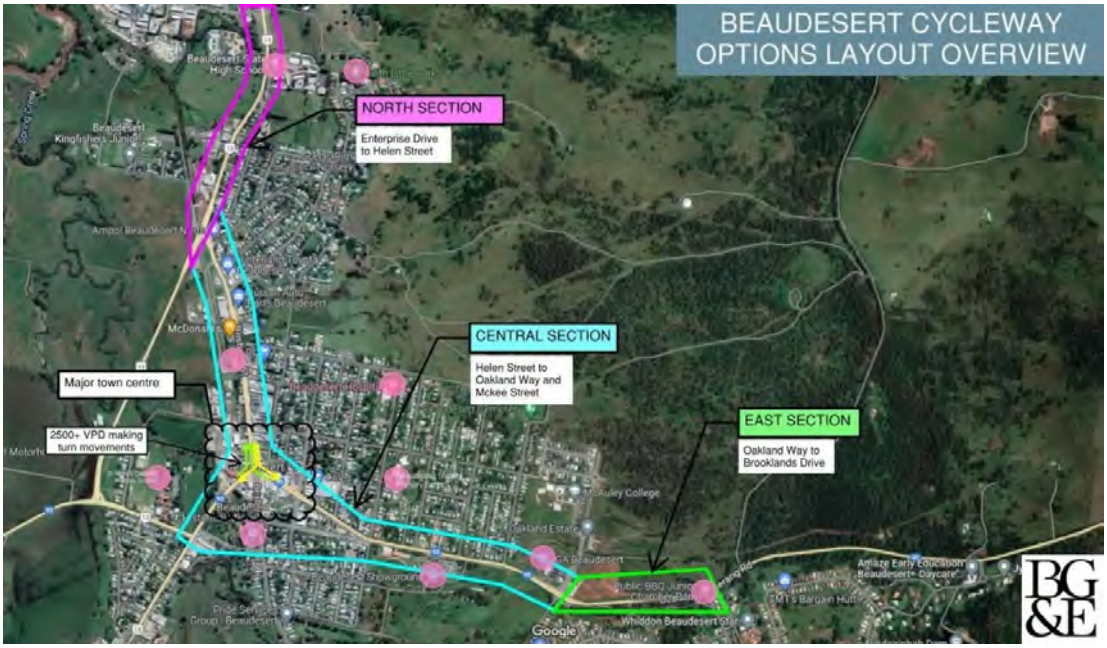


Figure 25: Options Layout Overview

9.2.1 North Section

The long list of options for the north section are listed below and depicted in Figure 26. Options for the north section include:

- Option N1 – Off Road Shared used path within the western verge
- Option N2 – Off Road Shared used path within the eastern verge
- Option N3 – On Road with separation device (Northbound & Southbound)
- Option N4 – Off Road Shared used path using rail track.

Figure 26: Long List Options – North Section

9.2.2 Central Section

The long list of options for the central section are listed below and depicted in Figure 27, including:

- Option C1 – Off Road (Helen Street)
- Option C2 – Off Road Verge (East & West)
- Option C3 – On Road with separation device (Northbound & Southbound)
- Option C4 – Off-Road Beaudesert Bypass
- Option C4(a) – Off-Road Beaudesert Bypass (Alternate #1)
- Option C4(b) – Off-Road Beaudesert Bypass (Alternate #2 McKee Street)
- Option C5 – Albert Street Connection
- Option C6 – Tubber Street Bypass
- Option C6(a) – Tubber Street Bypass (Alternate #1 Boundary Street)
- Option C6(b) – Tubber Street Bypass (Alternate #2 Tina Street)
- Option C7 – Tubber Street Bypass (Alternate #3 Anna Street) – NOT SHOWN on map

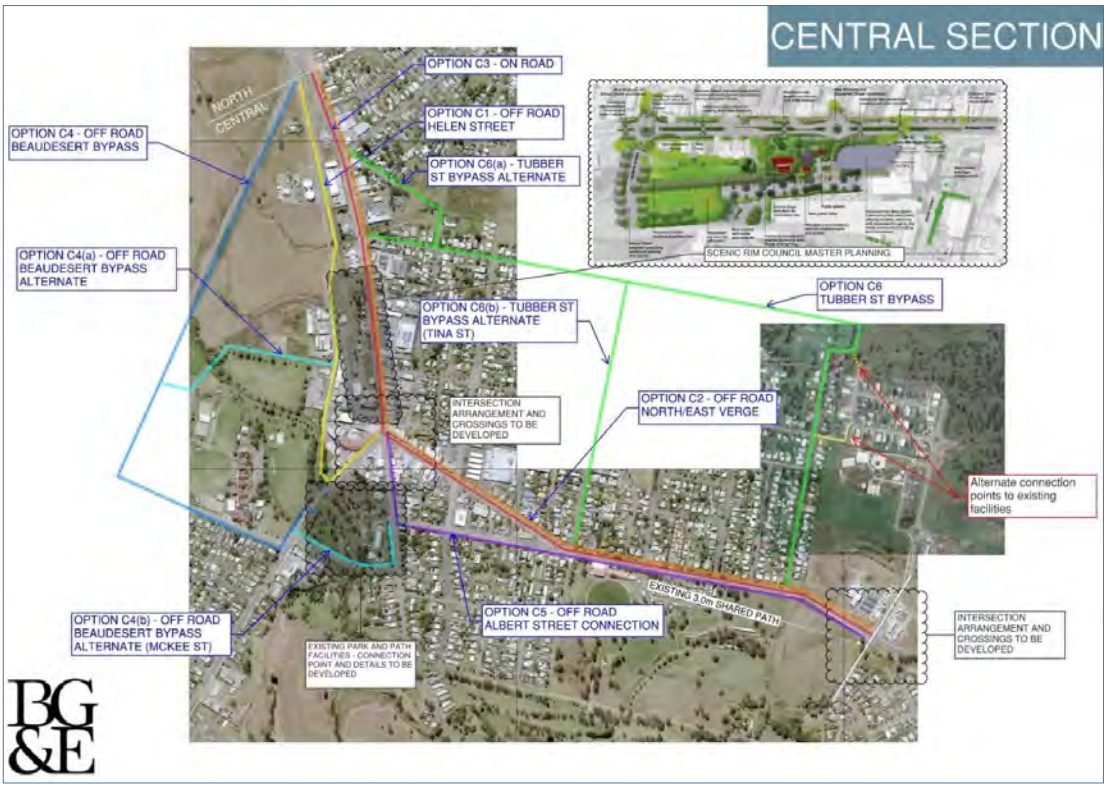


Figure 27: Long List Options – Central Section

9.2.3 East Section

The long list of options for the east section are listed below and depicted in Figure 28, including:

- Option E1 – Use Existing 3.0 m Shared Path
- Option E2 – Off-Road North/East Verge
- Option E3 – On Road with separation device (Northbound & Southbound)

Figure 28: Long List Options – East Section

Several alternative options were considered as part of the process that did not make it to the long list, these options were considered non-viable due to one or more of the following reasons:

- Excessive grades,
- Distance from attractor/generators,
- Not meeting project specified requirements or criteria,
- Impact to traffic performance,
- Similarity to other options,
- Safety,
- Cost.

10. Strengths, Weaknesses, Opportunities & Threats

10.1 SWOT Workshop

A Strengths, Weaknesses, Opportunities & Threats (SWOT) workshop was held on 18th April 2023 (both in person at TMR offices and virtually via Teams) to discuss the merits of each option and select a short-list of options to be carried forward into options refinement and Multi-Criteria Assessment (MCA) to determine the preferred option.

Attendees of the workshop included:

Table 11: SWOT Workshop Attendees

Attendee	Role
John McCormack	TMR Project Director
Robert Mitchell	TMR Project Manager
Brett Eddie	TMR ATIP Technical Advisor (Cycling and Walking)
Chean-Piau Lau	SRRC
Glenn Maxwell	BG&E Project Director
An Boc	BG&E Project Manager
Mardi Blanch	BG&E Planning Specialist
Jeremy Duxfield	BG&E Senior Civil Designer
Matt Downing	BG&E Civil Engineer
Laura Miranda	Civil Designer

Apologies: Stefan Limberger (TMR), Rachel Smith (ATIP)

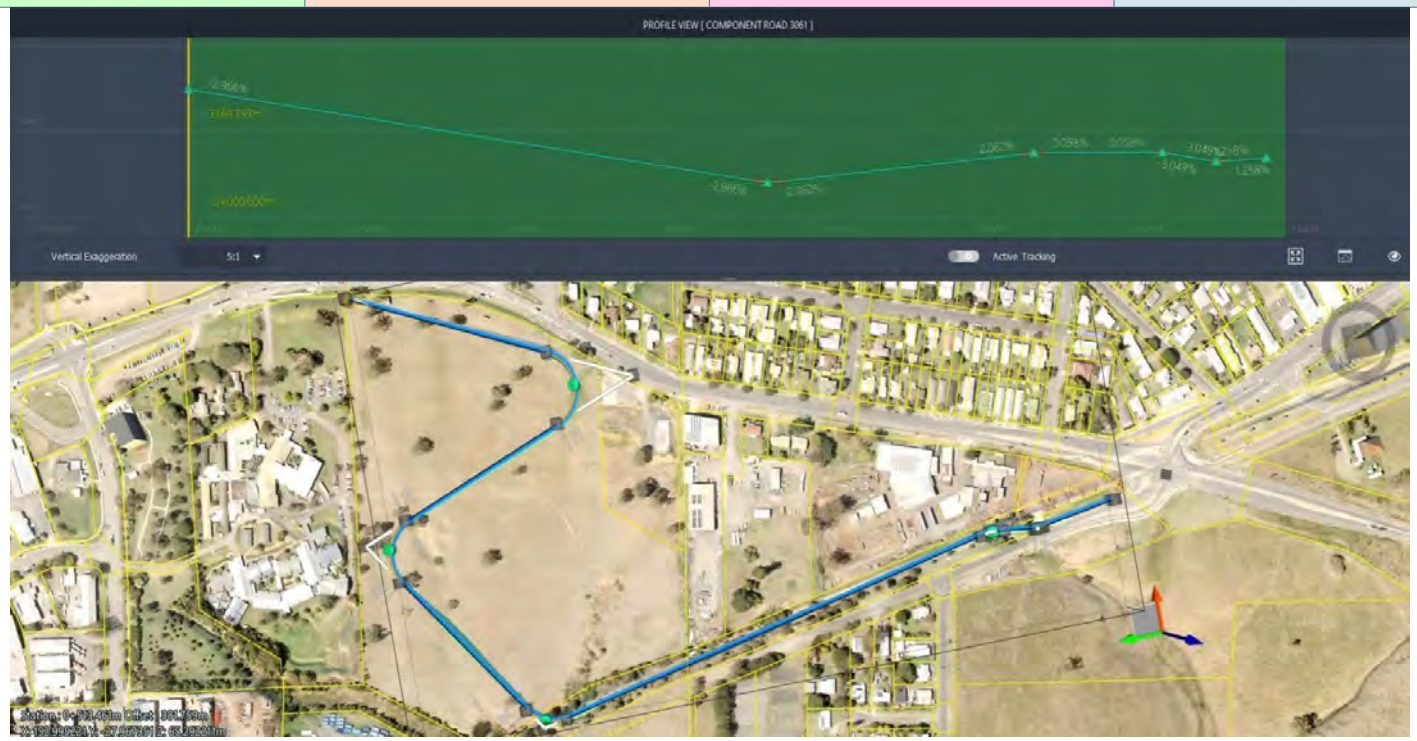
The workshop attendees assessed the Strengths, Weaknesses, Opportunities, & Threats for each option, as detailed in the following pages.

North Section – Option N1 (Western Verge)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Wider available verge width (6.5m) than eastern side (4.0m). Conflicts with existing school traffic, residential driveways and side streets is removed. Grades <3% Legible – north to south alignment Connects with existing bus stop facilities. Portions of existing 3m paths already in place. Provides connection for Wongaburra Gardens nursing home	Opposite side to the school and major residential catchment	Existing signalised at grade crossing at the school already in place and could be used to tie the east and western verges together. Building a western verge option and maintaining the existing pedestrian path of the eastern verge gives a connected facility on both sides.	Overhead powerlines located in the verge. DBYD indicates Water, Telstra, within verge. If alignment is on the eastern side through central section than option is less direct than eastern verge as requires crossings of Brisbane Street at Enterprise Dr and Helen Street

North Section – Option N2 (Eastern Verge)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Connectivity and accessibility are strong as option is located on same side as the school and the high-density residential area. Connects with the existing 3m shared path facilities at Enterprise Drive heading north creating a direct route without the need to cross.	Interaction with school entry and exit points- increased risk to cyclists/peds. May require resumptions of property frontages. Requires the crossing of two existing side roads (Turbot St and Mill St) Interaction with 43 residential driveways. Available verge width is less (4.0m than western side (6.5m) existing kerb and footpath likely to be replaced	Integrate with the existing constructed path around the school, including ramped crossing. Raised priority crossings at side streets.	Overhead powerlines located in the verge. DBYD indicates Water, Telstra, within verge. School as a stakeholder If alignment is on the western side or rail track through central section than option is less direct than western verge as requires crossings of Brisbane Street at Enterprise Dr and Helen Street.

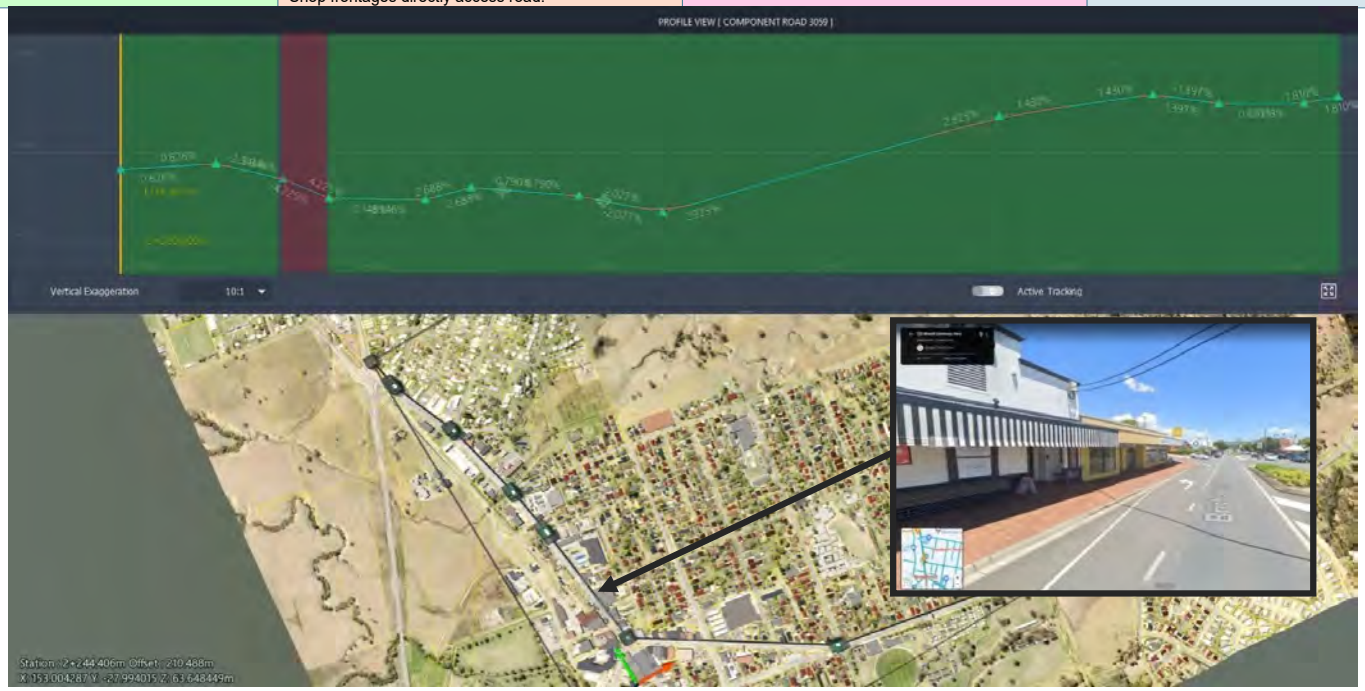
North Section – Option N3 (On Road with Separation)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Direct	Greater interaction with traffic at the schools and side streets, driveways Requires the road to be re-line marked. Widening of the road in some areas to accommodate the on-road facilities Likely need to replace kerb and drainage pits in some areas. May been seen as suitable for highly competent riders only. Especially being a Heavy vehicle route. Drainage and wheelie bins to be accounted for. On road carparking is removed. Utilities clash, pits in shoulder and lids to be modified. Pavement widening required along with the removal of any infrastructure included existing ITS and signals located within the cross section.	Connects with existing on road facilities at intersections.	Acceptance from the community, may not be perceived as best for community as it favours experience cyclists only. Does not cater for all levels of user. If road requires to be upgraded in the future, then work is possibly redundant. Existing Bus stop interaction and how cyclists are prioritised through the conflict zone. Construction under traffic – Traffic management.

North Section – Option N4 (Rail Corridor)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Within the existing rail corridor that has previously been identified as a possible location for the PCN. Council expressed desire to use this in their internal planning scheme. Avoids overhead powerlines, no interaction with the driveways and street crossings. Simple offline construction	Less direct than in corridor options Goes away from the school and residential areas so less connected. Due to the steeper terrain, a longer path is required to obtain <3% grades. Less legible than in corridor options Crossing of Helen Street/Brisbane Street required	Path could be wider as there is more available space. Open space could be re-purposed as a shared space with skate park/playground or other facilities (SRRC) Rail trail to Jimboomba, opportunity to promote region. Length could be shorter if grade relief options are used.	Might not be a favourable route as options that are within the road corridor. CPTED issues within the rail corridor Close to mapped Koala Habitat, clearing permits likely required Existing culvert/bridge maybe required to be removed (Stormwater assessment being undertaken)



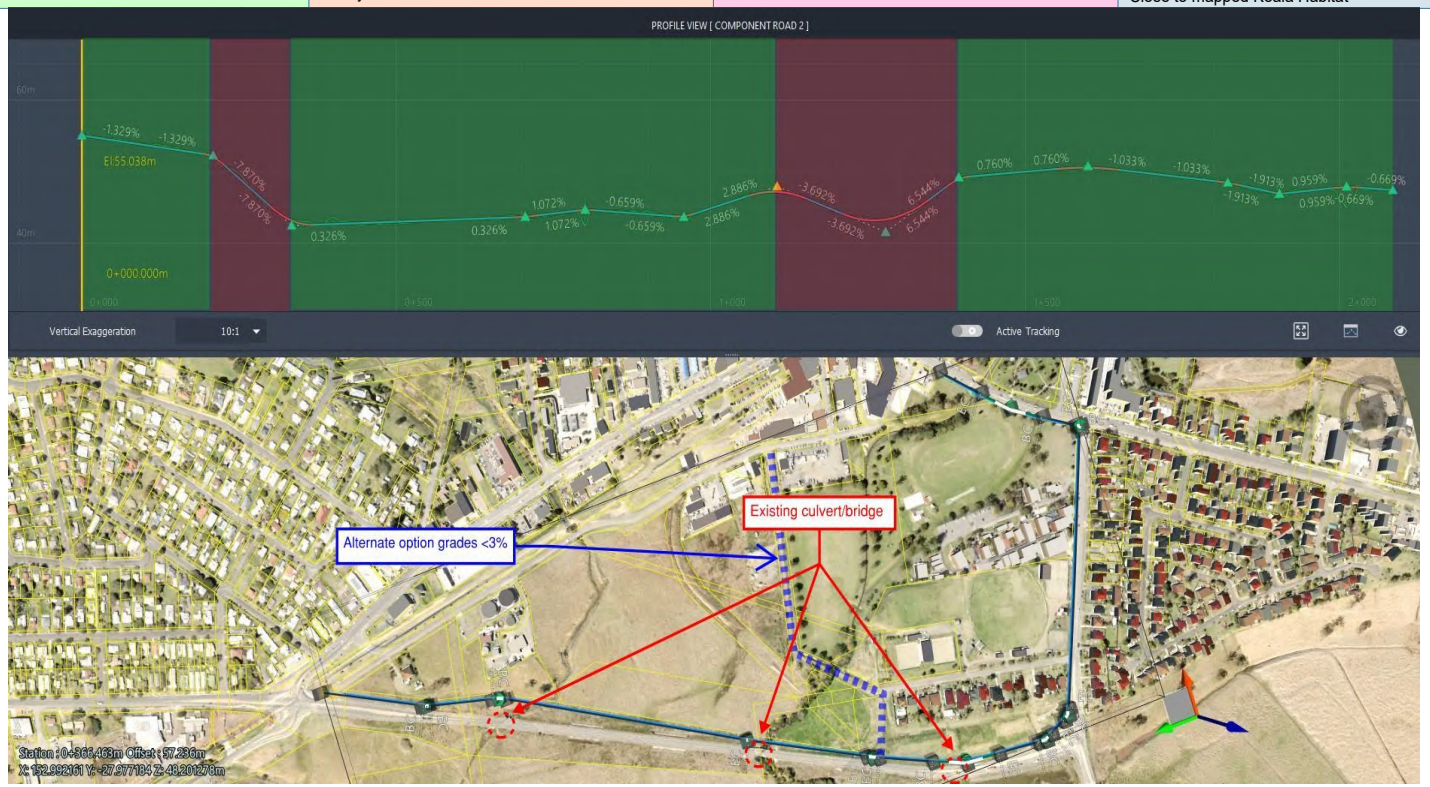
Central Section – Option C1 (Helen Street)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Grades <3% Still direct but avoids the busiest section of the link along Brisbane Road Less traffic on Helen St so could be more desirable for all users and attractive to less experienced users. Within the existing rail corridor that has previously been identified as a possible location for the PCN. Council expressed desire to use this in their internal planning scheme. Simple offline construction, stageable	Less direct than the Brisbane Street corridor but still legible and coherent, would make sense to use this link and is likely already being used. Some interaction with current Industrial area, may be conflict with loading/unloading zones.	Connect in with the Scenic Rim Council future town planning. Access to main town centre is not severed by connection to Brisbane St. Avoids flood zone. Connects with the Jubilee Park facilities along Telemon Street at central connection. Use of the existing facilities to be explored as an option. Connecting to the future SRRC planning for the sporting fields and college. Current movements show school children accessing the sports fields to the south	CPTED Scenic Rim Council future town planning and the ultimate Rail line and rail station being located in this area. (SRRC comment)

Central Section – Option C2 (Eastern Verge & Western Verge) -			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Majority of grades <3% Direct and legible as withing corridor Connectivity	Interaction with the busiest section of the link, driveways, business accesses, PUP in the verge and impacts to the on-street parking. East – interaction with 15 side streets. West - interaction with 10 side streets. Western verge - Volume of turning traffic at the intersection of Brisbane St / Telemon St in the heart of the CBD - introducing a cyclist leg or phase, impacting on the overall intersection performance. Disruption to businesses during construction Shop frontages directly access road.	Connect with the Scenic Rim Council future town planning. Raised priority crossings at side streets. Bike parking and end of trip facilities	Busiest section of the link with multiple businesses, petrol; stations and loading and unloading zones, on street parking making this a high-risk area and likely to be avoided by less experienced riders. Interaction with Scenic Rim town planning may result in delays, approvals and hold ups during design and construction. DBYD identifies overhead powerlines and multiple PUP assets located within this section on both sides of the road.

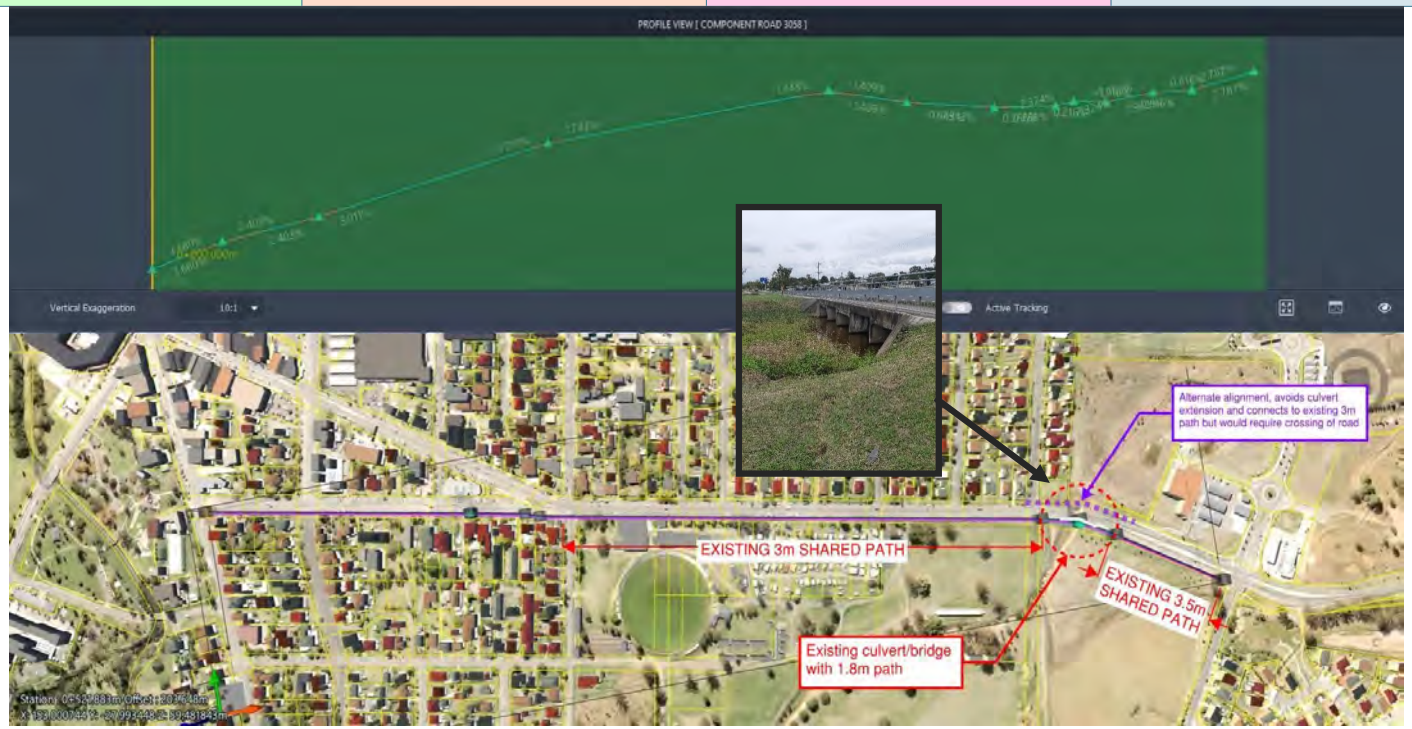


CENTRAL SECTION – OPTION C3 (On Road with Separation)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Majority of grades <3% Direct and legible	Interaction with the busiest section of the link, driveways, business accesses, PUP in the verge and impacts to the on-street parking. Requires on street parking to be removed or redistributed. Risk with community and business Volume of turning traffic at the intersection of Brisbane St / Telemon St in the heart of the CBD – there are over 2500 turn movements per day on several of the legs that would be impacted by introducing a cyclist leg or phase, impacting on the overall intersection performance. 25 side streets required to be crossed. Consistency with works by council Interaction of parked cars, business loading zones, pedestrians and vehicles makes, high risk to users	Connect with existing on road facilities	Busiest section of the link with multiple businesses, petrol; stations and loading and unloading zones, on street parking making this a high-risk area and likely to be avoided by less experienced riders. Interaction with Scenic Rim town planning may result in delays, approvals and hold ups during design and construction. Does not cater for all levels of user. Does not future proof for growth,

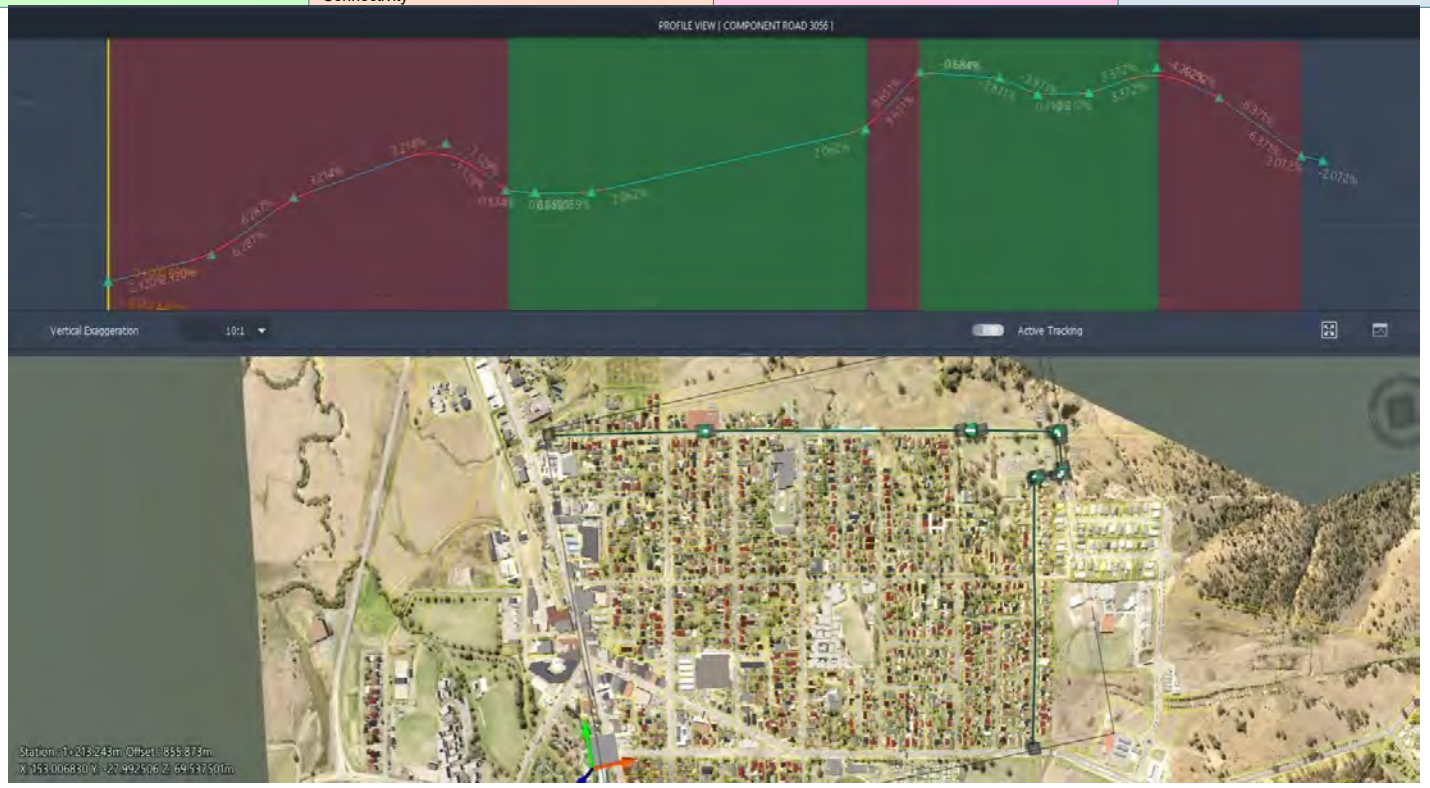
Central Section – Option C4 (Beaudesert St Bypass)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Avoids the busiest section of the link, driveways, business accesses, PUP and impacts to the on-street parking. As well as the existing intersection.	Less direct, and coherent, likely not desire line. Grades >6% in sections Existing culverts and bridges throughout this area that the path would have to interact with, likely there could be some new structures or modifications to existing structures. Heavy vehicle route	Path could be wider as there is more available space. Alternate route along Hopkins/Hereford Street has more favourable grades <3% and is more direct. Connect with the existing Jubilee Park facilities	Away from the original PCN desire lines CPTED Heavy vehicles frequent this route may not be preferable for all riders. Longer so users may choose alternative routes. Through “high” flood hazard area Close to mapped Koala Habitat



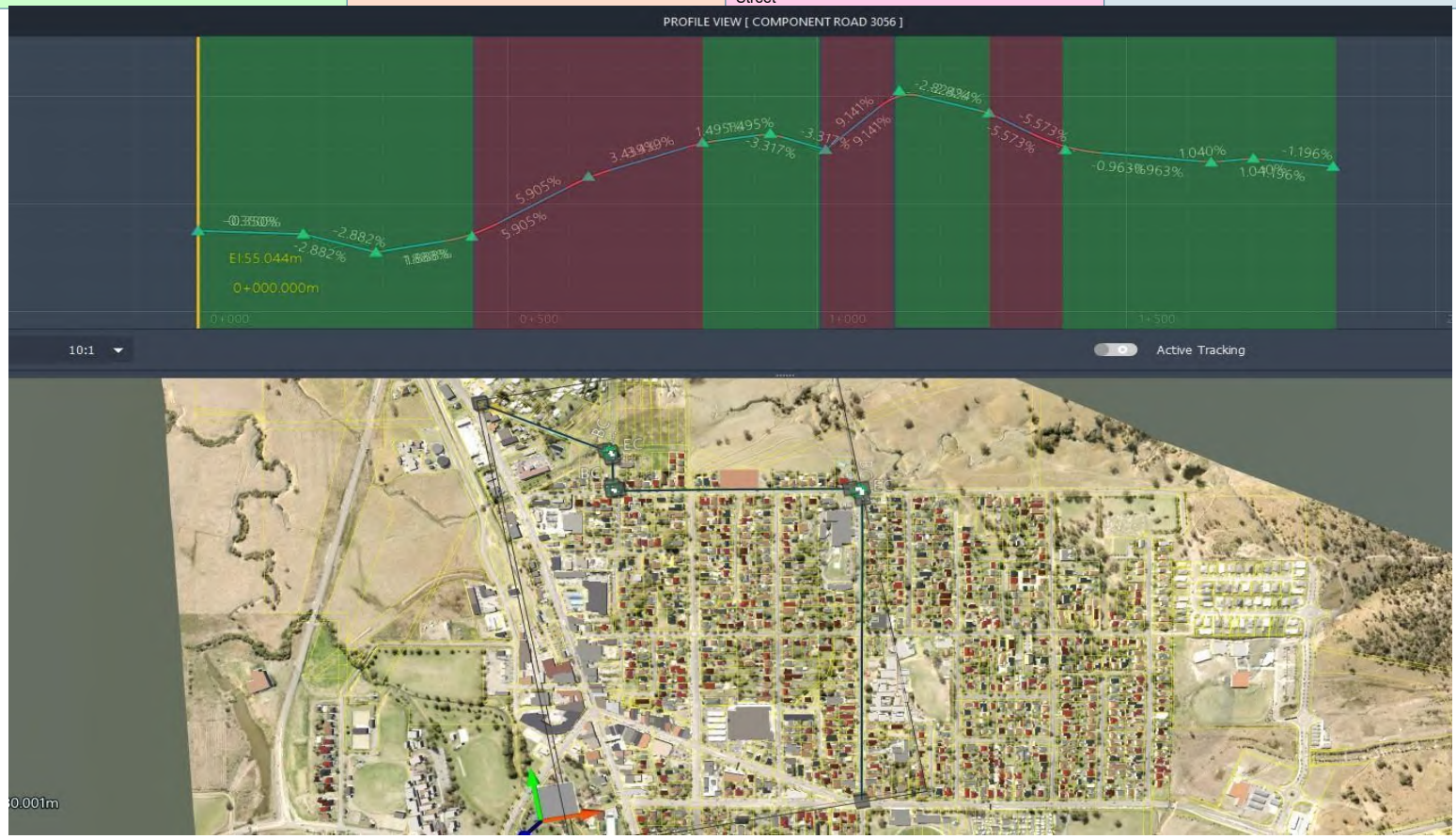
Central Section – Option C5 (Albert St) +			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Grades <3% Avoids busy part of the link and the need to remove on-street parking but remains direct by removing crossing points at busiest intersection. Less traffic use Albert St so could be more desirable for all users and attractive. Connectivity is improved over on road and eastern verge options. Over half of the link is already constructed with >3.0m paths	Interaction with resident driveways along Albert Street, could be avoided depending on path placement.	Existing Albert St corridor is wide enough to be able to construct a shared path and maintain lanes and shoulder. Connect with the Jubilee Park facilities. If on the northern verge will cross a side street and require raised priority crossing	Culvert crossing at Oakland Drive



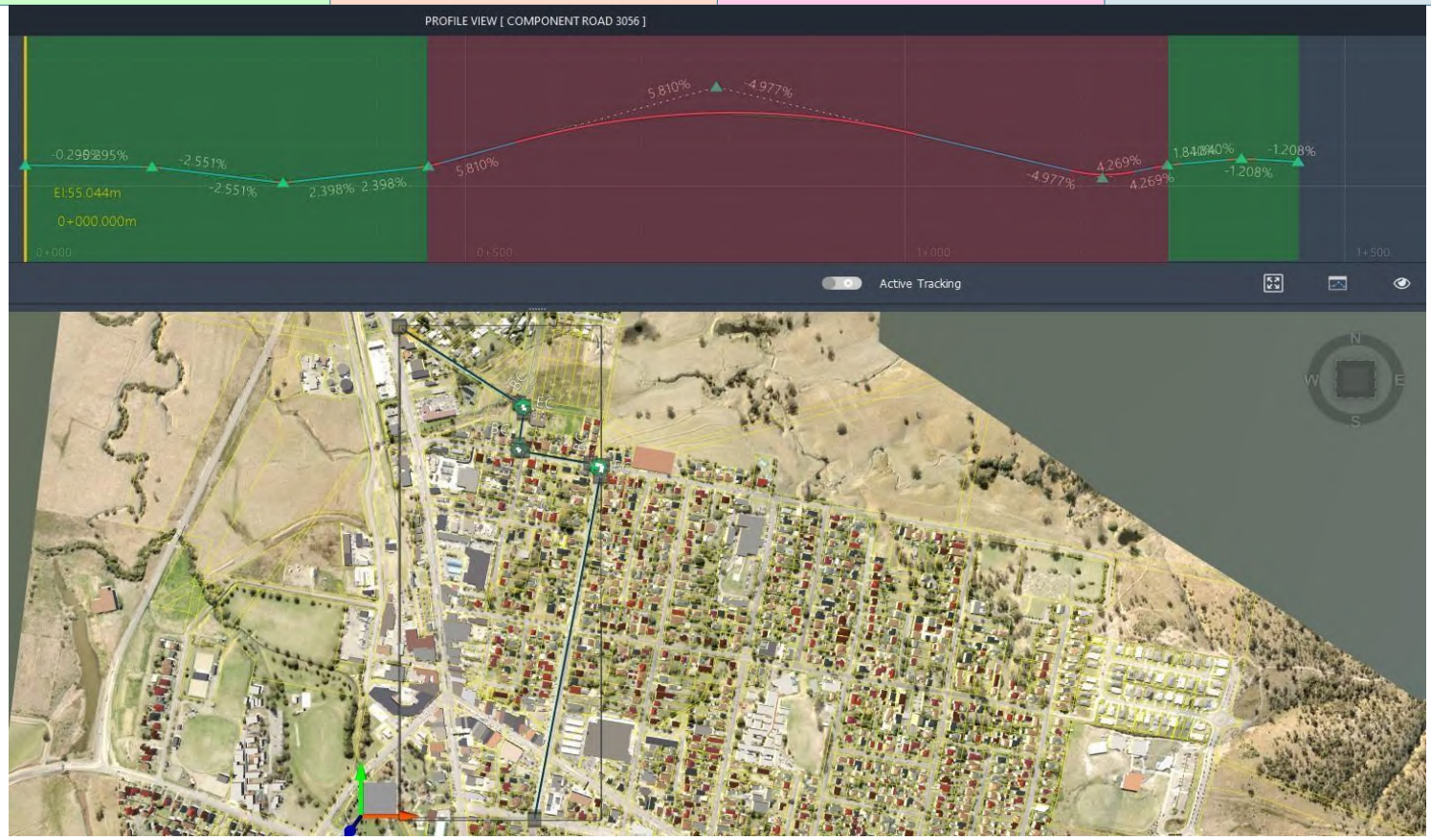
Central Section – Option C6 (Tubber St) -			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Avoids busy part of the link and the need to remove on-street parking and removing crossing points at busiest intersection.	Grades >7% in some areas Less direct and bypasses the CBD and major attractor/generators. Overhead powerlines located in the verge. May not be desirable as its away from main attractors. Connectivity	Create a separated facility that caters for all users due to available width	Away from the original PCN desire line CPTED Longer route and less direct so users may choose alternative routes



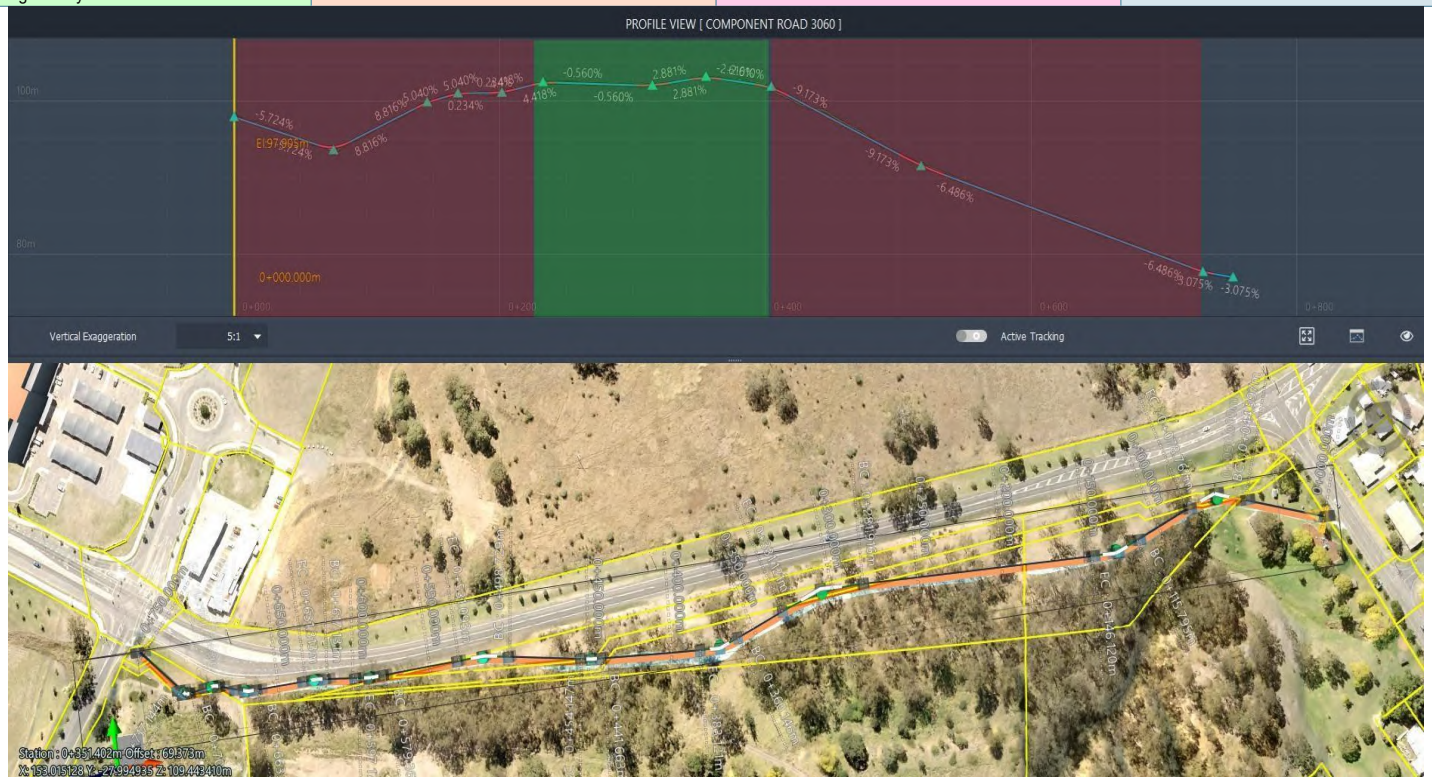
Central Section – Option C6a (Tina St) -			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Same as above	Same as above	Connects to the existing hospital and school along Tina Street	Same as above



Central Section – Option C6b (Anna St) -			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Same as above More direct than C6 and C6a	Same as above Removal of on-street parking required.	Connects to the existing intersection at Beaudesert-Nerang Road	Same as above



East Section – Option E1 (Existing Path)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
3.0m path recently constructed. Connects with the existing Junior Chamber Park facilities. Direct, legible, Connects to the existing intersection and shopping facilities, Existing lighting already installed	Grades >8% in some sections	Rest point Investigate if path is considered suitable for PCN approval	



East Section – Option E2 (Verge)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Direct and coherent Connectivity is good as it's on the same side as the shopping centre and existing path facilities at Oakland Drive	Grades >7% for half of the route Does not improve on the grades when compared to the existing path.	Makes provision for future connections to the east and any development that may happen on Oakland Drive. This may be a section that gets built by the developer, SRRC to investigate more.	Environmental concerns of the existing trees in the verge.

EAST SECTION – OPTION E3 (On Road with Separation)			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
Direct and coherent Connects with existing on road facilities at Oakland Way intersection.	Grades >7% for half of the route Requires the intersection to be modified to fit on road cycle lanes. Requires widening to both sides & adjusting the road crown. If on southbound carriageway option is not connected to existing park facilities.	Bi-directional facility to limit widening to one side and avoid intersection works	Does not cater for all levels of user. If road is upgraded/duplicated, then works could be redundant.

10.2 Key SWOT Workshop Outcomes

The SWOT workshop resulted in the following options to be taken forward for refinement and comparison through an MCA process.

North Section:

- Option N1 – Off-Road Western Verge
- Option N2 – Off-Road Eastern Verge
- Option N3 – On-Road with separation
- Option N4 – Off-Road Old Rail Track

Central Section:

- Option C1 – Off-Road Helen Street
- Option C3 – On-Road with separation
- Option C5 – Off-Road Albert Street Connection

East Section:

- Option E1 – Use Existing 3.0 m Shared Path
- Option E2 – Off-Road North/East Verge
- Option E3 – On-Road with separation

11. Shortlisted Options Refinement

Following the outcomes of the SWOT, the shortlisted options for each section were renamed as described below.

11.1 Modifications to Short-listed Options

11.1.1 On Road Sub-Options

Option N3, C3, and E3 (the on-road options for each section) were split into three to differentiate between the following:

- On-road with separation (both sides)
- On-road bi-directional with separation (northbound)
- On-road bi-directional with separation (southbound)

11.1.2 North Section – Options Naming Convention

The North Section options were renamed as follows:

- Option N1 – On-Road Cycle Lane with Separation Device (Both Sides)
- Option N2 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound)
- Option N3 – On-Road Bi-Directional Cycle Lane with Separation Device (Southbound)
- Option N4 – Off-Road Shared-Use Path within the Western Verge
- Option N5 – Off-Road Shared-Use Path within the Eastern Verge
- Option N6 – Off-Road Shared-Use Path Using the Old Rail Track

11.1.3 Central Section – Options Naming Convention

The Central Section options were renamed as follows:

- Option C1 – On-Road Cycle Lane with Separation Device (Both Sides)
- Option C2 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound)
- Option C3 – On-Road Bi-Directional Cycle Lane with Separation Device (Southbound)
- Option C4 – Shared-Use Path Using Helen Street and On-Road Albert Street
- Option C5 – Shared-Use Path Using Helen Street and Off-Road Albert Street within the Verge

11.1.4 East Section – Options Naming Convention

The East Section options were renamed as follows:

- Option E1 – On-Road Cycle Lane with Separation Device (Both Sides)
- Option E2 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound)
- Option E3 – On-Road Bi-Directional Cycle Lane with Separation Device (Southbound)
- Option E4 – Existing Off-Road

11.2 Shortlisted Options – Cross Sections and Alignments

The short-listed options were refined taking into consideration:

- Anticipated users
- Geometry and design standards
- PUP conflicts
- Constructability
- Minimising property impacts
- Minimising impact to property access
- Minimising grades (where applicable)
- Current Brisbane Road revitalisation works.

The refined short-listed options with proposed cross-sections are shown overleaf.

Table 12: Layout and Cross-Section - Option N1

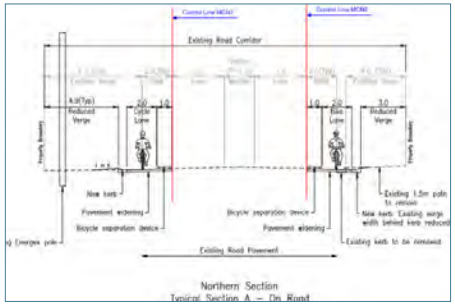
Option N1 – On-Road Cycle Lane with Separation Device (Both Sides)	
Layout	**Cross-Section**
	

Table 13: Layout and Cross-Section - Option N2 and N3

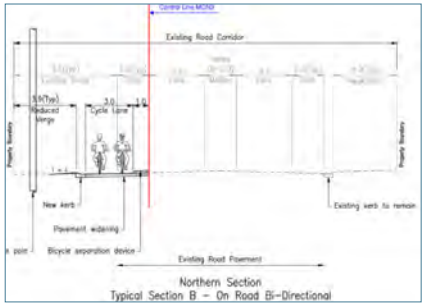
Option N2 and N3 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound)	
Layout	**Cross-Section**
	

Table 14: Layout and Cross-Section - Option N4

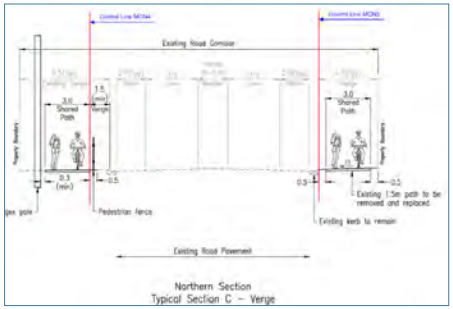
Option N4 – Off-Road Shared-Use Path within the Western Verge	
Layout	**Cross-Section**
	

Table 15: Layout and Cross-Section - Option N5

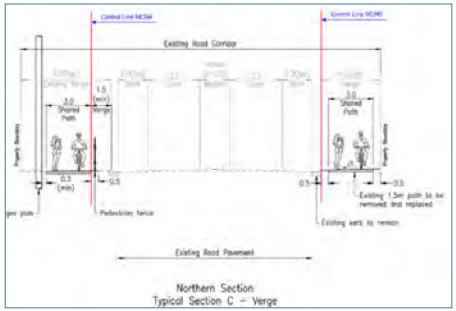
Option N5 – Off-Road Shared-Use Path within the Eastern Verge	
Layout	**Cross-Section**
	

Table 16: Layout and Cross-Section - Option N6

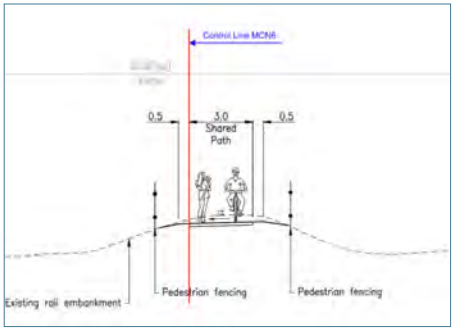
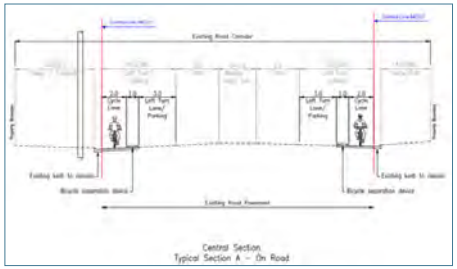
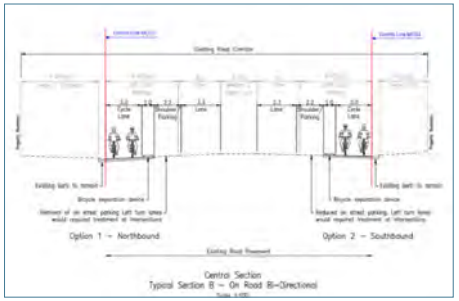
Off-Road Shared-Use Path Using the Old Rail Track	
Layout	Cross-Section
	

Table 17: Layout and Cross-Section - Option C1

Option C1 – On-Road Cycle Lane with Separation Device (Both Sides)	
Layout	Cross-Section
	

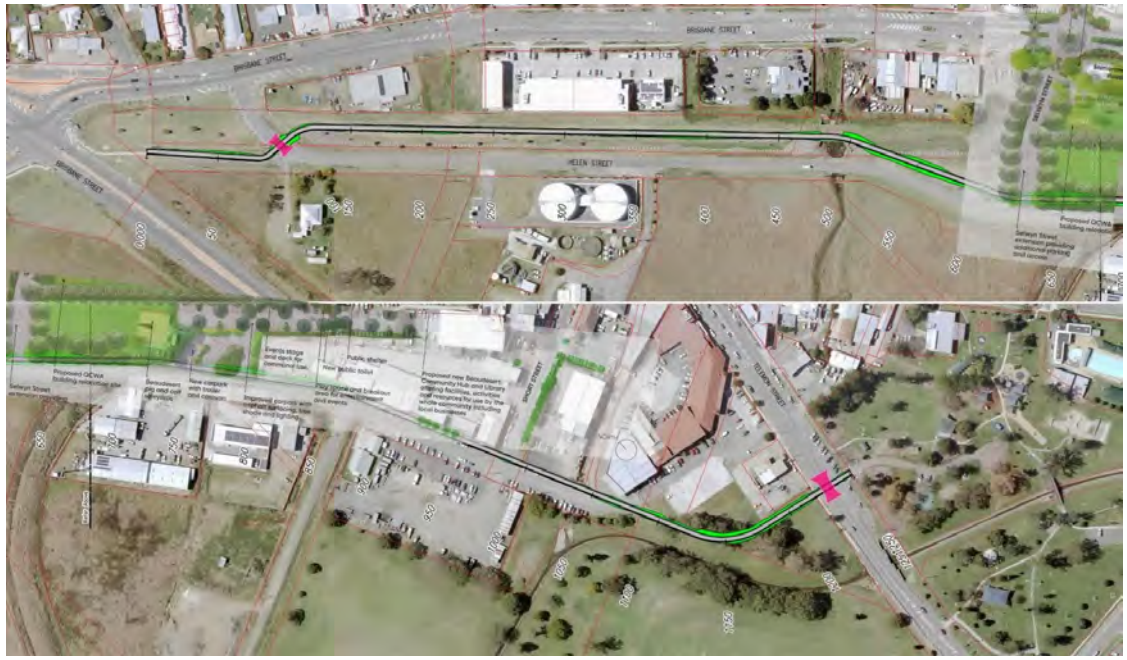
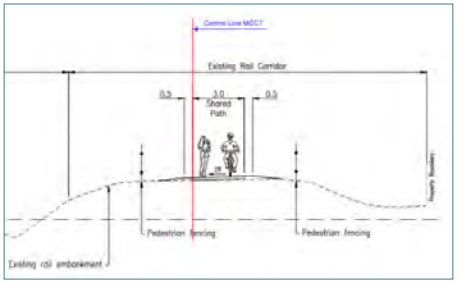
Option C1 – On-Road Cycle Lane with Separation Device (Both Sides)

Table 18: Layout and Cross-Section - Option C2 and C3

Option C2 & C3 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound & Southbound)	
Layout	Cross-Section
	

Option C2 & C3 – On-Road Bi-Directional Cycle Lane with Separation Device (Northbound & Southbound)

Table 19: Layout and Cross-Section - Option C4

Option C4 – Shared-Use Path Using Helen Street and On-Road Albert Street	
Layout	Cross-Section
	

Option C4 – Shared-Use Path Using Helen Street and On-Road Albert Street

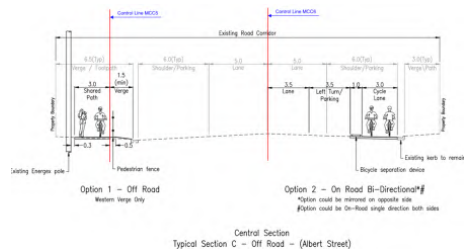
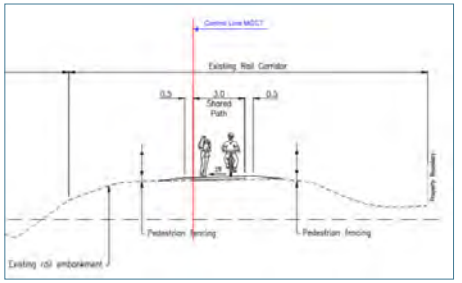


Table 20: Layout and Cross-Section - Option C5

Option C5 – Shared-Use Path Using Helen Street and On-Road Albert Street within verge	
Layout	Cross-Section
	

Option C5 – Shared-Use Path Using Helen Street and On-Road Albert Street within verge

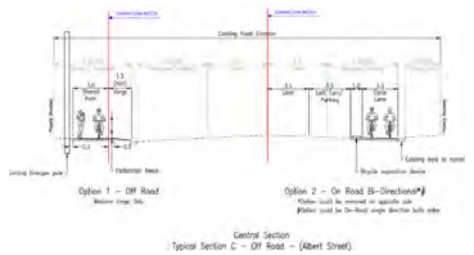


Table 21: Layout and Cross-Section - Option E1

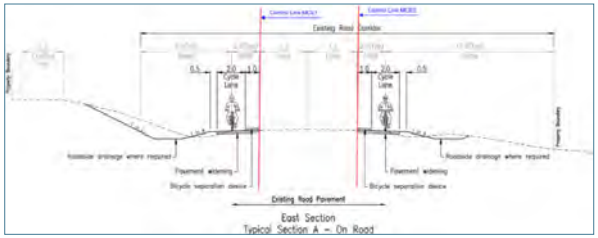
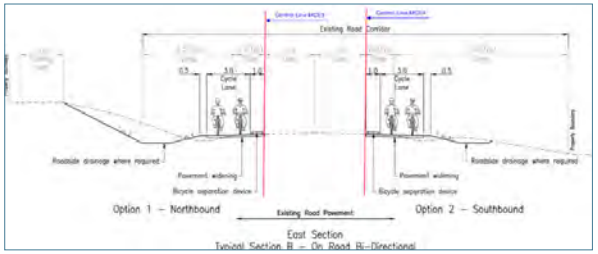
Option E1 – On-Road Cycle Lane with Separation Device (Both Sides)	
Layout	Cross-Section
	

Table 22: Layout and Cross-Section - Option E2

Option E2 – Separated On Road Bi-directional (Northbound & Southbound)	
Layout	Cross-Section
	

11.3 Comparative Cost Considerations

To differentiate the potential cost impacts of each shortlisted option, a strategic comparison was made to establish key scheduled quantities. The measurable 'high cost items' were quantified for each option using the Infraworks digital engineering tool, as shown in the table overleaf.

The table also shows other quantifiable differences between each option.

11.4 Options Comparison Table

AREA	OPTION	DESCRIPTION	RESUMPTIONS (m2)	STRUCTURES (Culverts / Ret Walls) (m)	PUP	FOOTPATH (m2)	ROAD PAVEMENT (m2)	EARTHWORKS (Cut/Fill) (m3)	CAR PARKS AFFECTED (Approx.)	BUSINESSES IMPACTED (Access)	DRIVEWAY INTERACTION (Safety)	LEVEL OF TRAFFIC STRESS (LTS) ATIP Technical Requirements Figure 1	Max Grade & Length of Grade	Number of signalised crossings (directness)	Traffic Management Required?
CENTRAL															
CENTRAL	BASE CASE	On Road Painted Cycle Way	Nil	130m - Extension of bridge culvert at eastern end. Includes road widening, relocation of pedestrian path and installing new barrier	* No impacts indentified at this stage	Nil	45m2 * widening required to accommodate on roads	Nil	300	Nil	Nil	4	all grades <3%	1 1	Y
CENTRAL	C1	On Road Cycle lane with separation device (Both Sides)	Nil	130m - Extension of bridge culvert at eastern end. Includes road widening, relocation of pedestrian path and installing new barrier	* No impacts indentified at this stage	5060	Nil	Cut - 170m3 Fill - 490m3	300	40	62	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	8	Y
CENTRAL	C2	On Road Bi-directional Cycle lane with separation device (Northbound)	Nil	130m - Extension of bridge culvert at eastern end. Includes road widening, relocation of pedestrian path and installing new barrier	* No impacts indentified at this stage	4335	Nil	Cut - 170m3 Fill - 490m3	186	20	27	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	5	Y
CENTRAL	C3	On Road Bi-directional Cycle lane with separation device (Southbound)	Nil	130m - Extension of bridge culvert at eastern end. Includes road widening, relocation of pedestrian path and installing new barrier	* No impacts indentified at this stage	4335	Nil	Cut - 190m3 Fill - 510m3	97	20	35	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	3	Y
CENTRAL	C4	Shared used path using Helen Street and Albert Street (on road)	Nil	100m2 - New pedestrian bridge if existing 1.8m path is not suitable	* No impacts indentified at this stage	3000	Nil	Cut - 440m3 Fill - 1145m3	20	Nil	15	1	all grades <3%	2	Y
CENTRAL	C5	As per stage C4 with Off Road Albert Street (verge)	Nil	100m2 - New pedestrian bridge if existing 1.8m path is not suitable	* Relocation of 5No. Energex poles.	3000	Nil	Cut - 400m3 Fill - 1455m3	20	Nil	15	1	all grades <3%	2	Y * Pedestrians
NORTH															
NORTH	BASE CASE	On Road Painted Cycle Way	Nil	Nil	* Relocation of 2No. Energex poles. * Reconfiguration of Brisbane/Helen St signals * Relocation of pedestrian signals and pram ramps outside of school	Nil	774m2 * widening required to accommodate on roads	Nil	200	1	Nil	4	all grades <3%	2	Y
NORTH	N1	On Road Cycle lane with separation device (Both Sides)	354m2	Nil	* Relocation of 4No. Energex poles. * Reconfiguration of Brisbane/Helen St signals * Relocation of pedestrian signals and pram ramps outside of school * Northbound side impacts existing fire hydrants and building over watermains	4340	800m2 * Brisbane/Helen Street intersection	Cut - 340m3 Fill - 1400m3	200	7	44	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	2	Y
NORTH	N2	On Road Bi-directional Cycle lane with separation device (Northbound)	354m2	Nil	* Relocation of 5No. Energex poles. * Reconfiguration of Brisbane/Helen St signals * Relocation of pedestrian signals and pram ramps outside of school * Northbound side impacts existing fire hydrants and building over watermains	3270	Nil	Cut - 75m3 Fill - 1280m3	30	6	4	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	2	Y
NORTH	N3	On Road Bi-directional Cycle lane with separation device (Southbound)	Nil	Nil	* Relocation of 2No. Energex poles. * Reconfiguration of Brisbane/Helen St signals * Relocation of pedestrian signals and pram ramps outside of school * Extension of 2No. Culvert	3240	800m2 * Brisbane/Helen Street intersection	Cut - 280m3 Fill - 380m3	51	1	40	3 * While separated there is still interaction with Heavy Vehicles. Multiple conflict points with driveway crossings and side streets (on both sides)	all grades <3%	2	Y
NORTH	N4	Off Road Shared used path within the western verge	354m2	Nil	* Relocation of 5No. Energex poles. * Relocation of pedestrian signals and pram ramps outside of school * Extension of 1No. Culvert	3225	Nil	Cut - 120m3 Fill - 1080m3	30	4	4	1	all grades <3%	1	N
NORTH	N5	Off Road Shared used path within the eastern verge	1000m2	Nil	* Relocation of 10No. Energex poles. * Extension of 2No. Culvert * Impacts to underground Water/Telstra/Elec	2490	Nil	Cut - 330m3 Fill - 195m3	51	1	40	1	all grades <3%	Nil	Y * Pedestrians
NORTH	N6	Off Road Shared used path using rail track	7100m2	Nil	* Relocation of 2No. Energex poles. * Relocation of pedestrian signals and pram ramps outside of school	4350	Nil	Cut - 1373m3 Fill - 735m3	Nil	1	2	1	4.5% 150m	1	N
EAST															
EAST	BASE CASE	On Road Painted Cycle Way	Nil	Nil	* Relocation of 2No. Energex poles. * Relocation of 5 lighting poles	Nil	2500m2 * widening required to accommodate on roads	Cut - 0m3 Fill - 940m3	Nil	Nil	Nil	4	6.5% 425m	2	Y
EAST	E1	On Road Cycle lane with separation device (Both Sides)	1280m2	Nil	* Relocation of 2No. Energex poles. * Relocation of 5 lighting poles	3600	Nil	Cut - 40m3 Fill - 1860m3	Nil	Nil	Nil	3 * While separated there is still interaction with Heavy Vehicles.	6.5% 425m	2	Y
EAST	E2	On Road Bi-directional Cycle lane with separation device (Northbound)	Nil	Nil	Nil	2400	Nil	Cut - 80m3 Fill - 720m3	Nil	Nil	Nil	3 * While separated there is still interaction with Heavy Vehicles.	6.5% 425m	2	Y
EAST	E3	On Road Bi-directional Cycle lane with separation device (Southbound)	1280m2	Nil	* Relocation of 2No. Energex poles. * Relocation of 5 lighting poles	2400	Nil	Cut - 20m3 Fill - 1140m3	Nil	Nil	Nil	3 * While separated there is still interaction with Heavy Vehicles.	6.5% 425m	2	Y
EAST	E4	Existing off-road	Nil	Nil	NIl	NIl	Nil	Nil	Nil	Nil	Nil	1	9.0% 70m	2	N

12. Multi-Criteria Analysis

An MCA workshop was undertaken on the shortlisted options. The purpose of the MCA workshop was to:

- Invite key stakeholders to participate in the assessment of options to ensure an inclusive approach; and
- Bring stakeholders together to identify the preferred cycleway option to be developed in the Business Case study.

12.1 MCA Methodology

The following methodology was applied for the MCA process:

1. TMR NOF (Network Optimisation Framework) MCA tool used as a base and guide
2. Refinement of criteria and initial scoring with TMR to establish a 'fit-for-purpose' assessment tool for this cycleway project, clearly based on State Government and TMR objectives
3. Draft material sent to participants for review prior to workshop
4. Conduct MCA Workshop with key stakeholders
5. Adjustment of MCA and sensitivity testing based on input and feedback in workshop from key stakeholders

The MCA was developed based on a modified version of TMR's MCA NOF (Network Optimisation Framework) tool catered for active transport. This required the inclusion of new criteria and the separation of cost as part of the assessment. Cost is not an impact, rather an affordability issue.

12.2 MCA Criteria and Weighting Development

The initial MCA criteria were developed on the 8th May 2023 in a meeting between TMR and BG&E. The criteria included the project specific objectives and drivers, strategic objectives, project differentiators and cost (magnitude only). The selected MCA criteria are outlined in Table 23 below.

Table 23: Initial MCA Criteria

Category	Criterion	Indicator
Economic Data	Implementation and Construction Costs*	Estimated cost of construction and procurement (outturn estimate)
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors, and generators)
	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	Number or density of instances requiring cycleway to give-way to road or driveway
Environmental Impact	Flora/ Fauna / Cultural Heritage	Impact on vegetation and / or sites of environmental importance or Cultural Heritage
Social Factors	Long-term impact on residents and businesses	Long-term impact to local land, property access, businesses, and kerbside (available) parking
Construction and Constructability	Constructability / Impacts of construction / TTM	Potential construction challenges including Traffic management) / Impact on property owners during construction
Traffic and Safety	Safety	Ability to incorporate positive impact on safety in regard to CPTED, number of heavy vehicle interactions, and driveway crossings
Future Planning	Compatibility with future land uses	Degree of alignment to future land uses and town planning objectives
	Strategic fit to planned infrastructure	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)
Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section
	Rideability - Grades	Grades, lengths >3% (DDA) and >5% (Rideability)
	Comfort - Stress Level	Stress level - LTS 1-4

Using the above approved criteria, a separate pairwise assessment was undertaken as per the NOF guidelines to develop the criteria weightings. The criteria pairwise process was undertaken during a meeting held with TMR on the 12th May 2023 which generated the following weighting matrix found in Table 24.

Table 24: Established Pairwise Weighting Matrix

	Implementation and Construction Costs* A	Network Connectivity (to existing catchments, attractors & generators) B	Safety C	Constructability / Impacts of construction / TTM D	Flora/ Fauna / Cultural Heritage E	Compatibility with future land uses F	Long-term impact on residents and businesses G	Accessibility - Shared Users and DDA compliance / opportunity H	Rideability - Grades I	Comfort - Stress Level J	Strategic fit to planned infrastructure K	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages L	WEIGHTING
Implementation and Construction Costs* A		B	C	A	A	F	G	A	I	J	A	L	6%
Network Connectivity (to existing catchments, attractors & generators) B			C	B	B	B	B	B	B	B	B	B	15%
Safety C				C	C	C	C	C	C	C	C	C	17%
Constructability / Impacts of construction / TTM D					E	D	G	H	I	J	D	L	3%
Flora/ Fauna / Cultural Heritage E						F	E	H	I	J	K	L	3%
Compatibility with future land uses F							G	H	I	J	F	L	5%
Long-term impact on residents and businesses G								G	I	J	G	L	8%
Accessibility - Shared Users and DDA compliance / opportunity H									I	J	H	L	6%
Rideability - Grades I										I	I	I	14%
Comfort - Stress Level J											J	J	12%
Strategic fit to planned infrastructure K												L	2%
Directness/ convenience/ travel time disruptions - Number of crossings / stoppages L													11%

12.3 Initial Scoring

Prior to the MCA workshop, the BG&E project team undertook a pre-population of the option scoring to provide an initial baseline for the MCA workshop. This initial scoring was developed based off the current project knowledge to establish a baseline for effective and efficient discussions to take place.

12.4 MCA Workshop

The MCA workshop was undertaken on 17th May 2023. Key stakeholders from TMR, ATIP, and SRRC were in attendance as shown in Table 25.

Table 25: MCA Workshop Attendees

Attendee	Role
John McCormack	TMR Project Director
Robert Mitchell	TMR Project Manager
Stefan Limberger	TMR Project Engineer
Brett Eddie	TMR ATIP Technical Advisor (Cycling and Walking)
Luchia Willows-Keetley	SRRC Strategic Planning
Rachel Smith	TMR ATIP (Cycling and walking)
Chean-Piau Lau	SRRC Engineer
Matthew Creedy	SRRC

Attendee	Role
Kathy Forrest	SRRC (Community Development)
Glenn Maxwell	BG&E Project Director
An Boc	BG&E Project Manager
Mardi Blanch	BG&E Planning Specialist
Jeremy Duxfield	BG&E Senior Civil Designer
Matt Downing	BG&E Civil Engineer
Laura Miranda	BG&E Civil Designer

The intent of the workshop was to open discussion and review and amend the initial MCA scoring developed by BG&E against the chosen criteria to ascertain the preferred option for further design development in future design stages.

During the workshop, attendees reviewed and commented on each of the criteria and scoring methodology, with the scoring shown overleaf. The results were robustly discussed and challenged within the workshop. At completion of the workshop concurrence or 'no objection' from all attendees was requested and received pending sensitivity analyses. Results of the MCA Workshop scoring are contained in Table 26, Table 27, and Table 28.

Table 26: MCA Workshop Scoring - North Section

Category	Criteria	Pairwise Comparison	Base Case	N1	N2	N3	N4	N5	N6	Comments
Economic Data	Implementation and Construction Costs*	6%	3	1	2	2	2	1	2	N1, N2, N3 all require the highest amount of TTM works being in corridor N4 impacts on (5) powerpoles and requires some resumptions and fill N5 requires removing and replacing existing footpath and relocation of (10) power poles along with water and Telstra below existing footpath N6 has largest earthorks costs but less of the TTM costs
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	15%	3	3	2	2	3	3	2	N2 and N3 are restructed by barrier reducing connectivity N6 is away from attractor/ generators
Traffic and Safety	Safety	17%	3	4	4	4	5	4	4	N4 has less driveway conflicts N6 has potential CPTED issues but minimal conflicts and is away from HVs
Construction and Constructability	Constructability / Impacts of construction / TTM	3%	3	3	3	2	4	1	5	BC, N1 and N2 - not enough shoulder width, widening into verge required, power pole relocations (3), requires TTM during construction N3 - widening into verge required, power pole relocation (3), requires TTM during construction, interaction with school during construction N4 - can be constructed away from corridor, powerpole relocations required (5) N5 - remove and replace exosting footpoath, relocate (10) power poles, widen existing verge, build over existing water and Telstra assets, requires TTM during construction (relocation of pedestrians during construction) N6 - can be built off-line
Environmental Impact	Flora/ Fauna / Cultural Heritage	3%	3	3	3	3	3	3	3	No discernible environmental and CH mapped constraints
Future Planning	Compatibility with future land uses	5%	3	3	3	3	3	3	1	N6 falls within known area of development (land tenure issues and reliability of corridor)
Social Factors	Long-term impact on residents and businesses	8%	3	3	4	4	4	4	5	Refer to comparison spreadsheet
Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	6%	3	4	4	4	5	5	5	N4 - western verge provides accessible path for western side N5 - eastern verge provides accessible path for school and residents on eastern side N6 - has potential to be built as accesible being off-line *subject to sensitivity analysis
	Rideability - Grades	14%	3	3	3	3	3	3	2	N6 has gardes up to 4.5% for 150m *subject to sensitivity analysis
	Comfort - Stress Level	12%	3	4	4	4	5	5	5	Refer to comparison spreadsheet
Future Planning	Strategic fit to planned infrastructure	2%	3	3	3	3	3	3	3	N6 uses existing rail trail - quarrantines corridor for future transport use
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	11%	3	4	4	4	4	5	4	Refer to comparison spreadsheet

Notes on table colours:

- Dark green – most desirable
- Yellow – neutral
- Red – least desirable

Table 27: MCA Workshop Scoring - Central Section

Category	Criteria	Pairwise Comparison	Base Case	C1	C2	C3	C4	C5	Comments
Economic Data	Implementation and Construction Costs*	6%	3	1	2	2	3	2	C1 - Work on both sides of road, highest driveways affected, TTM works C2 & C3 - Works on one side only C4 & C5 - off road, higher cut/fill but less TTM works compared to BC C5 - impacts PUP in the verge of Albert Street
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	15%	3	3	2	2	3	3	C1 provide no additional connectivity C2 & C3 provide less due to being restricted to one side - crossings C4 & C5 provides connectivity to attractor/generators (jubliee / sports), avoids the revitalistion works
Traffic and Safety	Safety	17%	3	4	4	4	5	5	C1, C3 & C3 all have interaction with multiple driveways and HVs C4 & C5 - are away from conflict points C5 - completely off road - avoids cars rat-running along Albert St and HVs *subject to sensitivity analysis
Construction and Constructability	Constructability / Impacts of construction / TTM	3%	3	2	2	2	4	4	C1 , C2 & C3 - no difference to Base Case C4 - offline and line marking on low volume road (Albert St) C5 - as per C4 plus PUP impacts within the verge of Albert St (overheads and telstra)
Environmental Impact	Flora/ Fauna / Cultural Heritage	3%	3	3	3	3	3	3	No discernable impacts to mapped constraints
Future Planning	Compatibility with future land uses	5%	3	3	3	3	4	4	C4 & C5 provide connection to known SRRC future planning areas
Social Factors	Long-term impact on residents and businesses	8%	3	2	3	3	4	4	Refer to comparative spreadsheet
Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	6%	3	3	3	3	4	5	C4 - still on road C5 - within verge *subject to sensitivity analysis
	Rideability - Grades	14%	3	3	3	3	3	3	Refer to comparative spreadsheet
	Comfort - Stress Level	12%	3	4	4	4	5	5	Refer to comparative spreadsheet
Future Planning	Strategic fit to planned infrastructure	2%	3	3	3	3	5	5	C4 & C5 fit within Council's future upgrade of Jubilee Park, avoids Town Centre revitalisation works, quarrantines rail corridor for future transport use
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	11%	3	4	4	5	5	5	Refer to comparative spreadsheet

Table 28: MCA Workshop Scoring - East Section

Category	Criteria	Pairwise Comparison	Base Case	E1	E2	E3	E4	Comments
Economic Data	Implementation and Construction Costs*	6%	3	1	2	2	5	E1 - Both sides E2 & E3 limited to one side only
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	15%	3	3	3	3	4	E4 - connects to residential and parks
Traffic and Safety	Safety	17%	3	4	4	4	5	E1, E2, E3 have separation from HV, no difference in CPTED E4 is completely off-road away from HV
Construction and Constructability	Constructability / Impacts of construction / TTM	3%	3	2	2	2	5	E1, E2, E3 require widening of existing formation E1 and E2 will require line-marking of existing intersection (Brooklands Dr)
Environmental Impact	Flora/ Fauna / Cultural Heritage	3%	3	2	3	2	5	E2 & E3 has potential mapped environmental constraints within verge (trees)
Future Planning	Compatibility with future land uses	5%	3	3	3	3	3	
Social Factors	Long-term impact on residents and businesses	8%	3	3	3	3	3	
Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	6%	3	3	3	4	4	E4 does not preclude accessibility
	Rideability - Grades	14%	3	3	3	3	3	Base Case is 6.5% All other on-road options are 6.5% E4 has 9% grade for 70m Rideability criteria not met for any option
	Comfort - Stress Level	12%	3	4	4	4	5	Refer to comparison spreadsheet
Future Planning	Strategic fit to planned infrastructure	2%	3	3	3	3	3	
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	11%	3	3	3	3	3	

12.5 Key Workshop Outcomes

The MCA scoring and pairwise weightings resulted in the following rankings in Table 29, Table 30, and Table 31..

Table 29: MCA Option Rankings - North Section

Summary of Option Scoring	N1	N2	N3	N4	N5	N6
Score	3.33	3.32	3.29	3.85	3.64	3.41
Rank	4	5	6	1	2	3

Table 30: MCA Option Rankings - Central Section

Summary of Option Scoring	C1	C2	C3	C4	C5
Score	3.17	3.15	3.26	4.03	4.03
Rank	4	5	3	1	1

Table 31: MCA Option Rankings - East Section

Summary of Option Scoring	E1	E2	E3	E4
Score	3.11	3.20	3.23	4.03
Rank	4	3	2	1

12.6 Post-MCA Workshop Outcomes and Sensitivity Analysis

Sensitivity testing was undertaken post MCA workshop in accordance with the NOF process. The sensitivity testing results showed no individual criteria was sensitive to proportional weighting changes, with the above results unchanged. Further details are depicted in Appendix D.

13. Preferred Option

Based on the optioneering process undertaken for the Beaudesert Cycleway, the preferred option includes a combination of:

- Option N4
- Option C4 or C5 (noting that discussions in the workshop led to a desire to investigate a combination of C4 and C5 with an extended verge on Albert Street)
- Option E4

A copy of the combined preferred option is shown in Appendix E.

14. Recommendations

This report detailed the investigations and planning undertaken by BG&E to identify the optimum Beaudesert cycleway alignment and facility form to meet the Project (and wider TMR strategic) objectives.

The optioneering process identified the Preferred Option as a combination of N4/C4/E4 as described in Section 13 above. As such, the following recommendations are made:

1. Accept the outcomes of the Beaudesert Cycleway optioneering process;
2. Proceed with the combined options N4+(C4 or C5)+E4 as the preferred option for the Beaudesert Cycleway; and
3. Progress the preferred Option to Business Case.

The following investigations are required in future design stages:

- Investigate a facility in the central section that combines both C4 and C55, with an extended verge on Albert Street;
- Undertake stormwater drainage assessment;
- Confirm access and driveway treatments;
- Investigate modifications to the signalised intersection of Brisben St/ Helen Street to install additional pedestrian facilities, and reduce conflicts at the left turn slip lane (into Brisbane St southbound);
- Confirm the entry arrangements into Jubilee Park;
- Confirm the shared path arrangement and cross-section through Jubilee Park in consultation with SRRC;
- Confirm opportunities for path connections into Brisbane St revitalisation scheme in consultation with SRRC;
- Identify the appropriate crossing treatment on Telemon St adjacent to Jubilee Park; and
- Prepare justification documentation for realignment of the PCN (following Business Case submission).

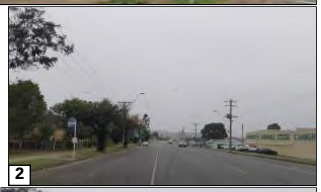
Appendices

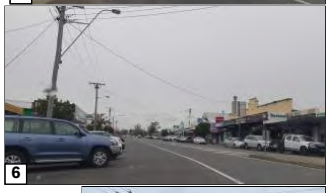
Appendix A – Site Visit Photos

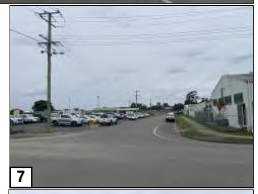
Beaudesert-Nerang Road and Mount Lindesday Highway Cycleway

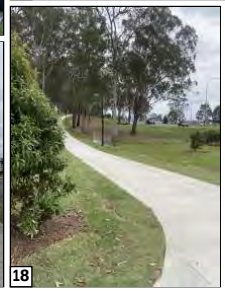
Site Visit - 21st September 2022

BG&E









Appendix B – Traffic Survey Results

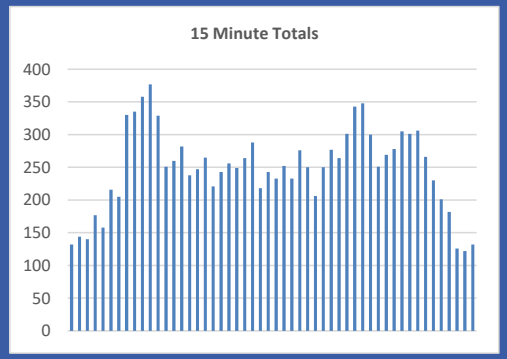
Survey Details

TTM Reference: **22BRD0085**
Location: **Beaudesert Bypass Rd / Brisbane St / Helen St**
Suburb: **Beaudesert**
Date: **Thursday, 1 December 2022**
Duration: **0600-1900**
Weather: **Heavy Rain**
AM Peak: **07:45-08:45**
PM Peak: **14:45-15:45**
Notes:

DATA

Quick display - Summaries

Survey Period: Full Duration to Select End time



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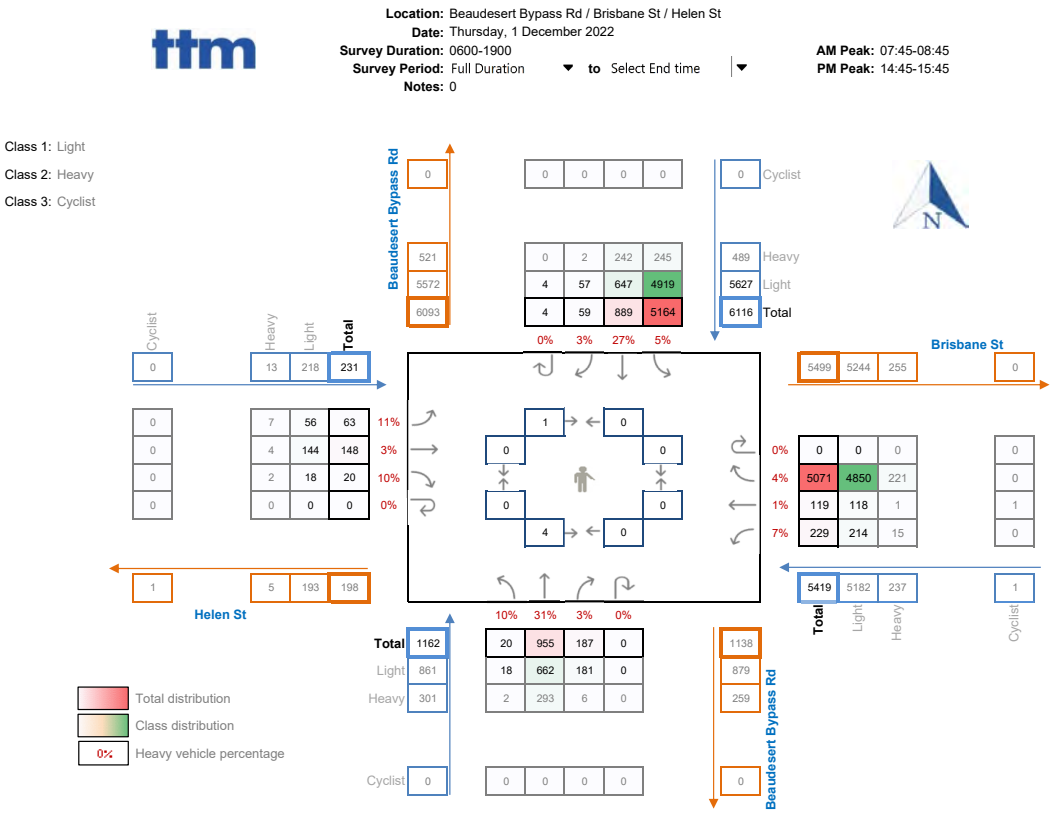
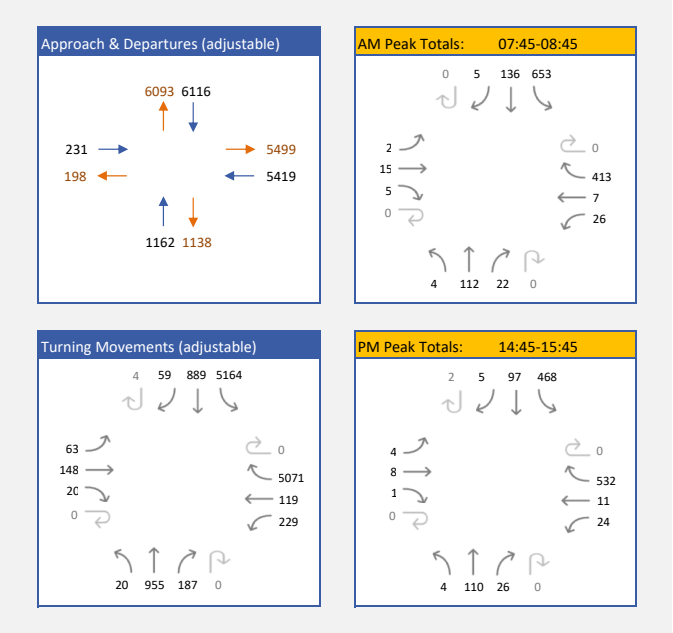

Location: Beaudesert Bypass Rd / Brisbane St / Helen St
Date: Thursday, 1 December 2022
Survey Duration: 0600-1900
Survey Period: Full Duration to Select End time
Notes: 0
AM Peak: 07:45-08:45
PM Peak: 14:45-15:45
Class 1: Light
Class 2: Heavy
Class 3: Cyclist
Beaudesert Bypass Rd
Brisbane St
Helen St
Cyclist
Heavy
Light
Total
Total distribution
Class distribution
Heavy vehicle percentage


Approach & Departures (adjustable)
6093 6116
231
198
5499
5419
1162 1138
AM Peak Totals: 07:45-08:45
0 5 136 653
2
15
5
0
0
413
7
26
4 112 22 0
Turning Movements (adjustable)
4 59 889 5164
63
148
20
0
0
5071
119
229
20 955 187 0
PM Peak Totals: 14:45-15:45
2 5 97 468
4
8
1
0
0
532
11
24
4 110 26 0

Movement	Nth App - Left				Nth App - Straight				Nth App - Right				Nth App - U Turn				Nth Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	EB	WB
06:00 - 06:15	39	7	**46**	0	8	4	**12**	0	0	1	**1**	0	0	0	**0**	0	**59**	**0**	0	0
06:15 - 06:30	61	6	**67**	0	6	5	**11**	0	0	0	**0**	0	0	0	**0**	0	**78**	**0**	0	0
06:30 - 06:45	40	8	**48**	0	11	4	**15**	0	2	0	**2**	0	0	0	**0**	0	**65**	**0**	0	0
06:45 - 07:00	60	11	**71**	0	14	6	**20**	0	3	0	**3**	0	0	0	**0**	0	**94**	**0**	0	0
07:00 - 07:15	53	4	**57**	0	11	10	**21**	0	0	0	**0**	0	0	0	**0**	0	**78**	**0**	0	0
07:15 - 07:30	104	1	**105**	0	16	5	**21**	0	0	0	**0**	0	0	0	**0**	0	**126**	**0**	0	0
07:30 - 07:45	85	8	**93**	0	8	6	**14**	0	1	0	**1**	0	1	0	**1**	0	**109**	**0**	0	0
07:45 - 08:00	167	10	**177**	0	29	7	**36**	0	2	0	**2**	0	0	0	**0**	0	**215**	**0**	0	0
08:00 - 08:15	142	10	**152**	0	23	8	**31**	0	1	0	**1**	0	0	0	**0**	0	**184**	**0**	0	0
08:15 - 08:30	141	7	**148**	0	27	6	**33**	0	1	0	**1**	0	0	0	**0**	0	**182**	**0**	0	0
08:30 - 08:45	169	7	**176**	0	25	11	**36**	0	1	0	**1**	0	0	0	**0**	0	**213**	**0**	0	0
08:45 - 09:00	147	17	**164**	0	14	6	**20**	0	0	0	**0**	0	0	0	**0**	0	**184**	**0**	0	0
09:00 - 09:15	89	5	**94**	0	17	6	**23**	0	1	0	**1**	0	0	0	**0**	0	**118**	**0**	0	0
09:15 - 09:30	103	6	**109**	0	11	7	**18**	0	3	0	**3**	0	0	0	**0**	0	**130**	**0**	0	0
09:30 - 09:45	96	6	**102**	0	8	7	**15**	0	4	0	**4**	0	0	0	**0**	0	**121**	**0**	0	0
09:45 - 10:00	79	5	**84**	0	11	8	**19**	0	3	1	**4**	0	0	0	**0**	0	**107**	**0**	0	0
10:00 - 10:15	90	8	**98**	0	9	9	**18**	0	0	0	**0**	0	0	0	**0**	0	**116**	**0**	0	0
10:15 - 10:30	79	5	**84**	0	14	10	**24**	0	1	0	**1**	0	1	0	**1**	0	**110**	**0**	0	0
10:30 - 10:45	81	7	**88**	0	13	5	**18**	0	0	0	**0**	0	0	0	**0**	0	**106**	**0**	0	0
10:45 - 11:00	102	6	**108**	0	7	5	**12**	0	0	0	**0**	0	0	0	**0**	0	**120**	**0**	0	0
11:00 - 11:15	91	3	**94**	0	11	12	**23**	0	0	0	**0**	0	0	0	**0**	0	**117**	**0**	0	0
11:15 - 11:30	95	1	**96**	0	13	3	**16**	0	4	0	**4**	0	0	0	**0**	0	**116**	**0**	0	0
11:30 - 11:45	99	4	**103**	0	8	6	**14**	0	3	0	**3**	0	0	0	**0**	0	**120**	**0**	0	0
11:45 - 12:00	98	3	**101**	0	12	10	**22**	0	1	0	**1**	0	0	0	**0**	0	**124**	**0**	0	0
12:00 - 12:15	82	5	**87**	0	11	2	**13**	0	0	0	**0**	0	0	0	**0**	0	**100**	**0**	0	0
12:15 - 12:30	80	3	**83**	0	13	2	**15**	0	2	0	**2**	0	0	0	**0**	0	**100**	**0**	0	0
12:30 - 12:45	101	6	**107**	0	8	6	**14**	0	0	0	**0**	0	0	0	**0**	0	**121**	**0**	0	0
12:45 - 13:00	90	4	**94**	0	10	10	**20**	0	0	0	**0**	0	0	0	**0**	0	**114**	**0**	0	0
13:00 - 13:15	104	2	**106**	0	7	7	**14**	0	0	0	**0**	0	0	0	**0**	0	**120**	**0**	0	0
13:15 - 13:30	111	6	**117**	0	14	6	**20**	0	1	0	**1**	0	0	0	**0**	0	**138**	**0**	0	0
13:30 - 13:45	98	3	**101**	0	6	4	**10**	0	1	0	**1**	0	0	0	**0**	0	**112**	**0**	0	0
13:45 - 14:00	70	3	**73**	0	12	4	**16**	0	3	0	**3**	0	0	0	**0**	0	**92**	**0**	0	0
14:00 - 14:15	112	3	**115**	0	8	1	**9**	0	3	0	**3**	0	0	0	**0**	0	**127**	**0**	0	0
14:15 - 14:30	111	5	**116**	0	13	2	**15**	0	0	0	**0**	0	0	0	**0**	0	**131**	**0**	0	0
14:30 - 14:45	96	7	**103**	0	20	2	**22**	0	0	0	**0**	0	0	0	**0**	0	**125**	**0**	0	0
14:45 - 15:00	96	4	**100**	0	32	4	**36**	0	1	0	**1**	0	0	0	**0**	0	**137**	**0**	0	0
15:00 - 15:15	109	2	**111**	0	17	4	**21**	0	0	0	**0**	0	0	0	**0**	0	**132**	**0**	0	0
15:15 - 15:30	128	8	**136**	0	21	1	**22**	0	3	0	**3**	0	2	0	**2**	0	**163**	**0**	0	0
15:30 - 15:45	115	6	**121**	0	14	4	**18**	0	1	0	**1**	0	0	0	**0**	0	**140**	**0**	0	0
15:45 - 16:00	97	3	**100**	0	13	2	**15**	0	1	0	**1**	0	0	0	**0**	0	**116**	**0**	0	0
16:00 - 16:15	118	3	**121**	0	11	2	**13**	0	2	0	**2**	0	0	0	**0**	0	**136**	**0**	0	0
16:15 - 16:30	101	4	**105**	0	10	0	**10**	0	1	0	**1**	0	0	0	**0**	0	**116**	**0**	0	0
16:30 - 16:45	108	3	**111**	0	9	2	**11**	0	1	0	**1**	0	0	0	**0**	0	**123**	**0**	1	0
16:45 - 17:00	97	4	**101**	0	11	3	**14**	0	0	0	**0**	0	0	0	**0**	0	**115**	**0**	0	0
17:00 - 17:15	90	2	**92**	0	10	1	**11**	0	0	0	**0**	0	0	0	**0**	0	**103**	**0**	0	0
17:15 - 17:30	77	0	**77**	0	13	0	**13**	0	2	0	**2**	0	0	0	**0**	0	**92**	**0**	0	0
17:30 - 17:45	71	0	**71**	0	12	1	**13**	0	0	0	**0**	0	0	0	**0**	0	**84**	**0**	0	0
17:45 - 18:00	86	1	**87**	0	7	3	**10**	0	1	0	**1**	0	0	0	**0**	0	**98**	**0**	0	0
18:00 - 18:15	89	2	**91**	0	6	0	**6**	0	1	0	**1**	0	0	0	**0**	0	**98**	**0**	0	0
18:15 - 18:30	52	0	**52**	0	6	0	**6**	0	0	0	**0**	0	0	0	**0**	0	**58**	**0**	0	0
18:30 - 18:45	60	1	**61**	0	3	2	**5**	0	1	0	**1**	0	0	0	**0**	0	**67**	**0**	0	0
18:45 - 19:00	60	0	**60**	0	4	1	**5**	0	1	0	**1**	0	0	0	**0**	0	**66**	**0**	0	0
TOTAL	**4919**	**245**	**5164**	**0**	**647**	**242**	**889**	**0**	**57**	**2**	**59**	**0**	**4**	**0**	**4**	**0**	**6116**	**0**	**1**	**0**
AM Peak:	619	34	**653**	0	104	32	**136**	0	5	0	**5**	0	0	0	**0**	0	**794**	**0**	0	0
PM Peak:	448	20	**468**	0	84	13	**97**	0	5	0	**5**	0	2	0	**2**	0	**572**	**0**	0	0

Movement	Sth App - Left				Sth App - Straight				Sth App - Right				Sth App	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy
06:00 - 06:15	0	0	**0**	0	13	3	**16**	0	5	0	**5**	0	0	0
06:15 - 06:30	0	0	**0**	0	10	8	**18**	0	4	0	**4**	0	0	0
06:30 - 06:45	1	0	**1**	0	11	12	**23**	0	2	1	**3**	0	0	0
06:45 - 07:00	0	0	**0**	0	15	3	**18**	0	2	0	**2**	0	0	0
07:00 - 07:15	0	0	**0**	0	10	4	**14**	0	2	0	**2**	0	0	0
07:15 - 07:30	0	0	**0**	0	11	6	**17**	0	1	0	**1**	0	0	0
07:30 - 07:45	0	0	**0**	0	19	5	**24**	0	3	0	**3**	0	0	0
07:45 - 08:00	1	0	**1**	0	15	9	**24**	0	4	0	**4**	0	0	0
08:00 - 08:15	2	0	**2**	0	18	9	**27**	0	3	1	**4**	0	0	0
08:15 - 08:30	0	0	**0**	0	23	6	**29**	0	7	0	**7**	0	0	0
08:30 - 08:45	1	0	**1**	0	23	9	**32**	0	7	0	**7**	0	0	0
08:45 - 09:00	0	0	**0**	0	16	5	**21**	0	4	0	**4**	0	0	0
09:00 - 09:15	0	0	**0**	0	5	10	**15**	0	5	0	**5**	0	0	0
09:15 - 09:30	1	0	**1**	0	13	9	**22**	0	4	0	**4**	0	0	0
09:30 - 09:45	1	0	**1**	0	21	11	**32**	0	3	0	**3**	0	0	0
09:45 - 10:00	0	0	**0**	0	7	4	**11**	0	2	0	**2**	0	0	0
10:00 - 10:15	2	0	**2**	0	13	11	**24**	0	2	0	**2**	0	0	0
10:15 - 10:30	0	0	**0**	0	12	7	**19**	0	1	0	**1**	0	0	0
10:30 - 10:45	0	0	**0**	0	4	5	**9**	0	3	0	**3**	0	0	0
10:45 - 11:00	0	0	**0**	0	12	11	**23**	0	4	0	**4**	0	0	0
11:00 - 11:15	1	0	**1**	0	7	6	**13**	0	5	0	**5**	0	0	0
11:15 - 11:30	0	0	**0**	0	7	5	**12**	0	2	0	**2**	0	0	0
11:30 - 11:45	0	0	**0**	0	20	9	**29**	0	3	0	**3**	0	0	0
11:45 - 12:00	1	1	**2**	0	12	7	**19**	0	5	0	**5**	0	0	0
12:00 - 12:15	0	0	**0**	0	7	4	**11**	0	5	0	**5**	0	0	0
12:15 - 12:30	0	1	**1**	0	13	7	**20**	0	6	0	**6**	0	0	0
12:30 - 12:45	0	0	**0**	0	8	9	**17**	0	0	0	**0**	0	0	0
12:45 - 13:00	1	0	**1**	0	14	3	**17**	0	4	0	**4**	0	0	0
13:00 - 13:15	0	0	**0**	0	13	6	**19**	0	4	0	**4**	0	0	0
13:15 - 13:30	0	0	**0**	0	13	7	**20**	0	6	0	**6**	0	0	0
13:30 - 13:45	0	0	**0**	0	7	7	**14**	0	3	0	**3**	0	0	0
13:45 - 14:00	0	0	**0**	0	11	5	**16**	0	2	0	**2**	0	0	0
14:00 - 14:15	1	0	**1**	0	7	1	**8**	0	4	0	**4**	0	0	0
14:15 - 14:30	0	0	**0**	0	10	5	**15**	0	11	0	**11**	0	0	0
14:30 - 14:45	0	0	**0**	0	9	7	**16**	0	3	0	**3**	0	0	0
14:45 - 15:00	1	0	**1**	0	16	8	**24**	0	4	0	**4**	0	0	0
15:00 - 15:15	1	0	**1**	0	35	6	**41**	0	8	1	**9**	0	0	0
15:15 - 15:30	0	0	**0**	0	18	8	**26**	0	7	0	**7**	0	0	0
15:30 - 15:45	2	0	**2**	0	16	3	**19**	0	5	1	**6**	0	0	0
15:45 - 16:00	0	0	**0**	0	12	5	**17**	0	1	0	**1**	0	0	0
16:00 - 16:15	0	0	**0**	0	12	4	**16**	0	4	0	**4**	0	0	0
16:15 - 16:30	0	0	**0**	0	19	4	**23**	0	6	1	**7**	0	0	0
16:30 - 16:45	0	0	**0**	0	14	7	**21**	0	3	1	**4**	0	0	0
16:45 - 17:00	0	0	**0**	0	13	3	**16**	0	3	0	**3**	0	0	0
17:00 - 17:15	0	0	**0**	0	19	2	**21**	0	0	0	**0**	0	0	0
17:15 - 17:30	0	0	**0**	0	20	1	**21**	0	1	0	**1**	0	0	0
17:30 - 17:45	0	0	**0**	0	10	3	**13**	0	2	0	**2**	0	0	0
17:45 - 18:00	0	0	**0**	0	6	1	**7**	0	1	0	**1**	0	0	0
18:00 - 18:15	0	0	**0**	0	6	0	**6**	0	1	0	**1**	0	0	0
18:15 - 18:30	0	0	**0**	0	12	2	**14**	0	1	0	**1**	0	0	0
18:30 - 18:45	1	0	**1**	0	4	0	**4**	0	2	0	**2**	0	0	0
18:45 - 19:00	0	0	**0**	0	1	1	**2**	0	1	0	**1**	0	0	0
TOTAL	**18**	**2**	**20**	**0**	**662**	**293**	**955**	**0**	**181**	**6**	**187**	**0**	**0**	**0**
AM Peak:	4	0	**4**	0	79	33	**112**	0	21	1	**22**	0	0	0
PM Peak:	4	0	**4**	0	85	25	**110**	0	24	2	**26**	0	0	0

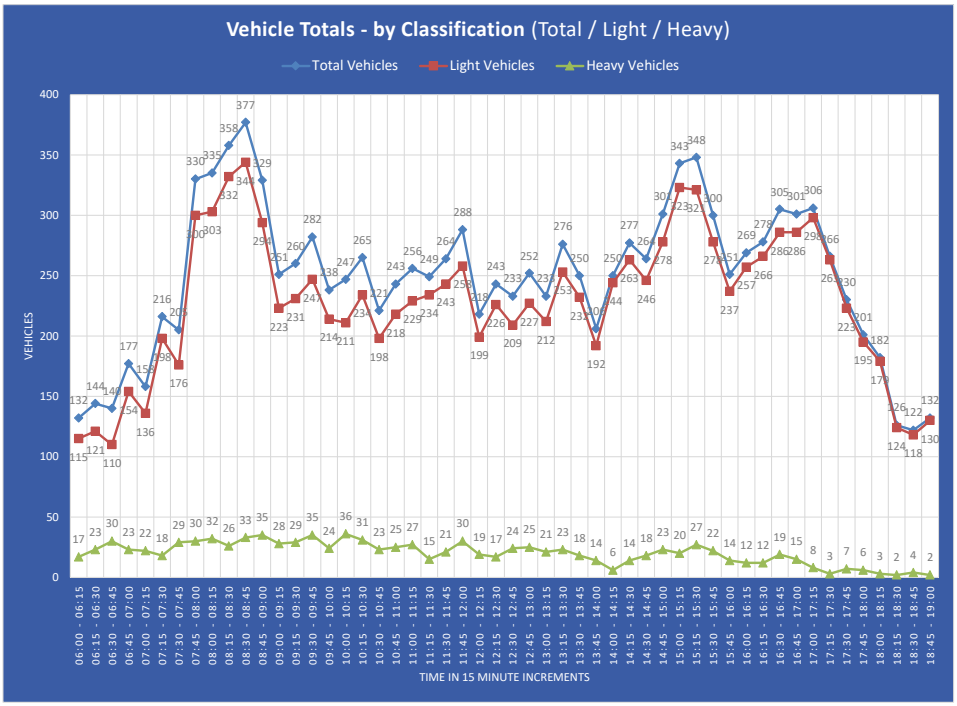
- U Turn		Sth Total		Peds	
Total	Cyclist	Vehicle	Cyclist	EB	WB
0	0	21	0	0	0
0	0	22	0	0	0
0	0	27	0	0	0
0	0	20	0	0	0
0	0	16	0	0	0
0	0	18	0	0	0
0	0	27	0	0	0
0	0	29	0	0	0
0	0	33	0	0	0
0	0	36	0	0	0
0	0	40	0	0	0
0	0	25	0	0	0
0	0	20	0	0	0
0	0	27	0	0	0
0	0	36	0	0	0
0	0	13	0	0	0
0	0	28	0	0	0
0	0	20	0	0	0
0	0	12	0	0	0
0	0	27	0	0	0
0	0	19	0	0	0
0	0	14	0	0	0
0	0	32	0	0	0
0	0	26	0	0	0
0	0	16	0	0	0
0	0	27	0	0	0
0	0	17	0	0	0
0	0	22	0	0	0
0	0	23	0	0	0
0	0	26	0	0	0
0	0	17	0	0	0
0	0	18	0	0	0
0	0	13	0	0	0
0	0	26	0	0	0
0	0	19	0	0	0
0	0	29	0	0	0
0	0	51	0	0	0
0	0	33	0	0	0
0	0	27	0	0	0
0	0	18	0	0	0
0	0	20	0	2	0
0	0	30	0	0	0
0	0	25	0	0	0
0	0	19	0	0	0
0	0	21	0	1	0
0	0	22	0	0	0
0	0	15	0	0	0
0	0	8	0	0	0
0	0	7	0	0	0
0	0	15	0	0	0
0	0	7	0	0	0
0	0	3	0	1	0
0	0	1162	0	4	0
0	0	138	0	0	0
0	0	140	0	0	0

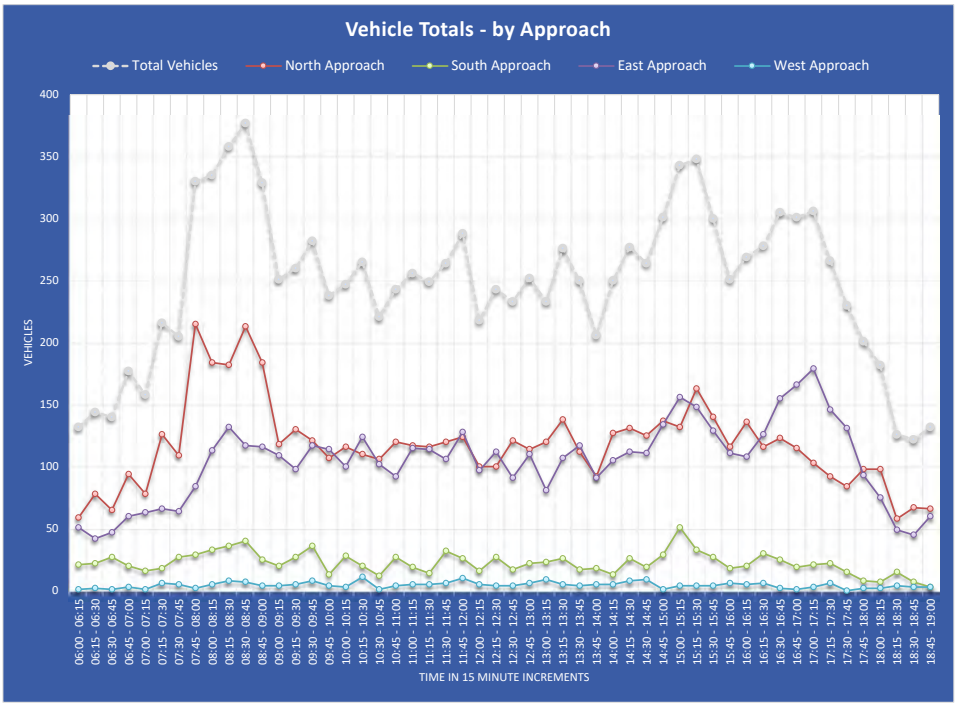
Movement	Est App - Left				Est App - Straight				Est App - Right				Est App - U Turn				Est Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
06:00 - 06:15	2	0	2	0	2	0	2	0	45	2	47	0	0	0	0	0	51	0	0	0
06:15 - 06:30	1	0	1	0	0	0	0	0	37	4	41	0	0	0	0	0	42	0	0	0
06:30 - 06:45	2	1	3	0	0	0	0	0	41	3	44	0	0	0	0	0	47	0	0	0
06:45 - 07:00	1	2	3	0	1	0	1	0	55	1	56	0	0	0	0	0	60	0	0	0
07:00 - 07:15	3	0	3	0	1	0	1	0	55	4	59	0	0	0	0	0	63	0	0	0
07:15 - 07:30	3	1	4	0	1	0	1	0	56	5	61	0	0	0	0	0	66	0	0	0
07:30 - 07:45	3	2	5	0	1	0	1	0	52	6	58	0	0	0	0	0	64	0	0	0
07:45 - 08:00	1	0	1	0	1	0	1	0	78	4	82	0	0	0	0	0	84	0	0	0
08:00 - 08:15	7	0	7	0	5	0	5	0	97	4	101	0	0	0	0	0	113	0	0	0
08:15 - 08:30	10	1	11	0	0	0	0	0	116	5	121	0	0	0	0	0	132	0	0	0
08:30 - 08:45	7	0	7	0	1	0	1	0	104	5	109	0	0	0	0	0	117	0	0	0
08:45 - 09:00	8	0	8	0	3	0	3	0	98	7	105	0	0	0	0	0	116	0	0	0
09:00 - 09:15	4	0	4	0	2	0	2	0	96	7	103	0	0	0	0	0	109	0	0	0
09:15 - 09:30	4	1	5	0	1	0	1	0	86	6	92	0	0	0	0	0	98	0	0	0
09:30 - 09:45	4	0	4	0	2	0	2	0	101	10	111	0	0	0	0	0	117	0	0	0
09:45 - 10:00	0	0	0	0	3	0	3	0	106	5	111	0	0	0	0	0	114	0	0	0
10:00 - 10:15	3	0	3	0	3	0	3	0	86	8	94	0	0	0	0	0	100	0	0	0
10:15 - 10:30	4	1	5	0	5	0	5	0	107	7	114	0	0	0	0	0	124	0	0	0
10:30 - 10:45	5	0	5	0	3	0	3	0	88	6	94	0	0	0	0	0	102	0	0	0
10:45 - 11:00	5	0	5	0	3	0	3	0	81	3	84	0	0	0	0	0	92	0	0	0
11:00 - 11:15	2	2	4	0	4	0	4	0	103	4	107	0	0	0	0	0	115	0	0	0
11:15 - 11:30	5	0	5	0	4	0	4	0	99	6	105	0	0	0	0	0	114	0	0	0
11:30 - 11:45	6	0	6	0	2	0	2	0	96	2	98	0	0	0	0	0	106	0	0	0
11:45 - 12:00	8	0	8	0	8	0	8	0	103	9	112	0	0	0	0	0	128	0	0	0
12:00 - 12:15	4	1	5	0	3	0	3	0	83	6	89	0	0	0	0	0	97	0	0	0
12:15 - 12:30	4	1	5	0	1	0	1	0	103	3	106	0	0	0	0	0	112	0	0	0
12:30 - 12:45	7	0	7	0	3	0	3	0	78	3	81	0	0	0	0	0	91	0	0	0
12:45 - 13:00	5	0	5	0	5	0	5	0	92	8	100	0	0	0	0	0	110	0	0	0
13:00 - 13:15	2	0	2	0	1	0	1	0	72	6	78	0	0	0	0	0	81	0	0	0
13:15 - 13:30	2	0	2	0	1	1	2	0	100	3	103	0	0	0	0	0	107	0	0	0
13:30 - 13:45	7	0	7	0	4	0	4	0	103	3	106	0	0	0	0	0	117	0	0	0
13:45 - 14:00	3	0	3	0	1	0	1	0	85	2	87	0	0	0	0	0	91	0	0	0
14:00 - 14:15	6	0	6	0	0	0	0	0	98	1	99	0	0	0	0	0	105	0	0	0
14:15 - 14:30	2	1	3	0	4	0	4	0	104	1	105	0	0	0	0	0	112	0	0	0
14:30 - 14:45	9	0	9	0	2	0	2	0	99	1	100	0	0	0	0	0	111	0	0	0
14:45 - 15:00	7	0	7	0	2	0	2	0	118	7	125	0	0	0	0	0	134	0	0	0
15:00 - 15:15	10	1	11	0	2	0	2	0	137	6	143	0	0	0	0	0	156	0	0	0
15:15 - 15:30	4	0	4	0	2	0	2	0	132	10	142	0	0	0	0	0	148	0	0	0
15:30 - 15:45	2	0	2	0	5	0	5	0	114	8	122	0	0	0	0	0	129	0	0	0
15:45 - 16:00	3	0	3	0	1	0	1	0	104	3	107	0	0	0	0	0	111	0	0	0
16:00 - 16:15	4	0	4	0	3	0	3	0	98	3	101	0	0	0	0	0	108	0	0	0
16:15 - 16:30	6	0	6	0	3	0	3	0	114	3	117	0	0	0	0	0	126	0	0	0
16:30 - 16:45	6	0	6	0	1	0	1	0	142	6	148	0	0	0	0	0	155	0	0	0
16:45 - 17:00	3	0	3	0	2	0	2	0	156	5	161	0	0	0	0	0	166	0	0	0
17:00 - 17:15	2	0	2	0	4	0	4	0	170	3	173	0	0	0	0	0	179	0	0	0
17:15 - 17:30	3	0	3	0	1	0	1	0	141	1	142	0	0	0	0	0	146	0	0	0
17:30 - 17:45	1	0	1	0	0	0	0	1	127	3	130	0	0	0	0	0	131	1	0	0
17:45 - 18:00	3	0	3	0	2	0	2	0	87	1	88	0	0	0	0	0	93	0	0	0
18:00 - 18:15	5	0	5	0	4	0	4	0	65	1	66	0	0	0	0	0	75	0	0	0
18:15 - 18:30	3	0	3	0	1	0	1	0	45	0	45	0	0	0	0	0	49	0	0	0
18:30 - 18:45	1	0	1	0	3	0	3	0	40	1	41	0	0	0	0	0	45	0	0	0
18:45 - 19:00	2	0	2	0	1	0	1	0	57	0	57	0	0	0	0	0	60	0	0	0
TOTAL	214	15	229	0	118	1	119	1	4850	221	5071	0	0	0	0	0	5419	1	0	0
AM Peak:	25	1	26	0	7	0	7	0	395	18	413	0	0	0	0	0	446	0	0	0
PM Peak:	23	1	24	0	11	0	11	0	501	31	532	0	0	0	0	0	567	0	0	0

Movement	Wst App - Left				Wst App - Straig		
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total
06:00 - 06:15	0	0	0	0	1	0	1
06:15 - 06:30	1	0	1	0	1	0	1
06:30 - 06:45	0	0	0	0	0	0	0
06:45 - 07:00	2	0	2	0	1	0	1
07:00 - 07:15	0	0	0	0	0	0	0
07:15 - 07:30	2	0	2	0	2	0	2
07:30 - 07:45	0	2	2	0	2	0	2
07:45 - 08:00	0	0	0	0	2	0	2
08:00 - 08:15	1	0	1	0	4	0	4
08:15 - 08:30	1	0	1	0	3	0	3
08:30 - 08:45	0	0	0	0	5	1	6
08:45 - 09:00	0	0	0	0	4	0	4
09:00 - 09:15	1	0	1	0	3	0	3
09:15 - 09:30	3	0	3	0	2	0	2
09:30 - 09:45	1	0	1	0	6	1	7
09:45 - 10:00	0	1	1	0	3	0	3
10:00 - 10:15	0	0	0	0	3	0	3
10:15 - 10:30	3	0	3	0	5	1	6
10:30 - 10:45	1	0	1	0	0	0	0
10:45 - 11:00	1	0	1	0	3	0	3
11:00 - 11:15	1	0	1	0	3	0	3
11:15 - 11:30	1	0	1	0	4	0	4
11:30 - 11:45	1	0	1	0	5	0	5
11:45 - 12:00	4	0	4	0	6	0	6
12:00 - 12:15	3	1	4	0	1	0	1
12:15 - 12:30	0	0	0	0	4	0	4
12:30 - 12:45	1	0	1	0	3	0	3
12:45 - 13:00	3	0	3	0	2	0	2
13:00 - 13:15	1	0	1	0	7	0	7
13:15 - 13:30	0	0	0	0	5	0	5
13:30 - 13:45	2	1	3	0	1	0	1
13:45 - 14:00	1	0	1	0	3	0	3
14:00 - 14:15	1	0	1	0	4	0	4
14:15 - 14:30	2	0	2	0	6	0	6
14:30 - 14:45	1	1	2	0	6	0	6
14:45 - 15:00	1	0	1	0	0	0	0
15:00 - 15:15	1	0	1	0	2	0	2
15:15 - 15:30	0	0	0	0	4	0	4
15:30 - 15:45	2	0	2	0	2	0	2
15:45 - 16:00	1	0	1	0	3	1	4
16:00 - 16:15	1	0	1	0	4	0	4
16:15 - 16:30	3	0	3	0	3	0	3
16:30 - 16:45	0	0	0	0	2	0	2
16:45 - 17:00	0	0	0	0	1	0	1
17:00 - 17:15	0	0	0	0	3	0	3
17:15 - 17:30	4	1	5	0	1	0	1
17:30 - 17:45	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	2	0	2
18:00 - 18:15	1	0	1	0	1	0	1
18:15 - 18:30	2	0	2	0	1	0	1
18:30 - 18:45	1	0	1	0	2	0	2
18:45 - 19:00	0	0	0	0	3	0	3
TOTAL	56	7	63	0	144	4	148
AM Peak:	2	0	2	0	14	1	15
PM Peak:	4	0	4	0	8	0	8

8

ght	Wst App - Right				Wst App - U Turn				Wst Total		Peds	
Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0
0	0	1	1	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	3	0	0	0
0	1	0	1	0	0	0	0	0	1	0	0	0
0	2	0	2	0	0	0	0	0	6	0	0	0
0	1	0	1	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0
0	3	1	4	0	0	0	0	0	8	0	0	0
0	1	0	1	0	0	0	0	0	7	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	8	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	3	0	0	0
0	2	0	2	0	0	0	0	0	11	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	1	0	1	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	0	0	0	10	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	1	0	1	0	0	0	0	0	6	0	0	0
0	1	0	1	0	0	0	0	0	9	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	1	0	1	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	8	0	0	0
0	1	0	1	0	0	0	0	0	9	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0
0	1	0	1	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	4	0	0	0
0	1	0	1	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	0	0	0	5	0	0	0
0	0	0	0	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	3	0	0	0
0	0	0	0	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0
0	0	0	0	0	0	0	0	0	2	0	0	0
0	1	0	1	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	0	3	0	0	0
0	0	0	0	0	0	0	0	0	3	0	0	0
0	18	2	20	0	0	0	0	0	231	0	0	0
0	4	1	5	0	0	0	0	0	22	0	0	0
0	1	0	1	0	0	0	0	0	13	0	0	0


Vehicle Totals - by Classification (Total / Light / Heavy)
Total Vehicles
Light Vehicles
Heavy Vehicles
VEHICLES
TIME IN 15 MINUTE INCREMENTS


Vehicle Totals - by Approach
Total Vehicles
North Approach
South Approach
East Approach
West Approach
VEHICLES
TIME IN 15 MINUTE INCREMENTS

AADT Volumes by Approach

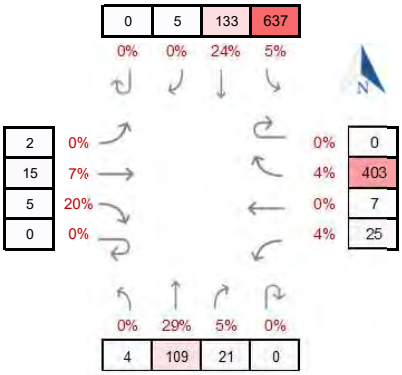
Note: AADT Volumes are an indicative approximation. Calculations are based of AM & PM peaks at 20% of the daily volume

Northern Approach:	**Beaudesert Bypass Rd**	
Northbound		5,875
Southbound		6,830
Total		12,705
Southern Approach:	**Beaudesert Bypass Rd**	
Northbound		1,390
Southbound		1,445
Total		2,835
Eastern Approach:	**Brisbane St**	
Eastbound		5,960
Westbound		5,065
Total		11,025
Western Approach:	**Helen St**	
Eastbound		175
Westbound		180
Total		355

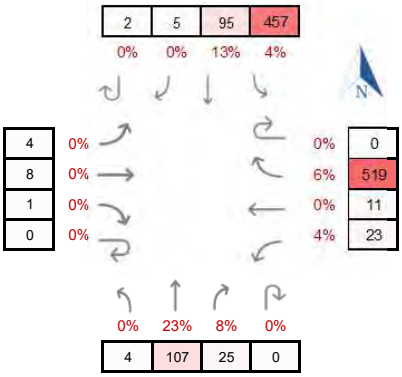
Survey Year:	2023
Assessment Year:	2022
Years:	-1
Growth Rate (p.a.):	2.50%
Growth Factor:	**0.9756**

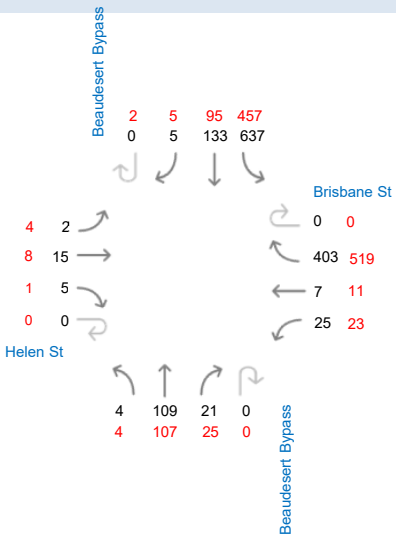
Site 1

AM



PM



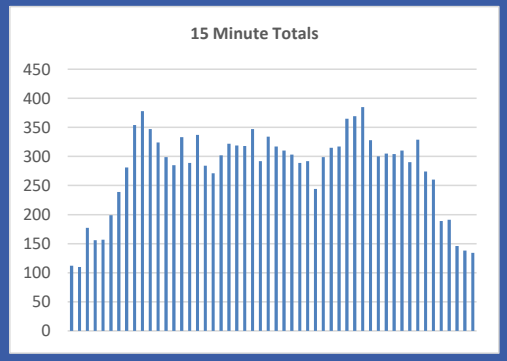

Beaudesert Bypass
2 5 95 457
0 5 133 637
Brisbane St
0 0
403 519
7 11
25 23
4 2
8 15
1 5
0 0
Helen St
4 109 21 0
4 107 25 0
Beaudesert Bypass

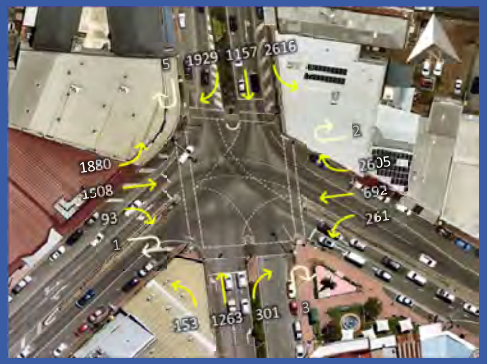
Survey Details

TTM Reference: **22BRD0085**
Location: **Brisbane St / Mount Lindesay Hwy / William St**
Suburb: **Beaudesert**
Date: **Thursday, 1 December 2022**
Duration: **0600-1900**
Weather: **Heavy Rain**
AM Peak: **08:00-09:00**
PM Peak: **14:45-15:45**
Notes:

Quick display - Summaries

Survey Period: Full Duration to Select End time





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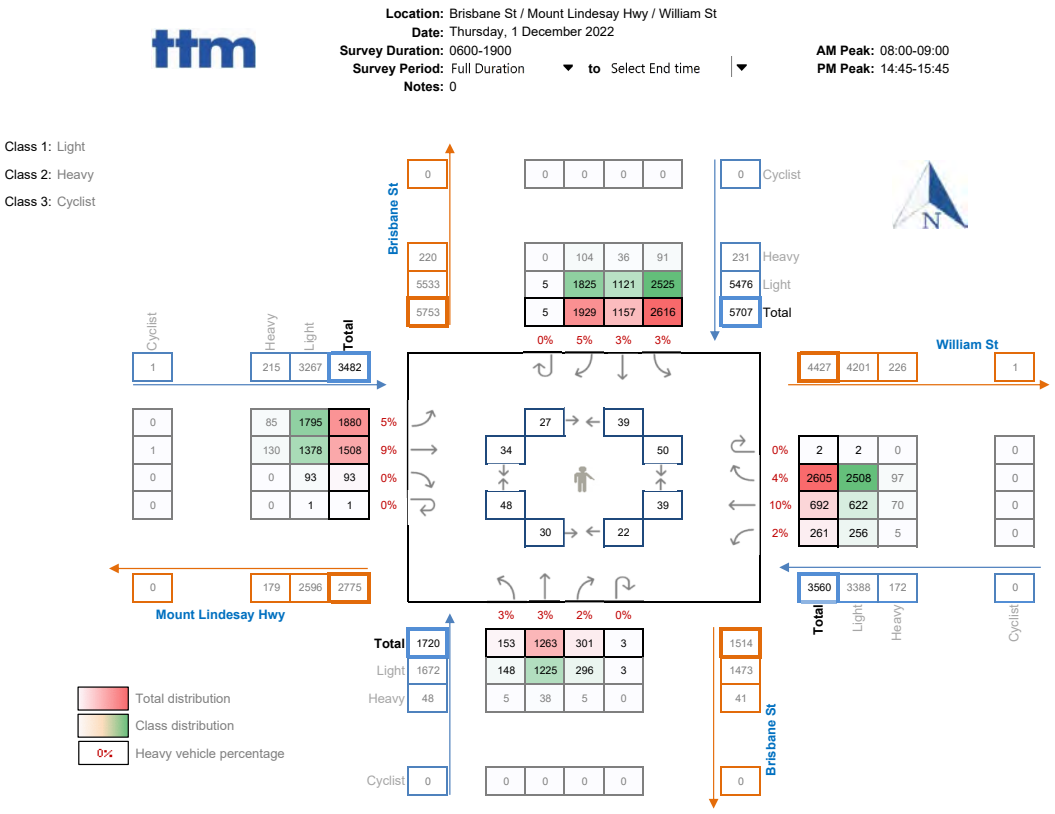
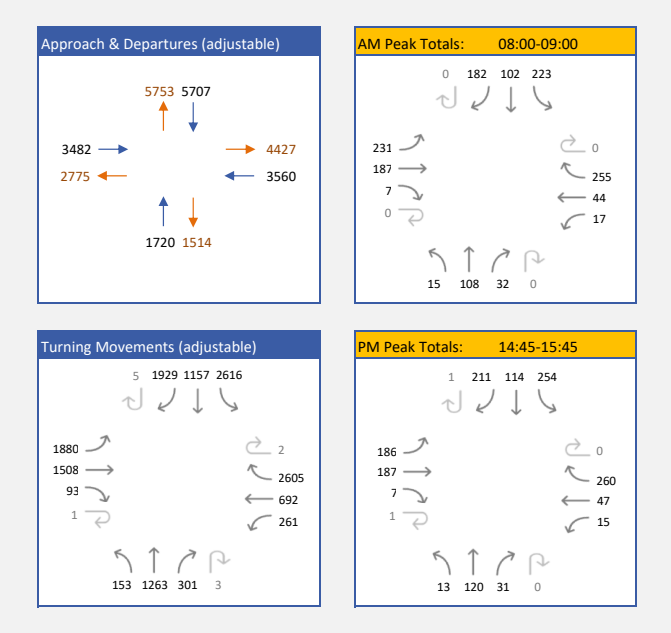

Location: Brisbane St / Mount Lindesay Hwy / William St
Date: Thursday, 1 December 2022
Survey Duration: 0600-1900
Survey Period: Full Duration to Select End time
Notes: 0
AM Peak: 08:00-09:00
PM Peak: 14:45-15:45
Class 1: Light
Class 2: Heavy
Class 3: Cyclist
Brisbane St
William St
Mount Lindesay Hwy
Cyclist
Heavy
Light
Total
Total distribution
Class distribution
Heavy vehicle percentage


Approach & Departures (adjustable)
5753 5707
3482
4427
2775
3560
1720 1514
AM Peak Totals: 08:00-09:00
0 182 102 223
231
187
7
0
0
255
44
17
15 108 32 0
Turning Movements (adjustable)
5 1929 1157 2616
1880
1508
93
1
2
2605
692
261
153 1263 301 3
PM Peak Totals: 14:45-15:45
1 211 114 254
186
187
7
1
0
260
47
15
13 120 31 0

Movement	Nth App - Left				Nth App - Straight				Nth App - Right				Nth App - U Turn				Nth Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	EB	WB
06:00 - 06:15	15	4	**19**	0	7	0	**7**	0	7	3	**10**	0	0	0	**0**	0	**36**	**0**	0	1
06:15 - 06:30	16	3	**19**	0	8	1	**9**	0	11	4	**15**	0	0	0	**0**	0	**43**	**0**	1	0
06:30 - 06:45	23	5	**28**	0	17	1	**18**	0	19	8	**27**	0	0	0	**0**	0	**73**	**0**	0	0
06:45 - 07:00	32	7	**39**	0	10	1	**11**	0	14	2	**16**	0	0	0	**0**	0	**66**	**0**	0	1
07:00 - 07:15	13	4	**17**	0	14	0	**14**	0	9	1	**10**	0	0	0	**0**	0	**41**	**0**	0	0
07:15 - 07:30	48	0	**48**	0	11	0	**11**	0	23	2	**25**	0	0	0	**0**	0	**84**	**0**	1	0
07:30 - 07:45	41	0	**41**	0	11	0	**11**	0	33	2	**35**	0	0	0	**0**	0	**87**	**0**	0	1
07:45 - 08:00	51	7	**58**	0	21	2	**23**	0	38	3	**41**	0	0	0	**0**	0	**122**	**0**	1	0
08:00 - 08:15	49	2	**51**	0	22	2	**24**	0	53	4	**57**	0	0	0	**0**	0	**132**	**0**	0	0
08:15 - 08:30	50	4	**54**	0	18	1	**19**	0	45	1	**46**	0	0	0	**0**	0	**119**	**0**	0	0
08:30 - 08:45	45	1	**46**	0	26	2	**28**	0	40	1	**41**	0	0	0	**0**	0	**115**	**0**	0	0
08:45 - 09:00	61	11	**72**	0	28	3	**31**	0	34	4	**38**	0	0	0	**0**	0	**141**	**0**	0	1
09:00 - 09:15	48	1	**49**	0	22	1	**23**	0	46	0	**46**	0	0	0	**0**	0	**118**	**0**	0	0
09:15 - 09:30	43	3	**46**	0	22	1	**23**	0	29	4	**33**	0	0	0	**0**	0	**102**	**0**	0	0
09:30 - 09:45	47	3	**50**	0	23	0	**23**	0	44	4	**48**	0	0	0	**0**	0	**121**	**0**	0	0
09:45 - 10:00	60	0	**60**	0	16	1	**17**	0	26	2	**28**	0	0	0	**0**	0	**105**	**0**	0	0
10:00 - 10:15	52	0	**52**	0	29	2	**31**	0	30	2	**32**	0	0	0	**0**	0	**115**	**0**	0	0
10:15 - 10:30	46	2	**48**	0	23	0	**23**	0	24	0	**24**	0	0	0	**0**	0	**95**	**0**	0	0
10:30 - 10:45	49	1	**50**	0	17	1	**18**	0	22	0	**22**	0	0	0	**0**	0	**90**	**0**	0	2
10:45 - 11:00	56	1	**57**	0	27	2	**29**	0	44	4	**48**	0	0	0	**0**	0	**134**	**0**	0	1
11:00 - 11:15	55	2	**57**	0	26	0	**26**	0	36	2	**38**	0	0	0	**0**	0	**121**	**0**	3	1
11:15 - 11:30	60	3	**63**	0	19	1	**20**	0	31	1	**32**	0	0	0	**0**	0	**115**	**0**	2	4
11:30 - 11:45	68	1	**69**	0	25	1	**26**	0	29	0	**29**	0	0	0	**0**	0	**124**	**0**	2	1
11:45 - 12:00	68	0	**68**	0	23	0	**23**	0	38	2	**40**	0	0	0	**0**	0	**131**	**0**	2	1
12:00 - 12:15	54	2	**56**	0	25	0	**25**	0	41	3	**44**	0	0	0	**0**	0	**125**	**0**	4	1
12:15 - 12:30	67	1	**68**	0	19	1	**20**	0	38	2	**40**	0	0	0	**0**	0	**128**	**0**	0	1
12:30 - 12:45	57	1	**58**	0	27	1	**28**	0	36	2	**38**	0	0	0	**0**	0	**124**	**0**	0	2
12:45 - 13:00	58	1	**59**	0	21	0	**21**	0	40	3	**43**	0	1	0	**1**	0	**124**	**0**	1	2
13:00 - 13:15	63	2	**65**	0	22	0	**22**	0	38	3	**41**	0	0	0	**0**	0	**128**	**0**	0	2
13:15 - 13:30	53	1	**54**	0	25	0	**25**	0	31	2	**33**	0	0	0	**0**	0	**112**	**0**	2	2
13:30 - 13:45	53	1	**54**	0	32	1	**33**	0	38	1	**39**	0	1	0	**1**	0	**127**	**0**	0	1
13:45 - 14:00	44	0	**44**	0	18	0	**18**	0	32	5	**37**	0	0	0	**0**	0	**99**	**0**	0	4
14:00 - 14:15	56	1	**57**	0	24	1	**25**	0	40	2	**42**	0	1	0	**1**	0	**125**	**0**	1	4
14:15 - 14:30	62	1	**63**	0	31	0	**31**	0	37	4	**41**	0	0	0	**0**	0	**135**	**0**	3	0
14:30 - 14:45	63	1	**64**	0	42	1	**43**	0	47	4	**51**	0	0	0	**0**	0	**158**	**0**	0	2
14:45 - 15:00	59	1	**60**	0	18	0	**18**	0	49	2	**51**	0	0	0	**0**	0	**129**	**0**	0	0
15:00 - 15:15	54	1	**55**	0	35	0	**35**	0	47	1	**48**	0	0	0	**0**	0	**138**	**0**	0	0
15:15 - 15:30	66	1	**67**	0	39	3	**42**	0	53	2	**55**	0	1	0	**1**	0	**165**	**0**	0	0
15:30 - 15:45	71	1	**72**	0	19	0	**19**	0	54	3	**57**	0	0	0	**0**	0	**148**	**0**	1	0
15:45 - 16:00	46	2	**48**	0	27	0	**27**	0	43	3	**46**	0	0	0	**0**	0	**121**	**0**	1	0
16:00 - 16:15	60	1	**61**	0	24	0	**24**	0	48	0	**48**	0	1	0	**1**	0	**134**	**0**	0	0
16:15 - 16:30	59	2	**61**	0	26	3	**29**	0	41	2	**43**	0	0	0	**0**	0	**133**	**0**	0	1
16:30 - 16:45	47	0	**47**	0	22	2	**24**	0	49	1	**50**	0	0	0	**0**	0	**121**	**0**	0	0
16:45 - 17:00	39	1	**40**	0	24	0	**24**	0	41	1	**42**	0	0	0	**0**	0	**106**	**0**	1	0
17:00 - 17:15	45	1	**46**	0	26	0	**26**	0	46	0	**46**	0	0	0	**0**	0	**118**	**0**	1	0
17:15 - 17:30	50	0	**50**	0	21	0	**21**	0	30	0	**30**	0	0	0	**0**	0	**101**	**0**	0	2
17:30 - 17:45	46	0	**46**	0	21	0	**21**	0	47	1	**48**	0	0	0	**0**	0	**115**	**0**	0	1
17:45 - 18:00	33	0	**33**	0	19	0	**19**	0	32	1	**33**	0	0	0	**0**	0	**85**	**0**	0	0
18:00 - 18:15	44	2	**46**	0	23	0	**23**	0	29	0	**29**	0	0	0	**0**	0	**98**	**0**	0	0
18:15 - 18:30	21	0	**21**	0	8	0	**8**	0	31	0	**31**	0	0	0	**0**	0	**60**	**0**	0	0
18:30 - 18:45	32	0	**32**	0	6	0	**6**	0	23	0	**23**	0	0	0	**0**	0	**61**	**0**	0	0
18:45 - 19:00	27	1	**28**	0	12	0	**12**	0	19	0	**19**	0	0	0	**0**	0	**59**	**0**	0	0
TOTAL	**2525**	**91**	**2616**	**0**	**1121**	**36**	**1157**	**0**	**1825**	**104**	**1929**	**0**	**5**	**0**	**5**	**0**	**5707**	**0**	**27**	**39**
AM Peak:	205	18	**223**	0	94	8	**102**	0	172	10	**182**	0	0	0	**0**	0	**507**	**0**	0	1
PM Peak:	250	4	**254**	0	111	3	**114**	0	203	8	**211**	0	1	0	**1**	0	**580**	**0**	**1**	0

Movement	Sth App - Left				Sth App - Straight				Sth App - Right				Sth App	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy
06:00 - 06:15	0	0	**0**	0	10	1	**11**	0	1	0	**1**	0	0	0
06:15 - 06:30	1	0	**1**	0	10	1	**11**	0	1	0	**1**	0	0	0
06:30 - 06:45	3	0	**3**	0	18	0	**18**	0	4	1	**5**	0	0	0
06:45 - 07:00	1	0	**1**	0	8	3	**11**	0	0	0	**0**	0	0	0
07:00 - 07:15	0	0	**0**	0	24	0	**24**	0	2	0	**2**	0	0	0
07:15 - 07:30	2	0	**2**	0	14	1	**15**	0	1	0	**1**	0	0	0
07:30 - 07:45	3	0	**3**	0	20	0	**20**	0	0	0	**0**	0	0	0
07:45 - 08:00	0	0	**0**	0	38	2	**40**	0	5	0	**5**	0	0	0
08:00 - 08:15	4	0	**4**	0	30	1	**31**	0	6	0	**6**	0	0	0
08:15 - 08:30	3	0	**3**	0	22	2	**24**	0	6	0	**6**	0	0	0
08:30 - 08:45	5	0	**5**	0	29	1	**30**	0	11	0	**11**	0	0	0
08:45 - 09:00	3	0	**3**	0	20	3	**23**	0	8	1	**9**	0	0	0
09:00 - 09:15	1	0	**1**	0	23	2	**25**	0	6	0	**6**	0	0	0
09:15 - 09:30	0	0	**0**	0	36	0	**36**	0	4	0	**4**	0	1	0
09:30 - 09:45	1	0	**1**	0	25	1	**26**	0	9	0	**9**	0	0	0
09:45 - 10:00	1	0	**1**	0	20	1	**21**	0	8	0	**8**	0	0	0
10:00 - 10:15	4	0	**4**	0	25	0	**25**	0	18	0	**18**	0	0	0
10:15 - 10:30	3	0	**3**	0	31	1	**32**	0	3	0	**3**	0	0	0
10:30 - 10:45	4	1	**5**	0	24	1	**25**	0	9	0	**9**	0	0	0
10:45 - 11:00	6	1	**7**	0	25	0	**25**	0	11	0	**11**	0	0	0
11:00 - 11:15	4	0	**4**	0	30	1	**31**	0	9	0	**9**	0	0	0
11:15 - 11:30	8	1	**9**	0	21	2	**23**	0	9	0	**9**	0	0	0
11:30 - 11:45	6	1	**7**	0	22	1	**23**	0	14	0	**14**	0	1	0
11:45 - 12:00	4	0	**4**	0	27	1	**28**	0	7	0	**7**	0	0	0
12:00 - 12:15	5	0	**5**	0	23	1	**24**	0	7	0	**7**	0	0	0
12:15 - 12:30	5	0	**5**	0	30	0	**30**	0	8	0	**8**	0	0	0
12:30 - 12:45	5	0	**5**	0	18	0	**18**	0	9	0	**9**	0	0	0
12:45 - 13:00	5	0	**5**	0	26	1	**27**	0	6	0	**6**	0	0	0
13:00 - 13:15	5	0	**5**	0	24	0	**24**	0	8	0	**8**	0	0	0
13:15 - 13:30	3	0	**3**	0	23	0	**23**	0	8	0	**8**	0	0	0
13:30 - 13:45	3	0	**3**	0	19	0	**19**	0	7	0	**7**	0	0	0
13:45 - 14:00	0	0	**0**	0	26	1	**27**	0	5	0	**5**	0	1	0
14:00 - 14:15	0	0	**0**	0	27	0	**27**	0	3	0	**3**	0	0	0
14:15 - 14:30	2	0	**2**	0	25	1	**26**	0	5	0	**5**	0	0	0
14:30 - 14:45	3	0	**3**	0	28	0	**28**	0	8	0	**8**	0	0	0
14:45 - 15:00	7	0	**7**	0	37	0	**37**	0	8	0	**8**	0	0	0
15:00 - 15:15	2	0	**2**	0	30	1	**31**	0	5	0	**5**	0	0	0
15:15 - 15:30	2	0	**2**	0	36	3	**39**	0	5	2	**7**	0	0	0
15:30 - 15:45	2	0	**2**	0	13	0	**13**	0	11	0	**11**	0	0	0
15:45 - 16:00	6	0	**6**	0	26	1	**27**	0	5	1	**6**	0	0	0
16:00 - 16:15	3	0	**3**	0	21	0	**21**	0	3	0	**3**	0	0	0
16:15 - 16:30	2	1	**3**	0	32	2	**34**	0	3	0	**3**	0	0	0
16:30 - 16:45	1	0	**1**	0	30	1	**31**	0	8	0	**8**	0	0	0
16:45 - 17:00	3	0	**3**	0	17	0	**17**	0	3	0	**3**	0	0	0
17:00 - 17:15	4	0	**4**	0	36	0	**36**	0	3	0	**3**	0	0	0
17:15 - 17:30	3	0	**3**	0	30	0	**30**	0	7	0	**7**	0	0	0
17:30 - 17:45	1	0	**1**	0	28	0	**28**	0	4	0	**4**	0	0	0
17:45 - 18:00	0	0	**0**	0	19	0	**19**	0	1	0	**1**	0	0	0
18:00 - 18:15	4	0	**4**	0	8	0	**8**	0	0	0	**0**	0	0	0
18:15 - 18:30	2	0	**2**	0	16	0	**16**	0	0	0	**0**	0	0	0
18:30 - 18:45	3	0	**3**	0	12	0	**12**	0	3	0	**3**	0	0	0
18:45 - 19:00	0	0	**0**	0	13	0	**13**	0	1	0	**1**	0	0	0
TOTAL	**148**	**5**	**153**	**0**	**1225**	**38**	**1263**	**0**	**296**	**5**	**301**	**0**	**3**	**0**
AM Peak:	15	0	**15**	0	101	7	**108**	0	31	1	**32**	0	0	0
PM Peak:	13	0	**13**	0	116	4	**120**	0	29	2	**31**	0	0	0

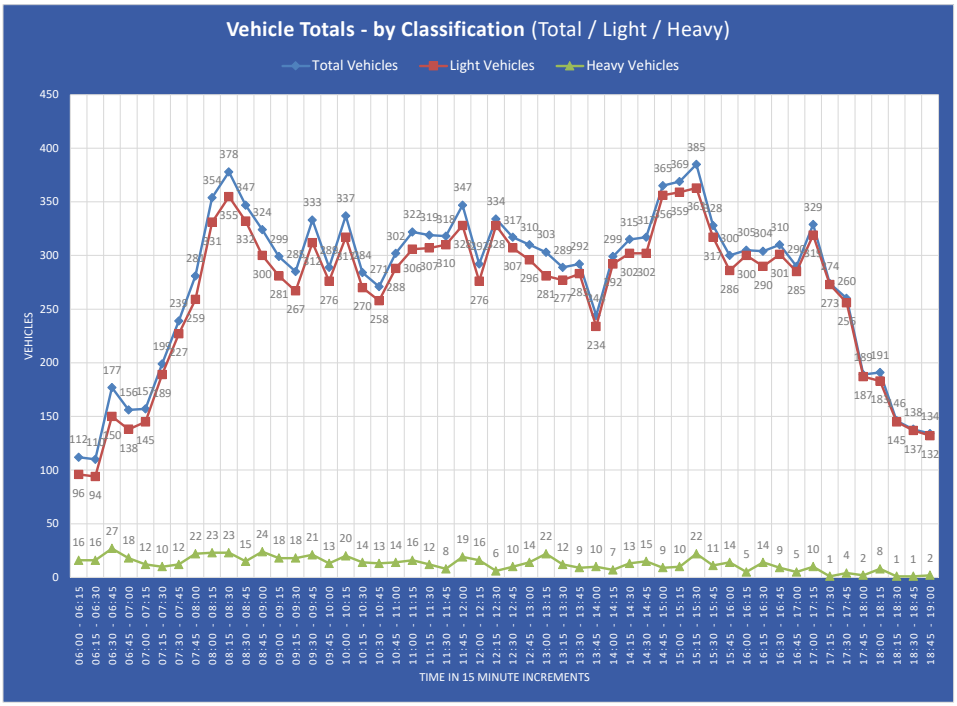
- U Turn		Sth Total		Peds	
Total	Cyclist	Vehicle	Cyclist	EB	WB
0	0	12	0	0	0
0	0	13	0	0	0
0	0	26	0	0	0
0	0	12	0	0	0
0	0	26	0	0	0
0	0	18	0	0	0
0	0	23	0	0	0
0	0	45	0	0	0
0	0	41	0	0	0
0	0	33	0	1	1
0	0	46	0	1	0
0	0	35	0	0	1
0	0	32	0	0	0
1	0	41	0	1	0
0	0	36	0	0	0
0	0	30	0	0	3
0	0	47	0	1	0
0	0	38	0	1	0
0	0	39	0	1	0
0	0	43	0	3	2
0	0	44	0	2	0
0	0	41	0	1	0
1	0	45	0	1	1
0	0	39	0	1	1
0	0	36	0	2	0
0	0	43	0	0	0
0	0	32	0	0	0
0	0	38	0	0	0
0	0	37	0	0	0
0	0	34	0	0	0
0	0	29	0	1	0
1	0	33	0	1	0
0	0	30	0	0	3
0	0	33	0	0	1
0	0	39	0	0	0
0	0	52	0	1	4
0	0	38	0	0	0
0	0	48	0	0	0
0	0	26	0	1	1
0	0	39	0	1	3
0	0	27	0	2	0
0	0	40	0	0	0
0	0	40	0	0	0
0	0	23	0	0	0
0	0	43	0	0	0
0	0	40	0	0	1
0	0	33	0	0	0
0	0	20	0	0	0
0	0	12	0	0	0
0	0	18	0	1	0
0	0	18	0	0	0
0	0	14	0	6	0
3	0	1720	0	30	22
0	0	155	0	2	2
0	0	164	0	2	5

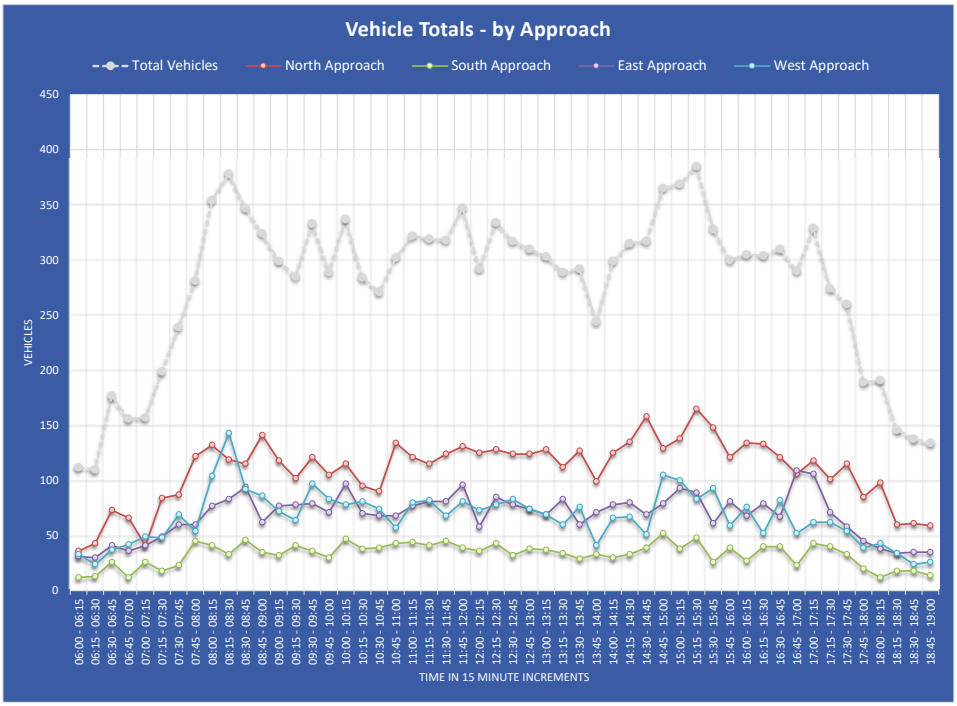
Movement	Est App - Left				Est App - Straight				Est App - Right				Est App - U Turn				Est Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
06:00 - 06:15	1	0	1	0	8	3	11	0	19	0	19	0	0	0	0	0	31	0	0	0
06:15 - 06:30	2	0	2	0	8	0	8	0	18	2	20	0	0	0	0	0	30	0	0	0
06:30 - 06:45	1	0	1	0	8	4	12	0	26	2	28	0	0	0	0	0	41	0	0	1
06:45 - 07:00	1	0	1	0	8	2	10	0	25	0	25	0	0	0	0	0	36	0	0	0
07:00 - 07:15	0	0	0	0	7	1	8	0	32	1	33	0	0	0	0	0	41	0	0	0
07:15 - 07:30	1	0	1	0	7	2	9	0	37	2	39	0	0	0	0	0	49	0	1	1
07:30 - 07:45	0	0	0	0	11	3	14	0	44	2	46	0	0	0	0	0	60	0	0	1
07:45 - 08:00	2	0	2	0	7	2	9	0	45	4	49	0	0	0	0	0	60	0	0	0
08:00 - 08:15	1	0	1	0	13	4	17	0	56	3	59	0	0	0	0	0	77	0	0	0
08:15 - 08:30	3	1	4	0	9	1	10	0	65	4	69	0	0	0	0	0	83	0	0	0
08:30 - 08:45	7	0	7	0	7	1	8	0	76	3	79	0	0	0	0	0	94	0	0	0
08:45 - 09:00	5	0	5	0	9	0	9	0	46	2	48	0	0	0	0	0	62	0	1	1
09:00 - 09:15	7	0	7	0	10	0	10	0	55	5	60	0	0	0	0	0	77	0	0	4
09:15 - 09:30	5	0	5	0	20	3	23	0	48	2	50	0	0	0	0	0	78	0	4	0
09:30 - 09:45	11	1	12	0	12	3	15	0	49	3	52	0	0	0	0	0	79	0	1	0
09:45 - 10:00	10	0	10	0	13	0	13	0	45	3	48	0	0	0	0	0	71	0	1	2
10:00 - 10:15	8	0	8	0	20	5	25	0	60	4	64	0	0	0	0	0	97	0	2	1
10:15 - 10:30	10	0	10	0	8	1	9	0	50	1	51	0	0	0	0	0	70	0	0	0
10:30 - 10:45	11	0	11	0	12	0	12	0	39	6	45	0	0	0	0	0	68	0	1	0
10:45 - 11:00	8	0	8	0	14	2	16	0	43	1	44	0	0	0	0	0	68	0	1	1
11:00 - 11:15	7	0	7	0	17	0	17	0	52	1	53	0	0	0	0	0	77	0	1	4
11:15 - 11:30	7	0	7	0	18	1	19	0	54	1	55	0	0	0	0	0	81	0	1	2
11:30 - 11:45	12	0	12	0	13	0	13	0	55	1	56	0	0	0	0	0	81	0	0	1
11:45 - 12:00	8	0	8	0	22	3	25	0	60	3	63	0	0	0	0	0	96	0	0	1
12:00 - 12:15	2	0	2	0	4	3	7	0	48	1	49	0	0	0	0	0	58	0	0	0
12:15 - 12:30	12	0	12	0	19	1	20	0	53	0	53	0	0	0	0	0	85	0	0	6
12:30 - 12:45	8	0	8	0	15	2	17	0	51	1	52	0	1	0	1	0	78	0	4	0
12:45 - 13:00	9	0	9	0	12	3	15	0	49	1	50	0	0	0	0	0	74	0	0	2
13:00 - 13:15	3	1	4	0	14	1	15	0	43	7	50	0	0	0	0	0	69	0	0	0
13:15 - 13:30	7	1	8	0	20	2	22	0	50	3	53	0	0	0	0	0	83	0	0	0
13:30 - 13:45	13	0	13	0	11	0	11	0	35	0	35	0	1	0	1	0	60	0	1	0
13:45 - 14:00	7	0	7	0	19	1	20	0	44	0	44	0	0	0	0	0	71	0	3	0
14:00 - 14:15	3	0	3	0	13	0	13	0	62	0	62	0	0	0	0	0	78	0	6	4
14:15 - 14:30	4	0	4	0	14	4	18	0	56	2	58	0	0	0	0	0	80	0	0	2
14:30 - 14:45	4	1	5	0	9	1	10	0	52	2	54	0	0	0	0	0	69	0	0	2
14:45 - 15:00	6	0	6	0	12	1	13	0	58	2	60	0	0	0	0	0	79	0	0	0
15:00 - 15:15	1	0	1	0	20	0	20	0	71	1	72	0	0	0	0	0	93	0	0	0
15:15 - 15:30	8	0	8	0	6	0	6	0	69	6	75	0	0	0	0	0	89	0	0	0
15:30 - 15:45	0	0	0	0	7	1	8	0	51	2	53	0	0	0	0	0	61	0	0	0
15:45 - 16:00	2	0	2	0	11	2	13	0	64	2	66	0	0	0	0	0	81	0	2	5
16:00 - 16:15	13	0	13	0	10	1	11	0	43	1	44	0	0	0	0	0	68	0	1	1
16:15 - 16:30	5	0	5	0	16	1	17	0	55	2	57	0	0	0	0	0	79	0	1	0
16:30 - 16:45	2	0	2	0	10	0	10	0	53	2	55	0	0	0	0	0	67	0	0	1
16:45 - 17:00	4	0	4	0	16	0	16	0	87	2	89	0	0	0	0	0	109	0	0	0
17:00 - 17:15	4	0	4	0	13	2	15	0	86	1	87	0	0	0	0	0	106	0	0	0
17:15 - 17:30	0	0	0	0	14	0	14	0	57	0	57	0	0	0	0	0	71	0	0	0
17:30 - 17:45	2	0	2	0	9	0	9	0	45	2	47	0	0	0	0	0	58	0	0	0
17:45 - 18:00	0	0	0	0	9	0	9	0	35	1	36	0	0	0	0	0	45	0	0	1
18:00 - 18:15	2	0	2	0	13	1	14	0	22	0	22	0	0	0	0	0	38	0	0	2
18:15 - 18:30	4	0	4	0	6	1	7	0	23	0	23	0	0	0	0	0	34	0	1	2
18:30 - 18:45	2	0	2	0	9	0	9	0	24	0	24	0	0	0	0	0	35	0	0	2
18:45 - 19:00	1	0	1	0	10	1	11	0	23	0	23	0	0	0	0	0	35	0	6	0
TOTAL	256	5	261	0	622	70	692	0	2508	97	2605	0	2	0	2	0	3560	0	39	50
AM Peak:	16	1	17	0	38	6	44	0	243	12	255	0	0	0	0	0	316	0	1	1
PM Peak:	15	0	15	0	45	2	47	0	249	11	260	0	0	0	0	0	322	0	0	0

Movement	Wst App - Left				Wst App - Straig		
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total
06:00 - 06:15	12	2	14	0	15	3	18
06:15 - 06:30	7	2	9	0	12	3	15
06:30 - 06:45	13	1	14	0	17	5	22
06:45 - 07:00	20	1	21	0	18	2	20
07:00 - 07:15	11	0	11	0	31	5	36
07:15 - 07:30	26	1	27	0	18	2	20
07:30 - 07:45	36	4	40	0	26	1	27
07:45 - 08:00	24	0	24	0	26	2	28
08:00 - 08:15	55	3	58	0	42	4	46
08:15 - 08:30	70	4	74	0	60	5	65
08:30 - 08:45	48	0	48	0	36	6	42
08:45 - 09:00	51	0	51	0	34	0	34
09:00 - 09:15	37	4	41	0	25	5	30
09:15 - 09:30	32	4	36	0	25	1	26
09:30 - 09:45	47	2	49	0	42	4	46
09:45 - 10:00	49	2	51	0	28	4	32
10:00 - 10:15	33	3	36	0	36	4	40
10:15 - 10:30	44	4	48	0	24	5	29
10:30 - 10:45	36	1	37	0	30	2	32
10:45 - 11:00	38	1	39	0	15	2	17
11:00 - 11:15	39	5	44	0	30	5	35
11:15 - 11:30	49	1	50	0	26	1	27
11:30 - 11:45	40	1	41	0	22	2	24
11:45 - 12:00	47	6	53	0	23	4	27
12:00 - 12:15	40	5	45	0	24	1	25
12:15 - 12:30	41	1	42	0	32	0	32
12:30 - 12:45	53	2	55	0	24	1	25
12:45 - 13:00	38	2	40	0	28	3	31
13:00 - 13:15	31	1	32	0	29	7	36
13:15 - 13:30	30	1	31	0	26	2	28
13:30 - 13:45	42	2	44	0	27	4	31
13:45 - 14:00	15	1	16	0	23	2	25
14:00 - 14:15	38	2	40	0	25	1	26
14:15 - 14:30	28	0	28	0	38	1	39
14:30 - 14:45	21	3	24	0	23	2	25
14:45 - 15:00	39	1	40	0	60	2	62
15:00 - 15:15	52	2	54	0	38	4	42
15:15 - 15:30	47	2	49	0	31	3	34
15:30 - 15:45	41	2	43	0	47	2	49
15:45 - 16:00	36	0	36	0	19	3	22
16:00 - 16:15	43	1	44	0	29	1	30
16:15 - 16:30	24	0	24	0	26	1	27
16:30 - 16:45	44	2	46	0	28	1	29
16:45 - 17:00	24	0	24	0	25	1	26
17:00 - 17:15	31	1	32	0	22	5	27
17:15 - 17:30	42	0	42	0	18	1	19
17:30 - 17:45	37	0	37	0	13	1	14
17:45 - 18:00	20	0	20	0	16	0	16
18:00 - 18:15	24	1	25	0	14	4	18
18:15 - 18:30	20	0	20	0	14	0	14
18:30 - 18:45	17	1	18	0	5	0	5
18:45 - 19:00	13	0	13	0	13	0	13
TOTAL	1795	85	1880	0	1378	130	1508
AM Peak:	224	7	231	0	172	15	187
PM Peak:	179	7	186	0	176	11	187

8

ght	Wst App - Right				Wst App - U Turn				Wst Total		Peds	
Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
0	1	0	**1**	0	0	0	**0**	0	**33**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**24**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**37**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**42**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**49**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**48**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**69**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**54**	**0**	1	0
0	0	0	**0**	0	0	0	**0**	0	**104**	**0**	0	0
0	4	0	**4**	0	0	0	**0**	0	**143**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**92**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**86**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**72**	**0**	2	1
0	2	0	**2**	0	0	0	**0**	0	**64**	**0**	2	0
0	2	0	**2**	0	0	0	**0**	0	**97**	**0**	2	0
0	0	0	**0**	0	0	0	**0**	0	**83**	**0**	2	1
0	2	0	**2**	0	0	0	**0**	0	**78**	**0**	1	1
0	4	0	**4**	0	0	0	**0**	0	**81**	**0**	0	0
0	5	0	**5**	0	0	0	**0**	0	**74**	**0**	4	2
0	1	0	**1**	0	0	0	**0**	0	**57**	**0**	1	4
0	1	0	**1**	0	0	0	**0**	0	**80**	**0**	1	8
0	5	0	**5**	0	0	0	**0**	0	**82**	**0**	1	1
0	3	0	**3**	0	0	0	**0**	0	**68**	**0**	3	3
0	1	0	**1**	0	0	0	**0**	0	**81**	**0**	2	0
0	3	0	**3**	0	0	0	**0**	0	**73**	**0**	0	0
0	4	0	**4**	0	0	0	**0**	0	**78**	**0**	2	1
0	3	0	**3**	0	0	0	**0**	0	**83**	**0**	1	1
0	3	0	**3**	0	0	0	**0**	0	**74**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**69**	**0**	5	1
0	1	0	**1**	0	0	0	**0**	0	**60**	**0**	3	0
0	1	0	**1**	0	0	0	**0**	0	**76**	**0**	1	2
0	0	0	**0**	0	0	0	**0**	0	**41**	**0**	0	2
0	0	0	**0**	0	0	0	**0**	0	**66**	**0**	3	0
0	0	0	**0**	0	0	0	**0**	0	**67**	**0**	3	0
0	2	0	**2**	0	0	0	**0**	0	**51**	**0**	0	2
0	2	0	**2**	0	1	0	**1**	0	**105**	**0**	3	0
0	4	0	**4**	0	0	0	**0**	0	**100**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**83**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**93**	**0**	2	3
0	1	0	**1**	0	0	0	**0**	0	**59**	**0**	1	0
0	2	0	**2**	0	0	0	**0**	0	**76**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**52**	**0**	0	1
0	7	0	**7**	0	0	0	**0**	0	**82**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**52**	**0**	0	0
0	3	0	**3**	0	0	0	**0**	0	**62**	**0**	1	0
0	1	0	**1**	0	0	0	**0**	0	**62**	**0**	1	0
1	3	0	**3**	0	0	0	**0**	0	**54**	**1**	0	0
0	3	0	**3**	0	0	0	**0**	0	**39**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**43**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**34**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**24**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**26**	**0**	0	0
1	**93**	0	**93**	0	**1**	0	**1**	0	**3482**	**1**	**48**	**34**
0	7	0	**7**	0	0	0	**0**	0	**425**	**0**	0	0
0	7	0	**7**	0	1	0	**1**	0	**381**	**0**	**5**	3


Vehicle Totals - by Classification (Total / Light / Heavy)
Total Vehicles
Light Vehicles
Heavy Vehicles
VEHICLES
TIME IN 15 MINUTE INCREMENTS


Vehicle Totals - by Approach
Total Vehicles
North Approach
South Approach
East Approach
West Approach
VEHICLES
TIME IN 15 MINUTE INCREMENTS

AADT Volumes by Approach

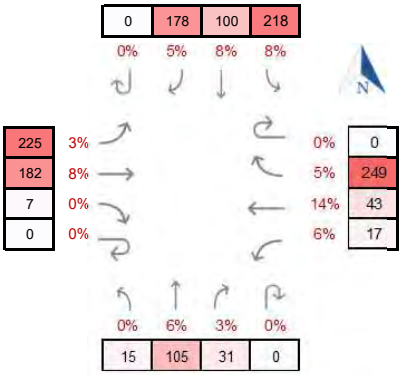
Note: AADT Volumes are an indicative approximation. Calculations are based of AM & PM peaks at 20% of the daily volume

Northern Approach:	**Brisbane St**	
Northbound		5,805
Southbound		5,435
Total		11,240
Southern Approach:	**Brisbane St**	
Northbound		1,595
Southbound		1,310
Total		2,905
Eastern Approach:	**William St**	
Eastbound		4,570
Westbound		3,190
Total		7,760
Western Approach:	**Mount Lindesay Hwy**	
Eastbound		4,030
Westbound		2,565
Total		6,595

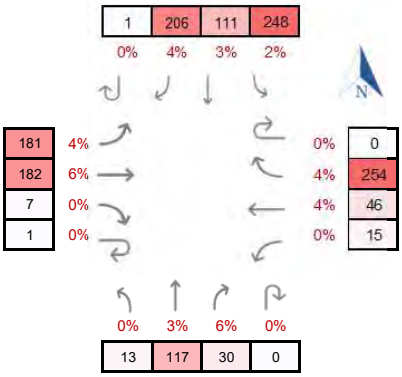
Survey Year:	2023
Assessment Year:	2022
Years:	-1
Growth Rate (p.a.):	2.50%
Growth Factor:	**0.9756**

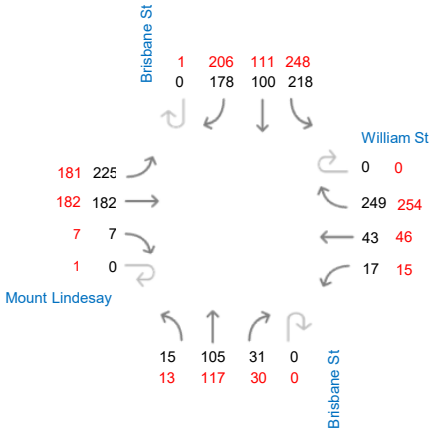
Site 1

AM



PM




Brisbane St
1 206 111 248
0 178 100 218
William St
0 0
249 254
43 46
17 15
181 225
182 182
7 7
1 0
Mount Lindesay
15 105 31 0
13 117 30 0
Brisbane St

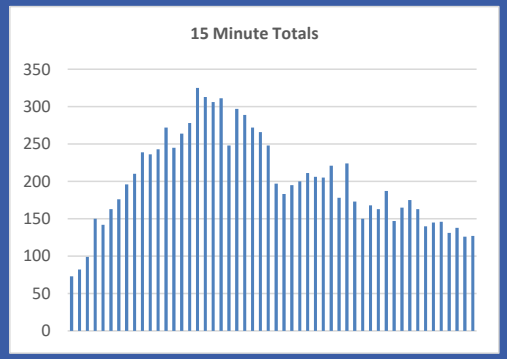
Survey Details

TTM Reference: **22BRD0085**
Location: **Beaudesert Bypass Rd / Brisbane St / Helen St**
Suburb: **Beaudesert**
Date: **Saturday, 3 December 2022**
Duration: **0600-1900**
Weather: **Fine**
Peak Hr: **10:00-11:00**

Notes:

Quick display - Summaries

Survey Period: Full Duration to Select End time



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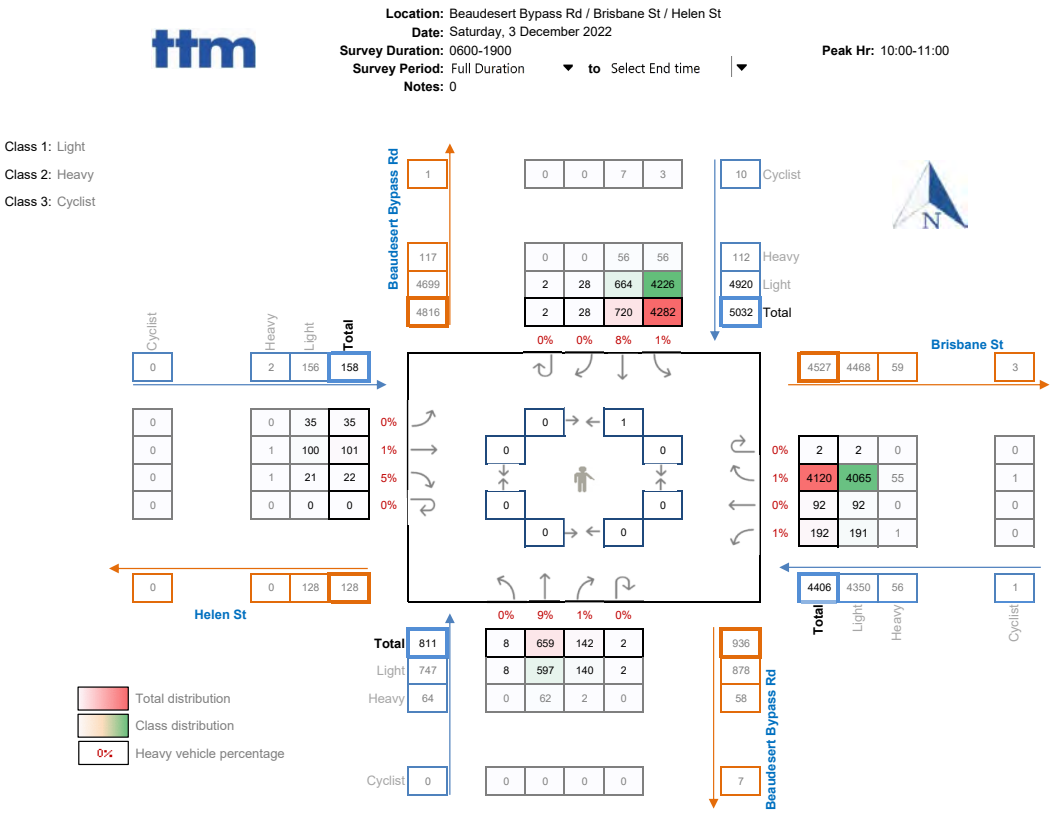
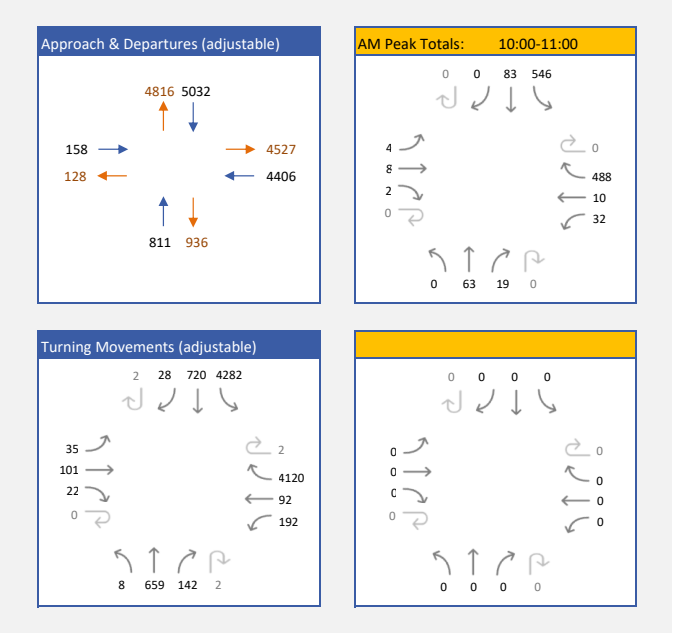

Location: Beaudesert Bypass Rd / Brisbane St / Helen St
Date: Saturday, 3 December 2022
Survey Duration: 0600-1900
Survey Period: Full Duration to Select End time
Notes: 0
Peak Hr: 10:00-11:00
Class 1: Light
Class 2: Heavy
Class 3: Cyclist
Beaudesert Bypass Rd
Brisbane St
Helen St
Cyclist
Heavy
Light
Total
Total distribution
Class distribution
Heavy vehicle percentage


Approach & Departures (adjustable)
4816 5032
158
128
4527
4406
811 936
AM Peak Totals: 10:00-11:00
0 0 83 546
0
488
10
32
0 63 19 0
Turning Movements (adjustable)
2 28 720 4282
35
101
22
0
2
4120
92
192
8 659 142 2
0 0 0 0
0
0
0
0
0
0
0
0
0 0 0 0

Movement	Nth App - Left				Nth App - Straight				Nth App - Right				Nth App - U Turn				Nth Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	EB	WB
06:00 - 06:15	25	5	**30**	0	6	3	**9**	1	0	0	**0**	0	0	0	**0**	0	**39**	**1**	0	0
06:15 - 06:30	32	1	**33**	0	8	4	**12**	0	2	0	**2**	0	0	0	**0**	0	**47**	**0**	0	0
06:30 - 06:45	38	2	**40**	1	13	4	**17**	0	1	0	**1**	0	0	0	**0**	0	**58**	**1**	0	0
06:45 - 07:00	55	4	**59**	0	9	1	**10**	0	0	0	**0**	0	0	0	**0**	0	**69**	**0**	0	0
07:00 - 07:15	57	0	**57**	0	15	2	**17**	5	0	0	**0**	0	0	0	**0**	0	**74**	**5**	0	0
07:15 - 07:30	72	1	**73**	0	10	2	**12**	0	0	0	**0**	0	0	0	**0**	0	**85**	**0**	0	0
07:30 - 07:45	79	0	**79**	0	10	2	**12**	0	0	0	**0**	0	0	0	**0**	0	**91**	**0**	0	0
07:45 - 08:00	90	3	**93**	0	13	1	**14**	0	0	0	**0**	0	1	0	**1**	0	**108**	**0**	0	0
08:00 - 08:15	85	2	**87**	0	10	2	**12**	0	0	0	**0**	0	0	0	**0**	0	**99**	**0**	0	0
08:15 - 08:30	89	2	**91**	0	13	0	**13**	0	1	0	**1**	0	0	0	**0**	0	**105**	**0**	0	0
08:30 - 08:45	105	1	**106**	0	11	2	**13**	0	0	0	**0**	0	0	0	**0**	0	**119**	**0**	0	0
08:45 - 09:00	108	3	**111**	0	13	3	**16**	0	0	0	**0**	0	0	0	**0**	0	**127**	**0**	0	1
09:00 - 09:15	102	0	**102**	0	21	5	**26**	0	2	0	**2**	0	0	0	**0**	0	**130**	**0**	0	0
09:15 - 09:30	100	1	**101**	0	10	0	**10**	0	0	0	**0**	0	0	0	**0**	0	**111**	**0**	0	0
09:30 - 09:45	106	0	**106**	0	17	0	**17**	0	0	0	**0**	0	0	0	**0**	0	**123**	**0**	0	0
09:45 - 10:00	113	2	**115**	0	9	0	**9**	0	1	0	**1**	0	0	0	**0**	0	**125**	**0**	0	0
10:00 - 10:15	151	1	**152**	0	11	1	**12**	0	0	0	**0**	0	0	0	**0**	0	**164**	**0**	0	0
10:15 - 10:30	134	1	**135**	0	23	1	**24**	0	0	0	**0**	0	0	0	**0**	0	**159**	**0**	0	0
10:30 - 10:45	131	1	**132**	0	18	0	**18**	0	0	0	**0**	0	0	0	**0**	0	**150**	**0**	0	0
10:45 - 11:00	125	2	**127**	0	28	1	**29**	0	0	0	**0**	0	0	0	**0**	0	**156**	**0**	0	0
11:00 - 11:15	112	0	**112**	1	13	2	**15**	0	1	0	**1**	0	0	0	**0**	0	**128**	**1**	0	0
11:15 - 11:30	131	3	**134**	0	20	1	**21**	0	1	0	**1**	0	0	0	**0**	0	**156**	**0**	0	0
11:30 - 11:45	108	0	**108**	0	22	2	**24**	0	2	0	**2**	0	0	0	**0**	0	**134**	**0**	0	0
11:45 - 12:00	115	0	**115**	0	20	1	**21**	0	0	0	**0**	0	0	0	**0**	0	**136**	**0**	0	0
12:00 - 12:15	117	1	**118**	0	19	2	**21**	1	3	0	**3**	0	0	0	**0**	0	**142**	**1**	0	0
12:15 - 12:30	108	0	**108**	0	17	1	**18**	0	0	0	**0**	0	0	0	**0**	0	**126**	**0**	0	0
12:30 - 12:45	73	1	**74**	0	11	1	**12**	0	0	0	**0**	0	0	0	**0**	0	**86**	**0**	0	0
12:45 - 13:00	74	1	**75**	0	13	1	**14**	0	0	0	**0**	0	0	0	**0**	0	**89**	**0**	0	0
13:00 - 13:15	85	2	**87**	0	6	1	**7**	0	1	0	**1**	0	0	0	**0**	0	**95**	**0**	0	0
13:15 - 13:30	82	1	**83**	0	10	0	**10**	0	0	0	**0**	0	0	0	**0**	0	**93**	**0**	0	0
13:30 - 13:45	73	0	**73**	0	11	0	**11**	0	1	0	**1**	0	0	0	**0**	0	**85**	**0**	0	0
13:45 - 14:00	85	1	**86**	0	15	1	**16**	0	1	0	**1**	0	0	0	**0**	0	**103**	**0**	0	0
14:00 - 14:15	77	5	**82**	0	15	1	**16**	0	1	0	**1**	0	1	0	**1**	0	**100**	**0**	0	0
14:15 - 14:30	90	0	**90**	0	14	1	**15**	0	2	0	**2**	0	0	0	**0**	0	**107**	**0**	0	0
14:30 - 14:45	62	0	**62**	0	10	0	**10**	0	0	0	**0**	0	0	0	**0**	0	**72**	**0**	0	0
14:45 - 15:00	80	0	**80**	0	18	0	**18**	0	1	0	**1**	0	0	0	**0**	0	**99**	**0**	0	0
15:00 - 15:15	69	0	**69**	0	10	0	**10**	0	0	0	**0**	0	0	0	**0**	0	**79**	**0**	0	0
15:15 - 15:30	51	1	**52**	1	7	2	**9**	0	0	0	**0**	0	0	0	**0**	0	**61**	**1**	0	0
15:30 - 15:45	55	1	**56**	0	11	0	**11**	0	1	0	**1**	0	0	0	**0**	0	**68**	**0**	0	0
15:45 - 16:00	60	1	**61**	0	10	1	**11**	0	1	0	**1**	0	0	0	**0**	0	**73**	**0**	0	0
16:00 - 16:15	74	3	**77**	0	16	0	**16**	0	1	0	**1**	0	0	0	**0**	0	**94**	**0**	0	0
16:15 - 16:30	69	0	**69**	0	8	0	**8**	0	0	0	**0**	0	0	0	**0**	0	**77**	**0**	0	0
16:30 - 16:45	53	0	**53**	0	13	2	**15**	0	1	0	**1**	0	0	0	**0**	0	**69**	**0**	0	0
16:45 - 17:00	63	0	**63**	0	14	1	**15**	0	2	0	**2**	0	0	0	**0**	0	**80**	**0**	0	0
17:00 - 17:15	58	0	**58**	0	11	1	**12**	0	0	0	**0**	0	0	0	**0**	0	**70**	**0**	0	0
17:15 - 17:30	59	2	**61**	0	14	0	**14**	0	0	0	**0**	0	0	0	**0**	0	**75**	**0**	0	0
17:30 - 17:45	75	0	**75**	0	12	0	**12**	0	0	0	**0**	0	0	0	**0**	0	**87**	**0**	0	0
17:45 - 18:00	60	1	**61**	0	7	0	**7**	0	0	0	**0**	0	0	0	**0**	0	**68**	**0**	0	0
18:00 - 18:15	61	0	**61**	0	8	0	**8**	0	0	0	**0**	0	0	0	**0**	0	**69**	**0**	0	0
18:15 - 18:30	49	0	**49**	0	12	0	**12**	0	1	0	**1**	0	0	0	**0**	0	**62**	**0**	0	0
18:30 - 18:45	56	0	**56**	0	3	0	**3**	0	0	0	**0**	0	0	0	**0**	0	**59**	**0**	0	0
18:45 - 19:00	45	0	**45**	0	6	0	**6**	0	0	0	**0**	0	0	0	**0**	0	**51**	**0**	0	0
TOTAL	**4226**	**56**	**4282**	**3**	**664**	**56**	**720**	**7**	**28**	**0**	**28**	**0**	**2**	**0**	**2**	**0**	**5032**	**10**	**0**	**1**
Peak Hr:	541	5	**546**	0	80	3	**83**	0	0	0	**0**	0	0	0	**0**	0	**629**	**0**	**0**	0
PM Peak:	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	**0**	0

Movement	Sth App - Left				Sth App - Straight				Sth App - Right				Sth App	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy
06:00 - 06:15	0	0	**0**	0	5	0	**5**	0	2	0	**2**	0	0	0
06:15 - 06:30	0	0	**0**	0	1	1	**2**	0	0	0	**0**	0	0	0
06:30 - 06:45	0	0	**0**	0	8	1	**9**	0	0	0	**0**	0	0	0
06:45 - 07:00	0	0	**0**	0	9	2	**11**	0	4	0	**4**	0	0	0
07:00 - 07:15	0	0	**0**	0	11	2	**13**	0	2	0	**2**	0	0	0
07:15 - 07:30	0	0	**0**	0	11	3	**14**	0	1	0	**1**	0	0	0
07:30 - 07:45	0	0	**0**	0	12	3	**15**	0	1	0	**1**	0	0	0
07:45 - 08:00	0	0	**0**	0	9	0	**9**	0	5	0	**5**	0	0	0
08:00 - 08:15	0	0	**0**	0	19	3	**22**	0	1	0	**1**	0	0	0
08:15 - 08:30	0	0	**0**	0	21	3	**24**	0	1	0	**1**	0	0	0
08:30 - 08:45	0	0	**0**	0	15	3	**18**	0	4	0	**4**	0	0	0
08:45 - 09:00	0	0	**0**	0	8	1	**9**	0	1	0	**1**	0	0	0
09:00 - 09:15	0	0	**0**	0	16	3	**19**	0	1	0	**1**	0	1	0
09:15 - 09:30	1	0	**1**	0	13	0	**13**	0	1	0	**1**	0	0	0
09:30 - 09:45	1	0	**1**	0	24	2	**26**	0	3	0	**3**	0	0	0
09:45 - 10:00	0	0	**0**	0	18	2	**20**	0	6	0	**6**	0	0	0
10:00 - 10:15	0	0	**0**	0	13	1	**14**	0	3	0	**3**	0	0	0
10:15 - 10:30	0	0	**0**	0	22	1	**23**	0	6	0	**6**	0	0	0
10:30 - 10:45	0	0	**0**	0	13	1	**14**	0	5	0	**5**	0	0	0
10:45 - 11:00	0	0	**0**	0	10	2	**12**	0	5	0	**5**	0	0	0
11:00 - 11:15	0	0	**0**	0	6	0	**6**	0	4	1	**5**	0	0	0
11:15 - 11:30	0	0	**0**	0	20	3	**23**	0	2	0	**2**	0	0	0
11:30 - 11:45	0	0	**0**	0	16	1	**17**	0	2	0	**2**	0	0	0
11:45 - 12:00	0	0	**0**	0	9	1	**10**	0	1	0	**1**	0	0	0
12:00 - 12:15	0	0	**0**	0	10	0	**10**	0	8	0	**8**	0	0	0
12:15 - 12:30	0	0	**0**	0	16	1	**17**	0	7	0	**7**	0	0	0
12:30 - 12:45	1	0	**1**	0	15	2	**17**	0	3	0	**3**	0	0	0
12:45 - 13:00	0	0	**0**	0	11	2	**13**	0	2	1	**3**	0	0	0
13:00 - 13:15	0	0	**0**	0	7	0	**7**	0	2	0	**2**	0	0	0
13:15 - 13:30	2	0	**2**	0	11	1	**12**	0	2	0	**2**	0	0	0
13:30 - 13:45	0	0	**0**	0	14	1	**15**	0	5	0	**5**	0	0	0
13:45 - 14:00	0	0	**0**	0	10	0	**10**	0	1	0	**1**	0	0	0
14:00 - 14:15	0	0	**0**	0	12	1	**13**	0	2	0	**2**	0	0	0
14:15 - 14:30	1	0	**1**	0	12	1	**13**	0	3	0	**3**	0	1	0
14:30 - 14:45	0	0	**0**	0	19	2	**21**	0	4	0	**4**	0	0	0
14:45 - 15:00	0	0	**0**	0	14	3	**17**	0	5	0	**5**	0	0	0
15:00 - 15:15	0	0	**0**	0	11	0	**11**	0	0	0	**0**	0	0	0
15:15 - 15:30	0	0	**0**	0	10	3	**13**	0	4	0	**4**	0	0	0
15:30 - 15:45	0	0	**0**	0	10	0	**10**	0	1	0	**1**	0	0	0
15:45 - 16:00	0	0	**0**	0	11	1	**12**	0	1	0	**1**	0	0	0
16:00 - 16:15	1	0	**1**	0	8	0	**8**	0	3	0	**3**	0	0	0
16:15 - 16:30	0	0	**0**	0	2	1	**3**	0	2	0	**2**	0	0	0
16:30 - 16:45	0	0	**0**	0	13	1	**14**	0	4	0	**4**	0	0	0
16:45 - 17:00	0	0	**0**	0	13	1	**14**	0	2	0	**2**	0	0	0
17:00 - 17:15	1	0	**1**	0	14	0	**14**	0	5	0	**5**	0	0	0
17:15 - 17:30	0	0	**0**	0	4	1	**5**	0	1	0	**1**	0	0	0
17:30 - 17:45	0	0	**0**	0	9	0	**9**	0	2	0	**2**	0	0	0
17:45 - 18:00	0	0	**0**	0	6	0	**6**	0	2	0	**2**	0	0	0
18:00 - 18:15	0	0	**0**	0	5	1	**6**	0	1	0	**1**	0	0	0
18:15 - 18:30	0	0	**0**	0	7	0	**7**	0	2	0	**2**	0	0	0
18:30 - 18:45	0	0	**0**	0	12	0	**12**	0	2	0	**2**	0	0	0
18:45 - 19:00	0	0	**0**	0	2	0	**2**	0	3	0	**3**	0	0	0
TOTAL	**8**	**0**	**8**	**0**	**597**	**62**	**659**	**0**	**140**	**2**	**142**	**0**	**2**	**0**
Peak Hr:	0	0	**0**	0	58	5	**63**	0	19	0	**19**	0	0	0
PM Peak:	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0

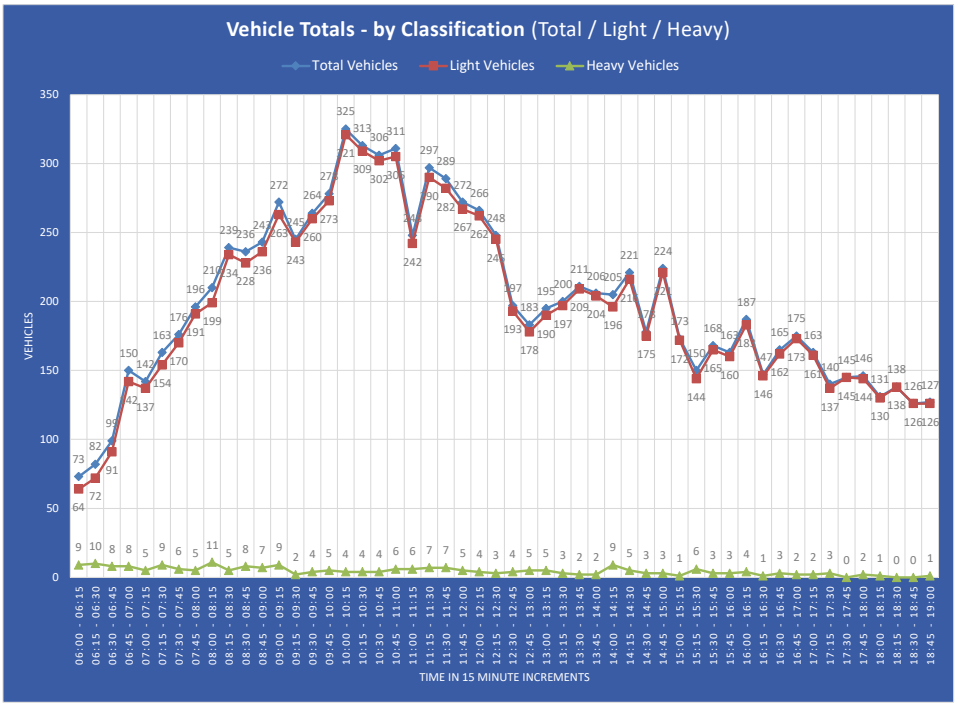
- U Turn		Sth Total		Peds	
Total	Cyclist	Vehicle	Cyclist	EB	WB
0	0	7	0	0	0
0	0	2	0	0	0
0	0	9	0	0	0
0	0	15	0	0	0
0	0	15	0	0	0
0	0	15	0	0	0
0	0	16	0	0	0
0	0	14	0	0	0
0	0	23	0	0	0
0	0	25	0	0	0
0	0	22	0	0	0
0	0	10	0	0	0
1	0	21	0	0	0
0	0	15	0	0	0
0	0	30	0	0	0
0	0	26	0	0	0
0	0	17	0	0	0
0	0	29	0	0	0
0	0	19	0	0	0
0	0	17	0	0	0
0	0	11	0	0	0
0	0	25	0	0	0
0	0	19	0	0	0
0	0	11	0	0	0
0	0	18	0	0	0
0	0	24	0	0	0
0	0	21	0	0	0
0	0	16	0	0	0
0	0	9	0	0	0
0	0	16	0	0	0
0	0	20	0	0	0
0	0	11	0	0	0
0	0	15	0	0	0
1	0	18	0	0	0
0	0	25	0	0	0
0	0	22	0	0	0
0	0	11	0	0	0
0	0	17	0	0	0
0	0	11	0	0	0
0	0	13	0	0	0
0	0	12	0	0	0
0	0	5	0	0	0
0	0	18	0	0	0
0	0	16	0	0	0
0	0	20	0	0	0
0	0	6	0	0	0
0	0	11	0	0	0
0	0	8	0	0	0
0	0	7	0	0	0
0	0	9	0	0	0
0	0	14	0	0	0
0	0	5	0	0	0
2	0	811	0	0	0
0	0	82	0	0	0
0	0	0	0	0	0

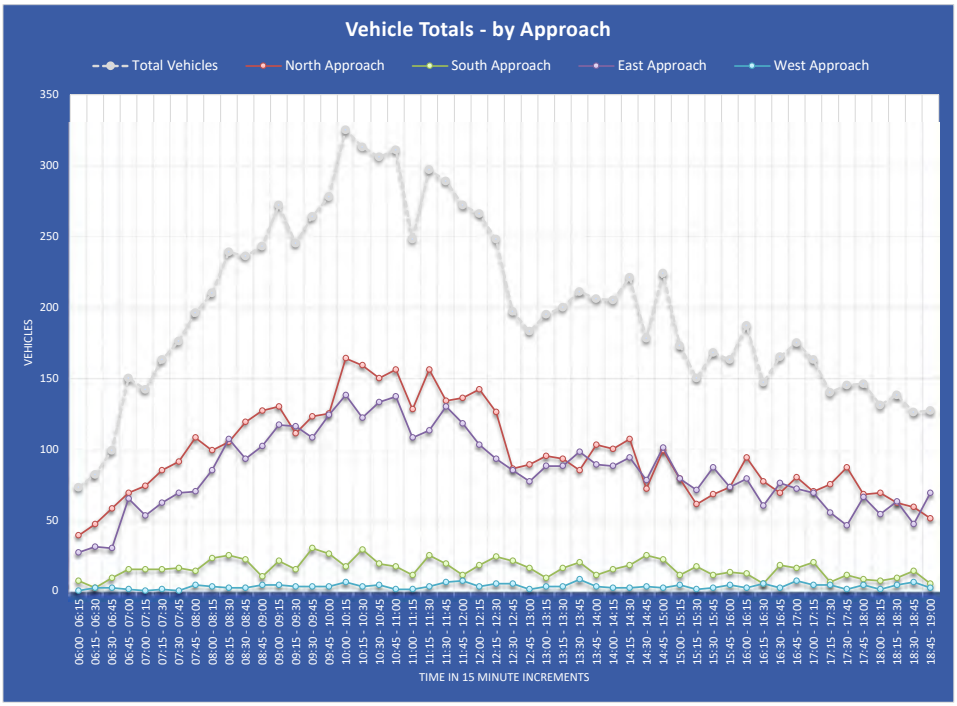
Movement	Est App - Left				Est App - Straight				Est App - Right				Est App - U Turn				Est Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
06:00 - 06:15	0	0	0	0	0	0	0	0	26	1	27	0	0	0	0	0	27	0	0	0
06:15 - 06:30	2	0	2	0	0	0	0	0	25	4	29	1	0	0	0	0	31	1	0	0
06:30 - 06:45	1	0	1	0	0	0	0	0	28	1	29	0	0	0	0	0	30	0	0	0
06:45 - 07:00	4	0	4	0	2	0	2	0	58	1	59	0	0	0	0	0	65	0	0	0
07:00 - 07:15	3	0	3	0	0	0	0	0	49	1	50	0	0	0	0	0	53	0	0	0
07:15 - 07:30	3	0	3	0	0	0	0	0	56	2	58	0	1	0	1	0	62	0	0	0
07:30 - 07:45	4	0	4	0	1	0	1	0	63	1	64	0	0	0	0	0	69	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	0	69	1	70	0	0	0	0	0	70	0	0	0
08:00 - 08:15	1	1	2	0	0	0	0	0	80	3	83	0	0	0	0	0	85	0	0	0
08:15 - 08:30	9	0	9	0	1	0	1	0	97	0	97	0	0	0	0	0	107	0	0	0
08:30 - 08:45	2	0	2	0	1	0	1	0	88	2	90	0	0	0	0	0	93	0	0	0
08:45 - 09:00	3	0	3	0	1	0	1	0	98	0	98	0	0	0	0	0	102	0	0	0
09:00 - 09:15	4	0	4	0	1	0	1	0	111	1	112	0	0	0	0	0	117	0	0	0
09:15 - 09:30	3	0	3	0	3	0	3	0	109	1	110	0	0	0	0	0	116	0	0	0
09:30 - 09:45	3	0	3	0	2	0	2	0	101	2	103	0	0	0	0	0	108	0	0	0
09:45 - 10:00	4	0	4	0	2	0	2	0	117	1	118	0	0	0	0	0	124	0	0	0
10:00 - 10:15	5	0	5	0	4	0	4	0	128	1	129	0	0	0	0	0	138	0	0	0
10:15 - 10:30	11	0	11	0	1	0	1	0	109	1	110	0	0	0	0	0	122	0	0	0
10:30 - 10:45	7	0	7	0	3	0	3	0	121	2	123	0	0	0	0	0	133	0	0	0
10:45 - 11:00	9	0	9	0	2	0	2	0	125	1	126	0	0	0	0	0	137	0	0	0
11:00 - 11:15	4	0	4	0	3	0	3	0	98	3	101	0	0	0	0	0	108	0	0	0
11:15 - 11:30	7	0	7	0	3	0	3	0	103	0	103	0	0	0	0	0	113	0	0	0
11:30 - 11:45	8	0	8	0	4	0	4	0	114	4	118	0	0	0	0	0	130	0	0	0
11:45 - 12:00	5	0	5	0	5	0	5	0	105	3	108	0	0	0	0	0	118	0	0	0
12:00 - 12:15	4	0	4	0	6	0	6	0	92	1	93	0	0	0	0	0	103	0	0	0
12:15 - 12:30	9	0	9	0	2	0	2	0	81	1	82	0	0	0	0	0	93	0	0	0
12:30 - 12:45	10	0	10	0	2	0	2	0	73	0	73	0	0	0	0	0	85	0	0	0
12:45 - 13:00	2	0	2	0	1	0	1	0	74	0	74	0	0	0	0	0	77	0	0	0
13:00 - 13:15	6	0	6	0	2	0	2	0	78	2	80	0	0	0	0	0	88	0	0	0
13:15 - 13:30	7	0	7	0	3	0	3	0	77	1	78	0	0	0	0	0	88	0	0	0
13:30 - 13:45	2	0	2	0	4	0	4	0	91	1	92	0	0	0	0	0	98	0	0	0
13:45 - 14:00	6	0	6	0	3	0	3	0	80	0	80	0	0	0	0	0	89	0	0	0
14:00 - 14:15	4	0	4	0	0	0	0	0	82	2	84	0	0	0	0	0	88	0	0	0
14:15 - 14:30	4	0	4	0	2	0	2	0	85	3	88	0	0	0	0	0	94	0	0	0
14:30 - 14:45	4	0	4	0	5	0	5	0	69	0	69	0	0	0	0	0	78	0	0	0
14:45 - 15:00	2	0	2	0	2	0	2	0	97	0	97	0	0	0	0	0	101	0	0	0
15:00 - 15:15	1	0	1	0	0	0	0	0	77	1	78	0	0	0	0	0	79	0	0	0
15:15 - 15:30	2	0	2	0	1	0	1	0	68	0	68	0	0	0	0	0	71	0	0	0
15:30 - 15:45	4	0	4	0	1	0	1	0	80	2	82	0	0	0	0	0	87	0	0	0
15:45 - 16:00	2	0	2	0	1	0	1	0	70	0	70	0	0	0	0	0	73	0	0	0
16:00 - 16:15	5	0	5	0	1	0	1	0	72	1	73	0	0	0	0	0	79	0	0	0
16:15 - 16:30	1	0	1	0	1	0	1	0	58	0	58	0	0	0	0	0	60	0	0	0
16:30 - 16:45	2	0	2	0	1	0	1	0	73	0	73	0	0	0	0	0	76	0	0	0
16:45 - 17:00	1	0	1	0	1	0	1	0	70	0	70	0	0	0	0	0	72	0	0	0
17:00 - 17:15	0	0	0	0	1	0	1	0	66	1	67	0	1	0	1	0	69	0	0	0
17:15 - 17:30	1	0	1	0	4	0	4	0	50	0	50	0	0	0	0	0	55	0	0	0
17:30 - 17:45	2	0	2	0	5	0	5	0	39	0	39	0	0	0	0	0	46	0	0	0
17:45 - 18:00	3	0	3	0	3	0	3	0	59	1	60	0	0	0	0	0	66	0	0	0
18:00 - 18:15	3	0	3	0	1	0	1	0	50	0	50	0	0	0	0	0	54	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	63	0	63	0	0	0	0	0	63	0	0	0
18:30 - 18:45	2	0	2	0	0	0	0	0	45	0	45	0	0	0	0	0	47	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0	0	68	1	69	0	0	0	0	0	69	0	0	0
TOTAL	191	1	192	0	92	0	92	0	4065	55	4120	1	2	0	2	0	4406	1	0	0
Peak Hr:	32	0	32	0	10	0	10	0	483	5	488	0	0	0	0	0	530	0	0	0
PM Peak:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Movement	Wst App - Left				Wst App - Straig		
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total
06:00 - 06:15	0	0	0	0	0	0	0
06:15 - 06:30	0	0	0	0	1	0	1
06:30 - 06:45	0	0	0	0	1	0	1
06:45 - 07:00	1	0	1	0	0	0	0
07:00 - 07:15	0	0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	0	1	1
07:30 - 07:45	0	0	0	0	0	0	0
07:45 - 08:00	0	0	0	0	4	0	4
08:00 - 08:15	1	0	1	0	1	0	1
08:15 - 08:30	1	0	1	0	1	0	1
08:30 - 08:45	2	0	2	0	0	0	0
08:45 - 09:00	0	0	0	0	3	0	3
09:00 - 09:15	0	0	0	0	3	0	3
09:15 - 09:30	2	0	2	0	1	0	1
09:30 - 09:45	1	0	1	0	1	0	1
09:45 - 10:00	1	0	1	0	1	0	1
10:00 - 10:15	2	0	2	0	4	0	4
10:15 - 10:30	1	0	1	0	1	0	1
10:30 - 10:45	1	0	1	0	3	0	3
10:45 - 11:00	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	1	0	1
11:15 - 11:30	1	0	1	0	2	0	2
11:30 - 11:45	3	0	3	0	3	0	3
11:45 - 12:00	1	0	1	0	5	0	5
12:00 - 12:15	0	0	0	0	1	0	1
12:15 - 12:30	1	0	1	0	4	0	4
12:30 - 12:45	3	0	3	0	2	0	2
12:45 - 13:00	0	0	0	0	1	0	1
13:00 - 13:15	0	0	0	0	3	0	3
13:15 - 13:30	1	0	1	0	2	0	2
13:30 - 13:45	3	0	3	0	4	0	4
13:45 - 14:00	0	0	0	0	3	0	3
14:00 - 14:15	0	0	0	0	2	0	2
14:15 - 14:30	1	0	1	0	1	0	1
14:30 - 14:45	0	0	0	0	2	0	2
14:45 - 15:00	1	0	1	0	1	0	1
15:00 - 15:15	1	0	1	0	3	0	3
15:15 - 15:30	0	0	0	0	1	0	1
15:30 - 15:45	1	0	1	0	1	0	1
15:45 - 16:00	0	0	0	0	4	0	4
16:00 - 16:15	0	0	0	0	2	0	2
16:15 - 16:30	0	0	0	0	3	0	3
16:30 - 16:45	0	0	0	0	2	0	2
16:45 - 17:00	1	0	1	0	5	0	5
17:00 - 17:15	0	0	0	0	3	0	3
17:15 - 17:30	1	0	1	0	2	0	2
17:30 - 17:45	0	0	0	0	1	0	1
17:45 - 18:00	0	0	0	0	4	0	4
18:00 - 18:15	1	0	1	0	0	0	0
18:15 - 18:30	0	0	0	0	4	0	4
18:30 - 18:45	1	0	1	0	2	0	2
18:45 - 19:00	1	0	1	0	1	0	1
TOTAL	35	0	35	0	100	1	101
Peak Hr:	4	0	4	0	8	0	8
PM Peak:	0	0	0	0	0	0	0

ght	Wst App - Right				Wst App - U Turn				Wst Total		Peds	
Cyclist	Light	Heavy	**Total**	Cyclist	Light	Heavy	**Total**	Cyclist	Vehicle	Cyclist	NB	SB
0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**2**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**4**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**4**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**3**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**3**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**6**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**6**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**7**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**5**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**5**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**3**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**8**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	1	**1**	0	0	0	**0**	0	**3**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**5**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**7**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**4**	**0**	0	0
0	1	0	**1**	0	0	0	**0**	0	**4**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**1**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**4**	**0**	0	0
0	3	0	**3**	0	0	0	**0**	0	**6**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**2**	**0**	0	0
0	**21**	**1**	**22**	0	0	0	**0**	0	**158**	**0**	0	0
0	2	0	**2**	0	0	0	**0**	0	**14**	**0**	0	0
0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	0	0

8


Vehicle Totals - by Classification (Total / Light / Heavy)
Total Vehicles
Light Vehicles
Heavy Vehicles
VEHICLES
TIME IN 15 MINUTE INCREMENTS


Vehicle Totals - by Approach
Total Vehicles
North Approach
South Approach
East Approach
West Approach
VEHICLES
350
300
250
200
150
100
50
0
TIME IN 15 MINUTE INCREMENTS

AADT Volumes by Approach

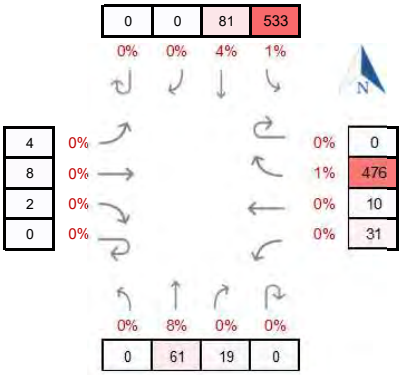
Note: AADT Volumes are an indicative approximation. Calculations are based of AM & PM peaks at 20% of the daily volume

Northern Approach:	**Beaudesert Bypass Rd**	
Northbound		2,775
Southbound		3,145
Total		5,920
Southern Approach:	**Beaudesert Bypass Rd**	
Northbound		410
Southbound		585
Total		995
Eastern Approach:	**Brisbane St**	
Eastbound		2,865
Westbound		2,650
Total		5,515
Western Approach:	**Helen St**	
Eastbound		70
Westbound		50
Total		120

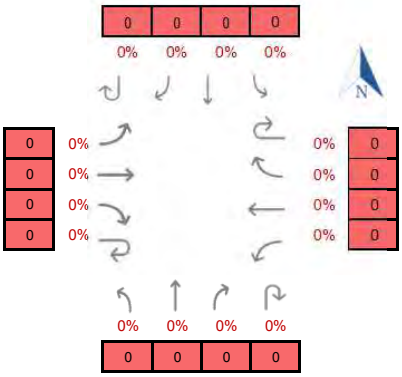
Survey Year:	2023
Assessment Year:	2022
Years:	-1
Growth Rate (p.a.):	2.50%
Growth Factor:	**0.9756**

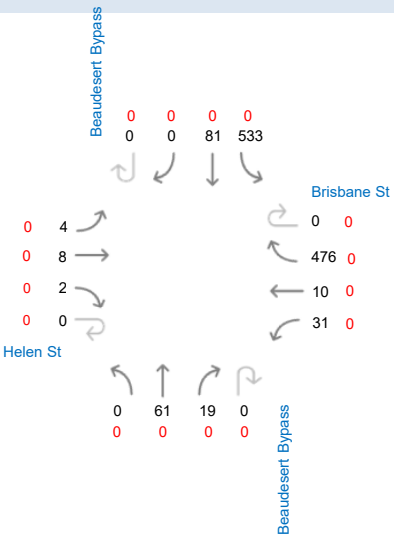
Site 1

AM



PM




Beaudesert Bypass
0 0 0 0
0 0 81 533
Brisbane St
0 0
476 0
10 0
31 0
0 4
0 8
0 2
0 0
Helen St
0 61 19 0
0 0 0 0
Beaudesert Bypass

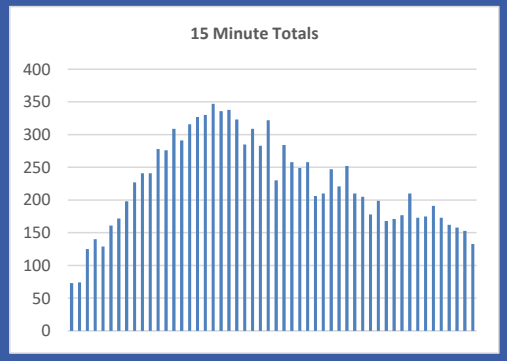
Survey Details

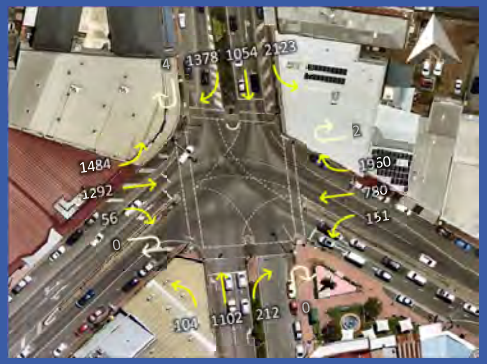
TTM Reference: **22BRD0085**
Location: **Brisbane St / Mount Lindesay Hwy / William St**
Suburb: **Beaudesert**
Date: **Saturday, 3 December 2022**
Duration: **0600-1900**
Weather: **Fine**
Peak Hr: **10:15-11:15**

Notes:

Quick display - Summaries

Survey Period: Full Duration to Select End time





Brisbane | Gold Coast | Melbourne | Sydney

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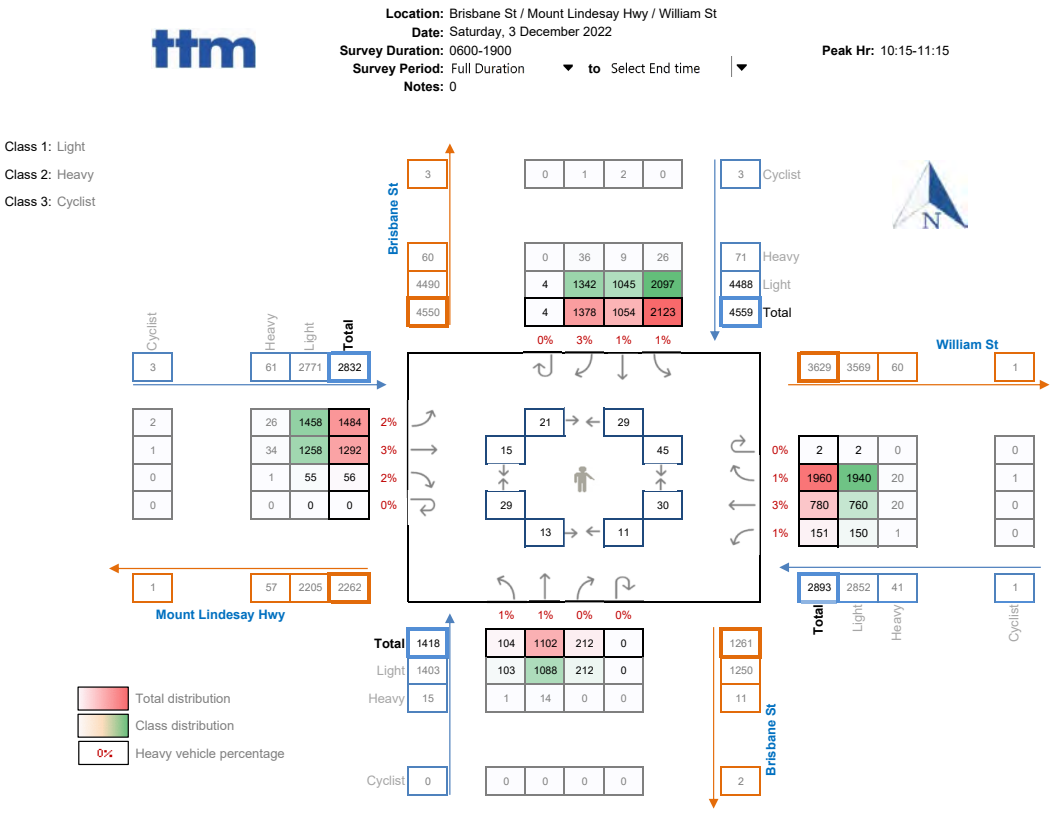
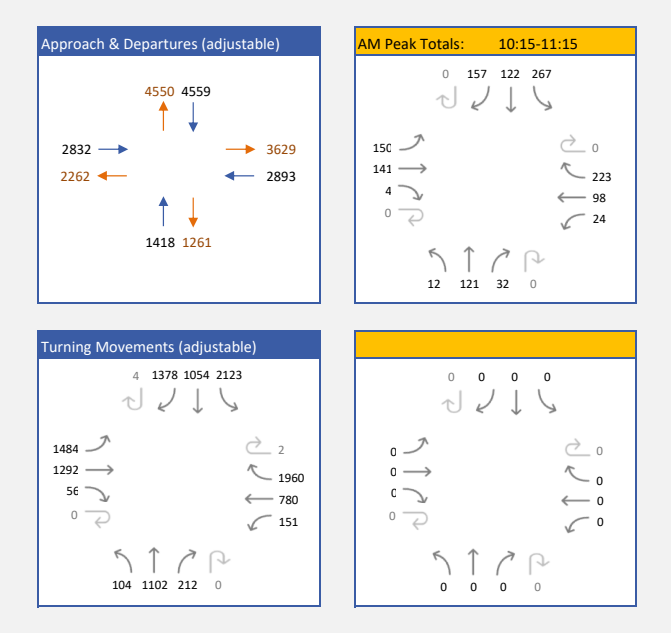

Location: Brisbane St / Mount Lindesay Hwy / William St
Date: Saturday, 3 December 2022
Survey Duration: 0600-1900
Survey Period: Full Duration to Select End time
Notes: 0
Peak Hr: 10:15-11:15
Class 1: Light
Class 2: Heavy
Class 3: Cyclist
Brisbane St
William St
Mount Lindesay Hwy
Cyclist
Heavy
Light
Total
Total distribution
Class distribution
Heavy vehicle percentage


Approach & Departures (adjustable)
4550 4559
2832
2262
3629
2893
1418 1261
AM Peak Totals: 10:15-11:15
0 157 122 267
150
141
4
0
0
223
98
24
12 121 32 0
Turning Movements (adjustable)
4 1378 1054 2123
1484
1292
56
0
2
1960
780
151
104 1102 212 0
0 0 0 0
0
0
0
0
0
0
0
0
0 0 0 0

Movement	Nth App - Left				Nth App - Straight				Nth App - Right				Nth App - U Turn				Nth Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	EB	WB
06:00 - 06:15	12	3	**15**	0	9	1	**10**	0	5	1	**6**	0	0	0	**0**	0	**31**	**0**	1	1
06:15 - 06:30	10	0	**10**	0	11	0	**11**	0	1	1	**2**	0	0	0	**0**	0	**23**	**0**	0	0
06:30 - 06:45	25	4	**29**	0	15	0	**15**	0	9	0	**9**	0	0	0	**0**	0	**53**	**0**	0	2
06:45 - 07:00	18	0	**18**	0	14	0	**14**	0	14	3	**17**	0	0	0	**0**	0	**49**	**0**	0	0
07:00 - 07:15	28	0	**28**	0	16	0	**16**	0	12	3	**15**	0	0	0	**0**	0	**59**	**0**	0	0
07:15 - 07:30	25	0	**25**	0	14	0	**14**	0	29	0	**29**	0	0	0	**0**	0	**68**	**0**	0	0
07:30 - 07:45	40	0	**40**	0	9	0	**9**	0	14	1	**15**	0	0	0	**0**	0	**64**	**0**	0	0
07:45 - 08:00	34	0	**34**	0	16	0	**16**	0	15	1	**16**	0	0	0	**0**	0	**66**	**0**	0	0
08:00 - 08:15	30	0	**30**	0	18	0	**18**	0	23	0	**23**	0	0	0	**0**	0	**71**	**0**	1	0
08:15 - 08:30	48	0	**48**	0	19	1	**20**	0	16	2	**18**	0	0	0	**0**	0	**86**	**0**	0	0
08:30 - 08:45	41	0	**41**	0	14	1	**15**	0	24	1	**25**	0	0	0	**0**	0	**81**	**0**	1	1
08:45 - 09:00	53	2	**55**	0	18	0	**18**	0	28	2	**30**	0	0	0	**0**	0	**103**	**0**	1	2
09:00 - 09:15	48	0	**48**	0	21	0	**21**	0	20	2	**22**	0	0	0	**0**	0	**91**	**0**	0	0
09:15 - 09:30	62	1	**63**	0	26	1	**27**	0	29	2	**31**	0	0	0	**0**	0	**121**	**0**	0	0
09:30 - 09:45	51	1	**52**	0	26	0	**26**	0	22	1	**23**	0	0	0	**0**	0	**101**	**0**	0	1
09:45 - 10:00	67	1	**68**	0	13	0	**13**	0	30	0	**30**	0	0	0	**0**	0	**111**	**0**	0	0
10:00 - 10:15	61	0	**61**	0	37	0	**37**	0	37	1	**38**	0	1	0	**1**	0	**137**	**0**	0	1
10:15 - 10:30	65	1	**66**	0	30	0	**30**	2	36	2	**38**	0	0	0	**0**	0	**134**	**2**	1	0
10:30 - 10:45	81	1	**82**	0	25	0	**25**	0	36	0	**36**	0	0	0	**0**	0	**143**	**0**	0	0
10:45 - 11:00	58	1	**59**	0	28	1	**29**	0	36	1	**37**	0	0	0	**0**	0	**125**	**0**	1	0
11:00 - 11:15	59	1	**60**	0	38	0	**38**	0	43	3	**46**	1	0	0	**0**	0	**144**	**1**	3	2
11:15 - 11:30	58	1	**59**	0	29	1	**30**	0	33	1	**34**	0	0	0	**0**	0	**123**	**0**	0	0
11:30 - 11:45	43	0	**43**	0	30	0	**30**	0	42	0	**42**	0	0	0	**0**	0	**115**	**0**	2	5
11:45 - 12:00	57	0	**57**	0	24	0	**24**	0	35	2	**37**	0	0	0	**0**	0	**118**	**0**	1	0
12:00 - 12:15	53	1	**54**	0	22	1	**23**	0	43	0	**43**	0	0	0	**0**	0	**120**	**0**	1	3
12:15 - 12:30	69	0	**69**	0	36	0	**36**	0	37	1	**38**	0	0	0	**0**	0	**143**	**0**	1	0
12:30 - 12:45	35	0	**35**	0	25	0	**25**	0	29	1	**30**	0	0	0	**0**	0	**90**	**0**	1	1
12:45 - 13:00	52	0	**52**	0	19	0	**19**	0	31	0	**31**	0	0	0	**0**	0	**102**	**0**	0	3
13:00 - 13:15	50	0	**50**	0	30	0	**30**	0	37	0	**37**	0	0	0	**0**	0	**117**	**0**	1	0
13:15 - 13:30	39	1	**40**	0	26	0	**26**	0	30	0	**30**	0	0	0	**0**	0	**96**	**0**	0	0
13:30 - 13:45	41	0	**41**	0	37	1	**38**	0	29	1	**30**	0	0	0	**0**	0	**109**	**0**	0	1
13:45 - 14:00	36	0	**36**	0	18	0	**18**	0	21	0	**21**	0	0	0	**0**	0	**75**	**0**	3	1
14:00 - 14:15	40	1	**41**	0	31	0	**31**	0	29	0	**29**	0	1	0	**1**	0	**102**	**0**	0	0
14:15 - 14:30	45	0	**45**	0	29	0	**29**	0	28	0	**28**	0	0	0	**0**	0	**102**	**0**	0	0
14:30 - 14:45	35	1	**36**	0	16	0	**16**	0	32	1	**33**	0	0	0	**0**	0	**85**	**0**	0	0
14:45 - 15:00	30	0	**30**	0	28	0	**28**	0	30	0	**30**	0	0	0	**0**	0	**88**	**0**	0	0
15:00 - 15:15	42	1	**43**	0	14	0	**14**	0	28	0	**28**	0	1	0	**1**	0	**86**	**0**	1	1
15:15 - 15:30	37	0	**37**	0	13	0	**13**	0	28	0	**28**	0	0	0	**0**	0	**78**	**0**	0	0
15:30 - 15:45	28	0	**28**	0	10	0	**10**	0	26	1	**27**	0	0	0	**0**	0	**65**	**0**	0	0
15:45 - 16:00	23	1	**24**	0	22	0	**22**	0	30	0	**30**	0	0	0	**0**	0	**76**	**0**	0	0
16:00 - 16:15	33	1	**34**	0	14	0	**14**	0	16	0	**16**	0	0	0	**0**	0	**64**	**0**	0	0
16:15 - 16:30	46	0	**46**	0	13	0	**13**	0	19	1	**20**	0	0	0	**0**	0	**79**	**0**	0	0
16:30 - 16:45	21	0	**21**	0	14	0	**14**	0	23	0	**23**	0	0	0	**0**	0	**58**	**0**	1	0
16:45 - 17:00	28	0	**28**	0	18	0	**18**	0	25	0	**25**	0	0	0	**0**	0	**71**	**0**	0	0
17:00 - 17:15	26	0	**26**	0	14	0	**14**	0	33	0	**33**	0	0	0	**0**	0	**73**	**0**	0	1
17:15 - 17:30	32	0	**32**	0	19	0	**19**	0	23	0	**23**	0	1	0	**1**	0	**75**	**0**	0	0
17:30 - 17:45	40	0	**40**	0	19	0	**19**	0	23	0	**23**	0	0	0	**0**	0	**82**	**0**	0	2
17:45 - 18:00	28	0	**28**	0	8	0	**8**	0	26	0	**26**	0	0	0	**0**	0	**62**	**0**	0	0
18:00 - 18:15	37	2	**39**	0	12	1	**13**	0	28	0	**28**	0	0	0	**0**	0	**80**	**0**	0	0
18:15 - 18:30	31	0	**31**	0	8	0	**8**	0	15	0	**15**	0	0	0	**0**	0	**54**	**0**	0	0
18:30 - 18:45	22	0	**22**	0	19	0	**19**	0	20	0	**20**	0	0	0	**0**	0	**61**	**0**	0	1
18:45 - 19:00	24	0	**24**	0	11	0	**11**	0	14	0	**14**	0	0	0	**0**	0	**49**	**0**	0	0
TOTAL	**2097**	**26**	**2123**	0	**1045**	**9**	**1054**	**2**	**1342**	**36**	**1378**	**1**	**4**	0	**4**	0	**4559**	**3**	**21**	**29**
Peak Hr:	263	4	**267**	0	121	1	**122**	2	151	6	**157**	1	0	0	**0**	0	**546**	**3**	**5**	2
PM Peak:	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	**0**	**0**	0	0

Movement	Sth App - Left				Sth App - Straight				Sth App - Right				Sth App	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy
06:00 - 06:15	0	0	**0**	0	8	0	**8**	0	0	0	**0**	0	0	0
06:15 - 06:30	1	0	**1**	0	10	2	**12**	0	0	0	**0**	0	0	0
06:30 - 06:45	0	0	**0**	0	9	0	**9**	0	2	0	**2**	0	0	0
06:45 - 07:00	3	0	**3**	0	13	0	**13**	0	2	0	**2**	0	0	0
07:00 - 07:15	1	0	**1**	0	8	0	**8**	0	5	0	**5**	0	0	0
07:15 - 07:30	4	0	**4**	0	20	0	**20**	0	0	0	**0**	0	0	0
07:30 - 07:45	2	0	**2**	0	17	1	**18**	0	7	0	**7**	0	0	0
07:45 - 08:00	0	0	**0**	0	19	1	**20**	0	5	0	**5**	0	0	0
08:00 - 08:15	3	0	**3**	0	25	1	**26**	0	2	0	**2**	0	0	0
08:15 - 08:30	4	0	**4**	0	25	0	**25**	0	6	0	**6**	0	0	0
08:30 - 08:45	1	0	**1**	0	23	0	**23**	0	2	0	**2**	0	0	0
08:45 - 09:00	4	0	**4**	0	30	0	**30**	0	5	0	**5**	0	0	0
09:00 - 09:15	0	0	**0**	0	23	1	**24**	0	5	0	**5**	0	0	0
09:15 - 09:30	5	0	**5**	0	30	1	**31**	0	8	0	**8**	0	0	0
09:30 - 09:45	2	0	**2**	0	22	0	**22**	0	12	0	**12**	0	0	0
09:45 - 10:00	2	0	**2**	0	34	0	**34**	0	6	0	**6**	0	0	0
10:00 - 10:15	1	0	**1**	0	45	0	**45**	0	3	0	**3**	0	0	0
10:15 - 10:30	2	0	**2**	0	27	0	**27**	0	5	0	**5**	0	0	0
10:30 - 10:45	3	0	**3**	0	30	0	**30**	0	14	0	**14**	0	0	0
10:45 - 11:00	4	0	**4**	0	31	0	**31**	0	7	0	**7**	0	0	0
11:00 - 11:15	3	0	**3**	0	32	1	**33**	0	6	0	**6**	0	0	0
11:15 - 11:30	5	0	**5**	0	26	1	**27**	0	6	0	**6**	0	0	0
11:30 - 11:45	3	1	**4**	0	28	1	**29**	0	7	0	**7**	0	0	0
11:45 - 12:00	2	0	**2**	0	33	1	**34**	0	5	0	**5**	0	0	0
12:00 - 12:15	4	0	**4**	0	28	0	**28**	0	3	0	**3**	0	0	0
12:15 - 12:30	3	0	**3**	0	24	0	**24**	0	2	0	**2**	0	0	0
12:30 - 12:45	2	0	**2**	0	24	0	**24**	0	7	0	**7**	0	0	0
12:45 - 13:00	3	0	**3**	0	28	0	**28**	0	7	0	**7**	0	0	0
13:00 - 13:15	0	0	**0**	0	29	0	**29**	0	3	0	**3**	0	0	0
13:15 - 13:30	2	0	**2**	0	25	0	**25**	0	3	0	**3**	0	0	0
13:30 - 13:45	2	0	**2**	0	22	0	**22**	0	3	0	**3**	0	0	0
13:45 - 14:00	8	0	**8**	0	15	0	**15**	0	6	0	**6**	0	0	0
14:00 - 14:15	0	0	**0**	0	19	1	**20**	0	4	0	**4**	0	0	0
14:15 - 14:30	1	0	**1**	0	22	0	**22**	0	4	0	**4**	0	0	0
14:30 - 14:45	2	0	**2**	0	26	0	**26**	0	4	0	**4**	0	0	0
14:45 - 15:00	3	0	**3**	0	26	0	**26**	0	6	0	**6**	0	0	0
15:00 - 15:15	1	0	**1**	0	12	0	**12**	0	5	0	**5**	0	0	0
15:15 - 15:30	1	0	**1**	0	19	0	**19**	0	1	0	**1**	0	0	0
15:30 - 15:45	3	0	**3**	0	12	0	**12**	0	1	0	**1**	0	0	0
15:45 - 16:00	0	0	**0**	0	13	0	**13**	0	6	0	**6**	0	0	0
16:00 - 16:15	0	0	**0**	0	18	1	**19**	0	1	0	**1**	0	0	0
16:15 - 16:30	1	0	**1**	0	18	0	**18**	0	5	0	**5**	0	0	0
16:30 - 16:45	1	0	**1**	0	18	0	**18**	0	1	0	**1**	0	0	0
16:45 - 17:00	0	0	**0**	0	16	0	**16**	0	2	0	**2**	0	0	0
17:00 - 17:15	2	0	**2**	0	16	0	**16**	0	1	0	**1**	0	0	0
17:15 - 17:30	1	0	**1**	0	11	0	**11**	0	1	0	**1**	0	0	0
17:30 - 17:45	0	0	**0**	0	14	0	**14**	0	1	0	**1**	0	0	0
17:45 - 18:00	0	0	**0**	0	10	0	**10**	0	5	0	**5**	0	0	0
18:00 - 18:15	2	0	**2**	0	8	1	**9**	0	3	0	**3**	0	0	0
18:15 - 18:30	2	0	**2**	0	15	0	**15**	0	3	0	**3**	0	0	0
18:30 - 18:45	2	0	**2**	0	16	0	**16**	0	4	0	**4**	0	0	0
18:45 - 19:00	2	0	**2**	0	16	0	**16**	0	0	0	**0**	0	0	0
TOTAL	**103**	**1**	**104**	0	**1088**	**14**	**1102**	0	**212**	0	**212**	0	0	0
Peak Hr:	12	0	**12**	0	120	1	**121**	0	32	0	**32**	0	0	0
PM Peak:	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0

- U Turn		Sth Total		Peds	
Total	Cyclist	Vehicle	Cyclist	EB	WB
0	0	8	0	0	0
0	0	13	0	0	0
0	0	11	0	1	2
0	0	18	0	0	0
0	0	14	0	1	0
0	0	24	0	0	0
0	0	27	0	0	0
0	0	25	0	0	0
0	0	31	0	0	0
0	0	35	0	0	0
0	0	26	0	0	0
0	0	39	0	0	1
0	0	29	0	4	3
0	0	44	0	0	0
0	0	36	0	0	0
0	0	42	0	0	0
0	0	49	0	0	1
0	0	34	0	1	0
0	0	47	0	0	0
0	0	42	0	0	0
0	0	42	0	0	0
0	0	38	0	0	2
0	0	40	0	1	0
0	0	41	0	2	0
0	0	35	0	0	0
0	0	29	0	0	0
0	0	33	0	0	0
0	0	38	0	0	1
0	0	32	0	0	0
0	0	30	0	0	0
0	0	27	0	0	0
0	0	29	0	0	0
0	0	24	0	0	0
0	0	27	0	0	0
0	0	32	0	0	0
0	0	35	0	0	0
0	0	18	0	0	0
0	0	21	0	0	0
0	0	16	0	0	0
0	0	19	0	1	0
0	0	20	0	0	0
0	0	24	0	0	0
0	0	20	0	2	0
0	0	18	0	0	0
0	0	19	0	0	0
0	0	13	0	0	1
0	0	15	0	0	0
0	0	15	0	0	0
0	0	14	0	0	0
0	0	20	0	0	0
0	0	22	0	0	0
0	0	18	0	0	0
0	0	1418	0	13	11
0	0	165	0	1	0
0	0	0	0	0	0

Movement	Est App - Left				Est App - Straight				Est App - Right				Est App - U Turn				Est Total		Peds	
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
06:00 - 06:15	1	0	1	0	11	0	11	0	9	0	9	0	0	0	0	0	21	0	1	0
06:15 - 06:30	0	0	0	0	7	0	7	0	13	1	14	0	0	0	0	0	21	0	0	1
06:30 - 06:45	2	0	2	0	10	0	10	0	28	0	28	0	0	0	0	0	40	0	0	1
06:45 - 07:00	1	1	2	0	16	0	16	0	29	0	29	0	0	0	0	0	47	0	0	0
07:00 - 07:15	3	0	3	0	11	0	11	0	18	1	19	0	0	0	0	0	33	0	2	2
07:15 - 07:30	1	0	1	0	5	0	5	0	34	2	36	0	0	0	0	0	42	0	1	1
07:30 - 07:45	1	0	1	0	19	0	19	0	31	1	32	0	0	0	0	0	52	0	0	0
07:45 - 08:00	3	0	3	0	22	1	23	0	42	0	42	0	0	0	0	0	68	0	0	0
08:00 - 08:15	2	0	2	0	17	1	18	0	39	0	39	0	0	0	0	0	59	0	0	0
08:15 - 08:30	2	0	2	0	14	1	15	0	49	0	49	0	0	0	0	0	66	0	3	0
08:30 - 08:45	6	0	6	0	25	0	25	0	40	1	41	0	0	0	0	0	72	0	1	0
08:45 - 09:00	4	0	4	0	15	0	15	0	37	1	38	0	0	0	0	0	57	0	1	2
09:00 - 09:15	3	0	3	0	21	0	21	0	52	2	54	0	0	0	0	0	78	0	0	1
09:15 - 09:30	4	0	4	0	25	1	26	0	47	0	47	0	0	0	0	0	77	0	0	0
09:30 - 09:45	8	0	8	0	18	1	19	0	55	0	55	0	0	0	0	0	82	0	0	1
09:45 - 10:00	4	0	4	0	17	1	18	0	55	0	55	0	0	0	0	0	77	0	0	2
10:00 - 10:15	4	0	4	0	13	0	13	0	49	0	49	0	0	0	0	0	66	0	0	0
10:15 - 10:30	2	0	2	0	27	0	27	0	61	1	62	0	0	0	0	0	91	0	1	0
10:30 - 10:45	7	0	7	0	24	0	24	0	65	3	68	0	0	0	0	0	99	0	2	3
10:45 - 11:00	7	0	7	0	18	2	20	0	56	0	56	0	0	0	0	0	83	0	0	0
11:00 - 11:15	8	0	8	0	26	1	27	0	37	0	37	0	0	0	0	0	72	0	3	4
11:15 - 11:30	6	0	6	0	19	2	21	0	48	0	48	0	0	0	0	0	75	0	2	5
11:30 - 11:45	3	0	3	0	10	0	10	0	46	1	47	0	0	0	0	0	60	0	1	2
11:45 - 12:00	4	0	4	0	22	0	22	0	54	0	54	0	0	0	0	0	80	0	2	5
12:00 - 12:15	7	0	7	0	17	1	18	0	40	0	40	0	0	0	0	0	65	0	0	0
12:15 - 12:30	4	0	4	0	24	0	24	0	48	0	48	0	0	0	0	0	76	0	1	0
12:30 - 12:45	3	0	3	0	16	0	16	0	30	0	30	0	0	0	0	0	49	0	1	3
12:45 - 13:00	6	0	6	0	17	0	17	0	43	0	43	0	0	0	0	0	66	0	0	1
13:00 - 13:15	4	0	4	0	28	0	28	0	23	0	23	0	0	0	0	0	55	0	0	1
13:15 - 13:30	4	0	4	0	11	0	11	0	44	0	44	0	0	0	0	0	59	0	0	0
13:30 - 13:45	1	0	1	0	15	1	16	0	40	0	40	0	0	0	0	0	57	0	0	2
13:45 - 14:00	0	0	0	0	15	0	15	0	34	1	35	0	0	0	0	0	50	0	2	1
14:00 - 14:15	2	0	2	0	6	1	7	0	41	1	42	0	1	0	1	0	52	0	0	0
14:15 - 14:30	4	0	4	0	19	1	20	0	32	1	33	0	0	0	0	0	57	0	0	6
14:30 - 14:45	6	0	6	0	11	0	11	0	24	0	24	1	0	0	0	0	41	1	0	1
14:45 - 15:00	3	0	3	0	20	0	20	0	48	0	48	0	0	0	0	0	71	0	0	0
15:00 - 15:15	0	0	0	0	12	0	12	0	23	1	24	0	0	0	0	0	36	0	0	0
15:15 - 15:30	1	0	1	0	9	0	9	0	37	0	37	0	0	0	0	0	47	0	0	0
15:30 - 15:45	6	0	6	0	11	0	11	0	41	0	41	0	0	0	0	0	58	0	0	0
15:45 - 16:00	1	0	1	0	12	0	12	0	39	0	39	0	0	0	0	0	52	0	0	0
16:00 - 16:15	1	0	1	0	7	1	8	0	22	0	22	0	0	0	0	0	31	0	0	0
16:15 - 16:30	1	0	1	0	13	0	13	0	18	0	18	0	0	0	0	0	32	0	0	0
16:30 - 16:45	0	0	0	0	5	2	7	0	42	0	42	0	0	0	0	0	49	0	2	0
16:45 - 17:00	1	0	1	0	13	0	13	0	37	1	38	0	0	0	0	0	52	0	0	0
17:00 - 17:15	1	0	1	0	12	0	12	0	25	0	25	0	0	0	0	0	38	0	0	0
17:15 - 17:30	2	0	2	0	11	0	11	0	35	0	35	0	0	0	0	0	48	0	0	0
17:30 - 17:45	1	0	1	0	9	0	9	0	38	0	38	0	0	0	0	0	48	0	0	0
17:45 - 18:00	2	0	2	0	9	1	10	0	30	0	30	0	0	0	0	0	42	0	0	0
18:00 - 18:15	1	0	1	0	6	0	6	0	26	0	26	0	0	0	0	0	33	0	0	0
18:15 - 18:30	2	0	2	0	3	1	4	0	37	0	37	0	1	0	1	0	44	0	0	0
18:30 - 18:45	0	0	0	0	8	0	8	0	25	0	25	0	0	0	0	0	33	0	4	0
18:45 - 19:00	0	0	0	0	9	0	9	0	24	1	25	0	0	0	0	0	34	0	0	0
TOTAL	150	1	151	0	760	20	780	0	1940	20	1960	1	2	0	2	0	2893	1	30	45
Peak Hr:	24	0	24	0	95	3	98	0	219	4	223	0	0	0	0	0	345	0	6	7
PM Peak:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Movement	Wst App - Left				Wst App - Straig		
Time	Light	Heavy	Total	Cyclist	Light	Heavy	Total
06:00 - 06:15	2	1	3	0	9	1	10
06:15 - 06:30	9	0	9	0	5	3	8
06:30 - 06:45	13	1	14	0	6	0	6
06:45 - 07:00	16	0	16	0	7	1	8
07:00 - 07:15	7	1	8	0	14	0	14
07:15 - 07:30	9	0	9	0	16	1	17
07:30 - 07:45	12	0	12	0	15	0	15
07:45 - 08:00	20	0	20	0	16	1	17
08:00 - 08:15	40	1	41	0	21	0	21
08:15 - 08:30	26	1	27	0	26	0	26
08:30 - 08:45	31	3	34	1	25	2	27
08:45 - 09:00	44	0	44	0	34	1	35
09:00 - 09:15	47	0	47	0	28	1	29
09:15 - 09:30	31	0	31	0	34	0	34
09:30 - 09:45	33	3	36	0	33	0	33
09:45 - 10:00	47	1	48	0	35	0	35
10:00 - 10:15	48	0	48	0	26	0	26
10:15 - 10:30	31	1	32	0	38	0	38
10:30 - 10:45	27	0	27	0	28	3	31
10:45 - 11:00	46	1	47	0	36	1	37
11:00 - 11:15	43	1	44	0	34	1	35
11:15 - 11:30	43	0	43	0	39	3	42
11:30 - 11:45	37	3	40	0	30	0	30
11:45 - 12:00	42	0	42	1	24	1	25
12:00 - 12:15	28	1	29	0	30	1	31
12:15 - 12:30	37	2	39	0	31	2	33
12:30 - 12:45	31	0	31	0	27	0	27
12:45 - 13:00	39	0	39	0	39	0	39
13:00 - 13:15	24	2	26	0	28	0	28
13:15 - 13:30	31	0	31	0	32	1	33
13:30 - 13:45	37	1	38	0	24	3	27
13:45 - 14:00	28	0	28	0	23	0	23
14:00 - 14:15	12	1	13	0	18	0	18
14:15 - 14:30	37	1	38	0	22	0	22
14:30 - 14:45	33	0	33	0	29	0	29
14:45 - 15:00	32	0	32	0	25	0	25
15:00 - 15:15	23	0	23	0	44	2	46
15:15 - 15:30	33	0	33	0	25	0	25
15:30 - 15:45	24	0	24	0	14	1	15
15:45 - 16:00	22	0	22	0	28	0	28
16:00 - 16:15	23	0	23	0	29	0	29
16:15 - 16:30	15	0	15	0	21	0	21
16:30 - 16:45	25	0	25	0	25	0	25
16:45 - 17:00	34	0	34	0	33	0	33
17:00 - 17:15	24	0	24	0	19	0	19
17:15 - 17:30	20	0	20	0	16	1	17
17:30 - 17:45	29	0	29	0	16	0	16
17:45 - 18:00	28	0	28	0	26	0	26
18:00 - 18:15	16	0	16	0	16	3	19
18:15 - 18:30	25	0	25	0	15	0	15
18:30 - 18:45	25	0	25	0	11	0	11
18:45 - 19:00	19	0	19	0	13	0	13
TOTAL	1458	26	1484	2	1258	34	1292
Peak Hr:	147	3	150	0	136	5	141
PM Peak:	0	0	0	0	0	0	0

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ght	Wst App - Right				Wst App - U Turn				Wst Total		Peds	
Cyclist	Light	Heavy	Total	Cyclist	Light	Heavy	Total	Cyclist	Vehicle	Cyclist	NB	SB
0	0	0	0	0	0	0	0	0	13	0	0	0
0	0	0	0	0	0	0	0	0	17	0	0	0
0	1	0	1	0	0	0	0	0	21	0	0	1
0	2	0	2	0	0	0	0	0	26	0	2	0
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0	1	0	1	0	0	0	0	0	54	0	1	1
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0	2	0	2	0	0	0	0	0	78	0	3	3
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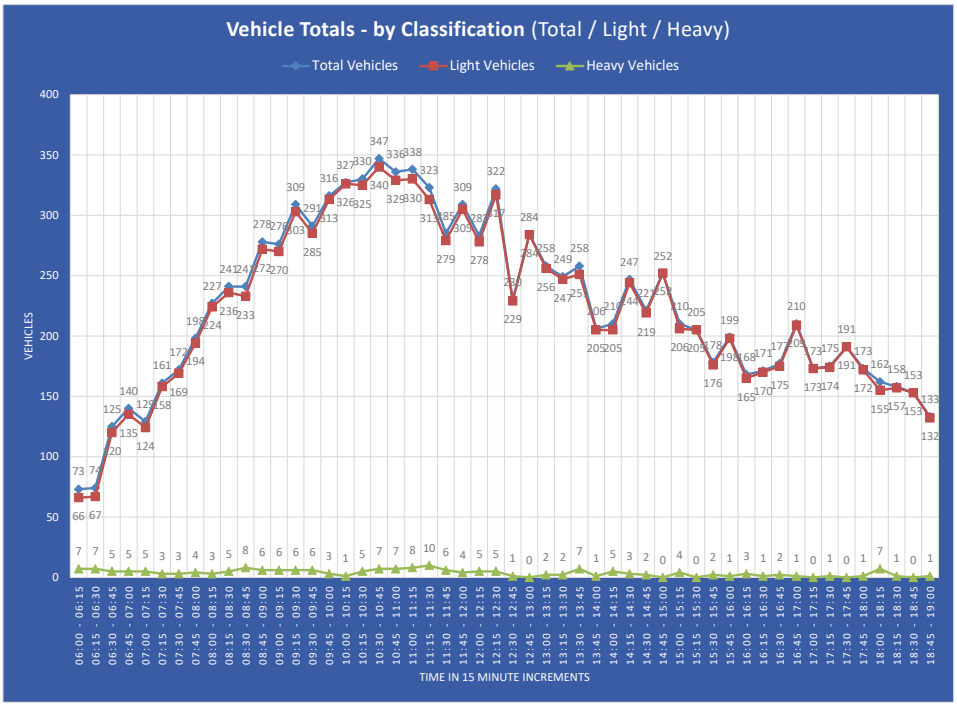
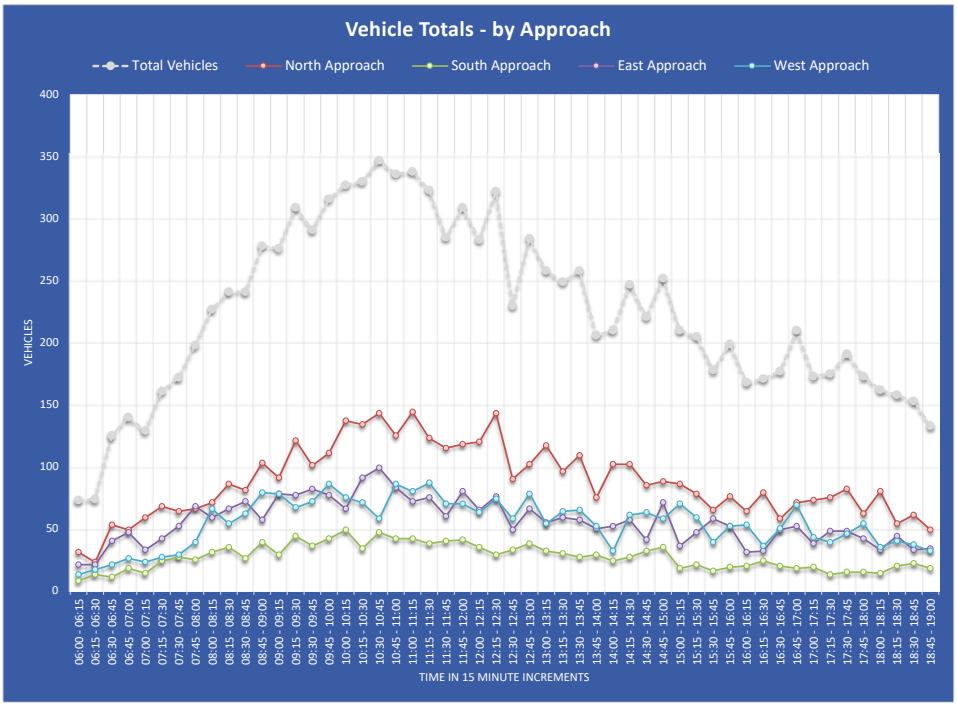

Vehicle Totals - by Classification (Total / Light / Heavy)
Total Vehicles
Light Vehicles
Heavy Vehicles
VEHICLES
TIME IN 15 MINUTE INCREMENTS


Vehicle Totals - by Approach
Total Vehicles
North Approach
South Approach
East Approach
West Approach
VEHICLES
TIME IN 15 MINUTE INCREMENTS

AADT Volumes by Approach

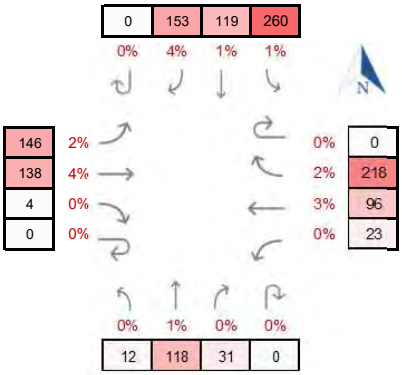
Note: AADT Volumes are an indicative approximation. Calculations are based of AM & PM peaks at 20% of the daily volume

Northern Approach:	**Brisbane St**	
Northbound		2,470
Southbound		2,730
Total		5,200
Southern Approach:	**Brisbane St**	
Northbound		825
Southbound		750
Total		1,575
Eastern Approach:	**William St**	
Eastbound		2,200
Westbound		1,725
Total		3,925
Western Approach:	**Mount Lindesay Hwy**	
Eastbound		1,475
Westbound		1,335
Total		2,810

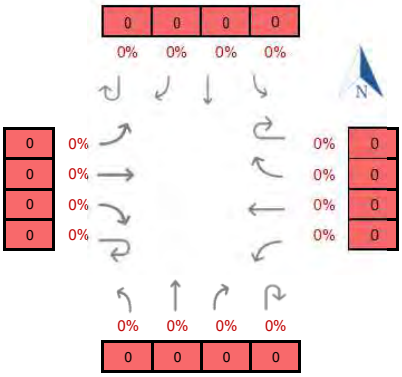
Survey Year:	2023
Assessment Year:	2022
Years:	-1
Growth Rate (p.a.):	2.50%
Growth Factor:	**0.9756**

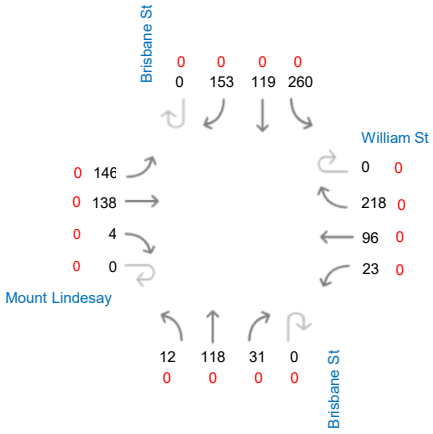
Site 1

AM



PM




Brisbane St
0 0 0 0
0 153 119 260
William St
0 146
0 138
0 4
0 0
Mount Lindesay
0 0
218 0
96 0
23 0
12 118 31 0
0 0 0 0
Brisbane St

Appendix C – General Arrangements of Cycleway Options

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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Document No. B22081-SKT-CI-101

GENERAL LEGEND

Existing (Surveyed)	Proposed	Description
	500	Control line & chainage mark
		Cadastral boundary
		Guardrail
		Pavement marking – Separation
		Pavement marking – Continuity line
		Pavement marking – Stop line
		Wire rope safety barrier
		Chainwire fence
		Weldedmesh fence
		Existing culvert
		Road Safety Barrier
		Cycle Safety Rail
		Tree

PAVEMENT MARKING

	Pavement marking – Separation 9x3
	Pavement marking – Continuity line
	Pavement marking – Barrier line – Double unbroken
	Pavement marking – Hold/give way line
	Pavement marking – Barrier line – Broken – Right
	Pavement marking – Turn line
	Pavement marking – Painted line unbroken
	Pavement marking – Stop line
	Pavement marking – Chevron pavement markings and outline

PUBLIC UTILITY PLANT LEGEND

Existing (Surveyed)	Description
E E E	Electricity – Aboveground
E E	Electricity – Underground
T T T	Telecomms – Aboveground
OF OF	Telecomms – Optical Fibre – Underground
T T	Telecomms – Underground
W W	Water main – Underground
S S	Sewer Main – Underground

ROADWORKS

- Parking spaces to be removed
- Pavement widening
- Existing median to be removed
- Existing parking spaces to remain
- On-road cycle path

Last Modified :- Nov 08, 2022 - 6:25pm

		Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
2A	For information only			08.11.22
1A	For information only			14.10.22

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-101.dwg
XREFS :- X_TLE_CIVIL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: Not to Scale

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
LEGEND

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	101 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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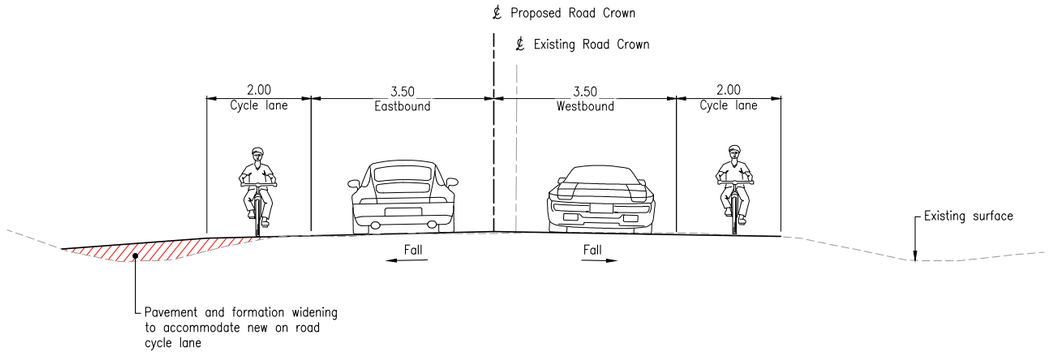
Document No. B22081-SKT-CI-102



Typical Widening Cross Section
Beaudesert–Nerang Road
Ch 1700 – 2190

1A	For information only		08.11.22
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 1.0 2.0m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – TYPICAL SECTIONS

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	102 of 10

Last Modified :- Nov 08, 2022 - 6:25pm
CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-102.dwg
XREFS :- X_TLE_CIVIL

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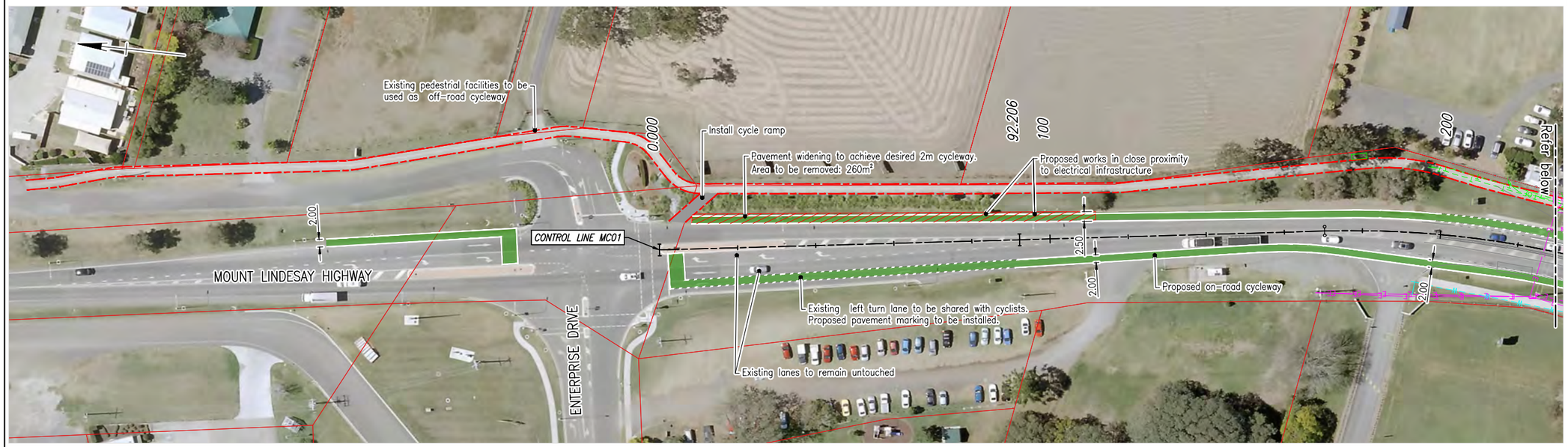
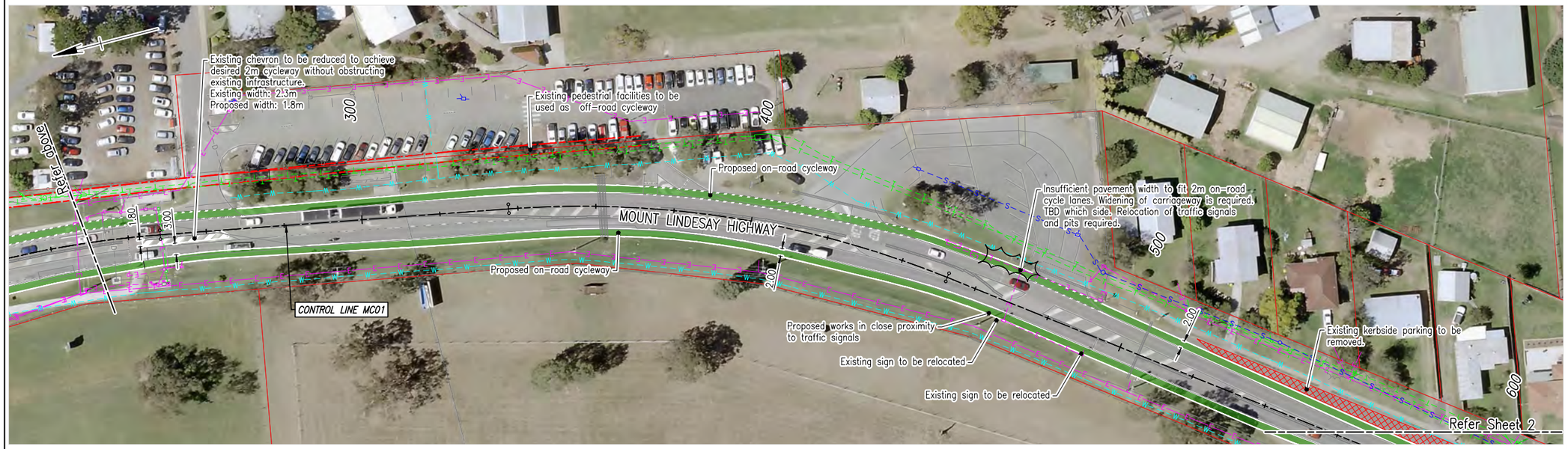
Document No. B22081-SKT-CI-110





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1A	For information only		14.10.22
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Last Modified :- Nov 08, 2022 - 6:25pm

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – GENERAL ARRANGEMENT SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	110 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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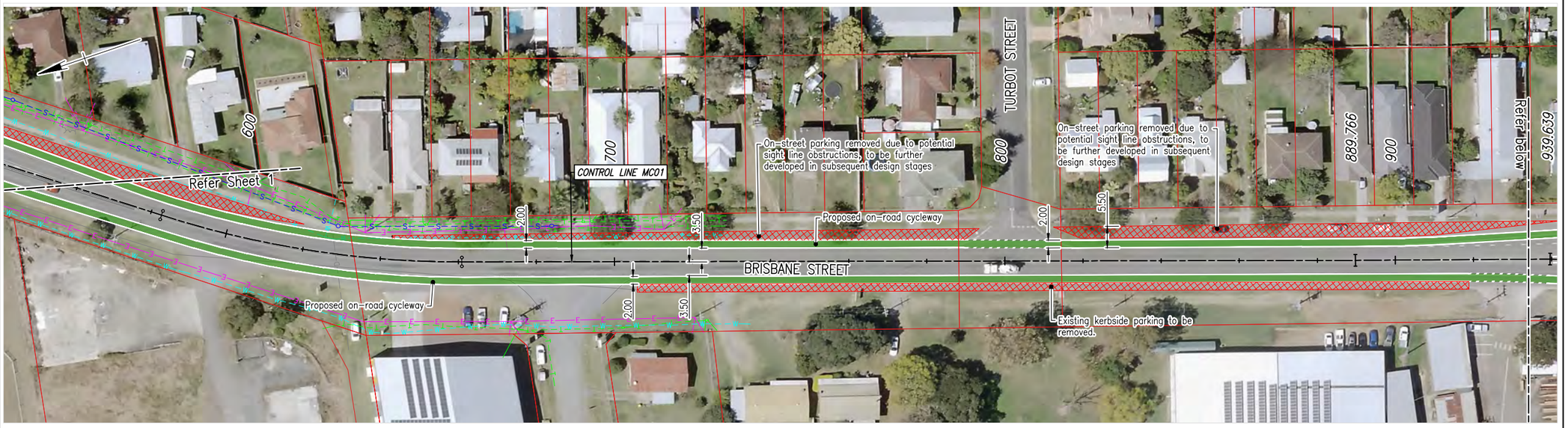
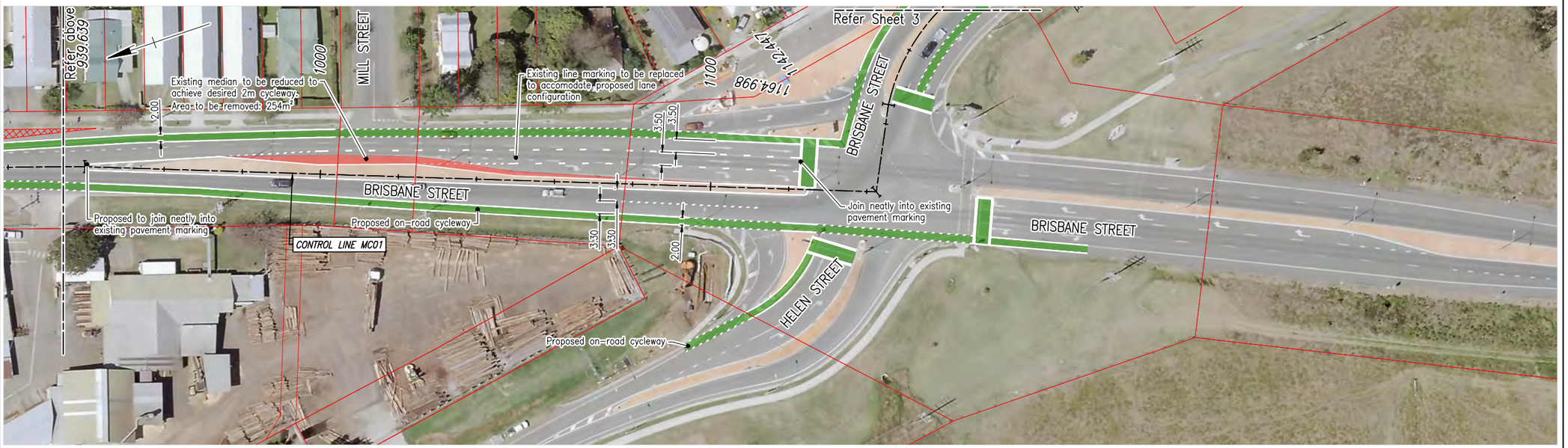
Document No. B22081-SKT-CI-111





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1A	For information only		14.10.22
Revisions/Descriptions		Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 - GENERAL ARRANGEMENT SHEET 2

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	111 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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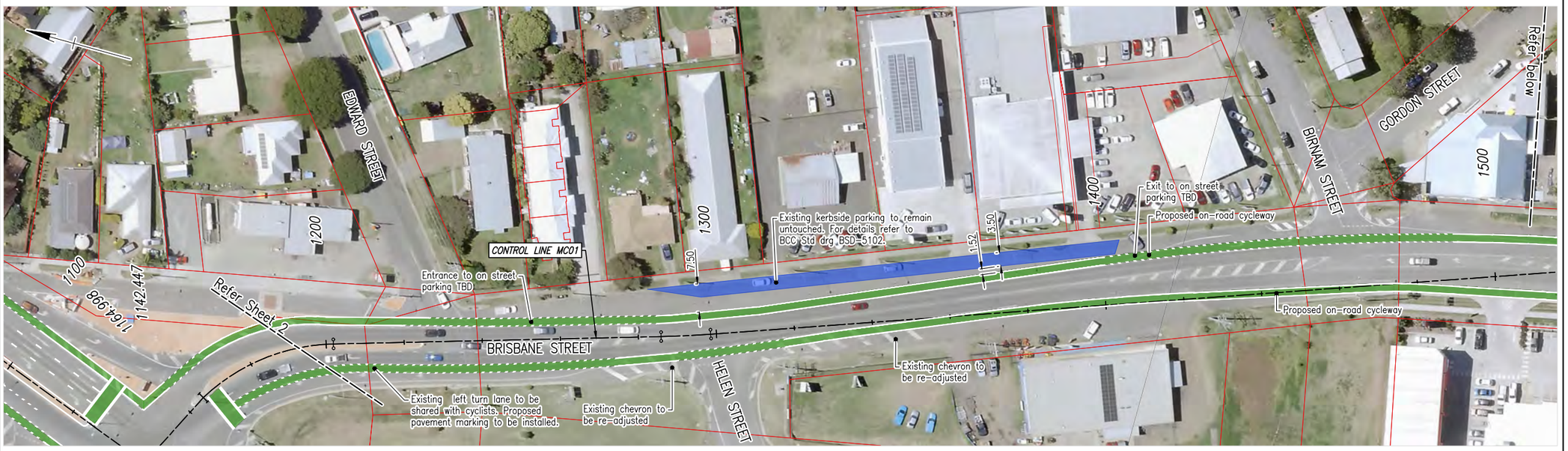

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1A	For information only		14.10.22
Revisions/Descriptions		Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

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Associated Job Nos	Survey Data	Horiz. Datum	GDA94
Auxiliary Drg Nos		Horiz. Grid	MGA94 Zone 56
		Height Datum	AHD Derived
		Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – GENERAL ARRANGEMENT SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	112 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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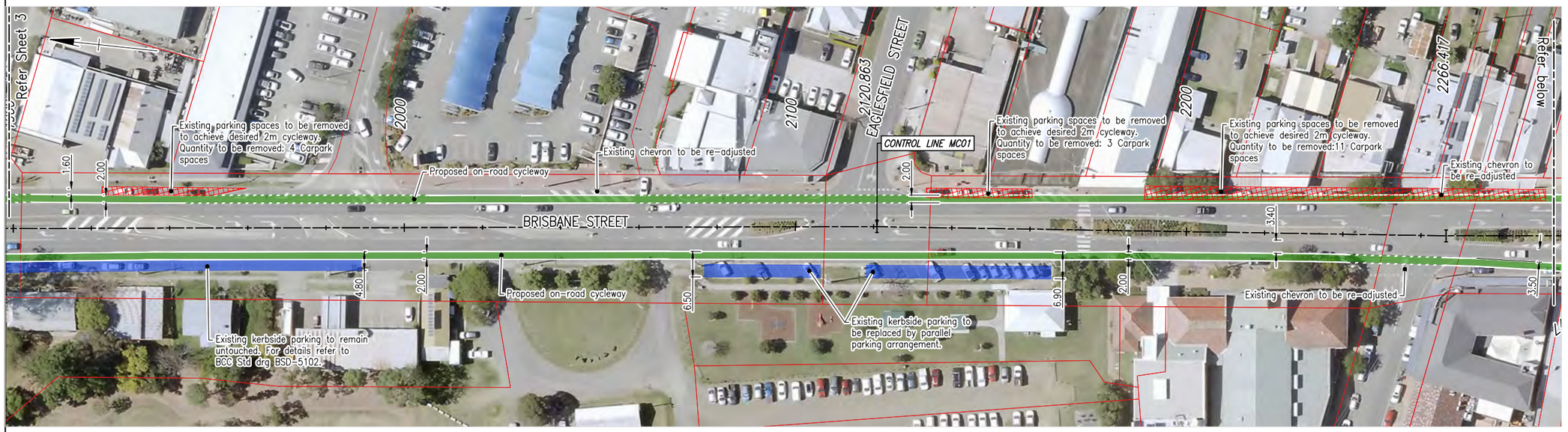

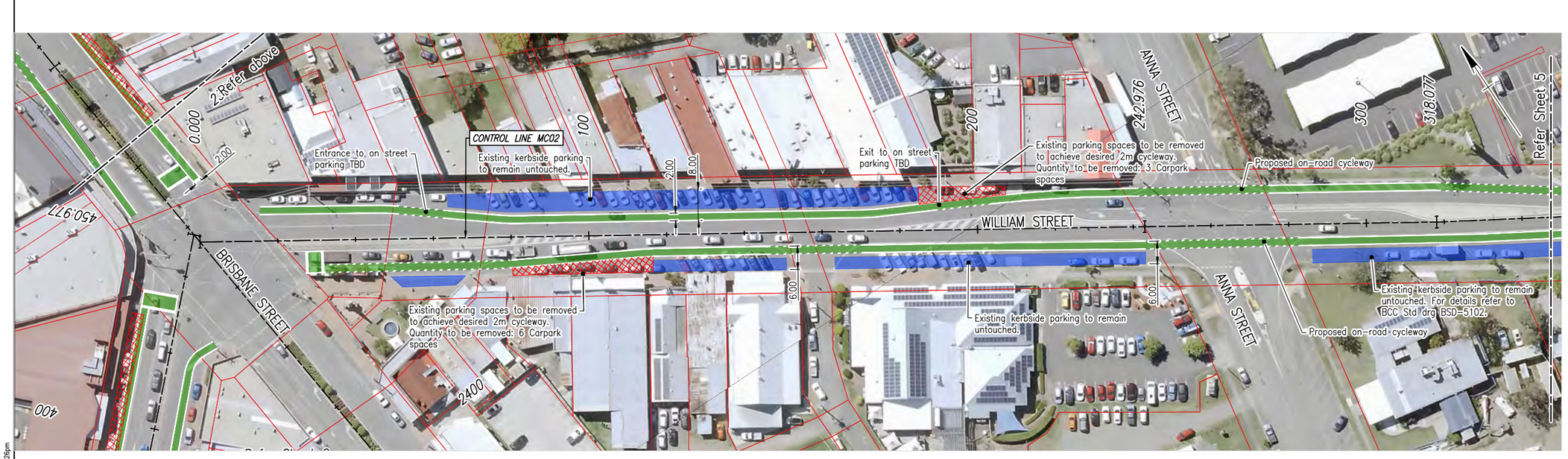

Last Modified :- Nov 08, 2022 - 6:26pm

2A	For information only		08.11.22
1A	For information only		14.10.22
Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title		Date

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – GENERAL ARRANGEMENT SHEET 4

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	113 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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1A	For information only		14.10.22
Revisions/Descriptions		Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 - GENERAL ARRANGEMENT SHEET 5

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	114 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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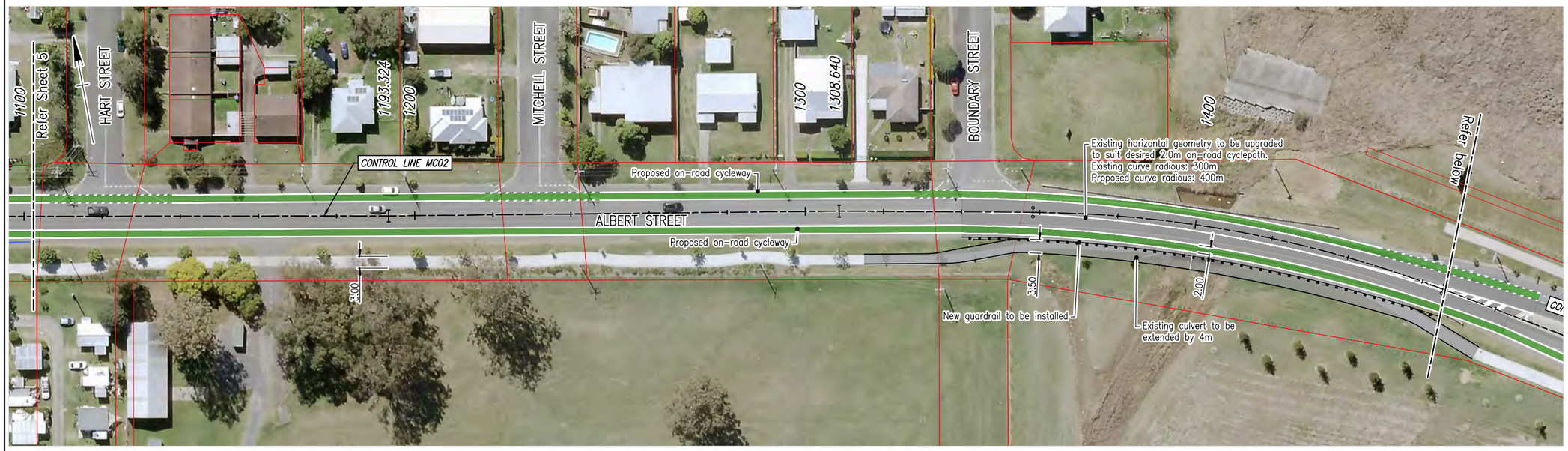
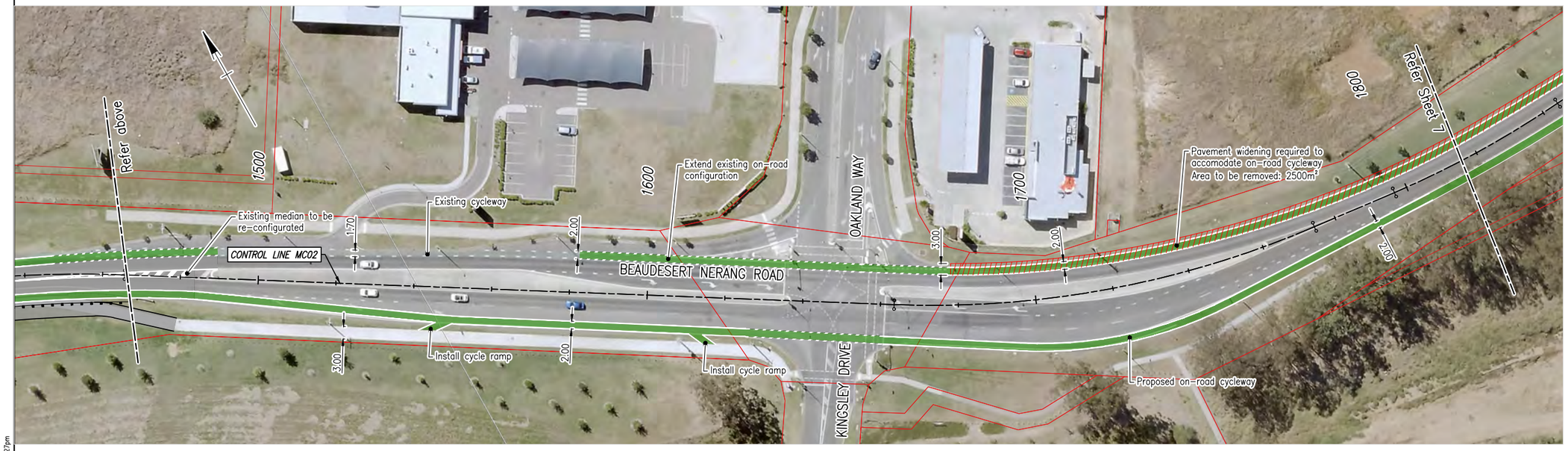
Document No. B22081-SKT-CI-115





2A	For information only		08.11.22
1A	For information only		14.10.22
Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title		Date

Last Modified :- Nov 08, 2022 - 6:27pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-115.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data		
	Horiz. Datum	GDA94	
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56	
	Height Datum	AHD Derived	
	Survey Books		

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 - GENERAL ARRANGEMENT SHEET 6

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	115 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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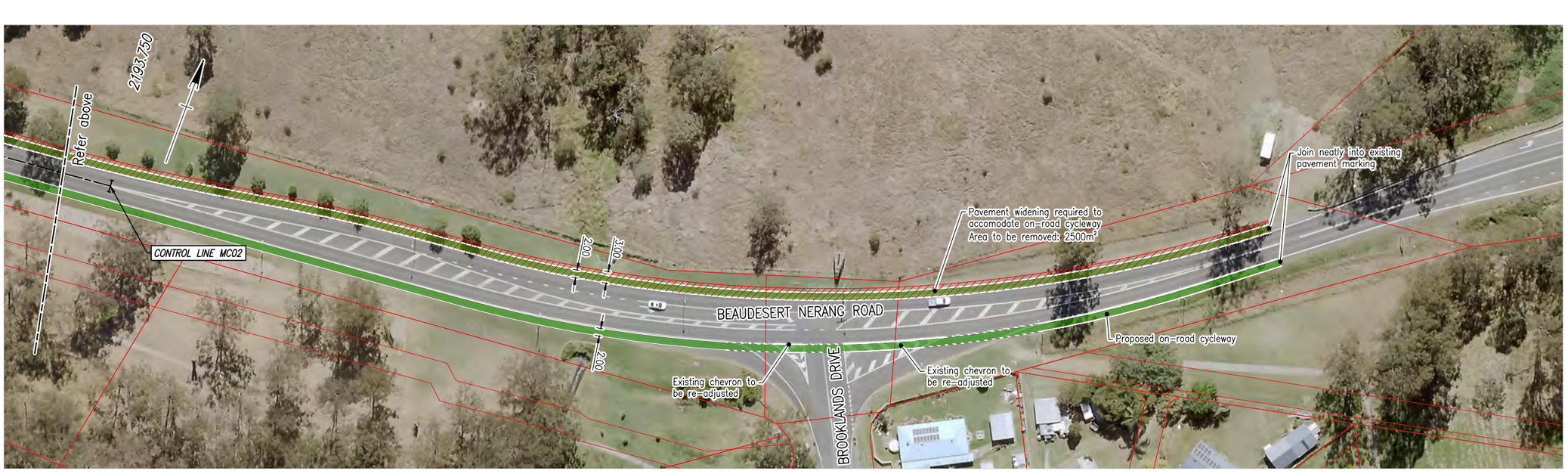
Document No. B22081-SKT-CI-116



2A	For information only		08.11.22
1A	For information only		14.10.22
Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title		Date

Last Modified :– Nov 08, 2022 – 6:27pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-116.dwg

XREFS :– X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – GENERAL ARRANGEMENT SHEET 7

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	116 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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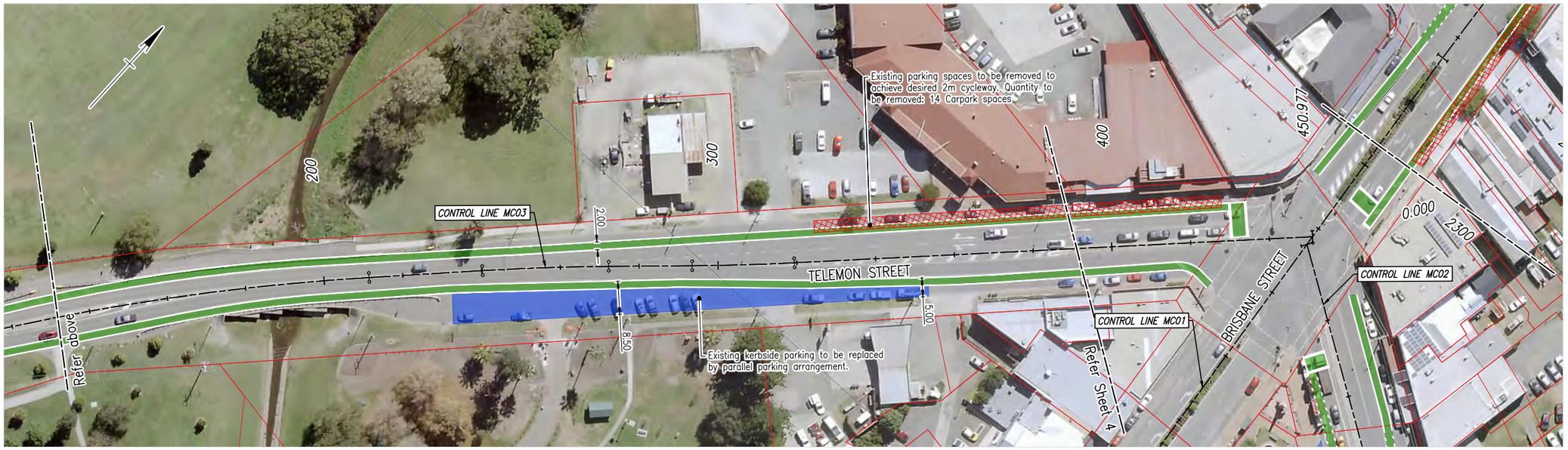
Document No. B22081-SKT-CI-117



Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
2A For information only		08.11.22
1A For information only		14.10.22

Last Modified :– Nov 08, 2022 – 6:27pm

CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-117.dwg

XREFS :– X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_DROA_OP1; X_SURV; X_DROA_OP1_ANNO; X_DROA_OP1_CTRL

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 1 – GENERAL ARRANGEMENT SHEET 8

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	2A
Series Number	117 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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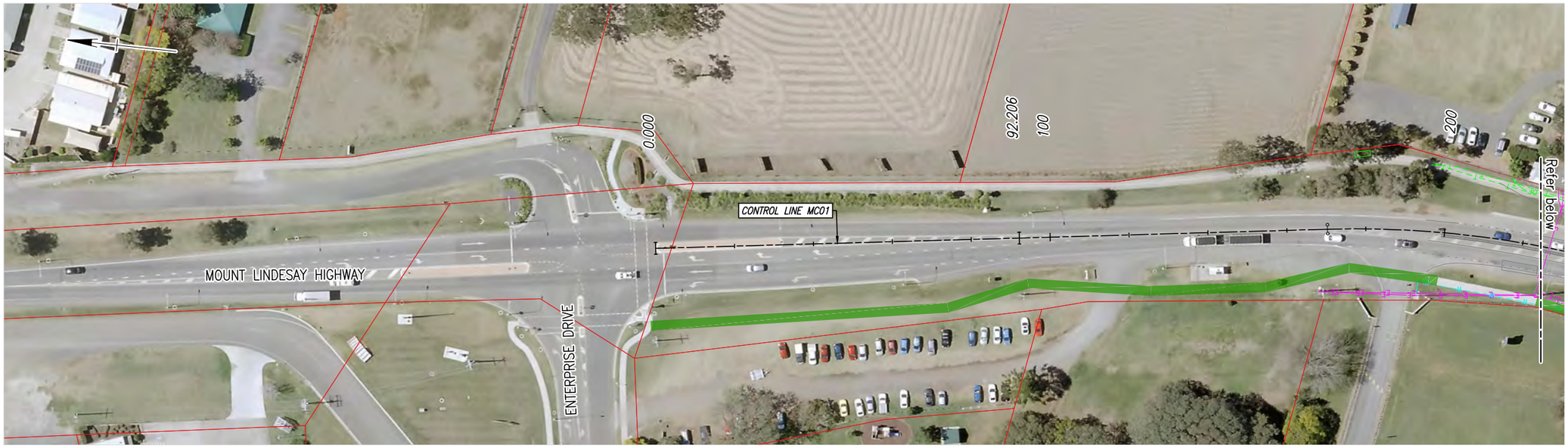
Document No. B22081-SKT-CI-210



1A	For information only		
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:28pm

CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-210.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	210 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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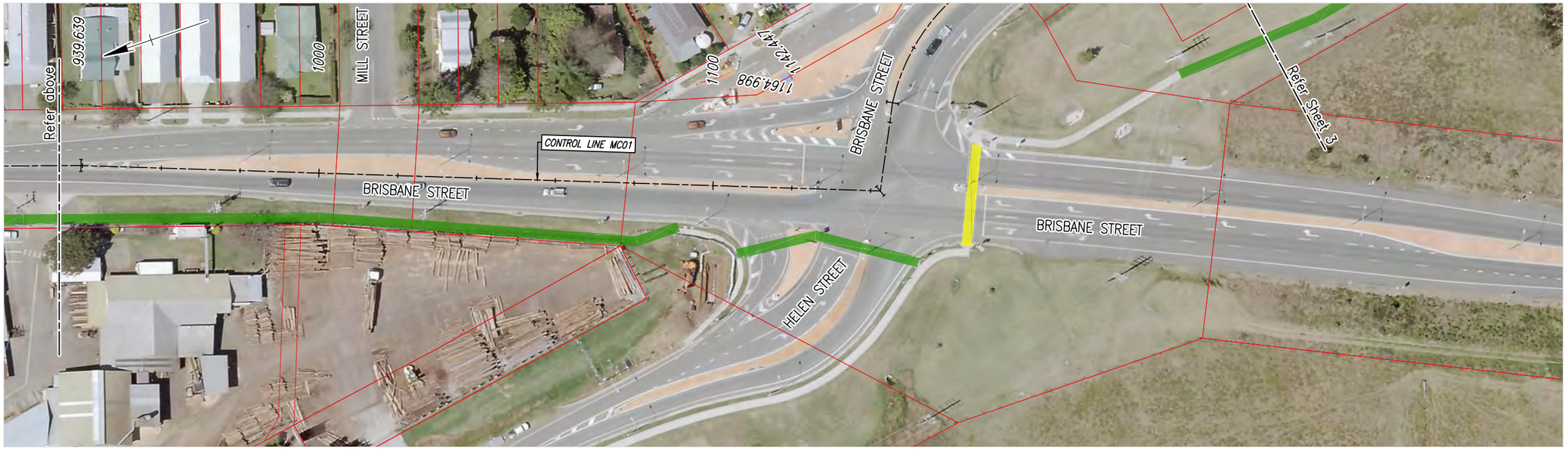
Document No. B22081-SKT-CI-211



1A	For information only		
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:28pm

CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-211.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	
Auxiliary Drg Nos	

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 2

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	211 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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Document No. B22081-SKT-CI-212

1A	For information only		
Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title		Date

Last Modified :- Nov 08, 2022 - 6:28pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-212.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	212 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
39-41 Nerang St, Nerang QLD 4211
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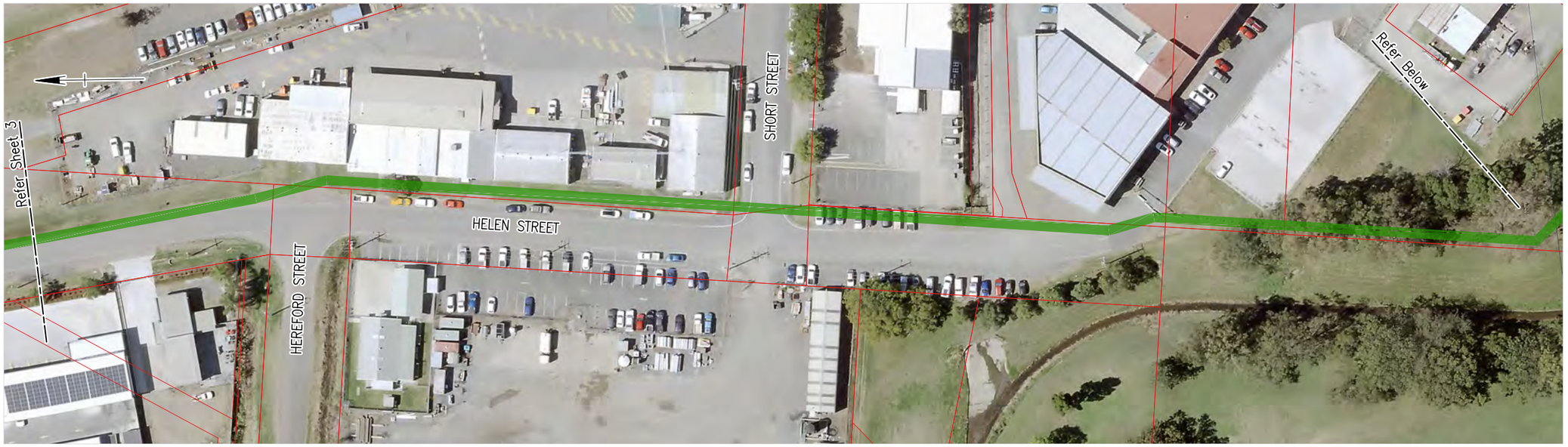
Document No. B22081-SKT-CI-213



1A	For information only		
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:28pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-213.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 4

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	213 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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Document No. B22081-SKT-CI-214

1A	For information only		
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:29pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-214.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 5

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	214 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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Document No. B22081-SKT-CI-215

1A	For information only		
Revisions/Descriptions		Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:29pm

CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-215.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 6

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	215 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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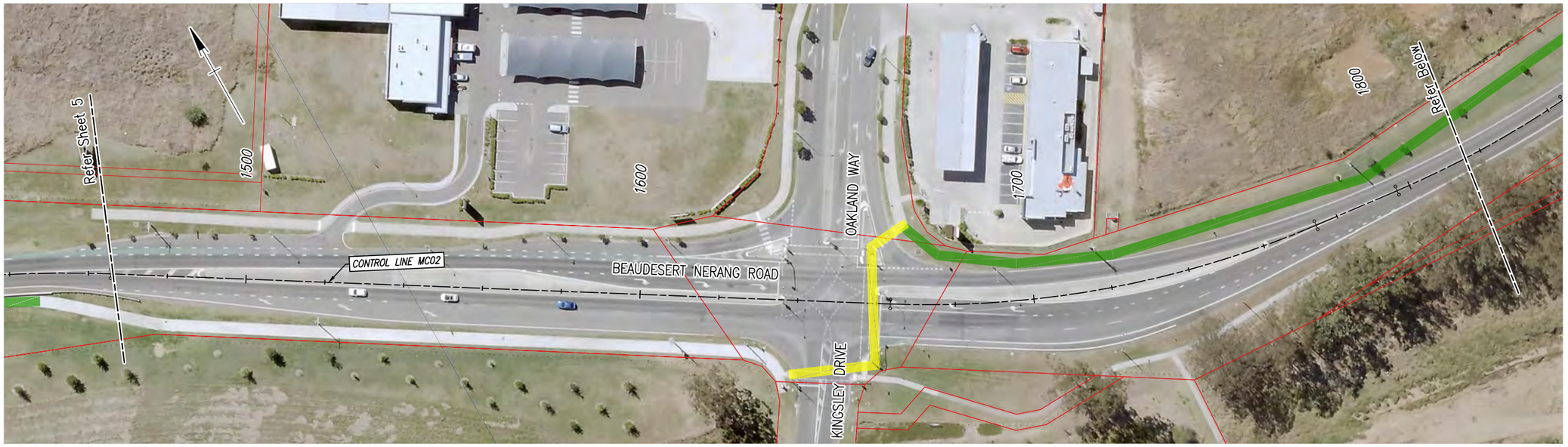
Document No. B22081-SKT-CI-216



1A	For information only		
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

Last Modified :- Nov 08, 2022 - 6:29pm

CAD FILES C:\12dS\data\AUR2DSYN01\B22081 Beaudesert-Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081-SKT-CI-216.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 7

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	216 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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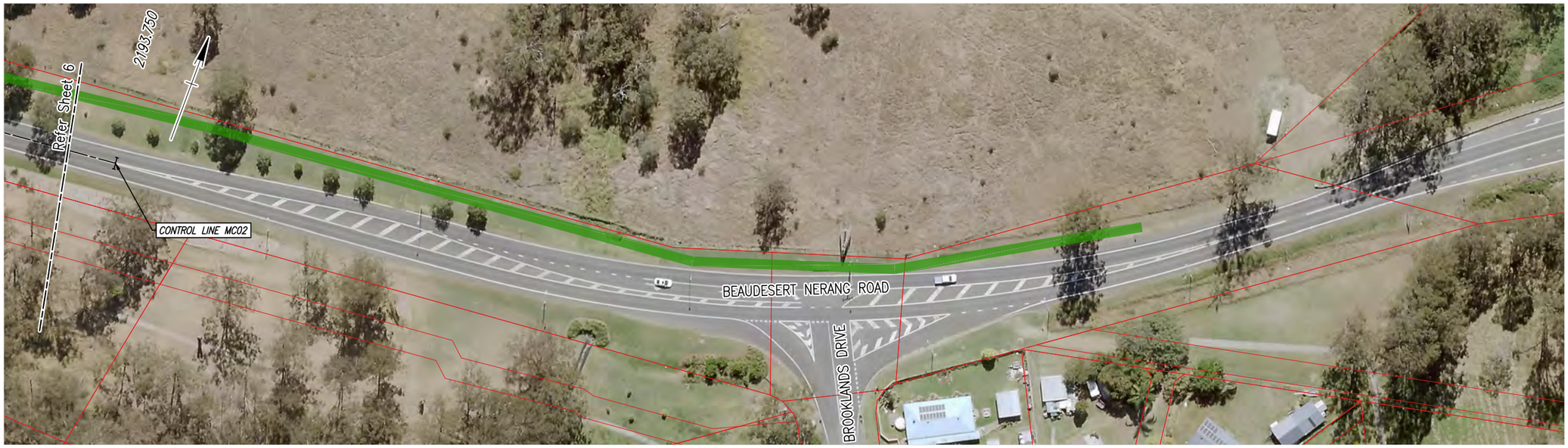
Document No. B22081–SKT–CI–217



1A	For information only		
Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date	

Last Modified :- Nov 08, 2022 - 6:29pm

CAD FILES | C:\12dS\data\AUR2DSYN01\B22081 Beaudesert–Nerang Rd Mt Lindesay Hwy Cycleway_199\100 DRAW\100.2 Civil\AutoCAD\Sketches\B22081–SKT–CI–217.dwg

XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; X_DROA_OP1_CTRL; X_DROA_OP2; X_DROA_OP2_ANNO

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 2 – GENERAL ARRANGEMENT SHEET 8

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	217 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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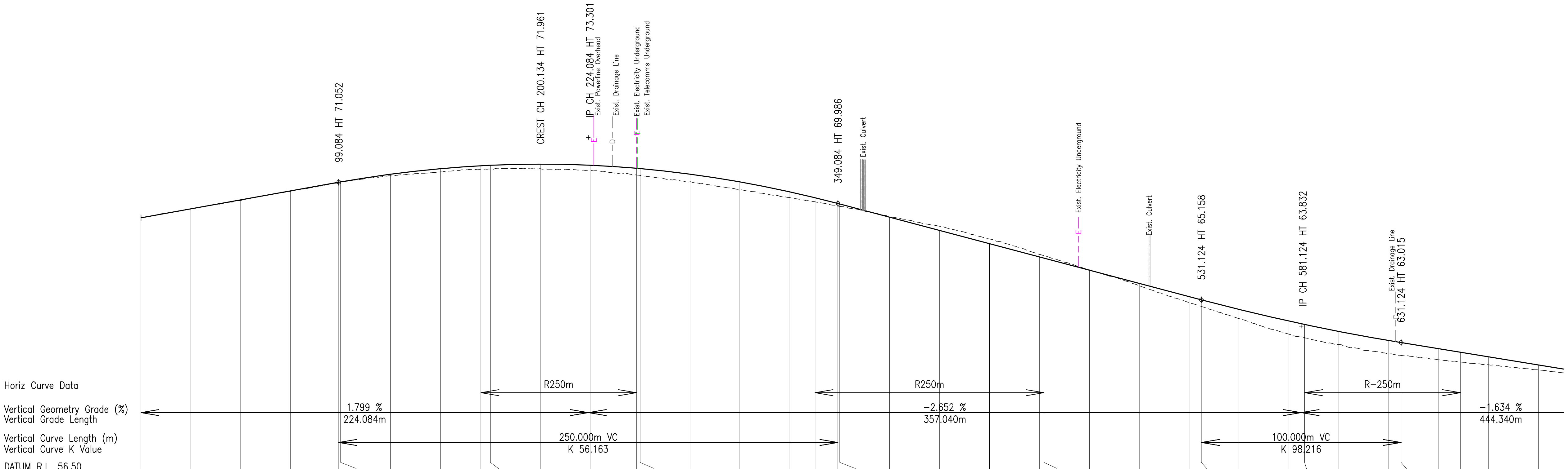
Document No. B22081-SKT-CI-300



CHAINAGE	DEPTH TO NATURAL SURFACE	DESIGN HEIGHT	NATURAL SURFACE
0	0.000	69.269	69.269
25	-0.003	69.719	69.716
50	-0.028	70.169	70.140
75	-0.021	70.618	70.598
99.084	-0.006	71.052	71.045
100	-0.006	71.068	71.062
125	-0.082	71.458	71.376
150	-0.165	71.737	71.572
170.312	-0.175	71.882	71.706
175	-0.182	71.905	71.723
200	-0.230	71.961	71.731
225	-0.260	71.906	71.646
248.2	-0.333	71.755	71.423
250	-0.343	71.740	71.396
275	-0.388	71.462	71.074
300	-0.391	71.073	70.682
325	-0.291	70.573	70.282
337.606	-0.205	70.278	70.073
349.084	-0.115	69.986	69.870
350	-0.114	69.961	69.847
375	-0.027	69.298	69.326
400	-0.209	68.635	68.844
425	-0.239	67.972	68.211
450	-0.128	67.309	67.438
452.283	-0.133	67.249	67.382
475	-0.019	66.646	66.665
500	-0.128	65.983	65.855
525	-0.308	65.320	65.012
531.124	-0.332	65.158	64.826
550	-0.461	64.675	64.214
575	-0.658	64.092	63.435
582.769	-0.666	63.924	63.258
600	-0.658	63.573	62.915
625	-0.663	63.117	62.454
631.124	-0.644	63.015	62.371
650	-0.560	62.706	62.147
660.904	-0.491	62.528	62.037
675	-0.401	62.298	61.897
700	-0.247	61.889	61.642

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LONGITUDINAL SECTION MC01

Rev	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
1A	For information only		

Last Modified :- Nov 08, 2022 - 6:36pm

CAD FILES C:\Users\laura.miranda\Documents\TMRCust\TempDwgLocation\AcPublish_18876\B22081-SKT-CI-300.dwg
XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC01 LONG SECTIONS SHEET 1

ENGINEERING CERTIFICATION (RPEQ)
PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	300 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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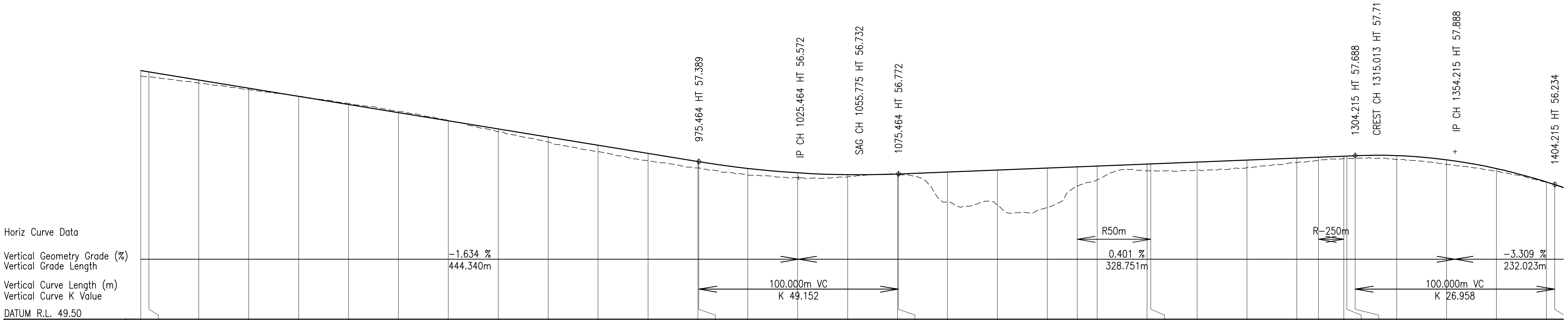
Document No. B22081-SKT-CI-301



CHAINAGE	NATURAL SURFACE	DESIGN HEIGHT	DEPTH TO NATURAL SURFACE
696	61.688	61.955	-0.267
700	61.642	61.889	-0.247
725	61.327	61.481	-0.154
750	60.998	61.072	-0.074
775	60.678	60.664	-0.014
800	60.309	60.255	-0.053
825	59.910	59.847	-0.063
850	59.452	59.439	-0.013
875	58.897	59.030	-0.133
900	58.374	58.622	-0.248
925	57.890	58.213	-0.323
950	57.436	57.805	-0.369
975	57.076	57.396	-0.320
975.464	57.074	57.389	-0.314
1000	56.719	57.049	-0.330
1025	56.585	56.829	-0.244
1050	56.625	56.736	-0.111
1075	56.755	56.770	-0.015
1075.464	56.748	56.772	-0.024
1100	55.371	56.870	-1.499
1125	55.205	56.970	-1.765
1150	55.095	57.070	-1.975
1164.998	56.167	57.130	-0.963
1175	56.484	57.171	-0.687
1200	56.940	57.271	-0.331
1201.851	56.932	57.278	-0.346
1225	56.946	57.371	-0.424
1250	57.085	57.471	-0.386
1275	57.346	57.571	-0.225
1285.813	57.435	57.614	-0.180
1298.518	57.553	57.665	-0.112
1300	57.542	57.671	-0.129
1304.215	57.542	57.688	-0.146
1325	57.491	57.691	-0.201
1350	57.252	57.483	-0.230
1375	56.897	57.042	-0.145
1400	56.352	56.370	-0.018
1404.215	56.239	56.234	-0.005

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LONGITUDINAL SECTION MC01

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	Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date
1A	For information only		

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA95
Horiz. Grid	MGA95 Zone 57
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC01 LONG SECTIONS SHEET 2

ENGINEERING CERTIFICATION (RPEQ)
PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	301 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

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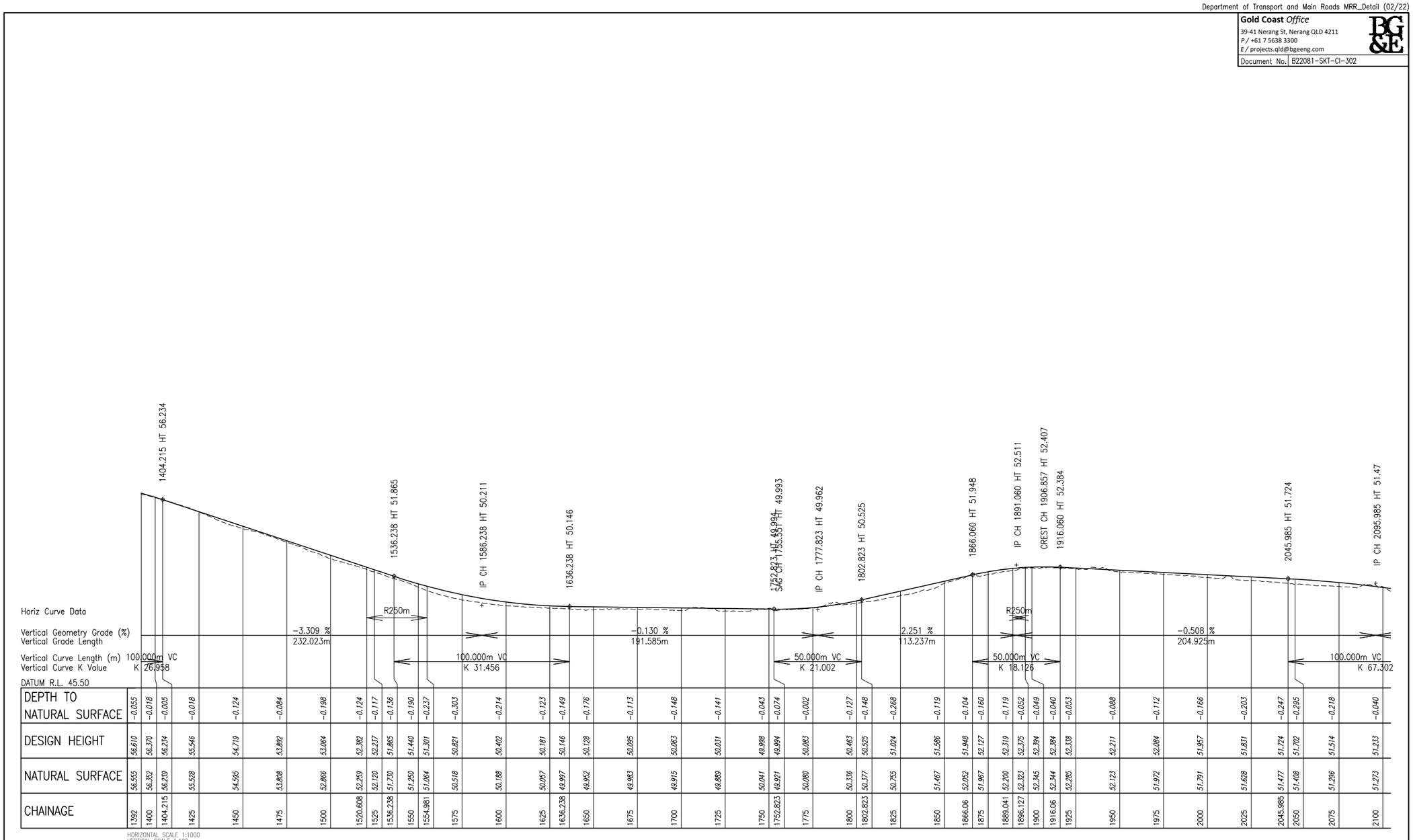
Document No. B22081-SKT-CI-302



LONGITUDINAL SECTION MC01

Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
1A For information only		

Last Modified :- Nov 08, 2022 - 6:37pm

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA96
Auxiliary Drg Nos	Horiz. Grid	MGA96 Zone 58
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC01 LONG SECTIONS SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	302 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

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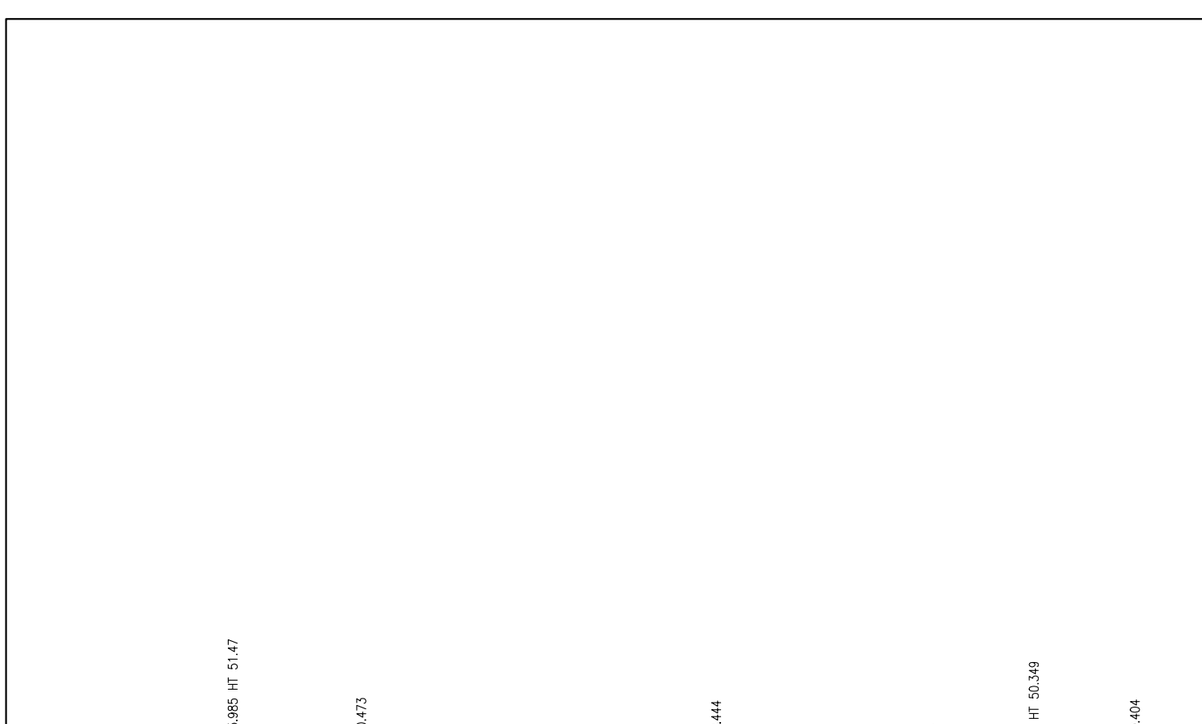

Horiz Curve Data

Vertical Geometry Grade (%)	-0.508 %		-1.994 %	2.374 %	0.140 %
Vertical Grade Length	204.925m		192.579m	114.476m	56.098m
Vertical Curve Length (m)		100.000m VC		150.000m VC	78.952m VC
Vertical Curve K Value		K 67.302		K 34.342	K 35.330

DATUM R.L. 43.50

DEPTH TO NATURAL SURFACE	-0.052	-0.040	-0.093	-0.195	-0.206	-0.246	-0.003	-0.036	-0.003	-0.420	-0.335	-0.376	-0.562	-0.283	-0.237	-0.191	-0.092	-0.054	-0.003	-0.015	0.000
DESIGN HEIGHT	51.380	51.233	50.859	50.473	50.393	49.885	49.397	49.126	48.917	48.593	48.451	48.491	48.713	49.116	49.412	49.665	50.089	50.536	50.404	50.414	50.427
NATURAL SURFACE	51.327	51.273	50.766	50.279	50.187	49.649	49.394	49.090	48.914	48.173	48.115	48.114	48.150	48.833	49.175	49.474	49.987	50.391	50.407	50.399	50.427
CHAINAGE	2088	2100	2125	2145.985	2150	2175	2200	2213.563	2225	2250	2275	2300	2325	2350	2363.563	2375	2400	2425	2442.515	2450	2459.137

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LONGITUDINAL SECTION MC01

Last Modified :- Nov 08, 2022 - 6:37pm

Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date
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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos

Auxiliary Drg Nos

Survey Data

Horiz. Datum	GDA97
Horiz. Grid	MGA97 Zone 59
Height Datum	AHD Derived
Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC01 LONG SECTIONS SHEET 4

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.
Contract No. 0
Drawing No. 1A
Series Number 303 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

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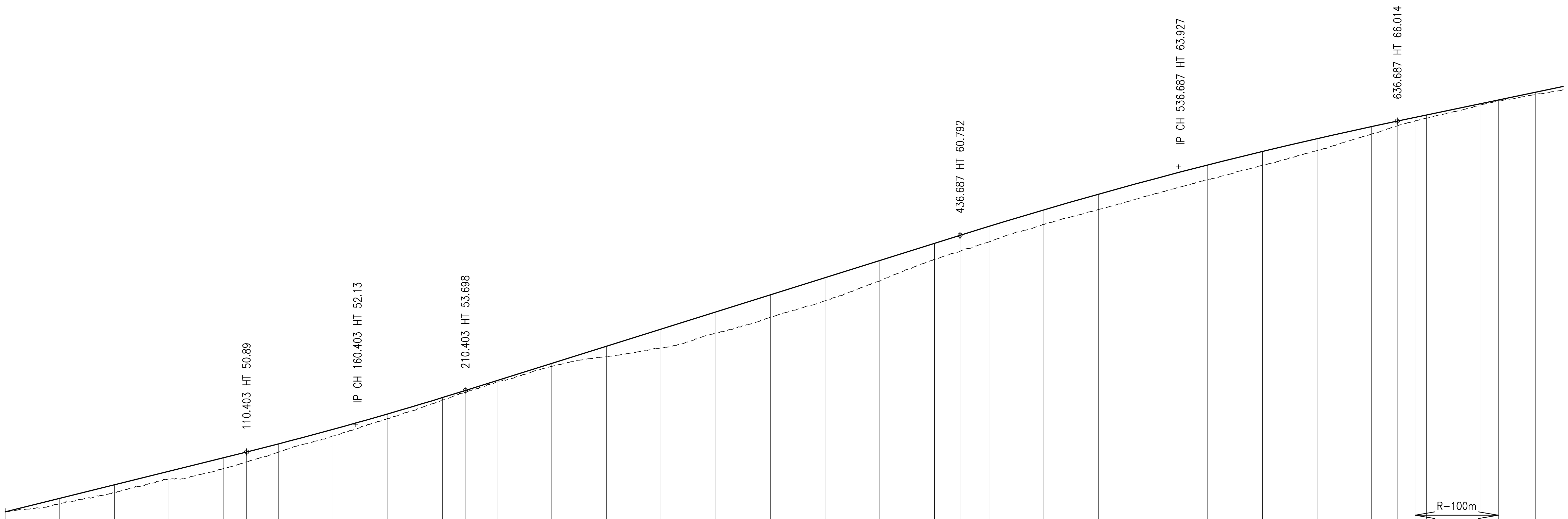
Document No. B22081-SKT-CI-304



Horiz Curve Data: R-100m

Vertical Geometry Grade (%) / Vertical Grade Length: 2.482 % 160.403m; 3.135 % 376.284m; 2.086 % 438.127m

Vertical Curve Length (m) / Vertical Curve K Value: 100.000m VC K 153.026; 200.000m VC K 190.727

DATUM R.L. 44.00

DEPTH TO NATURAL SURFACE	0.000	-0.244	-0.367	-0.368	-0.499	-0.455	-0.380	-0.301	-0.211	-0.097	-0.084	-0.073
DESIGN HEIGHT	48.150	48.770	49.391	50.011	50.631	50.890	51.259	51.924	52.629	53.375	53.698	54.156
NATURAL SURFACE	48.150	48.527	49.024	49.643	50.133	50.435	50.879	51.622	52.418	53.278	53.614	54.083
CHAINAGE	0	25	50	75	100	110.403	125	150	175	200	210.403	225

DEPTH TO NATURAL SURFACE	-0.138	-0.487	-0.857	-0.967	-1.023	-1.056	-0.945	-0.732	-0.733	-0.710	-0.665	-0.699
DESIGN HEIGHT	54.939	55.723	56.507	57.291	58.075	58.858	59.642	60.426	60.792	61.205	61.955	62.672
NATURAL SURFACE	54.801	55.236	55.650	56.324	57.051	57.802	58.697	59.693	60.059	60.495	61.290	61.973
CHAINAGE	250	275	300	325	350	375	400	425	436.687	450	475	500

DEPTH TO NATURAL SURFACE	-0.690	-0.663	-0.639	-0.550	-0.341	-0.221	-0.164	-0.142	-0.054	-0.060	-0.099
DESIGN HEIGHT	63.356	64.008	64.627	65.213	65.766	66.014	66.183	66.292	66.813	66.977	67.335
NATURAL SURFACE	62.667	63.345	63.988	64.663	65.425	65.793	66.019	66.150	66.759	66.917	67.236
CHAINAGE	525	550	575	600	625	636.687	644.815	650	675	682.849	700

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LONGITUDINAL SECTION MC02

Last Modified :- Nov 08, 2022 - 6:37pm

1A	For information only		
	Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA98
Horiz. Grid	MGA98 Zone 60
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC02 LONG SECTIONS SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	304 of 7

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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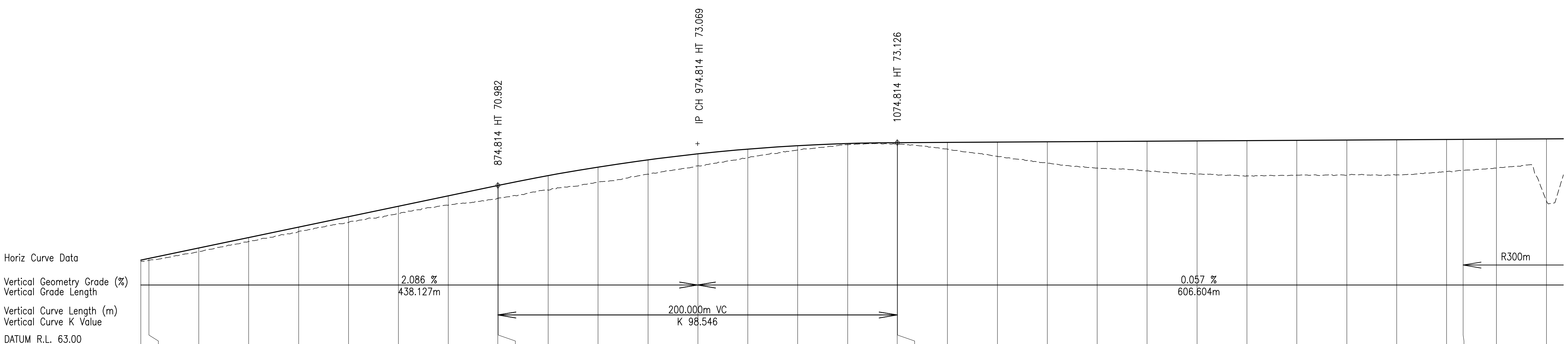
Document No. B22081-SKT-CI-305



DEPTH TO NATURAL SURFACE	-0.075	-0.099	-0.184	-0.206	-0.221	-0.285	-0.375	-0.467	-0.645	-0.643	-0.728
DESIGN HEIGHT	67.251	67.335	67.856	68.378	68.900	69.421	69.943	70.465	70.982	70.986	71.476
NATURAL SURFACE	67.176	67.236	67.673	68.172	68.679	69.136	69.568	69.998	70.338	70.343	70.748
CHAINAGE	696	700	725	750	775	800	825	850	874.814	875	900

DEPTH TO NATURAL SURFACE	-0.742	-0.719	-0.596	-0.435	-0.216	-0.061	-0.070	-0.072	-0.340	-0.713	-1.065
DESIGN HEIGHT	71.902	72.264	72.563	72.799	72.972	73.080	73.126	73.126	73.140	73.154	73.169
NATURAL SURFACE	71.160	71.546	71.968	72.365	72.756	73.019	73.056	73.054	72.800	72.441	72.104
CHAINAGE	925	950	975	1000	1025	1050	1074.814	1075	1100	1125	1150

DEPTH TO NATURAL SURFACE	-1.329	-1.484	-1.665	-1.766	-1.740	-1.757	-1.758	-1.601	-1.553	-1.438	-3.111
DESIGN HEIGHT	73.183	73.197	73.211	73.226	73.240	73.254	73.268	73.283	73.287	73.297	73.311
NATURAL SURFACE	71.854	71.713	71.546	71.460	71.500	71.497	71.511	71.682	71.734	71.859	70.200
CHAINAGE	1175	1200	1225	1250	1275	1300	1325	1350	1358.255	1375	1400

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LONGITUDINAL SECTION MC02

Rev	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
1A	For information only		

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos
Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA99
Horiz. Grid	MGA99 Zone 61
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC02 LONG SECTIONS

ENGINEERING CERTIFICATION (RPEQ)
PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	305 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

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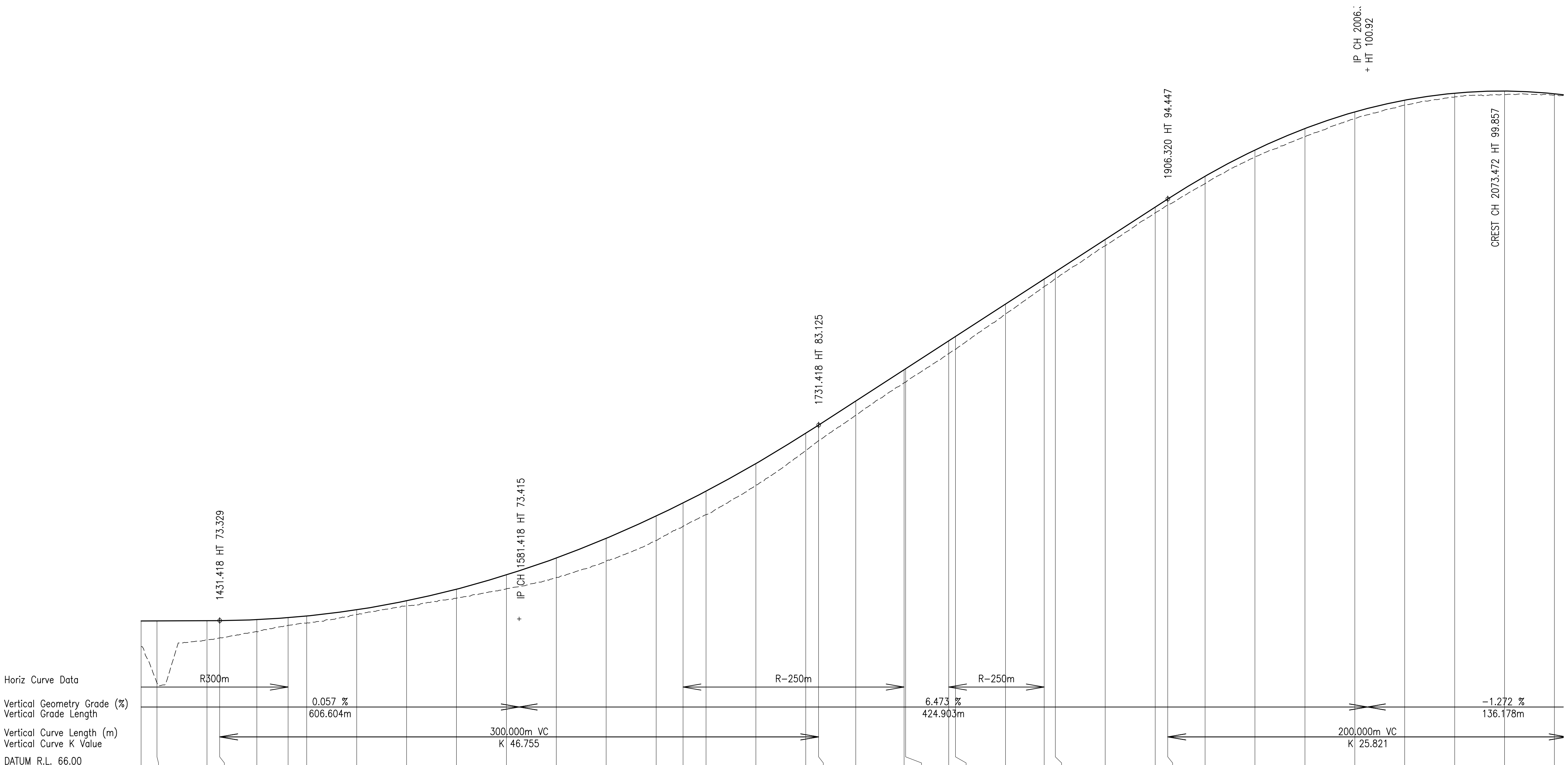
Document No. B22081-SKT-CI-306



CHAINAGE	NATURAL SURFACE	DESIGN HEIGHT	DEPTH TO NATURAL SURFACE
1392	72.022	73.307	-1.285
1400	70.200	73.311	-3.111
1425	72.370	73.325	-0.956
1431.418	72.461	73.329	-0.869
1450	72.774	73.377	-0.603
1465.648	73.090	73.474	-0.384
1475	73.208	73.557	-0.349
1500	73.640	73.871	-0.231
1525	74.061	74.319	-0.257
1550	74.451	74.900	-0.449
1575	74.920	75.616	-0.695
1600	75.483	76.464	-0.981
1625	76.298	77.447	-1.149
1650	77.340	78.563	-1.223
1663.509	78.047	79.222	-1.175
1675	78.639	79.813	-1.174
1700	80.121	81.196	-1.076
1725	81.833	82.714	-0.880
1731.418	82.347	83.125	-0.778
1750	83.613	84.328	-0.715
1774.234	85.245	85.896	-0.652
1775	85.281	85.946	-0.665
1796.577	86.706	87.343	-0.637
1800	86.918	87.564	-0.647
1825	88.681	89.183	-0.502
1844.414	90.065	90.439	-0.374
1850	90.455	90.801	-0.346
1875	92.107	92.419	-0.312
1900	93.753	94.038	-0.284
1906.32	94.148	94.447	-0.298
1925	95.219	95.588	-0.369
1950	96.548	96.905	-0.357
1975	97.560	97.979	-0.420
2000	98.478	98.812	-0.334
2025	99.157	99.402	-0.245
2050	99.563	99.750	-0.188
2075	99.681	99.857	-0.176
2100	99.661	99.721	-0.060

HORIZONTAL SCALE 1:1000

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1A	For information only		

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

Associated Job Nos

Auxiliary Drg Nos

Survey Data	
Horiz. Datum	GDA100
Horiz. Grid	MGA100 Zone 62
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC02 LONG SECTIONS

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
08 Nov 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	306 of 7

Department of Transport and Main Roads MRR_Detail (02/22)

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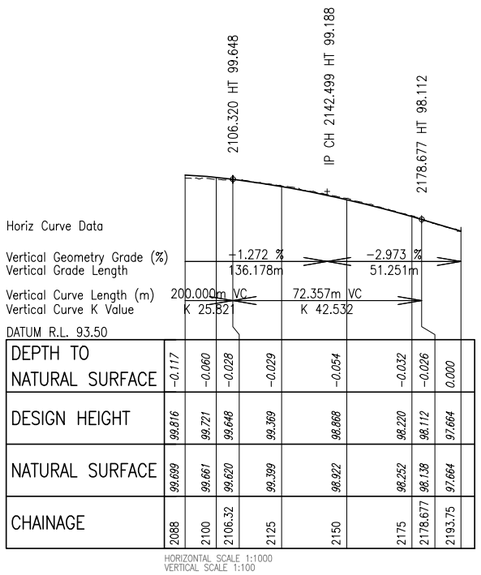
Document No. B22081-SKT-CI-307



LONGITUDINAL SECTION MC02

1A	For information only		
Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date	

Associated Job Nos

Auxiliary Drg Nos

Survey Data: Horiz. Datum GDA101; Horiz. Grid MGA101 Zone 63; Height Datum AHD Derived; Survey Books

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
MC02 LONG SECTIONS

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

08 Nov 2022

Queensland Government

Job No.

Contract No. 0

Drawing No. 1A

Series Number 307 of 7

Last Modified :- Nov 08, 2022 - 6:36pm

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XREFS :- X_TLE_CIVIL; X_CTRL_LS

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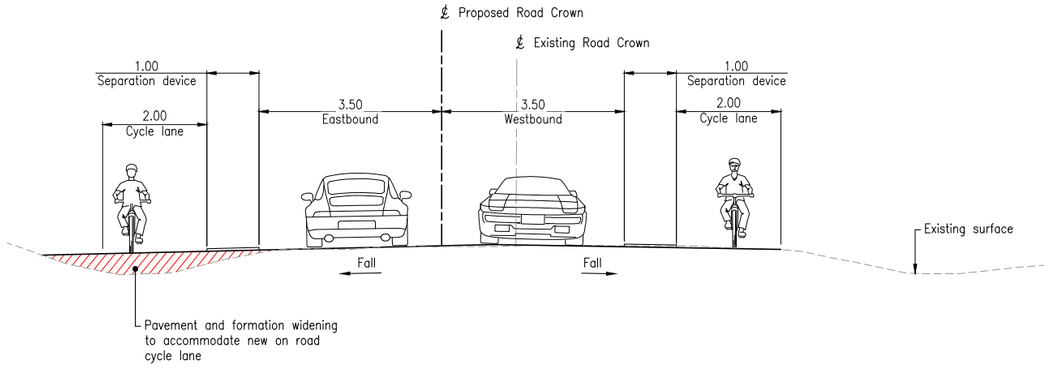

Typical Widening Cross Section
Beaudesert–Nerang Road
Ch 1700 – 2190

1A	For information only		2.12.22
	Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

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XREFS :- X_TLE_CIVIL

Associated Job Nos	
Auxiliary Drg Nos	
Survey Data	
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Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 1.0 2.0m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 – TYPICAL SECTIONS

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	402 of 9

Department of Transport and Main Roads MRR_Detail (02/22)

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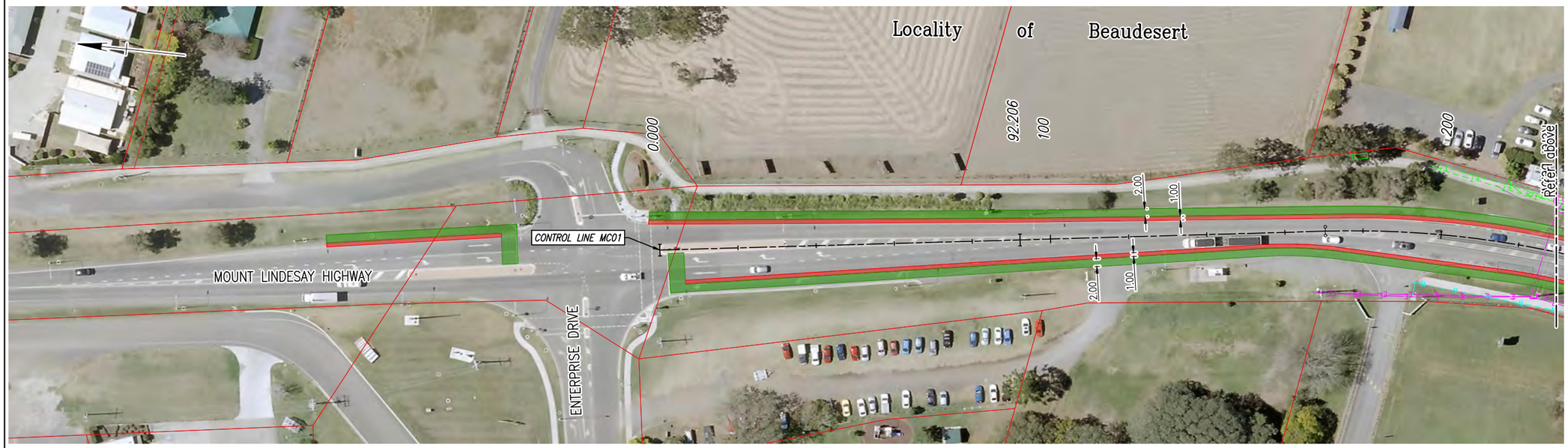
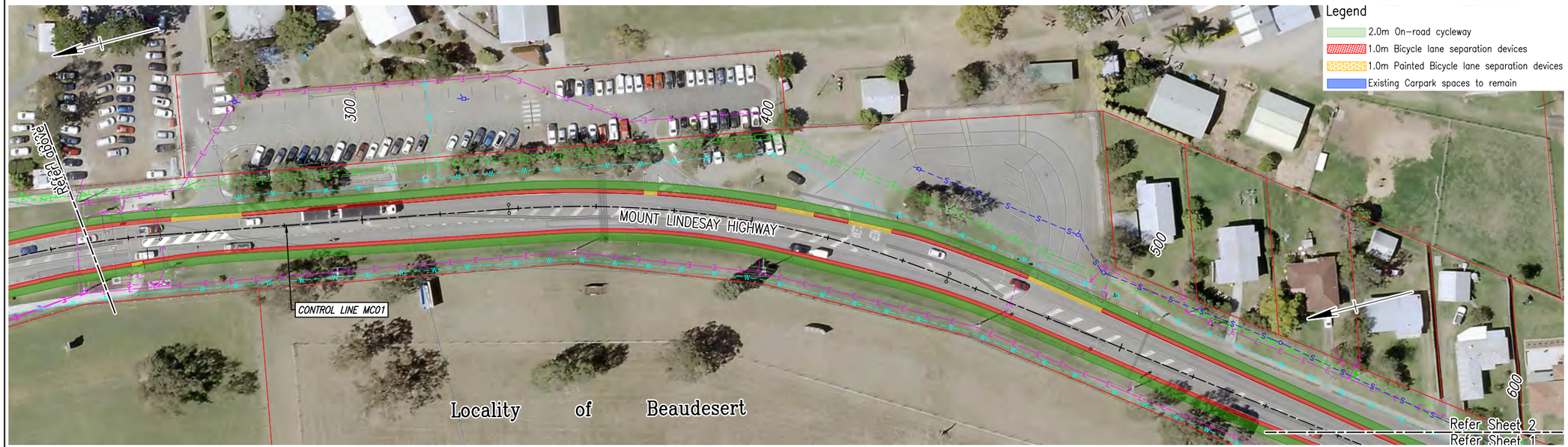
Document No. B22081-SKT-CI-410





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	Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 - GENERAL ARRANGEMENT SHEET 1

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	410 of 10

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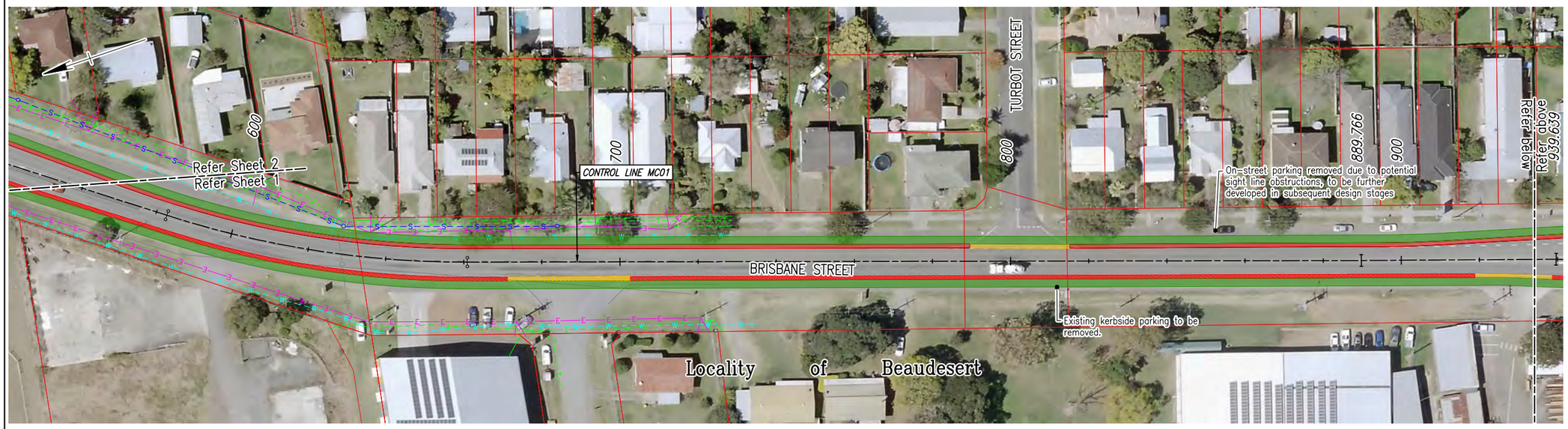

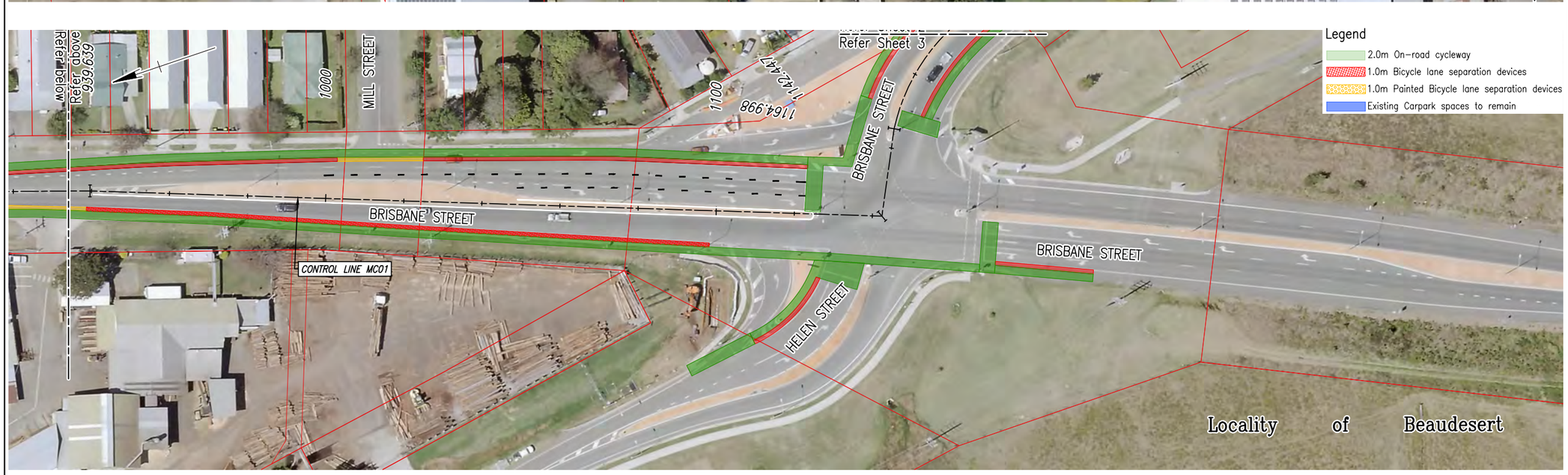

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	Revisions/Descriptions	Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. OR - Full Name and Position Title	Date

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 - GENERAL ARRANGEMENT SHEET 2

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	411 of 10

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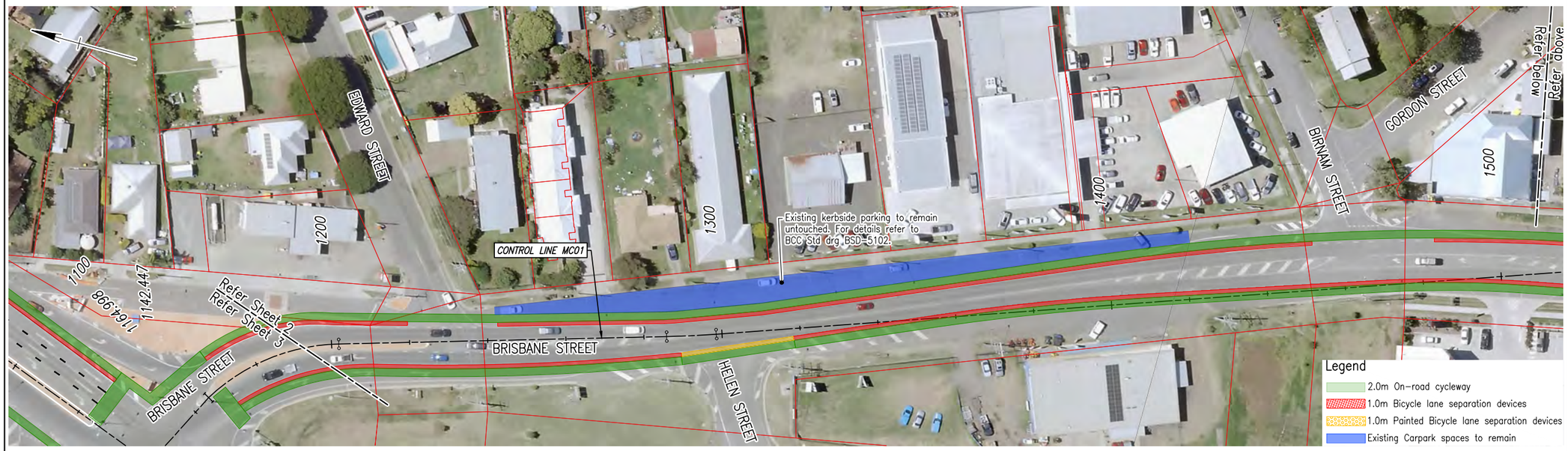

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1A For information only		2.12.22

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Associated Job Nos	
Auxiliary Drg Nos	
Survey Data – Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 – GENERAL ARRANGEMENT SHEET 3

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	412 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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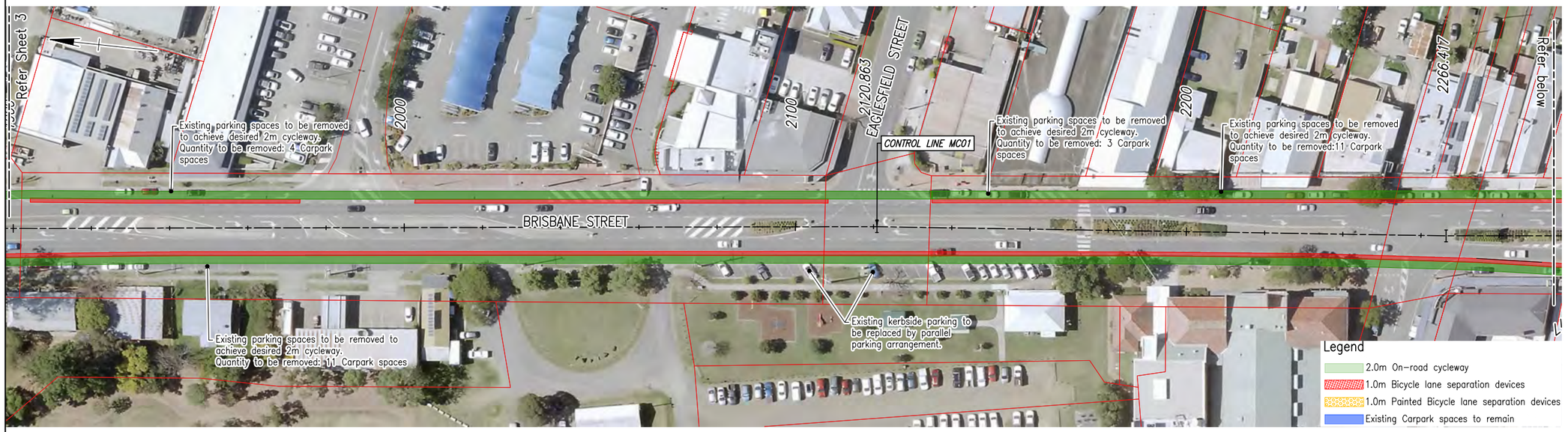

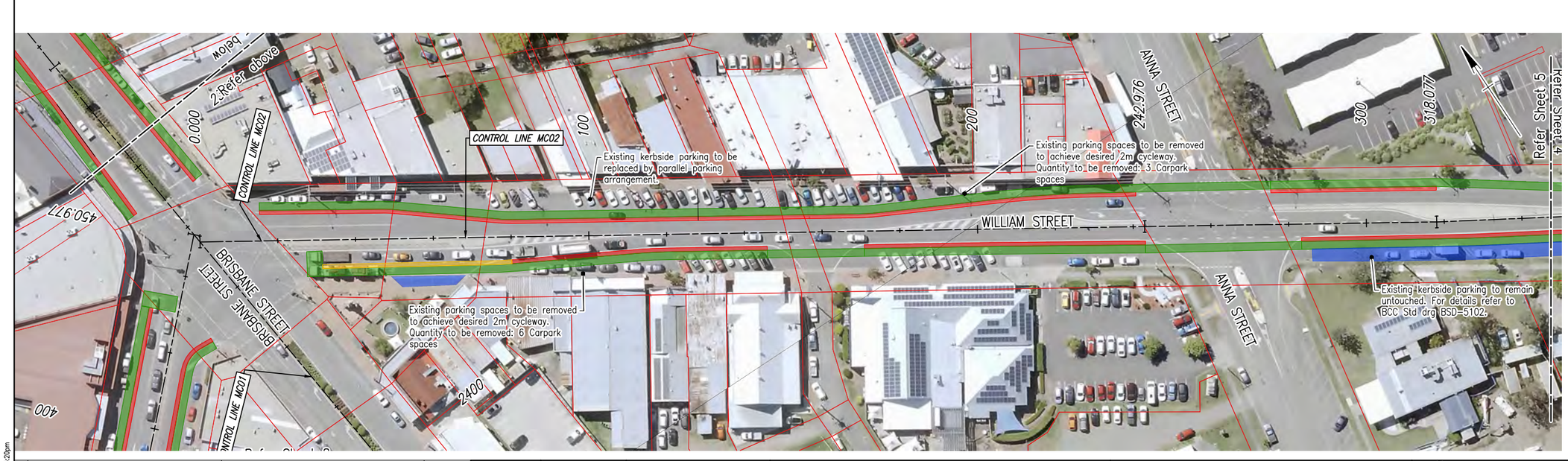

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Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title		Date

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Associated Job Nos	Survey Data	
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Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 – GENERAL ARRANGEMENT SHEET 4

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	413 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 – GENERAL ARRANGEMENT SHEET 5

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	414 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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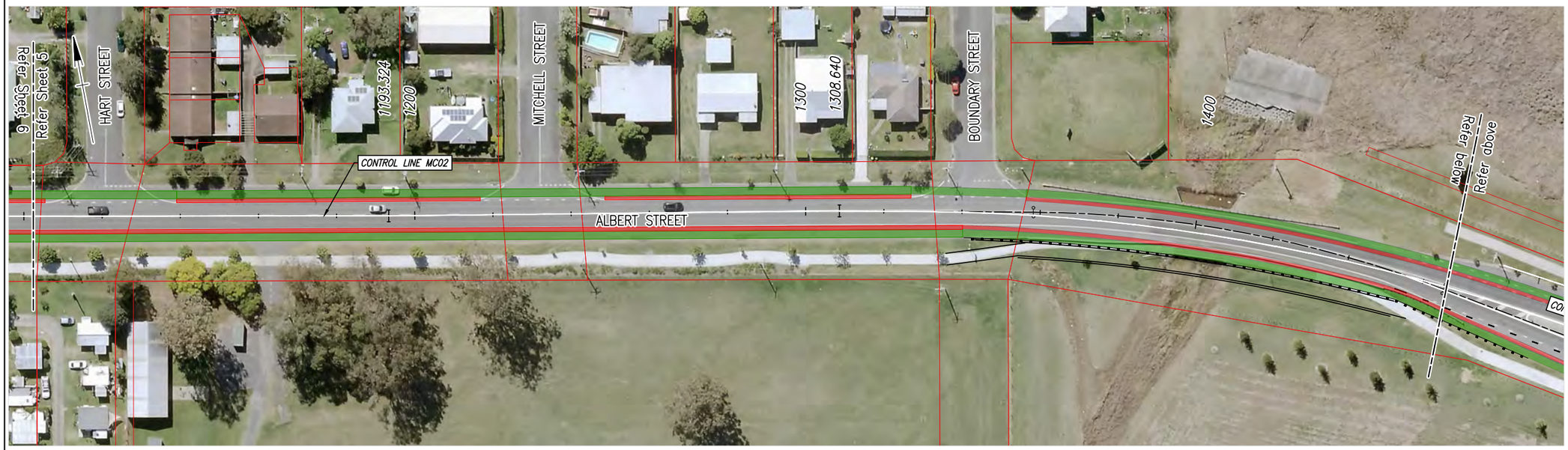

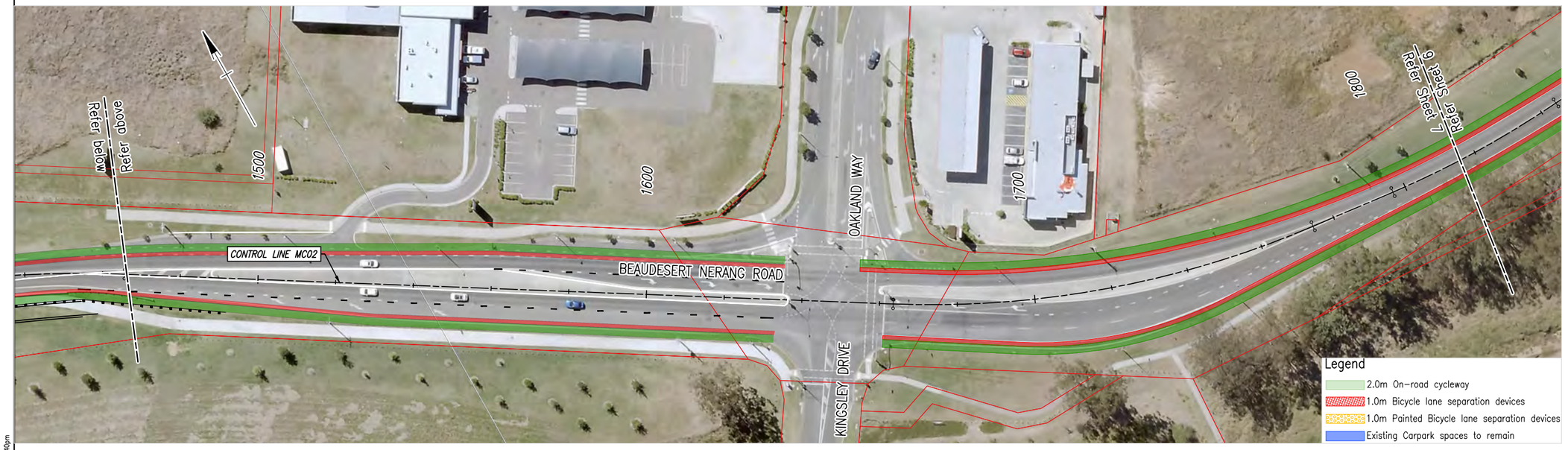

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 - GENERAL ARRANGEMENT SHEET 6

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY

05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	415 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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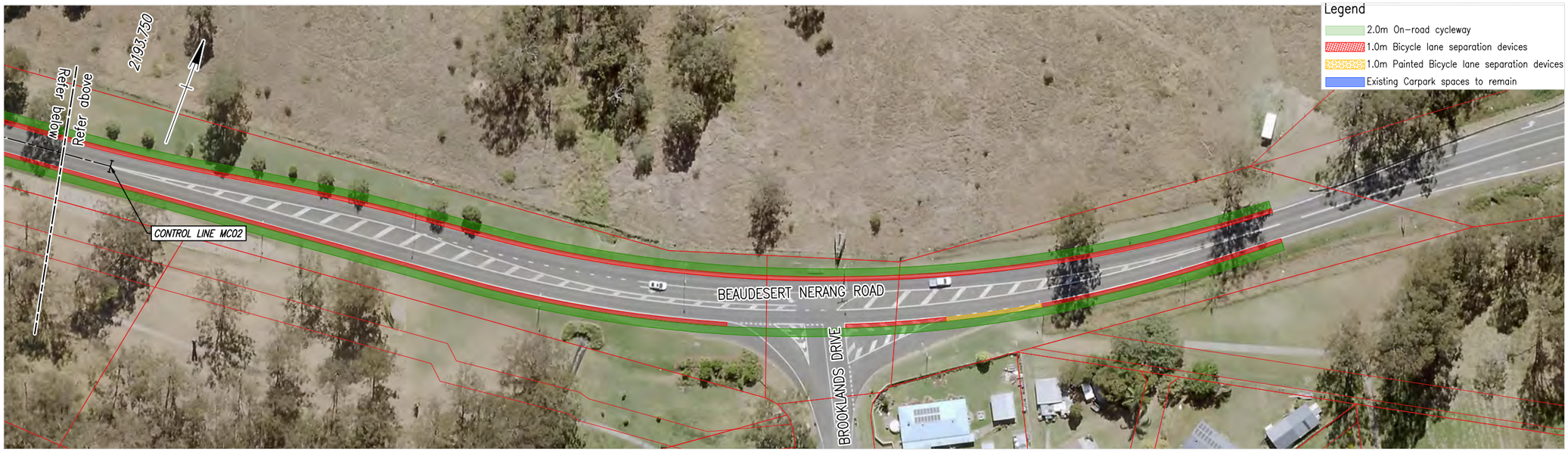

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Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
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Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD - MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 - GENERAL ARRANGEMENT SHEET 7

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	416 of 10

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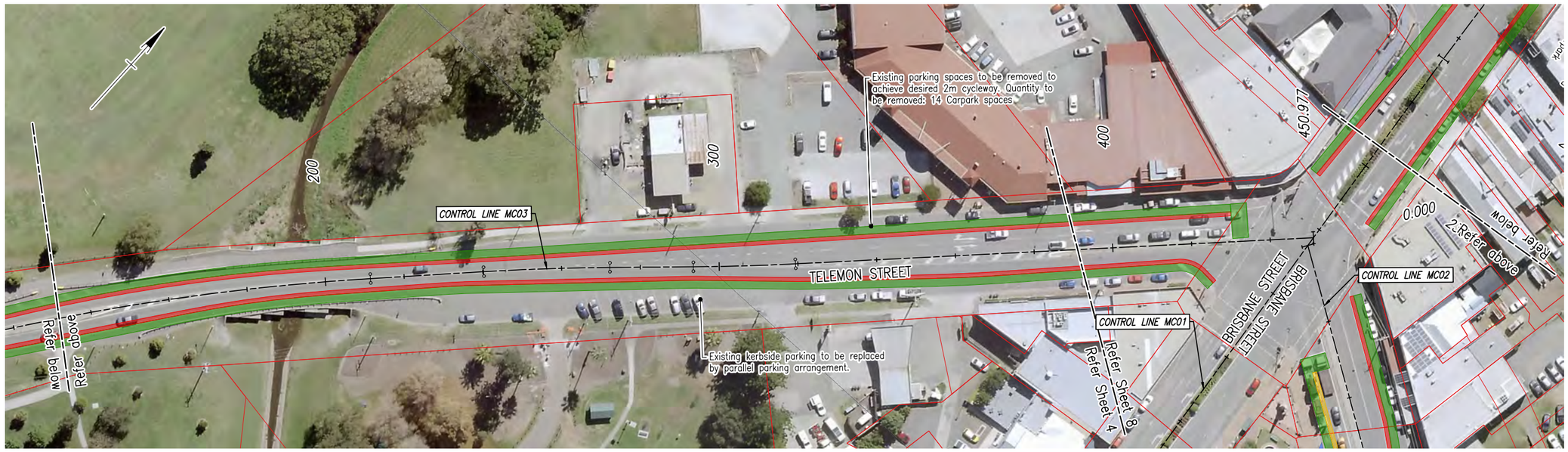

Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
1A For information only		2.12.22

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Associated Job Nos	
Auxiliary Drg Nos	

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
OPTION 3 – GENERAL ARRANGEMENT SHEET 8

ENGINEERING CERTIFICATION (RPEQ)

PRELIMINARY
05 Dec 2022

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	417 of 10

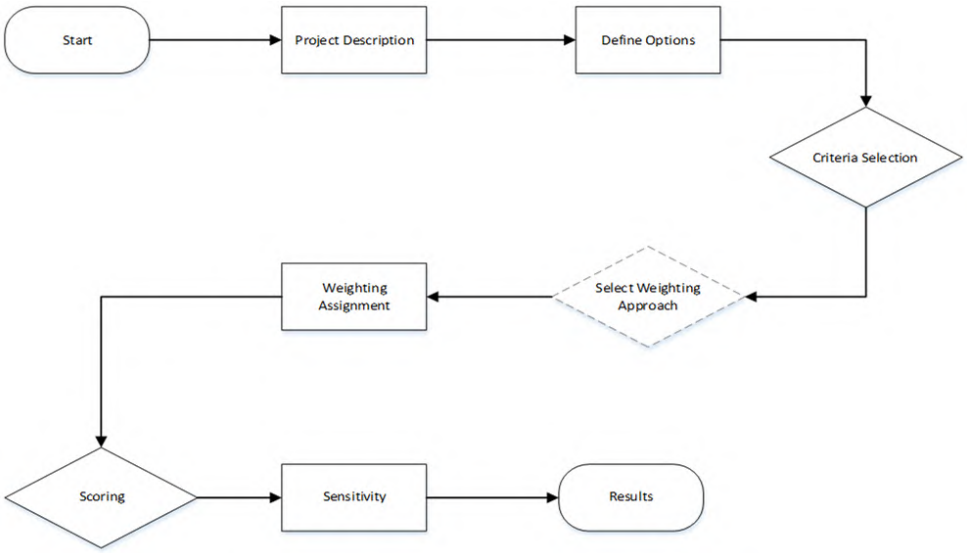
Appendix D – Smarter Solutions MCA

Department of Transport and Main Roads

Smarter Solutions - Multi-Criteria Assessment Tool

This Smarter Solutions Multi-Criteria Assessment (MCA) Tool provides a clear line-of-sight across the Department of Transport and Main Roads' (TMR) infrastructure planning and investment process, providing assurance that the Network Optimisation Framework is embedded in our decision-making.

The MCA Tool has been designed for use in selecting a preferred option, or ranking alternate options, where network optimisation solutions (NOS) are included within assessment processes. The MCA Tool applies a standardised consideration of NOS relative to large capital infrastructure, ensuring TMR is delivering the right infrastructure at the right time and aligning with government policy direction for investment as outlined in the Queensland Government's State Infrastructure Plan.



Queensland Government

Project Description

The project must be clearly defined within the MCA to ensure that appropriate options are short-listed for evaluation and that the criteria selected for assessment reflect the nature of the service requirement or opportunity. Accordingly, the project should be defined in terms of:

Decision Context: What is the overarching service need or opportunity that this project response is sought to address?
What is the timeframe for required impacts?

Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.
Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.

Network Context: What is the current transport infrastructure environment?
Is there any complimentary infrastructure investment occuring within close proximity?

Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network Plan – SEQ.
Existing PCN cycling routes are not continuous, lack signage and sections have no facilities.
Traffic surveys indicate a low cyclist count.
There are high percentages of heavy vehicles.

Key Objectives: What is the key objective the Project is being implemented to achieve?

Capacity	☐
Performance	☐
Behaviour Change	☐
Safety	☑
Other	☑

What are the segmented objectives - ultimate, intermediate and immediate?
What are the corresponding timeframes for these objectives?

Connectivity
Direct
Coherent / Legible
Safe
Accessible
Economical
Stageability
Public Reception

Define Options

Clearly define the short-listed options identified to achieve the outcomes sought.

Ref	Option	Description
Opt 1	A	**Complete onroad**
Opt 2	B	
Opt 3	C	
Opt 4	D	
Opt 5		
Opt 6		
Opt 7		
Opt 8		
Opt 20		

☐ Has a NOS Option been selected?

Criteria

As per the Smarter solutions - Multi-Criteria Assessment Technical Note, various criteria are mandatory when considering an NOS in the evaluation process. Additional criteria relating to intersection delay, public transport patronage and freight should be selected where appropriate.
* Where an NOS option has not been short-listed for assessment, please refine these criteria to reflect the options identified and the key project objectives.
A maximum of 20 criteria can be selected.

Category	Criterion	Use Criteria?	Indicator	Measure	Scoring Range 1	2	3	4	5
					Economic Data				
Economic Data	Implementation and Construction Costs*	Yes	Estimated cost of construction and procurement (outturn estimate)	Descriptive	Estimated cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
Economic Data	Whole-of-life Operation and Maintenance Costs*	No	Estimated cost of whole-of-life asset operation and maintenance	Descriptive	Estimated cost is significantly higher than Base Case option	Estimated cost is moderately higher than Base Case option	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option	Estimated cost is significantly less than Base Case option
Economic Data	End-to-end cost	No	Impact on direct end-to-end cost or price of travel (incl. amenity)	Descriptive	Significant negative impact on the direct end-to-end cost / price of travel (50% - 100% increase on Base Case)	Moderate negative impact on the direct end-to-end cost / price of travel (0% - 50% increase on Base Case)	No impact on the direct end-to-end cost / price of travel relative to Base Case	Moderate positive impact on the direct end-to-end cost / price of travel (0% - 50% reduction on Base Case)	Significant positive impact on the direct end-to-end cost / price of travel (50% - 100% reduction on Base Case)
Economic Data	Road User Vehicle Operating Costs	No	Estimated change in vehicle operating costs (Vehicle/Bus operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$/pkt	Significant increase in vehicle operating costs (50% - 100% increase on Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase on Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction on Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction on Base Case)
Economic Data	Rapid BCR	No	Rapid Benefit Cost Ratio	Ratio	0 to 0.5	0.5 to 1	N/A	1 to 1.5	> 1.5
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	Yes	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relativeto Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
Traffic Performance and Integration	Operating Conditions	No	Change in the efficiency of operating conditions	Descriptive	Significant negative impact on operating conditions relative to Base Case	Moderate negative impact on operating conditions relative to Base Case	No impact on operating conditions relative to Base Case	Moderate positive impact on operating conditions relative to Base Case	Significant positive impact on operating conditions relative to Base Case
Traffic Performance and Integration	Travel Time Reliability	No	Impact on time travel reliability, measured by the percent variation in travel time	% Variation	Travel delay equal to above 45% of average travel time	Travel delay equal to between 35% and 45% of average travel time	Travel delay equal to 35% of average travel time	Travel delay equal to between 25% to 35% of average travel time	Travel delay equal to less that 25% of average travel time
Traffic Performance and Integration	LOS	No	Impact on transport network performance as captured by the level of service rating	A-F LOS Scale	Significant negative impact on level of service relative to Base Case (-2 ratings)	Moderate negative impact on level of service relative to Base Case (-1 rating)	No change in level of service relative to Base Case	Moderate positive impact on level of service relative to Base Case (+1 rating)	Significant positive impact on level of service relative to Base Case (+2 ratings)
Traffic Performance and Integration	Intersection Delay	No	Change in intersection delay	min	Significant negative impact on intersection delay	Moderate negative impact on intersection delay	No impact on intersection delay	Moderate positive impact on intersection delay	Significant positive impact on intersection delay
Traffic Performance and Integration	Public Transport Patronage	No	Change in user behaviour to increase public transport patronage	# / week	Significant negative impact on public transport patronage	Moderate negative impact on public transport patronage	No impact on public transport patronage	Moderate positive impact on public transport patronage	Significant positive impact on public transport patronage
Traffic Performance and Integration	Active transport – Cyclists/Pedestrians	No	Impact on active transport users	Descriptive	Significant negative impact on active transport	Moderate negative impact on active transport	No impact on active transport	Moderate positive impact active transport	Significant positive impact on active transport
Traffic Performance and Integration	Performance Horizon	No	Performance of the option over time, as measured by the duration of benefits	Years	N/A	N/A	Duration of benefits <5 years	Duration of benefits between 5 – 10 years	Duration of benefits > 10 years
Traffic Performance and Integration	Amenity of travel	No	Change in the perceived quality or amenity of travel	Descriptive	Significant negative impact on the perceived quality and amenity of transport network relative to Base Case	Moderate negative impact on the perceived quality and amenity of transport network relative to Base Case	No impact on the perceived quality and amenity of transport network relative to Base Case	Moderate positive impact on the perceived quality and amenity of transport network relative to Base Case	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Traffic and Safety	Safety	Yes	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
Traffic Performance and Integration	Freight Volume	No	Impact on freight volume	m^3 / pkt	Significant reduction in freight volume relative to Base Case	Moderate reduction in freight volume relative to Base Case	No change in freight volume relative to Base Case	Moderate increase in freight volume relative to Base Case	Significant increase in freight volume relative to Base Case

Traffic Performance and Integration	**Freight Vehicle Operating Costs**	No	Estimated change in freight vehicle operating costs (Vehicle operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$	Significant increase in vehicle operating costs (50% - 100% increase relative to Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase relative to Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction relative to Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction relative to Base Case)
Traffic Performance and Integration	**Frequency of Service**	No	Impact on the frequency of freight services	#	Significant reduction in freight frequency relative to Base Case	Moderate reduction in freight frequency relative to Base Case	No change in freight frequency relative to Base Case	Moderate increase in freight frequency relative to Base Case	Significant increase in freight frequency relative to Base Case
Construction and Constructability	**Constructability / Impacts of construction / TTM**	Yes	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
Construction and Constructability	**Stageability**	No	Ability for the option to be implemented in discrete stages over time	Binary	N/A	No ability for the option to be implemented in stages	N/A	Ability for the option to be implemented in stages	N/A
Environmental Impact	**Noise and Air Quality**	No	Impact on noise and air quality		Significant reduction in noise and air quality relative to Base Case	Moderate reduction in noise and air quality relative to Base Case	No change in noise and air quality relative to Base Case	Moderate increase in noise and air quality relative to Base Case	Significant increase in noise and air quality relative to Base Case
Environmental Impact	**Vehicle Emissions**	No	Impact on vehicle emissions		Significant increase in fuel emissions relative to Base Case	Moderate increase in fuel emissions relative to Base Case	No change in fuel emissions relative to Base Case	Moderate reduction in fuel emissions relative to Base Case	Significant reduction in fuel emissions relative to Base Case
Environmental Impact	**Flora/ Fauna / Cultural Heritage**	Yes	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
Social Factors	**Barriers to development**	No	Are there any significant barriers to development? E.g. existing land use or cultural significance	Descriptive	Significant barriers to implementation arising from existing land use relative to Base Case	Moderate barriers to implementation arising from existing land us relative to Base Case	No barriers to implementation arising from existing land use relative to Base Case	N/A	N/A
Future Planning	**Compatibility with future land uses**	Yes	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
Social Factors	**Mode Shift**	No	Impact on user behaviour and influence on mode shift	Descriptive	Significant negative impact on user behaviour and mode shift and mode shift relative to Base Case	Moderate negative impact on user behaviour and mode shift relative to Base Case	No impact on user behaviour and mode shift relative to Base Case	Moderate positive impact on user behaviour and mode shift relative to Base Case	Significant positive impact on user behaviour and mode shift relative to Base Case
Social Factors	**Long-term impact on residents and businesses**	Yes	Long-term impact to local land, property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
Social Factors	**Attractability & Visual Amenity**	No	Ability to attract new users as a result of changes in bikeways, walking paths, noise during construction and design/aesthetic	Descriptive	Significant reduction in visual amenity and ability to attract new users	Moderate reduction in visual amenity and ability to attract new users	No impact on visual amenity and ability to attract new users relative to Base Case	Moderate increase in visual amenity and ability to attract new users	Significant increase in visual amenity and ability to attract new users
Social Factors	**Severance**	No	Impact on community severance	Descriptive	Significant increase in community severance	Moderate increase in community severance	No impact on community severance relative to Base Case	Moderate reduction in community severance	Significant reduction in community severance
Social Factors	**Regional development**	No	Change in the economic and social impact of the transport system on regiona development	Descriptive	Significant negative impact on future regional development	Moderate negative impact on future regional development	No impact on future regiona development relative to Base Case	Moderate positive impact on future regional development	Significant positive impact on future regional development
Add Lines here...									
Cycling Policies and Technical requirements	**Accessibility - Shared Users and DDA compliance / opportunity**	Yes	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
Traffic Performance and Integration	**User Type**	No	Appeals to more varieties of user types	Cross section					
Cycling Policies and Technical requirements	**Rideability - Grades**	Yes	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
Cycling Policies and Technical requirements	**Comfort - Stress Level**	Yes	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
Future Planning	**Strategic fit to planned infrastructure**	Yes	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
Traffic Performance and Integration	**Local Cycle Network**	No	Direct connection to local facilities				Does not preclude connection to future local cycle path		
Construction and Constructability	**PUP Risk**	No	Risk of Unknown PUP impacts	Descriptive	Significant PUP risk	Moderate PUP risk	No PUP risk	N/A	N/A

Social Factors	**CPTED**	No	Ability of path for inclusion of Safe CPTED Outcomes	Descriptive	Significant negative impact on the ability to incorporate CPTED Principals	Moderate negative impact on the ability to incorporate CPTED Principals	No impact on the ability to incorporate CPTED Principals from Base Case	Moderate positive impact on the ability to incorporate CPTED Principals	Significant positive impact on the ability to incorporate CPTED Principals
Social Factors	**Coherence / Legibility /Wayfinding**	No	Ability of path to communicate route choices to user	Descriptive	Significant negative impact on the route identification and legibility / Wayfinding	Moderate negative impact on the route identification and legibility Wayfinding	No impact on the route identification and legibility / Wayfinding from Base Case	Moderate positive impact on the route identification and legibility / Wayfinding	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Social Factors	**Project Attractability**	No	Ability of path to attract new users not in catchment	Descriptive	Significant negative impact on the route attractiveness (limited to commuters)	Moderate negative impact on the on the route attractiveness (limited to commuters and local access [school kids])	No impact on the route identification and legibility / Wayfinding	Moderate positive impact on the route attractiveness (commuters, local access [school kids] and new users)	Significant positive impact on the route attractiveness (tourism / significant destination)
Traffic Performance and Integration	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Yes	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case
Social Factors	**Public Reception**	No	Measure of likely public reception to project	Descriptive	Public highly likely to perceive facility does not meet expectations	Public likely to perceives facility does not meet expectations	No Change from Base Case	Public likely to perceives facility does meet expectations	Public highly favourable of project
Traffic Performance and Integration	**Land Tenure and Asset Ownership**	No	Current ownership of land along route Ultimate owner of asset along route	Descriptive	TMR have highly decreased sections of legal ability to develop route Council ultimate owner of sections of asset	TMR have decreased sections of legal ability to develop route Council ultimate owner of sections of asset	No Change from Base Case	TMR have increased sections of legal ability to develop route	TMR have full legal ability develop route

Preview of Selected Criterion

						Scoring Range				
12		Category	Criterion	Indicator	Measure	1	2	3	4	5
1	9	Economic Data	Implementation and Construction Costs*	Estimated cost of construction and procurement (outturn estimate)	Descriptive	Estimated cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Estimated cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
2	14	Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relative to Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
3	23	Traffic and Safety	Safety	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
4	27	Construction and Constructability	Constructability / Impacts of construction / TTM	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
5	34	Environmental Impact	Flora/ Fauna / Cultural Heritage	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
6	36	Future Planning	Compatibility with future land uses	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
7	38	Social Factors	Long-term impact on residents and businesses	Long-term impact to local land, property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
8	43	Cycling Policies and Technical requirements	Accessibility - Shared Users and DDA compliance / opportunity	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
9	45	Cycling Policies and Technical requirements	Rideability - Grades	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
10	46	Cycling Policies and Technical requirements	Comfort - Stress Level	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
11	47	Future Planning	Strategic fit to planned infrastructure	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
12	53	Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case

Weighting - Rank Methods

Category	Criterion	Criteria Ranking	Ranks to be assigned
Economic Data	Implementation and Construction Costs*	7	
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	2	
Traffic and Safety	Safety	1	
Construction and Constructability	Constructability / Impacts of construction / TTM	10	
Environmental Impact	Flora/ Fauna / Cultural Heritage	11	
Future Planning	Compatibility with future land uses	9	
Social Factors	Long-term impact on residents and businesses	6	
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opportunity	8	
	Rideability - Grades	3	
	Comfort - Stress Level	4	
Future Planning	Strategic fit to planned infrastructure	12	
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	5	

Weighting - Pairwise Comparison

		Implementation and Construction Costs* A	Network Connectivity (to existing catchments, attractors B	Safety C	Constructability / Impacts of construction / TTM D	Flora/ Fauna / Cultural Heritage E	Compatibility with future land uses F	Long-term impact on residents and businesses G	Accessibility - Shared Users and DDA compliance / H	Rideability - Grades I	Comfort - Stress Level J	Strategic fit to planned infrastructure K	Directness/ convenience/ travel time disruptions - L								WEIGHTING
Implementation and Construction Costs*	A		B	C	A	A	F	G	A	I	J	A	L								6%
Network Connectivity (to existing catchments,	B			C	B	B	B	B	B	B	B	B	B								15%
Safety	C				C	C	C	C	C	C	C	C	C								17%
Constructability / Impacts of construction / TTM	D					E	D	G	H	I	J	D	L								3%
Flora/ Fauna / Cultural Heritage	E						F	E	H	I	J	K	L								3%
Compatibility with future land uses	F							G	H	I	J	F	L								5%
Long-term impact on residents and businesses	G								G	I	J	G	L								8%
Accessibility - Shared Users and DDA compliance /	H									I	J	H	L								6%
Rideability - Grades	I										I	I	I								14%
Comfort - Stress Level	J											J	J								12%
Strategic fit to planned infrastructure	K												L								2%
Directness/ convenience/ travel time disruptions -	L																				11%

Option Scoring

Category	Criteria	Select	Pairwise Comparison	Base Case	A	B	C	Comments
Economic Data	Implementation and Construction Costs		6%	3				Refer to cost table.
Traffic Performance and Integration	Network Connectivity (to existing catchmen		15%	3				
Traffic and Safety	Safety		17%	3				
Construction and Constructability	Constructability / Impacts of construction / T		3%	3				
Environmental Impact	Flora/ Fauna / Cultural Heritage		3%	3				
Future Planning	Compatibility with future land use		5%	3				
Social Factors	Long-term impact on residents and busines		8%	3				
Cycling Policies and Technical requ	Accessibility - Shared Users and DDA com		6%	3				
	Rideability - Grades		14%	3				
	Comfort - Stress Level		12%	3				
Future Planning	Strategic fit to planned infrastructun		2%	3				
Traffic Performance and Integration	Directness/ convenience/ travel time disrup		11%					

Sensitivity Analysis

Best Option	Base Case

Category	Criteria	Proportional Change in Criteria Weighting			
		-50%	-25%	25%	50%
Economic Data	Implementation and Construction Costs*	Base Case	Base Case	Base Case	Base Case
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors	Base Case	Base Case	Base Case	Base Case
Traffic and Safety	Safety	Base Case	Base Case	Base Case	Base Case
Construction and Constructability	Constructability / Impacts of construction / TTM	Base Case	Base Case	Base Case	Base Case
Environmental Impact	Flora/ Fauna / Cultural Heritage	Base Case	Base Case	Base Case	Base Case
Future Planning	Compatibility with future land uses	Base Case	Base Case	Base Case	Base Case
Social Factors	Long-term impact on residents and businesses	Base Case	Base Case	Base Case	Base Case
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opp	Base Case	Base Case	Base Case	Base Case
	Rideability - Grades	Base Case	Base Case	Base Case	Base Case
	Comfort - Stress Level	Base Case	Base Case	Base Case	Base Case
Future Planning	Strategic fit to planned infrastructure	Base Case	Base Case	Base Case	Base Case
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Numt	Base Case	Base Case	Base Case	Base Case

Analysis

Print

Project Decription	
Decision Context:	Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.Provide fit
Network Context:	Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for deliv
Key Objectives:	**Safety** **Other**
	ConnectivityDirectCoherent / LegibleSafeAccessibleEconomicalStageabilityPublic Reception

Best Option		
Overall	**Base Case**	#N/A
Economic Data	Base Case	
Traffic Performance and Integrat	Base Case	
Traffic and Safety	Base Case	
Construction and Constructability	Base Case	
Environmental Impact	Base Case	

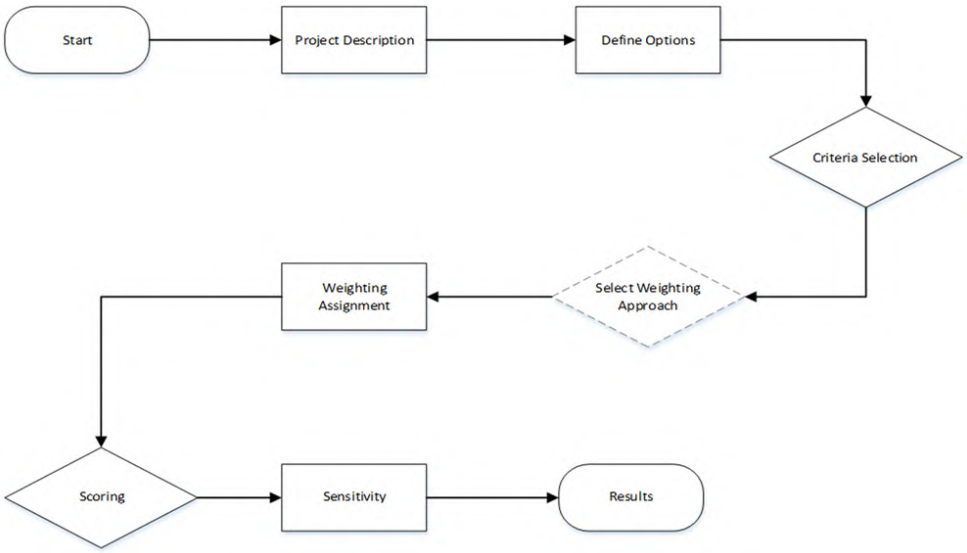
Summary of Option Scoring	Base Case	A	B	C	Comments
Score	2.68				
Rank	1				

Department of Transport and Main Roads

Smarter Solutions - Multi-Criteria Assessment Tool

This Smarter Solutions Multi-Criteria Assessment (MCA) Tool provides a clear line-of-sight across the Department of Transport and Main Roads' (TMR) infrastructure planning and investment process, providing assurance that the Network Optimisation Framework is embedded in our decision-making.

The MCA Tool has been designed for use in selecting a preferred option, or ranking alternate options, where network optimisation solutions (NOS) are included within assessment processes. The MCA Tool applies a standardised consideration of NOS relative to large capital infrastructure, ensuring TMR is delivering the right infrastructure at the right time and aligning with government policy direction for investment as outlined in the Queensland Government's State Infrastructure Plan.



Queensland Government

Project Description

The project must be clearly defined within the MCA to ensure that appropriate options are short-listed for evaluation and that the criteria selected for assessment reflect the nature of the service requirement or opportunity. Accordingly, the project should be defined in terms of:

Decision Context: What is the overarching service need or opportunity that this project response is sought to address?
What is the timeframe for required impacts?

Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.
Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.

Network Context: What is the current transport infrastructure environment?
Is there any complimentary infrastructure investment occuring within close proximity?

Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network Plan – SEQ.
Existing PCN cycling routes are not continuous, lack signage and sections have no facilities.
Traffic surveys indicate a low cyclist count.
There are high percentages of heavy vehicles.

Key Objectives: What is the key objective the Project is being implemented to achieve?

Capacity	☐
Performance	☐
Behaviour Change	☐
Safety	☑
Other	☑

What are the segmented objectives - ultimate, intermediate and immediate?
What are the corresponding timeframes for these objectives?

Connectivity
Direct
Coherent / Legible
Safe
Accessible
Economical
Stageability
Public Reception

Define Options

Clearly define the short-listed options identified to achieve the outcomes sought.

Ref	Option	Description	Has a NOS Option been selected?
Opt 1	BASE CASE	On Road Painted Cycle Way	
Opt 2	N1 On Road Cycle lane with separation device	On Road Cycle lane with separation device (Both Sides)	
Opt 3	N2 On Road Bi-directional Cycle lane with	On Road Bi-directional Cycle lane with separation device (Northbound)	
Opt 4	N3 On Road Bi-directional Cycle lane with	On Road Bi-directional Cycle lane with separation device (Southbound)	
Opt 5	N4 Off Road Shared used path within the western	Off Road Shared used path within the western verge	
Opt 6	N5 Off Road Shared used path within the eastern	Off Road Shared used path within the eastern verge	
Opt 7	N6 Off Road Shared used path using rail track	Off Road Shared used path using rail track	
Opt 8			
Opt 20			

Criteria

As per the Smarter solutions - Multi-Criteria Assessment Technical Note, various criteria are mandatory when considering an NOS in the evaluation process. Additional criteria relating to intersection delay, public transport patronage and freight should be selected where appropriate.
* Where an NOS option has not been short-listed for assessment, please refine these criteria to reflect the options identified and the key project objectives.
A maximum of 20 criteria can be selected.

Category	Criterion	Use Criteria?	Indicator	Measure	Scoring Range 1	2	3	4	5
					Economic Data				
Economic Data	**Implementation and Construction Costs***	Yes	Magnitude of cost of construction and procurement (outturn estimate)	Descriptive	Magnitude of cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is equivalent to the cost of the identified Base Case option	Magnitude of cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
Economic Data	**Whole-of-life Operation and Maintenance Costs***	No	Estimated cost of whole-of-life asset operation and maintenance	Descriptive	Estimated cost is significantly higher than Base Case option	Estimated cost is moderately higher than Base Case option	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option	Estimated cost is significantly less than Base Case option
Economic Data	**End-to-end cost**	No	Impact on direct end-to-end cost or price of travel (incl. amenity)	Descriptive	Significant negative impact on the direct end-to-end cost / price of travel (50% - 100% increase on Base Case)	Moderate negative impact on the direct end-to-end cost / price of travel (0% - 50% increase on Base Case)	No impact on the direct end-to-end cost / price of travel relative to Base Case	Moderate positive impact on the direct end-to-end cost / price of travel (0% - 50% reduction on Base Case)	Significant positive impact on the direct end-to-end cost / price of travel (50% - 100% reduction on Base Case)
Economic Data	**Road User Vehicle Operating Costs**	No	Estimated change in vehicle operating costs (Vehicle/Bus operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$/pkt	Significant increase in vehicle operating costs (50% - 100% increase on Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase on Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction on Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction on Base Case)
Economic Data	**Rapid BCR**	No	Rapid Benefit Cost Ratio	Ratio	0 to 0.5	0.5 to 1	N/A	1 to 1.5	> 1.5
Traffic Performance and Integration	**Network Connectivity (to existing catchments, attractors & generators)**	Yes	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relative to Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case

Traffic Performance and Integration	**Operating Conditions**	No	Change in the efficiency of operating conditions	Descriptive	Significant negative impact on operating conditions relative to Base Case	Moderate negative impact on operating conditions relative to Base Case	No impact on operating conditions relative to Base Case	Moderate positive impact on operating conditions relative to Base Case	Significant positive impact on operating conditions relative to Base Case
Traffic Performance and Integration	**Travel Time Reliability**	No	Impact on time travel reliability, measured by the percent variation in travel time	% Variation	Travel delay equal to above 45% of average travel time	Travel delay equal to between 35% and 45% of average travel time	Travel delay equal to 35% of average travel time	Travel delay equal to between 25% to 35% of average travel time	Travel delay equal to less that 25% of average travel time
Traffic Performance and Integration	**LOS**	No	Impact on transport network performance as captured by the level of service rating	A-F LOS Scale	Significant negative impact on level of service relative to Base Case (-2 ratings)	Moderate negative impact on level of service relative to Base Case (-1 rating)	No change in level of service relative to Base Case	Moderate positive impact on level of service relative to Base Case (+1 rating)	Significant positive impact on level of service relative to Base Case (+2 ratings)
Traffic Performance and Integration	**Intersection Delay**	No	Change in intersection delay	min	Significant negative impact on intersection delay	Moderate negative impact on intersection delay	No impact on intersection delay	Moderate positive impact on intersection delay	Significant positive impact on intersection delay
Traffic Performance and Integration	**Public Transport Patronage**	No	Change in user behaviour to increase public transport patronage	# / week	Significant negative impact on public transport patronage	Moderate negative impact on public transport patronage	No impact on public transport patronage	Moderate positive impact on public transport patronage	Significant positive impact on public transport patronage
Traffic Performance and Integration	**Active transport – Cyclists/Pedestrians**	No	Impact on active transport users	Descriptive	Significant negative impact on active transport	Moderate negative impact on active transport	No impact on active transport	Moderate positive impact active transport	Significant positive impact on active transport
Traffic Performance and Integration	**Performance Horizon**	No	Performance of the option over time, as measured by the duration of benefits	Years	N/A	N/A	Duration of benefits <5 years	Duration of benefits between 5 – 10 years	Duration of benefits > 10 years

Traffic Performance and Integration	**Amenity of travel**	No	Change in the perceived quality or amenity of travel	Descriptive	Significant negative impact on the perceived quality and amenity of transport network relative to Base Case	Moderate negative impact on the perceived quality and amenity of transport network relative to Base Case	No impact on the perceived quality and amenity of transport network relative to Base Case	Moderate positive impact on the perceived quality and amenity of transport network relative to Base Case	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Traffic and Safety	**Safety**	Yes	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
Traffic Performance and Integration	**Freight Volume**	No	Impact on freight volume	m^3 / pkt	Significant reduction in freight volume relative to Base Case	Moderate reduction in freight volume relative to Base Case	No change in freight volume relative to Base Case	Moderate increase in freight volume relative to Base Case	Significant increase in freight volume relative to Base Case
Traffic Performance and Integration	**Freight Vehicle Operating Costs**	No	Estimated change in freight vehicle operating costs (Vehicle operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$	Significant increase in vehicle operating costs (50% - 100% increase relative to Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase relative to Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction relative to Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction relative to Base Case)
Traffic Performance and Integration	**Frequency of Service**	No	Impact on the frequency of freight services	#	Significant reduction in freight frequency relative to Base Case	Moderate reduction in freight frequency relative to Base Case	No change in freight frequency relative to Base Case	Moderate increase in freight frequency relative to Base Case	Significant increase in freight frequency relative to Base Case
Construction and Constructability	**Constructability / Impacts of construction / TTM**	Yes	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
Construction and Constructability	**Stageability**	No	Ability for the option to be implemented in discrete stages over time	Binary	N/A	No ability for the option to be implemented in stages	N/A	Ability for the option to be implemented in stages	N/A

Environmental Impact	**Noise and Air Quality**	No	Impact on noise and air quality		Significant reduction in noise and air quality relative to Base Case	Moderate reduction in noise and air quality relative to Base Case	No change in noise and air quality relative to Base Case	Moderate increase in noise and air quality relative to Base Case	Significant increase in noise and air quality relative to Base Case
Environmental Impact	**Vehicle Emissions**	No	Impact on vehicle emissions		Significant increase in fuel emissions relative to Base Case	Moderate increase in fuel emissions relative to Base Case	No change in fuel emissions relative to Base Case	Moderate reduction in fuel emissions relative to Base Case	Significant reduction in fuel emissions relative to Base Case
Environmental Impact	**Flora/ Fauna / Cultural Heritage**	Yes	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
Social Factors	**Barriers to development**	No	Are there any significant barriers to development? E.g. existing land use or cultural significance	Descriptive	Significant barriers to implementation arising from existing land use relative to Base Case	Moderate barriers to implementation arising from existing land us relative to Base Case	No barriers to implementation arising from existing land use relative to Base Case	N/A	N/A
Future Planning	**Compatibility with future land uses**	Yes	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
Social Factors	**Mode Shift**	No	Impact on user behaviour and influence on mode shift	Descriptive	Significant negative impact on user behaviour and mode shift and mode shift relative to Base Case	Moderate negative impact on user behaviour and mode shift relative to Base Case	No impact on user behaviour and mode shift relative to Base Case	Moderate positive impact on user behaviour and mode shift relative to Base Case	Significant positive impact on user behaviour and mode shift relative to Base Case
Social Factors	**Long-term impact on residents and businesses**	Yes	Long-term impact to local land, property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case

Social Factors	**Attractability & Visual Amenity**	No	Ability to attract new users as a result of changes in bikeways, walking paths, noise during construction and design/aesthetic	Descriptive	Significant reduction in visual amenity and ability to attract new users	Moderate reduction in visual amenity and ability to attract new users	No impact on visual amenity and ability to attract new users relative to Base Case	Moderate increase in visual amenity and ability to attract new users	Significant increase in visual amenity and ability to attract new users
Social Factors	**Severance**	No	Impact on community severance	Descriptive	Significant increase in community severance	Moderate increase in community severance	No impact on community severance relative to Base Case	Moderate reduction in community severance	Significant reduction in community severance
Social Factors	**Regional development**	No	Change in the economic and social impact of the transport system on regional development	Descriptive	Significant negative impact on future regional development	Moderate negative impact on future regional development	No impact on future regional development relative to Base Case	Moderate positive impact on future regional development	Significant positive impact on future regional development
Add Lines here…									
Cycling Policies and Technical requirements	**Accessibility - Shared Users and DDA compliance / opportunity**	Yes	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
Traffic Performance and Integration	**User Type**	No	Appeals to more varieties of user types	Cross section					
Cycling Policies and Technical requirements	**Rideability - Grades**	Yes	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
Cycling Policies and Technical requirements	**Comfort - Stress Level**	Yes	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
Future Planning	**Strategic fit to planned infrastructure**	Yes	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
Traffic Performance and Integration	**Local Cycle Network**	No	Direct connection to local facilities				Does not preclude connection to future local cycle path		
Construction and Constructability	**PUP Risk**	No	Risk of Unknown PUP impacts	Descriptive	Significant PUP risk	Moderate PUP risk	No PUP risk	N/A	N/A
Social Factors	**CPTED**	No	Ability of path for inclusion of Safe CPTED Outcomes	Descriptive	Significant negative impact on the ability to incorporate CPTED Principals	Moderate negative impact on the ability to incorporate CPTED Principals	No impact on the ability to incorporate CPTED Principals from Base Case	Moderate positive impact on the ability to incorporate CPTED Principals	Significant positive impact on the ability to incorporate CPTED Principals
Social Factors	**Coherence / Legibility /Wayfinding**	No	Ability of path to communicate route choices to user	Descriptive	Significant negative impact on the route identification and legibility / Wayfinding	Moderate negative impact on the route identification and legibility / Wayfinding	No impact on the route identification and legibility / Wayfinding from Base Case	Moderate positive impact on the route identification and legibility / Wayfinding	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case

Social Factors	**Project Attractability**	No	Ability of path to attract new users not in catchment	Descriptive	Significant negative impact on the route attractiveness (limited to commuters)	Moderate negative impact on the on the route attractiveness (limited to commuters and local access [school kids])	No impact on the route identification and legibility / Wayfinding	Moderate positive impact on the route attractiveness (commuters, local access [school kids] and new users)	Significant positive impact on the route attractiveness (tourism / significant destination)
Traffic Performance and Integration	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Yes	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case
Social Factors	**Public Reception**	No	Measure of likely public reception to project	Descriptive	Public highly likely to perceive facility does not meet expectations	Public likely to perceives facility does not meet expectations	No Change from Base Case	Public likely to perceives facility does meet expectations	Public highly favourable of project
Traffic Performance and Integration	**Land Tenure and Asset Ownership**	No	Current ownership of land along route Ultimate owner of asset along route	Descriptive	TMR have highly decreased sections of legal ability to develop route Council ultimate owner of sections of asset	TMR have decreased sections of legal ability to develop route Council ultimate owner of sections of asset	No Change from Base Case	TMR have increased sections of legal ability to develop route	TMR have full legal ability develop route

Preview of Selected Criterion

		Category	Criterion	Indicator	Measure	Scoring Range				
12						1	2	3	4	5
2	14	**Traffic Performance and Integration**	**Network Connectivity (to existing catchments, attractors & generators)**	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relative to Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
3	23	**Traffic and Safety**	**Safety**	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
4	27	**Construction and Constructability**	**Constructability / Impacts of construction / TTM**	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
5	34	**Environmental Impact**	**Flora/ Fauna / Cultural Heritage**	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
6	36	**Future Planning**	**Compatibility with future land uses**	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
7	38	**Social Factors**	**Long-term impact on residents and businesses**	Long-term impact to local land, property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
8	43	**Cycling Policies and Technical requirements**	**Accessibility - Shared Users and DDA compliance / opportunity**	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to wider cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
9	45	**Cycling Policies and Technical requirements**	**Rideability - Grades**	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
10	46	**Cycling Policies and Technical requirements**	**Comfort - Stress Level**	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
11	47	**Future Planning**	**Strategic fit to planned infrastructure**	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
12	53	**Traffic Performance and Integration**	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case

Weighting - Rank Methods

Category	Criterion	Criteria Ranking	Ranks to be assigned
Economic Data	Implementation and Construction Costs*	7	
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	2	
Traffic and Safety	Safety	1	
Construction and Constructability	Constructability / Impacts of construction / TTM	10	
Environmental Impact	Flora/ Fauna / Cultural Heritage	11	
Future Planning	Compatibility with future land uses	9	
Social Factors	Long-term impact on residents and businesses	6	
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opportunity	8	
	Rideability - Grades	3	
	Comfort - Stress Level	4	
Future Planning	Strategic fit to planned infrastructure	12	
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	5	

Weighting - Pairwise Comparison

	Implementation and Construction Costs* A	Network Connectivity (to existing catchments, attractors B	Safety C	Constructability / Impacts of construction / TTM D	Flora/ Fauna / Cultural Heritage E	Compatibility with future land uses F	Long-term impact on residents and businesses G	Accessibility - Shared Users and DDA compliance / H	Rideability - Grades I	Comfort - Stress Level J	Strategic fit to planned infrastructure K	Directness/ convenience/ travel time disruptions - L									WEIGHTING
Implementation and Construction Costs* A		B	C	A	A	F	G	A	I	J	A	L									6%
Network Connectivity (to existing catchments, B			C	B	B	B	B	B	B	B	B	B									15%
Safety C				C	C	C	C	C	C	C	C	C									17%
Constructability / Impacts of construction / TTM D					E	D	G	H	I	J	D	L									3%
Flora/ Fauna / Cultural Heritage E						F	E	H	I	J	K	L									3%
Compatibility with future land uses F							G	H	I	J	F	L									5%
Long-term impact on residents and businesses G								G	I	J	G	L									8%
Accessibility - Shared Users and DDA compliance / H									I	J	H	L									6%
Rideability - Grades I										I	I	I									14%
Comfort - Stress Level J											J	J									12%
Strategic fit to planned infrastructure K												L									2%
Directness/ convenience/ travel time disruptions - L																					11%

Option Scoring

Criteria	Select	Base Case	N1 On Road Cycle lane with separation device (Both Sides)	N2 On Road Bi-directional Cycle lane with separation device (Northbound)	N3 On Road Bi-directional Cycle lane with separation device (Southbound)	N4 Off Road Shared used path within the western verge	N5 Off Road Shared used path within the eastern verge	N6 Off Road Shared used path using rail track	Comments	
Network Connectivity (to existing cate		3	3	2	2	3	3	2	N2 and N3 are restructed by barrier reducing connectivity N6 is away from attractor/ generator	
Safety		3	4	4	4	5	4	4	N4 has less driveway conflicts N6 has potential CPTED issues but minimal conflicts and is away from HV	
Constructability / Impacts of construc		3	3	3	2	4	1	5	BC, N1 and N2 - not enough shoulder width, widening into verge required, power pole relocations (3), requires TTM during construction N3 - widening into verge required, power pole relocation (3), requires TTM during construction, interaction with school during construction N4 - can be constructed away from corridor, powerpole relocations required (5) N5 - remove and replace exosting footpoath, relocate (10) power poles, widen existing verge, build over existing water and Telstra assets, requires TTM during construction (relocation of pedestrians during construction) N6 - can be built off-line	
Flora/ Fauna / Cultural Heritage		3	3	3	3	3	3	3	No discernible environmental and CH mapped constraints	
Compatibility with future land uses		3	3	3	3	3	3	1	N6 falls within known area of development (land tenure issues and reliability of corridor)	
Long-term impact on residents and bu		3	3	4	4	4	4	5	Refer to comparison spreadsheet	
Accessibility - Shared Users and DDA		3	4	4	4	5	5	5	N4 - western verge provides accessible path for western side N5 - eastern verge provides accessible path for school and residents on eastern side N6 - has potential to be built as accesible being off-lir	*sensitivity
Rideability - Grades		3	3	3	3	3	3	2	N6 has gardes up to 4.5% for 150m	*sensitivity
Comfort - Stress Level		3	4	4	4	5	5	5	Refer to comparison spreadshee	
Strategic fit to planned infrastructure		3	3	3	3	3	3	3	N6 uses existing rail trail - quarrantines corridor for future transport us	
Directness/ convenience/ travel time		3	4	4	4	4	5	4	Refer to comparison spreadshee	

Sensitivity Analysis

Best Option	N4 Off Road Shared used path within the western verge

Category	Criteria	Proportional Change in Criteria Weighting			
		-50%	-25%	25%	50%
Economic Data	Implementation and Construction Costs*	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Traffic and Safety	Safety	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Construction and Constructability	Constructability / Impacts of construction / TTM	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Environmental Impact	Flora/ Fauna / Cultural Heritage	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Future Planning	Compatibility with future land uses	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Social Factors	Long-term impact on residents and businesses	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opp	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
	Rideability - Grades	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
	Comfort - Stress Level	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Future Planning	Strategic fit to planned infrastructure	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Numt	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared	N4 Off Road Shared used path within the western verge

Analysis

Print

Project Decription	
Decision Context:	Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.Provide fit
Network Context:	Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for deliv
Key Objectives:	**Safety** **Other**
	ConnectivityDirectCoherent / LegibleSafeAccessibleEconomicalStageabilityPublic Reception

Best Option		
Overall	**ed path with**	Off Road Shared used path within the western verge
Economic Data	Base Case	
Traffic Performance and Integrat	sed path with	
Traffic and Safety	sed path with	
Construction and Constructability	ed used path	
Environmental Impact	Base Case	

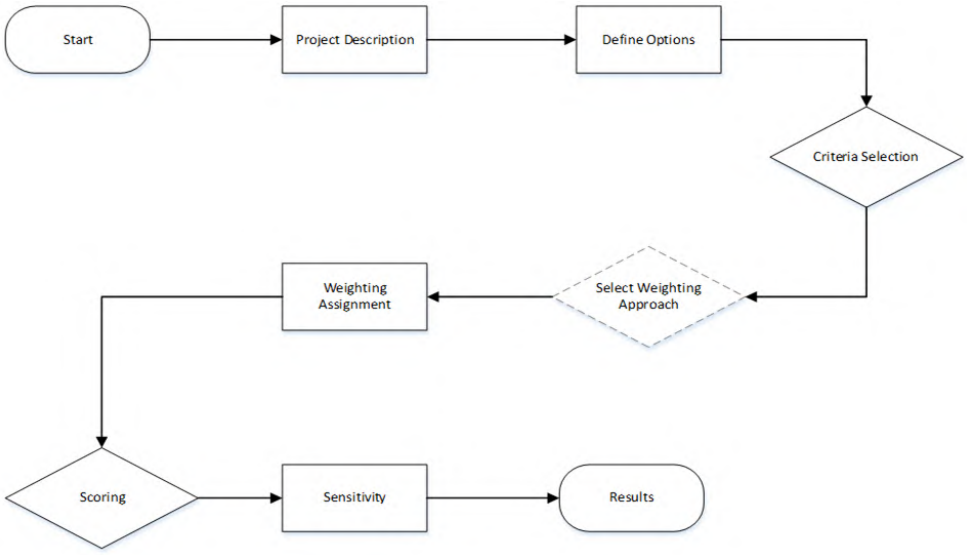
Summary of Option Scoring	Base Case	BASE CASE	N1 On Road	N2 On Road Bi-	N3 On Road Bi-	N4 Off	N5 Off	N6 Off	Comments	0
Score	3.00		3.33	3.32	3.29	3.85	3.64	3.41		
Rank	7		4	5	6	1	2	3		

Department of Transport and Main Roads

Smarter Solutions - Multi-Criteria Assessment Tool

This Smarter Solutions Multi-Criteria Assessment (MCA) Tool provides a clear line-of-sight across the Department of Transport and Main Roads' (TMR) infrastructure planning and investment process, providing assurance that the Network Optimisation Framework is embedded in our decision-making.

The MCA Tool has been designed for use in selecting a preferred option, or ranking alternate options, where network optimisation solutions (NOS) are included within assessment processes. The MCA Tool applies a standardised consideration of NOS relative to large capital infrastructure, ensuring TMR is delivering the right infrastructure at the right time and aligning with government policy direction for investment as outlined in the Queensland Government's State Infrastructure Plan.



Queensland Government

Project Description

The project must be clearly defined within the MCA to ensure that appropriate options are short-listed for evaluation and that the criteria selected for assessment reflect the nature of the service requirement or opportunity. Accordingly, the project should be defined in terms of:

Decision Context: What is the overarching service need or opportunity that this project response is sought to address?
What is the timeframe for required impacts?

Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.
Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.

Network Context: What is the current transport infrastructure environment?
Is there any complimentary infrastructure investment occuring within close proximity?

Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network Plan – SEQ.
Existing PCN cycling routes are not continuous, lack signage and sections have no facilities.
Traffic surveys indicate a low cyclist count.
There are high percentages of heavy vehicles.

Key Objectives: What is the key objective the Project is being implemented to achieve?

Capacity	☐
Performance	☐
Behaviour Change	☐
Safety	☑
Other	☑

What are the segmented objectives - ultimate, intermediate and immediate?
What are the corresponding timeframes for these objectives?

Connectivity
Direct
Coherent / Legible
Safe
Accessible
Economical
Stageability
Public Reception

Define Options

Clearly define the short-listed options identified to achieve the outcomes sought.

Ref	Option	Description
Opt 1	BASE CASE (on-road painted)	Complete on road (painted line marking)
Opt 2	C1 (on-road both sides with separators)	On Road Cycle lane with separation device (Both Sides)
Opt 3	C2 (on-road bi-directional northbound)	On Road Bi-directional Cycle lane with separation device (Northbound)
Opt 4	C3 (on-road bi-directional southbound)	On Road Bi-directional Cycle lane with separation device (Southbound)
Opt 5	C4 (off-road shared path Helen St/ on-road Albert	Shared used path using Helen Street and railway corridor (off-road) and Albert Street (on road) wtith separators
Opt 6	C5 (off road shared path Helen St/ railway	As per stage C4 with Off Road Albert Street (verge)
Opt 7		
Opt 8		
Opt 20		

Criteria

As per the Smarter solutions - Multi-Criteria Assessment Technical Note, various criteria are mandatory when considering an NOS in the evaluation process. Additional criteria relating to intersection delay, public transport patronage and freight should be selected where appropriate.
* Where an NOS option has not been short-listed for assessment, please refine these criteria to reflect the options identified and the key project objectives.
A maximum of 20 criteria can be selected.

Category	Criterion	Use Criteria?	Indicator	Measure	Scoring Range 1	2	3	4	5
Economic Data									
Economic Data	**Implementation and Construction Costs***	Yes	Magnitude of cost of construction and procurement (outturn estimate)	Descriptive	Magnitude of cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is equivalent to the cost of the identified Base Case option	Magnitude of cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
Economic Data	**Whole-of-life Operation and Maintenance Costs***	No	Estimated cost of whole-of-life asset operation and maintenance	Descriptive	Estimated cost is significantly higher than Base Case option	Estimated cost is moderately higher than Base Case option	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option	Estimated cost is significantly less than Base Case option
Economic Data	**End-to-end cost**	No	Impact on direct end-to-end cost or price of travel (incl. amenity)	Descriptive	Significant negative impact on the direct end-to-end cost / price of travel (50% - 100% increase on Base Case)	Moderate negative impact on the direct end-to-end cost / price of travel (0% - 50% increase on Base Case)	No impact on the direct end-to-end cost / price of travel relative to Base Case	Moderate positive impact on the direct end-to-end cost / price of travel (0% - 50% reduction on Base Case)	Significant positive impact on the direct end-to-end cost / price of travel (50% - 100% reduction on Base Case)
Economic Data	**Road User Vehicle Operating Costs**	No	Estimated change in vehicle operating costs (Vehicle/Bus operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$/pkt	Significant increase in vehicle operating costs (50% - 100% increase on Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase on Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction on Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction on Base Case)
Economic Data	**Rapid BCR**	No	Rapid Benefit Cost Ratio	Ratio	0 to 0.5	0.5 to 1	N/A	1 to 1.5	> 1.5
Traffic Performance and Integration	**Network Connectivity (to existing catchments, attractors & generators)**	Yes	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relativeto Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
Traffic Performance and Integration	**Operating Conditions**	No	Change in the efficiency of operating conditions	Descriptive	Significant negative impact on operating conditions relative to Base Case	Moderate negative impact on operating conditions relative to Base Case	No impact on operating conditions relative to Base Case	Moderate positive impact on operating conditions relative to Base Case	Significant positive impact on operating conditions relative to Base Case
Traffic Performance and Integration	**Travel Time Reliability**	No	Impact on time travel reliability, measured by the percent variation in travel time	% Variation	Travel delay equal to above 45% of average travel time	Travel delay equal to between 35% and 45% of average travel time	Travel delay equal to 35% of average travel time	Travel delay equal to between 25% to 35% of average travel time	Travel delay equal to less that 25% of average travel time
Traffic Performance and Integration	**LOS**	No	Impact on transport network performance as captured by the level of service rating	A-F LOS Scale	Significant negative impact on level of service relative to Base Case (-2 ratings)	Moderate negative impact on level of service relative to Base Case (-1 rating)	No change in level of service relative to Base Case	Moderate positive impact on level of service relative to Base Case (+1 rating)	Significant positive impact on level of service relative to Base Case (+2 ratings)
Traffic Performance and Integration	**Intersection Delay**	No	Change in intersection delay	min	Significant negative impact on intersection delay	Moderate negative impact on intersection delay	No impact on intersection delay	Moderate positive impact on intersection delay	Significant positive impact on intersection delay
Traffic Performance and Integration	**Public Transport Patronage**	No	Change in user behaviour to increase public transport patronage	# / week	Significant negative impact on public transport patronage	Moderate negative impact on public transport patronage	No impact on public transport patronage	Moderate positive impact on public transport patronage	Significant positive impact on public transport patronage
Traffic Performance and Integration	**Active transport – Cyclists/Pedestrians**	No	Impact on active transport users	Descriptive	Significant negative impact on active transport	Moderate negative impact on active transport	No impact on active transport	Moderate positive impact active transport	Significant positive impact on active transport
Traffic Performance and Integration	**Performance Horizon**	No	Performance of the option over time, as measured by the duration of benefits	Years	N/A	N/A	Duration of benefits <5 years	Duration of benefits between 5 – 10 years	Duration of benefits > 10 years
Traffic Performance and Integration	**Amenity of travel**	No	Change in the perceived quality or amenity of travel	Descriptive	Significant negative impact on the perceived quality and amenity of transport network relative to Base Case	Moderate negative impact on the perceived quality and amenity of transport network relative to Base Case	No impact on the perceived quality and amenity of transport network relative to Base Case	Moderate positive impact on the perceived quality and amenity of transport network relative to Base Case	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Traffic and Safety	**Safety**	Yes	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
Traffic Performance and Integration	**Freight Volume**	No	Impact on freight volume	m^3 / pkt	Significant reduction in freight volume relative to Base Case	Moderate reduction in freight volume relative to Base Case	No change in freight volume relative to Base Case	Moderate increase in freight volume relative to Base Case	Significant increase in freight volume relative to Base Case

Traffic Performance and Integration	**Freight Vehicle Operating Costs**	No	Estimated change in freight vehicle operating costs (Vehicle operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$	Significant increase in vehicle operating costs (50% - 100% increase relative to Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase relative to Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction relative to Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction relative to Base Case)
Traffic Performance and Integration	**Frequency of Service**	No	Impact on the frequency of freight services	#	Significant reduction in freight frequency relative to Base Case	Moderate reduction in freight frequency relative to Base Case	No change in freight frequency relative to Base Case	Moderate increase in freight frequency relative to Base Case	Significant increase in freight frequency relative to Base Case
Construction and Constructability	**Constructability / Impacts of construction / TTM**	Yes	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
Construction and Constructability	**Stageability**	No	Ability for the option to be implemented in discrete stages over time	Binary	N/A	No ability for the option to be implemented in stages	N/A	Ability for the option to be implemented in stages	N/A
Environmental Impact	**Noise and Air Quality**	No	Impact on noise and air quality		Significant reduction in noise and air quality relative to Base Case	Moderate reduction in noise and air quality relative to Base Case	No change in noise and air quality relative to Base Case	Moderate increase in noise and air quality relative to Base Case	Significant increase in noise and air quality relative to Base Case
Environmental Impact	**Vehicle Emissions**	No	Impact on vehicle emissions		Significant increase in fuel emissions relative to Base Case	Moderate increase in fuel emissions relative to Base Case	No change in fuel emissions relative to Base Case	Moderate reduction in fuel emissions relative to Base Case	Significant reduction in fuel emissions relative to Base Case
Environmental Impact	**Flora/ Fauna / Cultural Heritage**	Yes	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
Social Factors	**Barriers to development**	No	Are there any significant barriers to development? E.g. existing land use or cultural significance	Descriptive	Significant barriers to implementation arising from existing land use relative to Base Case	Moderate barriers to implementation arising from existing land us relative to Base Case	No barriers to implementation arising from existing land use relative to Base Case	N/A	N/A
Future Planning	**Compatibility with future land uses**	Yes	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
Social Factors	**Mode Shift**	No	Impact on user behaviour and influence on mode shift	Descriptive	Significant negative impact on user behaviour and mode shift and mode shift relative to Base Case	Moderate negative impact on user behaviour and mode shift relative to Base Case	No impact on user behaviour and mode shift relative to Base Case	Moderate positive impact on user behaviour and mode shift relative to Base Case	Significant positive impact on user behaviour and mode shift relative to Base Case
Social Factors	**Long-term impact on residents and businesses**	Yes	Long-term impact to local land, property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
Social Factors	**Attractability & Visual Amenity**	No	Ability to attract new users as a result of changes in bikeways, walking paths, noise during construction and design/aesthetic	Descriptive	Significant reduction in visual amenity and ability to attract new users	Moderate reduction in visual amenity and ability to attract new users	No impact on visual amenity and ability to attract new users relative to Base Case	Moderate increase in visual amenity and ability to attract new users	Significant increase in visual amenity and ability to attract new users
Social Factors	**Severance**	No	Impact on community severance	Descriptive	Significant increase in community severance	Moderate increase in community severance	No impact on community severance relative to Base Case	Moderate reduction in community severance	Significant reduction in community severance
Social Factors	**Regional development**	No	Change in the economic and social impact of the transport system on regiona development	Descriptive	Significant negative impact on future regional development	Moderate negative impact on future regional development	No impact on future regiona development relative to Base Case	Moderate positive impact on future regional development	Significant positive impact on future regional development
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Cycling Policies and Technical requirements	**Accessibility - Shared Users and DDA compliance / opportunity**	Yes	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
Traffic Performance and Integration	**User Type**	No	Appeals to more varieties of user types	Cross section					
Cycling Policies and Technical requirements	**Rideability - Grades**	Yes	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
Cycling Policies and Technical requirements	**Comfort - Stress Level**	Yes	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
Future Planning	**Strategic fit to planned infrastructure**	Yes	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
Traffic Performance and Integration	**Local Cycle Network**	No	Direct connection to local facilities				Does not preclude connection to future local cycle path		
Construction and Constructability	**PUP Risk**	No	Risk of Unknown PUP impacts	Descriptive	Significant PUP risk	Moderate PUP risk	No PUP risk	N/A	N/A

Social Factors	**CPTED**	No	Ability of path for inclusion of Safe CPTED Outcomes	Descriptive	Significant negative impact on the ability to incorporate CPTED Principals	Moderate negative impact on the ability to incorporate CPTED Principals	No impact on the ability to incorporate CPTED Principals from Base Case	Moderate positive impact on the ability to incorporate CPTED Principals	Significant positive impact on the ability to incorporate CPTED Principals
Social Factors	**Coherence / Legibility /Wayfinding**	No	Ability of path to communicate route choices to user	Descriptive	Significant negative impact on the route identification and legibility / Wayfinding	Moderate negative impact on the route identification and legibility Wayfinding	No impact on the route identification and legibility / Wayfinding from Base Case	Moderate positive impact on the route identification and legibility / Wayfinding	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Social Factors	**Project Attractability**	No	Ability of path to attract new users not in catchment	Descriptive	Significant negative impact on the route attractiveness (limited to commuters)	Moderate negative impact on the on the route attractiveness (limited to commuters and local access [school kids])	No impact on the route identification and legibility / Wayfinding	Moderate positive impact on the route attractiveness (commuters, local access [school kids] and new users)	Significant positive impact on the route attractiveness (tourism / significant destination)
Traffic Performance and Integration	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Yes	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case
Social Factors	**Public Reception**	No	Measure of likely public reception to project	Descriptive	Public highly likely to perceive facility does not meet expectations	Public likely to perceives facility does not meet expectations	No Change from Base Case	Public likely to perceives facility does meet expectations	Public highly favourable of project
Traffic Performance and Integration	**Land Tenure and Asset Ownership**	No	Current ownership of land along route Ultimate owner of asset along route	Descriptive	TMR have highly decreased sections of legal ability to develop route Council ultimate owner of sections of asset	TMR have decreased sections of legal ability to develop route Council ultimate owner of sections of asset	No Change from Base Case	TMR have increased sections of legal ability to develop route	TMR have full legal ability develop route

Preview of Selected Criterion

		Category	Criterion	Indicator	Measure	Scoring Range				
12						1	2	3	4	5
1	9	**Economic Data**	**Implementation and Construction Costs***	Magnitude of cost of construction and procurement (outturn estimate)	Descriptive	Magnitude of cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is equivalent to the cost of the identified Base Case option	Magnitude of cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
2	14	**Traffic Performance and Integration**	**Network Connectivity (to existing catchments, attractors & generators)**	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relative to Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
3	23	**Traffic and Safety**	**Safety**	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
4	27	**Construction and Constructability**	**Constructability / Impacts of construction / TTM**	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
5	34	**Environmental Impact**	**Flora/ Fauna / Cultural Heritage**	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
6	36	**Future Planning**	**Compatibility with future land uses**	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
7	38	**Social Factors**	**Long-term impact on residents and businesses**	Long-term impact to local land property access, businesses, and kerbside (available) parking	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
8	43	**Cycling Policies and Technical requirements**	**Accessibility - Shared Users and DDA compliance / opportunity**	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
9	45	**Cycling Policies and Technical requirements**	**Rideability - Grades**	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
10	46	**Cycling Policies and Technical requirements**	**Comfort - Stress Level**	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
11	47	**Future Planning**	**Strategic fit to planned infrastructure**	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
12	53	**Traffic Performance and Integration**	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case

Weighting - Rank Methods

Category	Criterion	Criteria Ranking	Ranks to be assigned
Economic Data	Implementation and Construction Costs*	7	
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	2	
Traffic and Safety	Safety	1	
Construction and Constructability	Constructability / Impacts of construction / TTM	10	
Environmental Impact	Flora/ Fauna / Cultural Heritage	11	
Future Planning	Compatibility with future land uses	9	
Social Factors	Long-term impact on residents and businesses	6	
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opportunity	8	
	Rideability - Grades	3	
	Comfort - Stress Level	4	
Future Planning	Strategic fit to planned infrastructure	12	
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	5	

Weighting - Pairwise Comparison

	Implementation and Construction Costs* A	Network Connectivity (to existing catchments, attractors B	Safety C	Constructability / Impacts of construction / TTM D	Flora/ Fauna / Cultural Heritage E	Compatibility with future land uses F	Long-term impact on residents and businesses G	Accessibility - Shared Users and DDA compliance / H	Rideability - Grades I	Comfort - Stress Level J	Strategic fit to planned infrastructure K	Directness/ convenience/ travel time disruptions - L									WEIGHTING
Implementation and Construction Costs* A		B	C	A	A	F	G	A	I	J	A	L									6%
Network Connectivity (to existing catchments, B			C	B	B	B	B	B	B	B	B	B									15%
Safety C				C	C	C	C	C	C	C	C	C									17%
Constructability / Impacts of construction / TTM D					E	D	G	H	I	J	D	L									3%
Flora/ Fauna / Cultural Heritage E						F	E	H	I	J	K	L									3%
Compatibility with future land uses F							G	H	I	J	F	L									5%
Long-term impact on residents and businesses G								G	I	J	G	L									8%
Accessibility - Shared Users and DDA compliance / H									I	J	H	L									6%
Rideability - Grades I										I	I	I									14%
Comfort - Stress Level J											J	J									12%
Strategic fit to planned infrastructure K												L									2%
Directness/ convenience/ travel time disruptions - L																					11%

Option Scoring

Criteria	Select	Base Case	C1 (on-road both sides with separators)	C2 (on-road bi-directional northbound)	C3 (on-road bi-directional southbound)	C4 (off-road shared path Helen St/ on-road Albert St with separator)	C5 (off road shared path Helen St/ railway corridor/ Albert St verge)	Comments	
Network Connectivity (to existing		3	3	2	2	3	3	C1 provide no additional connectivity C2 & C3 provide less due to being restricted to one side - crossings C4 & C5 provides connectivity to attractor/generators (jubliee / sports), avoids the revitalistion works	
Safety		3	4	4	4	5	5	C1, C3 & C3 all have interaction with multiple driveways and HVs C4 & C5 - are away from conflict points C5 - completely off road - avoids cars rat-running along Albert St and HVs	*sensitivity
Constructability / Impacts of cons		3	2	2	2	4	4	C1 , C2 & C3 - no difference to Base Case C4 - offline and line marking on low volume road (Albert St) C5 - as per C4 plus PUP impacts within the verge of Albert St (overheads and telstra)	
Flora/ Fauna / Cultural Heritage		3	3	3	3	3	3	No discernable impacts to mapped constraints	
Compatibility with future land use		3	3	3	3	4	4	C4 & C5 provide connection to known SRRC future planning areas	
Long-term impact on residents ar		3	2	3	3	4	4	Refer to comparative spreadsheet	
Accessibility - Shared Users and		3	3	3	3	4	5	C4 - still on road C5 - within verge	*sensitivity
Rideability - Grades		3	3	3	3	3	3	Refer to comparative spreadsheet	
Comfort - Stress Level		3	4	4	4	5	5	Refer to comparative spreadsheet	
Strategic fit to planned infrastruct		3	3	3	3	5	5	C4 & C5 fit within Council's future upgrade of Jubilee Park, avoids Town Centre revitalisation works, quarrantines rail corridor for future transport use	
Directness/ convenience/ travel t		3	4	4	5	5	5	Refer to comparative spreadsheet	

Sensitivity Analysis

Best Option	road shared path Helen St/ on-road Albert St with separator)				
Category	**Criteria**	**Proportional Change in Criteria Weighting**			
		-50%	**-25%**	**25%**	**50%**
Economic Data	Implementation and Construction Costs*	C5 (off road shared p	C5 (off road shared p	C5 (off road shared p	C5 (off road shared path Helen St/ railway corridor/ Albert St verge)
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Traffic and Safety	Safety	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Construction and Constructability	Constructability / Impacts of construction / TTM	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Environmental Impact	Flora/ Fauna / Cultural Heritage	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Future Planning	Compatibility with future land uses	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Social Factors	Long-term impact on residents and businesses	C4 (off-road shared p	C5 (off road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opp	C4 (off-road shared p	C4 (off-road shared p	C5 (off road shared p	C5 (off road shared path Helen St/ railway corridor/ Albert St verge)
	Rideability - Grades	C5 (off road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
	Comfort - Stress Level	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Future Planning	Strategic fit to planned infrastructure	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Numt	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared p	C4 (off-road shared path Helen St/ on-road Albert St with separator)

Analysis

Print

Project Decription	
Decision Context:	Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.Provide fit-for-purpos
Network Context:	Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the n
Key Objectives:	**Safety** **Other**
	ConnectivityDirectCoherent / LegibleSafeAccessibleEconomicalStageabilityPublic Reception

Best Option		
Overall	**en St/ on-roa**	Shared used path using Helen Street and railway corridor (off-road) and Albert Street (on road) wtith separators
Economic Data	Base Case	
Traffic Performance and Integrati	len St/ on-roa	
Traffic and Safety	len St/ on-roa	
Construction and Constructability	len St/ on-roa	
Environmental Impact	Base Case	

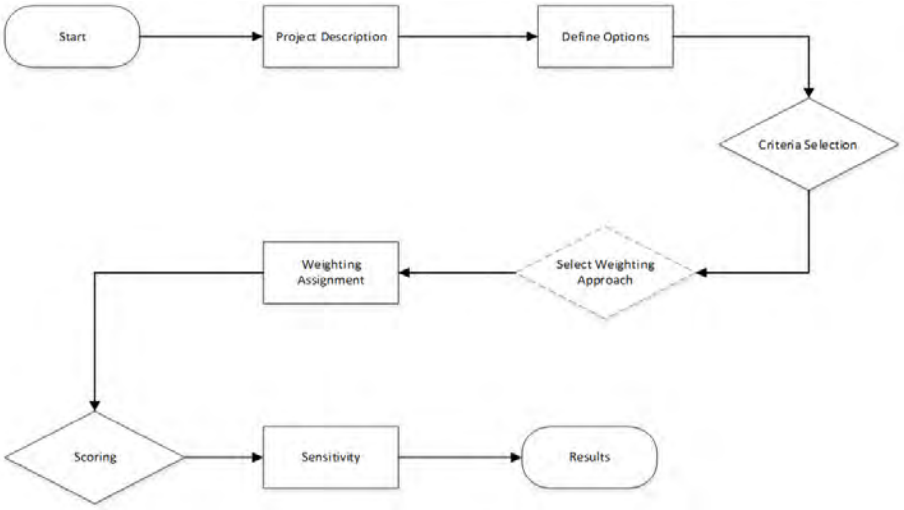
Summary of Option Scoring	Base Case	BASE CASE (on-road painted)	C1 (on-road both	C2 (on-road bi-	C3 (on-road bi-	C4 (off-road	C5 (off road	Comm ents	0
Score	3.00		3.17	3.15	3.26	4.03	4.03		
Rank	6		4	5	3	1	1		

Department of Transport and Main Roads

Smarter Solutions - Multi-Criteria Assessment Tool

This Smarter Solutions Multi-Criteria Assessment (MCA) Tool provides a clear line-of-sight across the Department of Transport and Main Roads' (TMR) infrastructure planning and investment process, providing assurance that the Network Optimisation Framework is embedded in our decision-making.

The MCA Tool has been designed for use in selecting a preferred option, or ranking alternate options, where network optimisation solutions (NOS) are included within assessment processes. The MCA Tool applies a standardised consideration of NOS relative to large capital infrastructure, ensuring TMR is delivering the right infrastructure at the right time and aligning with government policy direction for investment as outlined in the Queensland Government's State Infrastructure Plan.



Queensland Government

Project Description

The project must be clearly defined within the MCA to ensure that appropriate options are short-listed for evaluation and tha criteria selected for assessment reflect the nature of the service requirement or opportunity. Accordingly, the project should defined in terms of:

Decision Context: What is the overarching service need or opportunity that this project response is sought to address? What is the timeframe for required impacts?

Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.
Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.

Network Context: What is the current transport infrastructure environment?
Is there any complimentary infrastructure investment occuring within close proximity?

Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network Plan – SEQ.
Existing PCN cycling routes are not continuous, lack signage and sections have no facilities.
Traffic surveys indicate a low cyclist count.
There are high percentages of heavy vehicles.

Key Objectives: What is the key objective the Project is being implemented to achieve?

Capacity	☐
Performance	☐
Behaviour Change	☐
Safety	☑
Other	☑

What are the segmented objectives - ultimate, intermediate and immediate?
What are the corresponding timeframes for these objectives?

Connectivity
Direct
Coherent / Legible
Safe
Accessible
Economical
Stageability
Public Reception

Define Options

Clearly define the short-listed options identified to achieve the outcomes sought.

Ref	Option	Description
Opt 1	BASE CASE	On Road Painted Cycle Way
Opt 2	E1 On Road Cycle lane with separation device	On Road Cycle lane with separation device (Both Sides)
Opt 3	E2 On Road Bi-directional Cycle lane with	On Road Bi-directional Cycle lane with separation device (Northbound)
Opt 4	E3 On Road Bi-directional Cycle lane with	On Road Bi-directional Cycle lane with separation device (Southbound)
Opt 5	E4 Existing off-road	Existing off-road
Opt 6		
Opt 7		
Opt 8		
Opt 20		

Criteria

As per the Smarter solutions - Multi-Criteria Assessment Technical Note, various criteria are mandatory when considering an NOS in the evaluation process. Additional criteria relating to intersection delay, public transport patronage and freight should be selected where appropriate.
* Where an NOS option has not been short-listed for assessment, please refine these criteria to reflect the options identified and the key project objectives.
A maximum of 20 criteria can be selected.

Category	Criterion	Use Criteria?	Indicator	Measure	Scoring Range 1	2	3	4	5
Economic Data									
Economic Data	**Implementation and Construction Costs***	Yes	Magnitude of cost of construction and procurement (outturn estimate)	Descriptive	Magnitude of cost is significantly higher than Base Case option - high likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is moderately higher than Base Case option - moderate likelihood of high impact Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is equivalent to the cost of the identified Base Case option	Magnitude of cost is moderately less than Base Case option - moderate likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening	Magnitude of cost is significantly less than Base Case option - high likelihood of reduced Property / Structures / TTM / PUP / Pavement area / Road widening
Economic Data	**Whole-of-life Operation and Maintenance Costs***	No	Estimated cost of whole-of-life asset operation and maintenance	Descriptive	Estimated cost is significantly higher than Base Case option	Estimated cost is moderately higher than Base Case option	Estimated cost is equivalent to the cost of the identified Base Case option	Estimated cost is moderately less than Base Case option	Estimated cost is significantly less than Base Case option
Economic Data	**End-to-end cost**	No	Impact on direct end-to-end cost or price of travel (incl. amenity)	Descriptive	Significant negative impact on the direct end-to-end cost / price of travel (50% - 100% increase on Base Case)	Moderate negative impact on the direct end-to-end cost / price of travel (0% - 50% increase on Base Case)	No impact on the direct end-to-end cost / price of travel relative to Base Case	Moderate positive impact on the direct end-to-end cost / price of travel (0% - 50% reduction on Base Case)	Significant positive impact on the direct end-to-end cost / price of travel (50% - 100% reduction on Base Case)
Economic Data	**Road User Vehicle Operating Costs**	No	Estimated change in vehicle operating costs (Vehicle/Bus operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$/pkt	Significant increase in vehicle operating costs (50% - 100% increase on Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase on Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction on Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction on Base Case)
Economic Data	**Rapid BCR**	No	Rapid Benefit Cost Ratio	Ratio	0 to 0.5	0.5 to 1	N/A	1 to 1.5	> 1.5
Traffic Performance and Integration	**Network Connectivity (to existing catchments, attractors & generators)**	Yes	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relativeto Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
Traffic Performance and Integration	**Operating Conditions**	No	Change in the efficiency of operating conditions	Descriptive	Significant negative impact on operating conditions relative to Base Case	Moderate negative impact on operating conditions relative to Base Case	No impact on operating conditions relative to Base Case	Moderate positive impact on operating conditions relative to Base Case	Significant positive impact on operating conditions relative to Base Case
Traffic Performance and Integration	**Travel Time Reliability**	No	Impact on time travel reliability, measured by the percent variation in travel time	% Variation	Travel delay equal to above 45% of average travel time	Travel delay equal to between 35% and 45% of average travel time	Travel delay equal to 35% of average travel time	Travel delay equal to between 25% to 35% of average travel time	Travel delay equal to less that 25% of average travel time
Traffic Performance and Integration	**LOS**	No	Impact on transport network performance as captured by the level of service rating	A-F LOS Scale	Significant negative impact on level of service relative to Base Case (-2 ratings)	Moderate negative impact on level of service relative to Base Case (-1 rating)	No change in level of service relative to Base Case	Moderate positive impact on level of service relative to Base Case (+1 rating)	Significant positive impact on level of service relative to Base Case (+2 ratings)
Traffic Performance and Integration	**Intersection Delay**	No	Change in intersection delay	min	Significant negative impact on intersection delay	Moderate negative impact on intersection delay	No impact on intersection delay	Moderate positive impact on intersection delay	Significant positive impact on intersection delay
Traffic Performance and Integration	**Public Transport Patronage**	No	Change in user behaviour to increase public transport patronage	# / week	Significant negative impact on public transport patronage	Moderate negative impact on public transport patronage	No impact on public transport patronage	Moderate positive impact on public transport patronage	Significant positive impact on public transport patronage
Traffic Performance and Integration	**Active transport – Cyclists/Pedestrians**	No	Impact on active transport users	Descriptive	Significant negative impact on active transport	Moderate negative impact on active transport	No impact on active transport	Moderate positive impact active transport	Significant positive impact on active transport
Traffic Performance and Integration	**Performance Horizon**	No	Performance of the option over time, as measured by the duration of benefits	Years	N/A	N/A	Duration of benefits <5 years	Duration of benefits between 5 – 10 years	Duration of benefits > 10 years
Traffic Performance and Integration	**Amenity of travel**	No	Change in the perceived quality or amenity of travel	Descriptive	Significant negative impact on the perceived quality and amenity of transport network relative to Base Case	Moderate negative impact on the perceived quality and amenity of transport network relative to Base Case	No impact on the perceived quality and amenity of transport network relative to Base Case	Moderate positive impact on the perceived quality and amenity of transport network relative to Base Case	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Traffic and Safety	**Safety**	Yes	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
Traffic Performance and Integration	**Freight Volume**	No	Impact on freight volume	m^3 / pkt	Significant reduction in freight volume relative to Base Case	Moderate reduction in freight volume relative to Base Case	No change in freight volume relative to Base Case	Moderate increase in freight volume relative to Base Case	Significant increase in freight volume relative to Base Case

Traffic Performance and Integration	**Freight Vehicle Operating Costs**	No	Estimated change in freight vehicle operating costs (Vehicle operating costs: fuel, tyre wear, lubricants, repairs, maintenance)	$	Significant increase in vehicle operating costs (50% - 100% increase relative to Base Case)	Moderate increase in vehicle operating costs (0% - 50% increase relative to Base Case)	No change to vehicle operating costs relative to Base Case	Moderate reduction in vehicle operating cost (0% - 50% reduction relative to Base Case)	Significant reduction in vehicle operating cost (50% - 100% reduction relative to Base Case)
Traffic Performance and Integration	**Frequency of Service**	No	Impact on the frequency of freight services	#	Significant reduction in freight frequency relative to Base Case	Moderate reduction in freight frequency relative to Base Case	No change in freight frequency relative to Base Case	Moderate increase in freight frequency relative to Base Case	Significant increase in freight frequency relative to Base Case
Construction and Constructability	**Constructability / Impacts of construction / TTM**	Yes	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
Construction and Constructability	**Stageability**	No	Ability for the option to be implemented in discrete stages over time	Binary	N/A	No ability for the option to be implemented in stages	N/A	Ability for the option to be implemented in stages	N/A
Environmental Impact	**Noise and Air Quality**	No	Impact on noise and air quality		Significant reduction in noise and air quality relative to Base Case	Moderate reduction in noise and air quality relative to Base Case	No change in noise and air quality relative to Base Case	Moderate increase in noise and air quality relative to Base Case	Significant increase in noise and air quality relative to Base Case
Environmental Impact	**Vehicle Emissions**	No	Impact on vehicle emissions		Significant increase in fuel emissions relative to Base Case	Moderate increase in fuel emissions relative to Base Case	No change in fuel emissions relative to Base Case	Moderate reduction in fuel emissions relative to Base Case	Significant reduction in fuel emissions relative to Base Case
Environmental Impact	**Flora/ Fauna / Cultural Heritage**	Yes	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
Social Factors	**Barriers to development**	No	Are there any significant barriers to development? E.g. existing land use or cultural significance	Descriptive	Significant barriers to implementation arising from existing land use relative to Base Case	Moderate barriers to implementation arising from existing land us relative to Base Case	No barriers to implementation arising from existing land use relative to Base Case	N/A	N/A
Future Planning	**Compatibility with future land uses**	Yes	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
Social Factors	**Mode Shift**	No	Impact on user behaviour and influence on mode shift	Descriptive	Significant negative impact on user behaviour and mode shift and mode shift relative to Base Case	Moderate negative impact on user behaviour and mode shift relative to Base Case	No impact on user behaviour and mode shift relative to Base Case	Moderate positive impact on user behaviour and mode shift relative to Base Case	Significant positive impact on user behaviour and mode shift relative to Base Case
Social Factors	**Long-term impact on residents and businesses**	Yes	Long-term impact to local land, property access, businesses, and kerbside (available) parking. No. of driveways impacted	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
Social Factors	**Attractability & Visual Amenity**	No	Ability to attract new users as a result of changes in bikeways, walking paths, noise during construction and design/aesthetic	Descriptive	Significant reduction in visual amenity and ability to attract new users	Moderate reduction in visual amenity and ability to attract new users	No impact on visual amenity and ability to attract new users relative to Base Case	Moderate increase in visual amenity and ability to attract new users	Significant increase in visual amenity and ability to attract new users
Social Factors	**Severance**	No	Impact on community severance	Descriptive	Significant increase in community severance	Moderate increase in community severance	No impact on community severance relative to Base Case	Moderate reduction in community severance	Significant reduction in community severance
Social Factors	**Regional development**	No	Change in the economic and social impact of the transport system on regiona development	Descriptive	Significant negative impact on future regional development	Moderate negative impact on future regional development	No impact on future regiona development relative to Base Case	Moderate positive impact on future regional development	Significant positive impact on future regional development
Add Lines here...									
Cycling Policies and Technical requirements	**Accessibility - Shared Users and DDA compliance / opportunity**	Yes	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
Traffic Performance and Integration	**User Type**	No	Appeals to more varieties of user types	Cross section					
Cycling Policies and Technical requirements	**Rideability - Grades**	Yes	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
Cycling Policies and Technical requirements	**Comfort - Stress Level**	Yes	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
Future Planning	**Strategic fit to planned infrastructure**	Yes	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
Traffic Performance and Integration	**Local Cycle Network**	No	Direct connection to local facilities				Does not preclude connection to future local cycle path		
Construction and Constructability	**PUP Risk**	No	Risk of Unknown PUP impacts	Descriptive	Significant PUP risk	Moderate PUP risk	No PUP risk	N/A	N/A

Social Factors	**CPTED**	No	Ability of path for inclusion of Safe CPTED Outcomes	Descriptive	Significant negative impact on the ability to incorporate CPTED Principals	Moderate negative impact on the ability to incorporate CPTED Principals	No impact on the ability to incorporate CPTED Principals from Base Case	Moderate positive impact on the ability to incorporate CPTED Principals	Significant positive impact on the ability to incorporate CPTED Principals
Social Factors	**Coherence / Legibility /Wayfinding**	No	Ability of path to communicate route choices to user	Descriptive	Significant negative impact on the route identification and legibility / Wayfinding	Moderate negative impact on the route identification and legibility Wayfinding	No impact on the route identification and legibility / Wayfinding from Base Case	Moderate positive impact on the route identification and legibility / Wayfinding	Significant positive impact on the perceived quality and amenity of transport network relative to Base Case
Social Factors	**Project Attractability**	No	Ability of path to attract new users not in catchment	Descriptive	Significant negative impact on the route attractiveness (limited to commuters)	Moderate negative impact on the on the route attractiveness (limited to commuters and local access [school kids])	No impact on the route identification and legibility / Wayfinding	Moderate positive impact on the route attractiveness (commuters, local access [school kids] and new users)	Significant positive impact on the route attractiveness (tourism / significant destination)
Traffic Performance and Integration	**Directness/ convenience/ travel time disruptions - Number of crossings / stoppages**	Yes	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case
Social Factors	**Public Reception**	No	Measure of likely public reception to project	Descriptive	Public highly likely to perceive facility does not meet expectations	Public likely to perceives facility does not meet expectations	No Change from Base Case	Public likely to perceives facility does meet expectations	Public highly favourable of project
Traffic Performance and Integration	**Land Tenure and Asset Ownership**	No	Current ownership of land along route Ultimate owner of asset along route	Descriptive	TMR have highly decreased sections of legal ability to develop route Council ultimate owner of sections of asset	TMR have decreased sections of legal ability to develop route Council ultimate owner of sections of asset	No Change from Base Case	TMR have increased sections of legal ability to develop route	TMR have full legal ability develop route

Preview of Selected Criterion

Criterion	Indicator	Measure	Scoring Range				
			1	2	3	4	5
Network Connectivity (to existing catchments, attractors & generators)	Impact on the links and the density of connections in the network (Ability to Access Catchment, attractors and generators)	Descriptive	Significant negative impact on network connectivity relative to Base Case	Moderate negative impact on network connectivity relative to Base Case	No impact on network connectivity relative to Base Case	Moderate positive impact on network connectivity relative to Base Case	Significant positive impact on network connectivity relative to Base Case
Safety	Ability to incorporate positive impact on safety in regards to CPTED, number of heavy vehicle interactions, and driveway crossings	Descriptive	Significant negative impact on safety relative to Base Case	Moderate negative impact on safety relative to Base Case	No impact on safety relative to Base Case	Moderate positive impact on safety relative to Base Case	Significant positive impact on safety relative to Base Case
Constructability / Impacts of construction / TTM	Potential construction challenges including Traffic management) / Impact on property owners during construction	Descriptive	Significantly more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	Moderately more construction challenges (including TTM) or more negative impact on property owners during construction compared to Base Case	No additional construction challenges (including TTM) or negative impact on property owners during construction compared to Base Case	Moderately less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case	Significantly less construction challenges (including TTM) and less negative impact on property owners during construction compared to Base Case
Flora/ Fauna / Cultural Heritage	Impact on vegetation and / or sites of environmental importance or Cultural Heritage	Descriptive	Significant negative impact on vegetation and / or sites of importance relative to Base Case	Moderate negative impact on vegetation and / or sites of importance relative to Base Case	No impact on vegetation and / or sites of importance relative to Base Case	Moderate positive (or less) impact on vegetation and / or sites of importance relative to Base Case	Significant positive (or less) impact on vegetation or sites of importance relative to Base Case
Compatibility with future land uses	Degree of alignment to future land uses and town planning objectives	Descriptive	Significant misalignment of option to future land uses and town planning objectives compared to Base Case	Slight misalignment of option to future land uses and town planning objectives compared to Base Case	No improvement to alignment with future land uses and town planning relative to Base Case	Slightly better aligned with future land uses and town planning compared to Base Case	Significantly better aligned with future land uses and town planning compared to Base Case
Long-term impact on residents and businesses	Long-term impact to local land, property access, businesses, and kerbside (available) parking. No. of driveways impacted	Quantity of affected properties	Significantly more properties / parking spaces affected relative to Base Case	Moderately more properties / parking spaces affected relative to Base Case	No addition properties / parking spaces affected relative to Base Case	Moderately less properties / parking spaces affected relative to Base Case	Significantly less properties / parking spaces affected relative to Base Case
Accessibility - Shared Users and DDA compliance / opportunity	Ability for the path to cater for all shared users (including persons with a disability) / meets DDA standards / ability to widen cross-section	Descriptive	Significantly less ability to widen cross-section / less access to persons with a disability compared to Base Case	Moderately less ability to widen cross-section / less access to persons with a disability compared to Base Case	No differential to Base Case in regard to ability to widen cross-section / provide access to persons with a disability	Slightly more ability to widen cross-section / provides slightly more access to persons with a disability compared to Base Case	Significantly more ability to widen cross-section / provides more access to persons with a disability compared to Base Case
Rideability - Grades	Grades, lengths >3% (DDA) and >5% (Rideability)	Descriptive	Longer sections of grades >5% compared to Base Case	Longer sections of grades >3% compared to Base Case / no change to grades > 5% compared to Base Case	Grades comparative to Base Case (no worse)	Longer lengths of grades < 5% compared to Base Case	Longer lengths of grades < 3% compared to Base Case
Comfort - Stress Level	Stress level - LTS 1-4	Descriptive	Significantly worse LTS compared to Base Case	Moderately worse LTS compared to Base Case	No change in LTS compared to Base Case	Moderately improved LTS compared to Base Case	Significantly improved LTS compared to Base Case
Strategic fit to planned infrastructure	Ability to fit within local infrastructure planning (rail, town centre improvements, bypass)	Descriptive	Significantly less alignment with future infrastructure planning compared to Base Case	Moderately less alignment with future infrastructure planning compared to Base Case	No change to alignment with future infrastructure planning compared to Base Case	Moderately better alignment with future infrastructure planning compared to Base Case	Significantly better alignment with future infrastructure planning compared to Base Case
Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	Number or density of instances requiring cycleway to give-way to road or driveway	Number of crossings/ give-way occurrences (at road or driveway)	Significantly more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Moderately more crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	No change from Base Case	Moderately less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case	Significantly less crossings / instances requiring cyclist to give-way to road or driveway compared to Base case

Weighting - Rank Methods

Category	Criterion	Criteria Ranking	Ranks to be assigned
Economic Data	Implementation and Construction Costs*	7	
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors & generators)	2	
Traffic and Safety	Safety	1	
Construction and Constructability	Constructability / Impacts of construction / TTM	10	
Environmental Impact	Flora/ Fauna / Cultural Heritage	11	
Future Planning	Compatibility with future land uses	9	
Social Factors	Long-term impact on residents and businesses	6	
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opportunity	8	
	Rideability - Grades	3	
	Comfort - Stress Level	4	
Future Planning	Strategic fit to planned infrastructure	12	
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Number of crossings / stoppages	5	

Weighting - Pairwise Comparison

	Implementation and Construction Costs* A	Network Connectivity (to existing catchments, attractors B	Safety C	Constructability / Impacts of construction / TTM D	Flora/ Fauna / Cultural Heritage E	Compatibility with future land uses F	Long-term impact on residents and businesses G	Accessibility - Shared Users and DDA compliance / H	Rideability - Grades I	Comfort - Stress Level J	Strategic fit to planned infrastructure K	Directness/ convenience/ travel time disruptions - L									WEIGHTING
Implementation and Construction Costs* A		B	C	A	A	F	G	A	I	J	A	L									6%
Network Connectivity (to existing catchments, B			C	B	B	B	B	B	B	B	B	B									15%
Safety C				C	C	C	C	C	C	C	C	C									17%
Constructability / Impacts of construction / TTM D					E	D	G	H	I	J	D	L									3%
Flora/ Fauna / Cultural Heritage E						F	E	H	I	J	K	L									3%
Compatibility with future land uses F							G	H	I	J	F	L									5%
Long-term impact on residents and businesses G								G	I	J	G	L									8%
Accessibility - Shared Users and DDA compliance / H									I	J	H	L									6%
Rideability - Grades I										I	I	I									14%
Comfort - Stress Level J											J	J									12%
Strategic fit to planned infrastructure K												L									2%
Directness/ convenience/ travel time disruptions - L																					11%

Option Scoring

Criteria	Select	Base Case	E1 On Road Cycle lane with separation device	E2 On Road Bi-directional Cycle lane with separation device (Northbound)	E3 On Road Bi-directional Cycle lane with separation device (Southbound)	E4 Existing off-road	Comments
Network Connectivity (to existing catchı		3	3	3	3	4	E4 - connects to resodemtial and parks
Safety		3	4	4	4	5	E1, E2, E3 have separation from HV, no difference in CPTED E4 is completely off-road away from HV
Constructability / Impacts of constructio		3	2	2	2	5	E1, E2, E3 require widening of existing formation E1 and E2 will require line-marking of existing intersection (Brooklands Dr)
Flora/ Fauna / Cultural Heritage		3	2	3	2	5	E2 & E3 has potential mapped environmental constraints within verge (trees)
Compatibility with future land uses		3	3	3	3	3	
Long-term impact on residents and bus		3	3	3	3	3	
Accessibility - Shared Users and DDA c		3	3	3	4	4	E4 does not preclude accessibility
Rideability - Grades		3	3	3	3	3	Base Case is 6.5% All other on-road options are 6.5% E4 has 9% grade for 70m Rideability criteria not met for any option
Comfort - Stress Level		3	4	4	4	5	refer to comparison spreadsheet
Strategic fit to planned infrastructure		3	3	3	3	3	
Directness/ convenience/ travel time dis		3	3	3	3	3	

Sensitivity Analysis

Best Option	E4 Existing off-road

Category	Criteria	Proportional Change in Criteria Weighting			
		-50%	-25%	25%	50%
Economic Data	Implementation and Construction Costs*	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Traffic Performance and Integration	Network Connectivity (to existing catchments, attractors	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Traffic and Safety	Safety	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Construction and Constructability	Constructability / Impacts of construction / TTM	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Environmental Impact	Flora/ Fauna / Cultural Heritage	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Future Planning	Compatibility with future land uses	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Social Factors	Long-term impact on residents and businesses	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Cycling Policies and Technical requirem	Accessibility - Shared Users and DDA compliance / opp	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
	Rideability - Grades	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
	Comfort - Stress Level	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Future Planning	Strategic fit to planned infrastructure	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road
Traffic Performance and Integration	Directness/ convenience/ travel time disruptions - Numt	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road	E4 Existing off-road

Analysis

Print

Project Decription	
Decision Context:	Provide a continuous PCN facility through Beaudesert, connecting Beaudesert-Nerang Rd & Mount Lindesay Hwy.Provide fit-for-
Network Context:	Beaudesert-Nerang Rd & Mount Lindesay Hwy have been identified as a Principal Cycle Network - Route Priority A (for delivery i
Key Objectives:	**Safety** **Other**
	ConnectivityDirectCoherent / LegibleSafeAccessibleEconomicalStageabilityPublic Reception

Best Option		
Overall	**xisting off-ro**	Existing off-road
Economic Data	Existing off-ro	
Traffic Performance and Integratic	Existing off-ro	
Traffic and Safety	Existing off-ro	
Construction and Constructability	Existing off-ro	
Environmental Impact	Existing off-ro	

Summary of Option Scoring	Base Case	BASE CASE	E1 On Road	E2 On Road Bi-	E3 On Road Bi-	E4 Existin	Comm ents	0	0
Score	3.00		3.11	3.20	3.23	4.03			
Rank	5		4	3	2	1			

Appendix E – Preferred Options

Department of Transport and Main Roads MRR_Detail (02/22)

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCC5 DESIGN STRINGS; MCC6 DESIGN STRINGS; MCC7 DESIGN STRINGS; ALIGN ROAD MCC7

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C4 – OFF ROAD (HELEN STREET)

ENGINEERING CERTIFICATION (RPEQ)

SKETCH ONLY
14 Sep 2023

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

Department of Transport and Main Roads MRR_Detail (02/22)

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCC5 DESIGN STRINGS; MCC6 DESIGN STRINGS; MCC7 DESIGN STRINGS; ALIGN ROAD MCC7

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C4 – OFF ROAD (ALBERT STREET)

ENGINEERING CERTIFICATION (RPEQ)

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Drawing No.	1
Series Number	110 of 10

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCC5 DESIGN STRINGS; MCC6 DESIGN STRINGS; MCC7 DESIGN STRINGS; ALIGN ROAD MCC7

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C5 – OFF ROAD (HELEN STREET)

ENGINEERING CERTIFICATION (RPEQ)

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCC5 DESIGN STRINGS; MCC6 DESIGN STRINGS; MCC7 DESIGN STRINGS; ALIGN ROAD MCC7

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C5 – ON ROAD (ALBERT STREET)

ENGINEERING CERTIFICATION (RPEQ)

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Series Number	110 of 10

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCE2 DESIGN STRINGS; MCE1 DESIGN STRINGS

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
E1 – EXISTING PATH

ENGINEERING CERTIFICATION (RPEQ)

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Document No. B22081-SKT-CI-N4-001

Locality of Beaudesert

Intersection arrangement and crossing details to be confirmed in subsequent design stages

Interaction with the school and crossing locations to be confirmed at subsequent design stages

Driveway and access arrangements to be confirmed at subsequesnt design stages

MOUNT LINDESAY HIGHWAY

ENTERPRISE DRIVE

0.000 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800

Future development site. Coordination to be investigated at subsequent design stages

Driveway and access arrangements to be confirmed at subsequesnt design stages

BRISBANE STREET

Refer Inset A

Refer Right

TURBOT STREET

Driveway and access arrangements to be confirmed at subsequesnt design stages

Intersection arrangement and crossing details to be confirmed in subsequent design stages

MILL STREET

BRISBANE STREET

800 850 900 950 1000 1050

HELEN STREET

1074.248

Inset A

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; MCN4 DESIGN STRINGS; ALIGN ROAD MCN4

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
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BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points

Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
N4 – OFF ROAD (WEST VERGE)

ENGINEERING CERTIFICATION (RPEQ)

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Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

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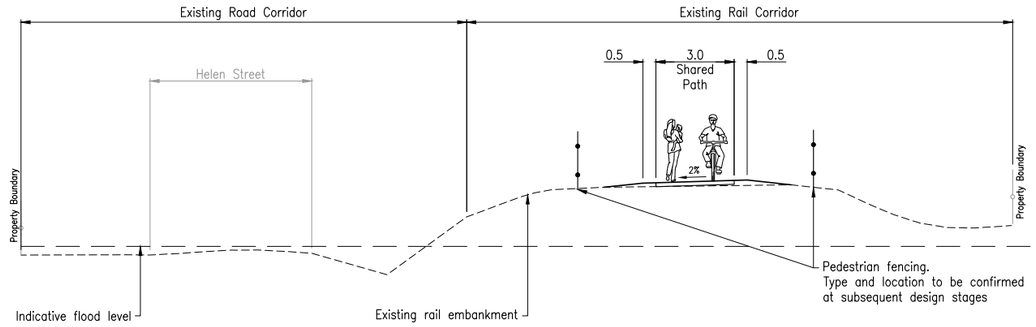
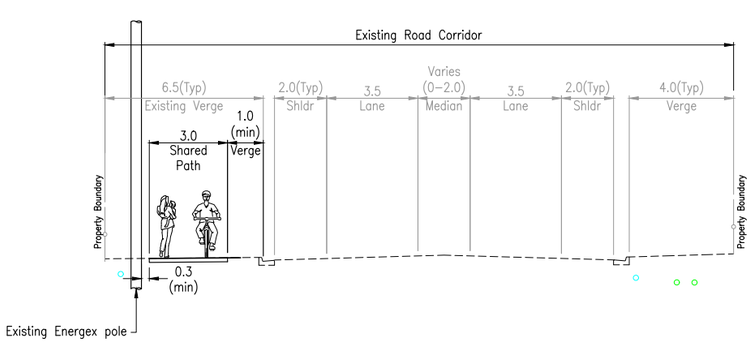
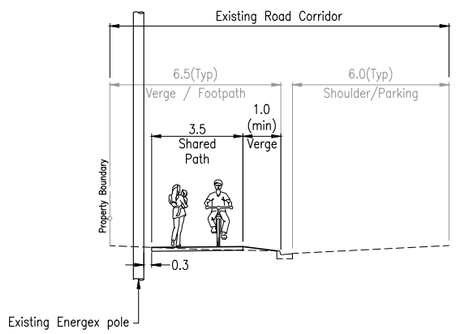


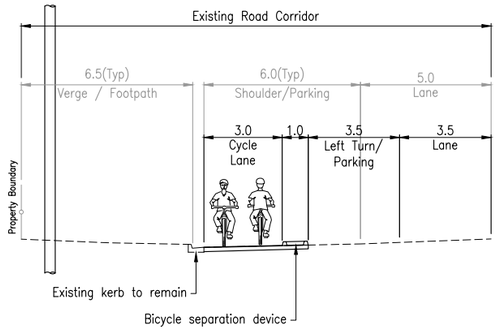
Option C4/C5 (Helen Street)
Typical Section
Scale 1:100



Option N4 (West Verge)
Typical Section
Scale 1:100



Option 1 – Off Road
Western Verge Only



Option 2 – On Road Bi-Directional*
* Opportunity to reduce parking and lane widths

Option C4/C5 (Albert Street)
Typical Section
Scale 1:100

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1A For information only		

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XREFS :- X_TLE_CIVIL; X_DRGA_TYP

Associated Job Nos	
Auxiliary Drg Nos	

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

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BEAUDESERT-NERANG ROAD – MOUNT LINDESAY HIGHWAY
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Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
PREFERRED OPTION TYPICAL SECTIONS
ENGINEERING CERTIFICATION (RPEQ)

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14 Sep 2023

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Job No.	
Contract No.	0
Drawing No.	1A
Series Number	300 of 7

Appendix F – ESR

Department of Transport and Main Roads

Environmental Scoping Report

Options Analysis and Business Case for Beaudesert-Nerang Road and Mt Lindesay Highway Cycleway

Project Number: 1509139

Queensland Government

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PROJECT DETAILS			
TMR District	Metro		
Project / Facility Name	Options Analysis and Business Case for Beaudesert-Nerang Road and Mt Lindesay Highway Cycleway		
Project Address	Beaudesert-Nerang Road and Mt Lindesay Highway, Beaudesert		
Facility Number		Lot on Plan	
E&H(S/H) / WBS / Internal Order No.			
Project Number	1509139	Geographical Coordinates (WGS84)	-27.988725, 152.996969
DMS References		Local Government Area	Scenic Rim Regional

REPORT PREPERATION			
I have prepared this report based on the best information available at the time. I have taken into account, to the fullest extent possible, all actual and potential environmental impacts of the project.			
Name	Fi Bengtsson	Signature	
Position	Senior Environmental Scientist	Date	9/06/2023
REPORT REVIEW			
Name	Daniel Willis	Signature	
Position	Principal Environmental Planner	Date	15/06/2023

VERSION HISTORY			
Version No.	Date	Changed by	Nature of amendment

PROJECT MANAGER ACCEPTANCE			
I agree that this report has been prepared based on the project scope at the time, and accept responsibility for ensuring any future changes to the scope are appropriately assessed.			
Name	An Boc	Signature	
Position	Project Manager	Date	

Note: This Environmental Scoping Report shall remain current for 12 months. A review will be required after this time should further subsequent assessment or management actions not be undertaken.

Contents

Table of Figures

Executive Summary

Overall the project has been assessed as having an environment and cultural heritage risk of **MEDIUM**.

☒ Medium Risk Projects

Further assessment is required for this project. A field assessment and/or survey of specific environment or heritage issue/s will be required during the design development phase of the project. This document will form part of the updated Environmental Scoping Report or where medium risks are confirmed, the Environmental Assessment Report.

Recommendations:

The potential environmental issues associated with this project and recommendations to mitigate (including need for further studies) are summarised below.

Environmental Factor	Potential Impact / Opportunity	Recommended Mitigation / Further Assessment	Potential Approvals
Waterway barrier works	Impacts to fish passage	Where works within mapped waterways for fish passage, including to existing crossings, are undertaken in accordance with the DAF *Accepted development requirements for operational work that is constructing or raising waterway barrier works* (October 2019), the works will comprise accepted development and will not require approval under the *Planning Act 2016*.	Operational works development approval - for waterway barrier works that are unable to comply with the DAF accepted development requirements.
Presence of soils at risk of erosion	Potential for erosion	The erosion risk rating for the project is expected to be **low**. The ESCP must be prepared by a Certified Professional in Erosion and Sediment Control (CPESC) or Registered Professional Engineer of Queensland (RPEQ). Works are to be undertaken during the dry period (April – November).	None identified
Land potentially on the EMR	Contaminated soils	TMR to confirm whether the rail corridor adjacent to Helen Street is on the Environmental Management Register (EMR).	Potential disposal permit.

Environmental Factor	Potential Impact / Opportunity	Recommended Mitigation / Further Assessment	Potential Approvals
Flooding	Potential for flooding through areas of the works site	Where possible, works are to be undertaken during the dry period (April – November) in flood prone areas. Temporary construction storage/laydown areas should be located outside of mapped floodways.	None identified
Fauna	Koala	Minimisation of clearing within the eastern extent of the works area works near Jaycee Park due to previous records of koalas within the general area. Mapping of non-juvenile koala habitat trees may assist in design development to minimise impacts on koala trees.	None identified
Flora	Potential for protected plants	Protected plants survey progressed in the eastern extent of the works near Jaycee Park once the extent of disturbance Is known.	Potential clearing permit for protected plants.
Prohibited or restricted invasive plants	Spread of pest species	The works are required to proceed with consideration of the general biosecurity obligation under section 23 of the *Biosecurity Act 2014* to take all reasonable and practical measures to prevent or minimise the biosecurity risk.	None identified
Heritage	Local heritage places are located in proximity to the alignment.	Where the alignment options are in proximity to structures over lots associated with Scenic Rim Regional Council offices, Beaudesert Hotel and Beaudesert Show Society buildings and structures, vibration impacts shall be minimised. Assessment for potential risks to Aboriginal cultural heritage within the eastern extent of the works area will be required once the extent of earthworks has been determined.	None identified
Noise, air quality and vibration	Many sensitive receivers adjoin the alignment.	Noise, vibration and air quality management measures are required to be included in the EMP(C) for construction phase impacts.	None identified
Public amenity	Constrained property access	Impacts to property and side street accesses should be avoided. Properties should be notified in the event access will be impacted during works.	None identified

1 Introduction

1.1 Environmental Scoping Report purpose

The purpose of the Environmental Scoping Report (ESR) is to make an early assessment of potential environmental impacts and opportunities associated with a proposed project. The intended outcome of the ESR is to determine an overall environmental risk rating for a project and identify whether further environmental assessments are warranted as part of the pre-construction process. For low environmental risk projects, the scoping report will provide the recommendations for any mitigation measures applicable to the project.

The overall environmental risk rating for the project is based on:

- existing environmental values,
- the scope of works and potential impacts from the works, and
- legislative triggers likely associated with the works.

Further details of the risk rating process and classification is provided in the Environmental Processes Manual.

1.2 Project Purpose and Status

The project seeks to establish a fit-for-purpose, safe, functional and continuous cycle path between Beaudesert State High School, Bromelton Street and Brooklands Drive where it intersects with Beaudesert Nerang Road.

The project has been driven by the following factors:

- Beaudesert Nerang Road and Mount Lindsay Highway have been identified as a Principal Cycle Network – Route Priority A (for delivery in the next 10 years) in TMR's Principal Cycle Network Plan – SEQ.
- Existing PCN cycling routes are not continuous, lack signage and sections have no facilities.
- Traffic surveys indicate low cyclist count.
- There are high percentages of heavy vehicles.
- The need to improve safety for cyclists.
- The desire to provide a continuous PCN facility.

An options analysis is being progressed and an associated business case is currently being prepared to further refine the preferred option, and to inform TMR of the likely costs associated with the project.

1.3 Project Location

Beaudesert is located approximately 70 km south of the Brisbane CBD within the Scenic Rim Regional Council local government area (refer to Figure 1).

The project follows the current Principal Cycle Network along sections of Mount Lindsay Highway, Brisbane Street, Helen Street, crossing Telemon Street and through Jubilee Park, before extending up Albert Street and continuing along the Beaudesert Nerang Road (refer Figure 2).

Generally, the project extents include:

Northern limit being Beaudesert State High School on Mount Lindsay Highway (25A)

Western limit being Bromelton Street on Beaudesert Nerang Road (25B).

Eastern limit to the first of the Booklands Drives on Beaudesert Nerang Road (202).

The project length is approximately 4.8km.

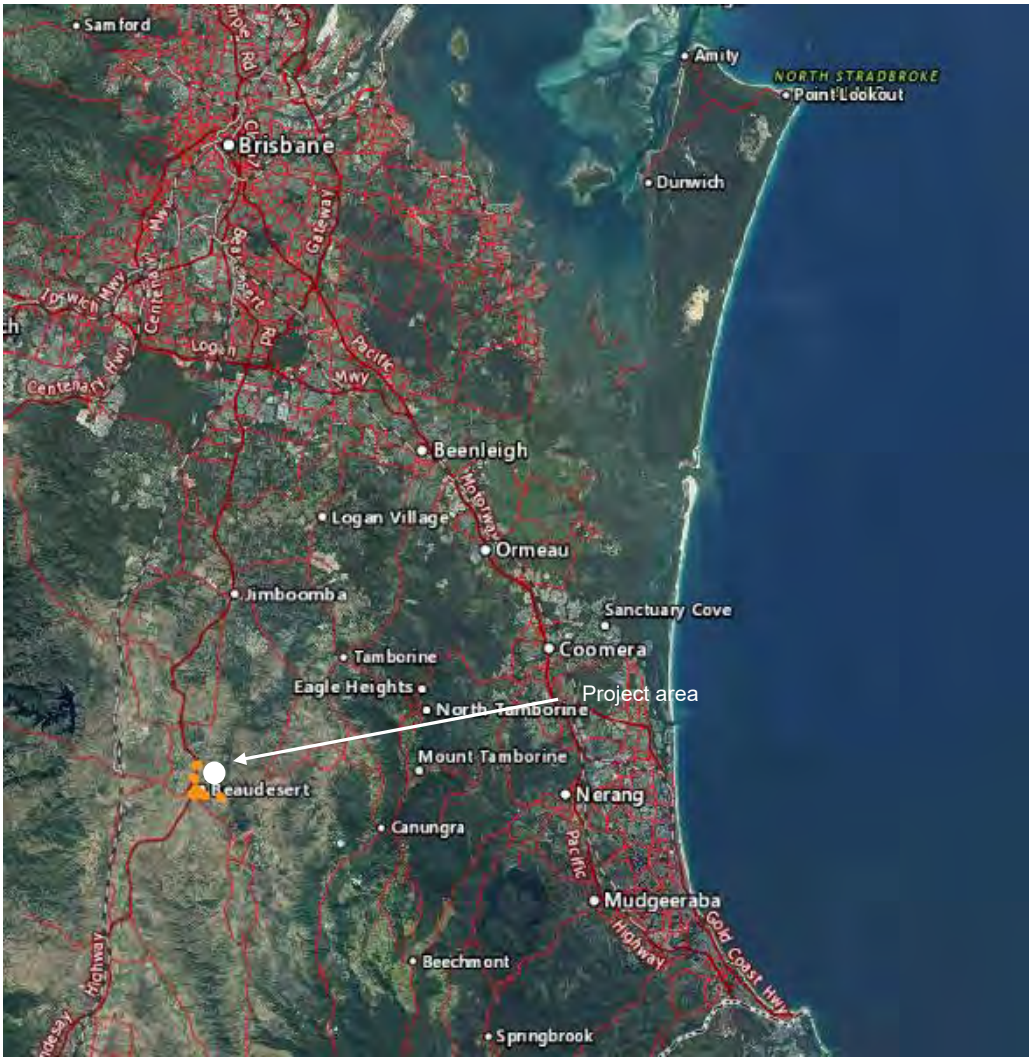

Figure 1 Location of project area
[Queensland Globe image]

Figure 2 Locality plan and major road network in proximity to the project area
[Queensland Globe image]

1.4 Project Scope

The project objectives include:

- Provision of a continuous PCN facility through Beaudesert, connecting Beaudesert Nerang Road and Mount Lindsay Highway.
- Provide fit-for-purpose cycling infrastructure that supports riders of all ages and abilities.
- Provide a facility that addresses the following strategic objectives:
    - Connected
    - Direct
    - Coherent/legible
    - Safe
    - Practical

- Accessible
- Economical
- Stageable
- Receives positive public reception.

Concept layout plans have been provided as Appendix A of this report.

1.5 Scoping Assessment Purpose and Methodology

The scoping environmental assessment was completed between October 2022 and June 2023. The scoping environmental assessment involved a desktop environmental assessment and site observations.

The following searches of relevant mapping products, databases and registers maintained by local government, State and Commonwealth agencies were undertaken:

- The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Department of Agriculture, Water and the Environment's (DAWE) Protected Matters Search Tool
- The Department of Natural Resources, Mines and Energy (DNRME) Regulated Vegetation Management Supporting Map
- The Department of Environment and Science (DES) WildNet database
- DES Protected Plants Flora Survey Trigger Area mapping
- The Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP) datab search
- DES Referable Wetlands mapping
- The Atlas of Australian Soils mapping
- Matters of State Environmental Significance (MSES) mapping
- Queensland Globe mapping
- Mapping layers in the DILGP Development Assessment Mapping System (DAMS mapping).

Copies of desktop search results are included in this report with select search outputs included in Appendix B of this report.

1.6 Risk Assessment Methodology

Risk assessment and ratings are to be conducted in accordance with TMR's Risk Assessment and Ratings Matrix published on TMR's Risk Management Tools and Techniques intranet site.

The identification and assessment of likely impacts of the project have been discussed for each environmental factor. Recommendations to mitigate and manage these impacts are to be made within the Environmental Management Plan (Construction). The significance of the residual impact of the project, taking into consideration the full implementation of these recommendations, is also determined (based on the TMR Risk Assessment and Ratings Matrix). Determination of the need for mitigation measures is determined in consideration of the *Guidance Note: Environment and Heritage Risk Assessment and Ratings for Projects*.

2 Scoping Environmental Assessment

WATER
Factors Identification - *Factors present, or potentially present, within/near to the project footprint*
Waterways (*Fisheries Act 1994*) The Department of Agriculture and Fisheries (DAF) has categorised waterways in Queensland based on the risk of adverse impacts on fish movement likely to occur as a result of waterway barrier works. Waterways are graded as green (low impact), amber (moderate impact), red (high impact) and major risk waterways by grey (tidal) or purple (non-tidal). Three DAF waterways are mapped as intersecting the project alignment (Figure 3): • Amber waterway – Fishers Gully (Spring Creek tributary), Brisbane Street • Purple waterway – Spring Creek, Telemon Street • Amber waterway – Spring Creek tributary, Beaudesert Nerang Road. Reference to the proposed design indicates that the cycleway will predominantly utilise the existing roadway crossings over the waterways. Extension to the crossing of the Spring Creek tributary on Beaudesert Nerang Road will be required. This is a highly modified, ephemeral waterway. Opportunity for fish passage would be limited to high volume rainfall events and flood flows.

WATER

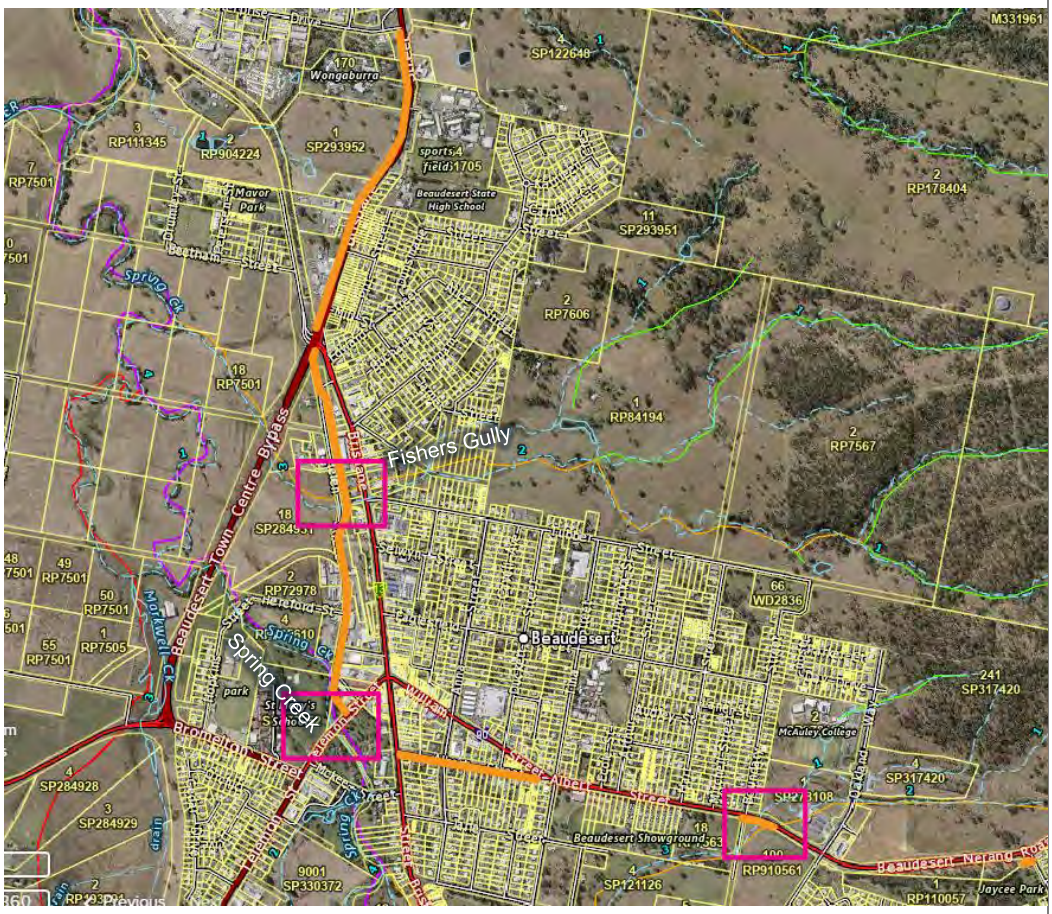

Figure 3. DAF waterways
[DAMS image]

Watercourses (*Water Act 2000*)

The watercourse identification map shows that Spring Creek is a watercourse managed under the *Water Act 2000*, which is environmentally significant for water resources. The tributaries identified above are mapped under the Act as drainage features. One overland flow path is also mapped as a drainage feature and intersects the alignment at the eastern end. Refer to Figure 4.

WATER

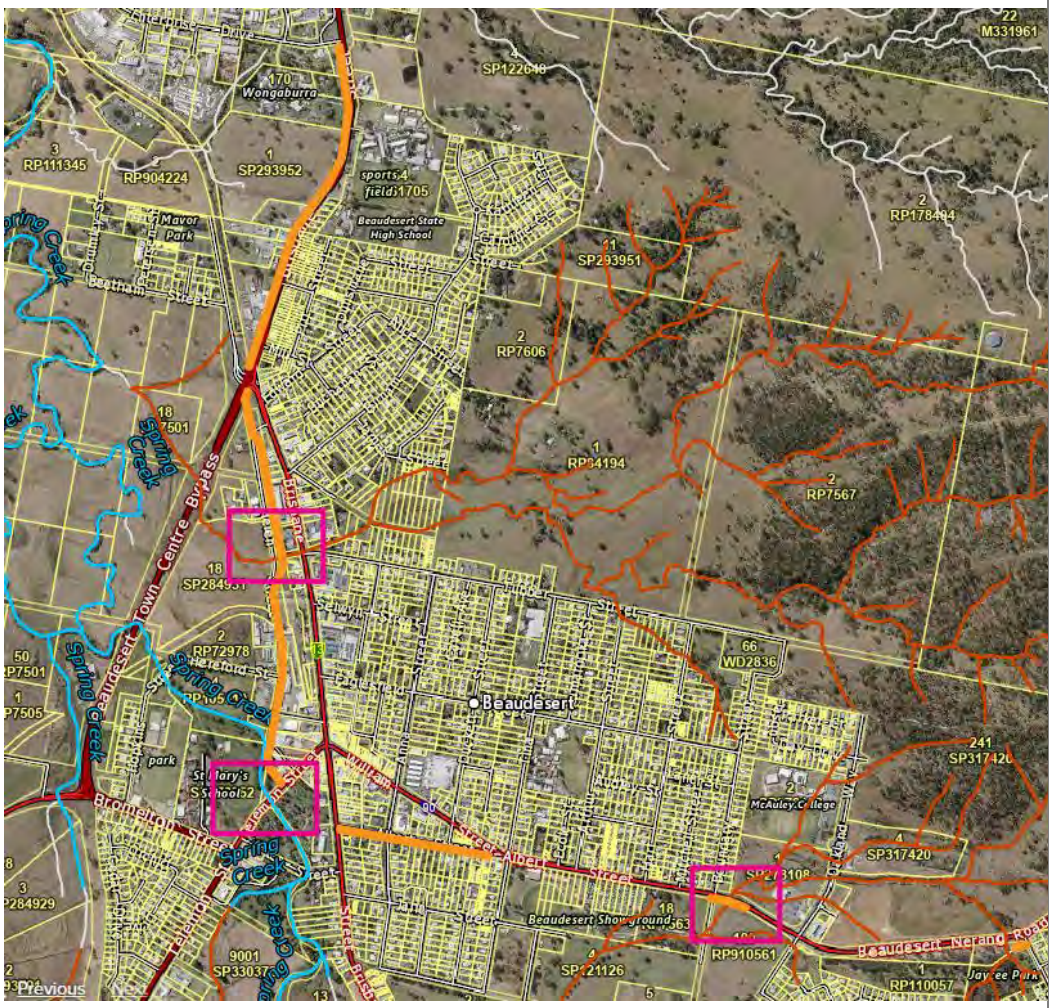

Figure 4. Water Act 2000 watercourses and drainage features
[Queensland Globe image]

Flooding

the Scenic Rim Planning Scheme 2020 maps a flood hazard area over the project alignment in the areas of Spring Creek and the tributaries discussed above (Figure 5, alignment boundaries indicated in orange). However, the project area is immediately above the 2017 floodline for the Logan and Albert Rivers (Figure 6). Probable maximum flood inundation with or without failure of Maroon Dam has been modelled as reaching below the 2017 floodline (Figure 7).

WATER

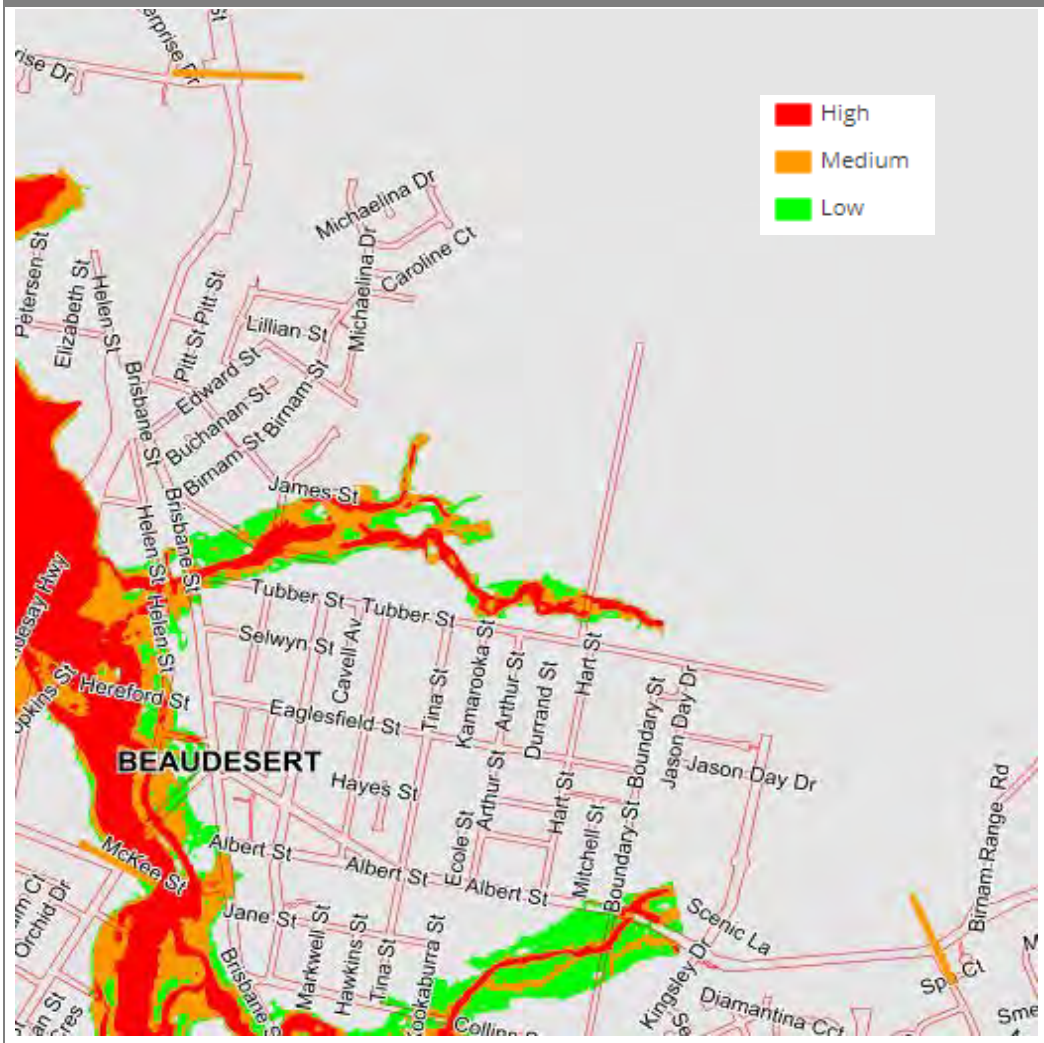

Figure 5. Flood hazard category areas
[Scenic Rim Planning Scheme 2020 image]

WATER

Figure 6. 2017 L ogan and Albert Rivers floodline
[Queensland Globe image]

Wetlands

The project area does not contain, and is not adjoined by any wetland protection area, Ramsar wetland or nationally important wetlands. The Moreton Bay Ramsar wetland is approximately 35 km from project area.

Fish Habitat Areas

The project area is not located within a fish habitat area.

Coastal Management

The project area is not located within a coastal management district.

Groundwater

Groundwater resources were not assessed for this project.

WATER

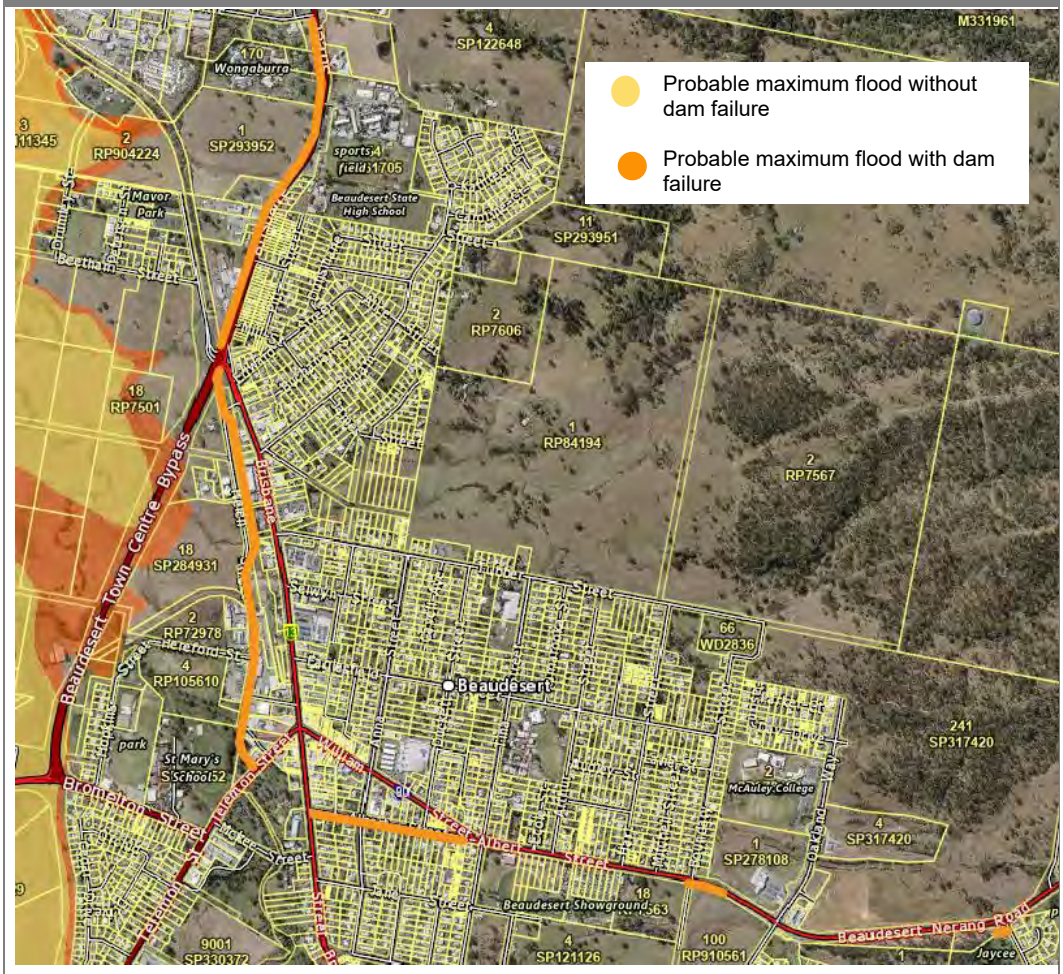

Figure 7. Probable maximum flood
[Queensland Globe image]

WATER	
Impacts, Opportunities and Mitigation Measures	
The majority of the alignment will make use of the existing roadway, however extension of the existing crossing over a mapped waterway for fish passage is proposed immediately east of Boundary Street on the southern side of Beaudesert Nerang Road (refer to General Arrangement drawing, sheet 6). During the design development phase, consideration should be given to maximising opportunities for fish passage for the waterway crossing in accordance with DAF's *Accepted development requirements for operational work that is constructing or raising waterway barrier works*. All reasonable precautions are to be taken by the construction entity to ensure that construction works do not adversely impact on the quality of water leaving the works area. Management of potential flows into and across the project area must be considered during design, and control measures are to be incorporated into an erosion and sediment control plan (ESCP). The grade of the land and the associated level of additional ground disturbance should be taken into account when designing erosion and sediment control provisions. Appropriate erosion and sediment control measures will be required to be employed during the construction phase of works to reduce the risk of sedimentation and contamination of drainage lines and nearby waterways. Consideration may be given to the inclusion of landscaping treatments to assist in the stabilisation of disturbed or exposed areas following construction activities. Vegetative cover should be re-established as soon as possible within the road verge post-construction. Negative impacts to drainage features can be minimised through the delineation of: • Defined works extent and no-go zones with respect to vegetation to be retained • Potential locations for erosion and sediment control devices • Preferred location for stockpiling and layover areas away from drainage lines. Risks associated with contamination from fuel or other chemicals into waterways are to be appropriately managed by ensuring on-site storage of chemicals and fuels is in accordance with AS1940 and appropriate setbacks from drainage features are maintained. Where possible, works should be scheduled to occur during the drier months (May – October) to avoid increased management requirements associated with heavy rain and flood risk.	
Legislative Requirements	
Standard legislative requirements	*Environmental Protection Act 1994* and *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* – including general obligations to prevent pollution of waterways
Approval Requirements	Nil
Contract Water Quality Risk Category	
☒ Low	• Contracts with minor earthworks, and • ground surface disturbance not greater than 1ha, and • do not undertake an activity that is defined in high risk, or

WATER	
	• are located 250m or greater upslope from: – a waterway (with defined bed and banks and water present) or – a dam or – waterbody. (That is, the site boundary is within the catchment of a waterway, dam, waterbody but is separated by more than 250m. NOTE: Site could be closer but not be within the catchment of a waterway, dam or waterbody.)
☐ Medium	• Contracts that are neither low nor high risk.
☐ High	• Works within the tidal limit, or • Works within a watercourse with water present, or • Works within a wetland or wetland protection area, or • Works that disturb ASS, or • Works that discharge from a tertiary water quality treatment device such as high efficiency sediment basin, or • Works that disturb a known contaminated site, or • Works immediately upstream of a stock and domestic water supply (potentially), or • Works will affect the habitat of fauna or flora sensitive to changes in water quality within the water shed of the project (e.g. special frogs and fish), • Works that have a permit that includes conditions directly related to water quality.
☐ Uncertain, further assessment required	

SOIL / LAND MANAGEMENT
Factors Identification - Factors present, or potentially present, within / near to the project footprint
Topography and Land Management The elevation of the project area ranges between 50 – 100 m AHD and sits above the flood plain associated with Logan River over 1 km to the west of the site. The landscape surrounding Beaudesert supports urban development on higher country at similar elevations to the township (refer Figure 8).

SOIL / LAND MANAGEMENT

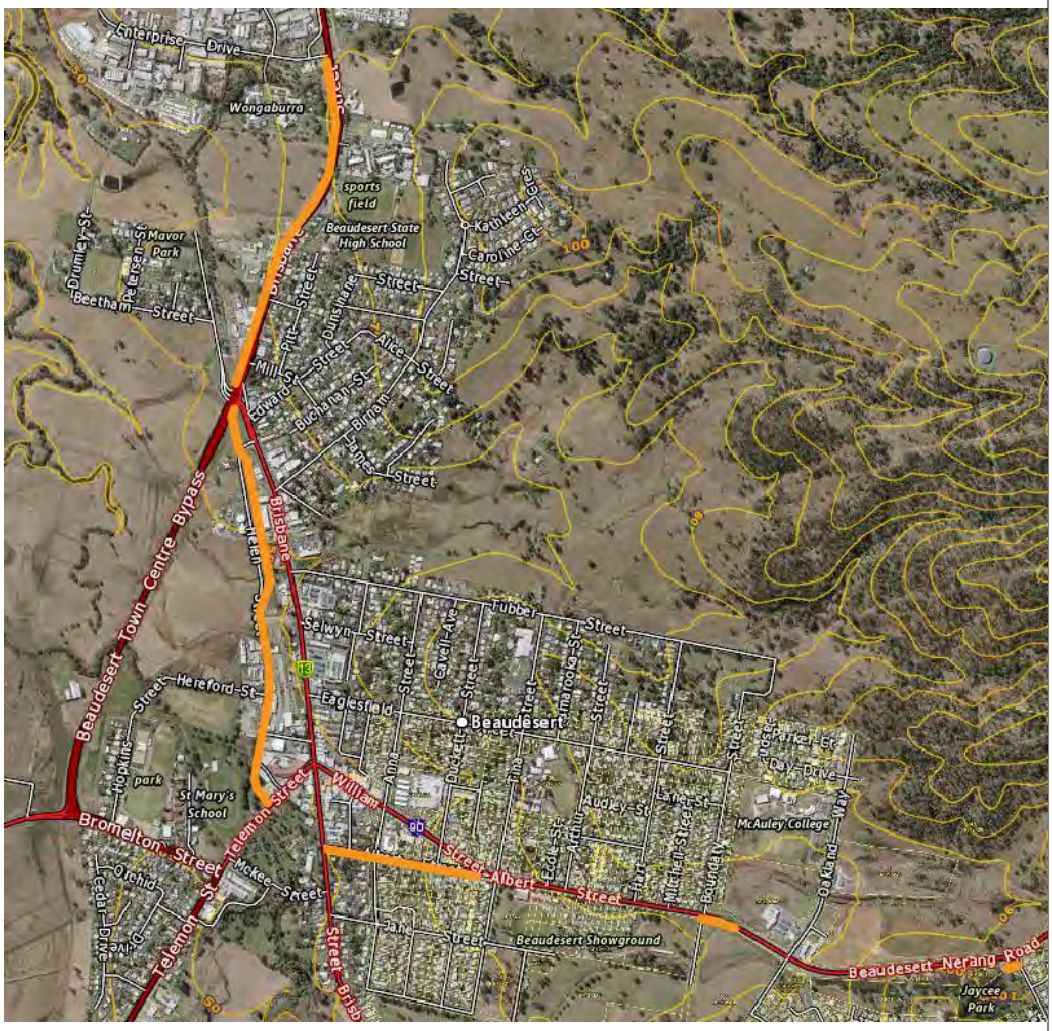

Figure 8. Contours and surrounding landscape features
[Queensland Globe image]

Geology

Queensland Globe 1:100,000 surface geology mapping indicates that the project alignment straddles several geological types (Figure 9):

- Beaudesert beds/3 (Te/3) – Claystone, sandstone, conglomerate, basalt, dolerite sills, minor carbonaceous shale
- Beaudesert beds/1 (Td>Te/1) – Duricrust as ferricrete, silcrete and indurated palaeosols at the top of a deep weathering profile
- Walloon Coal Measures (Jw) – Shale, siltstone, sandstone, coal seams

SOIL / LAND MANAGEMENT

- Alluvium (Qa) – Flood-plain alluvium as clay, silt, sand and gravel
- Ts-SEQ (Ts) – Sedimentary quartzose to sublabile sandstone, claystone, conglomerate, minor olivine basalt.

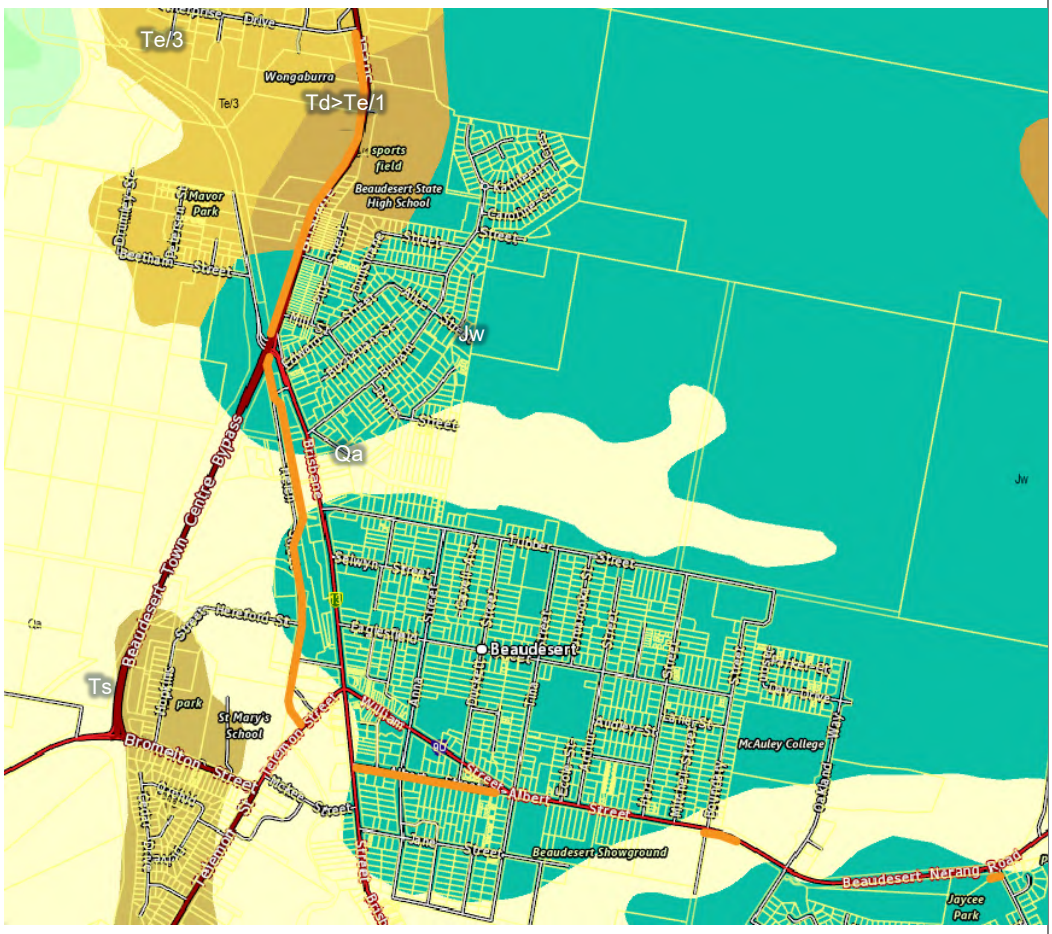

Figure 9. Surface geology
[Queensland Globe image]

Soils

The 1:2,000,000 Atlas of Australian soils mapping and relevant conversion tables shows several soil types in the project area (refer Figure 10):

- MM9 – Brown and red self-mulching cracking clays on terraced valley plains, dominated by Ug5.34 (vertosol).
- Me8 – Brown smooth-ped earths on a low hilly area of tertiary sediments and igneous rocks, dominated by Gn3.22 (ferrosol)

SOIL / LAND MANAGEMENT

- Rh9 – Friable brown duplex soils on steep hilly to mountainous lands, dominated by Db3.12 (chromosol)
- Kd6 – Black self-mulching cracking clays on valley plains, dominated by Ug5.15 (vertosol).

Vertosols are clays which are dominated by strong shrink and swell characteristics during dry and wet periods respectively. They can have a very fine crust and water can pool on the surface for long periods once wet. Ferrosols are also usually high in clay, however may be water repellent when dry. This can contribute to surface erosion once it rains after a dry spell.

Chromosols have a strong texture contrast between surface and sub layers. Chromosol surface soils may be weak and prone to dust if overworked. Subsoils tend to hold water and can be high in salt. These soils are susceptible to rill and sheet erosion.

Figure 10. Atlas of Australian Soils mapping
[Queensland Globe image]

SOIL / LAND MANAGEMENT

Acid Sulfate Soils

There is a lower risk of acid sulfate soils at elevations above 20 m AHD. No acid sulfate soils are mapped over the project area.

Contaminated Land

Notifiable activities are activities that have the potential to cause land contamination, such as service stations, cattle dips, tanneries, wood treatment sites, landfills, fuel storage and refuse tips. Service stations and a timber mill adjoin the alignment but no soil excavation associated with the project is proposed in these areas.

A search of the Contaminated Land Register (CLR) and Environmental Management Register (EMR) was not undertaken, however there is potential for Lot 2 on RP198713 located between Helen Street and Brisbane Road as being on the EMR as this site has previously operated as a service station. The works do not extend into this allotment. Consideration should also be given as to whether the former rail corridor adjacent to Helen Street is on the EMR for being used as a railyard which is a notifiable activity under Schedule 3 of the *Environmental Protection Act 1994*.

Rainfall

Figure 11 illustrates average monthly rainfall for Beaudesert Drumley Street weather station (site number 040983, approximately 600m from the project area). The period December to March generally receives the highest rainfall.

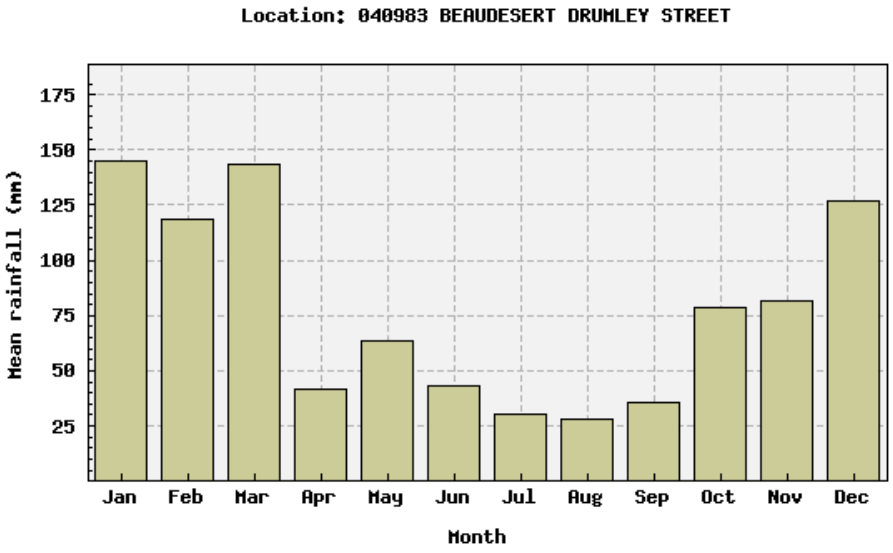

Figure 11. Mean rainfall data
[Bureau of Meteorology image]

SOIL / LAND MANAGEMENT
Impacts, Opportunities and Mitigation Measures

Contaminated Land

Where the further investigation confirms the risk of contaminated land occurring within the development footprint is not high (particularly the former rail corridor), the works may be progressed in accordance with MRTS 51.1 Environmental Management Annexure.

The construction entity is required to abide by:

- The general environmental duty under the *Environmental Protection Act 1994* to not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm
- The duty to notify under the *Environmental Protection Act 1994*, to notify their employer or potentially the administering authority of an event related to contaminated land that has occurred at the site during works.

Erosion and Sediment Control

Contract documentation is to require the contractor to prepare an ESCP as part of the works to minimise erosion and subsequent sediment movement offsite. The ESCP is to be prepared in accordance with MRTS52. Reference to the TMR's Table 1.3 of TMR's MRTS52 Erosion and Sediment Control Technical Specifications suggests that a project is considered to have a **low** risk of erosion given the area of exposed surface associated with the proposed works is unlikely to be more than 2,500 m^2 at any one time. The project duration is not likely to be more than 6 months and no key areas of environmental significance are at high risk of being impacted.

Standard erosion and sediment control measures are to be implemented throughout the construction phase in accordance with the *International Erosion and Sediment Control Association Guidelines 2008*. The ESCP is to be prepared by a Registered Professional Engineer of Queensland (RPEQ) or Certified Professional in Erosion and Sediment Control (CPESC) and is required to include site specific erosion and sediment control measures to be implemented during the construction phase. All erosion and sediment control devices are to be installed prior to works commencing and are to be maintained for the duration of the works.

All reasonable precautions shall be taken to prevent soil erosion from occurring, both within the project area and on adjoining lands. These precautions will include:

- Minimisation of site disturbance and the avoidance of unnecessary exposure of soil
- Activities that cause ground disturbances shall be suspended during adverse weather conditions
- Bunding and installing sediment traps around any stockpiles
- Maintaining a buffer around the disturbed areas and directing clean stormwater away from impacted areas of the site
- Ensuring ponding is minimised around and through the construction site
- Ensuring runoff from site is captured and filtered using erosion and sediment control measures.

The construction entity's EMP(C) should include:

SOIL / LAND MANAGEMENT	
• Daily checks of all erosion and sediment control measures that are in place to ensure that the appropriate control measures are performing as intended • Checking of diversion drains for slumps and damage from machinery • Rapid rehabilitation of any areas that are experiencing erosion and extra measures put in place to control the erosion • Removal and appropriate disposal of excess build-up of sediment at control structures • Investigation of any excessive sediment run off and appropriate measures taken to prevent or control further erosion • Maintenance of erosion and sediment control devices until such time as hard surfaces have been put in place, or suitable vegetation/site stabilisation measures have been successfully established. It is recommended that works are scheduled for drier months, being from May to October (where possible) to avoid any localised flooding which may occur during periods of heavy rain. **Soil Management** If local topsoil is to be reused for rehabilitation, it is to be stripped, stockpiled and treated appropriately prior to respreading. Topsoil is to be replaced and/or rehabilitated as soon as practically possible following the completion of construction works. Temporary stockpiles are to be located more than 10m from concentrated water flow, outside the drip line of trees to be retained and in accordance with preferred locations identified on the detailed design plans. Stockpiles are to be surrounded with appropriate erosion and sediment control devices.	
Legislative Requirements	
Standard legislative requirements	*Environmental Protection Act 1994* *Environmental Protection Regulation 2019* *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* *National Environmental Protection (Assessment of Site Contamination) Measure 1999, (amendment 1, 2013)*
Approval Requirements	None identified, although where contaminated material is identified within specific allotments, a disposal permit will be required for contaminated material to be taken offsite.
Contract Erosion Risk Category	
☒ Low	• <2500m² disturbed surface area open at any one time OR < 10t/ha/year soil loss predicted (using RUSLE), and • Controls installed and maintained in accordance with prescriptive standard (e.g. Standard Drawings).
☐ Medium	• All projects not meeting the characteristics above or below *More than 2,500 m^2 of disturbed surface area is anticipated to occur.*

SOIL / LAND MANAGEMENT	
☐ High	• Projects with two or more of the following characteristics: • Project duration >6 months • Project working within or discharging to sensitive environment such as marine parks, wetlands or waterway • Soils with high to very high erodibility rating (i.e. dispersive soils) • Projects which have >1 hectare of land exposed during months with monthly rainfall erosivity (R factor) is greater than 285 • Topography factor (LS) is greater than 2 or modal slopes on project are steeper than 15% (6.6 degrees) – to be confirmed at design phase.
☐ Uncertain, further assessment required	

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

Factors Identification - *Factors present, or potentially present, within / near to the project footprint*

Fauna

A search of the EPBC Act protected matters search tool identified 30 threatened fauna species with potential to occur within 2km of the project area, based on bio-climatic modelling. Of these species, the following were listed as known to occur under the search:

- *Hirundapus caudacutus* (white-throated needletail) – Listed as vulnerable under the EPBC Act and the *Nature Conservation Act 1992* (NC Act)
- *Maccullochella mariensis* (Mary River cod) – Listed as endangered under the EPBC Act and the NC Act
- *Phascolarctos cinereus* (koala) – Listed as endangered under the EPBC Act and the NC Act
- *Pteropus poliocephalus* (grey-headed flying-fox) – Listed as vulnerable under the EPBC Act and least concern under the NC Act

None of the above species were identified as previously recorded in the WildNet database within the same search area. However, the following threatened species have been recorded:

- *Botaurus poiciloptilus* (Australasian bittern) – Listed as endangered under the EPBC Act and the NC Act
- *Petauroides armillatus* (central greater glider) – Listed as endangered under the EPBC Act and the NC Act
- *Psephotus pulcherrimus* (paradise parrot) – Listed as extinct and presumed extinct in the wild under the EPBC Act and the NC Act respectively
- *Pseudomugil mellis* (honey blue eye) – Listed as vulnerable under the EPBC Act and the NC Act.

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

In addition, 4 species listed as 'special least concern' under the NC Act have also been recorded in the search radius.

The vast majority of the works are proposed within areas that have been previously cleared of vegetation. Vegetation within the development footprint was limited to planted vegetation in Jubilee Park with additional trees present to the south of Beaudesert Nerang Road within the eastern extent of the alignment. Given the lack of significant habitat, lack of connectivity to any substantial areas of remnant vegetation and proximity to the existing road network and urban development, no conservation significant fauna species are anticipated to frequent the vast majority of the project area.

Mapped essential habitat for koala is located in regulated vegetation beside the alignment in the south eastern section (refer to Figure 12) and this is also shown as core koala habitat under the State mapping (refer Figure 13). A record of a koala is listed under the State government's Biomaps webpage to the south of Jaycee Park in the far eastern extent of the works area, and two other records are shown within this general area indicating koalas have been recorded as present as recent as 2014 (refer Figure 14).

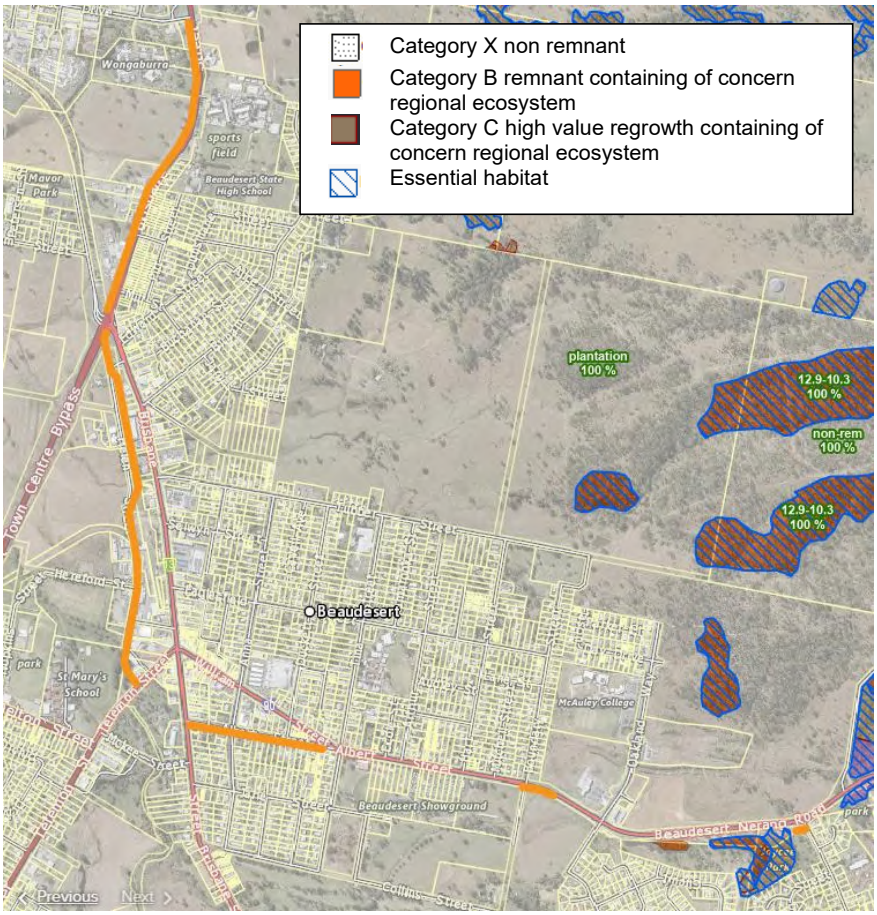

Figure 12. Regulated vegetation
[Qld Globe]

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

Figure 13. Core koala habitat mapping
[Qld Globe]

Flora

The EPBC Act protected matters search tool identified several threatened ecological communities which may occur or are likely to occur within 2km of the alignment.

State mapping shows that the majority of the alignment is mapped as category X vegetation (non-remnant). Remnant vegetation and high value regrowth (categories B and C respectively) are mapped beside the south eastern portion of the project alignment (Figure 12). Notwithstanding, the cycleway is existing within this portion of the alignment and will not require the removal of substantial vegetation adjacent to the existing pathway. No approvals are required for clearing of remnant vegetation or regulated regrowth as the project involves State supported transport infrastructure.

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

Figure 14. Koala sightings (blue dots)
[Qld Globe]

A high risk flora trigger area under the NC Act is also mapped in this section (Figure 15). None of the 11 plant species identified in the EPBC Act protected matters search were listed as known to occur. But the WildNet database search indicated that 22 national and/or State listed threatened or near threatened plant species have previously been recorded with a 2km radius of the project area. An additional 88 special least concern plant species have been previously recorded in the same search area.

The existing pathway meanders in and out of the mapped high risk areas for protected plants. Where clearing of native vegetation within an area mapped as high risk for protected plants occurs, a protected plants survey will be required to be completed for the area.

The risk of encountering protected plants along the alignment is low given the extent of modification that has occurred and the absence of any substantial works proposed in the eastern end of the project due to the presence of an existing pathway at this location.

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

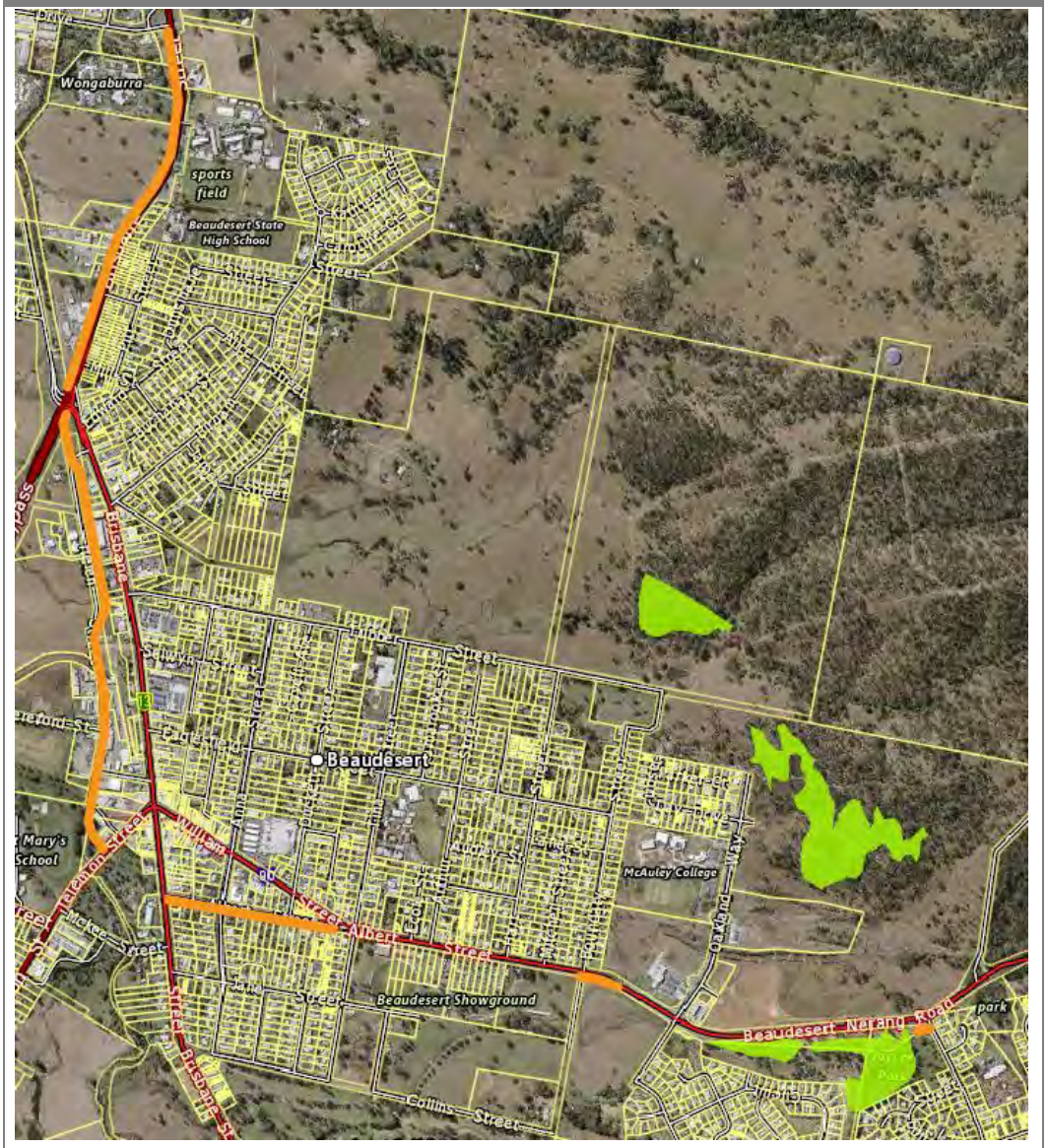

Figure 15. Protected plants trigger area
[Qld Globe]

Biosecurity

The project area is located within several mapped biosecurity zones: southern banana zone, grape phylloxera risk zone, papaya ringspot biosecurity zone 1 and sugar cane biosecurity zone 5. The following restricted invasive plants were identified in the Wildnet search report as previously recorded within 2km of the project area: *Senecio madagascariensis* (fireweed), *Cardiospermum grandiflorum* (balloon vine) and *Lantana camara* (lantana).

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)

Bushfire Hazard

Medium to high bushfire hazard is mapped in the south east section of the project area, predominantly associated with the mapped remnant vegetation (Figure 16).

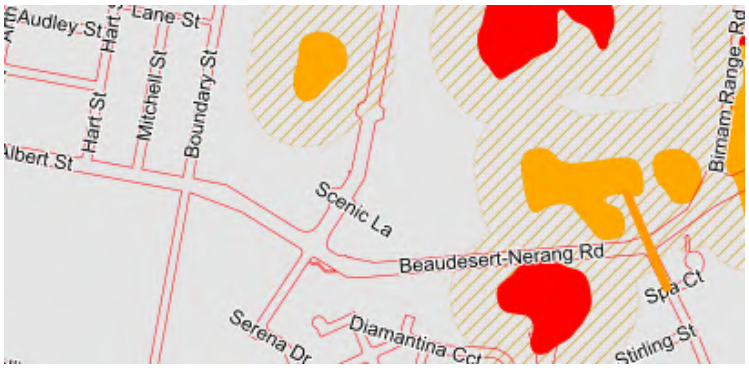

Figure 16. Local bushfire hazard

[Scenic Rim Planning Scheme interactive mapping image]

Impacts, Opportunities and Mitigation Measures

Fauna

Where clearing of mature native trees is required, a pre-clearance survey by a suitably qualified ecologist or a fauna spotter catcher is required. The construction entity is to comply with *Species management program for tampering with animal breeding places (low risk of impacts)* where risk of impacting fauna breeding places exists. A fauna spotter is to be present for clearing works.

Any clearing of mature koala habitat trees is required to be recorded for entering into TMR's Compliance Register which is submitted to DES. Non-juvenile koala habitat trees should be mapped as part of the design development phase to assist in minimising impacts to koala trees through the alignment configuration.

Flora

The design should seek to avoid the protected plants high risk and remnant vegetation areas in the south east section of the alignment. In the event clearing of vegetation within the mapped protected plants trigger area is required, a protected plants survey in accordance with *Flora Survey Guidelines – Protected Plants* will be required.

To minimise impacts to native vegetation areas during construction, an exclusion zone should be established around regulated areas prior to construction and maintenance of these zones should be included in the contractor's EMP(C).

Biosecurity

Weed management measures are to be incorporated into the EMP(C). Obligations to comply with the requirements of the *Biosecurity Act 2014* for prohibited and restricted invasive plants and animals as well as nominated environmental weeds must be met during the construction phase.

BIODIVERSITY (Fauna, flora, ecosystems, wetlands, habitat and biosecurity matters)	
Where a prohibited or restricted invasive plant or weed is discovered during construction works, it is required to be managed in accordance with the legislation. This may be best achieved by applying treatments in accordance with the DAF pest fact sheets. Prohibited and restricted invasive plants are to be disposed of appropriately and are not be used on site as mulch during revegetation/rehabilitation. Prohibited and restricted invasive plants are to be managed and controlled without impacting on native vegetation. The construction entity is required to take all reasonable and practical steps to prevent or minimise biosecurity risk and all vehicles and persons entering or leaving the site shall be free of weed material. Machinery, vehicles, and equipment arriving from contaminated or unknown sites shall be cleaned down prior to entering or leaving in accordance with the DAF Queensland Weed Spread Prevention Strategy. **Bushfire Hazard** The EMP(C) should include measures to minimise risks during times of greater than moderate fire danger, such as restricting hot works.	
Legislation – *identify any applicable permits, codes or other regulatory requirements*	
Applicable legislation	*Nature Conservation Act 1992* *Nature Conservation (Animals) Regulation 2020* *Nature Conservation (Plants) Regulation 2020* *Environment Protection and Biodiversity Conservation Act 1999* *Vegetation Management Act 1999* *Vegetation Management Regulation 2012* *Biosecurity Act 2014* *Biosecurity Regulation 2016* *Environmental Offsets Act 2014*
Approvals Requirements	Potential clearing permit for protected plants where clearing is proposed in the far eastern extent of the works area and a conservation significant plant species is identified within 100m of the clearing extents. MRTS 51 Environmental Management

CULTURAL HERITAGE
Factors Identification - *Factors present, or potentially present, within / near to the project footprint or associated with the project*
An assessment was undertaken to determine the risk of encountering an item or place of cultural heritage significance within the project area during the proposed works (refer to Appendix C for the full Cultural Heritage Risk Assessment (CHRA)). As part of the CHRA, searches were undertaken of the Queensland Heritage Register, the Australian Heritage Database, the Australasian Underwater Cultural Heritage

CULTURAL HERITAGE

Database, the Queensland National Trust Heritage Register, the Scenic Rim Regional Council local heritage register and the DATSIP register, to determine whether items or places of heritage value have previously been recorded within the project area.

A category 5 high risk to Aboriginal cultural heritage was identified in TMR's Cultural Heritage Risk Assessment along Beaudesert Nerang Road, due to the likelihood of containing artefacts and undefined project footprint at the time. The CHRA noted that further assessment would be required, and this should be progressed as part of the design development once the extent of the alignment and nominated earthworks have been determined. The area around the waterway crossing will require earthworks. This area has undergone significant ground disturbance as a result of previous vegetation removal, channel reshaping, instream works and road upgrade. Refer to comparable 1944 and 2021 images (Plates 1 and 2).

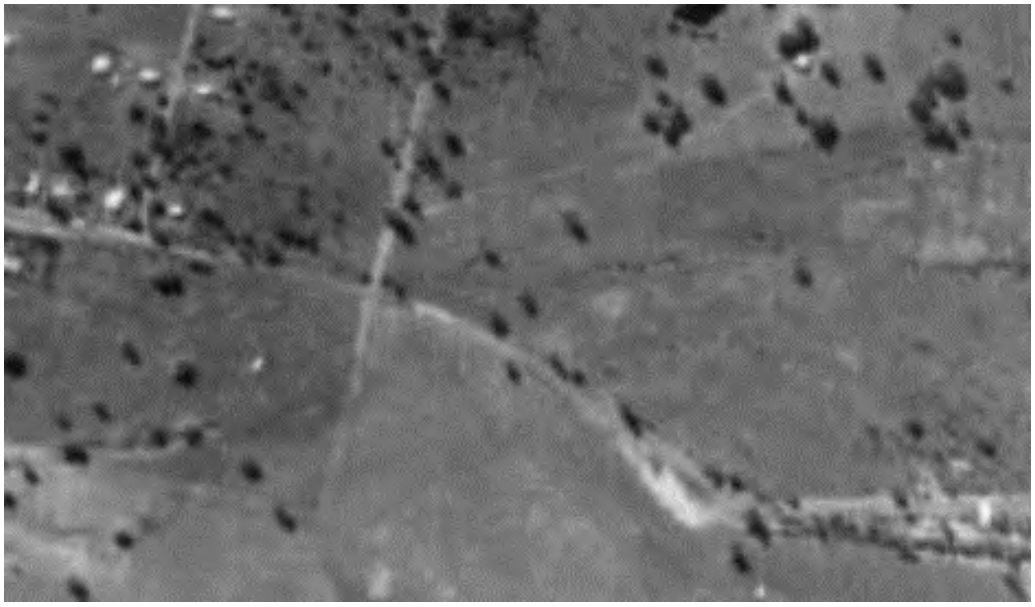

Plate 1. Aerial image 1944
[Qimagery image]

While no national or State listed heritage places adjoin the alignment, several local heritage places do, as mapped with the local planning scheme's overlay (Figure 17). The identified lots along the alignment are listed below:

- Lot 138 on WD4338 – Scenic Rim Regional Council building, 84 Brisbane Street
- Lot 77 on WD4386 – Scenic Rim Regional Council building, 82 Brisbane Street
- Lot 2 on RP817932 – Beaudesert Hotel, corner Brisbane and Short Streets
- Lots 1-8 on RP7563 – Beaudesert Show Society buildings and grounds, Albert Street
- Lot 21 on SP121123 – Beaudesert Show Society buildings and grounds, Albert Street.

It is not anticipated that encroachment into the listed allotments will be required.

CULTURAL HERITAGE

Plate 2. Aerial image 2021

[Qimagery]

CULTURAL HERITAGE

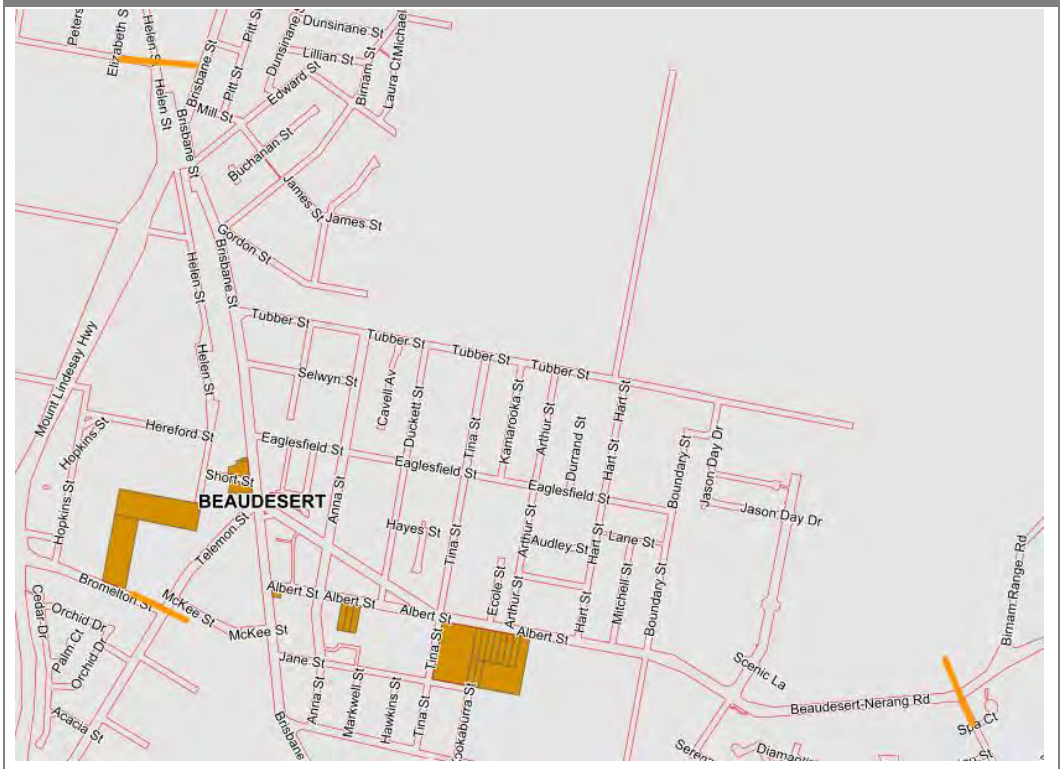

Figure 17. Local heritage places

[Scenic Rim Planning Scheme interactive mapping image]

Impacts, Opportunities and Mitigation Measures

Several historical structures are located along the alignment. Proposed works in these areas are limited to the road corridor and vibration associated with the works is anticipated to be minimal within these areas, reducing the risk that the project may adversely impact on the integrity of the structures. To manage community concerns re potential impacts, the local council should be notified of measures to mitigate impacts to local heritage places during works.

Ground disturbing activities have the potential to unearth unrecorded items of cultural heritage significance. While the majority of the alignment is located in areas that will constitute Category 3 activities, the eastern extent of the works may support places of potential Aboriginal cultural heritage, and further assessment including consultation with the local Aboriginal party is recommended.

The EMP(C) should include specifications for construction works to comply with the duty of care under the *Aboriginal Cultural Heritage Act 2003* and duty to notify should any Aboriginal items be unearthed during construction works, namely:

- Restriction of all works to the areas of previous disturbance in the road corridor

CULTURAL HERITAGE	

• Establish an unexpected finds procedure for unexpected cultural heritage finds and a discovery of human remains procedure in the unlikely event that suspected human remains are uncovered
• Inclusion of matters relating to Aboriginal cultural heritage risks and obligations in any induction for the site to ensure all personnel:
  • Understand the duty of care requirements under the *Aboriginal Cultural Heritage Act 2003*
  • Appreciate that potential exists for Aboriginal cultural heritage values to be encountered during works
• Implementation of the actions required should an item or place or suspected item or place of Aboriginal cultural heritage be observed during construction activities.	

Legislation – *identify any applicable permits, codes or other regulatory requirements*	
Applicable legislation	*Aboriginal Cultural Heritage Act 2003* *Queensland Heritage Act 1992.*
Approvals Requirements	No licence, permit or approvals required where works do not impact on matters of cultural heritage value. MRTS 51 Environmental Management

PUBLIC AMENITY / HEALTH
Factors Identification - *Factors present, or potentially present, within / near to the project footprint or associated with the project*
Noise, Air and Vibration Sensitive land uses/receptors have the potential to be impacted by construction noise and vibration. Many low density residential, commercial and industrial properties immediately adjoin the project footprint and many others are located within 100m of the boundary of the project area. Many of these properties are within a State transport noise corridor. State Planning Policy mapping indicates these properties are regularly subject to noise levels up to 73 dB(A) (Figure 18). Due to the alignment predominantly using the existing road corridor, it is anticipated that construction noise will be limited to areas of ground disturbance and be of short duration.

PUBLIC AMENITY / HEALTH

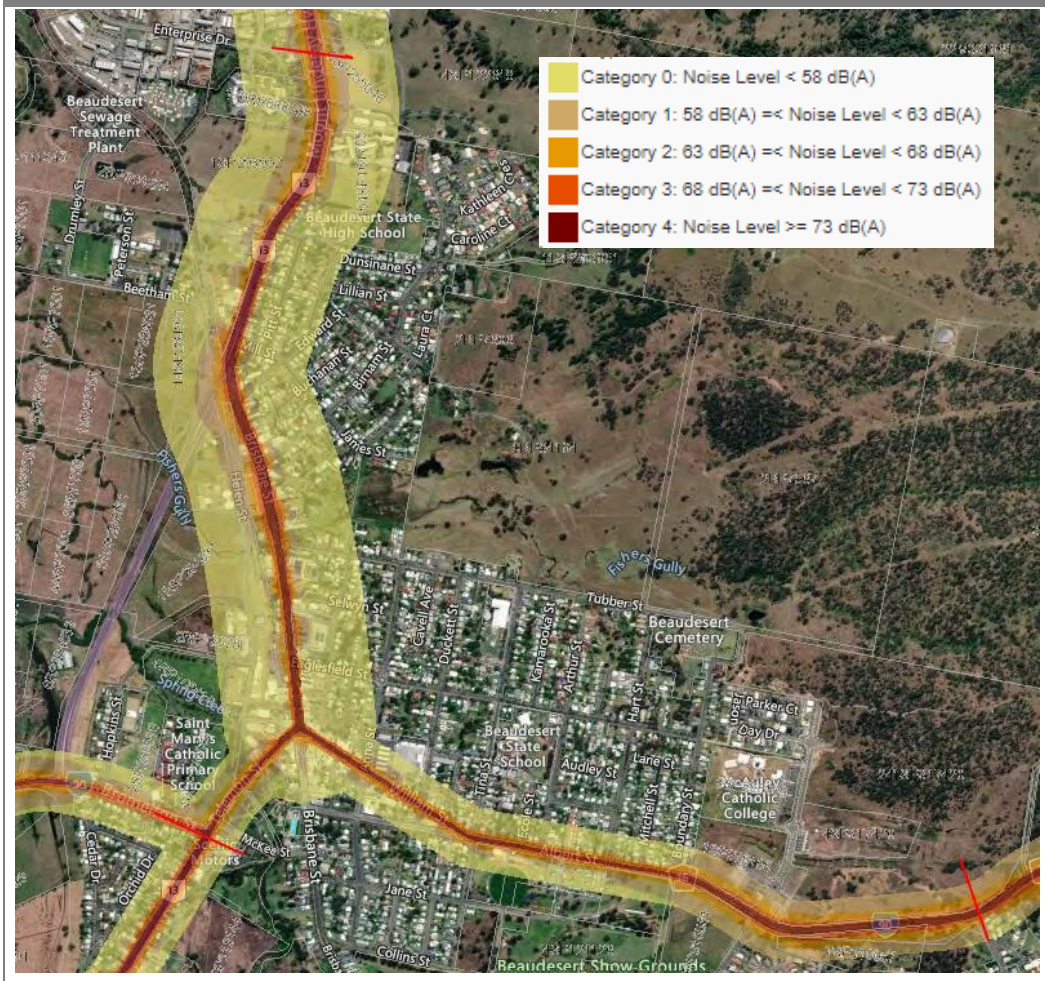

Figure 18. State controlled road transport noise corridor

[State Planning Policy Interactive Mapping System image]

Potential exists for adjoining properties to be subject to air quality, noise and vibration impacts during the construction phase of works where inadequate control measures are put in place. Consideration should be given to minimising the mobilisation of dust, as well as limiting noise pollution and ground vibration during construction. Of note, local heritage places identified in Figure 17 may be more susceptible to vibration impacts.

Public Amenity

No areas of high scenic amenity have been identified in close proximity to the project area. Private property, pedestrian and side street accesses are expected to be impacted short term during construction works.

PUBLIC AMENITY / HEALTH
Impacts, Opportunities and Mitigation Measures
Noise and Vibration Given the proximity to adjoining properties, there is potential for the proposed construction works to have noise and/or vibration impacts to adjoining residences and commercial/industrial premises where appropriate management measures are not included. The local heritage places identified above may be susceptible to vibration impacts. Reference to Table 3.2.1.1(a) of the TMR *Transport Noise Management Code of Practice* indicates that construction noise criteria have an upper limit of 65 – 75 dB(A) based on the rating background level (RBL). Given the presence of the State controlled road through the project alignment, properties in the area are anticipated to be regularly subject to noise impacts associated with vehicles on the roadway. The bikeway is unlikely to increase noise once operational. Construction works are generally expected to be completed within standard hours (i.e. Monday to Friday 7am – 6pm, excluding public holidays) and night works are not expected to be required. Construction works are anticipated to include the use of excavators, graders, compactors and rollers, trucks and other plant. No piling operations, dynamic compaction, blasting or demolition will be required. Management of impacts to adjoining properties will be through standard vibration and noise management measures during the project. Pre and post construction condition surveys will be required at sensitive receptors if vibration impacts are identified in accordance with the Code, MRTS51 and Tech Note 03. The construction entity shall at all times take reasonable and practicable management measures to mitigate noise and vibration impacts so as not to cause environmental harm and environmental nuisance in accordance with *Environmental Protection Act 1994* and environmental harm to structures, premises, services and buildings within or beyond the boundary of the project area. Local heritage buildings will require special consideration for vibration impacts. Complaints or enquiries are to be responded to by TMR project communications officers in consultation with contractor communication officers during the construction phase of works. Where complaints are received, noise and/or vibration monitoring may need to be undertaken. In such instances, noise and vibration monitoring equipment is to be deployed in proximity to the most affected properties. Any vibration monitoring would be anticipated to be operational for the duration of activities involving high impact rollers. **Air Quality** Construction works have the potential to create dust and air pollution which may impact adjoining residential and commercial/industrial properties. Where required, dust should be suppressed by applying water to bare soil. Construction works are to be restricted under extreme wind conditions and the extent of exposed ground is to be minimised. Vehicles and machinery are to be switched off during prolonged periods of inactivity. The construction entity will be required to manage complaints in response to air quality during construction. No burning of vegetation is permitted. **Public Amenity** Notifications will be required for those property access which may be impacted by works.

PUBLIC AMENITY / HEALTH	
Landscaping has been incorporated into the concept design. Landscaping will be undertaken in accordance with the Crime Prevention for Environmental Design Guidelines for Queensland.	
Legislation – *identify any applicable permits, codes or other regulatory requirements*	
Applicable legislation	*Environmental Protection Act 1994* *Environmental Protection (Noise) Policy 2019* *Environmental Protection Act (Air) Policy 2019* *Transport Noise Management Code of Practice: Volume 2 - Construction Noise and Vibration* *Tech Note 03*
Approvals Requirements	Compliance with *MRTS51 Environmental Management* Compliance with the general environmental duty under the *Environmental Protection Act 1994*
Further Assessments Required:	
☐ Road Traffic Noise Assessment Required[1] (operational road traffic noise)	
Construction Contract Noise Risk	
☒ Low	Guidelines for projects that would be low risk, professional judgement can be used where practical: • The project duration is less than 3 months, AND • The project construction activity is conducted during the daytime only (7 am to 6 pm) excluding Sundays and public holidays, AND • The project does not include piling, dynamic compaction or demolition, AND • Sensitive receivers are located greater than: – 50 m from the project area, OR – 30 m from the project area where the project progresses along an alignment with less than 1 week in the vicinity of individual sensitive receivers. The project area adjoins many properties within 30 m of the road, however all appear to be regularly subject to noise levels to the upper limits of TMR's construction noise criteria. In this regard, the construction vibration risk is considered to be low.
☐ Further assessment required – to be reviewed upon confirmation of detailed design The project area adjoins residential dwellings however also adjoins the rail line, indicating the land users will be intermittently subject to noise and vibration impacts associated with the project area.	

[1] Refer Guidance Note: Implementation of Transport Noise Management Coe of Practice Volume 1 and 2

PUBLIC AMENITY / HEALTH	
Contract Vibration Risk Category	
☒ Low	Guidelines for projects that would be low risk, professional judgement can be used where practical: • The project duration is less than 3 months, AND • The project construction activity is conducted during the daytime only (7 am to 6 pm) excluding Sundays and public holidays, AND • The project does not include blasting, piling or dynamic compaction or demolition, AND • Sensitive receivers and services are located greater than 50 m from vibratory rollers/hydraulic hammers. The project area adjoins residential dwellings however the period in which a vibrating roller is required to operate is unlikely to exceed 3 months (if at all), despite the construction works for the overall project anticipated to be in the order of 6 months. In this regard, the construction vibration risk is considered to be low. Pre and Post condition surveys will be required of sensitive receptors if vibration impacts in accordance with the Code, MRTS51 and Tech Note 03 are identified.
☐ **Further assessment required – to be reviewed upon confirmation of detailed design**	

RESOURCE USE AND MANAGEMENT (including Waste)			
Construction Materials required from Non-commercial Source			
☐ Water	☐ Gravel	☐ Fill	Other:
Known source:	Known source:	Known Source:	Known source:
Approx Qty:	Approx Qty:	Approx Qty:	Approx Qty:
Impacts, Opportunities and Mitigation Measures			
Details of construction materials and estimated volumes are to be determined during the design phase. Sources for resources and materials will be determined by the construction entity. The construction entity and TMR have general obligations to store and manage waste appropriately to prevent environmental harm. The EMP(C) is to include management measures for water use, waste and material storage. Impacts on resources and opportunities for re-using, recycling and reducing waste are to be identified within the EMP(C). Water supply for construction works is yet to be determined. If water is to be sourced from a river, creek, lake or spring, take must comply with *Exemption requirements for constructing authorities for the take of water without a water entitlement WSS/2013/666 V 3.02*. Requirements include but are not limited to: • submitting notifications to the Department 10 business days prior to taking water, • monitoring extraction impacts of the take and implementing measures to remedy impacts, and			

RESOURCE USE AND MANAGEMENT (including Waste)	
• record details of water taken as per the exemption requirements and make available to TMR Contract Administrator upon request. The proposed water take location must be detailed within EMP(C) for approval by TMR. If clearing to access waterways is required, the construction entity is to comply with the *Riverine protection permit exemption requirements*. It is expected that construction works will generate general construction wastes only. Given the size of the project, it is unlikely that storage of fuel and oil will occur within the project area. All chemicals and dangerous goods are to be appropriated stored on site (e.g. under cover, bunded). Unsuitable material not able to be used on site should be appropriately disposed of. Vegetation waste is to be mulched on site or removed from site. No burning or piling of woody debris is to occur. Mulch generated on site should be considered for reuse where suitable.	
Legislation – *identify any applicable permits, codes or other regulatory requirements*	
☒ Waste Reporting required for Contract	TMR requires the construction entity to provide waste reporting.
Applicable Approvals	Exemption requirements for constructing authorities for the take of water without a water entitlement (WSS/2013/666) Version 3.02 (06/12/2016). Notification for taking water (as per the *Water Act 2000*) will be required if water is to be taken from a waterway (to be undertaken by construction entity).

SPECIAL AREAS AND LAND TENURES	
Areas and tenures identified – Special areas and land tenures potentially impacted upon by the project	
The project alignment is mostly within the existing road corridor or adjacent reserve tenured land. The alignment does extend through old rail land adjacent to Helen Street and it is uncertain as to whether the land is on the EMR. A search should be completed of the EMR to ascertain if there are an contamination risks for the project.	
Impacts, Opportunities and Mitigation Measures	
Further investigation of contamination risk is recommended for the former rail land on the eastern side of Helen Street.	
Legislation – *identify any applicable permits, codes or other regulatory requirements*	
Applicable legislation	*Land Act 1994* *Environmental Protection Act 1994*
Approval Requirements	None identified

POSSIBLE ENVIRONMENTAL OFFSETS
Commonwealth Environmental Offsets ☐ There are EPBC Protected Matter/s potentially or likely to be impacted – No Could there be a significant impact on the matter? ☒ Unlikely ☐ Possible ☐ Likely There is a low potential for the project to impact on matters of national environmental significance.
Queensland Environmental Offsets ☐ Prescribed Activity – None identified ☐ Matter of State Environmental Significance impacted by Prescribed Activity – None identified Could there be a significant residual impact on the matter? ☒ Unlikely ☐ Possible ☐ Likely

3 Scoping Assessment Summary and Recommendations

Based on the current scope of works, the project has the following specific requirements in addition to standard measures:

- The project is not anticipated to trigger any development approval for a prescribed activity under the *Planning Regulation 2017* where the crossing of the tributary to Spring Creek on Beaudesert Nerang Road accords with the *Accepted development requirements for operational work that is constructing or raising waterway barrier works* (October 2019).
- An ESCP is to be prepared by an RPEQ or CPESC in accordance with MRTS52 and in accordance with the erosion risk category – **low**.
- Where works within a DAF waterway are required, works are to be undertaken in accordance with the DAF *Accepted development requirements for operational work that is constructing or raising waterway barrier works* (October 2019) to comprise accepted development and avoid approvals under the *Planning Act 2016*. Where works are unable to comply with the DAF documentation, the works will constitute assessable development and an operational works development approval for waterway barrier works will be required in accordance with Schedule 10, Part 6, Division 4 of the *Planning Regulation 2017*.
- Stormwater drainage infrastructure incorporated into the design may require the inclusion of appropriate measures for stormwater quality improvement and this will be required to be considered further in the design development.
- Where possible, works should be scheduled to occur during the drier months (April – November) to avoid large flows of water the project area during periods of heavy rain.
- Local heritage places adjoin the alignment. Vibration works proposed within proximity of these places will require additional assessment to determine risk and mitigation measures.
- A protected plants survey will be required for any clearing works to occur in the eastern extent of the alignment in proximity to Jaycee Park.
- Mapping of non-juvenile koala habitat trees should occur within the eastern extent of the works area to enable the design development to maximise opportunities to avoid impacting on koala trees.
- MRTS 51.1 Annexure is to include provision for the Contractor to employ an ecologist or fauna spotter catcher where clearing of mature native vegetation is proposed for a pre-clearance survey and a fauna spotter catcher is to be present during clearing of vegetation. The construction entity is to comply with *Species management program for tampering with animal breeding places (low risk of impacts)* where risk of impacting fauna breeding places exists.
- Water supply for construction works will be determined by the construction entity. If water is to be sourced from a river, creek, lake or spring, take mush comply with *Exemption requirements for constructing authorities for the take of water without a water entitlement WSS/2013/666 V 3.02*.
- Invasive plants declared under the *Biosecurity Act 2014* have been recorded within 2 km of the project area. The works are required to proceed with consideration of the general biosecurity obligation under section 23 of the *Biosecurity Act 2014* to take all reasonable and practical measures to prevent or minimise the biosecurity risk. Obligations to comply with the requirements of the *Biosecurity Act 2014*

for prohibited and restricted invasive plants and animals must be met during the construction phase. Where a prohibited or restricted invasive plant is discovered during construction works (such as lantana, balloon vine, fireweed, etc), it is required to be managed in accordance with the DAF pest fact sheets to guide the treatment and management measures.

- Many residences and commercial properties are present along the alignment. Reasonable and practicable management measures must be implemented to mitigate noise, air and vibration impacts so as not to cause environmental harm and environmental nuisance in accordance with *Environmental Protection Act 1994*. Management measures must also be included in the construction entity's EMP(C) to limit impacts to adjoining sensitive receivers.
- Consideration will need to be given to property and side street accesses during the construction phase of works. Notifications will be required for those properties whose access may be impacted.

Appendix A – Concept Layout Plan

Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
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Document No. B22081-SKT-CI-C4-001

Last Modified :- Sep 14, 2023 - 12:03pm

Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C4 – OFF ROAD (HELEN STREET)

ENGINEERING CERTIFICATION (RPEQ)

SKETCH ONLY
14 Sep 2023

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

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Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
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	Survey Books	

Scales
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Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C4 – OFF ROAD (ALBERT STREET)

ENGINEERING CERTIFICATION (RPEQ)

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14 Sep 2023

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Contract No.	0
Drawing No.	1
Series Number	110 of 10

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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

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BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
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Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C5 – OFF ROAD (HELEN STREET)

ENGINEERING CERTIFICATION (RPEQ)

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Job No.	
Contract No.	0
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Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
C5 – ON ROAD (ALBERT STREET)

ENGINEERING CERTIFICATION (RPEQ)

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Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

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XREFS :- X_IMG_AERIAL; X_SCAD; X_TLE_CIVIL; X_SURV; ALIGN ROAD; MCE2 DESIGN STRINGS; MCE1 DESIGN STRINGS

Associated Job Nos	Survey Data	
	Horiz. Datum	GDA94
Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales
0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
E1 – EXISTING PATH

ENGINEERING CERTIFICATION (RPEQ)

SKETCH ONLY
14 Sep 2023

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

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Document No. B22081-SKT-CI-N4-001

Locality of Beaudesert

Intersection arrangement and crossing details to be confirmed in subsequent design stages

Interaction with the school and crossing locations to be confirmed at subsequent design stages

Driveway and access arrangements to be confirmed at subsequesnt design stages

MOUNT LINDESAY HIGHWAY

ENTERPRISE DRIVE

0.000 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800

Future development site. Coordination to be investigated at subsequent design stages

Driveway and access arrangements to be confirmed at subsequesnt design stages

BRISBANE STREET

Refer Inset A

Refer Right

TURBOT STREET

Driveway and access arrangements to be confirmed at subsequesnt design stages

Intersection arrangement and crossing details to be confirmed in subsequent design stages

MILL STREET

BRISBANE STREET

800 850 900 950 1000 1050

HELEN STREET

10.74.248

Inset A

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Associated Job Nos	Survey Data	
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Auxiliary Drg Nos	Horiz. Grid	MGA94 Zone 56
	Height Datum	AHD Derived
	Survey Books	

Scales: 0 5 10 15 20m

Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)

BEAUDESERT–NERANG ROAD – MOUNT LINDESAY HIGHWAY

CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT–NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
N4 – OFF ROAD (WEST VERGE)

ENGINEERING CERTIFICATION (RPEQ)

SKETCH ONLY

14 Sep 2023

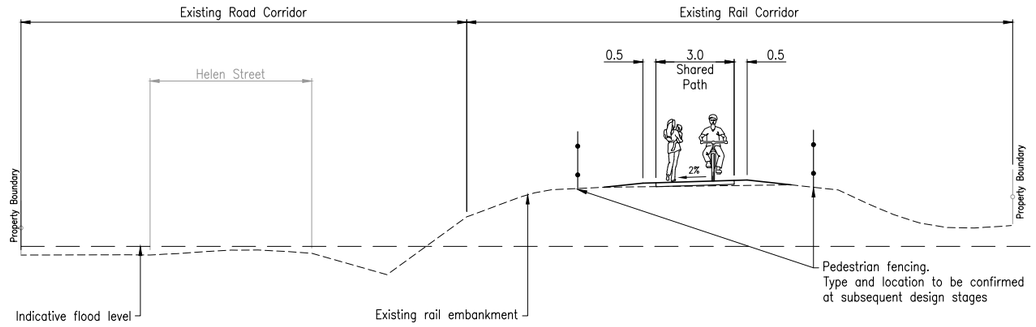
Queensland Government

Job No.	
Contract No.	0
Drawing No.	1
Series Number	110 of 10

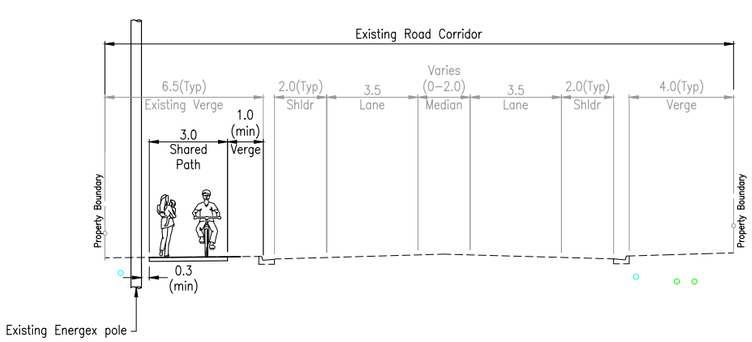
Department of Transport and Main Roads MRR_Detail (02/22)

Gold Coast *Office*
39-41 Nerang St, Nerang QLD 4211
P / +61 7 5638 3300
E / projects.qld@bgeeng.com

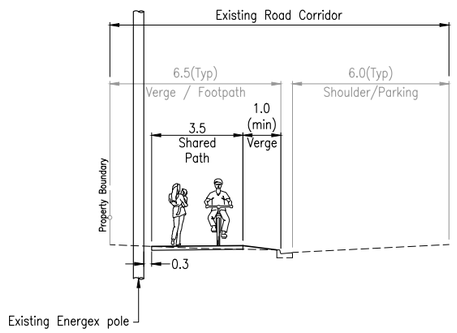
Document No. B22081-SKT-CI-TY-001



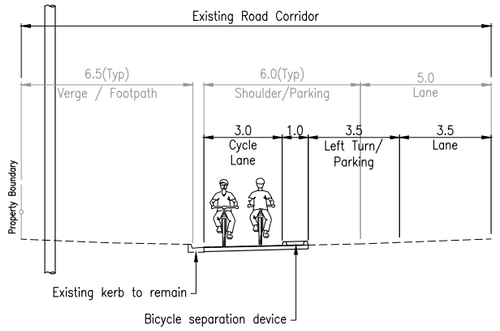
Option C4/C5 (Helen Street)
Typical Section
Scale 1:100



Option N4 (West Verge)
Typical Section
Scale 1:100



Option 1 – Off Road
Western Verge Only



Option 2 – On Road Bi-Directional*
* Opportunity to reduce parking and lane widths

Option C4/C5 (Albert Street)
Typical Section
Scale 1:100

Revisions/Descriptions	Signatory: – RPEQ Full Name, Eng. Area and RPEQ No. OR – Full Name and Position Title	Date
1A	For information only	

Last Modified :- Sep 14, 2023 – 11:52am

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XREFS :- X_TLE_CIVIL; X_DROA_TYP

Associated Job Nos	
Auxiliary Drg Nos	

Survey Data	
Horiz. Datum	GDA94
Horiz. Grid	MGA94 Zone 56
Height Datum	AHD Derived
Survey Books	

Scales
0 5 10 15 20m
Dimensions shown in METRES except where shown otherwise

SCENIC RIM REGIONAL COUNCIL (207)
BEAUDESERT-NERANG ROAD – MOUNT LINDESAY HIGHWAY
CTL CHGE

Reference Points				
Preceding RP	Dist. to start of job (km)	From start to end of job	From end to Following RP	Following RP

Through Chainage from

BEAUDESERT-NERANG ROAD
MOUNT LINDESAY HIGHWAY CYCLEWAY
PREFERRED OPTION TYPICAL SECTIONS
ENGINEERING CERTIFICATION (RPEQ)

SKETCH ONLY
14 Sep 2023

Queensland Government

Job No.	
Contract No.	0
Drawing No.	1A
Series Number	300 of 7

Appendix B – Desktop Search Results

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 07-Nov-2022

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	46
Listed Migratory Species:	16

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	21
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	5
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Moreton bay	20 - 30km upstream from Ramsar site	In feature area

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Grey box-grey gum wet forest of subtropical eastern Australia	Endangered	Community likely to occur within area	In feature area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area	In feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occur within area	In buffer area only
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Rostratula australis](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
[Turnix melanogaster](#) Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
[Maccullochella mariensis](#) Mary River Cod [83806]	Endangered	Translocated population known to occur within area	In feature area
FROG			
[Mixophyes fleayi](#) Fleay's Frog [25960]	Endangered	Species or species habitat may occur within area	In feature area
INSECT			
[Argynnis hyperbius inconstans](#) Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
[Chalinolobus dwyeri](#) Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area	In feature area
[Dasyurus maculatus maculatus (SE mainland population)](#) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area	In feature area
[Macroderma gigas](#) Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
[Petauroides volans](#) Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petaurus australis australis			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale penicillata			
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Potorous tridactylus tridactylus			
Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area	In feature area
Pseudomys novaehollandiae			
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
PLANT			
Arthraxon hispidus			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Bosistoa transversa			
Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat may occur within area	In feature area
Bulbophyllum globuliforme			
Miniature Moss-orchid, Hoop Pine Orchid [6649]	Vulnerable	Species or species habitat may occur within area	In feature area
Cupaniopsis shirleyana			
Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In feature area
Cupaniopsis tomentella			
Boonah Tuckeroo [3322]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Fontainea venosa [24040]	Vulnerable	Species or species habitat may occur within area	In feature area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Notelaea ipsviciensis Cooneana Olive [81858]	Critically Endangered	Species or species habitat may occur within area	In feature area
Notelaea lloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Planchonella eerwah Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Delma torquata Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Symposiachrus trivirgatus as Monarcha trivirgatus](#) Spectacled Monarch [83946]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Pandion haliaetus](#) Osprey [952]		Species or species habitat known to occur within area	In feature area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Anseranas semipalmata](#) Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Bubulcus ibis as Ardea ibis](#) Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
[Hirundapus caudacutus](#) White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Casino Ipswich Pipeline	2007/3877	Controlled Action	Completed	In buffer area only
Southern Regional Water Pipeline	2006/2593	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In buffer area only
South West Pipeline and Wyaralong Tanks Project, Qld	2018/8320	Not Controlled Action	Completed	In buffer area only
Upgraded sewerage infrastructure in the Helensvale/Coombabah catchment	2004/1427	Not Controlled Action	Completed	In buffer area only

Bioregional Assessments			
SubRegion	BioRegion	Website	Buffer Status
Clarence-Moreton	Clarence-Moreton	BA website	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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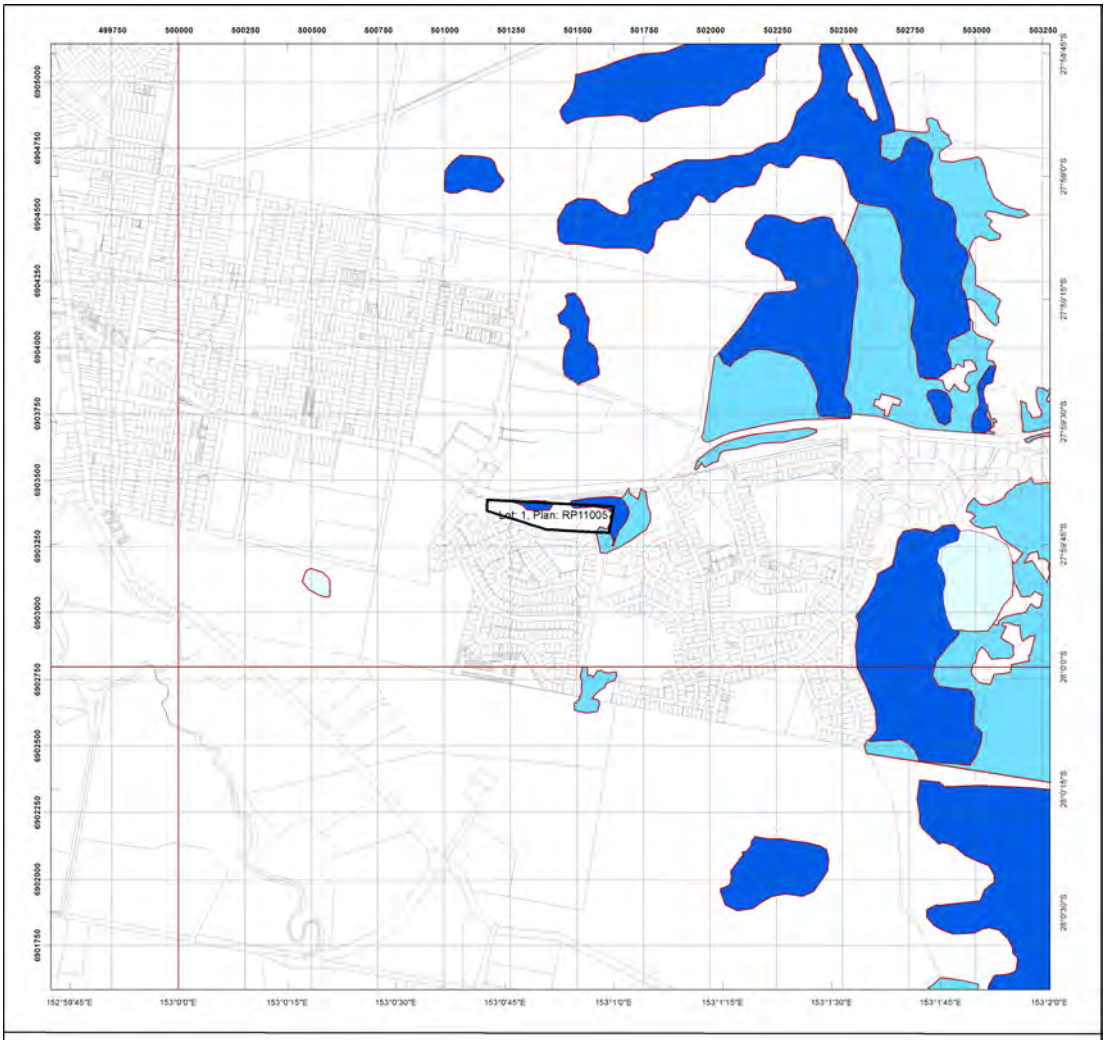
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

09/11/2022 16:03:29
Lot: 1 Plan: RP110057



Regulated Vegetation Management Map

Legend

- Selected Lot and Plan
- Category A area (Vegetation offsets/compliance notices/VDecs)
- Category B area (Remnant vegetation)
- Category C area (High-value regrowth vegetation)
- Category R area (Reef regrowth watercourse vegetation)
- Category X area (Exempt clearing work on Freehold, Indigenous and Leasehold land)
- Water
- Other land parcel boundaries

LOCALITY DIAGRAM

N

0 200 400 600 800 1,000 m

This product is projected into:
GDA 1994 MGA Zone 56

Disclaimer:
While every care is taken to ensure the accuracy of this product, the Department of Resources makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way and for any reason.

Additional information required for the assessment of vegetation values is provided in the accompanying "Vegetation Management Supporting map". For further information go to the web site: www.resources.qld.gov.au or contact the Department of Resources.

Digital data for the regulated vegetation management map is available from the Queensland Spatial Portal at http://www.information.qld.gov.au/

Land parcel boundaries are provided as locational aid only.

This map is updated on a monthly basis to ensure new PMAVs are included as they are approved.

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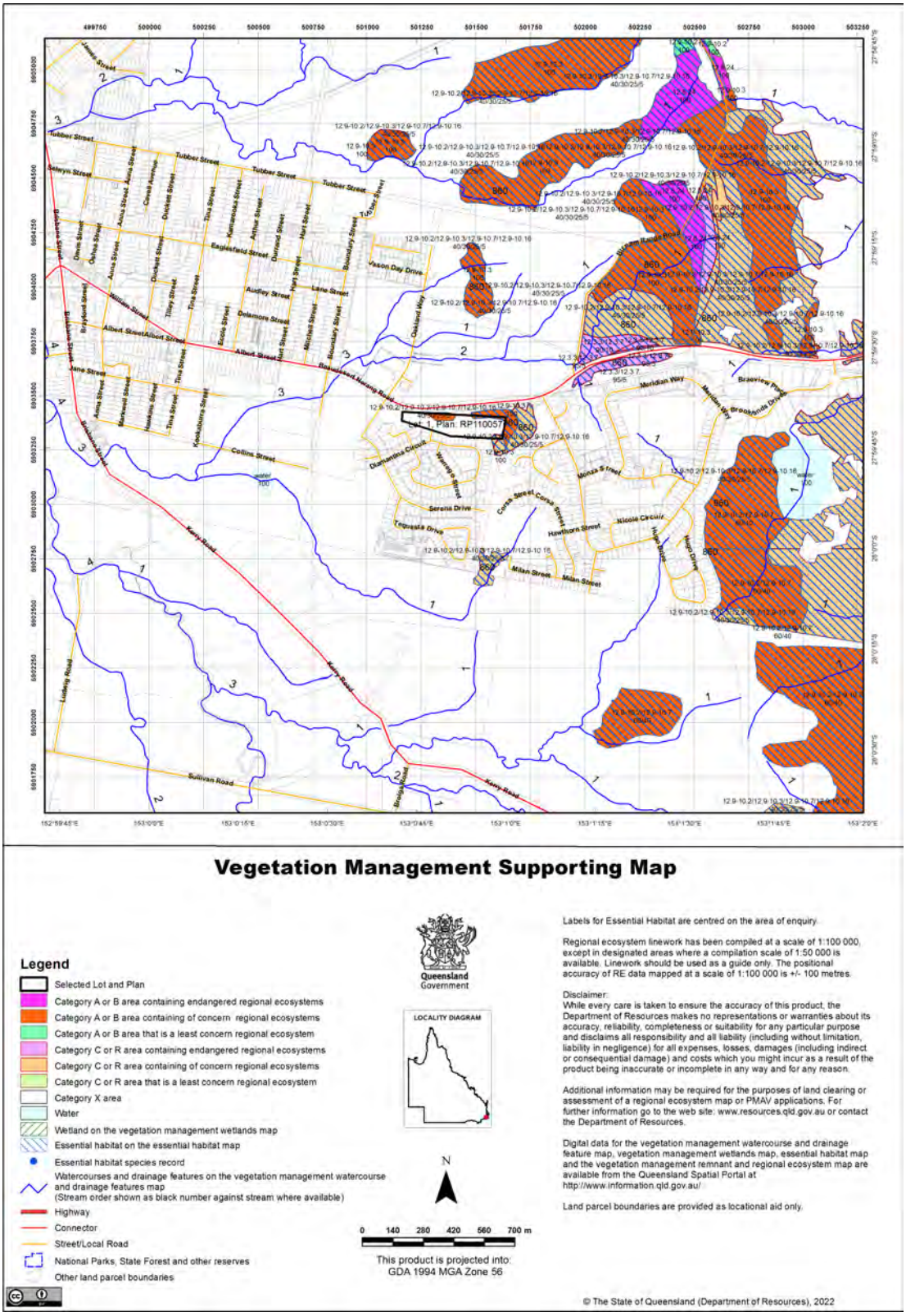
09/11/2022 16:03:29
Lot: 1 Plan: RP110057



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Lot: 1 Plan: RP110057

Vegetation Management Act 1999 - Extract from the essential habitat database

Essential habitat is required for assessment under the:

- State Development Assessment Provisions - State Code 16: Native vegetation clearing which sets out the matters of interest to the state for development assessment under the *Planning Act 2016*; and
- Accepted development vegetation clearing codes made under the *Vegetation Management Act 1999*

Essential habitat for one or more of the following species is found on and within 1.1 km of the identified subject lot/s on the accompanying essential habitat map.

This report identifies essential habitat in Category A, B and Category C areas.

The numeric labels on the essential habitat map can be cross referenced with the database below to determine which essential habitat factors might exist for a particular species.

Essential habitat is compiled from a combination of species habitat models and buffered species records.

The Department of Resources website (http://www.resources.qld.gov.au) has more information on how the layer is applied under the State Development Assessment Provisions - State Code 16: Native vegetation clearing and the *Vegetation Management Act 1999*.

Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated.

Essential habitat, for protected wildlife, means a category A area, a category B area or category C area shown on the regulated vegetation management map-

1) that has at least 3 essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database; or

2) in which the protected wildlife, at any stage of its life cycle, is located.

Protected wildlife includes critically endangered, endangered, vulnerable or near-threatened native wildlife prescribed under the *Nature Conservation Act 1992*.

Essential habitat in Category A and/or Category B and/or Category C

Label	Scientific Name	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
860	Phascolarctos cinereus	koala	E	Open forests and woodlands containing Eucalyptus, Corymbia, Lophostemon or Melaleuca trees having a trunk of a diameter of more than 10cm at 1.3m above the ground. Tree species used for food and habitat varies across the state and can include: Corymbia citriodora, Corymbia henryi, Corymbia intermedia, Eucalyptus acmenoides, Eucalyptus bancroftii, Eucalyptus biturbinata, Eucalyptus blakelyi, Eucalyptus brownii, Eucalyptus camaldulensis, Eucalyptus carnea, Eucalyptus chloroclada, Eucalyptus coolabah, Eucalyptus crebra, Eucalyptus dealbata, Eucalyptus drepanophylla, Eucalyptus dunnii, Eucalyptus eugenioides, Eucalyptus exserta, Eucalyptus fibrosa, Eucalyptus grandis, Eucalyptus helidonica, Eucalyptus latisinensis, Eucalyptus longirostrata, Eucalyptus major, Eucalyptus melanophloia, Eucalyptus melliodora, Eucalyptus microcarpa, Eucalyptus microcorys, Eucalyptus microtheca, Eucalyptus moluccana, Eucalyptus montivaga, Eucalyptus orgadophila, Eucalyptus papuana, Eucalyptus pilularis, Eucalyptus platyphylla, Eucalyptus populnea, Eucalyptus portuensis, Eucalyptus propinqua, Eucalyptus racemosa, Eucalyptus resinifera, Eucalyptus robusta, Eucalyptus saligna, Eucalyptus seeana, Eucalyptus siderophloia, Eucalyptus sideroxylon, Eucalyptus tereticornis, Eucalyptus thozetiana, Eucalyptus tindaliae, Eucalyptus umbra, Lophostemon confertus, Melaleuca leucadendra, Melaleuca quinquenervia.	Sea level to 1000m.	None	Riparian areas, plains and hill/escarpment slopes.

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8, 4.3.10, 4.3.11, 4.5.3, 4.5.5, 4.5.6, 4.5.8, 4.5.9, 4.7.1, 4.7.7, 4.7.8, 4.9.6, 4.9.10, 4.9.12, 4.9.17, 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.11, 6.3.12, 6.3.17, 6.3.18, 6.3.22, 6.3.24, 6.3.25, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.5.1, 6.5.2, 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.8, 6.5.9, 6.5.10, 6.5.11, 6.5.13, 6.5.14, 6.5.15, 6.5.16, 6.5.17, 6.5.18, 6.5.19, 6.6.2, 6.7.1, 6.7.2, 6.7.5, 6.7.6, 6.7.7, 6.7.9, 6.7.11, 6.7.12, 6.7.13, 6.7.14, 6.7.17, 6.9.3, 7.2.3, 7.2.4, 7.2.7, 7.2.11, 7.3.7, 7.3.8, 7.3.9, 7.3.12, 7.3.13, 7.3.14, 7.3.16, 7.3.19, 7.3.20, 7.3.21, 7.3.25, 7.3.26, 7.3.39, 7.3.40, 7.3.42, 7.3.43, 7.3.44, 7.3.45, 7.3.47, 7.3.48, 7.3.50, 7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.8.7, 7.8.8, 7.8.10, 7.8.15, 7.8.16, 7.8.17, 7.8.18, 7.8.19, 7.11.5, 7.11.6, 7.11.13, 7.11.14, 7.11.16, 7.11.18, 7.11.19, 7.11.20, 7.11.21, 7.11.31, 7.11.32, 7.11.33, 7.11.34, 7.11.35, 7.11.37, 7.11.41, 7.11.42, 7.11.43, 7.11.44, 7.11.45, 7.11.46, 7.11.47, 7.11.48, 7.11.49, 7.11.50, 7.11.51, 7.12.4, 7.12.5, 7.12.17, 7.12.21, 7.12.22, 7.12.23, 7.12.24, 7.12.25, 7.12.26, 7.12.27, 7.12.28, 7.12.29, 7.12.30, 7.12.33, 7.12.34, 7.12.35, 7.12.51, 7.12.52, 7.12.53, 7.12.54, 7.12.55, 7.12.56, 7.12.57, 7.12.58, 7.12.59, 7.12.60, 7.12.61, 7.12.62, 7.12.63, 7.12.65, 7.12.66, 7.12.69, 8.1.5, 8.2.3, 8.2.6, 8.2.7, 8.2.8, 8.2.11, 8.2.12, 8.2.13, 8.2.14, 8.3.1, 8.3.2, 8.3.3, 8.3.5, 8.3.6, 8.3.8, 8.3.10, 8.3.11, 8.3.13, 8.5.1, 8.5.2, 8.5.3, 8.5.5, 8.5.6, 8.5.7, 8.9.1, 8.10.1, 8.11.1, 8.11.3, 8.11.4, 8.11.5, 8.11.6, 8.11.8, 8.11.10, 8.11.12, 8.12.4, 8.12.5, 8.12.6, 8.12.7, 8.12.8, 8.12.9, 8.12.12, 8.12.14, 8.12.20, 8.12.22, 8.12.23, 8.12.25, 8.12.26, 8.12.27, 8.12.29, 8.12.31, 8.12.32, 9.3.1, 9.3.2, 9.3.3, 9.3.4, 9.3.5, 9.3.6, 9.3.7, 9.3.8, 9.3.10, 9.3.11, 9.3.13, 9.3.14, 9.3.15, 9.3.16, 9.3.17, 9.3.19, 9.3.20, 9.3.21, 9.3.22, 9.3.27, 9.4.1, 9.4.2, 9.5.1, 9.5.3, 9.5.4, 9.5.5, 9.5.6, 9.5.7, 9.5.8, 9.5.9, 9.5.10, 9.5.11, 9.5.12, 9.5.15, 9.5.16, 9.5.17, 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Queensland Government

WildNet species list

Search Criteria: Species List for a Specified Point
Species: All
Type: All
Queensland status: All
Records: All
Date: All
Latitude: -27.9883
Longitude: 152.9884
Distance: 2
Email: fibengtsson01@gmail.com
Date submitted: Monday 07 Nov 2022 17:33:03
Date extracted: Monday 07 Nov 2022 17:40:02

The number of records retrieved = 838

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Bufonidae	*Rhinella marina*	cane toad	Y			2
animals	amphibians	Limnodynastidae	*Limnodynastes peronii*	striped marshfrog		C		3
animals	amphibians	Myobatrachidae	*Uperoleia rugosa*	chubby gungan		C		1/1
animals	birds	Acanthizidae	*Acanthiza chrysorrhoa*	yellow-rumped thornbill		C		9
animals	birds	Acanthizidae	*Acanthiza nana*	yellow thornbill		C		1
animals	birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill		C		1
animals	birds	Acanthizidae	*Smicrornis brevirostris*	weebill		C		1
animals	birds	Accipitridae	*Aquila audax*	wedge-tailed eagle		C		1
animals	birds	Accipitridae	*Aviceda subcristata*	Pacific baza		C		1
animals	birds	Accipitridae	*Elanus axillaris*	black-shouldered kite		C		2
animals	birds	Accipitridae	*Haliastur sphenurus*	whistling kite		C		2
animals	birds	Accipitridae	*Hieraaetus morphnoides*	little eagle		C		1
animals	birds	Accipitridae	*Milvus migrans*	black kite		C		1
animals	birds	Acrocephalidae	*Acrocephalus australis*	Australian reed-warbler		C		20
animals	birds	Alcedinidae	*Ceyx azureus*	azure kingfisher		C		1
animals	birds	Anatidae	*Anas gracilis*	grey teal		C		6
animals	birds	Anatidae	*Anas superciliosa*	Pacific black duck		C		33
animals	birds	Anatidae	*Aythya australis*	hardhead		C		1
animals	birds	Anatidae	*Chenonetta jubata*	Australian wood duck		C		43
animals	birds	Anatidae	*Cygnus atratus*	black swan		C		1
animals	birds	Anatidae	*Dendrocygna eytoni*	plumed whistling-duck		C		11
animals	birds	Anatidae	*Dendrocygna sp.*			C		1
animals	birds	Anhingidae	*Anhinga novaehollandiae*	Australasian darter		C		3
animals	birds	Ardeidae	*Ardea alba modesta*	eastern great egret		C		11
animals	birds	Ardeidae	*Ardea intermedia*	intermediate egret		C		9
animals	birds	Ardeidae	*Ardea pacifica*	white-necked heron		C		2
animals	birds	Ardeidae	*Botaurus poiciloptilus*	Australasian bittern		E	E	1
animals	birds	Ardeidae	*Bubulcus ibis*	cattle egret		C		15
animals	birds	Ardeidae	*Egretta garzetta*	little egret		C		4
animals	birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron		C		18
animals	birds	Ardeidae	*Nycticorax caledonicus*	nankeen night-heron		C		3
animals	birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow		C		4
animals	birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird		C		20
animals	birds	Artamidae	*Cracticus torquatus*	grey butcherbird		C		7
animals	birds	Artamidae	*Gymnorhina tibicen*	Australian magpie		C		56
animals	birds	Artamidae	*Strepera graculina*	pied currawong		C		4
animals	birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo		C		2
animals	birds	Cacatuidae	*Eolophus roseicapilla*	galah		C		26
animals	birds	Cacatuidae	*Nymphicus hollandicus*	cockatiel		C		6
animals	birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike		C		21
animals	birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel		C		6
animals	birds	Charadriidae	*Erythrogonys cinctus*	red-kneed dotterel		C		2
animals	birds	Charadriidae	*Vanellus miles*	masked lapwing		C		12
animals	birds	Charadriidae	*Vanellus miles novaehollandiae*	masked lapwing (southern subspecies)		C		17
animals	birds	Charadriidae	*Vanellus tricolor*	banded lapwing		C		1
animals	birds	Ciconiidae	*Ephippiorhynchus asiaticus*	black-necked stork		C		3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Cisticolidae	*Cisticola exilis*	golden-headed cisticola		C		3
animals	birds	Columbidae	*Columba livia*	rock dove	Y			6
animals	birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove		C		6
animals	birds	Columbidae	*Ocyphaps lophotes*	crested pigeon		C		27
animals	birds	Columbidae	*Streptopelia chinensis*	spotted dove	Y			25
animals	birds	Coraciidae	*Eurystomus orientalis*	dollarbird		C		2
animals	birds	Corvidae	*Corvus orru*	Torresian crow		C		66
animals	birds	Cuculidae	*Centropus phasianinus*	pheasant coucal		C		2
animals	birds	Cuculidae	*Eudynamys orientalis*	eastern koel		C		5
animals	birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo		C		1
animals	birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo		C		2
animals	birds	Estrildidae	*Lonchura castaneothorax*	chestnut-breasted mannikin		C		15
animals	birds	Estrildidae	*Neochmia modesta*	plum-headed finch		C		2
animals	birds	Estrildidae	*Taeniopygia bichenovii*	double-barred finch		C		35
animals	birds	Estrildidae	*Taeniopygia guttata*	zebra finch		C		1
animals	birds	Falconidae	*Falco berigora*	brown falcon		C		1
animals	birds	Falconidae	*Falco cenchroides*	nankeen kestrel		C		2
animals	birds	Falconidae	*Falco subniger*	black falcon		C		2
animals	birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra		C		14
animals	birds	Halcyonidae	*Todiramphus macleayii*	forest kingfisher		C		2
animals	birds	Halcyonidae	*Todiramphus pyrrhopygius*	red-backed kingfisher		C		3
animals	birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher		C		2
animals	birds	Halcyonidae	*Todiramphus sordidus*	Torresian kingfisher		C		1
animals	birds	Hirundinidae	*Hirundo neoxena*	welcome swallow		C		9
animals	birds	Hirundinidae	*Petrochelidon ariel*	fairy martin		C		3
animals	birds	Hirundinidae	*Petrochelidon nigricans*	tree martin		C		1
animals	birds	Jacanidae	*Irediparra gallinacea*	comb-crested jacana		C		1
animals	birds	Maluridae	*Malurus cyaneus*	superb fairy-wren		C		52
animals	birds	Maluridae	*Malurus lamberti*	variegated fairy-wren		C		2
animals	birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren		C		2
animals	birds	Megaluridae	*Cincloramphus mathewsi*	rufous songlark		C		1
animals	birds	Megaluridae	*Cincloramphus timoriensis*	tawny grassbird		C		1
animals	birds	Megaluridae	*Poodytes gramineus*	little grassbird		C		1
animals	birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater		C		15
animals	birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater		C		30
animals	birds	Meliphagidae	*Manorina melanocephala*	noisy miner		C		24
animals	birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater		C		2
animals	birds	Meliphagidae	*Melithreptus lunatus*	white-naped honeyeater		C		1
animals	birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater		C		2
animals	birds	Meliphagidae	*Philemon citreogularis*	little friarbird		C		8
animals	birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird		C		5
animals	birds	Meliphagidae	*Plectorhyncha lanceolata*	striped honeyeater		C		2
animals	birds	Meropidae	*Merops ornatus*	rainbow bee-eater		C		3
animals	birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark		C		58
animals	birds	Monarchidae	*Myiagra inquieta*	restless flycatcher		C		3
animals	birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher		C		1

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animals	birds	Motacillidae	*Anthus novaeseelandiae*	Australasian pipit		C		1
animals	birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird		C		2
animals	birds	Oriolidae	*Sphecotheres vieilloti*	Australasian figbird		C		12
animals	birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush		C		1
animals	birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler		C		10
animals	birds	Pardalotidae	*Pardalotus punctatus*	spotted pardalote		C		2
animals	birds	Pardalotidae	*Pardalotus striatus*	striated pardalote		C		19
animals	birds	Passeridae	*Passer domesticus*	house sparrow	Y			11
animals	birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican		C		3
animals	birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant		C		3
animals	birds	Phalacrocoracidae	*Phalacrocorax carbo*	great cormorant		C		1
animals	birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant		C		10
animals	birds	Phalacrocoracidae	*Phalacrocorax varius*	pied cormorant		C		8
animals	birds	Phasianidae	*Synoicus ypsilophorus*	brown quail		C		1
animals	birds	Podargidae	*Podargus strigoides*	tawny frogmouth		C		3
animals	birds	Podicipedidae	*Poliocephalus poliocephalus*	hoary-headed grebe		C		1
animals	birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe		C		10
animals	birds	Psittacidae	*Alisterus scapularis*	Australian king-parrot		C		1
animals	birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella		C		31
animals	birds	Psittacidae	*Platycercus eximius*	eastern rosella		C		2
animals	birds	Psittacidae	*Psephotus pulcherrimus*	paradise parrot		PE	EX	1
animals	birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet		C		12
animals	birds	Psittacidae	*Trichoglossus moluccanus*	rainbow lorikeet		C		38
animals	birds	Rallidae	*Fulica atra*	Eurasian coot		C		1
animals	birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen		C		17
animals	birds	Rallidae	*Porphyrio melanotus*	purple swamphen		C		14
animals	birds	Rallidae	*Zapornia pusilla*	Baillon's crake		C		1
animals	birds	Recurvirostridae	*Himantopus himantopus*	black-winged stilt		C		3
animals	birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail		C		16
animals	birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail		C		46
animals	birds	Scolopacidae	*Calidris acuminata*	sharp-tailed sandpiper		SL		1
animals	birds	Scolopacidae	*Gallinago hardwickii*	Latham's snipe		SL		3
animals	birds	Strigidae	*Ninox boobook*	southern boobook		C		1
animals	birds	Sturnidae	*Acridotheres tristis*	common myna	Y			31
animals	birds	Sturnidae	*Sturnus vulgaris*	common starling	Y			8
animals	birds	Threskiornithidae	*Platalea flavipes*	yellow-billed spoonbill		C		1
animals	birds	Threskiornithidae	*Platalea regia*	royal spoonbill		C		6
animals	birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis		C		34
animals	birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis		C		34
animals	birds	Timaliidae	*Zosterops lateralis*	silvereye		C		11
animals	mammals	Canidae	*Canis familiaris*	dog	Y			1
animals	mammals	Canidae	*Canis familiaris (dingo)*	dingo				1
animals	mammals	Canidae	*Vulpes vulpes*	red fox	Y			1/1
animals	mammals	Dasyuridae	*Phascogale tapoatafa tapoatafa*	brush-tailed phascogale		C		1/1
animals	mammals	Leporidae	*Lepus europaeus*	European brown hare	Y			1
animals	mammals	Macropodidae	*Notamacropus rufogriseus*	red-necked wallaby		C		6/6

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animals	mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	platypus		SL		3/1
animals	mammals	Petauridae	*Petaurus breviceps sensu lato*	sugar glider		C		1
animals	mammals	Pseudocheiridae	*Petauroides armillatus*	central greater glider		E	E	1/1
animals	mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	common ringtail possum		C		1
animals	mammals	Pteropodidae	*Pteropus alecto*	black flying-fox		C		1
animals	mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox		C		1
animals	mammals	Pteropodidae	*Pteropus sp.*			C		1
animals	mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna		SL		1
animals	ray-finned fishes	Ambassidae	*Ambassis agassizii*	Agassiz's glassfish				1
animals	ray-finned fishes	Anguillidae	*Anguilla reinhardtii*	longfin eel				2
animals	ray-finned fishes	Cichlidae	*Oreochromis mossambica*	Mozambique mouthbrooder	Y			1
animals	ray-finned fishes	Cyprinidae	*Cyprinus carpio*	European carp	Y			1
animals	ray-finned fishes	Melanotaeniidae	*Melanotaenia duboulayi*	crimsonspotted rainbowfish				1
animals	ray-finned fishes	Poeciliidae	*Gambusia holbrooki*	mosquitofish	Y			1
animals	ray-finned fishes	Pseudomugilidae	*Pseudomugil mellis*	honey blue eye		V	V	1
animals	ray-finned fishes	Terapontidae	*Leiopotherapon unicolor*	spangled perch				1
animals	reptiles	Agamidae	*Intellagama lesueurii*	eastern water dragon		C		3
animals	reptiles	Agamidae	*Pogona barbata*	bearded dragon		C		1
animals	reptiles	Boidae	*Morelia spilota*	carpet python		C		1
animals	reptiles	Chelidae	*Emydura macquarii macquarii*	Murray turtle		C		2
animals	reptiles	Chelidae	*Wollumbinia latisternum*	saw-shelled turtle		C		1
animals	reptiles	Colubridae	*Boiga irregularis*	brown tree snake		C		1
animals	reptiles	Colubridae	*Dendrelaphis punctulatus*	green tree snake		C		1
animals	reptiles	Elapidae	*Brachyurophis australis*	coral snake		C		1/1
animals	reptiles	Elapidae	*Furina diadema*	red-naped snake		C		1/1
animals	reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake		C		1
animals	reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard		C		1/1
animals	reptiles	Pygopodidae	*Pygopus lepidopodus*	common scaly-foot		C		1/1
animals	reptiles	Typhlopidae	*Anilios wiedii*	brown-snouted blind snake		C		1
animals	reptiles	Varanidae	*Varanus sp.*	goanna		C		1
fungi	Agaricomycetes	Polyporaceae	*Loweporus tephroporus*			C		1/1
plants	land plants	Acanthaceae	*Pseuderanthemum variabile*	pastel flower		C		1
plants	land plants	Akaniaceae	*Akania bidwillii*	turnip wood		C		1
plants	land plants	Amaranthaceae	*Deeringia amaranthoides*	redberry		C		1
plants	land plants	Anacardiaceae	*Euroschinus falcatus*			C		1
plants	land plants	Annonaceae	*Melodorum leichhardtii*			C		1
plants	land plants	Aphanopetalaceae	*Aphanopetalum resinosum*	gumvine		C		1
plants	land plants	Apiaceae	*Actinotus gibbonsii*	dwarf flannel flower		C		1
plants	land plants	Apiaceae	*Actinotus helianthi*	flannel flower		C		1
plants	land plants	Apiaceae	*Ammi majus*	bishop's weed	Y			1/1
plants	land plants	Apiaceae	*Centella asiatica*			C		1
plants	land plants	Apiaceae	*Cyclospermum leptophyllum*		Y			1
plants	land plants	Apiaceae	*Xanthosia pilosa*	woolly xanthosia		C		1
plants	land plants	Apocynaceae	*Alstonia constricta*	bitterbark		C		1
plants	land plants	Apocynaceae	*Alyxia ruscifolia*			C		1
plants	land plants	Apocynaceae	*Araujia sericifera*	white moth vine	Y			1

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plants	land plants	Apocynaceae	*Carissa ovata*	currantbush		C		1
plants	land plants	Apocynaceae	*Gomphocarpus physocarpus*	balloon cottonbush	Y			1
plants	land plants	Apocynaceae	*Hoya australis*			C		1
plants	land plants	Apocynaceae	*Leichhardtia flavescens*			C		1
plants	land plants	Apocynaceae	*Leichhardtia longiloba*			V	V	1
plants	land plants	Apocynaceae	*Melodinus acutiflorus*	bellbird vine		C		1
plants	land plants	Apocynaceae	*Melodinus australis*	southern melodinus		C		1
plants	land plants	Apocynaceae	*Parsonsia fulva*	furry silkpod		C		1
plants	land plants	Apocynaceae	*Parsonsia induplicata*	thin-leaved silkpod		C		1
plants	land plants	Apocynaceae	*Parsonsia latifolia*	green-leaved silkpod		C		1
plants	land plants	Apocynaceae	*Parsonsia longipetiolata*			C		1
plants	land plants	Apocynaceae	*Parsonsia straminea*	monkey rope		C		1
plants	land plants	Apocynaceae	*Parsonsia tenuis*	slender silkpod		V		1
plants	land plants	Apocynaceae	*Parsonsia ventricosa*			C		1
plants	land plants	Apocynaceae	*Vinca major*	blue periwinkle	Y			1
plants	land plants	Apocynaceae	*Vincetoxicum paniculatum*			C		1
plants	land plants	Araceae	*Alocasia macrorrhizos*			C		1
plants	land plants	Araceae	*Gymnostachys anceps*	settler's flax		C		1
plants	land plants	Araceae	*Pothos longipes*			C		1
plants	land plants	Araliaceae	*Astrotricha biddulphiana*			C		1
plants	land plants	Araliaceae	*Astrotricha latifolia*			C		1
plants	land plants	Araliaceae	*Cephalaralia cephalobotrys*	climbing panax		C		1
plants	land plants	Araliaceae	*Hydrocotyle pedicellosa*			C		1
plants	land plants	Araliaceae	*Polyscias elegans*	celery wood		C		1
plants	land plants	Araliaceae	*Polyscias sambucifolia*	elderberry panax		C		1
plants	land plants	Araliaceae	*Trachymene incisa subsp. incisa*			C		1
plants	land plants	Araliaceae	*Trachymene procumbens*	creeping wild parsnip		C		1
plants	land plants	Araucariaceae	*Araucaria cunninghamii*	hoop pine		C		1
plants	land plants	Araucariaceae	*Araucaria cunninghamii var. cunninghamii*			C		1
plants	land plants	Arecaceae	*Archontophoenix cunninghamiana*	piccabeen palm		C		1
plants	land plants	Arecaceae	*Linospadix monostachyos*	walking stick palm		C		1
plants	land plants	Arecaceae	*Livistona australis*	cabbage tree palm		SL		1
plants	land plants	Asphodelaceae	*Bulbine bulbosa*	golden lily		C		1
plants	land plants	Aspleniaceae	*Asplenium australasicum*			C		1
plants	land plants	Aspleniaceae	*Asplenium flabellifolium*	necklace fern		C		1
plants	land plants	Aspleniaceae	*Asplenium polyodon*	mare's tail fern		C		1
plants	land plants	Asteraceae	*Adenostemma lavenia*			C		1
plants	land plants	Asteraceae	*Ageratina adenophora*	crofton weed	Y			1
plants	land plants	Asteraceae	*Ageratina riparia*	mistflower	Y			1
plants	land plants	Asteraceae	*Ambrosia artemisiifolia*	annual ragweed	Y			1/1
plants	land plants	Asteraceae	*Baccharis halimifolia*	groundsel bush	Y			1
plants	land plants	Asteraceae	*Bidens pilosa*		Y			1
plants	land plants	Asteraceae	*Brachyscome microcarpa*			C		1
plants	land plants	Asteraceae	*Calyptocarpus vialis*	creeping cinderella weed	Y			2/1
plants	land plants	Asteraceae	*Cassinia compacta*	tall cassinia		C		1
plants	land plants	Asteraceae	*Cassinia subtropica*			C		1

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plants	land plants	Asteraceae	*Centipeda minima subsp. minima*			C		1/1
plants	land plants	Asteraceae	*Centratherum riparium*			C		1
plants	land plants	Asteraceae	*Cirsium vulgare*	spear thistle	Y			1
plants	land plants	Asteraceae	*Coronidium elatum subsp. elatum*			C		1
plants	land plants	Asteraceae	*Coronidium lindsayanum*			C		1
plants	land plants	Asteraceae	*Cotula australis*	common cotula		C		1
plants	land plants	Asteraceae	*Crassocephalum crepidioides*	thickhead	Y			1
plants	land plants	Asteraceae	*Cyanthillium cinereum*			C		1
plants	land plants	Asteraceae	*Glossocardia bidens*	native cobbler's pegs		C		1
plants	land plants	Asteraceae	*Gynura drymophila*			C		1
plants	land plants	Asteraceae	*Hypochaeris radicata*	catsear	Y			1
plants	land plants	Asteraceae	*Lordhowea amygdalifolia*			C		1
plants	land plants	Asteraceae	*Olearia elliptica*			C		1
plants	land plants	Asteraceae	*Olearia microphylla*			C		1
plants	land plants	Asteraceae	*Olearia nernstii*	Ipswich daisy		C		1
plants	land plants	Asteraceae	*Ozothamnus diosmifolius*	white dogwood		C		1
plants	land plants	Asteraceae	*Ozothamnus rufescens*	soft dogwood		C		1
plants	land plants	Asteraceae	*Ozothamnus whitei*			C		1
plants	land plants	Asteraceae	*Senecio bathurstianus*			C		1
plants	land plants	Asteraceae	*Senecio bipinnatisectus*	Commonwealth weed		C		1
plants	land plants	Asteraceae	*Senecio madagascariensis*	fireweed	Y			1/1
plants	land plants	Asteraceae	*Senecio pinnatifolius var. serratus*			C		1
plants	land plants	Asteraceae	*Sigesbeckia orientalis*	Indian weed		C		1
plants	land plants	Asteraceae	*Symphyotrichum subulatum*		Y			1/1
plants	land plants	Asteraceae	*Tagetes minuta*	stinking roger	Y			1
plants	land plants	Asteraceae	*Xerochrysum bracteatum*	golden everlasting daisy		C		1
plants	land plants	Asteraceae	*Youngia japonica*			C		1
plants	land plants	Atherospermataceae	*Daphnandra apatela*			C		1
plants	land plants	Atherospermataceae	*Doryphora sassafras*	sassafras		C		1
plants	land plants	Athyriaceae	*Diplazium assimile*			C		1
plants	land plants	Berberidopsidaceae	*Streptothamnus moorei*			C		1
plants	land plants	Bignoniaceae	*Pandorea baileyana*	large-leaved wonga vine		C		1
plants	land plants	Bignoniaceae	*Pandorea jasminoides*			C		1
plants	land plants	Bignoniaceae	*Pandorea pandorana*	wonga vine		C		1
plants	land plants	Bignoniaceae	*Pandorea sp. (Mt Maroon P.I.Forster+ PIF7111)*			C		1
plants	land plants	Bignoniaceae	*Tecoma stans var. stans*		Y			1/1
plants	land plants	Blechnaceae	*Blechnum cartilagineum*	gristle fern		C		1
plants	land plants	Blechnaceae	*Blechnum neohollandicum*			C		1
plants	land plants	Blechnaceae	*Blechnum parrisiae*			SL		1
plants	land plants	Blechnaceae	*Blechnum patersonii*			SL		1
plants	land plants	Blechnaceae	*Blechnum spinulosum*			SL		1
plants	land plants	Blechnaceae	*Blechnum wattsii*	hard water fern		SL		1
plants	land plants	Boraginaceae	*Ehretia acuminata*			C		1
plants	land plants	Boraginaceae	*Hackelia latifolia*			C		1
plants	land plants	Brassicaceae	*Raphanus raphanistrum*	wild radish	Y			1/1
plants	land plants	Brassicaceae	*Rorippa gigantea*			C		1

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plants	land plants	Byttneriaceae	*Commersonia salviifolia*			C		1
plants	land plants	Byttneriaceae	*Seringia arborescens*			C		1
plants	land plants	Byttneriaceae	*Seringia hillii*			C		1
plants	land plants	Campanulaceae	*Isotoma axillaris*	australian harebell		SL		1
plants	land plants	Campanulaceae	*Lobelia andrewsii*			SL		1
plants	land plants	Campanulaceae	*Lobelia trigonocaulis*	forest lobelia		SL		1
plants	land plants	Campanulaceae	*Wahlenbergia scopulicola*			V		1
plants	land plants	Cannabaceae	*Aphananthe philippinensis*			C		1
plants	land plants	Cannabaceae	*Trema tomentosa var. aspera*			C		1
plants	land plants	Capparaceae	*Capparis arborea*	brush caper berry		C		1
plants	land plants	Capparaceae	*Capparis sarmentosa*	scrambling caper		C		1
plants	land plants	Carpodetaceae	*Abrophyllum ornans*			C		1
plants	land plants	Carpodetaceae	*Cuttsia viburnea*	silver-leaf cuttsia		C		1
plants	land plants	Casuarinaceae	*Allocasuarina littoralis*			C		1
plants	land plants	Casuarinaceae	*Allocasuarina rigida*			C		1
plants	land plants	Casuarinaceae	*Allocasuarina torulosa*			C		1
plants	land plants	Casuarinaceae	*Casuarina cunninghamiana*			C		1
plants	land plants	Celastraceae	*Denhamia bilocularis*			C		1
plants	land plants	Celastraceae	*Denhamia celastroides*	broad-leaved boxwood		C		1
plants	land plants	Celastraceae	*Denhamia silvestris*			C		1
plants	land plants	Chenopodiaceae	*Einadia hastata*			C		1
plants	land plants	Colchicaceae	*Tripladenia cunninghamii*			C		1
plants	land plants	Commelinaceae	*Pollia crispata*	pollia		C		1
plants	land plants	Convolvulaceae	*Calystegia marginata*	forest bindweed		C		1
plants	land plants	Convolvulaceae	*Dichondra repens*	kidney weed		C		1
plants	land plants	Cornaceae	*Alangium polyosmoides subsp. polyosmoides*			C		1
plants	land plants	Crassulaceae	*Crassula sieberiana*			C		1
plants	land plants	Cucurbitaceae	*Sicyos australis*	star cucumber		C		1
plants	land plants	Cunoniaceae	*Ackama paniculosa*			C		1
plants	land plants	Cunoniaceae	*Bauera rubioides*			C		1
plants	land plants	Cunoniaceae	*Callicoma serratifolia*	callicoma		C		1
plants	land plants	Cunoniaceae	*Karrabina benthamiana*			C		1
plants	land plants	Cunoniaceae	*Schizomeria ovata*	white cherry		C		1
plants	land plants	Cupressaceae	*Callitris rhomboidea*	dune cypress pine		C		1
plants	land plants	Cyatheaceae	*Alsophila australis*			C		1
plants	land plants	Cyatheaceae	*Sphaeropteris australis*			C		1
plants	land plants	Cyatheaceae	*Sphaeropteris cooperi*			C		1
plants	land plants	Cyperaceae	*Carex appressa*			C		1
plants	land plants	Cyperaceae	*Cyperus lucidus*			C		1
plants	land plants	Cyperaceae	*Cyperus tetraphyllus*			C		1
plants	land plants	Cyperaceae	*Gahnia aspera*			C		1
plants	land plants	Cyperaceae	*Gahnia insignis*			C		1
plants	land plants	Cyperaceae	*Gahnia melanocarpa*			C		1
plants	land plants	Cyperaceae	*Gahnia sieberiana*	sword grass		C		1
plants	land plants	Cyperaceae	*Gahnia subaequiglumis*			C		1
plants	land plants	Cyperaceae	*Lepidosperma elatius*			C		1

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plants	land plants	Cyperaceae	*Lepidosperma laterale*			C		1
plants	land plants	Cyperaceae	*Schoenoplectus subulatus*			C		1/1
plants	land plants	Cyperaceae	*Schoenus melanostachys*			C		1
plants	land plants	Davalliaceae	*Davallia pyxidata*			C		1
plants	land plants	Dennstaedtiaceae	*Histiopteris incisa*	bats-wing fern		C		1
plants	land plants	Dennstaedtiaceae	*Hypolepis glandulifera*	sticky ground fern		C		1
plants	land plants	Dennstaedtiaceae	*Pteridium esculentum*	common bracken		C		1
plants	land plants	Dicksoniaceae	*Calochlaena dubia*			C		1
plants	land plants	Dicksoniaceae	*Dicksonia antarctica*			SL		1
plants	land plants	Dilleniaceae	*Hibbertia aspera*			C		1
plants	land plants	Dilleniaceae	*Hibbertia dentata*	trailing guinea flower		C		1
plants	land plants	Dilleniaceae	*Hibbertia hexandra*			NT		1
plants	land plants	Dilleniaceae	*Hibbertia linearis var. obtusifolia*			C		1
plants	land plants	Dilleniaceae	*Hibbertia monticola*	mountain guinea flower		NT		1
plants	land plants	Dilleniaceae	*Hibbertia riparia*			C		1
plants	land plants	Dilleniaceae	*Hibbertia scandens*			C		1
plants	land plants	Dilleniaceae	*Hibbertia sericea*	silky guinea flower		C		1
plants	land plants	Dioscoreaceae	*Dioscorea transversa*	native yam		C		1
plants	land plants	Droseraceae	*Drosera*					1
plants	land plants	Droseraceae	*Drosera burmanni*			SL		1
plants	land plants	Dryopteridaceae	*Lastreopsis decomposita*	trim shield fern		SL		1
plants	land plants	Dryopteridaceae	*Lastreopsis marginans*	glossy shield fern		SL		1
plants	land plants	Dryopteridaceae	*Parapolystichum microsorum*			SL		1
plants	land plants	Dryopteridaceae	*Parapolystichum munitum*			SL		1
plants	land plants	Dryopteridaceae	*Parapolystichum smithianum*			SL		1
plants	land plants	Dryopteridaceae	*Polystichum formosum*			SL		1
plants	land plants	Ebenaceae	*Diospyros australis*	black plum		C		1
plants	land plants	Ebenaceae	*Diospyros pentamera*	myrtle ebony		C		1
plants	land plants	Elaeocarpaceae	*Elaeocarpus grandis*	blue quandong		C		1
plants	land plants	Elaeocarpaceae	*Elaeocarpus obovatus*	blueberry ash		C		1
plants	land plants	Elaeocarpaceae	*Elaeocarpus reticulatus*	ash quandong		C		1
plants	land plants	Elaeocarpaceae	*Sloanea australis*			C		1
plants	land plants	Elaeocarpaceae	*Sloanea woollsii*	yellow carrabeen		C		1
plants	land plants	Ericaceae	*Acrothamnus melaleucoides*			C		1
plants	land plants	Ericaceae	*Acrotriche aggregata*	red cluster heath		C		1
plants	land plants	Ericaceae	*Agiortia cicatricata*			NT		2
plants	land plants	Ericaceae	*Epacris longiflora*	fuchsia heath		C		1
plants	land plants	Ericaceae	*Leucopogon affinis*			C		1
plants	land plants	Ericaceae	*Melichrus adpressus*			C		1
plants	land plants	Ericaceae	*Melichrus urceolatus*	honey gorse		C		1
plants	land plants	Ericaceae	*Monotoca scoparia*	prickly broom heath		C		1
plants	land plants	Ericaceae	*Styphelia neoanglica*			C		1
plants	land plants	Ericaceae	*Styphelia sieberi*			C		1
plants	land plants	Ericaceae	*Trochocarpa laurina*	tree heath		C		1
plants	land plants	Ericaceae	*Woollsia pungens*			C		1
plants	land plants	Escalloniaceae	*Anopterus macleayanus*	Macleay laurel		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Escalloniaceae	*Polyosma cunninghamii*	featherwood		C		1
plants	land plants	Euphorbiaceae	*Acalypha capillipes*	small-leaved acalypha		C		1
plants	land plants	Euphorbiaceae	*Acalypha nemorum*	hairy acalypha		C		1
plants	land plants	Euphorbiaceae	*Amperea xiphoclada*			C		1
plants	land plants	Euphorbiaceae	*Baloghia inophylla*	scrub bloodwood		C		1
plants	land plants	Euphorbiaceae	*Claoxylon australe*	brittlewood		C		1
plants	land plants	Euphorbiaceae	*Croton acronychioides*	thick-leaved croton		C		1
plants	land plants	Euphorbiaceae	*Croton verreauxii*	green cascarilla		C		1
plants	land plants	Euphorbiaceae	*Excoecaria dallachyana*	scrub poison tree		C		1
plants	land plants	Euphorbiaceae	*Homalanthus populifolius*			C		1
plants	land plants	Euphorbiaceae	*Mallotus philippensis*	red kamala		C		1
plants	land plants	Euphorbiaceae	*Ricinocarpos speciosus*			V		1
plants	land plants	Euphorbiaceae	*Tragia novae-hollandiae*	stinging-vine		C		1
plants	land plants	Eupomatiaceae	*Eupomatia bennettii*	small bolwarra		C		1
plants	land plants	Eupomatiaceae	*Eupomatia laurina*	bolwarra		C		1
plants	land plants	Geraniaceae	*Pelargonium australe*			C		1
plants	land plants	Gesneriaceae	*Fieldia australis*	fieldia		SL		1
plants	land plants	Gleicheniaceae	*Dicranopteris linearis*			C		1
plants	land plants	Gleicheniaceae	*Gleichenia dicarpa*	pouched coral fern		C		1
plants	land plants	Gleicheniaceae	*Sticherus flabellatus var. flabellatus*			C		1
plants	land plants	Gleicheniaceae	*Sticherus lobatus*	spreading fan fern		C		1
plants	land plants	Goodeniaceae	*Coopernookia scabridiuscula*	coopernookia		V	V	1
plants	land plants	Goodeniaceae	*Dampiera purpurea*			C		1
plants	land plants	Goodeniaceae	*Goodenia hederacea*			C		1
plants	land plants	Goodeniaceae	*Goodenia ovata*			C		1
plants	land plants	Goodeniaceae	*Goodenia rotundifolia*			C		1
plants	land plants	Goodeniaceae	*Scaevola ramosissima*	purple fan flower		C		1
plants	land plants	Haloragaceae	*Gonocarpus oreophilus*			C		1
plants	land plants	Haloragaceae	*Gonocarpus teucrioides*			C		1
plants	land plants	Hemerocallidaceae	*Dianella caerulea*			C		1
plants	land plants	Hemerocallidaceae	*Dianella longifolia*			C		1
plants	land plants	Hemerocallidaceae	*Geitonoplesium cymosum*	scrambling lily		C		1
plants	land plants	Hemerocallidaceae	*Thelionema grande*			C		1
plants	land plants	Hymenophyllaceae	*Hymenophyllum cupressiforme*	common filmy fern		SL		1
plants	land plants	Hymenophyllaceae	*Hymenophyllum flabellatum*	shiny filmy fern		SL		1
plants	land plants	Hymenophyllaceae	*Polyphlebium venosum*	veined bristle fern		SL		1
plants	land plants	Iridaceae	*Libertia paniculata*			C		1
plants	land plants	Iridaceae	*Patersonia sericea*			C		1
plants	land plants	Juncaceae	*Juncus usitatus*			C		2
plants	land plants	Lamiaceae	*Ajuga australis*	Australian bugle		C		1
plants	land plants	Lamiaceae	*Coleus alloplectus*			C		1
plants	land plants	Lamiaceae	*Coleus australis*			C		1
plants	land plants	Lamiaceae	*Coleus graveolens*			C		1
plants	land plants	Lamiaceae	*Prostanthera nivea*			C		1
plants	land plants	Lamiaceae	*Prostanthera ovalifolia*			C		1
plants	land plants	Lamiaceae	*Westringia blakeana*			NT		1

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plants	land plants	Lauraceae	*Beilschmiedia elliptica*	grey walnut		C		2
plants	land plants	Lauraceae	*Cinnamomum oliveri*	Oliver's sassafras		C		1
plants	land plants	Lauraceae	*Cinnamomum virens*			C		1
plants	land plants	Lauraceae	*Cryptocarya erythroxylon*	pigeonberry ash		C		1
plants	land plants	Lauraceae	*Cryptocarya foveolata*	mountain walnut		C		1
plants	land plants	Lauraceae	*Cryptocarya glaucescens*			C		1
plants	land plants	Lauraceae	*Cryptocarya microneura*	murrogun		C		1
plants	land plants	Lauraceae	*Cryptocarya obovata*	pepperberry		C		1
plants	land plants	Lauraceae	*Cryptocarya rigida*	rose maple		C		1
plants	land plants	Lauraceae	*Litsea reticulata*			C		1
plants	land plants	Lauraceae	*Neolitsea australiensis*	green bolly gum		C		1
plants	land plants	Lauraceae	*Neolitsea dealbata*	white bolly gum		C		1
plants	land plants	Laxmanniaceae	*Cordyline petiolaris*	large-leaved palm lily		C		1
plants	land plants	Laxmanniaceae	*Cordyline stricta*	narrow-leaved palm lily		SL		1
plants	land plants	Laxmanniaceae	*Eustrephus latifolius*	wombat berry		C		1
plants	land plants	Laxmanniaceae	*Laxmannia gracilis*	slender wire lily		C		1
plants	land plants	Laxmanniaceae	*Lomandra filiformis*			C		1
plants	land plants	Laxmanniaceae	*Lomandra longifolia*			C		2
plants	land plants	Laxmanniaceae	*Lomandra multiflora*			C		1
plants	land plants	Laxmanniaceae	*Lomandra spicata*	jungle matrush		C		1
plants	land plants	Laxmanniaceae	*Thysanotus tuberosus*			C		1
plants	land plants	Leguminosae	*Acacia acrionastes*			NT		1
plants	land plants	Leguminosae	*Acacia blakei*			C		1
plants	land plants	Leguminosae	*Acacia falcata*	sickle wattle		C		1
plants	land plants	Leguminosae	*Acacia falciformis*	broad-leaved hickory		C		1
plants	land plants	Leguminosae	*Acacia fimbriata*	Brisbane golden wattle		C		2
plants	land plants	Leguminosae	*Acacia floribunda*	white sally wattle		C		1
plants	land plants	Leguminosae	*Acacia implexa*	lightwood		C		1
plants	land plants	Leguminosae	*Acacia irrorata subsp. irrorata*			C		1
plants	land plants	Leguminosae	*Acacia juncifolia*			C		1
plants	land plants	Leguminosae	*Acacia maidenii*	Maiden's wattle		C		1
plants	land plants	Leguminosae	*Acacia melanoxylon*	blackwood		C		1
plants	land plants	Leguminosae	*Acacia myrtifolia*			C		1
plants	land plants	Leguminosae	*Acacia obtusifolia*			C		1
plants	land plants	Leguminosae	*Acacia saxicola*	Mt. Maroon wattle		E		1
plants	land plants	Leguminosae	*Acacia suaveolens*	sweet wattle		C		1
plants	land plants	Leguminosae	*Acacia ulicifolia*			C		1
plants	land plants	Leguminosae	*Acacia viscidula*			C		1
plants	land plants	Leguminosae	*Archidendron grandiflorum*	lace flower tree		C		1
plants	land plants	Leguminosae	*Austrocallerya megasperma*			C		1
plants	land plants	Leguminosae	*Bossiaea rupicola*	pea flower		C		1
plants	land plants	Leguminosae	*Chorizema parviflorum*	eastern flame pea		C		1
plants	land plants	Leguminosae	*Crotalaria mitchellii subsp. mitchellii*			C		1
plants	land plants	Leguminosae	*Daviesia ulicifolia*	native gorse		C		1
plants	land plants	Leguminosae	*Daviesia wyattiana*	long-leaved bitter pea		C		1
plants	land plants	Leguminosae	*Desmodium brachypodum*	large ticktrefoil		C		1

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plants	land plants	Leguminosae	*Desmodium nemorosum*			C		1
plants	land plants	Leguminosae	*Desmodium rhytidophyllum*			C		1
plants	land plants	Leguminosae	*Desmodium varians*	slender tick trefoil		C		1
plants	land plants	Leguminosae	*Erythrina vespertilio*			C		1
plants	land plants	Leguminosae	*Glycine clandestina*			C		1
plants	land plants	Leguminosae	*Gompholobium latifolium*	broad wedge pea		C		1
plants	land plants	Leguminosae	*Gompholobium pinnatum*	poor mans gold		C		1
plants	land plants	Leguminosae	*Hardenbergia violacea*			C		1
plants	land plants	Leguminosae	*Hovea acutifolia*			C		1
plants	land plants	Leguminosae	*Hovea lanceolata*			C		1
plants	land plants	Leguminosae	*Indigofera australis*			C		1
plants	land plants	Leguminosae	*Jacksonia scoparia*			C		1
plants	land plants	Leguminosae	*Kennedia rubicunda*	red Kennedy pea		C		1
plants	land plants	Leguminosae	*Melilotus albus*	sweet clover	Y			1/1
plants	land plants	Leguminosae	*Mirbelia pungens*			C		1
plants	land plants	Leguminosae	*Podolobium ilicifolium*			C		1
plants	land plants	Leguminosae	*Pultenaea daphnoides*			C		1
plants	land plants	Leguminosae	*Pultenaea petiolaris*			C		1
plants	land plants	Leguminosae	*Pultenaea pycnocephala*			C		1
plants	land plants	Leguminosae	*Pultenaea whiteana*	Mt. Barney bush pea		V		1
plants	land plants	Leguminosae	*Swainsona galegifolia*	smooth Darling pea		C		1
plants	land plants	Leguminosae	*Tephrosia rufula*			C		1
plants	land plants	Leguminosae	*Vachellia farnesiana*		Y			1/1
plants	land plants	Leptaulaceae	*Citronella moorei*	churnwood		C		1
plants	land plants	Lindsaeaceae	*Lindsaea linearis*	screw fern		C		1
plants	land plants	Lindsaeaceae	*Lindsaea microphylla*	lacy wedge fern		C		1
plants	land plants	Loganiaceae	*Logania albiflora*			C		1
plants	land plants	Loranthaceae	*Amyema miquelii*			C		1
plants	land plants	Loranthaceae	*Amylotheca dictyophleba*			C		1
plants	land plants	Lycopodiaceae	*Phlegmariurus varius*			V		1
plants	land plants	Lycopodiaceae	*Pseudolycopodium densum*			SL		1
plants	land plants	Malvaceae	*Abutilon oxycarpum var. oxycarpum*			C		1
plants	land plants	Malvaceae	*Hibiscus heterophyllus*			C		1
plants	land plants	Malvaceae	*Malva parviflora*	small-flowered mallow	Y			1
plants	land plants	Meliaceae	*Anthocarapa nitidula*	incense cedar		C		1
plants	land plants	Meliaceae	*Dysoxylum fraserianum*	rose mahogany		C		1
plants	land plants	Meliaceae	*Dysoxylum rufum*			C		1
plants	land plants	Meliaceae	*Melia azedarach*	white cedar		C		2
plants	land plants	Meliaceae	*Synoum glandulosum*			C		1
plants	land plants	Meliaceae	*Toona ciliata*	red cedar		C		1
plants	land plants	Menispermaceae	*Legnephora moorei*			C		1
plants	land plants	Menispermaceae	*Sarcopetalum harveyanum*	pearl vine		C		1
plants	land plants	Menispermaceae	*Stephania japonica var. discolor*			C		1
plants	land plants	Menispermaceae	*Tinospora smilacina*	snakevine		C		1
plants	land plants	Monimiaceae	*Hedycarya angustifolia*	native mulberry		C		1
plants	land plants	Monimiaceae	*Palmeria scandens*	anchor vine		C		1

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plants	land plants	Monimiaceae	*Wilkiea huegeliana*	veiny wilkiea		C		1
plants	land plants	Moraceae	*Ficus coronata*	creek sandpaper fig		C		1
plants	land plants	Moraceae	*Ficus macrophylla*			C		1
plants	land plants	Moraceae	*Ficus obliqua*			C		1
plants	land plants	Moraceae	*Ficus watkinsiana*	green-leaved Moreton Bay fig		C		1
plants	land plants	Moraceae	*Maclura cochinchinensis*	cockspur thorn		C		2
plants	land plants	Moraceae	*Streblus brunonianus*	whalebone tree		C		1
plants	land plants	Moraceae	*Trophis scandens subsp. scandens*			C		1
plants	land plants	Myrsinaceae	*Embelia australiana*	embelia		C		1
plants	land plants	Myrsinaceae	*Myrsine howittiana*			C		1
plants	land plants	Myrsinaceae	*Myrsine subsessilis*			C		1
plants	land plants	Myrsinaceae	*Myrsine variabilis*			C		1
plants	land plants	Myrtaceae	*Acmena ingens*	southern satinash		C		1
plants	land plants	Myrtaceae	*Acmena smithii*	lillypilly satinash		C		1
plants	land plants	Myrtaceae	*Angophora leiocarpa*	rusty gum		C		1
plants	land plants	Myrtaceae	*Angophora subvelutina*			C		1
plants	land plants	Myrtaceae	*Backhousia myrtifolia*	carrol		C		1
plants	land plants	Myrtaceae	*Corymbia citriodora*	spotted gum		C		1
plants	land plants	Myrtaceae	*Corymbia intermedia*	pink bloodwood		C		1
plants	land plants	Myrtaceae	*Corymbia tessellaris*	Moreton Bay ash		C		1
plants	land plants	Myrtaceae	*Corymbia trachyphloia*			C		1
plants	land plants	Myrtaceae	*Eucalyptus acmenoides*			C		1
plants	land plants	Myrtaceae	*Eucalyptus biturbinata*			C		1
plants	land plants	Myrtaceae	*Eucalyptus campanulata*			C		1
plants	land plants	Myrtaceae	*Eucalyptus carnea*			C		1
plants	land plants	Myrtaceae	*Eucalyptus crebra*	narrow-leaved red ironbark		C		1
plants	land plants	Myrtaceae	*Eucalyptus dura*			C		1
plants	land plants	Myrtaceae	*Eucalyptus eugenioides*			C		1
plants	land plants	Myrtaceae	*Eucalyptus grandis*	flooded gum		C		1
plants	land plants	Myrtaceae	*Eucalyptus melliodora*	yellow box		C		1
plants	land plants	Myrtaceae	*Eucalyptus michaeliana*	Hillgrove gum		C		1
plants	land plants	Myrtaceae	*Eucalyptus microcorys*			C		1
plants	land plants	Myrtaceae	*Eucalyptus moluccana*	gum-topped box		C		1
plants	land plants	Myrtaceae	*Eucalyptus notabilis*			C		1
plants	land plants	Myrtaceae	*Eucalyptus oreades*	Blue Mountains ash		C		1
plants	land plants	Myrtaceae	*Eucalyptus propinqua*	small-fruited grey gum		C		1
plants	land plants	Myrtaceae	*Eucalyptus resinifera*	red mahogany		C		1
plants	land plants	Myrtaceae	*Eucalyptus saligna*			C		1
plants	land plants	Myrtaceae	*Eucalyptus seeana*	narrow-leaved red gum		C		1
plants	land plants	Myrtaceae	*Eucalyptus siderophloia*			C		1
plants	land plants	Myrtaceae	*Eucalyptus tereticornis*			C		1
plants	land plants	Myrtaceae	*Eucalyptus tindaliae*	Queensland white stringybark		C		1
plants	land plants	Myrtaceae	*Gossia hillii*			C		1
plants	land plants	Myrtaceae	*Kunzea ericoides*	burgan		C		1
plants	land plants	Myrtaceae	*Kunzea obovata*			C		1
plants	land plants	Myrtaceae	*Lenwebbia prominens*			NT		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Myrtaceae	*Leptospermum microcarpum*	small-fruited tea-tree		C		1
plants	land plants	Myrtaceae	*Leptospermum petersonii*			C		1
plants	land plants	Myrtaceae	*Leptospermum polygalifolium*	tantoon		C		2
plants	land plants	Myrtaceae	*Leptospermum trinervium*	woolly tea-tree		C		1
plants	land plants	Myrtaceae	*Lophostemon confertus*	brush box		C		1
plants	land plants	Myrtaceae	*Melaleuca comboynensis*			C		1
plants	land plants	Myrtaceae	*Melaleuca montana*			C		1
plants	land plants	Myrtaceae	*Melaleuca pallida*			C		1
plants	land plants	Myrtaceae	*Melaleuca viminalis*			C		2
plants	land plants	Myrtaceae	*Pilidiostigma glabrum*	plum myrtle		C		1
plants	land plants	Myrtaceae	*Rhodamnia argentea*	white myrtle		C		1
plants	land plants	Myrtaceae	*Rhodamnia rubescens*	scrub turpentine		CR	CE	1
plants	land plants	Myrtaceae	*Syncarpia glomulifera*			C		1
plants	land plants	Myrtaceae	*Syzygium australe*	scrub cherry		C		1
plants	land plants	Myrtaceae	*Syzygium corynanthum*	sour cherry		C		1
plants	land plants	Myrtaceae	*Syzygium crebrinerve*	purple cherry		C		1
plants	land plants	Myrtaceae	*Syzygium oleosum*	blue cherry		C		1
plants	land plants	Myrtaceae	*Tristaniopsis collina*	mountain water gum		C		1
plants	land plants	Myrtaceae	*Tristaniopsis laurina*			C		1
plants	land plants	Nephrolepidaceae	*Nephrolepis cordifolia*	fishbone fern		C		1
plants	land plants	Nothofagaceae	*Nothofagus moorei*	antarctic beech		C		1
plants	land plants	Oleaceae	*Jasminum dianthifolium*			C		1
plants	land plants	Oleaceae	*Notelaea ovata*	forest olive		C		1
plants	land plants	Oleaceae	*Notelaea punctata*			C		1
plants	land plants	Oleaceae	*Notelaea venosa*	smooth mock-olive		C		1
plants	land plants	Oleaceae	*Olea paniculata*			C		1
plants	land plants	Orchidaceae	*Bulbophyllum exiguum*			SL		1
plants	land plants	Orchidaceae	*Bulbophyllum schillerianum*	red rope orchid		SL		1
plants	land plants	Orchidaceae	*Caladenia carnea*			SL		1
plants	land plants	Orchidaceae	*Caladenia catenata*			SL		1
plants	land plants	Orchidaceae	*Calanthe triplicata*	christmas orchid		SL		1
plants	land plants	Orchidaceae	*Calochilus campestris*	copper beard orchid		SL		1
plants	land plants	Orchidaceae	*Cestichis swenssonii*			SL		1
plants	land plants	Orchidaceae	*Corybas aconitiflorus*			SL		1
plants	land plants	Orchidaceae	*Corybas fimbriatus*	fringed helmet orchid		SL		1
plants	land plants	Orchidaceae	*Corybas montanus*	small helmet orchid		V	V	1
plants	land plants	Orchidaceae	*Cryptostylis erecta*	bonnet orchid		SL		1
plants	land plants	Orchidaceae	*Cryptostylis subulata*	large tongue orchid		SL		1
plants	land plants	Orchidaceae	*Dendrobium aemulum*	ironbark orchid		SL		1
plants	land plants	Orchidaceae	*Dendrobium falcorostrum*	beech orchid		SL		1
plants	land plants	Orchidaceae	*Dendrobium gracilicaule*	slender orchid		SL		1
plants	land plants	Orchidaceae	*Dendrobium kingianum*			SL		1
plants	land plants	Orchidaceae	*Dendrobium monophyllum*			SL		1
plants	land plants	Orchidaceae	*Dendrobium speciosum*			SL		1
plants	land plants	Orchidaceae	*Dendrobium tetragonum*	tree spider orchid		SL		1
plants	land plants	Orchidaceae	*Diuris abbreviata*	lemon doubletail		SL		1

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plants	land plants	Orchidaceae	*Diuris sulphurea*	tiger orchid		SL		1
plants	land plants	Orchidaceae	*Dockrillia cucumerina*			SL		1
plants	land plants	Orchidaceae	*Dockrillia linguiformis*	tongue orchid		SL		1
plants	land plants	Orchidaceae	*Dockrillia mortii*			SL		1
plants	land plants	Orchidaceae	*Dockrillia pugioniformis*	dagger orchid		SL		1
plants	land plants	Orchidaceae	*Dockrillia schoenina*	pencil orchid		SL		1
plants	land plants	Orchidaceae	*Dockrillia teretifolia*	rat's tail orchid		SL		1
plants	land plants	Orchidaceae	*Erythrorchis cassythoides*	climbing orchid		SL		1
plants	land plants	Orchidaceae	*Gastrodia sesamoides*	cinnamon bells		SL		1
plants	land plants	Orchidaceae	*Microtis parviflora*	slender onion orchid		SL		1
plants	land plants	Orchidaceae	*Microtis unifolia*	common onion orchid		SL		1
plants	land plants	Orchidaceae	*Plectorrhiza tridentata*	tangle orchid		SL		1
plants	land plants	Orchidaceae	*Pterostylis baptistii*	king greenhood		SL		1
plants	land plants	Orchidaceae	*Pterostylis curta*	blunt greenhood		SL		1
plants	land plants	Orchidaceae	*Pterostylis daintreana*			SL		1
plants	land plants	Orchidaceae	*Pterostylis nutans*			SL		1
plants	land plants	Orchidaceae	*Rhinerrhiza divitiflora*			SL		1
plants	land plants	Orchidaceae	*Sarcochilus ceciliae*	fairy bells		SL		1
plants	land plants	Orchidaceae	*Sarcochilus falcatus*	orange blossom orchid		SL		1
plants	land plants	Orchidaceae	*Sarcochilus parviflorus*			SL		1
plants	land plants	Orchidaceae	*Spiranthes australis*			SL		1
plants	land plants	Orchidaceae	*Thelymitra*					1
plants	land plants	Orchidaceae	*Thelymitra ixioides*			SL		1
plants	land plants	Orchidaceae	*Thelymitra pauciflora*	slender sun orchid		SL		1
plants	land plants	Orthotrichaceae	*Macromitrium ligulare*			C		1/1
plants	land plants	Osmundaceae	*Todea barbara*	king fern		C		1
plants	land plants	Oxalidaceae	*Oxalis corniculata*		Y			2
plants	land plants	Passifloraceae	*Passiflora herbertiana subsp. herbertiana*	native passionfruit		C		1
plants	land plants	Pennantiaceae	*Pennantia cunninghamii*	brown beech		C		1
plants	land plants	Phyllanthaceae	*Actephila mooreana*			C		1
plants	land plants	Phyllanthaceae	*Breynia oblongifolia*			C		1
plants	land plants	Phyllanthaceae	*Glochidion ferdinandi*			C		1
plants	land plants	Phyllanthaceae	*Phyllanthus gunnii*			C		1
plants	land plants	Phyllanthaceae	*Poranthera corymbosa*			C		1
plants	land plants	Phyllanthaceae	*Poranthera microphylla*	small poranthera		C		1
plants	land plants	Phytolaccaceae	*Phytolacca octandra*	inkweed	Y			1
plants	land plants	Picrodendraceae	*Micrantheum ericoides*			C		1
plants	land plants	Picrodendraceae	*Pseudanthus orientalis*			C		1
plants	land plants	Piperaceae	*Peperomia leptostachya*			C		1
plants	land plants	Piperaceae	*Peperomia tetraphylla*			C		1
plants	land plants	Piperaceae	*Piper hederaceum*			C		1
plants	land plants	Pittosporaceae	*Auranticarpa rhombifolia*			C		1
plants	land plants	Pittosporaceae	*Billardiera scandens*			C		1
plants	land plants	Pittosporaceae	*Bursaria spinosa subsp. spinosa*			C		1
plants	land plants	Pittosporaceae	*Hymenosporum flavum*	native frangipani		C		1
plants	land plants	Pittosporaceae	*Pittosporum spinescens*			C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Pittosporaceae	*Pittosporum undulatum*	sweet pittosporum		C		1
plants	land plants	Plantaginaceae	*Bacopa monnieri*			C		1
plants	land plants	Poaceae	*Arundinella grevillensis*			V		1
plants	land plants	Poaceae	*Austrostipa ramosissima*	bamboo grass		C		1
plants	land plants	Poaceae	*Bothriochloa decipiens var. decipiens*			C		1
plants	land plants	Poaceae	*Bothriochloa pertusa*		Y			1
plants	land plants	Poaceae	*Chloris divaricata var. divaricata*	slender chloris		C		1/1
plants	land plants	Poaceae	*Cymbopogon refractus*	barbed-wire grass		C		1
plants	land plants	Poaceae	*Dichelachne micrantha*	shorthair plumegrass		C		1
plants	land plants	Poaceae	*Echinochloa crus-galli*	barnyard grass	Y			1/1
plants	land plants	Poaceae	*Echinopogon caespitosus*			C		1
plants	land plants	Poaceae	*Entolasia stricta*	wiry panic		C		1
plants	land plants	Poaceae	*Eragrostis tenuifolia*	elastic grass	Y			1
plants	land plants	Poaceae	*Heteropogon contortus*	black speargrass		C		1
plants	land plants	Poaceae	*Imperata cylindrica*	blady grass		C		2
plants	land plants	Poaceae	*Melinis repens*	red natal grass	Y			1
plants	land plants	Poaceae	*Oplismenus aemulus*	creeping shade grass		C		1
plants	land plants	Poaceae	*Oplismenus imbecillis*			C		1
plants	land plants	Poaceae	*Panicum bisulcatum*	blackseed panic		C		1
plants	land plants	Poaceae	*Panicum effusum*			C		1
plants	land plants	Poaceae	*Paspalidium criniforme*			C		1
plants	land plants	Poaceae	*Poa labillardierei var. labillardierei*	tussock grass		C		1
plants	land plants	Poaceae	*Poa sieberiana var. sieberiana*			C		1
plants	land plants	Poaceae	*Rytidosperma indutum*			C		1
plants	land plants	Poaceae	*Rytidosperma longifolium*			C		1
plants	land plants	Poaceae	*Sarga leiocladum*			C		1
plants	land plants	Poaceae	*Sorghum halepense*	Johnson grass	Y			1
plants	land plants	Poaceae	*Themeda triandra*	kangaroo grass		C		1
plants	land plants	Polygalaceae	*Comesperma breviflorum*			NT		1
plants	land plants	Polygalaceae	*Comesperma ericinum*			C		1
plants	land plants	Polygalaceae	*Comesperma esulifolium*	match heads		C		1
plants	land plants	Polygonaceae	*Muehlenbeckia gracillima*			C		1
plants	land plants	Polygonaceae	*Muehlenbeckia rhyticarya*			C		1
plants	land plants	Polygonaceae	*Rumex brownii*	swamp dock		C		1
plants	land plants	Polypodiaceae	*Dendroconche scandens*			SL		1
plants	land plants	Polypodiaceae	*Dictymia brownii*	strap fern		SL		1
plants	land plants	Polypodiaceae	*Drynaria rigidula*			SL		1
plants	land plants	Polypodiaceae	*Grammitis stenophylla*			SL		1
plants	land plants	Polypodiaceae	*Platycerium bifurcatum*			SL		1
plants	land plants	Polypodiaceae	*Platycerium superbum*	staghorn fern		SL		1
plants	land plants	Polypodiaceae	*Pyrrosia confluens*			SL		1
plants	land plants	Polypodiaceae	*Pyrrosia rupestris*	rock felt fern		SL		1
plants	land plants	Polypodiaceae	*Zealandia pustulata*			C		1
plants	land plants	Proteaceae	*Banksia conferta*			V		1
plants	land plants	Proteaceae	*Banksia integrifolia subsp. compar*			C		1
plants	land plants	Proteaceae	*Banksia integrifolia subsp. integrifolia*			C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Proteaceae	*Banksia neoanglica*			C		1
plants	land plants	Proteaceae	*Banksia spinulosa var. collina*			C		1
plants	land plants	Proteaceae	*Grevillea robusta*			C		1
plants	land plants	Proteaceae	*Hakea eriantha*			C		1
plants	land plants	Proteaceae	*Hakea laevipes subsp. graniticola*			C		1
plants	land plants	Proteaceae	*Hakea sericea*	white hakea		C		1
plants	land plants	Proteaceae	*Helicia glabriflora*	pale oak		C		1
plants	land plants	Proteaceae	*Lomatia arborescens*	tree lomatia		C		1
plants	land plants	Proteaceae	*Lomatia silaifolia*	crinkle bush		C		1
plants	land plants	Proteaceae	*Orites excelsus*	white beefwood		C		1
plants	land plants	Proteaceae	*Persoonia cornifolia*	broad-leaved geebung		C		1
plants	land plants	Proteaceae	*Persoonia sericea*	silky geebung		C		1
plants	land plants	Proteaceae	*Persoonia stradbrokensis x Persoonia virgata*			C		1
plants	land plants	Proteaceae	*Petrophile canescens*			C		1
plants	land plants	Proteaceae	*Stenocarpus salignus*	scrub beefwood		C		1
plants	land plants	Psilotaceae	*Psilotum nudum*	skeleton fork fern		SL		1
plants	land plants	Psilotaceae	*Tmesipteris ovata*			SL		1
plants	land plants	Pteridaceae	*Adiantum aethiopicum*			SL		1
plants	land plants	Pteridaceae	*Adiantum diaphanum*			SL		1
plants	land plants	Pteridaceae	*Adiantum formosum*			C		1
plants	land plants	Pteridaceae	*Adiantum hispidulum*			SL		1
plants	land plants	Pteridaceae	*Adiantum silvaticum*			SL		1
plants	land plants	Pteridaceae	*Cheilanthes distans*	bristly cloak fern		C		1
plants	land plants	Pteridaceae	*Cheilanthes sieberi*			C		1
plants	land plants	Pteridaceae	*Haplopteris elongata*			SL		1
plants	land plants	Pteridaceae	*Pellaea falcata*			SL		1
plants	land plants	Pteridaceae	*Pellaea nana*			SL		1
plants	land plants	Pteridaceae	*Pteris umbrosa*	jungle bracken		SL		1
plants	land plants	Putranjivaceae	*Drypetes deplanchei*	grey boxwood		C		1
plants	land plants	Quintiniaceae	*Quintinia sieberi*			C		1
plants	land plants	Ranunculaceae	*Clematis aristata*			C		1
plants	land plants	Ranunculaceae	*Clematis fawcettii*			V	V	1
plants	land plants	Ranunculaceae	*Clematis glycinoides*			C		1
plants	land plants	Ranunculaceae	*Ranunculus*					1
plants	land plants	Rhamnaceae	*Alphitonia excelsa*	soap tree		C		1
plants	land plants	Rhamnaceae	*Alphitonia petriei*	pink ash		C		1
plants	land plants	Rhamnaceae	*Cryptandra amara var. amara*			C		1
plants	land plants	Rhamnaceae	*Pomaderris argyrophylla*			C		1
plants	land plants	Rhamnaceae	*Pomaderris lanigera*			C		1
plants	land plants	Rhamnaceae	*Pomaderris ledifolia*			C		1
plants	land plants	Rhamnaceae	*Pomaderris nitidula*			C		1
plants	land plants	Ripogonaceae	*Ripogonum album*	white supplejack		C		1
plants	land plants	Ripogonaceae	*Ripogonum discolor*	prickly supplejack		C		1
plants	land plants	Ripogonaceae	*Ripogonum elseyanum*	hairy supplejack		C		1
plants	land plants	Rosaceae	*Rubus moluccanus*			C		1
plants	land plants	Rosaceae	*Rubus moorei*	bush lawyer		C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Rosaceae	*Rubus parvifolius*	pink-flowered native raspberry		C		1
plants	land plants	Rosaceae	*Rubus rosifolius*			C		1
plants	land plants	Rubiaceae	*Asperula conferta*			C		1
plants	land plants	Rubiaceae	*Dentella repens*	dentella		C		1/1
plants	land plants	Rubiaceae	*Gynochthodes jasminoides*			C		1
plants	land plants	Rubiaceae	*Opercularia aspera*	coarse stinkweed		C		1
plants	land plants	Rubiaceae	*Pomax umbellata*			C		1
plants	land plants	Rubiaceae	*Psychotria daphnoides*			C		1
plants	land plants	Rubiaceae	*Psychotria loniceroides*	hairy psychotria		C		1
plants	land plants	Rubiaceae	*Psydrax odorata*			C		1
plants	land plants	Rutaceae	*Acronychia laevis*	glossy acronychia		C		1
plants	land plants	Rutaceae	*Acronychia oblongifolia*	common acronychia		C		1
plants	land plants	Rutaceae	*Acronychia octandra*	doughwood		C		1
plants	land plants	Rutaceae	*Acronychia pubescens*	hairy acronychia		C		1
plants	land plants	Rutaceae	*Citrus australasica*			C		1
plants	land plants	Rutaceae	*Correa reflexa*			C		1
plants	land plants	Rutaceae	*Cyanothamnus quadrangulus*			C		1
plants	land plants	Rutaceae	*Flindersia australis*	crow's ash		C		1
plants	land plants	Rutaceae	*Flindersia schottiana*	bumpy ash		C		1
plants	land plants	Rutaceae	*Geijera salicifolia*	brush wilga		C		1
plants	land plants	Rutaceae	*Halfordia kendack*	saffron heart		C		1
plants	land plants	Rutaceae	*Leionema beckleri*			E		1
plants	land plants	Rutaceae	*Melicope micrococca*	white evodia		C		1
plants	land plants	Rutaceae	*Sarcomelicope simplicifolia subsp. simplicifolia*	yellow aspen		C		1
plants	land plants	Rutaceae	*Zanthoxylum brachyacanthum*			C		1
plants	land plants	Rutaceae	*Zieria compacta*			C		1
plants	land plants	Rutaceae	*Zieria fraseri*			C		1
plants	land plants	Rutaceae	*Zieria smithii*			C		1
plants	land plants	Salicaceae	*Casearia multinervosa*	casearia		C		1
plants	land plants	Salicaceae	*Scolopia braunii*	flintwood		C		1
plants	land plants	Santalaceae	*Choretrum candollei*	white sour bush		C		1
plants	land plants	Santalaceae	*Exocarpos cupressiformis*	native cherry		C		1
plants	land plants	Sapindaceae	*Alectryon subcinereus*			C		1
plants	land plants	Sapindaceae	*Arytera divaricata*	coogera		C		1
plants	land plants	Sapindaceae	*Cardiospermum grandiflorum*	heart seed vine	Y			1/1
plants	land plants	Sapindaceae	*Cupaniopsis foveolata*	narrow-leaved tuckeroo		C		1
plants	land plants	Sapindaceae	*Cupaniopsis serrata*	smooth tuckeroo		C		1
plants	land plants	Sapindaceae	*Diploglottis australis*	native tamarind		C		1
plants	land plants	Sapindaceae	*Dodonaea triquetra*	large-leaved hop bush		C		1
plants	land plants	Sapindaceae	*Dodonaea viscosa subsp. angustifolia*			C		1
plants	land plants	Sapindaceae	*Dodonaea viscosa subsp. spatulata*			C		1
plants	land plants	Sapindaceae	*Elattostachys nervosa*	green tamarind		C		1
plants	land plants	Sapindaceae	*Elattostachys xylocarpa*	white tamarind		C		1
plants	land plants	Sapindaceae	*Guioa semiglauca*	guioa		C		1
plants	land plants	Sapindaceae	*Harpullia hillii*			C		1
plants	land plants	Sapindaceae	*Harpullia pendula*			C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Sapindaceae	*Jagera pseudorhus*			C		1
plants	land plants	Sapindaceae	*Mischocarpus australis*	red pear-fruit		C		1
plants	land plants	Sapindaceae	*Rhysotoechia bifoliolata*			C		1
plants	land plants	Sapindaceae	*Sarcopteryx stipata*	steelwood		C		1
plants	land plants	Scrophulariaceae	*Eremophila debilis*	winter apple		C		1
plants	land plants	Scrophulariaceae	*Myoporum acuminatum*	coastal boobialla		C		1
plants	land plants	Smilacaceae	*Smilax australis*	barbed-wire vine		C		1
plants	land plants	Smilacaceae	*Smilax glyciphylla*	sweet sarsaparilla		C		1
plants	land plants	Solanaceae	*Cestrum parqui*	green cestrum	Y			1/1
plants	land plants	Solanaceae	*Duboisia myoporoides*			C		1
plants	land plants	Solanaceae	*Nicotiana forsteri*			C		1
plants	land plants	Solanaceae	*Solanum americanum*		Y			1
plants	land plants	Solanaceae	*Solanum callium*	brush nightshade		V		1
plants	land plants	Solanaceae	*Solanum inaequilaterum*	gin's whiskers		C		1
plants	land plants	Solanaceae	*Solanum mauritianum*	wild tobacco	Y			1/1
plants	land plants	Solanaceae	*Solanum prinophyllum*	forest nightshade		C		1
plants	land plants	Solanaceae	*Solanum semiarmatum*	prickly nightshade		C		1
plants	land plants	Solanaceae	*Solanum stelligerum*	devil's needles		C		1
plants	land plants	Sterculiaceae	*Argyrodendron actinophyllum*			C		1
plants	land plants	Sterculiaceae	*Argyrodendron trifoliolatum*	booyong		C		1
plants	land plants	Sterculiaceae	*Brachychiton acerifolius*	flame tree		SL		1
plants	land plants	Sterculiaceae	*Brachychiton discolor*			SL		1
plants	land plants	Sterculiaceae	*Brachychiton populneus*			C		1
plants	land plants	Sterculiaceae	*Sterculia quadrifida*	peanut tree		C		1
plants	land plants	Stylidiaceae	*Stylidium graminifolium*	grassy-leaved trigger-flower		C		1
plants	land plants	Stylidiaceae	*Stylidium laricifolium*	tree trigger plant		SL		1
plants	land plants	Surianaceae	*Guilfoylia monostylis*	guilfoylia		C		1
plants	land plants	Symplocaceae	*Symplocos thwaitesii*	buff hazelwood		C		1
plants	land plants	Tectariaceae	*Arthropteris beckleri*			C		1
plants	land plants	Tectariaceae	*Arthropteris tenella*	climbing fern		C		1
plants	land plants	Thymelaeaceae	*Pimelea latifolia*			C		1
plants	land plants	Thymelaeaceae	*Pimelea linifolia*			C		1
plants	land plants	Trimeniaceae	*Trimenia moorei*	bitter vine		C		1
plants	land plants	Typhaceae	*Typha domingensis*			C		1/1
plants	land plants	Typhaceae	*Typha orientalis*	broad-leaved cumbungi		C		1
plants	land plants	Urticaceae	*Boehmeria virgata var. austroqueenslandica*			C		1
plants	land plants	Urticaceae	*Dendrocnide excelsa*	giant stinging tree		C		1
plants	land plants	Urticaceae	*Elatostema reticulatum*	rainforest spinach		C		1
plants	land plants	Urticaceae	*Elatostema stipitatum*	soft nettle		C		1
plants	land plants	Urticaceae	*Pipturus argenteus*	white nettle		C		1
plants	land plants	Urticaceae	*Urtica incisa*	stinging nettle		C		1
plants	land plants	Verbenaceae	*Lantana camara*	lantana	Y			1
plants	land plants	Verbenaceae	*Verbena rigida*		Y			1/1
plants	land plants	Violaceae	*Pigea monopetala*			C		1
plants	land plants	Violaceae	*Viola betonicifolia*			C		1
plants	land plants	Violaceae	*Viola hederacea*			C		1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	land plants	Vitaceae	*Cissus antarctica*			C		1
plants	land plants	Vitaceae	*Cissus hypoglauca*			C		1
plants	land plants	Vitaceae	*Cissus sterculiifolia*			C		1
plants	land plants	Vitaceae	*Clematicissus opaca*			C		1
plants	land plants	Vitaceae	*Tetrastigma nitens*	shining grape		C		1
plants	land plants	Winteraceae	*Tasmannia insipida*	brush pepperbush		C		1
plants	land plants	Xanthorrhoeaceae	*Xanthorrhoea glauca subsp. glauca*			SL		1
plants	land plants	Xanthorrhoeaceae	*Xanthorrhoea johnsonii*			SL		1
plants	land plants	Xanthorrhoeaceae	*Xanthorrhoea latifolia subsp. latifolia*			SL		1
plants	land plants	Zingiberaceae	*Alpinia caerulea*	wild ginger		C		1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992.*
The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.*
The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).
This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.

Appendix C – Cultural Heritage Risk Assessment

Department of Transport and Main Roads

Cultural Heritage Risk Assessment	Revision Number: 3
	Effective Date: 26.07.2021

Executive Summary

This Cultural Heritage Risk Assessment (CHRA) provides an analysis of the cultural heritage risks pertaining to project Beaudesert-Bikeway, including a critique of both Historical and Indigenous heritage requirements. The CHRA finds that project Beaudesert-Bikeway is a high risk to cultural heritage due to the potential to impact artefactual material along Beaudesert-Nerang Road. In summary, Beaudesert-Bikeway has the following risk profile:

- ☐ Historical heritage issues: Any impacts to local heritage sites require consultation with SRRC
- ☐ Indigenous heritage issues: Impacts to road corridor along Beaudesert-Nerang Rd require possible consultation with Aboriginal Party

Further details on management recommendations for project Beaudesert-Bikeway are provided in Table 1.

Project Details			
PDO District	South Coast Region		
Project name & number	Beaudesert-Bikeway		
Project manager	An Boc	**Contact**	CHO: (07) 5563 6560 & Jamie.z.rowe@tmr.qld.gov.au PM: (07) 5563 6676 & an.z.boc@tmr.qld.gov.au
Location	Beaudesert-Nerang Rd / Brisbane St / Telemon St - Beaudesert		
Local Government	Scenic Rim Regional Council	**WBS**	52-01509139.O.CO.11.2
Road/Facility No	202, 25A, 25B	**DMS reference**	445/03383

Project Scope				
Nature of Works:	☐ Maintenance	☒ New construction	☐ Site Investigations	
	☐ Other:			
Phase:	☐ Concept	☐ Development	☐ Construction	☒ Other: BC
Estimated works start date:	TBC			
Scope of works: Plans/design drawings/project drawings to be attached in Appendices section (at rear)	Proposed alignment to provide bikeway to Beaudesert for residents along Beaudesert-Nerang Rd and Brisbane Street. The bikeway will			

Template Date: July 2021

Queensland Government

Project Scope	
	be located on a mixture of on road and off road, but it is not clear exactly where the on road and off-road sections will be at this stage.
Are there ancillary works? If Yes, describe briefly	TBC
Aboriginal Party/ies for project area: Complete this section based on results of DATSIP search (question 4 below).	Danggan Balun (Five Rivers) Queensland South Native Title Services PO Box 10832 BRISBANE QLD 4000 Freecall: 1800 663 693 Phone: (07) 3224 1200 Email: reception@qsnts.com.au
Has there been previous cultural heritage assessment/s for any or all of the project area? If yes, provide relevant details	

Management Recommendations

Only complete this table when you have completed Tables 2-6 below, if applicable. **Complete this table for ALL works. Describe landscape information for entire project/works (i.e. each section and associated disturbance areas).**

This section requires an ACCURATE DESCRIPTION OF THE 'ON GROUND' SITE CONDITIONS. Ensure that supporting documents are attached in the Appendices section (n.b. the duty of care category can change throughout works sections, e.g. works near specific vegetation &/or features like watercourses etc.)

Table 1 Overall Management Recommendations

Location description: Section / Chainage / GPS Coordinates / Waterway Name	**Property:** Lot on plan	**Past use/ground disturbance description:** (summarise land use/ground disturbance – attach aerials/site photos/other information as appendix to illustrate) E.g. evidence of past mechanical disturbance	**Description of Vegetation / Features within works spans** E.g. Rivers & creeks, rock outcrops, remnant or regrowth, open woodland grassland etc.	**Category** (Low risk or High Risk Duty of Care Category)	**Management Recommendations**
Beaudesert-Nerang Rd / Brisbane St / Telemon St		Mechanically cleared existing road corridor	Regrowth vegetation Grasses Weeds	Category 5 High Risk	• There are three local heritage places located within close proximity to the project area. Please see Table 2 for a full list of these. Any impacts to these heritage sites will require consultation with the Scenic Rim Regional Council. • At this stage the project is denoted a Category 5 High risk to aboriginal heritage due to the undefined footprint. Works along Beaudesert-Nerang Rd to the east of Beaudesert are likely to

Location description: Section / Chainage / GPS Coordinates / Waterway Name	**Property:** Lot on plan	**Past use/ground disturbance description:** (summarise land use/ground disturbance – attach aerials/site photos/other information as appendix to illustrate) E.g. evidence of past mechanical disturbance	**Description of Vegetation / Features within works spans** E.g. Rivers & creeks, rock outcrops, remnant or regrowth, open woodland grassland etc.	**Category** (Low risk or High Risk Duty of Care Category)	**Management Recommendations**
					contain artefactual material. Further assessment will be required at the development phase.

Historical cultural heritage assessment

Table 2 Historical Heritage Assessment

Are there any historical cultural heritage places/values inside or within 100 metres of the proposed works area? Search the following:	**Yes**	**No**
Queensland Heritage Register Refer to the 'How to search the QLD Heritage Register' Work Instruction or https://apps.des.qld.gov.au/heritage-register/ Comment: The Beaudesert war memorial #600028 is located within 100m of the proposed project area. Any impacts to this memorial will required consultation with the DES Heritage Unit.	☒	☐
Australian Heritage Database: http://www.environment.gov.au/heritage/publications/australian-heritage-database Comment: There are no known or registered sites in Project Area.	☐	☒
Australian National Shipwreck Database: http://www.environment.gov.au/heritage/underwater-heritage/auchd Comment: There are no known or registered sites in Project Area.	☐	☒
Queensland National Trust Heritage Register Places on this Register are not always on statutory registers – it is noted under each site whether it is on the statutory QHR: https://nationaltrustqld.org.au/what-we-do/Heritage-Conservation/heritage-register/ntaq-heritage-register Comment: There are no known or registered sites in Project Area.	☐	☒
Contact the relevant local government(s) to confirm if they have a local heritage register (this link will enable you to identify the relevant Shire and their contact details, search their Property Development/Interactive mapping/Planning Scheme or send an email request for advice on any local heritage places recorded within the project works area): https://www.statedevelopment.qld.gov.au/local-government/local-government-directory/search-the-local-government-directory Comment: There are no listed sites within the road corridor, however the following heritage sites immediately abut the corridor (see appendix for map): • Lot 77 WD4386 – Scenic Rim Regional Council Chambers • Lot 2 RP817932 – Beaudesert Hotel • Lot 1 RP7563 – Beaudesert Showgrounds Any impacts to these locations will require consultation with council.	☐	☒
Search TMR heritage datasets to confirm whether any other known historical sites are located within or immediately near the project area. For example, search the ECHO	☐	☒

Are there any historical cultural heritage places/values inside or within 100 metres of the proposed works area? Search the following:	**Yes**	**No**
register, iMaps interactive heritage layer, heritage data on L Drive and any local TMR heritage datasets Comment: There are no sites located on TMR mapping.		
Where practicable, site inspections (i.e. physically visiting the project area and walking over it to determine presence/absence of unknown heritage features) must be completed by the Cultural Heritage Officer for all CHRAs. Comment: Project works are in planning stage still and site visit is not currently required.	☐	☒

- **If you answered YES to ANY of the questions in Table 2**, then additional consultation with the relevant agency (local government, State DEHP and/or Federal DoE) is required and a statutory permit / development approval / certificate / referral may be required for the project. This consultation must be conducted now; once done complete the following:

  ☐ Record the outcomes (including required permits / DAs / certificates / referrals and/or additional management recommendations) in Table 1 Overall Management Recommendations, then proceed to Table 3.

- **If you answered NO to ALL questions in Table 2**, proceed to Table 3 below (Indigenous cultural heritage assessment).

Stage 1 Indigenous cultural heritage assessment

Table 3 Preliminary Risk Factors

Preliminary Risk Factors	Yes	No
Question 1: Are there any existing Cultural Heritage Management Agreement/s over any part of the project area? Are there any Cultural Heritage Network Agreements, Cultural Heritage Corridor Agreements, Service Level Agreements or any other deed or agreements with Aboriginal Party/ies over any part of the project area (inc. where ancillary works will occur)? Tip: review past project files and/or talk to the local Cultural Heritage Officer. Comment: There are no known agreements in Project Area.	☐	☒
Question 2: Are project works proposed in the Torres Strait Islands or in/near remote mainland Aboriginal communities? Important note: if works are within the Torres Strait, the project is automatically High Risk (Category 5) – document in Table 1 and proceed to Step 3 of the CH Process Manual. Comment: N/A	☐	☒
Question 3: Are there any political or community issues or concerns in the area to be impacted by the project works? Tip: tick Yes in situations where the works are receiving broader community interest and the project is generally seen to be a high priority, or at risk of media and/or political scrutiny. Comment: There are no anticipated political or community concerns related to cultural heritage for this project.	☐	☒
Question 4: Search DATSIP's Aboriginal and Torres Strait Islander Cultural Heritage Database and Register for the project area and a 100m buffer (Refer to the 'How to search the DATSIMA Database' Work Instruction. Did your DATSIP search identify any recorded cultural heritage sites? Comment: A search of the project area plus 100m buffer was conducted on the 7th July 2022. No items or place or heritage significance were identified.	☐	☒
Question 5: Is it likely that any of the DATSIP recorded sites will be impacted by the project works? Tips: For example, tick yes if: • works will occur within a Designated Landscape Area or Aboriginal Cultural Heritage Area; and/or • proposed works area (inc. clearing zone) overlaps a recorded site/s; and/or • works outside of an above Area or not overlapping a recorded site/s, but adjacent, could still potentially impact on its values (i.e. damaging vibrations, visual amenity, overall sense of the site, etc.). Note: Include map/s of project area/design showing DATSIP site/s and assessment area in Appendices sections. Comment: N/A	☐	☒
Question 6: Search TMR heritage datasets to confirm whether any other known Indigenous sites are located within or immediately near the project area. For example,	☐	☒

Preliminary Risk Factors	Yes	No
search the ECHO register, iMaps interactive heritage layer, heritage data on L Drive and any local TMR heritage datasets Comment: There are no sites located on TMR mapping.		
Question 7: Where practicable, site inspections (i.e. physically visiting the project area and walking over it to determine presence/absence of unknown heritage features) must be completed by the Cultural Heritage Officer for all CHRAs Comment: Project works are in planning stage still and site visit is not currently required.	☐	☒

➢ **If you answered YES to ANY of Questions 1-7**, then you need to develop appropriate management strategies, record in Table 1, then proceed to Table 4.

➢ **If you answered NO to ALL of Questions 1-7**, then proceed to Table 4 below.

Table 4 Category Risk Factors

Category 1 Risk Factors	Yes	No
Question 8: Will ANY project works be undertaken OUTSIDE the footprint of an existing TMR asset? For example, Asset Foot Print- means the area of existing asset which was subjected to earth disturbing works during construction. The footprint of an existing road is the area usually within 25m either side of the centreline of the road. It is the area of previous disturbance (n.b. some footprints will be less than 25m!). Comment: Proposed works involve on road and off road bikeway. It is unclear at this stage which sections will be on road and which off and whether all works will be confined to the existing TMR road reserve.	☐	☐
Question 9: Do the project works involve Surface Disturbance? Note: "Surface Disturbance" means any disturbance of an area which causes a lasting impact to the land or waters during the activity or after the activity has ceased (ACHA 2003 Duty of Care Guidelines, Page 5) Tips: For example, tick NO if the project is one or more of the following: • walking • driving along existing roads and tracks (within the existing alignment) or other infrastructure footprint • aerial surveys • navigating through water • cadastral, engineering, environmental or geological surveys using methods (such as GPS systems) which do not cause surface disturbance • photography Comment: Project will involve surface disturbance	☒	☐

➢ **If you answered YES to Question 8 or 9**, then the project works are probably not a duty of care Category 1 and you must proceed to Stage 2 (delete the paragraph below on this page and associated four checkboxes).

➢ **If you answered NO to both Questions 8 & 9**, then the proposed project works are probably a duty of care Category 1 and are 'Low Risk' – it is generally unlikely that the works will harm Aboriginal Cultural Heritage and that the activity will comply with the duty of care guidelines. It is reasonable and practicable for the works to proceed without further Cultural Heritage Assessment or consultation with the Aboriginal Party/ies. Note: Upon the discovery of a potential Cultural Heritage Find during Category 1 works, the 'Find-Stop-Notify-Manage' Work Instruction must be followed. Complete the following actions and proceed to Step 7 of the CH Process Manual:

☐ Record the outcomes of Table 2 Historical Heritage Assessment, including management recommendations, in Table 1 Overall Management Recommendations and copy information across to Environmental Scoping Report (ESR) and EMP (Site Investigation) templates.

☐ E-mail this CHRA to: (1) the Project Manager for inclusion in the project and contract documents and (2) the project's Environmental Officer for inclusion in the Medium Risk or High Risk Environmental documents.

☐ Go to Sign-off (page 15).

Stage 2 Indigenous cultural heritage assessment

Table 5 Category 2 Risk Factors

Category 2 Risk Factors	Yes	No
Question 10: Will ANY project works cause any ground disturbance that is inconsistent with previous surface disturbance? Note: "No additional disturbance" means surface disturbance not inconsistent with previous surface disturbance. (ACHA 2003 Duty of Care Guidelines, Pages 6-7) Note: "Surface Disturbance" means any disturbance of an area which causes a lasting impact to the land or waters during the activity or after the activity has ceased (ACHA 2003 Duty of Care Guidelines, Page 5) Tip: research historic aerial photos, etc to determine how the site has been disturbed previously Comment: Project works are located within a very heavily disturbed road corridor, however without having specific plan drawings it is not possible to accurately assess disturbance consistencies at this stage.	☐	☐
Question 11: Will ANY project works impact vegetation? If so, will the works cause any additional disturbance compared to that has previously occurred (e.g. is the clearing of remnant vegetation)? Note: Clearing of regrowth vegetation within areas that have previously been cleared is not additional vegetation disturbance. Tips: For example, tick yes if: • Any areas of vegetation which have NOT been previously cleared (i.e. remnant vegetation) will require removal; and/or • Any grading or earthworks be required on ground surfaces that have not been previously disturbed; and/or • New access tracks or widening of existing corridors will occur; and/or • The scale and scope of the clearing is greater than that which has occurred previously – e.g. using a tracked machine (bulldozer) where only a rubber tyred machine (backhoe) was used in the past. Comment: May be needed as part of pavement widening. There is no remannt vegetation located within road corridor	☒	☐

Table 6 Category 3 Risk Factors

Category 3 Risk Factors	Yes	No
Question 12: Will ANY project works be conducted in areas that are NOT "developed areas"? Tip: Developed area means an area that is developed or maintained for a particular purpose such as use as a park, garden, railway, road or other access route, navigation channel, municipal facility or infrastructure facility, such as powerlines, telecommunication lines or electricity infrastructure (*ACHA 2003 Duty of Care Guidelines*, Pages 6 & 8). Examples of developed areas might include: • Urban parks and gardens; and/or • Areas impacted by installation of railways, roads, telecommunication lines, sewerage or water pipes, powerlines or other electrical infrastructure; and/or • Within the '80km speed sign' boundary of towns; and/or • Subdivision developments that are well progressed (other infrastructure is already in place). Note: the area within the 'developed area' where the works are proposed, must already be disturbed (i.e. the disturbed portion of the road corridor)	☐	☒

Category 3 Risk Factors	Yes	No
Comment: Project area has been subject to significant previous development over the course of Beaudesert's history, including construction of the existing road and adjacent infrastructure.		
Additional Risk Checklist		
Despite works being duty of care Category 2 or 3, there are other risk factors that can be considered. Some of TMR's existing asset areas may still have residual Cultural Heritage present, which may or may not be recorded.		
Question 13: Are ANY project works in a high-risk landscape or geographic area? Tip: High risk areas include feature such as: • mature and/or remnant vegetation • Rock Outcrops • Caves • Foreshores and coastal dunes • Sand hills • Some hill and mound formations • Wetlands • Permanent and semi-permanent waterholes • Natural springs Comment: Project works are located within a suburban environment.	☐	☒
Question 14: Are you aware of any places, items, features or objects in the proposed works area that might be of Cultural Heritage value, but which might not have been registered in the past? Tip: An accurate answer to this question requires a site inspection, and also review available reports on the EMS Cultural Heritage reports library Comment: Project is in planning – a site visit has not been conducted at this stage.	☐	☐
Question 15: Are ANY project works in an area that is NOT a previously disturbed area? Note: "Where an activity is proposed in an area, which has previously been subject to Significant Ground Disturbance it is generally unlikely that the activity will harm Aboriginal cultural heritage and the activity will comply with the guidelines." (*ACHA 2003 Duty of Care Guidelines*, Page 9) "Significant Ground Disturbance" means: • Disturbance by machinery of the topsoil or surface rock layer of the ground, such as by ploughing, drilling or dredging; • The removal of native vegetation by disturbing root systems and exposing underlying soil. Comment: Project works are located within a very heavily disturbed road corridor, however without having specific plan drawings it is not possible to accurately assess disturbance consistencies at this stage.	☐	☐

➢ **If you answered YES to ANY of Questions 10-15** above, then the proposed project works are probably not a duty of care Category 2 or 3 and you must proceed to Stage 3 (delete the paragraph below on this page and associated four checkboxes).

➢ **If you answered NO to ALL of Questions 10-15**, then the proposed works are probably a duty of care Category 2 or 3 and are 'Low Risk' - it is generally unlikely that the activity will harm Aboriginal Cultural Heritage and the activity will comply with these guidelines. It is reasonable and practicable for the activity to proceed without further Cultural Heritage Assessment or consultation with the Aboriginal Party/ies. Note: Upon the discovery of a potential Cultural Heritage Find during Category 2/3 works, the 'Find-Stop-Notify-Manage' Work Instruction must be followed. Complete the following actions and proceed to Step 7 of the CH Process Manual:

☐ Record the outcomes of Table 2 Historical Heritage Assessment, including management recommendations, in Table 1 Overall Management Recommendations and copy information across to Environmental Scoping Report (ESR) and EMP (Site Investigation) templates.

☐ E-mail this CHRA to: (1) the Project Manager for inclusion in the project and contract documents and (2) the project's Environmental Officer for inclusion in the Medium Risk or High Risk Environmental documents.

☐ Go to Sign-off (page 15).

Stage 3 Indigenous cultural heritage assessment

The purpose of this section is to establish whether the project works are 'Low Risk' or 'High Risk'.

'**High Risk**' projects are:

1 **Category 4 Activities** in areas that have been subject to 'Significant Ground Disturbance' under the *ACHA 2003 Duty of Care Guidelines*, but where the following may apply:

- past ground disturbance has not been thorough or extensive across the entire works area; or
- recorded Cultural Heritage site/s within a TMR asset; or
- works will traverse or be in the vicinity of landscapes that have higher risk of residual Cultural Heritage being present; or
- where there are known high risk bioregions/landscapes; or
- within the vicinity of commonly known Cultural Heritage places; or
- where cultural material is present within or in very close proximity to the corridor/asset.

2 **Category 5 Activities** are those that do not fit under any other category outlined in this process or the *ACHA 2003 Duty of Care Guidelines*. Category 5 works are those that pose the highest risk of harming Aboriginal Cultural Heritage and these works should not proceed without further Cultural Heritage Assessment and consultation with the Aboriginal Party/ies.

Table 7 Category 4 or 5 Risk Factors

Category 4 or 5 Risk Factors	Yes	No
Question 16: Will any of the project works cause additional surface disturbance? "Additional surface disturbance" means surface disturbance inconsistent with previous surface disturbance. "Surface Disturbance" means any disturbance of an area which causes a lasting impact to the land or waters during the activity or after it has ceased. Note: "Where an activity is proposed in an area, which has previously been subject to Significant Ground Disturbance it is generally unlikely that the activity will harm Aboriginal cultural heritage and the activity will comply with the guidelines." (*ACHA 2003 Duty of Care Guidelines*, Page 9) "Significant Ground Disturbance" means: • Disturbance by machinery of the topsoil or surface rock layer of the ground, such as by ploughing, drilling or dredging; • The removal of native vegetation by disturbing root systems and exposing underlying soil. Comment: Project works are located within a very heavily disturbed road corridor, however without having specific plan drawings it is not possible to accurately assess disturbance consistencies at this stage.	☐	☐
Question 17: Will any of the project works cause direct disturbance to any high-risk landscapes or features? Note: "Disturbance" is defined under question 14 above. Tip: An accurate answer to this question requires a site inspection, and also review available reports on the EMS Cultural Heritage reports library Tip: Example high risk features include: • Ceremonial places	☐	☒

Category 4 or 5 Risk Factors	Yes	No
• Scarred or carved trees • Burials • Rock art • Fish traps and weirs • Occupation sites • Quarries and artefact scatters • Grinding grooves • Contact sites • Wells • mature and/or remnant vegetation • Rock Outcrops • Caves • Foreshores and coastal dunes • Sand hills • Some hill and mound formations • Wetlands • Permanent and semi-permanent waterholes • Natural springs Comment: N/A		

➢ **If you answered YES to Question 16 or 17**, then the project works are probably a duty of care Category 5 – these types of works present a HIGH RISK to Cultural Heritage and require further cultural heritage assessment by a Cultural Heritage Officer and consultation with the Aboriginal Party/ies in order to manage this risk prior to works commencing. Record the outcomes of Tables 2-7 in Table 1 Overall Management Recommendations then proceed to Step 3 of the CH Process Manual (delete the paragraph below on this page and associated four checkboxes).

TMR has agreed to support Recommendation 6 of the Queensland Government's Reparations Taskforce Report. Recommendation 6 relates to the formal acknowledgement of the financial contribution and labour of Aboriginal and Torres Strait Islander Queenslanders to the growth of Queensland, including development of plaques or other monuments at relevant locations in consultation with local Aboriginal and/or Torres Strait Islander people. It is envisaged that TMR could install plaques at roadside rest areas, shared paths, stopping bays or other suitable locations. Districts can also consider possibilities for broader/other acknowledgements of First Nations people should they identify an opportunity to do so during consultations with the community. If you think that a TMR project can assist implementation of Recommendation 6 please contact the TMR Working Group at Petrina.T.Schull@tmr.qld.gov.au or CorridorPolicy@tmr.qld.gov.au

➢ **If you answered NO to both Questions 16 & 17** then the proposed works are probably a duty of care Category 4 and are 'Low Risk' - it is generally unlikely that the activity will harm Aboriginal Cultural Heritage and the activity will comply with these guidelines. In these circumstances it is reasonable and practicable for the activity to proceed without further Cultural Heritage Assessment or consultation with the Aboriginal Party/ies Note: Upon the discovery of a potential Cultural Heritage Find during Category 4 works, the 'Find-Stop-Notify-Manage' Work Instruction must be followed. Complete the following actions and proceed to Step 7 of the CH Process Manual:

- ☐ Record the outcomes of Table 2 Historical Heritage Assessment, including management recommendations, in Table 1 Overall Management Recommendations and copy information across to Environmental Scoping Report (ESR) and EMP (Site Investigation) templates.
- ☐ E-mail this CHRA to: (1) the Project Manager for inclusion in the project and contract documents and (2) the project's Environmental Officer for inclusion in the Medium Risk or High Risk Environmental documents.
- ☐ Go to Sign-off (page 15).

Sign-off

Name:	**Name**:
Jamie Rowe	An Boc
Position:	**Position**:
Cultural Heritage Officer	**Project Manager**
Signature:	Signature:
	
Date:	Date:
12/07/2022	/ /

Note

This assessment of the project shall remain current for a period of 12 months. Commencement after that date will require revision to ensure its accuracy/currency. Should any part of the project scope (location or activities) change, this assessment must be revised. The results of the revision shall be documented.

Disclaimer

Unless informed otherwise TMR is acting in good faith that all results and information provided to the Department by relevant stakeholders and authorities is accurate and reliable information for the purposes of this risk assessment.

Appendices

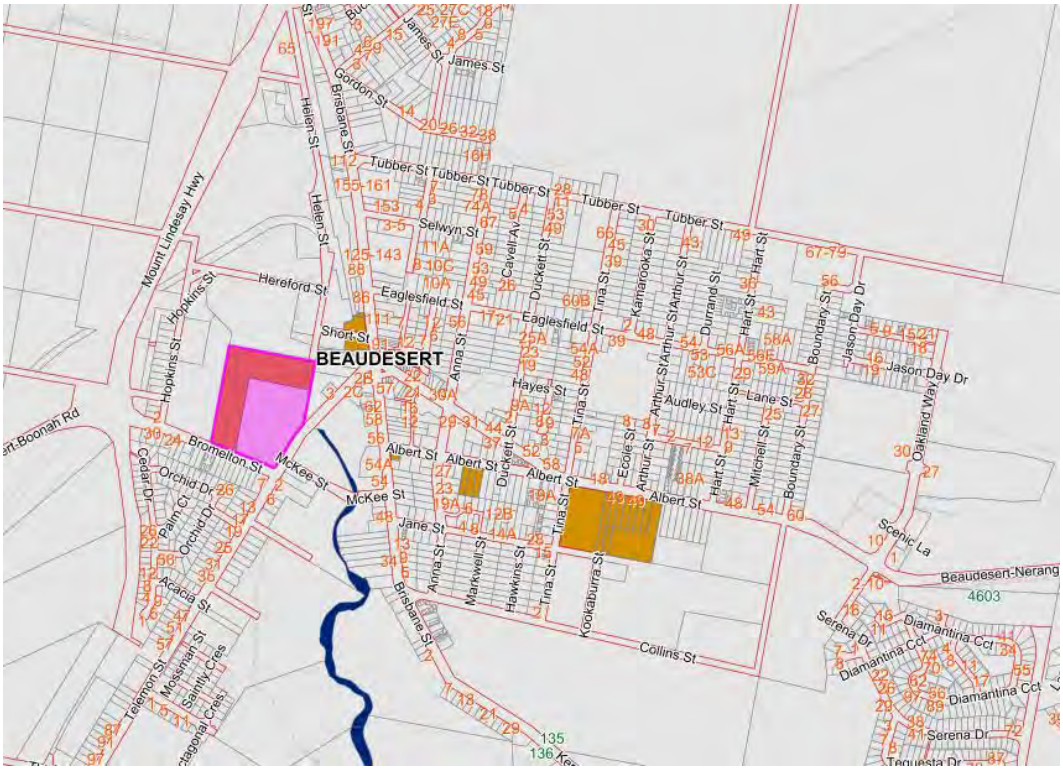


Figure 1 Aerial image showing places of local heritage significance in orange.

Figure 2 aerial image circa 2022 showing absence of any remnant vegetation within project area.

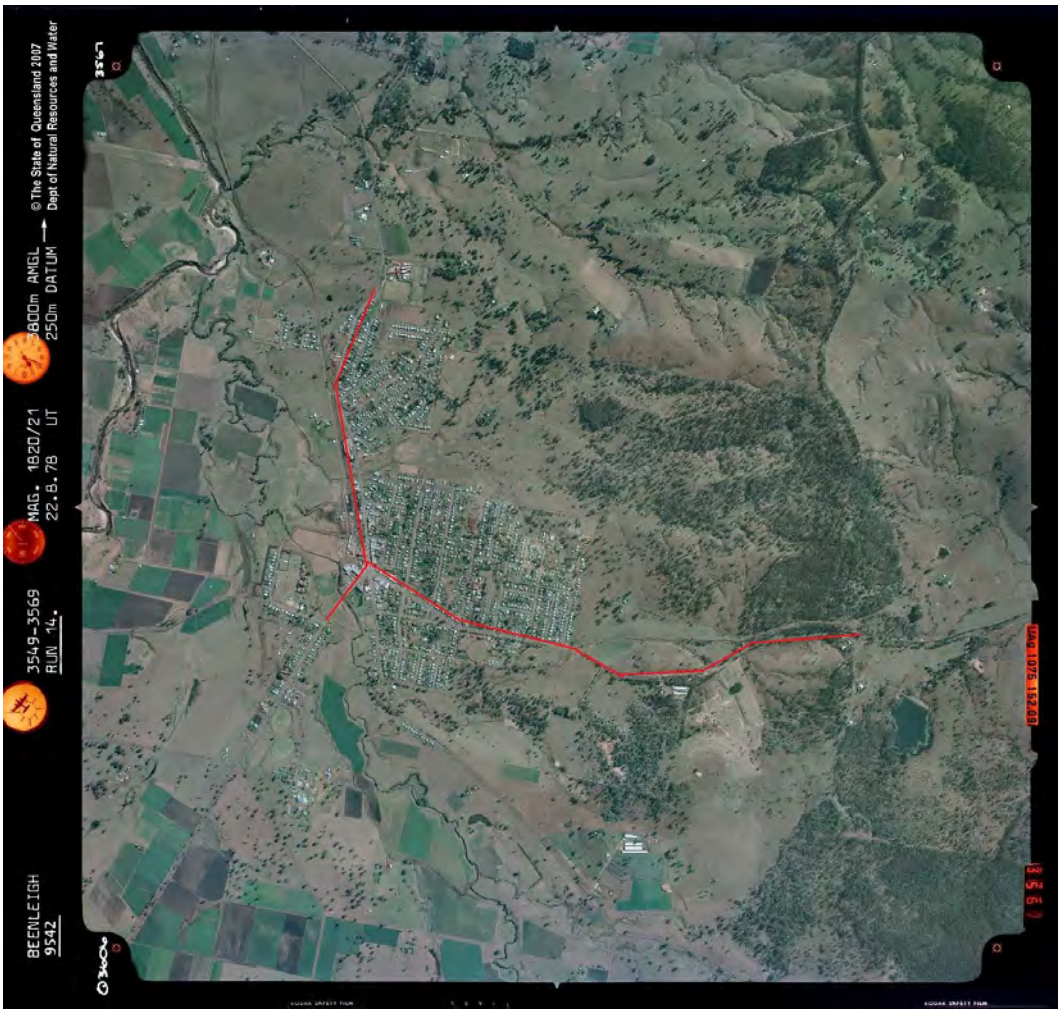
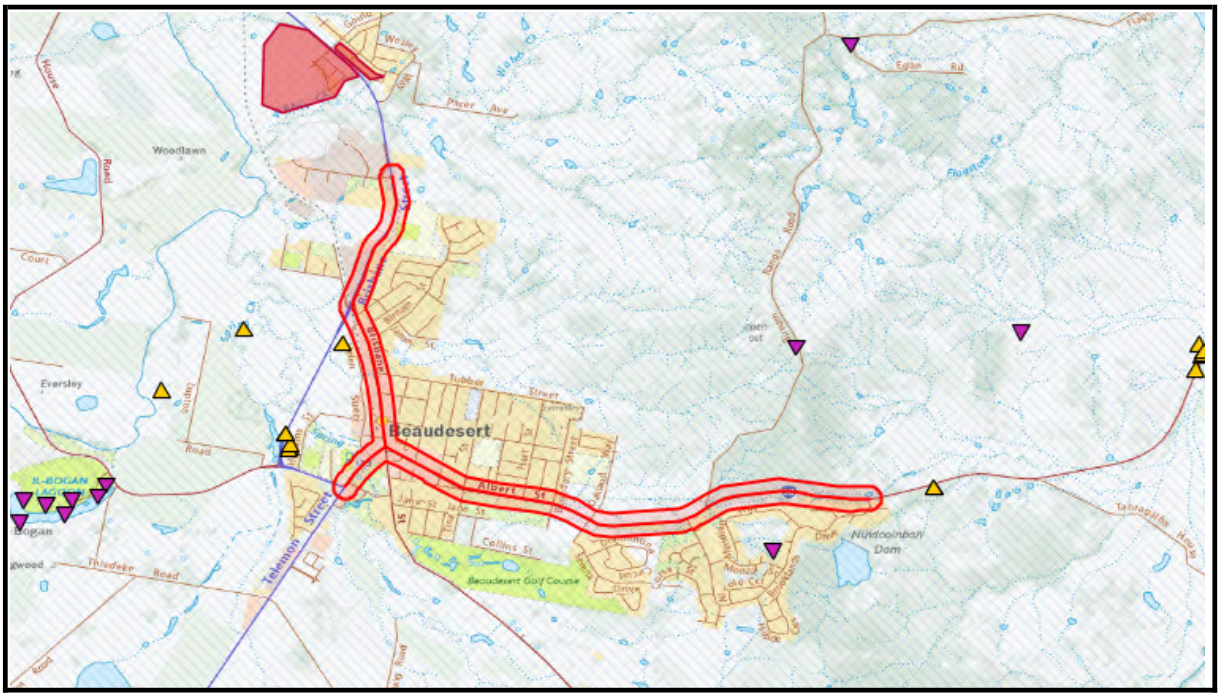


Figure 3 aerial image circa 1978 showing heavy development of much of the road corridor.

Queensland Government
Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships
Cultural Heritage Database and Register

Digital Data Search

Reference Number:	115434
Buffer Distance:	100 metres



There are no Aboriginal or Torres Strait Islander cultural heritage site points recorded in your specific search area.

There are no Aboriginal or Torres Strait Islander cultural heritage site polygons recorded in your specific search area.

Cultural heritage party for the area is:

QC Ref Number	QUD Ref Number	Name	Contact Details
QC2017/007	QUD331/2017	Danggan Balun (Five Rivers) People	Danggan Balun (Five Rivers) Queensland South Native Title Services PO Box 10832 BRISBANE QLD 4000 Freecall: 1800 663 693 Phone: (07) 3224 1200 Email: reception@qsnts.com.au

7 Jul 2022 10:16

GDA2020

Queensland Government
Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships
Cultural Heritage Database and Register

Digital Data Search

There is no cultural heritage body recorded in your specific search area.

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Cultural Heritage Study Areas recorded in your specific search area.

Regional Coordinator:

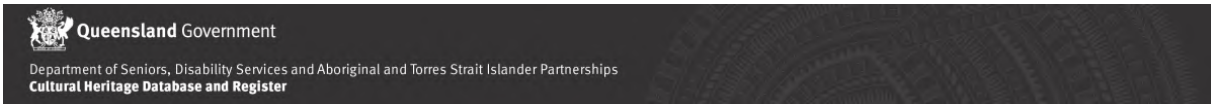
Name	Position	Phone	Mobile	Email
Cultural Heritage Unit	Cultural Heritage Coordinator Southern Region	1300 378 401		cultural.heritage@dsdsatsip.qld.gov.

Disclaimer: The Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships is the custodian of spatial data provided by various third parties for inclusion in the Aboriginal and Torres Strait Islander cultural heritage online portal. This includes spatial data provided by the National Native Title Tribunal and Aboriginal and Torres Strait Islander parties. Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships is not responsible for the accuracy of information provided by third parties or any errors in this search report arising from such information.

Map Datum: Geographic Latitude & Longitude (GDA2020)

7 Jul 2022 10:16

GDA2020



Digital Data Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.dsdsatsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a Category 5 activity is proposed that may impact on features set out in Paragraph 6 of the Guidelines, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The features set out in Paragraph 6 include:

- Rock outcrops

7 Jul 2022 10:16

GDA2020

Queensland Government
Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships
Cultural Heritage Database and Register

Digital Data Search

- Caves
- Foreshores and coastal dunes
- Sand Hills
- Areas of biogeographical significance, such as natural wetlands
- Permanent and semi-permanent waterholes, natural springs
- Native vegetation
- Some hill and mound formations

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

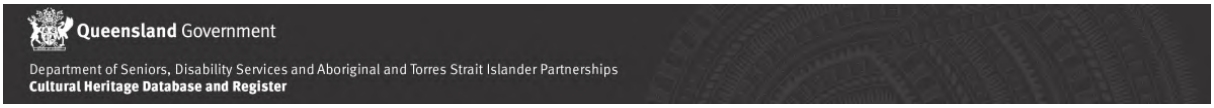
Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

The Director
Cultural Heritage | Community Participation | Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships

7 Jul 2022 10:16

GDA2020



Digital Data Search

Digital Data:

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7 Jul 2022 10:16

GDA2020

At BG&E, we are united by a common purpose – we believe that truly great engineering takes curiosity, bravery and trust, and is the key to creating extraordinary built environments.

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Attachment B:

Interim Community Engagement Report

Leisa Prowse
CONSULTING

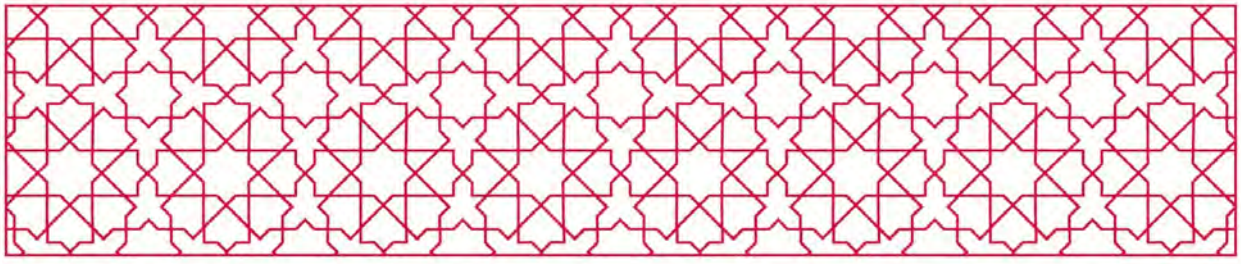
Scenic Rim Regional Council
Integrated Transport Plan
Stage 1 - Interim Community Engagement Report

September 2024

Document Control Sheet

Version History

Version	Date	Author	Reviewer	Action
1.0	25/09/24	Sophie Perissinotto Anna Uhr	Anna Uhr	Issued to Bitzios Consulting for review.
1.1	3/10/2024		Bodie Campbell	Bitzios Consulting review.
2.0	4/10/2024	Sophie Perissinotto	Council	Updated and issued to Council.
2.1	25/10/2024	Anna Uhr Sophie Perissinotto		Incorporating Council comments



Contents

Leisa Prowse Consulting

1 Introduction

Scenic Rim Regional Council (Council) is developing an Integrated Transport Plan (ITP). The ITP will help Council to better plan for the transport needs of the people across the Scenic Rim Region.

The Scenic Rim Region is projected to grow at an annual rate of 2%, reaching an estimated population of 67,000 by 2041. The projected population increase is expected to bring additional employment opportunities around the region. Rapidly rising population growth in neighbouring local government areas such as the Gold Coast, Ipswich and Logan will place further demand on the transport infrastructure in the Scenic Rim.

Council is developing the ITP to ensure that transport networks and connections in the Scenic Rim can grow with the population, meet increasing demand and are efficient, safe, reliable, accessible and sustainable. The ITP will be informed by a series of technical reports and community and stakeholder feedback.

The ITP will respond to the unique needs of the Scenic Rim by providing a strategic plan to guide works and upgrades for the road network, walking and cycling network and transport connections. The plan will also inform strategic planning documents, such as the Local Government Infrastructure Plan (LGIP).

Council has previously undertaken studies where transport, connectivity and mobility have been identified as priority issues for the Scenic Rim community including:

- Council Growth Management Strategy 2041
- Sport and Recreation Plan 2024-2034
- Health and Wellbeing Program Review
- Master planning projects, i.e. town centre Kalbar and Canungra (ongoing)
- Scenic Rim Community Plan 2011 - 2026
- Scenic Rim Planning Scheme 2020 – Strategic Framework
- Scenic Rim 2026 Corporate Plan.

Feedback provided by community members and stakeholders relating to transport was considered when designing this engagement process.

This document reports on Stage 1 stakeholder and community engagement. Stage 1 of engagement launched on Monday 22 July 2024 and concluded on Monday 2 September 2024.

This report outlines:

- the engagement aims and goals
- the engagement approach
- engagement activities, and who were involved
- feedback from the engagement activities
- key findings and insights.

2 Engagement approach

The goal of Stage 1 engagement was to reach a broad range of community members and stakeholders and hear about their current travel behaviour, experience, the issues they have faced and the ideas they have about travelling in and around the Scenic Rim.

The engagement is planned in two stages.

- **Stage 1: Informing the Draft Integrated Transport Plan**, which involves technical investigations and explores community and stakeholder experiences of travelling across road networks, walking paths, cycling routes and transport connections to inform the Draft ITP.
- **Stage 2: Commenting on the Draft Integrated Transport Plan,** which will make sure the plan meets the transport needs of the region and addresses any issues or concerns raised from the Stage 1 engagement.

An overview of the engagement approach is displayed in Figure 1.

The engagement process included a variety of engagement activities and communication tools to promote the engagement activities. These activities encouraged broad online engagement across the region, and opportunities for in-person conversations at some suburbs, towns and villages.

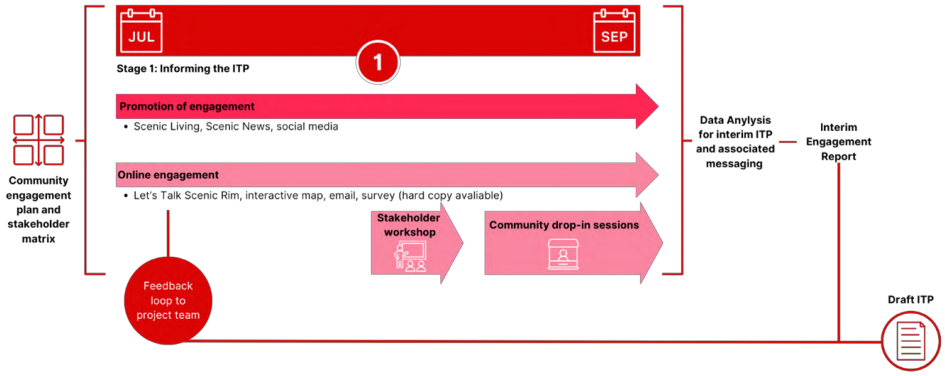


Figure 1: Engagement approach

2.1 Identified stakeholders

A range of stakeholders with an anticipated interest in the ITP were identified. These stakeholders included the following groups:

- Scenic Rim Regional Council Councillors
- Scenic Rim Regional Council staff
- Queensland Government agencies with an interest in roads and active transport
- schools located in the Scenic Rim
- buses and transport businesses in the Scenic Rim
- community interest groups and associations
- businesses in key town centres
- businesses and organisations in key industries of tourism, transport, disability transport
- environmental organisations
- active transport community groups and organisations
- local media outlets
- interested community members.

3 Engagement activities, respondents and reach

The feedback and data captured during the engagement process is detailed below.

Stage 1 of the engagement process ran for 6 weeks, from Monday 22 July to Monday 2 September 2024. During Stage 1 of engagement:

- 160 online survey responses were received
- 3 hard copy surveys were received
- 132 'pins' and associated comments were placed on the interactive map
- 79 community members spoke to a project team member at the drop-in sessions
- 14 stakeholders attended the stakeholder workshop
- 256 flyers were distributed
- 1,036 page visits were captured on the Let's Talk Scenic Rim project page and it continues to grow, currently at 1,128 page visits.

Section 4 of this report analyses in detail the ideas, insights and observations received by the project team during the engagement period.

3.1 Survey (online and hard copy)

The online survey was available on the Let's Talk Scenic Rim project page through the engagement period. 160 responses were received during this time.

The printed hard copy survey generally reflected the online survey. Printed copies of the survey were made available at Council Customer Contact Centres in Beaudesert, Boonah, Tamborine Mountain Library, and Canungra Library. Hard copy surveys were displayed at the drop-in sessions and were available to download from the Let's Talk Scenic Rim project webpage. 3 hard copy surveys were returned during the consultation period. A copy of the hard copy survey is provided at Appendix A.

The survey captured information about travel experience in, around and through the Scenic Rim Region. Questions in the survey included:

- the most common journeys taken in a week and the purpose of that journey
- the mode of transport used and if the respondent has access to a car
- the current experience of respondents travelling in the Scenic Rim
- the current experience of respondents using active transport (walking and cycling)
- the biggest issues travelling around the Scenic Rim
- future priorities for transport
- the experience of travelling around the Scenic Rim for respondents with additional mobility needs and family of those with additional mobility needs.

The survey also allowed respondents to provide a different, or other, response to most multiple-choice questions.

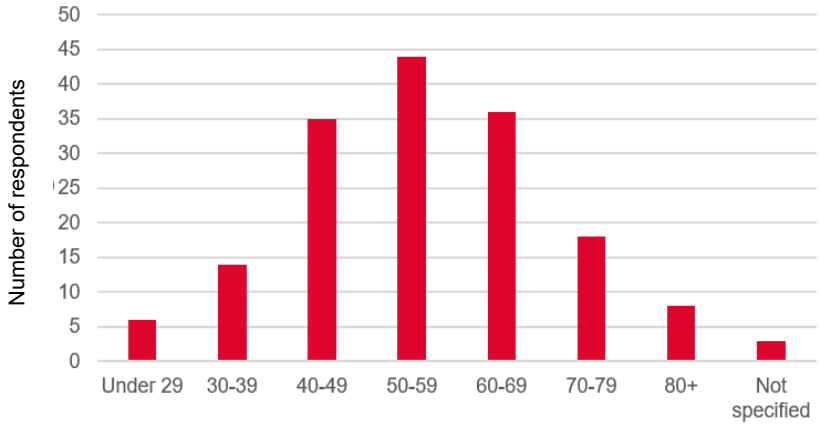
Open-ended questions in the survey explored:

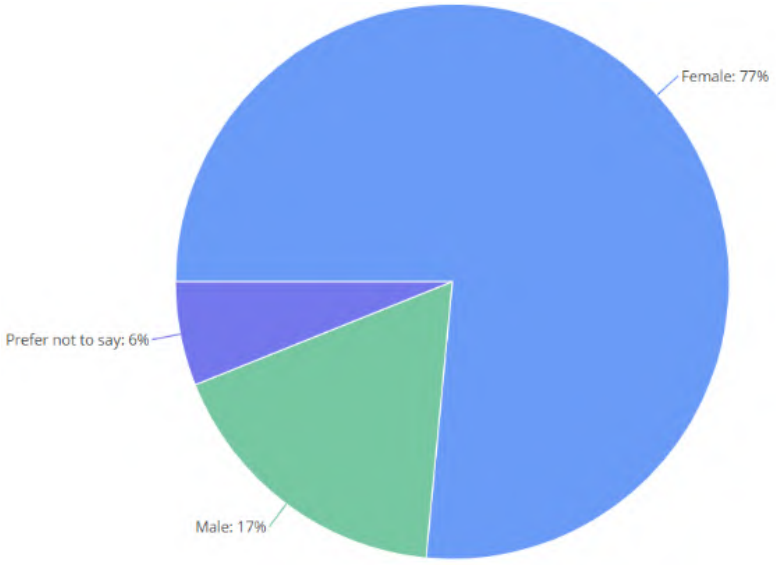
- more detail about travel experience
- more detail about travel experience for people with additional mobility needs.

Let's Talk Scenic Rim gathers demographic information as part of user registration. This was a required step before the online survey could be completed. Additional demographic questions were added to the hard copy survey.

A summary of feedback from the survey is further detailed in section 4 of this report. Verbatim feedback received in the survey is attached in Appendix B.

The most popular age group for survey respondents was between 50–59 years. Most survey respondents are female. Refer to Figures 2 and 3.





Figures 2 and 3: Age and sex of survey respondents

22% of respondents live in Boonah, as seen in Table 1. The next largest number of respondents live in Beaudesert (14%) and Kooralbyn (14%).

Table 1: Where do respondents live

Suburb	%	Number of respondents	Suburb	%	Number of respondents
Boonah	22%	35	Bromelton	1%	1
Beaudesert	14%	23	Bunjurgen	1%	1
Kooralbyn	14%	22	Cedar Grove	1%	1

Tamborine Mountain	9%	15	Ferny Glen	1%	1
Mount Tamborine	4%	6	Frenches Creek	1%	1
Canungra	3%	5	Greenbank	1%	1
Dugandan	3%	5	Hoya	1%	1
Gleneagle	3%	5	Moorang	1%	1
Tamborine	3%	5	Mount Alford	1%	1
Boyland	2%	4	North Tamborine	1%	1
Beechmont	2%	3	Obum Obum	1%	1
Kalbar	2%	3	Peak Crossing	1%	1
Eagle Heights	1%	2	Rathdowney	1%	1
Moogerah	1%	2	Roadvale	1%	1
Veresdale Scrub	1%	2	Springwood	1%	1
Allenview	1%	1	Undullah	1%	1
Auchenflower	1%	1	Witheren	1%	1
Dangandan	1%	1	Wongawallan	1%	1
Darlington	1%	1	Yamanto	1%	1
Barney View	1%	1	Net	100%	162
Brisbane City	1%	1			

Most survey respondents (63, 47%) live, work and pay rates in the Scenic Rim (Figure 4). Few respondents are visitors to the Scenic Rim (21 respondents), or work in the Scenic Rim (7 respondents) without living in the area. Respondents who are visitors to the Scenic Rim live in Brisbane, Logan and Ipswich local government areas.

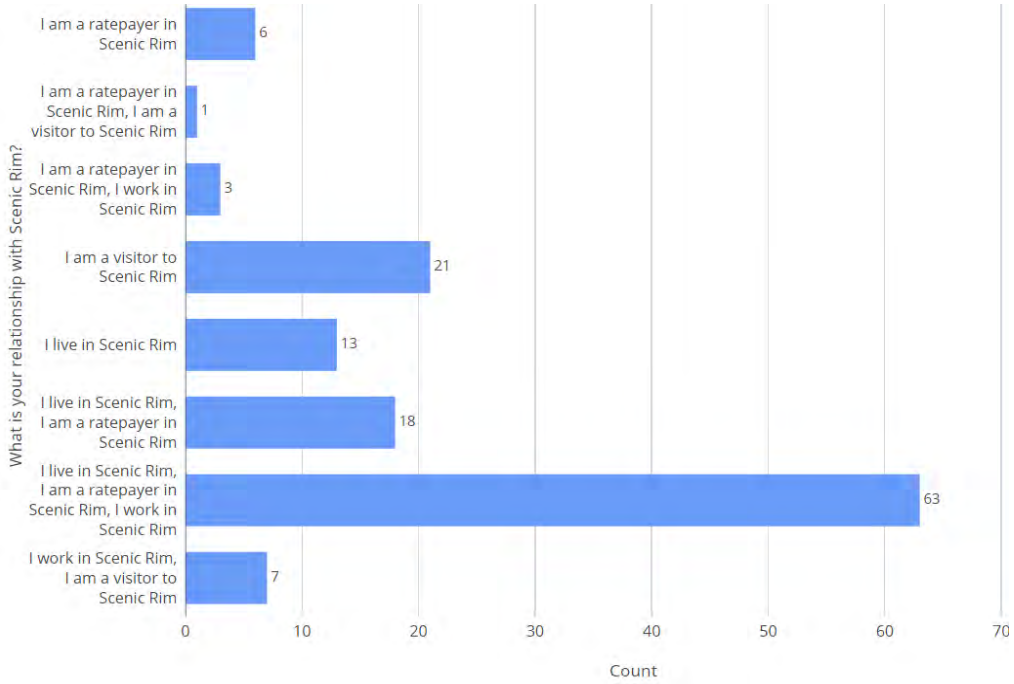


Figure 4: Survey respondents' connection with the Scenic Rim

3.2 Interactive map

The interactive map was available on Let's Talk Scenic Rim from 22 July 2024 to 2 September 2024. 34 community members placed 132 pins on the map. The map included 6 different pin categories: road safety, traffic congestion, walking, cycling, bus, and heavy vehicle/farm vehicle. Respondents could add up to 6 'pins'.

The top category of pin was walking followed by road safety (Figure 5).

Further analysis of the interactive map is discussed in section 4 of this report.

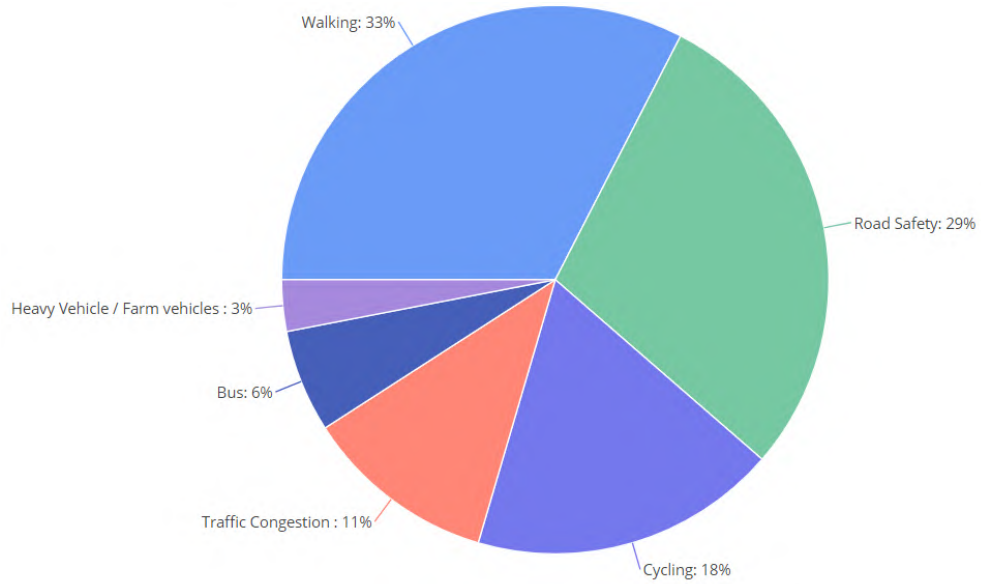


Figure 5: Categories of feedback provided on the interactive map

3.3 Drop-in sessions

5 drop-in sessions were held across the Scenic Rim Region, at:

- Canungra, on Sunday 11 August 2024 from 9am-11am at Canungra Village Markets
- Beaudesert, on Thursday 22 August 2024 from 9am-11am at Beaudesert Library
- Boonah, on Saturday 24 August 2024 from 7am-11am at Boonah Country Markets
- Tamborine Mountain, on Sunday 25 August 2024 from 8.30am-11.30am at Tamborine Mountain State School Markets
- Harrisville, on Sunday 31 August 2024 from 9.30am-11.30am at the Harrisville Agricultural Expo.

The project team had 79 conversations with community members who visited a drop-in session and handed out 256 project flyers.

The feedback captured at the drop-in sessions is discussed in section 4 of this report.

3.4 Stakeholder workshop

The project team held a stakeholder workshop on Thursday 22 August 2024 from 1pm-4pm at The Centre in Beaudesert.

The workshop aimed to gather feedback from stakeholders representing a range of community groups, businesses and organisations in the Scenic Rim about their insights, issues and ideas about travel in, around and through the region. The workshop included 5 activities which are analysed in section 4 of this report.

14 stakeholders attended the workshop.

3.5 Project promotion

The project was launched on Monday 22 July 2024 through email to registered users on Let's Talk Scenic Rim. 74 users opened the Let's Talk Scenic Rim project page from the launch email in the first week of the engagement period (22 – 28 July 2024).

The project was promoted through 6 posts on Council's LinkedIn and Facebook pages during the consultation period. The posts received a combined 40 reactions and 8 reposts. There were 547 'clicks through' to the Let's Talk Scenic Rim project page from social media posts.

A flyer was designed to advertise the project. The flyer included a short introduction to the project, the purpose of the project and engagement activities. The flyer also included a QR code which directed people to the Let's Talk Scenic Rim project page. The poster was distributed to local libraries and sent via email to local schools. A copy of the project flyer is provided at Appendix A.

The project was promoted in the following online and traditional media publications:

- Scenic Living in June 2024
- Scenic Rim Regional Council website on 19 September 2024
- Beaudesert Bulletin on 23 August 2024
- Beaudesert Times on 30 August 2024.

4 Engagement findings

This section of the report summarises community and stakeholder feedback captured throughout the engagement process. Analysis of this feedback paints a clear picture about aligned community and stakeholder priorities, and areas where there are differing views and opinions.

The analysis outlined in this section of the report includes:

- analysis of data captured through the survey
- analysis of data captured through the interactive map
- analysis of the most common themes discussed at the drop-in sessions
- analysis of feedback received at the stakeholder workshop.

The project team also used the feedback provided on maps to guide their technical assessments.

4.1 Survey

Feedback captured through the survey related to:

- current experience with the transport network
- current and potential future issues with the transport network
- current journeys and trips
- experience for people with additional mobility needs.

4.1.1 *Current experience with the transport network*

The most common responses from the survey indicated that respondents:

- have regular access to a motor vehicle (97%) and mainly travel by private car (98%)
- have mixed experiences in travel, being 'sometimes good and sometimes bad' (44%)
- sometimes (35%) walk as a method of transport, but think that walking is not well catered for in the Scenic Rim overall (46%) and would prefer to walk more often as a method of transport (74%)
- regularly (31%) or sometimes (34%) walk for recreation and would like to do it more often (84%)
- rarely (32%) or never (37%) cycle as a method of transport and think that cycling is not well catered for in the Scenic Rim (44%), but would like to cycle more often as a method of transport (65%)
- sometimes (37%) or rarely (26%) cycle for recreation and would like to do it more often (80%).
- think the current transport system does not work well for the community (79%).

When asked what would need to happen for them to walk more often as a method of transport, the most popular response was 'better connected walking paths' (126 selections) (Figure 6).

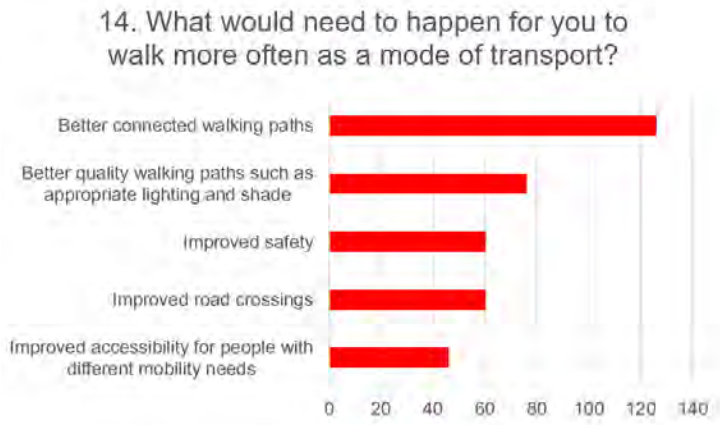


Figure 6: Responses to 14. What would need to happen for you to walk more often

Respondents were able to select multiple suggested changes in response to this question. When further analysing these responses by the home suburbs, towns or villages with the most respondents, the top responses were slightly different (Table 1).

Table 1: Priorities for the walking network by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Changes that would encourage respondents to walk more often as a method of transport	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Better connected walking paths	80%	16
	Better quality walking paths	60%	12
	Improved road crossings	40%	8
Boonah	Better connected walking paths	90%	28
	Better quality walking paths	68%	21
	Improved road crossings	45%	14
Kooralbyn	Better connected walking paths	94%	16
	Better quality walking paths	59%	10
	Improved accessibility for people with different mobility needs	53%	9
Tamborine Mountain	Better connected walking paths	100%	14
	Improved safety	57%	8
	Improved road crossings	50%	7

When asked what would need to happen for them to cycle more often as a method of transport, the most popular response was ‘better connected cycling paths’ (76 selections), followed by ‘improved safety’ (63 selections). Respondents were able to select multiple issues in response to this question (Figure 7).

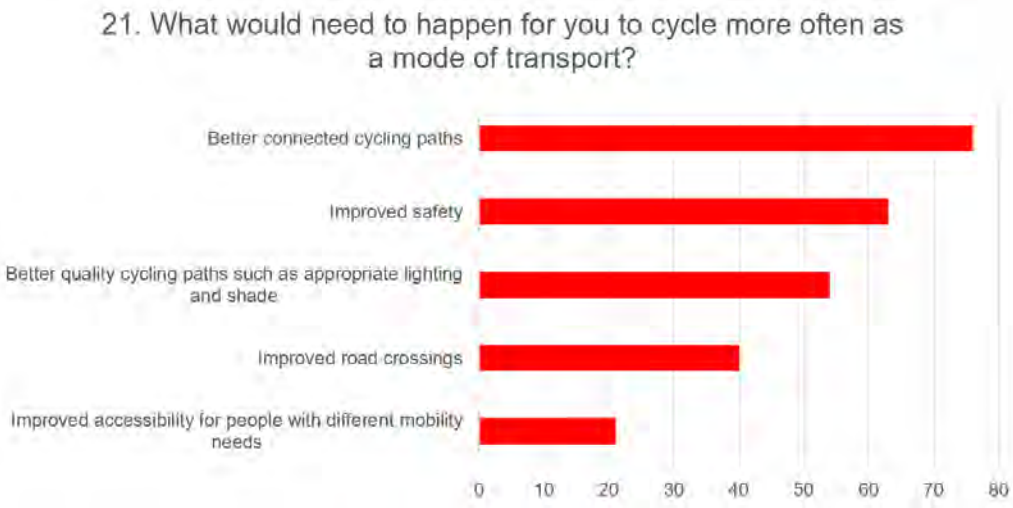


Figure 7: Responses to 14. What would need to happen for you to cycle more often

When further analysing these responses by the home suburbs, towns or villages with the most respondents, the responses placed ‘better quality cycling paths’ as a higher priority (Table 2).

Table 2: Priorities for the cycling network by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Changes that would encourage respondents to walk more often as a method of transport	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Better connected cycling paths	86%	12
	Better quality cycling paths	64%	9
	Improved road crossings	57%	8
	Improved safety	57%	8
Boonah	Better connected cycling paths	82%	18
	Better quality cycling paths	59%	13
	Improved road crossings	36%	8
Kooralbyn	Better connected cycling paths	86%	6
	Better quality cycling paths	71%	5
	Improved safety	71%	5
	Improved road crossings	57%	4
Tamborine Mountain	Better connected cycling paths	88%	7
	Improved safety	75%	6
	Better quality cycling paths	38%	3
	Improved road crossings	38%	3

These responses indicate that respondents from across the Scenic Rim would like to see the active transport network be more connected. This was the top response for all towns and villages to both questions.

When it comes to the walking network:

- Beaudesert, Boonah, Kooralbyn and Tamborine Mountain highlighted the quality of walking paths as a second priority.
- Respondents from Kooralbyn also highlighted potential for accessibility improvements.

When it comes to the cycling network respondents from all towns and villages prioritised path quality, with Tamborine Mountain respondents also prioritising safety.

The survey included an open-ended question asking respondents to expand on their current experience with travel in the Scenic Rim. Most responses related to the following common themes:

- road condition and maintenance (e.g., pavement condition and potholes)
- traffic congestion
- reliance on cars
- road safety and safety from drivers (e.g., safety concerns from road maintenance, speeding and road accidents)
- public transport
- active transport safety and accessibility (e.g., lack of connected and safe paths)
- access to services and facilities (e.g., distance to health services and speciality stores)
- access and parking (e.g., lack of parking at a destination, roads impacted by flooding, difficult intersections limiting access to an area)
- indirect roads (e.g., meandering or slow routes)
- mobility challenges and disability.

Figures 8 and 9 illustrate the responses to each open-ended question by theme. The most common theme of response was road condition and maintenance, which was mentioned in 85 responses.

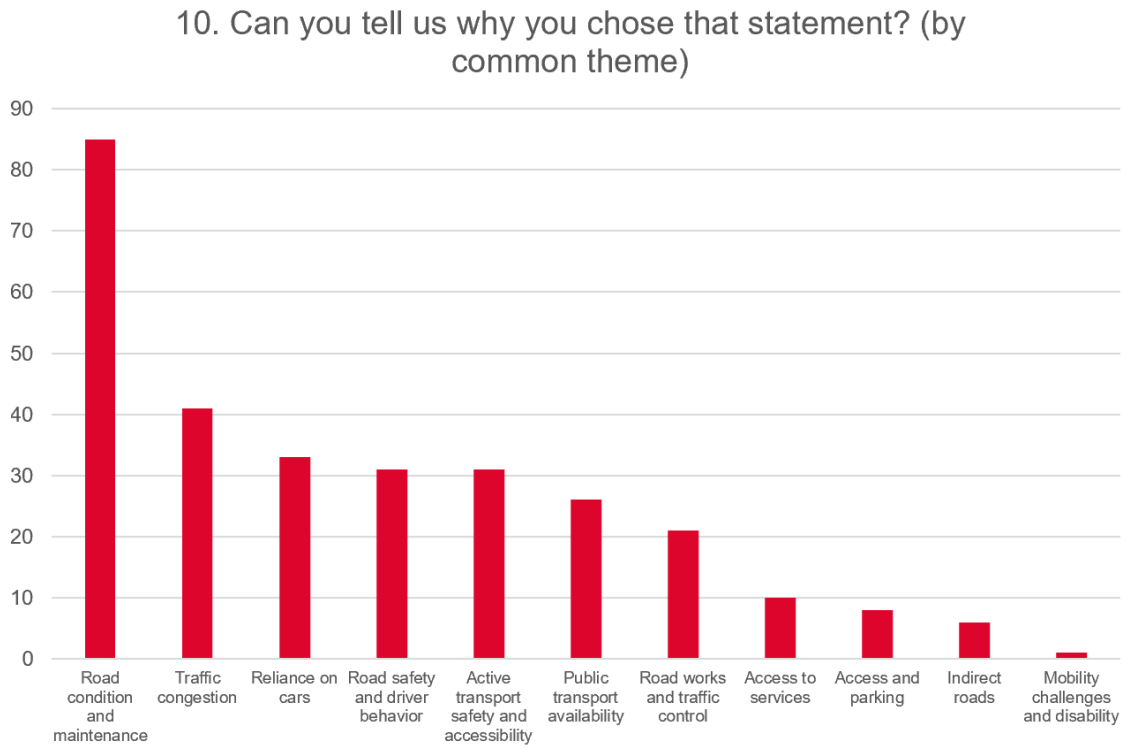


Figure 8: Common themes from responses to survey question 10

When further analysed by the home suburb of people living in the Scenic Rim, the most significant responses were about road condition and maintenance from people living in Boonah (18 responses) and Kooralbyn (12 responses), and active transport safety and accessibility from people living in Boonah (12 responses). Figure 9 illustrates the theme of comments by home suburb.

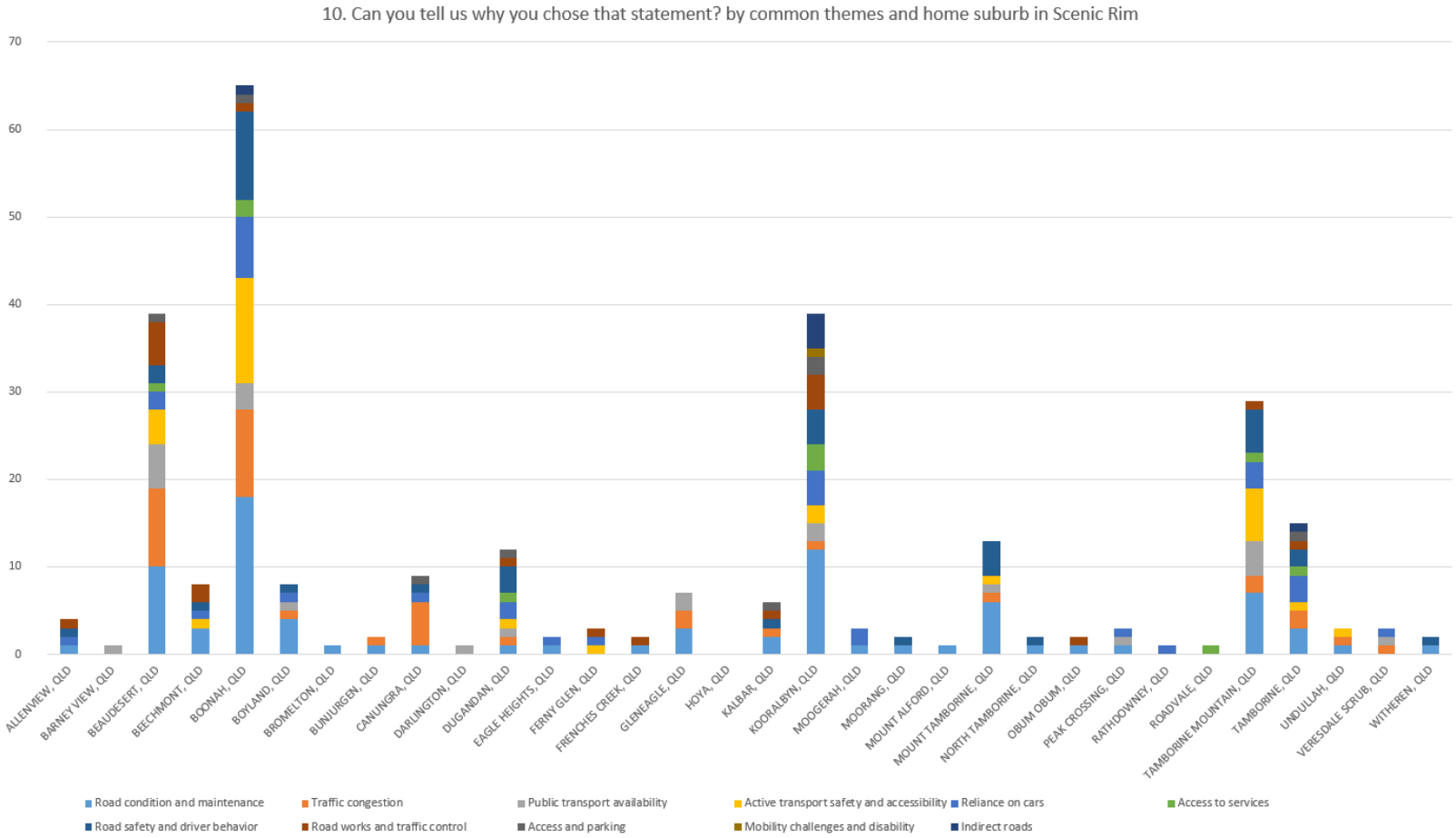


Figure 9: Common themes from responses to survey question 10 by home suburb, town or village

4.1.2 *Current and potential future issues with the transport network*

When asked about the biggest issues for them when travelling in and around the Scenic Rim, respondents selected:

- poor road conditions (73% of respondents selected this option)
- access to public transport services and facilities (55% of respondents selected this option)
- lack of suitable walking and cycling paths (54% of respondents selected this option).

Respondents were able to select multiple issues in response to this question.

However, when further analysing these responses by the home suburbs, towns or villages with the most respondents, the top issues are slightly different (Table 3).

Table 3: Transport priorities by home suburbs, towns and villages with largest number of responses

Home suburb, town or village	Priorities	Percentage of respondents from the suburb, town or village who selected this option	Number of respondents
Beaudesert	Poor road conditions	78%	18
	Access to public transport services and facilities	65%	15
	Lack of suitable walking and cycling paths	39%	9
Boonah	Poor road conditions	71%	25
	Lack of suitable walking and cycling paths	69%	24
	Lack of overtaking lanes on major roads	57%	20
Kooralbyn	Poor road conditions	81%	17
	Access to public transport services and facilities	62%	13
	Lack of suitable walking and cycling paths	33%	7
Tamborine Mountain	Lack of suitable walking and cycling paths	73%	11
	Poor road conditions	67%	17
	Access to public transport services and facilities	53%	13

When asked about their top 3 transport priorities for the community in the next 10 years, respondents selected:

- providing safe, accessible and reliable public transport (54% of respondents selected this option)
- higher quality roads connecting towns (52% of respondents selected this option)
- more pedestrian pathways linking residents to key destinations (e.g., school, shops) (36% of respondents selected this option).

When further analysing these responses by the home suburbs, towns or villages with the most respondents, the top transport priorities were:

- providing safe, accessible and reliable public transport for Beaudesert respondents (61%), Kooralbyn respondents (68%) and Tamborine Mountain respondents (67%)
- higher quality roads connecting towns for Boonah residents (60%).

Respondents from each of these towns and villages were concerned about road quality. Concerns about limited overtaking lanes was a significant difference for respondents who live in Boonah. This aligns with the following question, where Boonah respondents selected 'higher quality roads connecting towns' as their top transport priority.

Beaudesert, Kooralbyn and Tamborine Mountain respondents all selected providing safe, accessible and reliable public transport as their top transport priority for the next 10 years. However, these top priorities were very close in number of responses across the region at 54% and 52% respectively.

4.1.3 *Current journeys and trips*

Survey respondents provided their top 3 most common journeys. There were several destinations and reasons that were similar among different respondents (Table 4).

Table 4: Most common destination and reason for the journey for survey respondents

Destination	Reason for journey	Number of respondents
Beaudesert	Shops and other services	42
Beaudesert	Work	29
Boonah	Shops and other services	16
Beaudesert	Medical and health care services	13
Tamborine Mountain	Work	13
Brisbane	Work	12
Boonah	Work	11
Canungra	Shops and other services	9
Ipswich	Medical and health care services	9
Ipswich	Shops and other services	9

The most common journey was to Beaudesert for shops and services. Beaudesert was also the most common location for all journeys.

The most common reason respondents travel to the largest towns and villages in the Scenic Rim are:

- Aratula for work or sports (2 respondents to each)
- Beaudesert for shops and other services (42 respondents)
- Boonah for shops and other services (16 respondents)
- Rathdowney for work (4 respondents)
- Kalbar for shops and services (8 respondents)
- Tamborine Mountain for work (13 respondents).

Figure 10 illustrates the journeys and trips mentioned by survey respondents. The most popular journeys for larger suburbs and towns in the Scenic Rim is listed in Table 5.

Table 5: Most popular journeys and number of respondents who listed this journey

Journey	Number of respondents
Beaudesert – Gold Coast	7
Beaudesert – Boonah	12

Beaudesert – Brisbane	7
Beaudesert – Logan	3
Beaudesert – Canungra	3
Beaudesert – Ipswich	3
Beaudesert – Rathdowney	3
Within Beaudesert	9
Canungra – Beaudesert	8
Boonah – Brisbane	5
Boonah – Beaudesert	22
Boonah – Ipswich	11
Within Boonah	7
Kooralbyn – Brisbane	5
Kooralbyn - Beaudesert	24
Koorlabyn – Tamborine and Tamborine Mountain	5
Rathdowney – Gold Coast	5
Tamborine – Gold Coast	5
Tamborine Mountain – Beaudesert	14
Tamborine Mountain – Canungra	6
Within Tamborine Mountain	10

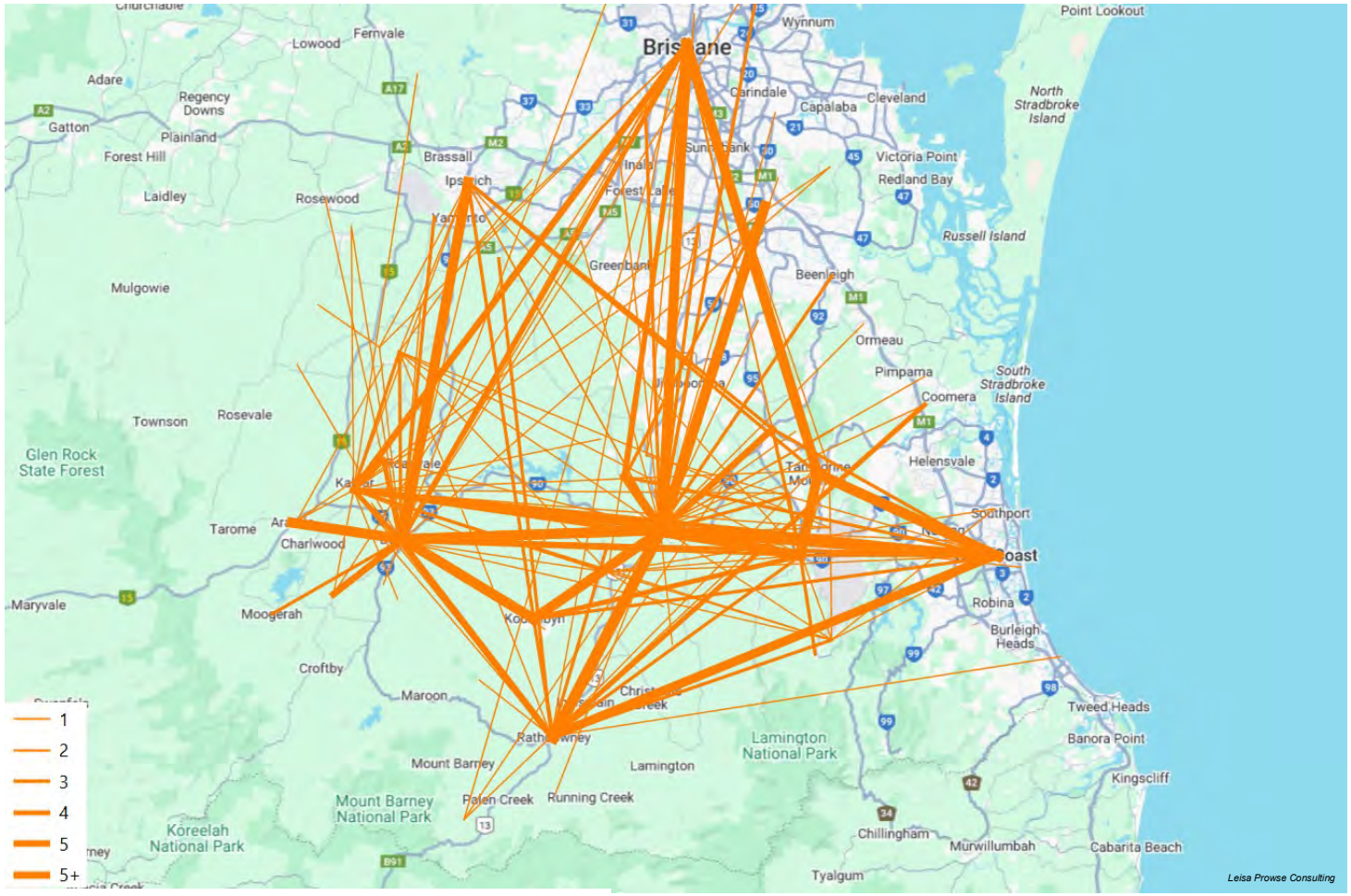


Figure 10: Survey respondents most common journeys

4.1.4 *Experience for people with additional mobility needs*

Most survey respondents said that they do not have any additional mobility needs (90%). However, 88% of the respondents who do have additional mobility needs indicated that these needs impact their travel experience.

When asked to elaborate more on those impacts, respondents mentioned:

- lack of or unmaintained footpaths
- need for additional pedestrian crossings
- difficulties in using mobility devices
- limited person with disability (PWD) car parks
- limited public transport options
- isolation caused from mobility challenges
- reliance on other people for transport
- difficulty in accessing services and facilities.

21% of respondents care for or have a family member who has additional mobility needs. 89% of those respondents indicated that the additional mobility needs of that person impacts their travel experience (89%). Respondents noted similar issues to the previous list of impacts.

4.2 Interactive map

The online interactive map was hosted on Let's Talk Scenic Rim. It asked respondents to write a comment associated with a location and a category. During the engagement period, the interactive map received 132 contributions from 24 contributors.

When making comments, contributors were asked to categorise their contribution by:

- Bus
- Cycling
- Heavy vehicles
- Walking
- Road safety
- Congestion.

The most popular category for contributions was walking (33% of all pins). Figure 11 displays the percentage of comments made on the map by category.

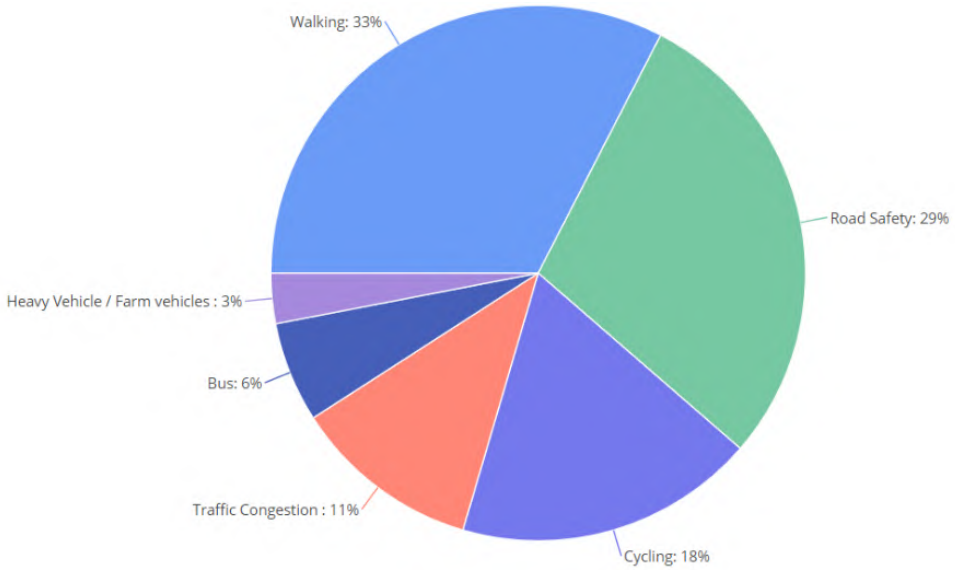


Figure 11: Percentage of interactive map comments by category

Comments provided were analysed to find common themes. The most common themes across all categories were safety concerns, active transport infrastructure and connections, and road condition and maintenance.

These themes reflect the responses provided to open-ended questions in the survey, and feedback received during drop-in sessions.

4.2.1 *Contributions by category*

4.2.1.1 Walking

Contributions related to walking were mainly concerns about safety of the footpath or missing footpaths. Concerns included the slope of the footpath being too steep, missing connections to shops, homes and other attractions, feeling unsafe on the paths and limited signage.

When analysed by theme coding, comments in the walking category related to:

- Safety concerns
- Maintenance and upgrades
- Connectivity.

The largest cluster of contributions was on Boonah, followed by Tamborine and Tamborine Mountain. Most of the comments in Boonah related to suggestions for new paths and the Fassifern Rail Trail, including suggestion to extend the trail, connect to other areas or add a carpark. Comments for Tamborine Mountain related to connections to the Botanic Garden, steep paths, suggestions for new paths and suggestion to improve safety for people walking.

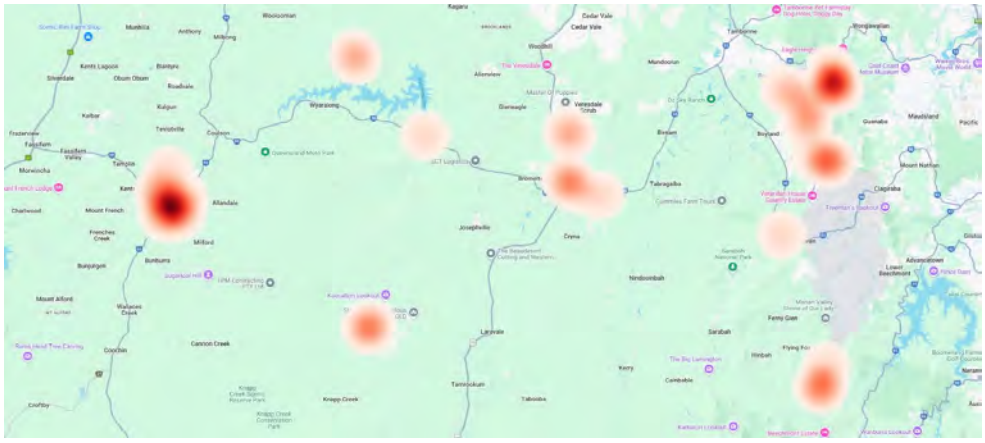


Figure 12: Heat map of interactive map 'pins' about walking

4.2.1.2 Road safety

Contributions related to road safety were mainly concerns about safety on roads and footpaths. Concerns included the condition and maintenance of roads, limited or no pedestrian crossings, safety of intersections and behaviour of drivers.

When analysed by theme coding, comments in the road safety category related to:

- Safety concerns for road user
- Safety concerns for walking
- Maintenance and upgrades.

The largest cluster of contributions was placed around Tamborine Mountain. Most of the comments in the area related to speed limits, road maintenance, congestion, intersection design, behaviour of drivers and road width.

Figure 13: Heat map of interactive map 'pins' about road safety

4.2.1.3 Cycling

Contributions related to cycling were mainly about cycling infrastructure. Concerns included path widths, end of trip facilities, connectivity, suggestions for new bike paths, safety concerns and signage.

When analysed by theme coding, comments in the cycling category related to:

- Cycling infrastructure
- Connectivity.

The largest cluster of contributions was placed around Boonah. Most of the comments in the area related to safety concerns, suggestions to extend the Fassifern Rail Trail and improve signage.

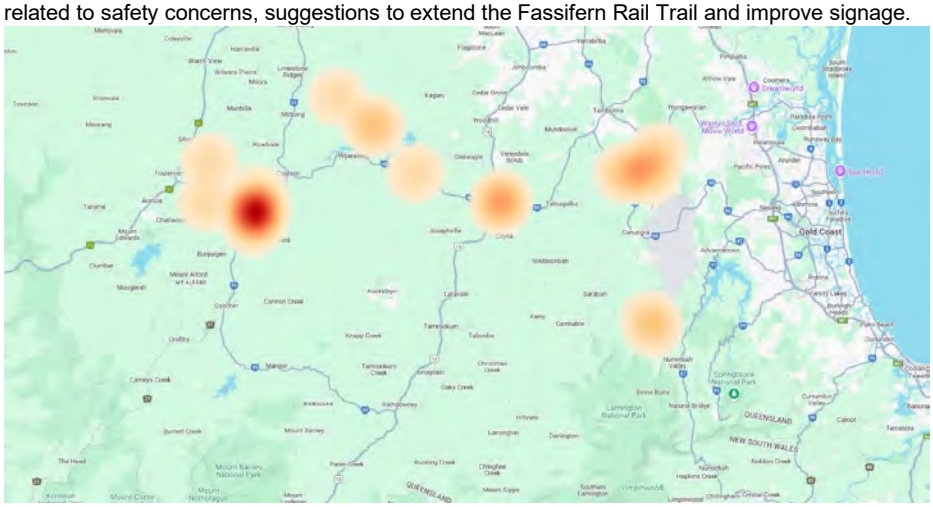


Figure 14: Heat map of interactive map 'pins' about cycling

4.2.1.4 Traffic congestion

The largest cluster of contributions was placed around Tamborine Mountain and Beaudesert. Most of the comments in the area related to congestion from intersections, school hours, new development, suggestion for bypass and visibility.

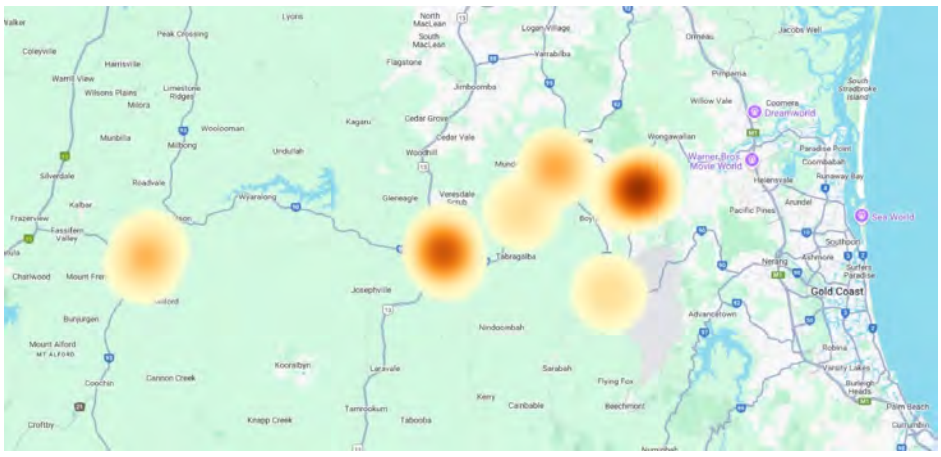


Figure 15: Heat map of interactive map 'pins' about traffic congestion

4.2.1.5 Bus

Contributions related to bus were mainly about suggestions for bus routes or stops. Suggestions included:

- Hop on, hop off bus in Tamborine Mountain, Binna Burra and Lamington National Park
- Bus routes for Boonah, Kalbar, Tamborine Mountain and Beaudesert.

The largest cluster of contributions was placed around Tamborine Mountain.

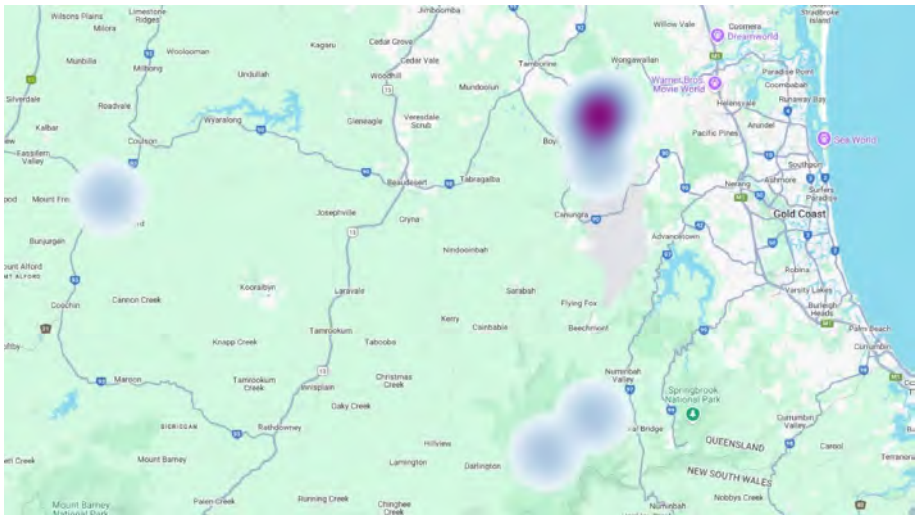


Figure 16: Heat map of interactive map 'pins' about buses

4.2.1.6 Heavy vehicle or farm vehicles

Contributions related to heavy vehicle and farm vehicles were mainly about traffic and safety concerns. Concerns included safety concerns from heavy vehicles and request for more signage.

When analysed by theme coding, comments in the heavy vehicle category related to traffic safety.

The largest cluster of contributions was placed around Boonah. These comments related to signage to limit engine braking.

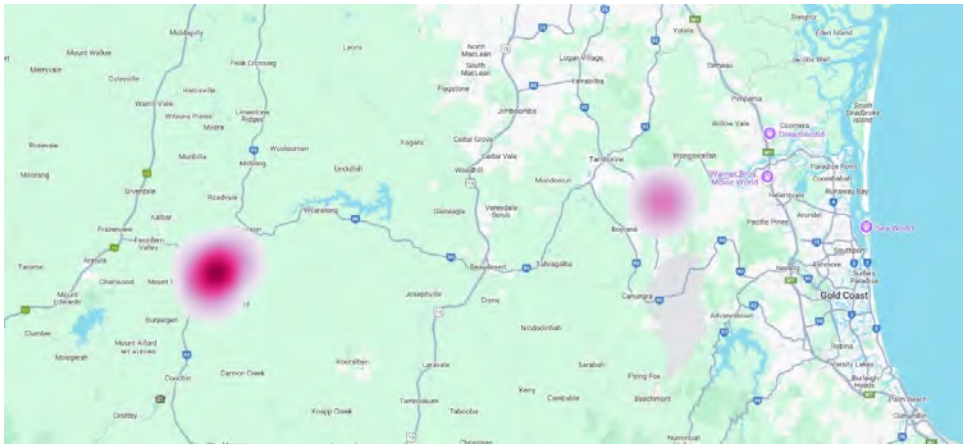


Figure 17: Heat map of interactive map 'pins' about heavy vehicles or farm vehicles

4.3 Drop-in sessions

The project team took summary notes of the discussions with community members at each drop-in session. By going to the places where people gather, insights were captured from passers-by who may not ordinarily engage in such an activity. Most of the visitors who provided their home suburb or town, lived in the area where the drop-in was held.

Conversations with visitors to the drop-ins indicated that the top-of-mind issues for community members were generally consistent with the themes raised in the survey.

Sections 4.3.1 to 4.3.5 breaks down drop-in feedback by location. However, overall, the most common feedback about car travel included road conditions and maintenance, road design, parking and congestion. The most common means of transport discussed at the drop-in sessions was public transport with 39 feedback items.

4.3.1 *Canungra Markets*

Feedback at Canungra Markets generally related to:

- heavy vehicles impacting the road condition
- school buses stopping on the road
- road conditions, including potholes, verge maintenance,
- road safety, including concealed driveways, speeding
- road design, including overtaking lanes and intersections
- traffic congestion in Canungra town centre
- lack of and unmaintained footpaths
- disconnected cycling network.

Figure 18: Canungra Markets drop-in session

4.3.2 *Beaudesert Library*

Feedback at Beaudesert Library generally related to:

- public transport, including the bus timetable, lengthy drive to the train station in Darra or Loganlea, connection between bus and train, opportunity for community bus network, suggestions for new bus routes
- traffic congestion, including during school drop-off and pick-up,
- walking around Beaudesert, nearby hikes, lack of footpaths
- cycling connection to rail trails and cycling routes for children and older people
- road design, including intersections
- limited car parking in Beaudesert
- new housing developments with limited footpaths and connectivity.

4.3.3 *Boonah Country Markets*

Feedback at Boonah Country Markets generally related to:

- the insufficient public transport network, including the need for bus or train connections around the Scenic Rim, as well as to Ipswich, Brisbane and the Gold Coast.
- impacts of car dependency on the mobility of youth and the elderly.
- maintenance of potholes and other road damage caused by extreme weather events
- dangerous speed limits, driver behaviour and concealed driveways in Boonah
- limited street parking in Boonah
- traffic congestion on roads to and from Boonah, as well as the lack of overtaking lanes
- the lack of safe footpaths and pedestrian crossings
- access to health care, via affordable community transport for the elderly the dangers of uneven footpaths for mobility vehicle users.

4.3.4 *Tamborine Mountain State School Markets*

Feedback at Tamborine Mountain State School Markets generally related to:

- unsafe road conditions, including dangerous speed limits, lack of overtaking lanes and impacts of weather events
- congestion caused by single lane roads
- lack of footpaths, pedestrian crossings and cycle paths
- insufficient public transport, including suggestions for a mountain shuttle bus to reduce congestion, as well as train links between Tambourine Mountain and other Scenic Rim suburbs.
- transportation for the elderly, including public transport to health care facilities
- car dependency.

4.3.5 *Harrisville Agricultural Expo*

Feedback at Harrisville Agricultural Expo generally related to:

- insufficient road infrastructure, particularly the dangerous turn offs and congestion on the Cunningham Highway
- road quality and maintenance, including potholes
- dangerous speed limits and driver behaviour
- lack of public transport limiting the mobility of youth and the elderly
- car dependency
- lack foot and cycle paths
- access to essential facilities including healthcare and education
- lack of horse-riding trails.

4.4 Stakeholder workshop

The stakeholder workshop gathered feedback about the participants':

- vision for the future of transport in the Scenic Rim
- views on the current transport network
- feedback on experience of different groups of people using the transport network
- feedback on the cycling and walking network
- top priorities for the transport network.

Participants discussed their ideas for the future at small tables and project team members took notes of the discussion. Feedback related to connectivity, infrastructure, safety, accessibility and technology (Table 5).

Table 5: Theme of feedback and verbatim feedback from workshop participants about ideas for transport

Theme	Verbatim feedback
Connections across the Scenic Rim	• Connect smaller towns to major centres • Local roads to connect across the Scenic Rim and connecting towns • Road connectivity for Kooralbyn to Boonah • Canungra by-pass • Public transport connections to Kooralbyn • Railway line completed – Boonah to Ipswich trail connection • Great Escarpment trail – Barrington tops to Boonah • Kooralbyn to Boonah Road • Fassifern rail trail to Boonah CBD • Connections
New and improved infrastructure	• Better quality roads • Active transport (walking in Kooralbyn) new paths • Road connectivity for Kooralbyn to Boonah • Canungra by-pass • More local roads in Kooralbyn • Beaudesert to Jimboomba cycling track (Rail trail) • Bitumen road (especially for school busses) • Servicing more small villages • EV charges • Public transport • Canungra active transport link • On road and off-road cyclists
Safety	• Safety for all transport modes (crossing, lighting) • Wild life corridors protection for Bromelton SDA (Todd Lane) • Kooralbyn flooding risk (one way out) • Reduce traffic through town • No traffic lights in small towns (keep their character)
Accessibility	• Access to public transport for all • Connect smaller towns to major centres (access for all, including vulnerable users) • Public transport connections to Kooralbyn • Light rail from Beaudesert to Flagstone • On-demand transport (growth and tourism) • More taxis
Technology	• EV air direct to city (v-tol) • Autonomous

	• Data to allow the network to respond • Drones
Other	• Major roads connecting towns • Keeping scenic identity • Freight – separation of heavy vehicles from local small towns and key centres and improving facilities, safety and amenities • Parking in Canungra • Increased traffic from Bromelton SDA to the Gold Coast • No inland rail

The following activity asked participants to discuss their main views on the current state of the transport network. The most common theme of feedback was about the road network and ideas for public transport (Table 6).

Table 6: Theme of feedback and verbatim feedback from workshop participants about their experience with the transport network

Theme	Verbatim feedback
Road network	• Main roads: lack of overtaking lanes • Bridges: single lane issues • Rural road condition issues and safety • Boyland road (100km/hr) rat run for turf trucks • Biddaddaba road • Wellington Bundock Dr Road entry into wildlife corridor • Local roads in Kooralbyn reduce speed to 50km/hr • Duck creek road reopening • Lions road – Running creek to Chinghee creek connection • Sealed shoulders to be wider for cycling • Mount Elliot Road to Lillybrook • Boonah to Ipswich trail to be completed • Boonah paths to be retrofitted • Kooralbyn to Boonah • Roundabout at Boonah police station • Coronation Dr
Public transport	• Lack of public transport services • Lack of information • Lack of integration with services • Missing public transport (on-demand) across the whole shire • Boonah to Ipswich • Fassifern rail trail into CBD. Connections into Boonah
Pedestrian safety	• Uneven pathways in key centres • Trip hazards • Lack of pram ramps • Width of paths • Lack of shade and seating • Poor and old facilities
Signage	• Poor signage and visibility on main roads • Lack of info signs on bridges • Warning signage • Driver education issues • Local road – wayfinding signage • Boonah – ‘no air braking’ sign to be provided

Other	• Out-of-towners on bridges • Preventing wildlife from being trapped by road guards and fences • Employment opportunities for Kooralbyn in Boonah • Emergency access to Kooralbyn • EV fast charging station • Safety for cyclists

The following activity asked participants to describe the particular issues of the groups and interests they represent. Participants discussed the experience of a bike rider, private bus tour, communities in the Scenic Rim, and local wildlife (Table 7).

Table 7: Interest or group and verbatim feedback from workshop participants about their experience with the transport network.

Interest or group	Key points
Bike riding	• Rail trail for cyclists and walkers. • Road safety needs to be improved for cyclists. • Top priority is promoting the rail trail, with Council support. • Beaudesert is a difficult place for cycling due to the hilly terrain. • Some older people have moved to electric bicycles. This option will increase the number of older people riding bikes. Accessibility upgrades could be needed to support this.
Private bus tour	• 30-40 people picked up per week from Tamborine Mountain. • Education opportunity for tourists about second route down the Mountain. • Suggestion to integrate the hop on hop off day pass with the Translink network to fill the rural network gaps, given there are few bus options currently. • Would like to see subsidised public transport and free travel for people over 65 years old.
Boonah community	• Many approvals for more housing in Boonah. • Recent approval for a traffic light signalled, but the community organisation would rather see a roundabout at the intersection. Note that Council highlighted part of Boonah's scenic amenity is the lack of no traffic lights.
Kooralbyn community	• Long-term request for a road from Kooralbyn to Boonah. The current route is 66 kilometres, via Beaudesert. • People living in Koorlabyn who cannot access the centre. • There is one road in and out which is at risk to fire and flood. • Koorlabyn is isolated and has low visitor numbers. • The footpath is not meeting needs. • Potential for connection to Kooralbyn in 2032 Games. • Local businesses are struggling.
Canungra community	• Thriving tourism hub. • Residents are trying to balance liveability with high tourism. • Concerned about road safety and accessibility.
Wildlife	• Would like to see more overpasses on the highway. • Would like to see a new reserve for mature eucalyptus.

The following activity was a deep dive into the cycling and walking network in the Scenic Rim. The project team has integrated this feedback directly into the technical components. Participants made notes on walking and cycling network maps for different towns and villages in the Scenic Rim. Verbatim feedback is included at Appendix B.

In the final activity, the project team gave participants 3 stickers each and asked them to place stickers on their top transport priorities for the Scenic Rim. Table 8 displays the number of stickers each priorities received. The priorities reflect the question included in the survey (Table 8).

Table 8: Theme of feedback and verbatim feedback from workshop participants about their experience with the transport network

Priority	Number of stickers
Providing safe, accessible and reliable public transport.	7
Higher quality roads connecting towns.	6
Protecting local green spaces and wildlife	5
More pedestrian pathways linking residents to key destinations (e.g., schools, shops).	4
Shared and/or dedicated cycle paths in towns.	4
Improving existing pedestrian facilities and streetscaping in towns.	4
Improving safety of the roads through education and enforcement programs.	3
Improving access to local businesses and shops.	2
Reducing traffic delays in towns and along major roads.	1
Cycle/trail connections between towns.	0
Providing support for people with mobility issues to access transport options.	0
Providing support for people from culturally diverse backgrounds to access transport options.	0
Additional comments and suggestions for priorities: • Shared and/or dedicated cycle and walking paths in towns, and recreation/rail trails. • Connecting roads between all towns. • The State government's Southeast regional plan: equity and fairness. It's not fair that after 32 years there is still not a road connecting Kooralbyn and Boonah.	

The most popular priority was 'providing safe, accessible and reliable public transport.' This aligns with the top priority from survey respondents. The second priority, 'higher quality roads connecting towns', was also in the top 3 priorities from survey respondents.

5 Insights and conclusions

Feedback captured during the engagement process has provided insights into community and stakeholder perceptions about the transport network in the Scenic Rim. This section summarises the feedback received to inform the ITP.

Analysis of community and stakeholder feedback indicates the following points.

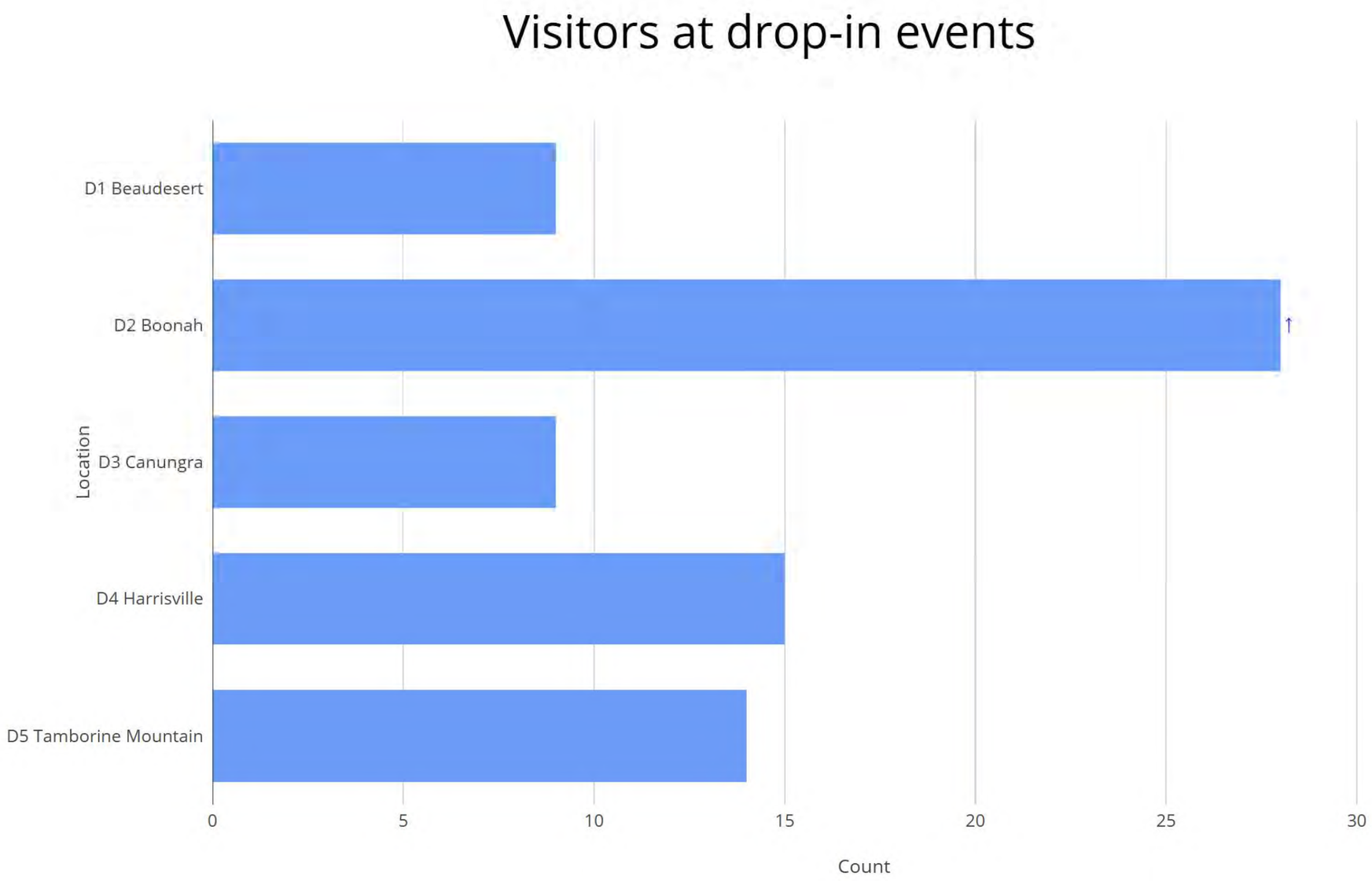
- Most community members and stakeholders rely on motor vehicle for transport.
- Community members and stakeholders face several challenges when travelling in and around the Scenic Rim.
- Community members and stakeholders shared their concerns about road conditions and maintenance across all engagement activities, relating to various towns and villages in the Scenic Rim.
- The most important prevalent issues for community members and stakeholders travelling in and around the Scenic Rim are:
  - poor road conditions
  - lack of suitable walking and cycling paths
  - connections across the Scenic Rim.
- The top priority for community members and stakeholders is providing safe and accessible public transport.
- Community members and stakeholders with additional mobility needs are very highly impacted by these additional needs when travelling in and around the Scenic Rim.

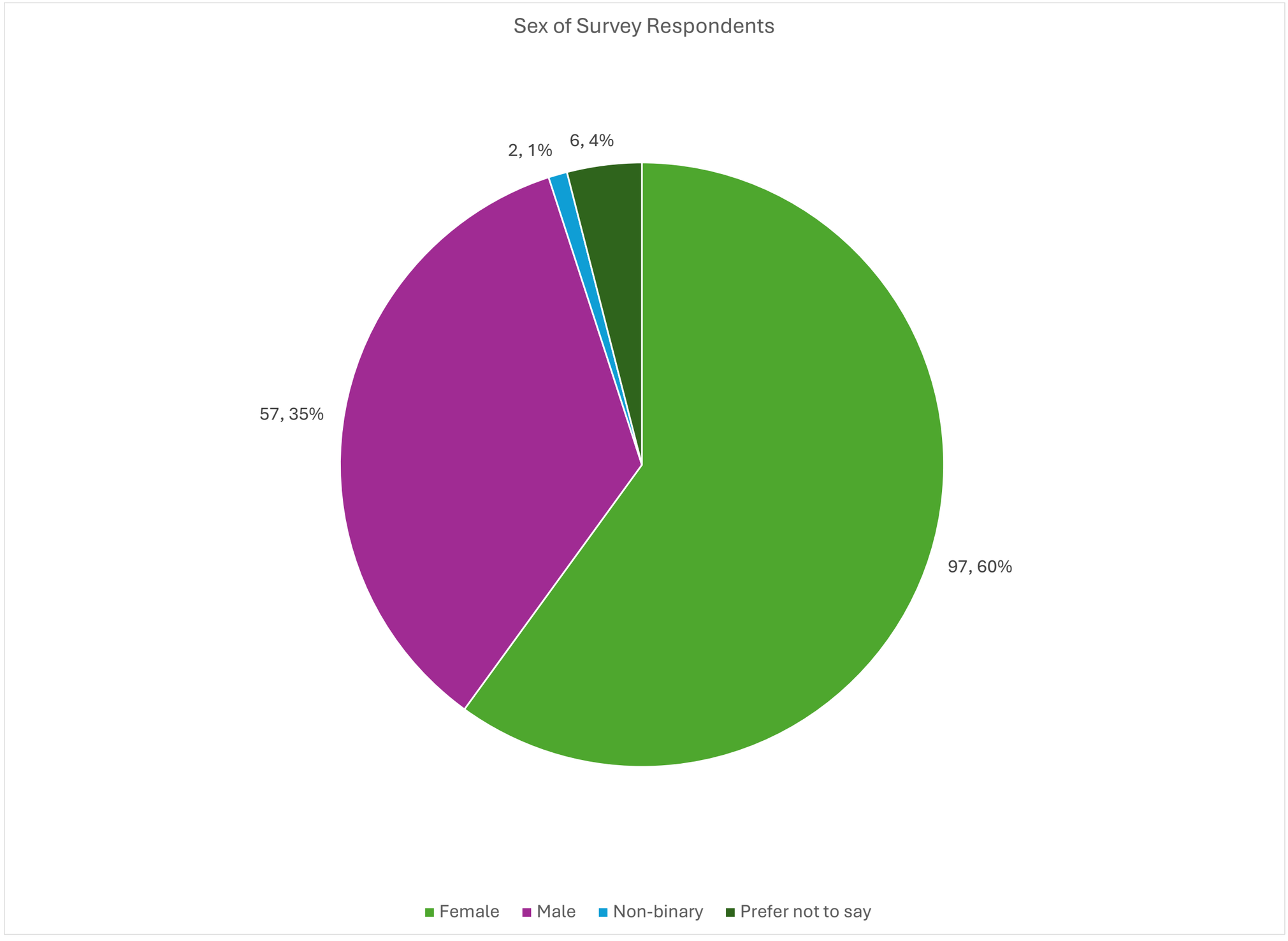
The community and stakeholder engagement process was designed to capture input to inform the development of the ITP. Stage 1 of the engagement process was delivered early in the project to ensure that the feedback captured from community members and stakeholders would inform the development of the ITP.

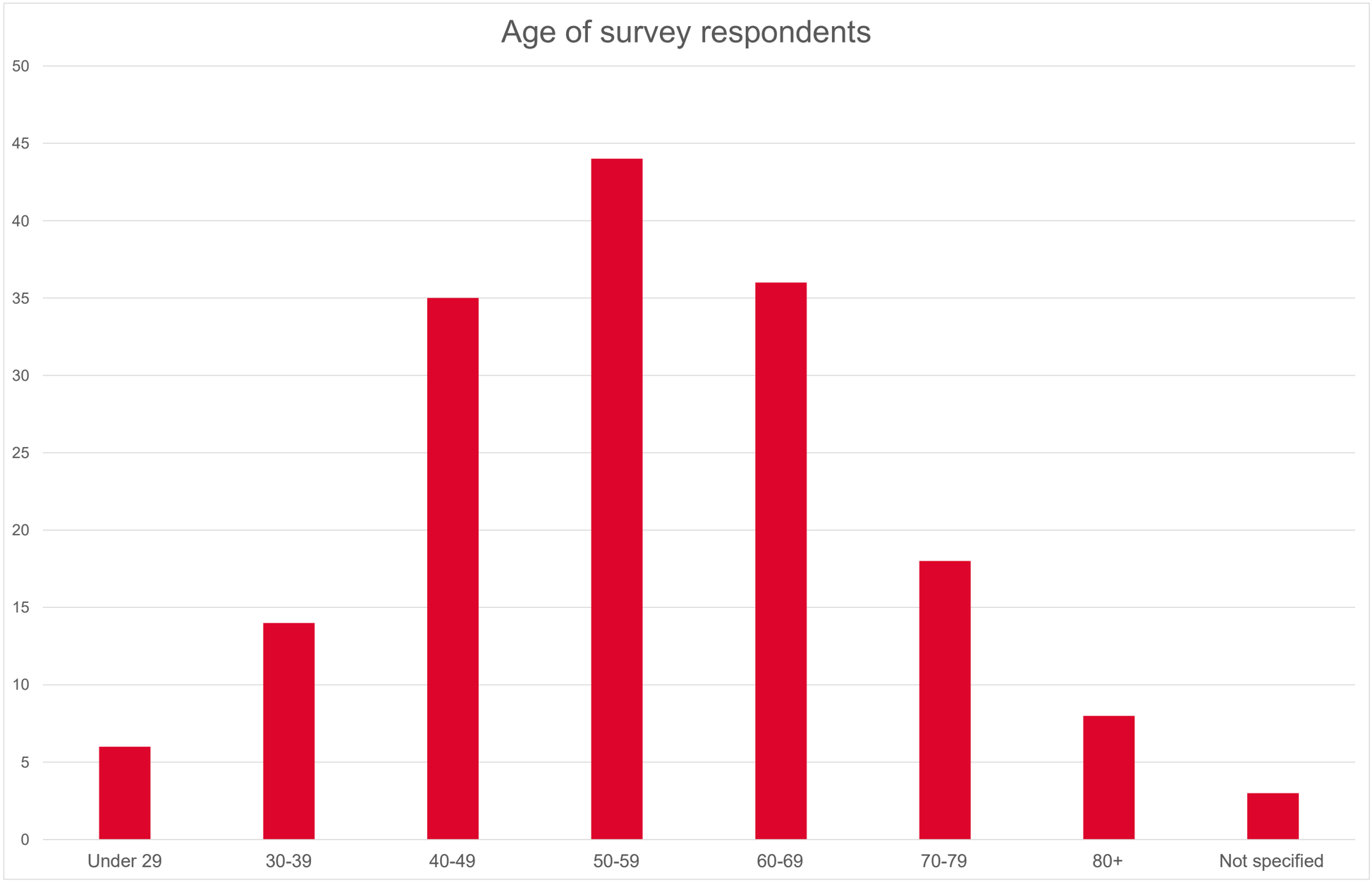
Stage 2 will test the draft plan and seek further feedback to ensure the feedback gathered during Stage 1 and summarised in the report reflects the intentions of community members and stakeholders.

Appendix A: Project collateral

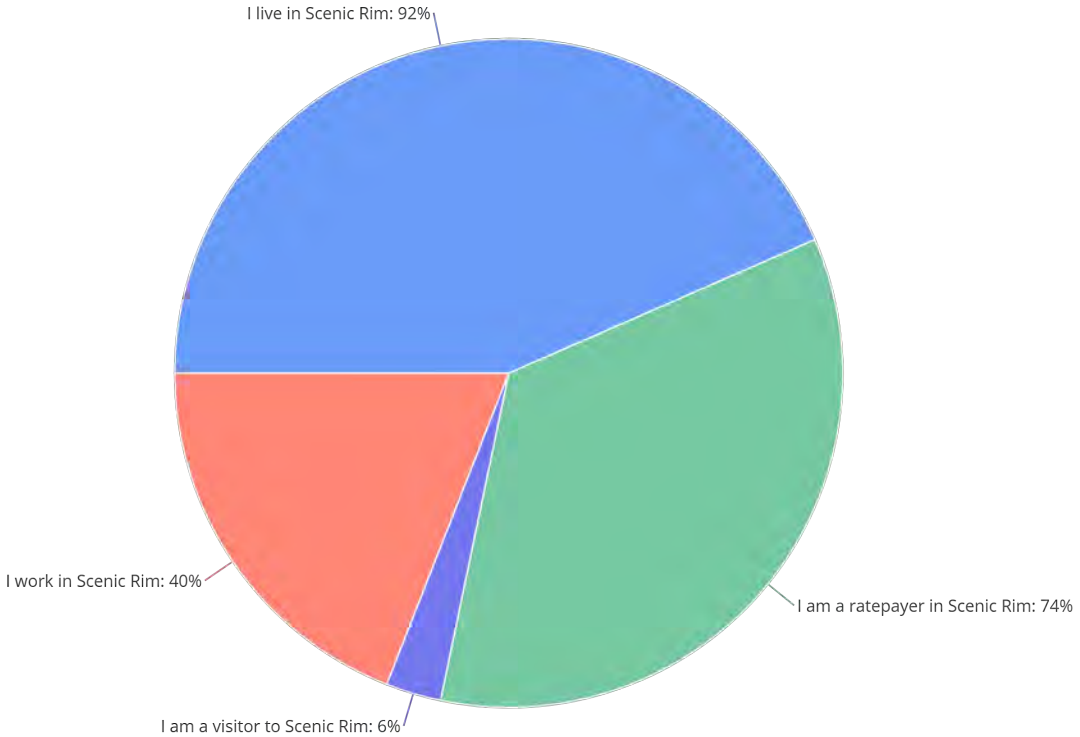
Appendix B: Engagement summary graphs


Visitors at drop-in events
D1 Beaudesert
D2 Boonah
D3 Canungra
D4 Harrisville
D5 Tamborine Mountain
Location
0
5
10
15
20
25
30
Count

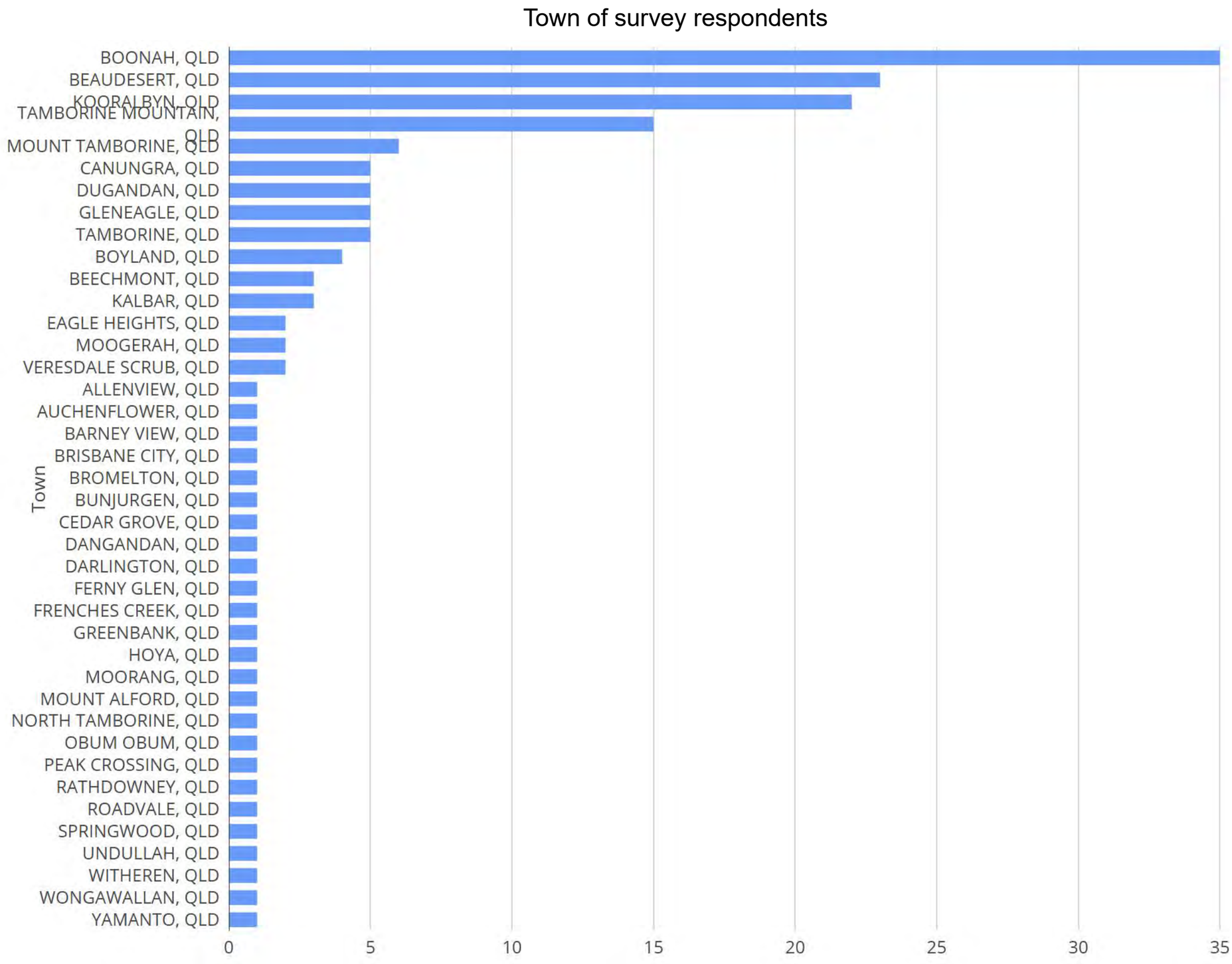

Sex of Survey Respondents
2, 1%
6, 4%
57, 35%
97, 60%
Female
Male
Non-binary
Prefer not to say


Age of survey respondents
50
45
40
35
30
25
20
15
10
5
0
Under 29
30-39
40-49
50-59
60-69
70-79
80+
Not specified

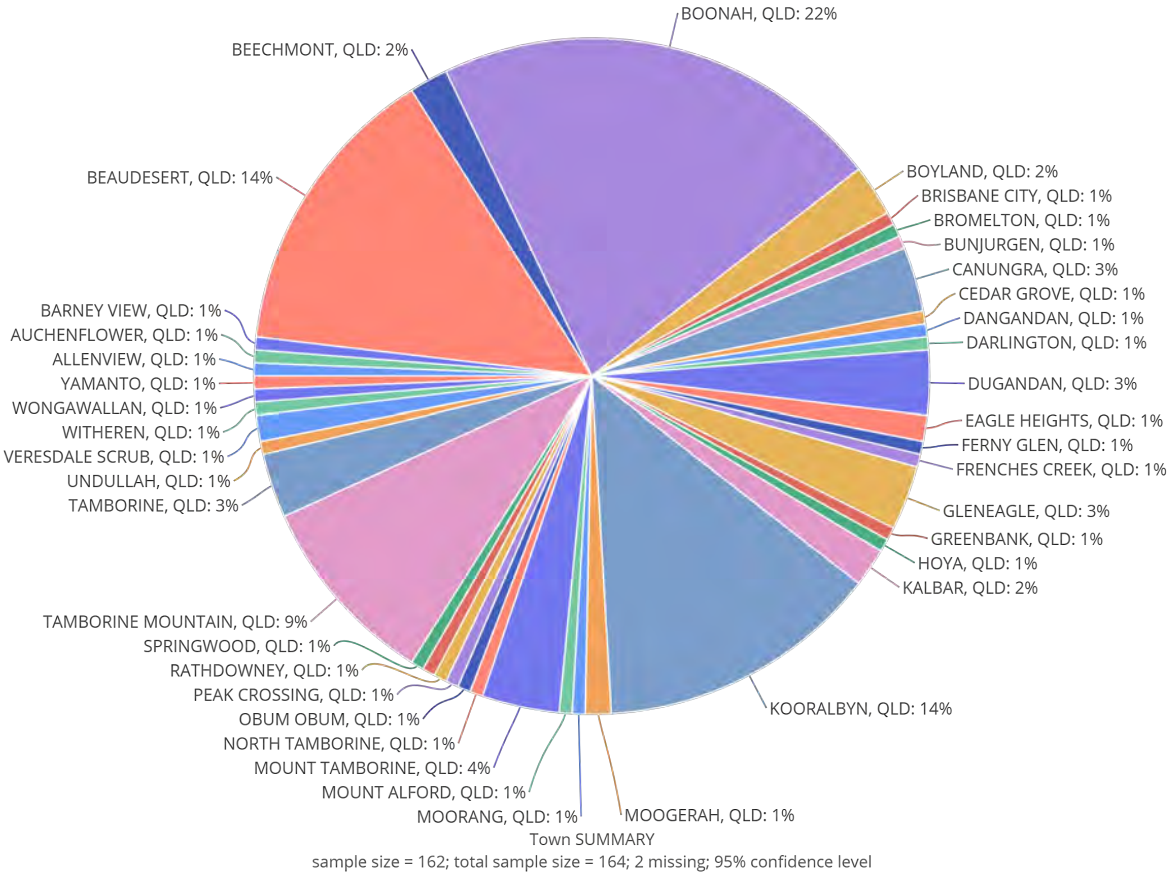
Relationship to Scenic Rim



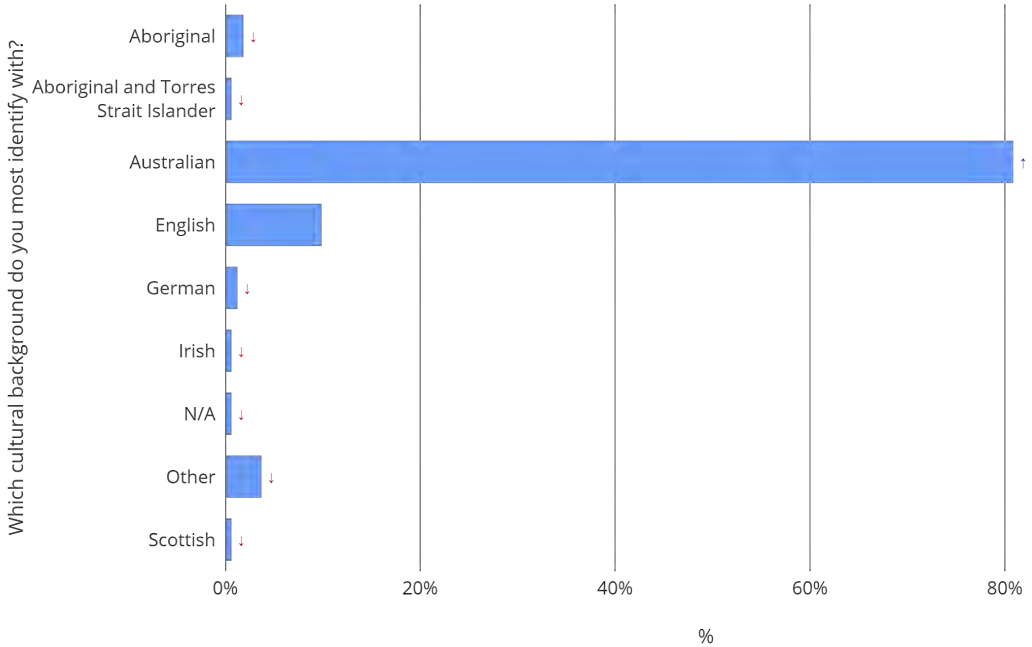
What is your relationship with Scenic Rim? - Categorized SUMMARY
sample size = 159; total sample size = 164; 5 missing; 95% confidence level


Town of survey respondents
Town
BOONAH, QLD
BEAUDESERT, QLD
KOORALBYN, QLD
TAMBORINE MOUNTAIN, QLD
MOUNT TAMBORINE, QLD
CANUNGRA, QLD
DUGANDAN, QLD
GLENEAGLE, QLD
TAMBORINE, QLD
BOYLAND, QLD
BEECHMONT, QLD
KALBAR, QLD
EAGLE HEIGHTS, QLD
MOOGERAH, QLD
VERESDALE SCRUB, QLD
ALLENVIEW, QLD
AUCHENFLOWER, QLD
BARNEY VIEW, QLD
BRISBANE CITY, QLD
BROMELTON, QLD
BUNJURGEN, QLD
CEDAR GROVE, QLD
DANGANDAN, QLD
DARLINGTON, QLD
FERNY GLEN, QLD
FRENCHES CREEK, QLD
GREENBANK, QLD
HOYA, QLD
MOORANG, QLD
MOUNT ALFORD, QLD
NORTH TAMBORINE, QLD
OBUM OBUM, QLD
PEAK CROSSING, QLD
RATHDOWNEY, QLD
ROADVALE, QLD
SPRINGWOOD, QLD
UNDULLAH, QLD
WITHEREN, QLD
WONGAWALLAN, QLD
YAMANTO, QLD
0
5
10
15
20
25
30
35

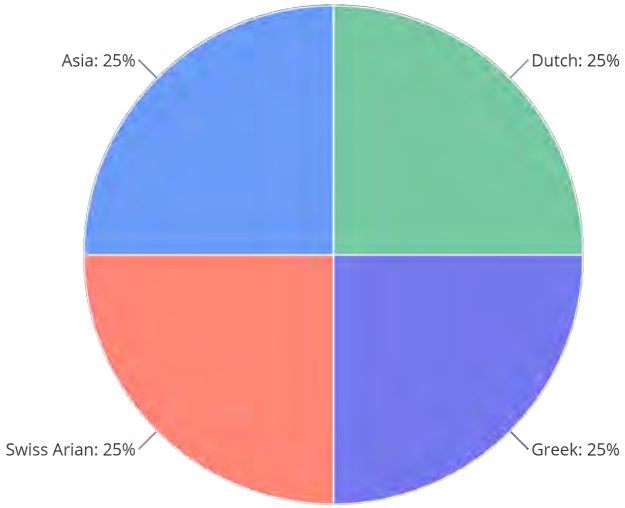
Location


BOONAH, QLD: 22%
BEECHMONT, QLD: 2%
BEAUDESERT, QLD: 14%
BOYLAND, QLD: 2%
BRISBANE CITY, QLD: 1%
BROMELTON, QLD: 1%
BUNJURGEN, QLD: 1%
CANUNGRA, QLD: 3%
CEDAR GROVE, QLD: 1%
DANGANDAN, QLD: 1%
DARLINGTON, QLD: 1%
DUGANDAN, QLD: 3%
EAGLE HEIGHTS, QLD: 1%
FERNY GLEN, QLD: 1%
FRENCHES CREEK, QLD: 1%
GLENEAGLE, QLD: 3%
GREENBANK, QLD: 1%
HOYA, QLD: 1%
KALBAR, QLD: 2%
KOORALBYN, QLD: 14%
MOOGERAH, QLD: 1%
MOORANG, QLD: 1%
MOUNT ALFORD, QLD: 1%
MOUNT TAMBORINE, QLD: 4%
NORTH TAMBORINE, QLD: 1%
OBUM OBUM, QLD: 1%
PEAK CROSSING, QLD: 1%
RATHDOWNEY, QLD: 1%
SPRINGWOOD, QLD: 1%
TAMBORINE MOUNTAIN, QLD: 9%
TAMBORINE, QLD: 3%
UNDULLAH, QLD: 1%
VERESDALE SCRUB, QLD: 1%
WITHEREN, QLD: 1%
WONGAWALLAN, QLD: 1%
YAMANTO, QLD: 1%
ALLENVIEW, QLD: 1%
AUCHENFLOWER, QLD: 1%
BARNEY VIEW, QLD: 1%
Town SUMMARY
sample size = 162; total sample size = 164; 2 missing; 95% confidence level

Ethnicity

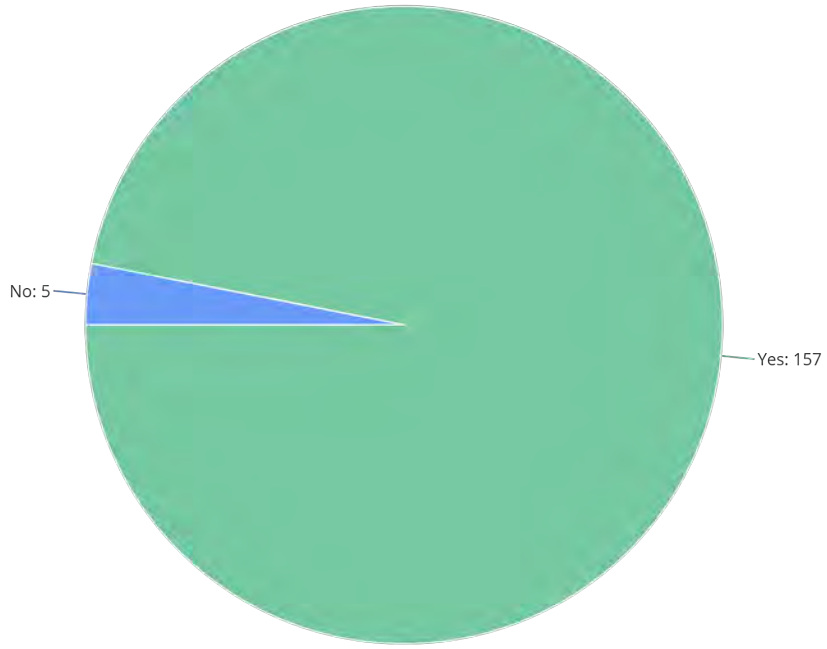


Which cultural background do you most identify with? SUMMARY
sample size = 162; total sample size = 164; 2 missing; 95% confidence level



If you answered 'Other', please tell us which cultural background you most identify with SUMMARY
sample size = 4; total sample size = 164; 160 missing; 95% confidence level

7. Do you have regular access to a motor vehicle?



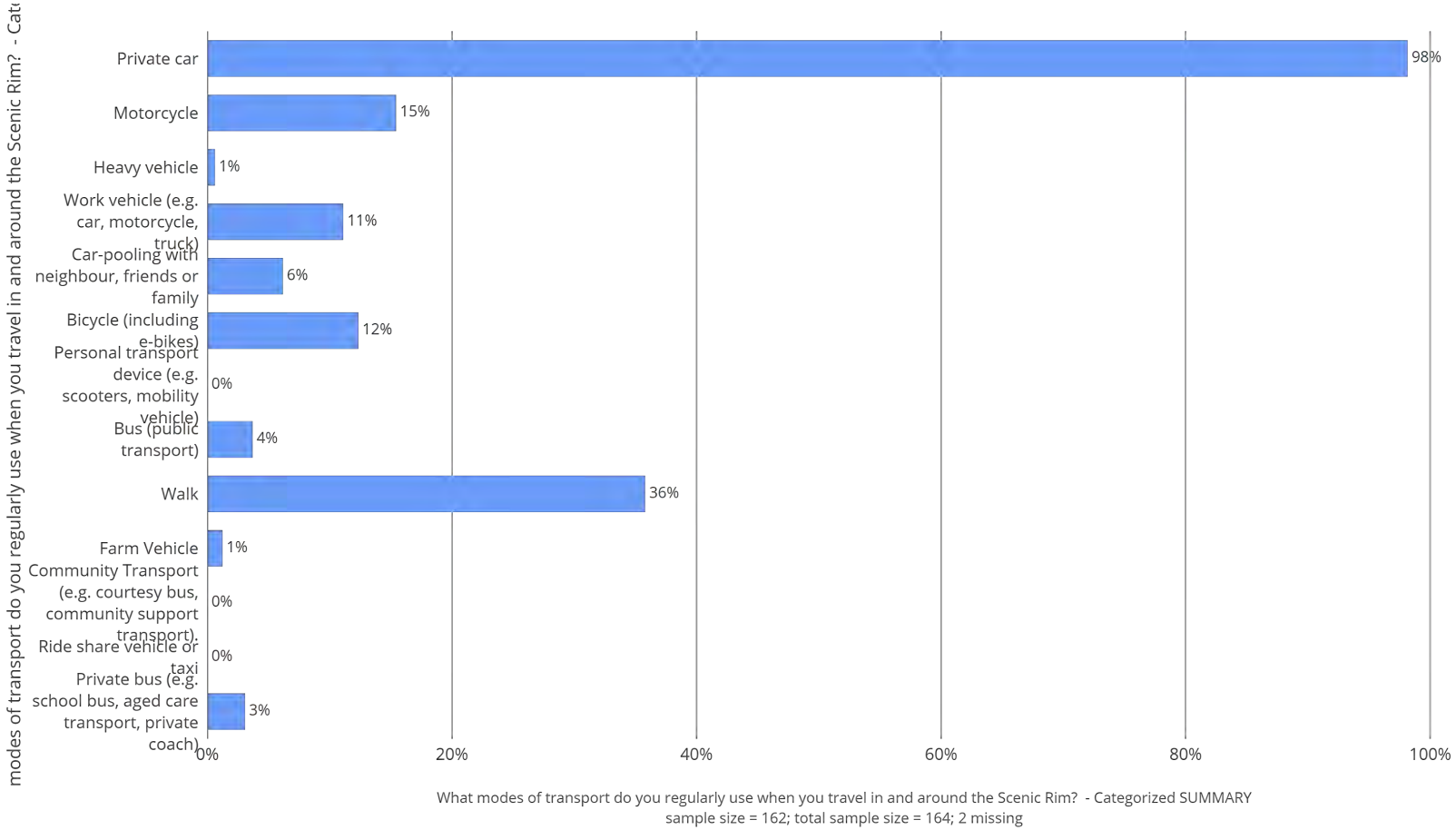
Do you have regular access to a motor vehicle? SUMMARY
sample size = 162; total sample size = 164; 2 missing

Q8: What modes of transport do you regularly use when you travel in and around the Scenic Rim? (Other - Please Specify)

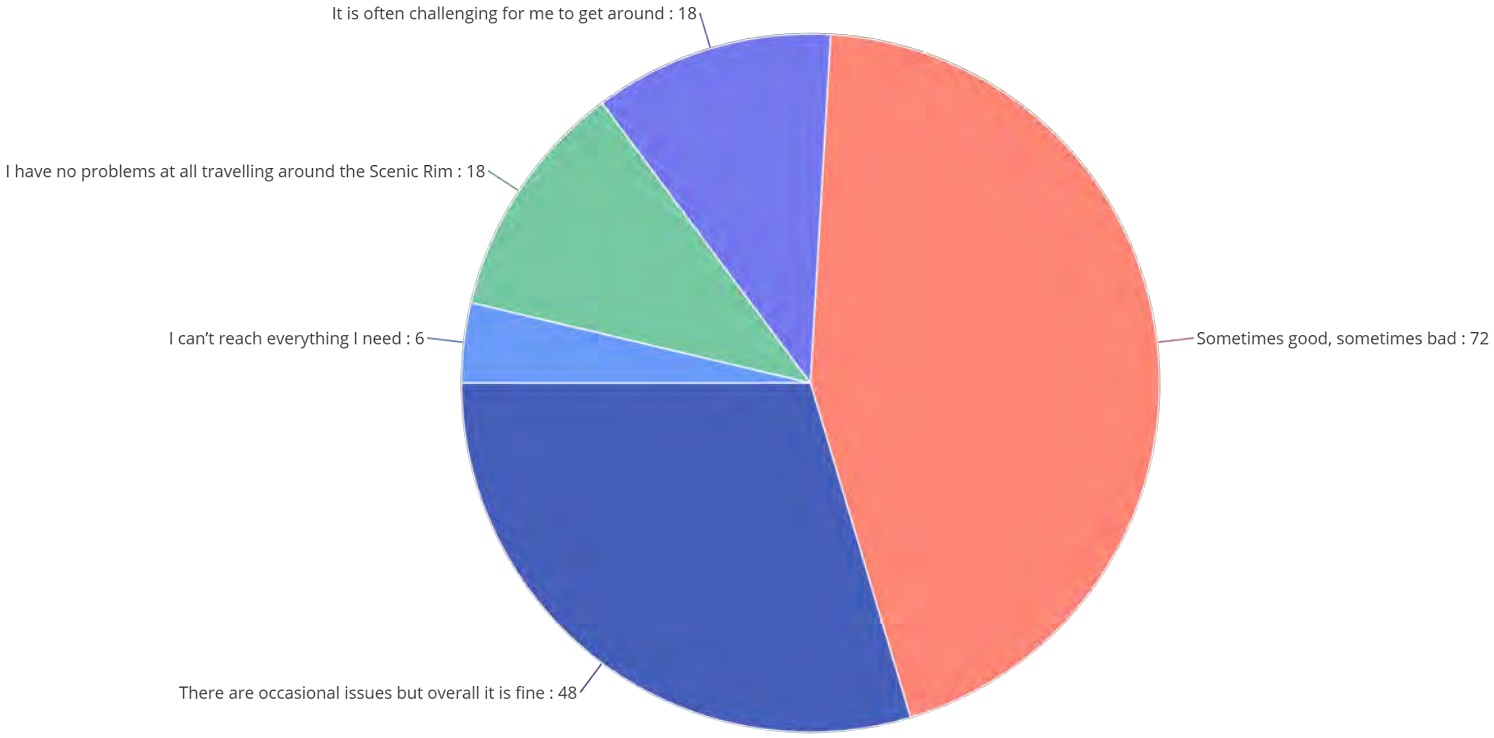
	Count
Chartered bus	1
Ride with friends	1
NET	2

What modes of transport do you regularly use when you travel in and around the Scenic Rim? (Other (please specify)) SUMMARY
sample size = 2; total sample size = 164; 162 missing; 95% confidence level

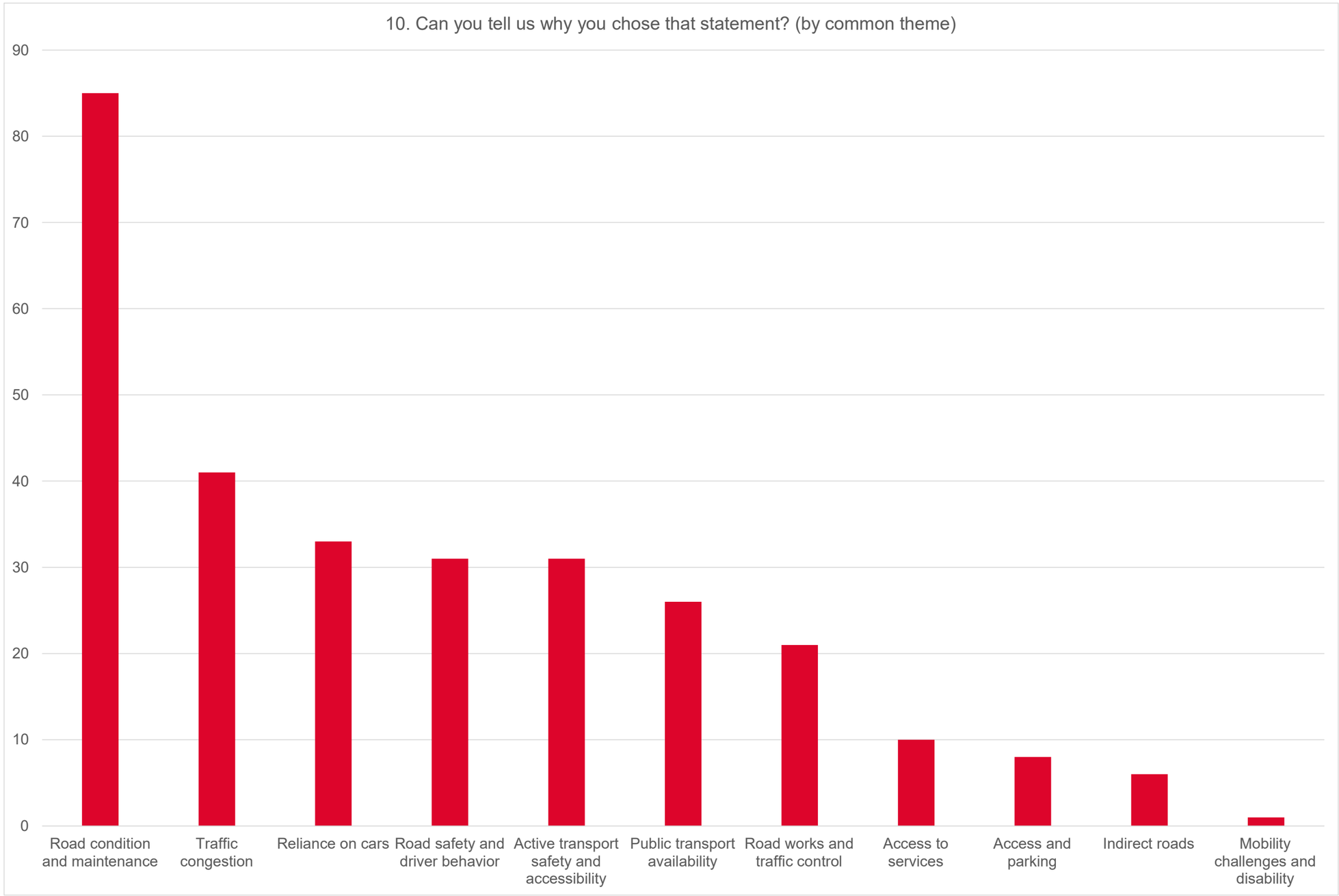
8. What modes of transport do you regularly use when you travel in and around the Scenic Rim?

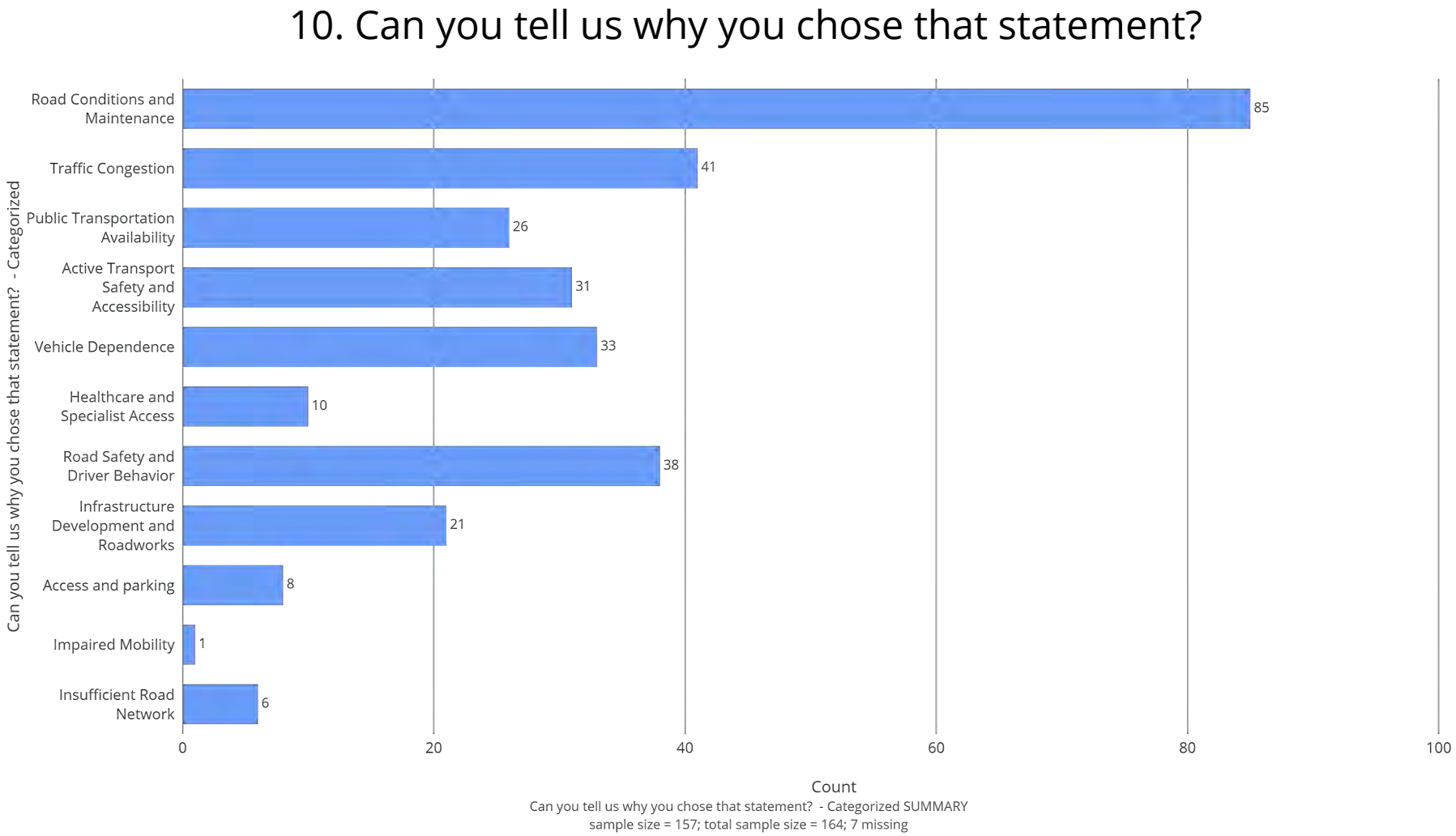


9. Select the statement which best describes your current experience of travelling in the Scenic Rim

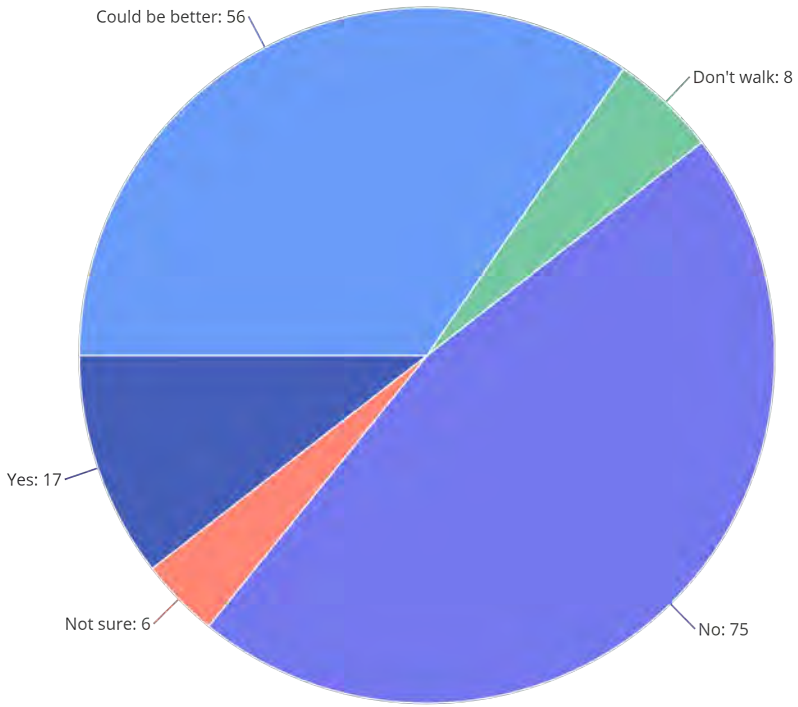


Select the statement which best describes your current experience of travelling in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing


10. Can you tell us why you chose that statement? (by common theme)
90
80
70
60
50
40
30
20
10
0
Road condition and maintenance
Traffic congestion
Reliance on cars
Road safety and driver behavior
Active transport safety and accessibility
Public transport availability
Road works and traffic control
Access to services
Access and parking
Indirect roads
Mobility challenges and disability

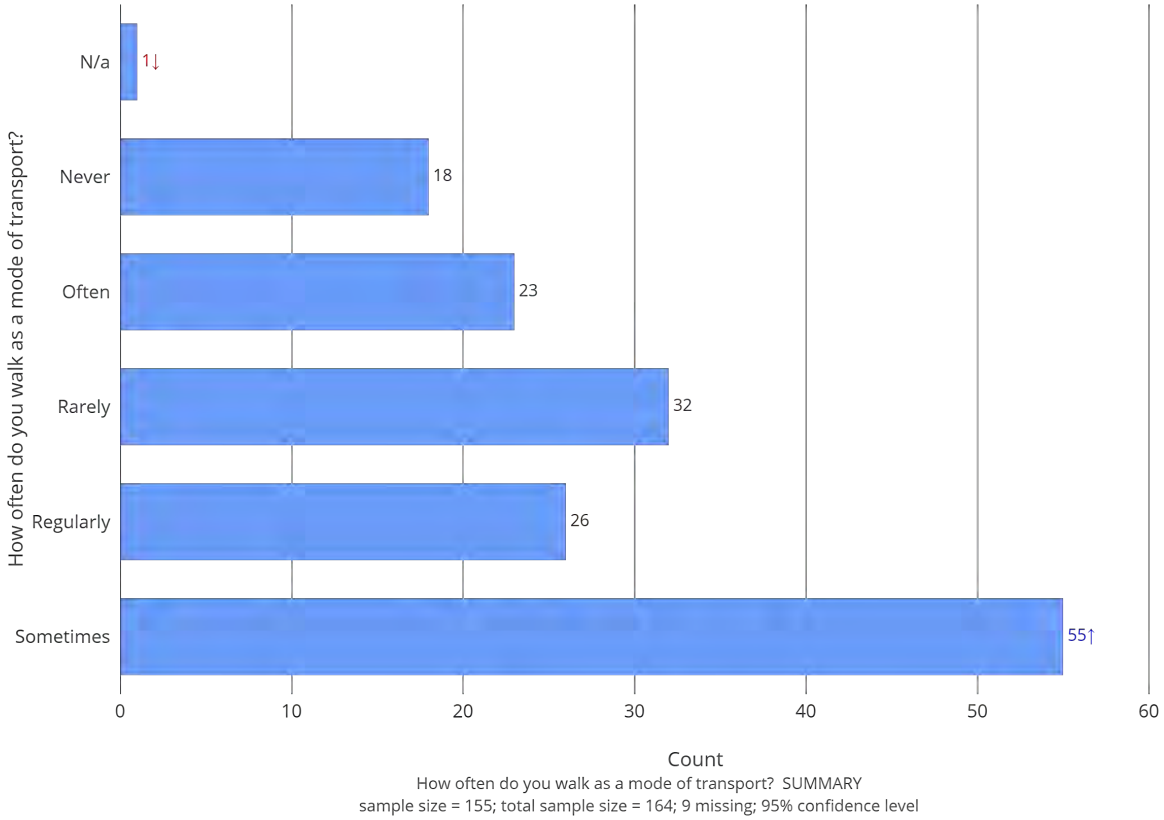

10. Can you tell us why you chose that statement?
Road Conditions and Maintenance
85
Traffic Congestion
41
Public Transportation Availability
26
Active Transport Safety and Accessibility
31
Vehicle Dependence
33
Healthcare and Specialist Access
10
Road Safety and Driver Behavior
38
Infrastructure Development and Roadworks
21
Access and parking
8
Impaired Mobility
1
Insufficient Road Network
6
Can you tell us why you chose that statement? - Categorized
0
20
40
60
80
100
Count
Can you tell us why you chose that statement? - Categorized SUMMARY
sample size = 157; total sample size = 164; 7 missing

11. Do you think that walking is well catered for in the Scenic Rim?



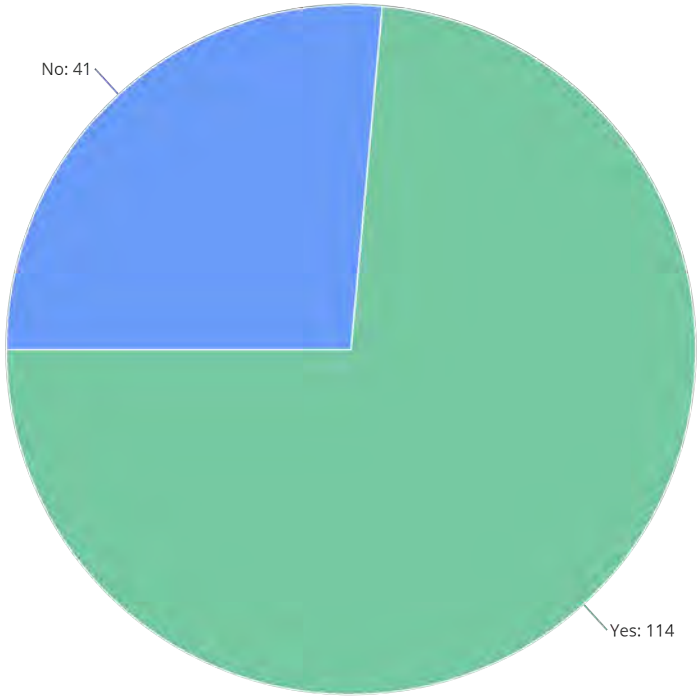
Do you think that walking is well catered for in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing

12. How often do you walk as a mode of transport?



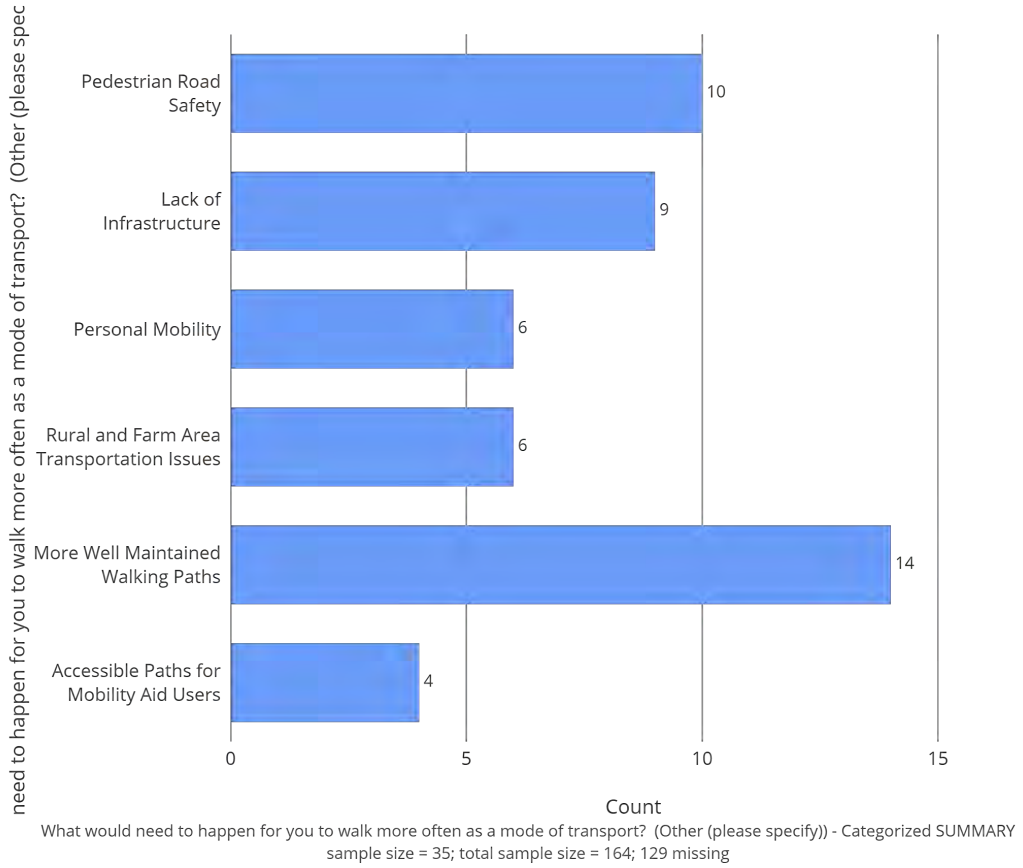
How often do you walk as a mode of transport? SUMMARY
sample size = 155; total sample size = 164; 9 missing; 95% confidence level

13. Would you like to walk more often as a mode of transport?



Would you like to walk more often as a mode of transport? SUMMARY
sample size = 155; total sample size = 164; 9 missing

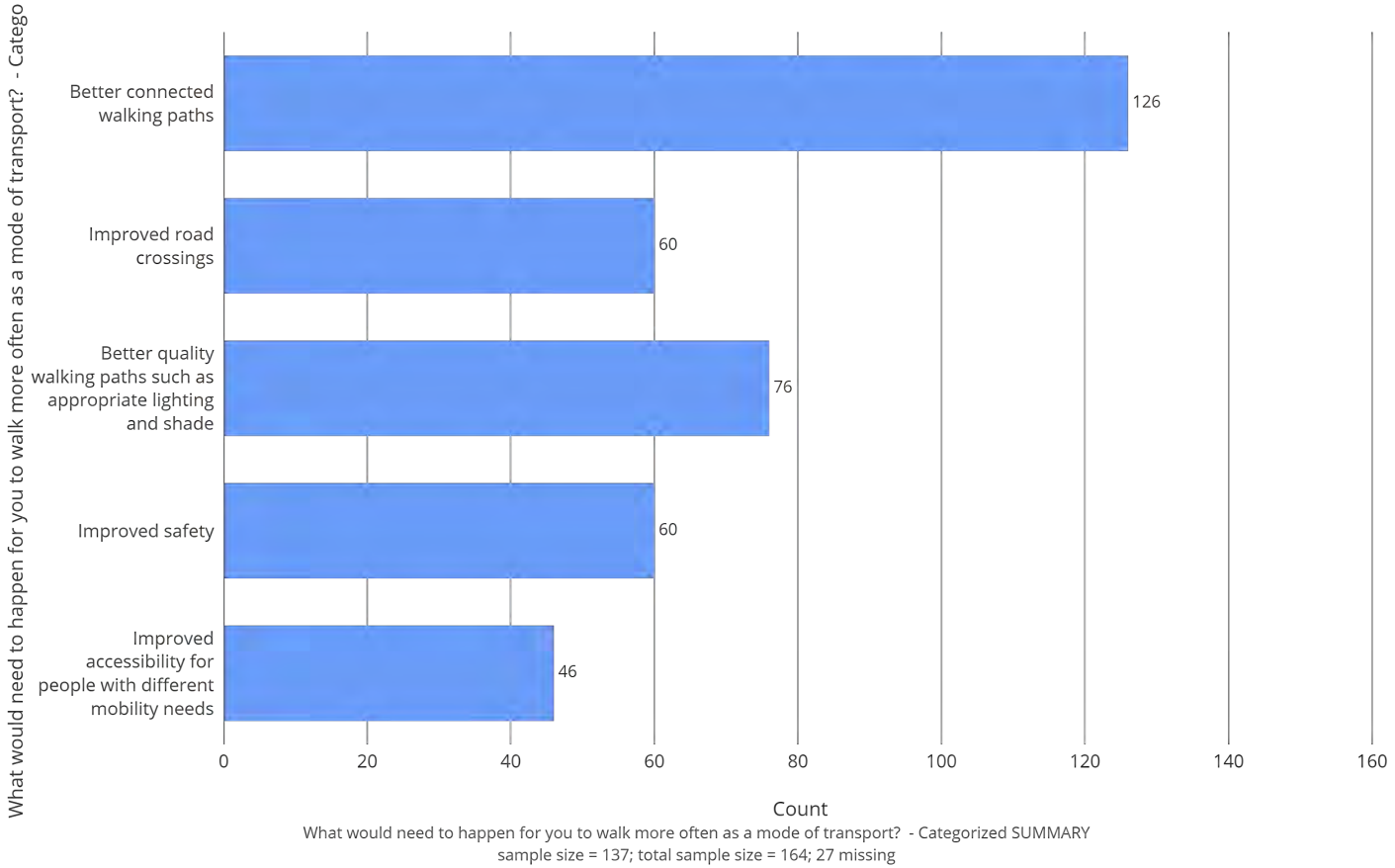
Q14: What would need to happen for you to talk more often as a mode of transport? (Other - Please specify)



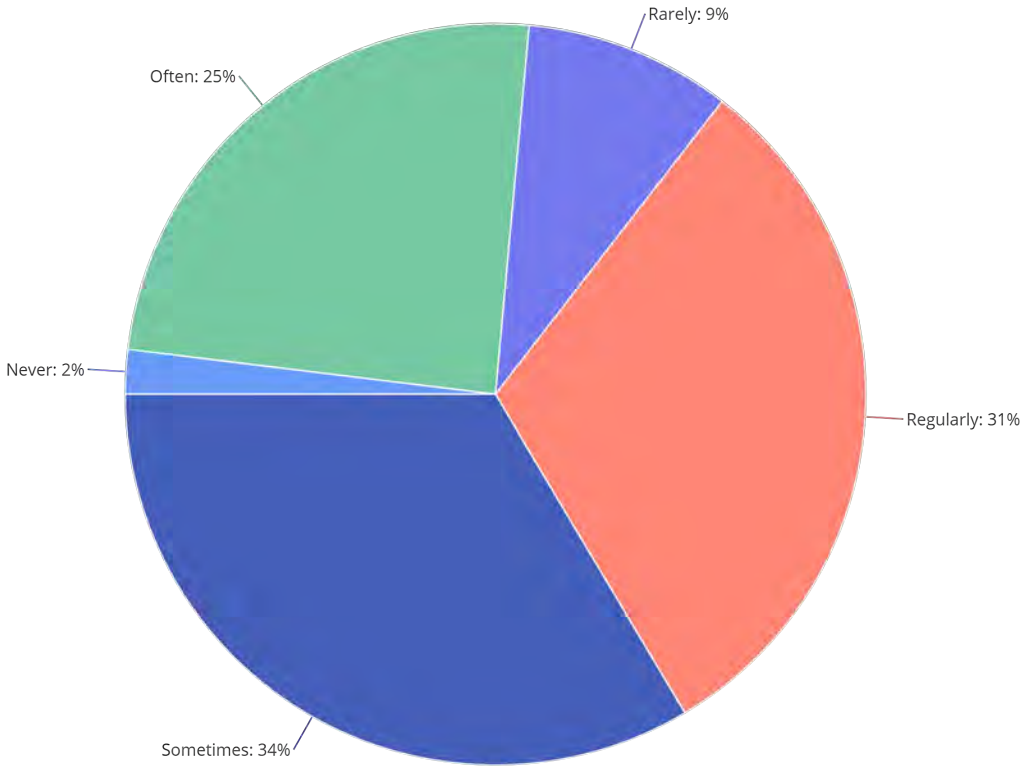
What would need to happen for you to walk more often as a mode of transport? (Other (please specify)) - Categorized SUMMARY
sample size = 35; total sample size = 164; 129 missing

70	
71	
72	
73	
74	The town footpaths are overgrown and council do nothing, can't even walk side by side in kalbar, so uneven they are unsafe, walking paths as in for fitness don't exist.
75	Live to far out of town to connect to public transport.
76	
77	

14. What would need to happen for you to walk more often as a mode of transport?

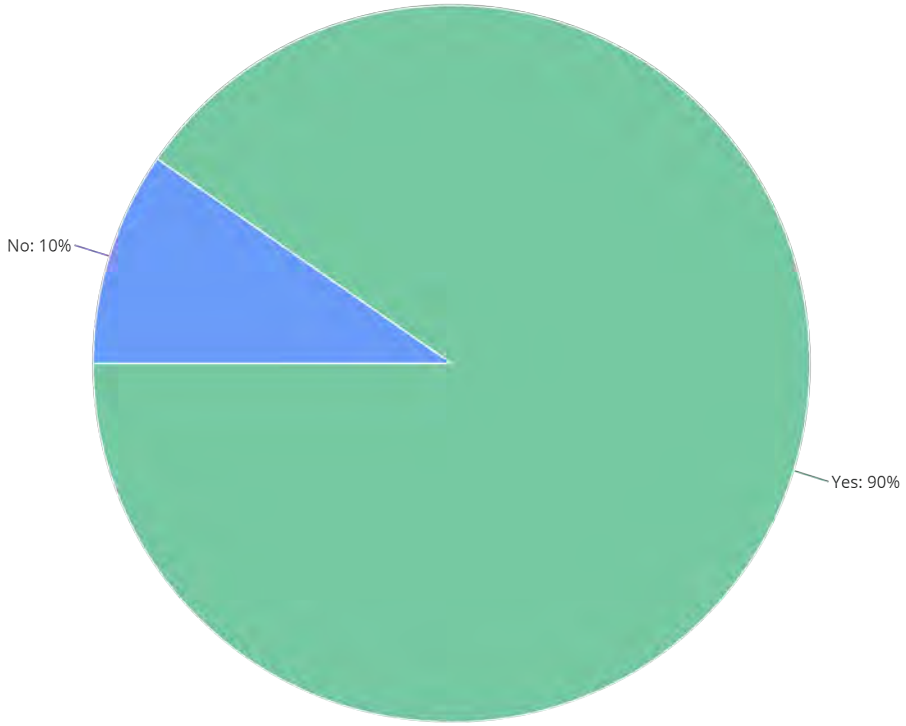


15. How often do you walk for recreation?



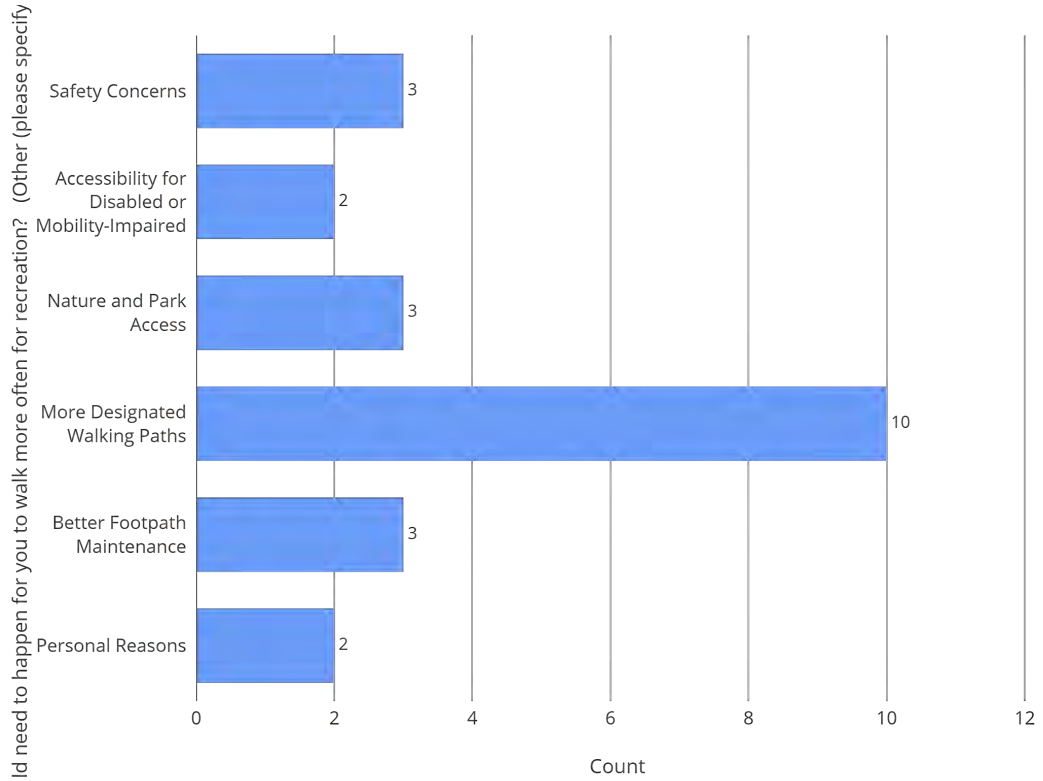
How often do you walk for recreation? SUMMARY
sample size = 155; total sample size = 164; 9 missing

16. Would you like to walk more for recreation?



Would you like to walk more often for recreation? SUMMARY
sample size = 155; total sample size = 164; 9 missing; 95% confidence level

Q17: What would need to happen for you to walk more for recreation? Other: Please Specify



What would need to happen for you to walk more often for recreation? (Other (please specify)) - Categorized SUMMARY
sample size = 17; total sample size = 164; 147 missing

23	
24	
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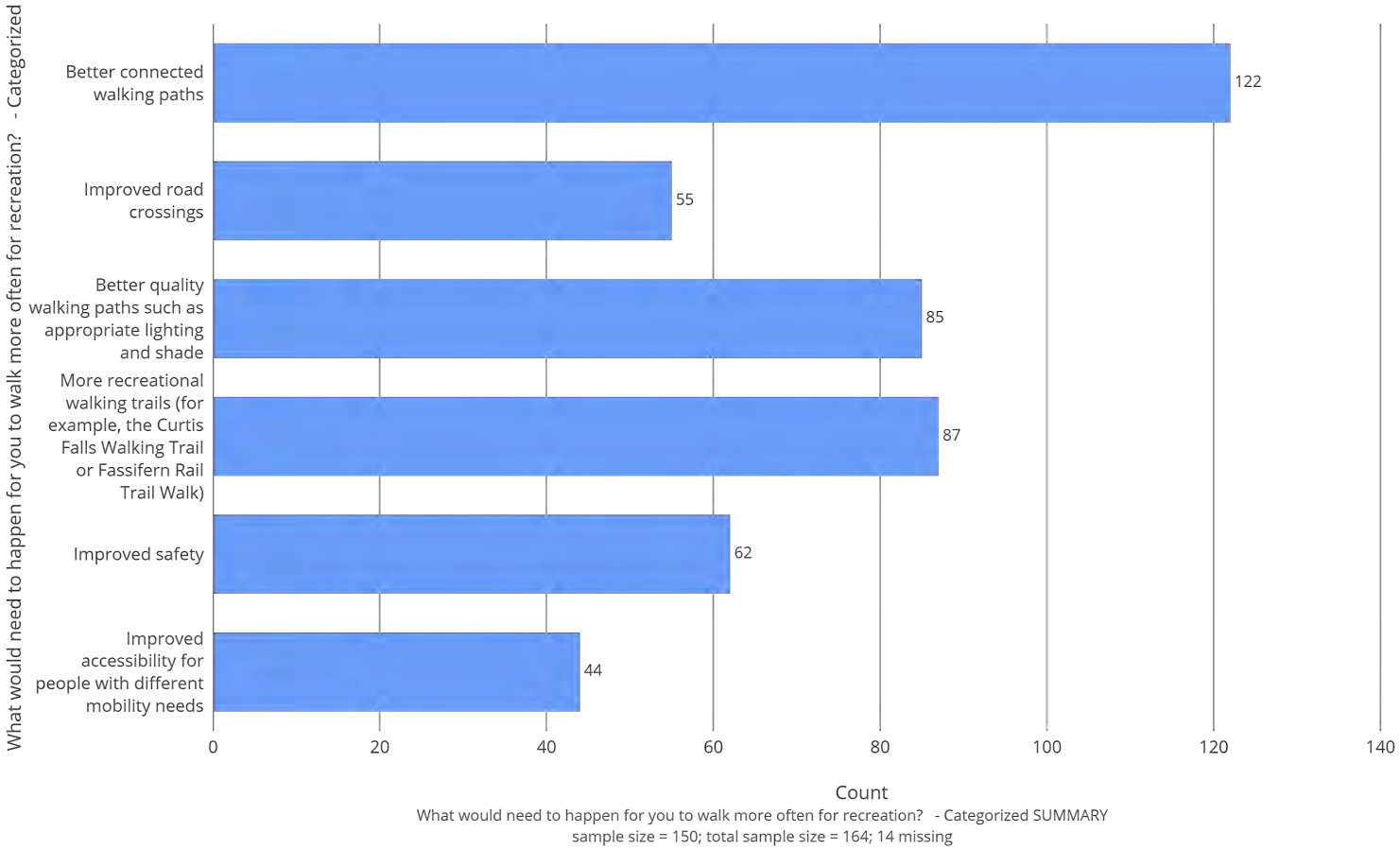
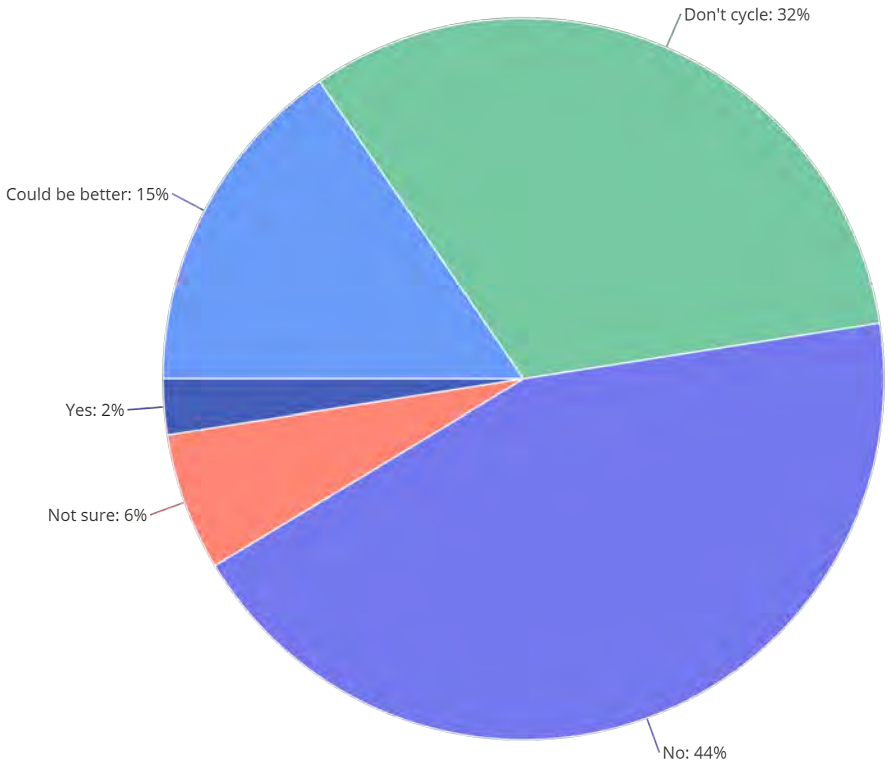
26	
27	
28	Kooralbyn currently has one footpath located on Routley Drive. I currently walk twice per week from the top of Boomerang Drive to the intersection with Merton Close. This is one of the only areas in Kooralbyn that is relatively flat and provides a reasonable

17. What would need to happen for you to walk more often for recreation?

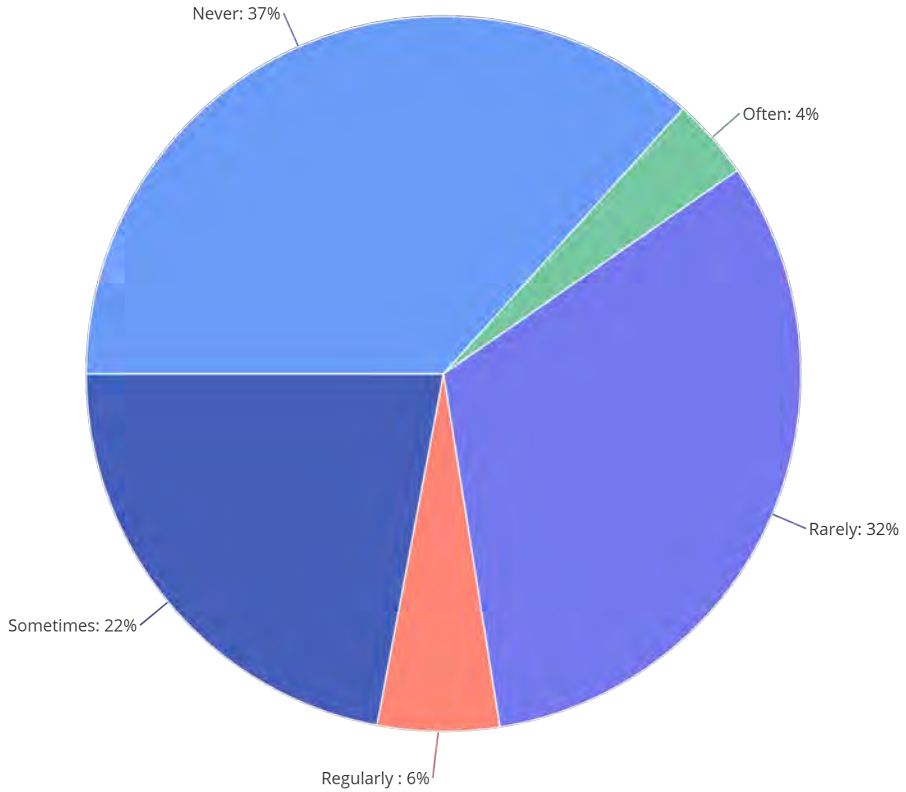


18. Do you think cycling is well catered for in the Scenic Rim?

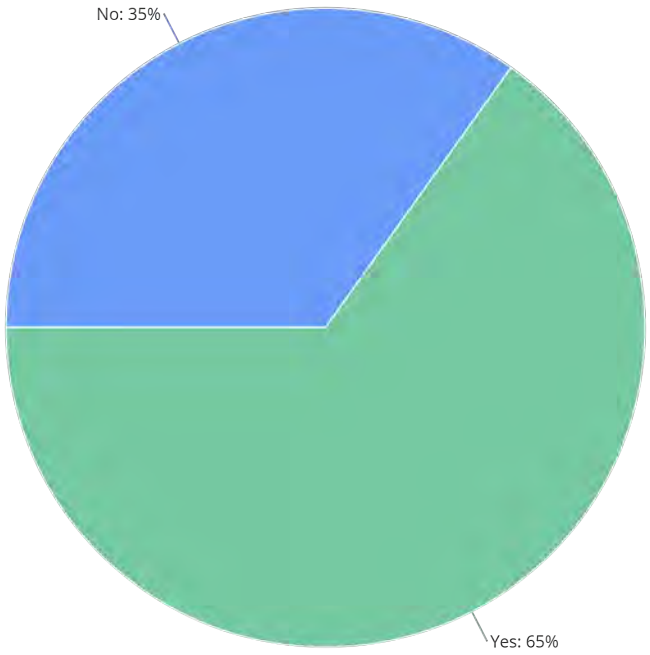


Do you think that cycling is well catered for in the Scenic Rim? SUMMARY
sample size = 162; total sample size = 164; 2 missing

19. How often do you cycle as a mode of transport?

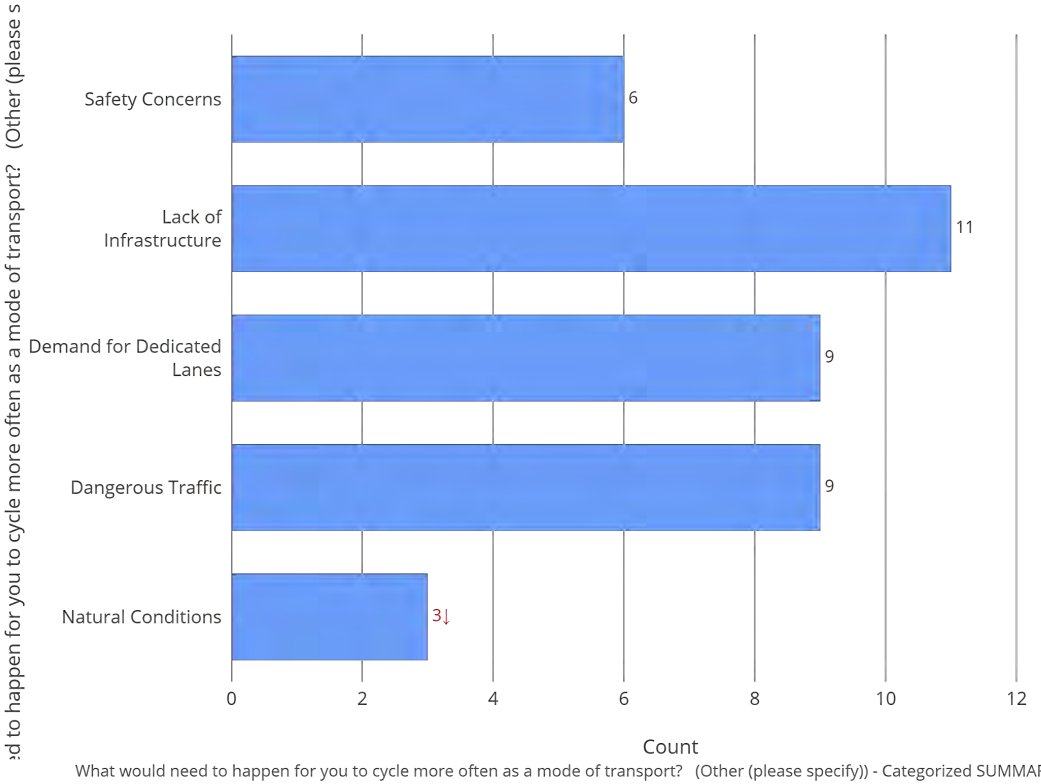


20. Would you like to cycle more often as a mode of transport?



Would you like to cycle more often as a mode of transport? SUMMARY
sample size = 109; total sample size = 164; 55 missing

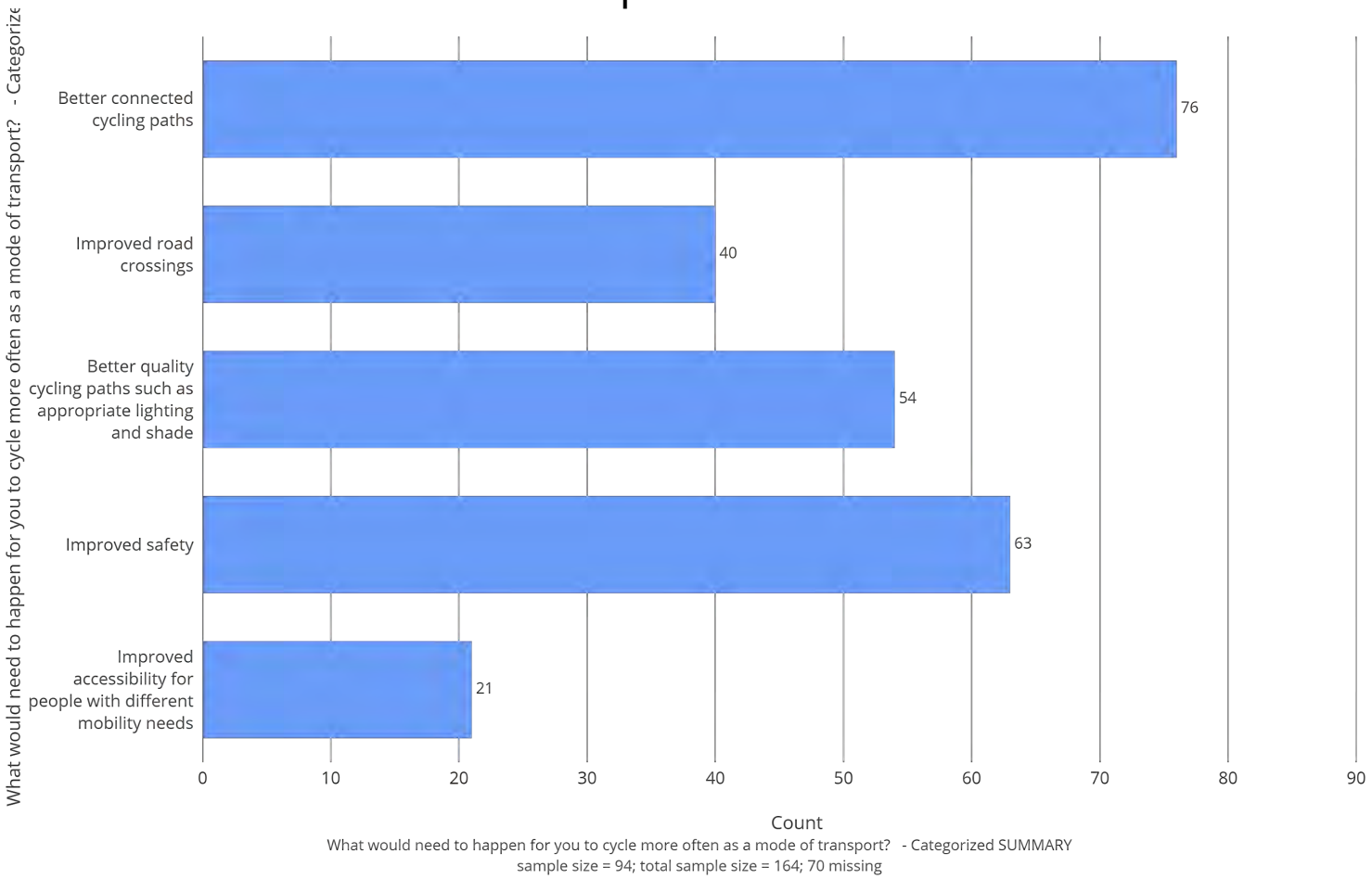
Q21: What would need to happen for you to cycle more often as a mode of transport? (Other, please specify)



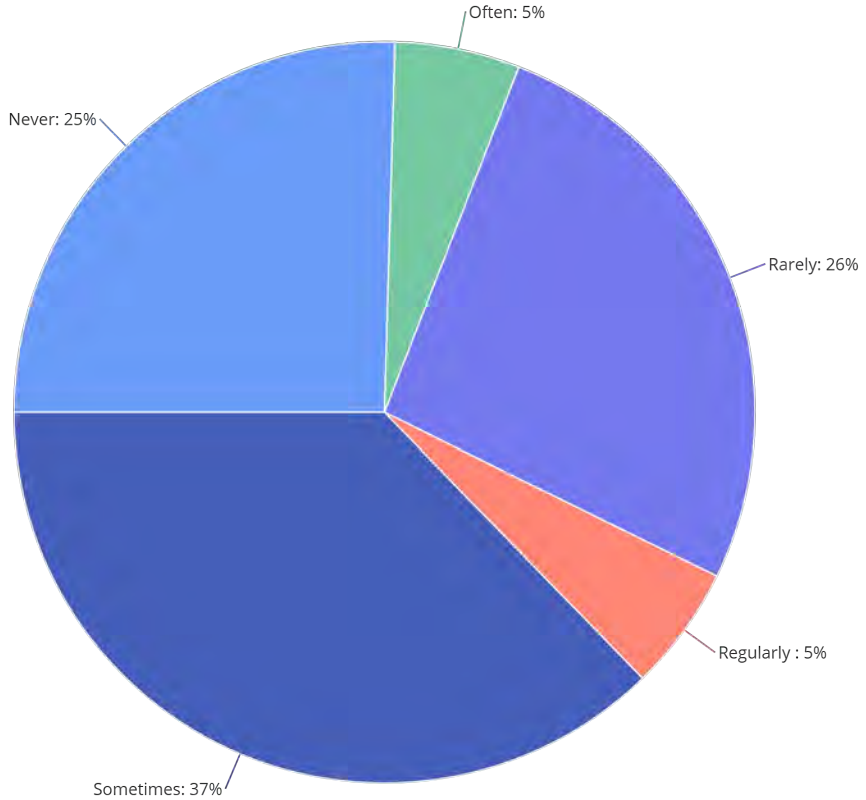
What would need to happen for you to cycle more often as a mode of transport? (Other (please specify)) - Categorized SUMMARY
sample size = 18; total sample size = 164; 146 missing; 95% confidence level

(please specify)) RAW DATA
sample size = 164

21. What would need to happen for you to cycle more often as a mode of transport?

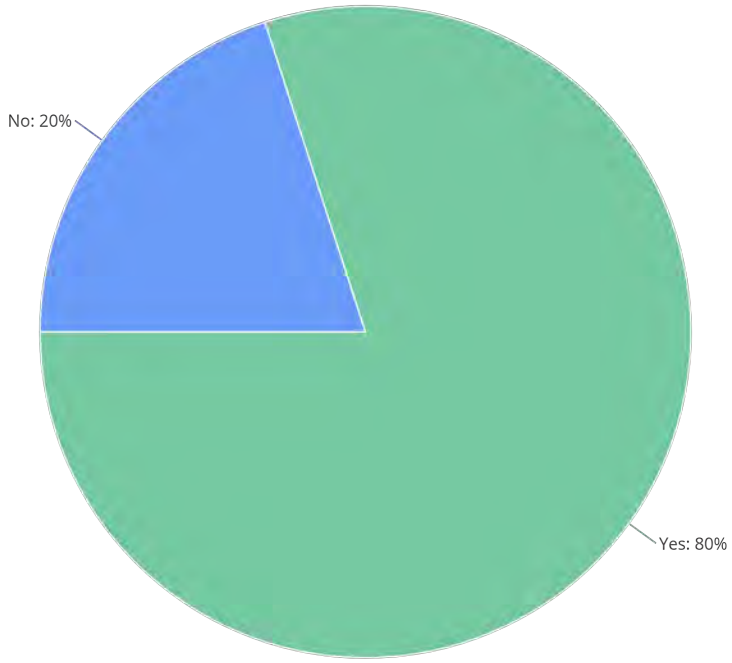


22. How often do you cycle for recreation?



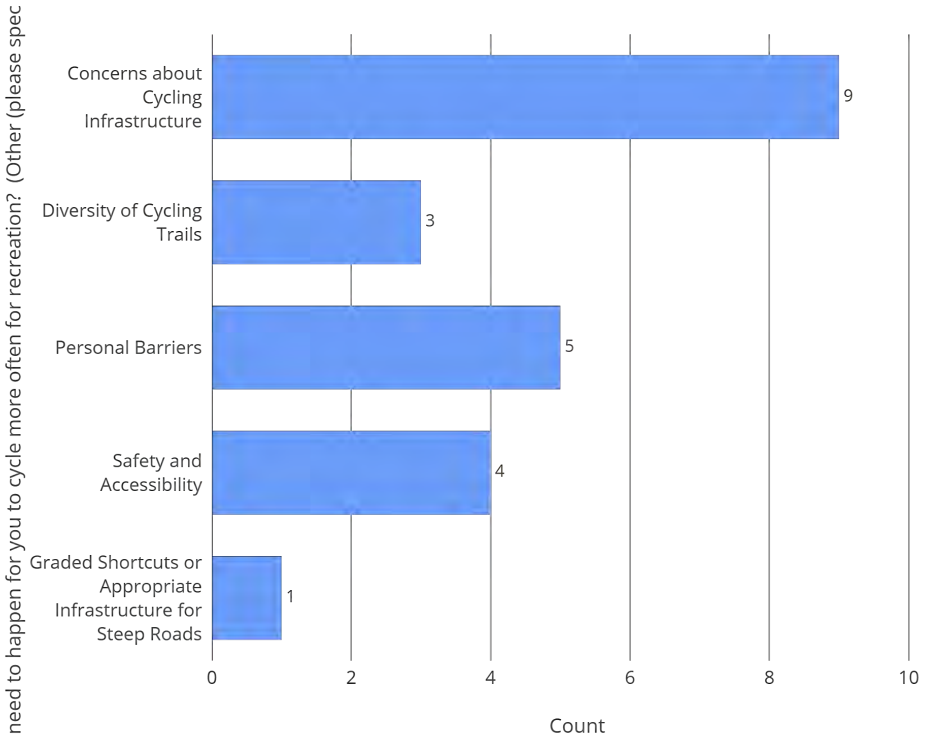
How often do you cycle for recreation? SUMMARY
sample size = 110; total sample size = 164; 54 missing

23. Would you like to cycle more often for recreation?



Would you like to cycle more often for recreation? SUMMARY
sample size = 110; total sample size = 164; 54 missing

Q24: What would need to happen for you to cycle more often for recreation? (Other: Please specify)

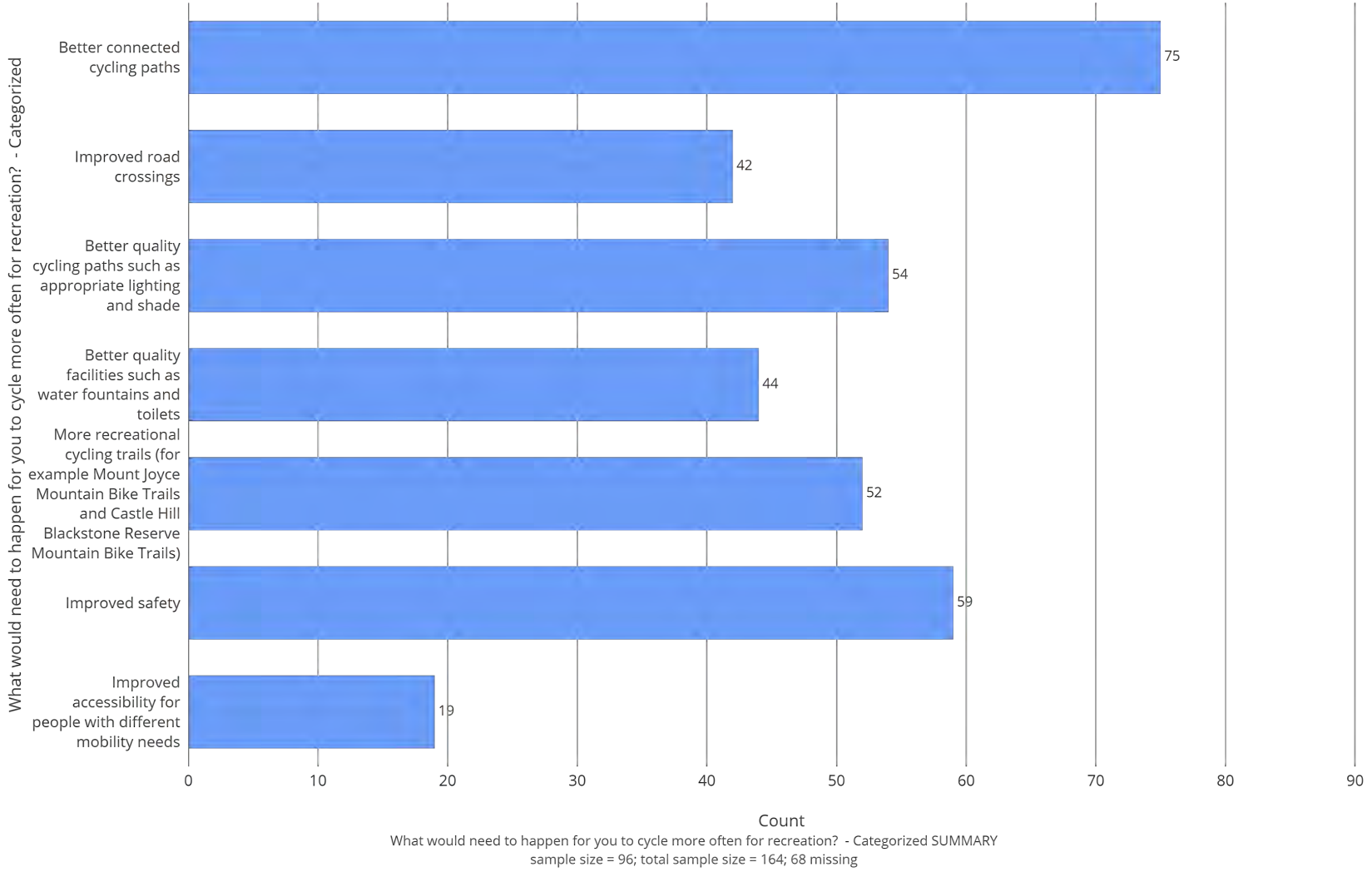


What would need to happen for you to cycle more often for recreation? (Other (please specify)) - Categorized SUMMARY
sample size = 17; total sample size = 164; 147 missing

58

What would need to happen for you to cycle more often for recreation? (Other (please specify)) RAW DATA
sample size = 164

24. What would need to happen for you to cycle more often for recreation?



Q25: Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? (Other, please specify)

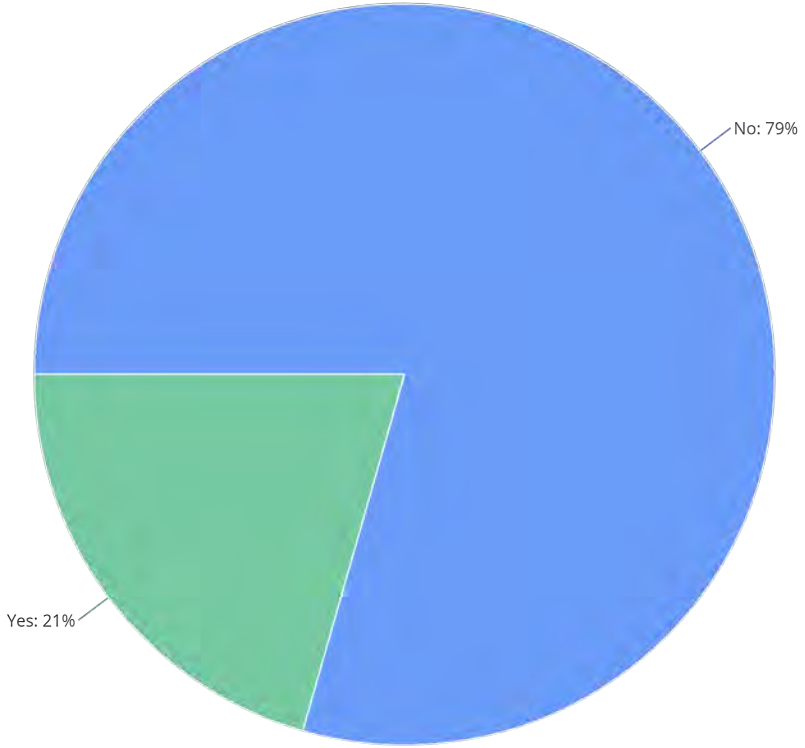
Key Themes:

- More Active Transport Infrastructure needed
- Road Maintenance
- Road Network Connectivity
- Need for Public Transport Options

91	A road from merry to tamrookum would be good
92	
93	

Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? (Other (please specify)) RAW DATA
sample size = 164

25. Do you think the ways in which people can travel in and around the Scenic Rim works well for the community?



Do you think the ways in which people can travel in and around the Scenic Rim works well for the community? SUMMARY
sample size = 141; total sample size = 164; 23 missing

Q26: What are the biggest issues for you when travelling in and around the Scenic Rim? (Other - Please specify)

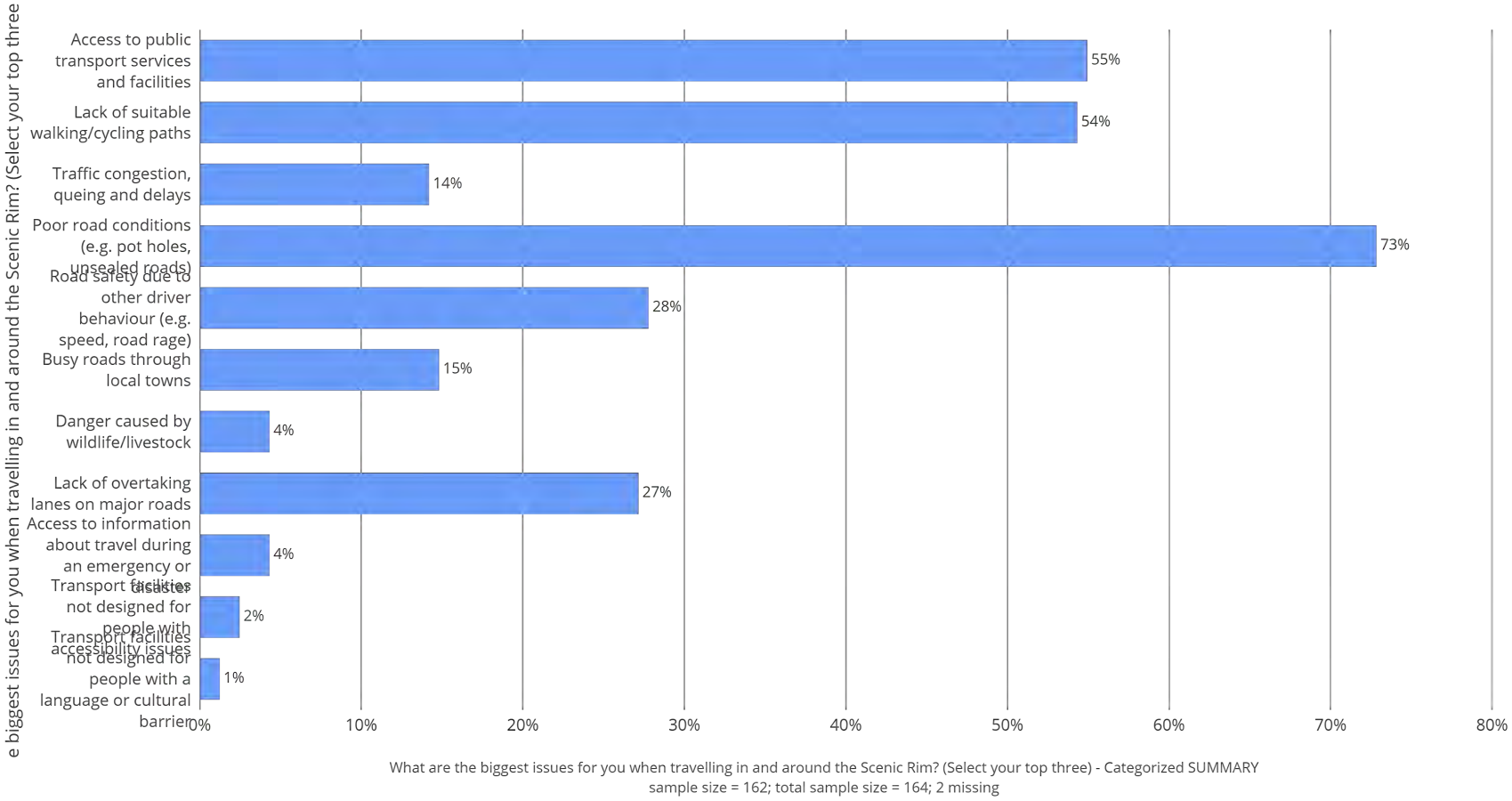
Key Themes:
- Mobility for the elderly or physically impaired
Lack of connecting infrastructure between suburbs

- Dangerous road conditions
- Active Transport infrastructure

- Lack of adequate facilities
- Protection of wildlife

What are the biggest issues for you when travelling in and around the Scenic Rim? (Select your top three) (Other (please specify)) RAW DATA
sample size = 164

26. What are the biggest issues for you when travelling in and around the Scenic Rim?



Q27: When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Other- please specify)

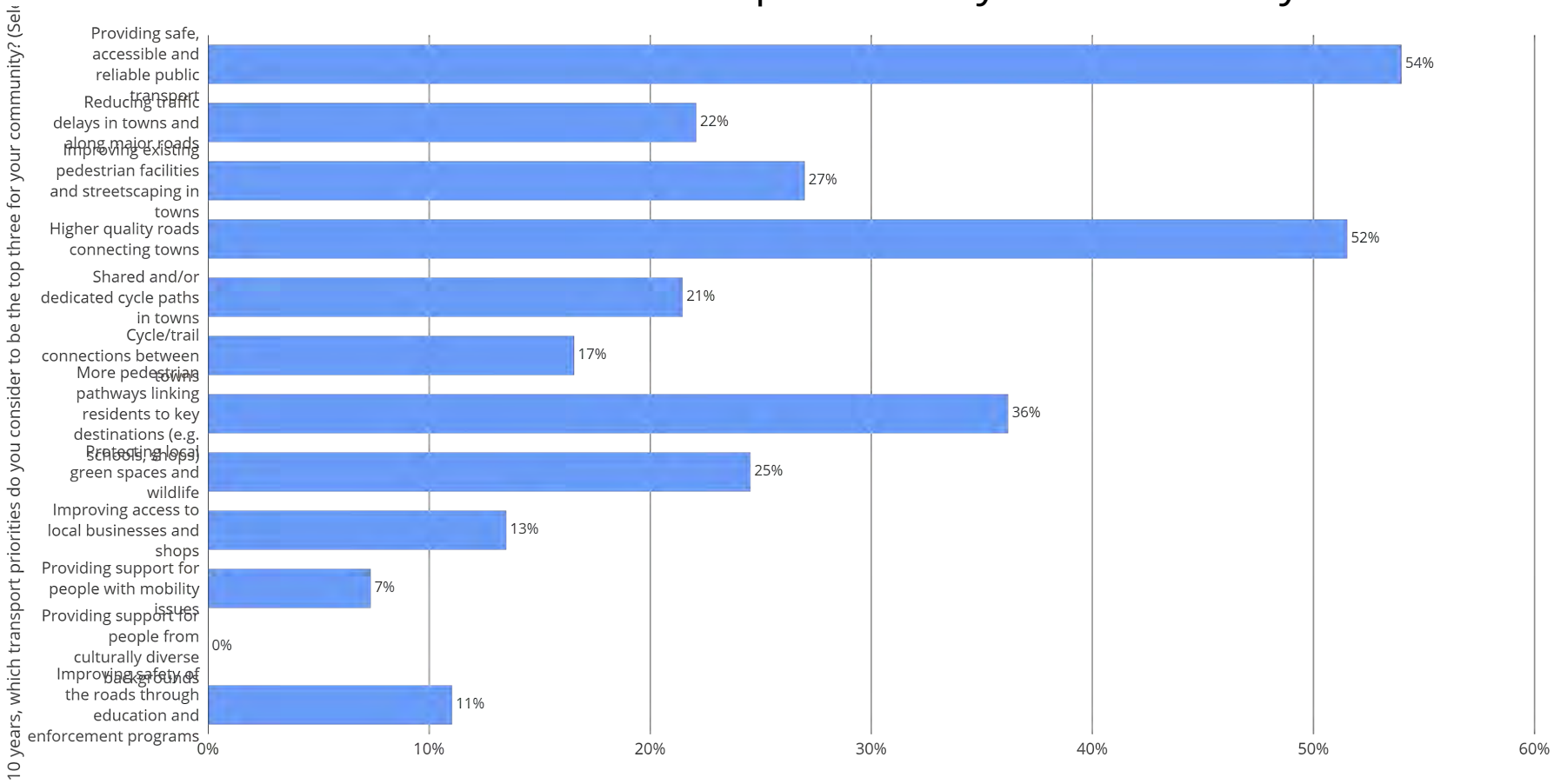
Key themes:

- Active Transport Infrastructure
- Public Transport options around the Scenic Rim and other cities such as Brisbane
- Pedestrian facilities
- Maintenance of Roads
- Strengthen the Road Network
- Protecting wildlife and the environment

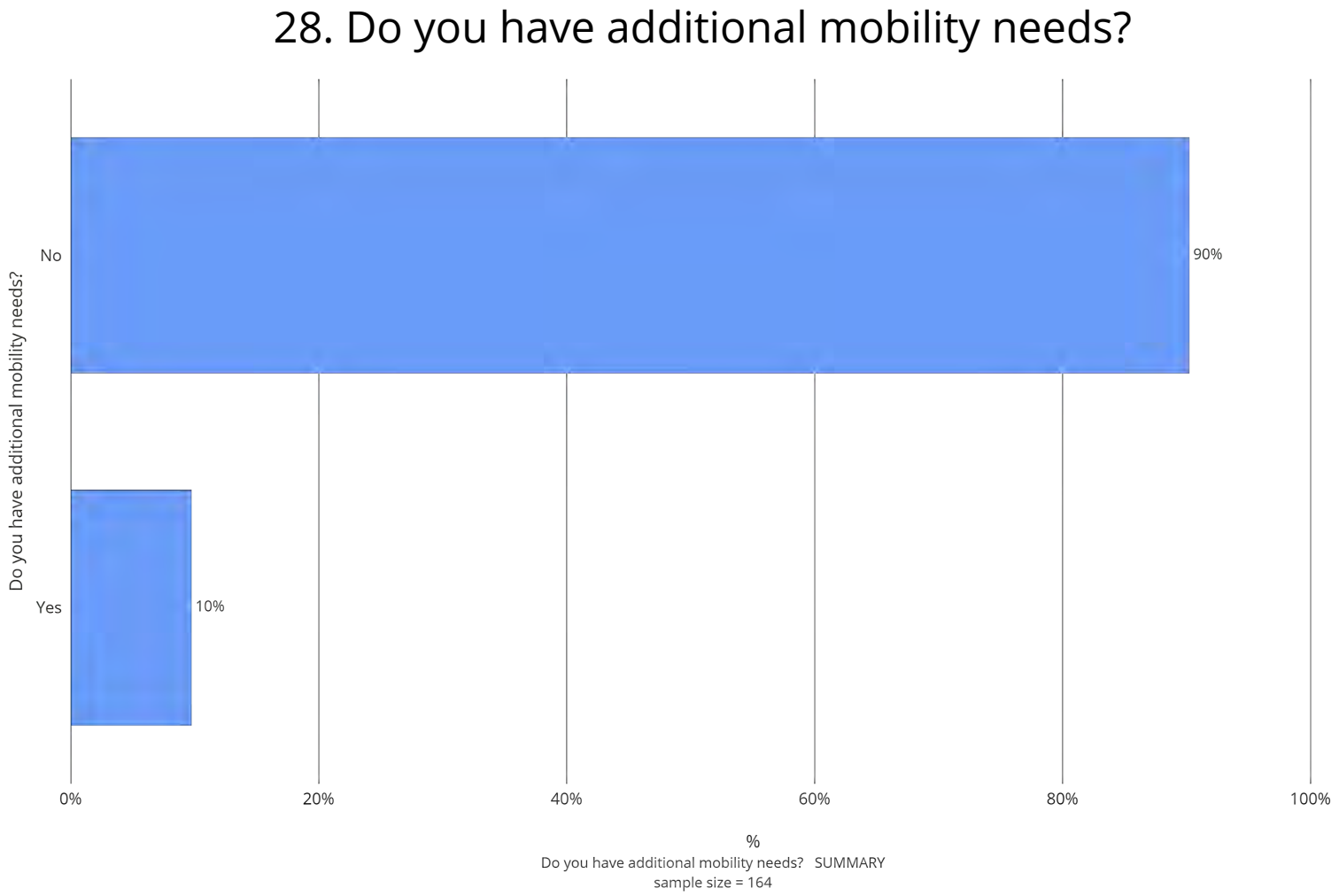
54
55
56
57

When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Select your top three). (Other (please specify)) RAW DATA
sample size = 164

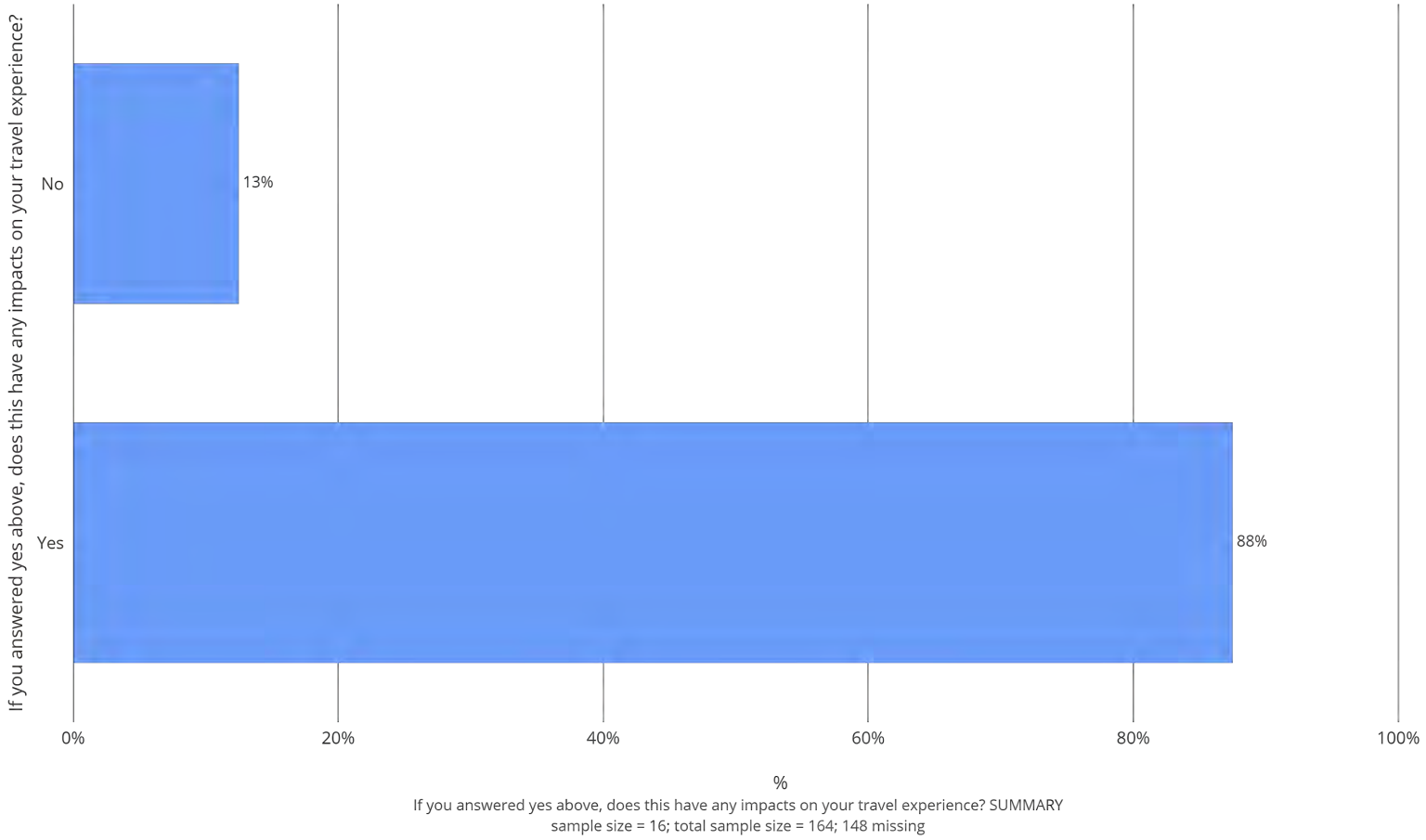
27. When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community?



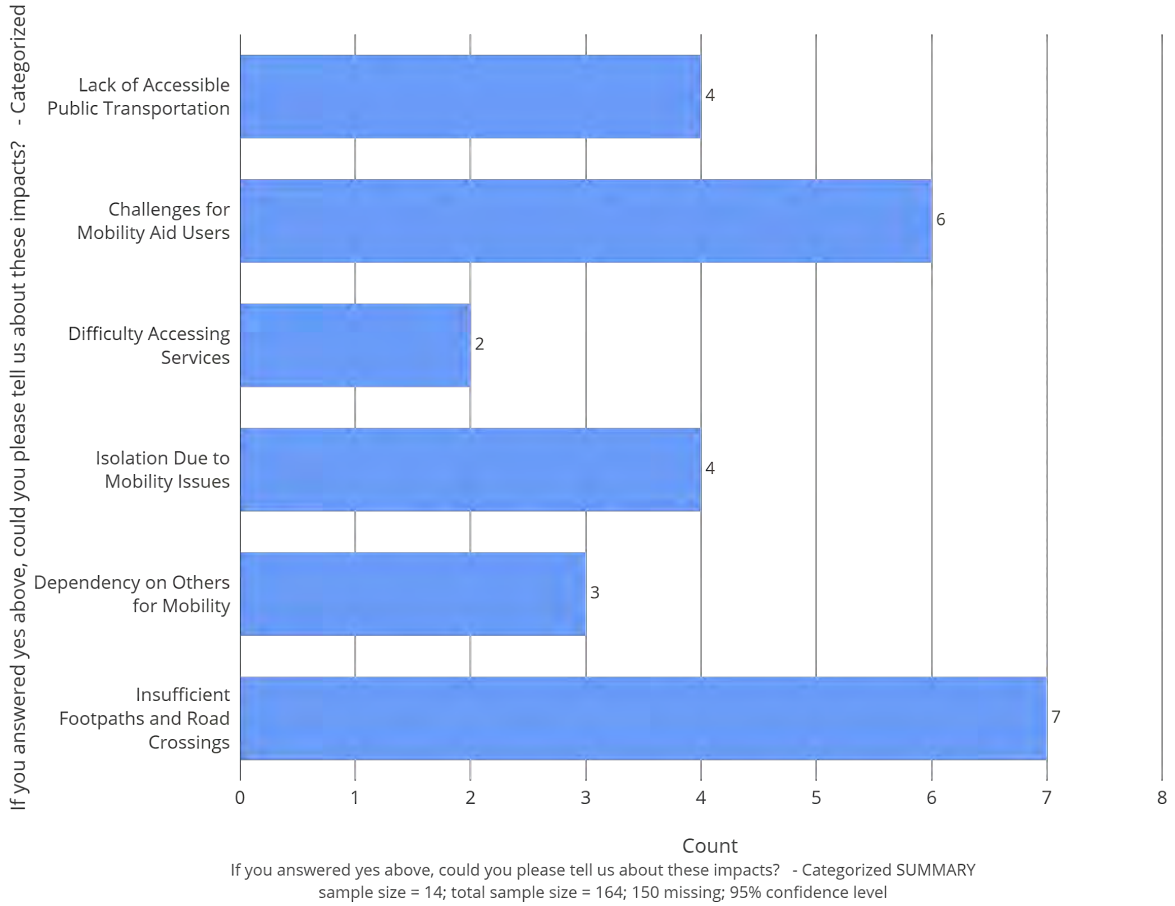
When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? (Select your top three). - Categorized SUMMARY
sample size = 163; total sample size = 164; 1 missing


28. Do you have additional mobility needs?
Do you have additional mobility needs?
No
Yes
90%
10%
0%
20%
40%
60%
80%
100%
%
Do you have additional mobility needs? SUMMARY
sample size = 164

29. If you answered yes above, does this have any impacts on your travel experience?



30. If you answered yes above, could you please tell us about these impacts?



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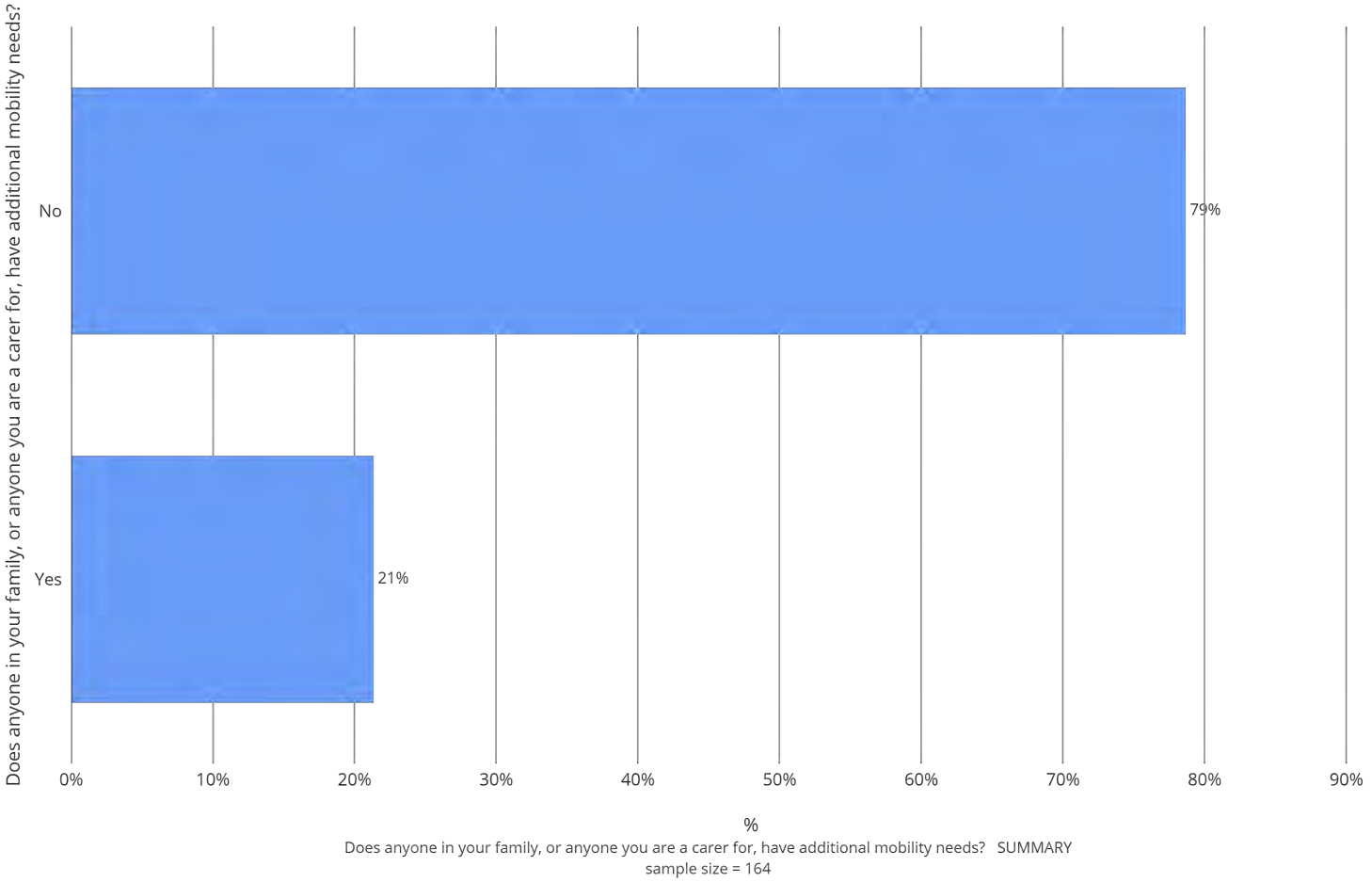
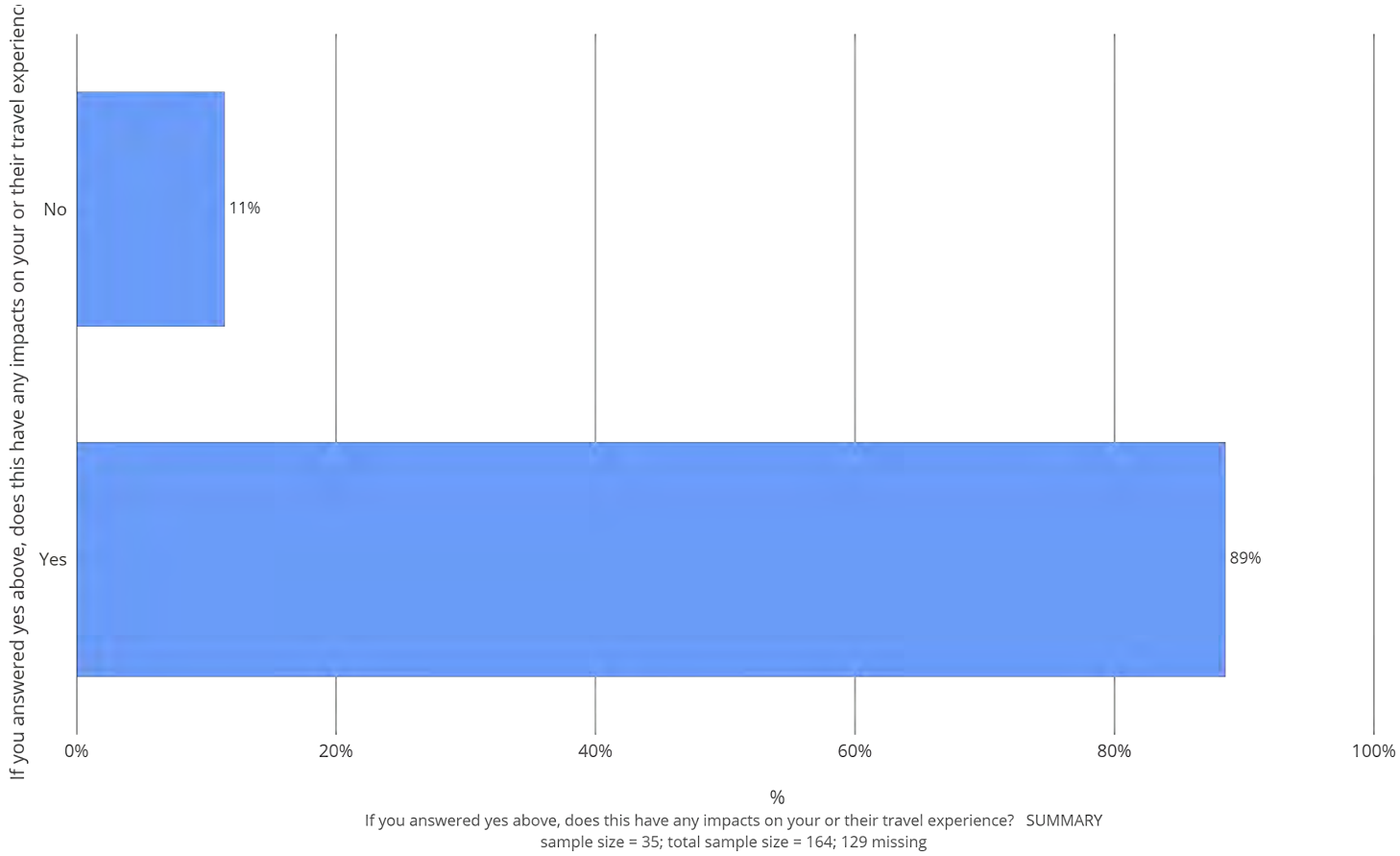
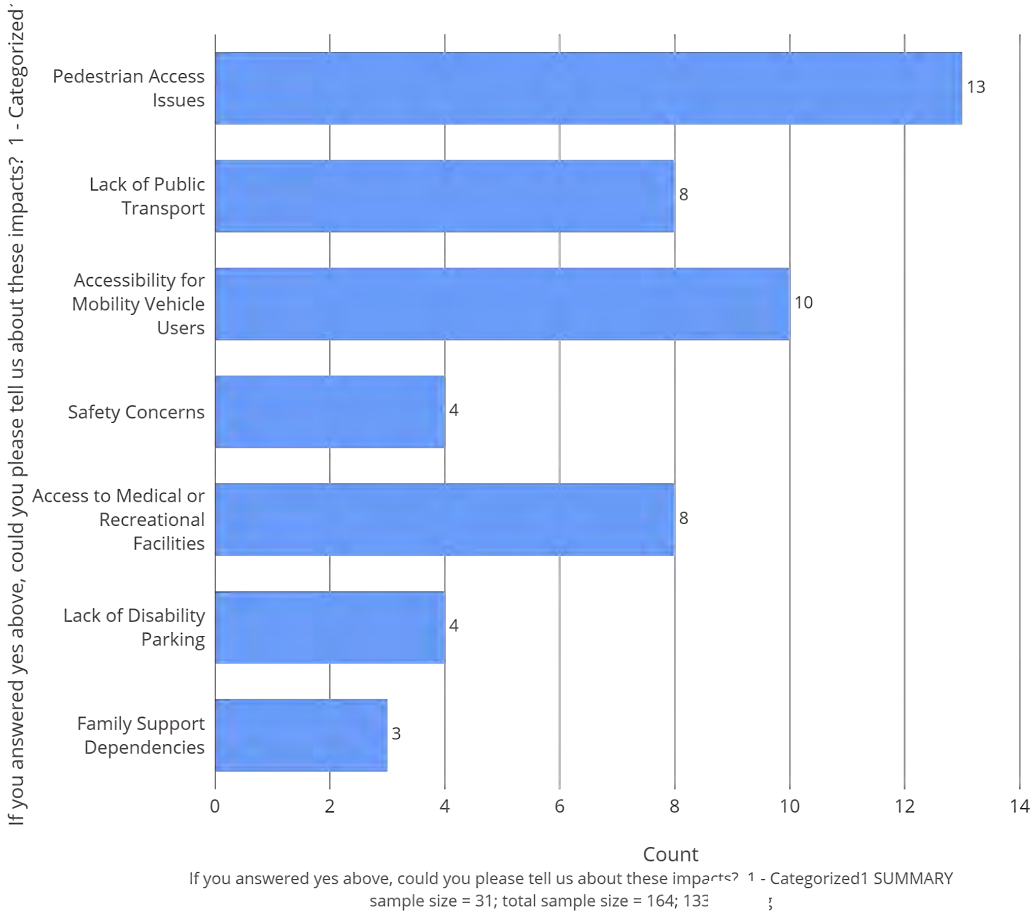
31. Does anyone from your family, or anyone you are a carer for, have any additional mobility needs?



32. If you answered yes above, does this have any impacts on your or their travel experience?



33. If you answered yes above, could you please tell us about these impacts?



16	
17	
18	
19	
20	
21	
22	
23	
24	Limited ability for my wife to walk safely around the village of Kooralbyn, no footpaths and uneven ground

Scenic Rim Regional Council

INTEGRATED TRANSPORT PLAN

Take the scenic route – Have your say to improve transport in, across and through the Scenic Rim Region.

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

Our region is projected to grow at an annual rate of 2%, reaching an estimated population of 64,679 by 2041. This growth will impact on our transport networks and connections.

Council is developing an Integrated Transport Plan to make sure our transport networks and connections grow with the population and are efficient, safe, reliable, accessible and sustainable. This is the first time a comprehensive study encompassing all transport network needs has been undertaken by Council.

This plan will provide a framework for the development of future transport needs within the Scenic Rim. It will also be a tool to help Council make strategic decisions to enhance transport outcomes.

Aligning the plan to the needs of the community forms an important part of the process.

Council is seeking your knowledge and experience of travelling around our region. We want to know about your experience travelling across road networks, walking paths, cycling routes and transport connections.

Your feedback will help Council to deliver better transport outcomes. It will make getting around the Scenic Rim safer, through an integrated transport network that is connected, reliable, accessible and sustainable.

The Plan with be informed by technical inputs and both previous and current community and stakeholder feedback. We will use your feedback to build on what we have already heard.

Ways to get involved:

- **complete our survey** online on *Let's Talk Scenic Rim* or by scanning the QR below
- **drop a pin** on the interactive map to tell us about specific locations link on *Let's Talk Scenic Rim* or by scanning the QR below
- **fill in a printed version** of the survey. You'll find these at your local Council offices and libraries
- **speak to our project team** in person at one of our drop-in sessions planned at key locations around the Scenic Rim in August. Check on *Let's Talk Scenic* Rim as we confirm dates and locations.
- **email the project team:** mail@scenicrim.qld. gov.au attention ***Integrated Transport Project team.***

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

The Walking Network Plans for the Integrated Transport Planning are 50% funded by the Department of Transport and Main Roads Queensland as part of the Walking Local Government Grant Scheme.

Scenic Rim Regional Council

INTEGRATED TRANSPORT PLAN

Take the **Survey**

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

1. What is your connection with the Scenic Rim? *(Select all that apply)*

- ☐ I am a Scenic Rim resident
- ☐ I am a visitor to the Scenic Rim
- ☐ I live in Scenic Rim
- ☐ I am a ratepayer in Scenic Rim
- ☐ I work in Scenic Rim
- ☐ I am a student in Scenic Rim
- ☐ I am a visitor to Scenic Rim
- ☐ I am not a resident of the Scenic Rim, but travel to the Scenic Rim for work.

2. Please indicate your gender: *(Choose any one option)*

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ Prefer not to say

3. Please indicate your age category. *(Choose any one option)*

- ☐ Under 15
- ☐ 15 to 24
- ☐ 25 to 44
- ☐ 45 to 65
- ☐ 66 to 79
- ☐ 80+
- ☐ Prefer not to say

4. Where do you live? *(town or suburb)*

5. Which cultural background do you most identify with? *(choose any one option))*

- ☐ Aboriginal
- ☐ Torres Strait Islander
- ☐ Aboriginal and Torres Strait Islander
- ☐ English
- ☐ Australian
- ☐ Irish
- ☐ Scottish
- ☐ German
- ☐ Other

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

6. Thinking of a typical week, describe the regular journeys you take within the Scenic Rim.

The three most common journeys I take in a typical week are:

Journey 1

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

Journey 2

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

Journey 3

From what suburb: To what suburb:

For the purpose of: ☐ Work ☐ Family/Friends ☐ Education ☐ Medical ☐ Shops
☐ Recreation/sports ☐ Dependents participating in/or from sporting activities

☐ Other (please specify)

Is this a return journey? ☐ Yes ☐ No

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

7. Do you have regular access to a motor vehicle?

☐ Yes ☐ No

8. What modes of transport do you regularly use when you travel in and around the Scenic Rim? *(select all that apply)*

- ☐ Private car
- ☐ Motorcycle
- ☐ Heavy vehicle
- ☐ Work vehicle (e.g., car, motorcycle, truck)
- ☐ Car-pooling with neighbour, friends or family
- ☐ Bicycle (including e-bikes)
- ☐ Personal transport device (e.g., scooters, mobility vehicle)
- ☐ Bus (public transport)
- ☐ Walk
- ☐ Community transport (e.g., courtesy bus, community support transport)
- ☐ Ride share vehicle or taxi
- ☐ Farm vehicle (e.g., tractor)
- ☐ Private bus (e.g., school bus, aged care transport, private coach)
- ☐ Other, please specify in the space below

9. Select the statement which best describes your current experience of travelling in the Scenic Rim.
(Choose any one option)

- ☐ I have no problems at all travelling around the Scenic Rim
- ☐ There are occasional issues but overall it is fine
- ☐ Sometimes good sometimes bad
- ☐ It is often challenging for me to get around
- ☐ I can't reach everything I need

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

10. Can you tell us why you chose that statement?

Active transport modes involve human-powered activities like walking and cycling. Tell us more about your experience walking in the Scenic Rim.

11. Do you think that walking is well catered for in the Scenic Rim?

☐ Yes ☐ No ☐ Could be better ☐ Don't walk (skip to question 18) ☐ Not sure

12. How often do you walk as a mode of transport?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

13. Would you like to walk more often as a mode of transport?

☐ Yes ☐ No

14. What would need to happen for you to walk more often as a mode of transport? *(choose all that apply)*

- ☐ Better connected walking paths
- ☐ Improved road crossings
- ☐ Better quality walking paths such as appropriate lighting and shade
- ☐ Improved safety
- ☐ Improved accessibility for people with different mobility needs
- ☐ Other, please specify in the space below

15. How often do you walk for recreation?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

16. Would you like to walk more often for recreation?

☐ Yes ☐ No

17. What would need to happen for you to walk more often for recreation? *(choose all that apply)*

- ☐ Better connected walking paths
- ☐ Improved road crossings
- ☐ Better quality walking paths such as appropriate lighting and shade
- ☐ More recreational walking trails (for example, the Curtis Falls Walking Trail or Fassifern Rail Trail Walk)
- ☐ Improved safety
- ☐ Improved accessibility for people with different mobility needs
- ☐ Other, please specify.

Tell us about your experience cycling in the Scenic Rim.

18. Do you think that cycling is well catered for in the Scenic Rim?

☐ Yes ☐ No ☐ Could be better ☐ Don't cycle (skip to question 25) ☐ Not sure

19. How often do you cycle as a mode of transport?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

20. Would you like to cycle more often as a mode of transport?

☐ Yes ☐ No

21. What would need to happen for you to cycle more often as a mode of transport? *(choose all that apply)*

- ☐ Better connected cycling paths
- ☐ Improved road crossings
- ☐ Better quality cycling paths such as appropriate lighting and shade
- ☐ Improved safety
- ☐ Improved accessibility for people with different mobility needs
- ☐ Other, please specify in the space below

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

22. How often do you cycle for recreation?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Regularly

23. Would you like to cycle more often for recreation?

☐ Yes ☐ No

24. What would need to happen for you to cycle more often for recreation? *(choose all that apply)*

☐ Better connected cycle paths
☐ Improved road crossings
☐ Better quality of cycle paths such as appropriate lighting and shade
☐ Better quality facilities such as water fountains and toilets
☐ More recreational cycling trails (for example, Mount Joyce Mountain Bike Trails and Castle Hill Blackstone Reserve Mountain Bike Trails)
☐ Improved safety
☐ Improved accessibility for people with different mobility needs
☐ Other, please specify in the space below

25. Do you think the ways in which people can travel in and around the Scenic Rim works well for the community?

☐ Yes ☐ No ☐ Other, please specify

26. What are the biggest issues for you when travelling in and around the Scenic Rim? *(number the boxes 1, 2 and 3)*

☐ Access to public transport services and facilities
☐ Lack of suitable walking/cycling paths
☐ Traffic congestion, queuing and delays
☐ Poor road conditions (e.g., pot holes, unsealed roads)
☐ Road safety due to other driver behaviour (e.g., speed, road rage)
☐ Busy roads through local towns
☐ Danger caused by wildlife/ livestock
☐ Lack of overtaking lanes on major roads

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

- [ ] Transport facilities not designed for people with accessibility issues
- [ ] Transport facilities not designed for people with cultural or language barriers
- [ ] Access to information about travel during an emergency or disaster
- [ ] Other, please specify in the space below

27. When thinking about the next 10 years, which transport priorities do you consider to be the top three for your community? *(number the boxes 1, 2 and 3)*

- [ ] Providing safe, accessible and reliable public transport
- [ ] Reducing traffic delays in towns and along major roads
- [ ] Improving existing pedestrian facilities and streetscaping in towns
- [ ] Higher quality roads connecting towns
- [ ] Shared and/or dedicated cycle paths in towns
- [ ] Cycle / trail connections between towns
- [ ] More pedestrian pathways linking residents to key destinations (e.g., schools, shops)
- [ ] Protecting local green spaces and wildlife
- [ ] Improving access to local businesses and shops
- [ ] Providing support for people with mobility issues
- [ ] Providing support for people from culturally diverse backgrounds
- [ ] Improving safety of the roads through education and enforcement programs
- [ ] Other, please specify in the space below

We understand there is proportion of the Scenic Rim population with mobility needs.

28. Do you have additional mobility needs?

- [ ] Yes
- [ ] No (skip to question 31)

29. If you answered yes above, does this have any impacts on your travel experience?

- [ ] Yes
- [ ] No

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

30. If you answered yes above, could you please tell us about these impacts?

31. Does anyone in your family, or anyone you are a carer for, have additional mobility needs?

☐ Yes ☐ No (skip to question 34)

32. If you answered yes above, does this have any impacts on your or their travel experience?

☐ Yes ☐ No

33. If you answered yes above, could you please tell us about these impacts?

INTEGRATED TRANSPORT PLAN | SURVEY QUESTIONS

34. Overall, when it comes to travelling in and around the Scenic Rim, is there anything else you would like to comment or provide feedback on?

Thank you for taking the time to submit your feedback. Your participation helps Council shape decisions for road networks, walking paths, cycle routes and transport connections as the Scenic Rim grows.

To submit your survey using this printed form, please email the completed form to **mail@scenicrim.qld.gov.au** or post your form to PO Box 25, Beaudesert QLD 4285 or drop it off at one of Council's Administration or Customer Contract Centres. Please mark your submission attention Integrated Transport Project Team.

If you would like to receive updates and outcomes of this survey, please 'subscribe' to the project page on *Let's Talk Scenic Rim* (https://letstalk.scenicrim.qld.gov.au/) to receive notifications and updates.

The Walking Network Plans for the Integrated Transport Planning are 50% funded by the Department of Transport and Main Roads Queensland as part of the Walking Local Government Grant Scheme.

Let's talk Scenic Rim

SCENIC RIM REGIONAL COUNCIL

Attachment C:

Recommended Option Concept Design

Notes:

Legend
- 3m Wide Shared Path
- Existing 2.5m Path (to be retained)
- BG&E Plans
- Trees
- Services(Electric Poles & Street Lights)
- Property Boundary

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Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	PRINCIPLE CYCLE NETWORK PLAN	S.G.M	13.11.2024
002	PRINCIPLE CYCLE NETWORK PLAN	R.TU	13.03.2025

Scale @ A3 0 10 20 30 40 50 1:1000

Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	1	002

Notes:

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

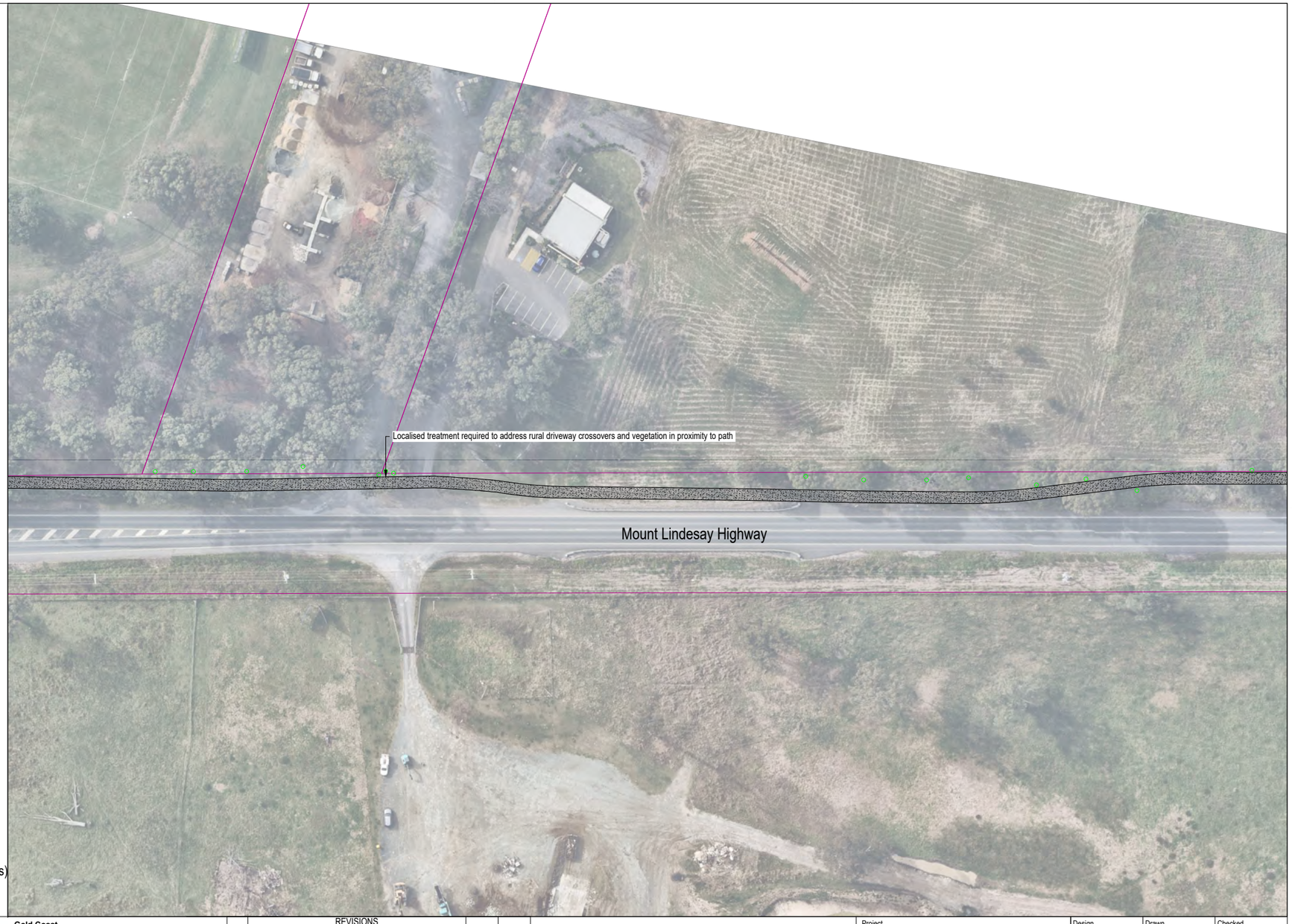
CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	2	002

N

Notes:



Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date	Project Number	Sheet Number	Issue
13.03.2025	P6364	3	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	4	002

N

Notes:

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	5	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	6	002

Notes:

Legend

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Issue	REVISIONS Revisions/Descriptions	Drawn	Date
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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	7	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	8	002

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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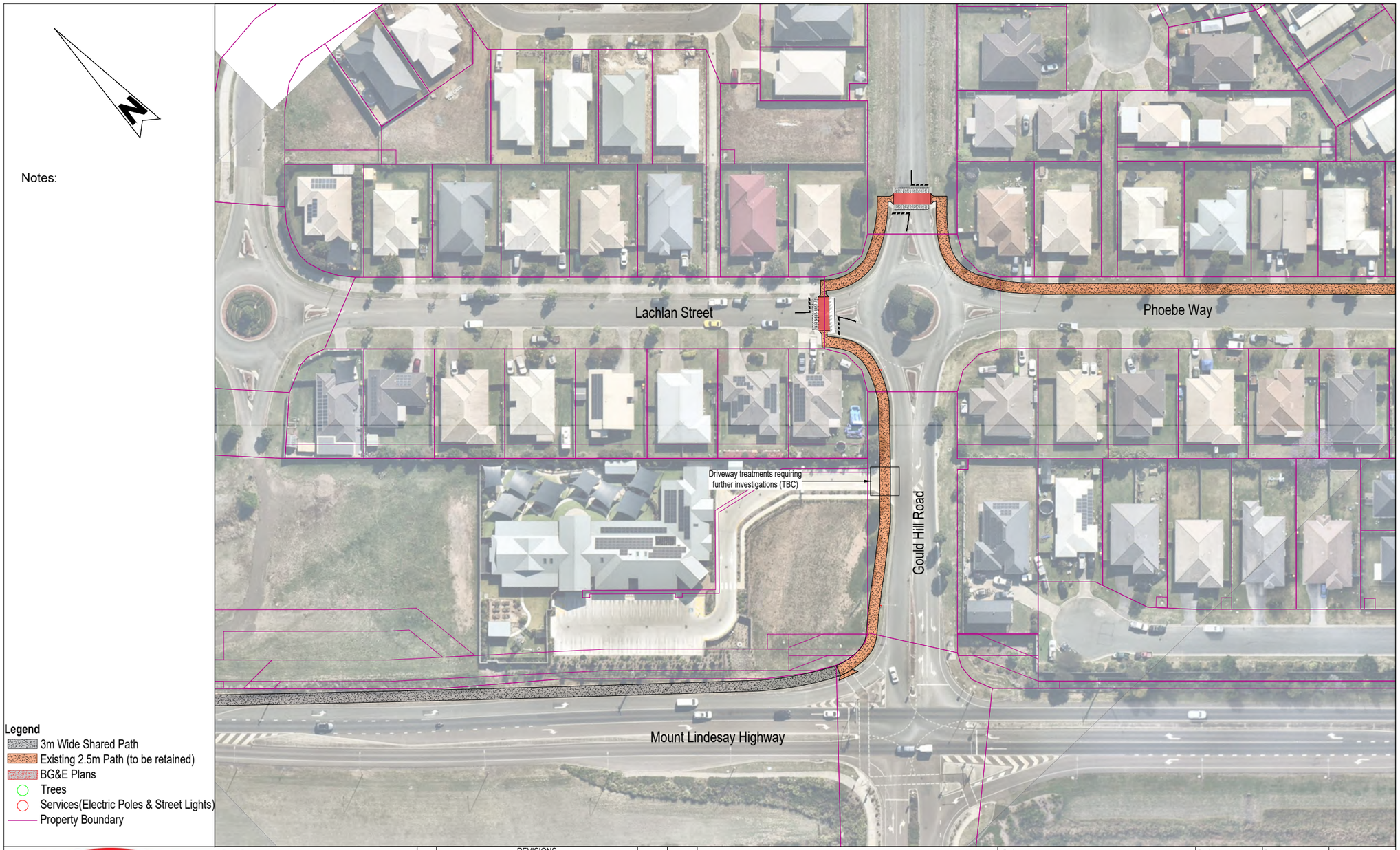
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	9	002



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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	10	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
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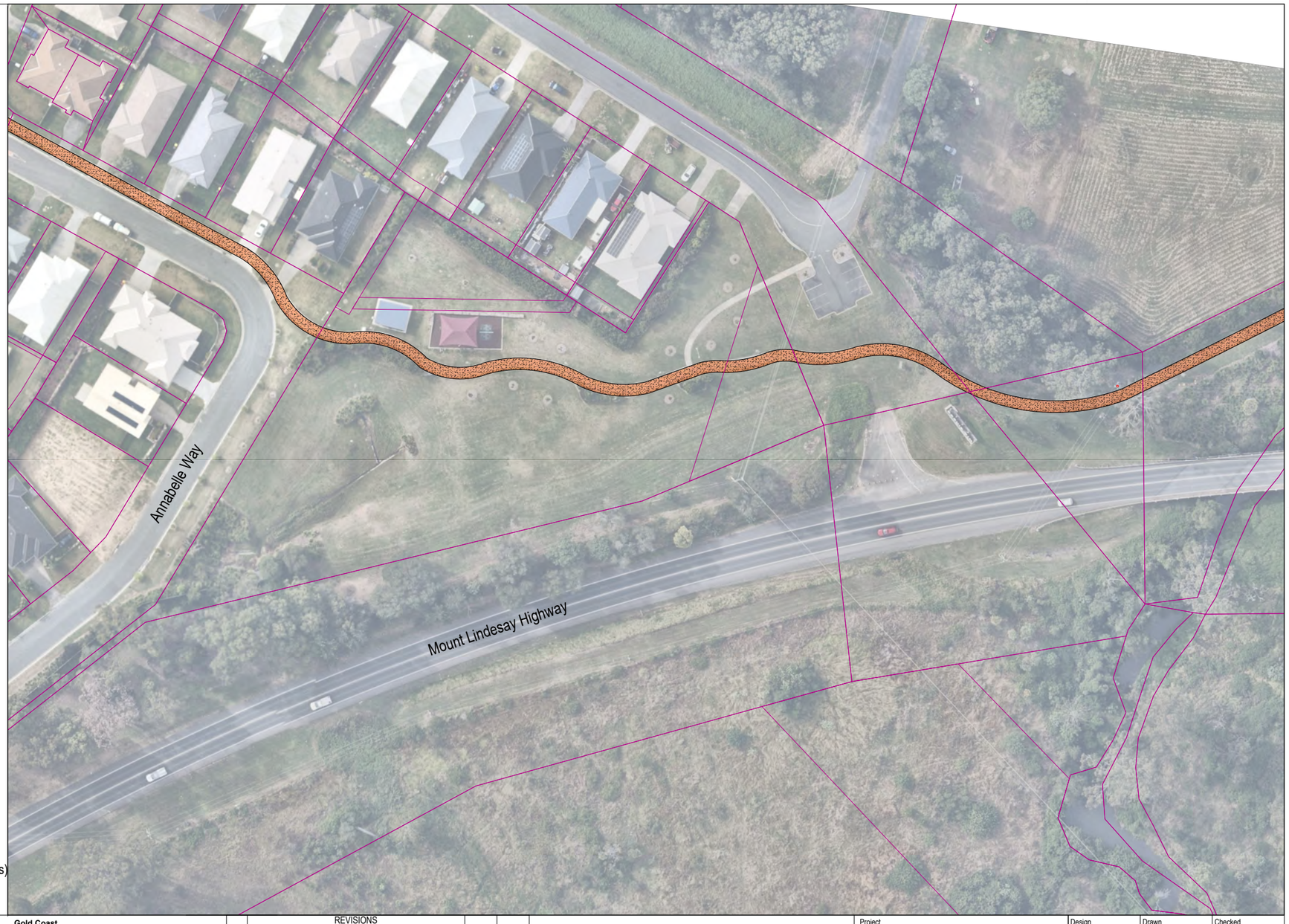

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Issue	REVISIONS Revisions/Descriptions	Drawn	Date
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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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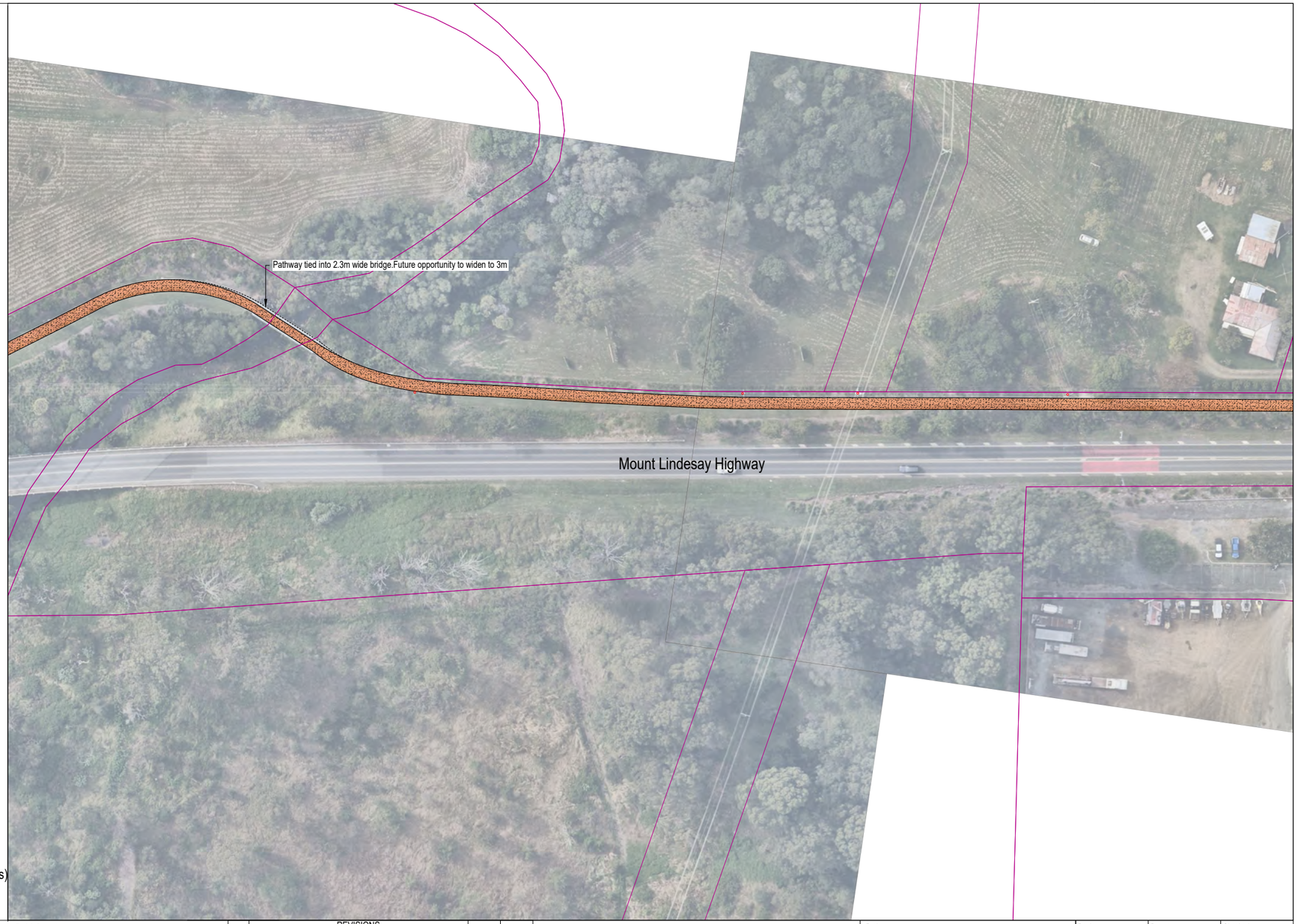
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	12	002



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Design	Drawn	Checked
R.TU	R.TU	A.E

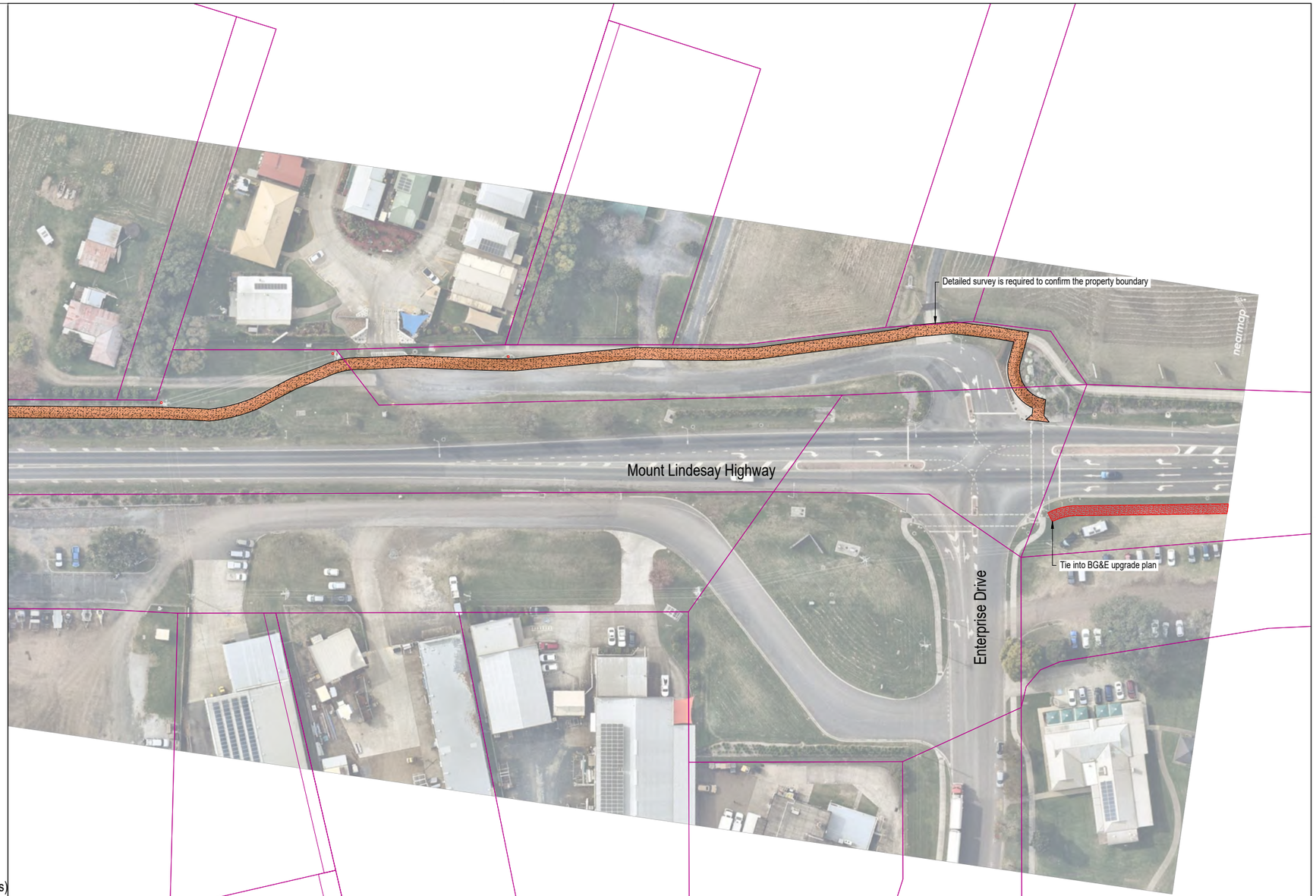
CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	13	002

N

Notes:



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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	14	002

Notes:

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	15	002

Notes:

Legend

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Scale @ A3 0 10 20 30 40 50 1:1000

Project	SCENIC RIM INTEGRATED TRANSPORT PLAN		
Title	PRINCIPLE CYCLE NETWORK PLAN ROUTE PRIORITY B MOUNT LINDSAY HIGHWAY		
Design	R.TU	Drawn	R.TU
Checked	A.E	CONCEPT ONLY	
Date	13.03.2025	Project Number	P6364
Sheet Number	16	Issue	002

Notes:

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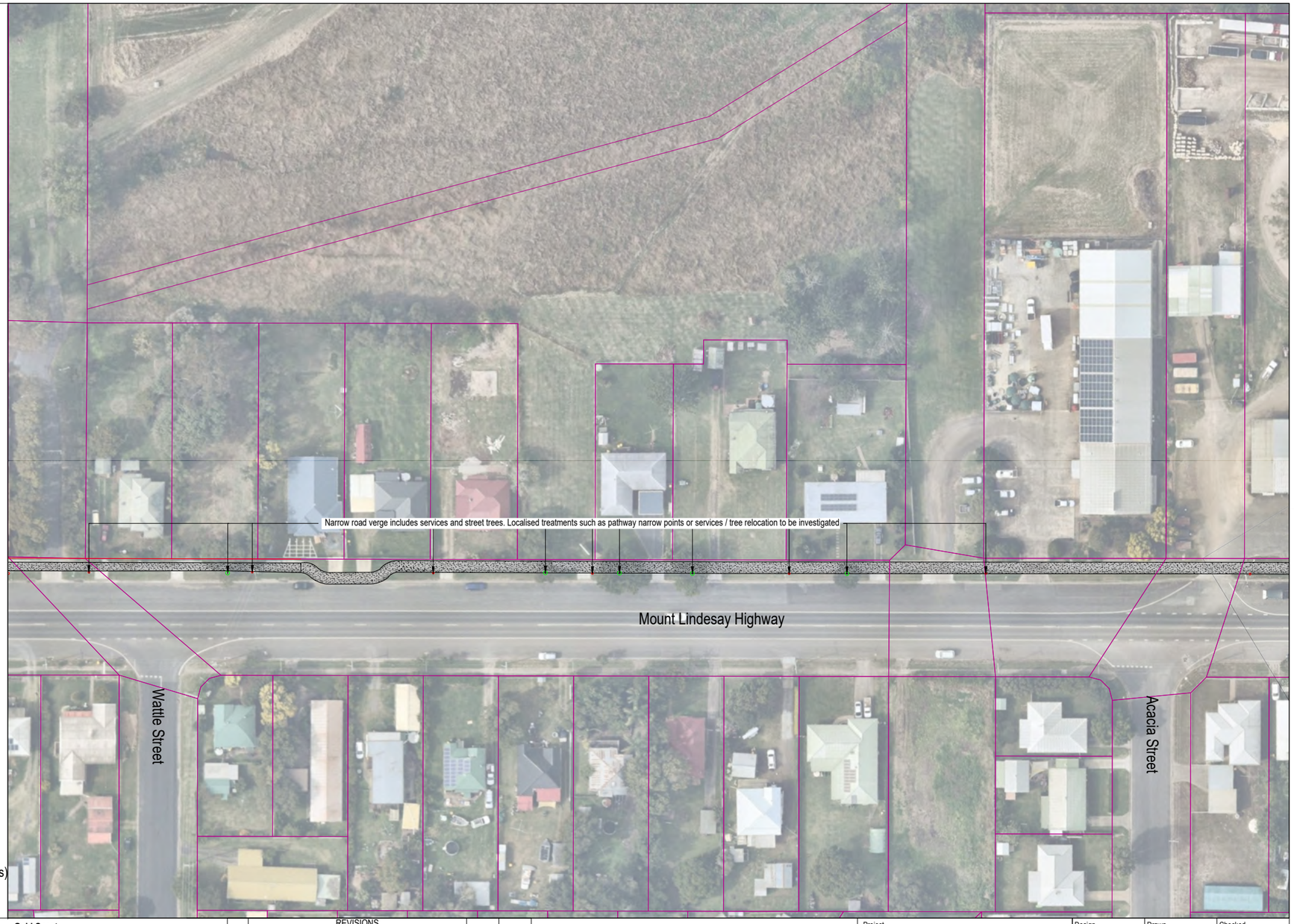
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	17	002



Notes:

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Design	Drawn	Checked
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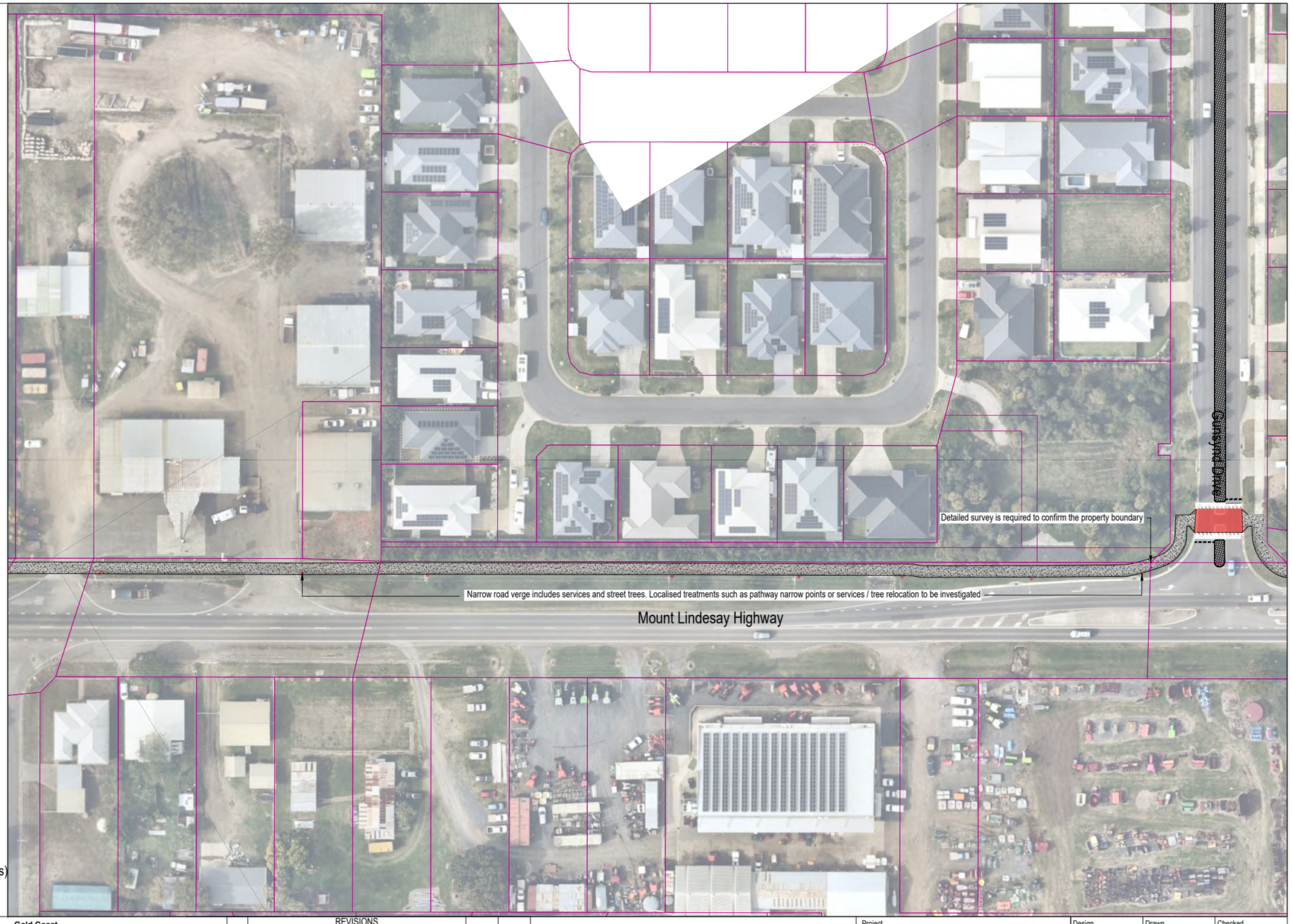
CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	18	002



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- Services(Electric Poles & Street Lights)
- Property Boundary

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Issue	REVISIONS Revisions/Descriptions	Drawn	Date
001	PRINCIPLE CYCLE NETWORK PLAN	S.G.M	13.11.2024
002	PRINCIPLE CYCLE NETWORK PLAN	R.TU	13.03.2025

Scale @ A3 0 10 20 30 40 50 1:1000

Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

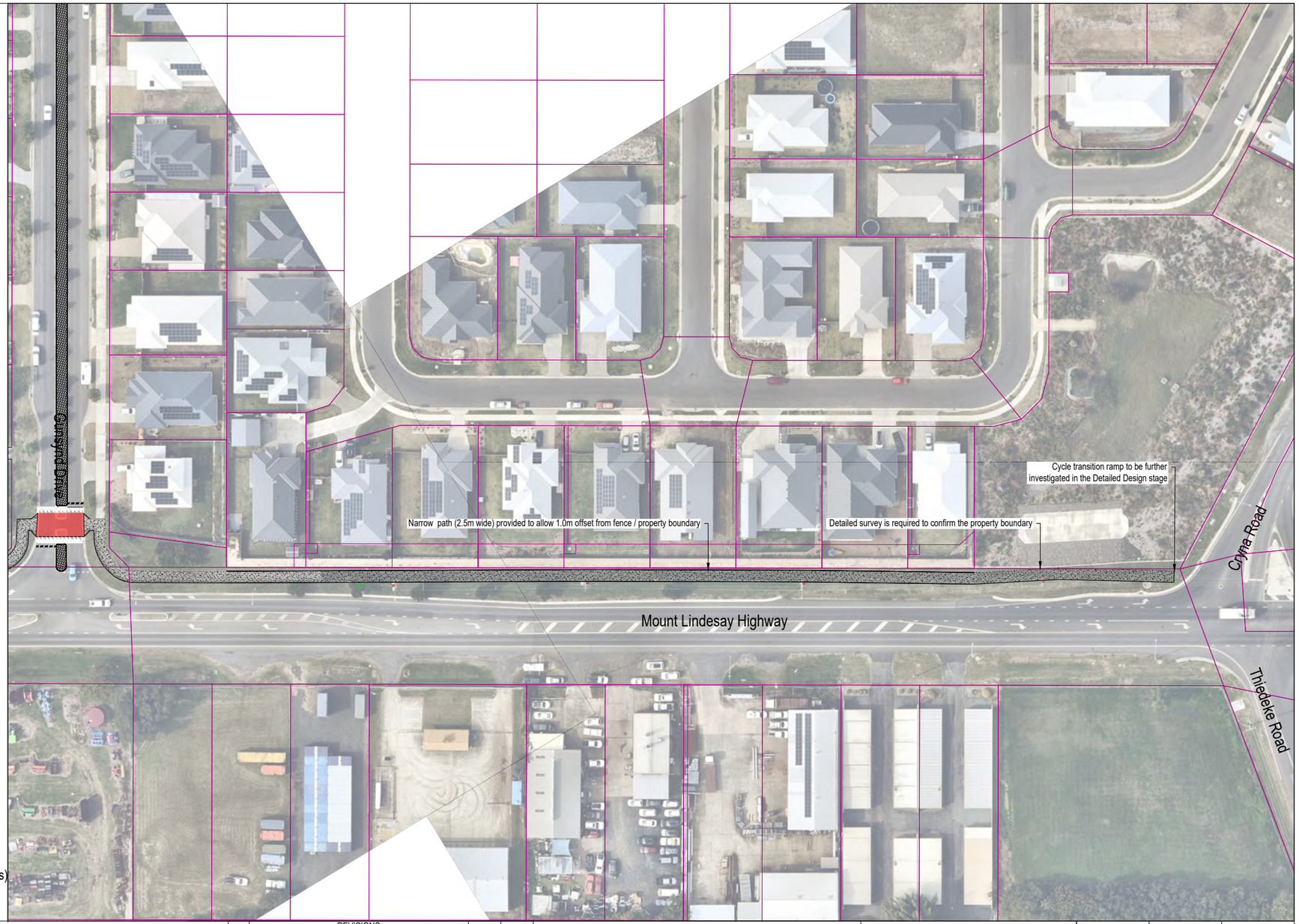
Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	19	002

Notes:



Legend

- 3m Wide Shared Path
- Existing 2.5m Path (to be retained)
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REVISIONS			
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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

Title: PRINCIPLE CYCLE NETWORK PLAN
ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	20	002

Notes:

Legend
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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

Design	Drawn	Checked
R.TU	R.TU	A.E

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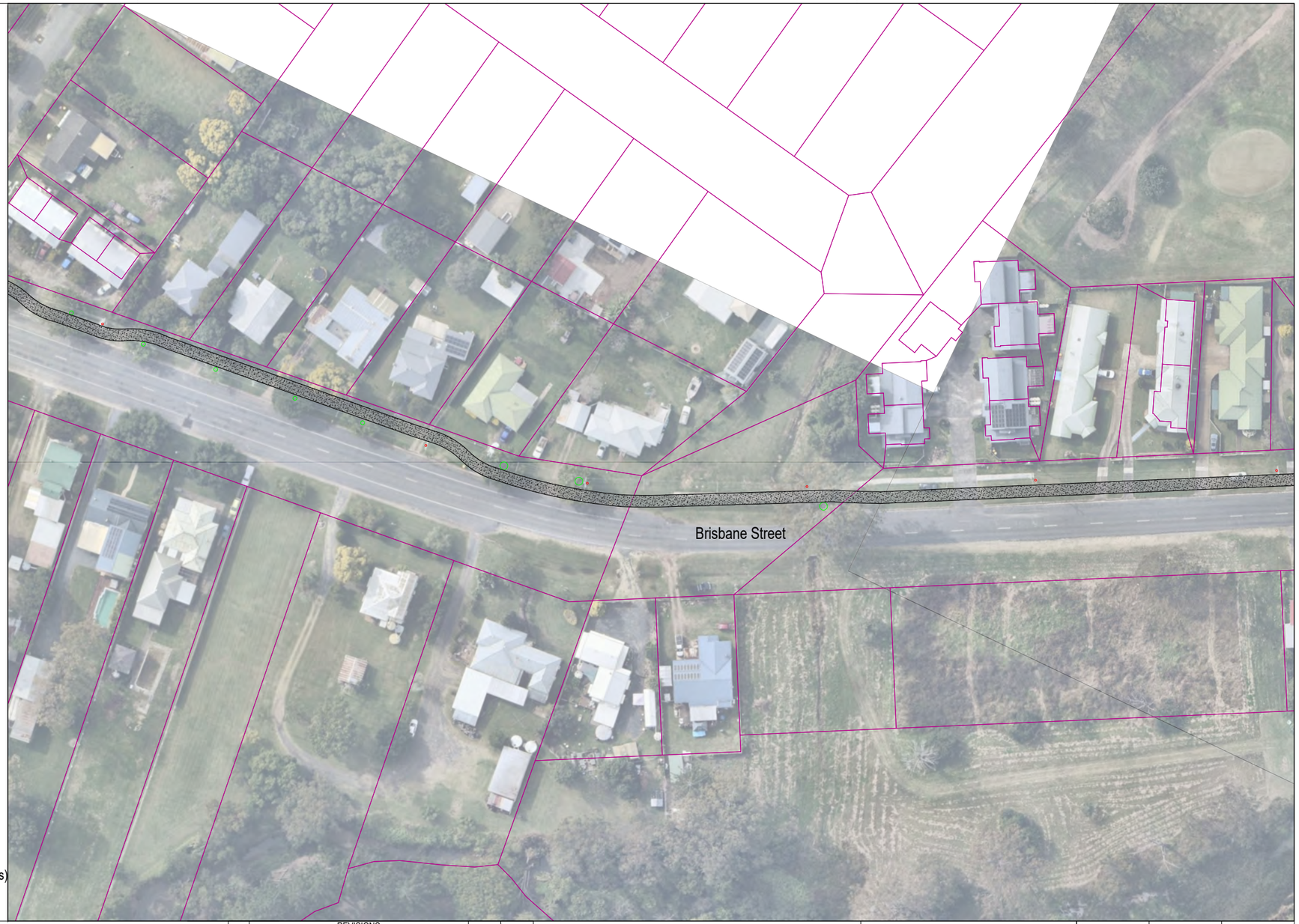
Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	21	002

Notes:



Legend

- 3m Wide Shared Path
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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

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R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	22	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

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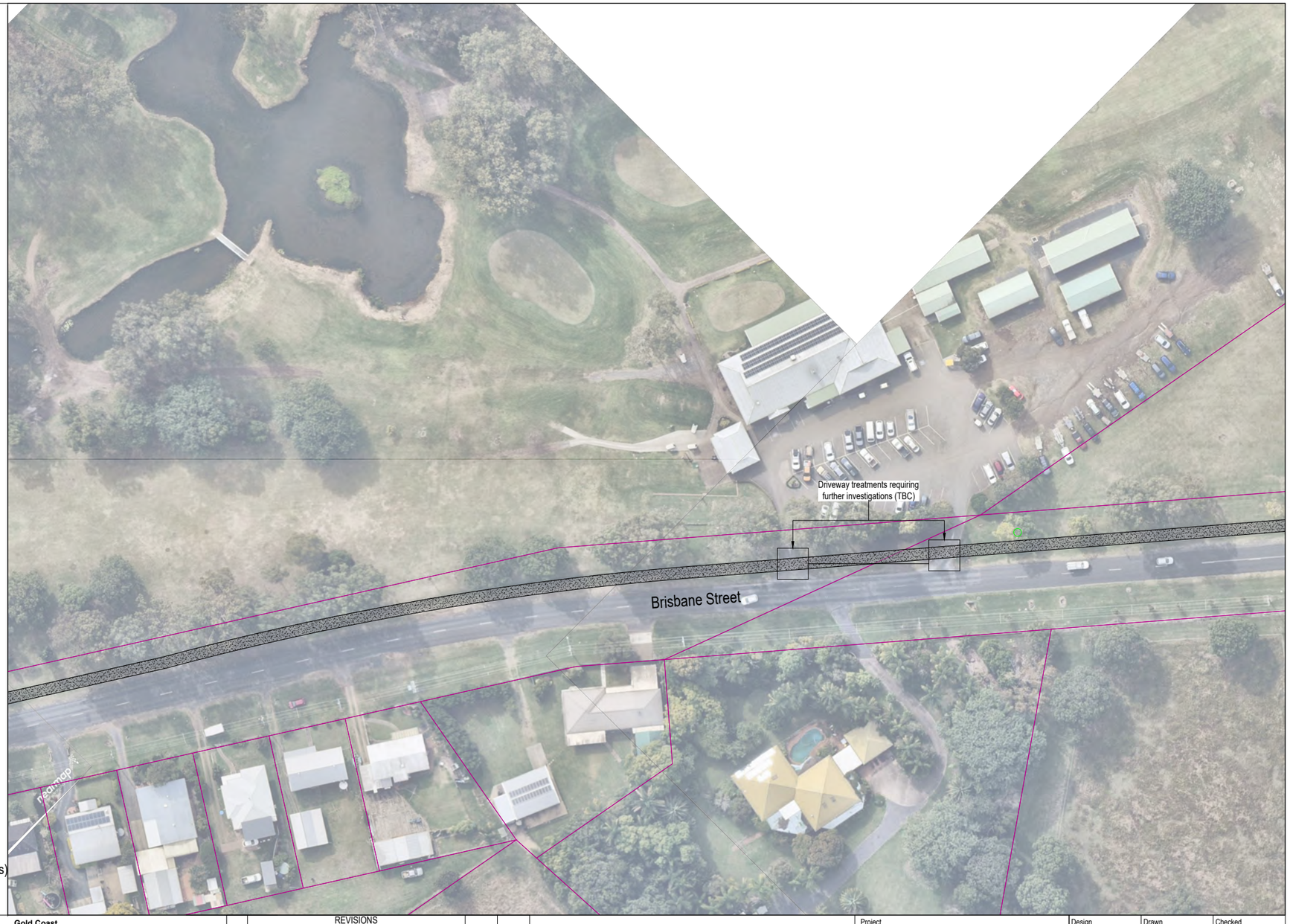
Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	23	002

Notes:



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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

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R.TU	R.TU	A.E

CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	24	002

Notes:

Legend

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Project: SCENIC RIM INTEGRATED TRANSPORT PLAN

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ROUTE PRIORITY B
MOUNT LINDSAY HIGHWAY

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CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	25	002

Notes:

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CONCEPT ONLY

Date: 13.03.2025

Project Number	Sheet Number	Issue
P6364	26	002