



# **INFRASTRUCTURE COMMITTEE MEETING**

## **AGENDA**

**4 APRIL 2023**

*Your attendance is required at an Infrastructure Committee meeting of Council to be held in the Council Chambers, 232 Bolsover Street, Rockhampton on 4 April 2023 commencing at 9:00am for transaction of the enclosed business.*

A handwritten signature in black ink, appearing to be "C. P.", written in a cursive style.

**CHIEF EXECUTIVE OFFICER**  
28 March 2023

Next Meeting Date: 03.05.23

**Please note:**

In accordance with the *Local Government Regulation 2012*, please be advised that all discussion held during the meeting is recorded for the purpose of verifying the minutes. This will include any discussion involving a Councillor, staff member or a member of the public.



## TABLE OF CONTENTS

ITEM	SUBJECT	PAGE NO
1	OPENING.....	1
2	PRESENT .....	1
3	APOLOGIES AND LEAVE OF ABSENCE .....	1
4	CONFIRMATION OF MINUTES.....	1
5	DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA .....	1
6	BUSINESS OUTSTANDING.....	2
	6.1 LIFTING MATTERS FROM THE TABLE .....	2
7	PUBLIC FORUMS/DEPUTATIONS .....	3
	NIL .....	3
8	PRESENTATION OF PETITIONS.....	3
	NIL .....	3
9	COUNCILLOR/DELEGATE REPORTS .....	3
	NIL .....	3
10	OFFICERS' REPORTS .....	4
	10.1 PROJECT DELIVERY CAPITAL PROJECT REPORT - MARCH 2023 .....	4
	10.2 RESPONSE TO PETITION - ACCESSIBLE PARKING .....	11
	10.3 QUAY STREET TRAFFIC CONFIGURATION.....	14
	10.4 PARKHURST ROADS STRATEGY .....	17
	10.5 WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK.....	32
11	NOTICES OF MOTION .....	54
	NIL .....	54
12	QUESTIONS ON NOTICE .....	54
	NIL .....	54
13	URGENT BUSINESS/QUESTIONS .....	54
14	CLOSURE OF MEETING.....	54

## **1 OPENING**

1.1 Acknowledgement of Country

## **2 PRESENT**

Members Present:

The Mayor, Councillor A P Williams (Chairperson)  
Deputy Mayor, Councillor N K Fisher  
Councillor S Latcham  
Councillor C E Smith  
Councillor C R Rutherford  
Councillor M D Wickerson  
Councillor D M Kirkland  
Councillor G D Mathers

In Attendance:

Mr E Pardon – Chief Executive Officer  
Mr P Kofod – General Manager Regional Services (Executive Officer)

## **3 APOLOGIES AND LEAVE OF ABSENCE**

## **4 CONFIRMATION OF MINUTES**

Minutes of the Infrastructure Committee held 7 March 2023

## **5 DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA**

## 6 BUSINESS OUTSTANDING

### 6.1 LIFTING MATTERS FROM THE TABLE

**File No:** 10097  
**Attachments:** Nil  
**Authorising Officer:** Peter Kofod - General Manager Regional Services  
**Author:** Peter Kofod - General Manager Regional Services

---

#### SUMMARY

*This report is being presented in order for matters that have been laid on the table at previous meetings to be formally lifted from the table prior to being dealt with at this meeting.*

#### OFFICER'S RECOMMENDATION

THAT the following matter be lifted from the table and dealt with accordingly:

- Quay Street Traffic Configuration

**7 PUBLIC FORUMS/DEPUTATIONS**

Nil

**8 PRESENTATION OF PETITIONS**

Nil

**9 COUNCILLOR/DELEGATE REPORTS**

Nil

## 10 OFFICERS' REPORTS

### 10.1 PROJECT DELIVERY CAPITAL PROJECT REPORT - MARCH 2023

**File No:** 7028  
**Attachments:** 1. [Project Delivery Capital Report](#)  
**Authorising Officer:** Peter Kofod - General Manager Regional Services  
**Author:** Andrew Collins - Manager Project Delivery

---

#### SUMMARY

*Monthly status report on all projects currently managed by the Project Delivery unit.*

#### OFFICER'S RECOMMENDATION

THAT the Project Delivery Monthly Report for March 2023 be received.

#### COMMENTARY

The Project Delivery section submits a monthly project report outlining the status of capital projects managed by the Unit.

The following projects are reported on for the month of March 2023.

- Alliance Maintenance Facility
- Botanic Gardens & Zoo Redevelopment
- Botanic Gardens Carpark
- SES Gracemere Carpark
- Athelstane Reservoir Roof Replacement
- Glenmore Water Treatment Plant Upgrade
- Glenmore Water Treatment Plant Solar Farm
- Gracemere & South Rockhampton STP Strategy
- Hail Damage Insurance Claim
- Mount Morgan Pool
- North Rockhampton Sewage Treatment Plant Upgrade
- Mount Morgan Water Treatment Plant
- Mount Morgan Water Supply Pipeline Project

# **PROJECT DELIVERY CAPITAL PROJECT REPORT - MARCH 2023**

## **Project Delivery Capital Report**

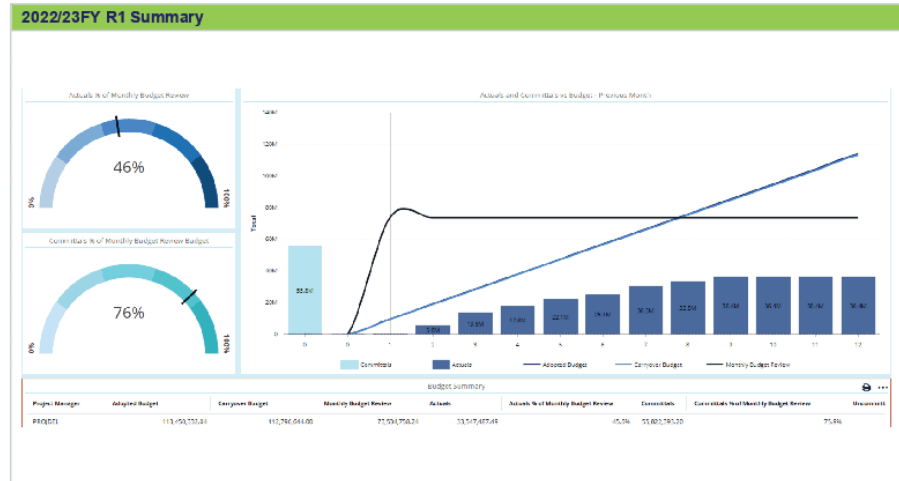
**Meeting Date: 4 April 2023**

**Attachment No: 1**

## Regional Services – Project Delivery Monthly Dashboard Update Reporting Period: March 2023



Scope			
<p><i>Deliver the annual capital works program, achieving a capital program within 95% of the budget.</i></p> <p><i>Ensure the delivery of infrastructure projects meet objectives set out in the 2022/23 Operational Plan.</i></p>			
<p><b>BUDGET \$97,034,758.</b></p>			
Traffic Light Reporting			
Item	Last Month	This Month	Comments
Scope	A	G	
Budget	G	A	Budget for MMWPP being assessed against tender offers
Schedule	R	R	Zoo visitor hub. Re-tender for stage 1 Visitor Hub MMWPP – Assessing time impacts of tender offers.



### Status Overview

#### Key Milestones & Deliverables This Month (March)

- Alliance Maintenance Facility**  
Project in final completion stages.
- North Rockhampton Sewage Treatment Plant**  
Construction of concrete structures to continue.
- Mt Morgan Water Security**  
Laydown are constructed / Pipes delivery commenced / Main contract tender adjudication
- Mt Morgan Pool**  
Pool construction contract prestart / Design development
- Zoo Playground**  
Completed.
- Botanic/Zoo Carpark**  
Carpark contract works commenced
- Botanic Gardens & Zoo Redevelopment**  
Tenders called for Visitor Hub

### Three Month Horizon

April	May	June
<ul style="list-style-type: none"> <li><b>Mt Morgan Pool</b> D&amp;C Design development</li> <li><b>Mt Morgan Water Security</b> Pipe deliveries/ WTP commissioned</li> <li><b>North Rockhampton Sewage Treatment Plant</b> Installation of walkways</li> <li><b>GWTP Upgrade</b> Filter reconstruction continue.</li> <li><b>Botanic Gardens &amp; Zoo Redevelopment</b> Visitor hup tender evaluation.</li> <li><b>GWTP / Solar</b> Site works to commence</li> <li><b>GSTP</b> Blower and aerator install</li> <li><b>Alliance Maintenance Facility</b> Power connection.</li> </ul>	<ul style="list-style-type: none"> <li><b>Mt Morgan Water Security</b> Pre-construction Activities</li> <li><b>North Rockhampton Sewage Treatment Plant</b> Walkway and mechanical install</li> <li><b>Botanic Gardens &amp; Zoo Redevelopment</b> Visitor Hub award</li> <li><b>GSTP</b> Aerator commissioning</li> </ul>	<ul style="list-style-type: none"> <li><b>GWTP / Solar</b> Work underway</li> <li><b>Mt Morgan Water Security</b> Site works underway</li> <li><b>North Rockhampton Sewage Treatment Plant</b> Mechanical / electrical installation</li> <li><b>Botanic Gardens &amp; Zoo Redevelopment</b> Site works underway</li> </ul>

Regional Services – Project Delivery  
 Monthly Dashboard Update  
 Reporting Period: March 2023



Project Name	Current Status	Monthly Update			
		Scope	Budget	Schedule	
Alliance Maintenance Facility	Construction	G	G	A	Alliance still working on the power connection for their Hangar, site power civil / infrastructure works continue.
Botanic Gardens & Zoo Redevelopment	Procurement / Construction	G	G	R	Project 1 - Visitor Hub Construction: Project and design documentation staging has been completed. (Stage 1: Visitor Hub, Stage 2: Animal Operations Centre). A revised tender package for stage 1 has been released to market and closes on 5 April 2023.  Project 3 - Playground: The installation of playground is 100% complete.
Botanic Gardens Carpark	Construction	G	G	G	Works onsite started on 20 March and is on track to be completed by 30 May 2023.
SES Carpark	Construction	G	G	G	Detailed design is completed for Hard stand and access road, Tender package currently advertised and closes on the Wednesday 29 March 2023.
Athelstane Reservoir Roof Replacement	Procurement	G	G	G	Following are the activities recently undertaken on the project: <ul style="list-style-type: none"> <li>Tender package 15416 Athelstane roof replacement was released to market on 17 February 2023,</li> <li>Tender site inspection completed. Tender to close on 5 April 2023.</li> </ul>
Glenmore Water Treatment Plant Upgrade	Design & Construction	G	G	G	<ul style="list-style-type: none"> <li>Filter floor concrete slab complete. Triton underdrain installation commenced</li> <li>Polymer dosing plant installation almost complete</li> <li>Commissioning of MgO dosing system underway</li> <li>Vendor commissioning of Carbon Dosing system progressing</li> <li>Control Room – Painting of ceilings and walls almost complete. Tiling commenced.</li> <li>Stage 2 Tender Submission for upgrade for the Design and Construction of Lamella Plates in Sedimentation Tanks, Sludge Removal System and UV System closed 8 February 2023. One submission received.</li> </ul>



Regional Services – Project Delivery  
 Monthly Dashboard Update  
 Reporting Period: March 2023



Project Name	Current Status	Monthly Update			
		Scope	Budget	Schedule	
Glenmore Water Treatment Solar Farm	Design & Construction	G	G	G	<ul style="list-style-type: none"> <li>Tracking system equipment has been secured and delivered to site.</li> <li>Tender has closed, been adjudicated and awarded to GEM solar. Work to commence on site in April</li> <li>GEM solar are finalising detail design (SID workshop programmed end of March) Long lead items. HV Kiosk and solar panels.</li> <li>GEM Liaison with Ergon energy for connection to grid</li> </ul>
Gracemere & South Rockhampton STP Strategy	Strategic Assessment	G	G	G	<p>Current work relates to developing and implementation of stages to be able to realise the strategic plan. A consultant has been engaged to develop the design strategy for both Gracemere and South Rocky STP's.</p> <ol style="list-style-type: none"> <li>Installation of Penstocks in bioreactors at SRSTP has been completed.</li> <li>New Caustic soda dosing system at SRSTP completed, VO issued to Haslin. Priced VO rejected. Tender package being compiled.</li> <li>Installation of recycled water PS at SRSTP underway, Ps structure , pump installation and cut in now completed. Electrical works to be finalised.</li> <li>New Wet well for Sludge Pump Station (Planning works undertaken, H2o have carried out site inspection)</li> <li>Condition assessments &amp; replacement of diffusers (Condition Assessment being planned)</li> <li>Condition assessments &amp; upgrade of sludge digesters (investigation work underway H2o have carried out site inspection)</li> <li>Upgrade of Sludge Lagoons both at SR &amp; G STPS (Gracemere works complete / NRSTP underway 30% scope increased / SRSTP underway 80%). Geobags at NRSTP are being processed (emptied)</li> <li>Sewer diversion; Gracemere to South R'ton STP (Geotech complete at GSTP, pipeline prelim design completed. PS design pre start / design commenced..)</li> <li>New SRSTP – (planning stage)</li> <li>Variation order issued to Haslin for new aerator install at GSTP. Aerators procured anticipated install April 2023, blower slab installation commenced late March</li> </ol>

Regional Services – Project Delivery  
 Monthly Dashboard Update  
 Reporting Period: March 2023



Project Name	Current Status				Monthly Update
		Scope	Budget	Schedule	
Hail Damage Insurance Claim	Construction	G	G	G	<ul style="list-style-type: none"> <li>• Works to Dooley Street Depot is 100% Completed.</li> <li>• North Rockhampton Library is 100% Completed.</li> <li>• Boathouse Café hail damaged Solar Panels is 100% Completed.</li> <li>• Elfin House Childcare centre is 100% completed.</li> <li>• 152 Lakes Creek Road landfill is 100% completed.</li> <li>• Kershaw Gardens Precinct roof structures are 100% completed.</li> <li>• Victoria Park Shade structures is 100% completed.</li> <li>• North Rockhampton Sewage Treatment Plant is now scheduled to be completed 27 March 2023 due to contractors being unavailable.</li> </ul>
Mount Morgan Pool	Construction	G	G	G	<ul style="list-style-type: none"> <li>• Contract Start up workshop held 15 Feb 2023</li> <li>• Detailed design underway</li> </ul>
North Rockhampton Sewage Treatment Plant Upgrade	Construction	G	G	G	<p>Following are the major activities recently undertaken on the project</p> <ul style="list-style-type: none"> <li>• Construction of the concrete structures has continued:</li> <li>• Further sections of the oxidation ditch and reactor concrete walls have been FRP. Structure approximately 90% completed; Ras chamber completed.</li> <li>• Clarifier 3 first section, first lift to Launder completed. Form and reinforcing to second wall section underway.</li> <li>• New blower building concrete structure now completed.</li> <li>• New HV building concrete structure now completed.</li> <li>• Mixed liquor lines installation underway</li> <li>• Electrical pit and duct being installed.</li> <li>• Epoxy coating of inlet structure completed,</li> <li>• Penstocks to inlet chamber installed.</li> <li>• Mixers to vortex chambers installed.</li> <li>• Blowers have arrive, will be installed in April</li> <li>• 100% stage 2A complete</li> <li>• 2B electrical design now underway;</li> <li>• HV Transformers procured, to be installed April</li> </ul>

**Regional Services – Project Delivery**  
**Monthly Dashboard Update**  
*Reporting Period: March 2023*



Project Name	Current Status	Monthly Update			
		Scope	Budget	Schedule	
Mt Morgan Water Treatment Plant	Construction	G	G	G	<p>Site Possession approved from 9 January 2023 and site established.</p> <ul style="list-style-type: none"> <li>The Contractor removed all the corroded structural supports and PVC pipes, grit blasted and painted the Clarifier and Filters.</li> <li>New structural supports installed</li> <li>Installation of laterals in the filter in progress.</li> <li>Lamella tubes and filter media ordered.</li> <li>New backwash pump ordered and delivered to site.</li> </ul>
Mt Morgan Water Pipeline Project	Construction	G	A	A	<p>Following are the major activities recently undertaken on the project:</p> <ul style="list-style-type: none"> <li>Contract awarded and first order placed for the Supply &amp; Delivery of Pipes, Fittings &amp; Valves for Mt Morgan Supply Trunk Mains.</li> <li>Tender package 15274 Design and Construction of Three Water Pump Stations for the Mount Morgan Water Supply Project was released to market on 21 October 2022, site inspection completed. Tender closed on 25 January 2023. Evaluation now in progress.</li> <li>Design development completed.</li> <li>Agreement being negotiated with Ed QLD for land lease / Order placed for fencing of the project laydown area at Lucas Street.</li> <li>Delivery of first batch of pipes to commence on 27 March 2023.</li> <li>Cultural Heritage Assessments to commence on 27 March 2023.</li> </ul>

**10.2 RESPONSE TO PETITION - ACCESSIBLE PARKING**

**File No:** 5252  
**Attachments:** Nil  
**Authorising Officer:** Martin Crow - Manager Infrastructure Planning  
Peter Kofod - General Manager Regional Services  
**Author:** Stuart Harvey - Coordinator Infrastructure Planning

---

**SUMMARY**

*Council received a petition in late 2022 regarding placement and location of disability parking with respect to rear loading vehicles. Officers have undertaken some analysis based on this information and present the following report for Council consideration.*

**OFFICER'S RECOMMENDATION**

THAT Council endorse the alteration of five (5) existing parallel accessible parking bays to make them compliant with the latest Australian Standards.

**COMMENTARY**

In October 2022 a petition was tabled to Council regarding placement and location of disability parking with respect to rear loading vehicles. The petition stated that the majority of disabled parking bays are not designed to accommodate rear loading vehicles and drivers are undertaking loading and unloading practices within the road or by straddling two parking spaces.

Officers made contact with the lead petitioner regarding the matters raised in the petition. With the advent of NDIS funding, more businesses now cater for disabled persons and there is now more demand for accessible facilities throughout the area. These NDIS providers have no conditions as part of accessing NDIS funding to provide accessible facilities such as compliant off-street accessible car parking. The petitioner stated that in the past, disabled people generally used taxis for travel who were more set up for parallel parks with side entrance vehicle access. Now with more NDIS funding, people are privately funding their vehicles to be modified for accessible access. The most common modification is rear door access as this modification is cheaper and leaves more room in the vehicle for other passengers. This type of vehicle is more suited to rear in parking as the footpath area can be used for unloading/loading of disabled passengers.

Officers have undertaken a review of existing disabled parking spaces within the CBD, as this has the greatest concentration of on-street disabled bays. There are currently 48 Accessible Parking bays within the CBD area. This represents a 1.65% of the total number of parking spaces. The new Australian Standard indicates the recommended percentage of accessible bays is approximately 2% for retail commercial land uses. Of the accessible parking bays provided within the CBD area there are 8 parallel spaces, 8 are in off-street parking areas regulated by Council, 10 are centre aisle parking and the rest are rear in angled parking. A desktop review of Gracemere and Mount Morgan indicated that there is one rear in angle accessible bay on Lawrie Street, and two parallel accessible bays on Morgan Street. These represent 2.8% and 2% of the total marked bays in the street respectively.

The Australian Standard for on-street parking has requirements for the dimensions and location of accessible parking spaces in an on-street road environment. The standard has specific provisions for rear loading accessible vehicles when the parking is parallel to the kerb. When accessible parking is rear in angled bays, it is understood that rear loading vehicles can utilize the available footpath for loading and unloading rather than the road carriageway. For centre aisle parking, it is not possible to extend the disabled parking bay to facilitate rear loading as this will encroach into the road carriageway. Whilst they may be compliant under the Australian Standard, they are not suitable for use by rear loading vehicles.

---

Of these 8 parallel spaces identified, there are three that are compliant with regards to the current standards (AS2890.5-2020). The other spaces would have been compliant when they were installed under the former Standard (AS2890.5-1993). In order to have a compliant parallel accessible parking space, the allocated bay needs to be 3.2m wide by 7.8m long. For the 5 spaces that are not compliant, this will require the removal of an adjacent parking space and, for some, the construction of an additional kerb ramp. The two parallel accessible parking spaces in Mount Morgan are compliant under AS2890.5-2020.

Street	Vicinity	Access	Dimensions	Compliant
East Street	Court House	Front and Rear Ramp space	3.2 x 7.8m	Yes (2020 standard)
East Street	Court House	Front and Rear Ramp space	3.2 x 7.8m	Yes (2020 standard)
East Street	Old Post Office	Shared ramp with adjacent bay	3.2 x 6.6m	No (1993 standard)
East Street	Old Post Office	Shared ramp with adjacent bay	3.2 x 6.6m	No (1993 standard)
Archer Street	Evans Edwards Accountants	Utilises driveway for ramp access	3.2 x 5.5m	No (1993 standard)
Denham Street	Riverston Tea Rooms	Flush with footpath (no kerb)	2.8 x 6.2m (3.2m wide using footpath)	No (1993 standard)
Quay Street	Near William Street intersection	Flush with footpath (no kerb)	2.8 x 8.0m (3.2m wide using footpath)	Yes (2020 standard)
Victoria Parade	Capricorn Survey Group	Utilises driveway for ramp access	2.5 x 5m	No

**Table 1:** Assessment of existing parallel parking spaces in CBD

It is Officers recommendation to retrofit the existing parallel parking spaces to reflect the current standard accessible parking bay dimensions. Where new accessible parking spaces are required, Council officers will preference the provision of angled parking spaces over parallel as they provide a better outcome for disabled patrons. However, if parallel parking is required, then the dimensions as outlined in AS2890.5 – 2020 will be adopted. Officers are aware of several isolated on-street accessible parking bays in areas in the Northside, these will be assessed and rectified over the next 12 months to ensure compliance with the new Australian Standard.

**BACKGROUND**

Accessible parking spaces are regulated under AS2890.5 – 2020 Australian Standard Parking Facilities Part 5: On Street Parking. The new standard specifies a minimum dimension of parallel accessible parking bays or 7.8m long and 3.2m wide.

The former Australian Standard AS2890.5 – 1993 (now superseded by the above) stipulated minimum dimensions of 3.2m wide and 5.5m-6.7m long.

**PREVIOUS DECISIONS**

A petition was tabled at the Ordinary Council meeting on 25 October 2022 and resolved as follows:

1. *THAT the petition requesting "Council consider placement and location of disability parking, in respect to rear loading personal vehicles which need space behind the vehicle to load and offload a wheelchair passenger safely" be received; and*
2. *THAT a report be brought back to the table.*

Moved by: Councillor Rutherford

Seconded by: Councillor Fisher

MOTION CARRIED UNANIMOUSLY

**BUDGET IMPLICATIONS**

The cost to retrofit the existing parallel parking spaces to comply with the new standard is likely to be in the order of \$800 per space for relocation of signage and re-linemarking. If an additional kerb ramp is required this would increase to \$3,800 per parking space. The cost of these parking space alterations can be covered under the Road Safety and Minor Works Program allocation.

**CORPORATE/OPERATIONAL PLAN**

This project aligns with the corporate plan outcome 1.1: Safe, accessible, reliable and sustainable infrastructure and facilities.

**CONCLUSION**

A petition has been brought to Council regarding accessible parking spaces in the region. This report outlines the findings and recommendations moving forward.

**10.3 QUAY STREET TRAFFIC CONFIGURATION**

<b>File No:</b>	<b>11359</b>
<b>Attachments:</b>	<b>Nil</b>
<b>Authorising Officer:</b>	<b>Martin Crow - Manager Infrastructure Planning Peter Kofod - General Manager Regional Services</b>
<b>Author:</b>	<b>Stuart Harvey - Coordinator Infrastructure Planning</b>
<b>Previous Items:</b>	<b>11.4 - Quay Street Traffic Configuration - Infrastructure Committee Meeting - 04 Oct 2022 9:00am 11.2 - Quay Street Traffic Configuration - Infrastructure Committee Meeting - 01 Nov 2022 9:00am</b>

---

**SUMMARY**

*Following on from the previous Council report in November 2022 consultation activities have occurred with property owners on Quay Street. This has resulted in a range of actions that are presented to Council for their consideration.*

**OFFICER'S RECOMMENDATION**

THAT Council:

1. Investigate further options and implications of different configurations of Quay Street
2. Remove the shared zone on Quay Street
3. Install a formalised island and signage at the Northern end of Quay Street
4. Implement Local Area Traffic Management devices on Quay Lane as a 12 month trial.

**COMMENTARY**

Following the Council report in November 2022, Council was approached by representatives of the business owners along Quay Street seeking further information and consultation with Councillors regarding the configuration of Quay Street.

At a meeting held in January 2023 with these business owners, a number of potential options were proposed around the configuration of Quay Street and concerns were raised with the volume and speed of vehicles in Quay Lane. Several of the potential options floated at that meeting or raised by Council after that meeting are currently being investigated. Due to the complexity of the work, and the impacts on the wider road network, further time is required to adequately design, model and cost the proposed options in detail before providing a recommendation to Council.

It is noted however that there are some concerns relating to Quay Street traffic that require some interim actions.

**Speed Compliance:**

Officers have previously mentioned that Quay Street has poor speed compliance, largely due to the wide road carriageway under the temporary one way arrangement. Whilst this arrangement has been occurring on a temporary basis, the decision to continue to leave it "as is" is not supported by Officers. The evidence taken from the most recent speed data indicates that despite being designated a Shared Zone and speed limited to 20 km/hr, the current arrangements do not create a safe slow speed environment that is required for a 20km/hr shared zone designation.

If the current one-way configuration is to remain without any further LATM, the Shared Zone designation would be required to be removed and be replaced with a 30km/hr or 40km/hr High Activity Transport User Area (HATUAs). HATUAs encourage social activity and have a significant value to the community as a 'place' for people to gather. Roads and streets that

---

are considered to be within HATUAs have land uses and developments that generate or attract levels of pedestrians and cyclists that are considered higher than typical. A speed limit of 30 km/h or 40 km/h may be adopted subject to certain conditions.

The area would likely be posted at 30km/hr based on the most recent speed data but would require the instigation of a speed limit review process.

#### **Temporary Nature of the one way arrangement:**

Businesses on Quay Street had raised issues around the effectiveness of the water filled barrier at the Northern extent of Quay Street and the temporary nature of this barrier on the overall amenity of Quay Street. The water filled barrier and signage had been left in place as the Quay Street arrangement was only temporarily one way and was awaiting a decision from Council on its configuration. However, it is noted that this arrangement detracts from the amenity of the Quay Street streetscape. Whilst Officers continue to investigate options for Quay Street it is proposed to install a formalised raised island at the Northern extent of Quay Street. This would be a pre-cast island that would be bolted into the existing road pavement and would allow for removal at a future date pending Council's decision on the configuration of Quay Street. This island would only be installed temporarily until a resolution was made from Council but would reduce the ambiguity around the one way arrangement for vehicles driving to the area.

#### **Speed and Volume on Quay Lane:**

A major concern raised by the property owners on Quay Street was the speed and volume of vehicles utilising Quay Lane since the introduction of the one way arrangement on Quay Street. There is still a demand for vehicles travelling from North to South and a large proportion of these vehicles are utilising Quay Lane rather than the wider road network. In an effort to discourage vehicles from utilising Quay Lane, and whilst other options are being explored and investigated, it is proposed to install temporary traffic calming devices within Quay Lane. This would likely be in the form of rubberised flat top speed humps within the laneway to slow vehicles speeds but without impacting heavy vehicle deliveries. Whilst the exact locations are not yet finalised it is likely that one or two of these speed humps would be installed. Officers will also conduct traffic counts pre and post construction to understand the impact or speed reduction brought about by their installation. This will remain in place for 12 months and a subsequent report on their effectiveness will be brought back to Council.

It is considered that these interim measures will address some of the business owner concerns whilst other options are being fully investigated by officers. It is important to note that these are temporary measures and the decision on the permanent arrangement of Quay Street may result in these being removed.

#### **BACKGROUND**

In September 2015, Council voted to commence construction of the new Quay Street redevelopment and proceed to detailed design for the parkland on the lower bank of the river. The design for Quay Street was a shared zone of 20km/hr and had a two-way carriageway at the same level as the pedestrian footpath. The shared zone was intended to prioritise vulnerable road users over vehicular traffic to encourage pedestrian and cyclist activity in Quay Street.

Upon completion of the construction of the Quay Street redevelopment works a question has been asked by Council regarding the potential of retaining the "in construction" traffic operation of one-way traffic flow.

A high level investigation was subsequently undertaken by Strategic Infrastructure regarding the potential benefits and issues of the proposed one way configuration of Quay Street. The results this high level assessment were presented to Council's CBD Steering Committee in November 2017, which identified that the one way operation was anticipated to lead to vehicles speeds in excess of the posted 20km/h speed limit within the shared zone on Quay Street, which in turn was expected to have significant impacts to pedestrian safety along the link.



**PREVIOUS DECISIONS**

A report was presented at the Infrastructure Committee meeting 4 October 2022 and resolved as follows:

*“THAT the matter lay on the table and be referred to the next Infrastructure Committee meeting.”*

*Moved by: Councillor Rutherford*

*Seconded by: Councillor Wickerson*

**MOTION CARRIED**

*Councillor Kirkland recorded her vote against the motion.*

The previous report was presented at the Infrastructure Committee meeting on 1 November 2022 and resolved as follows:

*THAT the matter lay on the table pending further information on the shared zone within the current configuration and speed environment.*

*Moved by: Councillor Smith*

**MOTION CARRIED**

*Councillor Kirkland and Councillor Mathers recorded their vote against the motion.*

**BUDGET IMPLICATIONS**

There is a cost associated with the proposed pre-cast island with costs likely to be in the order of \$7000 and can be funded through Road Safety and Minor Works Program

The cost of the temporary speed humps will likely be in the order of \$6,500 each and can be funded through the Road Safety and Minor Works Program.

The cost to implement the proposed treatments will likely be \$20,000.

**RISK ASSESSMENT**

- Under a one-way configuration without appropriate LATM treatments, vehicle speeds will remain higher than desired for a shared space and undermine the intent of the shared space (i.e. the pedestrian priority over vehicles). This could be partially mitigated through increased signage and enforcement of speed limits but enforcement action is likely to be sporadic. Vulnerable road users attempting to use the area as a shared zone will be placed at greater risk of injury and incidences of conflict will impact the communities acceptance of the shared space, leading to an underutilization of the facilities by pedestrians.
- There is a risk that any retrofitted LATM devices installed to slow vehicles or provide pedestrian facilities will detract from the streetscape design of Quay Street. This can be partially mitigated through designing devices with similar materials however this is expected to be costly and retrofitted devices are difficult to seamlessly install into the newly constructed redevelopment works.

**CORPORATE/OPERATIONAL PLAN**

The report contributes to Council's Corporate Plan goals, specifically:

3.1.1 Consult on, advocate, plan, deliver and maintain a range of safe urban and rural public infrastructure appropriate to the Region's needs, both present and into the future.

**CONCLUSION**

Subsequent to further discussions with landholders, a suite of options is to be further explored. In the interim period, a number of temporary measures should be implemented to mitigate against some of their concerns.

**10.4 PARKHURST ROADS STRATEGY**

<b>File No:</b>	<b>15481</b>
<b>Attachments:</b>	<ol style="list-style-type: none"><li><b>1. Parkhurst Roads Strategy, Part 1 - Planning Report for Trunk Infrastructure Projects T-96 &amp; T-97 (Executive Summary Extract)</b><a href="#">↓</a></li><li><b>2. Concept for T-96 Proposed Roundabout</b><a href="#">↓</a></li><li><b>3. Concept for T-97 Proposed Alexandra Street Extended</b><a href="#">↓</a></li><li><b>4. Concept for T-96 Proposed Roundabout with Added Slip Lane</b><a href="#">↓</a></li><li><b>5. Concept for T-96 Proposed Roundabout with Two Added Slip Lanes</b><a href="#">↓</a></li></ol>
<b>Authorising Officer:</b>	<b>Martin Crow - Manager Infrastructure Planning Peter Kofod - General Manager Regional Services</b>
<b>Author:</b>	<b>David Hood - Senior Infrastructure Planning Engineer</b>

---

**SUMMARY**

*This report presents the findings of transport infrastructure planning work undertaken in the zoned residential areas in the Parkhurst area and seeks Council's endorsement to proceed with detailed design of the first two key projects.*

*The first two key infrastructure projects in the area are:*

- 1. an upgraded intersection at the northern end of Alexandra Street where it meets Birkbeck Drive and Belmont Road (LGIP Project T-96); and*
- 2. the northern extension of Alexandra Street onto the McLaughlin Street corridor (LGIP Project T-97).*

*The accompanying report provides the planning basis for these projects.*

**OFFICER'S RECOMMENDATION**

THAT Council endorses the Parkhurst Roads Strategy for Proposed Trunk Infrastructure Projects, T-96 and T-97 dated November 2022 as the basis for progressing the detailed design of both projects.

**COMMENTARY**

Parkhurst has been identified as one of Rockhampton Regional Council's main areas for future residential growth. This locality is constrained through a current lack of delivered transport infrastructure available to service the planned development areas.

Council's Local Government Infrastructure Plan (LGIP) details, in broad terms, the trunk infrastructure works necessary to service these developments.

In planning for these significant, long-term infrastructure works, the approach used was:

- to investigate past and current levels of residential development in the area and determine the remaining life of the existing assets used to service them from an operational perspective;
- to use this remaining life as an interim measure whilst LGIP projects are delivered;
- to determine the level of infrastructure provision required to service further growth in the area up to the ultimate development capacity identified in Council's Planning Assumptions Report;
- in developing the infrastructure works in the preceding point, to give weight to delivery options that allow staged delivery of the works so that investments made now do not need significant rework or result in unnecessary and/or significant infrastructure redundancy when further stages become necessary;

- to minimise costs so far as is reasonably practicable; and
- to recommend an investment program for Council's consideration.

The planning report addresses the entire area from an overall traffic generation perspective and uses those findings as inputs to the transport infrastructure options available for the first two key transport network projects needed to service growth in the area. The Executive Summary of this planning report has been attached to this report (**refer Attachment 1**).

The strategy to service this locality is as follows:

1. Development generated traffic in the subject area will initially use Edenbrook Drive and Belmont Road as the southbound access onto the trunk road network. During this time, the intersection of Alexandra Street/ Belmont Road and Birkbeck Drive stays in its current tee configuration with Birkbeck Drive being the controlled leg. Operational performance of this intersection will deteriorate as traffic using Belmont Road and Alexandra Street increases (because of new lots having dwellings built on them and then occupied).
2. When the total number of lots from Riverside, Edenbrook and Ellida developments reaches 450 lots, an upgrade to the Birkbeck Drive/ Belmont Road/ Alexandra Street intersection is triggered. This is based on:
  - limiting operational delays at the existing Belmont/ Birkbeck/ Alexandra priority tee to acceptable levels; and
  - allowing a nominal 12-month construction period for a new intersection configuration to be constructed by the time traffic flows at the existing priority tee would otherwise become unacceptable.
3. These proposed works in the above item are the T-96 trunk infrastructure project works detailed in this report. Based on the traffic modelling and other considerations contained in the report, a roundabout configuration is recommended for the intersection. In this situation, a roundabout configuration has significant advantages over a signalised intersection configuration.

The benefits of a roundabout configuration being delivered at this location would include:

- It will occupy a significantly smaller footprint and have less impact on public utilities in the area. A smaller footprint will also have a lower construction cost than a signalised intersection configuration to achieve similar operating conditions.
- It would provide better traffic operation and result in lower delays (and consequently user running costs);
- It could be a de-facto 'gateway' treatment to the northern residential development areas.
- Through the adoption of appropriate geometry, the vehicle speeds at the intersection can be lowered to complement a Safe System design approach.

A concept plan of the T-96 proposed roundabout configuration is included as **Attachment 2**. This configuration would, in conjunction with the T-97 proposed works, service up to 935 lots contributing traffic to the Alexandra Street Extended (T-97) leg of the T-96 proposed roundabout shown in **Attachment 2**.

4. Traffic generated from lots in Edenbrook and Ellida developments will use the existing Edenbrook Drive and Belmont Road to travel southward. This could occur until volumes on Edenbrook Drive reach 600 vehicles in a peak hour. This is expected to occur when a total of 450-550 dwellings have been delivered within these two developments. At this time, the trunk infrastructure project T-97 will be triggered, requiring a new road connection from the Alexandra Street/ Birkbeck Drive/ Belmont Road intersection northbound up to the intersection of William Palfrey Road

and McLaughlin Street. This new road link will have sufficient capacity to allow Edenbrook to fully develop plus cater for 50% of expected traffic from the Ellida development area. A concept design drawing of T-97 is included as **Attachment 3**.

5. Once developed lots have reached 935 lots contributing to the Alexandra Street Extended leg of the roundabout shown in **Attachment 2**, some extra works are needed at the T-96 roundabout. A left turn slip lane on the north-eastern corner will need to be delivered as augmentation works to the roundabout and this would service up to a total equivalent of 1,468 detached dwelling lots being delivered and contributing traffic to the Alexandra Street Extended leg of the roundabout. A concept design of the roundabout with an added slip lane is included as **Attachment 4**
6. Beyond the 1468 detached dwelling lots, there may be a need for an added slip lane on the south-western corner of the Birkbeck / Belmont / Alexandra Street roundabout shown in **Attachment 4**. This will depend on traffic volumes and distributions realised over the coming years. It is not needed before the slip lane on the north-eastern corner. This added slip lane would service all development up to the Ultimate Development Capacity contributing traffic to the Alexandra Street Extended leg. A concept design showing the roundabout plus two slip lanes is included as **Attachment 5**.

## BACKGROUND

Council has previously undertaken planning works to set up a new transport corridor to link the northern end of Alexandra Street heading northward and eastward to connect with an existing road reserve along the McLaughlin Street corridor.

Council's LGIP shows a new road being delivered along this alignment and a new intersection configuration being delivered at the northern end of Alexandra Street.

## PREVIOUS DECISIONS

On 7 October 2015, the Infrastructure Committee resolved (refer to Item 13.4):

*THAT the Chief Executive Officer be authorised to issue a Notice of Intention to Resume in accordance with section 7 of the Acquisition of Land Act 1967 for the resumption of land from the owners of Lots 1 and 4 on SP258300 described as "land requirement for road purposes" to extend the Alexandra Street road corridor, generally in accordance with Drawings 2014-184-01 and 2014-084-02.*

These acquisitions are now complete.

## BUDGET IMPLICATIONS

The planning report's recommended near-term project delivery works (LGIP Project T-96) requires funds estimated at \$3.4 million dollars (in 2022 dollars). This project is a prerequisite to servicing traffic flows (in conjunction with the Alexandra Street Extended Project, T-97) up to 935 lots across the joint traffic catchments described in the report as 'Edenbrook Oscadia', 'Edenbrook East' and a part of the 'Ellida' sub-catchments.

The T-97 project requires funds estimated at \$13.4 million dollars (in 2022 dollars). Design and delivery of this project should closely follow the T-96 project works in the preceding paragraph, ideally so that they are effectively seamlessly delivered.

Desirably, detailed design would progress this financial year to enable early works, including services alteration works, to start next financial year with a view to delivering the projects by the 2026 'estimated year' published in Council's LGIP.

Council's 10-year forward works program includes provision of \$13.0 million dollars for these works to be delivered.

## LEGISLATIVE CONTEXT

The works detailed are for 'trunk infrastructure' under the Planning Act 2016.

**LEGAL IMPLICATIONS**

There are no known legal implications.

**STAFFING IMPLICATIONS**

There are no known staffing implications.

**RISK ASSESSMENT**

The planning undertaken has endeavoured to make the best use of Council's investment and minimise potential for cost over-run during construction. The proposed works represent scalable infrastructure as and when demand increases beyond the life of Council's current planning scheme.

**CORPORATE/OPERATIONAL PLAN**

The recommendation supports the following Corporate Plan goals:

- We are fiscally responsible
- We plan for growth with the future needs of the community, business and industry in mind
- Strategic planning supports the Region's growing population and enables economic development.
- Significant projects enable and support the Region's economy, community and environment.
- Our Region has infrastructure that meets current and future needs.

**CONCLUSION**

The report has a suitable level of planning detail to progress the projects to detailed design stage and recommends the next steps toward delivery, subject to Council's budget deliberation process.

# **PARKHURST ROADS STRATEGY**

## **Parkhurst Roads Strategy, Part 1 - Planning Report for Trunk Infrastructure Projects T-96 & T-97 (Executive Summary Extract)**

**Meeting Date: 4 April 2023**

**Attachment No: 1**

## Attachment 1

Parkhurst Roads Strategy  
Part 1: Planning Report for Trunk Infrastructure Projects, T-96 and T-97



### 1. Executive Summary

This report presents the findings of transport planning work undertaken in the zoned residential areas in the Parkhurst locality. The subject growth area in Parkhurst is one of the region's key growth areas.

It also presents the concept infrastructure planning for the first two (2) key trunk infrastructure projects in the area, being:

- an upgraded intersection at the northern end of Alexandra Street where it meets Birkbeck Drive and Belmont Road (LGIP Project T-96); and
- the northern extension of Alexandra Street onto the McLaughlin Street corridor (LGIP Project T-97).

#### Rationale

In planning for these significant, long-term infrastructure works, the approach used was:

- to investigate past and current levels of residential development in the area and determine the remaining life of the existing assets used to service them from an operational perspective
- to use this remaining life as an interim measure whilst LGIP projects are delivered;
- determine the level of infrastructure provision required to service further growth in the area up to the ultimate development capacity identified in Council's Planning Assumptions Report;
- in developing the infrastructure works in the preceding point, the ability to stage the works so that investments made now do not need significant rework or result in infrastructure redundancy has been given significant weight;
- to minimise costs so far as is reasonably practicable;
- recommend an investment program for Council's consideration.

#### Scope

This report considers the entire area in the first instance to gain a holistic understanding of the likely ultimate traffic generation from the subject zoned residential land. The works recommended in this report are part of a longer-term program of infrastructure provision but are necessary to facilitate continued development in the area in the near-term.

The recommended concepts in this report represent a balance of matters relevant to the proposed infrastructure in terms of its location and nearby surroundings and the wider transport network. Earlier corridor planning for this new link has allowed Council to secure the corridor in 2016 in the lead-up to delivery works.

The projects would deliver infrastructure capable of accommodating increased traffic demand to 2036. Consideration has also been given to future augmentation works to facilitate the ultimate (maximum) development horizon outlined in Council's Planning Assumptions Report.

#### Timing and Funding Findings

1. The recommended near-term project works requires funds estimated at \$3.4 million dollars (in 2022 dollars). This project is a prerequisite to servicing traffic flows (in conjunction with the Alexandra Street Extended Project, T-97) up to 935 lots across the combined traffic catchments described in this report as 'Edenbrook Oscadia', 'Edenbrook East' and the 'Ellida' sub-catchments. Desirably, detailed design would progress this financial year to enable early works, including services alteration works, to be done next financial year with a view to delivering the projects by the end of the 2024/25 financial year. This would see the delivery being achieved marginally ahead of the 2026 'estimated year' published in Council's LGIP.

Based on the modelling and other considerations contained in this report, a roundabout configuration is recommended for the intersection at T-96, generally in accordance with the layout shown on Concept Drawing ABB-SK-01(A) dated October 2022 attached to this report.

It has significant advantages over the signalised intersection option. The benefits of a roundabout configuration being delivered at this location would include:

## Attachment 1

Parkhurst Roads Strategy  
Part 1: Planning Report for Trunk Infrastructure Projects, T-96 and T-97



- 
- It will occupy a significantly smaller footprint and have less impact on public utilities in the area. A smaller footprint will also have a lower construction cost than a signalised intersection configuration to achieve similar operating conditions.
  - It would provide better traffic operation and result in lower delays (and consequently user running costs);
  - It could be a de-facto 'gateway' treatment to the northern residential development areas.
  - Through the adoption of appropriate geometry, the vehicle speeds at the intersection can be lowered to complement a Safe System design approach.
2. The T-97 project requires funds estimated at \$13.4 million dollars (in 2022 dollars). Design and delivery of this project should closely follow the T-96 project works in the preceding paragraph, ideally so that they are effectively seamlessly delivered.
3. Later Augmentation Works for T-96
- The later additional works are (in sequence):
- Before the time when 935 lots are delivered and contributing traffic to Alexandra Street Extended, the left turn slip lane on the north-eastern corner will need to be designed and delivered as augmentation works to the works recommended in sections 18.1 and 18.2 in this report. This extra work is estimated to cost a further \$0.65 million dollars (in 2022 dollars). This would service up to a total equivalent of 1,468 detached dwelling lots being delivered and contributing traffic to the Alexandra Street Extended leg.
  - The need for a left turn slip lane on the south-western corner is questionable at this time and will depend on traffic volumes realised over the coming years. It is not needed before the slip lane on the north-eastern corner. If it is needed, this extra work is estimated to cost a further \$0.65 million dollars (in 2022 dollars). This would service all development up to the Ultimate Development Capacity contributing traffic to the Alexandra Street Extended leg.

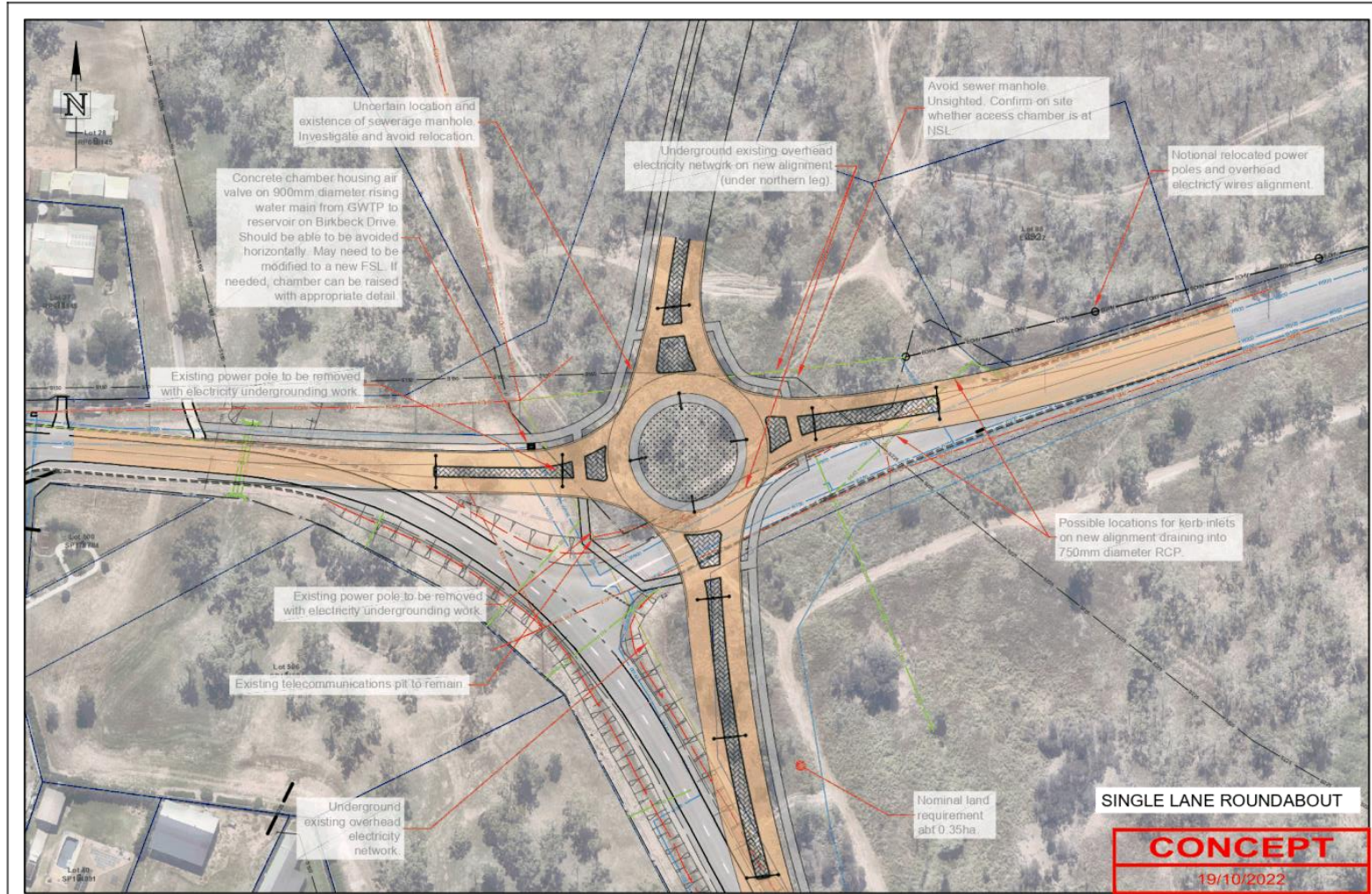


# **PARKHURST ROADS STRATEGY**

## **Concept for T-96 Proposed Roundabout**

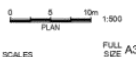
**Meeting Date: 4 April 2023**

**Attachment No: 2**



I:\rockhampton\Regional\Design\Design Office\Projects\2020\2023 - Renewals\51 (Belmont)\ACAD\Design\DH Design\Info\2023-2025-00-4254Apr2022.dwg 19/10/2022 15:10:11 PM DWG To PDF.plt

Surveyed:	Date:
RefMark:	RL
Datum:	Horiz:
	Vert:
Zone:	Survey Book:
XREF:	
Aux Plans:	



AMENDMENTS DESCRIPTION	DRAWN	APPRD	DATE



Designed	DJH	OCT 22
Checked		
Examined		
Recomm		

APPROVAL \_\_\_\_\_  
 RPEQ No \_\_\_\_\_ DATE \_\_\_\_\_  
 MANAGER INFRASTRUCTURE PLANNING

**ALEXANDRA STREET**  
 BELMONT ROAD & BIRKBECK DRIVE INTERSECTION  
 FUTURE INTERSECTION CONFIGURATION  
 SINGLE-LANE ROUNDABOUT CONCEPT PLAN

Sheet No:	ABB-SK-01
Sheet No:	1 of 1
Job No:	
A	

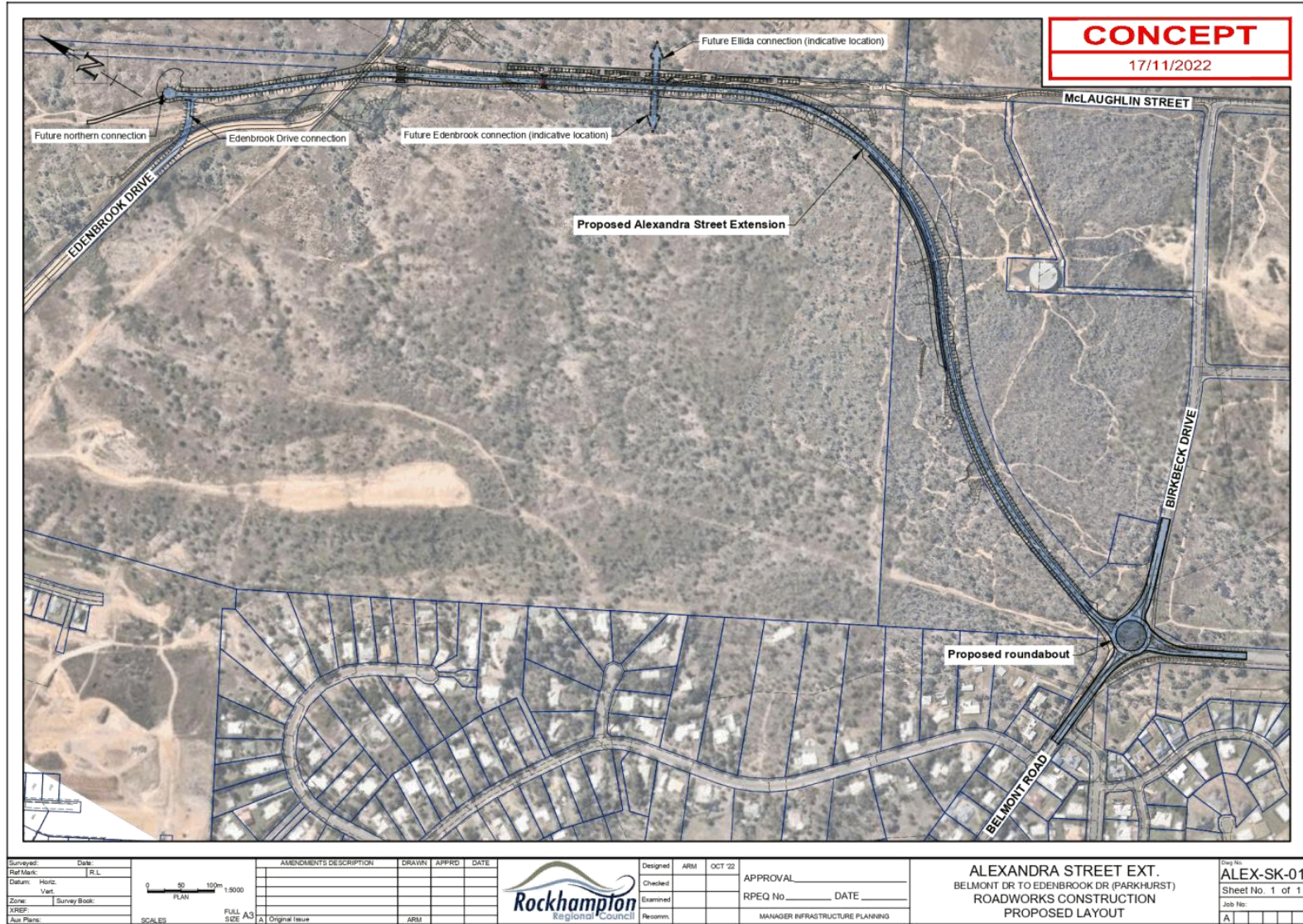
# **PARKHURST ROADS STRATEGY**

## **Concept for T-97 Proposed Alexandra Street Extended**

**Meeting Date: 4 April 2023**

**Attachment No: 3**





Surveyed: _____ Date: _____ Ref/Mark: _____   R.L. Datum: Horiz. _____ Vert. _____ Zone: _____ Survey Book: _____ XREF: _____ Aux Plans: _____	0 50 100m PLAN 1:5000 SCALES	<table border="1"> <thead> <tr> <th>AMENDMENTS DESCRIPTION</th> <th>DRAWN</th> <th>APPRD</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	AMENDMENTS DESCRIPTION	DRAWN	APPRD	DATE													Designed: _____ ARM _____ OCT 22 Checked: _____ Estimated: _____ Resomm: _____	APPROVAL _____ RPEQ No _____ DATE _____ MANAGER INFRASTRUCTURE PLANNING	Div No: _____ <b>ALEX-SK-01</b> Sheet No: 1 of 1 Job No: _____ A
AMENDMENTS DESCRIPTION	DRAWN	APPRD	DATE																		

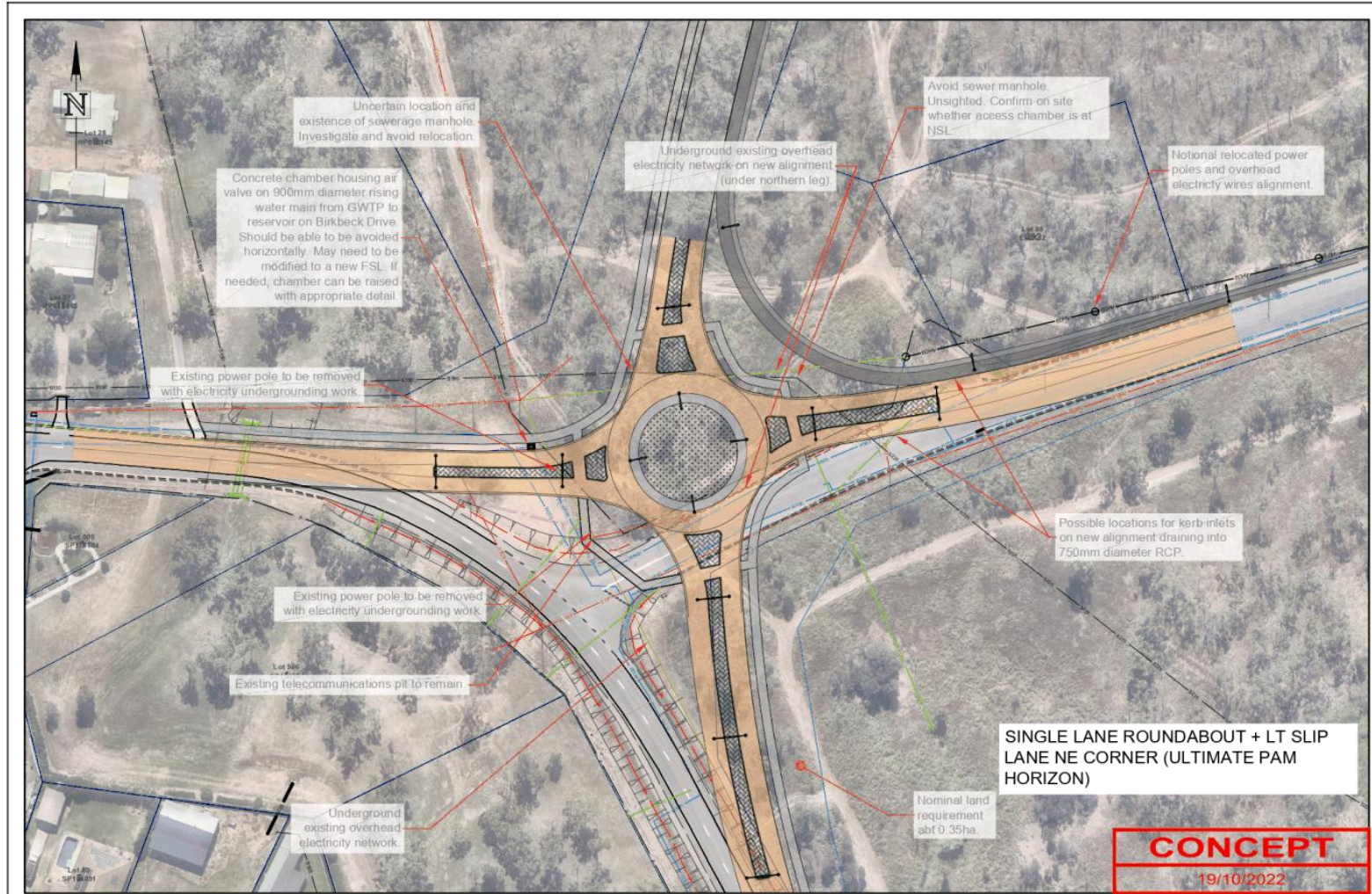
# **PARKHURST ROADS STRATEGY**

## **Concept for T-96 Proposed Roundabout with Added Slip Lane**

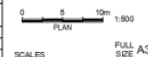
**Meeting Date: 4 April 2023**

**Attachment No: 4**





Surveyed:	Date:
RefMark:	RL
Datum:	Horiz:
	Vert:
Zone:	Survey Book:
XREF:	
Aux Plans:	



AMENDMENTS DESCRIPTION	DRAWN	APPRD	DATE



Designed:	D/JH	OCT 22
Checked:		
Examined:		
Recomm:		

APPROVAL \_\_\_\_\_  
 RPEQ No \_\_\_\_\_ DATE \_\_\_\_\_  
 MANAGER INFRASTRUCTURE PLANNING

**ALEXANDRA STREET**  
 BELMONT ROAD & BIRKBECK DRIVE INTERSECTION  
 FUTURE INTERSECTION CONFIGURATION  
 SINGLE-LANE ROUNDABOUT CONCEPT PLAN

Proj No:	ABB-SK-02
Sheet No:	1 of 1
Job No:	

V:\rockhampton\Regional\Design\Design\Office Projects\2020\2023 - Australia 51 (Electrical)\ACAD Design\04 Design Info\0203-256-00-02\04Apr2022.dwg, 19/10/2022 3:57:41 PM, DWG To PDF.plt

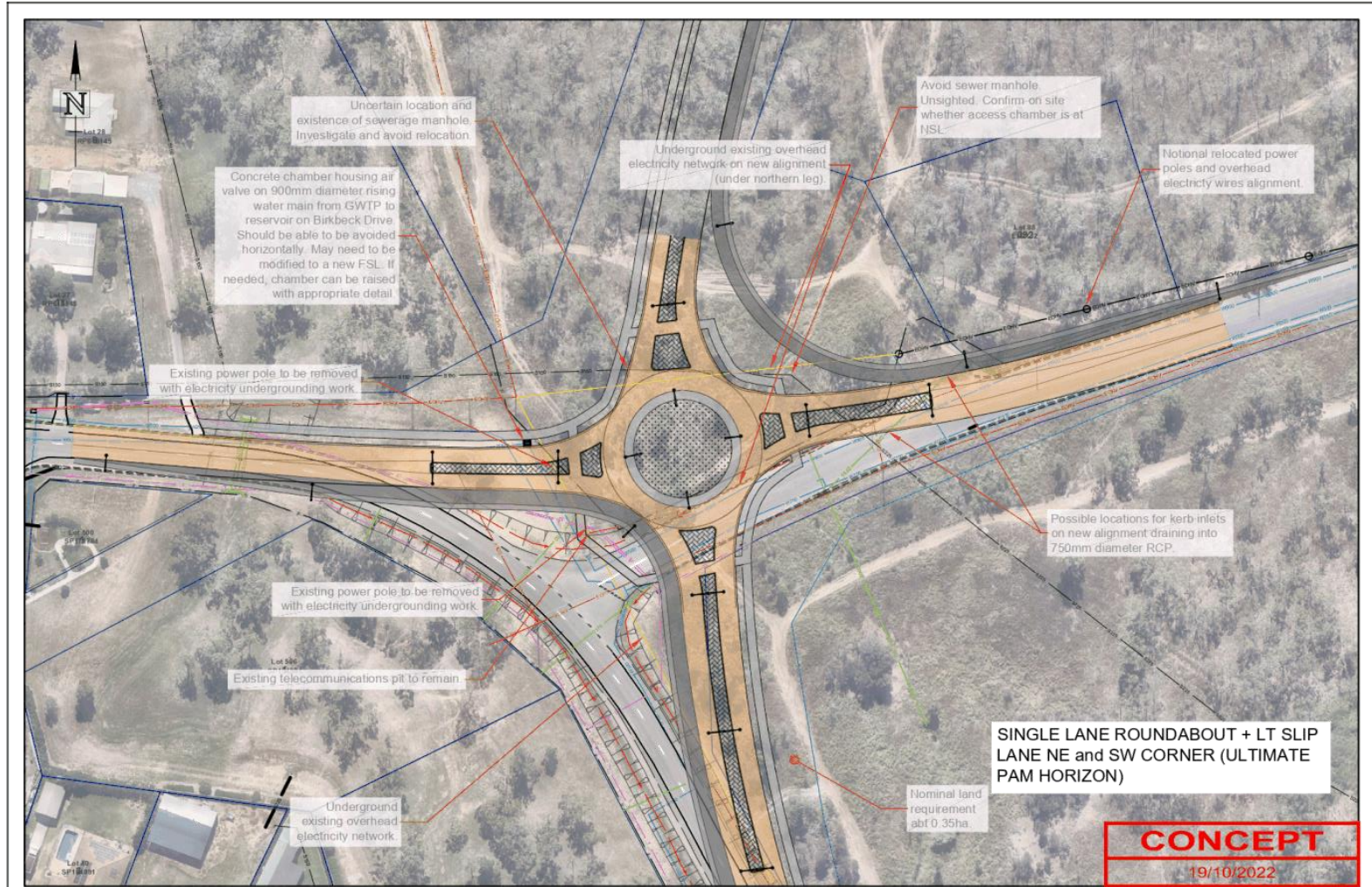
# **PARKHURST ROADS STRATEGY**

## **Concept for T-96 Proposed Roundabout with Two Added Slip Lanes**

**Meeting Date: 4 April 2023**

**Attachment No: 5**

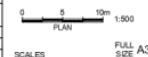




**SINGLE LANE ROUNDABOUT + LT SLIP LANE NE and SW CORNER (ULTIMATE PAM HORIZON)**

**CONCEPT**  
19/10/2022

Surveyed:	Date:
RefMark:	RL
Datum:	Horiz:
	Vert:
Zone:	Survey Book:
XREF:	
Aux Plans:	



AMENDMENTS DESCRIPTION	DRAWN	APPRD	DATE



Designed:	DJH	OCT 22
Checked:		
Examined:		
Revised:		

APPROVAL \_\_\_\_\_  
RPEQ No \_\_\_\_\_ DATE \_\_\_\_\_  
MANAGER INFRASTRUCTURE PLANNING

**ALEXANDRA STREET**  
BELMONT ROAD & BIRKBECK DRIVE INTERSECTION  
FUTURE INTERSECTION CONFIGURATION  
SINGLE-LANE ROUNDABOUT CONCEPT PLAN

Sheet No:	ABB-SK-03
Sheet No:	1 of 1
Job No:	
A	

V:\rockhampton\Regional\Design\Design\Office Project\5202023\23-00-00-02\BAP\2022\_06.dwg 19/10/2022 5:58:19 PM DWG To PDF.plt



## 10.5 WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK

**File No:** 14429

**Attachments:**

1. [Pathway Hierarchy Classification](#)
2. [Pathway Hierarchy Maps](#)
3. [Activity Centre Pathway Maps](#)
4. [Combined Pathway Maps](#)
5. [Pathway Prioritisation Framework](#)

**Authorising Officer:** Martin Crow - Manager Infrastructure Planning  
Peter Kofod - General Manager Regional Services

**Author:** Jamie Meyer - Infrastructure Planning Engineer

### SUMMARY

*Council Officers have been progressing a number of actions of the Walking and Cycling Strategy. This report seeks Council endorsement to enable delivery of these actions.*

### OFFICER'S RECOMMENDATION

THAT Council endorse the:

1. Walking and Cycling Strategy Pathway Hierarchy maps
2. Walking and Cycling Strategy Activity Centre Pathway maps
3. Walking and Cycling Strategy Pathway Prioritisation Framework

### COMMENTARY

Council Officers have been progressing a number of actions of the Walking and Cycling Strategy. Two of the short-term actions include:

Action 2.7	Develop a pathway hierarchy to determine the function and design and provision guidelines for different types of pathways
Action 2.12	Prepare and deliver a 10 year capital works program to deliver new walking and cycling infrastructure and facilities

This report provides a summary of these two actions and the next steps to deliver these actions.

#### **Action 2.7: Develop a pathway hierarchy to determine the function and design and provision guidelines for different types of pathways**

A pathway route hierarchy has been developed to identify and classify high order routes that serve a specific function within the network. This pathway hierarchy has been developed, separately to a road hierarchy as a high order pathway may not necessarily be located on a high order road.

The pathway hierarchy has been classified into:

- Principal,
- Distributor,
- Collector, or
- Local route.

These are based on a number of factors such as expected user demand, potential user groups, connections to trip generators and road hierarchy. The intent of the route classification is to determine the desirable levels of service, design standards and the type and level of infrastructure and facilities to be provided. **Attachment 1** provides details on the proposed hierarchy classification and design standards.

In addition to the developed hierarchy, and based upon previous workshops with Council, officers have applied the hierarchy over the key urban areas in the region. Routes identified on the pathway hierarchy largely serve a “movement” function i.e. moving people throughout the network to and from destinations and attractors eg Schools, shopping centres, work places etc. This is provided as **Attachment 2**.

Officers also recognise that “movement” from one area to another is only one part of the footpath network. There is also a need for footpath infrastructure within proximity to key activity centres. Activity centres are places where there is expected to be high pedestrian and cyclist activity such as schools, shopping precincts, hospitals etc. However, initially, the focus has been placed on schools and aged care facilities as these are identified in the Strategy as areas for special consideration due to the higher numbers of vulnerable users that may be present.

In order to provide for pedestrians and cyclists in these scenarios, activity centre routes have also been identified. These are pathway links within 200m of the activity centre, and likely to yield the highest number of users, to improve or encourage active travel to the centre. Maps showing the activity centre routes are shown in **Attachment 3**.

Maps showing existing pathways, and the hierarchy and activity centre routes are provided as **Attachment 4**. This represents the combined footpath network proposed to be delivered in each urban centre.

**Action 2.12: Prepare and deliver a 10 year capital works program to deliver new walking and cycling infrastructure and facilities**

A key outcome of the Walking and Cycling Strategy was to prepare a 10 year capital works program for delivery of new walking and cycling infrastructure and facilities. At the moment this is focused on new footpath links and crossings and does not include proposed works to existing footpath infrastructure.

The proposed capital works program will identify a prioritised list of projects to be undertaken annually based on the walking and cycling annual capital budget. The list of projects will be those identified on the pathway hierarchy and activity centre routes in Attachment 4. It is envisaged that the capital investment from the Footpath Asset Management Plan and the LTFF will be Councils proposed capital expenditure for footpath infrastructure. Currently it is:

Year	Allocation	Year	Allocation
22/23	\$12,500	27/28	\$1,012,500
23/24	\$12,500	28/29	\$1,012,500
24/25	\$12,500	29/30	\$1,012,500
25/26	\$1,012,500	30/31	\$1,012,500
26/27	\$1,012,500	31/32	\$1,012,500

This is a total of \$7,125,000 over 10 years. The estimated cost of the identified projects is \$37,000,000.

In order to establish an objective method to prioritise which projects are delivered, a prioritisation framework is needed. This framework applies a series of criteria to each potential project to ensure that those being delivered are meeting the Walking and Cycling strategy objectives. The criteria are:

- Strategic Alignment
- Connectivity
- Demand
- Network Enhancement
- Safety.

The proposed prioritisation framework is provided as **Attachment 5**.

The proposed pathway hierarchy, activity centre routes and the prioritisation framework were presented to Council at a briefing session on 29 November 2022. These have subsequently been updated based on Councillor feedback. The following summarises the feedback and officer’s recommendations:

Councillor feedback	Recommendation
Include missing link on Thozet Rd from Kerrigan St to Frenchville Rd	Include as a collector route and as a proposed hierarchy pathway project.
Change the collector route in Depot Hill from East St (William St to Wood St) to Quay St to provide a more attractive route	The purpose of the pathway hierarchy is to provide a movement function and to make it easier to access public transport. As there are a number of bus stops located along East St, it is recommended that this route remain. It is also recommended that another collector route be included along Quay St from William St to Francis St to provide a connection from the CBD and the boat ramp / Littler-Cum-Ingham Park. Include as a proposed hierarchy pathway project from Derby St to Francis St.
Provide a link from the Ski Gardens to Sir Raymond Huish Dr as close to river as possible.	It would be difficult to construct a footpath along the river frontage from Sir Raymond Huish Dr to the Ski Gardens due to the steep grades, impacts of flooding, land ownership and the location of the barrage. If planning for a recreational footpath along this route were to be undertaken, it may be better suited to undertake this during precinct planning eg Ski Gardens / Wandal sports precinct. Construction would be undertaken independently of the pathways capital works program due to the complexity and cost. The collector route on Lion Ck Rd provides a relatively direct connection to the Ski Gardens and surrounding sporting precincts and land uses.
Jardine St is quite hilly and may not be the best location for a footpath. It may not get used very often.	Jardine St is the most direct route between Crescent Lagoon School and Wandal sports grounds. However it is acknowledged that the undulating nature of the road may discourage use of a future footpath. During a recent review of the Principle Cycle Network (PCN), it was proposed to remove Jardine St from the PCN and include Western St instead due to similar questions around steep grade and usage. For these reasons it is recommended that Western St be included as a collector route (wider path allowing shared use and potentially more use due to flatter grade) and Jardine St to become a local route.
Follow up whether the TMR upgrade to Lawrie St, Gracemere includes footpaths on both sides of the road.	Detail is yet to be confirmed.
Dee St (Mt Morgan) is considered a more frequently used route than Morgan St (James St to Thompson Ave)	Keep Morgan St as a local route and extend the activity centre pathway to Thompson Ave. This will have no impact on what is delivered as both classifications have a preferred minimum width of 1.5m.

<p>Remove East St Ext (Mt Morgan) from the hierarchy as it is very hilly and may not get used. An alternative could be to provide access to James St via the side streets.</p>	<p>Remove East St Ext. Include Murphy St, Nicholson St and Richards St from East St Ext to James St as local routes. Include these as proposed hierarchy pathway projects.</p>
<p>Extend the existing footpath north along the highway at Bouldercombe</p>	<p>Include the Burnett Hwy from Gum Tree Ave to Kroombit Dr as a local route. Include from Hinchliffe Ave to Kroombit Dr as proposed hierarchy pathway project.</p>
<p>Should Pilbeam Dr be included in the pathway hierarchy?</p>	<p>Pilbeam Dr could be considered a major recreational precinct with the existing and future pathways largely serving a recreational / tourist function. It is envisaged the planning and construction of future pathway links along Pilbeam Dr would be undertaken independently of the pathways capital works program due to the complexity and cost. Include Pilbeam Dr corridor as a major recreational precinct.</p>
<p>Include River Rose Dr as part of the pathway hierarchy</p>	<p>Include River Rose Dr as a local route.</p>
<p>Increase the weighting of the Safety criteria in the pathway prioritisation framework</p>	<p>It is recommended that the weighting for “Safety” remains at 10%. The reason is that the potential risk to cyclist or pedestrian safety is also captured through other criteria. For example “Strategic alignment” prioritises projects that are on the PCNP or part of the pathway hierarchy higher. These routes are largely on higher order roads with higher traffic volumes and higher volumes of heavy vehicles, so prioritising these projects increases cyclist and pedestrian safety by reducing the potential for conflict with vehicles. Likewise, the “Connectivity” and “Demand” criteria prioritise projects closer to trip attractors higher. Roads closer to trip attractors are also likely to generate more vehicular traffic. By prioritising those pathway projects higher, the risk to safety is being reduced.</p>

**Next Steps**

Once the pathway hierarchy, activity centre routes and the prioritisation framework have been endorsed by Council, Officers will prioritise the identified projects and prepare a 10 year capital works program for the delivery of new walking and cycling infrastructure and facilities.

**BACKGROUND**

The Rockhampton Regional Councils’ Walking and Cycling Strategy has been developed to encourage people of all ages and abilities to walk and cycle as their preferred form of transport and recreation. The Strategy provides a framework for the planning and delivery of a safe, accessible, comfortable and connected walking and cycling network and developing initiatives to encourage people to walk or cycle more often.

The Strategy is set over a 10 year period and outlines initiatives and projects to be undertaken to achieve the goal of more people walking and cycling in the Rockhampton Region. Five broad priorities were identified and 43 actions to achieve those priorities have been developed into an action plan.

At a briefing session on 29 November 2022, Officers presented the proposed pathway hierarchy, activity centre routes and the prioritisation framework to Council and Councillors were invited to provide feedback.

### **PREVIOUS DECISIONS**

On 19 April 2022, Council adopted the Rockhampton Regional Council Walking and Cycling Strategy 2021 – 2031.

### **BUDGET IMPLICATIONS**

There is no set annual budget for the provision of pathway and cycling facilities. To achieve our goal of more people walking and cycling, a sustained commitment will be required to fund walking and cycling initiatives, infrastructure and facilities.

### **OPERATIONAL PLAN**

1.4 Healthy living and active lifestyles

1.1.1 Create community connectivity through the construction of walking circuits and missing links in footpaths.Type text

### **CONCLUSION**

The pathway hierarchy, activity centre routes and prioritisation framework are presented for Council consideration and endorsement. Once endorsed, Council Officers will prepare a 10 year capital works program for the delivery of new walking and cycling infrastructure and facilities.

# **WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK**

## **Pathway Hierarchy Classification**

**Meeting Date: 4 April 2023**

**Attachment No: 1**

## Pathway Route Hierarchy

A pathway route hierarchy has been developed to identify and classify routes that serve a specific function within the network. As such, not all routes or all of the existing pathways have been classified. Only those that are considered to provide key connections within the pathway network.

The intent of the route classification is to determine the levels of service, design standards and the type and level of infrastructure and facilities to be provided. Guidance has come from IPWEAQ's Street Design Manual: Walkable Neighbourhoods, Austroads<sup>1</sup> and Department of Transport and Main Roads<sup>2</sup>.

The pathway hierarchy has been classified into Principal, Distributor, Collector or Local routes based on a number of factors such as expected user demand, potential user groups, connections to trip generators and road hierarchy.

### Principal Route

Principal routes are located in areas where high user demand is present or expected and cater for a variety of user groups. These routes primarily serve a mix of commuter / tourist / recreation functions and may access a number of major destinations (such as the central business district, major schools / institutions, major sports / recreation areas and shopping centres).

#### **Design Characteristics**

- Desirable 3.0m wide shared path on at least one side of road. 3.0m is considered the standard width for a shared path.
- Design and construction standards reflect higher order function
- Inclusive design principles to cater for users of all abilities
- Provision of associated infrastructure (where appropriate)
  - Wayfinding signage
  - Lighting
  - Trees at 15m max. spacing
- At destinations such as major parks, recreational areas or precincts, infrastructure may also include:
  - Seating
  - Drinking fountain

#### **Location Characteristics**

- Generally longer distances connecting a variety of attractors
- Generally located on arterial or sub-arterial roads
- Good passive surveillance

### Distributor Route

Distributor routes are located in areas where moderate user demand is expected and may cater for several user groups. These routes provide connection with Principal routes and primarily provide access to a number of local and major destinations (such as major business centres, shopping centres, schools, district sports / recreation areas, hospitals).

#### **Design Characteristics**

- Desirable 2.5m wide shared path on at least one side of road. 2.5m is considered the minimum width for a shared path.
- Inclusive design principles to cater for users of all abilities

<sup>1</sup> Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling

<sup>2</sup> Road Planning and Design Manual Edition 2: Volume 3 - Supplement to Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling

- Provision of associated infrastructure (where appropriate)
  - Wayfinding signage
  - Lighting
  - Trees at 15m max. spacing
  - Seating (where elderly or mobility impaired users are likely)

**Location Characteristics**

- Connect with Principle routes
- Generally located on higher order roads
- Good passive surveillance

**Collector Route**

Collector routes are located in areas where low to moderate user demand is expected and may cater for several user groups. Provides connections with higher order routes and suburban destinations (such as local shops, aged care, schools, bus stops).

**Physical Characteristics**

- Desirable 2.0m wide path on at least one side of road. 2.0m is considered an appropriate width for a lower-use pedestrian corridor but allows for wheelchairs to safely pass.
- Design width and support facilities less than Distributor pathway
- Inclusive design principles to cater for users of all abilities
- Seating (where elderly or mobility impaired users are likely)
- Provision of trees at 15m max. spacing

**Locational Characteristics**

- Connecting links where a low to moderate volume of usage is expected
- Generally located on road reserve

**Local Route**

Local routes are located in areas where lower user demand is expected. Provides access within local residential areas and connects with higher order routes and neighbourhood destinations (such as schools, bus stops, local parks / recreation areas).

**Physical Characteristics**

- Desirable 1.5m wide path on at least one side of road
- Design width and support facilities less than Collector pathway
- Inclusive design principles to cater for users of all abilities

**Locational Characteristics**

- Connecting links where a lower volume of usage is expected
- Generally located on road reserve or open space

Where paths already exist but are not to the desired width as specified by the path hierarchy, they will be identified for replacement to the higher standard at a future date. In general, the priority will be to have a complete footpath network before further consideration be made to upgrading existing footpaths to wider configurations.

There will be instances when retro-fitting existing road reserves where the preferred pathway widths or physical characteristics may not be able to be achieved due to existing geometry or constraints. In these instances, Council may consider alternative solutions to achieve the desired level of service eg. pathways with reduced widths on both sides of the road, on-road cycle lanes etc

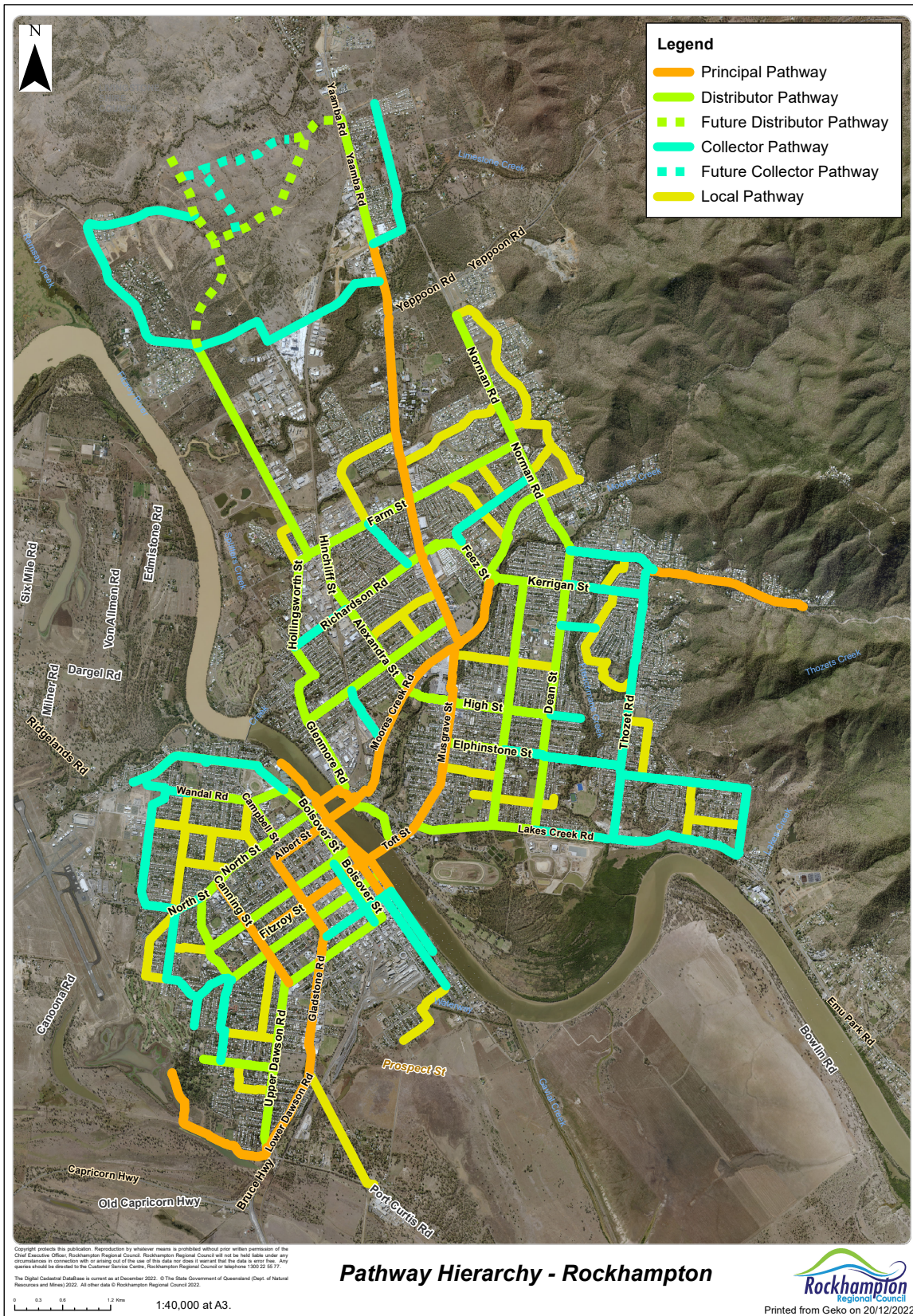


# **WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK**

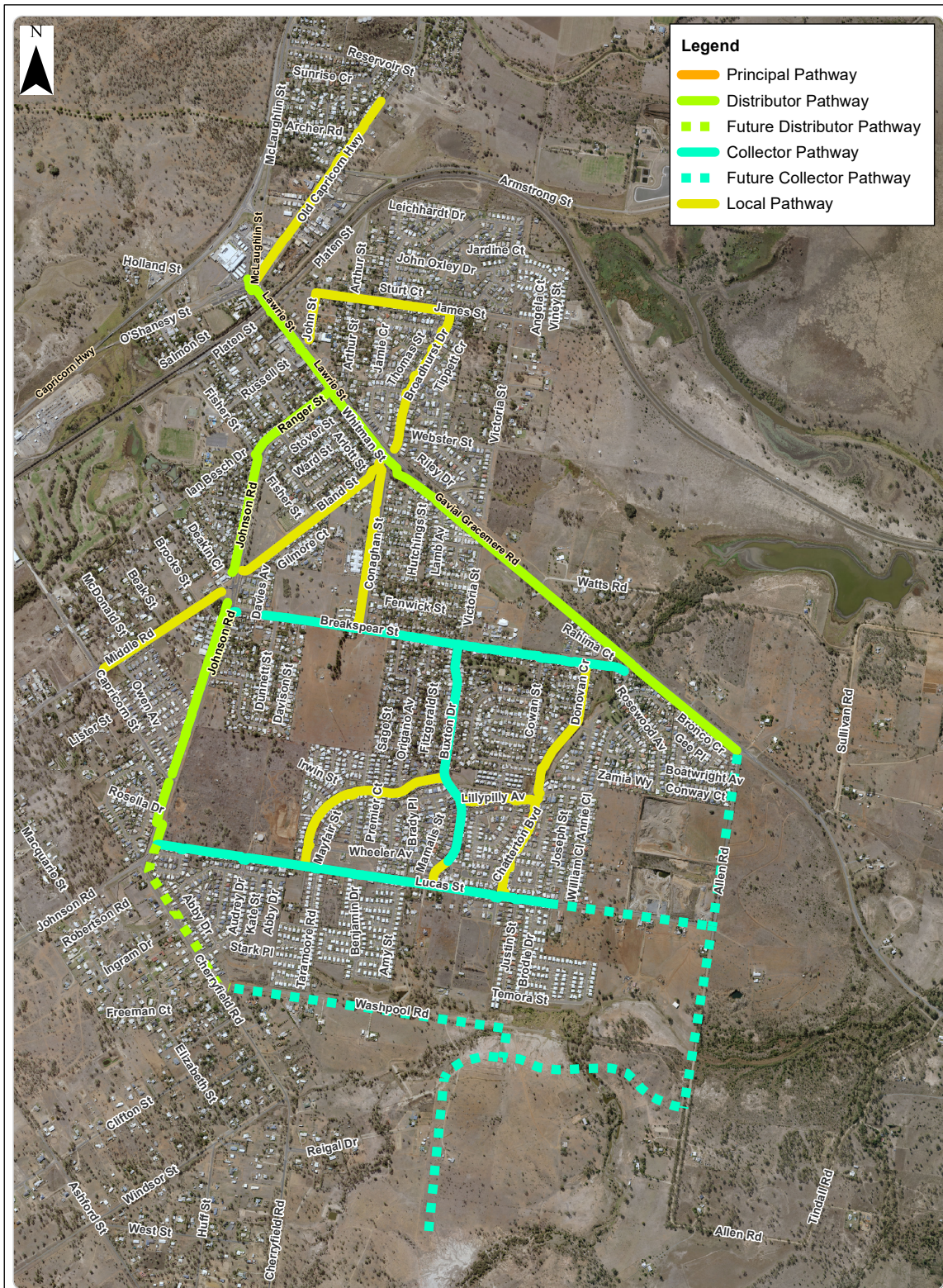
## **Pathway Hierarchy Maps**

**Meeting Date: 4 April 2023**

**Attachment No: 2**







Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council. Rockhampton Regional Council does not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 32 32 77.

The Digital Cadastral Database is current as at December 2022. © The State Government of Queensland (Dept. of Natural Resources and Mines) 2022. All other data © Rockhampton Regional Council 2022.

0 0.1 0.2 0.4 Kms

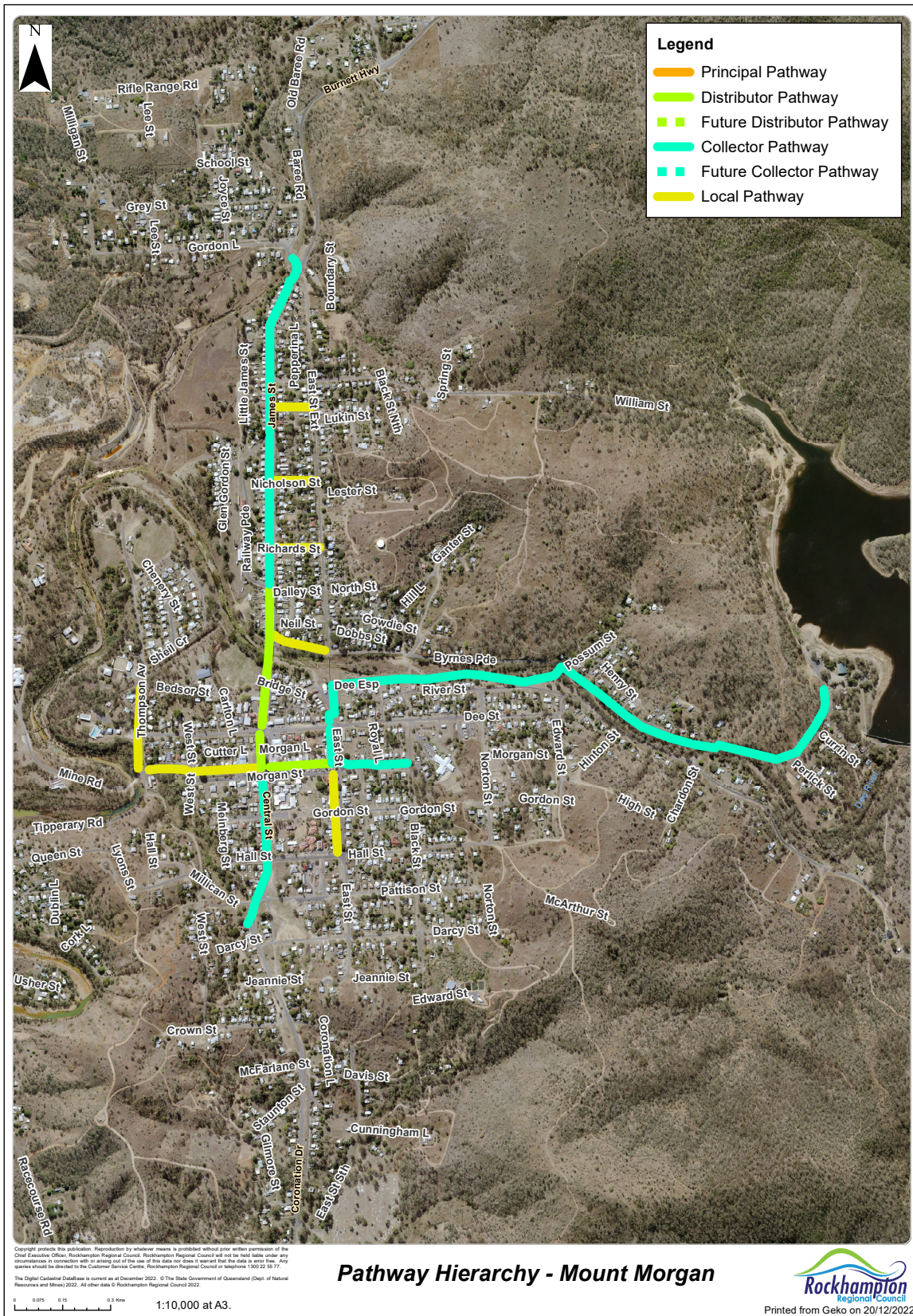
1:15,000 at A3.

**Pathway Hierarchy - Gracemere**



Printed from Geko on 20/12/2022





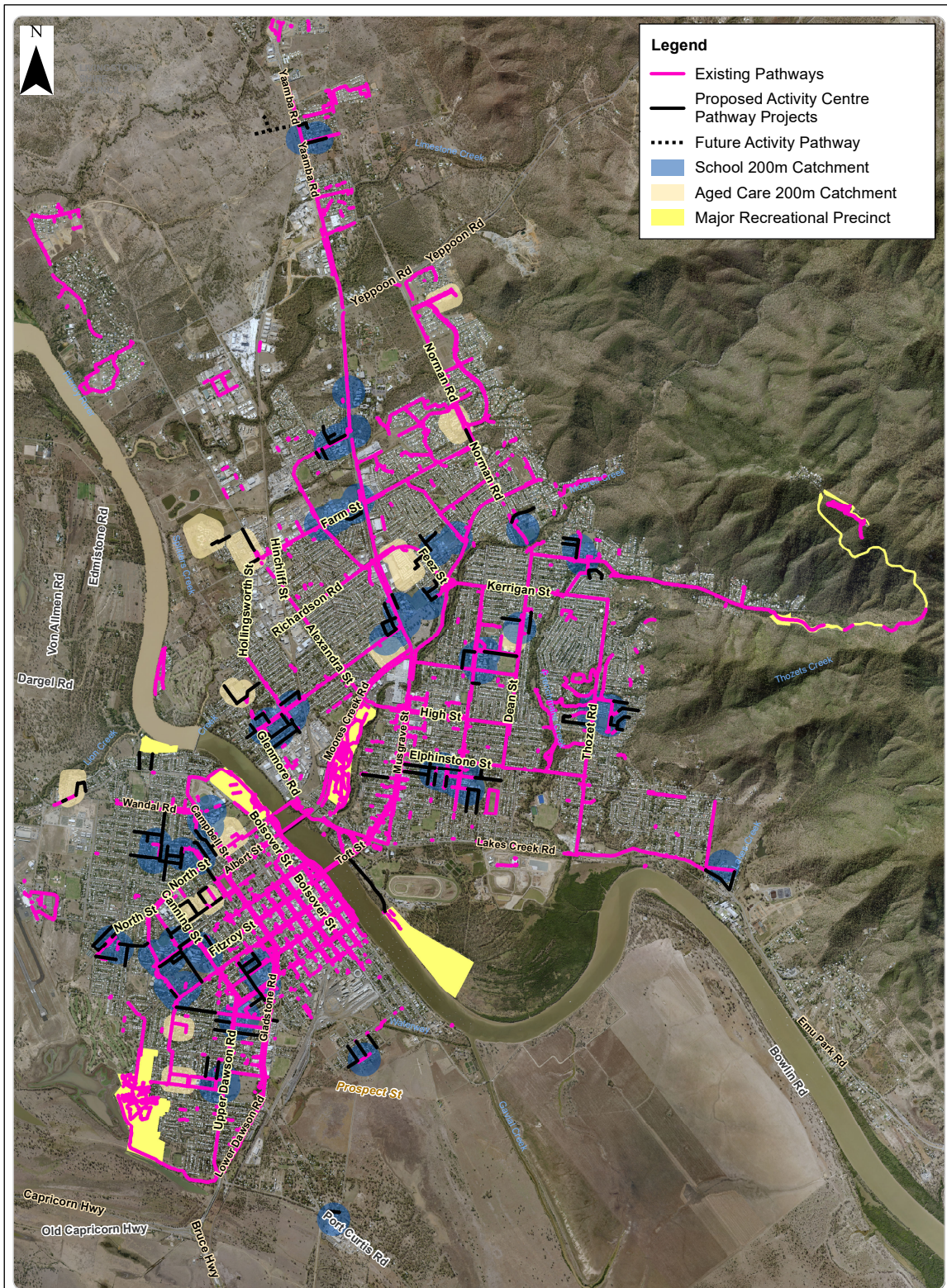
# **WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK**

## **Activity Centre Pathway Maps**

**Meeting Date: 4 April 2023**

**Attachment No: 3**





Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council. Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 32 32 77.

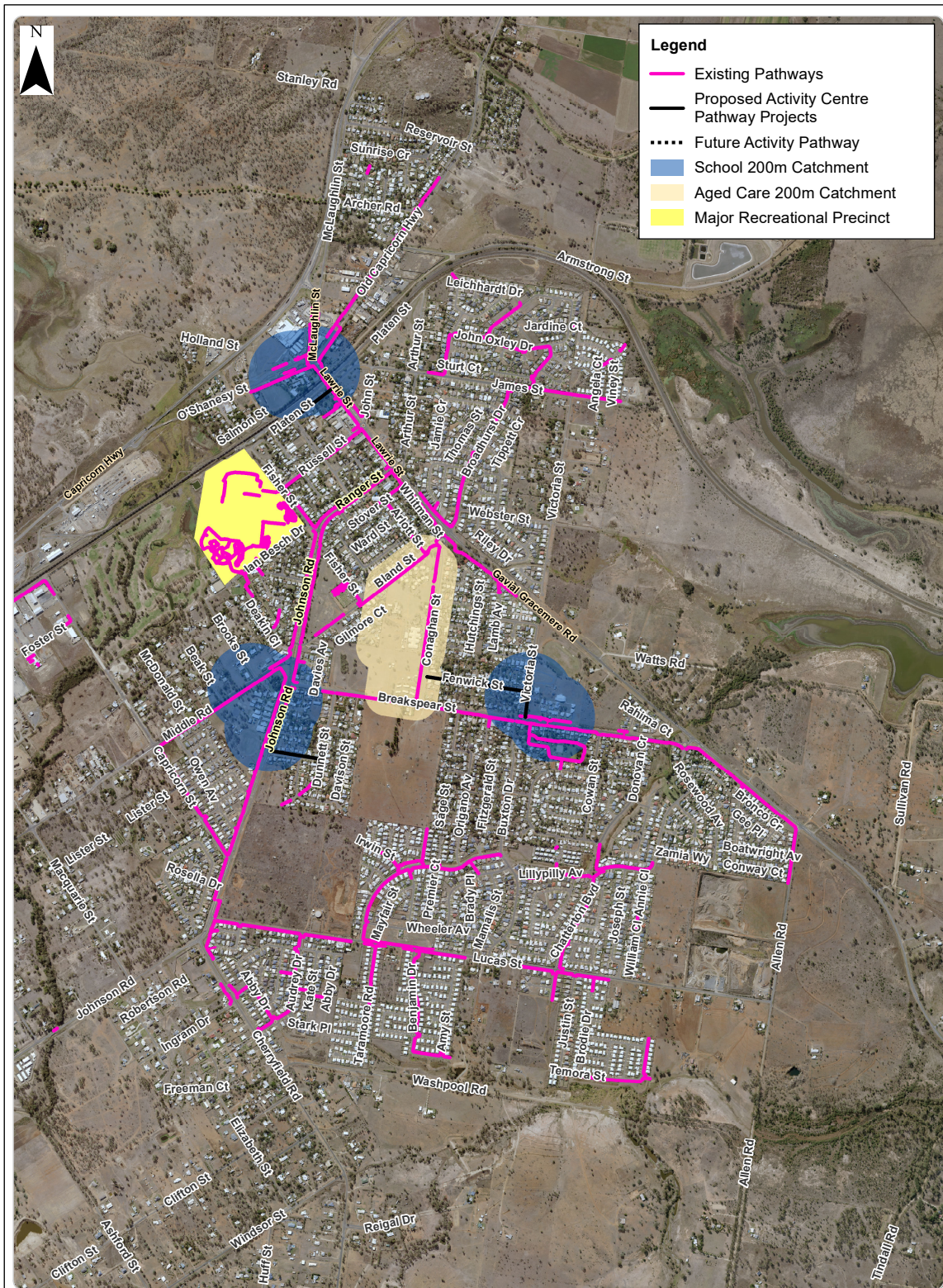
The Digital Cadastral Database is current as at December 2022. © The State Government of Queensland (Dept. of Natural Resources and Mines) 2022. All other data © Rockhampton Regional Council 2022.

**Activity Centre Pathways - Rockhampton**



0 0.3 0.6 1.2 Km  
1:40,000 at A3.





Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council. Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 32 55 77.

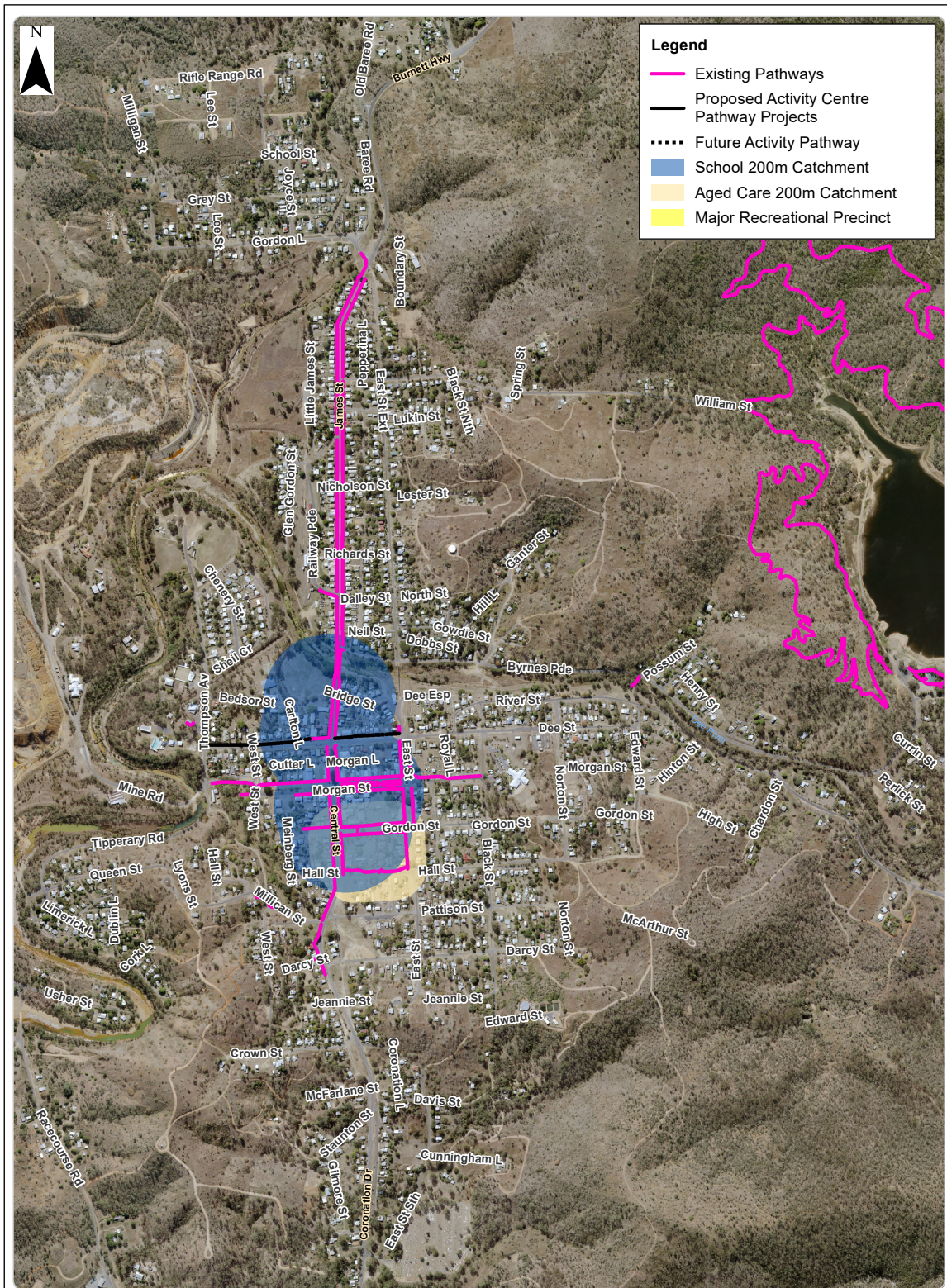
The Digital Cadastral Database is current as at December 2022. © The State Government of Queensland (Dept. of Natural Resources and Mines) 2022. All other data © Rockhampton Regional Council 2022.

0 0.1 0.2 0.4 Kms  
1:15,000 at A3.

**Activity Centre Pathways - Gracemere**

Rockhampton Regional Council  
Printed from Geko on 20/12/2022





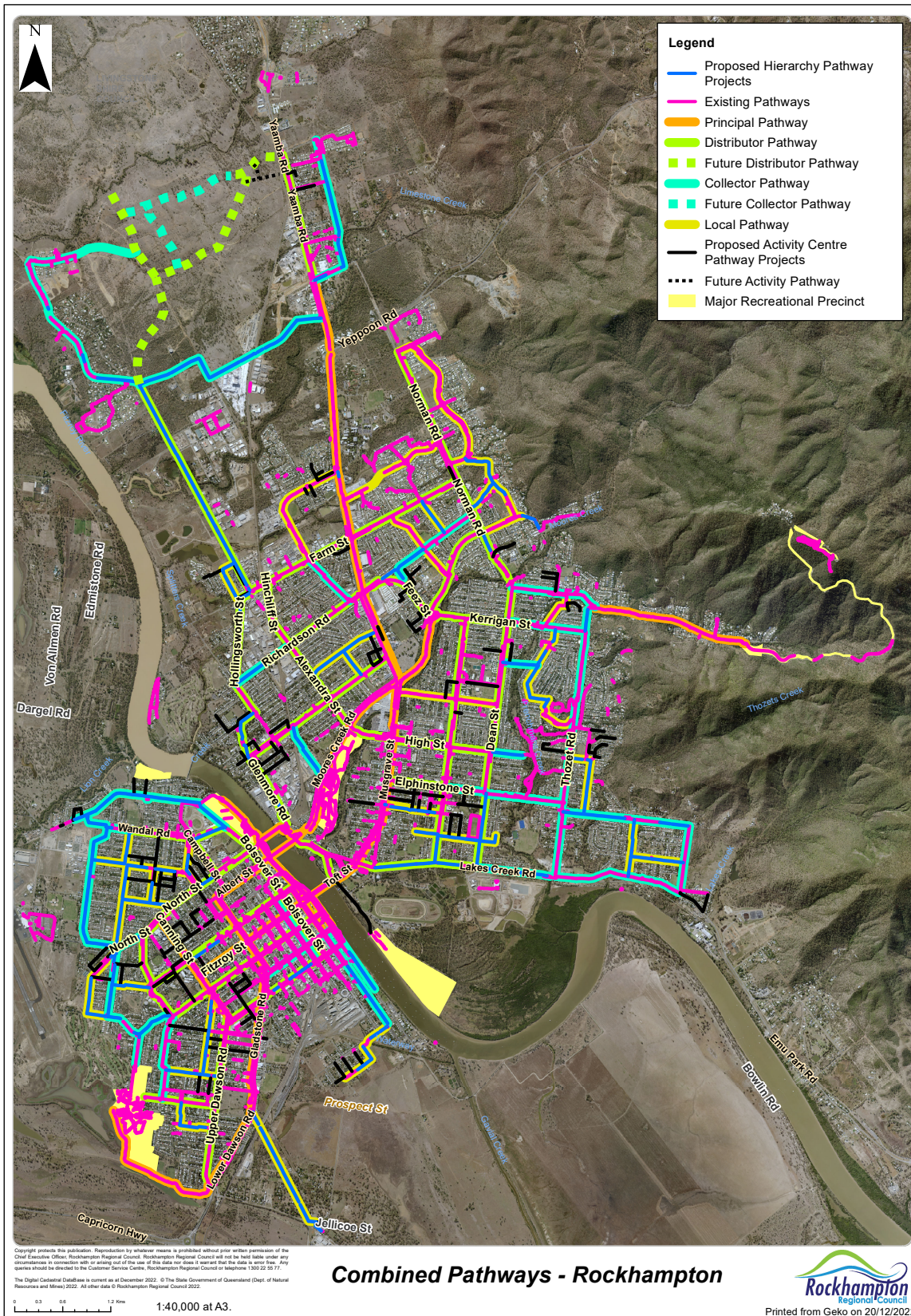


# **WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK**

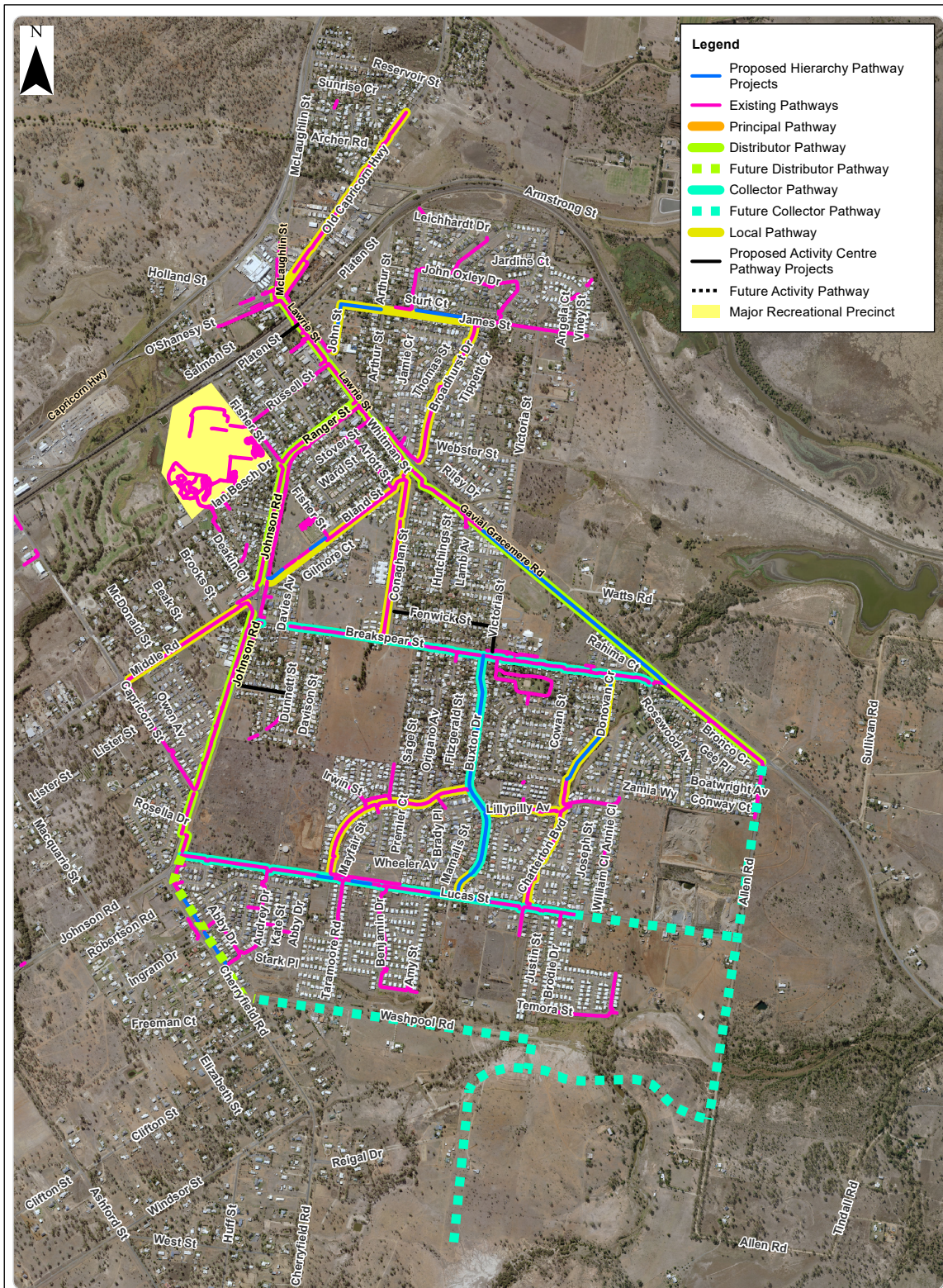
## **Combined Pathway Maps**

**Meeting Date: 4 April 2023**

**Attachment No: 4**







Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council. Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 32 52 77.

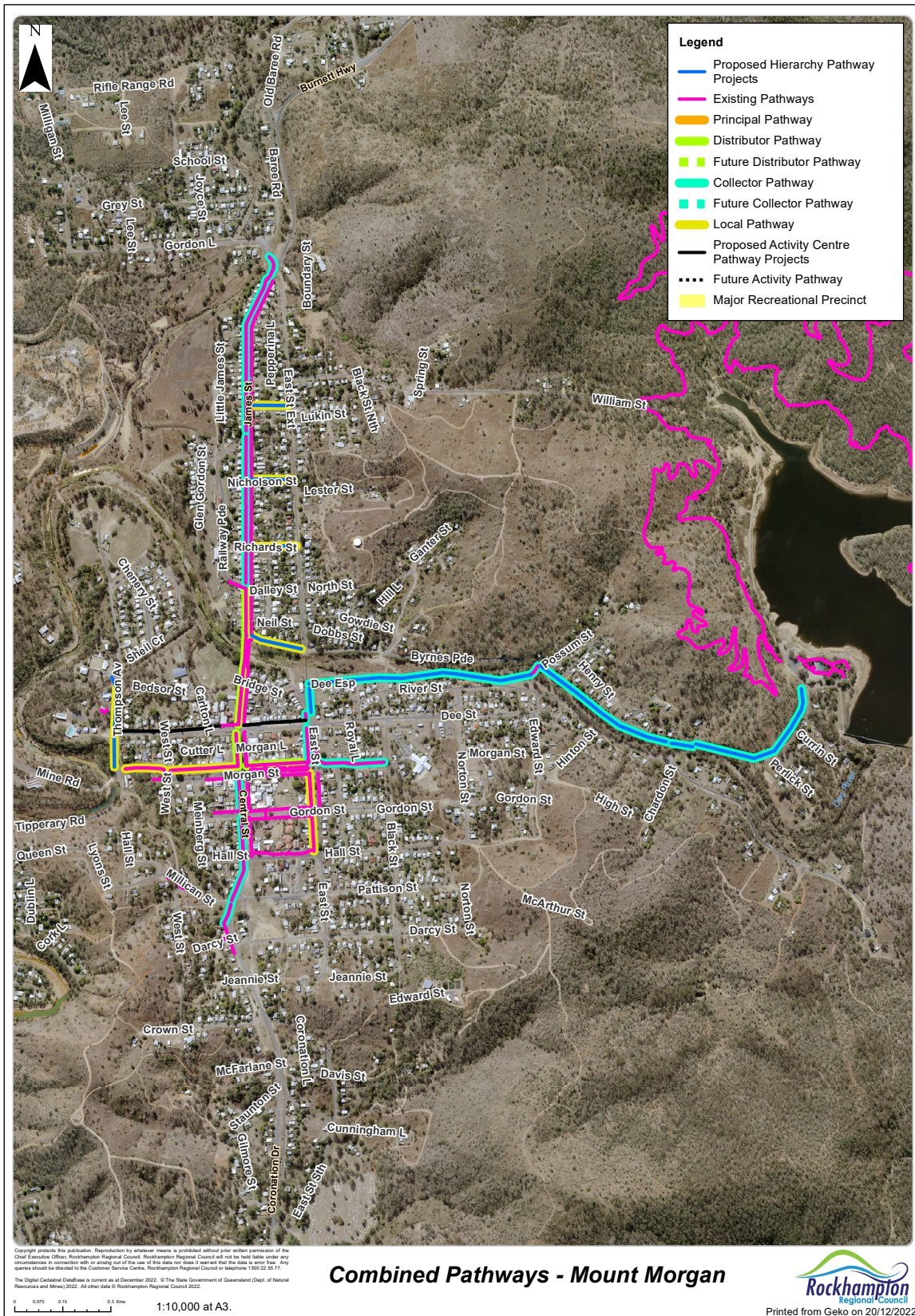
The Digital Cadastral Database is current as at December 2022. © The State Government of Queensland (Dept. of Natural Resources and Mines) 2022. All other data © Rockhampton Regional Council 2022.

0 0.1 0.2 0.4 Km  
1:15,000 at A3.

**Combined Pathways - Gracemere**

**Rockhampton**  
Regional Council  
Printed from Geko on 20/12/2022





# **WALKING AND CYCLING STRATEGY PATHWAY HIERARCHY AND PRIORITISATION FRAMEWORK**

## **Pathway Prioritisation Framework**

**Meeting Date: 4 April 2023**

**Attachment No: 5**



**Walking and Cycling Strategy Pathways PRIORITISATION**

Criteria	Measure	Weighting	Scoring criteria	Score
<b>Strategic alignment</b>	Project aligns with Principle Cycle Network Plan and/or pathway hierarchy	25%	Project is located on a Priority A route of PCNP and/or Principal pathway route	10
			Project is located on a Priority B route of PCNP and/or Distributor pathway route	8
			Project is located on a Priority C route of PCNP and/or Collector pathway route	5
			Project is located on PCNP or pathway hierarchy but not located on any of the above	2
<b>Connectivity</b>	Proximity to trip attractor e.g. activity centre, shopping centre, school, hospital, major employment area, major sports field or recreational area	25%	Adjacent to property boundary of attractor	10
			Within 100m of attractor	8
			Within 200m of attractor	5
			Within 200-400m of attractor	2
			More than 400m from attractor	0
<b>Demand</b>	Number of land use/attractors within a 200m catchment around project	20%	4 or more attractors within 200m of project	10
			2-3 attractors within 200m of project	8
			1 attractor within 200m of project	3
			No attractors within 200m of project	0
<b>Network enhancement</b>	Project completes distinct network links by filling "missing gaps". A network link is generally defined as a section of the network between two higher order roads.	20%	Completes a network link	10
			Provides an additional section of an already substantially completed network link	8
			Provides an additional section of a known and partially developed network link	5
			Provides the initial section of a known but undeveloped network link	2
			Not part of an existing link or an existing link is on the opposite side of the road	0
<b>Safety</b>	Project improves identified and substantiated risk or safety issue. Safety risks include high speeds, large % heavy vehicles, steep verge, narrow road, crash history, sight distance issues, etc.	10%	Project located in high risk environment	10
			Project located in moderate risk environment	8
			Project located in low risk environment	5
			Project located in area with no perceived safety risks.	0

**11 NOTICES OF MOTION**

Nil

**12 QUESTIONS ON NOTICE**

Nil

**13 URGENT BUSINESS/QUESTIONS**

*Urgent Business is a provision in the Agenda for members to raise questions or matters of a genuinely urgent or emergent nature, that are not a change to Council Policy and can not be delayed until the next scheduled Council or Committee Meeting.*

**14 CLOSURE OF MEETING**