

# INFRASTRUCTURE COMMITTEE MEETING

# AGENDA

# 21 JUNE 2022

Your attendance is required at an Infrastructure Committee meeting of Council to be held in the Council Chambers, 232 Bolsover Street, Rockhampton on 21 June 2022 commencing at 12:00pm for transaction of the enclosed business.

Meeting to commence no sooner than 15 minutes after the conclusion of the Communities Committee meeting.

CHIEF EXECUTIVE OFFICER 15 June 2022

Next Meeting Date: 19.07.22

### 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.

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# 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 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 17 May 2022

# 5 DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA

# 6 BUSINESS OUTSTANDING

Nil

# 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 MAY 2022

File No:	7028
Attachments:	<ol> <li>Capital Project Dashboard Report for May 2022</li> </ol>
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 May 2022 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 May 2022.

- Hail Damage Insurance Claim
- Mount Morgan Water Security
- Alliance Maintenance Facility
- RMoA / Cultural Precinct
- Botanic Gardens & Zoo Redevelopment
- Glenmore Water Treatment Plant Upgrade
- Gracemere & South Rockhampton STP Strategy
- Glenmore Water Treatment Plant Solar Farm
- Hockey Redevelopment (Flood mitigation works)
- Mount Morgan Pool
- North Rockhampton Sewage Treatment Plant Upgrade
- Riverbank Boardwalk
- Rockhampton Airport Security and Screening Upgrade / Solar
- Rockhampton Airport Parking

# PROJECT DELIVERY CAPITAL PROJECT REPORT MAY 2022

# Capital Project Dashboard Report for May 2022

Meeting Date: 21 June 2022

**Attachment No: 1** 



21 JUNE 2022

<u>Deliver</u> the annual capital works program, achieving a capital program within 95% of the budget. <u>Ensure</u> the delivery of infrastructure projects meet objectives set out in the 2021/22 Operational Plan.

Traffic Light Reporting							
Item	Last Month	This Comments					
Scope	Α	Α	Scope for East Street links is now being confirmed				
Budget <b>G G</b>		G	No current budget issues.				
Schedule	R	R	Glenmore Solar Farm, contract termination has impacted project delivery times				



Status Overview	Three Month Horizon		
Key Milestones & Deliverables This Month (May)	June	July	August
Mt Morgan Water Security     Business Case final version delivered. Lucas St Reservoir     design commenced     Alliance Maintenance Facility     Greater site works (alriside) underway and Hangar walls / roof     frame     North Rockhampton Sewage Treatment Plant     Site establishment complete, bulk civil works underway     Hail Damage Insurance Claim     North Rocky Library complete     Glenmore Water Treatment Plant     Site works underway.     Botanic Gardens & Zoo Redevelopment     Design development 90% complete     Riverbank Boardwalk     Construction commenced, demolition complete	<ul> <li>Alliance Maintenance Facility Greater site works continue / Hangar Roof</li> <li>North Rockhampton Sewage Treatment Plant Piling and under slab drainage to commence</li> <li>Mt Morgan Pool Concept design options delivered to Council</li> <li>Riverbank Boardwalk Construction continuing</li> <li>Hail Damage Insurance Claim Kershaw Gardens and landfill roof replacement</li> </ul>	Mt Morgan Pool     Design development based on concept option/     community Consult     Glenmore Water Treatment Plant     Redevelopment works continues.     Alliance Maintenance Facility     Site civil and Hangar works continue     North Rockhampton Sewage Treatment     Pling works and Underslab drainage     continue.     Riverbank Boardwalk     Construction continuing	<ul> <li>Rockhampton Airport Parking Equipment arrival for site installations</li> <li>GWTP Solar Farm Work anticipated to commence</li> <li>Mt Morgan Pool Design development / Construction procurement</li> <li>Riverbank Boardwalk Construction completion end of month</li> </ul>



Project Name	Current Status	Monthly Update			Monthly Update
Project Name	Current Status	Scope	Budget	Schedule	
Hail Damage Insurance Claim	Construction	G	G	G	<ul> <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 started on the 28<sup>th</sup> May and is 15% complete. Works are to be carried out on weekends for the Month of June to keep Childcare Centre operational.</li> <li>Victoria Park Shade structures is awarded and works Scheduled to be completed in June. Current minor delay with supply of materials.</li> <li>152 Lakes Creek Road landfill tender is awarded and scheduled to start on 6<sup>th</sup> of June.</li> <li>Kershaw Gardens Precinct and Depot is awarded and scheduled to start on 6<sup>th</sup> of June.</li> <li>North Rockhampton Sewage treatment Plant is awarded and works yet to be scheduled.</li> </ul>
Mt Morgan Water Security	Business Case	G	G	G	The final Business Case has been completed supporting a pipeline option from Gracemere to Mt Morgan and delivered to Council. AECOM have been commissioned to complete concept designs and performance specifications for the Old Cap Highway pump station and the Lucas Street Reservoir projects. Startup meeting held.
Alliance Maintenance Facility	Construction	G	G	G	Work continues on the airside civil works with construction of headwalls, grated perimeter drain, sub soil drainage and placement of culverts. On the Hangar all tilt up panels now erected, main structural steel is being erected on site. Roof purlins being installed Council assessing effectiveness of constructed diversion drain. Milestone 1 fund of \$3.75M has been received. Milestone 2 fund of \$7.5M has been received.



Project Name	Current Status		Monthly Update			
Project Name	Current Status	Scope	Budget	Schedule		
					Milestone 3 report due end of June.	
Rockhampton Museum of Art /Cultural Precinct Activation Works (East Street Links, Quay Lane Reconstruction)	Design & Construction	A	G	G	Work on East Street links continues. The external of the brick wall abutting 121 East Street has been battened and cladded including that side of the dividing wall to the links. The paved cross over to Quay Lane is currently being designed and priced. Pavers secured in Depot, The current building support structures (braces and stays) have been designed by the projects engineer however are temporary in nature. A 3D scan is being undertaken of the site and It is proposed to have the Project Engineer design the silhouette structural steel.	
Botanic Gardens & Zoo Redevelopment	Design	G	G	G	Package 2 Visitor Hub: Project on-track. Activities completed within the month include responding to requests for information raised by the architect and engineering teams. 90% Detail Design submission is on track for a submission in early June 2022. Package 3 Playground: Project on-track. Activities completed within the month include liaison with the manufacturer to confirm site arrangements, with a site visit undertaken with the supplier to confirm the exact location of the equipment, site impacts and methodology for installation.	
Glenmore Water Treatment Plant Upgrade	Design & Construction	G	G	A	Contractor completed 100% design for planned works. Small amount of design still required for activities planned towards the end of the project. Demolition/decommissioning works continued in May. Lime feeders have been decommissioned and removed. Construction works are on hold in the lime room until control room has been relocated. Commenced work on Control Room relocation. Airport Solar Feasibility Study - Capacity assessment completed – Options to progress being considered	



Project Name	Current Status	Monthly Update			
	Current Status	Scope	Budget	Schedule	
Gracemere & South Rockhampton STP Strategy	Strategic Assessment	G	G	G	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 for the Arthur St PS and process / design works on both Gracemere and South Rocky STP's         1       New Caustic soda dozing system at SRSTP         2       New Wet well for Sludge Pump Station         3       Design and Installation of Penstocks in bio-Reactors         4       Condition assessments & replacement of diffusers         5       Condition assessments & upgrade of sludge digesters         6       Upgrade of Sludge Lagoons both at SR & G STPS         7       Missing effluent pipeline at GSTP         8       Installation of Odour Control system at GSTP         9       Arthur Street SPS
Glenmore Water Treatment Solar Farm	Design & Construction	G	G	R	Site civil works complete. Termination condition being negotiated. Equipment in stock has been inspected. Received Variation proposal from Alliance Automation which is currently being reviewed.
Hockey Redevelopment (Flood Mitigation Works, Defect Works)	Construction	G	G	G	Flood Mitigation Works Works completed. Minor defects to complete. Field Surface Defects Work is complete. Defects to newly laid turf noted and being monitored. Turf needs to be played on to bed turf in.
G	Preliminary Evaluation	G	G	G	\$4.5M approved grant from Resources Community Infrastructure Fund. Funding agreement still to be received. Concept Design being undertaken. 3 options to be presented to council at Communities workshop on 21 June 2022
North Rockhampton Sewage Treatment Plant Upgrade	Construction	G	G	G	Land acquisition from Rockhampton Jockey Club – Now complete Project development and environmental approvals currently under assessment. Site establishment completed, bulk earthworks underway. Pile and concrete mix design submitted and accepted. Asbestos and debris found on site being managed as required.



Desite at Massa	Current Status				Monthly Update
Project Name	Current Status	Scope	Budget	Schedule	
Riverbank Boardwalk	Construction	G	G	G	Contract awarded, works started on 27 <sup>th</sup> April 2022. Site is secured, handrails removed and sent for hot dipped galvanising. New joists, FRP grating and flooring are currently being installed. Project is still on track to be completed on 1 <sup>st</sup> September 2022.
Rockhampton Airport Security and Screening Upgrade / Solar	Design & Construction	G	G	G	\$40,500 Transferred to Airport budget for purchase of UV cleaning module for x-ray lanes. Project on-track. Defect rectification ongoing Scope increased to include design of solar system for terminal and application to ergon for connection approval for Airport and tenant's solar applications.
Rockhampton Airport Parking	Design & Construction	G	G	G	Contract Awarded to equipment supplier 1 Feb 2022, design development underway. Total package includes operational services. Equipment is in manufacture stage, anticipate new arrival date on site early September 2022

## 10.2 AMENDMENT TO GATES AND GRIDS POLICY

File No:	11979
Attachments:	<ol> <li>Draft Gates and Grids Policy (track changes)<u>↓</u></li> <li>Draft Gates and Grids Policy (Clean)<u>↓</u></li> </ol>
Authorising Officer:	Peter Kofod - General Manager Regional Services
Author:	Hayley Chadwick - Business Improvement Advisor

## SUMMARY

The Gates and Grids Policy has been amended and is presented for Council's Consideration.

# OFFICER'S RECOMMENDATION

THAT Council adopts the amended Gates and Grids Policy and approves a review date of the Gates and Grids Policy of June 2024.

# COMMENTARY

The Gates and Grids Policy was adopted by Council in February 2020.

In reviewing the effectiveness of the Policy and associated processes over the last two years, a number of minor adjustments are recommended as follows:

Amendment	Justification
Definition added for Existing Gate or Grid or Gate and Grid	Given existing gates and grids have now been issued their approvals, the section within the policy has been amended slightly and a definition included for these existing gates and grids that existed prior to the policy being adopted.
5.2.2 (e) Limit gates to road class 10 and only where more appropriate than a grid and primarily only impacting the applicant/responsible person.	Allowing new gates on roads used by multiple properties increases the risk of negatively impacted/inconvenienced road users. Whilst existing structures may currently remain, it is preferred that limited new gates are approved.
5.2.2 Including an approval term of five years.	Increasing approval term from two years to five years to reduce financial impact on property owners and renewal processing costs to Council. This was discussed and adopted at Infrastructure Committee Meeting 17 May 2022.
5.4 (paragraph 4) Paragraph explains that Council may enforce current policy standards should circumstances have changed or significant community concern/impacts are evident.	Conditions of approval already outline that the structure may need to be removed if no longer effective, causing a nuisance or impacting safety. The criteria in Subordinate Local Law 1.17 is also considered when permits are renewed. Inclusion of this paragraph into the policy is to clarify this.
5.4.1 Existing gates and grids section moved to approvals and renewals section.	This process applied to existing gates and grids at the time the policy was adopted and is now complete. Existing gates and grids will now be considered at renewal time and have been moved to the renewal section. All new gates and grids must

now follow the new application process.

## PREVIOUS DECISIONS

At its meeting on 17 May 2022, the Infrastructure Committee adopted an approval term of 5 years for gates and grids approvals currently due for renewal.

# CONCLUSION

It is recommended Council adopt the amended Gates and Grids Policy and new review date.

# AMENDMENT TO GATES AND GRIDS POLICY

# Draft Gates and Grids Policy (track changes)

Meeting Date: 21 June 2022

**Attachment No: 1** 

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# GATES AND GRIDS POLICY

#### 1 Scope

This policy applies to gates and grids across a road under Rockhampton Regional Council's control. This policy does not apply to gates and grids located on property boundaries.

#### 2 Purpose

The purpose of this policy is to outline Council's approach for managing gates and grids installed across Council controlled roads.

#### 3 Related Documents

#### 3.1 Primary

Subordinate Local Law No. 1.17 (Gates and Grids) 2019

#### 3.2 Secondary

Anti-Discrimination Act 1991 Human Rights Act 2019 Local Government Act 2009 Local Government Regulation 2012 Local Law No. 1 (Administration) 2011 Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011 Subordinate Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2019 Transport Operations (Road Use Management) Act 1995 Capricom Municipal Development Guidelines - Heavy Duty Cattle Grid Standard Drawing CMDG-G-020 and 6.0m Gate Detail Standard Drawing CMDG-G-019 Compliance Inspection Checklist Fees and Charges Schedule Gates and Grids Application Form Gates and Grids Approval Renewal Form Gates and Grids Cancellation or Transfer Form Gates and Grids Fact Sheet Gates and Grids Public Notification Guide Gates and Grids Whole of Council Work Instruction Queensland Manual of Uniform Traffic Control Devices Department of Transport and Main Roads

Refund, Exemption and Reduction of Fees and Charges Policy

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### 4 Definitions

To assist in interpretation, the following definitions apply:

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Authorised Person	A person who is appointed under the <u>a</u> Local Government Act <u>2009 and other Act</u> to ensure members of the public comply with the relevant Local Government Act in relation to the local government and the Region.			
Council	Rockhampton Regional Council			
Existing Gate or Grid, or Gate and Grid	A gate or grid, or gate and grid installed prior to 4 February 2020 and th responsible person has been issued a current decision notice approval from a authorised person.			
Gate	As defined in <i>SLL 1.17</i> , a hinged or sliding barrier used to close an opening in a wall, fence or hedge.			
Grid	As defined in Subordinate Local Law No. 4 (Local Government Controlled Areas Facilities and Roads) 2019, a structure designed to:			
	(a) Permit the movement of pedestrian or vehicular traffic along a road; but			
	(b) Prevent the passage of livestock.			
Local Law No. 1	Local Law No. 1 (Administration) 2011			
Region	Rockhampton Regional Area defined by the Local Government Areas of Queensland.			
Responsible Person	As defined in Subordinate Local Law No. 4 (Local Government Controlled Area: Facilities and Roads) 2019, for a gate or grid installed across a road, means eac of the following persons:			
	(a) The person who installed the gate or grid, or the gate and the grid;			
	(b) The person for whose use or benefit of the gate or grid, or the gate and th grid, were installed;			
	(c) The person who has the benefit of the gate or grid, or the gate and the gri installed across the road.			
Road	As defined in Local Law No. 1:			
	(a) A road as defined in the Local Government Act 2009, section 59; and			
	(b) A State-controlled road:			
	<ul> <li>Prescribed under a subordinate local law for this subparagraph as a roa to which this local law applies unless otherwise provided; and</li> </ul>			
	<ul> <li>(ii) In respect of which the chief executive has given written agreement under the <i>Transport Operations (Road Use Management) Act 1995</i>, section 66(5)(b).</li> </ul>			
SLL1.17	Subordinate Local Law No. 1.17 (Gates and Grids) 2019			

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#### 5 Policy Statement

Council endeavours to minimise unreasonable nuisance and the potential for motorists to be exposed to safety hazards whilst utilising a road.

Council does however acknowledge that a gate, or a gate and a grid may be required under certain circumstances where other methods of controlling livestock, such as fencing is impractical. This policy ensures that where a gate, or a gate and a grid are permitted they are installed, managed and maintained to an acceptable and consistent standard which minimises unreasonable nuisance and safety risk to road users.

Council will not approve the installation of a grid without a gate.

#### 5.1 Prescribed Activities and Compliance with Local Laws

The installation of a gate, or a gate and a grid across a road, and being a responsible person for a gate, or a gate and a grid installed across a road are prescribed activities within SLL1.17. Such activities must be approved and remain compliant in accordance with this subordinate law. Approvals may be transferred in accordance with Local Law No. 1.

#### 5.2 Applications for New Installations

Applicants seeking approval for new installations must complete the Gates and Grids Application Form and submit with the required supporting documentation and application fee.

Applications received are assessed in accordance with the criteria specified within SLL1.17 and this policy.

#### 5.2.1 Public Notification

Public notification is required to be completed by applicants as part of the application process. The applicant is advised when this should commence.

The public notification period must last for 15 business days and involves the erection of a notice at the location of the proposed gate or gate and grid. The notice must be in the approved form as detailed in the Gates and Grids Public Notification Guide.

Evidence of the public notification must be supplied to Council not more than 10 business days after the public notification period ends (or a further agreed period) before the application is progressed. If not received, the application may lapse.

Submissions must be received by Council in writing within the public notification period and must:

(a) State the name and residential address of the submitter; and

(b) State the grounds for the submission, including facts and circumstances relied on for the grounds.

#### 5.2.2 Application Assessment

Applications are assessed in accordance with the criteria specified in SLL1.17 and with consideration to the following:

- (a) The need to contain livestock and if a viable alternative method is available;
- (b) Applications are generally only considered on roads that are unfenced, or partly fenced;
- (c) If the proposed gate or gate and grid creates an unreasonable obstruction, or disruption to vehicular or pedestrian traffic;
- (d) Submissions received during the public notification period; and
- (e) The characteristics of the road assessed as follows:

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Table of Assessment							
Road Class	Annual Average Daily Vehicle Count	Sealed	Unsealed/Unformed/ Formed				
10	≤10	Grid with Gate	Gate or Grid with Gate or Gate*				
30	11-30	Grid with Gate	Grid with GateGate or Grid with Gate				
75	31-75	Grid with Gate	Grid with Gate				
100	76-100	Consideration may be	given for Grid with Gate				
125	101-125	Not Ac	ceptable				
150	126-150	Not Ac	ceptable				
199	>150	Not Ac	ceptable				
*Gates are only c	onsidered where:						
~ ~ ~		sed location is considere a grid with a gate; and	d by an authorised persor				

(b) The gate will primarily only impact the responsible person/applicant's property.

If an application is approved, a Decision Notice Approval is issued to the applicant and is valid to 30 June, for a term of no more than 5 years.

If an application is refused, a Decision Notice Refusal and Information Notice is issued to the applicant. The applicant may request a decision review under Local Law No. 1.

#### 5.3 Approval Cancellations or Transfers on Property Sales

If the responsible person sells their property, they must notify Council on the Gates and Grids Cancellation or Transfer Form within 30 business days of the transfer of ownership of the property to cancel or transfer their approval thus cancelling their responsibility for the gate or grid, or the gate and the grid that was covered by the approval. Fees paid previously are not refunded when the approval is cancelled or transferred.

If an application to cancel or transfer has not be received within 30 business days, Council may consider the structure to be abandoned and will commence procedures as set out in paragraph 5.76 of this policy.

There is no fee associated with a transfer application and transferred approvals shall apply to the end of the current approval period.

#### 5.4 Approval of Existing Gate or Grid, or Gate and Grid

For an Existing gate or grid, or gate and grid installed prior to 4 February 2020 where a responsible person has been identified, the structure will be\_inspected and assessed by Council in accordance with the criteria specified in SLL1.17 and with consideration to the following:

- (a) The general condition and safety of the structure(s) and warning signage. Note: Provided existing structures are, in the opinion of the authorised person, of a safe and appropriate standard, they will not be required to meet current engineering standards and specifications;
- (b) The need to contain livestock and if a viable alternative method is available;
- (c) Whether the existing gate or grid, or gate and grid is on a road that is unfenced, or partly fenced;
- (d) If the existing gate or grid, or gate and grid creates an unreasonable obstruction, or disruption to vehicular or pedestrian traffic; and
- (e) The current road classification and usage.

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If approved, a Decision Notice Approval is issued valid to 30 June and the approval holder will be subject to the conditions of the approval and the provisions set out in paragraphs 5.3, 5.5 and 5.7 of this policy.

If an authorised person is not able to approve the structure, the responsible person will be contacted to negotiate an acceptable outcome. Where an acceptable outcome cannot be achieved, the structure may be considered non-compliant and procedures set out in paragraph 5.7 may commence.

#### 5.55.4 Approval Term and Renewals

Approvals are granted until 30 June for the term specified in the Decision Notice Approval.

Council issues a renewal notice before the approval expires and includes a Gates and Grids Approval Renewal Form and a Compliance Inspection Checklist.

Council assesses renewals to ensure the gate or grid, or the gate and the grid continues to comply with SLL 1.17 and the conditions of approval before issuing a new Decision Notice Approval, however for existing gates or grids, or gate and grid refer to paragraph 5.4.1 for the renewal assessment process.

Approved gates or grids, or gates and grids may, as reasonably necessary, be subject to current engineering standards, specifications and assessment requirements where Council considers circumstances have changed and/or community concerns have arisen.

If the approval is not renewed before expiry, Council may consider the gate or grid, or the gate and the grid to be non-compliant and may commence procedures as set out in paragraph 5.76 of this policy.

#### 5.4.1 Existing Gate or Grid, or Gate and Grid

If an existing gate or grid, or gate and grid, the authorised person assesses the structure in accordance with the criteria specified in SLL1.17 and with consideration to the following:

(a) The general condition and safety of the structure(s) and warning signage, provided existing structures are, in the opinion of the authorised person, of a safe and appropriate standard, they will not be required to meet current engineering standards and specifications;

(b) The need to contain livestock and if a viable alternative method is available;

(c) Whether the existing gate or grid, or gate and grid is on a road that is unfenced, or partly fenced;

(d) If the existing gate or grid, or gate and grid creates an unreasonable obstruction, or disruption to vehicular or pedestrian traffic; and

(e) The current road classification and usage.

#### 5.65.5 Obligations of Responsible Person

Conditions of an approval outline all obligations of the responsible person which may include:

- (a) Carrying out all work and/or bearing all costs associated with the permanent signage, installation and maintenance of the gate or grid, or the gate and the grid in accordance with the approved specifications and to the satisfaction of an authorised person;
- (b) Ensuring compliance at all times with the standards and conditions as specified in the approval;
- (c) Constructing drainage in association with the gate or grid, or the gate and the grid to ensure no damming or ponding of stormwater run-off occurs on the road, road reserve or adjoining property or approaches;
- (d) Erecting and maintaining permanent signage in accordance with the Department of Transport and Main Roads Queensland Manual of Uniform Traffic Control Devices;
- (e) Notifying Council at the completion of the work to arrange a final inspection;
- (f) Ensuring ongoing compliance by submitting the completed Compliance Inspection Checklist when applying to renew an approval;

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- (g) Maintaining the road, for a distance of five metres on each side of the structure in good, sufficient repair; and
- (h) Maintaining public liability insurance and providing Council with a Certificate of Currency and being personally liable for any damage or injury caused by the structure.

5.75.6 Abandoned or Non-Compliant Gate or Grid, or Gate and Grid

#### 5.7.15.6.1 Abandoned Gate or Grid, or Gate and Grid

An authorised person may consider that a gate or grid, or a gate and a grid is abandoned for a number of reasons including:

- (a) No new responsible person is identified after 30 business days of a cancellation of an approval holder; or
- (b) An unapproved or non-compliant structure where a responsible person cannot be determined.
- In these cases, Council will:
- (a) Erect a public notice at the location of the gate or grid, or the gate and the grid a minimum of 20 business days prior to its removal; and
- (b) After this time, if no application is received, may seize and impound the structure in accordance with Local Law No. 1.

#### 5.7.25.6.2 Non-Compliant Gate or Grid, or Gate and Grid

If at any time, an authorised person considers a gate or grid, or a gate and a grid to be noncompliant. Council will:

- (a) Where practical and possible, liaise with the responsible person to correct the noncompliances; and
- (b) May issue a compliance notice in accordance with Local Law No. 1.

Where non-compliances are not remedied, the structure may be seized and impounded and costs recovered in accordance with Local Law No. 1.

#### 5.85.7 Fees and Charges

An application fee and renewal fee applies as per Council's adopted Fees and Charges Schedule for the current financial year.

There is no fee associated with a cancellation or transfer application.

Application fees are not refundable if an application for an approval is refused or where an approval is cancelled. Fees may be refunded in accordance with Council's Refund, Exemption and Reduction of Fees and Charges Policy.

#### 5.95.8 Amending, Suspending or Cancelling Approval

Council may consider there are grounds under section 17 of Local Law No. 1 to amend, suspend or cancel an approval. These grounds and procedures are set out in sections 17 – 19 of Local Law No.1.

#### 6 Review Timelines

- This policy is reviewed when any of the following occur:
- (a) The related information is amended or replaced; or
- (b) Other circumstances as determined from time to time by the Council.

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### 7 Document Management

Sponsor	Chief Executive Officer
Business Owner	General Manager Community Services
Policy Owner	Manager Planning and Regulatory Services
Policy Quality Control	Legal and Governance

## **OUR VALUES**



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Adopted/Approved:	Adopted, 4 February 2020DRAFT	Department:	Community Services		
Version:	2	Section:	Planning and Regulatory Services		
Reviewed Date:		Page No:	Page 7 of 7		

# AMENDMENT TO GATES AND GRIDS POLICY

# Draft Gates and Grids Policy (Clean)

Meeting Date: 21 June 2022

**Attachment No: 2** 

Rockham

# GATES AND GRIDS POLICY

#### 1 Scope

This policy applies to gates and grids across a road under Rockhampton Regional Council's control. This policy does not apply to gates and grids located on property boundaries.

#### 2 Purpose

The purpose of this policy is to outline Council's approach for managing gates and grids installed across Council controlled roads.

#### 3 Related Documents

#### 3.1 Primary

Subordinate Local Law No. 1.17 (Gates and Grids) 2019

#### 3.2 Secondary

Anti-Discrimination Act 1991 Human Rights Act 2019 Local Government Act 2009 Local Government Regulation 2012 Local Law No. 1 (Administration) 2011 Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011 Subordinate Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2019 Transport Operations (Road Use Management) Act 1995 Capricorn Municipal Development Guidelines - Heavy Duty Cattle Grid Standard Drawing CMDG-G-020 and 6.0m Gate Detail Standard Drawing CMDG-G-019 Compliance Inspection Checklist Fees and Charges Schedule Gates and Grids Application Form Gates and Grids Approval Renewal Form Gates and Grids Cancellation or Transfer Form Gates and Grids Fact Sheet Gates and Grids Public Notification Guide Gates and Grids Whole of Council Work Instruction Queensland Manual of Uniform Traffic Control Devices Department of Transport and Main Roads

Refund, Exemption and Reduction of Fees and Charges Policy

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### 4 Definitions

To assist in interpretation, the following definitions apply:

Authorised Person	A person who is appointed under a Local Government Act to ensure members of the public comply with the relevant Local Government Acts in relation to the local government and the Region.			
Council	Rockhampton Regional Council			
Existing Gate or Grid, or Gate and Grid	A gate or grid, or gate and grid installed prior to 4 February 2020 and the responsible person has been issued a current decision notice approval from an authorised person.			
Gate	As defined in <i>SLL 1.17</i> , a hinged or sliding barrier used to close an opening in a wall, fence or hedge.			
Grid	As defined in Subordinate Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2019, a structure designed to:			
	<ul><li>(a) Permit the movement of pedestrian or vehicular traffic along a road; but</li><li>(b) Prevent the passage of livestock.</li></ul>			
Local Law No. 1	Local Law No. 1 (Administration) 2011			
Region	Rockhampton Regional Area defined by the Local Government Areas of Queensland.			
Responsible Person	As defined in Subordinate Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2019, for a gate or grid installed across a road, means each of the following persons:			
	(a) The person who installed the gate or grid, or the gate and the grid;			
	(b) The person for whose use or benefit of the gate or grid, or the gate and the grid, were installed;			
	(c) The person who has the benefit of the gate or grid, or the gate and the grid installed across the road.			
Road	As defined in Local Law No. 1:			
	(a) A road as defined in the Local Government Act 2009, section 59; and			
	(b) A State-controlled road:			
	<ul> <li>Prescribed under a subordinate local law for this subparagraph as a road to which this local law applies unless otherwise provided; and</li> </ul>			
	<ul> <li>(ii) In respect of which the chief executive has given written agreement under the <i>Transport Operations (Road Use Management) Act 1995</i>, section 66(5)(b).</li> </ul>			
SLL1.17	Subordinate Local Law No. 1.17 (Gates and Grids) 2019			
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#### 5 Policy Statement

Council endeavours to minimise unreasonable nuisance and the potential for motorists to be exposed to safety hazards whilst utilising a road.

Council does however acknowledge that a gate, or a gate and a grid may be required under certain circumstances where other methods of controlling livestock, such as fencing is impractical. This policy ensures that where a gate, or a gate and a grid are permitted they are installed, managed and maintained to an acceptable and consistent standard which minimises unreasonable nuisance and safety risk to road users.

Council will not approve the installation of a grid without a gate.

#### 5.1 Prescribed Activities and Compliance with Local Laws

The installation of a gate, or a gate and a grid across a road, and being a responsible person for a gate, or a gate and a grid installed across a road are prescribed activities within SLL1.17. Such activities must be approved and remain compliant in accordance with this subordinate law. Approvals may be transferred in accordance with Local Law No. 1.

#### 5.2 Applications for New Installations

Applicants seeking approval for new installations must complete the Gates and Grids Application Form and submit with the required supporting documentation and application fee.

Applications received are assessed in accordance with the criteria specified within SLL1.17 and this policy.

#### 5.2.1 Public Notification

Public notification is required to be completed by applicants as part of the application process. The applicant is advised when this should commence.

The public notification period must last for 15 business days and involves the erection of a notice at the location of the proposed gate or gate and grid. The notice must be in the approved form as detailed in the Gates and Grids Public Notification Guide.

Evidence of the public notification must be supplied to Council not more than 10 business days after the public notification period ends (or a further agreed period) before the application is progressed. If not received, the application may lapse.

Submissions must be received by Council in writing within the public notification period and must:

- (a) State the name and residential address of the submitter; and
- (b) State the grounds for the submission, including facts and circumstances relied on for the grounds.

#### 5.2.2 Application Assessment

Applications are assessed in accordance with the criteria specified in SLL1.17 and with consideration to the following:  $\label{eq:scalar}$ 

- (a) The need to contain livestock and if a viable alternative method is available;
- (b) Applications are generally only considered on roads that are unfenced, or partly fenced;
- (c) If the proposed gate or gate and grid creates an unreasonable obstruction, or disruption to vehicular or pedestrian traffic;
- (d) Submissions received during the public notification period; and
- (e) The characteristics of the road assessed as follows:

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Table of Assessment					
Road Class	Annual Average Daily Vehicle Count	Average Daily Sealed Earn			
10	≤10	Grid with Gate	Grid with Gate or Gate*		
30	11-30	Grid with Gate	Grid with Gate		
75	31-75	Grid with Gate	Grid with Gate		
100	76-100	Consideration may be given for Grid with Gate			
125	101-125	Not Acceptable			
150	126-150	Not Acceptable			
199	>150	Not Acceptable			

\*Gates are only considered where:

- (a) The use of a gate in the proposed location is considered by an authorised person to be more appropriate than a grid with a gate; and
- (b) The gate will primarily only impact the responsible person/applicant's property.

If an application is approved, a Decision Notice Approval is issued to the applicant and is valid to 30 June, for a term of no more than 5 years.

If an application is refused, a Decision Notice Refusal and Information Notice is issued to the applicant. The applicant may request a decision review under Local Law No. 1.

#### 5.3 Approval Cancellations or Transfers on Property Sales

If the responsible person sells their property, they must notify Council on the Gates and Grids Cancellation or Transfer Form within 30 business days of the transfer of ownership of the property to cancel or transfer their approval thus cancelling their responsibility for the gate or grid, or the gate and the grid that was covered by the approval. Fees paid previously are not refunded when the approval is cancelled or transferred.

If an application to cancel or transfer has not be received within 30 business days, Council may consider the structure to be abandoned and will commence procedures as set out in paragraph 5.6 of this policy.

There is no fee associated with a transfer application and transferred approvals shall apply to the end of the current approval period.

#### 5.4 Approval Term and Renewals

Approvals are granted for the term specified in the Decision Notice Approval.

Council issues a renewal notice before the approval expires and includes a Gates and Grids Approval Renewal Form and a Compliance Inspection Checklist.

Council assesses renewals to ensure the gate or grid, or the gate and the grid continues to comply with SLL 1.17 and the conditions of approval before issuing a new Decision Notice Approval, however for existing gates or grids, or gate and grid refer to paragraph 5.4.1 for the renewal assessment process.

Approved gates or grids, or gates and grids may, as reasonably necessary, be subject to current engineering standards, specifications and assessment requirements where Council considers circumstances have changed and/or community concerns have arisen.

If the approval is not renewed before expiry, Council may consider the gate or grid, or the gate and the grid to be non-compliant and may commence procedures as set out in paragraph 5.7 of this policy.

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#### 5.4.1 Existing Gate or Grid, or Gate and Grid

If an existing gate or grid, or gate and grid, the authorised person assesses the structure in accordance with the criteria specified in SLL1.17 and with consideration to the following:

(a) The general condition and safety of the structure(s) and warning signage, provided existing structures are, in the opinion of the authorised person, of a safe and appropriate standard, they will not be required to meet current engineering standards and specifications;

(b) The need to contain livestock and if a viable alternative method is available;

(c) Whether the existing gate or grid, or gate and grid is on a road that is unfenced, or partly fenced;

(d) If the existing gate or grid, or gate and grid creates an unreasonable obstruction, or disruption to vehicular or pedestrian traffic; and

(e) The current road classification and usage.

#### 5.5 Obligations of Responsible Person

Conditions of an approval outline all obligations of the responsible person which may include:

- (a) Carrying out all work and/or bearing all costs associated with the permanent signage, installation and maintenance of the gate or grid, or the gate and the grid in accordance with the approved specifications and to the satisfaction of an authorised person;
- (b) Ensuring compliance at all times with the standards and conditions as specified in the approval;
- (c) Constructing drainage in association with the gate or grid, or the gate and the grid to ensure no damming or ponding of stormwater run-off occurs on the road, road reserve or adjoining property or approaches;
- (d) Erecting and maintaining permanent signage in accordance with the Department of Transport and Main Roads Queensland Manual of Uniform Traffic Control Devices;
- (e) Notifying Council at the completion of the work to arrange a final inspection;
- (f) Ensuring ongoing compliance by submitting the completed Compliance Inspection Checklist when applying to renew an approval;
- (g) Maintaining the road, for a distance of five metres on each side of the structure in good, sufficient repair; and
- (h) Maintaining public liability insurance and providing Council with a Certificate of Currency and being personally liable for any damage or injury caused by the structure.

### 5.6 Abandoned or Non-Compliant Gate or Grid, or Gate and Grid

#### 5.6.1 Abandoned Gate or Grid, or Gate and Grid

An authorised person may consider that a gate or grid, or a gate and a grid is abandoned for a number of reasons including:

- (a) No new responsible person is identified after 30 business days of a cancellation of an approval holder; or
- (b) An unapproved or non-compliant structure where a responsible person cannot be determined.

In these cases, Council will:

- (a) Erect a public notice at the location of the gate or grid, or the gate and the grid a minimum of 20 business days prior to its removal; and
- (b) After this time, if no application is received, may seize and impound the structure in accordance with Local Law No. 1.

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#### 5.6.2 Non-Compliant Gate or Grid, or Gate and Grid

If at any time, an authorised person considers a gate or grid, or a gate and a grid to be noncompliant. Council will:

- (a) Where practical and possible, liaise with the responsible person to correct the noncompliances; and
- (b) May issue a compliance notice in accordance with Local Law No. 1.

Where non-compliances are not remedied, the structure may be seized and impounded and costs recovered in accordance with Local Law No. 1.

#### 5.7 Fees and Charges

An application fee and renewal fee applies as per Council's adopted Fees and Charges Schedule for the current financial year.

There is no fee associated with a cancellation or transfer application.

Application fees are not refundable if an application for an approval is refused or where an approval is cancelled. Fees may be refunded in accordance with Council's Refund, Exemption and Reduction of Fees and Charges Policy.

#### 5.8 Amending, Suspending or Cancelling Approval

Council may consider there are grounds under section 17 of Local Law No. 1 to amend, suspend or cancel an approval. These grounds and procedures are set out in sections 17 – 19 of Local Law No.1.

#### 6 Review Timelines

This policy is reviewed when any of the following occur:

- (a) The related information is amended or replaced; or
- (b) Other circumstances as determined from time to time by the Council.

#### 7 Document Management

Sponsor	Chief Executive Officer	
Business Owner	General Manager Community Services	
Policy Owner	Manager Planning and Regulatory Services	
Policy Quality Control	Legal and Governance	

### **OUR VALUES**



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## 10.3 PRELIMINARY BUSINESS CASE KERBSIDE ORGANICS SERVICE

File No:	13511
Attachments:	Nil
Authorising Officer:	Michael O'Keeffe - Manager Rockhampton Regional Waste and Recycling Peter Kofod - General Manager Regional Services
Author:	George Meacham - Coordinator Strategy and Education

## SUMMARY

A preliminary business case report to Council outlining latest findings of the FOGO Trial and providing early discussion points in anticipation of a final business case being prepared in support of a whole of community roll-out of a kerbside organic bin service.

### **OFFICER'S RECOMMENDATION**

THAT the report be received.

## SUMMARY

Council is currently undertaking a feasibility study into a community wide kerbside organic service, including a 12 month FOGO trail of 762 local households.

Current progress of this project against internal and regulatory performance measures is summarised in the table below:

Source	Performance Measure	RRC Progress	Status
RRC Waste	63% diversion from landfill by 2025	The FOGO Trial is currently achieving a diversion rate of	
Strategy 2020- 2030		71% across two FOGO service areas	
Queensland	75% of councils in the levy zone have	A full business case will be presented to Council in FY	
Organics Action	business cases for organics solutions	2022-23, pending final evaluation of FOGO trial learnings,	
Plan 2022- 2032	completed by 30 June 2023	finalisation of RRWR long term financial modelling and further clarification of State government funding	
2032		commitments for FOGO roll-out	
	Improved organics management	Subject to final business case recommendations and	
	services in place across Queensland	subsequent Council approval, service can be delivered to	
	by 2026 in SEQ and major regional	meet this target	
	council areas		
	Householders report a positive	Positive initial response from trial participants, we are	
	satisfaction rating with their service	soon to undertake mid trial surveying to monitor ongoing satisfaction levels	
	All councils that provide an organics	Initial estimates are that we would need to change over	
	collection service to adopt the	16,000 existing green bin lids to red lids to meet Australian	_
	Australian standard bin lid colour prior	Standards. Estimated cost is \$300k for purchase of lids and labour. We would be seeking State Government	
	to education commencing.	funding support, and would need to progress this program	ō
		as a priority in advance of any organics service roll-out	
	By 2025, 65% of households have	Subject to final business case recommendations and	
	organics capture services, rising to	subsequent Council approval, service can be delivered to	
	80% by 2030.	meet this target	
	By 2030, capture rates of 50% for food	FOGO trial minimum recovery rate of 40%. Additional	_
	organics (FO)	education is planned for remainder of trial and more	
		accurate data capture will be employed in final audit.	0
	By 2030, capture rates of 90% for garden organics (GO)	FOGO trial average recovery rate of 96%	$\checkmark$
	By 2030, contamination rates of <1%	FOGO trial contamination rates currently between 3-6%.	_
		However, Council does not believe 1% is an achievable	
		target, and has established 3% as its own target	Ō
	Regional Waste Management Plans to	CQROC currently working towards a regional waste	
	recommend improved organics	infrastructure plan within this timeframe.	
	management solutions and timing by 30 June 2023.		
	30 Julie 2023.		

# BACKGROUND

The diversion of organics from landfill is a well recognised mechanism for delivering environmental, economic and social benefits:

- reduced exposure to landfill disposal costs, including waste levies
- recirculation of valuable resources in the economy, leading to investment in local infrastructure and creating local jobs
- reduced demand on virgin materials, conservation of land, more efficient and sustainable agricultural practices
- social benefits arising from the increase in local food security, resilience and regional self-reliance
- reducing emissions from organics disposal in landfill.

# Policy Environment

A strong policy framework now exists across all levels of Australian Government focused on the diversion of waste from landfill, with the reuse of organics given immediate priority.

In 2019, the *National Waste Policy Action Plan*<sup>1</sup> committed Australia to achieving the following targets in respect of organic diversion:

- 80% recover rate from all waste streams by 2030
- Halve the amount of organic waste sent to landfill by 2030.

This has been backed up by the Queensland Government firstly in its 2019 commitment to achieve zero waste by 2050<sup>2</sup> (*Waste Management and Resource Recovery Strategy*) and followed up in early 2022 with commitments made in the *Queensland Organics Strategy*<sup>3</sup>:

- 80% of organic materials generated will be diverted from landfill by 2030
- A minimum of 70% recycle rate for organics will be achieved by 2030.

In respect of local government, the *Queensland Organics Strategy* goes on to commit to the following actions:

- Local governments to conduct a business case to identify the best fit-for-purpose option to improve household organic waste management in their local government area
- Local governments to use the findings of their business case to implement solutions to improve household organic waste management in their local government area.

In 2020 Rockhampton Regional Council (Council) published its *Waste Strategy 2020-30*<sup>4</sup> in which it also made a commitment to zero waste by 2050, and identifying organic diversion as an early priority: *"Strategic Action 2.1.1. Develop an organics business case. To establish best combined collections and processing solution to maximise the diversion of our organic waste stream."* 

# Waste Levy Considerations

In December 2021, the Queensland Government announced its intention to make the following regulatory amendments in respect of the Waste Levy<sup>5</sup>. These amendments will directly impact Council as follows:

• All levy rates will now be increased year on year by CPI

<sup>3</sup> Department of Environment and Science (2022).

- <sup>4</sup> Rockhampton Regional Council (2020). <u>Waste Strategy 2020-30</u>
- <sup>5</sup> Queensland Government (2021).
- https://www.qld.gov.au/environment/pollution/management/waste/recovery/disposal-levy/about/from-1-july-2022

<sup>&</sup>lt;sup>1</sup> Department of the Environment and Energy (2019). *National Waste Policy Action Plan* 

<sup>&</sup>lt;sup>2</sup> Department of Environment and Science (2019). <u>Waste Management and Resource Recovery</u> <u>Strategy</u>

https://www.qld.gov.au/environment/pollution/management/waste/recovery/reduction/organicsstrategy

• The MSW rebate, a reimbursement currently paid to offset the full cost of the levy on domestic ratepayers, is to be decreased year on year to a rate of 20% by 2030.

As a result of these changes, if Council does nothing to the current quantity of waste going to landfill, the cost burden on our domestic ratepayers will be an additional \$13M over the eight years to 2030, of which \$8M will be generated by kerbside general waste and will need to be recovered via the utility charge.

Note report to Council *Queensland Government Waste Levy Update (15-Mar-22)* providing details on the full impact of the waste levy.

Waste audit data shows that over 50% of this waste stream is compostable organic material. In 2021-22 this is a potential 10,500 tonnes of organic material that could be diverted from landfill, increasing to 11,500 tonnes by 2030.

In addition to the increased waste levy cost, the construction and ongoing operation of landfill assets is expensive and the life of our existing facility is finite. Increasing diversion will extend the life of this asset, mitigating the financial burden on ratepayers and reducing the high carbon impact of burying organic materials.

### PREVIOUS DECISIONS

### Feasibility Study

In July 2020, an options analysis was presented to Council evaluating the viability of a kerbside organic service, from which it was resolved that a full feasibility study (business case) should be undertaken to evaluate two preferred options shown below.

SIN SERVICE	ASE CASE (CURRENT SERVICE)	PTION 1	PTION 2
ENERAL WASTE	VEEKLY 240L	VEEKLY 120L	ORTNIGHTLY 120L
ECYCLING SERVICE	ORTNIGHTLY 240L	ORTNIGHTLY 240L	ORTNIGHTLY 240L
RGANIC SERVICE		ORTNIGHTLY 240L GARDEN ORGANICS (GO) ONLY	VEEKLY 240L FOOD AND GARDEN ORGANICS (FOGO)

TABLE 1: PREFERRED OPTIONS ARISING FROM OPTIONS ANALYSIS PRESENTED TO COUNCIL IN JULY 2020

As well as evaluating the viability of the above options, it was agreed that the business case would make recommendations in respect of the following key project decisions:

- Options for organic processing solution
- Contracted versus internally managed kerbside collections
- Potential pricing options to accommodate a variety of bin service configurations.

# FOGO Trial

Subsequent to the above decision to move to a full business case, Council secured funding from the Queensland Government to undertake a 12 months Food Organics Garden Organics (FOGO) Trial. The trial commenced in October 2021 and will run for 12 months. Three distinct sample groups are being used as shown in table below.

#### TABLE 2: FOGO TRIAL CONFIGURATIONS BEING TESTED

NEIGHBOURHOOD	ORGANICS	GENERAL WASTE	CADDY & LINERS
GRACEMERE (252 BINS)	WEEKLY 240L FOGO SERVICE	FORTNIGHTLY 140L	KITCHEN CADDY AND YEAR'S SUPPLY OF CADDY LINERS PROVIDED
SOUTHSIDE (255 BINS)	WEEKLY 240L FOGO SERVICE	FORTNIGHTLY 140L	KITCHEN CADDY ONLY PROVIDED
NORTHSIDE (257 BINS)	FORTNIGHTLY 240L GO SERVICE	WEEKLY 240L	-

The focus of this trial is to test a series of critical assumptions, in particular that the preferred service configurations can deliver against the following critical performance targets:

- A garden organics (GO) diversion rate of >95%
- A food organic (FO) diversion rate of > 50%
- A food and garden organic (FOGO) contamination rate of < 3%<sup>6</sup>
- Service cost per household is feasible.

Data is being gathered using three principal methods:

- Three kerbside bin audits (baseline, mid trial and end of trial)
- Attitudinal surveys (baseline and end of trial)
- Bin health check program (ongoing throughout the trial duration).

A variety of targeted educational and communication interventions are to be evaluated to determine the most effective methods for delivering the desired behaviour change.

The trial will also be used to evaluate risks, opportunities and costs associated with:

- Bin, caddy and caddy liner distribution and logistics
- Impact of reduced bin size and service frequency for general waste
- Kerbside collection service delivery
- Processing technology
- Public attitude and appetite for organic service.

# COMMENTARY

### Mid Trial Findings

The FOGO Trial is in week 36 of 52 at time of writing this report. Headline performance measures from the mid trial audit completed in week 26 include:

- Reduction in weekly residual waste in areas with full FOGO service from 14kg to 6kg per week per household, but no change in residual waste in GO only service area
- Recovery rate of at least 40% of all available food organics
- Recovery rate of 96% of all available garden organics
- Total organics recovery rate of 71% in FOGO service areas, 36% in GO only service area
- Contamination rates in FOGO service areas at 5-6%, and in GO only area at 3%
- Increase in waste presented at kerbside of between 39-63%
- Bin presentation rates of 67% across whole trial.

These findings are given in more detail in the table below.

<sup>&</sup>lt;sup>6</sup> *Guidelines for Auditing Kerbside Waste in Victoria*, Sustainability Victoria, 2009 (p34 for definitions of Key Performance Indictors)

				Mid Trial		
Metric	Waste Stream	UoM	Gracemere	Southside	Northside	Comment
			Weekly FOGO	Weekly FOGO	Fortnightly GO	
	Pre-trail residual	%	85%	89%	95%	
Presentation Rate	Mid-trial residual	%	88%	94%	92%	increase in FOGO areas
	Mid-trial organics	%	63%	66%	67%	comparable to commingled presentation
	Pre-trail residual	kg/hh/wk	13.6 kg	14.3 kg	14.4 kg	
	Mid-trial residual	kg/hh/wk	6.3 kg	5.6 kg	15.1 kg	fortnightly GO service is not reducing the weekly residual load
Generation	Mid-trial organics	kg/hh/wk	14.1 kg	14.3 kg	8.4 kg	
	Mid-trail total	kg/hh/wk	20.4 kg	19.9 kg	U U	
	Increased generation	%	50%	39%	63%	significant increased quantity not previously presented at kerbside
Contamination Rate	Organics	%	6%	5%	3%	higher than 3% target
	FO	%	87%	72%	n/a	This is inflated as the audit did not measure FO content in plastic bags
Recovery Rate	FO (adjusted)	%	44%	36%	n/a	adjusted rate if we assume all organics in plastic bags was FO
	GO	%	99%	99%	90%	not hitting 95% recovery target in GO only area
	All	%	69%	72%	36%	overall recovery in FOGO areas is mid to high performing

#### TABLE 3: MID TRIAL COMPOSITIONAL AUDIT FINDINGS

The reduction in general waste in the FOGO service areas is very positive, as the viability of this service rests in large part on achieving the target level of diversion from landfill.

As such, the total organics recovery rate of 71% in FOGO service area and recovery rates on garden organics of 99% in the FOGO service areas are both in excess of these targets. The lower recovery rate of just 90% for garden organics in the GO only trial area does suggest that the reduced bin size and fortnightly service frequency is an important behavioural driver for achieving higher recovery rates.

Recovery rates for food organics recorded in the audit is "a minimum of 40%". This rate is potentially higher, but the audit failed to measure the split between food versus garden organics presented in plastic bags, so for the purposes of not overstating the performance, all such waste has been assumed to be non-recovered food organics. Since the target recovery for food organics is 50%, this metric will be monitored very carefully to end of trial and more accurate data capture will be undertaken in final audit.

The trial has also seen a significant increase in the quantity of total waste being presented at the kerbside, varying from 39% to 63%. This is presumed to be garden organics that were previously either mulched in the garden or self-hauled to the local waste facility. This does have a cost implication to a future service roll-out, with additional collection costs and processing costs arising. This will however be partially offset by the corresponding reduced handling and processing cost that will no longer be required at our waste facilities.

Contamination rates in both our FOGO service areas are between 5-6%, higher than our target of 3%. Whilst this is of concern, it is also true that from our bin inspection data, it is a minority of around 10% of participants that are causing the majority of the problem.

Most of the contamination is bagged general waste. Again, we will be using the remainder of the trial to test out engagement and educational strategies to combat these issues.

Presentation rates for the organic bins have consistently been tracking at around 67%.

Participant response to the trail has been overwhelmingly positive. Where participants have raised issues, it has been focused on the following:

- Reduced general waste bin capacity and service frequency has been the most common issue, of the total 164 customer service requests handled, 120 have been regarding this issue. Of these, we have to date upsized 83 of the 140L bins back to standard 240L (this is 16% of participants issued with 140L bin). These have been almost exclusively large, young families.
- The second most common issue has been nuisance factors, primarily during the summer months, as residents sought additional advice to manage maggots, flies and bin odour issues.

# End of Trial

The FOGO trial is scheduled to run until 30<sup>th</sup> September 2022, after which time a decision will need to be made on what ongoing service we will offer the 762 participating households. The options are likely to be one of the following:

- 1. Cease organic services and return all participants to our standard two bin system
- 2. Continue to offer participants current service level, Council absorbing the cost
- 3. Continue to offer participants current service level, at an additional cost to fully or partially absorb the cost to Council.

A survey of participants is being prepared to canvas their preferences, and a separate report will be brought to Council making a final recommendation based on survey results, a financial analysis and other cost/benefit and reputational considerations.

## Feasibility Study

A full evaluation of the feasibility study, in the form of a business case will be presented to Council in FY2022-23, subject to finalisation of the following key inputs:

- Clarification from Queensland Government on quantum and structure of funding to Councils in support of FOGO implementation
- Finalisation of RRWR full cost pricing and airspace consumption modelling currently being developed by external consultants Resource Innovation, and in turn contingent upon finalisation of landfill concept design review currently underway by ATC Williams
- Final evaluation of the findings from the FOGO Trial.

The business case will need to fully explore and make recommendation on each of the identified risk factors highlighted in the table below:

#### TABLE 4: RISK FACTORS TO BE EXPLORED IN BUSINESS CASE

<b>Risk Factor</b>	Considerations
Service scope decisions	It will not be viable to extend an organics service to all current designated collection areas, particularly the outlying rural areas where typically organics are already largely dealt with on property. Initial estimates anticipate that perhaps 30,000 households out of the existing 32,000 will fall within a viable "urban" organics service area.
Bin standardisation	There is a very significant program of work required to switch all existing green lids on general waste bins to red lids. This is a critical precursor to rolling out an organics service to support our subsequent education and engagement strategies. Current estimates are that we may need to switch out 16,000 green lids, which would cost us around \$300k. This issue is being raised with State Government by ourselves and others in hope that some financial support will be forthcoming.
In-house v contracted collection services	Whilst the Council preference is to retain in-house staff and fleet to deliver any new kerbside collection services, in-house servicing will come at a financial premium which will need to be subject to full and explicit cost benefit analysis as part of the final business case.
Multi-dwelling units (MUDs)	Separate consideration will be given to how best to service MUDs given their unique requirements in terms of transferring waste from unit to kerbside, limited outdoor space in which to store bins, limited direct accountability where using shared bins, etc.
Procurement risk	Due to the ambitious targets being set at state and federal levels of government, we anticipate that there will be a serious supply side delay over the coming years for both collection trucks and bin stocks. The lead time for a truck is already 12-18 months, and once large councils in SEQ move to implement FOGO in 2023-25, supply chains will likely come under extreme pressure.
Processing procurement	We will be tendering for external contractor to deliver a suitable processing solution, but this in itself has inherent risks attached for proponents, including securing a suitable licenced site in the region and ensuring that increasingly stringent EPA guidelines and regulations are being met. This does mean that our ability to accurately estimate processing gate fees are somewhat limited in advance, with the higher end cost scenario being the one that we will likely have to plan for.
Funding uncertainty	The State Government has now provided certainty over the Waste Levy rates for the next 10 years (with review planned at 2025) which does make our modelling of operational costs and benefits much more robust. However, there continues to be little clarity on what level of funding is going to be made available to assist with implementation costs, including bin purchases, education and roll-out logistics. The current thinking is that a rate per household (akin to the NSW funding model) will be agreed, with negotiations and consultation ongoing at this time.
Education & engagement	It is imperative that there is a strong commitment to a suitably funded education and engagement campaign in support of roll-out. This will need to include personnel engaged on a contract basis for a minimum of 12 months over the period of the roll-out. This additional capacity will play an important role in engaging with various stakeholders to ensure we optimise community support for this service. This would include local businesses directly impacted such as garden bag providers.
Resourcing the implementation	It is imperative that there are suitable staff resources made available to support the implementation of this service. This will include suitable support to prepare data, communications and customer service capacity during the roll-out period, and additional on-ground operational resources to assist with bin distribution and troubleshooting during implementation.
Inclusion of compostable packaging	The decision to either include or exclude compostable packaging will have a direct impact on several other areas of our operation, including the potential to reduce compostables contamination in the yellow lid bin, community education on correct identification and disposal of compostables, FOGO processor's preferences and our future approach to event waste management.

#### BUDGET IMPLICATIONS

Whilst full cost benefit analysis is yet to be completed, the following indicative budget impacts are anticipated.

#### Indicative Roll-out Costs

TABLE 5: INDICATIVE FOGO ROLL-OUT COSTS

Cost Item	UoM	Qty	Unit Cost	Project Budget	\$ per hh
Collection vehicles	Vehicles	4	420,000	1,680,000	\$ 56.00
Wheelie bins	Bins	32,000	50	1,600,000	\$ 53.33
Wheelie bin lid changeover	Lids	16,000	18	288,000	\$ 9.60
Kitchen caddies	Caddies	32,000	7	224,000	\$ 7.47
Caddyliners	Liners	20,000	10	200,000	\$ 6.67
Bin distribution costs	Weeks	6	8,000	48,000	\$ 1.60
Education & Marketing	\$	1	300,000	300,000	\$ 10.00
Implementation Resources	FTE	5	100,000	500,000	\$ 16.67
Roll-out Costs				4,840,000	\$ 161.33

We are currently seeking clarification from the State Government on the level of funding support we can expect to assist with the above roll-out costs.

#### **Operational Costs**

Operational costs will be subject to several yet to be fully confirmed factors:

- Collection costs will be contingent on decision to use in-house versus contracted service delivery
- Processing costs will likely need to be budgeted at cost of in-vessel composting so as to ensure any facility meets highest potential regulatory requirements
- The phased reduction of the MSW waste levy rebate will increase the value of diversion from landfill, acting as an incentive to implement the organic service sooner rather than later.

Note that before Council makes any decision to implement a kerbside organics service it will need to register this project with the Clean Energy Regulator to receive Australian carbon credits.

#### STAFFING IMPLICATIONS

Again, without locking in any decisions, based on experiences from a range of LGAs in other jurisdictions with which we have directly engaged (including Randwick, City of Melville, Penrith and Shellharbour), the following staffing complement for a 12 month period spanning either side of the roll-out is anticipated as reasonable:

#### TABLE 6: INDICATIVE FOGO ROLL-OUT TEMPORARY STAFFING COSTS

Cost Item	UoM	Qty	Unit Cost	Project Budget	\$ per h
Project Staff:					
Project Officer	FTE	1.0	120,000	120,000	\$ 4.0
Communications Officer	FTE	1.0	100,000	100,000	\$ 3.3
Education Support Officer	FTE	1.0	100,000	100,000	\$ 3.3
Operations Officer	FTE	1.0	90,000	90,000	\$ 3.0
Operations Officer	FTE	1.0	90,000	90,000	\$ 3.0
Roll-out Costs		5.0		500,000	\$ 16.6

Note that these costs are already included earlier in this section under "Indicative Roll-Out Costs".

In addition, should we seek to deliver collection services using in-house staff, Council will require an additional 4 or 5 new driver positions, plus our fleet will increase by a comparable number of trucks.

#### CONCLUSION

The RRWR team's primary focus in respect of this project is now on completing the trial and preparing a full business case for Council consideration in FY2022-23.

This will include completing the ongoing work with external consultants to deliver full cost pricing and airspace consumption modelling.

We will also be working closely with State Government, LGAQ, and other regional Councils in Queensland to ensure we are in receipt of suitable funding and technical support to assist with this project.

#### 10.4 DERBY STREET DESIGN CONSULTATION OUTCOMES

File No:	1963
Attachments:	<ol> <li>Consultation Responses Part 1. 2. Consultation Responses Part 2 (Confidential)</li> <li>3. Summary Consultation Issues and Recommendations.</li> <li>4. Derby Street Concept Design proposed changes.</li> </ol>
Authorising Officer:	Stuart Harvey - Coordinator Infrastructure Planning Martin Crow - Manager Infrastructure Planning Peter Kofod - General Manager Regional Services
Author:	Jamie Meyer - Infrastructure Planning Engineer

#### SUMMARY

Public consultation for the Derby Street Design was open from Tuesday 26 April 2022 to Sunday 15 May 2022. This report presents the outcomes of the consultation and recommendations for Council to undertake detailed design.

#### OFFICER'S RECOMMENDATION

THAT the changes as outlined in the Summary of Derby Street Consultation Issues and Recommendations are endorsed and detailed design commence.

#### COMMENTARY

Council resolved on 15 March 2022 to undertake public consultation for the concept Derby Street Design. Subsequently, public consultation commenced on Tuesday 26 April 2022 and ended Sunday 15 May 2022.

Letters and survey forms were mailed to properties adjacent to Derby Street (between Canning Street and Denison Street) and an online survey was made available on Council's Engage website. A total of 55 responses were received.

The survey results (Attachments 1 and 2) show that there is strong support for the proposed design with 67% of respondents agreeing that the proposed design will create a safer environment for cyclists and pedestrians; 64% supporting the addition of on-road cycle lanes along Derby Street; and 74% of respondents supporting the addition of a shared path on the northern side of Derby Street. Only 29% of respondents thought the proposed design will encourage more walking and cycling with 40% saying no and 31% unsure. Just over 50% of respondents supported the addition of a landscaped centre median with 35% not supportive and 14% unsure.

This low level of support for a landscape centre median is reflected by the comments received and are discussed further in Attachment 3. A number of issues and concerns were raised during consultation and Attachment 3 provides a summary of these and recommendations to address them.

As a response to the issues raised, it is recommended the following changes are made as part of the detailed design:

- 1. Formalise car parking by line marking angle car parks on George Street (both sides of Derby Street) and Campbell Street (between Derby Street and William Street).
- 2. Include a right turn lane to access Hay Street and The Cathedral College car park on Derby Street.
- 3. Review opportunities for tree planting during detailed design.

It is also recommended that when the project proceeds to construction, that:

- 4. Painted chevron medians be installed between Canning Street and George Street instead of the concrete medians until a strategy has been developed that addresses the drainage issues and the construction of a concrete median does not adversely impact properties during rain or flood events.
- 5. The Talford Street intersection remains a priority controlled intersection as it currently is, until such time that the intersection's level of service or safety warrants the installation of traffic signals

The proposed recommendations aim to provide a balanced design that ultimately improves amenity, safety and network function for all road users.

#### BACKGROUND

Council has received funding through the Department of Transport and Main Roads 2020-21 Cycle Network Local Government Grants Program to undertake detailed design for the provision of cycling facilities on Derby Street from Canning Street to Denison Street.

The Cycle Network Local Government Grants Program allows the Queensland Government to work with local governments to deliver best practice, high quality and safe cycling infrastructure and facilities on principle cycle networks across Queensland. Derby Street is classified as a high priority route of the Rockhampton Principle Cycle Network.

#### PREVIOUS DECISIONS

On 10 December 2019, Council resolved to submit the detailed design for on-road and offroad cycle facilities on Derby Street, from Canning Street to Denison Street to the 2020/21 round of the Cycle Network Local Government Grants Program.

On 15 March 2022, Council resolved to undertake public consultation for the proposed Derby Street Design.

#### CONCLUSION

Public consultation has been undertaken for the Derby Street design and Council officers have considered all responses and have made recommendations for the detailed design. It is recommended that Council endorse the proposed recommendations and detailed design be undertaken.

# DERBY STREET DESIGN CONSULTATION OUTCOMES

### **Consultation Responses Part 1**

Meeting Date: 21 June 2022

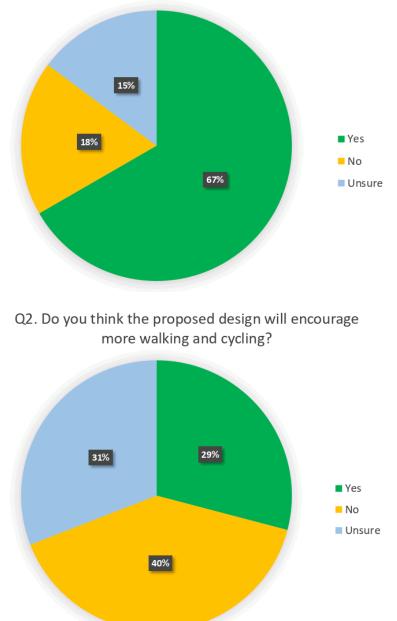
# **Derby Street draft design**

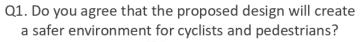
#### SURVEY RESPONSE REPORT: PART 1 26 April 2022- 15 May 2022

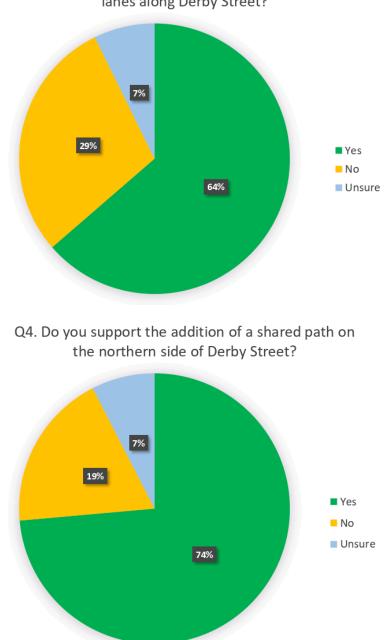
PROJECT NAME: Derby Street Upgrades Derby Street draft design : Survey Report for 26 April 2022 to 15 May 2022

### SURVEY QUESTIONS

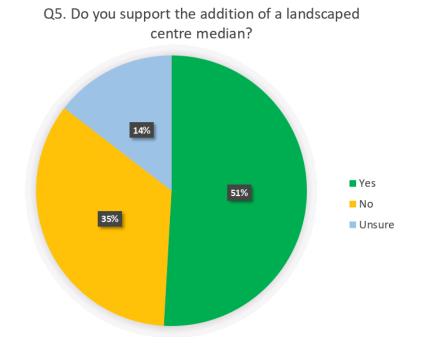
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Q3. Do you support the addition of on-road cycle lanes along Derby Street?



# DERBY STREET DESIGN CONSULTATION OUTCOMES

## Summary Consultation Issues and Recommendations

Meeting Date: 21 June 2022

Issue	No. of respondents	% of respondents	Recommendation
Vegetation in centre median	11	20%	No change to design. There were 11 respondents who opposed the use of vegetation in the centre median citing visibility or safety issues. Vegetation in routinely incorporated into road centre medians in accordance with CMDG and Planning Scheme policy. Adequate sight distance requirements will be calculated as part of the detailed design process.
Removal of car parks and parking restrictions	10	18%	Include marked angle parking bays on George Street and Campbell Street. 10 respondents opposed the idea of reducing car parking spaces as the design proposes by changing angle parking to parallel parking between George Street and Campbell Street (loss of 24 car parks). The main impact would be to the adjacent businesses between George Street and Campbell Street.
			To gain an understanding of current parking occupancy rates, a survey was undertaken between the hours of 8am and 4pm on Thursday 2 June. During the survey, officers inspected the car parks hourly and recorded vehicle registration numbers. The survey showed that 6 car parks were occupied by what appeared to be cars for sale for the duration of the survey, 9

Summary of Derby Street Consultation Issues and Recommendations

Issue	No. of respondents	% of respondents	Recommendation
			car parks were not occupied at all and the most car parks occupied at any time was 20 or 54% of total car parks. A previous car parking survey undertaken in 2020 showed similar occupancy rates. This would suggest that the proposed reduction of car parks from 37 to 13 is unlikely to adversely affect the neighbouring businesses.
			However, it is proposed to formalise car parking by line marking angle car parks on George Street (both sides of Derby Street) and Campbell Street (between Derby Street and William Street) to offset the parking lost on Derby Street. It is expected that this would provide approximately 70 formalised car parks for the surrounding businesses.
			It is important to note that if these businesses premises were being developed today, they would be required to provide on- site parking as outlined in the Access, parking and transport code. In the case of one of the larger businesses, this would equate to approximately 30 on-site car carks required (1 park per 100m <sup>2</sup> of total use area).

Issue	No. of respondents	% of respondents	Recommendation
Talford Street traffic signals	7	13%	No change to design. There were 7 responses regarding the proposed traffic signals at Talford Street such as whether they were necessary and whether they would hinder traffic flow. One of the key benefits of proposing traffic signals is to provide a safe signalised pedestrian crossing particularly for TCC students. The traffic signals are included as a longer term network strategy and are unlikely to be built as part of the initial project stages. The intersection would remain as a priority controlled intersection as it currently is. When the traffic signals are constructed, they are not expected to decrease the road network level of service as only low volumes of traffic are experienced on Talford Street meaning Derby Street traffic flow will remain uninterrupted the majority of the time. The detailed design will still show the traffic signals as ultimately this is the desired upgrade to improve safety and functionality of the road network.
Derby St / Denison St intersection	6	11%	No change to design. Improvements to the Derby Street / Denison Street intersection will be addressed through a future Blackspot project.

Issue	No. of respondents	% of respondents	Recommendation
Centre median preventing right turning in/out of property	5	9%	Include a right turn lane to access Hay St / TCC car park. Several residents, businesses and the Cathedral College (TCC) said they will be affected by the proposed centre median because vehicles will not be able to turn right into or out of the property. It is acknowledged that while this will cause some inconvenience, there are other routes within the road network that will allow access to all properties. It is proposed that a right turn facility be included to allow vehicles coming from Gladstone Road to access Hay Street and the TCC carpark and drop off/pick up area without having to perform a u-turn at Talford Street intersection. This would allow for easier access particularly for buses approaching from the north. This could be achieved by reducing the length of the right turn lanes between Talford Street and Gladstone Road and providing a space in the centre median for the right turn lane into Hay Street.
No cyclists or pedestrians will use the facilities	4	7%	<b>No change to design.</b> Four respondents commented on whether the pathway of cycle lanes would be used or how often. Derby Street is classified as a high priority route of the Rockhampton Principal Cycle Network Plan which is a key reason it was proposed to be upgraded to include improved walking and cycling infrastructure. This route provides a direct connection for cyclists and pedestrians to and from the CBD, schools and

Issue	No. of respondents	% of respondents	Recommendation
			Allenstown District Centre and provides a safe signalise crossing of the Bruce Highway.
Removal of trees on footpath	2	4%	<b>No change to design.</b> Two responses were not in favour of removing trees in the footpath to allow for a wider path. While the removal of trees is not a preferred solution, it is necessary in this instance if the width for a 2.5m shared path is to be achieved. A shared path is recommended to provide a sufficient width to allow safer interaction by a number of users such as pedestrians and cyclists, in particular school kids and the elderly with mobility devices.
Pathway / cycle network connections	2	4%	<b>No change to design.</b> Two respondents commented that the proposed pathway and cycle lanes won't link up to other parts of the network. This is not the case as the proposed pathway will connect with multiple existing pathways including at either end of the project and with multiple side streets intersecting with Derby Street.

Issue	No. of respondents	% of respondents	Recommendation
No improvement for safety at intersections or speed reduction	2	4%	No change to design. Two respondents commented that the proposed design does nothing to address existing safety issues particularly at intersections. All intersections along Derby Street are signed and line marked to make driver's aware of who has priority. Green surface paint in bicycle lanes are used to highlight potential conflict zones between cyclists and vehicles. These are proposed at locations where each side street intersects with Derby Street and will provide another visual cue for driver's on side streets that they need to give priority to Derby Street road users. With regards to speeding, Council's traffic count data suggests the majority of vehicles on Derby Street conform to the speed limit. Data from the past five years shows that approximately 4% of vehicles exceeded the speed limit which suggests isolated speeding behaviour. In any case, the proposed road upgrades including narrowing the traffic lanes, improved line marking and signage creates an environment that will help discourage driver's from speeding.

lssue	No. of respondents	% of respondents	Recommendation
Bicycles not detected at traffic signals.	1	2%	No change to design. One respondent commented that bicycles are often not detected at traffic signals causing long waits for cyclists. Most traffic lights are controlled by loops embedded in the road surface in the middle of the lane close to the stop line at a signalised intersection. Loops operate through a magnetic wave. When a car disrupts the wave, the signal detects that a car is at the lights. Sometimes bicycles do not trigger the loop to change the lights, simply because they do not contain as much metal as cars. The cycle lanes at the traffic signals may need loops installed. The traffic signals at Gladstone Road are TMR owned and operated. This issue could be raised with TMR during the design process.
Conflict between cyclists and customers	1	2%	No change to design. One of the business owners between George Street and Campbell Street has concerns that customers leaving the premises may be struck by passing cyclists due to close proximity. Regardless of whether a shared path is constructed, cyclists are legally permitted to ride on the footpath. It is considered the risk of a cyclist and customer colliding is low. Most cyclists that wish to travel at speed are likely to use the on-road cycle lanes.

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Issue	No. of respondents	% of respondents	Recommendation
Need more shade/trees in centre median and footpath	1	2%	Review opportunities for tree planting during detailed design. There was one comment that not enough shade is provided and that more street trees need to be planted. A review of how more shade / street trees may be able to be incorporated will be done as part of detailed design.
Potential drainage issues due to centre median	1	2%	No Change to design. Paint chevron medians initially instead of concrete medians until drainage is addressed as part of future stormwater upgrades. The residents adjacent to Patrick Street are concerned that the construction of a concrete centre median will adversely impact their property during rain or flood events. The residents said that currently, during rain or flood events, water backs up in theirs and neighbours properties and also flows north down Derby Street. The pooled water in their property rises until it reaches the level of the Derby Street crown and the water is then able to disperse across the road. This is confirmed by flood modelling.
			The concern is that the centre median (150mm higher than the road) will prevent the water from dispersing as it does currently and may raise the level of water backed up on surrounding properties. Council's South Rockhampton Local Catchment modelling also shows there are similar issues at several locations along Derby Street between Canning Street and George Street. Council Officers acknowledge this is a

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Issue	No. of respondents	% of respondents	Recommendation
			valid concern and one that will need to be addressed as part of an overall stormwater and flooding strategy for the catchment.
			Until this is undertaken, it is proposed that painted chevron medians be used between Canning Street and George Street instead of the concrete medians until a strategy has been developed that addresses the drainage issues and the construction of a concrete median does not adversely impact properties during rain or flood events. The design and layout of the road will effectively remain the same. The detailed design will still show the concrete centre median as ultimately this is the desired upgrade to improve safety, functionality and amenity.
Parking at TCC	1	2%	<b>No change to design.</b> There was one comment that there is not enough parking at TCC. The proposed road upgrades will have minimal impact on parking on Derby Street outside TCC.
Removal of rail easement	1	2%	<b>No change to design.</b> There was one comment regarding a rail easement and light rail facility. It is unclear what this refers to.

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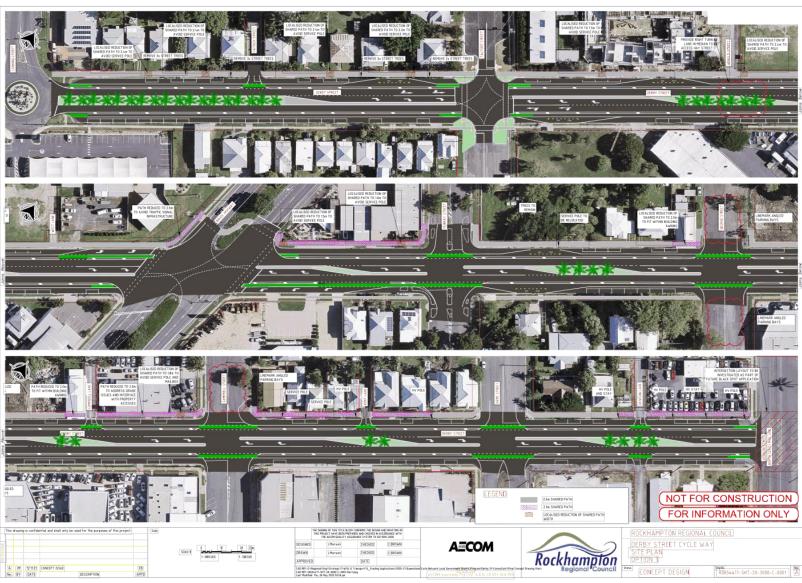
Issue	No. of respondents	% of respondents	Recommendation
Inclusion of left turn lane into Allenstown Plaza	1	2%	No change to design. There was one comment suggesting a left turn lane is required at the Allenstown Plaza entrance at Canning Street. It is considered the volume of traffic is not sufficient enough to warrant a dedicated left turn lane.
Turning lanes onto Bruce highway too short	1	2%	No change to design. There was one comment suggesting the turning lanes onto Gladstone Road are too short. The length of the left turn lanes are considered sufficient. These lanes are not expected to be subjected to large volumes of traffic other than at peak times when some queuing may be experienced.
Make Derby St left turn only	1	2%	<b>No change to design.</b> There was one comment suggesting Derby Street should be left turning only. This is not considered appropriate for an urban major collector road and would disconnect the road network and reduce level of service.
Pedestrian safety on shared path	1	2%	No change to design. There was one comment concerned with elderly residents and how they may experience safety issues due to speeding cyclists/scooters on the path. As highlighted previously, cyclists and scooters are already permitted to ride on the footpath. The widening of the pathway will only improve safety. Cyclists that wish to travel at speed are more likely to

Issue	No. of respondents	% of respondents	Recommendation
			use the on-road cycle lanes rather than stopping more frequently and giving way at side streets.

# DERBY STREET DESIGN CONSULTATION OUTCOMES

## Derby Street Concept Design proposed changes

Meeting Date: 21 June 2022



#### 10.5 UPPER DAWSON ROAD AND CAROLINE STREET BLACKSPOT PROJECT

File No:	5252
Attachments:	<ol> <li>Issues Raised by Businesses (Confidential)</li> <li>Upper Dawson Road / Caroline Street Project Layout</li> </ol>
Authorising Officer:	Martin Crow - Manager Infrastructure Planning Peter Kofod - General Manager Regional Services
Author:	Stuart Harvey - Coordinator Infrastructure Planning

#### SUMMARY

Council has received complaints from business owners adjacent to the intersection of Upper Dawson Road and Caroline Street about the proposed upgrade to traffic signals under the Federal Blackspot program. This report details the businesses concerns and highlights where Council have made provisions to address these concerns.

### OFFICER'S RECOMMENDATION

THAT should Blackspot Funding remain available for this project, that Council proceed with the construction of the Upper Dawson Road and Caroline Street project.

#### COMMENTARY

In the 2021/22 Round of Federal Blackspot funding Council were successful in obtaining funding of \$676,000 for the upgrade of Upper Dawson Road and Caroline Street intersection to a signalised intersection. The signalised intersection was chosen as it managed the safety risk while ensuring continuity of service to the surrounding community. Through the design process it is noted that there was no initial consultation or information shared with adjacent business owners. Business owners became aware of the project one month prior to construction when Council undertook its notification process via letterbox drop and door knocking surrounding landowners.

Prior to proposed commencement of construction, several adjacent business owners raised concerns to Council regarding the proposed intersection upgrade and changes to the road environment as a result of the project. A full list of the specific businesses and their issues is included as Attachment 1 in confidential. A summary of the key issues raised by businesses are listed below:

#### Removal of the Pedestrian Crossing:

Currently there is a zebra crossing on Upper Dawson Road between Caroline Street and Margaret Street. During school peak hours this crossing operates under supervision as a children's crossing. The zebra crossing is patronized by parents and students of Allenstown School and a nearby Childcare Centre.

The current location of the crossing, immediately opposite the school gate allows for students to cross from the school without having to wait on the Upper Dawson Road footpath. The current zebra crossing is not considered to be compliant under the current design standards, however its function as a children's crossing would be considered compliant.

Under the proposed project, this pedestrian crossing point will be removed and students will be required to cross at the signalised intersection. This means students will be required to walk 55m from the school gate to the signals at Caroline Street. During school peak hours, there will be a dedicated pedestrian phase at the intersection, whereby all vehicle movements are stopped and all pedestrian phases will run together.

When the signals are constructed, the crossing supervisor will be relocated to the traffic signals for a period, however the Department of Transport and Main Roads (DTMR) have indicated a strong intent to keep the crossing supervisor at the signals on a permanent basis post construction. Officers have strongly advocated for the supervisor position to stay on permanently at the intersection post construction. Due to the design of the signals at Caroline Street and the existing crossing's proximity to the signalised intersection, it is not safe or practicable for this crossing point to remain.

Signalised pedestrian movements at the proposed signals provide a more controlled crossing point for pedestrians across Upper Dawson Road particularly for crossing movements outside of school hours when the presence of pedestrians is not expected.

#### Impact to on street parking:

As the project is converting the intersection to traffic signals, there will be increased parking restrictions on approaches to the intersection. On street parking is not permitted within 20m of a signalised intersection and it is noted that this will have an impact on the on street parking on the four corners of the intersection. To mitigate impacts to parking, several indented parking spaces have been created on both Caroline Street and Upper Dawson Road increasing available parking from 4 parking spaces to 6 parking spaces.

The new parking spaces proposed are 3 spaces on Upper Dawson Road, which would be no standing from 7.30-9.00am, to prevent parents using these during morning school drop off. This is to discourage school parking in this location without detrimentally impacting available parking for neighbouring businesses. Additionally there is a dedicated 20 metres of parking on Caroline Street which will facilitate another 3 parking spaces. These spaces will be indented to provide improved separation from the carriageway and will have a kerb on them to separate them from the pedestrian footpath.

#### Impacts to business signage:

Several businesses raised concerns about the proposed infrastructure as a part of the project and how it might obscure or block vision of advertising signage for their respective businesses. As part of the design process and in consultation with the business, the traffic signal target boards have been lowered to 3m, which is the lowest that they can be reduced to under the Australian Standards, in order to reduce obstruction to business signage. Whilst the lowered signals will still cause some obstruction to the business signs, it is the best that can be done whilst adhering to Australian Standards. Additionally the proposed bus shelter on Upper Dawson Road obscures another business sign. This has been relocated as far to the east as is practicable to reduce obstruction of the business signage.

#### Construction impacts:

Businesses raised concerns about how access, loading of stock, dust and parking would be managed throughout the construction period. These impacts are managed by the Civil Operations construction crews throughout the build process. These crews work with businesses to ensure continuity of service and reduce impacts to trading during the construction period.

Construction projects within brownfield sites inherently have impacts to adjacent businesses and how they interact with the Council road reserve. Whilst it is noted that there was an absence of initial consultation when the project was first funded, officers have made efforts to engage with the businesses and address their concerns where possible. The proposed solution provides safety benefits for the wider Allenstown community and addresses known and ongoing safety issues at this intersection. For these reasons it is proposed to proceed with the project and commence construction as soon as practicable.

#### BACKGROUND

The intersection of Upper Dawson Road and Caroline Street was nominated for Blackspot funding in the 2021/22 Round of Federal Blackspot Program.

The intersection has experienced 3 Killed or Seriously Injured (KSI) Crashes in the 5 years preceding the application. Crashes were from vehicles travelling out of the southern side of Caroline Street or turning into Caroline Street.

Volumes on Upper Dawson Road were 10592 vehicles / day in 2020 with vehicle speeds very compliant with the posted speed limit of 60km/hour. Upper Dawson Road is identified in Council's Planning Scheme as an Urban Sub Arterial Road whose main function is to perform as the principle arteries for through traffic and freight movements across urban areas. These roads form the primary local road network and link main districts of the urban area.

Given the volume and function of Upper Dawson Road, and the restricted space within the road reserve at this intersection, there are limited options to manage the safety risks identified. Installation of Traffic Signals at this intersection was considered the most appropriate treatment, considering the type of crashes at this location, the function of the road, surrounding land uses, and maintaining access to surrounding residential streets and businesses. Blackspot submissions progress through several technical committees who review the proposed application against the safety issues identified and recommend or otherwise the proposed solution for funding.

#### PREVIOUS DECISIONS

At an Ordinary Council Meeting on 14 July 2020, Council resolved to endorse the application for Upper Dawson Road and Caroline Street for funding under the 2021/22 Blackspot funding round.

#### BUDGET IMPLICATIONS

The Upper Dawson Road and Caroline Street project is a fully funded project under the Federal Blackspot Program for an amount of \$676,000. Projects under this Blackspot funding round were to be completed by 30 June 2022. Council will seek an extension for the funding agreement but the outcome is uncertain.

### LEGAL IMPLICATIONS

Council has a duty of care to address road safety issues that are brought to its attention. This intersection has a crash history that qualifies it for Blackspot funding and Council have been given the full funds to address the safety issue. Council should exercise their duty of care to address this issue.

#### RISK ASSESSMENT

The Federal Government Blackspot Funding programme assists Council and State Government departments to reduce the number of casualty and fatality crashes within the Rockhampton Regional Council area. The systematic treatment of Blackspot identified intersections reduces the overall crash risks within our region. Council has a duty of care to provide a safe road environment for the community and weigh up the impacts and benefits of a proposed project accordingly.

#### CORPORATE/OPERATIONAL PLAN

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

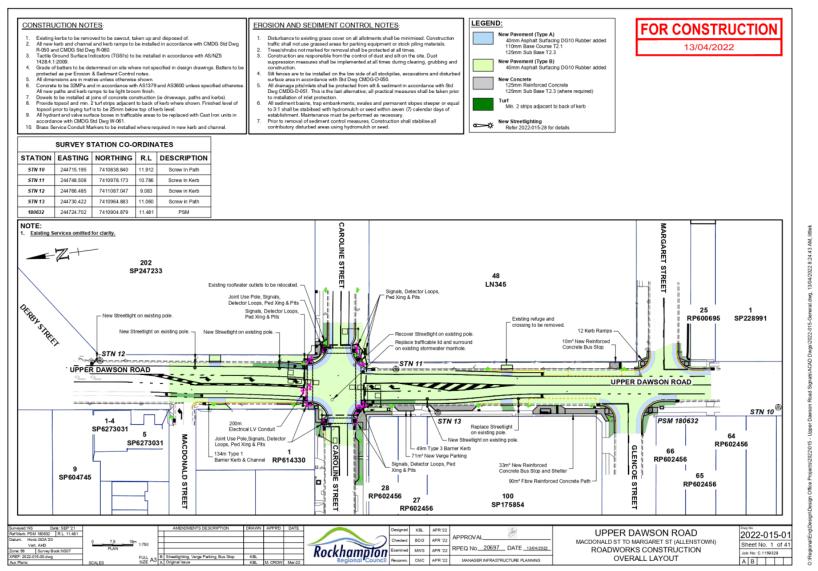
#### CONCLUSION

Council have received complaints from businesses adjacent to the proposed signalised intersection at Upper Dawson Road and Caroline Street. Officers have modified the design to accommodate and mitigate the concerns of the businesses. The issues and proposed solutions are now submitted to Council for their consideration and recommendation.

## UPPER DAWSON ROAD AND CAROLINE STREET BLACKSPOT PROJECT

## Upper Dawson Road / Caroline Street Project Layout

Meeting Date: 21 June 2022





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#### 10.6 STORMWATER PROGRAM UPDATE

File No:	1743			
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### SUMMARY

The Stormwater Program is a list of stormwater projects developed from flood study investigations, customer requests and areas known to Council as having experienced stormwater and flooding issues. A Stormwater prioritisation framework is applied to these stormwater and drainage issues to rank projects for further investigation, design and delivery.

#### OFFICER'S RECOMMENDATION

THAT the Stormwater Program Update report be received.

#### COMMENTARY

The purpose of this report is to present the updated Stormwater project list for Council's information. This list has been developed using the Stormwater Prioritisation framework (endorsed by Council in 2016), which applies a multi-criteria analysis to stormwater and drainage issues in order to assess and assign relative priority to the projects included in the updated list.

The criteria considered in the framework include the likelihood of impacts occurring, the potential impacts on people, property and infrastructure, and potential economic impacts. Details of the assessment criteria are provided in Attachment 1.

The project list is reviewed on an annual basis to inform future budget planning for stormwater and drainage works. The updated priority list of stormwater projects has been updated in June 2022, including projects identified after the latest rainfall events. The updated priority list is provided in Attachment 2. Due to the vast range of projects identified, and their associated cost estimates, Council resolved to adopt a Minor Stormwater program which was focussed on nuisance flooding, affecting a small number of properties and with an estimated cost of \$200,000 or less. This updated program is included as Attachment 3.

The majority of the projects are at a concept stage and require further investigation, planning, and detailed design. The process of developing these projects to a point where they can be funded and constructed requires significant time and resources.

Council's funding commitment of this program is currently relatively low with the majority of Council's funding being allocated to higher priority capital projects.

#### BACKGROUND

Customer requests received by Council are investigated to assess the nature and extent of the issue and where possible, determine the cause of the issue and potential mitigation measures.

Investigations include desktop assessments with hydraulic calculations, or more detailed hydrologic and hydraulic modelling.

The projects contained in the updated stormwater program have been compiled from a register of drainage issues that Council has received over time from concerned residents, as well as other identified sites.

#### PREVIOUS DECISIONS

At the Infrastructure Committee meeting held 19<sup>th</sup> July 2016, Council endorsed the Stormwater Project Prioritisation Framework, with endorsement of the then initial stormwater priorities list pending inclusion of additional projects brought to the attention of Councillors by residents.

At the Infrastructure Committee Meeting held on 27 August 2019 Council endorsed the Minor Stormwater Capital Program as a means to address smaller drainage projects.

#### **BUDGET IMPLICATIONS**

Historically Council had allocated in the order of \$3 million per annum in the capital program for Major Stormwater Mitigation projects and \$100,000 for the Minor Stormwater capital program. In the past 2 to 3 years the major Stormwater program funding had been reallocated for higher priority capital projects but was anticipated to be reinstated back into the capital budget in 2024/25. Recently Council has been successful in attracting external funding for the Archer Street drainage Scheme Stages 1 and 2 which will necessitate the bringing forward of the budget, predominantly into 2022/23.

#### STAFFING IMPLICATIONS

There are no staffing implications.

#### **RISK ASSESSMENT**

Council has a duty of care to residents to take the appropriate measures to relieve, where practicable, the impacts to people and property of periodic inundation from stormwater and drainage issues.

It many instances the proposed solutions may not be able to achieve complete immunity from all impacts, and measures may not be feasible due to the prohibitive costs. Nevertheless, issues and solutions can be investigated as part of detailed assessment, on a case by case basis, to evaluate and prioritise mitigation works based on assessment of risk.

### CORPORATE/OPERATIONAL PLAN

The Stormwater Program aligns with the corporate plan outcome of 1.1 Safe, accessible, reliable and sustainable infrastructure and facilities.

#### CONCLUSION

A 2022 update to the Stormwater Major and Minor Program is presented to Council for their information.

## **STORMWATER PROGRAM UPDATE**

### **Stormwater Prioritisation Criteria**

Meeting Date: 21 June 2022

### Attachment 1 – Criteria for Prioritisation of Stormwater Projects

#### Multi-Criteria Analysis (MCA)

Criteria	Weighting
Likelihood	25
People Impacts	25
Property Impacts	25
Infrastructure Impacts	15
Economic Impacts	10

#### **Prioritisation Criteria- Detailed Outline**

ls it clear	COUNCIL RESPONSIBILITY Is it clearly Council's responsibility to resolve this drainage issue?											
is it clear	ly council's respon	isonity to resolve this dramage is	sue:									
Criteria	Score	Descriptor	Ancillary Comments									
Yes	1	Clearly Council responsibility										
No	0	Clearly not council responsibility										
н		LIKELIHOOD he properties being impacted?										
Criteria	Score	Descriptor	Ancillary Comments									
Impacts during regular rain events	5	Greater than 18%AEP	Q1 to Q5									
Impacts during semi- regular rain events	4	Between 18 to 10 %AEP	Q5 to Q10									
Impacts during occasional more severe events	3	Between 10 to 5%AEP	Q10 to Q20									
Impacts only during infrequent severe events	2	Between 5 to 2%AEP	Q20 to Q50									
Impacts only during rare severe events	1	Smaller than 2%AEP	Q50 to Q100									
How hazar		OPLE IMPACTS ng to peoples safety on their prop	erty?									
Criteria	Score	Descriptor	Ancillary Comments									
Major threat to people's safety within the habitable areas.	5	Depth, velocity, dxv indicating extreme to high hazard for majority of properties impacted.										
Moderate threat to people's safety within the habitable areas.	4	Depth, velocity, dxv indicating medium hazard for majority of properties impacted.										
Minor threat to people's	3	Depth, velocity, dxv indicating										

safety within the habitable areas.		low hazard for majority of properties impacted.										
Major threat to people's safety within the non- habitable areas.	3	Depth, velocity, dxv indicating extreme to high hazard for majority of properties impacted.										
Moderate threat to people's safety within the non-habitable areas.	2	Depth, velocity, dxv indicating medium hazard for majority of properties impacted.										
Minor threat to people's safety within the non- habitable areas.	1	Depth, velocity, dxv indicating low hazard for majority of properties impacted.										
Flooding is not likely to pose a threat to people's safety on their property.	0											
Estir	<b>PROPERTIES IMPACTED</b> Estimated number of properties impacted by flooding?											
Criteria	Score	Descriptor	Ancillary Comments									
> 50	5											
26 to 50	4											
11 to 25	3											
5 to 10	2											
Less than 5	1											
н		RUCTURE IMPACTS pacts on public infrastructure?										
Criteria	Score	Descriptor	Ancillary Comments									
Major impact on critical public infrastructure.	5	Severe damage and/ or lengthy disruption to services.	Critical public infrastructure - Arterial and major collector roads and evacuation routes, airport, WTP, STP's and SPS's, emergency services facilities, hospital and health services, power and electricity infrastructure, evacuation centres.									
Moderate impact on critical public infrastructure.	4	Limited damage and/ or limited disruption to services.										
Minor impact on critical public infrastructure.	3	Minimal damage and /or minimal disruption to services.										
Major impact on local non- critical public infrastructure.	3	Severe damage and/ or lengthy disruption to services.	Non critical public infrastructure - Minor collector roads or below, community halls and centres, parks and									

			recreation facilities, sporting facilities.
Moderate impact on local non- critical public infrastructure.	2	Limited damage and/ or limited disruption to services.	
Minor impact on local non- critical public infrastructure.	1	Minimal damage and /or minimal disruption to services.	
No impact on public infrastructure	0		
How sev		NOMIC IMPACTS on the regional and local econom	
Criteria	Score	Descriptor	Ancillary Comments
Major impact on regional economy	5	Disruption to business or commercial enterprises on a wider scale for a long duration that also impacts other businesses outside the immediate area of the flooding.	
Moderate impact on regional economy	4	Disruption to business or commercial enterprises on a wider scale for a short duration that also impacts other businesses outside the immediate area of the flooding.	
Minor impact on regional economy	3	Disruption to business or commercial enterprises at the property scale for any duration that also impacts other businesses outside the immediate area of the flooding.	
Major impact on local economy	3	Disruption to business or commercial enterprises on a wider scale for a long duration.	
Moderate impact on local economy	2	Disruption to business or commercial enterprises on a wider scale for a short duration.	
Minor impact on local economy	1	Disruption to business or commercial enterprises at the property scale for any duration.	
No impact on economy	0		

PRIORITY DESIGNATION What weightage score designates a project as Low, Medium or High priority?									
Criteria	Score	Descriptor	Ancillary Comments						
Low	Score <200								
Medium	300> Score >=200								
High	Score >=300								

#### Score Rating

The project weightage score has been derived from assessing proposed projects against the following criteria:

- 1. Likelihood of properties being impacted how regularly are the properties being impacted?
- 2. People impacts how hazardous is the flooding to peoples safety on their property?
- 3. Properties impacted estimated number of properties impacted by flooding?
- 4. Infrastructure Impacts How severe are impacts on public infrastructure?
- 5. Economic Impacts How severe are impacts on the regional and local economy?

The scores for the above are then multiplied by the weightage and added together to come up with a total Benefit score.

## **STORMWATER PROGRAM UPDATE**

### **Stormwater Priority Projects**

Meeting Date: 21 June 2022

STORMWATER MAJOR CAPITAL WORKS PROGRAM													
Jun 22													
SN	AM Category	Priority	Proiects Location	From	То	Proposed Works	Scheme Amount	Project Amount				Unfunded	
SN	AM Category		Projects.Location	From	10	Proposed_Works	Scheme Amount	Project Amount	Estimate	Locality	Sub-Locality		Project Status/comments
1	New	High	Webber Park Scheme	North of Blue Bird's	Pfitzemaier St	Inlet & Outlet improvements to Webber Park	\$ 2,988,500		Accuracy Concept	Urban	Norman Gardens	\$2,041,500	
			Webber Park (Stage 1A & 1B)	Soccer field		and new Detention Basin. Inlet and Oulet Works including property		s 945.000	Detail design				Construction Completed
						acquisition. Construction of large detention basin within							Preliminary design complete. Communities advised that it would
			Webber Park (Stage 2)			Webber Park.		\$ 2,041,500					only likely to proceed with the development of a second soccer field at this location. Council reolution to support this.
			Webber Park (Stage 3)			Pipe Duplication Barnett St Install a new 1350, 1800,1950, 2100 and		5 -					Stage abandoned as unfeasible.
2	New	High	Canning St & Archer St Scheme	Canning St/ Quarry S	Quay StFitzroy River outlet	2250 mm RCP, raise Canning St and Quarry St footpath	\$ 14,085,328		Preliminary desig	Urban	South Rockhampton	\$14,085,328	Preliminary design- Dec 2020, AECOM
			Canning St & Archer St (Stage 1a)	Canning St	Archer St	Raise Canning St footpath- Stage 1a		\$ 68,856					This stage appears to be a priority for implementation. RRC funding.
			Canning St & Archer St (Stage 1b) Canning St & Archer St (Stage 2)	Quarry St Denison St	Quarry St Fitzrov River outlet	Raise Quarry St footpath- Stage 1b Construct new 2250mm RCP along Archer St		\$ 68,681 \$ 5,024,595					This stage may be a priority for implementation. RRC funding. Preliminary design - AECOM
			Canning at a Arther at (dage 2)	Denison at	Fizity River outlet	Stage 2 Install a new 1950mm RCP, 1800mm SCP		a 0,024,000					Pleiminary design - AECOM
			Canning St & Archer St (Stage 3)	Murray St	Denison St	and 2150 mm SCP including microtunnelling		\$ 5,587,452					Preliminary design - AECOM
						under highway and rail line- Stage 3 Install a new 1350mm and 1950 mm RCP-							
			Canning St & Archer St (Stage 4)	Canning St	Murnay St	Stage 4 Remove the existing 1800mm RCP.		\$ 3,335,743					Preliminary design- AECOM
3	New	High	South Rockhampton Upper Main Drain Scheme	George/ William St	Railway corridor/West St	construct an open channel, culverts across	\$ 12,611,400		Concept design	Urban	South Rockhampton	\$12,611,400	Planning Studies completed (AAD reduction by \$1.099,000)
			South Rockhampton Upper Main Drain (Stage 1)	Caroline St	Rail Corridor	railway line and streets Remove the existing 1900mm RCP and construct open channel		\$ 1,192,000					Further assessment required
			South Rockhampton Upper Main Drain (Stage 2)	Caroline St	Caroline St	Lower Caroline St and construct 22/1200x450 RCBC		\$ 1,330,400					Further assessment required
			South Rockhampton Upper Main Drain (Stage 3)	Stanley St	Caroline St	Remove the existing Brick arch main and		\$ 2,951,600					Further assessment required
			South Rockhampton Upper Main Drain (Stage 4)	Derby St	Stanley St	construct open channel Construct 18/ 1200x800 RCBC under Derby St22/1200x450 RCBC under Murray St:		\$ 3,432,400					Further assessment required
			South Rockhampton Upper Main Drain (Stage 5)		Derby St	formalise channel		\$ 1,220,100					Further assessment required
			South Rocknampton upper Main Drain (Stage 5)	George St	Derby St	Formalise channel within drainage reserve Lower Denham/ Campbell St and Campbell/		5 1,220,100					Purmer assessment required
			South Rockhampton Upper Main Drain (Stage 6)	Denham St	George St	William St intersection, regrade( oneway crossfall) Campbell St and William St from		\$ 2,484,900					Further assessment required
						Denham St to George St Formalise channel along Salevard St. Clean							
4	New	High	South Rookhampton Lower Main Drain Soheme	Saleyard St	Railway corridor/Port Curtis	existing channels and culvert, Jack 7/1800	\$ 10,981,500		Concept design	Urban	South Rockhampton	\$10,981,500	Planning Studies completed (AAD reduction by \$175,000); pre
		-	-		Rd	RCP across the railway line and clear downstrem embankment							project for upper main drain schemes.
			South Rockhampton Lower Main Drain (Stage 1)	North/East of Port Curtis Rd	Railway corridor	Breakout unused railway line & remove embankments		\$ 1,447,700					Further assessment required
			South Rockhampton Lower Main Drain (Stage 2)	North/East of Port Curtis Rd	Railway corridor	Jack 7/1800mmRCP through railway lines		\$ 8,002,900					Further assessment required
					along railway corridor	Jack 1/1080mm RCP across railway line at Saleyard St.Formalise 30m wide channel							
			South Rockhampton Lower Main Drain (Stage 3)	Saleyard St	towards Port Curtis Rd	along Saleward St; clean existing channels and culverts along the railway corridor		\$ 1,530,900					Further assessment required
5	New	High	Livingstone St Drainage Scheme	Stamford/Richmond	Lakes Creek Rd	Install 1800mm and 1050mm RCP	\$ 12.305.100		Indicative	Urban	Berserker	\$12.365.100	Planning Studies completed (AAD reduction by \$295,000)
-			Livingstone St Drainage Scheme (Stage 1)	St Armstrong St	Lakes Creek Rd	Install 1800mm RCP along Armstrong St and	-	s 7.580.000					Further assessment required
			Livingstone St Drainage Scheme (Stage 1)	Elphinstone St	Amstrong St	Musgrave St Install 1500mm RCP along drainage path		5 2,713,100					Further assessment required
$\vdash$			Livingstone St Drainage Scheme (Stage 2) Livingstone St Drainage Scheme (Stage 3)	Elphinstone St	Richmond St	with a few flow inlets Install 1050mm RCP along drainage path		5 2,713,100 5 847,800					Further assessment required
			Livingstone St Drainage Scheme (Stage 3)	Elphinstone St	Stamford St	with a few flow inlets Install 1050mm RCP along drainage path		s 847,800 \$ 1.224,200					Further assessment required
	New	High	Livingstone St Drainage Scheme (Stage 4) Wackford Street Drainage Scheme		Stamford St Haynes St	with a few flow inlets Combination of additional piping and	\$ 5.090.000	o 1,224,200	BudgetPredesig	114.00	Central	\$1,320.000	Planning Sudies and final design complete. Detention basin
0	riew	High	-	Hardy Av		regrading of street.	a 5,040,000	\$ 1,880,000	pudget+redesig	uroan	Central	\$1,320,000	deferred following concept. Complete: additional \$40,000 needed for inlet heaworks
$\vdash$			Wackford Street (Stage 1A) Wackford Street (Stage 1B)	Hardy Av Hardy Av	Haynes St Haynes St	Wackford St pipe duplication Wackford Street regrading		\$ 1,880,000 \$ 1,260,000					upgrading. Complete
			Wackford Street (Stage 1C)	Hamiette St	Haynes St	Harriette St Diversion		\$ 630,000 \$ 1,320,000					Complete Deferred following assessment
7	New	Medium	Wackford Street (Stage 2) Simpson & High St Drainage Scheme	Lot 3 RP601954 Simpson St/High St	Part only Mol and Refe	Detention Basin Construct fenced detention basin, construct	5 0.416.521	5 1.320.000	Concept design	Ildan	Frenchville	50 418 521	Element following assessment FMS 2017 and NRFMA-Stage 3 investigation, 2020
- '		in the shares				1500mm RCP network Construct a fenced detention basin next to	0 0,410,521	5 907.300	Concept design	oroan	- Terretry and	\$8,410,521	
$\vdash$			Simpson & High St Drainage Scheme (Stage 1)	Simpson St	Simpson St	the school car park		a wd7,300					Further assessment required, FMS 2017
			High Street(Hook St, High St, Dean St and Earl St) diversion-	Wooster St	Frenchmans Creek	Installation of 900mm to 1200dia pipes along Hook, High, Dean and Earl St discharging		\$ 8,449,221					NRFMA- Stage 3 investigation, 2020. Overall NRFMA BCR=4.2, This diversion replaces stage 2,3 and 4 of Simpson & High St
			NRFMA stage 3			into Frenchmans Creek- Runoff diversion		0,-10,661					Drainage Scheme, FMS 2017. Retrofiting of flaps on 3 cells of Water St Culverts included in the minor programme.
8	Upgrade	Medium	335 Irving Avenue	335 Irving Av	327 Irving Av	Piped and /or surface run off diversion to Duthie Park.	\$ 585,571	\$ 300,000	Concept	Urban	Frenchville	\$585,571	Scoped for preliminary design; engaged AECOM for assessment;
0	Upgrade	Medium	Heilbronne Street	5 Heilbronn St	4 & 6 Heilbronn St	Buy back 2 properties, swale and piping	\$ 1,300,000		Concept	Urban	Wandal	\$1,300,000	further inhouse revision; scoped for final design Scoped for preliminary design; engaged AECOM for assessment; subtactive revision arrowing for final design.
						Drainage relief works for 182 Earl St &							further inhouse revision required for final design
10	New	Medium	Robinson St	Dean St	Diplock St/ Frenchmans Creek	Tomkys Street Drainage Scheme, Potentially duplicate existing 1200 dia from Frenchmans		\$ 255,000	Concept	Urban	Frenchville	\$255,000	In response to 182 Earls St
						creek outlet and extend along Robinson St to Dean St intersection.							

11	New	Medium	Diplock St	302 Diplock	Dean St	Drainage relief works for 182 Earl St & Torrkys Street Drainage Scheme, Potentially duplicate existing 1050 dia from Frenchmans creek outlet and extend along High St to Dean St intersection.	\$ 204,000	\$ 204,000	Concept	Urban	Frenchville	\$204,000	In response to 182 Earls St
12	Upgrade	Medium	Sheild Avenue Drainage Scheme	Shield/Gowdie St	Woodland Dr	Provision of a rocklined outlet channel , install 1350 RCP and regrade the street Provision of a rockfilled outlet channel with	\$ 2,222,070		Concept design	Urban	Frenchville	\$2,222,070	Planning Studies Completed (AAD reduction by \$45,000)
			Shelid Avenue Drainage Scheme (Stage 1)	Shield/Gowdie St	Woodland Dr	Provision of a rockfilled outlet channel with improvement of K&C at Shield/Gowdie St, provision of a localised berm at the inlet head wall at Woodland Dr.		\$ 75,070					Further assessment required
			Sheild Avenue Drainage Scheme (Stage 2)	Woodlands Dr	Shield/Gowdie St	Install 1350mm RCP along Shield Av that discharges downstream of Shield?gowdie St.		\$ 1,631,800					Further assessment required
			Sheid Avenue Drainage Scheme (Stage 3)	Woodland Dr	Beal Av	Regrade Shield Av with one way slope		\$ 515,200					Further assessment required Ident/Fed in planning study (FMS 2017) without greater details;
13	Upgrade	Medium	Tomkys St Drainage Scheme	Wooster St	Tomkys St	Upgrading of undergrading network potentially with detention	\$ 3,000,000	\$ 3,000,000	Indicative	Urban	Frenchville	\$3,000,000	Robinson St and Diplock St projects to ease the issues. Diversion along High St starting from Dean St to Frenchmans Creek seems viable and option was raised with NRFMA team. To be taken forward secarate/.
14	New	Medium	90 Pennycuick & 324 Denham St Extended	23 Gardner St	100 Pennyquick St	Installation of 525 and 600 RCP and construction of a swale from Denham St Ext to 100 Pennyquick St; Dwg; 2020-103	\$ 385,429	\$ 385,429	Concept	Urban	West	\$385,429	Concept design Completed. Project may be seperated into two.
15	New	Medium	Stack Street Drainage Scheme	Curran St	Stack St	Channel Excavation D/S of Stack St. vegetated swale from Rose to Pilkington St. Inlet and 4x900 RCP, detention Basin	\$ 3,573,600		Concept	Urban	Koongal	\$3,573,800	Planning Studies completed (AAD reduction by \$135,000)
			Stack Street Drainage Scheme (Stage 1)	Stack St	Stenhouse St	Channel Excavation D/S of Stack St,		\$ 450,900					Further assessment required
			Stack Street Drainage Scheme (Stage 2)	Rose St	Pilkington St	Vegetated swale from Rose to Pilkington St, Inlet and 4x900 RCP		\$ 2,204,900					Further assessment required
			Stack Street Drainage Scheme (Stage 2B)	Pilkimgton St		Detention Basin		\$ 917,800					Further assessment required
			Stack Street Drainage Scheme (Stage 2A)	Stack St	Pilkington St	Stack St Floodway and inlet channel works. 460 dia pipe along Jones St and 525 pipe		5 -					Floodway Work's and concrete channel complete
10	New	Medium	20-22 Jones St Wandal	22 Jones St	Along Oakley Stto Wandal Rd	along Oakley St to Wandal Rd to mitigate nuisance flow. Dwg: 2019-204	\$ 683,000	-	Concept	Urban	Wandal		Concept design completed.
17	Upgrade	Medium	West St / Denham Street intersection			Regrading of intersection to provide overland flow path.	\$ 350,000	\$ 350,000	Concept	Urban	Central	\$350,000	Preliminary design completed.
18	New	Medium	Cheney Street	German St	Moores Creek	Install Pipes and pits	\$ 900,000	\$ 900,000	Concept	Urban	Frenchville	\$900,000	Releif drainage for the development north of German St. The amount only includes RRC agreed conttribution.
19	New	Medium	Cowap Street Drainage Project	Cowap St	Moores Creek	Install 600mm RCP across Moores Creek Road discharging into Moores Cr. Increase time for evacuation route, Floor level survey	\$ 210,000	\$ 210,000	Indicative	Urban	Park AwBerserker	\$210,000	house are low or high set. Upper level not anticipated to flood.
20	Upgrade	Medium	295 Shield Avenue	295 Shield Avenue	298 Thozet Road	Secure drainage feature through the properties.	\$ 800,000	\$ 800,000	Concept	Urban	Frenchville	3800,000	Shield Ave to Bloxsom with regrading upto 1m depth.
21	Upgrade	Medium	8 Callan Street	Rundle / Woodville St	Across Campbell St	Upgrade existiung piping to 900dia and 1200 dia from Bapaume SV Rundle St intersection	\$ 680,000	\$ 680,000	Concept	Urban	Wandal	\$680,000	Desktop assessment.Provide connection for Bapaume St Scheme
22	Upgrade	Medium	Dean Street Drainage Project	Dean St	-	Increase exising network capacity along Kerrigan St discharging east into Frenchmans Creek	\$ 337,500	\$ 337,500	Indicative	Urban	Frenchville	\$337,500	Further assessment required
23	Upgrade	Medium	13 Barry St	13 Barry St	Through properties to 11 Zamitate and Fisher St	Upgrading of undergrading network to 900- 1200 dia	\$ 485,000	\$ 485,000	Concept	Urban	Gracemere		Detailed design required.
24	New	Low	Quay Lane	Quay Lane	North Street/ Fitzray River	Install 750 dia underground pipe along Quat Un running north to North Street discharging into Fitzrov River	s 800,000	\$ 800,000	Concept	Urban	Central	\$800,000	Concept design, residual risk of grates being blocked. Section under North St / Vic Pde intersection constructed as part of intersection works.
28	New	Low	Bridge St	17 Bridge St	North/ East along Canavan St to outlet	piping of stagnant water at the intersection. Dwg: 2017-200	\$ 320,000	\$ 320,000	Concept	Urban	Berserker		Excessive ponding observed during 2017-2018 rain events.
27	New	Low	161 Venables Street	165 Venables St	Berserker Street	Dwg: 2017-200 Extend 750pipe from Berserker Stto 161/165 Veneable St gradually reducing its size to 375mm.Dwg: 2019-048	\$ 600,000	\$ 600,000	Concept	Urban	Frenchville		Preliminary Design and Estimate completed. Localised ponding investigation behind 157 is being undertaken; easement required, cost to be updated.
28	New	Low	Brooks St Drainage FSC Plan 387	Middle Rd	Golf Course	900dia pipe extension and open drain along western verge	\$ 373,000	\$ 373,000	Detailed design/o	Urban	West	\$373,000	Drain being eroded which is threatening the adjacent road and a western property being impacted by runoff. Safety concerns also. Fund being sought by Civil op in two stages.
29	New	Low	North Street Drainage Scheme	Knutsford St	Fitzroy River outlet	Easement and extension of underground drain up to Knutsford Street and duplication of pipes down North to Fitzroy River.	\$ 5,300,000	\$ 5,300,000	Concept	Urban	Central	\$5.300,000	Requires easement acquisition to commence works. Part of scheme completed in the 2000's.
	New		North Street (Stages 1 & 2)	Robert St	Knutsford St	Drainage feature runs through properties west of Robert St, easement and extension of underground drain up to Knutsford Street.				Urban	Central		Construction completed
	New		North Street (Stage 3)	Robert St	Knutsford St	Drainage feature runs through properties west of Robert St, easement and extension of underground drain up to Knutsford Street.		\$ 300,000	Concept	Urban	Central		Requires easement acquisition to commence works. Completion of a scheme carried out in the 2000's.
	New		North Street (Stage 4+)	RobertSt	Fitzroy River outlet	Drainage feature runs through properties west of Robert St, easement and extension of underground drain up to Knutsford Street.Upgrade to riverine outlet proposed.		\$ 5,000,000	Concept	Urban	Central		Requires easement acquisition to commence works. Completion of a scheme carried out in the 2000's.Stage 4 to river outlet added to upgrade existing piping reaching capacity at 1EY event_FMS 2017.
30	New	Low	Hempenstall Street Kawana	Farm St	Splitters Creek	Excessive runoff and eroson at the northern end of the Street. Currently no underground network and northern end being licenced to use by the nearby owner.New 600 to 825 RCP proposed.	\$ 400,000	\$ 400,000	Concept	Urban	Kawana	\$400,000	Desktop investigation completed
31	Upgrade	Low	Caribbea Estate Drainage Scheme			Additional piping, inlet capacity and detention basin capacity in Caribea Estate.	\$ 3.220,000		Concept	Urban	Central	\$3,118,000	Planning Studies completed
	Upgrade Upgrade		Caribbea Estate (Stage 1) Caribbea Estate (Stage 2)	Jack Allenby Park Rice Street		Detention Basin Improvements Install pipes and pits ( Rice Street)		5 - 5 -	Concept Concept	Urban Urban	Central Central		Construction completed Construction completed
	Upgrade		Caribbea Estate (Stage 3)	Various		Replace inlets- ongoing programme		\$ 180,000	Concept	Urban	Central		Ongoing Programme. Approx. 20 inlets remaining for replacement.
	Upgrade		Caribbea Estate (Stage 4)	Buzecott Street		Install pipes and pits-Calder / Henderson Street		\$ 300,000	Concept	Urban	Central		Requires updates in veiw of FMS-2017.
	New		Carribea Estate Q100 upgrades	Henderson St	Buzacott/ Bolland St/ Tropical Auto- Alexandra St	Installation of pipes and pits along Alexandra		\$ 2,760,000	Concept	Urban	Central		Requires update in view of FMS-2017; Diversion to Tropical Auto; would compliment Wackford St upgrades.
		1	1	-					1				

32	New	Low	Gracemere Industrial Area - Eastern Drainage Scheme			Establish major drainage system corridor. PFTI- D6, D-25, D27.	\$ 2,430,000		Concept	Urban	West		Preliminary design completed concurrently with the western catchment in view of a regional approch of stormwater management -AECOM.
	New		Gracemere Industrial Area Drainage Scheme (Gracemere Creek)	Macquarie St	Railway line	Establish major drainage system corridor. PFTI- D6		\$ 1,600,000	Concept	Urban	West		Macquarie St drainage investigation by OSKA-Knobel identified that oreek widening (upb 50m) provides in significant benefit in relation to decrease in flow paameters and hazard. Hence flood constraint may need to be managed by an individual developers
	New		Gracemere Creek Drainage Path	Middle Road	Railwayline	Establish major drainage system corridor from Middle Road to northern boundary of Lot 242 on LN837879, PFTI- D25.		\$ 780,000	Concept	Urban	West		Concrete lined channel of aprox 22.8m top width in between middle Road and Capricorn 5k Refer Flood Investigation, October 2016, XNOBEL Consuting, Wider flowpath may be secured downstream from Capricorn St. Further investigation needed.
	New		Gracemere Industrial Area - East of Overpass			Establish major drainage system corridor. PFTI-D27.		\$ 50,000	Concept	Urban	West		Preliminary design completed concurrently with the western catchment in view of a regional approach of stormwater management -AECOM.Required to secure an easement for stormwater quartity, quality device by developers not costed.
33	New	Low	Park Street Drainage Scheme			Drainage for Industrial Area and Glenmore Road	\$ 250,000		Detailed design/o	Urban	Central	\$250,000	Project completed
	New		Park Street (Stage 1 & 2A)	River	Glenmore Rd	Drain to drain Park St and Glenmore Road; plan: 2015-144		s -	Detailed design/o	Urban	Central		Project completed
	New		Park Street (Stage 2B)	Alick St	Tung Yeen st	Drain to drain Park St and Glenmore Road; plan: 2015-144		s .	Detailed design/o	Urban	Central		Project completed
	New		Park Street (Stage 3)	Glenmore Rd	Robison st	Drain to drain Park St and Glenmore Road; plan : 2015-145		s -	Detailed design/o	Urban	Central		Project completed
	New		Park Street (Stage 4)	Alick St/Glenmore	Haynes St	Install pipes and pits-Alick Street;2015-001		s .	Concept	Urban	Central		Project completed
	New		Park Street (Stage 5A & 5B)	Tung Yeen	Haynes St/ Main St	Install pipes and pits- Tung Yang Street		s .	Concept	Urban	Central		Project completed
	New		Park Street (Stage 6C)	st/Glenmore Farrell St		Install pipes and pits- Farrell Street2018-		s 250.000	Concept	Urban	Central		Preliminary Design
24	New	Low	Robison St Drainage	Park Street	Tom Brady/Dooley St	080 Install pipes and pits	\$ 300,000	s 300.000	Concept	Urban	Park Avenue	\$300,000	Brook &Associates investigation. Park St network to connect with
													Tom Brady St network. Cost further to be updated. Som type intert installed may have solved the large of pending
35	Upgrade	Low	Stanley Street	Fitzroy River	East St	Upgrade to carry Q100 from East St.	\$ 400,000	\$ 400,000		Urban	Central	\$400,000	
38	New	Low	Monier Road	Lot 31 Slade Street	Berserker Street	Detention/ Bio-retention	\$ 680,000 \$ 600,000	\$ 680,000 \$ 600,000	Concept	Urban	Parkhurst	\$680,000	Planning concept
3/	New	Low	Hyde Street drainage system	Brigg St	Berserker Street	Install minor drainage system Final stace of drainage scheme proposed in	\$ 600,000	\$ 600,000	Concept	Urban	Frenchville	\$600,000	Early Concept- Design Unit
38	Upgrade	Low	Elphinstone Street/Part Street Stage 3	28 Elphinstone St/169 Part St	34 Elphinstone St	1992, Extension of existing scheme across Part St and into Elphinstone St intersection. Refer to plan R01-048. Easement may be required on 169 Part St.	\$ 300,000	\$ 300.000	Concept	Urban	Central	\$300,000	Easement acquisition required, detail design completed but may be dated.
39	Upgrade	Low	150 Hinchliff St	Hinchilff St	Hallingsworth St	Shortterm: Install additional 1800mm RCP across Alexandra St, seoure easement to accommodate the pipe and widen approx upto 100 m D/S and upstream, culvert widening interference 100 kc and 179-181 Alexandra St( private and seems a bit normaliax)	\$ 540,000	\$ 540.000	Indicative	Urban	Kawana	\$540,000	Desktop assessment and initial concept.Further investigation required
40	New	Low	Parkhurst East Drainage Scheme	870-886 Yaamba Rd	930-960 Norman Road	Construct new drainage inc PFTI- D1, D2, D3 and D4.	\$ 2,281,000		Concept	Urban	Central	\$2,281,000	Planning Study Completed.
	New		Parkhurst East Drainage (Stage 1A)	870-886 Yaamba Rd	930-980 Norman Road	Construct new cross-drainage under Norman Road, PFTI- D2,		\$ 340.000	Concept	Urban	Central		Planning Study and Design Completed through DTMR. Construction to commence this financial year
	New		Parkhurst East Drainage (Stage 1B)	Bean Avenue	Mason Avenue	Construct major drainage network from northern extent of Bean Avenue to Mason Avenuet, PFTI -D1.		\$ 610,000	Concept	Urban	Central		Planning Study and Concept Design Completed.
	New		Parkhurst East Drainage, McMillan Avenue (Stage 1C)	Norman Road / McMillan Av intersection		Upgrade cross-drainage in McMillan Avenue. PFTI- D3.		\$ 711,000	Concept	Urban	Central		Planning Study and Design Completed through DTMR. Construction to commence this financial year
	New		Parkhurst East Drainage Scheme (Stage 3)	Norman Road/McMillan Av intersection	North of Alfred St	Establish major drainage network upstream from McMillan Avenue cross-drainage. PFTI- D4.		\$ 620,000	Concept	Urban	Central		Planning Study and Design Completed through DTMR. Part construction to commence this financial year
41	New	Low	PFTI - west Of GIA overpass, Gracemere	West of GIA Overpass	Boongary Road	PFTI D26 and D37	\$ 7.372.372		Prelimnary desig	Urban	Gracemere	\$7.372,372	
	New		Gracemere Industrial Area - West of Overpass	West of GIA overpass West of GIA	Boongary Road	Establish major drainage system corridor and secure land for detention basin. PFT+ D26. Construction of stormwater regional			Concept	Urban	Gracemere		Preliminary design of detention basin completed in 2017. purchasing of land from DTMR underway; in principle no objection from Power link for the proposed basin
	New		Gracemere regional detention basin-PFTI D37	overpass		detention basin		\$ 6,672,372	Prelimany design	Urban	Gracemere		Eliminates several detention system and mitigates potential impo
42	Upgrade	Low	13 Royes Crescent	Cui de Sao	Danker Street	Pipe upgrading to 600dia for frequent runoff capture and secure overland flowpath	\$ 300,000	\$ 300,000	Concept	Urban	Norman Gardens		Desktop investigation completed.Scope review required.
43	New	Low	105 Curran Street	Rhodes St	Cavan Lane	Culverts across Rhodes St and open channel behind 105 Curran St	\$ 300,000	\$ 300,000	concept	Urban	Koongal	\$300,000	desktop investigation completed. Refer to Dwg: 2018-083. this provides some relief. Combine with Stack St Projects.
44	New	Low	Lower Frenchville Rd drainage system	Watt St	Dean St	Install minor drainage system	\$ 600,000	\$ 600,000	Concept	Urban	Frenchville	\$600,000	Concept Design and estimate completed- Design
45	New	Low	William Street drainage extension Anna Meares Drive	Quarry St Origano Ave	Caroline St	Install minor drainage system Open Channell Improvements	\$ 1.200,000	\$ 1,200,000	Concept Concept	Urban	Allenstown	\$1,200,000	Early Concept- Design 2019-193 Concept Design and estimate completed, 2017-054
+0	Upgrade	Low		Singano Ave	Irwin St	Establish major drainage system corridor	\$ 310,000	a 310,000		Urban	Gracemere		
47	New	Low	Washpool Rd Drainage Soheme	South-east of		parallel to Washpool Road. PFTI- D5 & D- 28. Acquire land, construct swale and culverts:	\$ 10,412,000		Concept	Urban	Central		Preliminary design completed-WMS
$\vdash$	New		Drainage Path North of Washpool Road	Benjamin Dr	South of Temora St	PFTI -D5 Construction of a swale, culverts and land		\$ 1,702,000	,	Urban	Central		Preliminary design completed-WMS
	New		Drainge Path South of Washpool Road	Reigal Dr	Washpool Road	construction of a swale, culverts and land acquisition. PFTI-D28.		\$ 7,990,000	Preliminary	Urban	Central		Preliminary design completed-WMS
	New		Drainage Path north of Reigel Drive toward Cherryfield Road	North of Reigal Dr	PFTI- D28	Establish major drainage system corridor- PFTI D33		\$ 720,000	Preliminary	Urban	Central		Prežiminary design completed-WMS
48	New	Low	Parkhurst North Drainage Scheme	North of Olive St	Yaamba Road	Establish major drainage system corridor. PFTI- D29 & D-31.	\$ 305,000		Concept	Urban	Central	\$305,000	Further investigation required. Easement through some RRC an private lands.
	New		Parkhurst North Drainage (Stage 1)	North of Olive St	Yeamba Road	Establish major drainage system corridor. PFTI- D29.		\$ 245,000	Concept	Urban	Central		Further investigation required.
	New		Parkhurst North Drainage (Stage 2)	Yaamba Road (end of PFTI -D29)	Ramsay Creek	Establish major drainage system corridor. PFTI- D31.		\$ 60,000	Concept	Urban	Central		Further investigation required
49	New	Low	Victoria Street and Webster Street Drainage	Victoria St	North of Watts Rd	Establish major drainage system corridor.	\$ 150,000	\$ 150.000	Concept	Urban	Central	\$150,000	Further investigation required- anticaped higher cost than now
						PFTI- D36.							proposed. Hence major project

50	Upgrade	Low	Wehmeire St/Frenchville Rd	Wehmeier St	Frenchvile Rd	Secure easement from Wehmeire st to Frenchvile Rd; shift the sewer manhole at 18Rees Jones, realign the house drain and reformation of the drainage feature.	\$ 240,000	\$ 240,000	Concept	Urban	Frenchville	\$240,000	Desktop investigation
51	New	Low	McLeod Park Drainage Scheme	Simpson St	Frenchmans Creek	Diversion drainage to Frenchmans creek, Outlet Channel improvements and Open Drain Improvements	\$ 550,000		Concept	Urban	Central	\$550,000	Planning Studies completed
	New		McLeod Park Drainage (Stage 1 to 3)	Simpson St	Frenchmans Creek	Diversion drainage to Moores creek, Inlet Structure and Channel to Water St		s .	Concept	Urban	Central		Project Completed
	New		McLeod Park Drainage Outlet Channel	Water St	Frenchmans Creek	Easement Acquisition and Channel Works		\$ 450,000	Concept	Urban	Central		Design Complete \$250K acquisition, \$200K channel.
	Upgrade		McLeod Park Drainage Open Drain Improvements	McLeod Park		Channel improvements through park.		\$ 100,000	Concept	Urban	Central		Design Complete.
52	Upgrade	Low	Forest Park Drainage- Open Drain Improvements	Noman Rd	Brambles St	Open Channel Improvements	\$ 500,000	\$ 500,000	Concept	Urban	Norman Gardens	\$500,000	Concept Design and estimate completed- Design. To be further prioritised hence kept a the bottom of this programme as discussed with the design. Design unit is considering outsourcing a consultant.
							\$124,540,891	\$129,498,320				\$119,721,891	
			Note:									\$4,819,000	
					PFTIs under 200k still considered as major projects								
				Projects related to creek and riverine flooding to be reported separately.Rockonia Rd scheme re			moved.						
				Replacement of inlets and pits are renewals and considered under the inlet replacement program.			N						

## STORMWATER PROGRAM UPDATE

### **Minor Stormwater Priority Projects**

Meeting Date: 21 June 2022

#### MINOR STORMWATER CAPITAL WORKS PROGRAM

								Jun-22					
SN	AM Category			From	То	Proposed_Works	Est_Amount				Unfunded		
SN	AM Category	Priority	Projects/ Minor	From	10	Proposed_Works	Est_Amount	Estimate Accuracy	Locality	Sub-Locality		Project Status/comments	
1	New	Medium	Plahn Street	Berserker St	Intersection	New inlets and connecting pipes to relieve intersection flooding.	\$ 200,000	Canaept	Urban	Central	\$200,000	Concept Design and estimate completed. 2017-049	
2	New	Medium	17 Annie Cl	Back of the property	Annie Cl	600 RCP extension along the southern boundary to the back of the property	\$ 67,000	Concept	Urban	Gracemere	\$67,000	Postpone up until an easement is agreed.	
3	New	Medium	33 Spencer St	Henry St	Craigilee St	Extend 525 dia pipe along Spencer St with in lets at Craigilee St	\$ 190,000	Concept	Urban	South	\$190,000		
4	Upgrade	Low	275 Denham St Ext	North of Denham St Ext	277 Denham St Ext	Upgrade pipes to 825 and 900 , an additional inlet and overflow pit to prevent overlopping	\$ 222,604	Concept	Urban	West	\$222,004	Desktop investigation completed	
,	New	Low	18 Ann Street	12 Ann St	Existing grate inlet	Break out the K&C and provide a concreted transition to flush with the existing grate inlet	\$ 32,000	Concept	Urban	West	\$32,000	Desktop investigaion completed.	
6	Upgrade	Low	43 Haynes St	43 Haynes St	43 Haynes St	Secure drainage easement Extend the existing 1200x450 culvert	\$ 100,500	Concept	Urban	Park Ave	\$100,500	Scoped for design	
7	New	Low	Kent Lane	166 Kent Street	278 Campbell St	Install pipes and pits	\$ 100,000	Concept	Urban	Central	\$100,000	Concept design completed; forms part of upper main drain upgra	
8	New	Low	Balaclava/Simpson street Drainage (Stage 3)	Rear of 311 Salamanca St	Salamanca St	Divert Salamanca Strunoff into Baladava St. Refer plan R08- 032.	\$ 160,000	Budget/Predesign	Urban	Central	\$160,000	Detail design exists.Easement not yet agreed on 311 Salamanca	
9	Upgrade	Low	Platter/ James St intersection	Platten St	James St	Upgrade culvert to DN875 RCP	\$ 20.200	Concept	Urban	West	\$20,200	Desktop investigation completed	
20	New	Low	Taylor/ Bertram St	Taylor St	Bertram St	Secure drainage easement additional culvert capacity across Taylor St may be needed	\$ 50,000	Indicative	Urban	Park Ave	\$50,000	Drainage Essement on lot 69:RP602981 secured. Dvg.2018-191	
11	Upgrade	Low	Arthur Street (Gracemere)	James St Intersection		Upgrade Pipes and channel when updrading the intersection. ROL contributions available	\$ 320,000	Concept	Urban	West	\$320,000	Desktop investigation completed. This should be coupled with ro- widening works.	
12	New	Low	119 Stack Street	119 Stack St	111 Stack St	Acquire an easement and maintain flow path. Culvert across the Street may be needed	\$ 20,000	concept	Urban	Central	\$20,000	Desktop investigation completed. Easement acquisition only. Pa major drainage scheme.	
13	Upgrade	Low	278 Mason Street		Grubb S∜ Bryant St	Requires esement over previous flow path and modification of fencelines. Outlet channel maintenance is required and could be carried out seperately.	\$ 50,000	Concept	Urban	Central	\$50,000	Desktop investigation completed	
34	upgrade	Low	131 Stewart Street	131 Stewart St/Thorpe Street	Berserker Street	Upgrade pipe to 900dia to capture frequent run off	\$ 200,000	Concept	Urban	Frenchville	\$200,000	Further scoping to be undertaken. Desktop investigation complete	
15	New	Low	Kavanagh Crescent	No. 1	No 247A	Extend 450 dia pipe at 245 &245A Thozats Road to maintain the connectivity of pipes across the footpath.	\$ 45.000	Concept	Urban	Central	\$45,000	Desktop investigation completed	
28	Upgrade	Low	Knutsford Street	No. 22	Western St	and D/S of Helbronn St.	\$ 170,000	Concept	Urban	Central	\$170,000	Investigation of the catchment is required for further scoping.	
17	New	Low	333 Balaciava Street	Cul de Sac	Moores Creek	Back flow prevention device may be required Underground drainage-375 dia	\$ 30,000	Concept	Urban	Frenchville	\$30,000	Further scoping and investigation to be undertaken.	
18	Upgrade	Low	Bapaume Street	Rundle Street	6 Boonah St	extension from Rundle Rd to Boonah St intersection. Interallotment drain to pick up	\$ 150,000	Concept	Urban	Central	\$150,000	Further scoping and investigation to be undertaken.	
29	New	Low	Venables St	No. 157	no. 161	Interallotment drain to pick up ponded water and take to Moores creek Replace the exising permanent	\$ 110,000	Concept	Urban	Central	\$110,000	Design completed-but requires easement acquisition / property owner agreement. Currently stalled. May require Venables St Ma project to be constructed first.	
20	Upgrade	Low	Water St Culverts	Water St	Water St	backfow gates in three barrels with automatic flacs	\$ 37,000	Preliminary	Urban	Frenchville	\$37,000	Detailed design as per the exisiting flap on the fourth barrel.	
21	Upgrade	Low	Meyenberg Court Drainage Scheme	Meyenberg Ct	Cul De Sac	Floor Level survey, Install additional 600mm RCP along the easement Installation of 675mm pipe to	\$ 59,850	Indicative	Urban	Norman Gardens	\$59,850	Drainage path in between 29-31Meyemberg Ct not modelled correctly. The owner of 29 meyenberg has not experienced issue with runoff for 20 years. Appears not a project.	
22	New	Low	9 Rogar Av	Access to the property		drain the northen swale to the existing drainage feature Including K&C Owners to install drains with	\$ 155,000	Detailed design	Urban	Frenchville	\$155,000	Deatailed design complete. Council to endorse.	
23	Upgrade	Low	Jessie Street	No. 92		RRC to do connection. Research on history required.	\$ 25,000	Concept	Urban	Central	\$25,000	Sheet flow primarily may be from the driveway.	
24	Upgrade	Low		Street	Dean Street	Mitigate nuisance fow.(internal network not modelled, 525 RCP approx 5year capacity) Upgraded Inlet capture to	\$ 70,000		Urban	Frenchville		Model results within the subject site may not have reflected the r to some extent, however ponding is likely due to the land scapin limited internal pipe capacity. Internal to development.	
25	New	Low	Archerview Terrace	No. 28	No. 30	deals and feature	\$ 80,000 \$2,664,154		Urban	Central	\$80,000	Preliminary Design and estimate completed. 2018-124	

### 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