INFRASTRUCTURE COMMITTEE MEETING

AGENDA

21 JUNE 2016

Your attendance is required at a meeting of the Infrastructure Committee to be held in the Council Chambers, 232 Bolsover Street, Rockhampton on 21 June 2016 commencing at 12.30pm for transaction of the enclosed business.

CHIEF EXECUTIVE OFFICER
14 June 2016

Next Meeting Date: 19.07.16

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

2 PRESENT

Members Present:

Councillor R A Swadling
Councillor C E Smith
Councillor C R Rutherford
Councillor M D Wickerson

In Attendance:

Mr R Holmes – General Manager Regional Services (Executive Officer)
Mr E Pardon – Chief Executive Officer

3 APOLOGIES AND LEAVE OF ABSENCE

The Mayor, Councillor Margaret Strelow has tendered her apology and will not be in attendance.

Councillor Neil Fisher has tendered his apology and will not be in attendance.

Councillor Tony Williams was previously granted Leave of Absence from 21 June 2016 to 24 June 2016 inclusive.

4 CONFIRMATION OF MINUTES

Minutes of the Infrastructure Committee held 17 May 2016

5 DECLARATIONS OF INTEREST IN MATTERS ON THE AGENDA

6 BUSINESS OUTSTANDING

6.1 BUSINESS OUTSTANDING TABLE FOR INFRASTRUCTURE COMMITTEE

File No:	**10097**
Attachments:	**1. Business Outstanding Table**
Authorising Officer:	**Evan Pardon - Chief Executive Officer**
Author:	**Evan Pardon - Chief Executive Officer**

SUMMARY

The Business Outstanding table is used as a tool to monitor outstanding items resolved at previous Council or Committee Meetings. The current Business Outstanding table for the Infrastructure Committee is presented for Councillors' information.

OFFICER'S RECOMMENDATION

THAT the Business Outstanding Table for the Infrastructure Committee be received.

BUSINESS OUTSTANDING TABLE FOR INFRASTRUCTURE COMMITTEE

Business Outstanding Table

Meeting Date: 21 June 2016

Attachment No: 1

Date	Report Title	Resolution	Responsible Officer	Due Date	Notes
3 June 2015	Traffic Problems - Glenmore State School Area	THAT a report outlining the issues impacting on traffic, especially school related, in the area bounded by Farm Street/Yaamba Road/Carlton Street and McLaughlin Street including an action plan to address the issues be prepared for Committee consideration. THAT Council write to Glenmore State Primary School requesting that they revisit their recent decision in respect of finishing times due to the impact this was having on traffic in the area.	Robert Holmes	17/06/2015	Council officers are having on-going discussions with the Schools and DTMR regarding this matter after the School refused to review its school finishing times which were contributing to the traffic issues.
5 August 2015	German Street Traffic Concerns	1. THAT the report titled German Street Traffic Concerns be received and petitioners be advised in accordance with the recommendations; 2. THAT 40km/hr advisory speed signs are installed underneath the existing Curve Warnings signs on the approach to the curve on German Street and Raised Retro-reflective Pavement Markers (RRPM's) are installed along both edge lines for the length of the curve in accordance with drawing GERMAN-3; and 3. THAT Council continue to regularly monitor traffic for possible speed violations and notify the Queensland Police, as necessary, to take enforcement action. 4. THAT six months following the implementation of the recommendations above this matter be reassessed and a report be presented to the committee.	Angus Russell	01/06/2016	Works completed. Six month review to be undertaken around June 2016.

5 August 2015	Wackford Street Drainage Petition	THAT Council take the following action: 1. The inlet structure at the eastern end of Wackford Street is considered to be a problematic site for stormwater inundation and require that it be scheduled for regular inspection and cleared as required; 2. The trees adjacent to the Wackford Street inlet structure and channel be removed; 3. A drainage investigation into the Wackford Street drainage issues be conducted with a view to identifying possible mitigation options; 4. A drainage scheme based on the findings of the drainage investigation be prepared and the scheme be submitted to Council for budgetary consideration; 5. That all petitioners be advised of the actions being taken in accordance with recommendation 1-4 above.	Martin Crow	19/08/2015	More detailed flood modelling and preliminary design work has been completed. A report is being prepared for Council consideration. Residents to be advised after that.
2 September 2015	Rockhampton CBD Translink Bus Station	THAT a report be prepared for Council's consideration including preferred options for the Translink Bus Station in the Rockhampton CBD.	Martin Crow	16/09/2015	Report being presented at this meeting.
7 October 2015	Acquisition of Land for Road Corridor Purposes - Alexandra Street and Birkbeck Drive, Parkhurst	THAT the Chief Executive Officer be authorised to issue a Notice of Intention to Resume in accordance with section 7 of the Acquisition of Land Act 1967 for the resumption of land from the owners of Lots 1 and 4 on SP258300 described as "land requirement for road purposes" to extend the Alexandra Street road corridor, generally in accordance with Drawings 2014-184-01 and 2014-084-02.	Angus Russell	21/10/2015	Negotiation to acquire by agreement is progressing and is expected to be concluded in the near future.
4 November 2015	Vallis Street Safety Improvements	THAT Council resolve to implement Option 3, prohibition of a right turn movement on Vallis Street on the basis that it is the most cost effective solution that achieves the desired traffic safety improvements for the intersection of Dean and Vallis Streets and on Vallis Street itself	Angus Russell	18/11/2015	Written advice on Council's decision will be provided to residents and businesses before the implementation of the endorsed works.

04 November 2015	Dean Street U-Turn Facility at Vallis Street	THAT Council resolve to implement Option 2, a median extension on Dean Street on the basis that it is the most cost effective solution that achieves the desired traffic safety improvements for the intersection of Dean and Vallis Streets.	Angus Russell	18/11/2015	Written advice on Council's decision will be provided to residents and businesses before the implementation of the endorsed works.

7 PUBLIC FORUMS/DEPUTATIONS

Nil

8 OFFICERS' REPORTS

8.1 CIVIL OPERATIONS MONTHLY OPERATIONS REPORT - JUNE 2016

File No:	**7028**
Attachments:	**1. Monthly Operations Report - Civil Operations 31 May 2016** **2. Works Program June - July 2016**
Authorising Officer:	**Robert Holmes - General Manager Regional Services**
Author:	**David Bremert - Manager Civil Operations**

SUMMARY

This report outlines Civil Operations Monthly Operations Report 31 May 2016 and also Works Program of planned projects for the month June – July 2016.

OFFICER'S RECOMMENDATION

THAT the Civil Operations Monthly Operations Report for June 2016 be received.

COMMENTARY

The Civil Operations Section submits a monthly report outlining the details of the programmed works for the upcoming month to assist Council's Executives and Councillors when they receive enquiries from their constituents in relation to road and associated road reserve works.

BACKGROUND

	May
Inspections Created	**295**
Inspections Completed	**273**
Work Orders Created	**276**
Work Orders Completed	**278**

BUDGET IMPLICATIONS

All works specified in this report are included in Council's current approved budget.

LEGISLATIVE CONTEXT

All works outlined in this report will be conducted in a manner to comply with all legislation.

STAFFING IMPLICATIONS

The works specified in this report have been programmed whilst taking into consideration current staffing levels.

RISK ASSESSMENT

Civil Operations Section's staff conduct a risk assessment of their job site before work commences to ensure they have identified assessed and controlled any possible hazards to ensure the safety of themselves and others.

CONCLUSION

This report outlines the planned works program and the customer requests received for Civil Operations, Urban and Rural Operations Capital Projects Report Financial Year to Date and are for the information of Councillors.

CIVIL OPERATIONS MONTHLY OPERATIONS REPORT - JUNE 2016

Monthly Operations Report
Civil Operations 31 May 2016

Meeting Date: 21 June 2016

Attachment No: 1

MONTHLY OPERATIONS REPORT

CIVIL OPERATIONS SECTION

June 2016

VARIATIONS, ISSUES AND INNOVATIONS

Improvements / Deterioration in Levels of Services or Cost Drivers

Restoration of damage caused by Cyclone Marcia not completed during the Emergent Phase is still on hold while we await approval of our submissions.

Work has commenced on Scott Road and gravel re-sheeting flood damage.
Tenders have closed for the urban and rural works. Tenders will be assessed in the next two weeks.

1. COMPLIANCE WITH CUSTOMER SERVICE REQUESTS

The response times for completing the predominant customer requests in the reporting period of May 2016 for *Civil Operations* are as below:

All Monthly Requests (Priority 3)
Civil Operations 'Traffic Light' report
May 2016

	Balance B/F	Completed in Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	Work Orders Issued	Under Long Term Investigation	Avg W/O Issue Time (days) 12 months	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and
			Received	Completed									
Abandoned Vehicles (INFRA USE ONLY NOT CS) (Asset)	11	7	0	0	4	0	0	24.96	90	0.00	14.88	23.18	27.22
Property Accesses	1	1	5	3	2	0	0	3.60	14	0.67	5.08	8.59	23.67
Rural Property Addressing (Existing)	0	0	2	2	0	0	0	0.00	28	2.50	4.57	4.32	4.32
Rural Property Addressing (New)	3	3	0	0	0	0	0	0.00	28	0.00	14.82	13.07	9.59
Bridge Vandalism (Asset)	0	0	0	0	0	0	0	3.58	14	0.00	0.00	2.00	2.00
Boat Ramps (Asset)	1	1	2	1	1	1	0	-2.67	14	0.00	4.67	11.40	11.73
Bridge Maintenance (Asset)	1	1	1	0	1	0	0	6.96	60	0.00	4.00	5.33	5.25
Burn Off Advice - Reduction Burning	0	0	4	4	0	0	0	0.00	5	1.50	1.33	3.43	2.24
Bus Stops, Seating, Bus Shelters (Asset)	1	0	3	2	2	0	0	6.43	60	2.50	4.00	24.54	17.07
Drainage Miscellaneous (Asset)	36	13	12	7	28	1	0	8.65	30	4.00	7.87	15.00	20.49
Drainage Inundation (Flooding Issues) (Asset)	10	2	1	1	8	0	0	15.58	30	4.00	12.55	13.49	17.47
Drainage Kerb & Chanel (Asset)	17	4	7	4	16	1	0	10.61	30	5.25	9.53	23.98	29.66
Drainage Gully Pits (Asset)	4	1	3	1	5	1	0	11.10	30	6.00	9.29	15.34	19.91
Drainage Pipes and Culverts (Asset)	7	3	4	0	8	2	0	3.83	5	0.00	8.03	25.97	23.98
Drainage Vandalism (Asset)	0	0	0	0	0	0	0	0.65	30	0.00	0.00	5.00	5.00
Grading Unsealed Road Maintenance (Asset)	16	8	36	17	27	11	0	0.98	60	4.29	5.10	10.50	12.82
Guard Rails (Asset)	0	0	1	0	1	0	0	5.60	30	0.00	0.00	6.33	6.00
Guide Post (Asset)	2	2	1	1	0	0	0	9.55	14	0.00	69.17	50.11	54.00
Illegal Dumping (INFRA ONLY - CSO TO USE NUILIT)	2	1	2	2	1	0	0	9.98	14	3.50	8.38	19.14	19.75
Infrastructure - General Enquiry	1	1	4	3	1	0	0	107.64	2	1.67	3.47	4.02	1.74
Jetties/Wharves (Asset)	0	0	0	0	0	0	0	4.10	14	0.00	0.00	40.33	40.33
Miscellaneous Road Issues (Asset)	63	38	80	44	57	9	0	6.63	14	2.45	7.73	14.03	14.19
Footpath & Off-Road Cycle Ways Maint. (Asset)	27	18	33	17	25	5	0	5.83	30	2.00	6.62	16.86	16.22
Potholes - Sealed Roads (Asset)	28	15	33	18	28	14	0	0.49	5	1.11	2.74	11.94	11.87
Railway Crossings (Asset)	0	0	0	0	0	0	0	0.00	60	0.00	0.00	0.00	0.00
Rural Roadside Vegetation Slashing (Asset)	3	2	3	2	2	0	0	3.05	30	3.00	4.72	6.54	6.50
Signs & Lines (Already Existing) - (Asset)	11	7	27	14	17	9	0	2.78	10	1.36	4.12	10.36	9.81
Street Lighting - Other (Asset)	2	1	1	0	2	0	0	24.01	30	0.00	14.40	28.05	18.29
Street Lighting - Maintenance (Asset)	4	1	2	1	4	0	0	0.89	30	0.00	6.09	12.08	14.14
Street Sweeping - (Asset)	3	2	16	9	8	3	0	0.46	5	2.00	4.94	7.53	5.14
Traffic Lights (Asset)	6	6	6	4	2	2	0	0.12	14	0.50	0.79	1.97	2.23
Water Course Miscellaneous (Asset)	2	1	4	2	3	0	0	-2.19	14	3.00	7.43	12.08	13.30
Water Course Vandalism (Asset)	0	0	0	0	0	0	0	0.00	14	0.00	0.00	0.00	0.00

Comments & Additional Information

Delivery statistics have improved and we will continue to strive to meet the stated timeframes.

Priority Escalation

This function allows the Actioning Officer and/or Responsible Officer of the Request to receive an e-mail message each time the Priority is escalated. These Priority escalations are notification / reminders to action the request and not necessarily to complete the request.

Estimated Duration Maintenance

The Estimated Duration Maintenance form displays the Estimated Duration Maintenance Timeframe (or Service Level) for Request Types ie. Minutes, Hours, Days, Weeks and Years.

2. COMPLIANCE WITH STATUTORY AND REGULATORY REQUIREMENTS INCLUDING SAFETY, RISK AND OTHER LEGISLATIVE MATTERS

Safety Statistics

The safety statistics for the reporting period are:

	FORTH QUARTER		
	April	**May**	**June**
Number of Lost Time Injuries	**1**	**1**	**TBA**
Number of Days Lost Due to Injury	**8**	**3**	**TBA**
Total Number of Incidents Reported	**3**	**2**	**TBA**
Number of Incomplete Hazard Inspections	**4**	**6**	**TBA**

One Lost Time Injury and only two incidents reported in May.

Risk Management Summary

Example from Section Risk Register (excludes risks accepted/ALARP)

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Budget overrun (Capital Projects) resulting in inability to complete project to specification impacting on end user/fit for purpose, seeing corporate/operational plan objectives not being addressed and Council's credibility with the community being impacted.	Very High 2	1. (2) Design Services to design high risk projects prior to drafting budget to provide design estimates. Apply cost indexation to design estimates to update estimate to proposed budget period. 2. (2) Coordinators Urban and Rural Operations to prepare estimates for new projects and the Manager Civil Operations to review estimates. 3. Project management framework including project plans to be implemented.	30/06/2016	90%	All high risk projects being scoped, designed and design estimates being checked by Coordinator and Works Engineers. All projects have project plans and estimates undertaken. This is being undertaken in most projects.
Increased input costs not factored in to budgets thus resulting in inability to fully complete stated work programs.	High 4			100%	Material costs and plant costs regularly updated in estimates.

Potential Risk	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Failure of operation asset condition (roads, drainage, etc) leading to: injury or death of public/staff; damage to property/equipment - resulting in legal outcomes, financial impacts and negative publicity for Council.	Very High 2	(1) Fine tune and review the ongoing Civil Operation asset condition inspections, which are conducted in conjunction with Council's Asset Management Unit for assets, facilities & major projects. (Note - Civil Operations inspect rural roads but the Asset Management Unit inspect urban roads)	28/06/2016	75%	Rural roads being regularly inspected. Use of RACAS inspection system to commence in September, 2014 Urban Roads have RACAS system driven over once a year. Meeting with asset management staff to coordinate repairs has been undertaken.
"Unacceptable response times on maintenance call outs resulting in low community confidence."	Moderate 5			100%	Callout escalates until a response from a Council officer is obtained. Additional resources being allocated to improve the response times.
Interruption to program of works resulting in non-achievement of corporate targets and reduction in service delivery. (This includes Capital Works program)	Moderate 5	Project management framework/tool to provide a robust and prioritised forward works program.	30/06/2014	100%	10 year Works Program completed.
Contamination of land and waterways from inappropriate work practices / procedures.	Moderate 6			100%	All fuel trailers have spill kits. In field maintenance and fuelling kept to the minimum possible to reduce risk of contamination by hydrocarbons.
Landslip and/or rocks on road along Pilbeam Drive at Mt Archer - poses a threat to safety of road users resulting in public liability.	High 5			100%	Regular inspections are done after significant rain events

Legislative Compliance & Standards

3. ACHIEVEMENT OF CAPITAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

The following abbreviations have been used within the table below:

RWC	*Rural West Control*
UCC	*Urban Central Control*
UWC	*Urban West Control*

BDG	*Bridges*	*RC*	*Reconstruction*	*TM*	*Traffic Management*
BR	*Boat Ramps*	*RF*	*Road Furniture*	*AS*	*Asphalt Seal*
FP	*Footpaths*	*RS*	*Reseal*	*LA*	*Land Acquisition*
GR	*Gravel Re-sheet*	*SW*	*Stormwater*	*SL*	*Street Lighting*
NC	*New Construction*	*TL*	*Traffic Lights*		

End of Month General Ledger - (Inc Operating & Capital) - CIVIL OPERATIONS

As At End Of May

Report Run: 07-Jun-2016 09:20:26 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget	Revised Budget	Revised Budget (Pro Rata YTD)	YTD Actual	YTD Commit + Actual	Variance	On target
	$		$	$	$	%	91.7% of Year Gone
CAPITAL					Revised Budget Comparison		
CIVIL OPERATIONS							
CP416 - 2015 RURAL DISASTER RECONSTRUCTION							
1 - Revenues	0	0	0	(917,132)	(917,132)	0%	✓
Total Unit: Civil Operations Management	***0***	***0***	***0***	***(917,132)***	***(917,132)***	**0%**	✓
CP417 - 2015 URBAN DISASTER RECONSTRUCTION							
1 - Revenues	(10,000,000)	(10,000,000)	(9,166,667)	(2,911,748)	(2,911,748)	29%	✗
2 - Expenses	10,170,000	10,170,000	9,322,500	1,284,788	5,408,690	53%	✓
3 - Transfer / Overhead Allocation	0	0	0	106,826	106,826	0%	✗
Total Unit: Civil Operations Management	***170,000***	***170,000***	***155,833***	***(1,520,134)***	***2,603,768***	**1532%**	✗
CP418 - 2013 RURAL DISASTER RECONSTRUCTION							
1 - Revenues	0	0	0	(452,644)	(452,644)	0%	✓
Total Unit: Civil Operations Management	***0***	***0***	***0***	***(452,644)***	***(452,644)***	**0%**	✓
CP419 - 2013 URBAN DISASTER RECONSTRUCTION							
Total Unit: Civil Operations Management	***0***	***0***	***0***	***0***	***0***	**0%**	✓
CP420 - CAPITAL CONTROL REVENUE CIVIL OPERATIONS							
1 - Revenues	(4,074,057)	(4,474,057)	(4,101,219)	(13,039,416)	(13,039,416)	291%	✓
2 - Expenses	0	0	0	7	7	0%	✗
Total Unit: Civil Operations Management	***(4,074,057)***	***(4,474,057)***	***(4,101,219)***	***(13,039,410)***	***(13,039,410)***	**291%**	✓
CP421 - CAPITAL CONTROL RURAL GRAVEL CRUSH							
2 - Expenses	0	0	0	77,984	77,984	0%	✗
3 - Transfer / Overhead Allocation	0	0	0	423,212	423,212	0%	✗
Total Unit: Civil Operations Management	***0***	***0***	***0***	***501,196***	***501,196***	**0%**	✗
CP422 - CAPITAL CONTROL RURAL OPERATIONS WEST							
2 - Expenses	4,309,500	4,659,500	4,271,208	2,379,822	2,559,363	55%	✓
3 - Transfer / Overhead Allocation	0	0	0	1,532,687	1,532,687	0%	✗
Total Unit: Civil Operations Management	***4,309,500***	***4,659,500***	***4,271,208***	***3,912,509***	***4,092,050***	**88%**	✓
CP427 - CAPITAL CONTROL CENTRAL URBAN OPERATIONS							
2 - Expenses	14,779,702	17,593,802	16,127,652	10,091,325	17,317,328	98%	✗
3 - Transfer / Overhead Allocation	0	0	0	2,186,866	2,186,866	0%	✗
Total Unit: Civil Operations Management	***14,779,702***	***17,593,802***	***16,127,652***	***12,278,191***	***19,504,194***	**111%**	✗
CP428 - CAPITAL CONTROL WEST URBAN OPERATIONS							
1 - Revenues	0	0	0	(1,224)	(1,224)	0%	✓
2 - Expenses	3,290,000	3,380,000	3,098,333	2,253,235	2,264,819	67%	✓
3 - Transfer / Overhead Allocation	0	0	0	421,883	421,883	0%	✗
Total Unit: Civil Operations Management	***3,290,000***	***3,380,000***	***3,098,333***	***2,673,893***	***2,685,477***	**79%**	✓
Total Capital:	**18,475,145**	**21,329,245**	**19,551,808**	**3,436,470**	**14,977,500**	**70%**	✓
Grand Total:	**43,587,005**	**45,601,105**	**41,801,013**	**24,287,980**	**35,972,401**	**79%**	✓

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
URBAN OPERATIONS CENTRAL						
UCC-AS-Annual Reseal Program				4,000,000	0.00	
- UCC-AS Archer Street-Agnes Street to Quarry Street			100% Completed		142,763.86	140,000
- UCC-AS Archer Street-East Street to Quay Street					68,152.71	60,000
- UCC-AS Canning Street-Fitzroy Street to Archer Street	23/04/2016	24/04/2016	100% Completed		295,020.73	280,000
- UCC-AS Dean Street (Asphalt Repairs)-Elphinstone Street	27/05/2016	28/05/2016	100% Completed		75,189.27	160,000
- UCC-AS George Street-William Street to Bruce Highway		13/11/2015	100% Completed	0	12,870.71	13,000
- UCC-AS High Street-Berserker Street	29/08/2015	04/09/2015	100% Completed	220,000	220,507.12	220,000
- UCC-AS Thozet Road-Wigginton Street to Zervos Avenue	19/04/2016	22/04/2016	100% Completed		269,001.67	180,000
- UCC-AS Upper Dawson Rd-Cemetery Car Park to Church St			100% Completed		87,039.13	90,000
- UCC-AS Victoria Place-High Street to Blanchard Street		13/11/2015	100% Completed	0	18,192.32	18,200
- UCC-AS-Charles St-Musgrave St to 65/		15/07/2015	100% Completed	45,000	45,742.02	45,750
- UCC-AS-Oswald Street-Upper Dawson Ro				1	0.00	58,000
- UCC-MISC-Asphalt Repairs				0	891,053.00	0
- UCC-MISC-Surface Preparation					21,860.67	0
- UCC-RC-Marie Street-Skardon Street t				1	0.00	33,950
- UCC-RC-Skardon Street-Edington Stree				1	0.00	10,600
- UCC-RC-South Street-Murray Street to				1	0.00	10,600

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- UCC-RC-Stamford Street-Dean Street t				1	0.00	53,800
- UCC-RC-Wooster Street-Hutton Street				1	0.00	61,600
- UCC-SLS-Armstrong Lane-Edward Street to 104 Musgrave Str					4,210.28	25,500
- UCC-SLS-Armstrong Street-Musgrave Street to Spike Street					9,706.39	62,500
- UCC-SLS-Arnold Street-Fitzroy Street to Archer Street				0	3,893.98	19,700
- UCC-SLS-Atherton Street-Barrett Street to Capricorn Cres				0	8,083.24	31,300
- UCC-SLS-Bakara Street-Herbert Street to Bapaume Street				0	8,379.52	33,900
- UCC-SLS-Bank Street-Hadgraft Street to End				0	5,500.27	23,900
- UCC-SLS-Bapaume Street-Boisy Street to Rundle Street		29/04/2016	100% Completed	0	5,911.91	23,900
- UCC-SLS-Bloxsom Street-Wiltshire to End					12,088.90	54,800
- UCC-SLS-Boisy Street-Barambah Street to Turner Road		29/04/2016	100% Completed	0	9,591.11	28,500
- UCC-SLS-Boonah Street-Barambah Street to Bapaume Street				0	5,431.53	21,500
- UCC-SLS-Brae-Ross Street-Upper Dawson Road to Davis Stre				0	6,510.83	36,500
- UCC-SLS-Brigg Street-Plahn to Kerrigan Street					3,033.44	13,500
- UCC-SLS-Buckle Street-Edgar Street to Haynes Street				0	8,485.32	35,900
- UCC-SLS-Callaghan Street-Bruigom Street to MacNevin Stre				0	4,601.89	16,000
- UCC-SLS-Denham Terrace-Fitzroy Street to Denham Street				0	5,970.09	15,300
- UCC-SLS-Doblo Avenue-Bruigom Street to 10/12 Doblo Avenu				0	3,964.91	18,000

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- UCC-SLS-Donnollan Street-Hook Street to Clanfield Street					8,529.57	40,000
- UCC-SLS-Duffy Street-Stanlake Avenue to Richardson Rd				0	8,777.40	46,900
- UCC-SLS-Duncan Street-Hamilton Avenue to Lion Creek Road				0	4,424.16	16,500
- UCC-SLS-Earl Street-Georgeson Street to End					4,001.85	16,000
- UCC-SLS-Edgar Street-Main Street to Hogan Street				0	11,500.04	43,300
- UCC-SLS-Fitzpatrick Street-Edward Street to Musgrave Str				0	7,075.89	31,700
- UCC-SLS-Gowdie Ave Shields Ave to 5/7 Gowdie Ave-9/13 Go					8,715.08	
- UCC-SLS-Gowdie Avenue Shields Avenue to 5/7 Gowdie Avenu					-8,715.08	
- UCC-SLS-Guymer Street-Brigg Street to Beserker Street					6,512.63	30,400
- UCC-SLS-Hadgraft Street-MacAlister Street to End				0	4,281.32	23,300
- UCC-SLS-Halligan Cresent-Wright Street to End				0	8,256.79	34,500
- UCC-SLS-Hamilton Avenue-Duncan Street to Lion Creek Road		29/04/2016	100% Completed	0	10,302.21	39,600
- UCC-SLS-Harrison Street-Diplock to End					8,821.35	43,700
- UCC-SLS-Harrow Street-Denham Street Ext to End		29/04/2016	100% Completed	0	5,166.50	27,000
- UCC-SLS-Heath Street-Jardine Street to Little Oakley Str		29/04/2016	100% Completed		5,792.36	22,000
- UCC-SLS-Heath Street-Naughton Street to Jardine Street		29/04/2016	100% Completed	0	6,878.17	29,600
- UCC-SLS-Herbert Street-Knutsford Street to Mansfield Str				0	3,148.02	11,500
- UCC-SLS-Highway Street-Glenmore Road to Renshaw Street				0	2,943.79	13,800

- UCC-SLS-Hogan Street-Haynes Street to Edgar Street				0	10,891.56	34,900
- UCC-SLS-Hook Street-High Street to End					14,994.08	61,700
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
- UCC-SLS-Hutton Street-Simpson Street to Talbort Street					4,114.08	21,000
- UCC-SLS-Kingel Street-Morrison Street to Wandal Road		29/04/2016	100% Completed	0	6,079.07	21,300
- UCC-SLS-Knutsford Street-Herbert Street to Jardine Stree		29/04/2016	100% Completed	0	13,664.94	41,400
- UCC-SLS-Langford Street-Feez Street to End					4,104.46	16,600
- UCC-SLS-Lanigan Street-Jardine Street to Oakely Street				0	5,819.86	29,100
- UCC-SLS-Lanigan Street-Oakely Street to Norman Street				0	5,405.02	23,600
- UCC-SLS-Lauga Street-Haynes Street to Rail line				0	3,495.10	14,600
- UCC-SLS-Lauga Street-White Street to Taylor Street				0	3,788.18	17,400
- UCC-SLS-Leamington Street-Ford Street to Pine Street					4,341.75	25,500
- UCC-SLS-Livingstone Street-Phillips Street to Berserker					18,405.91	109,000
- UCC-SLS-Luck Avenue-Lion Creek Road to 7 Luck Avenue		29/04/2016	100% Completed	0	14,185.63	105,300
- UCC-SLS-Lund-Melbourne Street to North Street		29/04/2016	100% Completed	0	2,865.48	12,200
- UCC-SLS-MacAlister Street-Thompson Street to Hadgraft St				0	4,540.53	18,900
- UCC-SLS-Marie Street-Skardon Street to End					2,408.16	35,000
- UCC-SLS-McDougall Street-Thozet Road to Codd Street					4,191.03	19,200
- UCC-SLS-Melbourne Street-Lund Street to Victoria Street				0	4,591.53	22,000

- UCC-SLS-Menzies Street 59/61 Menzies Street to Alexandra					-16,452.96	
- UCC-SLS-Menzies St-Rice St to 59/61 Menzies St to Alexan					16,452.96	
- UCC-SLS-Morrison Street-Bracher Street to Kingel Street		29/04/2016	100% Completed	0	3,127.92	11,000
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
- UCC-SLS-Nicholson Street-Upper Dawson Road to Costello S				0	9,689.71	44,600
- UCC-SLS-Nobbs Street-Elphinstone Street to Charles Stree				0	9,863.06	48,500
- UCC-SLS-Noel Street-High Street to Wooster Street					7,400.83	33,600
- UCC-SLS-Oakley Street-Rundle Street to Jones Street		29/04/2016	100% Completed		6,663.32	33,000
- UCC-SLS-Orr Avenue-Carlton Street to Cul-de-sac				0	6,013.54	26,300
- UCC-SLS-Oswald Street-Upper Dawson Road to Lower Dawson				0	11,238.64	58,000
- UCC-SLS-Parris Street-Thompson Street to Cul-de-sac				0	3,866.49	24,900
- UCC-SLS-Pennycuick Street-Archer Street to Hawkins Stree				0	2,249.54	9,900
- UCC-SLS-Pennycuick Street-Considine Street to Schofeild				0	3,395.30	15,800
- UCC-SLS-Phillips Street-Elphinstone Street to Edington S					6,740.28	26,000
- UCC-SLS-Plahn Street-Berserker Street to 154/156 Plahn S					9,610.19	43,600
- UCC-SLS-Price Avenue-Roundabout to Carlton Street				0	7,181.67	31,900
- UCC-SLS-Randwick Street-Rodboro Street to End				0	1,497.31	6,800
- UCC-SLS-Renshaw Street-Highway Street to Main Street				0	4,615.64	19,200
- UCC-SLS-Rodboro Street-151 Rodboro Street to Berserker S				0	9,294.85	38,500

- UCC-SLS-Rodboro Street-Berserker Street to Nobbs Street				0	4,839.99	24,200
- UCC-SLS-Rodboro Street-Nobbs Street to Randwick Street				0	4,999.79	20,300
- UCC-SLS-Rodboro Street-Randwick Street to Mckean Street				0	2,859.12	116,000
- UCC-SLS-Scully Street-Wehmeier Street to End					1,077.41	6,200
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
- UCC-SLS-Shields Avenue-Bloxsom Street to Labanka Close					4,094.84	14,100
- UCC-SLS-Shillam Street-Pillich Street to Price Avenue				0	4,832.61	22,000
- UCC-SLS-Skardon Street-Marie Street to Edington Street					3,928.09	10,900
- UCC-SLS-Slurry Seals						
- UCC-SLS-South Street-Murray Street to West Street				0	9,126.78	10,600
- UCC-SLS-Stamford Street-Dean Street to Bawden Street					7,846.58	35,600
- UCC-SLS-Stamford Street-Skardon Street to Berserker Stre					10,815.88	54,700
- UCC-SLS-Talford Street-Archer Street to Fitzroy Street				0	7,112.94	31,700
- UCC-SLS-Wafer Court-Feez Street to Cul-de-sac				0	0.00	6,800
- UCC-SLS-Ward Street-Upper Dawson Road to Henry Street				0	3,395.30	15,400
- UCC-SLS-Wattle Street-16 Wattle Street to End				0	5,237.87	21,200
- UCC-SLS-Webber Avenue-Richardson Road to 8/10 Webber Ave				0	7,851.54	41,800
- UCC-SLS-West Street-Albert Street to North Street				0	6,933.03	39,600
- UCC-SLS-West Street-Cambridge Street to Archer Street				0	8,709.66	38,900

- UCC-SLS-West Street-South Street to 203 West Street				0	3,690.69	5,700
- UCC-SLS-Wigginton Street-Thozet to Halford				0	22,588.95	101,200
- UCC-SLS-Wooster Street-Clanfield Street to Berserker Str					11,476.44	51,500
- UCC-SLS-Wooster Street-Clanfield Street to Dean Street					2,462.66	10,900
- UCC-SLS-Wright Street-German Street to End				0	6,949.96	23,500
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
- UCC-SS-Robinson Street-Dean Street to Diggers Lane					9,161.27	15,900
- UCC-SS-Robinson Street-Diggers Lane to Berserker Street					6,070.10	12,000
UCC-ALL-Preproject planning and desi				200,000	0.00	200,000
UCC-AS-Murray St-South St to End		15/07/2015	100% Completed	21,000	20,890.65	21,000
UCC-BDG-Bridge Rehabilitation				100,000	0.00	0
UCC-BDG-High St Bridge Upgrade		15/07/2015	100% Completed	5,800	5,752.21	5,800
UCC-BS-Bus Stop Program				6,200	2,620.99	6,200
UCC-CAR P-Carpark 4 Cambridge Street Rockh	24/05/2016	07/06/2016		80,000	62,765.21	80,000
UCC-CAR P-Exhibition Road Car Park	13/10/2015	20/10/2015	100% Completed	20,000	30,472.21	30,500
UCC-FP-Agnes St - Penlington St to Ward St	04/04/2016	13/05/2016	100% Completed	42,000	59,057.01	42,000
UCC-FP-Agnes St - Range College to Penlington St	10/03/2016	01/04/2016	100% Completed	63,000	39,219.11	63,000
UCC-FP-Barrett St - Farm St to MacKinlay St	13/05/2016	17/06/2016	90% Completed	73,000	37,879.87	73,000
UCC-FP-Barrett St - MacKinlay St to Richardson Rd	12/04/2016	13/05/2016	100% Completed	69,000	49,392.04	69,000

UCC-FP-Charles St-Berserker St to Tomkins St	13/11/2015	27/11/2015	100% Completed	20,000	30,366.08	31,000
UCC-FP-Div 8: St. Marys Nobbs St ftpath –		15/07/2015	100% Completed	14,600	14,689.77	14,700
UCC-FP-Hall St - Lion Creek Rd to Huish Drive	18/01/2016	05/02/2016	100% Completed	57,000	47,442.03	57,000
UCC-FP-Kent Street Nos124&112 Div 6	30/03/2016	06/04/2016	100% Completed	20,000	8,698.87	9,000
UCC-FP-Lion Creek Rd - Hall St to New Exhibition Rd	09/02/2016	26/02/2016	100% Completed	47,000	33,028.38	47,000
UCC-FP-Main Street-Alexandra St to W	01/07/2015	31/08/2015	100% Completed	52,000	49,118.79	50,000
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UCC-FP-Nobbs St-167 Nobbs St to Burnett St	23/10/2015	28/10/2015	100% Completed	11,800	3,544.08	3,600
UCC-FP-OShanesy St-Thozet Rd to first cul de sac	07/04/2016	22/04/2016	100% Completed		16,989.24	17,000
UCC-FP-Randwick St-135 Nobbs St to Burnett St and Burnet	29/10/2015	10/11/2015	100% Completed	24,300	27,793.13	27,800
UCC-FP-Reconstruction Footpaths-To be de				170,000	22,873.48	170,000
UCC-FP-Talford Street_Albert Street				0	23,640.92	0
UCC-FP-Thozet Road #221 to #225	01/12/2015	03/12/2015	100% Completed	0	6,664.41	6,700
UCC-FP-Thozet Road-Dempsey Street to				162,000	371.16	162,000
UCC-FP-Thozet Road-Lilley Ave to Zer				180,000	23,854.83	180,000
UCC-FP-Upper Dawson Road-King St to	01/07/2015	21/08/2015	100% Completed	81,500	78,732.07	80,000
UCC-FP-Upper Dawson Road-King Street	06/05/2016	11/07/2016	50% Completed	250,000	147,132.80	250,000
UCC-FP-Victoria Parade-Frontage of Q	14/08/2015	17/08/2015	100% Completed	20,000	19,595.66	20,000
UCC-FP-Wiltshire Street	09/12/2015	12/01/2016	100% Completed	25,000	15,920.76	16,000

UCC-FP-Yaamba Rd - Mason Ave to Olive St	14/01/2016	29/03/2016	100% Completed	120,000	168,874.50	169,000
UCC-LA-Land acquisition costs associ				250,000	105,074.97	250,000
UCC-NC- Kent and Denham Street		01/10/2015	100% Completed	770,000	796,189.75	796,200
UCC-NC-Ballard St-Totteridge St to e				370,000	4,364.10	370,000
UCC-NC-Moores Ck Rd - Kerrigan Stree		30/08/2015	100% Completed	113,500	114,217.71	114,220
UCC-NC-North Rockhampton Flood Levy	07/08/2015	30/07/2015	90% Completed	1,600,000	1,586,796.73	1,780,000
UCC-NC-Pilbeam Drive Carpark Ch 0.2km				0	24,268.53	5,600

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
UCC-PM-RPMs on 60 kmh roads				70,000	47,514.97	70,000
UCC-RC- Thompson Street-MacAlister S	30/06/2015	30/10/2015	100% Completed	520,000	560,776.26	561,000
UCC-RC-Alick Street-Glenmore Road to		15/07/2015	100% Completed	32,000	31,824.29	31,850
UCC-RC-Bertram Street _Main St to Th				400,000	27,378.95	400,000
UCC-RC-Bevis St-Wandal Rd to Cavell				3,000	3,831.43	3,850
UCC-RC-Birdwood Street-Dibden Street	14/09/2015	27/05/2016	100% Completed	390,000	327,444.17	340,000
UCC-RC-Bolsover St - Stanley St intersection improvement	27/04/2016	03/06/2016	100% Completed	102,500	133,554.40	120,000
UCC-RC-Campbell Street-Archer Street	05/04/2016	30/08/2016	30% Completed	766,125	277,786.56	766,125
UCC-RC-Caroline St - Davies St intersection improvements	12/04/2016	13/05/2016	25% Completed	108,000	104,658.50	108,000
UCC-RC-Cavell Street-New Exhibition	31/08/2015	15/01/2015	100% Completed	505,000	549,264.05	550,000
UCC-RC-Dibden Street-Oakley Street t	14/09/2015	27/05/2016	100% Completed	460,000	532,222.58	540,000

UCC-RC-Edward St-Painswick St to Arm	01/07/2015	08/09/2015	100% Completed	300,000	301,159.47	301,200
UCC-RC-Eldon Street-High St to Clift	15/09/2015	30/10/2015	100% Completed	190,000	201,480.26	201,500
UCC-RC-Feez Street Roundabout safety				0	0.00	
UCC-RC-Francis Street-Quay Street to				95,000	10,766.92	95,000
UCC-RC-Gregory Street-Johnson Street	15/01/2016	11/04/2016	100% Completed	272,000	382,822.51	375,000
UCC-RC-Hindley Street-Elphinstone St				187,000	3,626.77	187,000
UCC-RC-Kent Street-Albert Street to		30/07/2015	100% Completed	31,000	31,423.37	31,425
UCC-RC-Linett Street-Bernard Street			100% Completed	2,350	2,313.13	2,350
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UCC-RC-Maloney Street-Quinn Street t	12/07/2016	15/08/2016		203,000	17,531.68	203,000
UCC-RC-Murray St - Derby St intersection improvements	23/05/2016	21/06/2016		166,000	24,341.00	166,000
UCC-RC-North Street-Canning Street t	22/06/2016	14/12/2016		330,000	33,181.85	330,000
UCC-RC-Oakley St-Wandal Rd to Dibden	14/09/2015	10/06/2016	95% Completed	325,000	185,919.45	225,000
UCC-RC-Parnell St-Upper Dawson Rd to		15/07/2015	100% Completed	900	803.19	900
UCC-RC-Pershing Street-Morgan Street	14/09/2015	27/05/2016	100% Completed	100,000	163,924.22	164,000
UCC-RC-Rodboro Street-Dean Street to				133,000	470.01	133,000
UCC-RC-Sharples Street (Berserker Street	12/07/2016	03/10/2016		706,680	51,519.06	706,680
UCC-RS-Div 6 East Lane Off Denham St		15/07/2015	100% Completed	4,600	4,604.57	4,600
UCC-RS-Road Safety Minor Works Progr				80,000	27,650.03	80,000

UCC-SL-Street Lighting Improvement P				50,000	486.44	10,000
UCC-SW-Alexander Street Drainage				40,000	339.36	40,000
UCC-SW-Caribbea Estate Stg 2				250,000	91,129.49	250,000
UCC-SW-Dean St Drainage_Rodboro St to Peter St					57,792.66	
UCC-SW-Dean Street-Rodboro Street	09/11/2015	31/05/2016	100% Completed	600,000	604,828.81	600,000
UCC-SW-Denham Street-West Street to				3,000	3,914.31	4,000
UCC-SW-Harrow Street-Number 2/4	01/06/2016	21/07/2016	Started	220,000	64,916.54	220,000
UCC-SW-Harrow Street-Number 60	25/02/2016	06/05/2016	100% Completed	200,000	172,128.61	175,000
UCC-SW-Highway Street-Renshaw St to		15/07/2015	100% Completed	4,500	4,521.19	4,521
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UCC-SW-Kent Lane_Bartletts Tavern					1,158.96	
UCC-SW-McLeod Park Open Drain					1,872.42	
UCC-SW-Oakley Street-Dibden Street to Jardine Park Stage 1	14/09/2015	27/05/2016	100% Completed	345,000	258,169.85	270,000
UCC-SW-Oakley Street-Dibden Street to Jardine Park Stage 2				0	67.49	0
UCC-SW-Park Street Stage 2B_Alick St	22/07/2016	15/09/2016		300,000	73,018.74	300,000
UCC-SW-Park Street Stage 3-Glenmore	23/05/2016	30/08/2016		500,000	78,568.62	500,000
UCC-SW-Park Street SW Stage 3B-Robison St to Haynes St					22,078.19	
UCC-SW-Parris Street-Number 20/24		15/07/2015	100% Completed	1,500	1,504.87	1,505
UCC-SW-Replace Stormwater Inlets			95% Completed	55,000	72,806.74	72,000

UCC-SW-Rigalsford Park Levy Banks		15/07/2015	100% Completed	52,000	51,543.12	51,600
UCC-SW-Simpson Street Drainage - Hearn St to Moores Cree					32,870.82	
UCC-SW-Stack Street _Rhodes Street to Stenhouse Street_Desig					-38,983.39	
UCC-SW-Stack Street Stg1 Drainage Sc	12/10/2016	01/04/2016	100% Completed	350,000	444,474.22	445,000
UCC-SW-Stamford Street-No 88	20/07/2015	19/08/2015	100% Completed	96,000	94,047.71	95,000
UCC-SW-Venables Street Drainage				60,000	0.00	60,000
UCC-SW-Wackford Street Drainage				0	11,254.88	
UCC-TL-Dean Street_Kerrigan Street Inter		31/03/2016	100% Completed	20,000	4,135.03	6,000
UCC-TL-Misc Traffic Light controllers f				0	0.00	0
UCC-TL-Traffic Signal full upgrade Elphinstone St-Berserker		22/05/2016	100% Completed	34,600	35,069.43	34,600
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UCC-TL-Traffic Signal full upgrade Feez St-St Anthonys entr		09/04/2016	100% Completed	31,000	32,183.55	31,000
UCC-TL-Traffic Signal upgrade Dean St-Honour St $21100		05/06/2016	100% Completed	21,100	18,232.05	21,100
UCC-TL-Traffic Signal upgrade Dean St-Robinson St $13300		16/04/2016	100% Completed	13,300	9,287.05	13,300
UCC-TM-East Street-Fitzroy St to Arc		15/07/2015	100% Completed	52,000	18,770.91	19,000
UCC-TM-Thozet Road & Rockonia Road		09/10/2015	100% Completed	115,000	105,803.18	106,000
				19,200,861	**12,791,643**	**19,441,426**

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
URBAN WEST OPERATIONS						
UWC-Annual Reseal Program				500,000	0.00	37,300
- UWC-Archer Road-McLaughlin Street to		13/09/2015	100% Completed	0	25,437.72	25,500
- UWC-Arlott Street-Stover Street to B		13/09/2015	100% Completed	0	14,279.23	14,300
- UWC-Breakspear Street-41/45 Breakspe		13/09/2015	100% Completed	0	41,766.17	41,800
- UWC-Charles Crescent-Johnson Road to		13/09/2015	100% Completed	0	5,804.04	5,800
- UWC-Cherryfield Road-Johnson Road to		13/09/2015	100% Completed	0	19,369.10	19,400
- UWC-Fenwick Street-Conaghan Street t		13/09/2015	100% Completed	0	21,301.82	21,300
- UWC-Fisher Street-Johnson Road to Pl		13/09/2015	100% Completed	0	28,544.21	28,600
- UWC-Ian Besch Drive-Fisher Street to		13/09/2015	100% Completed	0	20,126.57	20,200
- UWC-James Street-Platen Street to Jo		13/09/2015	100% Completed	0	4,023.76	4,100
- UWC-Jillian Court-Old Capricorn High		13/09/2015	100% Completed	0	7,814.75	7,900
- UWC-John Street-Lawrie Street to Jam		13/09/2015	100% Completed	0	12,711.31	12,800
- UWC-Labanka Crescent-7 Labanka Cresc		13/09/2015	100% Completed	0	11,267.00	11,300
- UWC-Lawrence Crescent-Johnson Road t		13/09/2015	100% Completed	0	3,992.48	4,000
- UWC-Lucas Street-67 Lucas Street to		13/09/2015	100% Completed	0	16,409.10	16,500
- UWC-Mallet Street-Russell Street to		13/09/2015	100% Completed	0	6,381.08	6,400
- UWC-McLaughlin Street-Periman Street		13/09/2015	100% Completed	0	37,096.64	37,100

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- UWC-O'Shanesy Street-26-28 O'Shanesy		13/09/2015	100% Completed	0	18,922.59	19,000
- UWC-Perriman Street-McLaughlin Stree		13/09/2015	100% Completed	0	4,423.67	4,500
- UWC-Platen Street-Lawrie Street to F		13/09/2015	100% Completed	0	21,616.94	21,700
- UWC-Platen Street-Lawrie Street to J		13/09/2015	100% Completed	0	6,978.12	7,000
- UWC-Sage Street-Origano Avenue to Cu		13/09/2015	100% Completed	0	11,807.87	11,900
- UWC-SLS-O'Shanesy Street-1 O'Shanesy		13/09/2015	100% Completed	9,000	8,990.51	9,000
- UWC-SS-Cedrick Archer Park Car park		27/11/2015	100% Completed	0	15,689.52	15,700
- UWC-SS-Dee Street-East Street to Edward Street		27/11/2015	100% Completed	0	11,470.13	11,500
- UWC-SS-Glen Gordon Street-James Street to End		27/11/2015	100% Completed	0	8,403.29	8,500
- UWC-SS-Gordon Lane-Joyce Street to James Street		27/11/2015	100% Completed	0	4,237.77	4,300
- UWC-SS-Morgan Street-East Street to Black Street		27/11/2015	100% Completed	0	3,276.11	3,300
- UWC-SS-Pugh Street-Byrnes Parade to Henry Street		27/11/2015	100% Completed	0	1,240.68	1,250
- UWC-SS-Queen Street-Limerick Road to Lyons Road		27/11/2015	100% Completed	0	6,477.48	6,500
- UWC-SS-River Street-Chardon Street to Hinton Street		27/11/2015	100% Completed	0	3,393.21	3,400
- UWC-SS-Staunton Street-MacFarlane Street to Gilmore Stre		27/11/2015	100% Completed	0	3,002.06	3,050
- UWC-SS-William Street-East Street Ext to 39 William Stre		27/11/2015	100% Completed	0	10,949.44	11,000
- UWC-Sunset Drive-McLaughlin Street t		13/09/2015	100% Completed	0	6,455.44	6,500
- UWC-Thora Street-Stover Street to Ar		13/09/2015	100% Completed	0	12,950.25	13,000

- UWC-Ward Street-Stover Street to Arl		13/09/2015	100% Completed	0	13,195.36	13,200
- UWC-Whitman Street-Stover Street to		13/09/2015	100% Completed	0	11,343.60	11,400
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UWC-Low cost sealing of minor roads				100,000	0.00	
- UWC-NC-Gowdie St Mt Morgan		16/11/2015	100% Completed	0	5,343.46	5,400
- UWC-NC-Henry St Mt Morgan		16/11/2015	100% Completed	0	26,668.94	26,700
- UWC-NC-Phillips St Mt Morgan		16/11/2015	100% Completed	0	11,792.93	11,800
- UWC-NC-Possum St Mt Morgan		16/11/2015	100% Completed	0	46,270.82	46,300
- UWC-NC-Pugh St Mt Morgan		16/11/2015	100% Completed	0	21,098.87	21,100
UWC-FP-Capricorn St - Johnson Rd to Middle Rd	01/02/2016	12/02/2016	100% Completed	18,000	23,766.98	24,000
UWC-FP-Gordon St - East St to Hall St	23/02/2016	18/03/2016	100% Completed	67,000	47,629.00	67,000
UWC-FP-Johnson Rd-Warra Pl to School		15/07/2015	100% Completed	5,700	5,651.34	5,700
UWC-FP-Lawrie St - Stover St to Bland St	12/01/2016	29/01/2016	100% Completed	64,000	77,668.63	77,700
UWC-FP-Lawrie St outside #17				3,000	272.69	3,000
UWC-FP-Lawrie St-Ranger St to Platte		15/07/2015	100% Completed	3,600	3,620.84	3,600
UWC-FP-Middle Road-Johnson Road to S	28/09/2015	20/10/2015	100% Completed	50,000	70,027.96	70,000
UWC-FP-OShannessy Street-Lawrie St t	25/08/2015	25/09/2015	100% Completed	48,000	48,446.76	48,500
UWC-GR-Armstrong Lane Gracemere CH 0		15/12/2015	100% Completed	0	13,878.97	14,000
UWC-NC-Middle Road-Capricorn Street	20/08/2015	29/04/2016	100% Completed	1,690,000	1,769,798.65	1,760,000

UWC-NC-Middle Road-Capricorn Street to Macquarie Street				125,000	0.00	
UWC-RC-Capricorn St-Gracemere Creek extend to Middle Rd					1,776.41	
UWC-RC-Macquarie St-Somerset Rd to Middle Rd					10,444.05	
Project Description	**Estimated/ Actual Start Date**	**Estimated/ Actual Completion Date**	**Status**	**Revised Budget 2**	**Total Committals**	**Estimated Final Cost**
UWC-RS-Gracemere Depot Carpark				1,000	874.17	880
UWC-SL-Johnson Road				100,000	13,410.17	100,000
UWC-SL-Streetlighting Improvement Pr				20,000	525.84	20,000
UWC-SW-Brooks St Drainage FSC Plan 387				500,000	13,440.42	500,000
UWC-SW-Replace Stormwater Inlets		30/06/2016	30% Completed	35,000	13,559.77	35,000
UWC-SW-Stewart Street - Somerset Road to Bo				70,000	0.00	70,000
				3,409,300	**2,687,117**	**3,410,680**

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
RURAL OPERATIONS WEST						
RWC-NC-Renewal of Unsealed Road Grav	01/07/2015	30/06/2016		1,503,000	0	0
- RWC-GR-Aremby Rd Bouldercombe Ch 3.69 - 4.69 km			100% Completed	0	15,912	15,912
- RWC-GR-Arthur St Westwood Ch 0.02-0.25 0.75-1.45 km		05/04/2016	100% Completed		10,417	10,417
- RWC-GR-Barnett Rd Bushley Ch 0.15-0.51 1.2-1.29 km		02/11/2015	100% Completed	0	15,572	16,000
- RWC-GR-Birrahlee Rd South Yaamba Ch 0.0-0.03 0.48-0.6 0.		15/02/2016	100% Completed		33,744	33,744
- RWC-GR-Bishop Rd Garnant Ch 2.95-3.39 3.47-3.58 5.25-5.5		26/05/2016	100% Completed		33,401	34,000
- RWC-GR-Blanche Rd Garnant Ch 5.85 - 6.10 km		29/04/2016	100% Completed		4,633	5,000
- RWC-GR-Boulder Creek Rd Mt Morgan Ch 8.5-8.8 km		30/10/2015	100% Completed	0	7,573	7,573
- RWC-GR-Brickworks Rd Stanwell Ch 4.66 - 5.06 km		09/11/2015	100% Completed	0	10,620	12,000
- RWC-GR-Bull Frog Lane Bajool Ch0.26-0.29 1.595-1.625 1.8		14/04/2016	100% Completed		8,314	8,314
- RWC-GR-Callan Ave Kabra Ch 0.0 - 0.8		17/08/2015	100% Completed	0	17,707	17,707
- RWC-GR-Calmorin Rd Ridgelands Ch 4.2-5.1 5.4-5.72km		29/09/2015	100% Completed	0	40,297	40,026
- RWC-GR-Casuarina Rd Midgee Ch0.0-0.25km		13/01/2016	100% Completed		-154	2,768
- RWC-GR-Cook Rd Kalapa Ch 0.0-0.2 0.33-0.36 1.08-1.13 km		04/03/2016	100% Completed		6,581	6,581
- RWC-GR-Dalma-Ridgelands Rd Ridgelands Ch 6.49-7.1km		02/03/2016	100% Completed		19,974	19,974
- RWC-GR-Dunphy Rd Gogango Ch 0.0-0.03		03/08/2015	100% Completed	0	10,147	10,147
- RWC-GR-Evans Rd Ridgelands Ch 0.3 - 0.5 km		22/09/2015	100% Completed	0	5,030	4,892

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- RWC-GR-Garnant Rd Garnant Ch 5.4-6.5		18/09/2015	100% Completed	0	79,171	79,171
- RWC-GR-Glenroy Rd Morinish Ch 16.57		18/08/2015	100% Completed	0	36,865	36,865
- RWC-GR-Glenroy Rd Morinish Ch 26.4 -		05/11/2015	100% Completed	0	118,712	119,000
- RWC-GR-Goodwin Rd Gracemere Ch 1.85 - 2.85 km		07/12/2015	100% Completed	0	29,860	29,860
- RWC-GR-Harding Rd Alton Downs Ch 0.0		13/08/2015	100% Completed	0	10,066	10,066
- RWC-GR-Harding Rd Dalma Ch 10.52 - 12.5 km		01/04/2016	100% Completed		27,618	27,618
- RWC-GR-High Valley Rd Wycarbah Ch 4.52-5.85km		22/03/2016	100% Completed		39,030	39,030
- RWC-GR-Hume Rd Kabra Ch 0.8 - 1.2km		17/08/2015	100% Completed	0	13,354	13,354
- RWC-GR-Iker Rd Kalapa Ch 2.61 - 3.51 km		25/01/2016	100% Completed		18,415	18,415
- RWC-GR-Josefski Rd Stanwell Ch 0.0 -		03/09/2015	100% Completed	0	21,467	21,467
- RWC-GR-Kabra Rd Kabra Ch 855 - 2930		26/08/2015	100% Completed	0	11,186	10,516
- RWC-GR-Kalapa Back Rd Kalapa Ch 4.26-4.46 5.1-5.525km		22/02/2016	100% Completed		16,699	16,699
- RWC-GR-Kalapa Black Mountain Rd Kalapa Ch 9.8-10 10.3-10		10/03/2016	100% Completed		17,344	17,344
- RWC-GR-Kirk Rd Bajool Ch 0.0-1.2 2.67-2.77 3.56-3.68 km		19/05/2016	100% Completed		19,902	20,000
- RWC-GR-Lion Mountain Rd Alton Downs Ch0.0-0.5		19/01/2016	100% Completed		12,457	12,457
- RWC-GR-Lion Mountain Rd Alton Downs/		31/08/2015	100% Completed	0	11,043	11,043
- RWC-GR-Little Rd Westwood Ch 0.33-0.45 0.5-0.525 km		07/04/2016	100% Completed		2,076	2,076
- RWC-GR-McLoughlin Rd Moongan Ch 0.00-0.05 0.15-0.20 km		07/10/2015	100% Completed	0	4,416	5,000

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- RWC-GR-Middle Rd Kalapa Ch 0.0 - 0.57 km		04/02/2016	100% Completed		7,950	7,950
- RWC-GR-Morinish Rd Morinish Ch 0.4-0		26/08/2015	100% Completed	0	38,629	38,629
- RWC-GR-Mount View Rd Bajool Ch 0.00 - 1.13km		11/04/2016	100% Completed		25,497	25,500
- RWC-GR-North Langmorn Rd Marmor Ch 0		16/07/2015	100% Completed	0	46,025	46,025
- RWC-GR-Nugget Ave Bouldercombe Ch 0.		18/08/2015	100% Completed	0	20,985	20,985
- RWC-GR-Offord Road Marmor Ch 0.0 - 0.69		13/08/2015	100% Completed	0	17,822	17,822
- RWC-GR-Old Capricorn Hwy Gracemere R		29/09/2015	100% Completed	0	7,341	7,341
- RWC-GR-Pocock Rd Stanwell Ch 0.155-0		03/09/2015	100% Completed	0	-8	138
- RWC-GR-Redbank Rd Morinish Ch 0.0-0.86 3.0-3.7 km		22/10/2015	100% Completed	0	53,392	53,392
- RWC-GR-Roope Rd Midgee Ch 0.1 - 1.83 km		21/01/2016	100% Completed		31,815	31,815
- RWC-GR-Rosewood Rd Wycarbah Ch 14.00 - 14.30 km		01/06/2016	100% Completed		13,511	13,511
- RWC-GR-San Jose Rd Marmor Ch 0.26-0.66 2		13/08/2015	100% Completed	0	59,538	59,538
- RWC-GR-Sandy Creek Rd Bushley Ch 0.5		02/11/2015	100% Completed	0	71,296	72,000
- RWC-GR-Shannen Rd Dalma Ch 0.1-0.34 0.7-1.7 km		21/03/2016	100% Completed		36,691	36,691
- RWC-GR-Sheridan St Westwood Ch 0.0 - 0.3 km		04/04/2016	100% Completed		4,390	4,390
- RWC-GR-Six Mile Rd Bajool Ch 2.9-3.3 3.5-3.7 4.2-4.3km		01/04/2016	100% Completed		17,400	17,400
- RWC-GR-Slaughterhouse Rd Westwood Ch 0.02 - 0.57 km		13/04/2016	100% Completed		7,747	7,747
- RWC-GR-Smith Rd Ch 2.0-2.17 km:		16/07/2015	100% Completed	0	14,937	14,937

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- RWC-GR-South Yaamba Rd Alton Downs Ch2.8-3.75		14/01/2016	100% Completed		26,157	26,157
- RWC-GR-Stanwell-Waroula Rd Alton Downs Ch 27.4 - 27.75km		13/01/2016	100% Completed		9,416	9,416
- RWC-GR-Sugarloaf Rd Westwood Ch3.4-4.4 4.6-5.8 6.2-6.6 6		22/04/2016	100% Completed		23,065	25,000
- RWC-GR-Thirsty Creek Rd Gogango Ch 3		17/08/2015	100% Completed	0	48,648	48,648
- RWC-GR-Toowarra Rd Kalapa Ch 3.77-4.07 4.15-4.27 5.73-5.		04/03/2016	100% Completed		7,757	7,757
- RWC-GR-Ulam Connection Rd Bajool Ch 6.17-6.39 6.48-6.78		22/04/2016	100% Completed		15,743	15,743
- RWC-GR-Upper Ulam Rd Bajool Ch 0.6-2.6 3.7-4.2 km		14/12/2015	100% Completed	0	48,866	48,866
- RWC-GR-Weir Park Rd Ch0.0-1.3km:		16/07/2015	100% Completed	0	25,320	25,320
- RWC-GR-Weir View Rd Bajool Ch 0.00-0.85 1.05-1.20km		13/04/2016	100% Completed		33,969	33,969
- RWC-GR-Yarra Rd Ch 4.6-5.1km: 5		16/07/2015	100% Completed	0	31,338	31,338
RWC-Annual Reseal Program	02/11/2015	01/12/2015		400,000	0	0
- RWC-RS-Allen Rd Gracemere Ch 0.26 to 0.81 0.81 to 0.95		17/12/2015	100% Completed	0	10,340	10,172
- RWC-RS-Aremby Rd Bouldercombe Ch 2.37 to 2.76 2.76 to 3.		17/12/2015	100% Completed	0	25,022	25,022
- RWC-RS-Bobs Creek Rd		11/11/2015	100% Completed	0	9,434	9,000
- RWC-RS-Brown Close Gracemere Ch 0.00		17/12/2015	100% Completed	0	2,037	2,037
- RWC-RS-E Williams Rd Kabra Ch 0.0 to 0.29km		17/12/2015	100% Completed	0	12,792	13,934
- RWC-RS-Four Mile Rd Kabra Ch 0.0 to		17/12/2015	100% Completed	0	44,973	44,881
- RWC-RS-Hewill Drive Gracemere Ch 0.0		17/12/2015	100% Completed	0	12,176	12,176

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
- RWC-RS-Latimer Ave Gracemere Ch 0.0		17/12/2015	100% Completed	0	10,009	10,009
- RWC-RS-McEvoy Rd Kabra Ch 0.0 to 2.1		17/12/2015	100% Completed	0	39,806	39,745
- RWC-RS-McKenzie Rd Alton Downs Ch 0.00 to 3.00		17/12/2015	100% Completed	0	70,346	65,177
- RWC-RS-Mogilno Rd Midgee Ch 4 to 4.5 5.55 to 5.57		11/11/2015	100% Completed	0	18,312	18,000
- RWC-RS-Moonmera St Kabra Ch 0.0 to 0.52		17/12/2015	100% Completed	0	7,496	7,496
- RWC-RS-Morgan St Kabra Ch 1.2 to 1.34		17/12/2015	100% Completed	0	688	688
- RWC-RS-Old Coach Rd Bajool Ch 8.8 to		11/11/2015	100% Completed	0	9,599	10,000
- RWC-RS-South Ulam Rd Bajool Ch 11.16		11/11/2015	100% Completed	0	24,877	25,000
- RWC-RS-Sunray Ave Bouldercombe Ch 0.00 to 0.35		17/12/2015	100% Completed	0	6,008	6,008
- RWC-RS-Washpool Rd Gracemere Ch 0.00 to 0.52		17/12/2015	100% Completed	0	6,647	6,647
RWC-BDG-Mount Hopeful Road Ch 0.4km					-4,874	
RWC-BDG-River Street				16,000	15,959	15,959
RWC-BDG-Rosewood Road-Neerkol Creek	01/07/2015	30/10/2015		150,000	156,656	156,656
RWC-FW-Extend floodway on Hanrahan Rd at Ch 5.83 by appr			100% Completed	0	29,710	29,710
RWC-FW-High Valley Rd at Ch 1.36 - Construct floodway 15		04/03/2016	100% Completed		25,916	25,882
RWC-GR-T Ramm Rd Marmor 0.0 - 0.3		16/07/2015		0	0	
RWC-Inslay Avenue-Bouldercombe-Ch 0-	04/04/2016	30/05/2016	100% Completed	150,000	131,054	140,000
RWC-LSS-Malchi-Nine Mile Road_Ch 3.3				0	-728	0

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
RWC-LSS-Struck Oil Road_Ch 1.3 to 1.				0	7,503	0
RWC-MC-Bishop Rd Louisa Creek					3,385	
RWC-MC-South Yaamba Rd Sandy Creek					3,099	
RWC-NC-Clem Clark Rd		30/06/2016		50,000	5,891	50,000
RWC-NC-Malchi Nine Mile Road-Ch 3.3	06/11/2015	07/12/2015	100% Completed	400,000	299,310	299,310
RWC-NC-Pink Lily Road-Upgrading to s	06/10/2015	05/02/2016	100% Completed	400,000	330,429	330,000
RWC-RC-Kabra Road - Boongary Rd Intersection					3,675	
RWC-RC-McKenzie Rd-Ch 4.392 to Ch 5.				3,650	3,641	3,641
RWC-RC-Nine Mile Rd floodway Ch7.85-	30/05/2016	22/07/2016		344,500	2,953	344,500
RWC-RC-Rosewood Road Ch 13.45	22/02/2016	01/06/2016	100% Completed	50,000	59,337	60,000
RWC-RC-Stanwell Waroula Road-Ch 7.85	22/03/2016	17/06/2016	90% complete	400,000	452,568	500,000
RWC-RC-Struck Oil Road-Ch 1.20-1.80	30/05/2016	24/06/2016	20% complete	100,000	30,882	100,000
RWC-RS-High St Bajool Bitumen Seal - Ch 1.090-1.310km		20/05/2016	50% complete		23,936	58,189
RWC-SW- Kabra Road-Ch 3.5 to Ch 3.6		13/11/2015	100% Completed	398,000	412,654	412,654
RWC-SW-Alton Downs Nine Mile Road-Ch				26,000	25,800	25,800
RWC-SW-Alton Downs Nine Mile Road-Ch	26/04/2016	17/06/2016	95% complete	80,000	96,923	80,000
RWC-SW-Glenroy Road-Ch 22.62	18/11/2015	02/12/2015	100% Completed	40,000	46,917	47,000
RWC-SW-Glenroy Road-Ch 9.84				3,650	3,615	3,615

Project Description	Estimated/ Actual Start Date	Estimated/ Actual Completion Date	Status	Revised Budget 2	Total Committals	Estimated Final Cost
RWC-SW-Kabra Road-Ch 1.94	04/03/2016	18/03/2016		65,000	19,277	65,000
RWC-SW-South Yaamba Road-Ch 0.50		29/04/2016	100% Completed	40,000	58,576	58,576
RWC-SW-South Yaamba Road-Ch 13.5		10/06/2016	100% Completed	15,000	10,201	15,000
RWC-SW-South Yaamba Road-Ch 14.4		21/04/2016	100% Completed	25,000	49,786	49,786
RWC-SW-South Yaamba Road-Ch 3.76 9.	22/03/2016	22/04/2016		0	0	0
				4,659,800	**4,089,294**	**4,660,331**
				27,269,961	**19,568,053**	**27,512,437**

4. ACHIEVEMENT OF OPERATIONAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

As at period ended May 2016 - 92% of year elapsed.

Overall the expenditure is around the 79% including committals which are close to the budget forecast.

End of Month General Ledger - (Inc Operating & Capital) - CIVIL OPERATIONS

As At End Of May

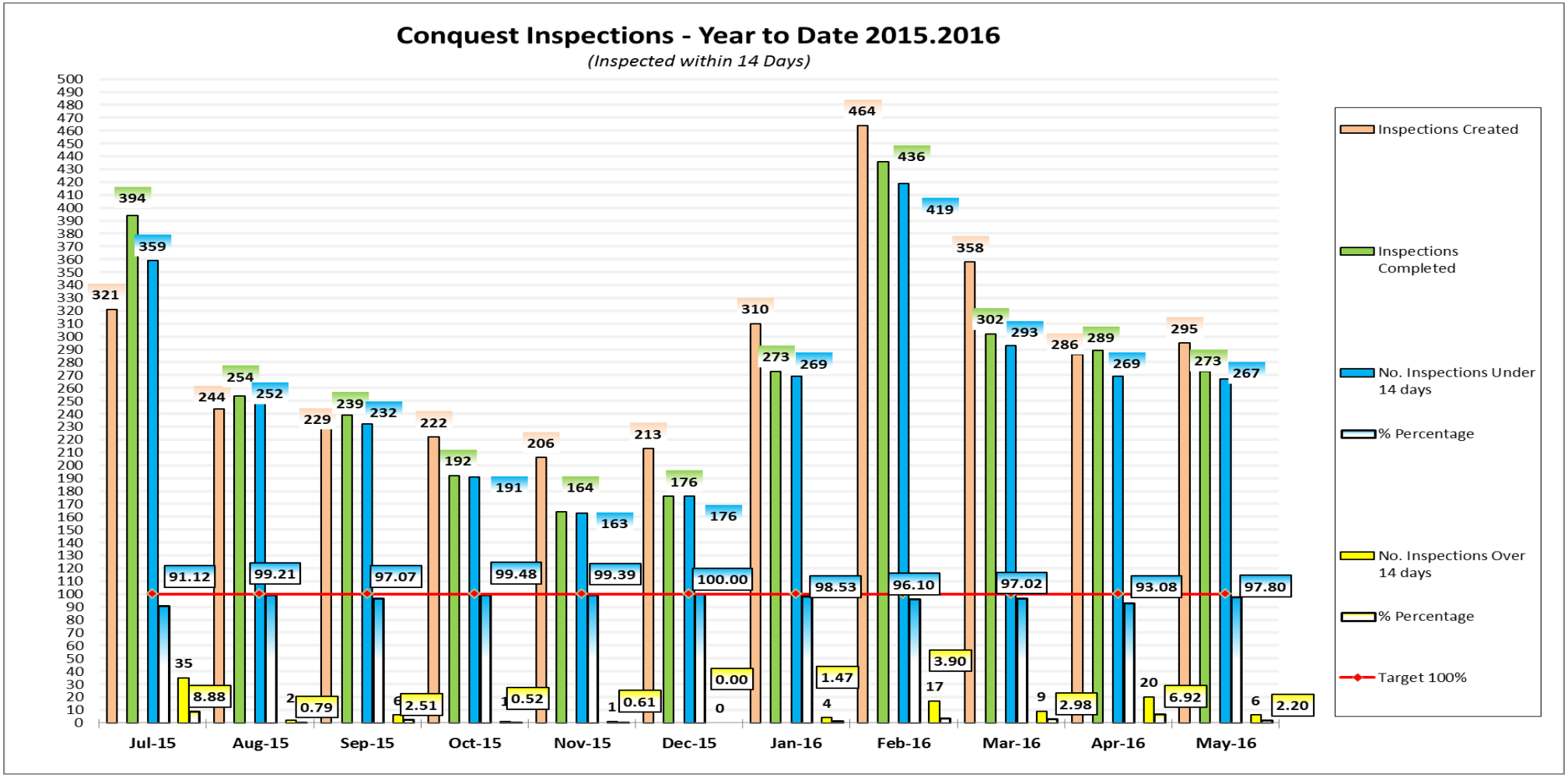
Report Run: 07-Jun-2016 09:20:26 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget $	Revised Budget	Revised Budget (Pro Rata YTD) $	YTD Actual $	YTD Commit + Actual $	Variance %	On target 91.7% of Year Gone
OPERATIONS					Adopted Budget Comparison		
CIVIL OPERATIONS							
Urban Operations							
1 - Revenues	(3,167,000)	(4,167,000)	(3,819,750)	(4,666,336)	(4,666,336)	112%	✓
2 - Expenses	6,198,707	7,198,707	6,598,815	7,064,547	7,122,625	99%	✗
3 - Transfer / Overhead Allocation	1,891,300	1,891,300	1,733,692	802,392	802,392	42%	✓
Total Unit: Urban Operations	***4,923,007***	***4,923,007***	***4,512,756***	***3,200,603***	***3,258,681***	**66%**	✓
Rural Operations							
1 - Revenues	(1,685,300)	(2,525,300)	(2,314,858)	(1,060,100)	(1,060,100)	42%	✗
2 - Expenses	4,011,793	4,011,793	3,677,477	1,886,775	1,945,174	48%	✓
3 - Transfer / Overhead Allocation	1,428,300	1,428,300	1,309,275	1,727,699	1,727,699	121%	✗
Total Unit: Rural Operations	***3,754,793***	***2,914,793***	***2,671,894***	***2,554,374***	***2,612,773***	**90%**	✓
Civil Operations Management							
1 - Revenues	(35,000)	(35,000)	(32,083)	(89,796)	(89,796)	257%	✓
2 - Expenses	17,987,184	17,987,184	16,488,252	16,442,728	16,469,642	92%	✓
3 - Transfer / Overhead Allocation	(1,518,124)	(1,518,124)	(1,391,614)	(1,256,400)	(1,256,400)	83%	✗
Total Unit: Civil Operations Management	***16,434,060***	***16,434,060***	***15,064,555***	***15,096,532***	***15,123,446***	**92%**	✗
Total Operations:	**25,111,860**	**24,271,860**	**22,249,205**	**20,851,510**	**20,994,900**	**86%**	✓
Grand Total:	**43,587,005**	**45,601,105**	**41,801,013**	**24,287,980**	**35,972,401**	**79%**	✓

5. DELIVERY OF SERVICES AND ACTIVITIES IN ACCORDANCE WITH COUNCIL'S ADOPTED SERVICE LEVELS

5.1 Conquest Inspections *Customer Request / Conquest Inspections* (finalised within 14 working days)

Service Delivery Standard	Target	Current Performance
Received May 295 inspections, 273 completed - 6 inspections outside the standard 14 days	100%	**97.80%**

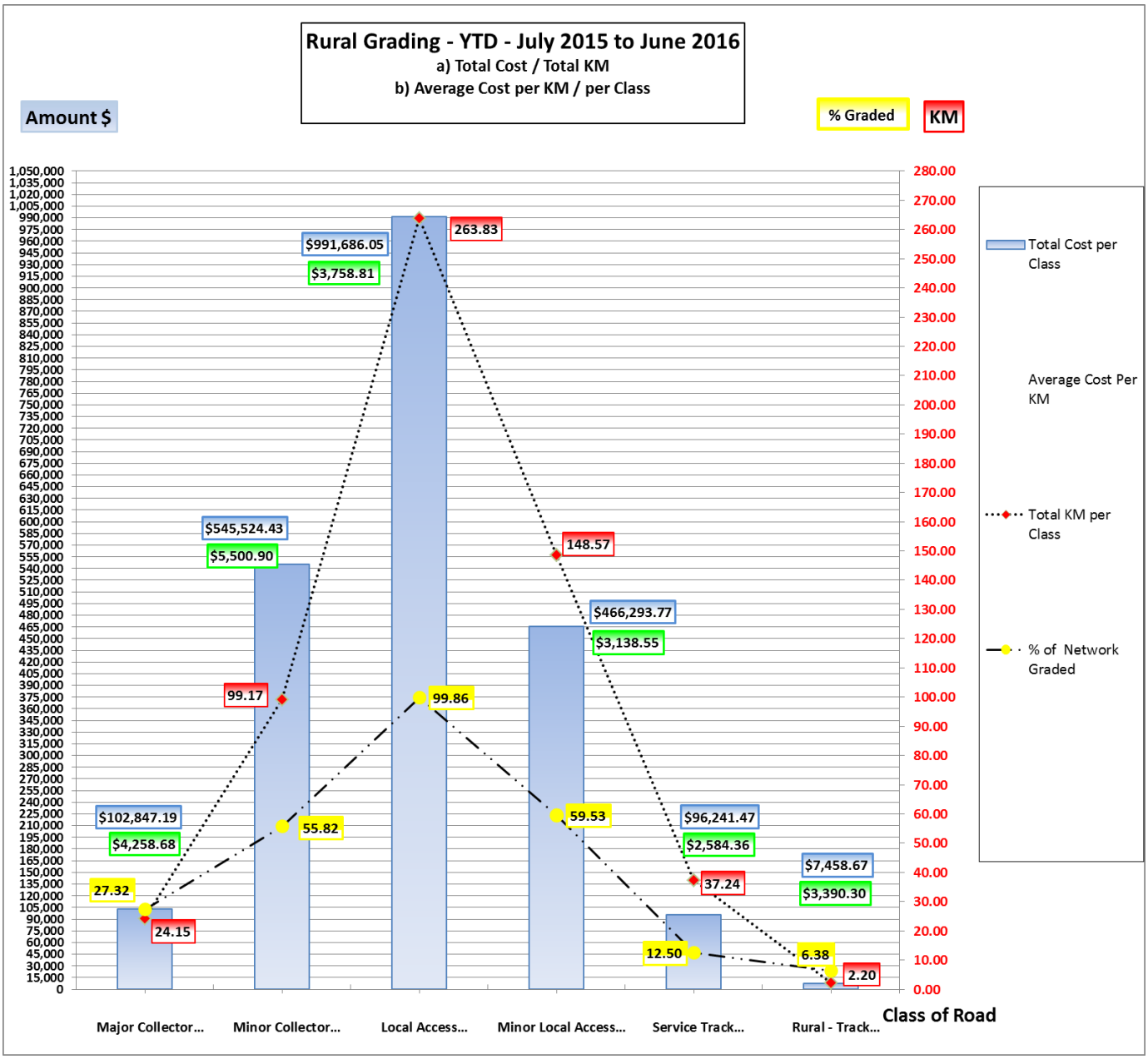

Conquest Inspections - Year to Date 2015.2016
(Inspected within 14 Days)
Inspections Created
Inspections Completed
No. Inspections Under 14 days
% Percentage
No. Inspections Over 14 days
% Percentage
Target 100%
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
321
394
359
91.12
35
8.88
244
254
252
99.21
2
0.79
229
239
232
97.07
6
2.51
222
192
191
99.48
1
0.52
206
164
163
99.39
1
0.61
213
176
176
100.00
0
0.00
310
273
269
98.53
4
1.47
464
436
419
96.10
17
3.90
358
302
293
97.02
9
2.98
286
289
269
93.08
20
6.92
295
273
267
97.80
6
2.20

5.2 Unsealed Road Surface Condition Summary

Council's unsealed road network is maintained through scheduled actions, and not by the use of intervention levels. Grading and re gravelling priorities are determined through regular inspections by suitably experienced road inspectors.

Rural Grading - YTD – July to June 2016

Class	Description of Class	Network Total Length KM	Total KM per Class	Total Cost per Class	Average Cost Per KM	% of Network Graded
4a	Major Collector	88.39	24.15	$102,847.19	$4,258.68	27.32
4b	Minor Collector	177.66	99.17	$545,524.43	$5,500.90	55.82
5a	Local Access	264.21	263.83	$991,686.05	$3,758.81	99.86
5b	Minor Local Access	249.56	148.57	$466,293.77	$3,138.55	59.53
5c	Service Track	297.84	37.24	$96,241.47	$2,584.36	12.50
5d	Rural - Track	34.49	2.20	$7,458.67	$3,390.30	6.38
	Total	**1112.15**	**575.16**	**$2,210,051.58**	**$3,842.50**	**51.72**



Road Name	KM	Cost		Road Name	KM	Cost
Archer Road	2.59	$17,403.42		Frankish Road	3.20	$16,270.01
Aremby Road	5.86	$22,737.00		Galton Street	0.43	$1,176.50
Arthur Street	2.00	$4,665.93		Garnant Road	2.75	$13,976.73
Ashford Street	0.76	$1,578.06		Georges Road	2.50	$7,295.12
Barnett Road	1.36	$2,810.32		Glenroy Road	31.32	$143,951.00
Bartlem Road	2.10	$7,759.14		Goodwin Road - Gracemere	1.85	$6,898.86
Benedict Road	4.80	$16,041.63		Granteleigh Road	4.39	$18,755.72
Bills Road - Marmor	4.6	$25,518.00		Halfpenny Road	5.60	$19,178.71
Birrahlee Road	3.7	$13,839.51		Harding Road	10.41	$44,629.96
Blanche Road	2.8	$10,637.07		High Valley Road	4.80	$16,636.34
Boulder Creek Road	10.70	$44,612.00		Hinchliffe Avenue	6.20	$3,417.12
Bob's Creek Road	3.89	$20,931.17		Horwell Road	0.50	5,231.16
Brickworks Road	4.66	$14,513.00		Hughes Road	0.89	$2,236.74

Bull Frog Lane	5.80	$21,027.33	Hume Road	7.10	$33,766.00
Bushley Road	1.83	$3,060.00	Hunt Road - Alton Downs	6.25	$36,424.60
Callan Road	1.20	$10,135.03	Iker Road	2.61	$12,818.03
Calliungal Road	0.10	$1,312.38	Inslay Avenue	1.20	$4,139.25
Calmorin Road	6.44	$29,443.00	Isabella Street	0.68	$8,481.00
Candlelight	1.74	$4,490.95	Jackson Road	4.23	$15,084.61
Casuarina Road	2.30	$10,787.42	Jones Street	0.40	$1,481.18
Cavell Road - Gracemere	1.60	$4,421.03	J Pierce Road	1.80	$9,610.30
Cocks Road	1.26	$3,963.99	Kabra-Scrubby Creek Rd	1.75	$13,082.89
Colliver Road	1.30	$5,526.24	Kalapa Back Road	5.92	$15,023.39
Cook Road	1.44	$2,036.00	Kalapa-Black Mountain Rd	9.52	$36,183.27
Cowan Street	2.22	$7,963.48	Kelly Road	1.00	$3,540.08
Craignaught Road	4.47	$13,184.30	Kirk Road	2.79	$7,042.57
Cranston Road	1.61	$6,253.29	Kraatz Road	1.10	$2,207.66
Dalma Ridgelands Road	12.61	$83,226.22	Lanuon road	2.60	$9,179.50
Dargel Road	1.00	$3,251.67	Laurel Bank Road	7.63	$31,367.80
Dee Road	0.60	$4,371.29	Lee Farm Road	1.25	$3,437.92
Deep Creek Road	1.48	$4,540.99	Limestone Road	3.00	$23,264.16
Delaney Lane	0.25	$1,198.05	Lion Mountain Road	8.12	$37,796.55
Dunphy Road	0.90	$4,256.98	Lion Mountain Road	1.97	$11,183.84
Dunning Road	3.20	$11,465.00	Little Road	0.70	$2,833.38
Enfield Road	7.32	$2,176.00	Mandalay Road	1.70	$7,184.43
Evergreen Road	5.83	$17,492.70	McKenzie Road	2.80	$5,619.53
E Williams Road	1.50	$5,553.00	Marmor Road	1.70	$7,199.00
Faraday Road	2.88	$24,967.21	Middle Road	0.72	$1,100.59
Flaherty Road	1.00	$4,002.88	Milner Road	0.25	$2,826.57
Subtotal 1	***121.70***	***$493,152.68***	***Subtotal***	***153.63***	***$641,532.07***

Road Name	***KM***	***Cost***	***Road Name***	***KM***	***Cost***
Mogilno Road	6.50	$44,233.64	Stanwell - Waroula Road	1.00	$3,428.84
Moller Road	2.20	$7,458.67	Stewart Park Road	1.10	$2,129.88
Morgan Street	0.22	$1,420.69	Struck Oil Road	3.50	$31,145.86
Morinish Road	6.80	$21,409.52	Sugarloaf Road	1.50	$4,175.00
Moses Road	8.71	$33,551.97	Sunray Avenue	0.30	$1,156.64
Mountain Hideaway Road	0.95	$2,085.52	Tee Tree Road	0.92	$5,902.27
Mount Hopeful Road	8.80	$20,268.04	Thirsty Creek Road	20.40	$52,874.02
Munns Road	5.30	$21,442.03	Toowarra Road	7.00	$15,558.77
Murphy Road	2.00	$9,169.00	Upper Ulam Connection	10.76	$27,407.36
North Langmorn Road	17.50	$34,822.00	Upper Ulam Road	9.8	$55,750.18
Oakey Creek Road	11.60	$35,584.00	Von Allmen Road	1.65	$6,185.95

O'Brien Road	0.75	$4,303.09
Old Coach Road	8.60	$45,850.00
Pandora Road	2.70	$11,616.60
Pink Lily Road	0.60	$3,310.97
Pocock Road	1.70	$6,354.61
Preston Road	0.72	$3,812.19
Queen of the Valley Road	0.70	$729.07
Redbank Road	8.10	$33,851.67
River Road	17.20	$43,421.68
Rookwood Road	18.39	$60,150.00
Salmon Road	2.52	$10,588.91
Salsbury Road	0.54	$3,365.88
Sandy Creek Road	9.89	$29,439.00
San Jose Road	9.00	$19,725.28
Scott Road	0.85	$2,304.78
Seymour Road	4.75	$30,680.00
Shannen Road	4.70	$11,272.95
Sheldrake Road	2.55	$9,292.20
Sheridan Street	1.70	$6,122.69
Sisalana Road	4.30	$24,219.00
Six Mile Road	5.95	28,607.48
Slaughterhouse Road	0.30	2,300.17
Smith Road - Gogango	14.89	$12,448.00
Somerset Road	2.24	9940.35
South Yaamba Road	2.34	$14,079.93
South Yaamba Road	25.09	$144,046.13
Springs Road	0.54	$1,771.73
Subtotal 1	***222.19***	***$805,049.44***

Warren Road	2.6	$8,653.84
Washpool Road	0.90	$4,158.75
Wayne's Lane	0.50	$3,505.39
Weale Creek Road	3.40	$16,041.10
Webb Road	0.70	$6,920.10
Wedel Road	2.21	$6,699.06
Wyvilles Road	0.50	$3,606.03
Yarra Road	5.30	$15,018.35
Subtotal 1	***74.04***	***$270,317.39***
Total	***571.56***	***$2,210,051.58***

CIVIL OPERATIONS MONTHLY OPERATIONS REPORT - JUNE 2016

Works Program June - July 2016

Meeting Date: 21 June 2016

Attachment No: 2

Construction and Works Program - June - July 2016

Council's Civil Operations Section advises the proposed road and associated road reserve network works and other planned projects to be conducted throughout the Region in June - July 2016 subject to weather conditions and other competing priorities. Please note that the information listed in the Potential Interruptions section is general information and does not override the information that is provided to the Emergency Services Personnel and Bus Company's etc.

Rural West Area				
Work Location	**Work Description**	**Start**	**Finish**	**Potential Interruptions**
RWC-Nine Mile Road Floodway	Stormwater	Early July 2016	Mid July 2016	Traffic Controllers & Speed Restrictions
RWC-SW-Kabra Road Ch 1.94 Floodway	Stormwater	Late July 2016	Early August 2016	Traffic Controllers & Speed Restrictions
RWC-Struck Oil Road		Late May 2016	Early July 2016	Traffic Controllers & Speed Restrictions
Urban Central Area				
Work Location	**Work Description**	**Start**	**Finish**	**Potential Interruptions**
UCC-BS-Bus Stop Denham Street	Bus Stops	Mid June 2016	Mid July 2016	Traffic Controllers & Speed Restrictions
UCC-BS-Murray St / Derby St Intersection Improvements	Black	Mid May 2016	Mid June 2016	Traffic Controllers & Speed Restrictions
UCC-FP-Upper Dawson Road-King Street to Blackall Street Stage 2A Roadworks	Footpath	Early May 2016	Early July 2016	Traffic Controllers & Speed Restrictions
UCC-NRFM Levee bank Earthworks Stage 2		Mid May 2016	Mid July 2016	Traffic Controllers & Speed Restrictions
UCC-O-Lion Ck Rd Cycle Lane	Other	Mid May 2016	Early June 2016	Traffic Controllers & Speed Restrictions
UCC-O-Various Jobs (Maintenance)	Other	Early June 2016	Late June 2016	Traffic Controllers & Speed Restrictions
UCC-O-Various Maintenance	Other	Early June 2016	Mid June 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Campbell Street-Archer Street to Cambridge Street	Re-construction	Early April 2016	Late July 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Francis Street-Quay Street to East Street	Re-construction	Early June 2016	Early July 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Maloney Street-Quinn Street to Alexandra Street	Re-construction	Mid July 2016	Mid August 2016	Traffic Controllers & Speed Restrictions
UCC-RC-North Street-Canning Street to Robert Street	Re-construction	Late June 2016	Mid December 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Quay Street-Fitzroy St to Denham St	Re-construction	Early November 2015	Mid June 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Quay Street-Fitzroy St to Denham St	Re-construction	Mid October 2015	Late September 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Rodboro Street-Dean Street to Ellis Street	Re-construction	Mid June 2016	Late July 2016	Traffic Controllers & Speed Restrictions
UCC-RC-Sharples Street- Berseker Street to Skardon	Re-construction	Mid July 2016	Early October 2016	Traffic Controllers & Speed Restrictions
UCC-SW-Harrow Street-Number 2/4	Stormwater	Early June 2016	Mid July 2016	Traffic Controllers & Speed Restrictions
UCC-SW-Park Street Stage 2B Alick st to Tung Yeen	Stormwater	Mid July 2016	Early September 2016	Traffic Controllers & Speed Restrictions
UCC-SW-Park Street Stage 3-Glenmore Road to Robison Street	Stormwater	Early June 2016	Early September 2016	Traffic Controllers & Speed Restrictions
Urban West Area				
Work Location	**Work Description**	**Start**	**Finish**	**Potential Interruptions**
UWC-FP-O'Shannessy Street-Lawrie St to Pierce St Stage 2	Footpath	Early June 2016	Mid June 2016	Traffic Controllers & Speed Restrictions

8.2 ENGINEERING SERVICES MONTHLY OPERATIONS REPORT - JUNE 2016

File No:	**7028**
Attachments:	**1. Monthly Operations Report - Engineering Services - 31 May 2016**
Authorising Officer:	**Robert Holmes - General Manager Regional Services**
Author:	**Martin Crow - Manager Engineering Services**

SUMMARY

This report outlines Engineering Services Monthly Operations Report for the period to the end of May 2016.

OFFICER'S RECOMMENDATION

THAT the Engineering Services Monthly Operations Report for May 2016 report be received.

COMMENTARY

The Engineering Services Section submits a monthly operations report outlining issues faced by the section and performance against nominated service level criteria.

Due to the reporting timeframes and agenda requirements of the Infrastructure Committee, the statistics utilised in the reports will lag the committee meeting dates by approximately one month.

ENGINEERING SERVICES MONTHLY OPERATIONS REPORT - JUNE 2016

Monthly Operations Report - Engineering Services - 31 May 2016

Meeting Date: 21 June 2016

Attachment No: 1

MONTHLY OPERATIONS REPORT

ENGINEERING SECTION

Period Ended 31 May 2016

VARIATIONS, ISSUES AND INNOVATIONS

Innovations

The Strategic Infrastructure Unit has embarked on surveying floor levels of properties adjacent to the North Rockhampton Local Creek catchments. This information will assist in gauging flood risk to properties and enable Council to target proposed mitigation options.

Improvements / Deterioration in Levels of Services or Cost Drivers

The traffic light report indicates that customer response times have been good in most areas over the past 6 and 12 months. The current month statistics are now reporting correctly. Development assessment timeframes have slipped in the area of operational works assessments. This appears to be related to timeframes associated with information being received from the applicant and in some cases compliance issues in relation to defects inspections.

LINKAGES TO OPERATIONAL PLAN

1. COMPLIANCE WITH CUSTOMER SERVICE REQUESTS

The response times for completing the predominant customer requests in the reporting period for 31 May 2016 are as below:

Rockhampton Regional Council

All Monthly Requests (Priority 3)
Engineering 'Traffic Light' report
May 2016

	Balance B/F	Completed in Current Mth	Current Month NEW Requests		TOTAL INCOMPLETE REQUESTS BALANCE	Work Orders Issued	Under Long Term Investigation	Avg W/O Issue Time (days) 12 months	Completion Standard (days)	Avg Completion Time (days) Current Mth	Avg Completion Time (days) 6 Months	Avg Completion Time (days) 12 Months	Avg Duration (days) 12 Months (complete and
			Received	Completed									
Urban Addressing (General)	1	1	0	0	0	0	0	1.36	28	0.00	6.86	6.93	6.36
Development - Building Over Sewerline	0	0	5	4	1	0	0	0.00	7	2.50	2.59	2.07	1.85
Engineering - Development Dust, Noise, Road, Misc	0	0	5	2	3	0	0	3.64	7 14	3.00	7.00	7.00	14.78
Disaster Management - General Enquiry SES	0	0	0	0	0	0	0	0.00	5	7.00	7.00	46.50	0.00
Engineering - General Enquiry	0	0	4	3	1	0	0	5.12	14	3.00	13.07	16.27	7.33
Flood Management Creeks/Rivers	0	0	2	2	0	0	0	0.00	10	1.00	4.21	5.67	4.59
Heavy Vehicles (Not related to MTCE)	0	0	0	0	0	0	0	0.00	28	0.00	9.00	9.00	9.00
Infra. Ops Unit - G/E (D/Planner) NOT FOR CSO USE	1	1	1	1	0	0	0	8.53	28	1.00	9.73	13.90	11.04
Water/Sewerage	0	0	1	1	0	0	0	0.00	28	1.00	5.40	5.00	1.20
Petition (Infra Use Only)	0	0	0	0	0	0	0	0.00	90	0.00	0.00	0.00	0.00
Roundabout/Medians (Not related to MTCE)	0	0	0	0	0	0	0	20.62	28	0.00	15.00	15.00	15.00
Speed Limits/Traffic Volumes (Not related to MTCE)	0	0	2	2	0	0	0	4.25	28	8.50	9.06	9.17	7.86
Signs & Lines (New Request - not already existing)	4	4	24	8	15	0	0	17.68	28	10.88	10.52	13.09	12.01
Traffic Signals (Stop Light) (Not related to MTCE)	1	1	2	0	2	0	0	2.77	28	0.00	5.33	10.71	9.00
Traffic Counts	1	1	4	3	1	0	0	-0.56	28	6.67	7.00	8.05	7.10

Comments & Additional Information

As at 1 September 2014, Engineering Services have adopted Service Levels for their Child Request Codes.

The Priority Escalation timeframes are only used as a notification reminder process.

These Service Levels have been set up in Pathways under Priority Escalation and Estimated Duration Maintenance parameters.

Priority Escalation

This function allows the Actioning Officer and/or Responsible Officer of the Request to receive an e-mail message each time the Priority is escalated. These Priority escalations are notification / reminders to action the request and not necessarily to complete the request.

Estimated Duration Maintenance

The Estimated Duration Maintenance form displays the Estimated Duration Maintenance Timeframe (or Service Level) for Request Types ie. Minutes, Hours, Days, Weeks and Years.

2. COMPLIANCE WITH STATUTORY AND REGULATORY REQUIREMENTS INCLUDING SAFETY, RISK AND OTHER LEGISLATIVE MATTERS

Safety Statistics

The safety statistics for the reporting period are:

	THIRD QUARTER		
	April	**May**	**June**
Number of Lost Time Injuries	**0**	**0**	0
Number of Days Lost Due to Injury	**0**	**0**	0
Total Number of Incidents Reported	**0**	**0**	0
Number of Incomplete Hazard Inspections	**0**	**0**	0

Risk Management Summary

Example from Section Risk Register (excludes risks accepted/ALARP)

Potential Risks	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Inability of Engineering Services to provide or maintain adequate levels of service for infrastructure planning, development assessment and infrastructure design resulting in reduced productivity, inadequate infrastructure, risk to the general public and workers and financial loss for Council.	High 4	1. Undertake staffing level review and business planning for Engineering Services. 2. Improve focus on professional development and training (including graduate development program) by management implementing appropriate training and development plans and staff completing them.	1/7/16	60%	T&D plans implemented in Design Services. Staffing review and minor restructure proposal carried out in May 2015 and has been implemented. T&D Matrix development has commenced for Strategic Infrastructure and Development Engineering Sections.

Potential Risks	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Breach of the Professional Engineers Act resulting in installation of unsafe infrastructure or infrastructure that does not meet legislative requirements causing the following possible impacts to Council: Service delivery delays; negative financial impacts; possible serious harm to public/workers; and reputation tarnished.	High 4	1. Make RPEQ qualification mandatory for some positions in the future. 2. Request technical staff to obtain their RPEQ if possible.	31/12/16	50%	Has been included as identified training for some in performance appraisals. New Coordinator Development Engineering is an RPEQ.
Inadequate Developer Contributions for Infrastructure resulting in a cost impost on ratepayers and reduction in funds available for other projects.	High 4	1. Further assessment & refinement of existing adopted charges resolution to ensure adequacy and accuracy. 2. Council adoption of SPA compliant Local Government Infrastructure Plan (LGIP).	30/06/16	95%	LGIP adopted with new planning scheme. AICR amended to reflect changes. External review of LGIP has been positive.
Failure to maintain accuracy and value of the forward works program and adequately provide for the annual capital program resulting in projects nominated for delivery being deferred to accommodate increased costs within annual capital program and the Long Term Financial Strategy (LTFS).	High 4	1. Continued refinement of forward works program. 2. Development of indicative estimating tool. 3. Develop Network specific prioritisation processes.	1/7/16	75%	Development of the FWP has stalled. Future design and concept budget included in capital budget. Draft prioritization process for pathways has been developed. Draft prioritization process for stormwater has been developed.
Identified Disaster Mitigation Strategies not actioned resulting in increased impact/effect of disaster events on the community and potential for increased costs to	High 5	1. Forward works program to be developed for disaster mitigation strategies to be submitted through Council's project evaluation and management system (PEMS)	1/7/16	40%	Action has stalled due to competing priorities for DMO. Previous work is now somewhat dated and needs to be revisited. Appointment of Floodplain

Potential Risks	Current Risk Rating	Future Control & Risk Treatment Plans	Due Date	% Completed	Comments
Council in recovery & restoration costs.		process, and for Natural Disaster Relief and Recovery Arrangements (NDRRA) funding applications. 2. Annual review and report on implementation of disaster mitigation strategies			Management Engineer will assist in progressing flood mitigation planning.
Reduced SES capability to respond during a disaster event, would require either a greater response from Council (which is unlikely given our resource levels) or a lesser response to the event, resulting in: community expectations unable to be met; a negative financial impact and reputational damage to Council.	High 5	Implement MOU with EMQ regarding shared management responsibilities for the SES, supported with appropriate funding and training.	1/7/16	60%	Action has stalled due to restructure of Emergency Services at a State Level and competing priorities for DMO and SES LC.

Legislative Compliance & Standards

All applicable legislative and compliance standards have been met.

3. ACHIEVEMENT OF CAPITAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

The following abbreviations have been used within the table below:

GIA	*Gracemere Industrial Area*
SRFL	*South Rockhampton Flood Levee*

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
ENGINEERING SERVICES CAPITAL WORKS PROGRAM					
Costs as at 31/05/16					
Gracemere Industrial Area Planning	1/7/15	30/6/16	Completed	$5,000	$5,055
Comment: Signage at GIA has been completed.					
Priority Infrastructure Planning Contingency	1/7/15	30/6/16	Not started	$50,000	$0
Comment: May be required for strategic land purchase for stormwater purposes at GIA..					
Monier Road Industrial Area Drainage	1/7/15	30/6/16	Completed	$25,000	($24,000)
Comment: These transactions are now completed.					
Traffic and Road Safety Minor Works Program	1/7/15	30/6/16	In Progress	$90,000	$0
Comment: Allocated to Diplock Street LATM, Dean St / Vallis St Intersection. Awaiting completion.					
Preliminary design and concepts	1/7/15	30/6/16	Not Started	$200,000	$0

Project	Start Date	Expected Completion Date	Status	Budget Estimate	YTD actual (incl committals)
Comment: Budget to allow progression of preliminary designs and estimates for future year works. Additional works required of Design Office this year has delayed the commencement of these works.					
Flood Valves North Rockhampton	1/7/15	30/6/16	In Progress	$50,000	$76,358
Comment:. Project is complete other than a small section of the Fraser St Levee. This budget to be read in conjunction with Budgets in Civil Operations and FRW.					

4. ACHIEVEMENT OF OPERATIONAL PROJECTS WITHIN ADOPTED BUDGET AND APPROVED TIMEFRAME

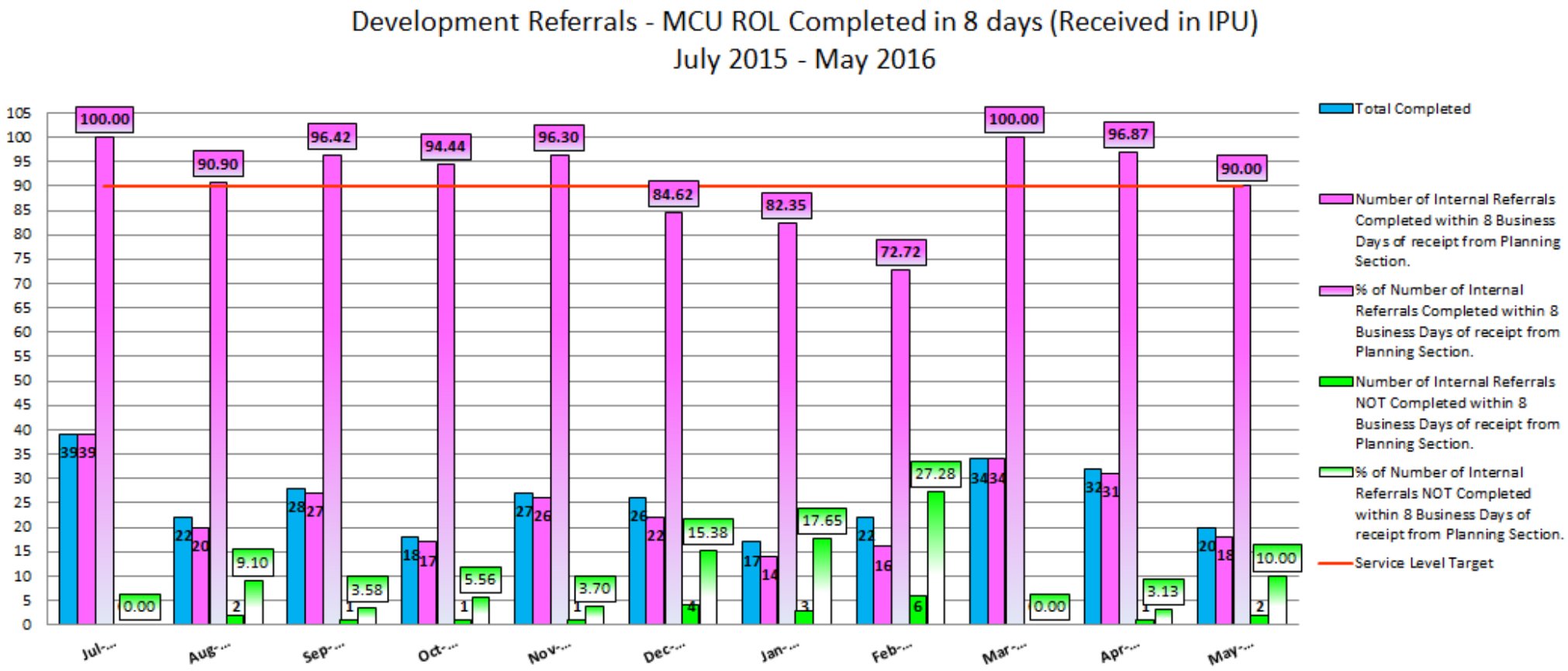
As at period ended 31 May 2016 – 91.66% of year elapsed

Project	Revised Budget	Actual (incl. committals)	% budget expended	Explanation
Traffic / Transport Planning Consultancy Budget	*$75,000*	*$16,866*	*22%*	*Portion of budget used for purchase of software ($16,595).*
Stormwater Drainage Planning Consultancy Budget	*$315,000*	*$283,302*	*90%*	*Refinement of Local Creek catchment works. Wackford St, Webber Park and Thozet Creek investigations.*
Road Safety Consultancy Budget	*$30,000*	*$15,273*	*50%*	*Used for road safety audits and training..*
Roads Alliance Consultancy Budget	*$50,000*	*$52,389*	*105%*	*Technical and administrative support for Rockhampton Regional Roads and Transport Group.*
Water and Sewerage Planning Consultancy Budget	*$20,000*	*$30,103*	*150%*	*Water Loss mapping.*
Resumptions of Land / easements	*$100,000*	*$34,070*	*34%*	*Utilised acquisition of land / easements for existing infrastructure or projects in future years.*
Disaster Management Consultancy Budget	*$50,000*	*$46,293*	*92%*	*Guardian reporting Pilot project & floor level survey*

1.

5. DELIVERY OF SERVICES AND ACTIVITIES IN ACCORDANCE WITH COUNCIL'S ADOPTED SERVICE LEVELS

Service Delivery Standard		Target	Current Performance
Development MCU, ROL Completed in 8 days	(Graph 1 below)	**90%**	**90%**



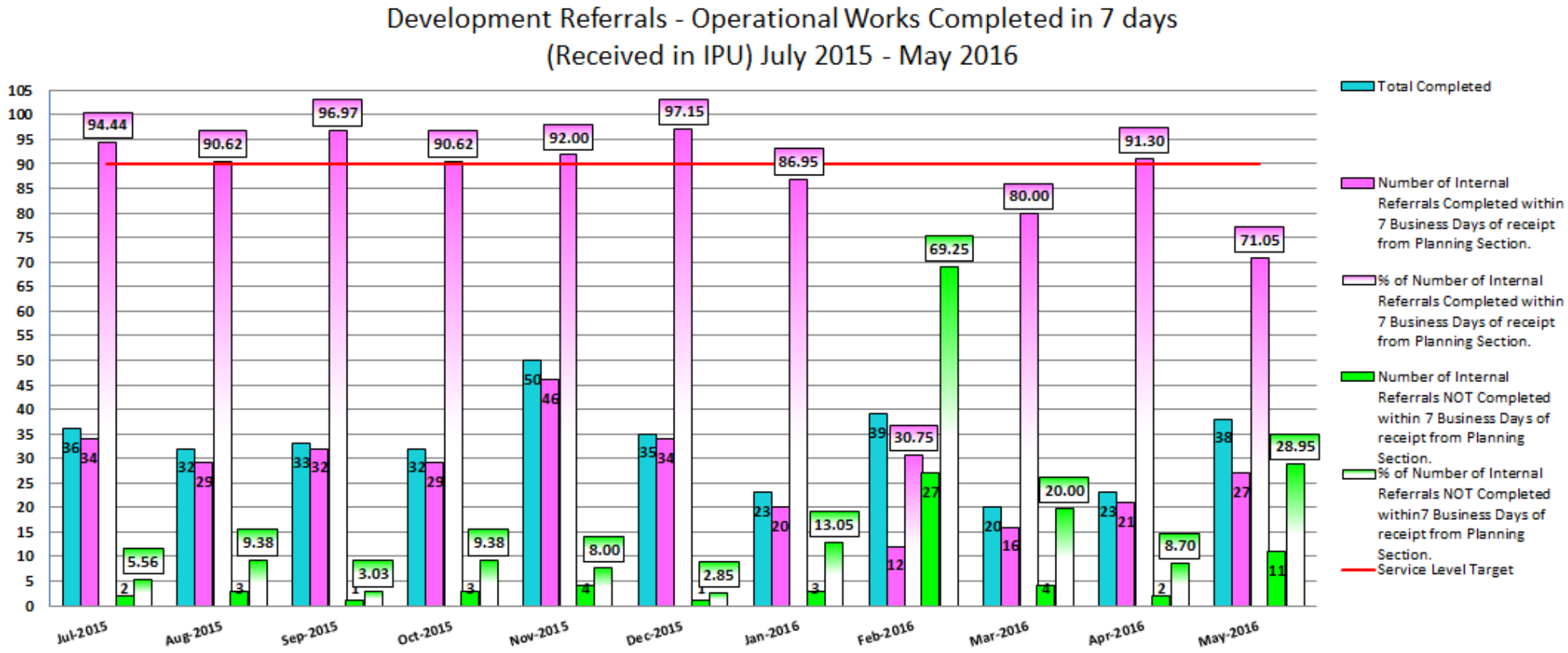
Comments

A total of 20 MCU & ROL referrals were completed in May 2016 in the required timeframe of 8 days.

2 MCU/ROL referral was not completed in the required timeframe of 8 days.

1 x 28 Days – awaiting further information from applicant, 1 x 9 Days.

Service Delivery Standard	Target	Current Performance
Development Operational Works Completed in 7 days (Graph 2 below)	**90%**	**71.05%**



Comments

A total of 38 Operational Works were completed in May 2016 in the required timeframe of 7 days.
11 Operational Works referral was not completed in the required timeframe of 7 days:-

1 x 85 days – Off Defects issues, 1 x 49 days – Extension granted by planning, 1 x 16 days – Informal request for information, 3 x 12 days – Off defects issues and additional plans received, 2 x 10 days, 3 x 8 days.

FINANCIAL MATTERS

End of Month General Ledger - (Inc Operating & Capital) - ENGINEERING SERVICES

As At End Of May

Report Run: 08-Jun-2016 10:35:23 Excludes Nat Accs: 2802,2914,2917,2924

	Adopted Budget	Revised Budget	Revised Budget (Pro Rata YTD)	YTD Actual	YTD Commit + Actual	Variance	On target
	$		$	$	$	%	91.7% of Year Gone
OPERATIONS							Adopted Budget Comparison
ENGINEERING SERVICES							
Development Engineering							
1 - Revenues	0	0	0	(4,146)	(4,146)	0%	✓
2 - Expenses	1,320,583	1,320,583	1,210,534	928,532	928,567	70%	✓
3 - Transfer / Overhead Allocation	(419,263)	(419,263)	(384,324)	(292,837)	(292,837)	70%	✗
Total Unit: Development Engineering	***901,320***	***901,320***	***826,210***	***631,548***	***631,584***	**70%**	✓
Strategic Infrastructure							
1 - Revenues	(36,500)	(36,500)	(33,458)	(51,656)	(51,656)	142%	✓
2 - Expenses	2,019,065	2,019,065	1,850,810	1,251,745	1,452,801	72%	✓
3 - Transfer / Overhead Allocation	(22,321)	(22,321)	(20,461)	(13,029)	(13,029)	58%	✗
Total Unit: Strategic Infrastructure	***1,960,244***	***1,960,244***	***1,796,891***	***1,187,060***	***1,388,116***	**71%**	✓
Engineering Services Management							
1 - Revenues	(120,000)	(120,000)	(110,000)	(340,098)	(340,098)	283%	✓
2 - Expenses	1,249,744	1,249,744	1,145,598	1,091,321	1,171,199	94%	✗
3 - Transfer / Overhead Allocation	(651,496)	(651,496)	(597,205)	(628,198)	(628,198)	96%	✓
Total Unit: Engineering Services Management	***478,248***	***478,248***	***438,394***	***123,024***	***202,902***	**42%**	✓
Design Services							
1 - Revenues	0	0	0	(13,499)	(13,499)	0%	✓
2 - Expenses	505,720	505,720	463,577	372,568	393,971	78%	✓
3 - Transfer / Overhead Allocation	92,836	92,836	85,100	75,120	75,120	81%	✓
Total Unit: Design Services	***598,556***	***598,556***	***548,677***	***434,188***	***455,591***	**76%**	✓
Total Operations:	**3,938,368**	**3,938,368**	**3,610,171**	**2,375,820**	**2,678,193**	**68%**	✓
CAPITAL							Revised Budget Comparison
ENGINEERING SERVICES							
CP430 - CAPITAL CONTROL ENGINEERING SERVICES							
1 - Revenues	0	0	0	(24,000)	(24,000)	0%	✓
2 - Expenses	200,000	420,000	385,000	91,517	99,478	24%	✓
3 - Transfer / Overhead Allocation	0	0	0	1,362	1,362	0%	✗
Total Unit: Design Services	***200,000***	***420,000***	***385,000***	***68,879***	***76,840***	**18%**	✓
CP431 - CAPITAL CONTROL ENGINEERING SERVICES REVENUE							
1 - Revenues	(1,703,750)	(1,703,750)	(1,561,771)	0	0	0%	✗
Total Unit: Design Services	***(1,703,750)***	***(1,703,750)***	***(1,561,771)***	***0***	***0***	**0%**	✗
Total Capital:	**(1,503,750)**	**(1,283,750)**	**(1,176,771)**	**68,879**	**76,840**	**-6%**	✗
Grand Total:	**2,434,618**	**2,654,618**	**2,433,400**	**2,444,700**	**2,755,033**	**104%**	✗

8.3 RENAMING SOUTHERN SECTION OF PANDORA ROAD

File No:	**8054**
Attachments:	**1. Location map**
Authorising Officer:	**Robert Holmes - General Manager Regional Services** **Martin Crow - Manager Engineering Services**
Author:	**Stuart Singer - Technical Officer**

SUMMARY

A request has been received from the son of a resident who resides on Pandora Road, to rename the southern section of Pandora Road. This report seeks to gain Council endorsement to undertake the formal renaming process for the southern section of Pandora Road, Alton Downs.

OFFICER'S RECOMMENDATION

THAT the southern section of Pandora Road, Alton Downs, be advertised for community suggestions for a name and for the formal renaming of this section of road, as per Councils Naming of Infrastructure Assets Policy and Procedure.

BACKGROUND

A request has been received by Council from the son of a resident who resides on Pandora Road, to rename the southern section of Pandora Road (Customer Request 438082). The requestor himself is a local to the area and resides within close proximity to Pandora Road.

According to the customer, emergency services were requested at the residence of 217 Pandora Road, (situated on the northern section of Pandora Road). The ambulance had difficulty locating the residence in a timely manner and initially entered the southern section of Pandora Road.

Councils Naming of Infrastructure Assets Policy states the policy provides a consistent approach to the naming of infrastructure assets, to ensure that Council's road network has an easily recognisable system of road and street name signs that assist both pedestrians and motorists and provides a safe traffic environment.

The southern section of Pandora Road is a 450m, Council maintained section which is discontinuous to the northern section of Pandora Road (refer to attachment 1). There is no constructed road connecting the southern section to the northern section and an unpassable stream (no structure) is within the road reserve.

Australian Standard AS/NZ 4819:2011 (Rural and urban addressing) states road names are intended to be enduring, and shall only be changed when necessary. Furthermore, a named road shall include only one section navigable by vehicles. Unconnected navigable sections, such as where separated by an unbridged stream, shall be assigned a separate road name.

If the road name is changed, there are two identified affected land owners. Council officers have talked to both land owners to gauge their attitude to a potential road name change.

Land owner one (Lot 11, Pandora Road) does not have an address to current standards and is aware of this. They do not reside at the property, however, expressed no concern with changing the road name and asked for a formal property address if the road name process is successful.

Land owner two (502 Pandora Road) does not reside at this address, however the property does have a house situated on it. He expressed he has no issue with the current name for the road and not really interested in changing the name. However, expressed he did see some merit in changing the name if reduced confusion, particularly for emergency services. He made comment he often sees motorist driving up this short section only to turn around (assumed they thought the road continued).

He was interested in the naming process and asked to be advised if the submission for a road name change is successful so he can nominate a name.

BUDGET IMPLICATIONS

The cost of advertisement plus the signage which is estimated to be $500.00 including installation.

POLICY IMPLICATIONS

The applicable policy is ‘Naming of Infrastructure Assets’.

CONCLUSION

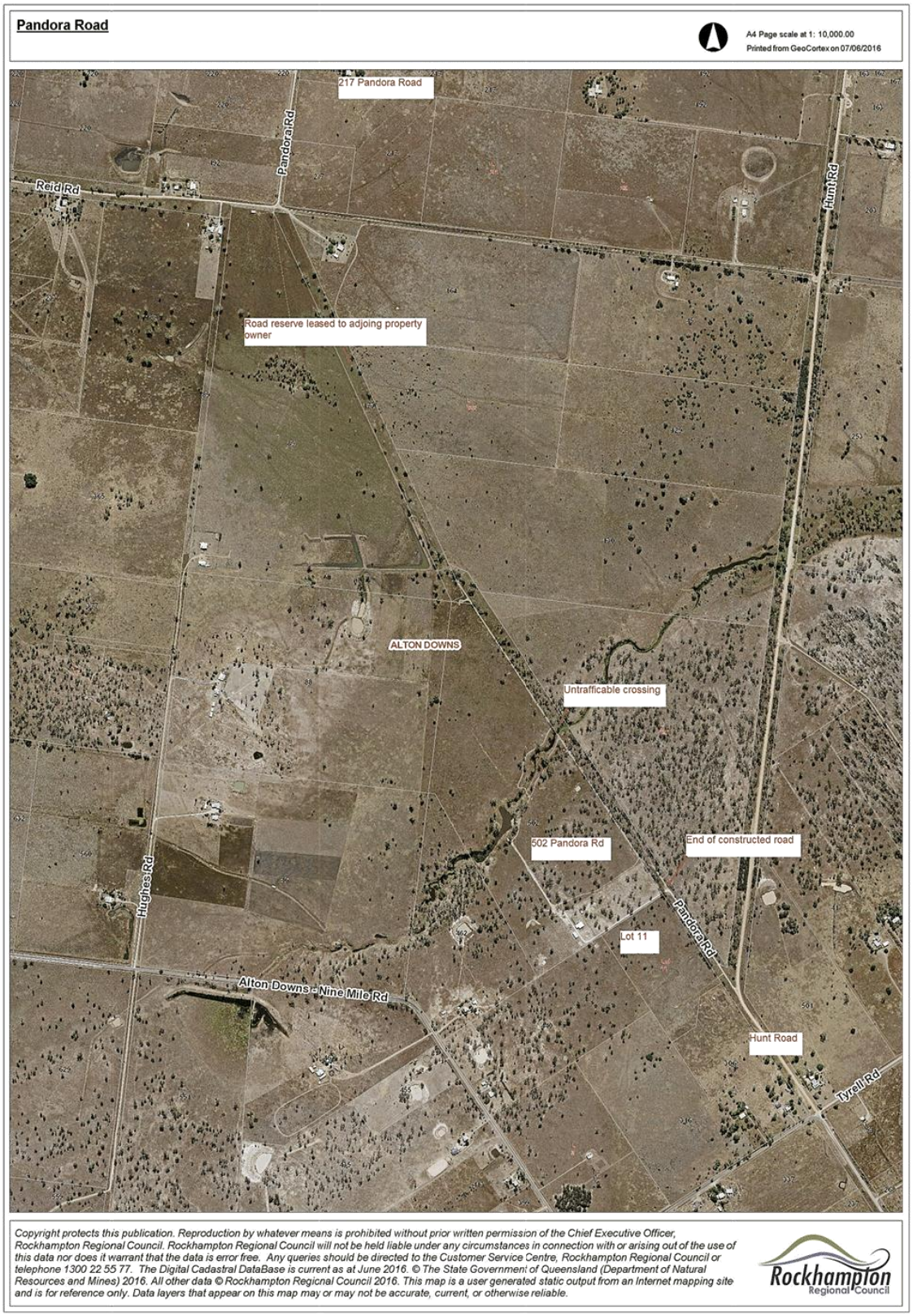
The southern section of Pandora Road, Alton Downs, be advertised for community suggestions for a name and for the formal renaming of this section of road, as per Councils Naming of Infrastructure Assets Policy and Procedure.

RENAMING SOUTHERN SECTION OF PANDORA ROAD

Location map

Meeting Date: 21 June 2016

Attachment No: 1


Pandora Road
A4 Page scale at 1: 10,000.00
Printed from GeoCortex on 07/06/2016
217 Pandora Road
Pandora Rd
Reid Rd
Hunt Rd
Road reserve leased to adjoing property owner
ALTON DOWNS
Untrafficable crossing
502 Pandora Rd
End of constructed road
Hughes Rd
Pandora Rd
Lot 11
Alton Downs - Nine Mile Rd
Hunt Road
Tyrell Rd
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Rockhampton Regional Council

8.4 THOZET ROAD FOOTPATH PARKING IMPLICATIONS

File No:	**1963**
Attachments:	**1. Dwg No. 2011-154-01 (Adjacent Project)** **2. Dwg No. 2016-067-SK1 (Proposed Layout)**
Authorising Officer:	**Robert Holmes - General Manager Regional Services**
Author:	**Grant Vaughan - Coordinator Civil Design**

SUMMARY

This report provides a summary of the proposed Thozet Road Footpath project and associated parking implications, and requests Council's support for the project to proceed.

OFFICER'S RECOMMENDATION

THAT The Council:

(1) supports the Thozet Road Footpath project which will result in the loss of on-street parking for 13 properties on the eastern side of Thozet Road, and

(2) advise the affected residents of Thozet Road of the proposed Shared Pathway Project, the identified impacts arising from the project, and the reasoning behind the proposed design.

COMMENTARY

In 2012, Council designed and constructed a 2.5m wide shared concrete path at Thozet Road from Kerrigan Street to Lilley Avenue. Due to the steep slopes in the verge, the road width was narrowed to allow the path to be constructed without affecting driveway access to adjacent properties. This project was the 1st Stage of a longer term project to provide a continuous pathway from Kerrigan Street through to Mount Archer School.

Figure 1 – Stage 1 Shared Path

A capital project was included in the 2015/2016 capital works program to extend the Thozet Road shared path from Lilley Avenue to Zervos Street. Detailed design of this project has recently been completed.

This project has adopted a similar methodology as Stage 1, reducing the existing roadway width to allow the path to be constructed without affecting driveway access to adjacent properties which have steep verge slopes. The existing street has a kerb to kerb width of 12.7m, which provides two travel lanes and on-street parking both sides.

The proposed road has a kerb to kerb width of 9.5m, which provides two travel lanes and on-street parking to one side only, resulting in the loss of on-street parking on the eastern side of Thozet Road. This will affect 13 properties from 344-368 Thozet Road.

Figure 2 – Steep Verge Slope at 356 Thozet Road

BACKGROUND

The construction of the Thozet Road Shared Path from Kerrigan Street to Lilley Avenue in 2012 resulted in the loss of on-street parking for five properties. There have been no known complaints raised by the residents, who have adapted by parking on the verge clear of the concrete path.

BUDGET IMPLICATIONS

Funding for this project has been deferred to the 2016/2017 capital budget.

CORPORATE/OPERATIONAL PLAN

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

CONCLUSION

Engineering Services staff have completed the design of a 2.5m wide shared concrete footpath from Lilley Avenue to Zervos Street. Due to the existing steep slopes in the verge, the proposal results in narrowing of the roadway and the loss of on-street parking for 13 adjacent properties.

Construction of an earlier stage in 2012 resulted in the loss of on-street parking for five properties, which have adapted without complaints.

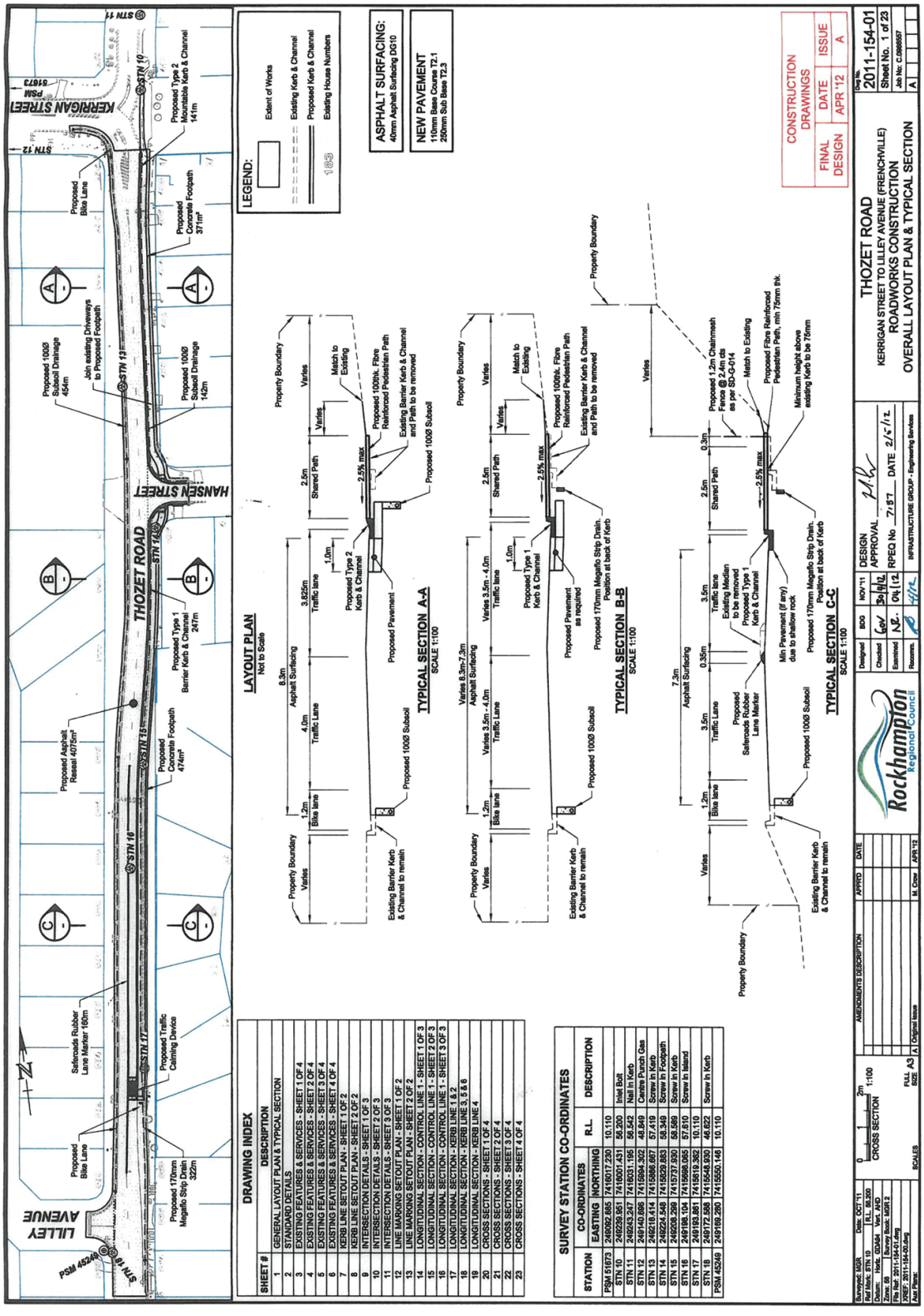
Council support for the proposal is sought due to the potential for complaints from residents following construction.

THOZET ROAD FOOTPATH PARKING IMPLICATIONS

Drawing No. 2011-154-01 (Adjacent Project)

Meeting Date: 21 June 2016

Attachment No: 1

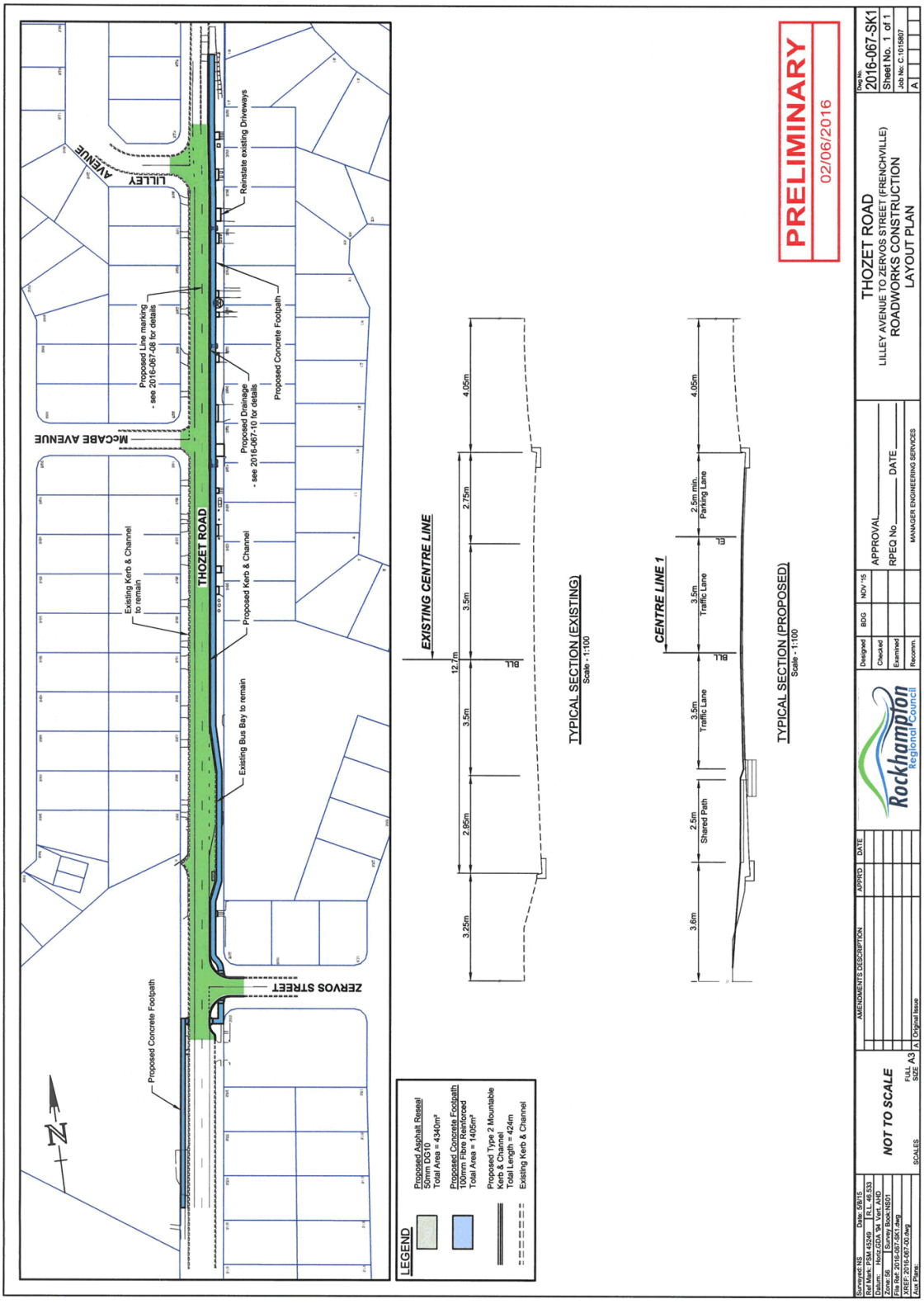

THOZET ROAD
KERRIGAN STREET
HANSEN STREET
LILLEY AVENUE
LAYOUT PLAN
Not to Scale
LEGEND:
Extent of Works
Existing Kerb & Channel
Proposed Kerb & Channel
Existing House Numbers
ASPHALT SURFACING:
40mm Asphalt Surfacing DG10
NEW PAVEMENT
110mm Base Course T2.1
250mm Sub Base T2.3
TYPICAL SECTION A-A
SCALE 1:100
TYPICAL SECTION B-B
SCALE 1:100
TYPICAL SECTION C-C
SCALE 1:100
DRAWING INDEX
SURVEY STATION CO-ORDINATES
CONSTRUCTION DRAWINGS
FINAL DESIGN
DATE APR '12
ISSUE A
THOZET ROAD
KERRIGAN STREET TO LILLEY AVENUE (FRENCHVILLE)
ROADWORKS CONSTRUCTION
OVERALL LAYOUT PLAN & TYPICAL SECTION
Rockhampton Regional Council
Dwg No. 2011-154-01
Sheet No. 1 of 23

THOZET ROAD FOOTPATH PARKING IMPLICATIONS

Drawing No. 2016-067-SK1 (Proposed Layout)

Meeting Date: 21 June 2016

Attachment No: 2


PRELIMINARY
02/06/2016
THOZET ROAD
LILLEY AVENUE TO ZERVOS STREET (FRENCHVILLE)
ROADWORKS CONSTRUCTION
LAYOUT PLAN
2016-067-SK1
Sheet No. 1 of 1
Job No. C-1015807
Rockhampton Regional Council
NOT TO SCALE
FULL SIZE A3
SCALES
AMENDMENTS DESCRIPTION
A Original Issue
APPROVAL
RPEQ No
DATE
MANAGER ENGINEERING SERVICES
Designed BDG NOV-15
Checked
Examined
Recomm
THOZET ROAD
LILLEY AVENUE
MCCABE AVENUE
ZERVOS STREET
Existing Kerb & Channel to remain
Proposed Kerb & Channel
Existing Bus Bay to remain
Proposed Concrete Footpath
Proposed Line marking - see 2016-067-08 for details
Proposed Drainage - see 2016-067-10 for details
Reinstate existing Driveways
LEGEND
Proposed Asphalt Reseal 65mm DG 10/14 Total Area = 4340m²
Proposed Concrete Footpath 100mm Fibre Reinforced Total Area = 1405m²
Proposed Type 2 Mountable Kerb & Channel Total Length = 424m
Existing Kerb & Channel
EXISTING CENTRE LINE
12.7m
3.25m
2.95m
3.5m
3.5m
2.75m
4.05m
TYPICAL SECTION (EXISTING)
Scale - 1:100
CENTRE LINE 1
3.6m
2.5m Shared Path
3.5m Traffic Lane
3.5m Traffic Lane
2.5m min Parking Lane
4.05m
TYPICAL SECTION (PROPOSED)
Scale - 1:100

8.5 SPEED LIMIT REVIEW - POISON CREEK ROAD

File No:	**7127**
Attachments:	**1. Speed Limit Review Report** **2. Proposed Signage Plan 2016-164-00**
Authorising Officer:	**Angus Russell - Coordinator Strategic Infrastructure** **Martin Crow - Manager Engineering Services** **Robert Holmes - General Manager Regional Services**
Author:	**Stuart Harvey - Traffic Engineer**

SUMMARY

A speed limit review has been undertaken in response to a request from community members in the Poison Creek Road area. This report provides a recommendation resulting from this speed limit review.

OFFICER'S RECOMMENDATION

That Council adopt an amended speed zone of 80km/h for the length of Poison Creek Road as shown on Plan 2016-164-00.

COMMENTARY

The request for a speed limit review was received from members of the Bouldercombe community. This report provides a recommendation on this speed limit review. A summary of the request that was recently investigated is as follows:

- Request to reduce speed limit on Poison Creek Road (as shown on Plan 2016-164-00) to 80km/h throughout the length of Poison Creek Road.

Residents in the Bouldercombe community have expressed their concern that the speed limit of 100km/hr along Poison Creek Road is not safe for the current road conditions. Poison Creek Road was originally posted at 100km/hr and then had the speed limit decreased to 80km/hr in 2013 due to the detour of traffic from the Mount Morgan Range. This was changed back to 100km/hr when the Mount Morgan Range reopened.

Residents have stated that it is difficult to turn into and out of properties along this section of road and that there have been several unreported crashes along the road in the past years. For these reasons, a change to the speed limit was requested.

A speed limit review was carried out at this location in accordance with the Manual of Uniform Traffic Control Devices (Part 4 – Speed Controls) and utilising the QLIMITS Speed Environment Analysis software. QLIMITS is a web based software application provided by the Department of Transport and Main Roads (DTMR) for the analysis of road environments for the purpose of setting speed limits. The speed limit review report is attached.

The recommendations of the review were discussed and approved by the Rockhampton Region 3E Speed Management Committee, which consists of representatives from the Queensland Police, Rockhampton Regional Council, Livingstone Shire Council and the Department of Traffic and Main Roads, at their monthly 3E Meeting.

Due to the sub-standard features along the horizontal alignment, the limited sight distance at accesses, and the reported crash history, a proposed speed limit of 80km/hr is recommended. Queensland Police have agreed to enforce the new speed limits after their introduction.

BACKGROUND

Council often receives requests for changes to speed limits in both urban and rural areas.

The Manual of Uniform Traffic Control Devices published by the Department of Transport and Main Roads provides a standardised methodology to conduct a technical assessment of an appropriate speed limit based on the road function, prevailing traffic speeds and speed environment.

In addition to applying this manual, Council also seeks the endorsement of a local 3E Speed Management Committee. The purpose of the Rockhampton Region 3E Speed Management Committee is to ensure that the interests of all road users are considered before a speed zone is established and to ensure that speed zones throughout the region are consistent and credible.

BUDGET IMPLICATIONS

Signage costs can be met within existing budgets.

RISK ASSESSMENT

In this location the speed limit will be reduced. The Police and Department of Transport and Main Roads support these changes and the Police have agreed to enforce the new speed limit after its introduction. The likelihood and severity of crashes in these locations should reduce as a result of the reduced speed limit.

Analysis indicated the majority of motorists are currently complying with the posted speed limit and travelling at a lower speed of 90km/hr. Reducing the speed limit to 80km/hr may result in some adverse comments from residents and motorists who drive through the area, however their compliance with the existing speed limits indicate an understanding of the importance of a reduced speed in the area. Adequate enforcement will be required to reinforce this change in speed through the area.

CORPORATE/OPERATIONAL PLAN

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

CONCLUSION

The recommended new speed limit on Poison Creek Road is the outcome of the analysis and evaluation process conducted by Council and is supported by the Rockhampton Region 3E Speed Management Committee. The recommendation is now presented to Council for consideration and adoption, prior to implementation.

SPEED LIMIT REVIEW – POISON CREEK ROAD

Speed Limit Review Report

Meeting Date: 21 June 2016

Attachment No: 1

Poison Creek Road Speed Limit Review May 2016

Prepared by RRC Engineering Services

Printed on 9/06/2016 May 2012

CONTENTS

1.0 Introduction

This report presents the findings of a speed limit review conducted on Poison Creek Road. The speed limit review covers the entire 2.338 km section of Poison Creek Road from the Burnett Highway to the intersection with the Razorback Road and Moonmera Road, Bouldercombe.

This speed limit review has been undertaken at the request of Councillor Smith. In April 2016, Councillor Smith was approached by residents to reduce the speed limit on Poison Creek Road from 100 km/h to 80 km/h. Engineering Services received this request as Customer Request (CR) 434473.

This speed limit review has been conducted in accordance with the speed limit review process outlined in the Manual of Uniform Traffic Control Devices (MUTCD), Part 4: Speed Controls (Sixth Issue, 18 November 2013).

Figure 1 illustrates the locality of the review.

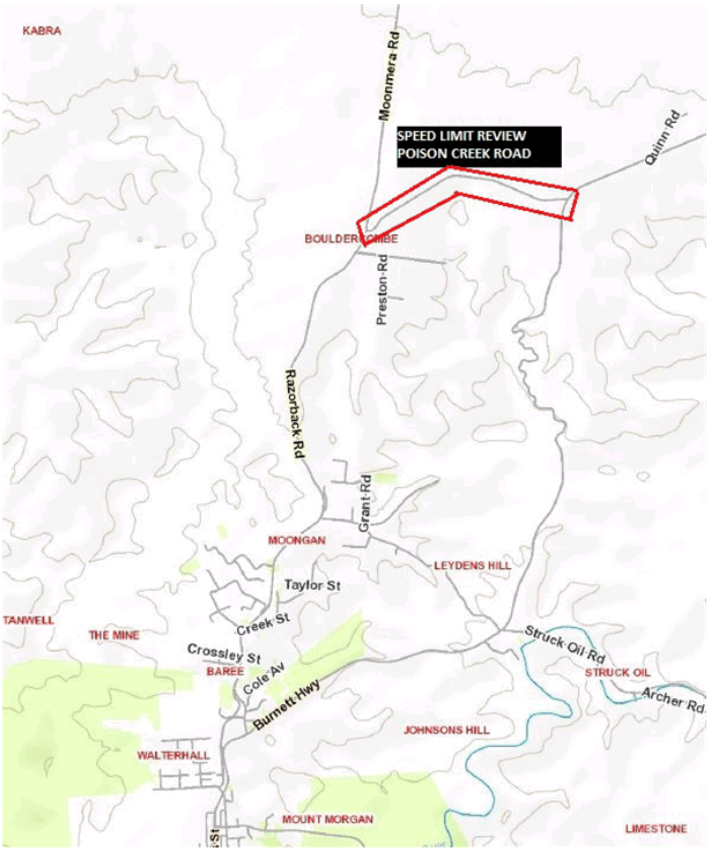


Figure 1: Locality of Speed Limit Review site

2.0 Site Details

Poison Creek Road is part of the Local Government road network, which connects local towns to the National Highway network. The section of Poison Creek Road which is applicable to this speed limit review, is the entire 2.338km section of road between the Burnett Highway at the Eastern end and to the intersection with the Razorback Road and Moonmera Road at the Western end, in the locality of Bouldercombe.

The Burnett Highway (Eastern approach) is an undivided two-lane carriageway, which passes through a mixture of flat, undulating and mountainous terrain through the range. The speed limit along the Burnett Highway through the intersection with Poison Creek Road is 100 km/h.

The Razorback Road (Western approach) is an undivided two-lane carriageway, which passes through mountainous terrain through the range, heading south to Mount Morgan. Moonmera Road (Western approach) is an undivided two-lane carriageway, which passes through a mixture of flat, undulating and rolling terrains, heading north to Gracemere. The speed limit along through the Razorback Road / Moonmera Road intersection with Poison Creek Road is 80 km/h.

The Poison Creek Road alignment is typically constrained and consists of short straights joined to small radius curves. The whole of the subject road segment currently operates under a permanent 100km/h speed limit.

Refer to Figure 2 for site location details.

3.0 Previous Speed Reviews

No previous formal speed reviews have been undertaken on the subject section of Poison Creek Road. Similarly, a search of the historical records in the QLIMITS (SLR QLD) program returned no records of previous reviews.

As part of the DTMR reconstruction roadworks to the Burnett Highway, through the range to Mount Morgan, a detour was in place that directed vehicles from the Burnett Highway onto Poison Creek Road and the Razorback Road. Whilst this detour was in place for approximately 18 months, the speed limit on Poison Creek Road was reduced to 80km/h.

4.0 Traffic Data

The annual average daily traffic volume (AADT) on Poison Creek Road has been calculated using traffic count data collected by Rockhampton Regional Council in the 2016 calendar year. One count site was located as follows:
Site 1: 350m East of the intersection with Razorback Road and Moonmera Road.

Site 1 yielded an AADT value of 1073 vehicles per day, with a commercial vehicle count of 7.5%.
Site 2 opposite access 95 (for speed data).

Please note, Site 2 (opposite access 95) was a short-term count specifically located mid-block to capture speed data for this review.

Reference should be made to Figure 2 for site locations and Appendix D for detailed traffic volume information from which the AADT values have been obtained.

5.0 Homogeneity of Road Section

Part 4/4.3.2 of the MUTCD suggests the speed limit review process should be applied only to segments of road, which are homogenous in terms of characteristics and speed environment. Following a subjective assessment of the continuity of the road segments with regard to density of roadside development, frequency of accesses and intersections, visibility and setback of dwellings, general speed environment, alignment, existing speed limits and traffic volume, it has been determined that for the purpose of this review the entire section of Poison Creek Road between the Burnett Highway and the Razorback Road and Moonmera Road intersection, forms one continuous homogenous road segment.

An aerial view, which gives an indication of the extent of roadside development within the homogenous segment, is shown in Figure 2.

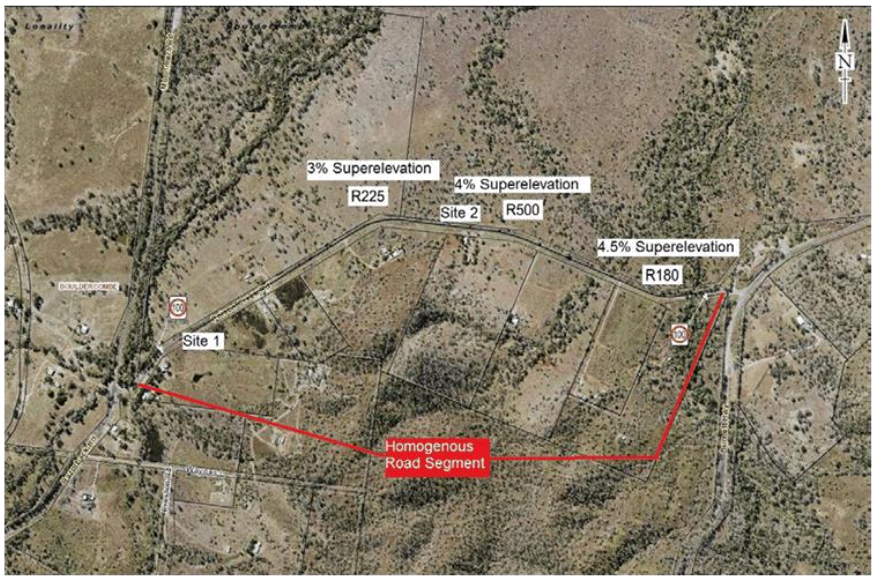


Figure 2: Aerial View of Homogenous Road Segment

The length of a homogenous segment is required to meet the minimum length requirements for speed zones specified in Table 4.1, Part 4 of the MUTCD. The length of the sole Homogenous Segment between the Burnett Highway and Razorback Road / Moonmera Road intersection is 2.338km. From Table 4.1 (extract shown in Figure 3), the length of this segment does not meet the normal minimum length and only marginally exceeds the absolute minimum length requirements for speed zones equal to 100km/h.

The length of this segment does however meet the normal minimum length and absolute minimum length requirements for speed zones equal to or less than 90km/h.

As the segment does not exceed the normal minimum length requirements associated with the existing speed limit of 100km/h, it is therefore not considered to be of appropriate length to comprise a linear speed zone of 100km/h.

Table 4.1 MINIMUM LENGTHS OF SPEED ZONES

Speed Limit (km/h)	Normal Minimum Length (km)	Absolute Minimum Length (km)
40: General	0.4	Not applicable
40: School zone only	Not applicable	0.2
40: High pedestrian activity zone only	Not applicable	0.2
50: Default urban limit	Not applicable	Not applicable
50	0.5	Not applicable
60	0.6	Not applicable
70	2.0	0.7
80	2.0	0.8
90	2.0	0.9
100	3.0	2.0
110	Not applicable	20.0 (see Section 3.3)

Figure 3: Table 4.1 - Minimum Length of Speed Zones from Part 4/4.5.1 of the MUTCD (Extract)

6.0 Determination of Appropriate Speed Limit

Part 4/4.2.1 of the MUTCD suggests the following criteria should be considered for a particular length of road in the determination of speed zones:

a) road function,
b) prevailing speeds, and
c) Speed Environment.

The MUTCD also suggests other issues, such as crash history and potential risk factors, be considered prior to the recommendation of an appropriate speed limit. The following analysis applies the standard procedure for the determination of an appropriate speed limit as described in Part 4/4.3.3 of the MUTCD.

6.1 Road Function

Roads are classified in terms of their function as part of the development of a road hierarchy plan. The functional road hierarchy is determined by grouping roads according to the character of service they provide.

Most roads form a variety of functions that range from the provision of access to properties, through to catering solely for through traffic movements. While many roads serve more than one function (to varying degrees), the concept of a hierarchy of roads is used to define the main function of each road. For the purpose of conducting speed limit reviews, the functional classification of roads shown in Appendix A, Part 4 of the MUTCD, Tables A1, A2 and A3 are used.

As previously discussed in Section 2, Poison Creek Road is part of the Local Government road network, which connects local towns to the National Highway network.

The sole homogenous segment is situated within a wholly rural environment, which connects the Local Government road network (Razorback Road and Moonmera Road) to the State Controlled network (Burnett Highway). The road borders onto land, which contains a mixture of large partially cleared land parcels and properties with long frontages, which appear to be primarily used for farming activities. There is only a scattering of isolated dwellings and buildings visible to traffic from the highway. In accordance with the functional classification descriptions provided in Table A2, Appendix A, Part 4 of the MUTCD, this segment has been classified as a rural trunk collector road.

The MUTCD suggests a first assessment of the speed limit appropriate for a particular road should be obtained by determining the typical speed limit, which is based on road function. These are the limits, which are considered in the first instance to be likely to match road users' expectations of the appropriate limit for the particular road. The speed limits that are typically associated with a particular road function are shown in Appendix B, Part 4 of the MUTCD, Tables B1, B2 and B3.

Within the sole homogenous segment, the typical speed limit applied to a rural trunk collector road, located in a rural environment, which is undivided and has limited direct access, is 100km/h (MUTCD Part 4, Table B2). However, considering Note 8 Appendix B, concerning when the design standard is less than 100km/h over a length of at least 2 km, the use of a lower speed limit should be considered. Hence, the existing 100km/h (general rural default) speed limit should be reconsidered as per this criteria. The road geometry is discussed in section 6.3.4 - other factors.

6.2 Prevailing Traffic Speed

Part 4/4.2.3 of the MUTCD states that prevailing traffic speeds are a major factor in the determination of a speed limit. For the purpose of this speed limit review, speed survey data was collected within the subject road segment at site 2 between Tuesday 19 April 2016 and Friday 22 April 2016. The survey location was located as follows:

Site 2: Opposite access 95

Site 2 was chosen for a more representative 'mid-block' location for the estimation of the V85th percentile speed. This site data is used for the analysis of speed data in this review.

Table 1 provides a summary of the available traffic speed data collected at the survey site. Reference should be made to Figure 2 for site locations and Appendix E for full details of available traffic speed data.

Table 1: Summary of traffic speed data

Site	Street	Location_Description	AADT_B	85th_Speed	15 km/h Pace	Perc_in _Pace	Mean Speed
2	Poison Ck Rd	Opp access 95		97.2	81-96	57.96	87.8

A review of the available speed data indicates that the measured speed distribution conforms to the acceptable distribution for a 90km/h speed limit (existing speed limit is 100km/h). Please note that the distribution is on the higher end for 90km/h, in particular the mean speed.

6.3 Speed Environment

In accordance with Part 4/4.2.4 of the MUTCD, the QLIMITS program (Speed Limit Review SLR-QLD) has been used to assess the speed environment for the subject road segment. The QLIMITS program has suggested an 80km/h speed limit for the subject road segment.

The findings are documented as follows. Reference should be made to Appendix B for complete details of the QLIMITS Speed Environment Report.

6.3.1 Frequency of Roadside Accesses

Average number of accesses per 100m is 0.26. Table 2 provides a summary of the frequency of roadside accesses by type for the subject road segment.

Table 2: Frequency of roadside accesses

	Type of access	Number
A	Residences, small commercial establishments, small public buildings and other units which generate light and/or occasional activity. (The weighting for this type of access is 1).	6

6.3.2 Crash History

A search of the Department of Transport and Main Roads' 'WebCrash 2' database indicates there has been five recorded crashes near the subject area of Poison Creek Road, between 2009 and 2016. A five-year period is generally recommended for use by traffic engineering and road safety practitioners as it represents the latest five year period of fully verified and validated crash data for all severity types. (note: Webcrash data is only updated to 2014 data, effectively the data period is 2009-2014).

Three of the five crashes recorded occurred at the intersections with Poison Creek Road. Intersection crashes result predominantly from a higher degree of potential vehicular conflict compared to road segments, as such, crashes that occurred at the intersections at either end of the road have been excluded from the crash evaluation. Additionally, crash types which cannot be addressed by any form of engineering countermeasure have also been excluded (in accordance with Section E2 (a) and Table E1, Appendix E, Part 4 of the MUTCD). The revised analysis criterion has reduced the total number of applicable crashes along Poison Creek Road to one.

Within the subject road section, the reported crash history suggests that the single vehicle loss of control crash type was off path-curve (DCA Code 800). The age group of this driver was in the 17-20 year group. Conditions were daylight and clear.

Lack of historic data could not provide a preliminary assessment of crash geography attributed to any specific location with high crash concentrations along this road, other than at the intersections.

Figure 4 provides a summary of applicable reported crashes within the subject road segment. Reference should be made to Appendix F for further details contained in the WebCrash2 reports.

Description	No. of crashes
Head-on	0
Rear-end	0
Lane change	0
Parallel lanes, turning	0
U-turn	0
Entering roadway	0
Overtaking, same direction	0
Hit parked vehicle	0
Hit railway train	0
Pedestrian	0
Permanent obstruction on carriageway	0
Hit animal	0
Off carriageway, on straight	0
Off carriageway, on straight, hit object	0
Out of control, on straight	0
Off carriageway on curve	1
Off carriageway, on curve, hit object	0
Out of control, on curve	0

Figure 4: Crash Count – Homogenous Segment

6.3.3 Crash Rate Comparison

It is widely accepted that the most appropriate manner of measuring road crashes is in terms of exposure to risk. For road segments, the accepted measure of exposure is distance travelled. For the purpose of speed zoning in Queensland, the casualty crash rate is computed in terms of equivalent risk unit (ERU) per 10^8 vehicle kilometres travelled (10^8 VKT).

The calculated casualty crash rates for each homogenous road segment can be compared to known typical casualty crash rates for similar roads, to determine if the subject road has a safety problem. Section E2, Appendix E, Part 4 of the MUTCD, states that for comparison purposes, the following convention should be used to describe the crash rate in relation to typical crash rates:

- Low Crash Rate: Less than the average casualty crash rate.
- Medium Crash Rate: Between average and critical casualty crash rates.
- High Crash Rate: Greater than or equal to the critical casualty crash rate.

Table 3 and Table 4 (Table E3 and E5, Appendix E, Part 4, MUTCD) provides the typical average and typical critical casualty crash rates for Queensland roads in rural environments.

Table 3: Rural Typical Average Casualty Crash Rates (Source: MUTCD Part 4 Sixth Issue 18th Nov 2013)

Table E3 TYPICAL COMPARISON CASUALTY CRASH RATES (AVERAGE) FOR ROADS IN RURAL ENVIRONMENT

Rural Typical Average Casualty Crash Rates (*10^4 ERU per 10^8 VKT)

Type of Road	ADT Band (veh/day)	Speed Zone (km/h)					
		40-50	60	70-80	90	100	110
Motorways and Freeways	>30,000	308.5	308.5	308.5	308.5	308.5	308.5
Highways	0 - 1,000	1,593.2	1,593.2	839.7	610.8	610.8	478.3
	1,001 - 3,000	1,593.2	1,593.2	824.1	643.3	643.3	709.8
	3,001 - 10,000	1,593.2	1,593.2	1,138.0	609.3	609.3	487.6
	10,001 - 20,000	1,593.2	1,593.2	612.5	612.5	612.6	-
	20,001 - 30,000	-	-	612.5	612.5	427.7	334.8
	>30,000	-	-	612.5	612.5	427.7	334.8
Arterial and Sub-Arterial Roads	0 - 1,000	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6
	1,001 - 3,000	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6
	3,001 - 10,000	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6	1,049.6
	10,001 - 20,000	378.9	378.9	378.9	378.9	378.9	378.9
	20,001 - 30,000	378.9	378.9	378.9	378.9	378.9	378.9
	>30,000	378.9	378.9	378.9	378.9	378.9	378.9
Trunk Collector Roads and Collector Roads	0 - 1,000	2,865.4	1,979.6	1,983.6	1,074.2	1,074.2	-
	1,001 - 3,000	2,394.0	2,394.0	1,524.1	844.2	844.2	-
	3,001 - 10,000	956.4	956.4	1,042.4	811.8	811.8	-
	10,001 - 20,000	-	496.0	496.0	569.0	569.0	-
	20,001 - 30,000	-	496.0	496.0	569.0	569.0	-
	>30,000	-	496.0	496.0	569.0	569.0	-
Local Roads	0 - 1,000	597.5	763.6	1,361.0	-	-	-
	1,001 - 3,000	597.5	763.6	1,361.0	-	-	-
	3,001 - 10,000	597.5	763.6	1,361.0	-	-	-

Table 4: Rural Typical Critical Casualty Crash Rates (Source: MUTCD Part 4 Sixth Issue 18th Nov 2013)

Table E5 TYPICAL COMPARISON CASUALTY CRASH RATES FOR ROADS IN RURAL ENVIRONMENT

Rural Typical Critical Casualty Crash Rates (*10^4 ERU per 10^8 VKT)

Type of Road	ADT Band (veh/day)	Speed Zone (km/h)					
		40-50	60	70-80	90	100	110
Motorways and Freeways	>30,000	312.4	312.4	312.4	312.4	312.4	312.4
Highways	0 - 1,000	1,681.5	1,681.5	974.5	629.0	629.0	497.4
	1,001 - 3,000	1,681.5	1,681.5	888.7	655.0	655.0	733.8
	3,001 - 10,000	1,681.5	1,681.5	1,171.6	616.2	616.2	511.0
	10,001 - 20,000	1,681.5	1,681.5	629.6	629.6	632.2	-
	20,001 - 30,000	-	-	629.6	629.6	442.1	344.6
	>30,000	-	-	629.6	629.6	442.1	344.6
Arterial and Sub-Arterial Roads	0 - 1,000	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7
	1,001 - 3,000	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7
	3,001 - 10,000	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7	1,098.7
	10,001 - 20,000	395.0	395.0	395.0	395.0	395.0	395.0
	20,001 - 30,000	395.0	395.0	395.0	395.0	395.0	395.0
	>30,000	395.0	395.0	395.0	395.0	395.0	395.0
Trunk Collector Roads and Collector Roads	0 - 1,000	3,242.6	2,108.3	2,063.3	1,094.1	1,094.1	-
	1,001 - 3,000	2,477.5	2,477.5	1,570.5	859.8	859.8	-
	3,001 - 10,000	1,000.3	1,000.3	1,067.6	828.2	828.2	-
	10,001 - 20,000	-	511.3	511.3	587.9	587.9	-
	20,001 - 30,000	-	511.3	511.3	587.9	587.9	-
	>30,000	-	511.3	511.3	587.9	587.9	-
Local Roads	0 - 1,000	693.6	801.6	1,422.3	-	-	-
	1,001 - 3,000	693.6	801.6	1,422.3	-	-	-
	3,001 - 10,000	693.6	801.6	1,422.3	-	-	-

Along Poison Creek road, the reported crash history results in an Average Annual Casualty Crash Rate of 877 10^4 ERU per 10^8 Vehicle Kilometres Travelled (VKT). With reference to Table 3 and Table 4, the Average Casualty Crash Rate for the road type is 844.2 (10^4 ERU per 10^8 VKT) and the Critical Casualty Crash Rate is 859.8 (10^4 ERU per 10^8 VKT). As such, the subject road segment is considered to have a higher than average crash rate.

6.3.4 Other factors

Substandard Curves:

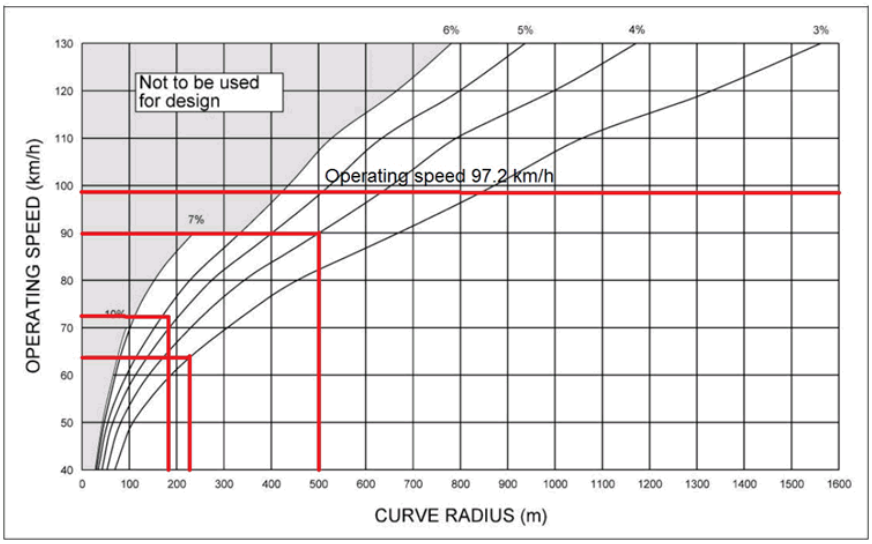
As part of the speed limit review, the physical characteristics of the road were considered by the investigators. There are three curves along the assessed route with varying curve radii. Figure 2 highlights the horizontal curves along the route:

- Curve 1: Radius of 225m and an average superelevation of 3%
- Curve 2: Radius of 500m and an average superelevation of 4%
- Curve 3: Radius of 180m and an average superelevation of 4.5%

These horizontal curves were then assessed against the AUSTROADS Guide to Road Design Part 3 to determine the appropriate operating speed for each curve. Figure 5 highlights that all of the three curves have operating speeds significantly lower than the posted speed limit of 100km/h.

During the site inspection it was noted that curves 1 and 3 have curve warning signs and advisory speed limits of 70km/h and 60km/h respectively. Curve 1 is also delineated with Chevron Alignment Markers (CAMS) which may have been a response to the reported crash in 2010.

Each of the substandard curves have been treated with the appropriate signage however, given that all of the curves along this length of road are substandard, consideration should be given to their impact on drivers operating speed along this segment.



Note: Based on a desirable maximum side friction for e ≤ 6%, absolute maximum side friction for e > 6%, and a linear distribution of side friction for e ≤ 6%.

Figure 5: Relationship between speed, radius and superelevation (Austroads Part 3 Figure 7.5 Extract)

Access Sight Distance:

Access sight distance was also inspected and calculated for several of the properties that have direct access onto Poison Creek Road. Three accesses on the southern side of Poison Creek Road were analysed as these were the three with the shortest sight distance at the driveway access. From the site inspection conducted:

- Access @ Chainage 0.78km SISD measured 178m looking Westbound
- Access @ Chainage 0.95km SISD measured 123m looking Westbound
- Access @ Chainage 1.14km SISD measured 129m looking Eastbound

As Poison Creek Road consists of tighter horizontal and vertical geometry, reference is made to Extended Design Domain (EDD) as per Austroads Guidelines. Safe Intersection Sight Distance under Extended Design Domain can be used for existing driveway accesses. Table 5 shows the reduced driver observation times that can be used under EDD. When applying these observation times to calculate the required Safe Intersection Sight Distance (Table 6 and 7) it is evident that 2 of the accesses only have safe intersection sight distance for a design speed of 80km/h and one access has a safe intersection sight distance for 100km/h.

Table 5: Driver observation time for SISD under EDD (Austroads Part 4A Extract)

Table A 8: Driver observation time for safe intersection sight distance under EDD

Observation time O_T (s)	Typical use
1.5	T-intersections on single carriageway roads (two-lane, two-way roads and one-way roads) that have a traffic volume <4000 veh/d. Cross intersections on single carriageway roads (two-lane, two-way roads and one-way roads) that have a traffic volume <400 veh/d. Simple intersection arrangements e.g. left in, left out on all roads.
2.0	T-intersections on single carriageway roads (two-lane, two-way roads and one-way roads) that have a traffic volume ≥4000 veh/d. Cross intersections on single carriageway roads (two-lane, two-way roads and one-way roads) that have a traffic volume ≥400 veh/d.
2.5	T-intersections and cross intersections on multi-lane roads. Intersections in overtaking lanes. Complex intersection layouts. Situations in which drivers may be distracted by other features.

Table 6: SISD under EDD 1.5 sec Observation time (Austroads Part 4A Extract)

Table A 9: Minimum EDD safe intersection sight distance and corresponding crest vertical curve size for sealed roads with level grades for the norm-day base case using an observation time of 1.5 seconds (m)

Design Speed (km/h)		Based on norm-day Safe Intersection Sight Distance [1] $h_1 = 1.1$ $h_2 = 1.25$ $d = 0.46$ [2] $O_T = 1.5$ seconds					
		$R_T = 1.5$ s		$R_T = 2.0$ s		$R_T = 2.5$ s	
		SISD (m)	K	SISD (m)	K	SISD (m)	K
40		47	2.4	53	2.9	-	-
50		63	4.2	70	5.2	-	-
60		81	7.0	89	8.5	-	-
70		100	10.7	110	12.9	-	-
80		121	15.7	133	18.7	-	-
90		144	22.2	157	26.2	169	30.5
100		169	30.4	183	35.6	197	41.2
110		195	40.6	211	47.2	226	54.3
120		-	-	240	61.3	257	70.1
130		-	-	271	78.2	289	89.0
Do all of the crest curve sizes listed provide acceptable car check case capability [3]	Norm-night [4]	**Yes** (d = 0.46, h_1 = 0.65 m, h_2 = 1.25 m, O_T = 0.6 s).					
	Mean-day	**Yes** (d = 0.41, h_1 = 1.1 m, h_2 = 1.25 m, O_T = 1.7 s).					
	Mean-Nnght [4]	**Yes** (d = 0.41, h_1 = 0.65 m, h_2 = 1.25 m, O_T = 1.2 s).					

Table 7: SISD under EDD 2.0 sec Observation time (Austroads Part 4A Extract)

Table A 10: Minimum EDD safe intersection sight distance and corresponding crest vertical curve size for sealed roads with level grades for the norm-day base case using an observation time of 2.0 seconds (m)

Design Speed (km/h)	Based on norm-day Safe Intersection Sight Distance [1] h_1 = 1.1 h_2 = 1.25 d = 0.46 [2] O_T = 2.0 seconds					
	R_T = 1.5 s		R_T = 2.0 s		R_T = 2.5 s	
	SISD (m)	K	SISD (m)	K	SISD (m)	K
40	53	2.9	58	3.6	-	-
50	70	5.2	77	6.3	-	-
60	89	8.5	97	10.1	-	-
70	110	12.9	120	15.3	-	-
80	133	18.7	144	22.0	-	-
90	157	26.2	169	30.5	182	35.2
100	183	35.6	197	41.2	211	47.2
110	111	47.2	226	54.3	241	61.9
120	-	-	257	70.1	273	79.5
130	-	-	289	89.0	307	101
Do all of the crest curve sizes listed provide acceptable car check case capability [3]	Norm-night [4]	Yes (d = 0.46, h_1 = 0.65 m, h_2 = 1.25 m, O_T = 1.1 s).				
	Mean-day	Yes (d = 0.41, h_1 = 1.1 m, h_2 = 1.25 m, O_T = 2.8 s).				
	Mean-night [4]	Yes (d = 0.41, h_1 = 0.65 m, h_2 = 1.25 m, O_T = 1.8 s).				

7.0 Criteria Based Speed Limits

While the formal speed limit review process is only generally applicable to linear speed zones which are implemented along a length of road, there are several other types of speed limits used on Queensland roads, such as, Criteria based speed limits. Criteria based speed limits are determined in accordance with specific criteria relevant only to that speed zone and are used to determine eligibility for speed limits such as:

- 50km/h Local Street Speed Limit.
- 110km/h Speed Limit.
- Rural Residential Speed Limits.
- Special Reduced Speed Limits.
- Rural Intersection Approach Speed Limits.

While undertaking the formal speed limit review, it was identified that the subject section of Poison Creek Road has no attributes that may meet the eligibility criteria based speed limits.

8.0 Speed Correlation & Recommendations

There is a discrepancy in the correlation between the three stages of this assessment. The road function suggests a 90km/h speed limit due to the rural function of the road with substandard alignment features and the current speed data indicates that a 90k/h speed limit is appropriate.

It is believed the substandard horizontal alignment has a significant road safety impact to motorists, warranting a lower posted speed limit. It is generally not good practice to have advisory speed signs at curves that advise a speed reduction of more than 20km/h under the posted speed limit. Along this segment of road, two of the three curves have advisory speed signs that are more than 20km/h under the posted speed limit. In addition to this, several of the property accesses along this route do not meet the requirements for EDD Safe Intersection Sight Distance at 100km/h.

Although the 100km/h speed limit zone is over the absolute minimum length of 2km, it is under the normal minimum length of 3km. The Department of Transport and Main Roads advice on speed limits is that changes in speed zones should be more than 10km/h if possible.

By posting an 80km/h speed limit, the sight distances and curve alignments become more consistent with the current AUSTROADS Guidelines for road design. This substantiates why the QLIMITS speed limit was proposed as 80km/h and hence, the recommended speed limit is 80km/h.

This recommendation has been based on the outcomes of the speed limit review process outlined in Part 4 of the MUTCD, however in this particular instance, engineering judgement has also been applied to recommend a posted speed limit of 80km/h.

Table 6 shows the overall correlation between the different stages of the speed limit review for the subject road segment.

Table 6: QLIMITS Speed Correlation & Recommendations

Stage	Description	Suggested Speed
1	The speed limit based on road function is	90km/h
2	The speed limit suggested by current speed data is	90km/h
3	The speed limit suggested by the speed environment (QLIMITS)	80km/h
4	Recommendation	80km/h

9.0 Recommendation of Speed Limit Committee (3E Committee)

The speed limit review was presented at the 3E's Committee meeting on Friday 20th May 2016. The Committee support the report and the recommended reduced speed limit of 80km/h.

Reference should be made to Appendix H for the 3E's Committee meeting minutes.

10.0 Appendix

10.1 Appendix A – QLimits Field Data (Form F1)

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FORM F1 QLIMITS FIELD DATA FORM

LOCAL GOVERNMENT/DISTRICT Rockhampton Regional Council ROAD: Poison Creek Road

LOCATION: Burnett Hwy to Razorback Road

RECORDER: Stuart Singer DATE: 11/05/2016

Tick (✓) the appropriate box to respond

1. LOCATION OF ROAD

The area in which this road section is located is generally:

(i)	Urban:	Fully built-up area with consolidated residential, commercial and industrial land uses.	☐
(ii)	Urban Fringe:	Less developed area typically containing low-density residential, small scale farming, future urban and other 'developing' land uses.	☐
(iii)	Rural Settlement:	Small settlements or townships located in rural areas which are typically located on through roads, and where all or most land development is concentrated on, or has direct access to, those through roads.	☐
(iv)	Rural:	Areas that are rural in nature, with large property or farm holdings. The only residential properties in these areas will be scattered homesteads and farmhouses.	☑

2. LENGTH OF ROAD

The length of road section is 2.34 km

3. UPPER LIMIT OF THE 15 km/h PACE

The upper limit of the 15km/h pace of free vehicles on this road section is 97.2 km/h

4. DEVELOPMENT (For divided roads only)

The development on both sides of the road is:

balanced ☐

unbalanced ☑

5. FREQUENCY OF ROADSIDE ACCESSES (for both sides of the road combined)

Note: (i) Abutting development on service roads is not considered and therefore only the points of access to the through traffic lanes are counted.
(ii) Crossroads are counted once each side of the road.

Abutting Properties:

(a) Residences, small commercial establishments, small public buildings and other units which generate light and/or occasional activity.

Number of this type: Side 1 = 1 Side 2 = 5

(b) Average commercial establishments, local schools, caravan parks, light industries, public buildings and other units generating activity that is:

(i) continuous light

(ii) moderate at certain regular times, such as commuting hours

(iii) substantial at infrequent intervals

Number of this type: Side 1 = 0 Side 2 = 0

c

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(c) Heavy industry, schools, shopping centres and other units generating
(i) continuous moderate activity or
(ii) substantial activity at certain regular times.
Number of this type: Side 1 = 0 Side 2 = 0

(d) Large shopping centres and other units generating substantial and continuous activity. Some large industries that are tourist attractions or for some other reason generate substantial traffic volumes would be included in this activity.
Number of this type: Side 1 = 0 Side 2 = 0

Intersections

(a) Intersecting roads of substantially lesser importance than the road being studied, or intersecting roads where side road traffic and turning movements have little effect on the traffic flow pattern of the road being studied.
Number of this type: Side 1 = 0 Side 2 = 0

(b) Intersecting roads of lesser importance than the road being studied but where side road traffic and turning movements are such that the intersection has appreciable effect on the traffic flow pattern of the road being studied.
Number of this type: Side 1 = 0 Side 2 = 0

(c) Signalised intersections, roundabouts and intersections with roads comparable to or of greater significance than the road being studied. Intersections which have a pronounced effect on the traffic flow pattern of the road being studied.
Number of this type: Side 1 = 0 Side 2 = 0

Note: (i) Abutting development on service roads is not considered and therefore only the points of access to the through traffic lanes are counted.
(ii) Crossroads are counted once each side of the road.

6. DIVIDED OR UNDIVIDED

The section of road being studied is:
- undivided ☑
- divided ☐

Note: (i) Double barrier lines do not constitute a median.
(ii) A painted median is sufficient to constitute a divided road if it extends for the full length of the section under consideration (excepting median breaks for turns, etc).

7. RESTRICTION OF ACCESS

The major part of this road has restriction of direct vehicular access on:
- neither side ☑
- one side ☐
- both sides ☐

Note: (i) This restriction may include service roads, river or railway line alongside the road or a large fenced-off area e.g. golf course, airport.

8. SETBACK

The setback of the through traffic lanes to the property boundary line is:
- less than 4 metres ☐
- 4-10 metres ☐
- more than 10 metres ☑

Note: (i) If development is balanced, the lower setback value should be used.
(ii) If development is unbalanced, the setback value for the more developed side should be used.

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9. MEDIAN

The central median has a width of N/A metres

10. PROTECTION OF TURNING/CROSSING VEHICLES

The median protects turning vehicles:	fully	☐
	only partially or not at all	☑

11. NUMBER OF LANES

The total number of traffic lanes is 2 lanes

Note: (i) include through lanes in both directions.
(ii) do not include service roads or exclusive parking lanes.
(iii) if lanes are not clearly marked, count the number of lanes normally used by drivers during busy traffic periods.

12. FUNCTION OF ROAD

The main reason that vehicles use this section of road is:	traffic movement	☑
	access to abutting properties	☐

13. ADJACENT ROAD SECTIONS

The speed limits on the adjoining road sections are: 80 km/h 100 km/h

14. FREEWAY

Is this road a motorway, freeway or expressway?	NO	☑	YES	☐

15. LOW SPEED AREA

Is this road a low speed area?	NO	☑
	YES (LATM area)	☐
	YES (shared-use zone)	☐

16. OTHER FACTORS

Is the road predominantly winding or hilly?	NO	☐	YES	☑
Is the road unusually congested?	NO	☑	YES	☐

17. SPECIAL ROADSIDE ACTIVITIES

Are there any schools along this road section?	NO	☑	YES	☐

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18. CASUALTY CRASH RATES

Compared to other similar road sections the casualty crash rate is:

- average or lower than average ☐
- a little higher than average ☑
- significantly higher than average ☐

Note: Care should be exercised when using historical crash rate data. Only use relevant data pertaining to crashes that have occurred whilst the road is in its current state, e.g. if an intersection has been signalised or a road recently reconstructed, only use crash data from the period following these changes.

19. TRAFFIC SIGNALS/ROUNDABOUTS

Are there any traffic signals or roundabouts along this road section? NO ☑ YES ☐

10.2 Appendix B – QLimits Speed Environment Reports (Form F2)

Speed Limit Review – Queensland (SLR-QLD)
Detailed Assessment Report

Background Information

Analysed By: Stuart Singer.
User Reference: PoisonCreek Road, Rev. 1
Road Name: Poison Creek Road.
Road Location: Mount Morgan.
Suburb: Mount Morgan.
GPS Start Point : -23.5782, 150.4049.
GPS Finish Point: -23.5755, 150.4252.
TMR Road Number: .
Local Government: 258, Rockhampton Regional Council
Main Roads District: 6, Central
The need to review the speed limit on this road has occurred due to community request.
The length of the road section being assessed is 2.33 km
AADT on this road section is 1072 vpd
The existing speed limit is 100 km/h.

Adjacent Speed Zones
Approach 1: 80 km/h - Razorback Road (Western Approach)
Approach 2: 100 km/h - Burnett Highway (Eastern Approach)

Recommended Speed Limit:

80

Stage 1: Road function

This section of Poison Creek Road being assessed is located in a rural area.
The road type is: Trunk Collector Roads and Collector Roads.
The Typical Speed Limit is: 90 km/h.
The Existing Speed Limit **does not** equal the Typical Speed Limit

Stage 2: Prevailing Traffic speed

Sample data on 2957 vehicles was analysed using ' '
The upper limit of 15 km/h pace is 96
The mean speed is 88 km/h
The 85th percentile speed is 97 km/h
Hence, the prevailing traffic speed data **does not** correlate with the existing Speed Limit

Stage 3: QLIMITS

The suggested speed limit based on the speed environment analysis was **80 km/h** after allowing for site specific issues.

Additional issues considered:

- The upper limit of pace speed of 96 km/h is significantly higher than the recommended speed limit of 80 km/h. This represents a significant difference between the current behaviour of drivers and the recommended limit. Further investigation should be undertaken.

- Note: A Road safety audit has NOT been conducted to assess roadside activities or hazards

- The accident rate for this section of road is **significantly higher** than the average for this type of road. Further investigation of the possible causes for this increased accident rate is recommended. A review of the recommended speed limit may or may not be appropriate depending on local circumstances.

- Adverse road conditions have been identified along the section of road. Targeted advisory signing, remedial works or lower limits should be considered if appropriate. The issues include:
  All (3) of the curves along the assessed route have radius' that are below the AUSTROADS Absolute Minimum Curve Radius. SISD at 3 accesses are below AUSTROADS Normal Design standards.

- Speed environment was assessed (Stage 3 was completed). Answers to the Speed Environment questions were as follows:
  - Has a comprehensive road safety audit been completed? NO
  - Did the road safety audit highlight deficiencies that have not been corrected? YES
  - Was the road safety audit conducted more than 3 years ago? NO
  - Is there a concern for pedestrian or cyclist safety along the road segment? NO
  - Are there high risk intersections in the road segment? NO

Frequency of Roadside Accesses

	Type of access	Number
A	Residences, small commercial establishments, small public buildings and other units which generate light and/or occasional activity. (The weighting for this type of access is 1).	6
B	Average commercial establishment, local schools, caravan parks, light industries, public buildings and units generating activity which is either: 1. Continuous light. 2. Moderate at certain times, such as commuting hours. 3. Substantial at infrequent intervals. (The weighting for this type of access is 2).	0
C	Heavy industry, schools, shopping centres and other units generating continuous moderate activity or substantial activity at certain regular times. (The weighting for this type of access is 3).	0
D	Large shopping centres and other units generating substantial and continuous activity. Some large industries which are tourist attractions or for some other reason generate substantial traffic volumes would be included in this activity. (The weighting for this type of access is 4).	0
E	Unsignalised intersecting roads of substantially lesser importance than the road being assessed, or intersecting roads where side traffic and turning movements have little effect on the traffic flow pattern of the road being considered. (The weighting for this type of access is 1).	0
F	Unsignalised intersecting roads of lesser importance than the road being assessed but where the side road traffic and turning movements are such that the intersection has appreciable effect on the traffic flow pattern of the road being considered. (The weighting for this type of access is 2).	0
G	Unsignalised intersecting roads of comparable or greater significance than the road being assessed. Intersections which have pronounced effect on the traffic flow pattern of the road being considered. (The weighting for this type of access is 3).	0

H	Roundabouts and signalised intersecting roads. (The weighting for this type of access is 3).	0
	Average number of accesses per 100 m	0.25

Freeway
This road is not a freeway

Road Geometry and Congestion
Adverse road conditions have been identified along the section of road. Targeted advisory signing, remedial works or lower limits should be considered if appropriate. The issues include: All (3) of the curves along the assessed route have radius' that are below the AUSTROADS Absolute Minimum Curve Radius. SISD at 3 accesses are below AUSTROADS Normal Design standards.

Special Roadside Activities

Note: A Road safety audit has NOT been conducted to assess roadside activities or hazards

Number of crashes in the past 5 years:

Description	No. of crashes
Head-on	0
Rear-end	0
Lane change	0
Parallel lanes, turning	0
U-turn	0
Entering roadway	0
Overtaking, same direction	0
Hit parked vehicle	0
Hit railway train	0
Pedestrian	0
Permanent obstruction on carriageway	0
Hit animal	0
Off carriageway, on straight	0
Off carriageway, on straight, hit object	0
Out of control, on straight	0
Off carriageway on curve	1
Off carriageway, on curve, hit object	0
Out of control, on curve	0

The average annual equivalent crash risk is 8.00 (10^4)

Crash Rate
The crash rate is 877 (10^4 ERUs per 10^8 VKT)

Stage 4: Speed correlation check & recommendations

The speed limit based on road function is **90 km/h.**

The speed limit suggested by current speed data is **90 km/h.**
The speed limit suggested by the speed environment (QLIMITS) is **80 km/h.**

Recommendations and authorisation

THE RECOMMENDED SPEED LIMIT IS 80 km/h

10.3 Appendix C – QLimits Checklist (Form F3)

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Form F3 CHECKLIST FOR REVIEW OF EXISTING SPEED LIMIT

(Not required for setting speed limits on roads in rural residential areas. See Section 3.4).

LOCATION IDENTIFICATION

Road Owner: ☐ MRD ☑ LGA

District Number: .....

LGA Number: .....

LGA Name: Rockhampton Regional Council

Town/City: .....

Suburb: Parish of Bouldercombe

Road Name: Poison Creek Road

Road Section: Whole section

Road Number: P.S.i.d.006205A-G

Road Segment:

	Location or Reference Point	Chainage or Distance	GPS Coordinates (decimal degrees)	
			Latitude	Longitude
Start	Burnett Highway	0.0 km		
End	Razorback Road / Moonmera Road	2.338 km		

Existing Speed Limit: 100 km/h km/h

AADT: 1073

REVIEWING OFFICER

Name: Stuart Harvey

Employer: RRC

Address: .....

Phone No: .....

Date of Review: 11/05/2016

Have you undertaken appropriate training in the application of Part 4? Yes ☑ No ☐

Notes:

1. The numbering convention used for the Checklist coincides with that used in Figure F1.
2. References to Figures and Tables are to those in Part 4 of the Manual of Uniform Traffic Control Devices.
3. Mark following selections with a tick.

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SPEED LIMIT REVIEW

1. The need to review the speed limit on this road has occurred due to:
   - ☐ General Limit no longer applicable
   - ☐ Altered speed environment
   - ☐ Evidence of speed limit/vehicle speed discrepancies
   - ☐ Need to adjust speed zone lengths
   - ☑ Community request
   - ☐ Other (specify) .....

Stage 1 – Road Function Analysis

2. Road Function

   If the road is in a rural environment, go to Step 3.

   For a road in an urban environment, the function of the road has been identified as:
   - ☐ Access / Local street
   - ☐ Collector street
   - ☐ Trunk collector road
   - ☐ Sub-arterial road
   - ☐ Arterial road
   - ☐ Controlled access arterial road, Freeway

   If rural, go to Step 3

3. From Table B1 (Urban) or B2 (Rural), the typical speed limit is: 100 km/h
4. The existing speed limit equals the typical speed limit?
   - ☑ Yes - go to Step 6
   - ☐ No - go to Step 5
5. Is it proposed to alter the road function to align the typical speed limit with the existing speed limit speed?
   - ☐ Yes - go to Step 18
   - ☐ No - go to Step 6

Stage 2 – Prevailing Vehicle Speed Analysis

6. Prevailing Vehicle Speed Data

(a) Collected using:
- ☐ Manual methods
- ☑ Automatic device (specify type) Metro Count
- ☐ Other (specify) .....

(b) Collected according to guidelines:
- ☑ Specified in Appendix G
- ☐ Other (specify) .....

(c) Analysed using:
- ☐ EsdeeMan version 3.0
- ☐ Manual methods
- ☑ Other (specify) Metro Count Software

(d) Results from analysis:

No. of vehicles in sample 2957
Upper limit of 15 km/h pace: 96 km/h
% vehicles in the 15 km/h pace: 58 %
85th %ile speed: 97 km/h
Mean speed: 88

7. Speed data correlates with existing speed limit? (see Table C1)
   - ☐ Yes - go to Step 11
   - ☑ No - go to Step 7a

7a. From Table C2,
Suggested speed limit is: 90 km/h

Go to Step 8.

Stage 3 – Speed Environment Analysis

8. QLIMITS

(a) Field Data Form F1 (Appendix D):
- ☑ Completed
- ☑ Copy attached

(b) Analysis Report Form F2 (Appendix D):
- ☑ Completed
- ☑ Copy attached

(c) QLIMITS recommended speed limit
80 km/h

(d) QLIMITS flagged considerations?
- ☐ No
- ☑ Yes (see Report Form F2 (Appendix D))

Stage 4 – Correlation Check

9. Correlation check

(a) Outputs from each stage are:

Stage 1
Typical speed limit 90 km/h

Stage 2
From Table C2
Suggested speed limit 90 km/h

Stage 3
QLIMITS recommendation 80 km/h

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(b) Is there a correlation between two of the three outputs from Stages 1, 2 and 3 above?

☐ Yes.....km/h - go to Step 11

☑ No - go to Step 10

10. Have all data, QLIMITS input/output and road function been checked?

☐ No - go to Step 2

☑ Yes - go to Step 24

Other Criteria

11. (From Steps 7 and 9)

(a) The calculated casualty crash rate is:
877 * 10^4 ERUs per 10^8 VKT

(b) The typical casualty crash rates are:
Average: 844 * 10^4 ERUs per 10^8 VKT
Critical: 860 * 10^4 ERUs per 10^8 VKT

(c) The casualty crash rate / potential risk factor is comparatively:

☐ Low (=< Average)

☐ Medium (Between average and critical)

☑ High (>= Critical)

(d) Is casualty crash rate / potential risk factor high?

☑ Yes - go to Step 12

☐ No - Figure F1 leads to:

☐ Step 19

☐ Step 13

12. Crash investigation / road safety review or audit conducted by:
Name: QPS Officer
Date: 07/12/2010
File/Report No.: 20101095474
Go to Step 15

13. Has the review process suggested an increase in the speed limit?

☐ Yes - go to Step 14

☐ No - go to Step 23

14. Has a safety review (or road safety audit) identified any risk factors?

☐ Yes - go to Step 16

☐ No - go to Step 23

15. A crash investigation or safety review has identified causal or risk factors?

☑ Yes - go to Step 16

☐ No - go to Step 22

16. Is treatment feasible?

☐ Yes - go to Step 17

☑ No - go to Step 21

17. (From Step 16)
Proposed treatments / works have been listed for the financial year:.....
Go to Step 20

18. (From Step 5)
See Figure F1, Note 18
Go to Step 17

19. (From Step 11 via Step 7)
Retain existing limit - go to Step 25

20. Consider whether an interim alteration to the speed limit is necessary.
Go to Step 25

21. (From Step 16)
Subject to Figure F1 (Note 21), it is considered appropriate to:

☐ Increase

☑ Decrease

the existing speed limit by 20 km/h
Go to Step 25

22. (From Step 15)
Retain existing speed limit with enhanced enforcement.
Go to Step 25

23. (From Step 13 or 14)
Adopt speed limit noted at 9(b).
Go to Step 25

24. (From Step 10)
The review of speed limits according to the process described in Figure F1 has failed to determine an appropriate speed limit. Action taken is as follows:

(a) ☑ The Checklist, together with all relevant data and information, has been referred to the responsible officer for consideration.
Referred to: Manager (Engineering Services)
By: Stuart Harvey
RPEQ No:.....
Date: 24/05/2016
The responsible officer now has responsibility for providing recommendations at Step 25.

(b) ☑ Input to the review requested from the Traffic Advisory Committee (TAC)
Committee meeting of 20/05/2016 offered the following information:
.....

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.....
.....
.....

and/or advised a preferred speed limit of:

..... km/h

(c) Has information provided by the committee assisted in determining an appropriate limit?

☐ Yes - it is .....km/h

Go to Step 25

☐ No - (a) I concur the following speed limit for the section of road under consideration: .....km/h

Concurred by:.....(TAC Chair)

Date: .....

25. Recommendation by Engineer

Following the completion of this checklist, which documents the process for the review of speed limits according to Figure F1 of Part 4 of the MUTCD, I submit the following:

Recommended Speed Limit: 80 km/h

Recommended by:

Name: Martin Crow

Position: Manager (Engineering Services)

RPEQ No: 7187

Date: .....

Authorisation for Deliberation

☐ The recommended speed limit is approved for deliberation in the SMC.

☐ The recommended speed limit is not approved for deliberation by the SMC for the following reasons:

.....
.....
.....

☐ The alternative speed limit to be discussed or retained is:.....km/h

Reasons for the alternative speed limit are:

.....
.....
.....

Authorised by: .....

Position: .....

(Responsible Officer/ Regional Director)

Date: .....

Endorsement by Speed Management Committee (SMC) (3E's Committee)

☑ The recommended speed limit has been endorsed by the SMC. (3E's Committee)

☐ The recommended speed limit has not been endorsed by the SMC and will now be sent back to the responsible officer for referral to the Speed Limit Review Panel (SLRP).

Recommendation by Speed Limit Review Panel (SLRP)

Following the deliberation by the SLRP, the chairperson will forward its recommendation to the responsible officer for consideration:

Recommended Speed Limit: ..... km/h

Recommended by:

Name:.....

(Chairperson SLRP)

Position:.....

RPEQ No:.....

Date:.....

Authorisation for Installation

☐ The recommended speed limit is authorised for installation according to the provisions of MUTCD Part 1, Appendix C.

☐ The recommended speed limit is not authorised for the following reasons:

.....
.....
.....

☐ The alternative speed limit to be installed or retained is:.....km/h

Reasons for the alternative speed limit are:

.....
.....
.....

Authorised by: .....

Position: .....

(responsible officer/ Regional Director)

Date: .....

☐ Form M994 or equivalent local government Form completed by authorising officer and copy filed with this Checklist.

(Failure to complete this task could compromise the legality of the Speed Limit.)

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26. Review / Evaluation

Will the existing speed limit be altered?

- ☐ Yes - program assessment to occur 1-4 weeks after installation.
- ☐ No - program for review in 5 years or sooner if required.

Where Steps 21, 22 or 23 have indicated that enhanced enforcement is required, complete the following:

Enhanced enforcement of this site by QPS has been requested by reporting the outcome for this speed limit review to:

- ☐ Local TAC (Traffic Advisory Committee)
- ☐ Regional Speed Management Advisory Committee
- ☐ Regional QPS Traffic Co-ordinator

Reported by: .....

Position: .....

Date: .....

- ☐ Written advice
- ☐ Other (specify) .....

10.4 Appendix D – Traffic Volume Data

MetroCount Traffic Executive
Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-421 -- English (ENA)

Datasets:
Site: **[006205D] !Poison Ck Rd rd (350m E of Poison Ck Rd int)**
Attribute: Bouldercombe
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 10:19 Friday, 26 February 2016 => 14:21 Tuesday, 15 March 2016,
Zone:
File: 006205D 0 2016-03-16 0809.EC0 (Plus)
Identifier: JJ09RE4S MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default axle (v4.05)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:
Filter time: **10:20 Friday, 26 February 2016 => 14:21 Tuesday, 15 March 2016 (18.1675)**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, South (bound), P = North
Separation: Headway > 0 sec, Span 0 - 100 metre
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (metre, kilometre, m/s, km/h, kg, tonne)
In profile: Vehicles = 19646 / 19648 (99.99%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-421
Site: 006205D.0.1NS
Description: **!Poison Ck Rd rd (350m E of Poison Ck Rd int)**
Filter time: **10:20 Friday, 26 February 2016 => 14:21 Tuesday, 15 March 2016**
Scheme: Vehicle classification (AustRoads94)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NS) Sp(10,160) Headway(>0) Span(0 - 100)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	1.0	3.0	4.0	6.5	5.5	7.0	7.3	3.7	4.8
0100-0200	0.7	1.3	1.5	1.5	2.5	4.0	3.3	1.4	2.2
0200-0300	2.0	1.3	1.0	1.0	1.5	1.7	2.7	1.4	1.7
0300-0400	5.7	4.3	6.5	4.0	7.0	2.7	3.3	5.4	4.6
0400-0500	14.0	13.0	11.5	8.5	12.5	7.7	3.3	12.2	9.9
0500-0600	30.3	26.7	24.0	26.5	21.0	12.0	6.0	26.2	20.4
0600-0700	63.3	56.7	59.5	51.0	56.0	23.7	14.0	57.8	44.8
0700-0800	85.7	99.0	84.0	79.5	78.0	42.0	28.0	86.4	69.3
0800-0900	**111.0**	**107.0**	**103.5**	**99.0**	**122.5**	65.0	37.7	**108.7**	**89.6**
0900-1000	91.7	91.0	81.5	86.0	92.0	**90.3**	61.7	88.9	84.6
1000-1100	62.3	70.7	75.5	55.5	73.3	84.3	64.3	67.8	69.8
1100-1200	53.3	61.0	59.5	63.0	64.3	71.3	**73.7**	60.1	64.0
1200-1300	60.3	63.0	55.0	54.0	72.7	69.7	58.0	62.0	62.6
1300-1400	62.7	62.3	60.5	61.0	72.3	68.3	62.0	64.2	64.5
1400-1500	70.7	55.0	67.0	79.0	100.3	64.3	**73.0**	74.6	72.7
1500-1600	97.3	99.5	90.5	101.5	**120.7**	**74.0**	71.0	**103.1**	**92.9**
1600-1700	**101.3**	97.0	**90.5**	98.0	109.0	60.0	63.0	100.2	87.3
1700-1800	84.0	**103.0**	89.0	**104.5**	105.7	63.3	62.7	96.8	85.6
1800-1900	49.0	60.5	49.5	77.5	77.3	41.3	47.7	62.8	56.7
1900-2000	26.7	40.0	31.5	43.5	46.7	23.7	31.3	37.5	34.2
2000-2100	18.0	25.5	14.5	22.5	24.3	11.0	18.0	21.0	18.8
2100-2200	10.3	13.5	15.0	13.5	17.7	16.7	12.7	14.0	14.2
2200-2300	11.7	8.5	13.0	15.0	18.3	14.7	7.0	13.6	12.7
2300-2400	2.3	3.5	4.0	6.0	8.3	7.0	3.3	4.9	5.0
Totals									
0700-1900	929.3	969.0	906.0	958.5	1088.2	794.0	702.7	975.6	899.6
0600-2200	1047.7	1104.7	1026.5	1089.0	1232.8	869.0	778.7	1105.9	1011.6
0600-0000	1061.7	1116.7	1043.5	1110.0	1259.5	890.7	789.0	1124.4	1029.2
0000-0000	1115.3	1166.3	1092.0	1158.0	1309.5	925.7	815.0	1174.6	1072.9
AM Peak	0800	0800	0800	0800	0800	0900	1100		
	111.0	107.0	103.5	99.0	122.5	90.3	73.7		
PM Peak	1600	1700	1600	1700	1500	1500	1400		
	101.3	103.0	90.5	104.5	120.7	74.0	73.0		

10.5 Appendix E – Speed Survey Data

MetroCount Traffic Executive
Speed Statistics by Hour

SpeedStatHour-466 -- English (ENA)

Datasets:

Site:	**[006201??] Poison Ck Rd rd (access95)**
Attribute:	Bouldercombe
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration:	11:36 Tuesday, 19 April 2016 => 9:47 Friday, 22 April 2016,
Zone:	
File:	006201__22Apr2016.EC0 (Plus)
Identifier:	K5679GJH MC56-6 [MC55] (c)Microcom 02/03/01
Algorithm:	Factory default axle (v4.05)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**11:37 Tuesday, 19 April 2016 => 9:47 Friday, 22 April 2016 (2.92383)**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	10 - 160 km/h.
Direction:	North, South (bound), P = North
Separation:	Headway > 4 sec, Span 0 - 100 metre
Name:	Default Profile
Scheme:	Vehicle classification (AustRoads94)
Units:	Metric (metre, kilometre, m/s, km/h, kg, tonne)
In profile:	Vehicles = 2957 / 3376 (87.59%)

Speed Statistics by Hour

SpeedStatHour-466

Site:	006201??.0.1NS
Description:	**Poison Ck Rd rd (access95)**
Filter time:	**11:37 Tuesday, 19 April 2016 => 9:47 Friday, 22 April 2016**
Scheme:	Vehicle classification (AustRoads94)
Filter:	Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NS) Sp(10,160) Headway(>4) Span(0 - 100)

Vehicles = 2957
Posted speed limit = 100 km/h, Exceeding = 264 (8.93%), Mean Exceeding = 105.41 km/h
Maximum = 139.0 km/h, **Minimum** = 35.8 km/h, **Mean** = 87.8 km/h
85% Speed = 97.2 km/h, **95% Speed** = 102.6 km/h, **Median** = 88.2 km/h
15 km/h Pace = 81 - 96, **Number in Pace** = 1714 (57.96%)
Variance = 97.71, **Standard Deviation** = 9.88 km/h

Hour Bins (Partial days)

Time	Bin		Min	Max	Mean	Median	85%	95%	>PSL 100 km/h	
0000	10	0.3%	72.2	103.8	87.4	84.6	97.9	103.7	1	10.0%
0100	11	0.4%	68.5	99.5	87.5	88.6	97.2	97.9	0	0.0%
0200	7	0.2%	71.0	97.0	86.6	92.5	95.0	96.8	0	0.0%
0300	15	0.5%	71.9	109.3	84.5	82.4	94.0	99.7	2	13.3%
0400	36	1.2%	57.6	119.1	86.8	87.5	99.0	105.5	4	11.1%
0500	82	2.8%	59.0	112.9	87.5	87.8	99.7	105.1	11	13.4%
0600	167	5.6%	57.8	116.0	85.0	85.3	93.6	99.0	8	4.8%
0700	192	6.5%	57.6	119.9	88.2	88.6	96.5	101.5	14	7.3%
0800	233	7.9%	62.2	124.0	88.4	88.6	97.2	104.0	24	10.3%
0900	148	5.0%	35.8	109.6	85.8	86.0	94.3	101.5	12	8.1%
1000	126	4.3%	57.0	112.7	85.6	85.3	95.8	100.1	7	5.6%
1100	125	4.2%	64.3	109.3	86.3	87.1	96.8	101.9	8	6.4%
1200	153	5.2%	56.1	134.2	88.4	87.8	98.6	101.5	16	10.5%
1300	170	5.7%	59.6	120.2	87.6	87.1	96.5	102.2	11	6.5%
1400	228	7.7%	60.5	128.9	88.5	88.9	98.3	103.3	21	9.2%
1500	245	8.3%	55.4	132.7	88.7	89.3	96.8	101.5	15	6.1%
1600	281	9.5%	62.1	119.5	90.0	90.0	98.3	102.2	30	10.7%
1700	279	9.4%	54.9	121.8	89.6	90.0	98.3	103.7	30	10.8%
1800	176	6.0%	61.0	117.6	87.7	88.6	97.2	101.9	16	9.1%
1900	111	3.8%	58.3	111.4	88.3	87.8	99.4	103.3	16	14.4%
2000	64	2.2%	55.8	109.3	85.0	85.3	96.8	101.5	8	12.5%
2100	45	1.5%	63.1	110.0	85.6	83.9	97.2	102.2	6	13.3%
2200	33	1.1%	67.8	139.0	88.2	87.8	98.3	104.8	4	12.1%
2300	20	0.7%	65.5	99.4	84.8	86.0	94.7	98.3	0	0.0%
----	**2957**	**100.0%**	**35.8**	**139.0**	**87.8**	**88.2**	**97.2**	**102.6**	**264**	**8.9%**

10.6 Appendix F – Crash Data History

Data Analysis
Customer Services, Safety and Regulation Division

WebCrash v2.3 Reports

The page numbers shown here are those of the overall PDF file (they range 1-5).
The PDF page numbers appear at the top left-hand corner of each page.
Pages within individual reports are numbered from 1 and appear at the top right-hand corner of each page.
When printing specific reports with Acrobat Reader, the PDF page numbers must be specified.

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Data Restrictions

Please note:-

IMPORTANT MESSAGE

Around 10% to 15% of non-fatal crash records for 1 July 2012 to 31 December 2014 are incomplete and unavailable. Data Analysis are addressing the issues to resolve this problem as soon as possible.

The crash data for 1 July 2012 to 31 December 2014 is being made available and users must exercise caution when analysing this data.

The data CAN be used to identify locations where crash frequency has increased, however, the degree of increase may be under-reported and some locations may not be identified. The data CAN be used to examine individual crash details.

The data is NOT suitable for:

* Time series trend analysis

* Comparison of characteristics

* Evaluation of crash reductions

* Evaluation of crash risk

* Crash rates (per VKT, per Vehicle type, per licence holder, per population)

With 10% to 15% of crash records unavailable the data is under-reported, biased and fairly limited for analytical purposes, however, it is considered a reasonable level of completeness for Black Spot submissions and examining individual crash details.

The Department of Transport and Main Roads (TMR) WebCrash system reports on the following crash data - fatal to 31 December 2015, hospitalisation to 31 December 2014, medical treatment to 31 December 2014, minor injury to 31 December 2014 and property damage only to 31 December 2010.

Road Crash Data Inclusion Requirements

Please also note that the information held in the RoadCrash database relating to crashes occurring within the last 12 months are considered preliminary as investigations into crashes can take up to 12 months to finalise. Please further note that to qualify as valid, crashes must meet the following criteria:

1. The crash occurred on a public road, and
2. A person was killed or injured, or
3. At least one vehicle was towed away, or
4. The value of property damage was:
   (a) $2500 damage to property other than vehicles (after 1 December 1999)
   (b) $2500 damage to vehicle and property (after 1 December 1991 and prior to 1 December 1999)
   (c) $1000 damage to property (prior to 1 December 1991)

Note: crashes resulting from medical conditions or deliberate acts are excluded.

Contact Details:

Postal Address: Manager (Data Analysis)
Customer Services, Safety and Regulation Division
Department of Transport and Main Roads
PO Box 673
Fortitude Valley
Qld 4006

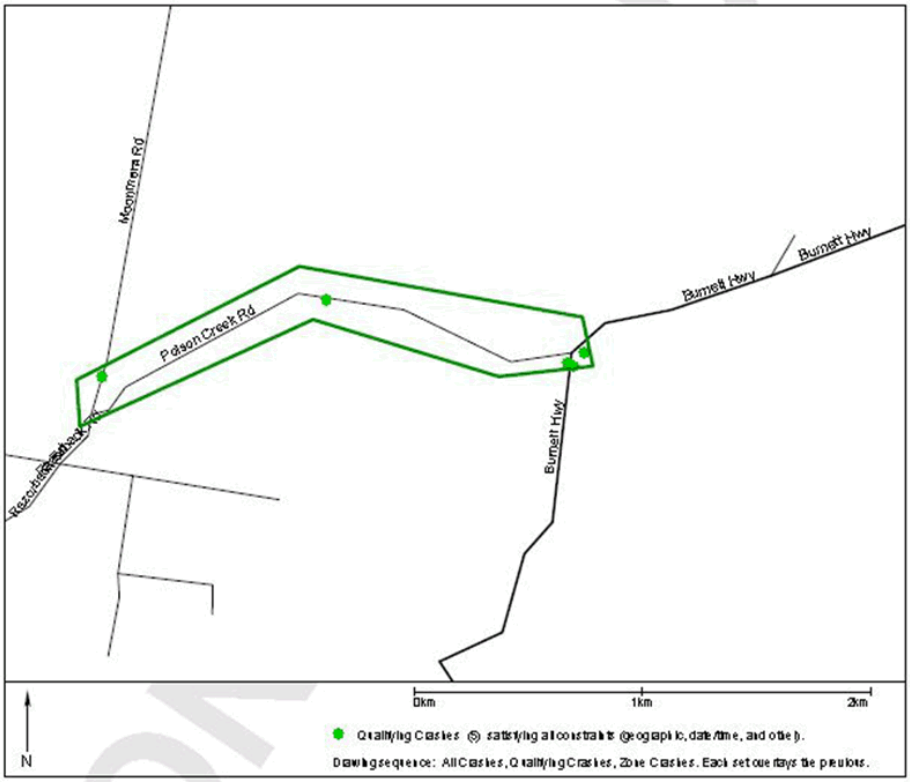
Phone: 07 3066 2236
Fax: 07 3066 2410
Email: DataAnalysis@tmr.qld.gov.au

Report 1

PDF Page 3 of 5 **Crash Details by Crash Date** Page 1 of 3

NOTE: This report has been limited to the maximum of 500 records.

Report Constraints
Geographic Constraints
Map
and
Date and Time Constraints
Continuous time: 2009 to 2016



Crash Number	20100886154 (1 of 5)	Crash Nature	Hit Animal Incl. Ridden Horse Or Carriage
Date and Time	Mon 27-Sep-2010 7pm	Speed Limit	100
LGA	Fitzroy Shire Council(54)	Crash Severity	Property Damage Only
SLA (Suburb)	Fitzroy (S) - Pt B(3154)	Roadway Feature	Not Applicable
Road Authority	Local Govt	Roadway Surface	Sealed - Dry
Street	Moonmera Rd	Horiz. Alignment	Straight
Intersecting St		Vert. Alignment	Dip
Latitude GDA94	-23.576393	Traffic Control	No Traffic Control
Longitude GDA94	150.405089	Lighting Condition	Darkness - unlighted
DCA Coding	Pass & Misc: Hit Animal(609)	Atmospheric Cond.	Clear

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Printed on 9/06/2016 Author: Stuart Harvey – Traffic Engineer **May 2016**

Report 1

PDF Page 4 of 5

Crash Details by Crash Date

Unit Number	1 of 2	Licence State	QLD
Unit Type	Utility; Panel Van	Origin State	QLD
Controller Gender	M	Intended Action	Go straight ahead
Controller Age Group	30-39	Damage	Moderate - towed away
Licence Type	Open	Unit Headed Direction	North

Unit Number	2 of 2	Licence State	N/A
Unit Type	Animal - stock	Origin State	UNK
Controller Gender	U	Intended Action	Not applicable
Controller Age Group	Unknown	Damage	Not applicable
Licence Type	Not applicable	Unit Headed Direction	East

Contributing Circumstances
Unit 1 ANIMAL UNCONTROLLED - ON ROAD
Unit 2 NOT APPLICABLE

Crash Number	20101005309 (2 of 5)	Crash Nature	Hit Fixed Obstruction Or Temporary Object
Date and Time	Sun 7-Nov-2010 9pm	Speed Limit	80
LGA	Fitzroy Shire Council(54)	Crash Severity	Property Damage Only
SLA (Suburb)	Fitzroy (S) - Pt B(3154)	Roadway Feature	T Junction
Road Authority	Main Roads	Roadway Surface	Sealed - Dry
Street	Burnett Hwy	Horiz. Alignment	Curved-View open
Intersecting St	Poison Creek Rd	Vert. Alignment	Level
Latitude GDA94	-23.574989	Traffic Control	Give Way
Longitude GDA94	150.425760	Lighting Condition	Darkness - unlighted
DCA Coding	Off Path-Curve: Off Cway Lt Bend Hit Obj(804)	Atmospheric Cond.	Clear

Unit Number	1 of 1	Licence State	QLD
Unit Type	Car; Station Wagon	Origin State	UNK
Controller Gender	M	Intended Action	Make right turn
Controller Age Group	21-24	Damage	Major - towed away
Licence Type	Cancelled; disqualified	Unit Headed Direction	East

Contributing Circumstances
Unit 1 VIOLATION - OVER PRESCRIBED CONCENTRATION OF ALCOHOL

Crash Number	20101095474 (3 of 5)	Crash Nature	Hit Fixed Obstruction Or Temporary Object
Date and Time	Tue 7-Dec-2010 7am	Speed Limit	100
LGA	Fitzroy Shire Council(54)	Crash Severity	Minor Injury
SLA (Suburb)	Fitzroy (S) - Pt B(3154)	Roadway Feature	Not Applicable
Road Authority	Local Govt	Roadway Surface	Sealed - Dry
Street	Poison Ck Rd	Horiz. Alignment	Curved-View obscured
Intersecting St		Vert. Alignment	Crest
Latitude GDA94	-23.573143	Traffic Control	No Traffic Control
Longitude GDA94	150.414623	Lighting Condition	Daylight
DCA Coding	Off Path-Curve: Other(800)	Atmospheric Cond.	Clear

Unit Number	1 of 1	Licence State	QLD
Unit Type	Car; Station Wagon	Origin State	QLD
Controller Gender	F	Intended Action	Go straight ahead
Controller Age Group	17-20	Damage	Major - towed away
Licence Type	Open	Unit Headed Direction	East

Contributing Circumstances
Unit 1 ROAD CONDITIONS - MISCELLANEOUS

Injury Details

Injured Person	1 of 1	Age Group	17-20
Unit Number	1	Road User	Driver
Injury Severity	Minor injury	Restraint	Fitted - Worn
Gender	F	Helmet	Not Applicable

Crash Number	20111012471 (4 of 5)	Crash Nature	Hit Fixed Obstruction Or Temporary Object
Date and Time	Sun 13-Nov-2011 2am	Speed Limit	40
LGA	Fitzroy Shire Council(54)	Crash Severity	Hospitalisation
SLA (Suburb)	Fitzroy (S) - Pt B(3154)	Roadway Feature	Not Applicable
Road Authority	Main Roads	Roadway Surface	Sealed - Dry
Street	Burnett Hwy	Horiz. Alignment	Curved-View obscured
Intersecting St		Vert. Alignment	Dip
Latitude GDA94	-23.575557	Traffic Control	No Traffic Control
Longitude GDA94	150.425294	Lighting Condition	Darkness - unlighted
DCA Coding	Off Path-Curve: Off Cway Rt Bend Hit Obj(803)	Atmospheric Cond.	Clear

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Report 1

Crash Details by Crash Date

Unit Number	1 of 1	Licence State	QLD
Unit Type	Car; Station Wagon	Origin State	UNK
Controller Gender	M	Intended Action	Go straight ahead
Controller AgeGroup	30-39	Damage	Major - towed away
Licence Type	Open	Unit Headed Direction	North

Contributing Circumstances
Unit 1 CONDITION - UNDER INFLUENCE OF LIQUOR/DRUG

Injury Details

Injured Person	1 of 1	Age Group	30-39
Unit Number	1	Road User	Driver
Injury Severity	Hospitalised	Restraint	Unknown
Gender	M	Helmet	Not Applicable

Crash Number	20131318999 (5 of 5)	Crash Nature	Hit Parked Vehicle
Date and Time	Sat 26-Oct-2013 10am	Speed Limit	60
LGA	Fitzroy Shire Council(54)	Crash Severity	Medical Treatment
SLA (Suburb)	Fitzroy (S) - Pt B(3154)	Roadway Feature	Not Applicable
Road Authority	Local Govt	Roadway Surface	Sealed - Dry
Street	Poison Ck Rd	Horiz. Alignment	Straight
Intersecting St		Vert. Alignment	Grade
Latitude GDA94	-23.575421	Traffic Control	No Traffic Control
Longitude GDA94	150.424978	Lighting Condition	Daylight
DCA Coding	Ped'N: Hit Other(000)	Atmospheric Cond.	Clear

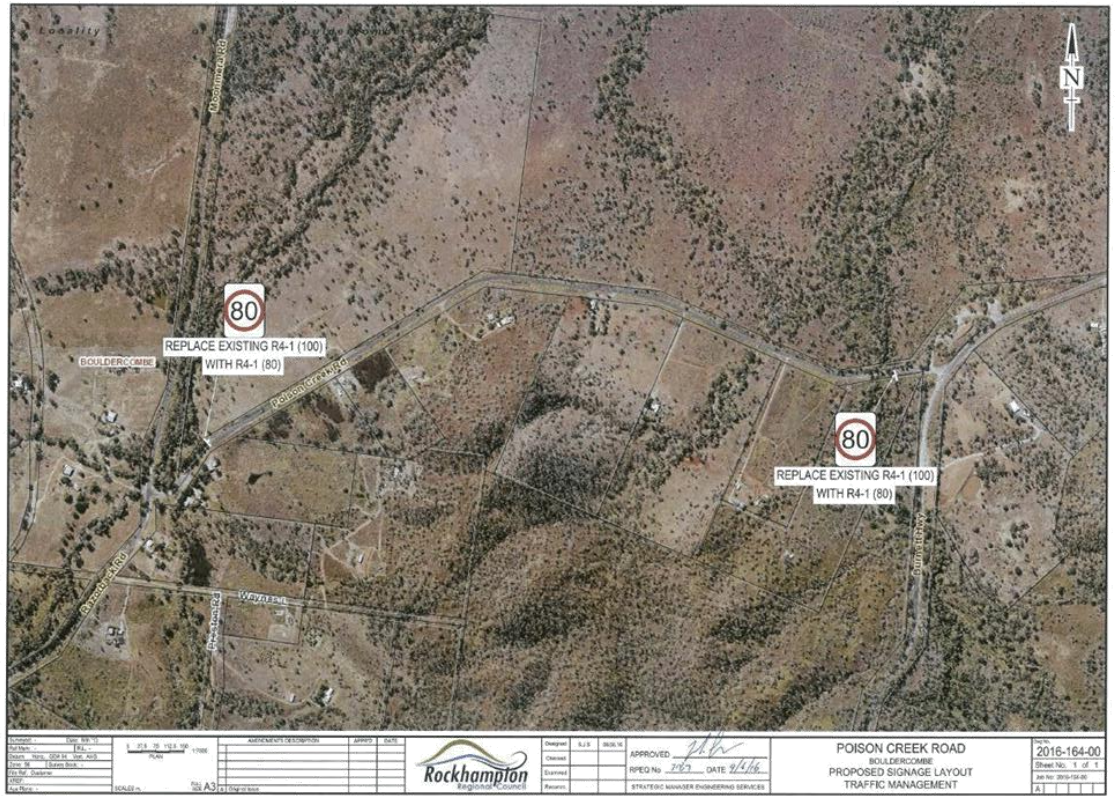
Unit Number	1 of 3	Licence State	QLD
Unit Type	Car; Station Wagon	Origin State	
Controller Gender	M	Intended Action	Go straight ahead
Controller AgeGroup	60-69	Damage	Minor
Licence Type	Open	Unit Headed Direction	West
Unit Number	2 of 3	Licence State	N/A
Unit Type	Car; Station Wagon	Origin State	
Controller Gender	U	Intended Action	Unknown/not stated
Controller AgeGroup	Unknown	Damage	Moderate - towed away
Licence Type		Unit Headed Direction	MISSING FROM wc_report_column_values
Unit Number	3 of 3	Licence State	N/A
Unit Type	Pedestrian	Origin State	
Controller Gender	M	Intended Action	Remain stationary
Controller AgeGroup	0-4	Damage	Not applicable
Licence Type	Not applicable	Unit Headed Direction	South

Contributing Circumstances
Unit 1 ROAD - WET/SLIPPERY
Unit 1 VIOLATION - UNDUE CARE AND ATTENTION
Unit 1 DRIVER - MEDICAL CONDITION (HEART ATTACK; EPILEPSY ETC.)
Unit 2 ROAD - WET/SLIPPERY
Unit 3 ROAD - WET/SLIPPERY

Injury Details

Injured Person	1 of 1	Age Group	0-4
Unit Number	3	Road User	Pedestrian
Injury Severity	Medically treated	Restraint	Not Applicable
Gender	M	Helmet	Not Applicable

10.7 Appendix G – Proposed speed sign layout



10.8 Appendix H – 3E's Committee meeting minutes

Queensland Government

Minutes

Fitzroy District 3E Committee meeting, Strategic
May 2016

Date Friday, 20 May 2016 **Time** 10:30am – 11:40am

Place DTMR Office, 31 Knight Street, Ground Floor Conference Room

Chair Jeff Van Nunen **Minute taker** Kath Ferguson

Attendees

DTMR	Jeff Van Nunen (JVN)	LSC	Elliot Horsup (EH)
DTMR	Chris Yung (CJY)	LSC	Jackson Loram (JL)
RRC	Laurie Schreck (LS)	QPS	Deniel Beasy (DB)

Safety

- Jeff went through the building evacuation procedure and building amenities

Apologies

- DTMR – Dave Grosse, Peter Trim, Kevin Oberg, Tracy Davis, Garry Patterson, Colin Edmonston, Shertam Motto-Lawton
- QPS – Ewan Findlater, Ray Pimm, Nicole Thompson
- LSC – Michael Prior, Phil McKone, Madhave Karki, Amal Meegahawattage
- RRC – David Bremert, Stuart Harvey, Stuart Singer

Approval of minutes from last meeting

- Approved via email

Outstanding actions from last meeting

Task owner	Action item	Status
Jeff Van Nunen (DTMR)	16/12/15: Discussion on LSC's Adopted Infrastructure Charges Resolution (AICR), as part of the Local Government Infrastructure Program (LGIP) **ACTION:** Jeff to provide copies to DTMR Managers for their action **Update:** Completed. **Close out**	

Agenda item 1 QPS Crash Data Overview

- Will not be presented at this meeting. Carry over to next Strategic meeting

Agenda item 2 Road Safety Strategy/Action Plan

- Action from 3/06/2015 meeting: CJE advised that there is a trial to be conducted around strategically allocating patrol areas to Transport Inspectors **ACTION:** CJE to organise a meeting with EF and Transport Inspectors to discuss
  - Update 16/09/2015: Compliance Modelling Project scoped. Data analysis in progress – to be rolled out in late 2015. Project brief emailed to Ewan Findlater.
  - Update 9/03/2016: A full day workshop will be conducted 30/03/16 before rollout of the trial
  - **Update:** In-house trial has been completed and it will now be rolled out 01/07/2016. Denial spoke about QPS and Transport Inspectors working together. **ACTION:** Colin to schedule a meeting with Ewan

Agenda item 3 Agency Sharing and Upcoming Events/Campaigns

- Fatality Free Friday – Next Friday is Fatality Free Friday. In the lead up, the inflatable key has been to the Dawson River Rest Area, Boyne Island Rest Area, Barcaldine, Longreach, Gladstone and BCC Cinema. Is at the Rockhampton Customer Service Centre today. Next week a Classic Car Tour through Mackay is scheduled and supported by QPS. Committee Members are invited to visit the inflatable key in the CSC after the meeting today.

Agenda item 4 Sponsorship / Resourcing / Funding Issues & Opportunities

- Community Road Safety Grants – submissions are currently being reviewed.

Agenda item 5 General Business

- **Emu Park State School, school zone**: See Attachment A for a plan of the requested changes. Existing signage has discrepancies in the times. Request is to add more school street frontage to the current school zone. It is currently 50km/h in the area the extended school zone is requested for. This requires input from Colin. To be discussed at next 3E meeting.
- **North Rockhampton, Bruce Highway:** For information, DTMR have received a request to regrade crest vertical curve to the north of Terranova Drive to improve safety. Funding constraints limit what can be done. Discussion on a possible future protected right turn lane at this intersection and at the next northern intersection.

- **Intersection Western Yeppoon – Emu Park Road & Tanby Road:** For information, DTMR have received request to address safety concerns with regard to the steep incline, crest and a request for a speed reduction. DTMR are aware that there is an issue at this intersection and are looking at options. However, DTMR will not be reducing the speed. Private accesses are the responsibility of the property owner. Elliot advised that there may have been a change of material use at a property in this area.

- **Poison Creek Road, Bouldercombe, speed limit review:** See Attachment B for the report. Poison Creek Road runs between Burnett Highway and the Razorback Road. The report recommends a reduction in speed from 100km/h to 80km/h. The final recommendation came down to engineering judgment. Laurie went through specific points of the review to highlight reasoning behind final recommendation. Committee discussion on the nature of crashes reported. Jeff gave comment on the speed data – to get a fair representation, data for 6pm-6am and weekends should be removed. Discussion on location of traffic counts and period of data collection. **Committee Decision:** Support the speed recommendation

- **RRC:** For QPS information, speed complaints received for:
  - Jardine Street, near airport, south Rockhampton
  - Thomason Street, off Alexander Street, north Rockhampton
  - Meter Street, south Rockhampton
  - Larnach Street, off Gladstone Road, south Rockhampton

- **Lakes Creek Road, access to PCYC:** RRC has received a request for "slow down, kids don't bounce" signage on the access road. RRC see the merit of making drivers aware of children in the area, however, suggested instead installing "Shared Zone" signage. DTMR agrees with installation of the sign

- **St Ursula's School, school zone:** LSC are reviewing the current school zone. The current school zone includes the kindergarten on the northern side of Queen Street. Queen Street in front of the kindergarten is divided by a wide grassed median. It is unlikely that parents would park on the opposite side of Queen Street to access the kindergarten. LSC would like to remove the school zone from the southern side of Queen Street between Mary and Hill Streets. See Attachment C for a draft plan. To remove a school zone will require community consultation and input from Colin.

- **Keppel Sands Road & Musa Drive**: LCS provided a draft plan to be reviewed by DTMR, see Attachment D.

- **Rockhampton Road, Yeppoon:** The current 70km/h zone is below the absolute minimum length for a 70km/h zone. LSC are proposing to reduce to 60km/h. See Attachment E for draft plan. This will create a consistent speed zone in the area. **Committee Decision:** Support the speed reduction.

- **Sturt Drive, Yeppoon:** speed complaint received. LSC will install traffic counts. Also for QPS information.

- **Knight Street:** 50km/h zone. Jeff suggest a repeater 50km signage is required as the road environment changes from outside the concrete plant and it doesn't feel like a 50km zone. **ACTION:** RRC to review

- **Vehicle Registration:** Deniel advised committee of a 'Qld Rego' smart phone app. You can use this app to check the registration status of any vehicle by inputting the licence plate number.

Please note: some general business actions will be moved to be addressed at future Operational meetings.

Date of next meeting

The next meeting is proposed for Wednesday, 8 June 2016. It will have an operational focus.

SPEED LIMIT REVIEW – POISON CREEK ROAD

Proposed Signage Plan 2016-164-00

Meeting Date: 21 June 2016

Attachment No: 2

Surveyed: -	Date: Mth '13		
Ref Mark: -	R.L. -		
Datum: Horiz. GDA 94 Vert. AHD			
Zone: 56	Survey Book: -		
File Ref: Customer			
XREF:			
Aux Plans: -			

0 37.5 75 112.5 150 1:7500 PLAN
SCALES m. FULL SIZE A3

	AMENDMENTS DESCRIPTION	APPR'D	DATE
A	Original Issue		

Rockhampton Regional Council

Designed	S.J.S	08.06.16
Checked		
Examined		
Recomm.		

APPROVED [signature]
RPEQ No 7187 DATE 9/6/16
STRATEGIC MANAGER ENGINEERING SERVICES

POISON CREEK ROAD
BOULDERCOMBE
PROPOSED SIGNAGE LAYOUT
TRAFFIC MANAGEMENT

Dwg No. 2016-164-00
Sheet No. 1 of 1
Job No: 2016-164-00
A

8.6 CQ PRINCIPLE CYCLE NETWORK PLAN - PRIORITY ROUTE PLANS

File No:	**5732**
Attachments:	**1. PCNP Priority Routes - Survey Responses** **2. RRC PriorityRoutes Amended**
Authorising Officer:	**Angus Russell - Coordinator Strategic Infrastructure** **Martin Crow - Manager Engineering Services**
Author:	**Stuart Harvey - Traffic Engineer**
Previous Items:	**11.2 - CQ Principal Cycle Network Plan - Priority Route Maps - Ordinary Council - 27 Jan 2016 9.00 am**

SUMMARY

The Department of Transport and Main Roads have recently completed a draft of the proposed Priority Route Maps, highlighting Council's preferred and priority routes within the Principle Cycle Network. These priority routes will assist with future planning and design, and will increase opportunities for State Government funding. The Department is seeking endorsement of these plans by Rockhampton Regional Council. Council have consulted with the public on the proposed priorities and the outcome of the consultation is now presented to Council for endorsement

OFFICER'S RECOMMENDATION

THAT Council review and endorse the Priority Route Maps for the Principle Cycle Network.

COMMENTARY

The Queensland Government is seeking endorsement of the proposed Priority Route Maps by Rockhampton Regional Council. The priority route maps are an addendum to the Central Queensland Principle Cycle Network Plan (CQPCNP) and provide an indication of the desired implementation priority of routes within the Rockhampton Region's Principle Cycle Network.

These maps will be used to guide State and local government planning, design and investment to deliver the Principle Cycle Network. The routes are indicative and guide further planning and design to determine the precise route, design and form of the cycle facilities. The maps also guide assessment of Queensland Government Cycle Network Local Government Grants program applications.

Council officers began working with Department of Transport and Main Roads in June 2015 to develop these priority route maps. The routes identified in the CQPCNP (endorsed by Council in June 2014) were identified as priority A (for delivery in the next 10 years), priority B (10-15 years), priority C (15 to 20 years) or priority D (for delivery in the next 20 years or more).

Prioritisation considered safety, topography, land use, current usage, knowledge of current or latent demand, feasibility, constructability, cost effectiveness and location of existing cycling infrastructure. Also routes that supported trips to work, school, shops and other major attractors were considered a higher priority than those used for sporting or training circuits.

The priority maps indicatively show where future capital projects for cycling infrastructure will occur however other cycling facilities may be delivered outside these routes as part of other projects, or as the result of development.

At the request of Council, Council officers consulted with the public and stakeholders to gain their opinion on the proposed prioritisation of the PCNP routes. An online survey was made available to the public to provide feedback on the suitability of the priorities allocated to routes in the PCNP.

Information was made available through the website and hard copies at the customer service centres.

The online survey was advertised through a notice in the Regional Voice email Newsletter, Facebook Posts and through consultation with local cycling groups. The survey was open from 4 April 2016 to 29 April 2016 and received 27 responses. Detail of the survey results can be found in the PCNP Priority Routes - Survey Responses attachment.

Of the responses received, the following breakdown was given.

Area	Agree	Unsure	Disagree
Rockhampton City	52%	25%	23%
Gracemere	40%	36%	24%
Bouldercombe & Mt Morgan	36%	36%	28%

A significant proportion answered "unsure" for several maps, it is believed that this answer was given where the respondent was not familiar with the area and did not ride there. Some respondents disagreed with the priorities as they believed that they all should be Priority A projects.

A large proportion of respondents provided comments and proposed changes to the maps. These comments were considered by Council officers and the following changes were made to the priority maps:

- Change of priority for the Old Capricorn Highway from Priority D to Priority C
- Change of priority for the Capricorn Highway from Priority C to Priority B
- Change of priority for the Neville Hewitt Bridge (Glenmore Road to Bolsover Street) from Priority B to Priority A
- Change of priority for Quay Street (Stanley St to South St) from Priority D to Priority A
- Change of Glenmore Road (Neville Hewitt Bridge to Fitzroy Bridge) from Priority C to Priority B
- Consideration of routes through Birdwood Park, Rigarlsford Park, Ollie Smith Park and Duthie Park. As these are for recreational purposes they will be forwarded to Park Department for possible inclusion in their open space masterplans.

The proposed changes to the priority maps can be seen in the attachment RRC_PriorityRoutes_Amended.

BACKGROUND

The Queensland Principal Cycle Network is comprised of core cycle routes designed to maximise the community's use of the bicycle as an everyday form of transport. It is a functional network concentrated on trips that can be easily cycled.

The focus of a principal cycle network is on connecting residential areas with employment nodes such as town centres, industrial precincts, ports, high frequency public transport, education facilities, and shopping and entertainment destinations within a 5km radius of town centres and key destinations in urban areas.

The network was identified by analysing existing and future demands for cycling using demographic data and travel patterns. Preliminary workshops were held with representatives from local industry, education, tourism, bicycle, community and interest groups, local councils and state agencies. Further consultation took place with Local Government stakeholders to refine the principal cycle network before it was endorsed by Council in June 2014.

PREVIOUS DECISIONS

On 4 June 2014, Council resolved that the Rockhampton sub-region section of the Central Queensland Principal Cycle Network Plan be endorsed.

A report recommending endorsement of the priority routes was considered by Council on 27 January 2016. Council concluded that more consultation was required resolved “THAT this plan be the subject of consultation with cycle networks and with individual users.”

BUDGET IMPLICATIONS

There are no immediate implications on the budget however endorsement of these priority route maps implies that these routes will be given preference when considering future capital projects for cycle infrastructure.

The approval of these priority routes allows Council to apply for future State funding however some programs may require matching funding from Council.

CORPORATE/OPERATIONAL PLAN

The endorsement of the CQPCNP, recommended endorsement of the Priority Route Maps and the delivery of projects on the network supports Strategy 3 of the Community Plan: “A community that enjoys a range of strategically placed and integrated pedestrian and cycle paths”.

CONCLUSION

With the endorsement of the *Central Queensland Principal Cycle Network Plan* in June 2014, Council, in conjunction with the Department of Transport and Main Roads, have prioritised several routes throughout the region to highlight the desired staged implementation of the Principal Cycle Network. This report now seeks Councils endorsement of these proposed priority routes.

CQ PRINCIPLE CYCLE NETWORK PLAN - PRIORITY ROUTE PLANS

PCNP Priority Routes – Survey Responses

Meeting Date: 21 June 2016

Attachment No: 1

CQ Principal Cycle Network Proposed Urban Priority Routes

Survey responses

Feedback period: Monday 4 April - Friday 29 April

Overall Survey Response

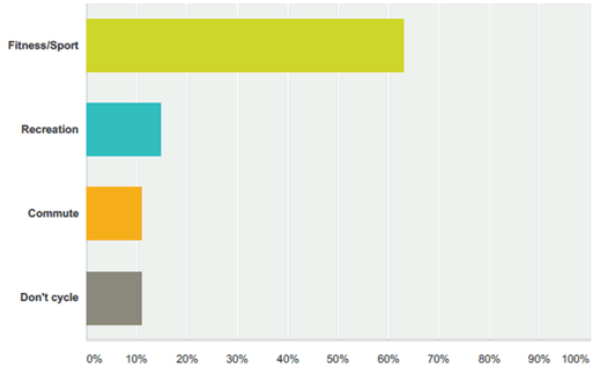
1% of the Rockhampton Regional Council population identified as a 'bicycle user' in the Department of Transport and Main Roads, Household travel in Rockhampton and Yeppoon survey (February 2015). Current population is 83,653 according to Council's profile.id community profile.

The survey received 27 responses.

What is your participation in cycling activities?

Answered: 27 Skipped: 0

The majority of the respondents indicated that they cycled for fitness or sport.



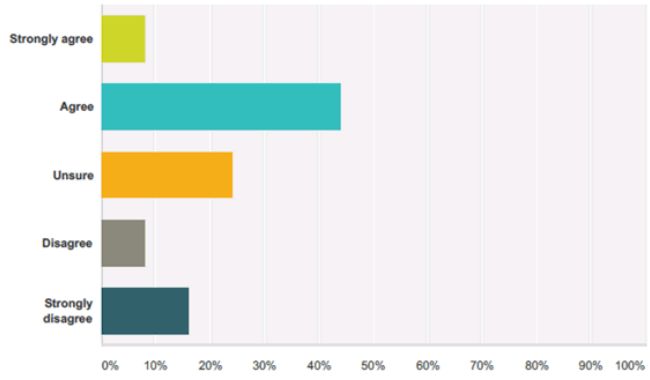
Answer Choices	Responses	
Fitness/Sport	62.96%	17
Recreation	14.81%	4
Commute	11.11%	3
Don't cycle	11.11%	3
Total		27

CQ Principal Cycle Network Proposed Urban Priority Routes

Are the proposed urban cycle routes for Rockhampton prioritised appropriately?

Answered: 25 Skipped: 2

- 52% of the respondents agreed



Answer Choices	Responses	
Strongly agree	8.00%	2
Agree	44.00%	11
Unsure	24.00%	6
Disagree	8.00%	2
Strongly disagree	16.00%	4
Total		25

Comments from respondents that strongly agree or agree:

- More Labels and streets names are needed - it is very difficult to comment on the plan when you have to estimate where the routes are. There are some sections where the Priority A routes come very close to each other but there is no connection - this seems a waste not to be able to connect from one route to another. Places like 1. High St/Musgrave St to Moores Crk Road/Yaamba Rd, 2.Glenmore Road from ??Railway bridge to the ??new bridge. 3. the Newbridge route seems to stop mid bridge? and not connect to Bolsover St. Point 1 should also extend to the intersection of Main Street so that one of the largest Secondary schools in Rockhampton - Emmaus College (with two campuses) is included in the

bike route - enabling safe travel for secondary students to school on using a busy highway. Also I would think the extension of High Street after Dean St is not a high priority compared to Farm St between Yaamba Rd and Alexander St - where Glenmore School (Secondary and Primary) is located. Also the inclusion of Derby St is strange when it is already a very wide street

- I am assuming that cycling routes are designated cycle/pedestrian paths and not shared lanes with cars etc. I have recently moved to Upper Dawson Road. The concrete footpath that I have ridden my bike along next to Upper Dawson Road is a hazard for walkers, cyclists and disability scooters.. I certainly give way to pedestrians when trying to navigate this path. It is too dangerous to ride on Upper Dawson Rd and almost as dangerous on the path. When the footpath reachers Spencer St there is a high gutter that even a walker has difficulty in managing. The total length of the pathway is full of traps. Hope our new Councillor takes the time to walk or better still ride his bike along it. Rockhampton has the potential to be the cycling city of Qld but can only be so if the Council takes cycle/pedestrian paths seriously. Many people of all ages would ride bikes if it could be done safely.
- I am very happy to see the section of Yaamba Road from Parkhurst to Rockhampton being given Route Priority A - which I can only assume means that a far more appropriate crossing for cyclists will be established across Limestone Creek, enabling cyclists to be removed from the highway so they no longer have to tempt fate by riding centimetres away from heavy vehicles that have nowhere to go. This situation has been going on for too long. So many cyclists have too many close calls on the the narrow Limestone Creek bridge between the Heritage Village and the university, so it's good to see council giving this particular area priority. I just hope it happens before a death or serious injury occurs, either via an accident or a road rage attack from an impatient motorist.
- Connection between North and South needs immediate attention.
- I think that Mt Archer should be moved up at least to priority b if not a.
- I would recommend that the council look at converting the old Capricorn highway from rocky (yepen roundabout) roundabout to Gracemere into a bikeway. rocky to Gracemere is a major cycle training route and a dedicated bike way would remove riders from the highway, increase safety encourage commuter riders.
- P1 north side is fine it covers most areas though no one would use the kershaw gardens to commute its too dangerous with trees dark hidden locations and too many walkers (I'd put that back as P3) but south side is a joke no one should have to ride up a crappy road surface like upper Dawson road (there is too many man holes water caps etc) why ride up the hill of north street or canning street... if going to hospital sure, .. but to commute to north side shops schools or to parks its just wrong pedal power is not a v8 engine. any one riding from air port would be better to use western street and connect to lion creek road or ridgelands rd past show grounds the yellow route on south side should be up first, it flat, has connections and safer more roomy and sensible p2 on south side like said above should

be in P1 status is safer easier to ride etc the parks like kershaw gardens P3 a better off road paved connecting bike way from lakes creek road, to Kerrigan St vr Birdwood park, Rigarlsford Park, Ollie Smith Park, Durthie park, the bike ways & goat tracks are there already but are gravel, have dead ends and do not link to your P1 network some times by less than 25 meters it could with less priority connect this to frenchville road mt archer etc and the first turkey reserve is a complete off road recreational by-pass but it would be a safe place to put a no cars take your family for a ride area and premote community in the parks and fitness as a whole.

Comments from respondents that are unsure, disagree or strongly disagree:

- The routes as shown are busy roads I use quiet streets and avoid roundabouts. Between Kawana and the rail bridge, there is an opportunity to follow parts of the rail line and go under it in Park Avenue. When travelling north on Glenmore Rd, continue north into Thomson St (needs a small walk bridge) up to Richardson Rd, then left into Haynes St to Farm St etc.
- All are necessary, however time frame for implementation is unrealistic. Measures can be implemented much sooner than indicated. Many cyclists currently use these routes.
- The Mt Archer route should be first priority. There are no routes for road cyclists who do it for sport. The Rockhampton to Gracemere highway should be widened so that we can ride safely on it. You should make an Alton Downs route. You should make a separate road beside the highways from Rockhampton to Yeppoon and Rockhampton to Emu Park for cyclists and pedestrians. The old bridge should be a top priority.
- Emu Park and Yeppoon Roads are used on a daily basis and are quite busy with limited maintenance and almost no shoulder for cyclists to ride these should be Priority A. North St, Canning St and Upper Dawson Rd have no logical need to be upgraded in the near future as they don't really join part of any regular route. The Woolwash should be on the list as it is used regularly.and Mt Archer should be part of the current upgrades to the road as this is a popular training ride, should be an immediate not a priority A or unprioritised as per the map.
- Connection to Rockhampton to Yeppoon rail trail Rocky end appears to be 15 years away at least.
- Not sure if this plan is to totally separate cars & bikes.
- A lot of the A region already has existing cycle ways, I believe some areas in B & C may be of higher importance due to the nature of road surface and amount of vehicular traffic where incidents are more likely to occur.
- Musgrave Street should be in the next 10 years for access to the shopping precinct, and as part of North/South access across the city. Lakes Creek Road should be higher in priority as

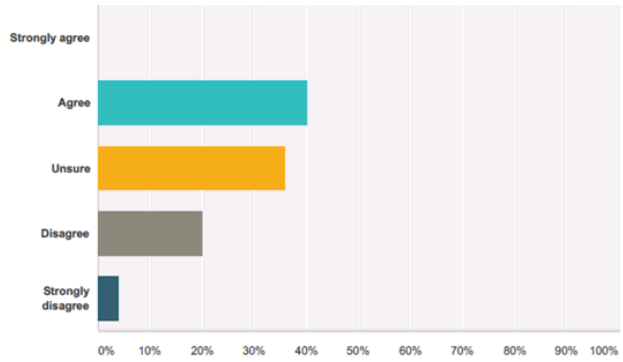
it is a flat arterial road. There should also be a specific plan for a North/South crossing that facilitates commuting. The area behind Heights College and Glenmore schools (McLaughlan St + Farm St) could be done sooner to promote cycling for students, and as an alternative route for cycling to CQU. This plan applies to roads, but the bike/walking path network is very disjointed and should be addressed as a priority as well.

- While I agree with the priority routes, the timeframe is far to long. All of the proposed routes are currently used by cyclists. Simple measures such as signage and increased awareness can be implemented far sooner. Some minor infrastructure changes can be carried out when roads are being resurfaced - including ensuring complete surface repair to the kerb.

Are the proposed urban cycle routes for Gracemere prioritised appropriately?

Answered: 25 Skipped: 2

- 40% of respondents agreed.



Answer Choices	Responses	
Strongly agree	0.00%	0
Agree	40.00%	10
Unsure	36.00%	9
Disagree	20.00%	5
Strongly disagree	4.00%	1
Total		25

Comments from respondents that strongly agree or agree:

- Comments on Capricorn Highway as per Rockhampton map. - As a regular commuter to Stanwell Power Station, I am disappointed that this plan falls short of the outline given in the Central Queensland Principal Cycle Network Plan (2014) which flagged this as a route to be considered.
- P1 would be a link from rockhampton to gracemere using the old highway near yeppen yeppen round about and connect it to the other old highway past the caravan park widening that road as for rest i agree to a point though if highschool goes ahead there is nothing ready for it

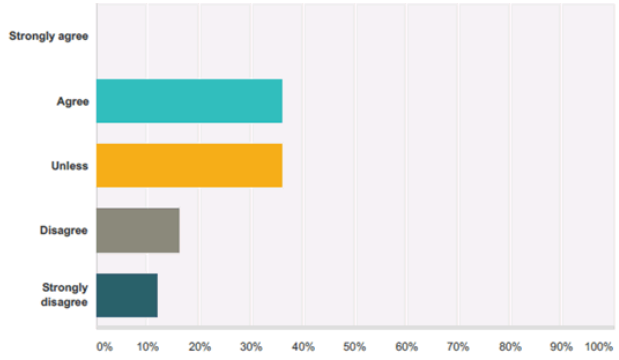
Comments from respondents that are unsure, disagree or strongly disagree:

- As for previous comment, time frame is far too long as these routes are currently in use by cyclists. Also what is the detail for construction?
- Too many low priority areas identified.- i.e. too much red and not enough green.
- I think a cycle/walkway into Rockhampton would be of priority for everyone who lives in Gracemere so they can have the option of cycling or walking into Rockhampton. There is NO current way to do this safely at the moment and with Gracemere growing rapidly it is needed URGENTLY!!!!!
- I would recommend that the council look at converting the old Capricorn highway from rocky (yepen roundabout) roundabout to Gracemere into a bikeway. rocky to Gracemere is a major cycle training route and a dedicated bike way would remove riders from the highway, increase safety encourage commuter riders. Johnson road needs a dedicated bikeway for same reasons as above
- As for my previous comments, timeframe is far to long! The Capricorn Highway in particular requires considerable attention and inclusion. The current road is unsafe and not suitable for cycle transport, however it is the only direct route between Gracemere and Rockhampton. A proposed solution is to use the old Capricorn Highway as the main cycle route in both directions. This would require construction of a dedicated cycle path (two way) adjacent to the southern side of the Capricorn highway for part of the route.

Are the proposed urban cycle routes for Bouldercombe and Mount Morgan prioritised appropriately?

Answered: 25 Skipped: 2

- 36% of respondents agreed



Answer Choices	Responses	
Strongly agree	0.00%	0
Agree	36.00%	9
Unless	36.00%	9
Disagree	16.00%	4
Strongly disagree	12.00%	3
Total		25

Comments from respondents that indicated strongly agree or agree:

No respondents that agree provide comments.

Comments from respondents that indicated unsure, disagree or strongly disagree:

- As for previous comments, routes are currently in use, timeframe to long for implementation.
- The road from Bouldercombe to Mount Morgan should be Prioritised A or maybe a B.
- No connection between the two towns is shown as any priority.
- route c above should be a high priority
- All routes to be completed in the next 10 years.

- it's a pity we forget the hill principle when planning this show grounds area to city centre i sure hope your fit riding that way or up queen street as i do when up there

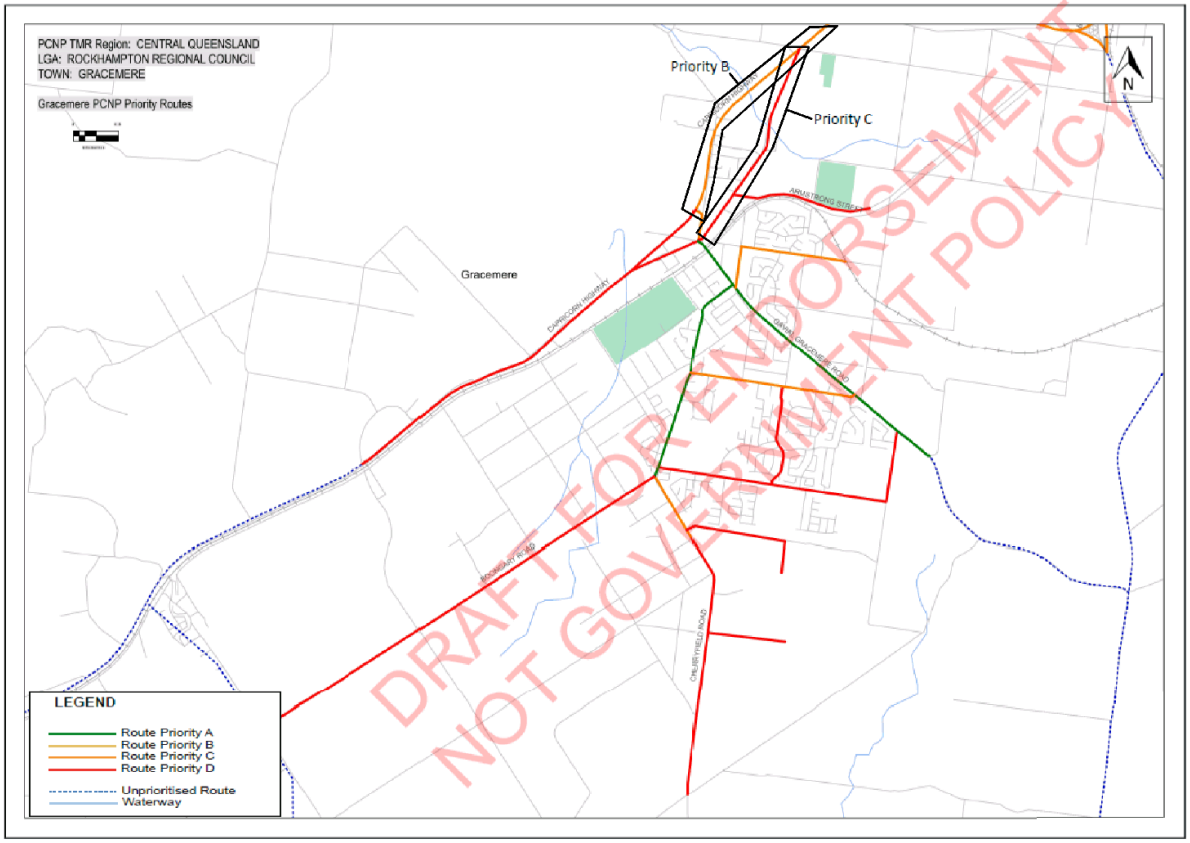
CQ PRINCIPLE CYCLE NETWORK PLAN - PRIORITY ROUTE PLANS

RRC PriorityRoutes Amended

Meeting Date: 21 June 2016

Attachment No: 2

Rockhampton Regional Council – Gracemere



Priority Route Map 17

Central Queensland Principal Cycle Network

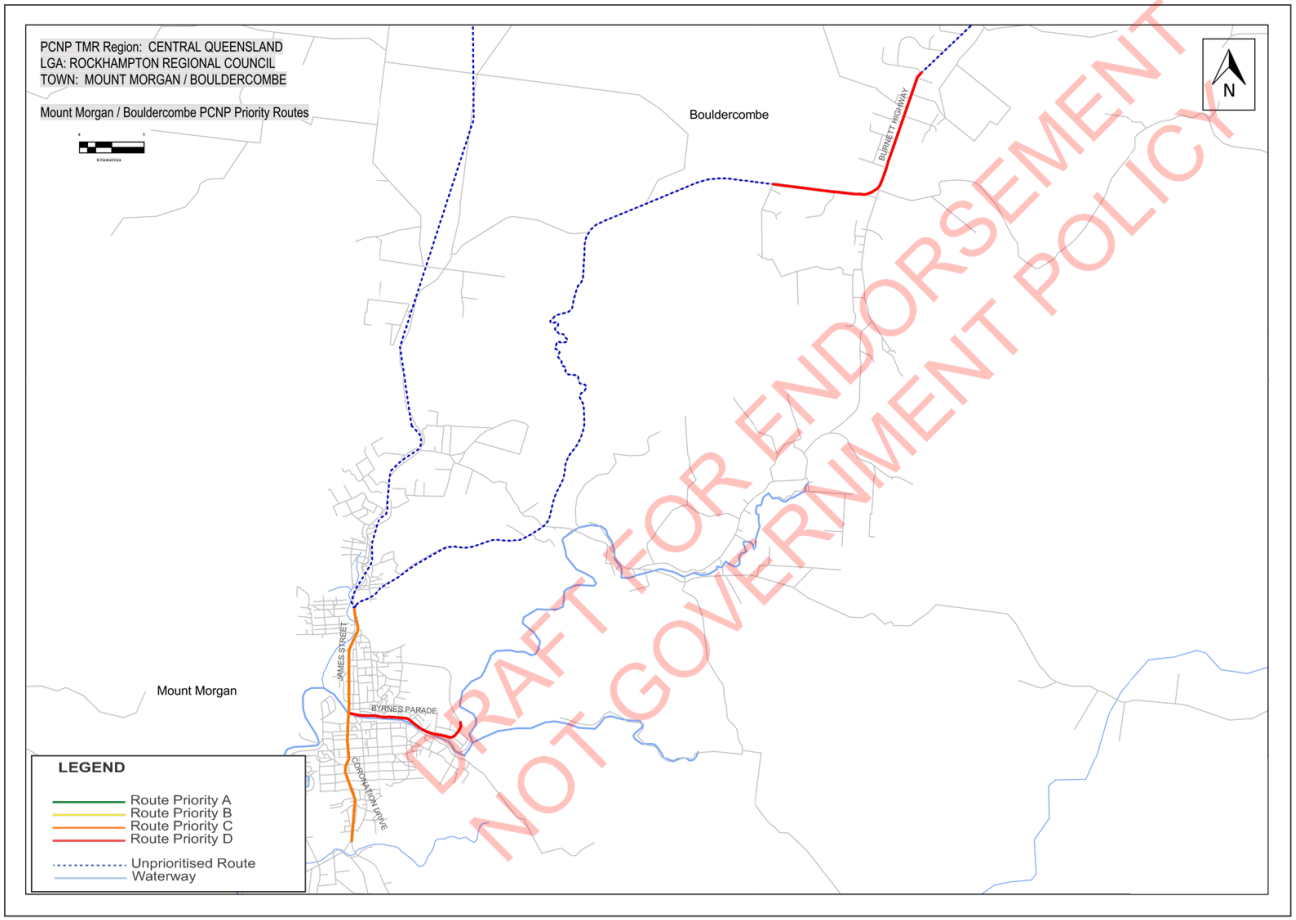
The routes shown are indicative and exist to guide further planning that will determine the precise routes and design of cycle facilities.

Queensland Government

Priority Route Maps, Central Queensland, Addendum to Principal Cycle Network Plan, Department of Transport and Main Roads, December 2015

20

Rockhampton Regional Council – Mount Morgan / Bouldercombe



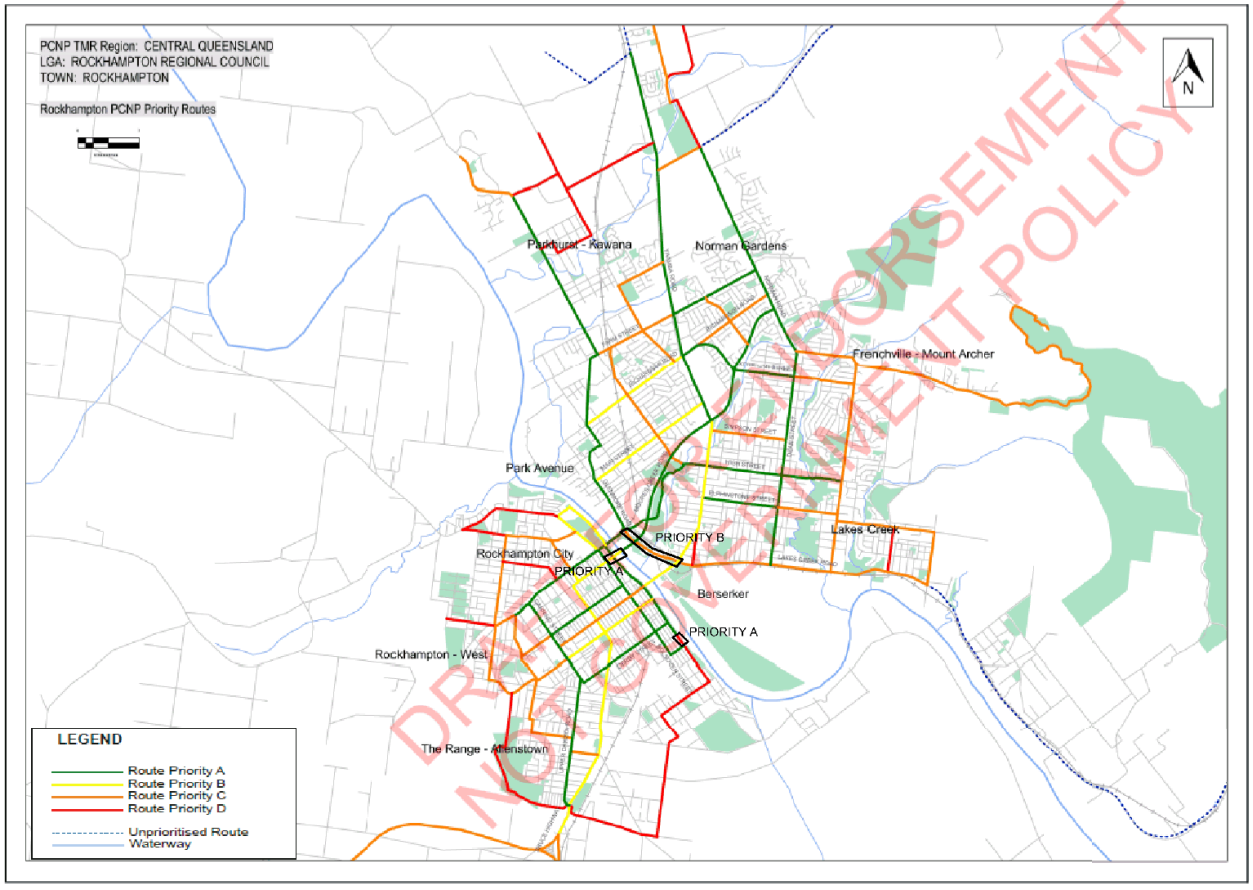
Priority Route Map 18

Central Queensland Principal Cycle Network

The routes shown are indicative and exist to guide further planning that will determine the precise routes and design of cycle facilities.

Queensland Government

Rockhampton Regional Council – Rockhampton



Priority Route Map 19

Central Queensland Principal Cycle Network

The routes shown are indicative and exist to guide further planning that will determine the precise routes and design of cycle facilities.

Queensland Government

Priority Route Maps, Central Queensland, Addendum to Principal Cycle Network Plan, Department of Transport and Main Roads, December 2015

22

8.7 WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

File No:	**8055, 2479**
Attachments:	**1. Base Case Mapping** **2. Scenario 1 Mapping** **3. Scenario 2 Mapping** **4. Scenario 3 Mapping** **5. Scenario 1 Difference Mapping**
Authorising Officer:	**Robert Holmes - General Manager Regional Services**
Author:	**Martin Crow - Manager Engineering Services**

SUMMARY

Council has carried out preliminary investigations in relation to the repeated flooding experienced in and around Webber Park, Norman Gardens.

OFFICER'S RECOMMENDATION

THAT Council take the following action:

a) proceed to preliminary design and cost estimating for Stages 1B and 1A of the Webber Park Drainage Scheme;

b) include the Webber Park Drainage Scheme in the Stormwater Project Prioritisation process and list for consideration for future capital budgets;

c) enter into discussions with members of the public directly impacted by the proposed Webber Park Drainage Scheme; and

d) advise interested residents of the results of the preliminary investigation and the actions being undertaken in accordance with the recommendations above.

COMMENTARY

In March 2016 a preliminary drainage investigation report was completed by consulting engineers AECOM which explored a number of mitigation options to resolve flash flooding issues being experienced in and around Webber Park.

The conclusions reached by the preliminary investigations were as follows.

a) The majority of the stormwater drainage within the catchment has less than 39% AEP (1 in 2 year) capacity.

b) The drainage outlet from Chalmers Street has limited capacity resulting in bypass flows tending westerly through private property before discharging into the Webber park open channel.

c) The open channel through Webber Park has adequate capacity to convey the 1% AEP (1 in 100 year) peak flow.

d) The inlet at the downstream end of Webber Park is undersized resulting in bypass flows tending westerly through private property before discharging into Barrett Street. Capacity issues would be exacerbated if the inlet became blocked.

e) The road reserves downstream of the open channel in Webber Park generally contains the 1% AEP flow however the flood heights and velocities may pose an extreme flood hazard.

The report examined the following 5 potential mitigation options.

Option	Description
1	Duplication of Downstream Pipe Network in Barrett Street
2	Upgrade to the Chalmers Street Inlet Pipe
3	Construct a 1.2m deep detention basin on a quarter of Webber Park
4	Construct a 3.0m deep detention basin on a quarter of Webber Park
5	Construct a 1.2m deep detention basin on half of Webber Park

Hydraulic testing of these options indicated that each of these particular mitigation options by themselves would resolve the flooding issues and therefore 3 scenarios combining a number of mitigation options were further tested. These scenarios were as follows.

Scenario	Description
1	Option 5 + resumption of 2 properties upstream and downstream of Webber Park to facilitate better inlet and outlet control
2	Option 1 + Option 2 + Option 5
3	Scenario 1 + Option 1

On the basis of the preliminary investigations undertaken, Scenario 3 proved to have the most effective reduction in flood risk. As a result, the following stages were recommended for further investigation.

Stage 1A – Webber Park Detention Basin - $2.04M

Stage 1B – Construction of Overland Flow Paths at Inlet and Outlet- $1.41M

Stage 2 – Duplication of Downstream Stormwater Network - $2.48M

Based on the significant capital expenditure required, a further recommendation was made to undertake a tangible flood damage assessment and preliminary economic appraisal to check whether the capital expenditure delivered a positive net benefit to the community.

The tangible flood damage assessment assigns an estimated cost of damage to a particular building based on the building's size, type and the depth of flooding. For the purposes of this report, a building was considered to be impacted when it's footprint was within the identified flood extent and the peak flood level exceeded the average ground level within the building footprint. This assessment was subsequently completed in conjunction with the preliminary investigation work.

When looking at the number of properties benefited, this represents the number of properties that no longer have flooding within the building footprint and does not include those properties that receive a benefit through reduced depth or velocity of flooding.

It should also be noted that the property numbers identified include all properties within the catchment and not just those adjacent to Webber Park. The average reduction in flood damage does however take into consideration those properties that benefit through reduced depth of flooding.

A summary of the preliminary drainage investigation and tangible damage assessment results compared with the base case is in the following table.

	Base Case	**Scenario 1**	**Scenario 2**	**Scenario 3**
Properties Impacted (18% AEP)	51	37	42	36
Properties Impacted (1% AEP)	132	117	117	115
Properties Benefited (18% AEP)	0	14	9	15
Properties Benefited (1% AEP)	0	15	15	17
Cost of Scheme ($)		$3,277,500	$4,817,800	$5,934,200
$/property benefitted (18% AEP)		$234,107	$535,311	$395,613
$/property benefitted (1% AEP)		$218,500	$321,186	$349,070
Ave Reduction in Flood Damage (18% AEP)		$291,959	$228,355	$296,376
Ave Reduction in Flood Damage (1% AEP)		$424,854	$495,433	$671,932
No. 18% AEP Events to break even.		11	21	20
No. 1% AEP Events to break even.		8	10	9

It is important to note that despite the considerable investment required, the proposed drainage relief schemes improve but do not entirely resolve the drainage issue being experienced in the Webber Park catchment.

The information provided in the above table provides some basis for further analysis of the merits of the scheme.

The figures arrived at for cost per property benefitted gives some indication of the level of investment that Council is considering to spend per benefitted house and can be compared to the probable average value of the house. As stated before, this does not take into consideration any benefits that other properties may receive through reduced flood levels.

The average reduction in flood damage does take into consideration benefits to both those properties that no longer have flooding in the building and those that would experience a reduced flood level.

If the life of the proposed infrastructure is taken to be 50 years, then it is arguable that the investment indicated in Scenario 1 is justified based on the average reduction in flood damage associated with the more frequent 18% AEP event. In other terms a 1 in 5 year Average Recurrence Interval event would have to happen 11 times in 50 years for the Scenario 1 drainage scheme to break even. Taken over a very long period of time, a 1 in 5 year Average Recurrence Interval event should occur 10 times in a 50 year period and so the Scenario 1 scheme would be very close to break-even point at the end of the nominal infrastructure life.

In the same period of time, Scenario's 2 and 3 schemes would require approximately 20 of these 1 in 5 year Average Recurrence Interval events to happen to break even. This is statistically highly unlikely.

On this basis it is suggested that Scenario 1 be further developed for consideration in Council's stormwater improvement capital program. The following stages are proposed to be taken through to preliminary design and costing.

Stage 1B – Construction of Overland Flow Paths at Inlet and Outlet- $1.41M

Stage 1A – Webber Park Detention Basin - $2.04M

These works do not preclude the duplication of the downstream stormwater pipe network (Stage 2) in the future should Council wish to do so.

In order to progress both of these stages it will be necessary to engage with the directly impacted community members, those being the owners of the properties that will need to be resumed to deliver stage 1B and also the Bluebirds Soccer Club who may be impacted by stage 1A. It is also suggested that these engagements should proceed before advising other concerned or impacted residents of the outcomes of Council's preliminary investigations.

BACKGROUND

During Council's community engagement activities in the aftermath of Tropical Cyclone Marcia, Council representatives were provided with accounts of the flooding events and details of the impacts on the residents and their properties adjacent to Webber Park. Preliminary investigations by Council Officers had identified issues in relation to the capacity of the existing drainage system and a lack of a defined overland flow path at the downstream outlet to Webber Park. Under current stormwater design methodologies it is generally the road or land under Council's control that allows the passage of overland flow once the pipe capacity has been exceeded. The outlet to Webber Park does not allow for this overland flow component and consequently the stormwater follows the natural drainage path through private properties.

The aspirational targets set for the mitigation options report are as outlined in the Capricorn Municipal Design Guidelines. In summary they were as follows.

1. Minor Design Storm Event (18%AEP / 5yr ARI) – flows contained within either open channels and /or the pit and pipe network under council's control.
2. Major Design Storm Event (1% AEP/100yr ARI) – flows wholly contained within the road reserve or land under Council's control in combination with the pit and pipe network, or a pipe system with an overland relief flow path or defined open channel.

These aspirational targets can be extremely difficult to achieve in an existing built up area and often compromises have to be made to enable an effective and affordable relief drainage scheme to be implemented.

BUDGET IMPLICATIONS

The drainage relief scheme once decided will need to be prioritised against other Council drainage schemes to be allocated funding in future capital programs. A budget allocation of $750,000 has been included in the 2017/18 financial year of the draft capital program for the commencement of this scheme. This allocation was included in anticipation of resumption of 2 properties. Further preliminary design works and estimates can be carried out under current budget allocations.

CORPORATE/OPERATIONAL PLAN

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

CONCLUSION

Preliminary investigations have identified issues in relation to the capacity of the existing drainage system and a lack of a defined overland flow path both upstream and downstream of Webber Park.

These deficiencies do not allow for the containment of overland flow within the road reserve or land under Council's control. A preliminary drainage investigation has identified a possible staged drainage scheme that will improve but not eliminate the flooding issues being experienced by residents in and around Webber Park. A tangible damages assessment indicates that a partial implementation of the recommended drainage scheme may represent value for money.

WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

Base Case Mapping

Meeting Date: 21 June 2016

Attachment No: 1


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
GEANEY STREET
RICHARDSON ROAD
MOORES CREEK ROAD
YAAMBA ROAD
Model Overview
Model East of Norman Road
AECOM
N
GDA 1994 MGA Zone 56
Metres
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Peak Velocities (m/s)
0.00 - 0.50
0.50 - 1.00
1.00 - 2.00
2.00 - 3.00
3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
18% AEP Event, 1 Hour Storm
Basecase
Map
2
A3 size


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
GEANEY STREET
RICHARDSON ROAD
Model Overview
0 400 800 1200 Metres
Model East of Norman Road
AECOM
www.aecom.com
N
GDA 1994 MGA Zone 56
Metres
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Peak Velocities (m/s)
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3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
1% AEP Event, 1 Hour Storm
Basecase
PROJECT ID 60441811
CREATED BY briggh
LAST MODIFIED 22/09/2015
VERSION 1
Map
3
A3 size

WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

Scenario 1 Mapping

Meeting Date: 21 June 2016

Attachment No: 2

Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
Model Overview
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Model East of Norman Road
AECOM
www.aecom.com
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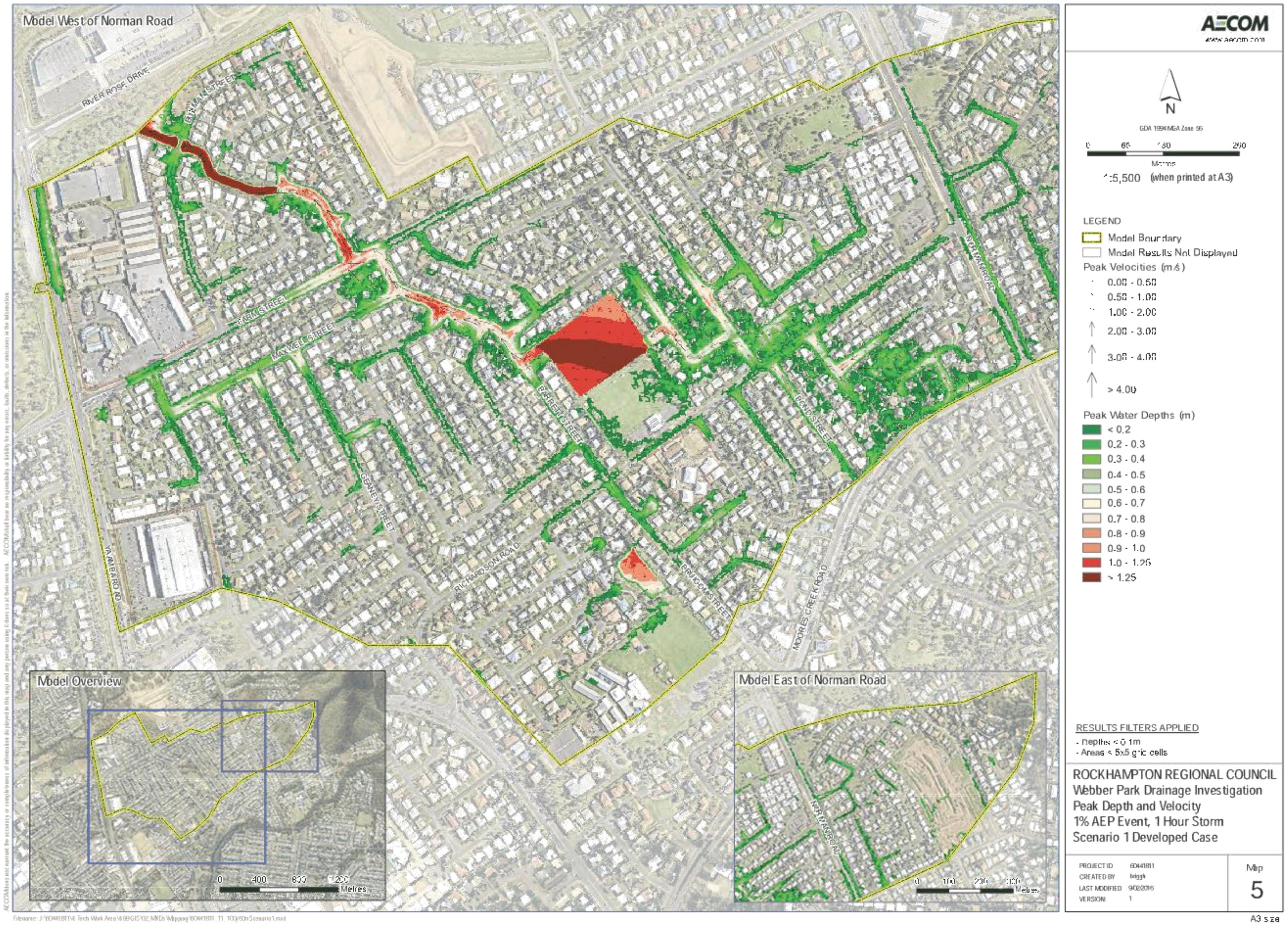
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
18% AEP Event, 1 Hour Storm
Scenario 1 Developed Case
PROJECT ID 60441811
CREATED BY briggk
LAST MODIFIED 9/02/2016
VERSION 1
Map
4
A3 size


Model West of Norman Road
RIVER ROSE DRIVE
PARK STREET
CAMPBELL STREET
GARNETT STREET
RICHARDSON ROAD
MOORES CREEK ROAD
Model Overview
0 400 800 1200 Metres
Model East of Norman Road
Metres
AECOM
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GDA 1994 MGA Zone 56
0 65 130 260
Metres
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LEGEND
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3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
1% AEP Event, 1 Hour Storm
Scenario 1 Developed Case
PROJECT ID 60441811
CREATED BY briggh
LAST MODIFIED 9/02/2016
VERSION 1
Map
5
A3 size

WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

Scenario 2 Mapping

Meeting Date: 21 June 2016

Attachment No: 3


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
MAXWELL STREET
GEANEY STREET
RICHARDSON ROAD
MOORES CREEK ROAD
NORMAN ROAD
Model Overview
Model East of Norman Road
AECOM
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GDA 1994 MGA Zone 56
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2.00 - 3.00
3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
18% AEP Event, 1 Hour Storm
Scenario 2 Developed Case
PROJECT ID
CREATED BY
LAST MODIFIED
VERSION 1
Map
6
A3 size


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
GEANEY STREET
RICHARDSON ROAD
MOORES CREEK ROAD
Model Overview
Model East of Norman Road
AECOM
N
GDA 1994 MGA Zone 56
Metres
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Peak Velocities (m/s)
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0.50 - 1.00
1.00 - 2.00
2.00 - 3.00
3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
1% AEP Event, 1 Hour Storm
Scenario 2 Developed Case
PROJECT ID
CREATED BY
LAST MODIFIED
VERSION 1
Map
7
A3 size

WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

Scenario 3 Mapping

Meeting Date: 21 June 2016

Attachment No: 4


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
GEANEY STREET
RICHARDSON ROAD
Model Overview
Model East of Norman Road
www.aecom.com
N
GDA 1994 MGA Zone 56
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Peak Velocities (m/s)
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1.00 - 2.00
2.00 - 3.00
3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
18% AEP Event, 1 Hour Storm
Scenario 3 Developed Case
PROJECT ID 60441811
CREATED BY briggk
LAST MODIFIED 9/02/2016
VERSION 1
Map
8
A3 size

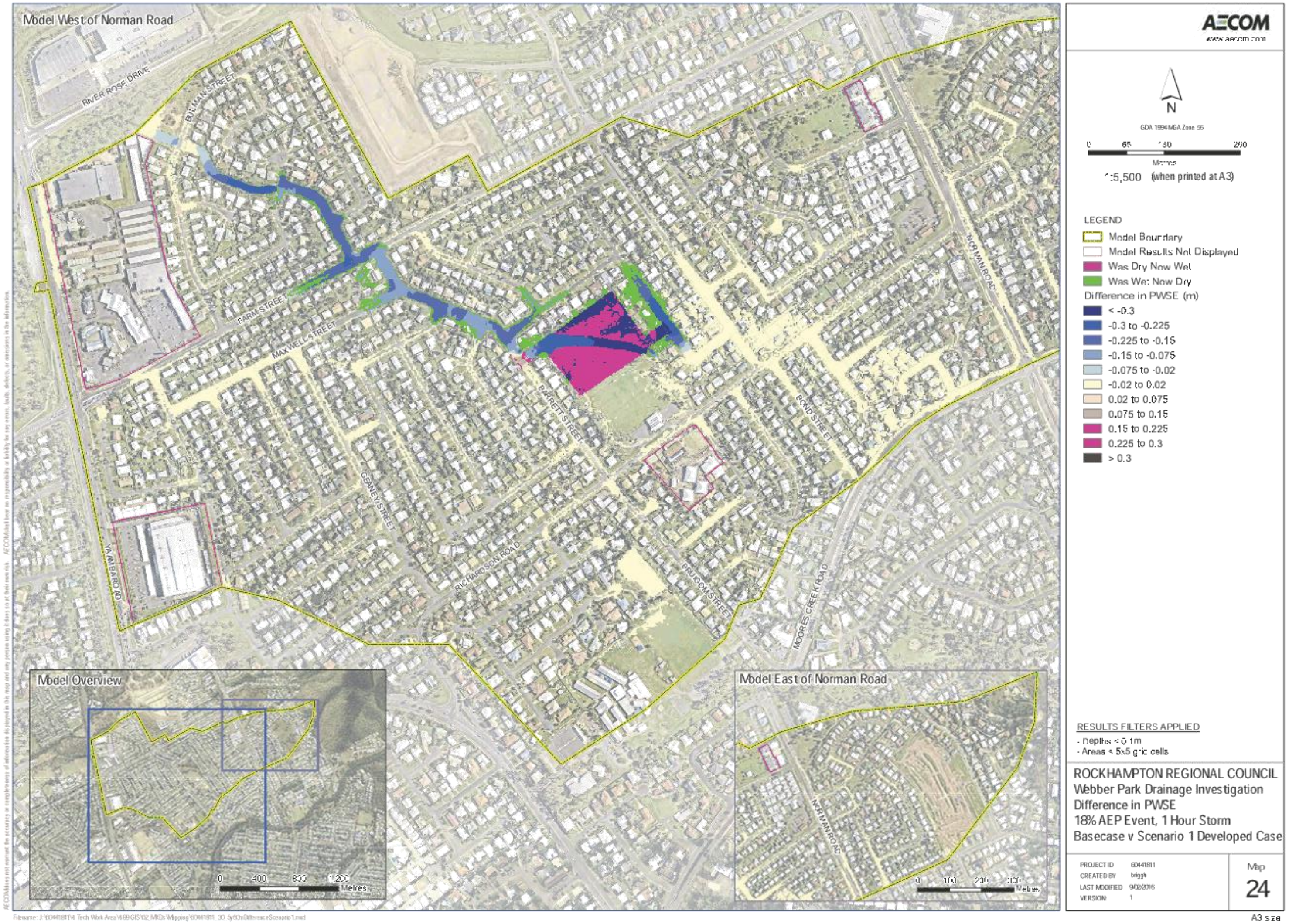

Model West of Norman Road
RIVER ROSE DRIVE
CAREY STREET
MAXWELL STREET
GEANEY STREET
RICHARDSON ROAD
BRAGG STREET
MOORES CREEK ROAD
YAAMBA ROAD
Model Overview
Model East of Norman Road
AECOM
N
GDA 1994 MGA Zone 56
0 65 130 260
Metres
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Peak Velocities (m/s)
0.00 - 0.50
0.50 - 1.00
1.00 - 2.00
2.00 - 3.00
3.00 - 4.00
> 4.00
Peak Water Depths (m)
< 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1.0
1.0 - 1.25
> 1.25
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Peak Depth and Velocity
1% AEP Event, 1 Hour Storm
Scenario 3 Developed Case
PROJECT ID
CREATED BY
LAST MODIFIED
VERSION 1
Map
9
A3 size

WEBBER PARK PRELIMINARY DRAINAGE INVESTIGATION

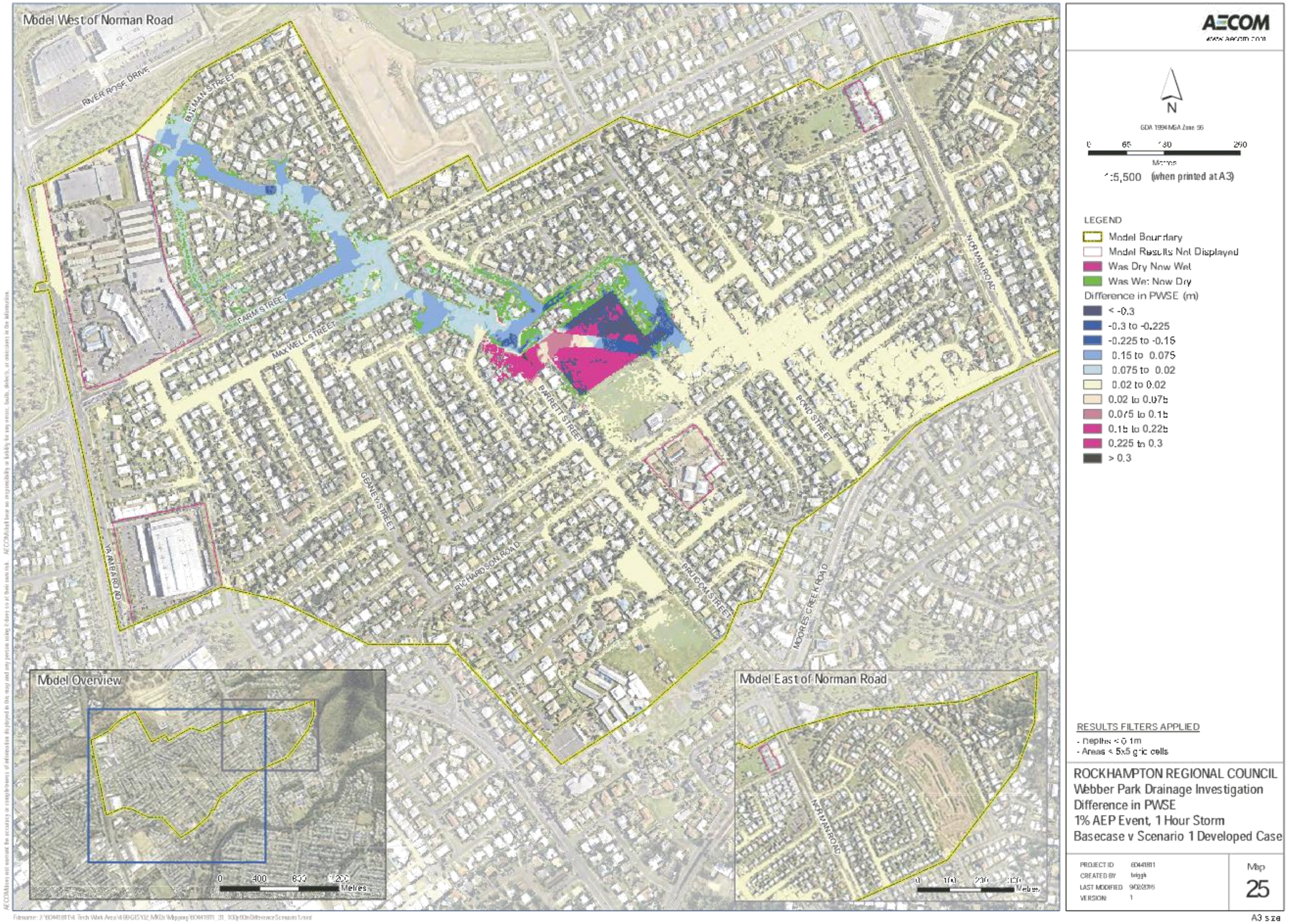
Scenario 1 Difference Mapping

Meeting Date: 21 June 2016

Attachment No: 5



Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
MAXWELL STREET
GEANEY STREET
RICHARDSON ROAD
BARRETT STREET
BOND STREET
BRUCE STREET
NORMAN ROAD
MOORES CREEK ROAD
Model Overview
Model East of Norman Road
AECOM
N
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Was Dry Now Wet
Was Wet Now Dry
Difference in PWSE (m)
< -0.3
-0.3 to -0.225
-0.225 to -0.15
-0.15 to -0.075
-0.075 to -0.02
-0.02 to 0.02
0.02 to 0.075
0.075 to 0.15
0.15 to 0.225
0.225 to 0.3
> 0.3
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Difference in PWSE
18% AEP Event, 1 Hour Storm
Basecase v Scenario 1 Developed Case
PROJECT ID
CREATED BY
LAST MODIFIED
VERSION 1
Map
24
A3 size


Model West of Norman Road
RIVER ROSE DRIVE
FARM STREET
MAXWELL STREET
BARRETT STREET
RICHARDSON ROAD
NORMAN ROAD
MOORES CREEK ROAD
Model Overview
Model East of Norman Road
AECOM
N
GDA 1994 MGA Zone 56
Metres
1:5,500 (when printed at A3)
LEGEND
Model Boundary
Model Results Not Displayed
Was Dry Now Wet
Was Wet Now Dry
Difference in PWSE (m)
< -0.3
-0.3 to -0.225
-0.225 to -0.15
0.15 to 0.075
0.075 to 0.02
0.02 to 0.02
0.02 to 0.075
0.075 to 0.15
0.15 to 0.225
0.225 to 0.3
> 0.3
RESULTS FILTERS APPLIED
- Depths < 0.1m
- Areas < 5x5 grid cells
ROCKHAMPTON REGIONAL COUNCIL
Webber Park Drainage Investigation
Difference in PWSE
1% AEP Event, 1 Hour Storm
Basecase v Scenario 1 Developed Case
PROJECT ID 60441811
VERSION 1
Map
25
A3 size

9 NOTICES OF MOTION

Nil

10 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.

11 CLOSED SESSION

In accordance with the provisions of section 275 of the *Local Government Regulation 2012,* a local government may resolve to close a meeting to the public to discuss confidential items, such that its Councillors or members consider it necessary to close the meeting.

RECOMMENDATION

THAT the meeting be closed to the public to discuss the following items, which are considered confidential in accordance with section 275 of the *Local Government Regulation 2012,* for the reasons indicated.

12.1 Wackford Street Drainage Preliminary Design Report

This report is considered confidential in accordance with section 275(1)(h), of the *Local Government Regulation 2012*, as it contains information relating to other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage.

12 CONFIDENTIAL REPORTS

12.1 WACKFORD STREET DRAINAGE PRELIMINARY DESIGN REPORT

File No: **8055, 2479**

Attachments:
1. **Executive Summary**
2. **Base Case Mapping**
3. **Scenario 1 Mapping**
4. **Scenario 2 Mapping**
5. **Table 11 Property Impacts**

Authorising Officer: **Robert Holmes - General Manager Regional Services**

Author: **Martin Crow - Manager Engineering Services**

This report is considered confidential in accordance with section 275(1)(h), of the *Local Government Regulation 2012*, as it contains information relating to other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage.

SUMMARY

Council has carried out further investigations in relation to the repeated flooding experienced in Wackford Street, Park Avenue.

13 CLOSURE OF MEETING