

Project Funding Nomination Form

for Fatal Crash Remediation Location Development Process



Source of funds: (Program) **Program: Targeted Road Safety Program (TRSP)**

Region: **North Coast** **Local Government:** **City of Moreton Bay**

Road Name (Section): **Brisbane – Woodford Road (401)**

Road No.	Start Chainage (km)	End Chainage (km)	Distance (km)
401	46.15	46.20	0.05

Fatal Crash Number: **202302020264** **Fatal Crash Date:** **3 Dec 2023**

Project Location: The proposed site of the project located at Mount Mee on Brisbane – Woodford Road near the intersection of Lewington Road.

Figure 1 illustrates the location of the project site.

Figure 1: Locality map

Need for Project

A fatal crash occurred at 9:54am on Sunday 3 December 2023 on Brisbane – Woodford Road, near Lewington Road intersection. A s.47(3)(b) of the RTI Act motorbike rider dropped his bike on a sweeping right bend just north of the Lewington Road intersection. As the rider was heading north toward Mt Mee township, he has lost control and veered off the left side of the road into a culvert. The rider died in hospital s.47(3)(b) of the RTI Act from injuries sustained.

Brisbane – Woodford Road (locally known as Mount Mee Road) forms part of the TMR network and provides a north/south link between Bald Hills and D’Aguilar – Approximately 60kms. Lewington Road is a council road that forms a tee intersection on the northern side of Mount Mee Road. The fatal crash occurred just to the north of Lewington Road.

This section of Brisbane – Woodford Road is also popular with motorcycle riders, as it contains many tight horizontal curves over mountainous / undulating terrain. There have been 3 reported motorcycle crashes in the section of road near Lewington Road in the last 5 years, including 1 fatal and 2 hospitalisation crashes.

At the time of the incident, the posted speed limit on Brisbane – Woodford Road was 80km/hr. This posted speed limit was reduced from 100km/hr to 80km/hr in August 2023, just prior to the fatal crash, and included a review and replacement of signage along this section of road.

North Coast Region has assessed the roadside environment at the location of the fatal crash in accordance the *Austrads Guide to Road Design, Part 6: Roadside Design, Safety & Barriers* and the supplementary guidance contained in the *2nd Edition* of *TMR’s Road Planning & Design Manual*. The assessment resulted in a roadside hazard risk score of 1.2, exceeding TMR’s Network Roadside Risk Intervention Threshold (NRRIT) of 0.6.

Refer to **Attachment E** for the Fatal Crash Investigation Report.

Scope of Proposed Project	
In Scope:	<p><u>The following items are in scope:</u></p> <ul style="list-style-type: none"> • Batter flattening to 1 on 6 for a width of 4.5m outside the traffic lane. • Tree clearing to a minimum width of 6m on the outside of the horizontal curve and wider to allow for batter tie-ins. • Installation of Chevron Alignment Markers (CAMs) in accordance with the current standards. <p>The reassessment of this modified roadside environment results in a roadside hazard risk score of 0.559, achieving compliance to TMR's NRRIT of 0.6.</p> <p>Refer to Attachment A for the Concept Design.</p>
Options Considered	<p>Safety barrier was considered as an option to reduce the severity of collisions with the existing batter and vegetation in this location. This option was discounted as investigations concluded that to shield the hazards, the safety barrier would need to be installed across the current intersection with Lewington Road to meet the barrier run-out length requirements and to facilitate the installation of a crashworthy barrier end treatment. The realignment or relocation of Lewington Road to facilitate this barrier treatment was not considered a feasible option due to the high cost.</p> <p>Realignment and formation widening to meet the current road design standards was also considered to reduce the frequency and occurrence of crashes at this location. This option was also discounted as a feasible option due to the high cost. Chevron Alignment Markers (CAMs) will be installed as an additional risk mitigation treatment for the substandard elements of the road geometry, supplementing the existing warning sign and advisory speeds.</p>
Stakeholder Management	<p>No consultation has currently been undertaken, however, due to the minor nature of the works and limited impact on neighbouring properties and accesses, no negative feedback is anticipated. It is anticipated that all stakeholders will be in favour of the proposed works.</p>
Cost Estimate	<p>The estimated project cost is \$705,000.</p> <p>Refer to Attachment B for the Cost Estimate.</p> <p>Refer to Attachment C for the Out-turned Project Costs and Cash Flow.</p>
Project Benefits	<p>The benefit/cost ratio for the project is calculated to be 3.0 and the project is forecast to prevent 3.1 FSI crashes over the 20-year life of the project.</p> <p>Refer to Attachment D for the Nomination Summary and BCR.</p>

Source Fund \$'000	Proposed expenditure flows				
	Prior Expenditure \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
705	-	-	492	213	705

Submitted and Recommended (Supervising Engineer)

Name: Irrelevant information Signature: Irrelevant information RPEQ: 10537	Principal Engineer Traffic Engineering Team Maintenance, Assets & Traffic Engineering Unit North Coast Region Date: <u>31</u> / <u>01</u> / <u>2025</u>
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Approved (Deputy Regional Director)

Name: Irrelevant information Signature: Irrelevant information	Deputy Regional Director North Coast Region Date: <u>10</u> / <u>02</u> / <u>2025</u>
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Comments:

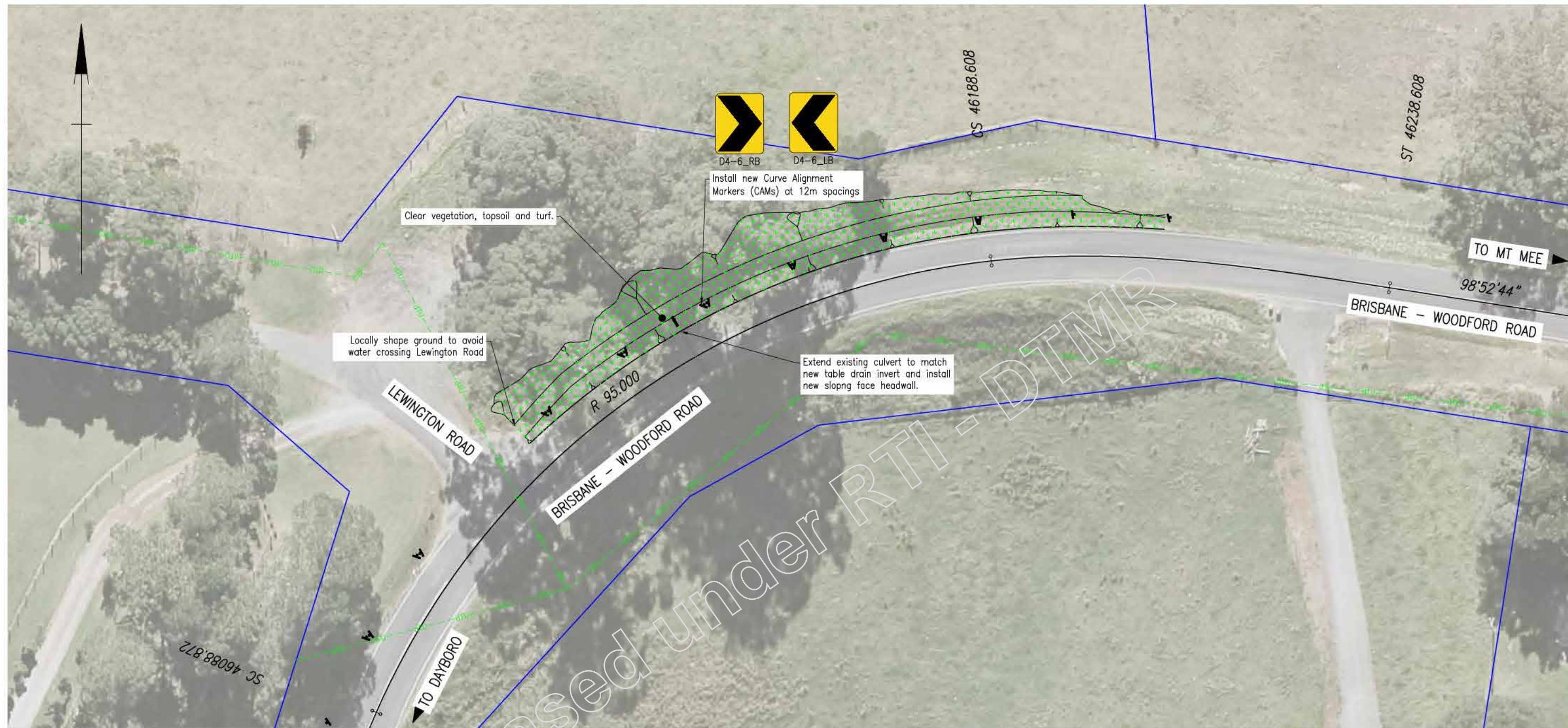
Attachments:

- A. Concept Design
- B. Cost Estimate
- C. Out-turned Project Costs & Cash Flow
- D. Nomination Summary and Benefit Cost Ratio
- E. Fatal Crash Investigation Report

ATTACHMENT A

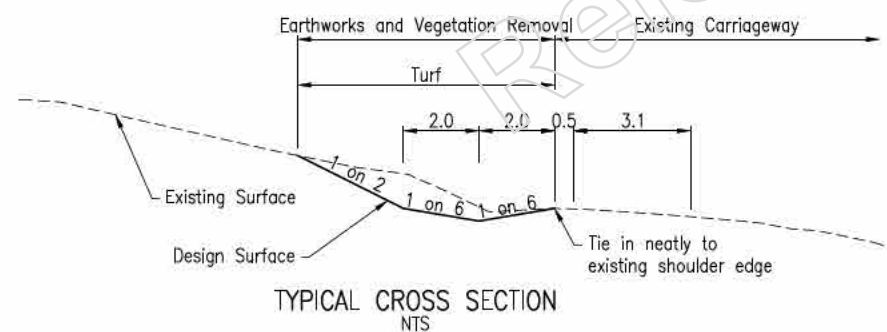
Concept Design

Released under RTI - DTMR



NOTES

1. An operating speed model was run to determine an operating speed of 74km/hr for the R95 horizontal curve.
2. The design is based on Aerial Laser Scanning (ALS) survey data.
3. Risk Score of 0.559 is based on a horizontal offset of 4.5m from the edge of traffic lane to the 1 on 2 cut slope and operating speed of 80km/hr.
4. Location of services and culvert to be confirmed. Location shown on drawing is based on DBYD data.
5. Environmental and Cultural Heritage assessment required to assess impact of tree clearing.



Last Modified: Jun 27, 2024 - 11:26am XREFS: 240810_ALIGNMENT.dwg : X_DRAW.dwg

F		Associated Job Nos		Survey Data		Scales		MORETON BAY CITY COUNCIL		LEWINGTON ROAD INTERSECTION			
E				Horiz. Datum		0 2 4 6 8 10m		BRISBANE - WOODFORD ROAD		VEGETATION REMOVAL AND			
D				Horiz. Grid		Dimensions shown in metres except where shown otherwise		CTL CHGE 46150 - 46200		BATTER SLOPE FLATTENING		Contract No.	
C		Auxiliary Drg Nos		Height Datum				Reference Points		ENGINEERING CERTIFICATION (RPEQ)		Drawing No.	
B				Survey Books		No Survey		Preceding RP		<div style="border: 2px solid red; padding: 5px; text-align: center;"> PRELIMINARY 27 June 2024 </div>		Page 8 of 46	
A		Issued For Construction		Date				Dist. to start of job (km)				Series Number	
		Signatory: - RPEQ Full Name, Eng. Area and RPEQ No. or Full Name and Position Title						From start to end of job				A	
		Date						From end to Following RP					
		RTI 5787						Following RP					
								Through Chainage from					

ATTACHMENT B

Cost Estimate

Released under RTI - DTMR

Project Number :
 Project Boundary :MORETON BAY REGIONAL COUNCIL
 Asset Name :BRISBANE - WOODFORD ROAD (401)
 Location :Ch 46.15 - 46.20KM



Queensland Government

NOTE: Estimate must be considered absolutely as the property of Transport and Main Roads until the acceptance of a tender, and must under no circumstances be divulged.

BRISBANE - WOODFORD ROAD - BATTER FLATTENING

Summary of Estimated Project Cost					
Cost Description	Cost	% Total Cost			
Work Package: Concept	\$ 10,000.00	1.5%	Construction Costs		
Work Package: Development	\$ 129,400.00	19.1%			
Work Package: Implementation	\$ 50,700.00	7.5%			
Work Package: Finalisation	\$ 7,000.00	1.0%			
Work Package: Principals Obligations	\$ 24,018.00	3.5%			
Work Package: Principals Contingency	\$ 194,028.00	40.0%			
Total of Principals Costs	\$ 415,146.00	61.1%			
Total of Construction Costs	\$ 263,950.00	38.9%			
Total Project Cost:	\$ 679,096.00	100.0%			
Principals Costs					
Project Proposal	\$ -	0.0%	Provision for Traffic	\$ 56,500	21.4%
Options Analysis	\$ 10,000.00	2.4%	Contractors Camp & Site	\$ 21,500	8.1%
Business Case	\$ -	0.0%	Environmental	\$ 24,000	9.1%
Preliminary Design	\$ -	0.0%	Drainage	\$ 30,400	11.5%
Detailed design	\$ 41,400.00	10.0%	Miscellaneous (Concrete)	\$ -	0.0%
Project handover and report	\$ 5,000.00	1.2%	Retaining walls	\$ -	0.0%
Project management	\$ 70,400.00	17.0%	Clearing and Grubbing	\$ 35,700	13.5%
Contract Admin	\$ 10,800.00	2.6%	Landscaping	\$ 35,150	13.3%
Principals Environmental	\$ 59,500.00	14.3%	Earthworks - Excavation	\$ 42,200	16.0%
Principals Supplied Materials	\$ -	0.0%	Earthworks - Embankment	\$ 3,000	1.1%
Public Utility Plant	\$ 22,500.00	5.4%	Pavements	\$ -	0.0%
Resumptions	\$ -	0.0%	Bitumen Surfacing	\$ -	0.0%
Other Payments and Costs	\$ 1,518.00	0.4%	Asphalt	\$ -	0.0%
Contingency	\$ 194,028.00	46.7%	Signage & linemarking	\$ 15,500	5.9%
Subtotal	\$ 415,146.00	100.0%	Roadside Structures	\$ -	0.0%
			Conduits and pits (lighting & traffic)	\$ -	0.0%
			Traffic Signals	\$ -	0.0%
			Lighting	\$ -	0.0%
			Bridge	\$ -	0.0%
			Custom Items	\$ -	0.0%
			Subtotal	\$ 263,950.00	100.0%

Work Package: Concept							Total:	\$ 10,000.00
Item No.	Description	Additional Info	Unit of Measure	Quantity	Unit Rate (\$)	Amount (\$)		

Options Analysis								
11400.01	Produce Options Analysis Report		lumpsum			\$ 10,000.00		

Work Package: Development							Total:	\$ 129,400.00
Item No.	Description	Additional Info	Unit of Measure	Quantity	Unit Rate (\$)	Amount (\$)		

Design Planning (Preliminary and Detailed)								
12150.01	Road safety audits		lumpsum			\$ 11,400.00		
Design Investigation Reports								
12310.01	Road design and drawings - general		lumpsum			\$ 30,000.00		
Project Stage Management (All Stages)								
15010.01	TMR internal project management		lumpsum			\$ 14,400.00		
15030.01	Project administration cost		lumpsum			\$ 1,500.00		
15070.01	Community engagement		lumpsum			\$ 12,600.00		
Environmental and Cultural Heritage								
17020.01	Environmental Impact Study		lumpsum			\$ 7,500.00		
17030.01	Environmental Management Plan		lumpsum			\$ 5,000.00		
17050.01	Native title		lumpsum			\$ 2,000.00		
17040.01	Cultural heritage		lumpsum			\$ 40,000.00		
17070.01	Environment and Cultural Heritage Management		lumpsum			\$ 5,000.00		

Work Package: Implementation							Total:	\$ 50,700.00
Item No.	Description	Additional Info	Unit of Measure	Quantity	Unit Rate (\$)	Amount (\$)		

Contract Administration								
13020.01	Superintendent / Inspector cost		lumpsum			\$ 10,800.00		
13580.01	Road safety audits		lumpsum			\$ 11,400.00		
Project Stage Management (All Stages)								
15010.01	TMR internal project management		lumpsum			\$ 14,400.00		
15030.01	Project administration cost		lumpsum			\$ 1,500.00		
15070.01	Community engagement		lumpsum			\$ 12,600.00		

Work Package: Finalisation							Total:	\$ 7,000.00
Item No.	Description	Additional Info	Unit of Measure	Quantity	Unit Rate (\$)	Amount (\$)		

Finalisation								
14060.01	Handover and completion report (Finalisation Report)		lumpsum			\$ 5,000.00		

Project Number :
 Project Boundary :MORETON BAY REGIONAL COUNCIL
 Asset Name :BRISBANE - WOODFORD ROAD (401)
 Location :Ch 46.15 - 46.20KM



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BRISBANE - WOODFORD ROAD - BATTER FLATTENING

Item No.	Description	Additional Info	Unit of Measure	Quantity	Unit Rate (\$)	Amount (\$)
Project Stage Management (All Stages)						
15010.01	TMR internal project management		lumpsum			\$ 2,000.00
Work Package: Principals Obligations						Total: \$ 24,018.00
Public Utility Plant						
18010.01	Public Utility Plant identification		lumpsum			\$ 2,500.00
18090.01P	Relocation of services - Telecommunications assets (Provisional Item if ordered)		lumpsum			\$ 20,000.00
Principals Obligations						
19150.01	Portable long service leave, levies and fees		lumpsum			\$ 1,518.00
Work Package: Principals Contingency						Total: \$ 194,028.00
Project Stage Management (All Stages)						
15080.01	Risk management	40% of Project Cost	lumpsum			\$ 194,028.00
Work Package: A - Roadworks						Total: \$ 263,950.00
MRS02 Nov 23 Provision for Traffic						
20017.01	Planning of temporary traffic management (TMP)		lumpsum			\$ 2,500.00
20018.01	Design of temporary traffic management (TGS)		lumpsum			\$ 2,500.00
20019.01	Implementation, maintenance and removal of temporary traffic management		lumpsum			\$ 50,000.00
20020.01	Administration of temporary traffic management		lumpsum			\$ 1,500.00
MRS28 Nov 19 Contractor's Site Facilities and Camp						
20101.01	Contractor's site facilities		lumpsum			\$ 20,000.00
MRS50 Nov 22 Specific Quality System Requirements						
20151.01	Supply of As Constructed drawings and the additional requirements of As Constructed documents for structures		item	1	\$ 1,500.00	\$ 1,500.00
MRS51 Jun 23 Environmental Management						
20202.01	Develop Environmental Management Plan (Construction)		lumpsum			\$ 5,000.00
20203.01	Implement Environmental Management Plan (Construction)		lumpsum			\$ 5,000.00
20211.01	Cultural Heritage Management		lumpsum			\$ 2,000.00
20242.01P	Fauna Management (Provisional Item, if ordered) (Provisional Item if ordered)		lumpsum			\$ 2,000.00
MRS52 Nov 21 Erosion and Sediment Control						
20502.01	Erosion and Sediment Control Devices (Non-Itemised)		lumpsum			\$ 5,000.00
MRS56 Mar 22 Construction Surveying						
21403.01	Supply survey information		lumpsum			\$ 5,000.00
MRS03 Jul 21 Drainage Structures, Retaining Structures and Embankment Slope Protections						
Removal/Demolition						
30002.01	Removal or demolition of culvert end structures		lumpsum			\$ 2,000.00
Supply and Installation of Culverts						
30251.01	Supply and installation of steel-reinforced concrete pipe culvert components, Class 4, 375mm diameter		m	4.88	\$ 5,000.00	\$ 24,400.00
Concrete in Culverts and End Structures						
30362.01	Aprons to culverts, reinforced concrete		m^3	1	\$ 2,000.00	\$ 2,000.00
30366.01	Precast concrete end structures to culverts, 375RCP		each	1	\$ 2,000.00	\$ 2,000.00
MRS04 Jun 23 General Earthworks						
Preparation						
32001.01	Clearing and grubbing		m^2	540	\$ 5.00	\$ 2,700.00
32001.02	Clearing and grubbing	Tree Removal	m^2	30	\$ 1,100.00	\$ 33,000.00
32003.01P	Stripping of Topsoil (Provisional Quantity, as directed) (Provisional Quantity as Directed)		m^3	55	\$ 50.00	\$ 2,750.00
Excavation						
32101.01	Excavation all materials		m^3	211	\$ 200.00	\$ 42,200.00
Embankment						
32201.01	Embankment		m^3	10	\$ 300.00	\$ 3,000.00
MRS16 Jul 17 Landscape and Revegetation Works						
Landscape and Revegetation - Imported Materials						
50709.01P	Imported topsoil (Provisional Quantity, if ordered) (Provisional Quantity if ordered)		m^3	54	\$ 100.00	\$ 5,400.00
Landscape and Revegetation Works - Turfing						
50901.01	Installation of turf [description]		m^2	540	\$ 50.00	\$ 27,000.00
MRS14 Mar 22 Road Furniture						
Guidance and Information Systems						
50051.01	Road edge guide posts		each	10	\$ 150.00	\$ 1,500.00

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BRISBANE - WOODFORD ROAD - BATTER FLATTENING

50052.01	Supply of regulatory, warning and hazard sign faces, as listed in Clause 1.3 of Annexure MRS14.1	lumpsum	\$	4,000.00
50056.01	Installation of regulatory, warning and hazard signs, as listed in Clause 1.3 of Annexure MRS14.1	lumpsum	\$	10,000.00

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ATTACHMENT C

Outturned Project Costs & Cash Flow

Released under RTI - DTMR

ATTACHMENT D

Nomination Summary & Benefit Cost Ratio

Released under RTI - DTMR

Nomination Summary

Nomination Name	Lewington Rd: Batter slope flattening and vegetation clearing				
Core Road Name	Mount Mee Road	Suburb	Mount Mee		
Network	State	Traffic Growth Rate	2.0%	Discount Rate	6.0%

Road Owner	TMR	Road ID	401
Start (km)	46.150	End (km)	46.200
Length (km)	0.050		

Unique Identifier No.	
Latitude	152.7602778
Longitude	152.7602778
Rural/Urban	Rural
Site Type	Discrete Site - Other

Nature of Concern
 To address the severity of crashes on this curve
 High level of motorcycle crashes, 1 fatal and 1 hospitalisation reported in the last 5 years.

Core Treatments
 Core treatments include:
 • batter flattening to 1 on 6 for 4.5m outside traffic lane
 • tree clearing for minimum 6m outside traffic land

Added Value Treatments

Core	TREATMENTS - First 5 Only	Cost
Treatment 1	1.28 Remove Roadside Hazards (from 2m to 3m)(add if required)	\$705,000
Treatment 2	1.29 Remove Roadside Hazards (from 3m to 4m)(add if required)	\$0
Treatment 3	1.30 Remove Roadside Hazards (from 4m to 5m)(add if required)	\$0
Treatment 4	1.23 Install Chevron Alignment Markers (CAMs) on Outside of Curve	\$0
Treatment 5	No treatment selected	
		\$705,000

Added Value	TREATMENTS - First 5 Only	Cost
Treatment A	No treatment selected	\$0
Treatment B	No treatment selected	\$0
Treatment C	No treatment selected	\$0
Treatment D	No treatment selected	
Treatment E	No treatment selected	
		\$0

DCA GROUPS >>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total	
CRASH SEVERITY																							
Fatal																					1	1	1
Hospitalised																					1	1	1
Medical Treatment																							0
Minor Injury																							0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2

Road Data	
AADT	815
Heavy Vehicle AADT	97
Motorcyclist AADT	
Cyclist AADT	
Pedestrian AADT	0
Speed Limit (km/h)	80 km/h

Project Benefits	Core	Combined
BCR	3.0	3.0
Total Benefits (NPV)	\$2,112,648	\$2,112,648
Total Costs (NPV)	\$705,000	\$705,000
FSI's Saved (20yr)	3.1	3.1
Safety Risk Score	735.2	735.2
Total \$/FSI Saved	\$225,588	\$225,588

Released

ATTACHMENT E

Fatal Crash Investigation Report

Released under RTI - DTMR

Fatal Crash Investigation

Location: Brisbane-Woodford Rd, Mt Mee
Road No: 401
Chainage: Ch. 46.18km (imaps)
Crash Date: Sunday, 3 December 2023
Crash No: 20232020264

Stage 1 Report

Stage 1 Investigation of Road Safety and Road Environment
Conditions

Document control sheet

Contact for enquiries and proposed changes

If you have any questions regarding this document or if you have a suggestion for improvement, please contact:

Contact officer Deputy Regional Director (North Coast)
 Phone Irrelevant information

Document sign off

Report prepared by:

Name Irrelevant information
 Position Acting Senior Advisor (Traffic Investigations)
 Signature Irrelevant information Date 28/08/2024

Submitted by:

Name Irrelevant information
 Position Principal Engineer (Traffic Engineering)
 Signature Irrelevant information Date 8/11/2024

Name Irrelevant information
 Position A/Manager (Assets and Maintenance)
 Signature Irrelevant information Date 22/11/2024

Endorsed by:

Name Irrelevant information
 Position Deputy Regional Director (North Coast)
 Signature Irrelevant information Date 29/11/2024

Purpose of Report

The purpose of this report is to collect road-based information at and on the approaches to crash sites, to determine any road infrastructure factors which, if treated, could reduce the risk of serious crashes happening at the site in the future.

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1 Crash Details

1.1 Description of Crash:

Based on the Queensland Police Service Fatal Incident Information report, on Sunday 3 December 2023 at 9.54am, Unit 1, a motorcyclist, was travelling northbound on Mount Mee Road near the intersection of Lewington Road.

As Unit 1 approached a sweeping right-hand bend, the rider has lost control and veered off to the left side of the road into the culvert.

Speed and inexperience may be a contributing factor. Unit 1 driver pronounced deceased in hospital on s.47(3)(b) of the RTI Act

1.2 Road No. & Gazetted Name:

401

1.3 Through Distance:

Ch. 46.17km

1.4 Exact Location of Crash:

40m north of Lewington Road Gazetted direction.

1.5 Crash No:

20232020264

1.6 Time and Date:

9.54am on Sunday 3 December 2023

1.7 DCA Code:

DCA 805

1.8 Crash Severity:

Fatal

1.9 Victim Information:

s.47(3)(b) of the RTI Act

1.10 Unit Information:

350cc Royal Enfield motorcycle in good condition.

1.11 Atmospheric Conditions:

Dry and clear.

2 Police Report Information

2.1 Police preliminary opinion as to possible road contributing factors:

Snr Constable Barry Griffin of Moreton FCU advised that their investigations to date led them to the opinion that the construction and maintenance standard of the road has not been a significant contributing factor in this incident.

3 Site Details: Site Inspection

3.1 Date of Site Investigation:

08/12/2023

3.2 Description of Crash Site:

The fatal crash detailed in this report occurred on Mt Mee Road (Brisbane-Woodford Rd), which commences in the south at Strathpine in an urban environment and ends some 60km north in a rural environment at the township of D'Aguiar.

A review of latest five year validated crash data, 500m either side of the crash site, has identified four other crashes in the period (1/03/2018 – 28/02/2023), all involving motorcycles. Two of these were DCA 804 "Off left bend into object" type crashes, one being DCA 805 "Out of control on carriageway" type crash and one being a DCA 501 "Head on" whilst overtaking type crash. The DCA 805 incident and the incident detailed in this report, took place on the same reverse curve in the same direction. Signage and linemarking on this reverse curve are to current standards and QPS did not believe that the road was a contributing factor in this December 2023 incident. Of note that in August 2023 TMR implemented a speed limit reduction from the previous 100km/h limit to 80km/h, over the five kilometre section between Chainage 41.7 to 46.9. Part of the rationale for the speed limit drop being the high crash rate involving motorcyclists. The noted crash history all occurred with a posted speed limit of 100km/h.

The location where Unit 1 lost control at Mt. Mee (Ch. 46.17km) is in a rural environment on a reverse curve, which commences with a 135m radius left curve and immediately transitions into a 90m radius right curve. Northbound (gazetted) seal widths include a 3.2m travel lane with 4.2% of superelevation and a 1.2m shoulder. The southbound seal widths include a 3.2m travel lane with 6.3% of superelevation and a 1.2m shoulder. The embankment that Unit 1 impacted is positioned beside the northbound lane around 20m north of Lewington Road and is 1.7m from the northbound edgeline. The cross section of the v drain which starts 0.5m from the road edge, has a 1 on 4 batter slope and then transitions into a 1 on 3 to 1 on 1 slope varying in height from 1.5m to 2.5m.

The pavement at the crash site consists of a sprayed seal which was last resurfaced in May 2007. TMR has an annual pavement resurfacing and rehabilitation program and works are prioritised based on condition, traffic volumes, available funding and other needs across the network. Visual observations indicate that the seal in this area is showing minimal signs of flushing in both the north and southbound lanes. Flushing is where the road has a very smooth or polished surface with little stone texture, which can result in reduced skid resistance. Based on this information, TMR has concluded that the pavement and surface is in fair condition consistent along this section of the road and has not been a significant contributing factor in relation to this incident. A reseal has been planned for the 2024/25

financial year between Ch. 45.76km and Ch. 49.6km which will remove the minor ride quality imperfections, which are a result of the road patches between the reverse curve.

At the time of the crash, Road Edge Guide Posts (REGP) and Chevron Alignment Markers (CAMS) were present around the 50km/h reverse curve and were installed to a high standard, along with freshly painted centre lines, edge lines and continuity lines.

Signs north of Sellin Road (1.77km south of Lewington Rd) on the northbound approach to Lewington Road include

- 3 x regulatory 80 km/h speed signs.
- 2 x large red warning signs, highlighting that the next 2 kms is a high crash zone and that speeding has caused crashes.
- 1 x reverse curve warning sign with a supplementary 50km/h advisory speed warning sign.
- 4 x Chevron Alignment Markers (CAMS) to delineate motorists regarding the left/right 50km/h advisory curve.

The location where Unit 1 lost control is half-way through a 50km/h advisory speed reverse curve that is delineated with 4 CAM warning signs and multiple REGP's. QPS investigations had found that the motorcyclist fell on his side, immediately prior to Lewington Road and then slid 27m before impacting an earth embankment, 15m north of Lewington Road.

TMR crash investigation officer & Principal Engineer individually drove northbound from the Selin Road intersection at the posted 80km/h speed limit and considered the combination of warning and delineation signage to provide a high level of information to the motorist to modify their travel speed and comfortably travel through the reverse curve where the fatal crash occurred. The two officers also covertly observed 20-30 motorcyclists on approach and through the curve and noted that they all appeared to comfortably complete the manoeuvre through the reverse curves whilst staying within their lanes.

An ordered works order has been developed to further improve the northbound signage on approach to Lewington Road. These include relocating an R4-1B(80) speed sign, so it has greater separation from the 50km/h reverse curve advisory warning sign. Additionally, the two large partially faded red high crash zone signs will be replaced with a "high crash zone / reduce speed" type sign and the reverse curve advisory speed warning signs will also be renewed. These signs have been installed by the completion of this report.

3.3 Site Investigation Sketch Plan:

The sketch is the indicative travel path based on advice from QPS and evidence onsite.



3.4 Site Investigation Photographs:



Photo 1: The road alignment leading up to the crash site.



Photo 2: Speed and warning signs on approach to the last reverse curve that unit 1 lost control on.



Photo 3: Image showing the travel path of unit 1 and where unit 1 came to rest.



Photo 4: Image showing the rest point of unit 1 with the motorcycle positioned 2m from rider.

4 Crash History and Analysis

4.1 Road Crash 2 Crash Incident Report:

LIVES LOST CRASH INFORMATION

Time: 0954	Date: 03/12/23	Location: Mount Mee Rd, Mount Mee
No of units: 1	Circumstance / Cause: Veer off road/unknown	
Description: Unit 1, a motorcycle, was travelling north on Mount Mee Road near the intersection of Lewington Road.		
As Unit 1 approached a sweeping right hand bend, the rider has lost control and veered off the left side of the road into the culvert.		
Speed and inexperience may be a contributing factor.		
Unit 1 driver pronounced deceased in hospital or s.47(3)(b) of the RTI Act		
Victim:	s.47(3)(b) of the RTI Act rider of unit 1	
2302020264	NCR 257	

Fatal Crash: 202302020264

Crash Number: 202302020264	Units Involved: 1	Load Date: 22 July 2024 12:57
Severity: Fatal	Fatalities: 1	
Date: 3 December 2023	Hospitalised: 0	
Time: 09	Medically Treated: 0	
Day: Sunday	Minor Injuries: 0	
Street: Not applicable	Police Division: Woodford	Latitude: -27.062543
Street Int: Mount Mee Rd / Lewington Rd / Brisbane - Woodford Rd	Police Patrol Group: North Moreton	Longitude: 152.790545
Landmark: Unknown	Police District: Moreton	Link: Google Map
Suburb: Mount Mee	Police Region: North Coast	
LOA: Moreton Bay Regional	CSB Region: Seq North	
ABS SA2: Woodford - D'Aguilar	POO District: North Coast	
ABS SA3: Caboolture Hinterland	POU Region: North Coast	
ABS SA4: Moreton Bay - North	Road Section ID: 401	
ABS Rural/Urban: Rural	Road Section: Brisbane - Woodford Road	
Authority: State controlled	Thru Dist: 46 ISS	
Atmospheric: Clear	Speed Limit: 80 km/h	
Lighting: Daylight	Crash Nature: Motorcycle or bicycle - overturn, fall, drop	
Road Surface: Sealed (dry)	DCA Code: 805 [Off Path-Curve: Out Of Control On Cway]	
Horizontal Alignment: Curved (view open)	DCA Group: 2200 [Out of Control, On Curve]	
Vertical Alignment: Grade	Roadway Feature: T junction	
Impact Location: O/s road	Traffic Control: No traffic control	

Description:

On 03/12/2023 at approx. 10:00am Police from Woodford Strick have attended a single vehicle crash. Motorbike rider - XXXX DOB XXXX has dropped his bike on a sweeping right bend just north of the Lewington Road intersection. Rider was heading north toward Mt Mee township s.47(3)(b) of the RTI Act.

s.47(3)(b) of the RTI Act

s.47(3)(b) of the RTI Act Woodford attended RBH on s.47(3)(b) of the RTI Act of s.47(3)(b) of the RTI Act being notified of the death of XXXX at 03:08am. s.47(3)(b) of the RTI Act police from s.47(3)(b) of the RTI Act.

Unit 1

Unit Type: Motorcycle	Registration Status: Registered	Occupants: 1
Controlled: Yes	State Registered: Queensland	Casualties: 1
Age: s.47(3)(b) of the RTI Act	Intended Action: Go straight ahead	
Gender: s.47(3)(b) of the RTI Act	Direction: North East	Unit Damage: Moderate - towed away
Licence Level: s.47(3)(b) of the RTI Act	On Street: Mount Mee Road	Towing: Not towing
Licence State: Queensland		Dangerous Goods: No

4.2 Road Crash 2 Crash Listing Detail Report:

Crash Number: 201900138661 Units Involved: 2 Load Date: 30 January 2020 02:28
 Severity: Hospitalisation Fatalities: 0
 Date: 20 January 2019 Hospitalised: 3
 Time: 12 Medically Treated: 0
 Day: Sunday Minor Injuries: 0

Street: Mount Mee Rd Police Division: Woodford Latitude: -27.0824053
 Street Int: Not applicable Police Patrol Group: North Moreton Longitude: 152.76259
 Landmark: Unknown Police District: Moreton Link: [Google Map](#)
 Suburb: Mount Mee Police Region: North Coast
 LGA: Moreton Bay Regional CSB Region: Seq North
 ABS SA2: Woodford - D'Agular PDO District: North Coast
 ABS SA3: Caboolture Hinterland PDO Region: North Coast
 ABS SA4: Moreton Bay - North Road Section ID: 401
 ABS Rural/Urban: Rural Road Section: Brisbane - Woodford Road
 Authority: State controlled Thru Dist: 46.359

Atmospheric: Clear Speed Limit: 100 km/h
 Lighting: Daylight Crash Nature: Head-on
 Road Surface: Sealed (dry) DCA Code: 501 [veh'S Overtaking: Head On]
 Horizontal Alignment: Curved (view open) DCA Group: 2 [Head-on]
 Vertical Alignment: Level Roadway Feature: No feature
 Impact Location: On road Traffic Control: No traffic control

Description:
 Two vehicle traffic crash: Unit 1: xxxxx - White Suzuki motorcycle 1 occupant - xxxxxxxxxxxxxx (rider) Unit 2: xxxxx - Orange/Black Honda motorcycle 2 occupants - xxxxxxxx (rider), xxxxxxxxxxxxxxxx (passenger) Location: Crash occurred on Mount Mee Road directly out the front of 1463 Mount Mee Road. This section of road is a 100km/hr speed limit with 1 lane heading south towards Dayboro and 1 lane heading north towards D'Agular Hwy. There is double continuous dividing lines at this location. Details: Unit 1 vehicle was travelling North and s.47(3)(b) of the RTI Act. The unit 2 vehicle was travelling south towards Dayboro. At the crash location there is a slight bend in the road. At this location Unit 1 vehicle had crossed double continuous lines to overtake a utility. At this time Unit 2 vehicle was travelling the other way. Both vehicles collided head on on the south bound lane causing both vehicle to crash. Unit 1 vehicle and rider slid of the road, unit 2 vehicle and occupants came to a stop in the north bound lane s.47(3)(b) of the RTI Act
 s.47(3)(b) of the RTI Act
 s.47(3)(b) of the RTI Act
 s.47(3)(b) of the RTI Act
 Arrangements made for Brisbane crews to attend RBWH: s.47(3)(b) of the RTI Act

Crash Number: 201900586361 Units Involved: 1 Load Date: 27 March 2020 22:46
 Severity: Hospitalisation Fatalities: 0
 Date: 23 March 2019 Hospitalised: 1
 Time: 15 Medically Treated: 0
 Day: Saturday Minor Injuries: 0

Street: Mount Mee Rd Police Division: Woodford Latitude: -27.081100011
 Street Int: Not applicable Police Patrol Group: North Moreton Longitude: 152.765138388
 Landmark: Unknown Police District: Moreton Link: [Google Map](#)
 Suburb: Mount Mee Police Region: North Coast
 LGA: Moreton Bay Regional CSB Region: Seq North
 ABS SA2: Woodford - D'Agular PDO District: North Coast
 ABS SA3: Caboolture Hinterland PDO Region: North Coast
 ABS SA4: Moreton Bay - North Road Section ID: 401
 ABS Rural/Urban: Rural Road Section: Brisbane - Woodford Road
 Authority: State controlled Thru Dist: 46.893

Atmospheric: Clear Speed Limit: 80 km/h
 Lighting: Daylight Crash Nature: Hit fixed obstruction or temporary object
 Road Surface: Sealed (dry) DCA Code: 804 [Off Path-Curve: Off Cway Lt Bend Hit Obj]
 Horizontal Alignment: Curved (view open) DCA Group: 15 [Off carriageway, on curve; hit object]
 Vertical Alignment: Grade Roadway Feature: No feature
 Impact Location: On road-related area Traffic Control: No traffic control

Description:
 23/03/2019 - 1500 hrs single motorcycle crash has occurred on Mount Mee Road, Mount Mee in the vicinity of number 1420. The single occupant Unit 1 rider was travelling in a westerly direction. Lost control of the bike. Crossed the centre lines and collided with the boundary fence of number 1420 paddock before coming to a stationary position. QFRS, QSA and QPS in attendance. s.47(3)(b) of the RTI Act
 s.47(3)(b) of the RTI Act

Crash Number:	202001063247	Units Involved:	1	Load Date:	11 April 2021 16:06
Severity:	Hospitalisation	Fatalities:	0		
Date:	23 May 2020	Hospitalised:	1		
Time:	14	Medically Treated:	0		
Day:	Saturday	Minor Injuries:	0		
Street:	Mount Mee Rd	Police Division:	Woodford	Latitude:	-27.083254
Street Int:	Not applicable	Police Patrol Group:	North Moreton	Longitude:	152.760270
Landmark:	Unknown	Police District:	Moreton	Link:	Google Map
Suburb:	Mount Mee	Police Region:	North Coast		
LGA:	Moreton Bay Regional	CSB Region:	Seq North		
ABS SA2:	Woodford - D'Aguiar	PDO District:	North Coast		
ABS SA3:	Caboolture Hinterland	PDO Region:	North Coast		
ABS SA4:	Moreton Bay - North	Road Section ID:	401		
ABS Rural/Urban:	Rural	Road Section:	Brisbane - Woodford Road		
Authority:	State controlled	Thru Dist:	46.074		
Atmospheric:	Clear	Speed Limit:	100 kmh		
Lighting:	Daylight	Crash Nature:	Hit fixed obstruction or temporary object		
Road Surface:	Sealed (dry)	DCA Code:	804 [Off Path-Curve: Off Cway L: Bend Hit Obj]		
Horizontal Alignment:	Curved (view open)	DCA Group:	19 [Off carriageway, on curve; hill object]		
Vertical Alignment:	Level	Roadway Feature:	No feature		
Impact Location:	On road-related area	Traffic Control:	No traffic control		

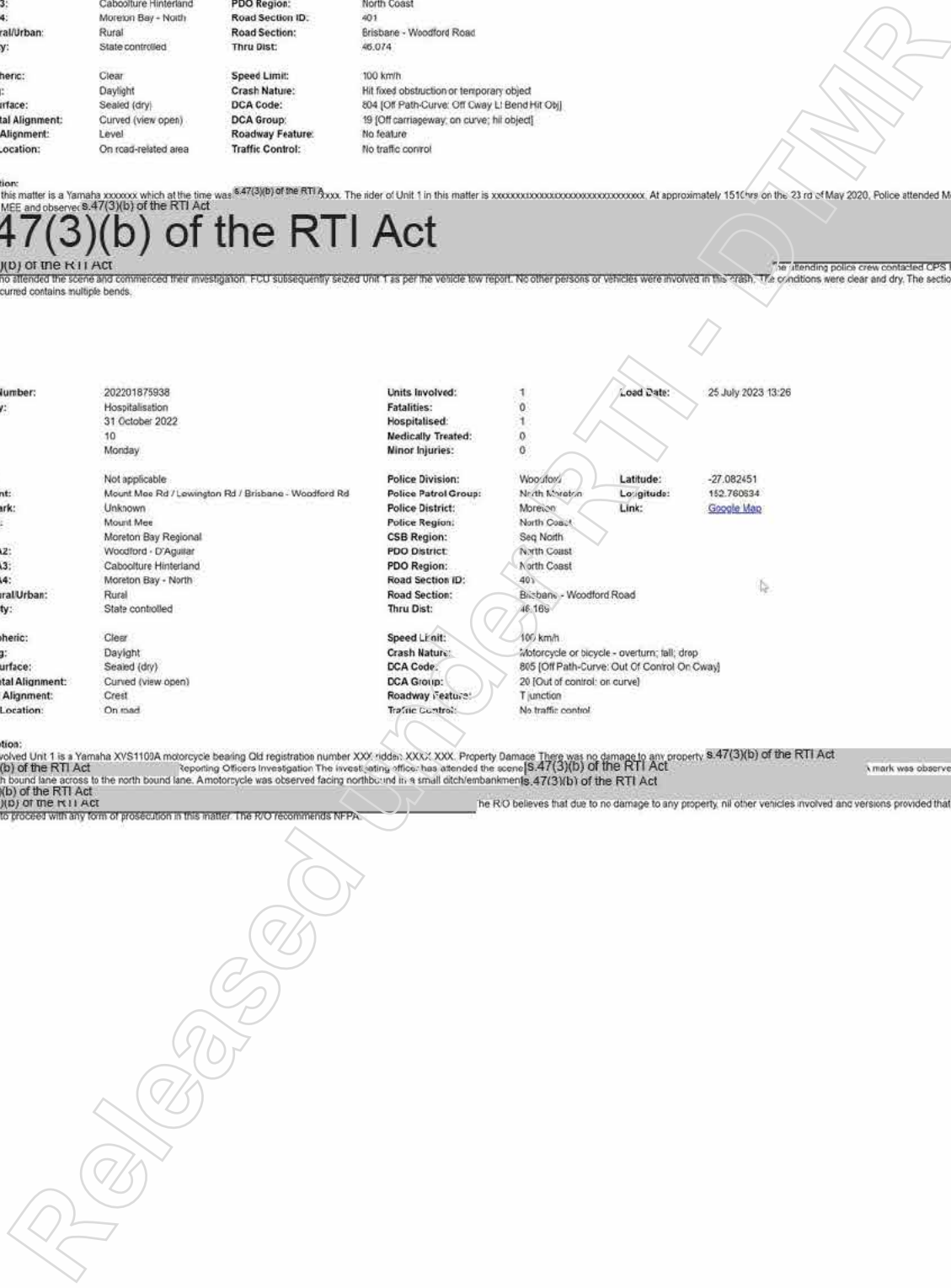
Description:
Unit 1 in this matter is a Yamaha xxxxxx which at the time was s.47(3)(b) of the RTI Act. The rider of Unit 1 in this matter is xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. At approximately 1510hrs on the 23rd of May 2020, Police attended Mount Mee Road, MOUNT MEE and observe: s.47(3)(b) of the RTI Act.

s.47(3)(b) of the RTI Act

s.47(3)(b) of the RTI Act
The attending police crew contacted CPS Forensic Crash Unit (FCU) who attended the scene and commenced their investigation. FCU subsequently seized Unit 1 as per the vehicle tow report. No other persons or vehicles were involved in this crash. The conditions were clear and dry. The section of road where the crash occurred contains multiple bends.

Crash Number:	202201875938	Units Involved:	1	Load Date:	25 July 2023 13:26
Severity:	Hospitalisation	Fatalities:	0		
Date:	31 October 2022	Hospitalised:	1		
Time:	10	Medically Treated:	0		
Day:	Monday	Minor Injuries:	0		
Street:	Not applicable	Police Division:	Woodford	Latitude:	-27.082451
Street Int:	Mount Mee Rd / Lewington Rd / Brisbane - Woodford Rd	Police Patrol Group:	North Moreton	Longitude:	152.760634
Landmark:	Unknown	Police District:	Moreton	Link:	Google Map
Suburb:	Mount Mee	Police Region:	North Coast		
LGA:	Moreton Bay Regional	CSB Region:	Seq North		
ABS SA2:	Woodford - D'Aguiar	PDO District:	North Coast		
ABS SA3:	Caboolture Hinterland	PDO Region:	North Coast		
ABS SA4:	Moreton Bay - North	Road Section ID:	401		
ABS Rural/Urban:	Rural	Road Section:	Brisbane - Woodford Road		
Authority:	State controlled	Thru Dist:	46.169		
Atmospheric:	Clear	Speed Limit:	100 kmh		
Lighting:	Daylight	Crash Nature:	Motorcycle or bicycle - overturn; fall; drop		
Road Surface:	Sealed (dry)	DCA Code:	805 [Off Path-Curve: Out Of Control On Cway]		
Horizontal Alignment:	Curved (view open)	DCA Group:	20 [Out of control: on curve]		
Vertical Alignment:	Crest	Roadway Feature:	T junction		
Impact Location:	On road	Traffic Control:	No traffic control		

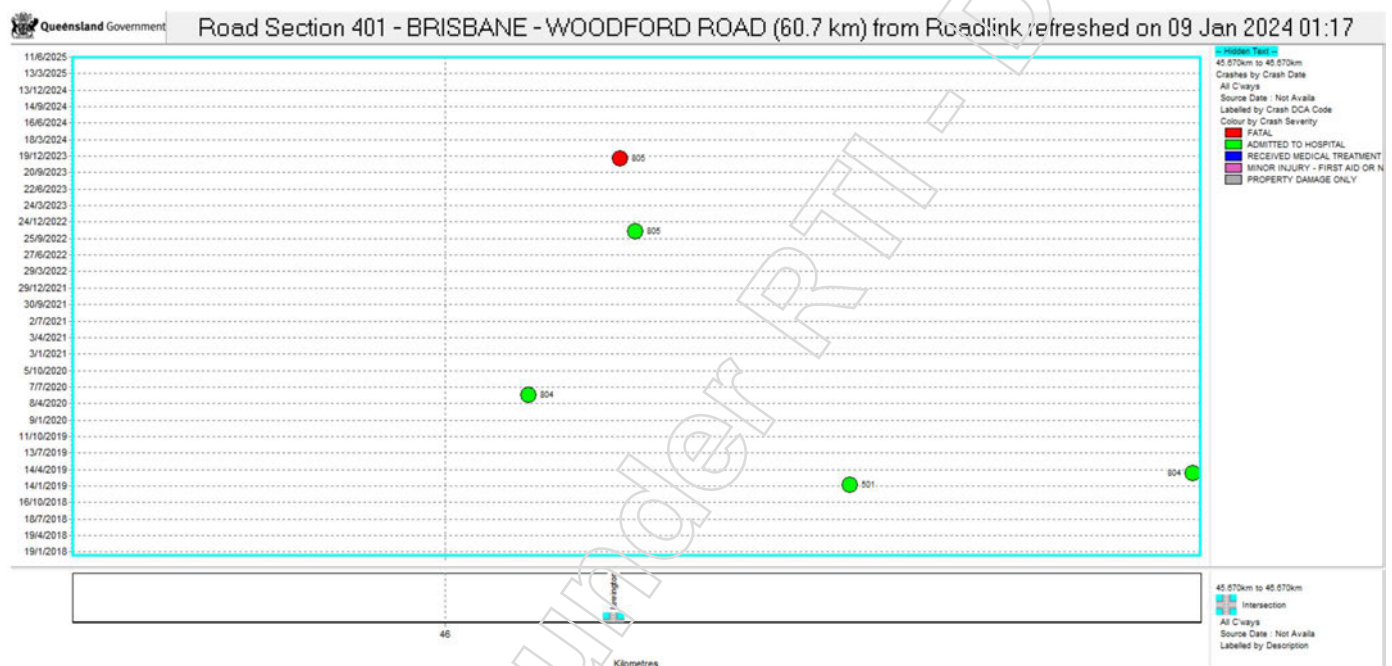
Description:
Units Involved Unit 1 is a Yamaha XVS1100A motorcycle bearing Qld registration number XXX XXXX XXX. Property Damage There was no damage to any property. s.47(3)(b) of the RTI Act
Reporting Officers Investigation The investigating officer has attended the scene s.47(3)(b) of the RTI Act
the south bound lane across to the north bound lane. A motorcycle was observed facing northbound in a small ditch/embankment s.47(3)(b) of the RTI Act
s.47(3)(b) of the RTI Act
s.47(3)(b) of the RTI Act
The RO believes that due to no damage to any property, no other vehicles involved and versions provided that it is not in the public interest to proceed with any form of prosecution in this matter. The RO recommends NPPA.



4.3 Collision Diagram or Chartview Diagram:

A review of crash data over the last five years for a distance of 500m either side of the crash site, has identified there have been four crashes in the previous five year validated crash period (1/3/2018 to 28/2/2023).

Of these four crashes, all involved motorcyclists and three involved motorcyclists crossing the double barrier lines and colliding into vehicles travelling in the opposite direction or farm property fences. One of the four crashes occurred at the exact location as the incident documented in this report. This motorcyclist describes hitting a bump on the road after coming around a bend which threw the motorcycle to the ground. This rider stated he was travelling at 80km/h, however the advisory speed on the reverse curve warning sign recommends travelling the curves at a speed of 50km/h. As noted in section 3.2 of the report, all of these crashes occurred when the speed limit was 100km/h. In August 2023 TMR reduced the speed limit to 80km/h.



5 Attachments

- Appendix A - Crash Site Investigation Checklist.
- Appendix B - Recommended Remedial Countermeasures – Regional Action Plan.

6 Investigating Officer's Statement

This Crash Investigation was carried out by the TMR North Coast Region (NCR) Traffic Engineering (TE), using observations and information made available to them. Every effort was made to ensure that all relevant safety issues were considered.

7 Review

Refer to Appendix B for Recommended Remedial Countermeasures - Regional Action Plan.

7.1 Immediate Remedial Measures:

TMR officers assessed the site for signage deficiencies and determined that leading up to Lewington Road and through the reverse curve, has been signed to current standards displaying 3 x 80km/h speed signs, a 50km/h curve advisory warning sign, CAMS and REGP's and advanced and intersection direction signs. Two large faded red High Crash and Speed warning signs are also in place. TMR officers found that the signage could be improved with the

- installation of 1 new red High Crash Zone / Reduce Speed motorcycle sign in the northbound direction at Ch. 45.58km and the removal of the 2 faded red signs.
- replace existing Reverse Curve and 50km/h Advisory Warning signs positioned at Ch. 45.90km.
- the relocation of 1 x Regulatory 80km/h Speed sign from Ch. 45.83km to Ch. 45.71km as its too close to the Reverse Curve Advisory 50km/h warning signs.

These works are complete.

7.2 Actions that Permanently Reduce Road Safety Risk:

TMR's Road Safety Programs Unit of the Engineering and Technology Branch administer the Targeted Road Safety Program (TRSP). A sub-program of the TRSP is the Fatal Crash Remediation Program (FCRP). This is the only funding avenue currently available for TMR to fund remedial works at this site. The aim of the FCRP is to fund low cost infrastructure that can be implemented with a short lead time and will reduce the potential and/or severity of a future incident. The total cost of a submission for an infrastructure treatment at a fatal crash site is subject to the following maximum project budget caps:

- Up to \$500,000 maximum project funding that requires no supporting minimum benefit cost ratio (BCR)
- Up to \$1,000,000 maximum project funding that requires a supporting benefit cost ratio (BCR) of at least 1.0.

BCR's are calculated based on the project's forecasted ability to address the crash(es) at the site.

TMR will investigate the feasibility of reshaping the earth embankment that unit 1 contacted at the crash site to create a more forgiving roadside. A funding nomination will be made if a treatment can be identified that may help reduce the reoccurrence or severity of a similar off-road incident and meets the FCRP eligibility criteria.

8 Warrant for Stage 2 Investigation

Trigger	Yes/NO (If answer is Yes to any one of the triggers, then stage 2 investigation is needed)	Explanation
Investigation finds that road infrastructure at the site poses significant road safety risks, even though these may not have contributed to the crash	Yes	Roadside environments contain non-frangible items and/or terrain features not considered forgiving to an errant vehicle.
Investigation finds that there is a possibility that the road infrastructure contributed to the likelihood and/or the severity of the crash	Yes	The shape of the earth embankment may have influenced severity of the crash.
Investigation finds that the crash occurred at an emerging crash site	No	
Investigation identifies the crash site as a high-risk location	No	

8.1 Deputy Regional Director Recommendation:

A stage 2 Crash Investigation is a more complex investigation that includes greater level of assessment of road geometry, traffic data and traffic control arrangements on approach and at the crash site. It is considered that the level of detail undertaken within this stage 1 crash investigation has identified sufficient detail regarding the crash site and crash circumstances, and to determine any feasible remedial actions to help address a future crash occurrence or severity. It has been discussed at the NCR Crash Committee that there is no value in undertaking more detailed investigations and proceeding to a Stage 2 report. This report has been reviewed and endorsed by the Deputy Regional Director (North Coast) that a stage 2 report is not required.

Appendix A - Crash Site Investigation Checklist

Crash Site Investigation Checklist - Road Information		
Issue		Information Captured, If applicable (Note if not applicable)
<i>General road and traffic conditions:</i>	Intersections	Lewington Road
	Bridges	N/A
	Merge/diverge/weave arrangements	N/A
	Adjacent speed zones	N/A
	Vehicle composition	HV = 7.8 - 10.8%
<i>Traffic control arrangements:</i>	Traffic signals (type, phasing, defects)	N/A
	Roundabouts	N/A
	Traffic signs (type, location, condition and visibility)	G2-1 road name, Give Way and streetname blade
	Linemarking	Yellow RRPM, double barrier & edgelines in good condition.
	Chevron alignment markers	70m south of crash site.
	Guideposts	At 5.9m spacing on crash curve.
	Road works	N/A
<i>Geometry:</i>	Horizontal (straight, curve radius and direction etc.)	Reverse curve - Left to right. 10m straight between 2 curves.
	Vertical alignment (grade, crest, dip etc.)	Dip between 2 crests.
	Layout	N/A
	Number of lanes including auxiliary/overtaking lanes	2 lane / 2 way
	Lane widths	3.2m
	Shoulder widths	1.2m
	Cross fall	
	Superelevation slope and transition	4.2% fall to southbound lane. See crossfall plan.
<i>Roadside characteristics/conditions:</i>	Clear zone information	4m to trees, 1.5 - 2m to the 2.5m high embankment.
	Cluttered/ uncluttered	Uncluttered
	Urban/rural	Rural
	Commercial/residential	Farming area.
	Roadside hazards	Trees, embankment & batter slope
	Landscaping/vegetation	Roadside trees
	Batters/embankments	NB side - 2m embankment, SB side - 40% batter slope
	Roadside activity (driver distraction)	Nil
<i>Sight distance:</i>	Meet the required sight distance for the posted speed limit?	Not on first left curve of reverse curve due to 3m embankment
	Restricted by road geometry or physical obstructions?	Yes
	Sight obstructions, e.g. overgrown vegetation	Nil

Crash Site Investigation Checklist - Road Information		
Issue		Information Captured, If applicable (Note if not applicable)
<i>Surface type, texture and condition:</i>	Type	8mm Spray seal laid 15/5/2007
	Sealed/unsealed	Sealed
	Wet/dry	Dry
	Surface defects	Small bump at seal change
	Skid marks	No
	Pot holes	No
	Ruts	No
	Loose gravel	At edgeline of intersection
	Slippery	Unknown
	Fatty	Minimal SB & NB
	Polished	Unknown
	Uneven	Slightly at seal change
	Drainage issues	Unknown
	Shoulder/edge drop off	40mm - Either side of intersection NB
	Shoulders sealed/unsealed	Sealed
Ponding	Unknown	
<i>Road furniture:</i>	Sign posts	4 for Roadname & Give Way
	Power/light poles	No
	Guardrail (including end treatments)	No
	Medians	No
	Bridge railings	No
<i>Drainage:</i>	Culverts	23m north of intersection
	Pipes	23m north of intersection
	Floodways	No
	Causeways	No
	Cross fall	No
	Flowpaths	West to east
	Width of the pavement being drained	8.8m
<i>Parking conditions/restrictions:</i>	Associated signs and linemarking	No
<i>Public transport provision/facilities:</i>	Associated signs and linemarking	No
<i>Pedestrian and bicycle facilities:</i>		
	Crossing type	No
	Kerb extensions	No
	Refuges	No
	Supervision	No
	Associated signs and linemarking	No
<i>Additional characteristics:</i>	Accesses	No
	Sidetracks/detours	No
	Stock crossings	No
	Wildlife activity	No

**Appendix B -
Recommended Remedial Countermeasures -
Regional Action Plan**

Released under RTI - DTMR

REGIONAL ACTION PLAN
RECOMMENDED REMEDIAL COUNTERMEASURES
STAGE 1 REPORT

This Regional Action Plan has been developed to address the recommended remedial countermeasures contained within the report.

The site's crash history, preliminary findings of any road contributing factors and preliminary recommended remedial treatments to help reduce the potential or severity of a future incident were discussed at Crash Investigation Report was presented and reviewed at the North Coast Region Crash Investigation meeting held on 23/02/2024. These discussions were minuted and have helped form the recommended remedial crash countermeasures.

Attending the meeting were: Irrelevant information

Irrelevant information

Apologies: Irrelevant information

Crash Investigation Report No:
20232020264

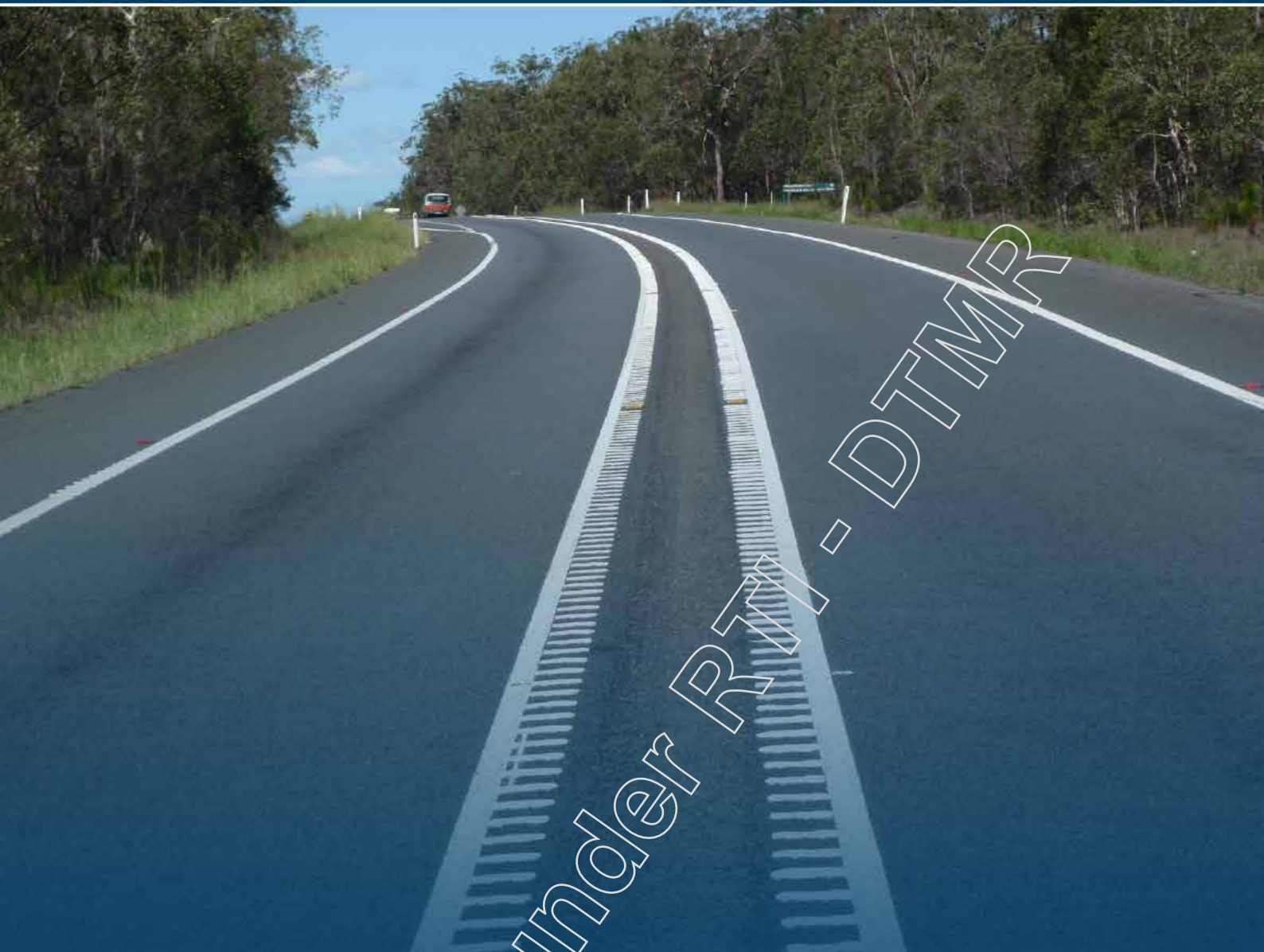
Crash Date:
3/12/2023

Road Name:
Mt. Mee Road

Location:
Lewington Rd, Mt Mee

Ch:
Ch. 46.18km

Ref Number	Recommended Remedial Treatment	Treatment Type (Interim / Permanent)	Agreed Action	Action Officer	Target Completion Date	Comments
1	Upgrade signs as per items listed in this report	Permanent		Irrelevant information	September 2024	Complete
2	As per section 7.2 of this report, develop a layout and cost estimate to reshape the embankment to be forgiving and or install guardrail.	Permanent	Complete funding submission under the FCRP if a treatment can be identified that may help reduce the reoccurrence or severity of a similar off-road incident and meets the FCRP eligibility criteria.	Irrelevant information	June 2025	



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Fatal Crash Remediation Development Guidelines

Targeted Road Safety Program

TRSP – June 2023

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Status:	Final
DMS ref. no:	450/00010

Version history

Version no.	Date	Changed by	Nature of amendment
1.0	26 February – 6 March 2019	Irrelevant information	Endorsements and Approvals – FINAL
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Departmental approvals

Endorsement

The following officers have endorsed this document:

Investment Program Manager – Strategy

Name Irrelevant information

Position Director (Road Safety Programs)

Signature Irrelevant information Date 14 / 06 / 2023

Investment Program Manager – Operations

Name Irrelevant information

Position A/Director (Program Delivery)

Signature Irrelevant information Date 14 / 06 / 2023

Investment Program Manager – Technical

Name Irrelevant information

Position A/Director (Safer Roads)

Signature Irrelevant information Date 14 / 06 / 2023

Investment Program Executive Manager

Name Irrelevant information

Position Executive Director (Safer Roads Infrastructure)

Signature Irrelevant information Date 14 / 06 / 2023

Road Safety Champion

Name Irrelevant information

Position Regional Director (Central Queensland)

Signature Irrelevant information Date 14 / 6 / 2023

Approval

The following officer has approved this document:

Senior Responsible Owner

Name	Irrelevant information	
Position	Chief Engineer	
Signature	Irrelevant information	
	Date	15 / 06 / 2023

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1. Introduction

These guidelines outline the eligibility criteria and timeframes required for the development of a project proposal by Transport and Main Roads (TMR) Program Delivery and Operations (PDO) regions/districts through the Fatal Crash Remediation (FCR) development process.

The FCR development process is intended to target locations on the state-controlled network, where a **Crash Investigation Report** has been completed in response to a fatal crash. Funding approved through FCR is for low-cost, high-benefit infrastructure treatments that have been identified in the fatal crash report and are proven crash countermeasures to reduce the severity and/or likelihood of the type of crash (DCA code) that has occurred.

The primary focus of the development process is to address the fatal crash type that has occurred. If feasible, the treatment(s) could also address other crash trends at the location.

The development process is an ongoing process and a FCR project proposal can be developed and submitted to Engineering and Technology (E&T) for assessment any time throughout the year in response to a fatal crash.

The FCR development process is one of several current active processes used to progress project proposals for consideration under the Targeted Road Safety Program (TRSP).

1.1 Technical Guidance

Regions/districts are encouraged to seek guidance and direction from their designated Safer Roads Infrastructure ([SRI](#)) – [Safer Roads Regional engineering contact](#) when investigating and developing proposals.

1.2 Developing Engineering Treatments

The *Queensland Guide to Road Safety Part 2: Safe Roads* is a recommended reference for the steps involved in investigating road safety issues and developing engineering treatments. This document can be downloaded from the [TMR technical documents website](#).

Once treatment(s) have been determined, choose corresponding treatments from those listed under the *Reduction Factors* worksheet in the Nomination (BCR) Form (spreadsheet).

2. Fatal Crash Remediation Eligibility Requirements

2.1 Locations that can be Nominated

Locations on the state-controlled network that have had a finalised **Crash Investigation Report** undertaken for a fatal crash are eligible to be nominated under the FCR development process. The infrastructure measures recommended must be low-cost and high-benefit that can be implemented immediately. The recommended measures should be infrastructure treatments that have been proven to reduce the severity and/or likelihood of the crash DCA group relating to the fatal crash.

2.2 When can Nominations be Submitted

The FCR development process is an ongoing process. A project proposal can be developed and submitted to Safer Roads Infrastructure (SRI) at any time for assessment throughout the year, to fund feasible infrastructure actions that have been recommended in a Crash Investigation Report which was undertaken to address a fatal crash.

Send your project proposal to your [\(SRI\) – Safer Roads Regional engineering contact](#).

A FCR project proposal should be submitted to SRI at the earliest opportunity following the completion of the Crash Investigation Report as outlined in the Crash Investigation Organisational Policy.

2.3 Funding Limits and Eligibility Requirements

The aim of the FCR Program is to fund low-cost infrastructure measures that can be implemented with a short lead time, which will reduce the potential and/or severity of a future crash similar in nature as identified in the Fatal Crash Investigation report. It is acknowledged that fatal crashes will occur at locations that have a history of various crash trends, where the fatal crash may not be the predominant crash trend. SRI recommend that any capital investment should address as much of the crash history as possible. To ensure benefits are maximised from the limited funding available, the total cost of submissions for each fatal crash investigation is subject to the following maximum project budget caps:

- Up to \$500,000 maximum project funding that requires no supporting minimum Benefit Cost Ratio (BCR)
- Up to \$1,000,000 maximum project funding that requires a supporting BCR of at least 1.0

BCRs are calculated using the BCR functionality built into the latest Nomination Form (spreadsheet) available from the [Annual TRSP Development and Nomination Process](#) SharePoint site. A minimum three-year crash data period is to be adopted for the BCR calculation.

If the identified preferred scope of works cannot be achieved within the above funding limits and supporting BCR requirements, then the Region/District should approach their [SRI – Safer Roads Regional engineering contact](#) with a concept proposal that identifies the:

- Recommended scope of works
- Concept cost estimate
- Anticipated crash reductions
- Timeframe for delivery; and
- BCR

SRI will provide guidance to the Region/District on the way forward, including either:

- Modifying the proposal to fit within the FCR Development requirements.
- Consideration for nomination through the [Annual TRSP Development and Nomination Process](#) (used for development of Safer Roads Sooner, Black Spot and Vulnerable User project proposals).
- If the safety issues warrant, consider the proposal on its own merits for programming under other sub-programs of the TRSP.

2.4 Eligible Treatments

Standard FCR proposals should be low-cost, high-benefit (value-for-money) engineering treatments that have a proven ability to reduce the potential occurrence and/or severity of the DCA code attributed to the fatal crash. Refer to the Crash Reduction Factors Matrix page of the Nomination Form for guidance regarding potential treatments that have proven ability to reduce crash potential for each DCA Group.

2.5 Ineligible Treatments

Recommendations to perform work that is essentially routine or program maintenance; or rehabilitation (e.g.: replacing existing line marking and other existing delineators; replacing existing barrier, repairing shoulders / edge wear) – **ARE NOT ELIGIBLE for FCR funding**. This work should be funded through the Region's/District's *Maintenance, Preservation & Environment (MP&E) Investment Program* allocation.

Planning Studies, Route Link Investigations and Road Safety Audits are not eligible under this program. Regions/districts have Transport System Planning Program (TSPP) funding (*Safety and Critical Maintenance Upgrades*), as well as Road Safety Minor Works (RSMW) funding that can be used for these types of activities.

Only crashes that occur on State-controlled roads are eligible for FCR funding.

If there are any concerns about the eligibility of any potential treatment in a project proposal, seek advice from your [SRI – Safer Roads Regional engineering contact](#) before progressing.

2.6 Delivery Timeframes

Project proposals developed in line with this process, are required to be delivered within **12-months** of the funding approval. This timeframe reflects the responsiveness required to treat sites where a recent fatal crash has occurred.

3. Nomination Process

3.1 Documents Required

For all FCR nominations:

- A completed **Fatal Crash Investigation Remediation Funding Application** (see **Appendix A**). Form F5337 (this can be downloaded from the [TRSP: Sub-programs, Initiatives and Development sharepoint site](#) – clicking on the [link on the Fatal Crash Remediation button](#) to the Fatal Crash Remediation application (F5337). A separate form F5337 must be completed for each nomination. All project proposals must be endorsed by a RPEQ.

If the funds requested exceed \$500,000:

- A completed Nomination Form (spreadsheet) with a BCR of 1.0 or greater is required.

3.2 Submitting a Proposal

Nomination proposals (including all supporting documentation) should be submitted by email to the [TRSP](#) email. These will be reviewed by the [SRI – Safer Roads Regional engineering contact](#).

4. Assessment and Approval

4.1 Assessment

All project proposals submitted will be assessed by SRI. Regions/districts will be notified as soon as possible of the assessment and approval outcome (a three-day turn-around is targeted).

4.2 Raising of Successful Projects

Successful project proposals approved through the FCR development process, are to be raised under the TRSP – **Fatal Crash Remediation** sub-program. Funding to be applied to approved FCR projects should be sourced from the TRSP – Targeted Safety Interventions state-wide bulk (CDOP).

5. Summary

Table 1 – Fatal Crash Remediation Nominations – Key Requirements Summary:


Key Requirements Summary		
Requirement	\$500,000 and Under	Over \$500,000 up to / including \$1,000,000
Fatal Crash Remediation Funding Application required	Yes	Yes
Completed Nomination Form – with BCR of 1.0+ required	No	Yes
Time for assessment by SRI	Up to 7 days	Up to 7 days
Time for completion of approved work	Within 12-months of approval	Within 12-months of approval

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Appendix A

Fatal Crash Remediation Application (Form F5337).

This can be downloaded from the [link on the Fatal Crash Remediation button](#) on the [TRSP: Sub-programs, Initiatives and Development sharepoint site](#).

 **Queensland Government** **Fatal Crash Remediation Funding Application**

Date:

Site details

District: <input type="text"/>	Contact officer/Phone number: <input type="text"/>
Road number: <input type="text"/>	Intersection number (if applicable): <input type="text"/>
Road name: <input type="text"/>	Intersection name (if applicable): <input type="text"/>
Start chainage: <input type="text"/>	End chainage: <input type="text"/>

Investigation details

Crash date: <input type="text"/>	Crash number: <input type="text"/>	Pursuit reference: <input type="text"/>
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Project proposal details

Scope of project (clearly identify which crash investigation recommendations are included)

Project cost:

Cost estimate attached? Yes No

Nomination form (with BCR calculation) attached: Yes No N/A

Page 1 of 2 LT&R Forms Area Form F5337 QFD

Any further information relevant to the proposal

[Large empty text area for providing further information relevant to the proposal]

RPEQ endorsement

I consider the proposed treatment is appropriate to help address the severity and/or likelihood of a reoccurrence of the fatal crash DCA code

Name

RPEQ Registration number

Signature

Date

Regional Director and District Director endorsement

Regional Director name

District Director name

Signature

Signature

Date

Date