

**RED TEXT = Engineer undertaking SLR to complete**  
**GREEN TEXT = Responsible Officer to complete**

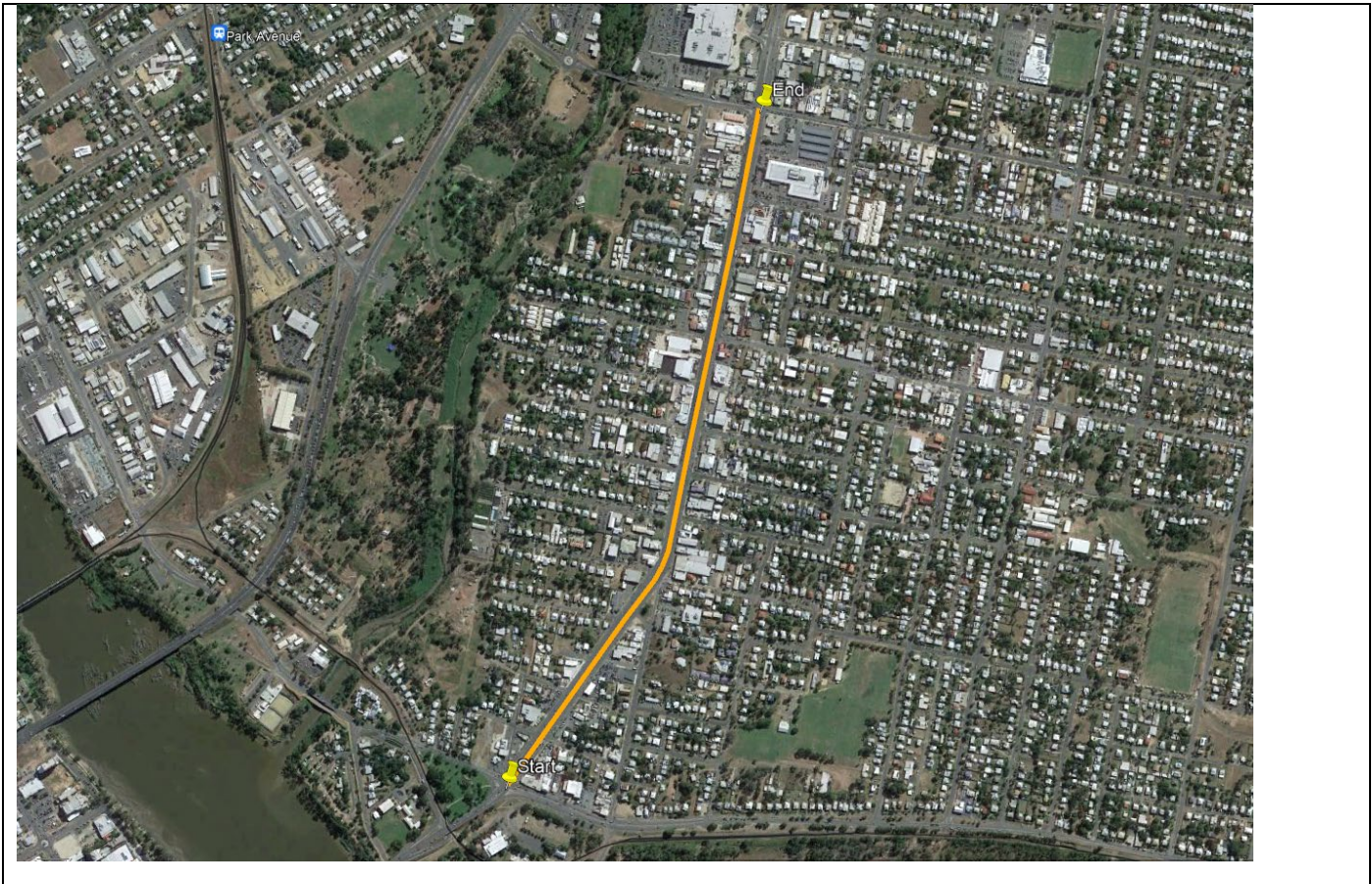
**SITE DETAILS**

Road Authority:  Department of Transport and Main Roads District Date of Assessment: **14/10/22**  
 Local Government Agency Assessor: **John Smith**

Road Name: **Sandy - Kangaroo Road** LGA Name: **Central Regional Council**  
 Road Number (if applicable): **691** TMR District Name: **Central District**  
 Suburb: **Warriorville** Reference: **221014 Sandy Kangaroo Road – 01**

	Location or Reference Point	Chainage or Distance	GPS Coordinates (decimal degrees)	
			Latitude	Longitude
<b>Start</b>	<b>Apple Orchard Road</b>	<b>1.57</b>	<b>-23.372055</b>	<b>150.518705</b>
<b>End</b>	<b>Gas Works Road</b>	<b>3.26</b>	<b>-23.358154</b>	<b>150.523473</b>

Existing Speed Limit (km/h): **60** Segment Length (km): **1.69** Traffic Volume (vpd): **26,688**  
 Aerial Imagery of Speed Zone: Pedestrian Volume (ppd): **416**



**STAGE 1 – NEED FOR REVIEW IDENTIFIED?**

Detail circumstances that lead to a speed limit review being requested (QRSTUV GSM Section 3.5.1):

**Community request to reduce speed due to increased cyclist movements along corridor.**

**Desktop Review** - Detail circumstances that require the need for a full speed limit review to be undertaken:

**Crash rate in 2021 appears to have increased compared to previous years, as well as increases in traffic volumes.**

## STAGE 2 – CRITERIA BASED SPEED LIMIT (CBSL) ASSESSMENT

- Is the road segment a foreshore? Refer to QRSTUV GSM Section 4.3.1 for definition of foreshore
  - No – go to Question 2
  - Yes – refer to QRSTUV GSM Section 4.3.1 and go to Stage 6 (Other considerations)
- Is the road considered a car park or access driveway?
  - No – go to Question 4
  - Yes – go to Question 3
- In the car park, are traffic calming devices present?
  - No – adopt 20km/h speed limit and go to Stage 6 (Engineer Recommendation)
  - Yes – adopt 10 km/h speed limit and go to stage 6 (Other considerations)
- Is the road segment a Shared Zone? Refer to QRSTUV GSM Section 4.3.2 for definition of Shared Zone
  - No – go to Question 5
  - Yes – refer to Section 4.3.2 and go to Stage 6 (Other considerations)
- Is the road unsealed or have a narrow seal? Refer to QRSTUV GSM Section 4.3.3 for definition of unsealed road or road with a narrow seal.
  - No – go to Question 6
  - Yes – refer to QRSTUV GSM Section 4.3.3 and go to Stage 6 (Other considerations)
- Is the speed zone a High Active Transport User Area (HATUA)? Refer to QRSTUV GSM Section 4.3.4 for definition of HATUA
  - No – go to Question 7
  - Yes – refer to QRSTUV GSM Section 4.3.4 and go to Stage 6 (Other considerations)
- Is the speed zone an Urban Local / Access Street? Refer to QRSTUV GSM Section 4.3.5 for Urban Local / Access Street definition
  - No – go to Question 8
  - Yes – refer to QRSTUV GSM Section 4.3.5 and go to Stage 6 (Other considerations)
- Is the speed zone considered to be a footpath or shared path with a different posted speed to the road? Refer to QRSTUV GSM Section 4.3.6 for Footpath or shared path speed zones definition
  - No – CBSL do NOT apply, go to Stage 3 (Risk Assessed Speed Limit) and Stage 4 (Speed Data Speed Limit)
  - Yes – refer to QRSTUV GSM Section 4.3.6 and go to Stage 6 (Other considerations)

## STAGE 3 – RISK ASSESSED SPEED LIMIT (RASL) ASSESSMENT

Crash Risk Rating (CRR)					Infrastructure Risk Rating (IRR)		
DCA Group	Description	(L) FSI Index	(H) FSI Index	No. Casualty Crashes	Road Attribute	Category	
1	Intersection, from adjacent approaches	0.46	0.73	3	Road stereotype	Divided traversable (3.0)	
2	Head-on	0.85	1.44		Alignment	Straight (1)	
3	Opposing vehicles, turning	0.53	0.84		Sealed shoulder width	Wide Shoulder	
4	Rear-end	0.25	0.37		Lane width	Medium <sup>(1)</sup>	
5	Lane change	0.34	0.42	5	Roadside hazard risk - left side	Moderate (1.43)	
6	Parallel lanes, turning	0.36	0.59	1	Roadside hazard risk - right side	Moderate (1.43)	
7	U-turn	0.39	0.57		Land use	Commercial strip (5.0)	
8	Entering roadway	0.38	0.71	2	At-grade intersection density	5 to <10/km (2.6)	
9	Overtaking, same direction	0.50	0.65		Access density	10 to <20km (1.1)	
10	Hit parked vehicle	0.43	0.81	3	Traffic volume	18,000vpd + (3.4) (NA)	
11	Hit train	1.07	0.90		IRR Score	1.79	
12	Pedestrian	0.60	0.98	2			
13	Permanent obstruction on carriageway	0.28	0.53		Road Risk Metric (RRM)		
14	Hit animal	0.53	0.55		CRR Band	Low	
15	Off carriageway, on straight	0.54	0.70		IRR Band	Medium	
16	Off carriageway, on straight, hit object	0.60	0.66	2	RRM	Medium	
17	Out of control, on straight	0.55	0.73				
18	Off carriageway, on curve	0.65	0.59		Road Classification		
19	Off carriageway, on curve, hit object	0.65	0.71		Environmental Context Class	Urban	
20	Out of control, on curve	0.67	0.66		Functional Classification	Arterial	
21	Other	0.51	0.63	1			
Est. FSI per 10 <sup>8</sup> VKT		8.40 (FSI Index * Crashes) 365*5*26688 (Volume) * 1.69 (Length) / 100,000,000= 10.21			Risk Assessed Speed Limit (km/h)		60
Crash Data Period (5 years)							
From (inclusive):		1/1/2017					
To (inclusive):		31/12/2021					

Additional comments (if required):

RASL was undertaken for both Gazettal and Against-Gazettal carriageways.
The results shown above are of the Gazettal carriageway.
The Against-Gazettal Carriageway came out with the same RRM score

STAGE 4 – SPEED DATA SPEED LIMIT (SDSL) ASSESSMENT

Mean Speed (km/h): 52.1 Speed Data Conforms with Speed Limit (Y/N) : Y
Upper Limit of 15km/h Pace Speed (km/h): 62 Speed Limit Suggested by Speed Data (km/h): N/A
Percentage within Pace Speed (%): 68.3
Speed Data Speed Limit (km/h): 60

Additional comments (if required) (e.g. dates, times, locations and descriptions of speed data collected):

Speed Data was collected over a 7-day period. Vehicle data recorded on Monday-Friday between 6am and 6pm was utilised for the speed data analysis.
The speed data was collected on a straight segment, away from signalised and priority-controlled intersections., as this represented a significant portion of the road's length.
The conditions at the time were clear and dry. The road was free of any road works and maintenance.
Count data was obtained from Speed Data.

STAGE 5 – ASSESSED SPEED CONSIDERATION

- 1. Does SDSL Correlate with RASL?
2. Is SDSL lower than RASL?

Assessed Speed Limit (km/h): .....60.....

Additional comments related to speed management activities (if required) (QRSTUV GSM Section 6.1):

N/A

STAGE 6 – OTHER CONSIDERATIONS

Are there other site specific circumstances that may apply or exist that could affect the selection of an appropriate speed limit? (refer to QRSTUV GSM Section 7 for relevant guidance, sub-sections as per below):

	Yes	No
Is there school activity in the speed zone? (Section 7.1)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is a variable speed limit sign appropriate? (Section 7.2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a speed limit required for a specific vehicle class? (Section 7.3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the road a traffic carrying road through strip-shopping centres or commercial area? (Section 7.4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the road a speed zone on an arterial road through a rural town? (Section 7.5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a high crash rate? (Section 7.6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a high crash rural intersection? (Section 7.7)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the road being considered for a 110km/h speed limit? (Section 7.8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the road have a rough surface? (Section 7.9)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a temporary speed limit being proposed? (Section 7.10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a signalised intersection on the road section? (Section 7.11)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the road section an on or off ramp? (Section 7.12)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the speed limit proposed to be offset? (Section 7.13)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there other circumstances to consider? (Section 7.14)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Considered Speed Limit (km/h): .....60.....

Additional comments related to other considerations (if required, particularly noting if there is more than one speed limit, such as for a school zone, variable speed limits, speed limits for a specific vehicle class or path speed limits):

The land use is strip shopping on this 6 lane road. It is felt that while a lower speed may be considered, the existing 60km/h is being abided by and the road has a low crash rate. The road has signalised intersections along the length of the road, although as they are on existing 50km/h or 60km/h roads, there was not deemed any concern with these signalised intersections.

STAGE 7 – ENGINEER RECOMMENDATION

SUMMARY OF TECHNICAL ASSESSMENTS

Stage 2 – CBSL Apply (Y/N):	N	if Yes, Details:	
Stage 3 – RASL Speed Limit (km/h):	60	Safety Works Required (Y/N):	N
Stage 4 – SDSL Speed Limit (km/h):	60	Speed Management Activities Recommended: (Y/N):	N
Stage 5 – Assessed Speed Limit (km/h):	60	More than one Speed: (Y(km/h)/N):	N
Stage 6 – Considered Speed Limit (km/h):	60	More than one Speed: (Y(km/h)/N):	N
<b>Stage 7 – Recommended Speed Limit (km/h):</b>	<b>60</b>		

ENGINEERS RECOMMENDATION:

Does the recommended speed limit align with the technical assessments assessed speed limit summarised above (Y/N): ...Y.....

If Yes, provide details of any accompanying works or 'context for suitability of the (QRSTUV GSM Section 8) recommended speed limit (if applicable):

As the RASL correlates with the SDSL for this section, retaining the existing 60km/hr speed limit appears appropriate without any additional speed management measures necessary.

This speed limit is also in line with the adjacent speed limits.

If No, detail alternate recommendation and provide reasons / justification of your (the Engineers) recommended speed limit:

SPEED LIMIT REVIEW - RECOMMENDED SPEED LIMIT (km/h): .....60.....

RESPONSIBLE OFFICER'S ACCEPTANCE OF ENGINEERS RECOMMENDATION:

Do you (the Responsible Officer) accept the speed limit review and engineer recommendations undertaken by the Engineer:
[ ] No - return to suitably qualified Engineer to repeat Stages 1 - 6 with justification
[X] Yes - submit to SMC

Name: Jane Smith
Position: Manager (Road Operations)
Signature: Signature Here
Date: 28/11/22

NOTE: In accepting the Engineering Recommendation the responsible officer accepts that the speed limit review has been completed in accordance with the process outlined within the TMR's QRSTUV GSM, by a certified engineer experienced in undertaking speed limit reviews and general road safety matters. It is not for the Responsible Officer to question the Engineering Recommendation if the speed limit review has been conducted appropriately.

If No, detail why the speed limit review was not accepted (if required):

Dotted lines for providing justification if the recommendation was not accepted.

STAGE 8 - APPROVAL AND IMPLEMENTATION

SPEED MANAGEMENT COMMITTEE FINDINGS:

SMC Endorse Engineers' Recommendations (Y/N): Y Date of SMC: 14/11/22

If No, provide justification:

Dotted lines for providing justification if the SMC did not endorse the recommendations.

NOTE: Attach documented findings from the Speed Management Committee to this Form

Where the SMC has NOT endorsed the recommendations of the engineer, the responsible officer shall require the engineer to reconsider the recommendation (refer to QRSTUV GSM Section 9.2).

RESPONSIBLE OFFICER APPROVAL:

Approved Speed Limit (km/h): 60 Name: Jane Smith
Additional Approved Works (if applicable): Position: Manager (Road Operations)
Signature: Signature Here
Date:

NOTE: The responsible officer shall provide a copy of the documentation that supports this Speed Limit Review to either through the approved online system or email to speedlimitreview@tmr.qld.gov.au.

STAGE 9 – MONITOR & EVALUATE

Will the speed limit or speed environment be altered as a result of the recommendations contained within this speed limit review?

- Yes – program post-implementation to occur within 3 months following implementation and schedule routine review in 5 years or sooner
- No – schedule routine review in 5 years or sooner

Date of Next Review: ..... 28/11/22 .....

MISCELLANEOUS

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

- Local Traffic Advisory Committee (TAC)
- Local Speed Management Committee (SMC)
- Regional QPS Traffic Co-Ordinator

Reported by: .....

Position: .....

Date: .....

Additional Comments (if required):

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