



REPORT ON PROPOSAL BY YARRA CITY COUNCIL FOR MILLER STREET MEDIAN CLOSURE AT RAE STREET AND WHITE STREET IN THE FITZROY NORTH AREA

1. PROPOSAL

The Department of Transport received a request from Yarra City Council to consider the trial installation of a kerbed median on Miller Street to prohibit right turns in and out of Rae Street and White Street as part of a Local Area Place Making Plan (LAPM) for Fitzroy North.

The LAPM was adopted in March 2019 and aims to create a more livable area for the community through a placemaking approach. A traffic impact assessment report has been prepared by GTA consultants on behalf of the City of Yarra (Fileit reference 17958977).



Figure 1 Proposed changes to Miller Street at Rae Street and White Street as per GTA Traffic Impact Assessment V171550

2. EXISTING CONDITIONS AND TRAFFIC PATTERNS

Miller Street carries approximately 2,900 vehicles per day and intersects with the two state managed roads -St Georges Road to the east and Nicholson Street to the west. It is generally configured as a two-way, two lane local road with on-street parking and has a carriageway width of approximately 13m. Local area traffic management devices are present in the form of speed cushions and chicanes, reducing the trafficable width to a single lane at some locations.

Bus route 506 operates along Miller Street between Nicholson Street and St Georges Road. In addition, tram routes are present along Nicholson Street and St Georges Road.

White Street						White Street					
			44 ↑	↓	134				148 ↑	↓	74
			4 ↓			Miller Street			3 ↓		
111	51 →	1	114	19	76	148	106 →	2	52	20	154
→	56 ↓	←	↓	↔	→	→	39 ↓	←	↓	↔	→
←	↔	↑	↔	↔	←	←	↔	↑	↔	↔	←
107	13	25	6	←	93	148	109	29	110	28	←
			↔	↔	↔				↔	↔	↔
			↔	↔	↔				↔	↔	↔
			44 ↑	↓	210				167 ↑	↓	114
Rae Street						Rae Street					

Figure 2 Existing turning movements at the intersection of Miller St, Rae St and White St during the AM peak (left) and PM peak (right) as per GTA Traffic Impact Assessment V171550.

3. EFFECT OF CLOSURE

To be able to understand the effect of the proposed closure, it is necessary to understand potential operational and safety impacts on adjacent intersections.

The GTA report does not assess the change in vehicle volumes and associated operational implications at the unsignalized intersections of St Georges Road & Miller Street and Miller Street & Nicholson Street.

For further context it is also important to note how each of the intersecting roads are configured:

- Nicholson Street has two lanes in each direction, consisting of a dedicated tram lane (with vehicles permitted to make turns at Miller Street) and a vehicle lane; and
- St Georges Road is configured with on-road bicycle lanes in both directions, two vehicle lanes and two shared tram and traffic lanes.

The proposed closures will require vehicles travelling:

- Southbound to make a right turn at the unsignalized intersections of St Georges Rd or Nicholson Street; and
- Northbound to make a right turn at Nicholson St.

As no existing condition analysis has been undertaken, it is difficult to establish additional delays and the associated difficulty road users may have in selecting an appropriate gap at each unsignalized intersection.

Whilst this may be problematic at the intersection of Nicholson Street and Miller Street, these difficulties are likely to be more prevalent at the intersection of Miller Street and St Georges Road. This is because there are greater cognitive demands for drivers as they are required to give way to trams, vehicles and cyclists prior to completing the desired maneuver.

Furthermore, these difficulties in gap selection are highlighted by the presence of bus detectors on Millers Street which activate the nearby pedestrian operated signals to facilitate bus movements on to St Georges Road. This indicates that buses may have difficulties in selecting an appropriate gap and are likely delayed. The proposed arrangement would likely increase the delays experienced by buses.

A review of crash history for the five-year period ending 30 June 2019 shows:

- At the intersection of St Georges Road and Miller Street, nine crashes have been recorded of which two involve road users undertaking a right-turn from Miller St

- to St Georges Rd; and
- At the intersection of Nicholson Street and Miller Street, nine crashes have been recorded of which five are classified as cross-traffic (DCA 110) and involve road users attempting to travel east-west along Miller Street. A single crash involving a vehicle attempting to enter Nicholson Street from Miller Street (west) has been recorded.

For the full crash history, please refer to Figures 3 and 4 in the Appendix.

The Department of Transport (DoT) understands that both St Georges Road and Nicholson Street, in the vicinity of Millers Street, is often congested during peak periods, which may exacerbate the above safety and operational concerns.

4. IMPACT ON PUBLIC TRANSPORT & EMERGENCY VEHICLES:

Trams along Nicholson Street are likely to be impacted as outlined in the GTA Report due to increased vehicle volumes directed to Nicholson Street.

Buses on route 506 will have increased travel times due to greater demand for turning movements from Miller Street to St Georges Road and Nicholson Street.

It is recommended that Yarra City Council consult emergency services to confirm that the closures will not detrimentally impact operation.

5. CONCLUSIONS:

DoT does not support the trial installation of a kerbed median on Miller Street to prohibit right turns into and out of both Rae Street and White Street due to the potential impact on public transport and safety concerns at the unsignalized intersections of St Georges Road & Miller Street and Nicholson Street & Miller Street.

If you wish to discuss the matter further, Mr Manawa Herath - Senior Movement and Safety Engineer (Tel: 03 9313 1241) would be pleased to assist.

Yours sincerely,



THOMAS ALEMIS
A/TEAM LEADER – MOVEMENT & SAFETY CENTRAL
17 /03/ 2020

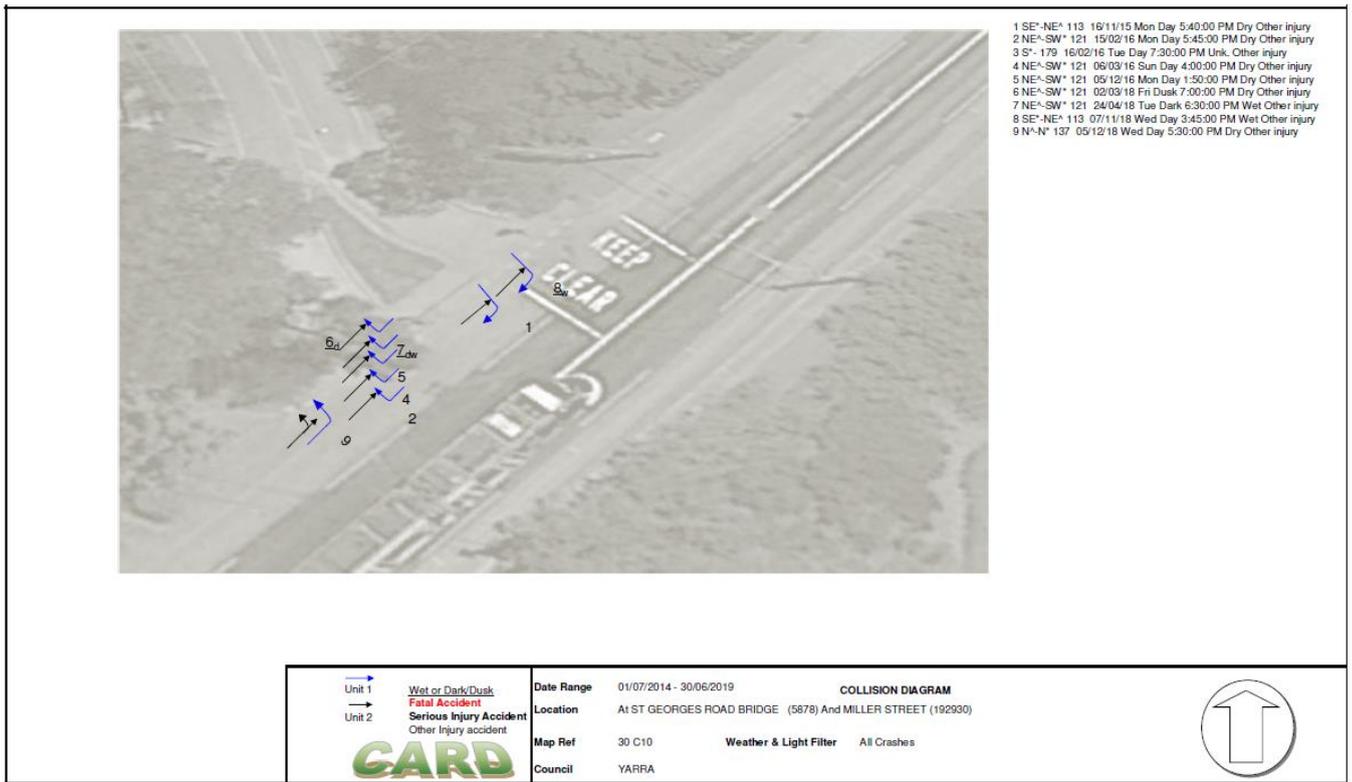


Figure 3 Crash diagram for the intersection of Miller Street and St Georges Road

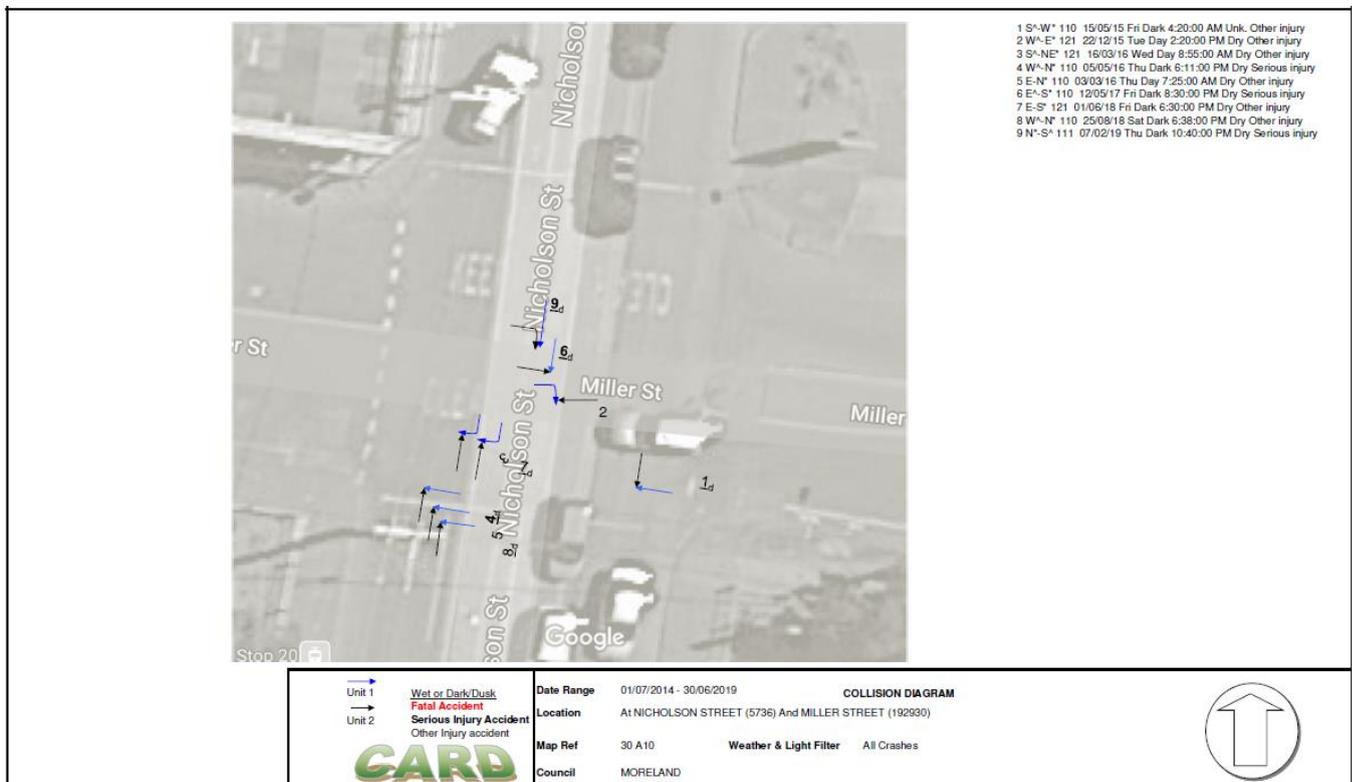


Figure 4 Crash diagram for the intersection of Miller Street and Nicholson Street