## **Traffic Committee**



# AGENDA

DATE OF MEETING: 14 April 2025 LOCATION: Committee Rooms TIME: 2.30pm

## **Statement of Ethical Obligations**

The Mayor and councillors are reminded that they remain bound by the Oath/Affirmation of Office made at the start of the council term to undertake their civic duties in the best interests of the people of Fairfield City and to faithfully and impartially carry out the functions, powers, authorities and discretions vested in them under the Local Government Act or any other Act, to the best of their skill and judgement.

The Mayor and councillors are also reminded of the requirement for disclosure of conflicts of interest in relation to items listed for consideration on the Agenda or which are considered at this meeting in accordance with the Code of Conduct and Code of Meeting Practice.

#### AGENDA Traffic Committee Meeting Date: 14 April 2025

SUBJECT

## - APOLOGIES AND REASONS ACCEPTED

- CONFIRMATION OF MINUTES

## **SECTION A**

'Matters referred to Council for its decision'

There are no reports submitted for this section.

## **SECTION B**

'Matters submitted to the Committee for decision subject to the right of referral'

9:	Brenan Street Smithfield - Installation of Flat-Top Road Hump File Number: 12/03610
10:	<u>Cheyenne Road Greenfield Park - Review of Existing Speed Cushion</u> File Number: 17/1426715
11:	<u>Kamira Court Villawood - Installation of a Part-Time 2 Hour Parking Restriction in Council</u> <u>Car Park</u> File Number: 25/07025
12:	Polding Street and Marlborough Street Smithfield Intersection - Roundabout Upgrade File Number: 11/02644
13:	Smithfield Road and Cherokee Avenue Greenfield Park Intersection - Proposed Full- Time Right Turn Ban from Cherokee Avenue onto Smithfield Road and Upgrade of the Existing Pedestrian Refuge Island File Number: 12/00329

PAGE

ITEM

# **Traffic Committee**



# SECTION B

'Matters submitted to the Committee for decision subject to the right of referral'

Meeting Date 14 April 2025

**SUBJECT:** Brenan Street Smithfield - Installation of Flat-Top Road Hump

#### **FILE NUMBER:** 12/03610

**REPORT BY:** Simon Cai, Professional Engineer

#### **RECOMMENDATION:**

That:

- 1. The installation of 1 flat-top road hump in Brenan Street (outside house numbers 267 and 270) between Gipps Road and Dublin Street Smithfield, as shown in Attachment A of the report, be approved.
- 2. The affected stakeholders be notified of the Committee's decision.
- 3. The Fairfield City Police Area Command (PAC) be requested to undertake surveillance to deter motorists from speeding along Brenan Street Smithfield.

#### SUPPORTING DOCUMENTS:

AT-A J Concept Plans

2 Pages

#### CITY PLAN

This report is linked to Theme 2 Places and Infrastructure in the Fairfield City Plan.

#### SUMMARY

Council had received reports over the years regarding speeding and other road safety concerns in Brenan Street Smithfield.

A traffic survey in Brenan Street in October 2024 revealed that Brenan Street (between Wetherill Street and Gipps Street) has an 85<sup>th</sup> percentile speed of 58km/h which is higher than the speed limit of 50km/h. The traffic counts also identified a number of vehicles travelled in excess of 60km/h over the 7-day surveyed period.

The Traffic assessment carried out in accordance with Council's Intervention Guidelines found that Brenan Street requires consultation for a physical traffic calming device as an

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intervention. Council consulted residents regarding the installation of flat-top road humps on Brenan Street Smithfield between Wetherill Street and Dublin Street.

Council has allocated \$80,000.00 under the Local Area Traffic Management (LATM) program to implement traffic calming devices in Brenan Street Smithfield. Upon further review, the available funding will cover the installation of 1 flat-top road hump instead of 2 as initially thought. Consideration for the installation of additional traffic calming devices in Brenan Street will be reviewed when considering future LATM projects. The proposed installation of 1 flat-top road hump in Brenan Street as shown in attachment A is recommended for approval.

#### BACKGROUND

Council has received complaints from the local community regarding motorists speeding in Brenan Street Smithfield.

The Fairfield City Police Area Command has been requested to include Brenan Street Smithfield as part of their patrols to help deter speeding in the street.

Brenan Street is classified as a collector road with a default urban speed limit of 50km/h. Currently, land use surrounding Brenan Street is predominately residential and there are school buses operating in the street.



Figure 1: An aerial photo indicating Brenan Street Smithfield between Wetherill Street and Dublin Street and its locality.

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#### DISCUSSION

#### Intervention Guidelines

The following table identifies traffic calming priority guidelines at which intervention is considered appropriate to address speeding issues in residential streets. The guide uses the traffic conditions (such as speed, volume, accidents) at which intervention with an appropriate traffic calming measure would be considered.

Intervention Guide - Traffic Calming Priority Guidelines for 50km/h local/collector roads

				High Speed of surveyed		
85 <sup>th</sup> percentile speed (km/h)	Consult for intervention	5-year crash history	Consult for intervention	No. of vehicles travelled between 70- 80km/h	No. of vehicles travelled >81km/h	Consultation for intervention
<50km/h	No	>=5	Yes	>30	>20	Yes
51-55km/h	No	>=4	Yes	>30	>20	Yes
56-60km/h	Maybe (crash or peak travel speeds determine)	>=3	Yes	>30	>20	Yes
>61km/h	Yes	>=2	Yes	>30	>20	Yes

 Table 1: Assessment of Brenan Street warrant for traffic calming devices in accordance with Council's traffic calming intervention guide.

This proposal meets the above guide in terms of the number of vehicles and the 85<sup>th</sup> percentile speed data recorded as highlighted in bold within the above table.

#### Traffic Conditions

Council has allocated funding under the LATM program to implement traffic calming devices on Brenan Street to address the community's concerns. This proposal is to help reduce speeding on Brenan Street Smithfield between Wetherill Street and Dublin Street.

A 7-day traffic count was undertaken in October 2024 to obtain information related to the travel speeds and traffic volumes on Brenan Street Smithfield. The results of the 7-day traffic count indicate that the combined 85<sup>th</sup> percentile speed (speed in which majority of motorists recorded travelling) on Brenan Street is 58km/h and the Annual Average Daily Traffic (AADT) was recorded at 3,517.

The recorded AADT of 3,517 is consistent with the traffic volumes expected on a collector road which is designed to move motorists from local roads to regional roads such as Wetherill Street. Considering the speed limit is 50km/h, the recorded 85<sup>th</sup> percentile of 58km/h is considered relatively high when compared to the speed limit of 50km/h.

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Further, the number of vehicles travelling between 70km/h - 80km/h in Brenan Street at the surveyed location is 147 vehicles per day. The number of vehicles travelling over 80km/h is recorded as 39 per day.

	Eastbound		Westbound		
85 <sup>th</sup> percentile speed	No. of vehicles travelling between 50- 60km/hr	No. of vehicles travelling between 60- 70km/h	85 <sup>th</sup> percentile speed	No. of vehicles travelling between 50-60km/h	No. of vehicles travelling over 60- 70km/h
58km/h	4324	676	58km/h	5349	705

 Table 2: Assessment of Brenan Street warrant for traffic calming devices in accordance with Council's traffic calming intervention guide.

	Eastbound		Westbound			
85 <sup>th</sup> percentile speed	No. of vehicles travelling between 70- 80km/hr	No. of vehicles travelling over 80km/h	85 <sup>th</sup> percentile speed	No. of vehicles travelling between 70-80km/h	No. of vehicles travelling over 80km/h	
58km/h	64	12	58km/h	83	11	

 Table 3: Assessment of Brenan Street warrant for traffic calming devices in accordance with Council's traffic calming intervention guide.

#### Crash Analysis for Brenan Street Smithfield between Wetherill Street and Dublin Street

According to the Transport for NSW (TfNSW) crash data for the past 5-year period (from 1 July 2018 to 30 to June 2023) there were 10 reported crashes on Brenan Street Smithfield between Wetherill Street and Dublin Street with a majority of the crashes occurring at the roundabout intersection of Brenan Street and Gipps Street Smithfield as shown below:

- 1 x cross-traffic minor/other injury crash on 20 November 2019 (RUM Code 10) involving a westbound passenger vehicle colliding with a northbound passenger vehicle in dry, night and fine conditions.
- 1 x cross-traffic serious injury crash on 21 January 2020 (RUM Code 10) involving a northbound passenger vehicle colliding with a westbound passenger vehicle at the intersection in dry, daylight and fine conditions.
- 1 x cross-traffic tow-away crash on 6 February 2020 (RUM Code 10) involving a westbound passenger vehicle colliding with a northbound passenger vehicle in wet, night and overcast conditions.
- 1 x cross-traffic minor/other injury crash on 16 September 2021 (RUM Code 10) involving a southbound passenger vehicle colliding with an eastbound cyclist at the intersection in dry, daylight and fine conditions.
- 1 x cross-traffic moderate injury crash on 1 December 2021 (RUM Code 10) involving a northbound light truck colliding with a westbound passenger vehicle in dry, daylight and fine conditions.

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- 1 x cross-traffic serious injury crash on 13 January 2022 (RUM Code 10) involving a northbound passenger vehicle colliding with a westbound passenger vehicle in wet, daylight and raining conditions.
- 1 x manoeuvring minor/other injury crash on 5 July 2022 (RUM Code 10) involving two passenger vehicles colliding at unknown directions in wet, daylight and overcast conditions.
- 1 x cross-traffic minor/other injury crash on 14 November 2022 (RUM Code 10) involving a northbound passenger vehicle colliding with a westbound passenger vehicle in dry, daylight and fine conditions.
- 1 x cross-traffic tow-away crash on 13 July 2023 (RUM Code 10) involving a westbound passenger vehicle colliding with a northbound passenger vehicle in dry, night and fine conditions.

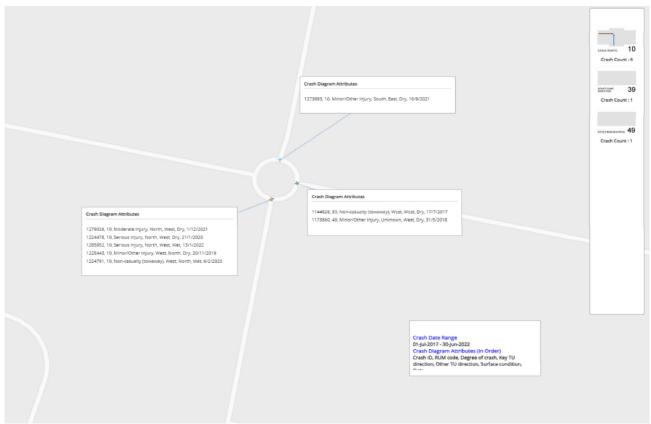


Figure 2: Crash diagram for the intersection of Brenan Street and Gipps Street Smithfield for the past 5 year period (from 1 July 2018 to 30 June 2023).

As a result of adverse crash history at Brenan Street and Gipps Street Smithfield intersection, Council was successful in obtaining funding under the Australian Government Blackspot Program 2024/2025 to address the crashes specifically at this location. Roundabout construction works are programmed to be completed within the financial year of 2024/2025.

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#### Proposed Flat-Top Road Hump under the 2024/2025 LATM Project

The original proposal was to install 2 flat-top road humps outside house numbers 267 and 270 Brenan Street Smithfield and house numbers 287, 289 and 304 Brenan Street Smithfield.

However, due to funding availability and a review of project cost, low overhead wires (height clearance of approximately 4m) at 287, 289 and 304 Brenan Street Smithfield and an objection from a property owner at this location, Council officers have decided not to proceed with the installation of a flat-top road hump at this location. The installation of additional traffic calming devices in Brenan Street will be reviewed when considering future LATM projects.

The flat-top road hump is proposed on Brenan Street Smithfield between Gipps Street and Dublin Street. The road slopes downhill which means motorists can accelerate when travelling along this section of Brenan Street when compared to the other sections of the road. One flat-top speed hump is proposed in Brenan Street outside house numbers 267 and 270 Brenan Street Smithfield as shown in Attachment A of the report.



Figure 3: A photo showing the vertical dip and tyre marks on Brenan Street Smithfield between Gipps Street and Dublin Street.

The location of the flat-top road humps is based on a systematic approach accounting for the length of the road, road geometry, existing streetlighting, sight lines and vehicle speeds as outlined by the Austroads Guide to Traffic Management Part 8: Local Area Traffic Management 2016 (Section 3.3.2 Device Spacing and Speed-based Design). These factors

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ensure flat-top road humps are placed where they will be most effective in reducing vehicle speeds, while minimising negative impacts on traffic flow and road users.

All the proposed flat-top road humps are placed near an existing streetlight to ensure that they are visible to motorists in low light conditions. This will help motorists to adjust their speed gradually, rather than reacting abruptly, especially at night. As these devices may be misinterpreted as a crossing, fencing is provided at the kerb to prevent pedestrian movements directly onto the device.

Austroads recommends spacing flat top road humps at intervals of 80 to 120 metres to maintain consistent speed reduction along a length of road. On straight roads, the interval is based on an acceleration rate to maximum speed before slowing down. The longer the separation, the higher the expected maximum speed in-between and vice versa.

#### Parking Impacts

The proposal to install a flat-top road hump in Brenan Street will not result in the loss of onstreet parking spaces where hump is proposed to be installed.

#### **CONSULTATION & TIMING**

Consultation letters for the installation of 2 flat-top road humps were sent out to the affected residents in December 2024 allowing them 4 weeks to provide a submission.

The original proposal was also advertised on Council's website for a period of 28 days (from 19 February to 19 March 2025) in accordance with the Roads Act 1993 in place of a local newspaper.

There are school bus services on Brenan Street. Both the local bus company and TfNSW were consulted regarding the proposal and they raised no objections.

#### Resident's Objection

One objection was received from property owner of 289 Brenan Street Smithfield. The resident's concerns were that motorists are using Gipps Street via Polding Street/The Horsley Drive as a shortcut.

In response to resident's concerns about motorists speeding in Gipps Street, Council officers have advised the resident of 289 Brenan Street Smithfield that Council has received funding under the Australian Government Blackspot Program to upgrade the roundabout and install traffic calming devices at the intersection of Brenan Street and Gipps Street Smithfield. This proposal involves the widening of the existing roundabout central island to improve vehicle deflection and install flat-top road humps on all 4 approaches to the roundabout. It is expected to deter motorists from speeding near the intersection. The report of speeding on Gipps Street will be investigated separately to this matter and a response provided to them accordingly when the investigation is complete.

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Figure 4: Indicating the objector's property and where the flat-top road hump is proposed to be installed in Brenan Street impacting the stakeholders.

#### FINANCIAL IMPLICATIONS

The cost of this project is estimated to be \$73,000.00 and it can be accommodated within the Council's budget of \$80,000.00.

#### CONCLUSION

Council has allocated funding to implement traffic calming devices along Brenan Street to address the community's concerns under the LATM.

Based on the outcome of the investigation and the community consultation undertaken by Council officers, it is recommended that approval be granted to install 1 flat-top road hump along Brenan Street Smithfield between Gipps Street and Dublin Street.

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#### Authorisation:

Traffic & Transport Coordinator Manager Design Services Manager Waste and Cleansing Operations

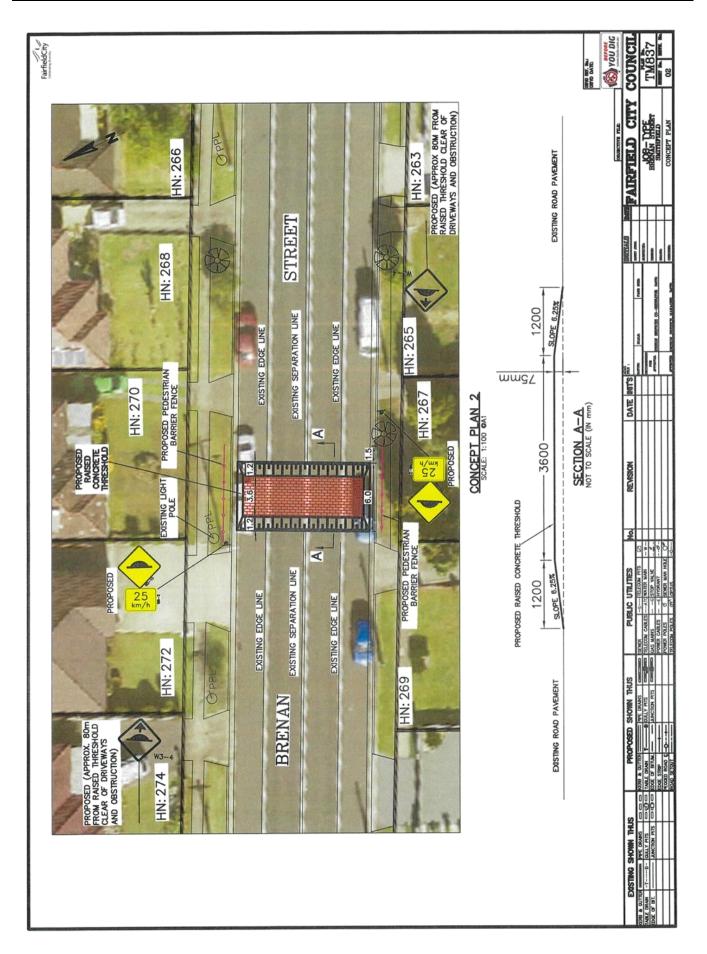
Traffic Committee - 14 April 2025

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\*\*\*\*\* END OF ITEM 9 \*\*\*\*\*







Meeting Date 14 April 2025

**SUBJECT:** Cheyenne Road Greenfield Park - Review of Existing Speed Cushion

#### **FILE NUMBER:** 17/14267

PREVIOUS ITEMS: 31 - Cheyenne Road Greenfield Park - Review of existing Speed Cushion -Traffic Committee - 14 Oct 2024

**REPORT BY:** Gaurab Ghimire, Graduate Engineer (Traffic)

#### **RECOMMENDATION:**

That:

- 1. The speed cushions near 35 Cheyenne Road Greenfield Park be removed.
- 2. The resident be notified of the Committee's decision.

#### **SUPPORTING DOCUMENTS:**

There are no supporting documents for this report.

#### CITY PLAN

This report is linked to Theme 2 Places and Infrastructure in the Fairfield City Plan.

### SUMMARY

Council has received another request to remove the existing speed cushions near 35 Cheyenne Road Greenfield Park.

While speeding remains a concern in Cheyenne Road, a review of individual resident circumstance is sometimes required to be considered. This may lead to the removal of the existing device and investigation of an alternate traffic calming treatment. This would be subject to funding availability in the future.

Accordingly, it is proposed to remove the existing speed cushions near 35 Cheyenne Road Greenfield Park.

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## Background

Council had previously received concerns regarding speeding on Cheyenne Road Greenfield Park which lead to the installation of speed cushions.

A traffic count undertaken in August 2017 revealed the 85th percentile speed was 64km/h on Cheyenne Road, exceeding the posted speed limit of 50km/h (speed 85% of motorists travelled at or below). As a result, 2 sets of speed cushions were installed – 1 near Arrowhead Road and the other outside 35 Cheyenne Road Greenfield.



Figure 1: Aerial photo of Cheyenne Road Greenfield Park.

These speed cushions were initially implemented for a 6-month trial period. The speed cushions demonstrated a reduction in vehicle speeds.

Following the installation of the speed cushions, another 7-day traffic count was conducted in December 2021 to measure the impact of the speed cushions on vehicle speeds and traffic patterns. The results of this traffic count showed a significant decrease in speeding:

• 85th percentile speed: Reduced to 43km/h (40km/hr westbound and 45km/hr eastbound), a significant improvement from the previous 64km/h (63km/hr westbound and 64km/hr eastbound) recorded before the installation of the speed cushions.

#### Crash History

#### Before Speed Cushion Installation

According to Transport for NSW's 5-year crash history between July 2012 to June 2017, there were 2 reported crashes on Cheyenne Road between Sweethaven Road and Mimosa Road. These crashes involved vehicles undertaking a 'U-Turn' on Cheyenne Road.

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#### After Speed Cushion Installation

According to Transport for NSW's 5-year crash history between July 2019 to June 2024, there was 1 reported rear-end crash on Cheyenne Road near Shawnee Street.

#### Noise Concerns

A request was received from a resident at 35 Cheyenne Road Greenfield Park recently for the speed cushions outside their property to be removed, citing the noise generated by vehicles traversing the speed cushions outside their property led to sleepless nights, as it is outside their bedroom window. The resident is a heavy vehicle (school buses) driver, responsible for transporting school children. Loss of sleep due to the noise from vehicles traversing speed cushions can lead to fatigue, reducing alertness and increasing risk of accidents.

The report in October 2024 confirmed the retention of the speed cushions. At that time, the nature of the noise impact on the residents was not clearly articulated. As a consequence, it was not taken into consideration in making the recommendation to retain the speed cushion devices.

#### Discussion

While it is acknowledged speeding remains a concern on Cheyenne Road Greenfield Park, as mentioned previously, it is important to review individual cases warranting their removal and investigation of an alternate treatment.

In the circumstances, removal of the speed cushion due to the implications of the noise disturbance, is considered appropriate ie. the loss of sleep for a heavy vehicle driver and ongoing management of fatigue.

An alternative traffic calming treatment that would not generate the noise impact associated with speed cushions is to be investigated. This treatment would be considered for implementation in a future operational plan.

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#### CONCLUSION

While speeding remains a concern on Cheyenne Road Greenfield Park, the removal of the speed cushions outside 35 Cheyenne Road Greenfield Park is appropriate to address the noise disruption and its impact on a resident's well-being.

An alternative treatment will be considered for Cheyenne Road Greenfield Park, with its implementation to be considered in a future Operational Plan.

Gaurab Ghimire Graduate Engineer (Traffic)

Authorisation: Traffic & Transport Coordinator Manager Design Services Director City Delivery

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File Name: TRA14042025\_7.DOCX \*\*\*\*\* END OF ITEM 10 \*\*\*\*\*

**SUBJECT:** Kamira Court Villawood - Installation of a Part-Time 2 Hour Parking Restriction in Council Car Park

#### **FILE NUMBER:** 25/07025

**REPORT BY:** Gaurab Ghimire, Graduate Engineer (Traffic)

#### **RECOMMENDATION:**

That:

- 1. The installation of a '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' and 'No Stopping' parking restriction in the Kamira Court Car Park Villawood, as shown in Attachment A of the report, for a 6-month trial period be approved.
- 2. The results of the 6-month trial, including an analysis of all the existing parking and linemarking restrictions within the car park be undertaken and reported back to the Committee for consideration.
- 3. The affected stakeholders, including Council's Community Regulatory Services Branch, be notified of the Committee's decision.

#### SUPPORTING DOCUMENTS:

AT-A J Kamira Court Car Park, Villawood - Signage Plan

## CITY PLAN

This report is linked to *Theme 2 Places and Infrastructure* in the Fairfield City Plan.

#### SUMMARY

Council has received requests to improve turnover of parking spaces within the Kamira Court Car Park in Villawood Town Centre by shop keepers and visitors to the area.

It is proposed to install a '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' and 'No Stopping' parking restriction for approximately 30% of the parking spaces in the Kamira Court Car Park (as shown in Attachment A of the report) for a 6-month trial period. This will increase parking turnover at this location benefitting the Villawood town centre.

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#### BACKGROUND

Kamira Court is a local road providing access for rear servicing of businesses, adjacent residences and the centralised car park for the town centre.

Villawood Town Centre hosts a range of businesses, including food related retail shops, restaurants and general shopping. There are also parking demands arising from community groups, high density residential buildings, construction activity and train services through Villawood Train Station.

The centralised car park was provided to service the shops and business within the town centre. The planning approval process has reduced the requirement for provision of residential parking over time, particularly in proximity to rail stations. This adds residential and visitor demand to employee and commuter parking in and around the town centre.

The 2 proposed 'No Stopping' spaces enhance pedestrian accessibility by connecting the walkway area to the Villawood Town Centre walkway.

Villawood Railway Station is not a nominated station by Transport for NSW and has no limitations on the introduction of time limited parking within 1km of the station.

#### SITE OBSERVATIONS

Site observations on 7 March 2025 at 9.00am, 12.00pm and 4.00pm showed parking spaces were occupied mostly by the same vehicles from morning to evening (likely to be residents, business employees or business owners).

- 9.00am only 2 parking spaces available out of 67
- 12.00pm only 3 parking spaces available out of 67
- 4.00pm only 1 parking space available out of 67

These findings indicate low availability of parking in car park for shoppers and visitors to the town centre.

As a result, visitors and business customers have increased difficulty in finding parking at this location.

#### PROPOSED CHANGES

It is proposed to convert 18 unrestricted parking spaces to '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' restricted parking spaces and 2 'No Parking' spaces to 'No Stopping' spaces.

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#### **CONSULTATION & TIMING**

Council consulted with residents and businesses in February 2024 to convert all the unrestricted parking spaces within the Council car park to '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' restricted parking spaces.

The survey response revealed that only 25% supported the restriction while 25% objected to the restriction. Where a restriction was to be applied, 45% wanted to be exempt from the proposed restriction (residential permit system) and 5% supported limited installation ie. 1 row of parking to be restricted.

Due to the feedback received, the proposal was discontinued at that time.

A revised proposal to convert 1 row of parking spaces to '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat', as shown in Figure 1, was put to consultation in November 2024.

Council received 9 supporting and 28 objections to the proposal. As the survey was conducted via QR code, it did not capture property addresses of the respondents. As the restriction would limit long-stay parking, it is expected the objections would come from those supporting or needing long-stay parking – residents, employees and/or commuters.

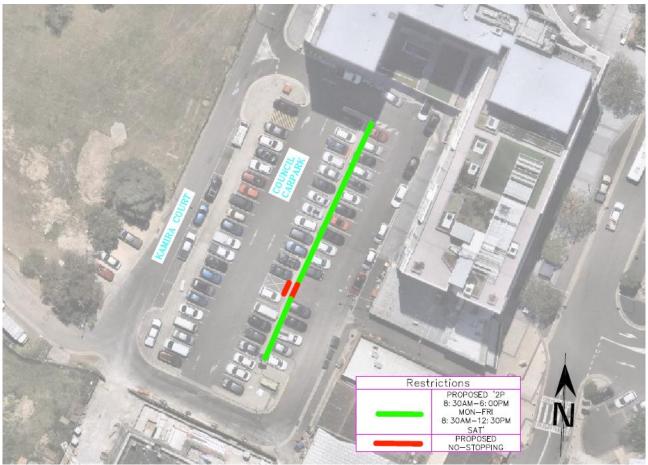


Figure 1: Aerial Image of Kamira Court car park with proposed restriction

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#### CONCLUSION

The centralised parking provided in Kamira Court is to support the business activity in Villawood Town Centre. When demand is low – overnight for example – then alternate uses such as residential parking may be an appropriate use. The 2P restriction would allow residents to park between 4:00pm and 10:30am before an infringement would occur.

Objections to introducing time-limited parking in the 2 rounds of consultation undertaken were received. As the proposed parking restriction is to turnover parking spaces for short-stay visitors to Villawood Town Centre, it is recommended to be implemented.

Installation of '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' and 'No Stopping' parking restriction within the car park located at Kamira Court Villawood as shown in Attachment A for a 6-month trial period is recommended.

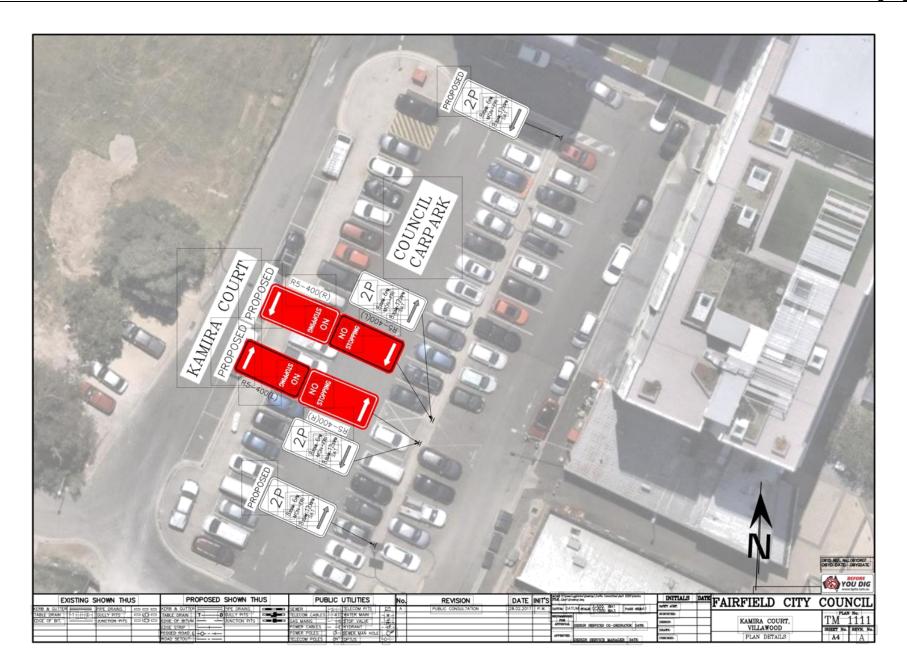
Additionally, it is recommended that an analysis of all the existing parking and linemarking restrictions within the car park be undertaken when reviewing the '2P 8.30am-6.00pm Mon-Fri and 8.30am-12.30pm Sat' parking restriction after a 6-month trial.

Gaurab Ghimire Graduate Engineer (Traffic)

Authorisation: Traffic & Transport Coordinator Manager Design Services Manager Waste and Cleansing Operations

Traffic Committee - 14 April 2025

File Name: TRA14042025\_5.DOCX
\*\*\*\*\* END OF ITEM 11 \*\*\*\*\*



**SUBJECT:** Polding Street and Marlborough Street Smithfield Intersection -Roundabout Upgrade

**FILE NUMBER:** 11/02644

**REPORT BY:** Simon Cai, Professional Engineer

#### **RECOMMENDATION:**

That:

- 1. The modifications to the roundabout at the Polding Street and Marlborough Street Smithfield intersection including the installation of asphalt speed humps, associated signage and line markings, as shown in Attachment A of the report, be approved.
- 2. The affected stakeholders be notified of the Committee's decision.

#### SUPPORTING DOCUMENTS:

AT-A 🕂	Concept Plans	2 Pages
AT-B 🕂	Swept Path Analysis	6 Pages
AT-C 😃	Crash Diagram	1 Page

#### CITY PLAN

This report is linked to Theme 2 Places and Infrastructure in the Fairfield City Plan.

#### SUMMARY

The intersection of Polding Street and Marlborough Street Smithfield (roundabout) was identified as a blackspot location meeting the funding requirements after a review of the crash history for the intersection. There were 4 reported injury crashes during the past 5-year period from 1 July 2017 to 30 June 2022.

Council was successful in obtaining funding under the Australian Government Blackspot Program 2024/2025 to upgrade the existing roundabout at the intersection. This resulted in Council obtaining funding for an amount of \$296,132.00 through the program to improve roundabout deflection at the existing roundabout intersection of Polding Street and Marlborough Street Smithfield.

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The proposed modifications are recommended for approval.

## BACKGROUND

Polding Street is classified as a regional road carrying high traffic volumes on a daily basis. The primary function of the sub-arterial road is to facilitate vehicular traffic movements to and from the surrounding road network and to ensure there is good access to public transport services.

Marlborough Street is classified as a collector road with a default urban speed limit of 50 km/hr and it provides direct access to properties in the area.

While speed humps can effectively reduce travel speeds which can significantly reduce the severity of crashes and improve pedestrian safety on local roads, speed humps have potential impacts on a 60km/hr regional road. For example, they can increase travel time, noise and can possibly impact emergency vehicle response times.

An aerial photo of the existing roundabout intersection is shown in Figure 1 below:



Figure 1: Polding Street and Marlborough Street Smithfield Intersection.

The crash history warranted a review of the intersection. The upgrade of the existing roundabout is designed to reduce vehicle speeds on the approaches to the roundabout and improve visibility at night to reduce the severity of crashes occurring at this location.

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#### ASSESSMENT

#### Crash History

A check of the Transport for NSW (TfNSW) crash data for the past 5-year period (from 1 July 2017 to 30 June 2022) for which the blackspot submission was made, revealed that there were 4 reported injury crashes at the intersection of Polding Street and Marlborough Street Smithfield (roundabout).

The crash details are as follows:

- 1 x pedestrian far side serious injury crash (RUM Code 2) on 5 November 2017 involving a westbound passenger vehicle colliding with a northbound pedestrian in wet, daylight and raining conditions.
- 1 x run-off-carriageway minor/other injury crash (RUM Code 73) on 22 August 2019 involving a westbound passenger vehicle at the intersection in dry, night and fine conditions.
- A cross-traffic minor/other injury crash (RUM Code 10) on 13 January 2021 involving an eastbound passenger vehicle colliding with a northbound mobility scooter at the intersection in dry, day light and fine conditions.
- 1 x pedestrian other moderate injury crash (RUM Code 9) on 2 October 2021 involving passenger vehicle turning left and colliding with a pedestrian at unknown direction in dry, dusk and fine conditions.

#### Proposed Improvements

The roundabout proposal at the intersection of Polding Street and Marlborough Street, Smithfield involves:

- Modifying the existing splitter islands associated with the roundabout to improve deflection at the entry and circulating lanes of the roundabout to further slow down traffic. The proposal is to widen the existing splitter islands on both Polding Street and Marlborough Street to the pedestrian refuge islands to at least 2 metres wide with the minimum crossing gap of 3 metres. This is in accordance with the current TfNSW Technical Direction TDT 2011/01a for Pedestrian Refuges (Supplement for narrowing or widening of roads at Pedestrian Refuges).
- Installing 4 asphalt speed humps at all approaches to the roundabout intersection to help reduce the travel speeds.
- Constructing new kerb ramps to facilitate pedestrians crossing at the intersection.
- Installing regulatory and warning signs including 'No Stopping' restrictions, 'Keep Left' signs and associated speed humps and advisory '25 km/h' speed limit signs at/near the intersection.
- Installing a painted median island with chevron markings at all approaches to the roundabout adjacent to the splitter islands.
- Removing 10 on-street parking spaces at/near the roundabout intersection.

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#### Parking Impacts

There would be a loss of approximately 10 unrestricted on-street parking spaces (3 from the western side of Marlborough Street, 5 from the eastern side of Marlborough Street and 2 from the southern side of Polding Street), as shown in Figure 2 below:

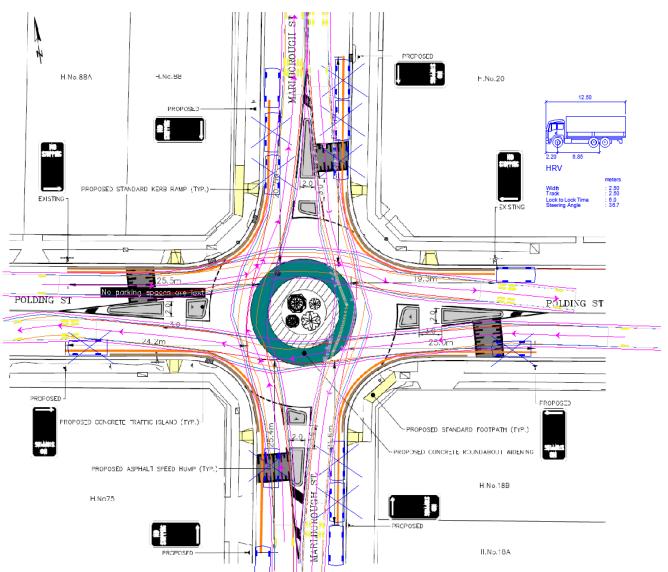


Figure 2 shows where parking spaces would impact service vehicles manoeuvring through the Polding Street and Marlborough Street Smithfield Intersection.

The proposal to upgrade the existing roundabout would result in greater roundabout central island and splitter islands sizes thus reducing the carriageway widths near the roundabout. This would help improve deflection at the roundabout and protection for pedestrians crossing at the splitter islands due to the increase in gap size of the splitter island.

The loss of parking spaces associated with the 'No Stopping' restrictions is required to facilitate the swept path of vehicles including service vehicles and buses at the intersection.

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Information regarding the loss of on-street parking spaces was included in the consultation letters sent out to the affected property owners/occupants.

#### Swept Path Analysis

The design vehicle used for this intersection was a service vehicle of 8.8m long with a checking vehicle that is a single rigid truck such as a 12.5m long bus (sourced from Table 5.1 of Austroads Guide to Road Design Part 4).

Turning path analysis has identified that there are no issues with vehicles and buses manoeuvring at the intersection of Polding Street and Marlborough Street. A copy of the swept path assessment has been included as part of Attachment C of the report.

Whilst the 19m truck movements are infrequent along local residential streets, the turning path analysis has also demonstrated vehicles of up to 19 metres long can satisfactorily traverse the roundabout via Polding Street.

## **CONSULTATION & TIMING**

The affected stakeholders were notified of the proposal via letters sent on 6 December 2024 and they were given a 28 day period to respond to the roundabout upgrade proposal.

The roundabout upgrade proposal was advertised on Council's website for a period of 28 days (from 18 February to 18 March 2025) in accordance with the Roads Act 1993 in place of a local newspaper. One objection was received from a resident on 3 January 2025 by email concerning the loss of 10 on-street parking spaces at the intersection. A Council officer has explained to the customer that the loss of on-street parking spaces associated with the 'No Stopping' restrictions is required to facilitate the swept path of vehicles including service vehicles and buses. This is especially so around the larger splitter islands which offer wider gaps for pedestrians to use when crossing at this location. Council officers have made every effort to keep the loss of on-street parking spaces to a minimum.

Transit Systems and TfNSW were also consulted regarding the proposal to upgrade the existing roundabout and they have no objections to the proposal.

#### FINANCIAL IMPLICATIONS

The cost of the project is estimated to be \$296,132.00.

Council has obtained grant funding through TfNSW as part of the Australian Government Blackspot Program 2024/2025.

Acceptance of the grant funds was considered by Council and the project and its expenditure have been accepted as part of Council's 2024/25 Operational Plan.

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#### CONCLUSION

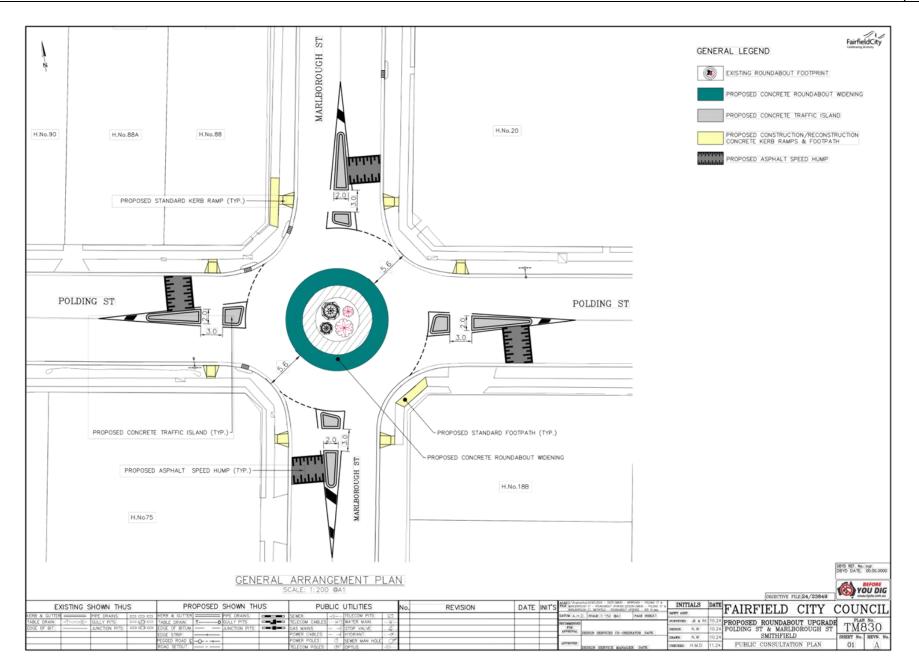
To improve roundabout deflection and reduce vehicle speeds at the intersection, it is recommended that the modifications to the roundabout including the installation of asphalt speed humps, associated signage and line markings at the intersection of Polding Street and Marlborough Street Smithfield, as shown in Attachment A of the report, be approved.

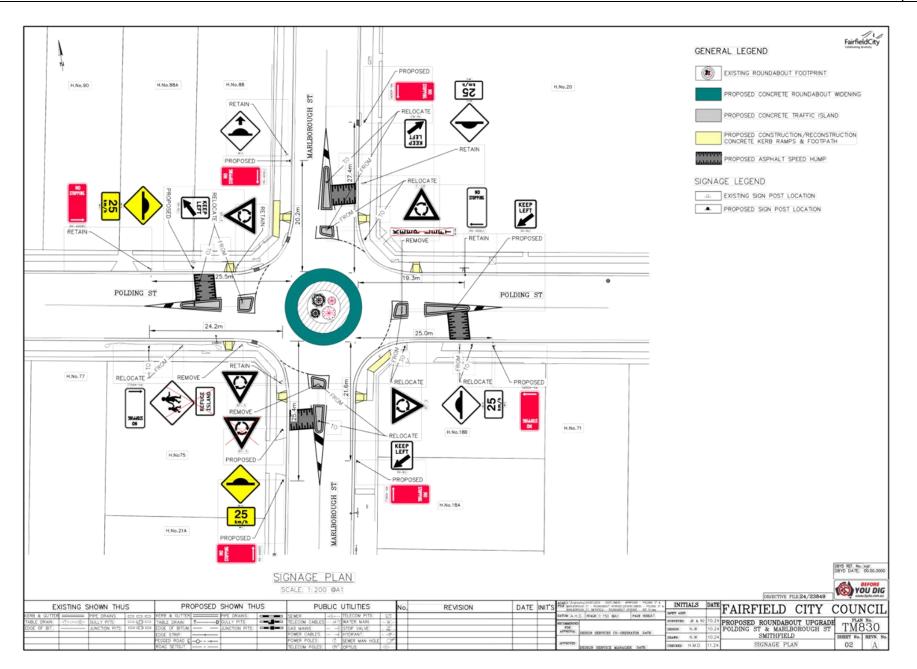
Simon Cai Professional Engineer

Authorisation: Traffic & Transport Coordinator Manager Design Services Manager Waste and Cleansing Operations

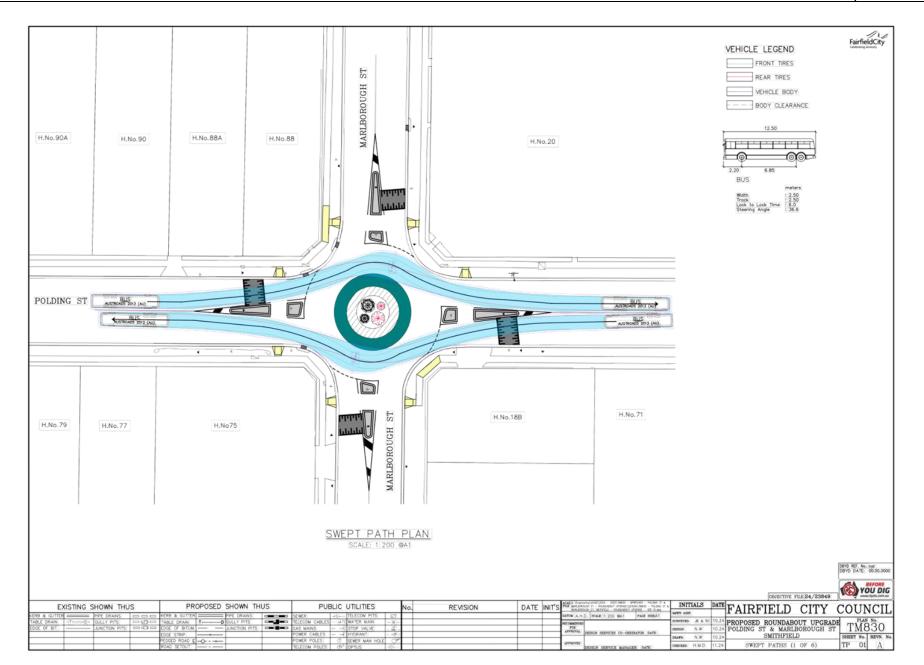
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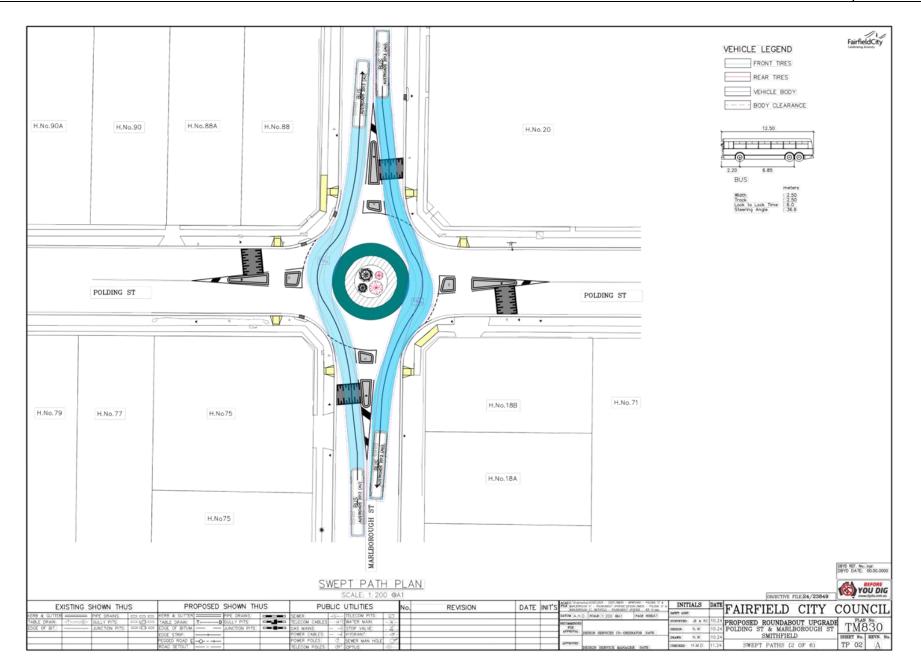
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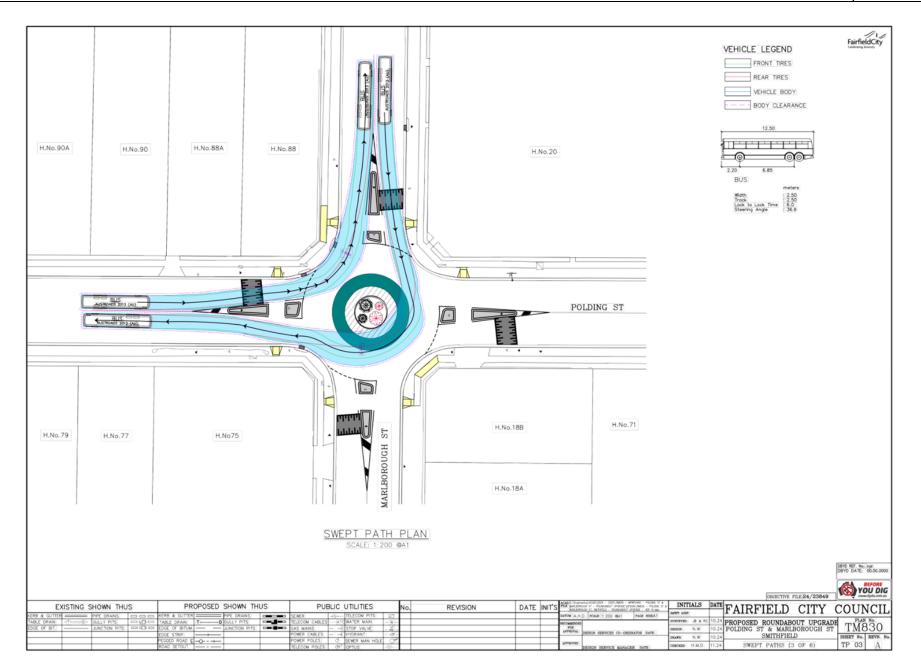


#### ATTACHMENT B

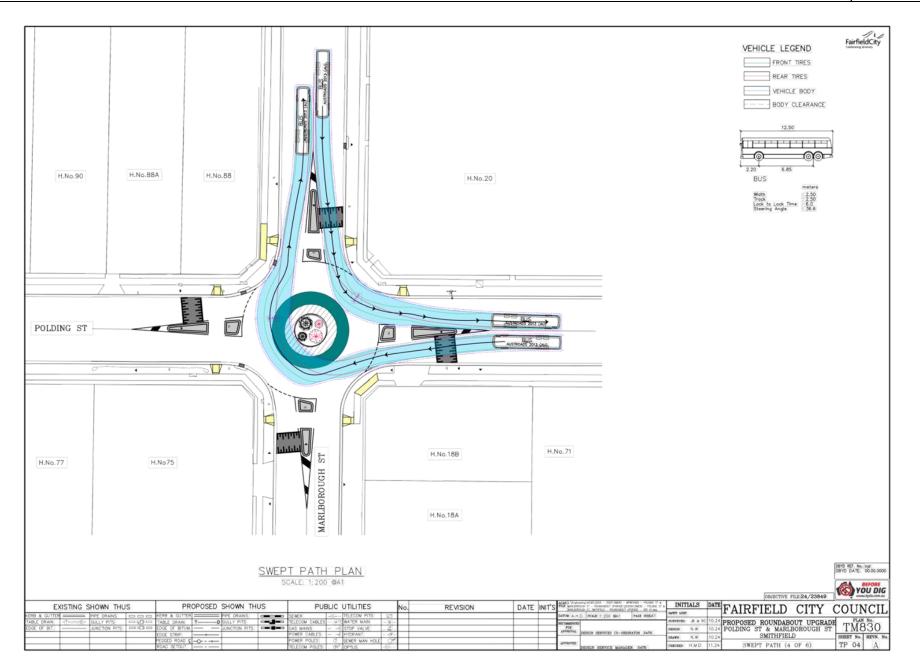


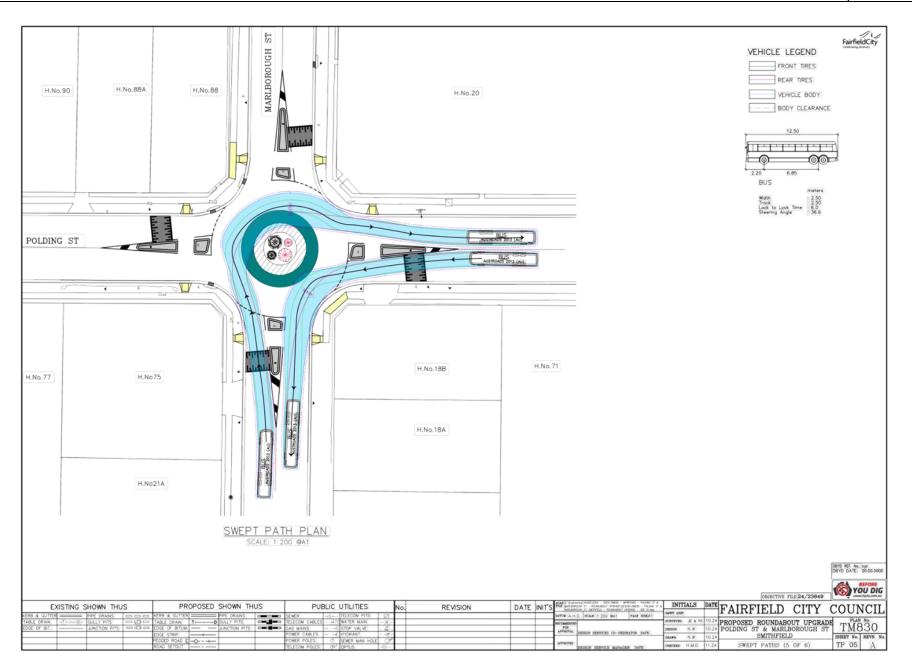


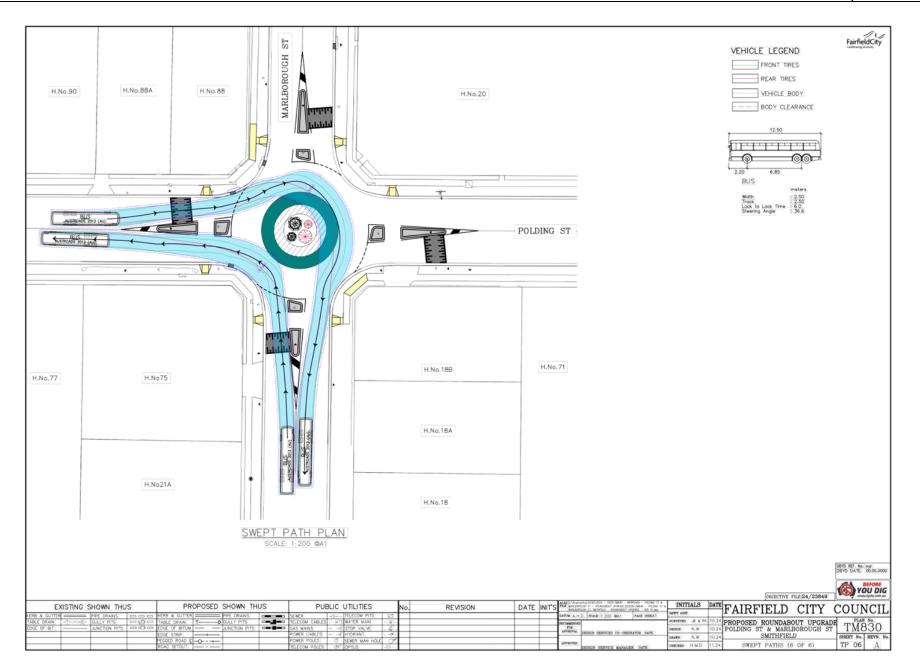
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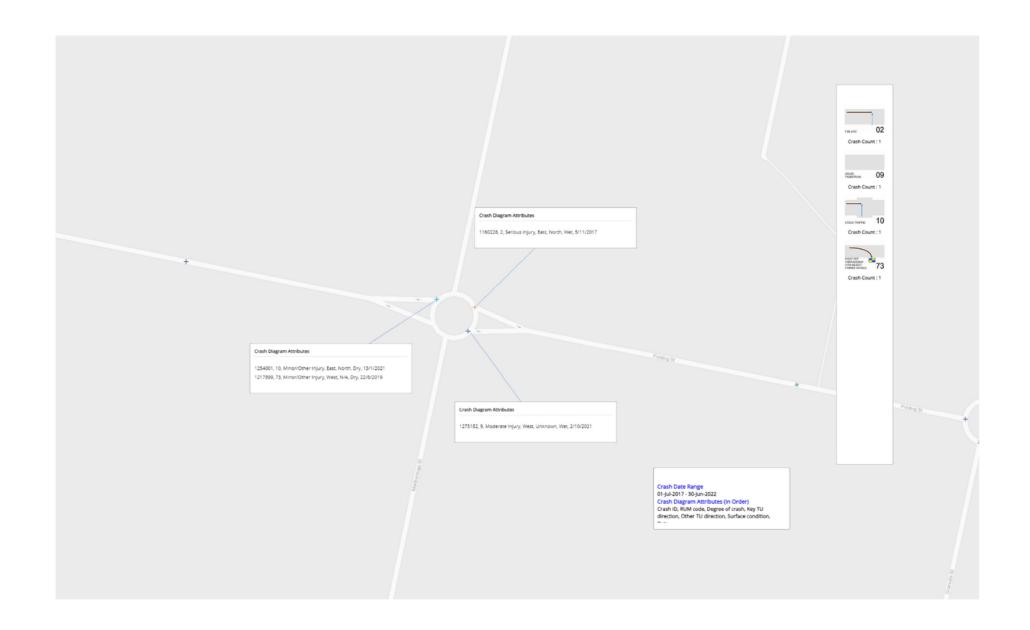


#### ATTACHMENT B









Item Number. 13

**SUBJECT:** Smithfield Road and Cherokee Avenue Greenfield Park Intersection -Proposed Full-Time Right Turn Ban from Cherokee Avenue onto Smithfield Road and Upgrade of the Existing Pedestrian Refuge Island

FILE NUMBER: 12/00329

**REPORT BY:** Simon Cai, Professional Engineer

#### **RECOMMENDATION:**

That the report be received and noted.

#### SUPPORTING DOCUMENTS:

AT-A J Concept Plan

1 Page

#### CITY PLAN

This report is linked to *Theme 2 Places and Infrastructure* in the Fairfield City Plan.

#### SUMMARY

Council has submitted an application under the 2025/2026 Australian Government Black Spot Program to seek funding to ban the right turn movements from Cherokee Avenue onto Smithfield Road at the intersection of Smithfield Road and Cherokee Avenue. This is based on a review of the number of crashes involving vehicles turning right out of Cherokee Avenue colliding with vehicles travelling on Smithfield Road Greenfield Park.

Currently, there are existing part-time 'No Right Turn, 7.00am – 10.00am and 3.00pm – 6.00pm, Monday to Friday' restrictions at the intersection to ban the right turn movements from Cherokee Avenue to Smithfield Road during the AM and PM peak hours.

#### Background

Smithfield Road is a 2-way, 2-lane regional road that carries relatively high traffic volumes on a daily basis and has a sign posted speed limit of 60km/hr. There are existing 'No Stopping' and timed 'No Stopping' restrictions on Smithfield Road to facilitate the movement of different road users.

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The painted seagull island treatment at the intersection of Smithfield Road and Cherokee Avenue was removed after August 2017 as part of the Smithfield Road upgrade to widen the road from 2 lanes of traffic to 4 lanes.

The intersection of Smithfield Road and Cherokee Avenue is controlled by a stop-sign with priority being given to vehicles travelling on Smithfield Road. There is an existing pedestrian refuge on Cherokee Avenue at the intersection of Smithfield Road to assist pedestrians crossing Cherokee Avenue by allowing them to cross the road in 2 stages.

Cherokee Avenue is a local road that provides direct access to 338 residential properties and has a speed limit of 50km/h.



Figure 1: Intersection of Smithfield Road and Cherokee Avenue, Greenfield Park.

#### Crash History

A check of the Transport for NSW (TfNSW) crash data for the past 5-year period (from July 2018 to June 2023) revealed that there were 7 reported crashes at the intersection of Smithfield Road and Cherokee Avenue following the removal of seagull island treatment. Details are as follows:

• 1 x right near minor/other injury crash (Rum Code 13) on 6 November 2018 at 7.30am involving a southbound passenger vehicle turning right out of Cherokee Avenue colliding with a northbound passenger vehicle on Smithfield Road in dry, dawn and fine conditions.

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- 1 x right-through moderate injury crash (Rum Code 21) on 9 January 2019 at 8.30pm involving a southbound passenger vehicle turning right out of Cherokee Avenue colliding with a northbound passenger vehicle on Smithfield Road in dry, night and fine conditions.
- 1 x cross traffic towaway crash (Rum Code 10) on 11 February 2019 at 9.10pm involving a southbound passenger vehicle on Cherokee Avenue colliding with an eastbound light truck on Smithfield Road in dry, night and fine conditions.
- 1 x cross-traffic moderate injury crash (Rum Code 10) on 28 June 2019 at 11.40am involving a southbound passenger vehicle on Cherokee Avenue colliding with an eastbound passenger vehicle on Smithfield Road in dry, daylight and fine conditions.
- 1 x right near minor/other injury crash (Rum Code 13) on 21 January 2020 at 10.40am involving a southbound passenger vehicle on Cherokee Avenue colliding with a northbound passenger vehicle in dry, daylight and fine conditions.
- 1 x run-off-carriageway moderate injury crash right into parked vehicle/object (Rum Code 73) on 30 December 2022 at 2.30pm involving a northbound vehicle on Cherokee Avenue at the Cherokee Avenue intersection in dry, daylight and fine conditions.
- 1 x cross traffic serious injury crash (Rum Code 10) on 4 March 2023 at 8.50pm involving a southbound passenger vehicle on Cherokee Avenue colliding with an eastbound passenger vehicle on Smithfield Road in dry, night and fine conditions.

#### Traffic Assessment

Council officers organised intersection traffic counts to determine the volume and direction of vehicles and number of pedestrian movements at the intersection of Smithfield Road and Cherokee Avenue Greenfield Park. The traffic counts were undertaken on Thursday 6 March 2025 between 7.00am and 6.00pm and on Saturday 8 March 2025 between 9.00am and 1.00pm.

The results of the traffic movements observed at the intersection of Smithfield Road and Cherokee Avenue are summarised in the tables below:

Times		No. of vehicle from Cherokee Smithfield Road		No. of right turn movements from Smithfield Road	No. of pedestrian movements at
		Left turn	Right turn	into Cherokee	the
		movements	movements	Avenue	intersection
7.00am	_	56	10	17	0
8.00am					
8.00am	Ι	78	6	24	2
9.00am					
9.00am	Ι	48	5	33	1
10.00am					
10.00am	Ι	45	17	18	0
11.00am					
11.00am	Ι	27	22	25	1
12.00pm					

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Times		No. of vehicle from Cherokee Smithfield Road		No. of right turn movements from Smithfield Road	No. of pedestrian movements at	
		Left turn movements	Right turn movements	into Cherokee Avenue	the intersection	
12.00pm 1.00pm	-	29	23	30	3	
1.00pm 2.00pm	_	40	10	27	2	
2.00pm 3.00pm	-	30	19	40	0	
3.00pm 4.00pm	-	28	5	36	3	
4.00pm 5.00pm	_	43	2	37	2	
5.00pm 6.00pm	-	25	6	52	0	
Total		449	125	339	14	

Table 1: Results of the traffic counts undertaken at the intersection of Smithfield Road and Cherokee Avenueon Thursday 6 March 2025 between 7.00am and 6.00pm.

Times		No. of vehicle me Cherokee Avenue		No. of right turn movements from	No. of pedestrian	
		Left turn movements	Right turn movements	Smithfield Road into Cherokee	movements at the	
				Avenue	intersection	
9.00am	_	36	33	273	2	
10.00am						
10.00am	I	36	25	269	3	
11.00am						
11.00am	I	44	16	268	4	
12.00pm						
12.00pm	-	32	17	270	0	
1.00pm						
Total		148	91	1080	9	

Table 2: Results of the traffic counts undertaken at the intersection of Smithfield Road and Cherokee Avenueon Saturday 8 March 2025 between 9am and 1pm.

From the traffic count data approximately 22% of vehicles turn right at the intersection on a weekday between 7.00am and 6.00pm whilst 38% of vehicles turn right on a weekend between 9.00am and 1.00pm.

The low percentage of vehicles turning right at the intersection can be attributed to existing part-time right turn restrictions along with the high volume of vehicles travelling on Smithfield Road making it difficult for motorists to find a gap in the flow of traffic to turn right at the intersection.

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The local bus operator, Transit Systems has confirmed that the buses and school buses in the area would not be impacted by the existing and proposed 'No Right Turn' restrictions at the intersection of Smithfield Road and Cherokee Avenue. All buses are not required to perform right turn movements from Cherokee Avenue onto Smithfield Road.

#### Proposed Treatments under the Australian Government Blackspot Program

There is a need for motorists to cross 4 traffic lanes (2 lanes of traffic in each direction) in order to turn right from Cherokee Avenue onto Smithfield Road which carries relatively high traffic volumes on a daily basis. The lack of gaps in traffic streams on Smithfield Road from time to time cause drivers to take smaller gaps to perform the right turn movements. This significantly increases the risks associated with the right-turn movements.

Based on the review of crash history, the proposal is to ban the right turn movements from Cherokee Avenue onto Smithfield Road to improve traffic and road safety.

Council has applied for funding to implement full-time 'All Traffic (Left Symbolic)' restrictions on Cherokee Avenue at Smithfield Road intersection. In addition, it is proposed to upgrade the existing pedestrian refuge and associated traffic devices, kerb ramps and footpaths at the intersection.

The cost estimate for this project is \$88,696.65.

#### Alternative Routes

Should the right turn movements from Cherokee Avenue onto Smithfield Road be banned, there are 2 alternative routes available for residents/motorists to use in order to travel south on Smithfield Road.

The alternate routes for the southbound right-turn movements from Cherokee Avenue onto Smithfield Road are as shown in Figures 2 and 3 below:

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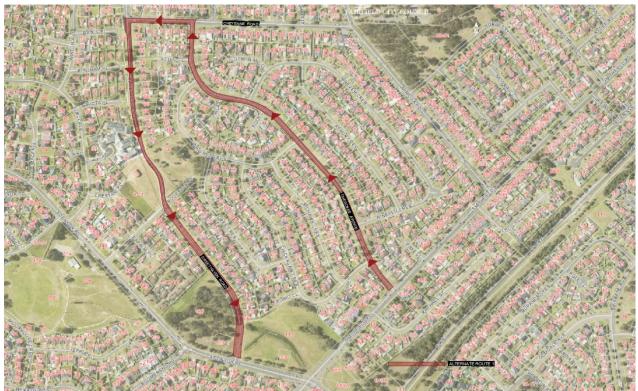


Figure 2: Detour 1 for the proposed full-time 'No Right Turn' restrictions at the Smithfield Road and Cherokee Avenue intersection. Additional distance is approximately 2 kilometres which is equivalent to around an increased 2 minutes of travel time.

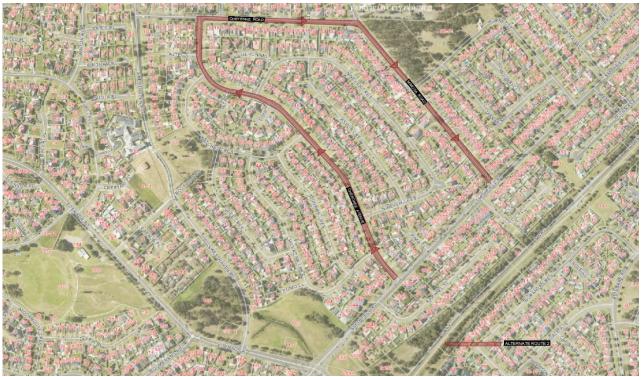


Figure 3: Detour 2 for the proposed full-time 'No Right Turn' restrictions at the Smithfield Road and Cherokee Avenue intersection. Additional distance is approximately 1.8 kilometres which is equivalent to around an increased 1.8 minutes of travel time.

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As there are existing 'No Right Turn, 7.00am – 10.00am and 3.00pm – 6.00pm, Monday to Friday' restrictions at the intersection of Smithfield Road and Cherokee Avenue, the proposal to change it to full-time 'No Right Turn' restrictions are expected to have minor impact onto the adjoining road network. There are already alternative routes available for motorists to use instead of turning right from Cherokee Avenue onto Smithfield Road.

## **CONSULTATION & TIMING**

Subject to the outcome of the funding application, the proposal to implement full-time 'No Right Turn' restrictions at the intersection of Smithfield Road and Cherokee Avenue will be consulted with the community. As part of the approval process, a traffic management plan detailing the proposal will be submitted to the TfNSW for review and approval before reporting it to the Fairfield Traffic Committee for approval.

#### CONCLUSION

Should the funding application for the full-time right-turn ban from Cherokee Avenue onto Smithfield Road, upgrade of pedestrian refuge island, signage and linemarking be successful then it should be noted that the proposal will be reported back to the Fairfield Traffic Committee for approval.

Simon Cai **Professional Engineer** 

#### Authorisation:

Traffic & Transport Coordinator Manager Design Services Manager Waste and Cleansing Operations

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