

NOTICE OF MEETING

## You are advised of the following meeting:

Thursday 20 April 2017

# **Ryde Traffic Committee Meeting**

# Committee Meeting Room, Level 1A, 1 Pope Street, Ryde - 10.00am

### MEMBERS

City of Ryde (Chair)	. Director City Works and Infrastructure
Roads and Maritime Services of NSW	Sydney North Region
NSW Police Force	Ryde Local Area Command
Member for Ryde (1 items)	The Hon. V Dominello MP
Member for Lane Cove (2 items)	The Hon. A Roberts MP

### ADVISORS

Sydney Buses	Western Region
--------------	----------------

Committee Members, Advisors and Councillors are invited to attend the next meeting of the Ryde Traffic Committee. Alternatively, please forward comments on any matter listed for discussion to the Meeting Convenor, via email, by 5pm Tuesday 18 April 2017.

Members of the public may register to address the Ryde Traffic Committee on any matter listed for discussion by contacting the Meeting Convenor, via email, by 5pm Tuesday 18 April 2017.

Meeting Convenor Greg Holding - Team Leader Traffic Services gholding@ryde.nsw.gov.au





Meeting Date: Location: Time: Thursday 9 February 2017 Committee Meeting Room, Level 1A, 1 Pope Street, Ryde 10.00am

# NOTICE OF BUSINESS

# APOLOGIES

**DECLARATIONS OF INTEREST** 

CONFIRMATION OF PREVIOUS MINUTES

MATTERS ARISING FROM PREVIOUS MINUTES

### MATTERS FOR CONSIDERATION

- (A) BELLEVUE AVENUE, WEST RYDE TIMED PARKING
- (B) OXFORD STREET, GLADESVILLE DROP-OFF / PICK-UP ZONE EXTENSION AT OUR LADY QUEEN OF PEACE SCHOOL
- (C) PHILLIP ROAD, PUTNEY 'P DISABILITY ONLY' ZONE

MATTERS FOR TRAFFIC ENGINEERING ADVICE

- (D) MATTERS APPROVED UNDER DELEGATION
- (E) PEDESTRIAN CROSSINGS IN EASTWOOD TOWN CENTRE
- (F) 'LEFT TURN ONLY' IN HILLVIEW LANE AT WEST PARADE, EASTWOOD
- (G) MODIFICATION OF EXISTING ROUNDABOUT AT INTERSECTION OF HERRING ROAD AND DORA STREET, MARSFIELD

LATE ITEMS

**GENERAL BUSINESS** 





## ITEM (A) BELLEVUE AVENUE, WEST RYDE

SUBJECT:TIMED PARKINGELECTORATE:RYDEWARD:WESTPOLICE LAC:RYDEROAD CLASS:NON-CLASSIFIEDREFERENCE:D16/38740 & T2016-00533OFFICER:J BEGLEY

### INTRODUCTION

City of Ryde has received representation from a business owner in Victoria Road, West Ryde, via the Mayor, to provide additional short-term parking in Bellevue Avenue for patrons of the West Ryde Town Centre.

### CONTEXT

- 1. Bellevue Avenue runs perpendicular to Victoria Road and currently has two spaces of '1P 9:30AM-6.00PM MON-FRI & 8.30AM-12.30PM SAT' on both sides of the road, between Victoria Road and Dickson Lane.
- 2. No on-street parking is available on Victoria Road west of Bellevue Avenue (in front of residential properties), due to the location of a Bus Stop and 'NO STOPPING' zone.
- Parking on Victoria Road, east of Bellevue Avenue (in front business premises) is signposted 'CLEARWAY 6AM-10AM 3PM-7PM MON-FRI, 1P 10AM-3PM MON-FRI 8.30AM-12.30PM SAT'.
- 4. All properties that have a frontage onto Bellevue Avenue have access to off street parking.

### REFERENCES

- [NSW] *Road Rules 2014* Rule 204 Meaning of certain information on or with permissive parking signs
- [NSW] *Road Rules 2014* Rule 205 Parking for longer than indicated
- [NSW] *Road Rules 2014* Rule 205A Parking outside times indicated.

### COMMUNITY ENGAGEMENT

The occupants of five residential properties in the area, shown in *Figure A1*, were doorknocked and letterboxed by Council staff on Friday 24 March 2017, to determine the level of support for extending the existing one-hour parking in Bellevue Avenue.



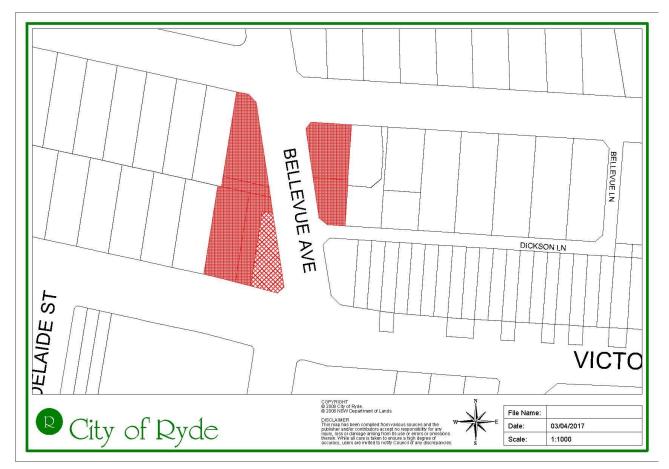


Figure A1 Community engagement distribution

The two residents that Council staff were able to speak to during the door knocking phase both indicated their support for the proposal, indicating that visitors often had to park a considerable distance away to find parking.

No additional responses were received from the letterbox drop that was undertaken.

# DISCUSSION

The unrestricted parking in Bellevue Avenue regularly experiences 100% occupancy. Extending the timed-parking on the western side of Bellevue Avenue by three spaces would improve the availability of short-term parking in the area and will also improve turnover of available on-street parking.

# APPROVALS

Should the proposed measures be supported by Ryde Traffic Committee, it is intended that the matter will be referred to the Works and Community Committee for consideration of the Council to seek the remaining approvals.



## PROPOSAL

To convert three of the existing unrestricted parking spaces on the western side of Bellevue Avenue, West Ryde to '1P 9.30AM-6PM MON-FRI 8.30AM 12.30PM SAT'.











# ITEM (B) OXFORD STREET, GLADESVILLE

SUBJECT:DROP-OFF / PICK-UP ZONE EXTENSION AT<br/>OUR LADY QUEEN OF PEACE SCHOOLELECTORATE:LANE COVEWARD:EASTPOLICE LAC:RYDEROAD CLASS:NON-CLASSIFIEDREFERENCE:T2017-00200OFFICER:L PEARS

### INTRODUCTION

City of Ryde has received representation from the Principal of Our Lady Queen of Peace Catholic Primary School requesting consideration be given to extending the existing 'NO PARKING 8-9.30AM 2.30-4.30PM SCHOOL DAYS' zone in Oxford Street, Gladesville to increase the supply of Kiss & Ride spaces and address the instances of double parking in the area.

Furthermore, in order to align to standard school-zone hours, it is proposed that the existing 'NO PARKING 8-9.30AM 2.30-**4.30PM** SCHOOL DAYS' zone, located outside the school, be changed to 'NO PARKING 8-9.30AM 2.30-**4PM** SCHOOL DAYS' when the extension is implemented.

These changes are considered minor in nature but will have a large benefit to the school and surrounding community.

### CONTEXT

- 1. Oxford Street is a two-way road, with an 8.5 m wide carriageway.
- 2. There is unrestricted parking on both sides of Oxford Street between the pedestrian crossing and Cambridge Street, except for a 'NO PARKING 8-9.30AM 2.30-4.30PM SCHOOL DAYS' zone along the school frontage.
- 3. Percy Street intersects Oxford Street at a 45 degree angle at the end of the existing 'NO PARKING 8-9.30AM 2.30-4.30PM SCHOOL DAYS' zone.
- 4. The residential properties at 14 & 16-18 Oxford Street are owned by the school's associated Church, which has agreed to the changes.

### REFERENCES

- [NSW] *Road Rules 2014* Rule 168 No parking signs
- City of Ryde's Road Safety Plan



### COMMUNITY ENGAGEMENT

All properties directly affected by the extension (14 & 16-18 Oxford Street) are owned by the school's associated Church, which has agreed to the changes. Given that the school is in favour of the changes and the low impact on the remainder of the street, no further consultation has been undertaken.

# DISCUSSION

It has been observed that parents regularly queue their vehicles in the travel lane, waiting to enter the Kiss & Ride zone, resulting in the travel lane being blocked at the intersection of Percy Street. This practice increases congestion, confusion, and limits sight distance for drivers wishing to continue along Oxford Street, and turn in and out of Percy Street.

The school operates a process to manage the drop-off/pick-up area, which keeps traffic moving into and out of the Kiss & Ride Zone. The Road Safety Officer is working with the school to provide additional support and resources to compliment the proposed changes.

The extension of the NO PARKING area will help reduce the instances of the intersection of Oxford Street and Percy Street being blocked, reducing the risk to drivers and pedestrians.

The remainder of the unrestricted on-street parking in the area is sufficiently vacant to absorb any displacement as a result of the proposed changes.

### APPROVALS

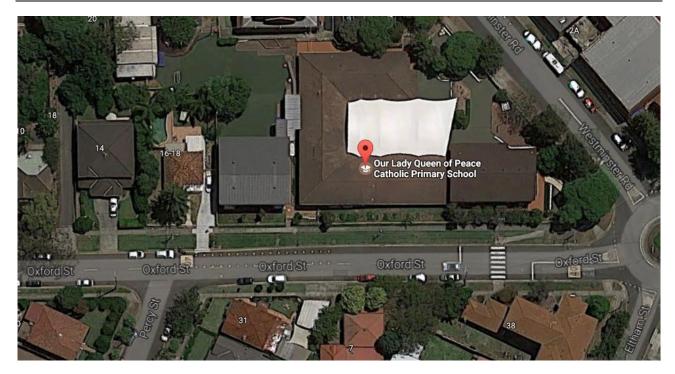
Should the proposed measures be supported by Ryde Traffic Committee, it is intended that the matter will be referred to the Works and Community Committee for consideration of the Council to seek the remaining approvals.

### PROPOSAL

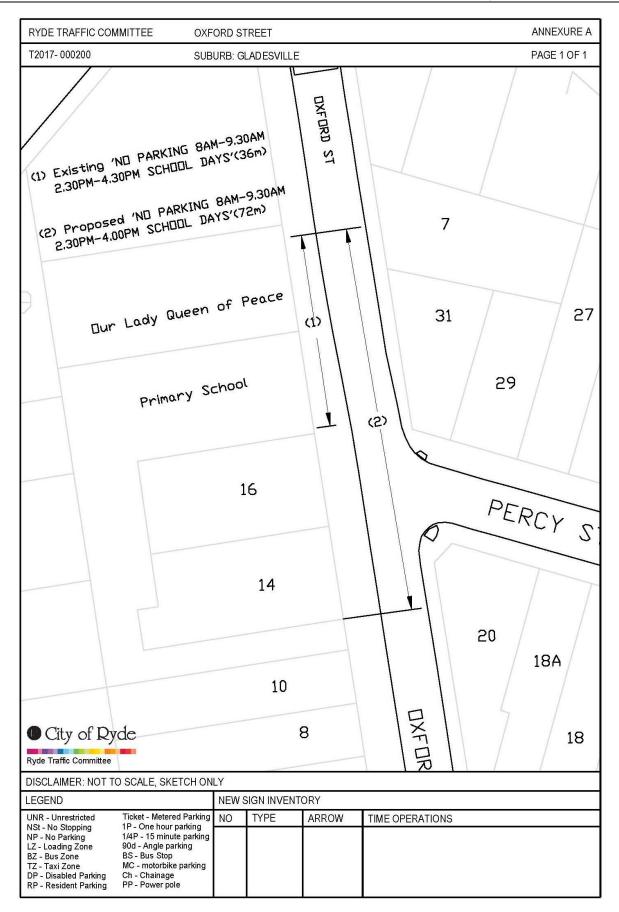
- 1. To convert 36 m of the existing unrestricted parking at 14 to 18 Oxford Street, Gladesville to 'NO PARKING 8-9.30AM 2.30-4PM SCHOOL DAYS'.
- 2. To convert the existing 36 m of 'NO PARKING 8-9.30AM 2.30-4.30PM SCHOOL DAYS' in Oxford Street, Gladesville, at Our Lady Queen of Peace Catholic Primary School to 'NO PARKING 8-9.30AM 2.30-4PM SCHOOL DAYS'.



# Ryde Traffic Committee









# ITEM (C) PHILLIP ROAD, PUTNEY

SUBJECT:'P DISABILITY ONLY' ZONEELECTORATE:LANE COVEWARD:EASTPOLICE LAC:RYDEROAD CLASS:NON-CLASSIFIEDREFERENCE:CRM-1903779 & T2016-02082OFFICER:J BEGLEY

## INTRODUCTION

City of Ryde has received representation from a local resident requesting consideration be given to installing a 'P DISABILITY ONLY' zone in Phillip Road, Putney, to improve access in the area.

### CONTEXT

- 1. The carriageway of Phillip Road is 13 m wide, incorporating a 3.4 m wide parking lane on both sides.
- 2. The kerbside parking lane between the driveways of 32 & 34 Phillip Road is 9.8 m long.

### REFERENCES

- [NSW] *Road Rules 2014* Rule 203 Stopping in a parking area for people with disabilities
- [NSW] *Road Rules 2014* Rule 206 Time extension for people with disabilities
- Australian Standards' AS2890.5 Section 4.5 On Street Parking Parking for people with disabilities.

### COMMUNITY ENGAGEMENT

The resident of 32 Phillip Road has indicated that they are in favour of the proposed changes and they have been advised that the space would be available for any MPS card holder to use. Given the low impact of the proposed changes and that the resident of 32 Phillip Road is in favour of the proposal, no further consultation will be undertaken with the wider community.

### DISCUSSION

Given the close proximity of a driveway at the rear of the proposed 'P DISABILITY ONLY' zone, it is not proposed to install a kerb ramp.

The 'P DISABILITY ONLY' zone will be reviewed on an annual basis.



# APPROVALS

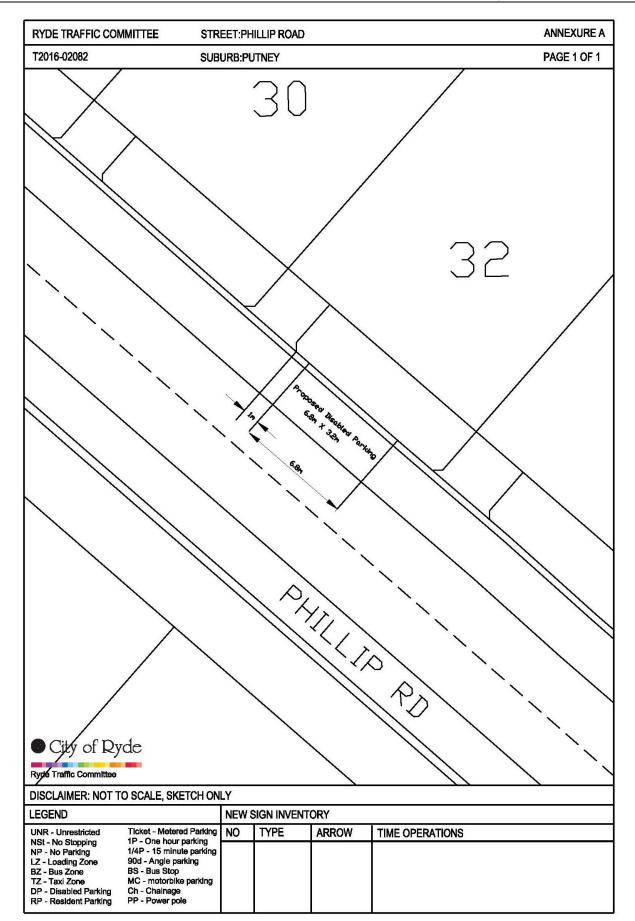
Should the proposed measures be supported by Ryde Traffic Committee, it is intended that the matter will be referred to the Works and Community Committee for consideration of the Council to seek the remaining approvals.

## PROPOSAL

To convert 6.8 m of the existing unrestricted parking in Phillip Road, outside 32 Phillip Road, Putney to 'P DISABILITY ONLY', to be reviewed annually.











# ITEM (D) MATTERS APPROVED UNDER DELEGATION

The parking control measures outlined in *Table 1*, below, were installed to reinforce existing controls under the [NSW] *Road Rules 2014*.

# Table 1Parking control measures installed to reinforce existing controls under Road<br/>Rules 2014

Location Parking Control Measure		Existing <i>Road Rules</i> 2014 Control	Installation Date	
Stephen Avenue, Ryde	10 m of 'NO STOPPING' on both sides of Stephen Avenue, southwest of Quarry Road.	Rule 170 Stopping at or near an intersection	Target: April 2017	





## ITEM (E) PEDESTRIAN CROSSINGS IN EASTWOOD TOWN CENTRE

### INTRODUCTION

The Council has resolved to undertake new traffic and parking surveys to check if the pedestrian crossings in Eastwood Town Centre meet the RMS's criteria for signalised pedestrian crossings, taking into consideration growth in the area.

RMS has not delegated approving installing traffic lights to Council. Council is seeking Ryde Traffic Committee's agreement with the data analysis.

### BACKGROUND

Following a Notice of Motion from Councillor Li, the following was resolved at the Council meeting held on 25 October 2016:

- (a) That Council requests staff update previously undertaken traffic and pedestrian surveys and consider, via the Ryde Traffic Committee, installing traffic signals at appropriate crossings with high pedestrian activity within the Eastwood Town Centre area, taking into account wherever possible expected population growth in the future.
- (b) That a report be forwarded to the Ryde Traffic Committee responding to the request from the Eastwood Chamber of Commerce that a "Left Turn Only" restriction be placed on vehicles exiting Hillview Lane onto West Parade.

Council regularly receives reports from the public that pedestrians using the pedestrian crossings in Eastwood Town Centre hold up traffic, particularly in the afternoon peak period. The sites are regularly checked to see if they meet the RMS's criteria for installing signalised pedestrian crossings.

### **RMS CRITERIA**

RMS is the approving authority for all traffic lights in NSW, including signalised pedestrian crossings. RMS has set the following criteria to assess a site's suitability for signalised pedestrian crossings:

A mid-block signalised pedestrian crossing may be considered if one of the following criteria is met:

- (a) For each of four one-hour periods of any average day:
  - (1) the pedestrian flow crossing the road exceeds 250 persons per hour, and
  - (2) the vehicular flow exceeds 600 vehicles per hour in each direction or, where there is a central median of at least 1.2 m wide, 1000 vehicles per hour in each direction.

OR

- (b) For each of eight one-hour periods of an average day:
  - (1) the pedestrian flow exceeds 175 persons per hour, and



- (2) the vehicular flow exceeds 600 vehicles per hour in each direction or, where there is a central median of at least 1.2 m wide, 1000 vehicles per hour in each direction, and
- (3) there is no other pedestrian crossing or signalised pedestrian crossing within a reasonable distance.

# METHOD, RESULTS & ANALYSIS

Traffic and pedestrian counts were undertaken for the following three consecutive days, at the eleven existing pedestrian crossings in Eastwood Town Centre:

- Tuesday 7 March 2017,
- Wednesday 8 March 2017, and
- Thursday 9 March 2017.

Thursday 9 March 2017 yielded the greatest numbers of traffic and pedestrians and results for the peak four hours for each site are shown in *Table E1*. The result indicate that although pedestrian volumes a high throughout the day, vehicular volumes do not meet the RMS's criteria to install signalised pedestrian crossings at any of the sites.

## DISCUSSION

### Growth

In recent years, Council has received a significant increase in development applications for high density residential dwellings within Eastwood Town Centre. The Bureau of Transport Statistics estimates population growth in Eastwood Town Centre to be 3% per annum until 2041. Although these changes will result in an increase in vehicular trips, the low parking rates in Council's DCP and the proximity of Eastwood train station are likely to result in a much lower traffic growth. With an estimated 1.5% increase in traffic flow per annum, the sites will not reach the RMS's criteria for another 50 years.

### Practicality of installing signalised pedestrian crossings

Sites 1, 2, 6 & 8 are considered midblock pedestrian crossings. However, the remaining seven sites are located close to intersections and would require traffic lights at the intersection. This would require a much larger study that would only be practical in considering a large-scale development in the area.

### CONCLUSION

RMS is the approving authority for signalised pedestrian crossings. None of the eleven existing pedestrian crossings in Eastwood Town Centre meet the RMS's criteria for installing signalised pedestrian crossings, even when growth is taken into account. Many of the pedestrian crossings cannot be changed to signalised pedestrian crossings, without installing traffic signals at the adjacent intersection. This is a much larger scenario to model and it is intended that Council will pursue these investigations in considering a future large-scale developments in the area.



# REFERENCES

• RMS's Traffic Signal Design - Section 2: Warrants





Site 1	West Pa	rade (outside Library	()	
<b>T</b> '		Vehicles / hour		
Time	Pedestrians / hour	Northbound	Southbound	
7.15 - 8.15 am	454	292	281	
8.15 - 9.15 am	426	182	434	
4.45 - 5.45 pm	676	323	171	
5.45 - 6.45 pm	738	294	476	
Site 2	West Parade	(north of Rowe Stree	north of Rowe Street Mall)	
Time		Vehicles	s / hour	
Time	Pedestrians / hour	Northbound	Southbound	
7.45 - 8.45 am	301	553	351	
8.45 - 9.45 am	265	538	554	
4.45 - 5.45 pm	436	349	686	
5.45 - 6.45 pm	407 329		707	
Site 3	Hillview Road	l (east of Progress Av	venue)	
Time	Pedestrians / hour	Vehicles / hour		
Time	Pedestrians / nour	Northbound	Southbound	
7.45 - 8.45 am	192	339	298	
8.45 - 9.45 am	359	227	278	
3.30- 4.30 pm	522	284	253	
4.30 - 5.30 pm	420	305	224	
Site 4	Progress Avenue (south	Progress Avenue (south of Hillview Road)		
Time		Vehicles / hour		
Time	Pedestrians / hour	westbound		
12.00 - 1.00 pm	192	125		
11.00am - 12pm	359 104			
1.15 - 2.15 pm	522	142		
2.15 - 3.15 pm	420	135	$\neg$	
Site 5	Progress Avenue (north of Hillview Lane)			
Time	Pedestrians / hour	Vehicles / hour		
Time		westbound		
11.15 -12.15 am	919	147		
12.15 - 1.15 pm	718	136		
2.00 - 3.00 pm	977	143		
3.00 - 4.00 pm	887	133		

# Table E1 Traffic and pedestrian count results - Thursday 9 March 2017



Site 6	Lakeside Ro	ad (south of Hillview Ro	oad)
Time a		Vehicles	-
Time	Pedestrians / hour	Northbound	Southbound
12.00 - 1.00 pm	56	296	148
11.00 - 12.00 pm	66	289	147
2.45 - 3.45 pm	99	341	147
3.45 - 4.45 pm	47	327	136
Site 7	Lakeside Ro	ad (north of Hillview La	ine)
<b>T</b> '		Vehicles / hour	
Time	Pedestrians / hour	Northbound	Southbound
12.00-1.00 PM	432	240	192
1.00-2.00 PM	341	186	155
2.45 - 3.45 PM	452	224	228
3.45 - 4.45 PM	346	192	154
Site 8	The Avenu	e (north of Rowe Stree	t)
Time	Pedestrian Volume Crossing Road	Northbound Vehicles	Southbound Vehicles
-	(pedestrians/hour)	(vehicles/hour)	(vehicles/hour)
<b>-</b>	· · · · · · · · · · · · · · · · · · ·	Vehicles	, ,
Time	Pedestrians / hour	Northbound	Southbound
10.15-11.15 AM	514	254	160
9.15-10.15 AM	408	201	207
2.45 - 3.45 PM	499	243	256
3.45 - 4.45 PM	457	251	206
Site 9	Trelawney St	reet (south of Rowe Str	eet)
<b>T</b> '	-	Vehicles / hour	
Time	Pedestrians / hour	Northbound	Southbound
10.45-11.45 AM	514	380	152
11.45-12.45 AM	408	350	156
3.15 - 4.15 PM	499	450	198
4.45 - 5.45 PM	457	510	117
Site 10	Railway Par	rade (south of Ethel Street)	
Time	Dedectriese (here	Vehicles / hour	
Time	Pedestrians / hour	Northbound	Southbound
7.30-8.30 AM	275	390	232
8.30- 9.30 AM	201	260	204
4.30- 5.30 PM	225	224	151
5.30-6.30 PM	262	305	191
Site 11	Railway Par	ade (north of Rowe Stre	et)
	Vehicles / hour		,
Time	Pedestrians / hour	Northbound	Southbound
7.30-8.30 AM	153	423	259
8.30- 9.30 AM	246	280	205
5.15-6.15 PM	430	314	234
4.30- 5.30 PM	409	250	200



# ITEM (F) 'LEFT TURN ONLY' IN HILLVIEW LANE AT WEST PARADE, EASTWOOD

### INTRODUCTION

The Council has resolved to investigate installing a 'LEFT TURN ONLY' in Hillview Lane at West Parade, Eastwood.

Under the Instrument of delegation, Ryde Traffic Committee and Council are unable to approve the changes until RMS have approved a Traffic Management Plan. Council staff intend to seek the appropriate approvals to install a a 'LEFT TURN ONLY' and are currently seeking Ryde Traffic Committee's agreement with the data analysis.

### BACKGROUND

Following a Notice of Motion from Councillor Li, the following was resolved at the Council meeting held on 25 October 2016:

- (a) That Council requests staff update previously undertaken traffic and pedestrian surveys and consider, via the Ryde Traffic Committee, installing traffic signals at appropriate crossings with high pedestrian activity within the Eastwood Town Centre area, taking into account wherever possible expected population growth in the future.
- (b) That a report be forwarded to the Ryde Traffic Committee responding to the request from the Eastwood Chamber of Commerce that a "Left Turn Only" restriction be placed on vehicles exiting Hillview Lane onto West Parade.

### CONTEXT

- 1 West Parade is a collector road and has a 50 km/hr speed limit.
- 2. Hillview Lane is an eastbound one-way lane.
- 3. The intersection of Hillview Lane and West Parade is controlled by STOP sign treatment.

### REFERENCES

- [NSW] *Road Rules 2014* Rule 88 Left Turn signs
- Guide to Road Design Part 4A: Un-signalised and Signalised Intersections.

### DISCUSSION

### **Traffic Survey**

Traffic counts were undertaken at the intersection for twelve hours on Wednesday 9 March 2017. The results of the peak-hour flows are shown in *Table F1*. The traffic survey results have also revealed that 339 and 358 vehicles turn left and right, respectively, on to West Parade during the period between 7am and 7pm, which is a twelve-hour interval.



	Hillvie	w Lane	West Parade	West Parade
	(east b	bound)	(north bound)	(south bound)
	Left Turn	Right Turn	Through	Through
AM peak	9	10	304	561
PM peak	41	33	460	359

 Table F1
 Peak hour intersection count at Hillview Lane and West Parade - 9 March 2017

The following site conditions cause drivers difficulty turning right from Hillview Lane into West Parade:

- the sight distance available for drivers exiting Hillview Lane at West Parade is less than 25 m, on the eastern approach, and
- vehicles waiting for pedestrians to use the pedestrian crossing located to the south of Hillview Lane and queue along West Parade, across the intersection.

The resulting queues in Hillview Lane cause significant delays to other motorists turning left out of Hillview Road into Hillview Lane. The level of traffic movements in Hillview Lane indicates that the majority are using the lane for through access.

# **Crash History**

During the period from January 2011 to June 2016 there has been one reported crash at the intersection of Hillview Lane and West Parade.

# Options

The following provides commentary on treatments that may improve the situation:

- RMS has previously advised that 'KEEP CLEAR' linemarking is only suitable to assist drivers entering a side road from a major road, where vehicles regularly queue back into a signalised intersection.
- Parking in Eastwood is at a premium and therefore, the removal of parking, to improve sight distance at the intersection, is not supported.
- In the event a turn ban is installed, it is likely that the most preferred alternative route for right-turning traffic is to turn left into West Parade, circulate the roundabout and return along West Parade. Should the Council wish to pursue the turn ban, the following process is required:
  - o assess the impact of redistributed traffic,
  - consult with the local businesses, and
  - refer the matter to RMS, in the form of a Traffic Management Plan, for their consideration, and
  - if RMS concurs with the Traffic Management Plan, the matter can be formally considered by Ryde Traffic Committee.



# CONCLUSION

Given that installing a 'LEFT TURN ONLY' is likely to improve traffic flow, with minimal negative impacts, Council staff intend to pursue the appropriate approvals.





### ITEM (G) MODIFICATION OF EXISTING ROUNDABOUT AT INTERSECTION OF HERRING ROAD AND DORA STREET, MARSFIELD

## INTRODUCTION

As part of the redevelopment of 3-5 Dora Street, Marsfield, NSW Land & Housing Corporation is proposing changes to the design of the existing roundabout at the intersection of Herring Road and Dora Street, to provide an accessible path between their property and the nearest Bus Stops. Three options have been provided by NSW Land & Housing Corporation.

Council is requesting Ryde Traffic Committee to provide advice, on the three options, to NSW Land & Housing Corporation. The final design will be forwarded to Ryde Traffic Committee for Technical Aproval, prior to implementation.

### BACKGROUND

3-5 Dora Street is being redeveloped as a senior's housing development, consisting of seven self-care dwellings. One of the core requirements associated with this class of development is that it must meet minimum distance requirements associated with access to public transport and services. Clauses 26 & 38(i) of *State Environmental Planning Policy Housing for Seniors or Persons with a Disability (SEPP HS)* outlines the specific criteria for determining site suitability and what measures are required to address any deficiencies found. Given that the nearest shopping facility (Macquarie Centre) is 1.2 km from the proposed development, safe access for aged and disabled persons to the nearest Bus Stop must be provided.

### CONTEXT

- 1. Dora Street and is a two-way local road, with a speed limit of 50 km/h.
- 2. Herring Road is a two-way collector road, with a speed limit of 50 km/h.
- 3. The intersection of Herring Road and Dora Street operates as a single-lane roundabout.
- 4. There are Bus Stops on both sides of Herring Road, just southwest of the roundabout. There is an existing bus shelter and concrete boarding pad at both locations.

### REFERENCES

- [NSW] *Road Rules 2014* Part 9 Roundabouts
- State Environmental Planning Policy Housing for Seniors or Persons with a Disability
- RMS's Technical Direction TDT2011/01A Pedestrian Refuges



## DISCUSSION

NSW Land & Housing Corporation engaged the services of a Traffic Engineer and a Disability Access Specialist to review the route to and from the proposed development, at 3-5 Dora Street, and the nearest Bus Stops on Herring Road. The consultants identified the following works to meet the access requirements of *SEPP HS*:

- replace the existing kerb ramps in Dora Street,
- install new footpaths and kerb ramps in Herring Road, and
- replace the roundabout splitter island with a pedestrian refuge.

Three options have been proposed by NSW Land & Housing Corporation's Development Engineers to address these issues, which differ in their treatment of the splitter island:

- Option 1: does not propose any amendments to the splitter island arrangement, apart from the addition of holding rails. This option does not comply with RMS's Technical Direction.
- Option 2: proposes to convert the splitter island to a pedestrian refuge, located further south of the roundabout, with new kerb and guttering narrowing the northbound carriageway of Herring Road. The relocated pedestrian refuge straddles the access driveway serving 88 Herring Road, thus restricting movement to a left-in/out arrangement. While plans state that the proposed refuge complies with RMS's Technical Direction, the refuge as drawn does not support this claim.
- Option 3: in addition to the pedestrian refuge in Option 2, installing chevron linemarking on the north-eastbound lane of Herring Road on approach to the roundabout. As with Option 2, the pedestrian refuge does not comply with RMS's Technical Direction and enforces a left-in/out arrangement at 88 Herring Road.

All three options propose to:

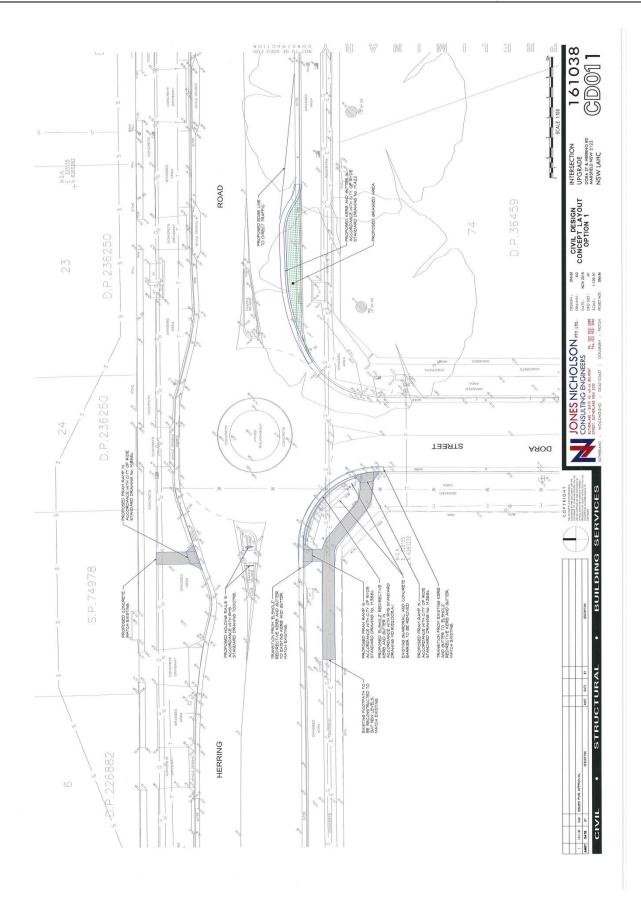
- replace the existing kerb ramps in Dora Street,
- install new footpaths and kerb ramps in Herring Road, and
- replace the existing guardrail on the southern corner of the roundabout with elsholz redirective kerb, and
- reduce the speed of south-westbound traffic entering the roundabout by installing a kerb extension on the western corner.

Both the Traffic Engineer and Accessibility consultants identify that the damaged guardrail should be replaced; however, neither make reference to the removal of the guardrail and replacement by elsholz redirective kerb.

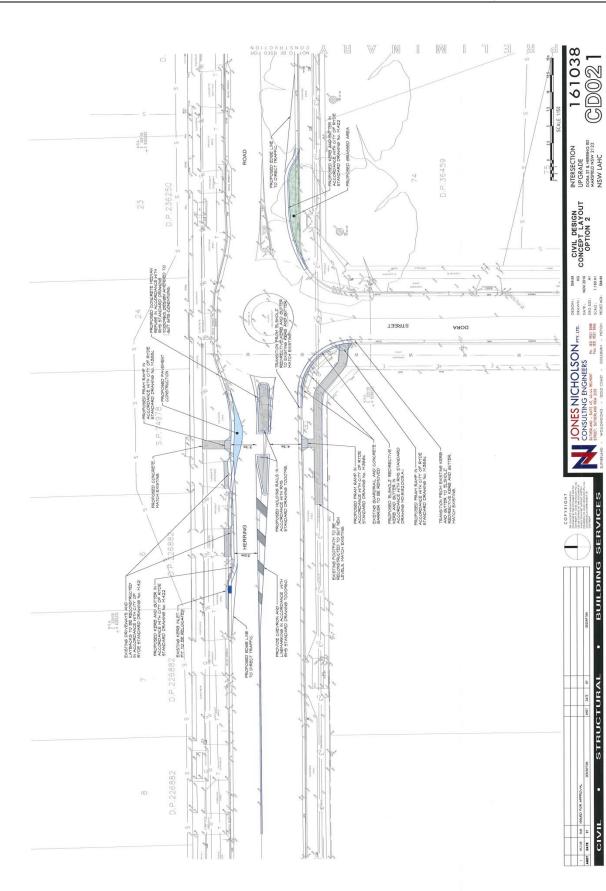
The existing guardrail is designed to arrest a south-westbound errant vehicle and help prevent a collision with the power pole, which also supports a street light. Given that elsholz-style kerb is only effective as a redirective kerb when struck at an angle less than 25°, its effectiveness is limited at this location. Therefore, Council staff endorse replacing the existing guardrail, and installing elsholz redirective kerb.







**Q** City of Ryde



**Q** City of Ryde



