



17 November 2016

File: COR2009/206

---

**NOTICE OF MEETING**

---

**You are advised of the following meeting:**

**Thursday 17 November 2016**

**Ryde Traffic Committee Meeting**

**Woolwich Meeting Room, Level 1, North Ryde Office,  
Building 0, 3 Richardson Place, North 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 (13 items)..... The Hon. V Dominello MP  
Member for Lane Cove (2 items)..... The Hon. A Roberts MP

**ADVISORS**

Sydney Buses ..... Western Region

Committee members and advisors are invited to attend the next meeting of the Traffic Committee. Alternatively, please forward comments on any matter to City of Ryde's Team Leader - Traffic Services, Mr Greg Holding, via email [gholding@ryde.nsw.gov.au](mailto:gholding@ryde.nsw.gov.au) by 5pm Tuesday 15 November 2016. If no comments are received, it is intended to deal with the matters in accordance with the Agenda proposals.

Councillors with an interest in any Agenda item should forward comments to City of Ryde's Team Leader - Traffic Services, Mr Greg Holding, via email [gholding@ryde.nsw.gov.au](mailto:gholding@ryde.nsw.gov.au) by 5pm Tuesday 15 November 2016.



**Meeting Date:** Thursday 17 November 2016  
**Location:** Woolwich Meeting Room, Level 1, North Ryde Office,  
Building 0, 3 Richardson Place, North Ryde  
**Time:** 10.00am

## NOTICE OF BUSINESS

### APOLOGIES

### DECLARATIONS OF INTEREST

### CONFIRMATION OF PREVIOUS MINUTES

### MATTERS ARISING FROM PREVIOUS MINUTES

### MATTERS FOR CONSIDERATION

---

**ITEM (A)**                    **WOODBINE CRESCENT, RYDE**  
**SUBJECT:**                PARKING CONTROL MEASURES  
**ELECTORATE:**        RYDE  
**WARD:**                    CENTRAL  
**POLICE LAC:**         RYDE  
**ROAD CLASS:**        NON-CLASSIFIED  
**REFERENCE:**         D16/72536 & T2016-01080  
**OFFICER:**             A Mendis

---

**ITEM (B)**                    **COX'S ROAD , NORTH RYDE**  
**SUBJECT:**                NO STOPPING AT NORTH RYDE PUBLIC SCHOOL  
**ELECTORATE:**        RYDE  
**WARD:**                    WEST  
**POLICE LAC:**         RYDE  
**ROAD CLASS:**        NON-CLASSIFIED  
**REFERENCE:**         D15/136271 & T2015-01665  
**OFFICER:**             L Pears

---



---

**ITEM (C)                      BADAJOZ ROAD, EAST RYDE**  
SUBJECT:                      ROAD SAFETY AT RYDE EAST PUBLIC SCHOOL  
ELECTORATE:                 LANE COVE  
WARD:                         EAST  
POLICE LAC:                 RYDE  
ROAD CLASS:                NON-CLASSIFIED  
REFERENCE:                 D15/98351 & T2015-01438  
OFFICER:                    L Pears

---

**ITEM (D)                      MORRISON ROAD, PUTNEY**  
SUBJECT:                      LOCAL AREA TRAFFIC MANAGEMENT SCHEME  
ELECTORATE:                 RYDE  
WARD:                         EAST  
POLICE LAC:                 RYDE  
ROAD CLASS:                NON-CLASSIFIED  
REFERENCE:                 T2016-01843  
OFFICER:                    G Holding

---

**ITEM (E)                      WATTS ROAD, TALLWOOD AVENUE AND DONOVAN STREET, RYDE**  
SUBJECT:                      LOCAL AREA TRAFFIC MANAGEMENT SCHEME  
ELECTORATE:                 RYDE  
WARD:                         WEST  
POLICE LAC:                 RYDE  
ROAD CLASS:                NON-CLASSIFIED  
REFERENCE:                 CRM-1737300 & T2015-01259  
OFFICER:                    S Wood

---

**ITEM (F)                      LOVELL ROAD, DENISTONE EAST**  
SUBJECT:                      PARKING CONTROL MEASURES  
ELECTORATE:                 RYDE  
WARD:                         WEST  
POLICE LAC:                 RYDE  
ROAD CLASS:                NON-CLASSIFIED  
REFERENCE:                 T2016-01844  
OFFICER:                    G Holding

---

**ITEM (G)                      DALTON AVENUE AT BLAXLAND ROAD, DENISTONE EAST**  
SUBJECT:                      2016/2017 BLACK SPOT PROGRAMME WORKS  
ELECTORATE:                 RYDE  
WARD:                         WEST  
POLICE LAC:                 RYDE  
ROAD CLASS:                NON-CLASSIFIED  
REFERENCE:                 T2016-01582  
OFFICER:                    S Wood

---



---

**ITEM (H) INTERSECTION OF RYRIE STREET AND MORSHEAD STREET, NORTH RYDE**  
SUBJECT: 2016/2017 BLACK SPOT PROGRAMME WORKS  
ELECTORATE: RYDE  
WARD: EAST  
POLICE LAC: RYDE  
ROAD CLASS: NON-CLASSIFIED  
REFERENCE: T2016-01583  
OFFICER: S Wood

---

**ITEM (I) SMALLS ROAD & ZOLA AVENUE , RYDE**  
SUBJECT: 2016/2017 BLACK SPOT PROGRAMME WORKS  
ELECTORATE: RYDE  
WARD: CENTRAL  
POLICE LAC: RYDE  
ROAD CLASS: NON-CLASSIFIED  
REFERENCE: T2016-01584  
OFFICER: S Wood

---

**ITEM (J) CULLODEN & WATERLOO ROADS , MARSFIELD**  
SUBJECT: 2016/2017 SAFER ROADS PROGRAM WORKS  
ELECTORATE: RYDE  
WARD: WEST  
POLICE LAC: RYDE  
ROAD CLASS: NON-CLASSIFIED  
REFERENCE: D15/91836 & T2016-01552  
OFFICER: S Wood

---

**ITEM (K) SMITH STREET, RYDE**  
SUBJECT: SIGNAGE AND LINEMARKING PLAN APPROVAL  
ELECTORATE: RYDE  
WARD: CENTRAL  
POLICE LAC: RYDE  
ROAD CLASS: NON-CLASSIFIED  
REFERENCE: D16/150021 & T2016-01827  
OFFICER: P Bastawrous

---

## EXTRA ITEMS

## GENERAL BUSINESS



## **ADVISORY ITEMS**

1. MATTERS APPROVED UNDER DELEGATION
2. DRIVEWAY TREATMENTS
3. MERITON STREET, GLADESVILLE –  
ACTIVE TRANSPORT WALKING COMMUNITIES PROGRAM WORKS
4. RYDE TRAFFIC COMMITTEE 2017 MEETING DATES
5. BRABYN STREET, DENISTONE EAST – PERMANENT ROAD CLOSURE



<b>ITEM (A)</b>	<b>WOODBINE CRESCENT, RYDE</b>
<b>SUBJECT:</b>	<b>PARKING CONTROL MEASURES</b>
<b>ELECTORATE:</b>	RYDE
<b>WARD:</b>	CENTRAL
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	D16/72536 & T2016-01080
<b>OFFICER:</b>	A MENDIS

## OVERVIEW

City of Ryde has received representation from local residents requesting consideration be given to improving safety around the reverse curve at the northern end of Woodbine Crescent, Ryde.

The carriageway along Woodbine Crescent narrows to a 6.8 m at the reverse curve. Kerbside parking is regularly at high occupancy and it is proposed to install 'NO PARKING' zones to improve driver sight distance to approaching traffic on the reverse curve at the northern end.

## CONTEXT

1. Woodbine Crescent has a 6.8 m wide carriageway and parking is currently unrestricted throughout the reverse curve at the northern end of Woodbine Crescent.
2. At the southern end of Woodbine crescent there is currently 'NO PARKING' on the inner radius of the curve.
3. Woodbine Crescent has a speed limit of 50 kmh.

## REFERENCES

- [NSW] *Road Rules 2014* Rule 168 No Parking Signs

## CONSULTATION

The occupants of all 69 properties in Woodbine Crescent have been notified of the proposal.

25 responses have been received in support to the proposal and five NOT in support. Occupants that do not support the proposed changes have raised the following concerns:

- displacement of parking further down Woodbine Crescent,
- despite the proposed parking control measures, the front fence at 62 Woodbine Crescent reduces sight distance through the corner,
- the proposed parking control measures are too long,



- driver speeds may increase, and
- the use of Woodbine Crescent for through traffic.

Regarding the abovementioned concerns:

- The displacement of parking further down Woodbine Crescent is not expected to reduce driver visibility as the horizontal alignment of that section of Woodbine Crescent is straight.
- The extent of proposed parking control measures create required sight visibility on the inner radii of the reverse curve and are expected to improve sight visibility around the front fence of 62 Woodbine Crescent, which has been constructed according to Council's requirements.
- Recent traffic speed/volume surveys undertaken outside 26 & 42 Woodbine Crescent have revealed that Woodbine Crescent carries 517 veh/day with an 85th percentile speed of 56 km/h. It is unlikely that current traffic conditions in Woodbine Crescent are expected to change due to the proposed parking control measures.

Alternative measures that have been suggested include converting Woodbine Crescent to one-way flow and allow parking on both sides of the road. The traffic volumes and geometry of Woodbine Crescent do not warrant on-way traffic flow between Bambi Street and Quarry Road.

Although the occupants that have not responded are understood to be providing undeclared support, City of Ryde staff intend to notify all 69 properties before the matter is considered by Council.

## **DISCUSSION**

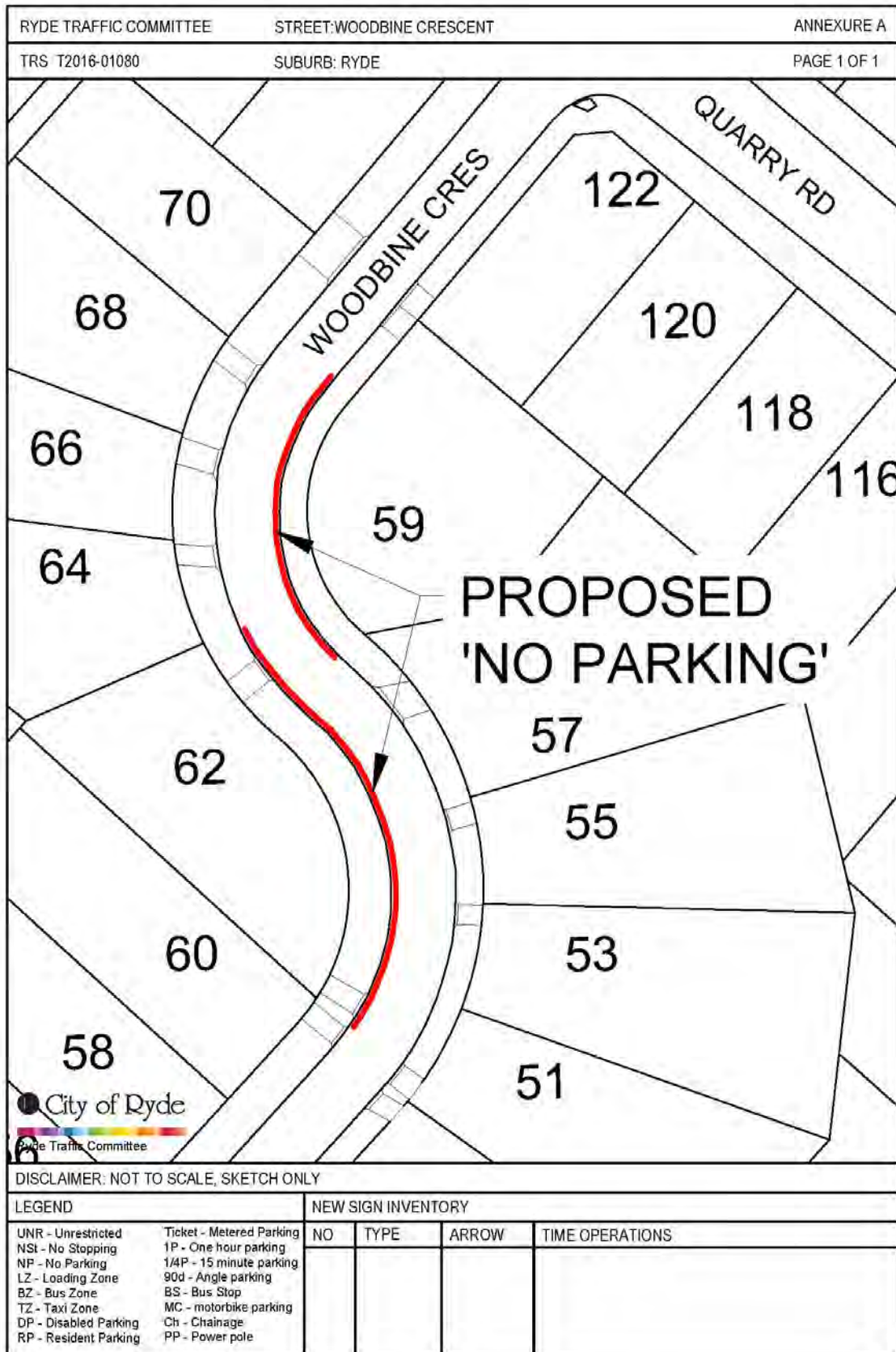
The sight lines are regularly blocked by parked vehicles around the reverse curve at the northern end of Woodbine Crescent. To improve the safety of road users and accessibility for waste-collection vehicles, it is proposed to install 'NO PARKING' zones outside 59 and 62 Woodbine Crescent.

## **PROPOSAL**

To install 'NO PARKING' zones outside 59 and 62 Woodbine Crescent, Ryde, as shown in the attached plan.









Page intentionally left blank

**ITEM (B) COX'S ROAD, NORTH RYDE**

**SUBJECT:** NO STOPPING AT NORTH RYDE PUBLIC SCHOOL  
**ELECTORATE:** RYDE  
**WARD:** WEST  
**POLICE LAC:** RYDE  
**ROAD CLASS:** NON-CLASSIFIED  
**REFERENCE:** D15/136271 & T2015-01665  
**OFFICER:** L PEARS

**OVERVIEW**

City of Ryde has received representation from North Ryde Public School P&C Association requesting consideration be given to improving pedestrian and vehicle safety around the Kiss and Ride zone on Cox's Road, including the installation of:

- 'NO STOPPING' in Cox's Road, between the driveways to the off-street drop-off / pick-up area,
- linemarking on the carriageway to help reduce the incidence of vehicles queueing across the driveways, and
- linemarking on the footpath across the driveways to the off-street drop-off / pick-up area.

**CONTEXT**

4. Cox's Road is a key thoroughfare for traffic from Lane Cove Road accessing shops and schools in North Ryde.
5. North Ryde Public School has an off-street car park area that is used for drop-off and pick-up students, with separate entrance and exit driveways in close proximity to each other.
6. The existing Kiss & Ride zone ends immediately before the exit driveway.

**REFERENCES**

- [NSW] *Road Rules 2014* Rule 167 No stopping signs

**CONSULTATION**

The proposal has been forwarded to the North Ryde Public School Principal and the School's P&C Association, both of which are in favour of the proposed changes.

**DISCUSSION**

Currently the Kiss and Ride zone extends across two school driveways. These driveways are entry and exit points for the off-street drop-off / pick-up circuit. Vehicles using the on-street Kiss & Ride zone are often queued across the driveways, blocking access for vehicles to and from Cox’s Road. This contributes to additional traffic congestion along Cox’s Road in the morning and afternoon peak times.

The school has also raised concerns that vehicles parked within this area of the Kiss & Ride zone obscure the vision of drivers entering and exiting the school, increasing the risk of pedestrian and vehicle crashes.

It is proposed to relocate the end of Kiss & Ride zone to before the first driveway and installing linemarkings on the footpath and carriageway as shown in the attached diagram.

The proposed ‘NO STOPPING 8AM-4PM SCHOOL DAYS’ requires the approval of Council, via Ryde Traffic Committee, whereas the linemarking is advisory and therefore is approved under existing staff delegations.

**PROPOSAL**

To install ‘NO STOPPING 8AM-4PM SCHOOL DAYS’ across and between the driveways to North Ryde Public School, in Cox’s Road, North Ryde.





RYDE TRAFFIC COMMITTEE	STREET: COX'S ROAD	ANNEXURE A
T2015-01665	SUBURB: NORTH RYDE	PAGE 1 OF 1

The sketch shows Cox's Road with North Ryde Public School to the left. Existing signage includes '1P 8.30AM-4PM MON-FRI 8.30AM-12.30PM SAT', 'NO P 4PM-7PM MON-FRI', and 'EXISTING: NO P 8AM-9.30AM 2.30PM-4PM SCHOOL DAYS 1P 9.30AM-2.30PM MON-FRI 8.30AM-12.30PM SAT'. A proposed 'NO STOPPING 8AM-7PM MON-FRI' zone is indicated with a green line. New advisory linemarking is also shown.

City of Ryde  
Ryde Traffic Committee

DISCLAIMER: NOT TO SCALE, SKETCH ONLY

LEGEND		NEW SIGN INVENTORY			
NO	TYPE	ARROW	TIME OPERATIONS		
UNR - Unrestricted	Ticket - Metered Parking				
NSt - No Stopping	1P - One hour parking				
NP - No Parking	1/4P - 15 minute parking				
LZ - Loading Zone	90d - Angle parking				
BZ - Bus Zone	BS - Bus Stop				
TZ - Taxi Zone	MC - motorbike parking				
DP - Disabled Parking	Ch - Chainage				
RP - Resident Parking	PP - Power pole				



Page intentionally left blank

---

<b>ITEM (C)</b>	<b>BADAJEZ ROAD, RYDE</b>
<b>SUBJECT:</b>	<b>ROAD SAFETY AT RYDE EAST PUBLIC SCHOOL</b>
<b>ELECTORATE:</b>	LANE COVE AND RYDE
<b>WARD:</b>	EAST
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	D15/98351 & T2015-01438
<b>OFFICER:</b>	G HOLDING

## OVERVIEW

Representation has been received from a parent of Ryde East Public School requesting consideration be given to improving pedestrian safety in Badajoz Road, Ryde.

A drop-in session revealed a number of issues. Based on subsequent investigations, RMS has agreed that Council can:

1. install a flat-top road hump at the existing pedestrian crossing in Badajoz Road, south of Twin Road, to create a raised pedestrian crossing,
2. install a raised pedestrian crossing in Badajoz Road at the existing children's crossing in Badajoz Road between Twin Road and Nerang Street,
3. install a 'P DISABILITY ONLY 8am-9.30am 2.30pm-4pm SCHOOL DAYS' zone on the eastern side of Badajoz Road, north of the driveway to Ryde East Public School, and
4. address driver behavioural issues, such as illegal parking, through education and enforcement.

## BACKGROUND

A Notice of Motion, regarding the road safety in the Ryde East Public School area, was considered at the Council meeting held on 22 March 2016. Subsequently, Council resolved the following:

- (a) *That the General Manager facilitate a collaborative meeting as soon as possible after the school holidays, to discuss and initiate a road safety improvement plan with the objective to reduce the safety risks to pedestrians and school children from Ryde East Public School.*
- (b) *That the General Manager invites the following parties to attend a collaborative style meeting including:-*
  1. *Roads Maritime Services Representative;*
  2. *City of Ryde, Director - City Works and Infrastructure and Traffic Engineers;*
  3. *Hon. Anthony Roberts MP;*
  4. *Ryde East Public School, Parents & Citizens Association and Ms Kat Everett;*
  5. *Local residents.*

- (c) *That the Council give due consideration for a road safety improvement plan which includes measures for increased visibility for pedestrians and school children at the Badajoz Road crossing.*
- (d) *That, in addition to the existing refuge island, Council investigate the option for a marked zebra crossing to replace the existing school crossing outside Ryde East Public School on Badajoz Road, including a speed hump for the safety of the Ryde East Public School and pedestrians.*
- (e) *That Council explore the option to remove the Zebra crossing at the Twin Road/Badajoz Road roundabout.*
- (f) *That Council give consideration to widening the "Kiss and Drop" Zone area by a metre, to alleviate traffic congestion during critical pick up and drop off times.*
- (g) *That Council, as a matter of urgency, investigate the road safety concerns affecting the Ryde East Public School community and provide a comprehensive report to Councillors outlining proposed road safety improvements with an indication of a timeframe for implementation.*
- (h) *That Council liaise with the relevant sources to discuss funding of the road safety improvements including the RMS and the Hon. Anthony Roberts MP.*
- (i) *That Council facilitate a road safety educational program for parents at the school working in conjunction with Ms Kat Everett and the P&C.*
- (j) *That the minutes of the initial meeting and any other meeting be provided to all Councillors.*

Following an initial investigation during the school term, Ryde East Public School, the school's P&C Association and 146 local residences were requested to raise any issues regarding road safety in the Ryde East Public School area, through a drop-in session and/or in writing. All Councillors, RMS and Anthony Roberts MP were invited to attend the drop-in session.

22 submissions were received which covered a range of issues, specifically:

1. Five submissions from local residents and nine submissions from non-residents raised concerns regarding the:
  - proximity of the pedestrian crossing in Badajoz Road, south of Twin Road, to the roundabout at Twin Road,
  - drivers not stopping at the supervised children's crossing in Badajoz Road, midblock between Twin Road and Nerang Street,
  - pedestrians not aware of the Road Rules regarding the use of the children's crossing in Badajoz Road, midblock between Twin Road and Nerang Street, after hours,
  - no controlled crossing facilities for pedestrians at the children's crossing in Badajoz Road, midblock between Twin Road and Nerang Street, after hours, and
  - speed and attentiveness of drivers approaching the abovementioned pedestrian facilities from all directions.



2. Three submissions from two local residents urged Council not to undertake any changes, due to the effects of installing speed-reduction devices and pedestrian crossings.
3. Three submissions from local residents and one submission from a non-resident raised concerns regarding:
  - traffic congestion,
  - illegal parking, and
  - driver speeds.
4. One submission from a parent of Ryde East Public School, requesting the installation of a 'P DISABILITY ONLY' zone in Badajoz Road, near the entrance to the school, to improve access for MPS card holders, when dropping-off and picking-up students.
5. A majority of submissions included requests to change the pedestrian crossing in Badajoz Road in some manner.

## CONTEXT

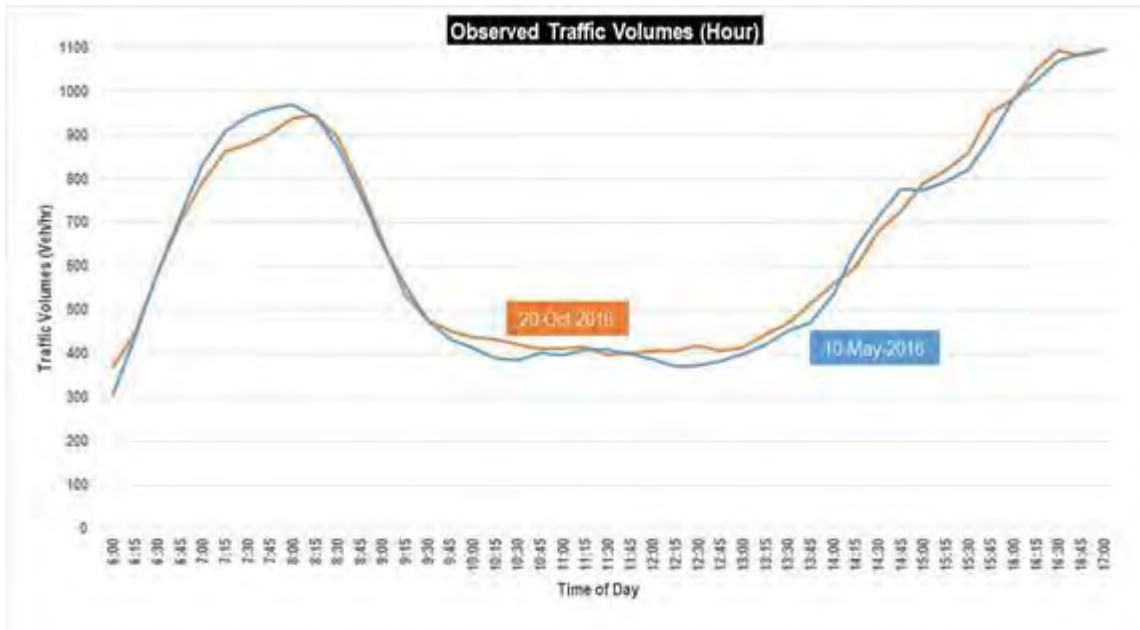
1. The controlled crossing facilities for pedestrians in Badajoz Road are:
  - the pedestrian crossing, south of the roundabout at Twin Road, and
  - a children's crossing located midblock between Twin Road and Nerang Street.
 A summary of pedestrian and traffic counts undertaken at these facilities are shown in *Table 1* and *Charts 1, 2 & 3*.
2. There are 40 km/h School Zones in Badajoz Road (with Flashing Lights) and Twin Road (without flashing lights). A summary of traffic speed and volume surveys, undertaken in Badajoz Road, are shown in *Table 2*.

*Table 1 Summary of pedestrian and traffic counts in Badajoz Road, Ryde*

Location	Date	Time	Pedestrian volume	Traffic volume
Existing pedestrian crossing in Badajoz Road, south of Twin Road	10 May 2016	8.15-9.15am	14 ped	941 veh
		3.15-4.15pm	24 ped	794 veh
	20 Oct 2016	8.15-9.15am	8 ped	946 veh
		3.15-4.15pm	50 ped	819 veh
Existing children's crossing in Badajoz Road, between Twin Road and Nerang Street	10 May 2016	8.15-9.15am	151 ped	942 veh
		3.15-4.15pm	125 ped	806 veh
	20 Oct 2016	8.15-9.15am	92 ped	938 veh
		3.15-4.15pm	165 ped	816 veh



**Chart 1** Observed vehicle counts in Badajoz Road, between Twin Road and Nerang Street, Ryde.



**Chart 2** Observed pedestrians crossing Badajoz Road at the existing pedestrian crossing in Badajoz Road, south of Twin Road, Ryde



Chart 3 Observed pedestrians crossing Badajoz Road at the existing children’s crossing in Badajoz Road, between Twin Road and Nerang Street, Ryde

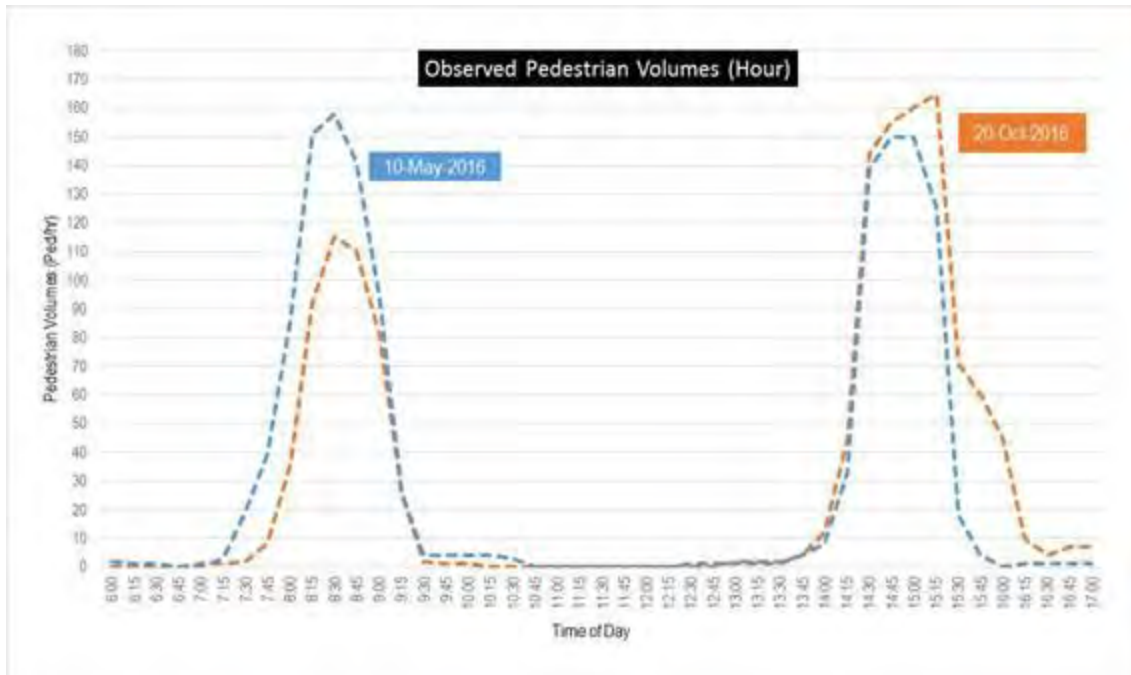


Table 2 Summary of traffic speed and volume surveys in Badajoz Road, Ryde

Location	Date	Time	Speed Limit	85th percentile speed	Volume
Outside 33 Badajoz Road	21-27 Jun 2016	8am-9am weekdays	40 km/h School Zone	47.7 km/h	322 veh/h
	20-26 Oct 2016			44.1 km/h	881 veh/h
	21-27 Jun 2016	3pm-4pm weekdays		44.8 km/h	458 veh/h
	20-26 Oct 2016			44.0 km/h	776 veh/h
	21-27 Jun 2016	All other times	50 km/h	57 km/h	8051 veh/day
	20-26 Oct 2016			57 km/h	8515 veh/day
Outside 47 Badajoz Road	21-27 Jun 2016	8am-9am weekdays	40 km/h School Zone	36.8 km/h	809 veh/h
	20-26 Oct 2016			37.7 km/h	873 veh/h
	21-27 Jun 2016	3pm-4pm weekdays		37.5 km/h	766 veh/h
	20-26 Oct 2016			37.2 km/h	781 veh/h
	21-27 Jun 2016	All other times	50 km/h	44 km/h	8321 veh/day
	20-26 Oct 2016			44 km/h	8583 veh/day

REFERENCES

- RMS’s Roads and Maritime Supplement to Australian Standard 1742 Manual of Uniform Traffic Control Devices parts 1-15 Version 2.4

## CONSULTATION

In addition to the drop-in session, Ryde East Public School, the school's P&C Association and 146 local residents have been notified that:

- based on current pedestrian and traffic levels of use and behaviours, RMS has agreed that Council can:
  1. install a flat-top road hump at the existing pedestrian crossing in Badajoz Road, south of Twin Road, to create a raised pedestrian crossing,
  2. install a raised pedestrian crossing in Badajoz Road at the existing children's crossing in Badajoz Road between Twin Road and Nerang Street,
  3. install a 'P DISABILITY ONLY 8am-9.30am 2.30pm-4pm SCHOOL DAYS' zone on the eastern side of Badajoz Road, north of the driveway to Ryde East Public School, and
  4. address driver behavioural issues, such as illegal parking, through education and enforcement,
- the matter will be tabled at this Ryde Traffic Committee meeting.

## DISCUSSION

In order to address the issues raised by the community, it is proposed that the measures shown in *Table 3* be undertaken. RMS has agreed that these measures are appropriate, under their Reduced Warrant for sites used predominantly by children:

*In two counts of one hour duration immediately before and after school hours:*

- (a)  $P \geq 30$  pedestrians per hour, and
- (b)  $V \geq 200$  vehicles per hour.

**Table 3** Summary of road safety issues raised and proposed measures at Ryde East Public School

Location	Issue	Proposed measure
Pedestrian crossing in Badajoz Road, south of Twin Road	The proximity of the pedestrian crossing to the roundabout at Twin Road	1. Upgrade the existing signage and linemarking at this pedestrian crossing
	The speed and attentiveness of approaching drivers.	2. Install a flat-top road hump at this pedestrian crossing, to create a raised pedestrian crossing *
Children's crossing in Badajoz Road, midblock between Twin Road and Nerang Street	Drivers not stopping during supervised hours	Install a raised pedestrian crossing at this children's crossing *
	Pedestrians not aware of the Road Rules regarding the use of this children's crossing after hours	
	No controlled crossing facilities for pedestrians at this location after hours	
	The speed and attentiveness of approaching drivers	
Badajoz Road	Traffic congestion	None
Badajoz Road	Illegal parking	Education and enforcement
Badajoz Road	Driver speeds	Install the abovementioned raised pedestrian crossings
Badajoz Road, near the entrance to the school	Request to install a 'P DISABILITY ONLY' zone to improve access when dropping-off / picking-up students	Install a 'P DISABILITY ONLY 8am-9.30am 2.30pm-4pm SCHOOL DAYS' zone on the eastern side of Badajoz Road, north of the driveway to Ryde East Public School *

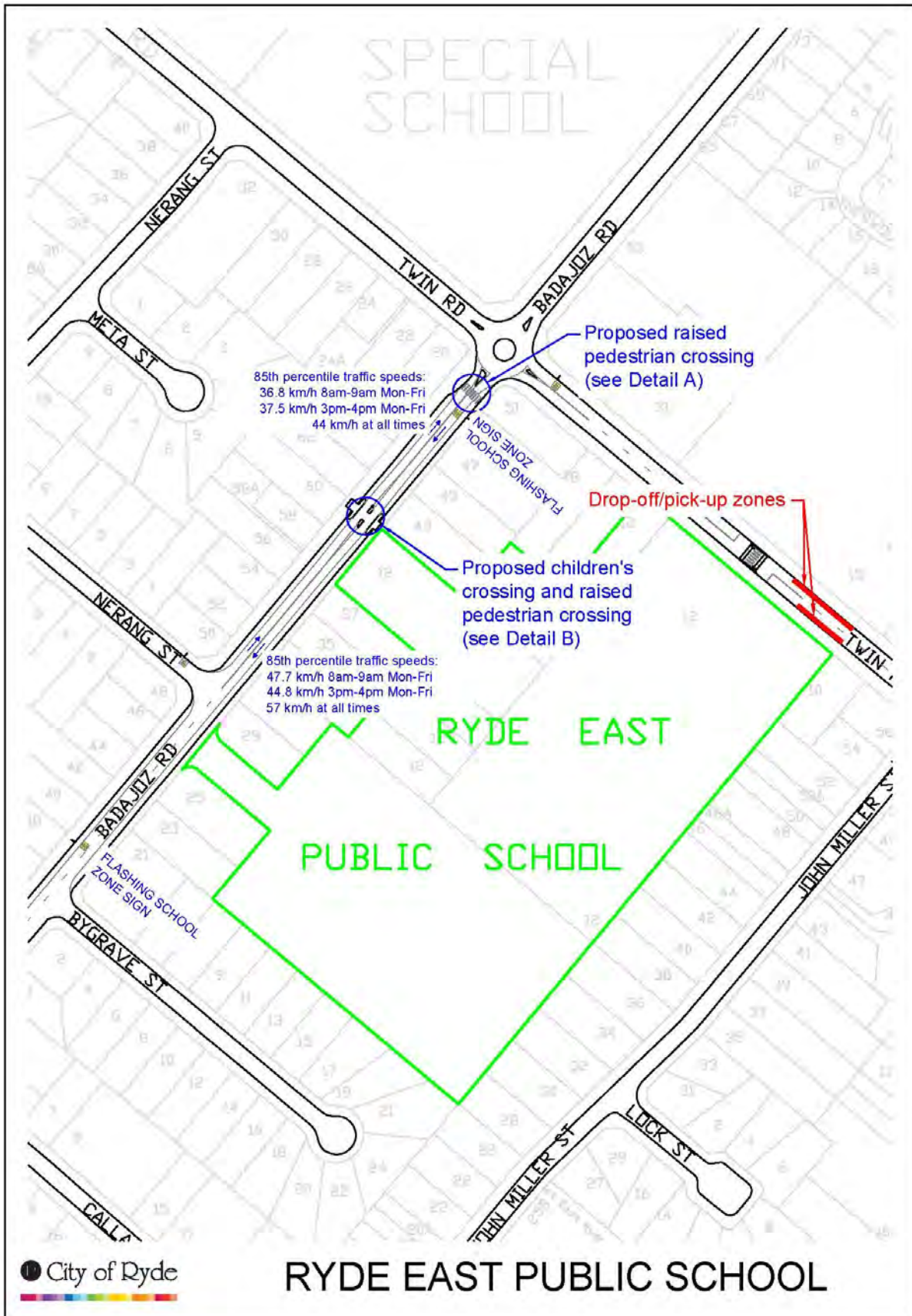
\* requires Ryde Traffic Committee support and Council approval.

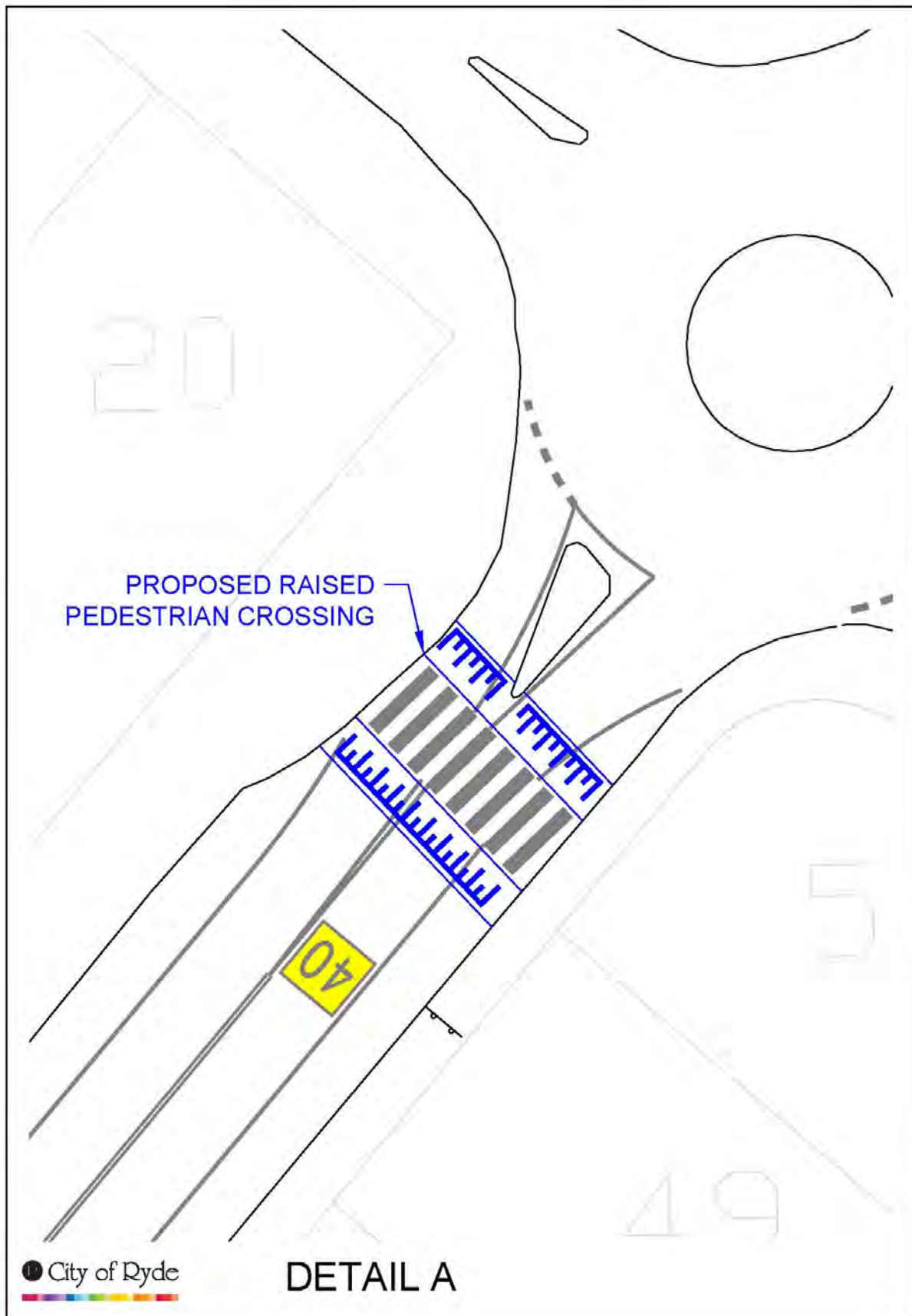
City of Ryde's Road Safety Officer will address driver behavioural issues, such as illegal parking, through education and liaise with local area Police regarding enforcement.



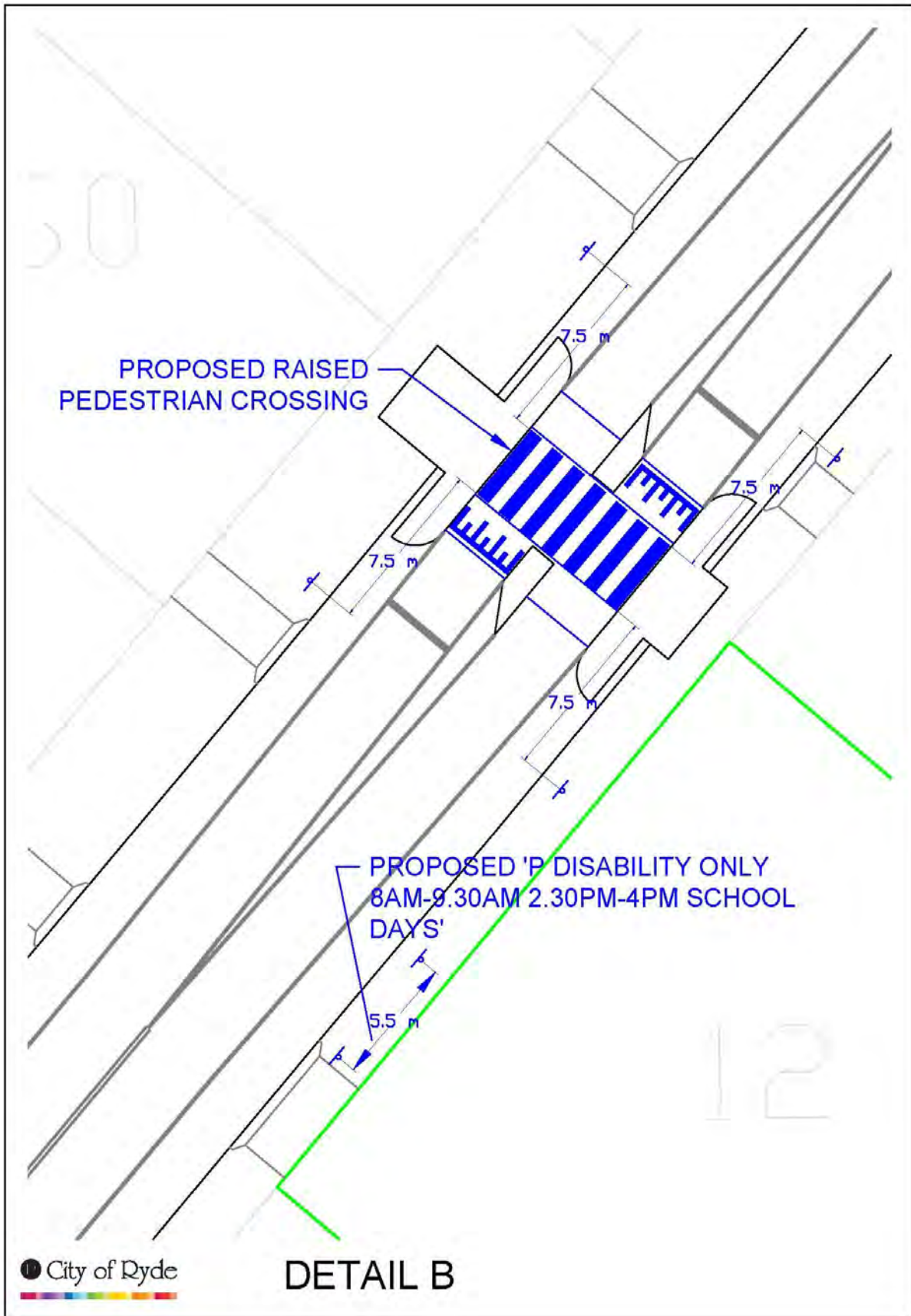
## **PROPOSAL**

1. To install a flat-top road hump at the existing pedestrian crossing in Badajoz Road, south of Twin Road, Ryde, to create a raised pedestrian crossing.
2. To install a raised pedestrian crossing in Badajoz Road at the existing children's crossing in Badajoz Road between Twin Road and Nerang Street, Ryde.
3. To install a 5.5 m 'P DISABILITY ONLY 8am-9.30am 2.30pm-4pm SCHOOL DAYS' zone on the eastern side of Badajoz Road, north of the driveway to Ryde East Public School, Ryde.











Page intentionally left blank

---

<b>ITEM (D)</b>	<b>MORRISON ROAD, PUTNEY</b>
<b>SUBJECT:</b>	<b>LOCAL AREA TRAFFIC MANAGEMENT SCHEME</b>
<b>ELECTORATE:</b>	LANE COVE
<b>WARD:</b>	EAST
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	T2016-01843
<b>OFFICER:</b>	G HOLDING

## OVERVIEW

City of Ryde and RMS are undertaking a Local Area Traffic Management (LATM) scheme in Morrison Road, Putney. The project includes investigating a suitable treatment to improve pedestrian safety at the intersection of Morrison Road, Parry Street and Acacia Avenue. The attached Traffic Management Options Paper (TMOP) provides analysis of four options:

- Option 1A - Minor road safety works,
- Option 1B - Minor road safety works with a left-in/left-out of Acacia Avenue,
- Option 2 - Roundabout, and
- Option 3 - Traffic lights.

Based on warrant and safety analysis detailed in the TMOP, it is proposed to implement Option 1A, with a number of modifications.

## BACKGROUND

City of Ryde has previously received a number of representations from local residents requesting consideration be given to the installation of LATM devices to reduce the speed and volume of traffic in Morrison Road. Morrison Road is heavily used as a “rat-run” to avoid Victoria Road.

City of Ryde collected data and commissioned Bitzios Consulting to examine traffic volumes, average travel times and percentage of through vehicles in Morrison Road. The salient findings were:

1. Morrison Road is currently carrying 10,000 to 13,000 vehicles per day, two-way, with approximately 500-600 vehicles per hour in each peak direction.
2. 35% of the vehicles on Morrison Road in the AM period (7am-10am) and 30% of the vehicles in the PM peak comprise of through traffic.

RMS investigated restricting access to the area at the signalised intersection of Victoria Road and Meriton Street. Removing the free left turn from Victoria Road was examined. However, it was not possible to develop an option that would maintain sufficient efficiency during the afternoon peak. Furthermore, City of Ryde's public consultation revealed significant opposition to installing a 'NO LEFT TURN 3PM-7PM MON-FRI'.

City of Ryde worked in conjunction with RMS and NSW State Government to develop a concept LATM scheme for Morrison Road. The Member for Lane Cove announced that the project and other road safety initiatives would be funded by RMS.

RMS has agreed to proceed with the project, with funding over two financial years:

- 2015/16:            Design of all LATM devices  
                         Kerb extensions in Morrison Road at the existing signalised pedestrian crossing outside Putney Public School  
                         Flush threshold in Boulton Street, south of Morrison Road  
                         Flush threshold in Payten Street, south of Morrison Road  
                         Flush threshold in Douglas Street, south of Morrison Road  
                         Flush threshold in Charles Street, south of Morrison Road  
                         Flush threshold in Charles Street, south of Parry Street  
                         Flush threshold in Delange Road, south of Morrison Road  
                         Raised threshold in Morrison Road, east of Princes Street  
**Investigate treatments at the intersection of Morrison Road, Parry Street and Acacia Avenue.**
- 2016/17:            Raised threshold in Morrison Road, east of Delange Road  
                         Raised threshold in Morrison Road, west of Mitchell Street  
                         Roundabout at the intersection of Morrison Road and Princes Street  
                         Raised threshold in Morrison Road, at Bremner Park / Morrison Park  
                         Raised threshold in Morrison Road, at Peel Park  
**Implement a suitable treatment at the intersection of Morrison Road, Parry Street and Acacia Avenue**  
                         Monitor the LATM scheme and make adjustments.

Furthermore, RMS has agreed to:

- consider a 40 km/h speed limit in Morrison Road, between Princes Street and Mitchell Street,
- adjust the pedestrian phases at the signalised intersection of Morrison Road and Charles Street (complete),
- investigate a left-in / left-out at the signalised intersection of Morrison Road and Church Street,

- investigate the installation of an off-street drop-off / pick-up area at Putney Public School, and
- continue to monitor the signalised intersection of Meriton Road and Victoria Road.

At the Council meeting held on 23 June 2015, a Notice of Motion regarding the intersection of Morrison Road, Parry Street and Acacia Avenue was considered. Subsequently, Council resolved the following:

*That arising from concerns raised during the current community consultation on the Morrison Road Safety Initiative, Council prior to finalising the package of traffic calming works, conduct a road safety review (between the hours of 8.00am to 9.30am and 2.30pm to 4.00pm) of the intersection of Morrison Road, Parry Street and Acacia Avenue (in close proximity to Putney Public School) to determine whether any additional traffic calming devices should be introduced at this intersection to improve safety for pedestrians, cyclists and vehicles.*

The initial consultation for the project revealed that a portion of the community consider the intersection of Morrison Road, Parry Street and Acacia Avenue as being of concern. Based on this feedback:

- A Road Safety Check at the intersection of has been undertaken by Bitzios Consulting, proposing a number of changes to the intersection, based on site observations.
- City Works & Infrastructure staff have investigated other matters raised by members of the public, proposing further changes to the intersection.
- GTA Consultants (Sydney Office) has been engaged to design a roundabout and traffic signals to concept level.

This information was used to develop a Preliminary Draft Traffic Management Options Paper (TMOP) for the intersection that recommends that four design options be assessed through:

- traffic modelling analysis, and
- a Road Safety Audit.

The Preliminary Draft TMOP was tabled at the Ryde Traffic Committee meeting held on 26 November 2015. Subsequently, Council resolved the following at the Works and Community Committee meeting held on 15 December 2015:

*That Council:*

- *Undertakes a warrant-based analysis as applicable, prior to undertaking any modelling analysis and road safety audit review of design options for the intersection of Morrison Road, Parry Street and Acacia Avenue, as endorsed by the Ryde Traffic Committee.*
- *Further investigates installing speed-reduction devices in Parry Street, Putney.*

## CONTEXT

1. Morrison Road is a non-Classified road that runs between Meriton Street and Church Street, providing a parallel route to Victoria Road.
2. Morrison Road is characterised by residential dwellings, Putney Village town centre and Putney Public School.
3. Morrison Road is part of a regional bike route and therefore lane widths between 3.3 m and 3.7 m have been avoided.
4. Morrison Road is a public bus route, operated by Sydney Buses.

## REFERENCES

- Austroads' *Guide to Traffic Management Part 8 - LATM*

## CONSULTATION

City of Ryde consulted the concept LATM scheme with residents/businesses in the area bounded by Church Street, Victoria Road, Punt Road and Parramatta River. This revealed:

1. overall support for the concept LATM scheme, and
2. concerns regarding the safety at the intersection of Morrison Road, Parry Street and Acacia Avenue.

A summary of the TMOP findings, as outlined in the discussion, has been distributed to key community stakeholders.

## DISCUSSION

The following is a summary of the TMOP findings:

### **Option 1A      Minor road safety works**

This treatment includes a median island in Parry Street, rubber speed hump in Acacia Avenue and rubber speed cushion in Morrison Road.

A Road Safety Check has revealed that, with some minor changes to the design, this option is the most suitable to address the issues raised.

### **Option 1B      Minor road safety works with a left-in / left-out of Acacia Avenue**

This treatment includes a median island in Parry Street and rubber speed cushion in Morrison Road.

RMS is the approving authority for turn bans. The community will experience an estimated total delay of 124 minutes of travel time during peak periods per day, due to the turn ban. It is likely that this delay will not be acceptable to the local community and there is a risk that drivers will:

- continue to make right turns,

- make U-turns in Parry Street, or
- use the roundabout at Parry Street and Charles Street, thereby increasing traffic in Parry Street.

Therefore, this option is not being pursued further.

### **Option 2      Roundabout**

A Road Safety Check has revealed that:

- the site survey indicates that the approach gradients and intersection cross fall are too steep for a roundabout to safely operate at this location,
- roundabouts typically improve traffic flow and reduce pedestrian safety, which is not in keeping with the Morrison Road LATM scheme, and
- other concerns with the design include the location of a driveway in the circulating portion.

Therefore, this option is not being pursued further.

### **Option 3      Traffic lights**

RMS is the approving authority for traffic lights. Pedestrian and traffic volumes at this location do not meet the RMS's minimum requirements. Therefore, RMS will not consider traffic lights at this location.

Therefore, it is proposed to implement Option 1A. The design has been updated to include the recommendations of the Road Safety Check and now includes:

- a concrete dividing strip (rumble bars) in Parry Street, west of Morrison Road,
- a rubber speed hump in Acacia Avenue, north of Parry Street,
- three rubber speed cushions in Morrison Road,
- kerb blisters and kerb ramps in Parry Street, and
- various signage and linemarking.

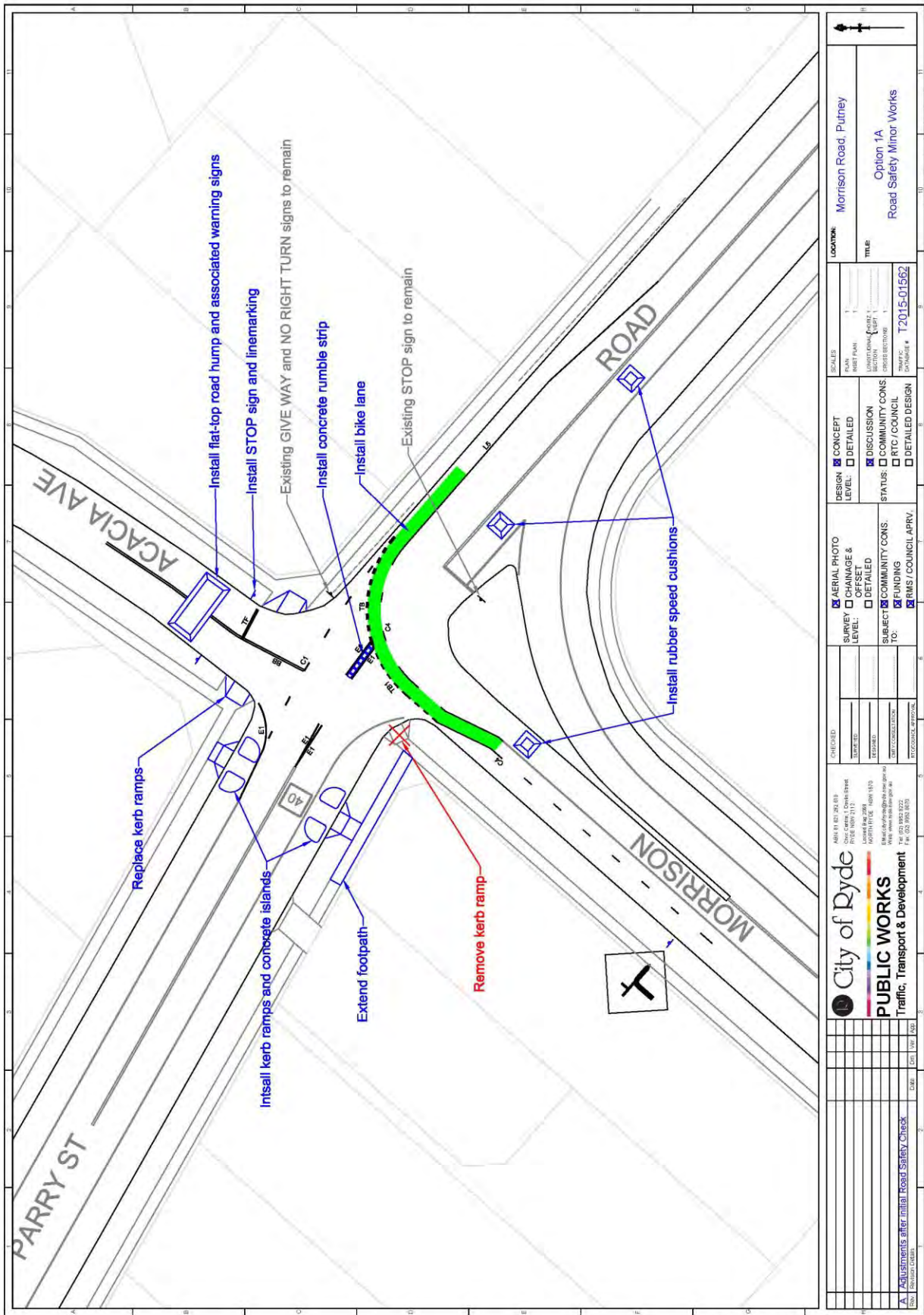
Further investigations into the installation of speed-reduction devices in Parry Street will be undertaken during the 'Monitor & Review' phase of the project.

**PROPOSAL**

To implement the minor road safety works of Option 1A in Morrison Road, Putney, as shown in the attached plan, including:

- a concrete dividing strip (rumble bars) in Parry Street, west of Morrison Road,
- a rubber speed hump in Acacia Avenue, north of Parry Street,
- three rubber speed cushions in Morrison Road,
- kerb blisters and kerb ramps in Parry Street, and
- various signage and linemarking.





<b>City of Ryde</b> <b>PUBLIC WORKS</b> Traffic, Transport & Development <small>080 01 326 033          PO Box 1000 Ryde NSW 1513          Locked Mail Bag 2282          North Ryde NSW 1513          Fax 02 9862 2222          www.cityofryde.nsw.gov.au          PO Box 9808 Ryde</small>		<b>PROJECT NO:</b> T2015-01562 <b>DATE:</b> 15/09/2016 <b>SCALE:</b> 1:1000 <b>SECTION:</b> 1 <b>DATE:</b> 15/09/2016 <b>DATE:</b> 15/09/2016 <b>DATE:</b> 15/09/2016	<b>LOCATION:</b> Morrison Road, Putney <b>TITLE:</b> Option 1A Road Safety Minor Works
<b>DESIGN LEVEL:</b> <input checked="" type="checkbox"/> CONCEPT <input type="checkbox"/> DETAILED	<b>STATUS:</b> <input checked="" type="checkbox"/> DISCUSSION <input type="checkbox"/> COMMUNITY CONS <input type="checkbox"/> RT/COUNCIL <input type="checkbox"/> DETAILED DESIGN	<b>APPROVALS:</b> <input checked="" type="checkbox"/> AERIAL PHOTO SURVEY <input type="checkbox"/> CHANGE & LEVEL <input type="checkbox"/> DETAILED <input checked="" type="checkbox"/> SUBJECT TO: COMMUNITY CONS <input checked="" type="checkbox"/> FUNDING <input checked="" type="checkbox"/> RMS / COUNCIL APV.	



Page intentionally left blank



<b>ITEM (E)</b>	<b>WATTS ROAD, TALLWOOD AVENUE AND DONOVAN STREET, RYDE</b>
<b>SUBJECT:</b>	<b>LOCAL AREA TRAFFIC MANAGEMENT SCHEME</b>
<b>ELECTORATE:</b>	RYDE
<b>WARD:</b>	WEST
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	CRM-1737300 & T2015-01259
<b>OFFICER:</b>	S WOOD

## **OVERVIEW**

City of Ryde has received representation from a resident of Watts Road requesting consideration be given to installing speed-reduction devices in Watts Road, Ryde. Investigations have revealed that:

- the default speed limit of 50 km/h is being significantly exceeded in Watts Road, Tallwood Avenue and Donovan Street, and
- the partial implementation of traffic calming in only one or two streets will result in the displacement of traffic to the other(s).

Therefore, it is proposed to install traffic calming in Watts Road, Tallwood Avenue and Donovan Street. Further consultation will be undertaken once the exact location of the devices is determined during the concept-design phase.

## **BACKGROUND**

Following resident concerns regarding the speed of vehicles in Watts Road, the matter of installing speed-reduction devices has previously been investigated:

- A proposal to install a one-way, angled slow-point adjacent to Watts Park was presented to residents in May 2009. Due to resident concerns, regarding the loss of parking, Council resolved not to progress the matter.
- A proposal to reduce the travel lane width, by installing a dividing (BB) line at the crest in Watts Road was presented to residents in November 2013. Due to resident concerns, regarding the loss of parking, Council resolved not to progress the matter.

Following the most recent representation, speed surveys were undertaken in Watts Road in August 2015, which indicated that the 85th percentile speed of drivers is in excess of 60 km/h. A survey of Watts Road occupants revealed support for traffic calming in Watts Road.



Further studies indicated that the introduction of traffic calming in Watts Road would likely result in the displacement of through traffic to the adjacent roads of Tallwood Avenue and Donovan Street. Further speed surveys revealed that the 85th percentile speed of drivers in:

- Tallwood Avenue is 60 km/h, and
- Donovan Street is in excess of 50 km/h.

An external provider carried out a detailed study into the introduction of an LATM scheme in all three streets and concluded that measures to reduce traffic speeds were justified.

## CONTEXT

1. Watts Road, Tallwood Avenue and Donovan Street all provide a link between North Road and Bridge Road.
2. Drivers can use any of these three streets in conjunction with Herring Road to provide an alternative route to Epping Road that avoids Lane Cove Road.
3. Watts Road has an average carriageway width of 7.5 m and Tallwood Avenue and Donovan Street are approximately 6.5 m in width.
4. The area is characterised by residential dwellings and Watts Road contains a strip of three local shops (cafe, chemist and surgery).
5. Tallwood Avenue provides access for Bus Routes 286, 297 & 518.

## REFERENCES

- [NSW] *Road Rules 2014* Rule 25 Speed limit elsewhere
- Austroads' *Guide to Traffic Management Part 8 – Local Area Traffic Management*
- State Transit's *Bus Infrastructure Guide*

## CONSULTATION

Initial consultation in November 2015 with the occupants of the 59 properties in Watts Road revealed support for traffic calming. A second survey, delivered in September 2016 to the occupants of the 48 properties in Tallwood Avenue and 39 properties in Donovan Street have revealed similar support for installing traffic calming in their street.



**Table 1** Summary of consultation results for installing traffic calming in Watts Road, Tallwood Avenue and Donovan Street

	<b>Watts Road</b>	<b>Tallwood Avenue</b>	<b>Donovan Street</b>	<b>Total</b>
Properties consulted	59	48	39	146
Responses received	28 (47%)	12 (25%)	11 (28%)	41 (28%)
Supported	21	9	6	26
Not supported	7	3	2	12
Undecided	0	0	3	3

Although the occupants that have not responded are understood to be providing undeclared support, City of Ryde staff intend to notify all 146 properties before the matter is considered by Council.

Further consultation will be undertaken with the occupants directly affected by the changes, once the exact location of the devices is determined during the concept-design phase.

## DISCUSSION

Investigations indicate that:

- the default speed limit of 50 km/h is being significantly exceeded in Watts Road, Tallwood Avenue and Donovan Street, and
- the partial implementation of traffic calming in only one or two streets will result in the displacement of traffic to the other(s).

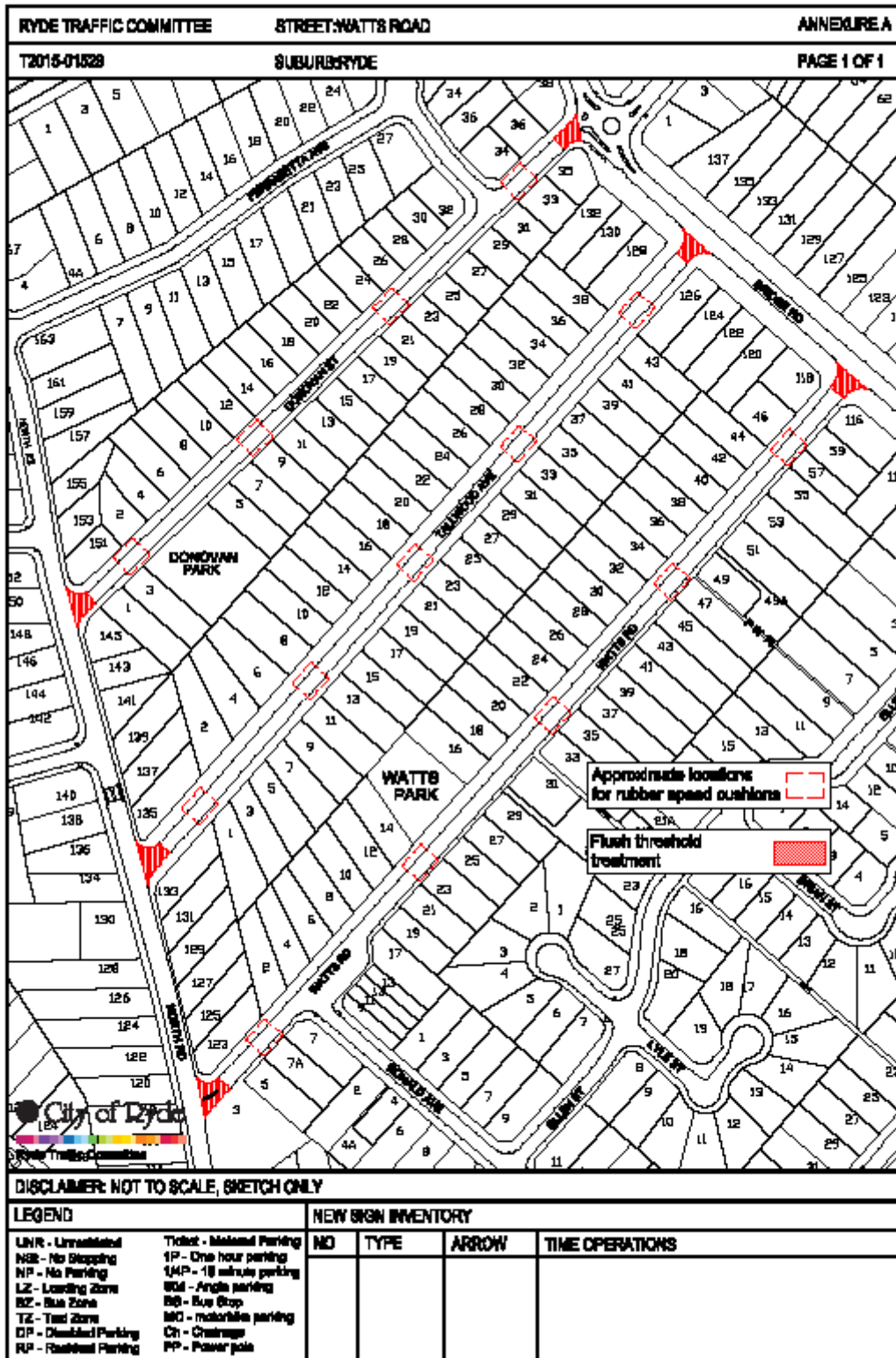
The proposed traffic calming devices will be flush thresholds at the entrance to the street and a number of midblock rubber speed cushions. These devices have been chosen to reduce the following negative impacts of traffic calming:

- installation disruption,
- noise,
- bus service disruption, and
- reduction of kerbside parking.

## PROPOSAL

1. To install flush thresholds in Watts Road, Tallwood Avenue and Donovan Street, Ryde, as shown on the attached plan.
2. To install and rubber speed cushions in Watts Road, Tallwood Avenue and Donovan Street, Ryde, as shown on the attached plan.







Page intentionally left blank



**ITEM (F)                      LOVELL ROAD, DENISTONE EAST**

**SUBJECT:**                      **PARKING CONTROL MEASURES**  
**ELECTORATE:**                RYDE  
**WARD:**                        WEST  
**POLICE LAC:**                RYDE  
**ROAD CLASS:**                NON-CLASSIFIED  
**REFERENCE:**                T2016-01844  
**OFFICER:**                    G HOLDING

**OVERVIEW**

This Item seeks approval to install parking control measures and linemarking, as part of a project to widen the carriageway of Lovell Road, between Blaxland Road and Hollis Avenue, Denistone East.

The road-widening project has been approved by Council, under the 2016/17 Road & Kerb Renewal Program. Further approvals are only required to install parking control measures and additional linemarking, as shown on the attached plan.

**CONTEXT**

1. The road widening project improves traffic flow and parking by providing enough carriageway width to accommodate kerbside parking and a travel lane on both sides of Lovell Road.
2. The proposed changes to parking control measures are the installation of:
  - a 55 m 'NO STOPPING 6AM-9.30AM 3PM-6PM MON-FRI' zone on the northern side of Lovell Road, outside 12 to 14-16 Lovell Road, and
  - a 27 m 'BUS ZONE' at the existing Bus Stop on the southern side of Lovell Road, outside 2 Hollis Avenue,as shown on the attached plan.
3. The proposed linemarking layout is also shown on the attached plan.

**REFERENCES**

- [NSW] Road Rules 2014 Rule 167 No stopping signs
- [NSW] Road Rules 2014 Rule 183 Stopping in a bus zone

**CONSULTATION**

The residents and businesses in the area have been notified of the upcoming changes and City of Ryde staff have held a number of meetings with the service station at 2 Lovell Road.

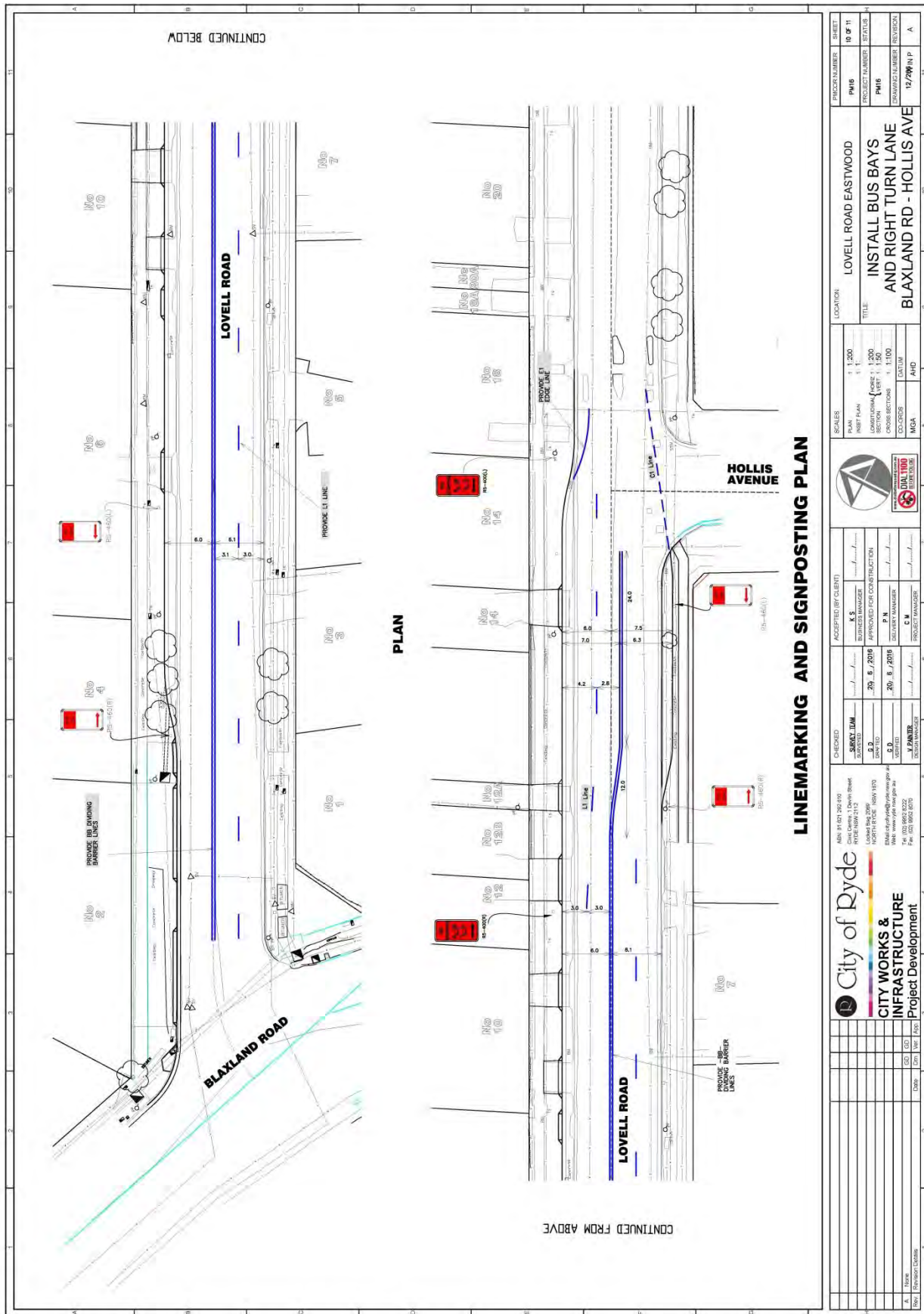
**DISCUSSION**

The proposed 55 m 'NO STOPPING 6AM-9.30AM 3PM-6PM MON-FRI' zone flares the intersection, creating a by-pass lane to allow through vehicles to manoeuvre around right-turning vehicles in Lovell Road during peak periods.

The proposed 27 m 'BUS ZONE' formalises parking controls at the existing Bus Stop.

**PROPOSAL**

1. To install a 55 m 'NO STOPPING 6AM-9.30AM 3PM-6PM MON-FRI' zone on the northern side of Lovell Road, outside 12 to 14-16 Lovell Road, Denistone East.
2. To install a 27 m 'BUS ZONE' on the southern side of Lovell Road at the existing Bus Stop, outside 2 Hollis Avenue, Denistone East.
3. To install linemarking in Lovell Road, between Blaxland Road and Hollis Avenue, Denistone East, as shown on the attached plan.



LINEMARKING AND SIGNPOSTING PLAN

CHECKED		ACCEPTED (BY CLIENT)		SCALES		LOCATION	SHEET
DRN	CHK	DRN	CHK	PLAN	1:1,200	LOVELL ROAD EASTWOOD	NO OF 11
CD	CHK	CD	CHK	ASSET PLAN	1:1,200	INSTALL BUS BAYS	NO OF 11
DESIGNER		DESIGNER		SECTIONAL A	1:1,200	AND RIGHT TURN LANE	STATUS
				CROSS SECTIONS	1:1,100	BLAXLAND RD - HOLLIS AVE	
				COLOURS	AS SHOWN		



Page intentionally left blank

**ITEM (G) DALTON AVENUE AT BLAXLAND ROAD, DENISTONE EAST**

**SUBJECT:** 2016/2017 BLACK SPOT PROGRAMME WORKS  
**ELECTORATE:** RYDE  
**WARD:** DENISTONE  
**POLICE LAC:** RYDE  
**ROAD CLASS:** NON-CLASSIFIED  
**REFERENCE:** T2016-01582  
**OFFICER:** S WOOD

**OVERVIEW**

Due to the crash history at the intersection of Dalton Avenue and Blaxland Road, Denistone East, City of Ryde has received funding to install a median island stop treatment (MIST) in Dalton Avenue at Blaxland Road, under the Australian Government's 2016/2017 Black Spot Programme.

Given that Council's position on the matter is known, *this Item* is referred to Ryde Traffic Committee for technical approval of the design.

**BACKGROUND**

The Australian Government's Black Spot Programme is administered by RMS and funds crash-reduction works. Notification was received from RMS that City of Ryde had successfully sought funding to install a MIST in Dalton Avenue at Blaxland Road on 4 May 2016. Council accepted the funding at the Works and Community Committee meeting held on 16 August 2016.

**CONTEXT**

1. Blaxland Road is an undivided, four-lane, two-way Classified Road with a speed limit of 60 m/h.
2. Dalton Avenue is a non-Classified Road, with a default 50 km/h speed limit, that meets Blaxland Road at T-intersection with an existing GIVE WAY treatment.

**REFERENCES**

- [NSW] *Road Rules 2014* Rule 67 Stopping and giving way at a stop sign or stop line at an intersection without traffic lights.
- [NSW] *Road Rules 2014* Rule 167 No Stopping signs.



## CONSULTATION

Prior to applying for funding, the occupants of four surrounding properties were notified of the proposal and one comment was received expressing concern that this was not a good use of public funds. As part of the application process the benefit/cost analysis showed that the expected reduction in accidents would result in a monetary benefit to society over the life of the devices.

The same properties have since been notified of Council's intentions to install the MIST and no comments have been received in response.

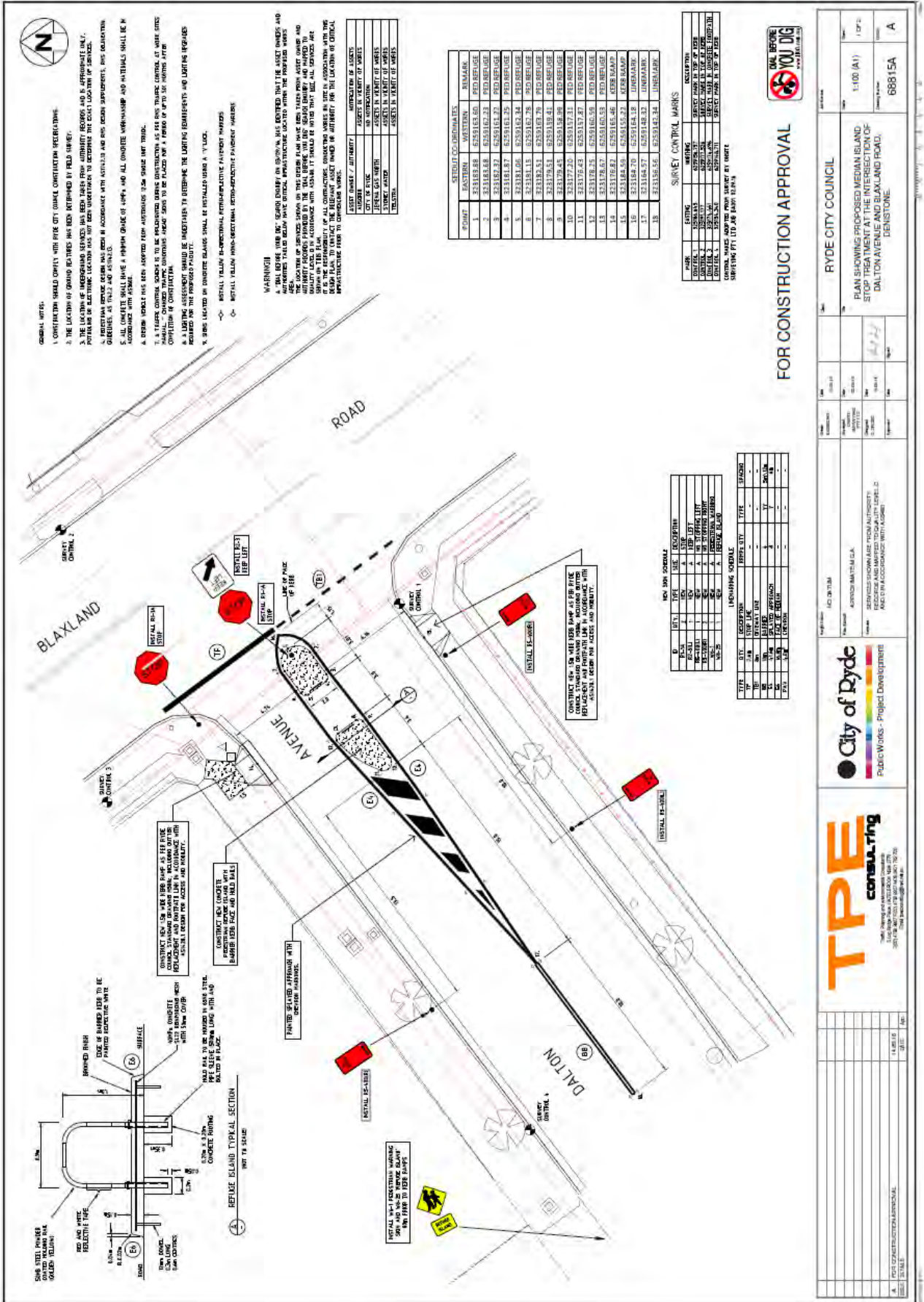
## DISCUSSION

There were three casualty crashes in the five-year period between 2009 and 2014. The proposed measures have been designed to reduce the potential for these to occur in the future. A MIST helps to regulate turning movements at the intersection whilst assisting pedestrians wishing to cross Dalton Avenue in this location.

## PROPOSAL

To install a Median Island Stop Treatment (MIST) in Dalton Avenue at Blaxland Road, Denistone East, as shown on the attached plan.





**GENERAL NOTES:**

1. CONSTRUCTION SHALL COMPLY WITH RITE CITY SIGNAL CONTROL SYSTEM SPECIFICATIONS.
2. THE LOCATION OF SIGNAL FIXTURES HAS BEEN REFERRED BY FIELD SURVEY.
3. THE LOCATION OF INTERSECTION SIGNALS HAS BEEN TAKEN FROM CURRENT SIGNALING AND IS APPROXIMATE IN LAYOUT AND POSITION TO THE EXISTING LAYOUT AND HAS NOT BEEN TAKEN INTO ACCOUNT TO DETERMINE THE EXACT LOCATION OF SIGNALS.
4. PROPOSED SIGNALING DESIGN HAS BEEN IN ACCORDANCE WITH STATE AND RITE CITY STANDARDS AND RECOMMENDATIONS, AND OBSERVATION OF CURRENT SIGNING AND SIGNALING HAS BEEN TAKEN INTO ACCOUNT.
5. ALL CONCRETE SHALL HAVE A MINIMUM GRADE OF 1:100, AND ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS.
6. VERGEMENT SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
7. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
8. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
9. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
10. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
11. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
12. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
13. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
14. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
15. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
16. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
17. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
18. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
19. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.
20. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.

**WARNING**

A. THIS DRAWING IS A GENERAL INDICATION OF THE LOCATION OF THE PROPOSED WORKS AND IS NOT A CONTRACT DOCUMENT. THE LOCATION OF ANY WORKS SHOWN ON THIS DRAWING SHALL BE TAKEN FROM THE RELEVANT ASSET OWNER'S RECORD DRAWINGS AND THE RELEVANT ASSET OWNER'S RECORD DRAWINGS SHALL BE TAKEN FROM THE RELEVANT ASSET OWNER'S RECORD DRAWINGS.

B. THE RELEVANT ASSET OWNER SHALL BE CONTACTED BY THE ENGINEER TO OBTAIN THE RELEVANT ASSET OWNER'S RECORD DRAWINGS AND THE RELEVANT ASSET OWNER'S RECORD DRAWINGS SHALL BE TAKEN FROM THE RELEVANT ASSET OWNER'S RECORD DRAWINGS.

C. ALL CONCRETE SHALL HAVE A MINIMUM GRADE OF 1:100, AND ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.

D. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.

E. ALL CURB AND GUTTER WORK SHALL BE IN ACCORDANCE WITH STANDARDS FOR VERGEMENT AS PER THE RITE CITY TRAFFIC CONTROL SYSTEM SPECIFICATIONS.

POINT	ELEVATION (M)	DESCRIPTION
1	25.51183.88	REF. POINT
2	25.51183.88	REF. POINT
3	25.51183.87	REF. POINT
4	25.51181.15	REF. POINT
5	25.51181.06	REF. POINT
6	25.51181.11	REF. POINT
7	25.51179.51	REF. POINT
8	25.51179.51	REF. POINT
9	25.51179.45	REF. POINT
10	25.51179.45	REF. POINT
11	25.51179.42	REF. POINT
12	25.51179.42	REF. POINT
13	25.51178.62	REF. POINT
14	25.51178.62	REF. POINT
15	25.51184.59	REF. POINT
16	25.51184.70	REF. POINT
17	25.51184.57	REF. POINT
18	25.51184.56	REF. POINT

NO.	DESCRIPTION	MARKING	TYPE	SIZE	COLOR	LOCATION
1	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
2	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
3	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
4	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
5	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
6	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
7	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
8	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
9	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
10	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
11	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
12	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
13	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
14	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
15	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
16	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
17	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
18	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
19	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE
20	ROAD NARROWS	A	150	150	RED	BLAXLAND AVENUE

### FOR CONSTRUCTION APPROVAL

RYDE CITY COUNCIL	1:100 (A1)	DATE: 6/8/11	SCALE: A
PLAN SHOWING PROPOSED MEDIUM ISLAND STOP THAT MEETS AT THE INTERSECTION OF DALTON AVENUE AND BLAXLAND ROAD, DENSTONE.			
PROJECT NO.: 68811SA		DRAWN BY: [Signature]	



Page intentionally left blank



**ITEM (H) INTERSECTION OF RYRIE STREET AND MORSHEAD STREET,  
NORTH RYDE**

**SUBJECT:** 2016/2017 BLACKSPOT PROGRAM WORKS  
**ELECTORATE:** RYDE  
**WARD:** EAST  
**POLICE LAC:** RYDE  
**ROAD CLASS:** NON-CLASSIFIED  
**REFERENCE:** T2016-01583  
**OFFICER:** S WOOD

**OVERVIEW**

Due to the crash history at the intersection of Ryrie Street and Morshead Street, North Ryde, City of Ryde has received funding to install a roundabout at the intersection, under the Australian Government's 2016/2017 Black Spot Programme.

Given that Council's position on the matter is known, *this Item* is referred to Ryde Traffic Committee for technical approval of the design.

**BACKGROUND**

The intersection of Morshead Street and Ryrie Street was identified as fulfilling the requirements for funding under Roads and Maritime's Blackspot program. Funding was successfully sought during the 2015/16 financial year with construction due to commence in the 2016/17 financial year.

The Australian Government's Black Spot Programme is administered by RMS and funds crash-reduction works. Notification was received from RMS that City of Ryde had successfully sought funding to install a roundabout at the intersection of Ryrie Street and Morshead Street on 4 May 2016. Council accepted the funding at the Works and Community Committee meeting held on 16 August 2016.

**CONTEXT**

1. The intersection of Ryrie Street and Morshead Street is within a 40km/h School Zone, during 8am-9.30am 2.30pm-4.30pm, with a default speed limit of 50 km/h at all other times.
2. The existing STOP treatment at the intersection gives priority to traffic proceeding on Ryrie Street.
3. Truscott Street Public School is located on the southeast corner of the intersection.

**REFERENCES**

- [NSW] *Road Rules 2014* Part 9 Roundabouts



**CONSULTATION**

Prior to applying for funding, the occupants of six surrounding properties and Truscott Street Public School were notified of the proposal. Truscott Street Public School responded in support of the proposal.

The same properties and Truscott Street Public School have since been notified of Council’s intentions to install the roundabout and no comments have been received in response.

**DISCUSSION**

There have been two casualty crashes in the five-year period between 2009 and 2014 and the proposed measures have been designed to reduce the potential for these to occur in the future. A roundabout will assist in slowing traffic at this intersection whilst helping to regulate turning movements at the intersection.

**PROPOSAL**

To install a roundabout at the intersection of Ryrie Street and Morshead Street, North Ryde, as shown on the attached plan.



**GENERAL NOTES:**

- CONSTRUCTION SHALL COMPLY WITH ANY CITY ENGINEER SPECIFICATIONS.
- THE LOCATION OF BOUNDARY MARKERS HAS BEEN DETERMINED BY FIELD MEASUREMENT AND VERIFIED BY AERIAL PHOTOGRAPHY.
- THE LOCATION OF BOUNDARY MARKERS HAS BEEN DETERMINED BY AERIAL PHOTOGRAPHY AND APPROXIMATE ONLY. FIELD MEASUREMENT SHOULD BE USED TO DETERMINE THE EXACT LOCATION OF BOUNDARY MARKERS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AS1428.3 AND ANY OTHER APPLICABLE STANDARDS AND REGULATIONS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ANY CITY ENGINEER SPECIFICATIONS AND ANY OTHER APPLICABLE STANDARDS AND REGULATIONS.
- THE SHED SHALL BE FOR TRUCKS AND TRAILERS ONLY.
- A FRAME CONTROL SHALL BE TO BE PROVIDED ON THE SHED STRUCTURE AS PER THE TRUCK CONTROL AS WITH SITES IN THE VICINITY OF HIGHWAY 153.
- ALL BOUNDARY MARKERS SHALL BE PLACED ON THE PROPERTY LINE AFTER CONSTRUCTION IS COMPLETE.
- ALL BOUNDARY MARKERS SHALL BE INSTALLED USING A "T" MARK.

**WARNING!**

WARNING! THE SHED SHALL NOT BE USED TO STORE OR DISPLAY ANY TYPE OF FLAMMABLE OR EXPLOSIVE MATERIAL. THE SHED SHALL BE USED AS A STORAGE AREA FOR CONSTRUCTION MATERIALS ONLY.

MARK	DATE	DESCRIPTION
1	15/01/15	INSTALL SIGNAGE
2	15/01/15	INSTALL SIGNAGE
3	15/01/15	INSTALL SIGNAGE

MARK	DATE	DESCRIPTION
1	15/01/15	INSTALL SIGNAGE
2	15/01/15	INSTALL SIGNAGE
3	15/01/15	INSTALL SIGNAGE
4	15/01/15	INSTALL SIGNAGE
5	15/01/15	INSTALL SIGNAGE
6	15/01/15	INSTALL SIGNAGE
7	15/01/15	INSTALL SIGNAGE
8	15/01/15	INSTALL SIGNAGE
9	15/01/15	INSTALL SIGNAGE
10	15/01/15	INSTALL SIGNAGE
11	15/01/15	INSTALL SIGNAGE
12	15/01/15	INSTALL SIGNAGE
13	15/01/15	INSTALL SIGNAGE
14	15/01/15	INSTALL SIGNAGE
15	15/01/15	INSTALL SIGNAGE
16	15/01/15	INSTALL SIGNAGE
17	15/01/15	INSTALL SIGNAGE
18	15/01/15	INSTALL SIGNAGE
19	15/01/15	INSTALL SIGNAGE
20	15/01/15	INSTALL SIGNAGE
21	15/01/15	INSTALL SIGNAGE
22	15/01/15	INSTALL SIGNAGE
23	15/01/15	INSTALL SIGNAGE
24	15/01/15	INSTALL SIGNAGE
25	15/01/15	INSTALL SIGNAGE

MARK	DATE	DESCRIPTION
1	15/01/15	INSTALL SIGNAGE
2	15/01/15	INSTALL SIGNAGE
3	15/01/15	INSTALL SIGNAGE

FOR REVIEW

RYDE CITY COUNCIL

PLAN SHOWING PROPOSED ROUNDABOUT AT THE INTERSECTION OF MORSEHEAD STREET AND RYDE STREET, NORTH RYDE.

1:100 (A1)

68815G

MARK	DATE	DESCRIPTION
1	15/01/15	INSTALL SIGNAGE
2	15/01/15	INSTALL SIGNAGE
3	15/01/15	INSTALL SIGNAGE



Page intentionally left blank



<b>ITEM (I)</b>	<b>SMALLS ROAD AND ZOLA AVENUE, RYDE</b>
<b>SUBJECT:</b>	<b>2016/2017 BLACK SPOT PROGRAMME WORKS</b>
<b>ELECTORATE:</b>	RYDE
<b>WARD:</b>	CENTRAL
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	T2016-01584
<b>OFFICER:</b>	S WOOD

## OVERVIEW

Due to the crash history at the intersection of Smalls Road and Zola Avenue, Ryde, City of Ryde has received funding, under the Australian Government's 2016/2017 Black Spot Programme, to install:

- kerb extensions in Smalls Road on both sides of Zola Avenue, and
- a STOP sign in Zola Avenue and bring forward the associated linemarking into Smalls Road.

Given that Council's position on the matter is known, *this Item* is referred to Ryde Traffic Committee for technical approval of the design.

## BACKGROUND

The Australian Government's Black Spot Programme is administered by RMS and funds crash-reduction works. Notification was received from RMS that City of Ryde had successfully sought funding on 4 May 2016 to install:

- kerb extensions in Smalls Road on both sides of Zola Avenue, and
- a STOP sign in Zola Avenue and bring forward the associated linemarking into Smalls Road.

Council accepted the funding at the Works and Community Committee meeting held on 16 August 2016.

## CONTEXT

1. Smalls Road and Zola Avenue have default speed limits of 50 km/h, with one travel lane in each direction.
2. Zola Avenue meets Smalls Road at a T-intersection, with no signposted controls.

## REFERENCES

- [NSW] *Road Rules 2014* Rule 68 Stopping and giving way at a stop sign or stop line at other places.



- [NSW] Road Rules 2014 Rule 167 No Stopping signs.

**CONSULTATION**

Prior to applying for funding, the occupants of fourteen surrounding properties were notified of the proposal and no comments were received in response.

The same properties have since been notified of Council’s intentions to proceed with the proposal and no comments have been received in response.

**DISCUSSION**

There have been two casualty crashes in the five-year period between 2009 and 2014 and the proposed measures have been designed to reduce the potential for these to occur in the future. The kerb extensions allow the stop-control line in Zola Avenue to be brought forward into Smalls Road, thereby increasing sight distance to approaching vehicles.

**PROPOSAL**

To install kerb extensions in Smalls Road on both sides of Zola Avenue, Ryde, and a STOP sign and associated linemarking in Zola Avenue at Smalls Road, Ryde, as shown on the attached plan.



NO.	DATE	BY	REVISION
1	10/28/16	MS	ISSUE FOR PERMIT
2	11/01/16	MS	FOR CONSTRUCTION

NO.	DATE	BY	REVISION
1	10/28/16	MS	ISSUE FOR PERMIT
2	11/01/16	MS	FOR CONSTRUCTION

**GENERAL NOTES:**

- CONSTRUCTION SHALL COMPLY WITH THE CITY OF RYDE'S STANDARD SPECIFICATIONS.
- THE LOCATION OF SIGNAGE REQUIREMENTS HAS BEEN DETERMINED BY THIS DRAWING.
- THE LOCATION OF SIGNAGE REQUIREMENTS HAS BEEN DETERMINED BY THIS DRAWING. SIGNAGE SHALL BE APPLICABLE ONLY TO THE LOCATION OF SIGNAGE.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.

**WARNING:**  
 THE USE OF CONCRETE IS REQUIRED FOR THE SIGNAGE AND ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.

**CONCRETE WORK SHALL BE IN ACCORDANCE WITH ALL CITY OF RYDE AND STATE REQUIREMENTS FOR CONSTRUCTION AND OPERATIONS.**

**INSTALL YELLOW MOUNTAIN ISLAND RETRACTION SIGNAGE.**

**INSTALL YELLOW MOUNTAIN ISLAND RETRACTION SIGNAGE.**

**INSTALL YELLOW MOUNTAIN ISLAND RETRACTION SIGNAGE.**

NO.	DATE	BY	REVISION
1	10/28/16	MS	ISSUE FOR PERMIT
2	11/01/16	MS	FOR CONSTRUCTION

NO.	DATE	BY	REVISION
1	10/28/16	MS	ISSUE FOR PERMIT
2	11/01/16	MS	FOR CONSTRUCTION

NO.	DATE	BY	REVISION
1	10/28/16	MS	ISSUE FOR PERMIT
2	11/01/16	MS	FOR CONSTRUCTION

**FOR CONSTRUCTION**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**TPE CONSULTING**

**TPE CONSULTING**

**TPE CONSULTING**

**City of Ryde**

**City of Ryde**

**City of Ryde**

**Public Works - Project Development**

**Public Works - Project Development**

**Public Works - Project Development**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**

**RYDE CITY COUNCIL**



Page intentionally left blank



**ITEM (J) CULLODEN AND WATERLOO ROADS, MARSFIELD**

**SUBJECT:** 2016-2017 SAFER ROADS PROGRAM WORKS  
**ELECTORATE:** RYDE  
**WARD:** WEST  
**POLICE LAC:** RYDE  
**ROAD CLASS:** NON-CLASSIFIED  
**REFERENCE:** D15/91836 & T2016-01552  
**OFFICER:** S WOOD

**OVERVIEW**

Due to the crash history at the intersection of Culloden And Waterloo Roads, Marsfield, City of Ryde has received funding to reconstruct and improve the splitter islands on the southern and western approaches to the roundabout of Culloden Road and Waterloo Road, under the RMS's 2016/2017 Safer Roads Program.

Given that Council's position on the matter is known, *this Item* is referred to Ryde Traffic Committee for technical approval of the design.

**BACKGROUND**

The roundabout of Culloden Road and Waterloo Road was identified as fulfilling the requirements for funding under Roads and Maritime's Safer Roads Program. Notification was received from RMS that City of Ryde had successfully sought funding to reconstruct and improve the splitter islands on 4 May 2016. Council accepted the funding at the Works and Community Committee meeting held on 16 August 2016.

**CONTEXT**

1. The roundabout operates as a single lane, with a 50 km/h speed limit on all approaches.
2. There is an existing shared-use path that crosses the carriageway, through the southern splitter islands that are proposed to be reconstructed.

**REFERENCES**

- [NSW] *Road Rules 2014* Rule 114 Giving way when entering or driving in a roundabout

**CONSULTATION**

Given the low impact of the proposed changes and that there are no residential or business properties in the vicinity of the works, no consultation has been undertaken.



## DISCUSSION

There have been two casualty crashes in the five-year period between 2009 and 2014 and the proposed measures have been designed to reduce the potential for these to occur in the future. The redesign of the splitter islands will:

- assist cyclists and pedestrians negotiating the roundabout, reducing potential conflicts from occurring, and
- increase entry/exit angles, reducing the speed of vehicles in the roundabout.

## PROPOSAL

To reconstruct and improve the existing splitter islands on the southern and western approaches to the roundabout of Culloden Road and Waterloo Road as shown on the attached plan.





		<b>Five Year Crash Data Period</b> 1/07/09 to 30/06/14	
		F – Fatality I – Injury W – Wet Surface D – Darkness	<b>Waterloo Rd and Culloden Rd,                  Marsfield</b>



Page intentionally left blank

---

<b>ITEM (K)</b>	<b>SMITH STREET, RYDE</b>
<b>SUBJECT:</b>	<b>SIGNAGE AND LINEMARKING PLAN APPROVAL</b>
<b>ELECTORATE:</b>	RYDE
<b>WARD:</b>	CENTRAL
<b>POLICE LAC:</b>	RYDE
<b>ROAD CLASS:</b>	NON-CLASSIFIED
<b>REFERENCE:</b>	LDA2014/378 & D16/150021
<b>OFFICER:</b>	P Bastawrous

## INTRODUCTION

City of Ryde has received representation from the developer at 7-11 Smith Street requesting consideration be given to approval of a signage and linemarking plans in Smith Street, Ryde. Council's Conditions of Consent for the Development Application provides Council's position on the matter and This Item is presented to Ryde Traffic Committee to seek Technical Approval.

## BACKGROUND

As part of the conditions of consent for LDA2014/378, the applicant is required to have the signage and linemarking plan approved through the Ryde Traffic Committee:

**92. Signage and line marking-- External.** *A plan demonstrating the proposed signage and line marking within Council's Public Domain (Both on the Road and within the footpath), shall be prepared by a suitably qualified person and submitted to and approved by the Ryde Traffic Committee prior to the issue of an Occupation Certificate.*

*For waste management, safe easy access must be provided for waste collection vehicles to service the waste containers. "No Parking; 5.00am to 11.00am; Tues; Waste Vehicles Excepted" will be required to be placed on the Smith St frontage to enable the trucks to access the bins for servicing. This signage will be erected by the developer at no cost to Council.*

**Note:** *The applicant is advised that the plan will require approval by the Ryde Traffic Committee and adequate time should be allowed for this process.*

## CONTEXT

1. Smith Street is a two-way road, with a 10.5 m carriageway and two-hour parking control measures on both sides,
2. Smith Street intersects with Pope Street at the southernmost end and Buffalo Road at the northernmost end.

## REFERENCES

[NSW] Road Rules 2014 Rule 168 No parking signs.

**CONSULTATION**

Given the low impact of the changes, which are directly outside the site, no consultation has been undertaken. There are currently no occupants within the development. As such, the site directly affected does not require consultation.

**DISCUSSION**

To assist with the collection of waste, the applicant has been asked to provide parking control measures during waste-collection periods and maintain the existing two-hour parking control measures outside of these times. Waste collection in the Smith Street area is undertaken on Tuesdays between 5am and 11am.

**PROPOSAL**

To approve the attached signage and linemarking plan submitted by Varga Traffic Planning, dated 18 October 2016 (Ref 16548).



18 October 2016  
Ref 16548

The Chairperson  
Ryde Local Traffic Committee  
Locked Bay 2069  
NORTH RYDE NSW 1670

Dear Sir/Madam,

**LDA 2014/0378**  
**7-11 SMITH STREET, RYDE**  
**PROPOSED POST-CONSTRUCTION CHANGES TO KERBSIDE PARKING RESTRICTIONS**

---

Please find attached a plan illustrating the proposed kerbside parking restrictions to be implemented along the site frontage in Smith Street at the completion of the project, as required by consent condition No.92 of LDA 2014/0378.

The attached plan shows:

- existing parking signage to the north, south and west of the site
- suggested parking signage measured from the S.B.A. of Smith Street, including No Parking restrictions between 5am and 11am on Tuesday for garbage collection

All works are to be undertaken at *no cost* to the Council.

I would be grateful if the proposed changes to the parking restrictions could be submitted to the *Ryde Local Traffic Committee* for concurrence.

Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely

Chris Palmer  
Traffic Engineer B.Eng (Civil)  
Varga Traffic Planning Pty Ltd



# PROPOSED POST-CONSTRUCTION PARKING RESTRICTIONS

7-11 Smith Street, Ryde

0m 25m

Scale 1:300 @ A4 Size



**ADVISORY ITEM 1                      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*. The matters outlined in *Table 2*, below, were approved under Delegation.

*Table 1    Parking control measures installed to reinforce existing controls under Road Rules 2014*

<b>Location</b>	<b>Parking Control Measure</b>	<b>Existing Road Rules 2014 Control</b>	<b>Installation Date</b>
Khartoum Road, Macquarie Park	20 m of 'NO STOPPING' both sides of Khartoum Road, south of the intersection with Talavera Road	Rule 170 Stopping at or near an intersection	26 Oct 2016
Parkes Street, West Ryde	10 m of 'NO STOPPING' both sides of Wattle Lane on the southwest side of Parkes Street	Rule 170 Stopping at or near an intersection	TBA
Gordon Crescent, Denistone	20 m of NO STOPPING adjacent to the existing dividing (BB) line outside 9 Gordon Crescent	Rule 208 Parallel parking on a road (except in a median strip parking area)	TBA

*Table 2    Matters approved under Delegation*

<b>Location</b>	<b>Proposal</b>	<b>Consultation</b>	<b>Approval Date</b>
Cox's Road, North Ryde	Install a 13 m 'BUS ZONE 7.30AM-8.30AM 3.00PM-4.00PM SCHOOL DAYS' on the southern side of Cox's Road, outside 108 Cox's Road, North Ryde.	The occupants of 104,105,106,107,108, 109,110,111& 112 Cox's Road have been notified of the changes. No comments have been received.	TBA



Page intentionally left blank

## ADVISORY ITEM 2      DRIVEWAY TREATMENTS

*This Item* provides Council with an update on the current driveway treatments, which:

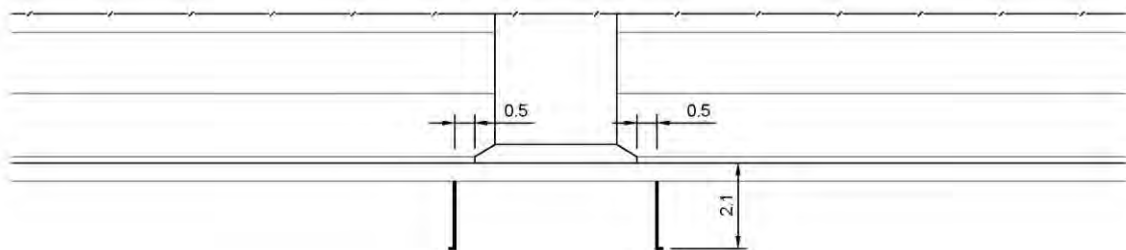
- are cost effective,
- help drivers park and queue in a considerate manner, and in turn
- help occupants exit and enter their driveways.

### ADVISORY TREATMENTS

The following treatments are NOT regulatory traffic and parking control measures and therefore:

- can be installed under existing staff delegations, and
- the driveway remains the enforceable parking control, under the [NSW] *Road Rules 2014*.

**Driveway delineation linemarking** consists of single lines, located in the parking lane, beside a driveway layback, as shown in *Figure 1*. This treatment delineates the location of the driveway layback, and encourages drivers to park a small distance from the edge of the driveway layback.



*Figure 1 Driveway delineation linemarking*

**Bow tie driveway linemarking** consists of linemarking in the shape of a bow tie, located in the parking lane, beside a driveway layback, as shown in *Figure 2*. This treatment encourages drivers to:

- park further away from driveways, to improve access/egress,
- park only one vehicle in between driveways, where the kerb is not long enough to park two vehicles without encroaching over at least one of the driveways, or
- avoid parking between driveways, where the kerb is not long enough for a vehicle to stop/park without encroaching over at least one of the driveways.

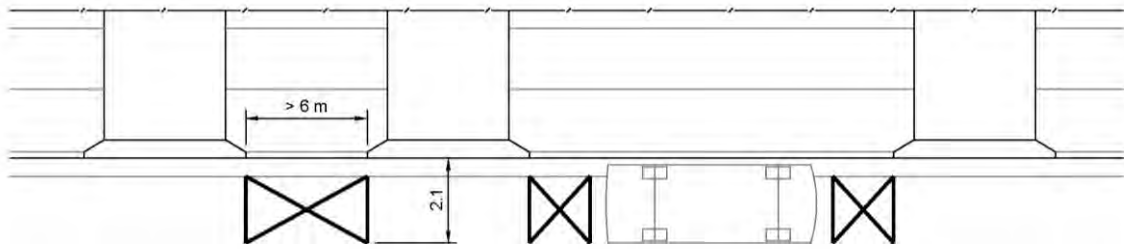


Figure 2 Bow tie driveway delineation linemarking

**Carriageway hatching at driveways** consists of linemarking in the shape of a bow tie, in the parking and the adjacent travel lane, across the driveway layback, as shown in Figure 3. This treatment encourages drivers to avoid stopping/parking/queuing across a driveway and is planned to be installed in Dobson Crescent and Warwick Street, shortly.

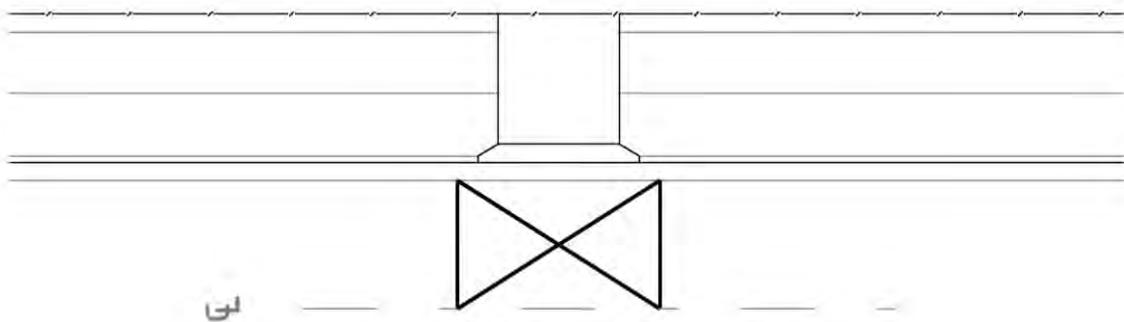


Figure 3 Carriageway hatching at driveways to be installed at driveways in Dobson Crescent and Warwick Street

Although Council has previously charged owners/occupiers to install the abovementioned treatments, the cost associated with transactions and other administration costs is larger than the install cost. Therefore, charging for this service will cease.

**Footpath hatching at driveways** consists of yellow hatched linemarking across the footpath section of the driveway, as shown in Figure 4. This treatment helps pedestrians identify conflict points and increase awareness of the presence of vehicles, without giving the impression that vehicles have the right of way.

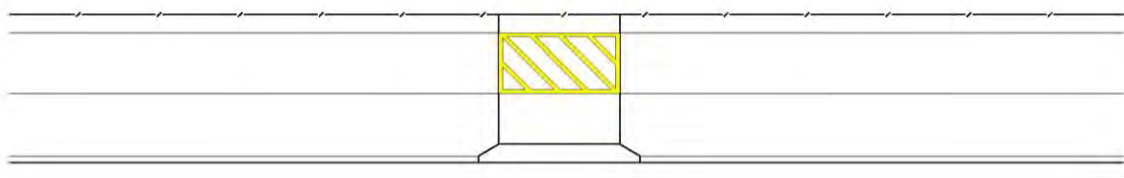


Figure 4 Footpath hatching at driveways



## REGULATORY TREATMENTS

The following treatments are regulatory parking control measures and therefore:

- require approval from Council, via Ryde Traffic Committee, and
- can be enforced, under the [NSW] *Road Rules 2014*.

**‘NO PARKING’ zones** replicate the Road Rules for driveways, allowing a driver to stop their vehicle, in order to drop-off and pick-up goods/passengers, provided they stay with the vehicle. This treatment is generally only used across driveways in/near town centres, where parking demand is high.

**‘NO STOPPING’ zones** do not allow drivers to stop/park. This treatment is generally only used across driveways to:

- emergency services facilities (including hospitals),
- Council facilities,
- public transport facilities, and
- schools.

**‘P MOTOR BIKES ONLY’ zones** only allow riders to stop/park motorcycles. This treatment is generally used between driveways, where the kerb is not long enough for a car to stop/park without encroaching over at least one of the driveways.

**‘KEEP CLEAR’ pavement markings** consist of a ‘KEEP CLEAR’ message in the travel lane(s), as shown in *Figure 5*, and do not allow drivers to queue. This treatment is only used in front of driveways to:

- emergency services facilities (including hospitals),
- Council facilities, and
- public transport facilities.

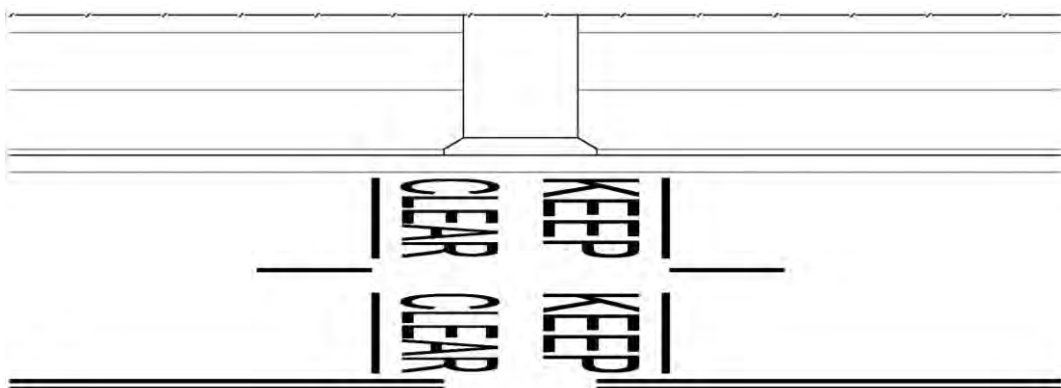


Figure 5 ‘KEEP CLEAR’ pavement markings



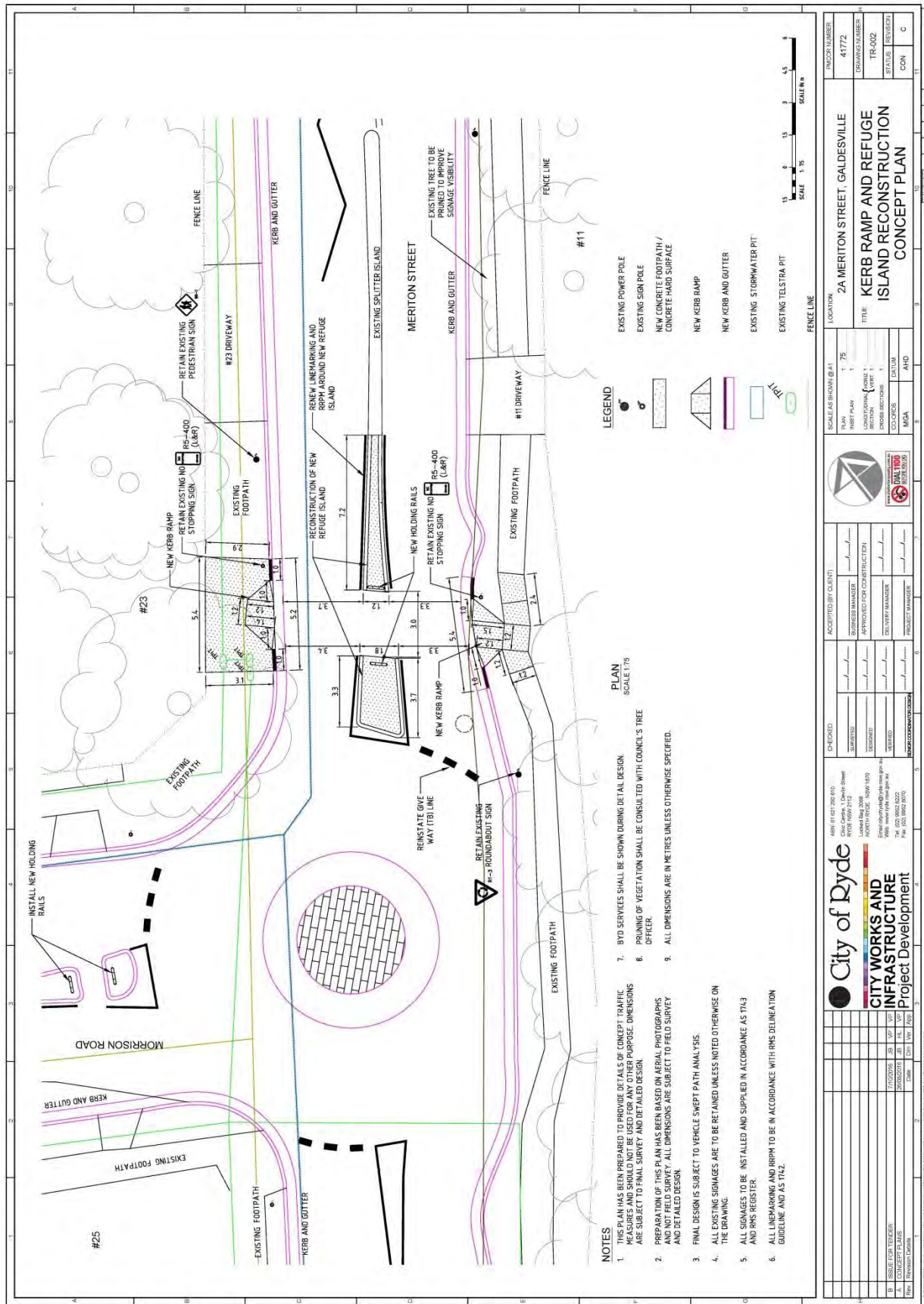
Page intentionally left blank

**ADVISORY ITEM 3****MERITON STREET, GLADESVILLE  
ACTIVE TRANSPORT WALKING COMMUNITIES PROGRAM  
WORKS**

*This Item* advises Ryde Traffic Committee and Council of the design to reconstruct the splitter island on the north-eastern leg of the roundabout at Meriton Street and Morrison Road, Gladesville, as shown in the attached plan.

A Pedestrian Access and Mobility Plan (PAMP) study was undertaken for the Gladesville area in 2015/16. Funding was successfully sought during the 2015/16 financial year, under the RMS's Active Transport Walking Communities Program, with construction due to commence in the 2016/17 financial year. Council accepted the funding at the Works and Community Committee meeting held on 16 August 2016. Most of the works are minor in nature and can be approved under existing staff delegations.

The existing gap in the splitter island on the north-eastern leg of the roundabout at Meriton Street and Morrison Road does not provide ample space for pedestrians to wait and cross Meriton Street in two parts. Due to the geometry of the existing roundabout, the swept paths of vehicles prevent widening the splitter island to accommodate a full pedestrian refuge. However, it is still beneficial to widen the gap in the splitter island to improve pedestrian access.



- NOTES**
1. THIS PLAN HAS BEEN PREPARED TO PROVIDE DETAILS OF CONCEPT TRAFFIC MEASURES AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. DIMENSIONS ARE SUBJECT TO FINAL SURVEY AND DETAILED DESIGN.
  2. PREPARATION OF THIS PLAN HAS BEEN BASED ON AERIAL PHOTOGRAPHS AND NOT FIELD SURVEY. ALL DIMENSIONS ARE SUBJECT TO FIELD SURVEY AND DETAILED DESIGN.
  3. FINAL DESIGN IS SUBJECT TO VEHICLE SWEEP PATH ANALYSIS.
  4. ALL EXISTING SIGNAGES ARE TO BE RETAINED UNLESS NOTED OTHERWISE ON THE DRAWING.
  5. ALL SIGNAGES TO BE INSTALLED AND SUPPLIED IN ACCORDANCE AS T14J AND RMS REGISTER.
  6. ALL LINEMARKING AND RRPM TO BE IN ACCORDANCE WITH RMS DELINEATION GUIDELINE AND AS T14Z.
  7. BYD SERVICES SHALL BE SHOWN DURING DETAIL DESIGN.
  8. PRUNING OF VEGETATION SHALL BE CONSULTED WITH COUNCIL'S TREE OFFICER.
  9. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED.

<p>SCALE AS SHOWN @ A1</p> <p>PLAN: 1:75</p> <p>SECTION: 1:10</p> <p>ENGINE RECTIFIER: 1</p> <p>DATE: 15/09/16</p> <p>PROJECT MANAGER: MGA</p>		<p>PROJECT NUMBER: 41772</p> <p>DRAWING NUMBER: TR-002</p> <p>STATUS: REVISED</p> <p>CON: C</p>
<p>LOCATION: 2A MERITON STREET, GALDESVILLE</p> <p>TITLE: KERB RAMP AND REFUGE ISLAND RECONSTRUCTION CONCEPT PLAN</p>		<p>APPROVED BY (UBRT):</p> <p>APPROVED FOR CONSTRUCTION:</p> <p>DATE: / /</p>
<p>CHECKED:</p> <p>DESIGNED:</p> <p>DRAWN:</p> <p>VERIFIED:</p>		<p>APPROVED BY (UBRT):</p> <p>APPROVED FOR CONSTRUCTION:</p> <p>DATE: / /</p>
<p>City of Ryde</p> <p><b>CITY WORKS AND INFRASTRUCTURE</b></p> <p>Project Development</p>		<p>MAN BY (ET 200 P10):</p> <p>DATE: 15/09/16</p> <p>PROJECT NUMBER: 41772</p> <p>LOCATION: 2A MERITON STREET, GALDESVILLE</p> <p>LOCALITY: NORTH HILLS, NSW 1570</p> <p>PROJECT MANAGER: MGA</p> <p>DATE: 15/09/16</p> <p>PHONE: (02) 8962 0222</p> <p>FAX: (02) 8962 9076</p>



---

**ADVISORY ITEM 4      RYDE TRAFFIC COMMITTEE  
2017 MEETING DATES**

*This Item* is to advise the Ryde Traffic Committee (RTC) meeting dates to be held in 2017.

RTC meetings have previously been held six times per year, on a cycle of the fourth Thursday of odd months (January, March, May, July, September and November). Ryde Traffic Committee Resolutions are considered by Council at the next available Works and Community Committee (W&CC) meeting.

In 2016, Council changed the timing of the W&CC meetings, which continue to be held on the third Tuesday of each month. There was insufficient time between RTC and W&CC meetings to allow Business Paper preparation for the subsequent W&CC meeting, causing significant delays to the implementation of approved works. Therefore, RTC meetings were held on the third Thursday of the odd months in 2016. This schedule did not take into account the timeframes:

- between each RTC meeting and the following RTC meeting, and
  - between RTC meetings and W&CC meetings,
- without overlapping of tasks.

Preparation of RTC meeting Items commence ten weeks before the meeting, in order to:

- undertake a detailed investigation,
- develop a proposal,
- consult with stakeholders,
- analyse responses,
- recommend a proposal,
- prepare draft reports for management to review, and
- publish the Business Paper.

Once the RTC meeting has been held, the following actions are undertaken before the matter is referred to the W&CC meeting:

- refer the RTC meeting Minutes to the RTC members for confirmation,
- notify the recipients of the original consultation that the proposed measures are to be considered by Council at the W&CC meeting,
- consolidate additional information that is relevant for Council to make an informed decision, including:
  - an estimated cost to implement, and
  - addressing any further concerns of the RTC and stakeholders, and
- prepare a draft report for management to review.

If changes are approved by Council at the W&CC meeting, the following actions are undertaken to implement the changes:

- order signs and engage linemarking contractors,
- notify recipients of the original consultation of Council's decision, and
- schedule implementation.

Recent improvements to the above processes include:

- consulting with a wider range of stakeholders,
- expanding the additional information provided to Council at the W&CC meetings, and
- additional record keeping.

In order to provide sufficient time:

- between each RTC meeting and the following RTC meeting, and
- between RTC meetings and W&CC meetings,

without overlapping of tasks, the 2017 RTC meetings are scheduled to be held five times per year on the following dates:

1. Thursday 9 February 2017,
2. Thursday 20 April 2017,
3. Thursday 29 June 2017,
4. Thursday 7 September 2017, and
5. Thursday 16 November 2017.



---

**ADVISORY ITEM 5      BRABYN STREET, DENISTONE EAST  
PERMANENT ROAD CLOSURE****Overview**

Council has previously considered measures to improve traffic flow and safety in Brabyn Street, Denistone East and it was resolved to consult with the community regarding a permanent closure of Brabyn Street. RMS is the approving authority for closing roads to through traffic, under the instrument of Delegation. *This Item* seeks advice from RMS regarding its position on the proposal of a closure, based on the feedback received.

**Background**

Denistone East Public School has classrooms on both sides of Brabyn Street and students are required to cross Brabyn Street several times a day. To improve access and safety, the road is closed by lowering boom gates on school days, between 9.30am and 3pm on Monday to Thursday and between 9am and 2.30pm on Fridays.

City of Ryde received representation from local residents requesting consideration be given to:

- converting Brabyn Street to one way, eastbound,
- converting Brabyn Street to one way, westbound,
- removing the boom gates, and/or
- converting Boronia Lane to one way, eastbound.

In response, City of Ryde engaged an external provider to investigate converting Brabyn Street to one way, eastbound, and removing the boom gates. It was found that:

- most of the traffic accessing Brabyn Street is school traffic coming from the east, via Kings Road,
- a one-way eastbound arrangement on Brabyn Street would result in more traffic being diverted to surrounding local residential streets, including Henderson Street, Russell Street, and Boronia Lane,
- Boronia Lane is not suitable as a primary traffic link to the school, and
- a one-way eastbound arrangement would likely require a re-configuration of the Lovell Road / Pickford Avenue / Russell Street roundabout to allow traffic to enter Russell Street from all legs.

Furthermore, it was recommended that a permanent closure of Brabyn Street be considered, in order to improve safety. The attached consultant's report was tabled at Ryde Traffic Committee in March 2015. Subsequently, Council resolved the following at the Works and Community Committee meeting held on 5 May 2015:



- (i) That Council consider the recommendations of the *Brabyn Street Traffic Management Options Paper*, prepared by *Bitzios Consulting* dated 10 February 2015, for:
1. *Implementing a permanent road closure in Brabyn Street at the existing pedestrian crossing, which would provide the following benefits:*
    - *More safety for children and other pedestrians;*
    - *Prevent conflicting traffic from opposite ends of the street accessing the school drop-off zone; and*
    - *Prevent traffic from taking unnecessary detours through surrounding streets to access Brabyn Street;*
  2. *Instating a 'No Stopping' measure on both sides of the eastern end of Brabyn Street during school drop-off and pick-up times (8:30am–9:30am and 2:30pm–4:00pm) to allow for smoother flow of traffic entering and exiting the school drop-off bay; and*
  3. *Re-constructing the turning area at the western side of the permanent road closure to facilitate U-turns.*
- (ii) *That Council consult with affected residents and Denistone East Primary School regarding implementing the recommended measures and the local community regarding the proposed road closure.*
- (iii) That the results of the survey be reported back to the Local Traffic Committee for consideration.

## Consultation

Surveys were distributed to the occupants of the 152 properties in the area bounded by Lovell Road, Kings Road and Russell Street (including the school), to determine the level of support for a permanent closure to traffic of Brabyn Street. The consultation period closes at COB 14 November 2016. The feedback received up to COB 4 November 2016 has been summarised in *Table 1*, below, and an update of all feedback received will be tabled at the meeting.

*Table 1 Summary of consultation results received up to COB 4 November 2016 for permanently closing Brabyn Street, Denistone East.*

	<b>Total</b>
Properties consulted	152
Responses received	39 (26%)
Supported	10
Not supported	26
Undecided	3

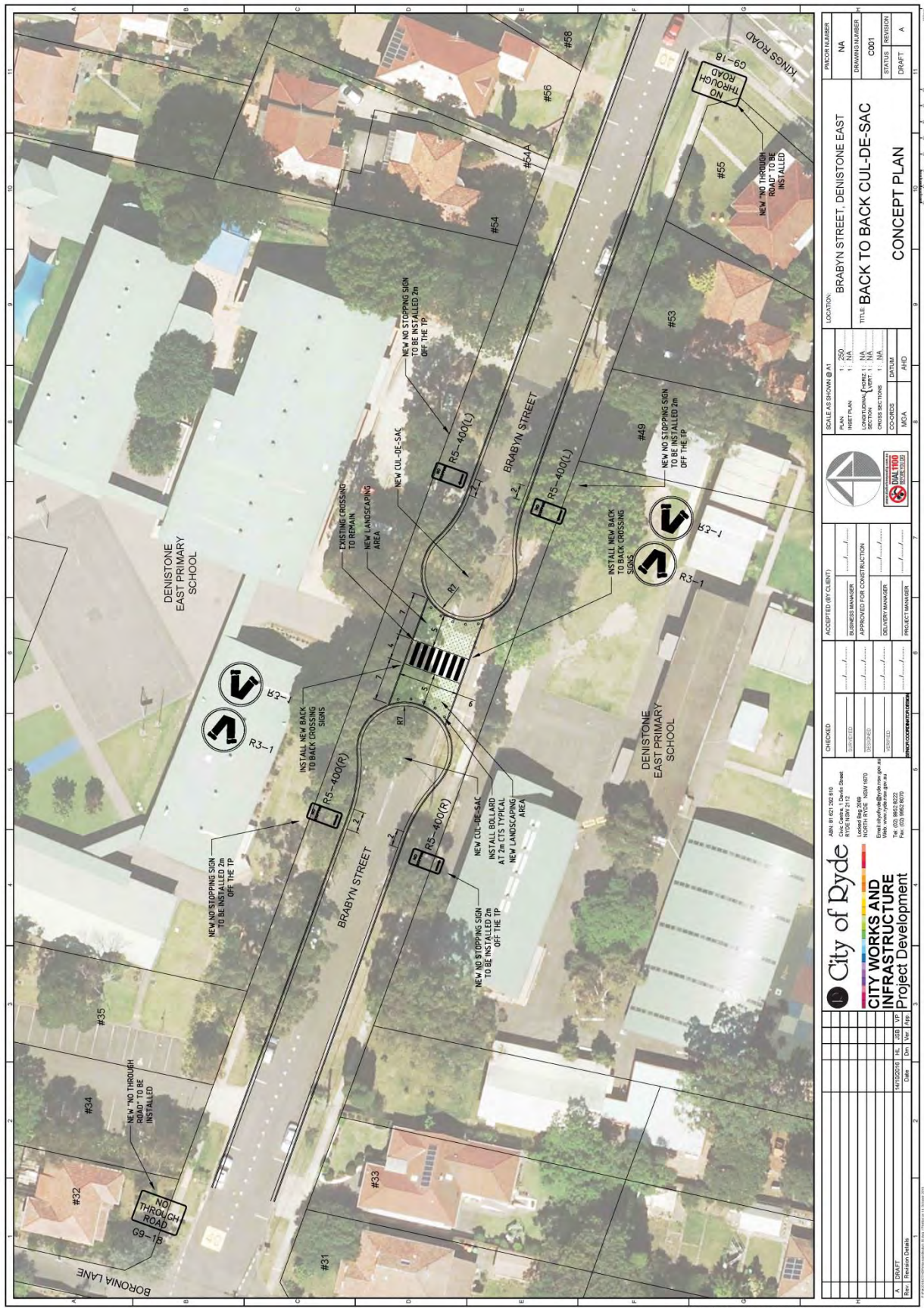


If at the conclusion of the consultation it is clear that there is NOT a substantial majority of local resident support for the closure it will not be pursued any further.

Given that the Bitzios report confirms that much of the safety concerns stem from the narrow road carriageway the potential for widening this in a future capital work renewal program will be investigated.







<b>City of Ryde</b> <b>CITY WORKS AND INFRASTRUCTURE</b> Project Development		AREA: 81 671 700 810 RYDE NSW 2112 Locked Bag 2088 NORTH RYDE NSW 2113 Web: <a href="http://www.cityofryde.nsw.gov.au">www.cityofryde.nsw.gov.au</a> Tel: (02) 9955 8222 Fax: (02) 9955 9070	CHECKED: _____ DATE: _____ DESIGNED: _____ DRAWN: _____ PROJECT COORDINATOR: _____	ACCEPTED BY (CLIENT): BUSINESS MANAGER: _____ APPROVED FOR CONSTRUCTION: _____ DELIVERY MANAGER: _____ PROJECT MANAGER: _____	SCALE: AS SHOWN @ A1 SHEET PLAN: 1: N/A LONGITUDINAL CROSS SECTION: 1: N/A CROSS SECTIONS: 1: N/A CO-ORDINATES: MGA DATUM: AHD	LOCATION: BRABYN STREET, DENISTONE EAST TITLE: BACK TO BACK CUL-DE-SAC CONCEPT PLAN	PROJECT NUMBER: N/A DRAWING NUMBER: C001 STATUS: REVISION DRAFT: A
--	--	--	--	---	---	---	---

# BRABYN STREET ONE-WAY ASSESSMENT



FOR

**CITY OF RYDE**

**BITZIOS**  
consulting

#### Gold Coast

Suite 26, 58 Riverwalk Avenue  
Robina QLD 4226  
P: (07) 5562 5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

#### Brisbane

Level 2, 428 Upper Edward Street  
Spring Hill QLD 4000  
P: (07) 3831 4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

#### Sydney

Studio 203, 3 Gladstone Street  
Newtown NSW 2042  
P: (02) 9557 6202



**DOCUMENT CONTROL SHEET****Issue History**

Report File Name	Prepared by	Reviewed by	Issued by	Date	Issued to
P1939.001R Brabyn Street One-Way Assessment	J. Smith	A. Finlay	J. Smith	10/2/2015	Nina Fard, City of Ryde

*Copyright in the information and data in this document is the property of Bitzios Consulting. This document and its information and data is for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or in part for any purpose other than for which it was supplied by Bitzios Consulting. Bitzios Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or its information and data.*

# CONTENTS

	Page
<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1 BACKGROUND	1
1.2 SCOPE OF STUDY	2
<b>2. EXISTING CONDITIONS .....</b>	<b>2</b>
2.1 PARKING CONTROLS	2
2.2 TRAFFIC CONDITIONS	2
<b>3. ONE-WAY ASSESSMENT .....</b>	<b>4</b>
3.1 BENEFITS	4
3.2 POTENTIAL DETRIMENTS	4
<b>4. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>5</b>

## Figures

Figure 1.1: Study Area

Figure 1.2: Road closure in operation

Figure 2.1: Existing parking controls on Brabyn Street

Figure 2.2: Existing traffic congestion at eastern end of Brabyn Street

Figure 2.3: Lovell Road / Russell Street / Pickford Avenue roundabout configuration

Figure 3.1: Likely Detours to Brabyn Street (with one-way eastbound arrangement)

Figure 3.2: Boronia Lane

## 1. INTRODUCTION

### 1.1 BACKGROUND

Brabyn Street is located in Denistone East, within the City of Ryde. It runs east-west from Kings Road to Russell Street. Lovell Road, a sub-arterial road, runs parallel to Brabyn Street. Boronia Lane is a small lane connecting Lovell Road with Brabyn Street and through to Henderson Street.

Denistone East Primary School is located on the eastern end of Brabyn Street, and occupies both sides of the street. The street currently includes a day time road closure (implemented by a boom gate) during the school hours of 9:30am to 3:00pm Monday to Thursday and 9:00am to 2:30pm Friday, to allow children to cross safely between the two sides without conflict with vehicles.

Figure 1.1 shows an aerial photo of the study area, and Figure 1.2 shows the existing road closure in place.



(Image Source: Six Maps)

**Figure 1.1: Study Area**



(Image Source: Google Street View)

**Figure 1.2: Road closure in operation**

## 1.2 SCOPE OF STUDY

A proposal has been submitted to allow traffic to travel one way eastbound along Brabyn Street towards Kings Road. In conjunction with the one-way treatment, the existing part-time road closure is proposed to be removed.

Bitzios Consulting has been commissioned by the City of Ryde to assess the implications of this proposal, including the impacts to road network efficiency, residential amenity, and road safety. This report summarises the findings of the study.

## 2. EXISTING CONDITIONS

### 2.1 PARKING CONTROLS

Brabyn Street is used as the primary drop-off and pick-up point for traffic accessing Denistone East Primary School during school days. There are two existing “Kiss & Ride” bays located on both sides of the boom gates, as well as a built-in turning bay on the northern side. A “No Stopping” zone exists on the northern side adjacent the drop-off turning bay during afternoon school hours. Unrestricted parking is available along other sections of Brabyn Street. Figure 2.1 shows the existing parking controls of Brabyn Street adjacent the school.



(Image Source: Six Maps)

**Figure 2.1: Existing parking controls on Brabyn Street**

### 2.2 TRAFFIC CONDITIONS

A site visit was conducted on Wednesday 4 February, 2015 between 8:30am and 9:15am to observe the existing school traffic conditions on Brabyn Street and the surrounding road network.

The following observations were made during the site visit:

- on-street parking is evident on both sides of the street, creating a narrow path for vehicles;
- the ‘Kiss & Ride’ bays are heavily used;
- there is a significant burst of traffic accessing the drop-off bay at 9:00am, predominantly to and from Kings Road;
- due to the combination of heavy on-street parking on both sides, and heavy traffic in and out of the drop-off turning bay, congestion occurs on the eastern end of the street (see Figure 2.2);

- Boronia Lane is rarely used as a connector route to Brabyn Street; and
- the roundabout configuration at Lovell Road/Russell Street/Pickford Avenue (see Figure 2.3) only permits access into Russell Street via the left turn from Lovell Road.



Figure 2.2: Existing traffic congestion at eastern end of Brabyn Street



(Image Source: Six Maps)

Figure 2.3: Lovell Road / Russell Street / Pickford Avenue Roundabout Configuration

### 3. ONE-WAY ASSESSMENT

#### 3.1 BENEFITS

One of the key benefits of making Brabyn Street one-way eastbound is the reduction of traffic and the subsequent congestion on the eastern end of the street, which was evident during the site inspection.

Moreover, the one-way treatment would optimise the existing drop-off / pick-up turning bay arrangement at the school, located on the northern side, by allowing cars to enter and exit left in and left out without the need to give way (as currently occurs if turning right out of the bay).

#### 3.2 POTENTIAL DETRIMENTS

Making Brabyn Street one-way, however, would produce the following impacts to the surrounding traffic network:

- With the current configuration of the roundabout at Lovell Road/Russell Street/Pickford Avenue, which only permits access into Russell Street via the left turn from Lovell Road, traffic accessing Brabyn Street from the other legs would need to access via (refer to Figure 3.1):
  - Boronia Lane, if travelling primarily to the eastern end near the school; or
  - Hollis Avenue—Karnak Street—Russell Street, if travelling to the western end;
- Traffic accessing the school drop-off zone will likely choose to take Boronia Lane. This lane is narrow and has a short sight distance (Figure 3.2), and would be unsuitable for school traffic to use as the major connector to Brabyn Street.



(Image Source: Six Maps)

Figure 3.1: Likely Detours to Brabyn Street (with one-way eastbound arrangement)



Figure 3.2: Boronia Lane

#### 4. CONCLUSIONS AND RECOMMENDATIONS

Based on the current traffic conditions and roundabout configuration at Lovell Road / Pickford Avenue / Russell Street, as well as the site observation, the following conclusions are made:

- most of the traffic accessing Brabyn Street is school traffic coming from the east via Kings Road;
- a one-way eastbound arrangement on Brabyn Street would result in more traffic being diverted to surrounding local residential streets, including Henderson Street, Russell Street, and Boronia Lane;
- Boronia Lane is not suitable as a primary traffic link to the school; and
- a one-way eastbound arrangement would likely require a re-configuration of the Lovell Road / Pickford Avenue / Russell Street roundabout to allow traffic to enter Russell Street from all legs.

Based on the above conclusions, the following recommendations are made:

- implement a permanent road closure in Brabyn Street at the existing pedestrian crossing, which would provide the following benefits:
  - more safety for children and other pedestrians;
  - prevent conflicting traffic from opposite ends of the street accessing the school drop-off zone; and
  - prevent traffic from taking unnecessary detours through surrounding streets to access Brabyn Street;
- instate a “No Stopping” measure on both sides of the eastern end of Brabyn Street during school drop-off and pick-up times (8:30am–9:30am and 2:30pm–4:00pm) to allow for smoother flow of traffic entering and exiting the school drop-off bay; and
- re-design the turning area at the western side of the permanent road closure, to facilitate U-turns

