
9 TRAFFIC AND PARKING INVESTIGATIONS - DENISTONE EAST PUBLIC SCHOOL

Report prepared by: Traffic Engineer, Traffic Transport & Development
File No.: GRP/09/3/17 - BP19/255

REPORT SUMMARY

This report outlines the traffic and parking investigations that have been undertaken on the roads that have a frontage with Denistone East Public School. TPE (Traffic, Planning and Environmental) Consulting was commissioned by the City of Ryde in May 2018 to undertake a traffic and road safety assessment.

The assessment outlines the issues raised by the school community and details the proposed recommendations that have been separated into a short and medium term works program.

In addition to continued enforcement and education, Council's traffic section proposes the following actions:

Short Term Works (0 - 2 years):

- All signage and line marking deficiencies that falls under RMS jurisdiction to be reported to that entity for its investigation.
- Address deficiencies in parking and bus zone signage, ensuring that all zones are closed to facilitate enforcement.
- Address deficiencies associated with statutory *No Stopping* signage at intersections.
- Review possible extensions to existing 'Kiss and Ride' zones on Brabyn Street.
- Access and egress arrangements at the internal 'Kiss and Ride' zone off Brabyn Street be modified as discussed in this report.
- A 'Kiss and Ride' zone be created along the Henderson Street school frontage with the zone to be signposted as per RMS requirements.
- Formalisation of key intersections in the vicinity of the school with *Give Way* signage and line marking. Double barrier lines to be provided at intersections to assist motorists in adopting correcting travel path.
- Centreline line marking on Kings Road to be installed to counteract current visual misalignment.
- Assess whether pedestrian refuges can be provided at key intersections subject to turning path manoeuvres.
- Replacement of non-standard pedestrian fencing on Kings Road.
- Installation of pedestrian fencing in the vicinity of the pedestrian crossing on Brabyn Street to prevent parents from dropping their children on the

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approaches to the crossing.

- Review possible one way traffic flow operation on Boronia Lane.
- Assess where additional driveway delineation lines are required on streets with a school frontage.

Proposed Medium Term Works (3 – 5 years):

- Kerb ramps at all intersections on main routes to school to be upgraded to ensure compliance with Council's and RMS standards.
- Review footpaths along major desire routes to/from Denistone East Public School.
- Review of street lighting along pedestrian desire routes.
- Review pedestrian crossing facilities along pedestrian desire line routes.

RECOMMENDATION:

- (a) That Council place the Denistone East Public School Traffic and Parking Study on public exhibition for a period of 28 days.
- (b) That following the community consultation, a report be provided back to Council, via the Ryde Traffic Committee.

ATTACHMENTS

- 1 Denistone East Public School - TPE Consulting Study
- 2 Denistone East Public School - Community Information Session Q&A
- 3 RMS Warrants for Pedestrian Crossings

Report Prepared By:

John Begley
Traffic Engineer, Traffic Transport & Development

Report Approved By:

Kelly Yoon
Senior Traffic and Development Engineer

Wayne Rylands
Director - City Works

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Introduction

TPE (Traffic, Planning and Environmental) Consulting was commissioned by the City of Ryde in May 2018 to undertake a traffic and road safety assessment of all roads that have a frontage with Denistone East Public School, namely Brabyn Street, Kings Road, Boronia Lane – see *Attachment 1*.

Council Engineers expanded on this assessment to also include nearby streets commonly used by parents and carers of children attending the school. It should be noted that the TPE report has been used purely as an aide in determining a short and medium term works program to address traffic and road safety deficiencies on streets surrounding Denistone East Public School.

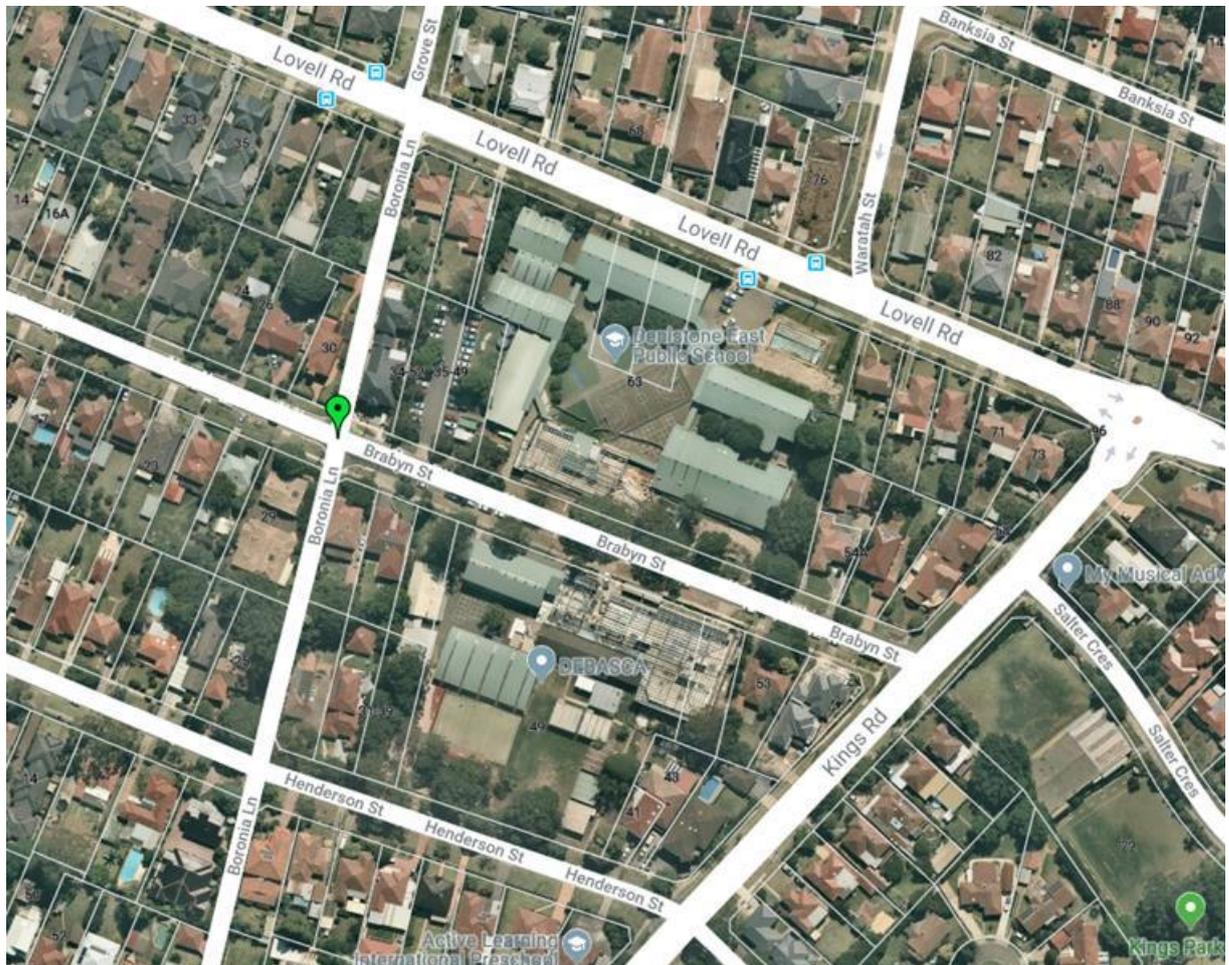


Figure 1: Site Location and Environs

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The Works and Community Committee Report No. 7/17, dated Tuesday 17 October 2017, recommended that City of Ryde Council adopt a schedule to investigate traffic and parking issues at the 28 schools located within the council area. The school schedule was created in order to:

1. Better manage existing staff resources;
2. Undertake more in-depth investigations within each school catchment area;
3. Budget infrastructure solutions; and
4. Ultimately provide better outcomes for the local and school community.

Consultation Process

A web page on 'Traffic and Parking Investigations Around Schools' was developed, through which Council sought to inform the local community that it was investigating traffic and parking issues around various schools with the aim of improving safety for users in each catchment area.

The local community was encouraged to provide feedback on what it considered were traffic and road safety issues pertaining to Denistone East Public School and its environs. These issues were then mapped using an online mapping tool. Council also requested information on how people were travelling to and from the school through a short travel to school survey.

The community was encouraged to provide any further comments or concerns on how Council could improve traffic flow and safety in the area through an online submission form.

A mail out to all residences in the catchment area was also undertaken, inviting people to an evening information session at the school hall at Truscott Street Public School, which was held on Tuesday, 13 March 2018.

Community concerns from the information session were noted and responded to – see *Attachment 2*.

Requirements, Responsibilities and Jurisdictions

Through the consultation process, the Truscott Street Public School community requested a variety of traffic facilities and remedial works to be investigated and provided. Council in general is responsible for all matters that are situated on local roads. However, there are a number of facilities which, while located on local roads, fall outside Council's jurisdiction and which are the sole responsibility of Roads and Maritime Services (RMS). RMS is responsible for the following matters:

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- The installation, operation and management of all traffic signal sites;
- Any changes to the phasing arrangement at traffic signal sites;
- The installation, operation and management of all urban speed zones;
- The installation, operation and management of all 40kph School Zones including maintenance of 40kph pavement patches and dragons teeth delineation; and
- All matters associated with the operation and management of State Roads i.e. Epping Road, which includes all associated parking signage and line marking.

School communities generally perceive that pedestrian crossings are the safest method for children to cross a road carriageway. However, before a location can be considered for a pedestrian crossing it must meet minimum warrants set by the RMS which are based on pedestrian and vehicle numbers – see *Attachment 3*.

Brabyn Street: Requests for Full Time Road Closure

Brabyn Street along the School frontage east of Boronia Lane is closed to all traffic between the hours of 9:30am – 3pm Monday to Thursday and from 9:00am – 2:30pm on Fridays. The School's operating hours are from 9:25am – 3:25pm Monday to Thursday and from 8:55am to 2:55pm on Fridays. The road closure is controlled by boom gates located on either side of the pedestrian crossing.

The issue of closing Brabyn Street permanently has been raised a number of times whenever there is discussion about traffic and road safety issues associated with Denistone East Public School.

The Ryde Traffic Committee (RTC) at its meeting of 26 March 2015 resolved in part that:

- A. Council consider the recommendations of the Brabyn Street Traffic Management Options Paper, prepared by Bitzios Consulting dated 10 February 2015, for: Implementing a permanent road closure in Brabyn Street at the existing pedestrian crossing,*
- B. Council consult with affected residents and Denistone East Primary School regarding implementing the recommended measures and the local community regarding the proposed road closure.*

Local residents were subsequently consulted prior to the RTC meeting of 17 November 2016 with surveys 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.

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<i>Properties Consulted</i>	152
<i>Responses Received</i>	39
<i>Support the Closure</i>	10
<i>Do Not Support the Closure</i>	26
<i>Undecided</i>	3

As there was a clear majority against the permanent road closure by local residents, any further request by parents for its closure will not be entertained.

Operation of School's internal *Kiss and Ride* zone on Brabyn Street.

The source of much of the congestion that presently exists on Brabyn Street is due to the uncontrolled operation of the School's internal 'Kiss and Ride' zone that is located on the eastern side of the pedestrian crossing. The access points to the area are not clearly defined, with parents accessing the location from both directions on Brabyn Street and egressing in both directions back onto Brabyn Street. The multiple movements permitted inevitably means that localised congestion occurs.

It is thus considered that the following measures be installed to reduce congestion and enhance efficiency at this location.

1. The access and egress driveways to the internal 'Kiss and Ride' zone on Brabyn Street to be clearly signposted.
2. *No Right Turn* signage to be installed at the egress driveway on Brabyn Street which may have to be augmented by a median island to ensure that only left turns back onto Brabyn Street can be undertaken.
3. The afternoon *No Stopping* restrictions on Brabyn Street, east of the egress driveway be converted to include the morning drop off time period.
4. All parents wishing to use the School's internal 'Kiss and Ride' zone will now be required to have their surname prominently displayed. If their child is not ready to be collected, they will be required to go around the block to access the 'Kiss and Ride' area again.
5. Assess whether morning peak hour *No Right Turn* restrictions will be required on Brabyn Street at Kings Road.

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A further modification to the above operation would have the right turn access into the school's internal 'Kiss and Ride' zone prohibited for all vehicles arriving from Kings Road. This right turn restriction would either be signposted initially or would require a central median island to be installed to essentially enforce a left in/left out operation.

Proposed Henderson Street *Kiss and Ride* zone

The school has an extensive frontage onto Henderson Street which is accessible via a number of gates. This street frontage is an ideal location for a formal 'Kiss and Ride' zone to be created as shade structures are already provided, thus providing shelter to waiting children in addition to a formal playground keeping them entertained when waiting for their parents to arrive. It is proposed that this school frontage be signposted as a 'Kiss and Ride' zone with the School to encourage parents to use this street in addition to the existing ones on Brabyn Street.

InvestigationsSignage & Line Marking Audit

- Issue 1: RMS is responsible for the installation and maintenance of all urban speed limit and school zone delineation. This includes speed signage/ pavement patches/ and dragons teeth line marking. Audit revealed that many of these facilities are in a poor state of maintenance. Council to advise RMS of location of all speed and school zone related delineation that is non-compliant, with these to be upgraded as a matter of urgency
- Issue 2: A review of the statutory *No Stopping* restrictions at intersections on many of the roads in the vicinity of the school indicates that signage at many intersections are either missing or incorrectly signposted. Works orders re currently being prepared to address this issue.
- Issue 3: The statutory *No Stopping* restrictions associated with existing pedestrian crossing facilities on roads in the vicinity of the school are significantly in excess of RMS requirements. All locations have been assessed and it has been determined that the compliant distances required at these crossing will enable additional time-restricted parking zones to be created which will provide more parking opportunities for parents and carers of children attending the school.
- Issue 4: Audit revealed that many of the bus zones in the vicinity of the school have not been signposted or have been signposted incorrectly. This matter will be addressed as a matter of urgency.

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- Issue 5: Council is responsible for all signage/line marking within subject area that falls under its care and control. Intersection line marking is quite faded at many locations with additional line marking required to denote the correct travel path through intersections and to denote on-street parking areas.
- Issue 6: Additional signage and delineation required at the intersection of Waratah Street and Lovell Street to denote that this is one way at the intersection.
- Issue 7: Centre lane line marking required on Kings Road to correct the offset misalignment of the road for motorists between the intersection of Lovell Road and Brabyn Street.
- Issue 8: Intersection of Kings Road and Salter Road requires *Give Way* signage and line marking with additional centre line double barrier lines to assist motorists traversing this intersection. The feasibility of installing a pedestrian refuge at this intersection will be investigated.
- Issue 9: Intersection of Kings Road and Brabyn Street requires *Give Way* signage and line marking with centre line double barrier lines to assist motorists traversing this intersection.
- Issue 10: The width of the kerb ramps at the pedestrian crossing on Kings Road at Brabyn Street is non-standard and needs to be widened to 3.6m. The pedestrian fencing at this location is also non-standard and needs replacement.
- Issue 11: Intersection of Kings Road and Henderson Street requires *Give Way* signage and line marking with centre line double barrier lines to assist motorists traversing this intersection.
- Issue 12: There are a number of locations on streets surrounding the school where time-restricted parking zones can be provided to assist parents during school drop off and pick up times. These will be investigated and installed if considered warranted.

Crash Analysis

The roads surrounding Denistone East Public School were assessed using the 2013 - March 2018 RMS crash dataset. This dataset is populated by reported accidents to NSW Police, and will not include any unreported accidents. It should be noted that all the above crash data is confirmed.

This analysis indicated that the only road with a direct school frontage on which crashes have occurred is Lovell Street. All crashes were of a minor nature, with none involving pedestrians and none occurring during school drop off and pick up times.

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The injury crash that occurred on Kings Road near Brabyn Street was a pedestrian related crash which occurred at 6:30pm on 4th July 2014. Despite the presence of a pedestrian crossing facility at this location, the pedestrian chose to cross Kings Road just north of the crossing when he was struck by the vehicle.



Figure 3: Crash Analysis

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Proposed ActionsEnforcement

Feedback from residents and school community indicate that some parents and carers continue to undertake unsafe practices despite being regularly informed of the penalties and risks. Therefore, Council's new dedicated School Zone Enforcement Officers will be requested to undertake additional patrols of Denistone East Public School throughout the school year. In particular, they will be requested to target individuals who are undertaking the following illegal practices:

- blocking resident driveways
- double parking
- parking in *No Stopping* zones or within 3m of double barrier lines
- dropping off children within the Children's Crossing zone.

Education

Education is regularly delivered to students through the Department of Education curriculum on road and pedestrian safety. Council's Road Safety Officer works with the RMS, police and schools to target information and programs at parents and carers with the aim of improving driver behaviour in school zones.

Each year Council distributes updated fact sheets to schools in English, Chinese and Korean languages on various road safety topics which are then distributed through the school to parents and carers. Council will also continue to provide road safety signage and resources to schools and from 2019 will be developing and distributing a quarterly road safety newsletter in different languages to all primary schools as an additional reminder of safe practices, road rules and penalties.

Proposed Short-Term Works

- All signage and line marking deficiencies that falls under RMS jurisdiction to be reported to that entity for its investigation.
- Address deficiencies in parking and bus zone signage, ensuring that all zones are closed to facilitate enforcement.
- Address deficiencies associated with statutory *No Stopping* signage at intersections.
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- Installation of pedestrian fencing in the vicinity of the pedestrian crossing on Brabyn Street to prevent parents from dropping their children on the approaches to the crossing.
- Review possible one way traffic flow operation on Boronia Lane.
- Assess where additional driveway delineation lines are required on streets with a school frontage.

Proposed Medium-Term Works

- Kerb ramps at all intersections on main routes to school to be upgraded to ensure compliance with Council's and RMS standards.
- Review footpaths along major desire routes to/from Denistone East Public School.
- Review of street lighting along pedestrian desire routes.
- Review pedestrian crossing facilities along pedestrian desire line routes.

Community Engagement

Recommendations that require the approval of the Ryde Traffic Committee will, as part of the associated report, contain results of consultation with the local community and school if directly impacted.

Where changes are necessitated to ensure compliance with NSW Road Rules, only directly impacted residents will be advised about minor works to be undertaken i.e. statutory *No Stopping* restrictions at intersections, pedestrian facilities or signposting of bus zones. While the opinions of residents will be considered in all proposals, it should be noted that road safety will be of paramount importance in all cases.

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The maintenance of signage and line marking and provision of associated new minor delineation works is generally catered for through the annual Block Grant that Council receives each year from Roads and Maritime New works such as enhanced street lighting / provision of traffic calming devices / pedestrian refuges or enhanced pedestrian crossings all must be funded by Council directly or through funding submissions to the Federal or State Government via road safety programs.