



WALLBRIDGE GILBERT  
AZTEC

## TECHNICAL NOTE

**DATE:** 7<sup>th</sup> October 2021

**PROJECT NUMBER:** WGA190190

**DOCUMENT NUMBER:** WGA190190-RP-TT-0002[A]

**TO:** Holmes Dyer

**ATTENTION:** Nitsan Taylor

**SUBJECT:** Addendum to Plympton Residential DPA Traffic Assessment Report (Rev E)

---

### 1. INTRODUCTION AND PURPOSE OF TECHNICAL NOTE

Holmes Dyer has concluded community consultation on the proposed re-zoning.

Holmes Dyer received a number of submissions from residents of Gardner Street who are concerned that the re-zoning and subsequent development of the land will exacerbate existing traffic issues. These existing concerns relate to high traffic volumes and high demand for on-street car parking currently associated with the Plympton International College on Errington Street.

Gardner Street and Errington Street “Existing Conditions” are discussed in sections 3.1.6 and 3.1.7 respectively in the original Traffic Assessment Report (TAR). The TAR describes Errington Street and Gardner Street as urban local roads according to West Torrens Council Transport Strategy. The TAR also discusses the intersection type and arrangement of Errington Street and Gardner Street.

The proposed development access to Gardner Street is known as Access Point 2 (AP2) and is discussed within Section 4.4.2 of the TAR. The anticipated internal distribution (of traffic into the local network) for the development is discussed in Section 5.2.2.

This Technical Note aims to provide specific context to the existing traffic issues on Gardner Street and Errington Street, and apply those findings to the proposed impacts expected through the development known as the “ex-Boral Site Rezoning” in the TAR.

### 2. REVISIONS TO THE DPA

Additional site visits and an on-street parking assessment were undertaken by WGA on Thursday 23<sup>rd</sup> September during the morning and afternoon peak student drop off and pick up periods (8:30am-9:00am and 3:30pm-4:00pm).

A traffic count survey was also undertaken on Errington Street between Sunday 19<sup>th</sup> September to Saturday 25<sup>th</sup> September. The Traffic Count report is provided in Appendix A.

60 Wyatt Street  
Adelaide SA 5000  
T: 08 8223 7433  
WGASA Pty Ltd  
ABN 97 617 437 724

A summary of the Errington Street traffic counter data is as follows:

- The daily traffic volumes on Errington Street during the survey period was 739 vehicles per day (VPD) with a commercial content of 4.4 percent.
- The TAR suggests (without the benefit of traffic count) an AADT of 2,000 VPD, which is significantly higher than the actual traffic count results.
- Errington street experiences defined peaks from 8:00am-9:00am and 3:00pm-4:00pm. This coincides with school traffic associated with student drop offs and pick-ups.
- The morning peak is the most dominant with an average of 182 vehicles per hour (VPH) compared to the afternoon peak of 102 VPH.
- During the weekend the daily traffic volumes (307 VPD) effectively reduce to half the weekday traffic volumes and there is no defined peak (nominally 20-30 VPH consistently between 9-5pm).
- 7 bicycles were recorded on Errington Street (though some cyclists may have travelled around the traffic counter via the footpath).
- The traffic survey indicates that 85 percent of traffic travelling on Errington Street is travelling at or below 38.1 km/h

Compared to Errington Street, Gardner Street is a lower hierarchy in terms of the network, being a local street with a smaller “catchment” of residential dwellings and other traffic generating development. Whilst traffic volumes were not collected on Gardner Street, they are considerably lower than Errington Street i.e., less than 500 VPD. The TAR indicates a peak hour volume of around 100 VPH on Gardner Street and that is still implied to be a conservatively realistic volume in the morning peak based on site observations.

The TAR indicates traffic generation from the rezoning equivalent to 60 dwellings, and which is unchanged from the current proposed yield for the site.

The TAR defines the Gardner Street access to and from the proposed rezoning as Access Point 2 (AP2) with the exact position of AP2 to be detailed, which is unchanged. Based upon the assumption that 25 percent of the development enters and exits the site from AP2, the TAR predicts in total that 49 VPD will enter AP2 and 49 VPD will exit via AP2. The TAR then forecasts that there will be 9 vehicles exiting the development from AP2 in the morning peak. This reverses in the afternoon peak with 9 vehicles expected to enter the development at AP2. These assumptions remain unchanged.

The TAR indicates that the majority of vehicles that leave AP2 are expected to join the arterial network (Mooringe Avenue) via Streeters Road. It is worth noting that City of West Torrens has proposed some widening and upgrading of Streeters Road, which will facilitate the development traffic. Additionally, with Streeters Road only experiencing very low volumes (continuing post development), the delays to vehicles turning out of Streeters Road are relatively low. The original TAR mentions that some traffic from AP2 may divert to Errington Street (via Gardner Street) to access Mooringe Avenue.

Since the TAR was prepared, the City of West Torrens Development Plan has been superseded by the PlanSA Planning and Design Code. This has an effect on the parking rates for the development, but not the traffic analysis. The changes between the superseded City of West Torrens Development Plan (PDC16) and the Planning and Design Code are indicated in Table 1 below. It is assumed that all dwellings fit under the term “Row, semi-detached, group or detached dwellings” and that the number of bedrooms is 3 or more per dwelling.

**Table 1 – Revisions to Parking Rates for the Ex-Boral Rezoning**

Requirement	Off Street Covered	Off Street Uncovered	Additional (on-street) Visitor Parking	Number of Parks Required
<b>Council Development Plan</b>	1 Covered Park per dwelling	1 Uncovered Park per dwelling	0 per dwelling	120
<b>Planning and Design Code</b>	1 Covered Park per dwelling	1 Uncovered Park per dwelling	0.33 parks per dwelling	140

### 3. SITE OBSERVATIONS

The following site observations were made on Thursday 23<sup>rd</sup> September:

- The Plympton International College is a significant generator of traffic for the local road network during the morning and afternoon student drop off and pick up periods.
- Errington Street has an “Emu Crossing” consisting of a 25 km/h zone that is operational during student drop off and pick up periods. The speed limit is supplemented by temporary signage when the speed limit applies, and the crossing is also monitored by students when operational. The Emu Crossing and approaches (on Errington Street) are marked as no standing zones, and drop off and pick up of students is permitted outside of this area.
- The majority of local traffic is concentrated on Errington Street (which adjoins the school frontage). It was observed by WGA that the surrounding local network is also used for student drop off and pick-ups.
- Parking congestion did not appear to be an issue on Errington Street north of Gardner Street, this is in part due to the bike lanes being in operation southbound from 8:00am-9:00am and northbound from 3:00pm-4:00pm. This results in adequate width for two-way traffic movements on Errington Street as it restricts vehicles being parked opposite each other. There are also benefits to sight lines at intersections and driveways created by this parking restriction.
- Pedestrian movements are moderate in the morning peak as students make their way to school. Some students were observed to walk to school whilst others have been dropped off within the local area.
- Pedestrians crossing north-south on Errington Street, across Gardner Street are sometimes obscured by parked vehicles. The traffic turning movements at this location compounded by pedestrian movements result in minor issues with traffic flowing through the intersection and is one of the more active locations for mixing of traffic and vulnerable road users in the general area.
- Drop off points for the school are not formalised to a certain location(s), this results in drop off zones being less controlled, as they would be for example at a dedicated “kiss n drop” zone.
- Popular drop off points were observed to be on Errington Street adjacent to the school where parking is allowed (beyond the Emu Crossing Speed Zone). Additionally, some students are being dropped off in Gardner Street (both sides of Errington Street) in close proximity to the Errington Street Road intersection. This can sometimes result in some congestion around the intersection, particularly the eastern leg of Gardner Street.
- The road width of Gardner Street is approximately 8.6 m, which only allows one direction of through traffic to pass where vehicles are parked on either side of the road parallel to each other. As drop off is popular around Gardner Street / Errington Street intersection, this restricts flows in and out of the intersection on Gardner Street.
- The afternoon peak was not observed to have as heavy pedestrian movements compared to the morning peak, this may be due to students participating in after-hours activities. Consequently, the traffic and parking issues (vehicles parking, doors opening, single lane traffic due to adjacent parking) were not as pronounced in the afternoon peak.
- The Pedestrian Actuated Crossing (PAC) on Mooringe Avenue assists vehicles turning right out of Errington Street when the crossing is actuated by school students.

- Queues turning right out of Errington Street onto Mooringe Avenue were observed to be a maximum of a two of vehicles and cleared relatively quickly with the assistance of the PAC being activated and stopping Mooringe Ave eastbound through traffic.

#### **4. GARDNER STREET AND ERRINGTON STREET REVISIONS**

Based on our assessment the following revisions are considered applicable to the TAR:

- Section 3.1.7 “Errington Street” has the estimated daily traffic volume revised downward to 730 VPD.
- Under the Planning and Design Code on street parking requirements for the former Boral site to increase from 0 to 20 spaces.

#### **5. POST DEVELOPMENT TRAFFIC AND PARKING IMPACTS**

The traffic volume assumptions in the original TAR are considered conservative for the local traffic conditions.

Subsequent field observations indicate some minor interaction issues between vulnerable road users and traffic turning movements at the Gardner Street / Errington Street intersection. These issues relate to relatively narrow road widths on Gardner Street when adjacent parking occurs (opposite sides of road) within 50 m of the intersection during school drop off in the morning peak. The issues are existing and relate to the area of Errington Street Emu Crossing speed zone (and subsequent no standing of vehicles) and proximity of Gardner Street to the school as a convenient drop off point for students arriving in vehicles.

To address the existing observations, Plympton International College and City of West Torrens may consider development of a Traffic Management Plan, that may enable the school community, including students, parents, caregivers, staff and students, to manage onsite parking, pedestrian movements and to complement existing road safety strategies. Consideration to extension of yellow “no standing” line markings on Gardner Street could reduce the potential for parking “abreast” restricting traffic movements at the Gardner Street / Errington Street intersection.

AP2 is indicated to be located 30 m east of Streeters Road, placing the access approximately 140 m from the Gardner Street / Errington Street intersection, and a significant distance (90 m) from the main school “drop off” activity on Gardner Street. Therefore, the proposed access point position is unlikely to interfere with school traffic and associated parking manoeuvres currently experienced on Gardner Street.

The proposed development (ex-Boral Rezoning) will introduce a relatively low volume of traffic onto Gardner Street, in the order of 10 VPH in the morning peak. The afternoon peak for the development would also not align with the Plympton College generated afternoon peak on Errington Street. Furthermore, residential visitor parking for the proposed development is more likely to occur during the weekends or evenings and outside the timeframes where school traffic is present.

#### **6. SUMMARY**

This Technical Notes provides the following updates to the findings of the original TAR (rev E):

- Considers the impacts of the proposed “ex Boral rezoning” residential development, and traffic generating from Access Point 2 (AP2) onto Gardner Street, against the existing traffic issues created by school drop offs on and around Gardener Street.
- Acknowledges there are some local issues with minor congestion and road user “mix” around the Gardner Street / Errington Street intersection during peak times, particularly the morning peak. However, these matters are relatively commonplace for locations within close proximity to a school. Generally, these are relatively well managed with the assistance of the Emu Crossing controlling vehicle speeds, and temporary bike lanes restricting parking on Errington Street.

- Existing traffic management issues related to the school could be improved through the development of a Traffic Management Plan, which would be the responsibility for School and City of West Torrens to develop.
- Traffic management on Gardner Street could be improved by consideration of parking controls limiting school drop offs in congested “high activity” locations where there is high road user interaction.
- Infers that the volumes predicted to enter Gardner Street from the development (via AP2) are relatively low and would not create discernible traffic impacts to the immediate local network, or the operation of the general area during peak school activities.

Yours faithfully



Justin Henderson  
for  
**WALLBRIDGE GILBERT AZTEC**

JH:hge



---

**APPENDIX A**  
**ERRINGTON STREET**  
**TRAFFIC COUNTS**



### Automatic Traffic Count Site Summary

<b>STREET NAME :</b>	Errington Street	<b>LOCATION:</b>	outside 14
<b>SUBURB:</b>	Plympton	<b>START DATE :</b>	Sunday 19 Sep 2021
<b>FILE NAME :</b>	Individual-2034.txt	<b>FINISH DATE :</b>	Saturday 25 Sep 2021
<b>SITE ID NUMBER :</b>	040	<b>SPEED ZONE :</b>	50
<b>PREPARED BY :</b>	Austraffic	<b>ROAD CLASSIFICATION:</b>	
<b>DATE:</b>	07/10/2021		
<b>SIGNATURE:</b>			

		DIRECTION OF TRAVEL		
		TWO-WAY	Northbound	Southbound
<b>TRAFFIC VOLUME:</b> <b>[VEH/DAY]</b>	Week Days Only Average	739	347	392
	Total Survey Average	615	293	323
<b>WEEK DAY PEAK HOUR VOLUME:</b>	AM 8:00	185	83	102
	PM 15:00	97	50	60
<b>PEAK DAY</b>		Fri 24 Sep 2021	Wed 22 Sep 2021	Fri 24 Sep 2021
<b>PEAK DAY VOLUME</b>		767	359	415
<b>WEEKDAY PACE</b>	15Kph Pace Start	31	31	30
	% Pace Volume	76%	73%	79%
<b>TOTAL SPEEDS:</b> <b>Km/Hr</b>	85th Percentile	45	46	44
	Average	38.1	38.6	37.6
<b>95th Percentile</b>	Sunday 19/09/21	49.7	50.5	47.5
	Monday 20/09/21	48.7	49.8	47.6
	Tuesday 21/09/21	50.3	51.8	48.0
	Wednesday 22/09/21	49.4	50.5	46.9
	Thursday 23/09/21	49.4	50.1	48.4
	Friday 24/09/21	48.5	48.4	47.8
	Saturday 25/09/21	49.8	50.0	48.5
<b>99th Percentile</b>	Sunday 19/09/21	55.5	55.7	51.7
	Monday 20/09/21	51.9	53.2	51.2
	Tuesday 21/09/21	54.3	55.6	52.2
	Wednesday 22/09/21	53.7	55.4	52.5
	Thursday 23/09/21	52.7	52.8	53.3
	Friday 24/09/21	56.3	55.0	56.4
	Saturday 25/09/21	54.0	54.0	52.2
<b>CLASSIFICATION % *:</b>	Week Days CLASS 1 %	94.8%	94.3%	95.3%
	Week Days Commercial	4.6%	5.2%	4.1%
<b>NOTES : (OBSERVATIONS)</b>				
* CLASS 1 - Short Vehicles up to 5.5m Commercial - Classes 3 to 12 inclusive				



### Automatic Traffic Counts - Site Data

<b>Site No:</b>	040	<b>North Point</b>
<b>Date:</b>	Sunday 19 Sep 2021	
<b>Start Time:</b>	0:00	
<b>Officer:</b>	ATS	
<b>Road:</b>	Errington Street	
<b>Suburb:</b>	Plympton	
<b>LOCATION:</b>	outside 14	
<b>Map/GPS Ref:</b>		
<b>Comments:</b>		

**Sketch** Copyright © Google