728-750 Princes Highway, Tempe

Peer Review Transport Impact Assessment

Prepared by: GTA Consultants (NSW) Pty Ltd for Inner West Council on 29/01/19 Reference: N165200 Issue #: A



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Quality Record

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1. INTRODUCTION

1.1. Background

Inner West Council engaged GTA Consultants (GTA) in November 2018 to complete a peer review of the traffic impact assessment completed by Transport and Traffic Planning Associates (TTPA) dated October 2017 to support a new Bunnings development at 728-750 Princes Highway, Tempe.

GTA has specifically been requested to provide commentary and recommendations on the adequacy of TTPA's methodology, report conclusions and any potential additional or alternative mitigation measures. This review will assist in gaining a greater understanding of the potential traffic and parking related impacts of the proposed Bunnings on the surrounding road network.

1.2. Purpose of this Report

The purpose of this peer review is to objectively consider the impact of future traffic generation, parking demand and accessibility characteristics of the proposal. This includes impacts on the operational capacity of the site itself and in the context of the surrounding local area.

This report sets out an assessment of the impacts associated with the proposed development as represented in the traffic impact assessment prepared by TTPA dated October 2017, with consideration of the following:

- 1. existing traffic and parking conditions
- 2. suitability of the proposed parking in terms of supply (quantum) and layout
- 3. the traffic generating characteristics of the proposed development
- 4. suitability of the proposed access arrangements for the site
- 5. the transport impact of the development proposal on the surrounding road network
- 6. potential mitigation measures and adjacent landowner liaison to mitigate the traffic effects of the proposal.

1.3. References

In preparing this report, reference has been made to the following:

- 'Proposed Bunnings Development 728-750 Princes Highway, Tempe', Transport and Traffic Planning Associates, October 2017
- Marrickville Development Control Plan (DCP) 2011
- Roads and Maritime Services (Roads and Maritime), Guide to Traffic Generating Developments (Guide) 2002
- Other documents and data as referenced in this report.



2. REVIEW OF PROPOSED DEVELOPMENT

2.1. Subject Site

The subject site is at 728-750 Princes Highway, Tempe. It has frontages of approximately 150 metres to Princes Highway and 120 metres to Smith Street and has historically been used for warehousing and office uses.

The surrounding properties include a mix of residential dwellings, heavy industrial uses and various recreational facilities. IKEA Tempe bounds the site to the north. The location of the site and surrounding land uses within this context are shown in Figure 2.1.

Figure 2.1: Subject site and its environs



Base image source: Sydway

2.2. Development Proposal

The proposal includes a Bunnings warehouse covering 19,813m² Gross Floor Area (GFA) plus more than 2,000m² GFA for building materials and landscape yard. A total of 424 undercroft parking spaces with access via Princes Highway and Smith Street are also proposed.

A summary of the development proposal is outlined in Table 2.1.



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Table 2.1: Development proposal

Use	Size
Warehouse	14,103m² GFA
Timber trade	2,492m ² GFA
Nursery and bagged loading	3,218m ² GFA
Total retail area	19,813m ² GFA
Building Materials and Landscape Yard	2,129m ² GFA[1]

The Level 1 plan for the proposed development is shown in Figure 2.2.

Figure 2.2: Proposed development site plan



Source: John R Brogan & Associates Pty Ltd, Project Number 1381 Drawing Number 101 dated October 2013

2.3. Vehicle Access and Road Network Modifications

Site access is proposed via a two-way driveway on Smith Street in the south-east corner of the site. This access would allow for all movements in and out of Bunnings and via the signalised intersection on Princes Highway. A second access is proposed on Princes Highway in the north-west corner of the site. This access allows for northbound Princes Highway traffic to turn right turn on entry via provision of a 95-metre turn bay. Vehicles exiting the site will be required to turn left and travel south on Princes Highway. No left turn on entry or right turn on exit is permitted. It is understood that Roads and Maritime has provided concurrence with these access arrangements, subject to specific conditions.

Significant upgrades to the signalised intersection of Princes Highway/ Smith Street also forms part of the proposal. Local widening of Smith Street is required to allow for future traffic and includes three lanes on approach to Princes Highway



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Figure 2.3: Proposed road network modifications

Source: AT&L Project Number 15-274 Drawing Number SKC14, dated 5 September 2017

2.4. Car Parking and Loading

The proposal includes 424 undercroft car parking spaces for staff and visitors. A loading dock is proposed on the eastern boundary and adjacent to the Level 1 retail trading area. Access is via an internal ramp linking with the Smith Street and Princes Highway accesses. Trucks would enter via Smith Street and exit via Princes Highway.

2.5. Crash History

An analysis the most recent crash data covering the six-year period to 2017 has been undertaken based on data provided by Transport for NSW. The data covers the Princes Highway between Smith Street and Foreman Street. The crash locations are shown in Figure 2.4.



Figure 2.4: Crash map 2012 to 2017



Base image source: Transport for NSW

Review of the data indicates 24 crashes have been recorded along Princes Highway between Smith Street and Foreman Street between 2013 and 2017. Two of these crashes involved pedestrians in mid-block locations separated from the signalised crossings at Smith Street. The majority of the other crashes were classified as rear end or side-swipe most likely a result of lane changing. Such incidents are typical for busy urban environments.



3. REPORT METHODOLOGY

3.1. Preamble

GTA has completed a peer review of the TTPA Assessment of Traffic and Parking Implications report (ref: 17053) dated October 2017. This review considers the TTPA methodology and comments on the general approach from a traffic, transport and parking perspective and makes recommendations where relevant.

3.2. Existing Conditions

3.2.1. Traffic Volumes

GTA has reviewed the traffic volumes adopted in the TTPA assessment. The traffic volumes appear to be based on historical traffic data and when accounting for growth factors, are unlikely to be accurate given the need to reflect current traffic volumes and the impacts associated with the proposed development.

To understand current traffic volumes in the vicinity of the site, GTA commissioned traffic movement counts between 4pm and 6pm on Thursday 6 December 2018 and between 11am and 1pm on Saturday 8 December 2018 at the following intersections:

- Princes Highway/ Gannon Street
- Princes Highway/ Union Street/ Smith Street
- Princes Highway/ IKEA access.

These intersections are key to the study area and will be impacted by the proposed development. The peak hour traffic volumes are summarised in Figure 3.1.

Figure 3.1: Existing Thursday PM (and Saturday) peak hour traffic volumes



The traffic survey results indicate significant variances when compared with the traffic volumes adopted as part of the TTPA assessment. This includes at the key intersections of Princes Highway/ Smith Street and IKEA access. Table 3.1 has been prepared to better understand the variances in the data.



Peak	Approach	TTPA, 2017 assessment	GTA 2018 survey results	Difference
	South	1,350	1,645	+22%
Weekday PM	East	103	131	+27%
	North	2,865	2,648	-8%
	South	1,527	1,921	+26%
Saturday midday	East	50	85	+70%
	North	1,637	1,791	+9%

Table 3.1: Comparison of traffic volumes at Princes Highway/ Smith Street

The TTPA assessment SIDRA modelling outputs indicate that a five per cent heavy vehicle proportion was adopted for Princes Highway traffic. All vehicles on the minor local roads were assumed to be light vehicles. The completed 2018 surveys confirm that the proportion of heavy vehicles varied significantly, depending on day/ time and approach. It is recommended that the TTPA assessment be updated based on the 2018 surveyed traffic volumes, including the applicable heavy vehicle proportions.

It is also noted that the TTPA assessment references traffic data at the Princes Highway intersections at Smith Street, IKEA access, Bellevue Road and Railway Road however intersection modelling was completed at the Princes Highway/ Smith Street intersection only. It is recommended that the IKEA access also be modelled as a minimum to appropriately assess the traffic impacts associated with the proposed development.

3.2.2. Intersection Operation

The operation of the key intersections within the study area have been assessed using SIDRA INTERSECTION¹, a computer based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the Roads and Maritime, is vehicle delay. SIDRA INTERSECTION determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 3.2 shows the criteria that SIDRA INTERSECTION adopts in assessing the level of service.

Table 3.2: SIDRA INTERSECTION level of service criteria

Level of Service (LOS)	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
В	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
С	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

Table 3.3 presents a summary of the existing operation of the key intersections using December 2018 traffic volumes, with full results included in Appendix A of this report.

¹ Program used under license from Akcelik & Associates Pty Ltd.



Intersection	Peak	Leg	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
		South	0.70	1	33	А
	DM	East	0.49	65	48	E
		North	0.66	1	25	A
Princes Highway/		Overall	0.70	3	48	Α
Union Street		South	0.67	1	30	A
	Saturday	East	0.36	65	33	E
	Saturuay	North	0.45	1	11	A
		Overall	0.67	2	33	Α
	РМ	South	0.52	4	40	A
		East	0.28	49	53	D
		North	0.74	9	177	A
Princes Highway/		Overall	0.74	9	177	Α
IKEA access		South	0.61	5	75	A
		East	0.45	47	67	D
	Saturuay	North	0.58	15	139	В
		Overall	0.61	14	139	Α
		South	0.69	8	155	A
	DM	North	0.76	10	197	A
		West	0.74	52	172	D
Princes Highway/		Overall	0.76	15	197	В
Gannon Street		South	0.78	9	194	A
	Coturday	North	0.48	6	66	A
	Saturday	West	0.79	58	178	E
		Overall	0.79	16	194	В

Table 3.3: Existing operating conditions

Table 3.3 indicates that the surveyed intersections generally operate satisfactorily in the weekday PM and Saturday midday peak hours. Princes Highway traffic volumes are significantly higher than the minor legs and as such, green phase time prioritise Princes Highway traffic resulting in higher delays for Smith Street, IKEA access and Gannon Street vehicles. Site observations confirm that there is also traffic signal coordination along the Princes Highway corridor.

A review of the TTPA assessment SIDRA results indicates that the Princes Highway/ Smith Street intersection was modelled using a practical cycle time of 120 seconds and 70 seconds in the weekday PM and Saturday midday peak periods respectively. Assessment of the survey data (using the live footage) confirms that an intersection cycle time of 140 second is typical during each peak period. Based on this, it is recommended that intersection modelling be updated to ensure accuracy.

3.2.3. Public Transport

Following a review and update of the Sydney bus network by Transport for NSW, bus routes servicing the area have been modified post submission of the TTPA assessment. Table 3.4 provides a summary of the existing bus services in the vicinity of the site.



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Table 3.4: Public transport services

Service	Route number	Route description	Location of stop	Distance to nearest stop	Frequency on/ off-peak
348 Wolli Creek to Bondi Junction		Wolli Creek to Bondi Junction			20 mins/ 30 mins
Bus	422	Kogarah to Central Pitt St	Princes Highway at Smith Street	Adjacent to site	10-15 mins/ 15 mins
	425	Tempe to Dulwich Hill			30 mins/ hourly

3.3. Car Parking

Marrickville DCP 2011 specifies a parking rate for bulky goods use of one space per 100 square metres for sites in Area 3 of the Council parking area map. The TTPA assessment makes reference to parking surveys completed by ROAR Data specific to Bunnings sites around Sydney which found that peak parking demand ranged between one space per 48 square metres and 55.6 square metres. To ensure no impact to the already limited and in high demand on-street parking, GTA agrees with adopting the parking rates specific to Bunnings. Based on the proposed 19,813 square metres, the peak parking demand is estimated to be between 357 and 412 spaces.

The proposed development includes provision for 424 parking spaces. This is 12 spaces in excess of the maximum demand surveyed at all Sydney Bunnings stores. Bunnings customers typically drive, mostly as the nature and size of bulky goods purchases make public transport use or travel by active travel modes impractical. Because of this, the parking survey rates would already account for the majority of visitors travelling by private vehicle and therefore providing additional parking in excess of the anticipated maximum peak parking demand would be unlikely to result in an even higher parking demand.

Based on the above, GTA agrees that the proposed quantum of on-site parking is appropriate for the proposed development and would unlikely result in reduced availability of on-street parking near the site. It is however recommended that staff be encouraged to make use of public transport services and where practical, active travel. This could be implemented as part of a formal workplace travel plan.

3.4. Traffic Analysis

3.4.1. Traffic Generation

The TTPA assessment references ROAR Data traffic generation surveys of existing Bunnings stores across Australia. The data concluded that as the size of the bulky goods retail area increases, the traffic generation rate decreases, as shown in Figure 3.2. This is typical for a range of retail land uses and generally accepted.





Figure 3.2: Thursday and Saturday peak period Bunnings traffic generation rates

Based on the proposed 19,813 square metres of floor area, the TTPA assessment adopted a traffic generation rate of 1.56 and 4.5 vehicle trips per hour for every 100 square metres in the PM and Saturday midday peak hours respectively. Figure 3.2 suggests that while the adopted PM peak hour rate is generally consistent with the traffic generation trend, the adopted Saturday rate is slightly low. A rate of 4.7 vehicle trips per 100 square metres may be considered a more appropriate rate based on the linear extrapolation of the above data. The TTPA assessment also specifies a rate of 0.6 vehicle trips per 100 square metres during the AM peak hour however it is unclear how this was derived. Notwithstanding, the AM peak hour is not considered critical. This is supported by the Guide to Traffic Generating Developments not specifying an AM traffic generation rate for bulky goods retail stores.

Using the TTPA adopted rates, the proposed development is expected to generate 309 and 892 trips in the weekday PM and Saturday peak hours respectively. Adopting the 27 and 28 per cent reduction rates developed by ARRB² (and as referenced as part of the TTPA assessment) in the weekday PM and Saturday midday peak hours, this would result in 226 and 642 trips in the PM and Saturday midday peak hours respectively. It is noted that the TTPA assessment adopted a 28 per cent reduction for both peak hours. While minor, it is recommended that the weekday PM traffic generation rates be updated to be consistent with ARRB and to ensure accurate assessment given the known high traffic volumes on Princes Highway through the area.

The TTPA assessment indicates that the sites former uses generated 90 to 100 vehicle trips in the weekday AM and PM peak hours. It is unsure as to how these volumes have been estimated and it is recommended that details be provided to ensure accuracy.

Table 3.5 presents a summary of the relatively minor differences in traffic generation estimates and mostly relate to the ARRB reduction rates and applicable Saturday trip rates. The weekday PM rates also exclude reductions associated with former uses.

² 25th ARRB Conference – Shaping the future: Linking policy, research and outcomes, Perth, Australia 2012.



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Table 3.5: Traffic generation estimates

Peak hour	Peak hour TTPA traffic generation estimate		Difference
PM	223 [1]	226 [1]	+1%
Saturday	640	670	+5%

[1] Excludes reduction of 90 vehicle trips to account for existing site uses

Excluding existing site traffic generation, the TTPA assessment results in traffic generation estimates similar to the GTA recommended estimates. Adopting the higher traffic generation rate of 4.7 trips per 100 square metres in the Saturday peak hour results in a relatively minor increase of 30 vehicle trips in the peak hour (or five per cent).

It is also unclear as to the justification for adopting a 40 per cent inbound and 60 per cent outbound directional distribution of traffic during the weekday PM peak hour. The majority of large format retail and bulky goods (including Bunnings) customers spend less than an hour in store resulting in a typical 50:50 directional distribution of traffic. The IKEA traffic data supports this approach.

Table 3.6 summarises the traffic generation of the proposed development based on the revised split of traffic. It is noted that the site appeared vacant at the time of the traffic surveys in December 2018, with no discount applied to account for existing uses.

Deek herre	Directional split		Traffic generation (trips)			
Peak nour	In	Out	In	Out	Total	
PM	50%	50%	113	113	226	
Saturday midday	50%	50%	335	335	670	

Table 3.6: Proposed development traffic generation

The TTPA assessment adopted the following directional distribution of traffic:

- North: 45 per cent
- South: 45 per cent
- Other: 10 per cent.

The above distribution is consistent with the 2018 traffic surveys at the IKEA access which indicates a relatively consistent 50:50 split between northbound and southbound traffic in the weekday PM and Saturday midday peak hours. It is considered appropriate to assume that a small percentage will distribute to minor east/ west roads along Princes Highway near the site.

Table 3.7 provides a summary of the contribution of traffic to the key surveyed intersections near the site.

Table 3.7: Increase of development traffic on key intersections

Intersection	Peak period	Existing 2018 traffic volumes	Existing 2018 traffic volumes + development traffic	Difference
Princes Highway/	PM	5,603	5,710	2%
Gannon Street	Saturday	4,823	5,141	7%
Princes Highway/ Smith Street	PM	4,424	4,661	5%
	Saturday	3,797	4,507	19%
Princes Highway/ IKEA access	PM	4,428	4,535	2%
	Saturday	4,169	4,487	8%

Based on the above, it is recommended that the following be incorporated into the TTPA assessment:



- sensitivity test the Saturday midday peak hour based on a rate of 4.7 trips/ 100 square metres
- provide detail on how the weekday AM traffic generation rate of 0.6 trips/ 100 square metres was formulated
- correct the weekday PM passer-by ARRB reduction factor to 27 per cent
- adopt a 50:50 split between inbound and outbound traffic for all peak hours
- disregard any discount in traffic volumes for existing site uses when using updated traffic surveys.

3.4.2. Traffic Impacts

The TTPA assessment does not includes details of the SIDRA modelling intersection layouts or adopted traffic signal phasing to assess likely traffic impacts associated with the proposed development. An earlier version of the report (dated April 2017) included the proposed Traffic Control Signal for the modified Princes Highway/ Smith Street intersection, with the phasing shown in Figure 3.3.



Figure 3.3: Proposed modified Princes Highway/ Smith Street intersection phasing

Section 7 of the Roads and Maritime Traffic Signal Design Guide requires full pedestrian protection be provided where there are two lanes of vehicles turning left or right through the pedestrian movement. Based on this and assuming the phasing in Figure 3.3 was adopted in the latest TTPA assessment (dated October 2017), the proposed modified intersection layout would require the pedestrian crossing on the northern leg of the intersection (across Princes Highway) and to run as a separate phase to Phase C.

GTA has completed preliminary SIDRA modelling for the proposed Princes Highway/ Smith Street intersection layout with the inclusion of development traffic. Results indicate that while the intersection has the potential to operate within satisfactory limits in the weekday PM peak, with an overall level of service B (LOS B), 95th percentile queues along Princes Highway are expected to extend approximately 230 metres for the south approach and 390 metres for the north approach. This is significantly greater than existing conditions. Saturday midday peak hour modelling indicates a poor overall level of service (LOS F) with significant increases to queue lengths and delays for the south and east approaches.

GTA has also completed preliminary intersection modelling at the proposed site access on Princes Highway. The results indicate that the right turn into the site will experience unsatisfactory delays (LOS E or worse) in both the weekday PM and Saturday midday peak hours, with delay in the PM peak hour in excess of satisfactory parameters despite inclusion of bunching to account for upstream traffic signals. The TTPA assessment model was based on higher Princes Highway north approach traffic volumes at this location. It is reasonable to assume that the modelling results would also result in a corresponding greater delay and queuing, especially for the right turn movement over and above the GTA model. It is recommended that the TTPA assessment address these modelling details, including rationale for any such adopted modelling parameters. This may include, but not necessarily limited to any such modified gap acceptance parameters, bunching factors, vehicle speed, right turn efficiency assumptions etc.



N165200 // 29/01/19 Transport Impact Assessment // Issue: A 728-750 Princes Highway, Tempe, Peer Review SIDRA modelling results indicate that the other two study area intersections of Princes Highway/ IKEA access and Princes Highway/ Gannon Street are expected to continue to operate satisfactorily in the weekday PM and Saturday midday peak hours based on the traffic generation assumptions detailed in Section 3.4.1. Notwithstanding, and as detailed above, it is recommended that sensitivity testing be completed on the traffic generation rate of 4.7 trips per 100 square metres for the Saturday midday peak hour.



4. TRAFFIC MANAGEMENT

4.1. Local Area Traffic Management

Local area traffic management (LATM) measures have been implemented in several local streets within Tempe, including measures on Smith Street adjacent to the site. Road cushions have been implemented to limit vehicle speed close to residential dwellings, as shown in Figure 4.1. Road cushions are common LATM vertical deflection devices and also serve to allow heavy vehicles to avoid them, thus eliminating noise impacts and passenger discomfort on buses. It is understood that there are resident concerns with noise impacts associated with these measures.

Figure 4.1: Existing Smith Street road cushions



This section seeks to identify alternative LATM devices that could be considered for implementation, specifically on Smith Street to reduce speed and improve safety near the site. Table 4.1 provides a summary of the advantages and disadvantages of select LATM devices.

Table 4.1:	Advantages	and	disadvantages	of	LATM	devices
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LATM device	Advantages	Disadvantages
Road humps	 significantly reduces vehicle speeds near the device reduces risk of road crashes relatively low cost to install and maintain can be designed to limit discomfort to cyclists regulate speeds over the entire length of the street when used in a series. 	 may adversely affect access for trucks/ commercial vehicles and emergency vehicles traffic noise level may increase immediately before and after the device due to braking, acceleration and the vertical displacement of vehicles (Bendtsen & Larson 2001) local traffic may be diverted to nearby streets without LATM measures uncomfortable for vehicle passengers and cyclists



LATM device	Advantages	Disadvantages
Road cushions	 a reported 27% reduction in 85th percentile vehicle speeds in the vicinity of the device regulate speeds over the entire length of the street when used in a series relatively low cost to install and maintain do not restrict or cause discomfort to cyclists can be designed so that they can be avoided by trucks/ commercial vehicles, etc. 	 the traffic noise level may increase immediately before and after the device due to braking, acceleration and the vertical displacement of vehicles and their goods less effective in slowing vehicles with a wide track less effective in slowing motorcyclists can prevent cyclists using kerbside gaps near on-street parking drivers can reduce the intended effect by traversing the cushions with only two wheels.
Flat-top road humps	 significantly reduces vehicle speeds near the device reduces risk of road crashes relatively low cost to install and maintain regulate speeds over the entire length of the street when used in a series can be designed to limit discomfort to cyclists. 	 may adversely affect access for trucks/ commercial vehicles and emergency vehicles traffic noise level may increase immediately before and after the device due to braking, acceleration and the vertical displacement of vehicles and their goods local traffic may be diverted to nearby streets without LATM measures uncomfortable for vehicle passengers and cyclists
Raised pavements	 significantly reduces vehicle speeds near the device can be used to highlight the presence of an intersection when used in a series they will regulate speeds over the entire length of the street. 	 may adversely affect access for trucks/ commercial vehicles and emergency vehicles traffic noise level may increase immediately before and after the device due to braking, acceleration and the vertical displacement of vehicles and their goods may divert traffic to nearby streets without LATM measures uncomfortable for vehicle passengers.

Given the proposed development would require use of 19-metre-long articulated vehicles, horizontal deflection LATM devices have not been considered as they would likely impact the swept paths of these vehicles and/ or require the removal of several Smith Street kerbside parking spaces.

Table 4.1 indicates that road cushions are considered the most appropriate LATM device to use along Smith Street to reduce traffic speed and improve road safety. Road cushions should have minimum gaps of 750 millimetres between the base of the cushions and kerb, and also between adjacent cushions to accommodate cyclists. Cushions should generally be constructed 3 metres long and 1.6 to 1.9 metres wide with a height of 70 to 80 millimetres. The narrower 1.6-metre-wide cushions are generally more acceptable for heavy vehicles as they allow trucks to straddle the cushions, however these are likely to be less effective that wider devices in reducing car speed.

Australian Standards Manual of Uniform Traffic Control Devices – Part 13: Local Area Traffic Management (AS1742.13:2009) recommends that maximum device spacings should be in the range 80 to 120 metres. Taking into consideration the proximity of LATM devices to site accesses and other streets, the location of the existing speed cushions mid-block along the Smith Street site frontage is considered appropriate as it is not expected to compromise the manoeuvrability of vehicles accessing the site. There is potential for additional speed cushions to be installed mid-block between the proposed site access and Wood Street, approximately 110 metres east of the existing speed cushions, to further slow local traffic (and any such Bunnings traffic) travelling towards South Street. That said, the proposed development should not be conditioned with providing LATM devices in this location as development traffic is not expected to travel through this area. This could be enforced by implementing signage to restrict all movements out of the site to right turns out only.



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4.2. Alternative Access Potential

It is understood that the potential for shared access arrangements has been considered as part of the proposed development. Shared access with IKEA to the north would limit any such traffic effects on Smith Street to the south and potentially local roads west of Princes Highway. This detail has been raised by Bunnings in consultation with IKEA, with correspondence included in Appendix B.

Overall, shared access arrangements would not be feasible for several reasons. The additional traffic volumes using the IKEA access on the Princes Highway would result in increased delay and queuing, with through traffic on Princes Highway also likely to be affected. IKEA is currently afforded a high level of access for their customers and would be hesitant to relinquish this. IKEA would be required to grant a right of way (or easement) across their land for the benefit of the Bunnings site to permit such shared access arrangements. For Bunnings, circuitous access arrangements would also likely be problematic and result in driver confusion, increased risk on the surrounding road network and overall poor customer experience.

A review of the proposed site access arrangements has also been completed to assess the potential to permit a left turn slip lane for southbound Princes Highway traffic. This would limit the anticipated traffic effects on Smith Street. Roads and Maritime concurrence indicate agreement for right turns on entry and left turns on exit at the new Princes Highway access. A left turn slip lane for southbound Princes Highway traffic also formed part of the agreed upgrades at the Princes Highway/ Smith Street signalised intersection. Such measures limit impacts to through traffic on Princes Highway and maintain acceptable overall intersection operation.

A similar left turn slip lane would also be required to permit southbound Princes Highway traffic to directly access the site at the new access in the north-west corner of the site. Such measures were ultimately not feasible given the proximity to the IKEA service vehicle access immediately to the north. It is also uncommon for a slip lane to be permitted across an adjacent site for the benefit of another.



5. CONCLUSION

GTA Consultants has completed a transport review of the Assessment of Traffic and Parking Implications prepared by TTPA in October 2017, completed as part of the proposed Bunnings at 728-750 Princes Highway, Tempe. In summary, the following conclusions and recommendations are made:

- Existing SIDRA modelling is recommended to be updated based on 2018 traffic survey data at key intersections and for this to be calibrated against current operating conditions, including accurate traffic signal phasing.
- Existing public transport provision is recommended to be updated following recent modifications to bus routes and scheduling in the area.
- The proposed car parking provision of 424 spaces is considered acceptable to accommodate peak parking demand and would not encourage a higher mode shift for travel via private vehicle, provided the number of staff spaces is restricted and a workplace travel plan implemented.
- The adopted weekday PM peak hour traffic generation rate is considered appropriate based on data collected at other Bunnings sites, with the Saturday rate considered marginally low.
- It is recommended that the anticipated traffic generation estimates be recalculated to consider a vacant existing site when modelling surrounding intersections (with 2018 traffic survey data).
- It is recommended that the PM peak hour pass-by traffic generation discount factor be reduced slightly to 27 per cent, consistent with research completed by ARRB.
- The adopted distribution of traffic is considered appropriate based on data at surrounding surveyed intersections.
- It is recommended that a 50:50 split between inbound and outbound traffic be implemented in the weekday PM peak hour (rather than 60:40).
- It is recommended that the proposed traffic signal phasing for the modified Princes Highway/ Smith Street intersection be designed to Roads and Maritime Services standards and detailed in the report.
- It is recommended that details be provided, should any such modifications be made to the default SIDRA parameters, particularly at the proposed Princes Highway access and Princes Highway/ Smith Street traffic signals.
- Existing LATM devices along Smith Street are considered appropriate to manage additional traffic on Smith Street with opportunity to implement left only signage for exiting vehicles on Smith Street.
- Bunnings has engaged with IKEA to investigate opportunities for shared access arrangements.



A. SIDRA RESULTS





N165200 // 29/01/19 Transport Impact Assessment // Issue: A 728-750 Princes Highway, Tempe, Peer Review

USER REPORT FOR SITE

Project: 190110sid-N165200 728-750 Princes Highway, Tempe

Site: 2 [1 Princes/ IKEA PM]

Site Category: -Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Site Layout



Move	Movement Performance - Vehicles											
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South:	Princes	Highway										
2	T1	1582	4.7	0.484	0.6	LOS A	1.8	12.9	0.04	0.04	0.04	58.6
3	R2	115	2.8	0.515	43.0	LOS D	5.6	39.8	0.70	0.91	0.99	12.1
Approa	ach	1697	4.5	0.515	3.5	LOS A	5.6	39.8	0.08	0.10	0.10	49.7
East: I	KEA site	access										
4	L2	140	3.0	0.280	42.2	LOS C	7.4	53.3	0.83	0.68	0.83	11.0
6	R2	113	0.9	0.204	56.7	LOS E	3.4	24.0	0.92	0.70	0.92	10.6
Approa	ach	253	2.1	0.280	48.7	LOS D	7.4	53.3	0.87	0.69	0.87	10.8
North:	Princes H	lighway										
7	L2	121	1.7	0.080	13.9	LOS A	0.2	1.2	0.02	0.86	0.02	20.6
8	T1	2591	4.8	0.739	8.7	LOS A	24.2	176.6	0.43	0.40	0.43	44.6
Approa	ach	2712	4.7	0.739	8.9	LOS A	24.2	176.6	0.41	0.42	0.41	42.8
All Veh	nicles	4661	4.5	0.739	9.1	LOS A	24.2	176.6	0.32	0.31	0.32	40.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



REF: Reference Phase

VAR: Variable Phase



Phase Timing Summary								
Phase	Α	В	С					
Phase Change Time (sec)	0	95	113					

Green Time (sec)	89	12	21
Phase Time (sec)	95	18	27
Phase Split	68%	13%	19%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Site: 101 [2 Princes/ Smith/ Union PM]

New Site Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C



Move	Movement Performance - Vehicles											
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South	: Princes	s Highway										
1	L2	37	0.0	0.139	5.9	LOS A	0.3	2.4	0.02	0.12	0.02	49.0
2	T1	1674	4.6	0.695	0.7	LOS A	4.6	33.2	0.07	0.08	0.07	56.9
3	R2	21	35.0	0.695	6.5	LOS A	2.2	16.4	0.08	0.10	0.08	48.5
Appro	ach	1732	4.9	0.695	0.9	LOS A	4.6	33.2	0.07	0.08	0.07	56.3
East:	Smith St	reet										
4	L2	34	9.4	0.108	56.5	LOS E	1.9	14.6	0.87	0.72	0.87	16.7
5	T1	39	0.0	0.493	64.3	LOS E	6.9	48.4	0.98	0.78	0.98	20.7
6	R2	65	1.6	0.493	68.9	LOS E	6.9	48.4	0.98	0.78	0.98	16.2
Appro	ach	138	3.1	0.493	64.6	LOS E	6.9	48.4	0.96	0.77	0.96	17.8
North:	Princes	Highway										
7	L2	27	11.5	0.655	6.5	LOS A	3.4	25.1	0.06	0.07	0.06	49.8
8	T1	2760	4.5	0.655	0.8	LOS A	3.5	25.1	0.06	0.06	0.06	56.7
Appro	ach	2787	4.5	0.655	0.9	LOS A	3.5	25.1	0.06	0.06	0.06	56.6
All Vel	hicles	4657	4.6	0.695	2.8	LOS A	6.9	48.4	0.09	0.09	0.09	50.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.





REF: Reference Phase VAR: Variable Phase



Phase	Α	В	С
Phase Change Time (sec)	0	109	120
Green Time (sec)	105	5	17
Phase Time (sec)	111	8	21
Phase Split	79%	6%	15%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Site: 3 [3 Princes/ Gannon PM]

Site Category: -Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B



Move	Movement Performance - Vehicles											
Mov	Turn	Demand	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Aver. No.	Average
ID		Total	ΗV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Cycles	Speed
		veh/h	%	v/c	sec		veh	m				km/h
South:	Princes	Highway										
1	L2	673	0.0	0.406	5.7	LOS A	0.9	6.3	0.04	0.59	0.04	46.4
2	T1	1653	4.4	0.693	9.1	LOS A	21.4	155.4	0.42	0.39	0.42	42.8
Approa	ach	2325	3.1	0.693	8.1	LOS A	21.4	155.4	0.31	0.45	0.31	44.2
North:	Princes	Highway										
8	T1	2716	4.5	0.760	9.8	LOS A	27.1	196.8	0.49	0.45	0.49	41.9
Approa	ach	2716	4.5	0.760	9.8	LOS A	27.1	196.8	0.49	0.45	0.49	41.9
West:	Gannon	Street										
10	L2	39	8.1	0.743	51.5	LOS D	13.5	96.3	0.87	0.83	0.94	20.1
12	R2	818	1.3	0.743	52.5	LOS D	24.3	172.2	0.92	0.85	0.96	23.0
Approa	ach	857	1.6	0.743	52.4	LOS D	24.3	172.2	0.92	0.85	0.96	22.9
All Veh	nicles	5898	3.6	0.760	15.3	LOS B	27.1	196.8	0.48	0.51	0.48	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



Phase Timing Summary								
Phase	Α	В						
Phase Change Time (sec)	0	94						
Green Time (sec)	88	40						
Phase Time (sec) 94 46								

Phase Split 67% 33%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Site: 2 [1 Princes/ IKEA Sat]

Site Category: -Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C



Move	Movement Performance - Vehicles											
Mov ID	Turn	Demand I Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South:	Princes	Highway										
2	T1	1776	7.8	0.554	0.7	LOS A	2.3	17.1	0.04	0.04	0.04	58.9
3	R2	276	0.0	0.611	35.5	LOS C	10.7	74.9	0.63	0.94	0.98	18.2
Approa	ach	2052	6.7	0.611	5.3	LOS A	10.7	74.9	0.12	0.16	0.17	47.7
East: I	KEA site	access										
4	L2	202	0.0	0.353	33.0	LOS C	9.6	67.2	0.75	0.63	0.75	16.9
6	R2	246	0.9	0.453	59.2	LOS E	7.9	56.0	0.96	0.77	0.96	10.4
Approa	ach	448	0.5	0.453	47.4	LOS D	9.6	67.2	0.86	0.71	0.86	13.0
North:	Princes H	lighway										
7	L2	253	0.4	0.185	14.1	LOS A	0.4	2.9	0.03	0.86	0.03	20.6
8	T1	1636	7.9	0.578	15.3	LOS B	18.5	138.6	0.49	0.45	0.49	41.5
Approa	ach	1888	6.9	0.578	15.1	LOS B	18.5	138.6	0.43	0.50	0.43	38.3
All Veh	nicles	4388	6.1	0.611	13.9	LOS A	18.5	138.6	0.33	0.36	0.35	36.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



REF: Reference Phase

VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class (MC) Running	Undetected Movement
Mixed Running & Stopped MCs	Continuous Movement
Other Movement Class (MC) Stopped	Phase Transition Applied

Phase Timing Summary								
Phase	Α	В	С					
Phase Change Time (sec)	0	82	113					

Green Time (sec)	76	25	21
Phase Time (sec)	82	31	27
Phase Split	59%	22%	19%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Site: 101 [2 Princes/ Smith/ Union Sat]

New Site Site Category: (None) Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C



Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South	: Princes	s Highway										
1	L2	65	1.6	0.135	5.9	LOS A	0.3	2.3	0.02	0.21	0.02	47.8
2	T1	1935	7.1	0.673	0.6	LOS A	4.1	30.2	0.06	0.08	0.06	58.2
3	R2	22	9.5	0.673	6.3	LOS A	3.1	22.8	0.07	0.08	0.07	49.9
Appro	ach	2022	6.9	0.673	0.9	LOS A	4.1	30.2	0.06	0.08	0.06	57.7
East: Smith Street												
4	L2	19	11.1	0.059	55.0	LOS D	1.1	8.1	0.85	0.69	0.85	17.0
5	T1	20	0.0	0.364	64.2	LOS E	4.6	32.6	0.97	0.76	0.97	20.6
6	R2	51	2.1	0.364	68.8	LOS E	4.6	32.6	0.97	0.76	0.97	20.7
Appro	ach	89	3.5	0.364	64.8	LOS E	4.6	32.6	0.95	0.75	0.95	20.0
North: Princes Highway												
7	L2	39	0.0	0.454	6.2	LOS A	1.5	11.2	0.04	0.07	0.04	52.7
8	T1	1846	7.2	0.454	0.7	LOS A	1.5	11.2	0.04	0.05	0.04	58.3
Appro	ach	1885	7.0	0.454	0.8	LOS A	1.5	11.2	0.04	0.05	0.04	58.1
All Ve	hicles	3997	6.9	0.673	2.3	LOS A	4.6	32.6	0.07	0.08	0.07	54.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.





REF: Reference Phase VAR: Variable Phase



Phase	Α	В	С
Phase Change Time (sec)	0	108	120
Green Time (sec)	104	6	16
Phase Time (sec)	110	10	20
Phase Split	79%	7%	14%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Site: 3 [3 Princes/ Gannon Sat]

Site Category: -Signals - Fixed Time Coordinated Cycle Time = 140 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog Phase Times determined by the program Phase Sequence: Variable Phasing Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B



Movement Performance - Vehicles												
Mov	Turn	Demand I	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Aver. No.	Average
U		lotal veh/h	HV %	Sath v/c	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Cycles	Speed km/h
South:	Princes	Highway	,0	110	000		Von					
1	L2	592	0.4	0.508	13.0	LOS A	11.2	78.4	0.31	0.68	0.31	40.1
2	T1	1894	6.9	0.781	8.1	LOS A	26.2	194.0	0.45	0.42	0.45	44.2
Approa	ach	2485	5.4	0.781	9.2	LOS A	26.2	194.0	0.42	0.48	0.42	42.8
North: Princes Highway												
8	T1	1756	6.8	0.482	5.8	LOS A	9.0	66.4	0.25	0.22	0.25	47.8
Approa	ach	1756	6.8	0.482	5.8	LOS A	9.0	66.4	0.25	0.22	0.25	47.8
West: Gannon Street												
10	L2	116	2.7	0.788	57.7	LOS E	13.5	96.1	0.90	0.86	1.03	18.8
12	R2	720	1.0	0.788	57.8	LOS E	25.3	178.4	0.95	0.88	1.04	21.7
Approa	ach	836	1.3	0.788	57.8	LOS E	25.3	178.4	0.94	0.88	1.04	21.4
All Veh	nicles	5077	5.2	0.788	16.0	LOS B	26.2	194.0	0.44	0.46	0.46	35.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



Phase Timing Summary				
Phase	Α	В		
Phase Change Time (sec)	0	97		
Green Time (sec)	91	37		
Phase Time (sec)	97	43		

Phase Split 69% 31%

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

SIDRA INTERSECTION 8.0 | Copyright © 2000-2018 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: GTA CONSULTANTS | Created: Tuesday, 29 January 2019 5:16:26 PM Project: P:\N16500-16599\N165200 728-750 Princes Highway, Tempe\Modelling\190110sid-N165200 728-750 Princes Highway, Tempe.sip8

B. IKEA CONSULTATION





N165200 // 29/01/19 Transport Impact Assessment // Issue: A 728-750 Princes Highway, Tempe, Peer Review

Mackenzie Brinums

From:	Philip Drew <pdrew@bunnings.com.au></pdrew@bunnings.com.au>
Sent:	Thursday, 13 December 2018 9:11 AM
То:	George Tsaprounis
Subject:	Bunnings Tempe - discussion with IKEA

Good morning George,

We have approached IKEA and the below is self-explanatory. For your consideration and inclusion as appropriate in the report for the panel.

Thanks

Phil

From: Richard Lawton <<u>richard.lawton@ikea.com</u>>
Sent: Wednesday, 12 December 2018 9:21 AM
To: Andrew O'Neill <<u>AONeill@bunnings.com.au</u>>
Cc: Hannah Baker <<u>HBaker@bunnings.com.au</u>>; Steven Adamson <<u>steve.adamson@ikea.com</u>>
Subject: RE: Tempe - alternative access via Ikea land

Hi Andrew,

Apologies for the delay in responding to your email of the 20th November however it was necessary for me to formally present your approach to IKEA management and also key stakeholders who preside over the operation of the Tempe Retail Park (i.e. IKEA Service Office, IKEA Store and Decathlon).

Whilst all concerned are eager to assist where possible with finding alternative routes for traffic serving your proposed store, it is considered that the option of traffic traversing over the site at the back of the store including the loading area, as well as being directed to/from the Princes Highway via the site's signalised intersection, is unfortunately unmanageable and a cause for both health and safety concerns and significant congestion, both on the site and from the Highway itself.

We are happy to consider any alternative options and work closely with yourselves, the Council and importantly the local residents to reach satisfactory agreement for all parties. In this regard, please do not hesitate in contacting me should you wish to discuss this matter further.

With regards to the Road Dedication Deed, I should be in a position to send executed copies to you before the holiday period.

Kind regards

Rick Lawton Real Estate & Development Manager, Australia IKEA Pty Ltd IKEA Service Office L1 Clock Tower, 630 Princes Highway Tempe, NSW, 2044

Tel: +61 401 698 182 Email: <u>richard.lawton@ikea.com</u> Web: <u>http://www.ikea.com.au</u> Social: <u>https://www.facebook.com/ikea.au</u> From: Andrew O'Neill [mailto:AONeill@bunnings.com.au]
Sent: Friday, 7 December 2018 1:36 PM
To: Richard Lawton <<u>richard.lawton@ikea.com</u>>
Cc: Hannah Baker <<u>HBaker@bunnings.com.au</u>>
Subject: Tempe - alternative access via Ikea land

Hi Rick

Can you please give me some guidance on the timing for a response on this matter please?

In addition how are you going with getting the agreed documents executed please?

Regards,

Andrew 0417 873 217

From: Andrew O'Neill
Sent: Tuesday, 20 November 2018 9:11 AM
To: 'Richard Lawton' <<u>richard.lawton@ikea.com</u>>
Cc: Hannah Baker <<u>HBaker@bunnings.com.au</u>>
Subject: Tempe - alternative access via Ikea land

Hi Rick

As mentioned previously, our DA for development of the adjoining land at 728-750 Princes Highway was considered by the Sydney Eastern City Planning Panel on 18 October 2018. The panel resolved to defer its decision to enable preparation of an additional traffic study (see attached) which must be submitted to the Panel by 15 December 2018. Amongst other matters, this study was to propose and review alternative options to Bunnings traffic using Smith Street. Specifically the option of crossing IKEA's land was raised as an option worthy of consideration to provide an alternative to Bunnings customer and truck traffic using Smith Street. The option suggested at the Panel meeting was that Bunnings' traffic should be directed to/from the Highway via IKEA's signalised intersection with the Princes Highway and access to/from Bellevue Street. We have sketched this up to illustrate.

The legal means to effect this access would be via a legally binding agreement, including the purchase of an appropriate right of way benefiting Bunnings over the IKEA property. On the basis of a reasonable commercial offer, we would invite IKEA to consider this proposal as a serious request from Bunnings.

Given the timing outlined above, we invite your written response to this request as soon as reasonably practicable.

Regards

Andrew O'Neill National Property Development Manager

Bunnings Group Limited 11 Shirley Street, Rosehill NSW 2142 Locked Bag 30, Granville NSW 2142 Phone: (02) 9846 7266 Fax: (02) 9846 7530 Mobile: 0417 873 217 E-Mail: aoneill@bunnings.com.au Website: www.bunnings.com.au



www.gta.com.au