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Our Reference: 20300-L02\_A

Tuesday, 31 May 2016

**Environment and Project Management Attn:** Mr. P T Cleary 61 Hall St Pitt Town NSW 2756

Dear Sir,

# Re: Subdivision of Lot 12 DP1021340 Hall Street, Pitt Town NSW – Traffic Assessment

Reference is made to your request to prepare a traffic assessment for the further subdivision of Lot 12 DP1021340 from 11 Lots to 14 Lots.

Having discussed the provided documentation with Shaun Cleary from Environment and Project Management (EPM) and reviewed Part 3A Instrument of Approval for the Project Application o7\_0140 for the Pitt Town Development Area (PTDA) Concept Plan, the following has been prepared based on our understanding of the Project.

This document is recommended to be read in conjunction with the Section 75W Modification Application dated May 2016 by EPM.

If you have any further enquiries regarding this matter, please do not hesitate to contact the undersigned.

Yours faithfully

BARNSON PTY LTD

Rachael Sleep *BEng (Hons)* **Civil Engineer** 







#### Existing Development

The existing development resides within the Blighton Precinct, boarded to the east by the Cleary Precinct with the Central Precinct to the south. These precincts are part of the Pitt Town Development Area, which is detailed by the Concept Plan (MPA No. 07\_0140) dated 10 July 2008 (prepared by Johnson Property Group, dated 27 August 2008).

The 11 Lot subdivision of Lot 12 DP1021340 was approved by Hawkesbury City Council under the Development Application DA0832/14 in December 2015. The approved site layout plan No. 8824812DA2 is attached in Appendix A for reference.

The development is bounded by Hawkesbury Street along its eastern boundary, and Hall Street along its southern boundary. Hawkesbury Street is a local road which services the surrounding Brighton and Cleary subdivisions, whilst Hall Street acts as a local connector road, providing connectivity to Punt Road, the main north-south link to Pitt Town CBD.

#### Proposed Modification

The applicant seeks to further subdivide four lots: Lots 1, 8, 10 and 11 referred to on Plan No. 8824812DA2, into seven new lots; Lots 901 to 907 shown on Plan 882481DA9 attached in Appendix B. Therefore, this modification seeks to create an additional three lots within the Blighton Precinct. As part of this modification:

- Two extra lots will have access via Hall Street; and
- One extra lot will have access via Hawkesbury Street.

The traffic generated from the additional three extra lots resulting from this modification is expected to be offset by the likely loss of six lots within the Cleary Precinct. The Cleary Precinct borders the Brighton Precinct to the east, and shares street frontage to Hawkesbury Street. This reduction of lot numbers in the Clearly Precinct is described in the Section 75 Modification Application by EPM dated May 2016. This reduction of overall lot numbers within the Blighton and Clearly Precints is considered non conservative and therefore not considered within this letter. Instead, traffic impacts associated with the increase in lot numbers within the Brighton Precinct only has been determined.



#### Traffic Assessment of Modification

#### Traffic Generation

The Concept Plan approval for the Pitt Town Development Area was granted in 2008 with the conditions put forward in Part 3A Instrument of Approval.

These conditions specify that as part of the concept, the maximum number of lots in the Blighton and Cleary precincts totals 131 lots. These numbers recognise that modifications may be necessary throughout the development stages of the Pitt Town Development Area, but reflect general capacity of the area.

*The RTA Guide to Traffic Generating Developments – Updated Traffic Surveys* (Technical Direction TDT 2013/04A dated August 2013) specifies that for a residential dwelling within Sydney the following traffic generation rates are recommended:

- 0.99 average weekday peak hour trips per dwelling; and
- 1.32 maximum weekday peak hour trips per dwelling.

Table 1.0 below summarises that the maximum peak hour trips generated by the background development traffic as per the Concept Plan is 173 trips per peak period which is considered conservative.

The maximum peak hour trips generated from the further subdivision of Lot 12 to include three additional lots is 5 peak hour trips. This results in a maximum of 178 peak hour trips on Hall Street, with a much lower number of trips on Hawkesbury Street.

Component	Peak Hour Generation Rate	No. Peak Hour Trips		
Background Traffic				
Approved number of Blighton and Cleary Lots – <b>131 lots</b>	1.32/lot	173		
	TOTAL	173		
Modified Development Traffic				
Hawkesbury Street Access – one lot	1.32/lot	2		
Hall Street Access – two lots	1.32/lot	3		
	TOTAL	5		

## Table 1.0: Development Traffic Generation Rates



# **Traffic Distribution**

Traffic generated by the Blighton and Cleary development precincts are expected to travel west along Hall Street, and then south down Punt Road/Bathurst Street to Pitt Town CBD and/or the road network which services the greater Hawkesbury region.

Approximately 40 or less developments will have access to the local road network via Hawkesbury Street, whilst all vehicles generated by the developments are expected to travel west on Hall Street.

The traffic generated by the additional three lots will follow the same distribution as the background development traffic, with:

- Two (2) additional peak trips to/from Hawkesbury Street; and
- Five (5) additional peak trips to/from Hall Street and Punt Road.

## Traffic Impacts

The increase in traffic generation as a result of the modification is 5 peak hour trips on Hall Street and Punt Road, which equates to less than 3% of the total hourly flow. An additional two trips will be generated on Hawkesbury Street. These traffic volumes are considered to have a negligible effect on the level of service of the existing streets, with no adverse traffic impacts resulting on residential amenity, safety or traffic flow for the modified subdivision.

The RTA guide to Traffic Generating Developments (Oct 2002) specifies performance standards for desirable local street efficacy. For local streets, such as Hawkesbury Street, the desirable environmental goal is 200 peak hourly trips. For collector streets, such as Hall Street, the goal is 300 peak hourly trips.

Based upon the total traffic volumes on Hawkesbury Street and Hall Street as a result of the modified development, both streets operate within their environmental goals.

## Conclusion

The proposed modification for subdivision of Lot 12 DP1021340, Pitt Town to accommodate three additional lots is considered not to result in any adverse traffic impacts to the surrounding road network.



# Appendix A –

MP07\_0140 Approved Lot 12 subdivision layout



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OF 1	PROPOSED SUBDIVISIO DP 1021340 AT PITT	ON OF TOWN	SHEET No. 1 OF 1 SHEETS



# Appendix B –

Proposed modifications to Lot 12 subdivision



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