

Monday, 26 August 2013

EPM

Attn: Mr P T Cleary
61 Hall St
Pitt Town NSW 2756

Dear Sir,

**Re: SUBDIVISION of LOT 12 DP1021340 HALL ST, PITT TOWN
TRAFFIC ASSESSMENT**

Reference is made to your request to prepare a traffic assessment for an 11 lot residential subdivision of Lot 12 DP1021340.

Having discussed the provided documentation with Shaun Cleary and reviewed the Project Application and Approval on the Department of Planning website, the following has been prepared based on our understanding of the Project and your development objectives.

Background

Under an approved Masterplan of subdivision for Pitt Town granted by the NSW Department of Planning and determined 23/2/2009 (Concept Plan 07_0140), the site is identified for residential subdivision.

On the Masterplan, the site is one of two properties within the 'Blighton' Precinct which is approved for a total of 22 lots and an internal access road of 15m width linking Hawkesbury Street at its eastern boundary with Hall Street along its southern boundary.

Proposed modification

A modified plan of subdivision dated 4/12/2012 by McInlay Morgan & Associates has been prepared to facilitate residential subdivision of Lot 12 DP1021340 into 11 lots and a Public Reserve for the foreshore fronting the Hawkesbury River.

As part of this modification, the internal access road has been deleted with nine lots having frontage to Hall Street or Hawkesbury Street, and the remaining two lots (3 and 11) each having a battleaxe access.

Traffic Assessment of modification

Traffic Generation

The site is serviced by Hall Street which will be classified as a Collector Road in servicing 200 plus residential lots as approved under the Masterplan, plus other land with frontage to Hall Street. The general flow of traffic from Hall Street will be to the south along Punt Road then into Bathurst Street and Pitt Town Road, which links with Windsor Road (MR184) approximately 5km to the south-west at McGraths Hill.

As part of the approval for Project Application 07_0140, it was determined that improvement works to Pitt Town Road will satisfactorily accommodate the increase in traffic resulting from the development with no further works required. In considering overall traffic generation, the proposed modification does not result in any increase in lots serviced by Hall Street. Accordingly, the proposed modification will not result in any increase in traffic locally to Hall Street and Punt Road or to Pitt Town Road.

Traffic distribution

As part of the modification, the internal link road between Hawkesbury Street and Hall Street is to be removed, with each proposed lot under the modified subdivision to achieve access from these roads. The removal of the link road will result in a minor change in distribution of traffic to Hawkesbury Street and Hall Street.

For Hawkesbury Street, a total of 8 lots will have frontage to this street compared with 6 lots under the approved Masterplan. In addition, another 13 lots on the opposite eastern 'Cleary Precinct' will have frontage to Hawkesbury Street. As a result Hawkesbury Street will directly service 21 lots. For Hall Street, a total of 3 lots will have frontage to this being the same as the approved Masterplan. Based upon 21 lots fronting both sides of Hawkesbury Street, the proposed modification that provides for two additional lots (fronting the street) will result in a minor increase in traffic to Hawkesbury Street.

Under the Roads & Maritime Services Guide to Traffic Generating Developments - *Updated Traffic Surveys* (Technical Direction TDT 2013/04A dated August 2013, the traffic generation for a residential dwelling is stated as 10.7 vehicles per day with a weekday morning peak of 1.32 vehicle trips per hour, when most movements will be westbound exiting Hawkesbury Street into Hall Street. Based on these figures, a comparison between the approved Masterplan and modification in terms of traffic generation to Hawkesbury Street is as follows:

- Approved VPD 203
- Modified VPD 225
- Approved Peak VPH 25
- Modified Peak VPH 28

Highlighting the peak period when traffic generation is at its greatest, the modified peak at 28 vehicles per hour represents an increase of 3 vehicles per hour above the approval (one additional vehicle movement every 20 minutes), which is considered a minor increase. In addition this equates to an average interval of 2 minutes: 08 seconds between vehicles, which represents a low traffic flow with minimal impact on residential amenity and traffic flow in and out of Hall Street.

Environmental capacity of residential streets

With reference to the RTA Guide to Traffic Generating Developments *Table 4.6 - Environmental capacity performance standards on residential streets*, Hawkesbury Street is classified as a Local Street with a maximum recommended speed limit of 40km/h and maximum peak hour volume of 300 vehicles per hour.

Based on the modified subdivision plan resulting in a peak traffic generation of 28 vehicles per hour, it is clear that traffic flow on Hawkesbury Street north of Hall Street is minimal compared with its recommended maximum capacity. Accordingly the effect of the modification on traffic distribution is considered to be minor and non consequential.

Traffic Safety

The modified subdivision plan results in the deletion of the approved internal access road between Hawkesbury Street and Hall Street. By virtue of this, two intersections are deleted to these streets respectively. To Hall Street, the design of the intersection is at measured at 55 degrees. At this angle the intersection angle is significantly less than the recommended safe minimum of 70 degrees for unobstructed sight distance and field of vision as recommended in AUSTRROADS Guide to Traffic Engineering Practice, PART 5, Intersections at Grade.

Given Hall Street will service 200 plus residential lots with a daily volume of 1,800VPD+ and daily peak of 170VPH+, the designed 55 degree intersection angle to Hall Street is not a preferable outcome in the interests of maximising traffic safety. Accordingly, the modified plan by McInlay Morgan & Associates which identifies a culs de sac servicing the western half of the Blighton Precinct with a 90 degree intersection is considered a preferable road design outcome in the interests of maximising traffic safety.

Conclusion

The proposed modification for subdivision of Lot 12 DP1021340, Pitt Town; and in particular the deletion of the internal access road is considered not to result in any adverse traffic impacts to Hawkesbury Street and Hall Street.

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

Yours faithfully

BARNSON PTY LTD



Ben Rourke
BTPm, MEnvLaw
Senior Town Planner