PLANNING & NATURAL SYSTEMS

ATTACHMENT G

DA-577/2017 - RESIDENTIAL FLAT BUILDING PEEL STREET, TUNCURRY

DEVELOPMENT CONTROL UNIT MEETING

30 NOVEMBER 2017

ABN: 62 124 492 335

PROPOSED RESIDENTIAL APARTMENTS

WAKEFIELD ASHURST DEVELOPMENTS PTY LTD

15 PEEL STREET, TUNCURRY

Traffic Impact Statement

19 May 2017

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1. DEVELOPMENT PROPOSAL

a. Location

The site of the proposed development is a land parcel bound by Kent Street, Peel Street and Manning Lane in Tuncurry, New South Wales, in the MidCoast Council local government area. Outlined in Figure 1, the location is opposite a supermarket in Kent Street, and is in close proximity to the town centre of Tuncurry. Additionally, there are many opportunities for recreation and education within easy walking distance, less than 800m from the site.

One vehicular driveway is proposed onto Manning Lane at the south-east corner of the site. The laneway is a one-way road accessed from the north at Kent Street. All traffic exiting the proposed development will turn right onto Manning Lane and then travel south to Catherine Street before distributing around the road network.

Figure 1: Development Site – Locality Plan

b. Proposed Development

Currently an unused church, the proposal is for an apartment building to be constructed at the development site, including: a basement carpark; a carpark, residential units and open space at ground level, and; residential units in the six floors above ground level. With 20 three-bedroom units and 15 two-bedroom units, the building is to comprise a total of 35 residential flats.

c. Traffic Impact Summary

The proposed apartment building is estimated to generate 19 vehicle trips away from the site in the morning peak hour and 14 trips to the site in the afternoon peak hour. Thirty metres of new concrete footpath will be constructed along Peel Street to accommodate new pedestrian movements between the building entrance and the local pathway network.

At the Kent Street / Manning Lane intersection and the Manning Lane / Catherine Street T-junction, existing traffic volumes are relatively low and both were found to adequately accommodate the generated traffic. Therefore, the impact of this development on road infrastructure is considered minimal, provided vegetation be maintained at the south end of Manning Lane prior to development construction.

The scope of this report was limited to estimating the development generated traffic and its impact on the external road network and it specifically excluded consideration of car parking provision, pavement impacts, stormwater drainage and traffic noise. Whilst not being impacted significantly by this development, MidCoast Council has two major intersection projects in the planning stages and may wish to consider comments which have been provided in this report regarding traffic flow in the Tuncurry network and the concept design of the proposed new roundabout at Peel Street / Kent Street.

2. EXISTING TRAFFIC

a. Traffic Volumes

According to verbal advice, from Kumar Kuruppu of the Forster office of MidCoast Council on 18th May 2017, traffic counts taken five or more years ago (prior to development of the nearby supermarket) indicate Peel Street carried 1815 veh/day and Kent Street carried 947 veh/day.

Turning movement volumes were taken at the Kent Street / Manning Lane intersection on Wednesday, 3rd May 2017. Peak period volumes are shown in Appendix A.

Observations were made on 3rd May 2017 that the Manning Lane / Catherine Street T-junction carries very low traffic volumes. For example, between 12:30pm and 2:00pm, Catherine Street was observed to carry only 14 vehicles. Hence, peak vehicle movements are expected to also be very low.

b. Other Traffic Information

No crashes were recorded at the Kent Street / Manning Lane intersection or the Manning Lane / Catherine Street T-junction in the five-year period to September 2016. However, further from the development site access point there are two crash problems which have been highlighted for attention through the Federal Black Spot program.

Firstly, according to the 1st February 2017 minutes of the Local Traffic Committee Meeting, there is a proposal to construct a roundabout at the Peel Street / Kent Street intersection. This intersection currently operates under priority control, however, a roundabout is proposed to address a crash problem and will be funded under the 2016/17 Federal Black Spot Program. A concept design is included in the meeting minutes. There are three concerns with the concept that would be pertinent to address prior to its construction: potential for excessive speeds through the roundabout from the Peel Street (north) approach; potential for conflict between vehicles exiting the roundabout and vehicles reversing from angled car parks on the Kent Street (east) approach, and; potential to better accommodate the high volume of pedestrian movements occurring at the intersection.

Secondly, according to a discussion on 18th May 2017 with Ben Konetschnik from the Hunter office of Roads and Maritime Services (RMS), there is also a Federal Black Spot proposal to construct a roundabout at the Manning Street / Point Road T-junction.

3. GENERATED TRAFFIC

a. Generated Trips

The trips generated to the proposed residential apartment building are estimated as per the weekday trip generation rates for high density residential flat dwellings, as outlined on page 2 of the *Guide to Traffic Generating Developments: Updated traffic surveys,* RMS Technical Direction TDT2013/04a (published August 2013). Table 1 shows the rates and the resulting trips.

AM Peak trips	Development Number	Regional Average Rate	Trips/hr	Resulting Trips/hr
per unit	35	0.53	18.55	
per car space	55	0.35	19.25	19
per bedroom	90	0.21	18.9	
PM Peak trips			Trips/hr	Trips/hr
per unit	35	0.32	11.2	
per car space	55	0.26	14.3	14
per bedroom	90	0.15	13.5	
Daily trips			Trips/day	Trips/day
per unit	35	4.58	160.3	
per car space	55	3.22	177.1	175
per bedroom	90	1.93	173.7	

Table 1: Traffic Generated to the Development Site

b. Distribution of Generated Trips

Trips generated to the development site will typically be directed away from the residential apartments in the morning peak hour and returning in the afternoon peak hour. There are centres for commerce, recreation and education in all directions, hence it will be assumed that traffic distributes equally to the north and south from the development site.

Vehicular traffic crossing the state-controlled road will do so indirectly due to the restrictions created by the centre median along Manning Street. So, vehicular access to the southbound carriageway of Manning Street will typically occur at either the Manning Street / South Street traffic signals, or the Manning Street / Point Road priority controlled T-junction.

The proportions assumed to access the site from the various directions in the morning and afternoon peak hours are shown in Appendix B and the resultant trips are shown in Appendix C.

4. DISCUSSION

With the supermarket now constructed on the north-east corner of the Peel Street / Kent Street intersection, daily traffic volumes have likely increased significantly. Both Kent Street and Peel Street now have the potential to be considered collector roads since non-local traffic may be diverting their travel route to access the supermarket. The attraction of Federal Black Spot funding for a roundabout at Manning Street / Point Road, and the presence of a solid centre median island along the full length of Manning Street, both indicate the existence of traffic flow pressures on the Tuncurry road network. It is likely a simple improvement on Manning Street between the South Street traffic signals and Point Road, such as the provision of one right-turn slot to turn east and one right-turn slot to turn west, would greatly improve the ability to cross the state controlled road through Tuncurry. This would minimise travel on the network and reduce queuing and delay for all vehicles.

a. Kent Street / Manning Lane

The turning movement volumes taken on 3rd May 2017 show that 289 vehicles typically use the Kent Street / Manning Lane intersection during the afternoon peak hour. The intersection operates efficiently and, since the development is estimated to generate only 14 trips during the afternoon peak - which represents less than 5% of existing traffic volumes, no significant impact is expected at the intersection.

b. Manning Lane / Catherine Street

The development is estimated to generate only 19 movements during the morning peak hour, so, the additional traffic is expected to be well within the capacity of the junction. However, there is a temporary sight distance obstruction for traffic exiting Manning Lane onto Catherine Street due to vegetation which has grown. Photo 5 and Photo 6 in Appendix D show that a small palm shrub to the east and a small frangipani tree to the west are obscuring vision to vehicles travelling along Catherine Street. It is recommended that consultation be undertaken with a view to removing and/or heavily trimming the palm and the frangipani so that the vegetation is contained behind the property fence line.

c. Active Transport

Pedestrian access to the development will be accommodated by the construction of new concrete footpath along Peel Street, approximately 30m in length, which links to the existing Tuncurry footpath network.

Bicycle access to the development will be either on the new concrete footpath, or by use of the driveway access onto Manning Lane.

5. CONCLUSION

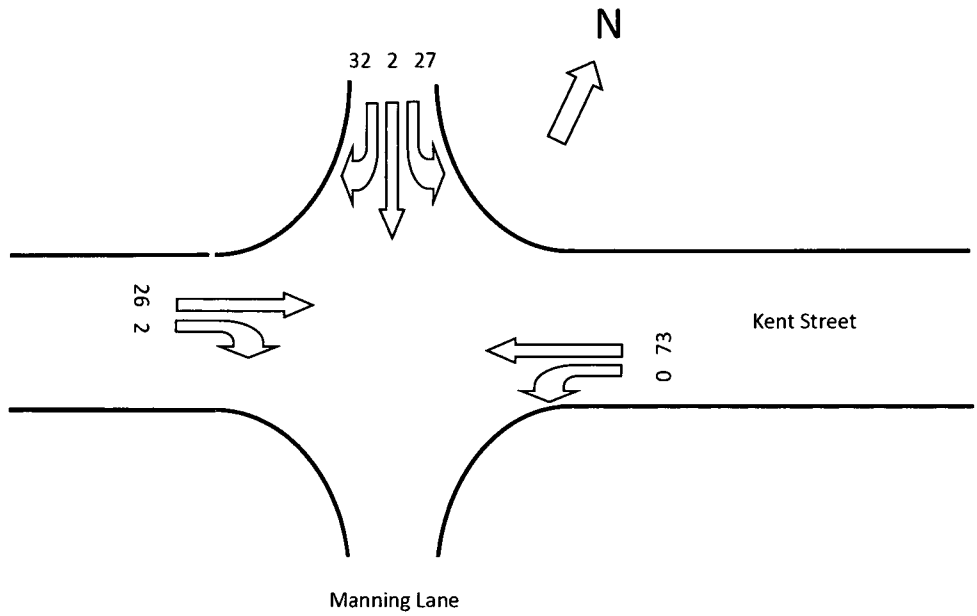
This report has outlined the existing traffic situation near the development site in Tuncurry. Whilst not significantly impacted by development generated traffic, it has been found there are council plans to construct two new roundabouts at the Peel Street / Kent Street and Manning Street / Point Road intersections.

The likely generation of traffic for the proposed residential apartments is low and was found to be easily accommodated in the existing road network, provided that vegetation maintenance at the Manning Lane / Catherine Street T-junction is undertaken to preserve sight lines when giving way on the Manning Lane approach.

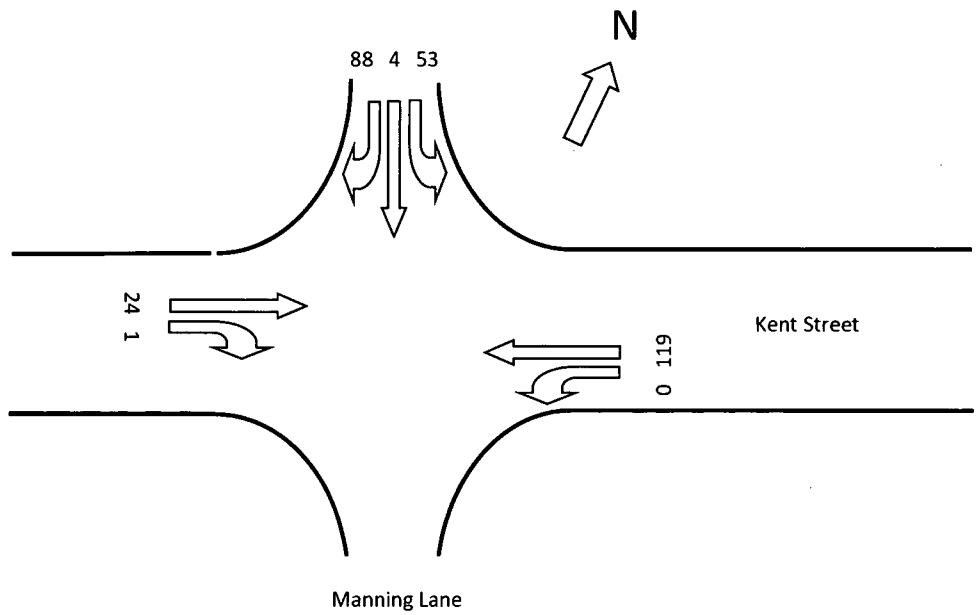
Thirty metres of new concrete footpath will be constructed along Peel Street to accommodate pedestrian movements between the building entrance and the local pathway network.

APPENDIX A – Existing Turning Movements

8:15am – 9:15am Morning Peak (counted Wednesday, 3rd May 2017)

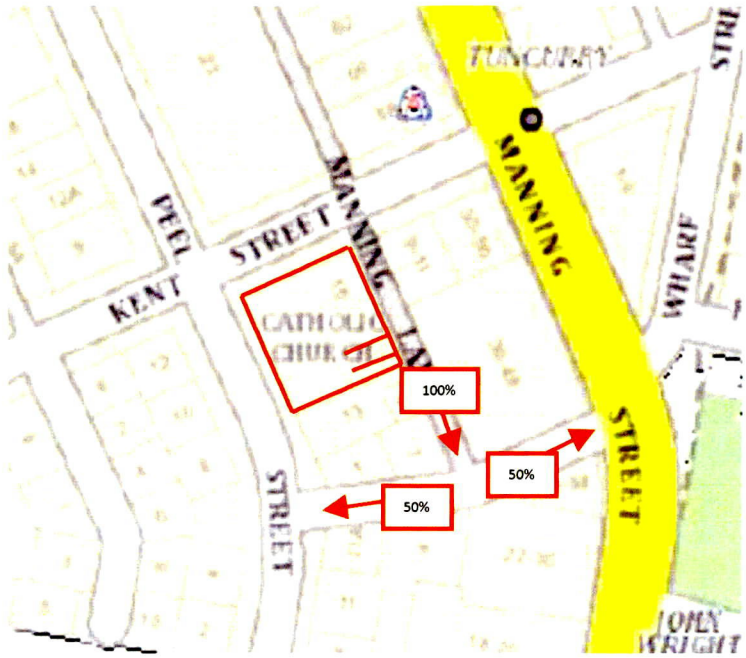


2:45pm – 3:45pm Afternoon Peak (counted Wednesday, 3rd May 2017)

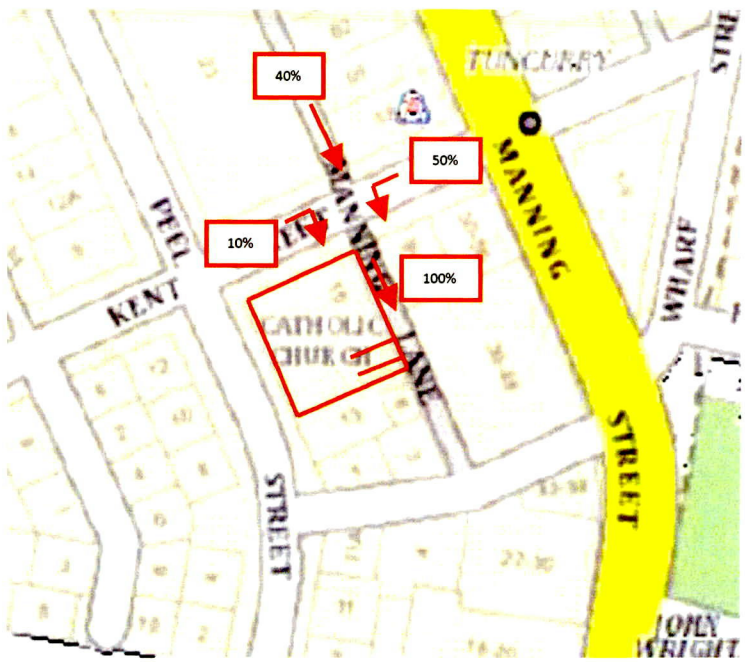


APPENDIX B – Distribution of Development Traffic

(Morning Peak Hour)

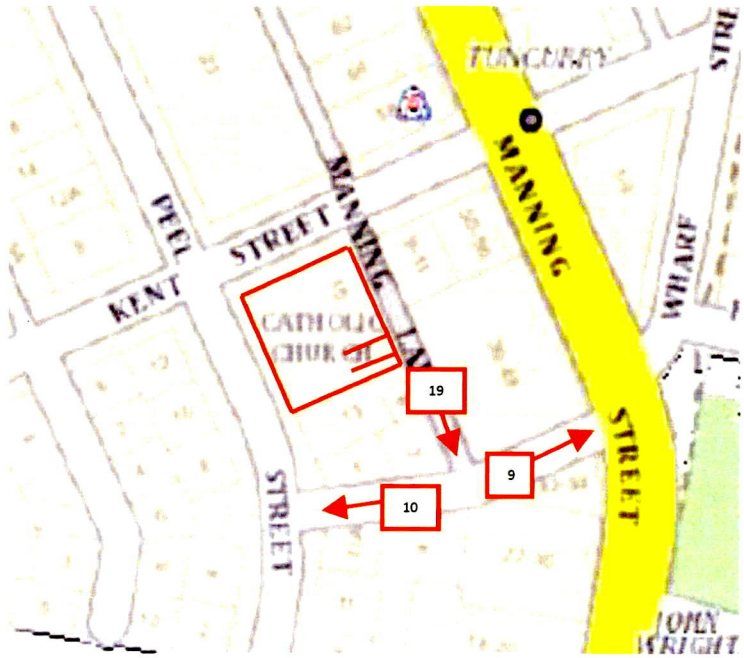


(Afternoon Peak Hour)

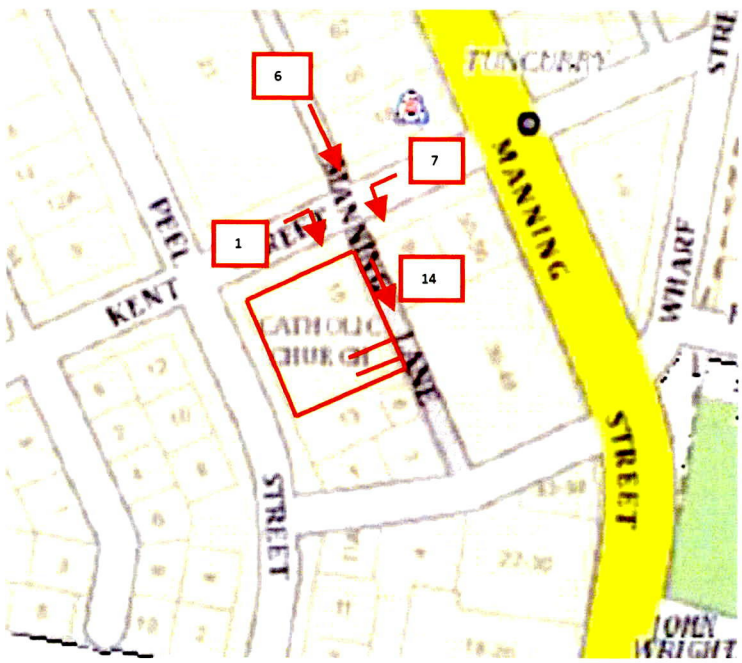


APPENDIX C – Generated Trips (veh/hr)

(Morning Peak Hour)



(Afternoon Peak Hour)



APPENDIX D – Photos

Photo 1: Kent Street / Manning Lane intersection from Kent Street (west) approach.

Photo 2: Kent Street / Manning Lane intersection from Kent Street (east) approach.

Photo 3: Kent Street / Manning Lane intersection from Manning Lane (north) approach.

Photo 4: View looking north from the proposed driveway location on Manning Lane.

Photo 5: View looking east from Manning Lane at the Catherine Street T-junction.

Photo 6: View looking west from Manning Lane at the Catherine Street T-junction.