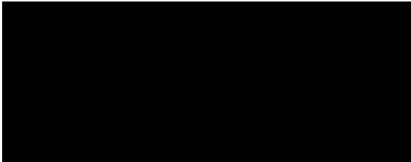


27 March 2024

P2517 PMA 23 lot residential subdivision Kootingal



Attn: [Redacted]

Dear [Redacted]

Review of traffic and access for proposed 23 lot residential subdivision, Kootingal, NSW

Further to your email, we have now completed our site visit and assessment for the above project and provide the following summary with regards to traffic and access for the proposed 23 lot residential subdivision located in Kootingal off Reginald Drive and Orchid Drive.



Figure 1 Subject site within context of local road network

Existing situation

The subject site is located in the township of Kootingal north of Tamworth off the New England Highway. The New England Highway forms part of the state road network and provides a single lane of travel in both directions. The New England Highway in this location carries a mixture of regional and interstate traffic movements as well as local demands from various townships north of Tamworth.

The main access points to Kootingal from the highway are at Chelmsford Street (southern end of town) which is a T-intersection providing a seagull layout allowing for northbound movements and a channelised left turn lane for southbound traffic. To the north of the town Dorothy Avenue connects with the highway at a 4 way intersection with Betts Lane the western leg. This intersection provides channelised turn treatments for northbound traffic and a left turn slip lane for southbound traffic turning into Dorothy Avenue. Side roads connect to the highway via simple give way controls with recent upgrades seeing these intersections being restricted to one way left out only. These changes require all inbound traffic to turn at either the Chelmsford Street intersection or the Dorothy Avenue intersection.

Traffic data provided by the TfNSW automatic count station (Id:92033 and 92757) on the New England Highway to the north and south of Kootingal show that in 2012 the daily traffic flows were in the order of 2,800 and 3,000 vehicles with 14% heavy vehicles. Allowing average growth of 2% pa current flows could be in the order of 3,400-3,800. Based on peak hour flows representing 10% of the daily flows this would indicate that the peak hourly flows could be in the order of 360 vehicles per hour 2-way.

The main street through Kootingal is **Denman Avenue** which runs parallel to the New England Highway and connects to Dorothy Avenue to the north and Chelmsford Street to the south as well as Back Kootingal Road, an alternate route south towards Tamworth. Denman Avenue through the town centre is a wide road with a carriageway width in the order of 15.8 metres and allows for a single lane of travel in each direction with parking along each side. North of the town centre it narrows to 11.5m. On the western side there is a shared pathway providing a cycling connection to the school, library and pool as well as the shops to the south. It operates under the posted speed limit of 50 km/h with a school zone reducing speeds to 40km/h adjacent to the school. There is school crossing as well as pedestrian refuges which support the safe movement of pedestrians.

In addition to train services, there are public and school bus services connecting Kootingal with towns north and south including Tamworth. Bus route 444 runs daily along Denman Avenue.





Photo 1 – Shared path on the western side of Denman Avenue



Photo 2 – View along Denman Avenue showing typical cross section. Subject site is located on the left

To the north end of Denman Avenue, Barber Street, Reginald Drive and Coach Street are local residential streets providing access to the residential area on the north east of town. To the south this residential development is accessed from Station Street via a number of local streets including Wagonia Drive, Grevillea Crescent and Orchid Drive. The roads have all been designed and built in accordance with Council design requirements with kerb and guttering, street lighting and an urban speed limit of 50km/h.

Based on site observations and the application of standard traffic generation rates, existing traffic demands on these internal residential streets are low with peak flows on Barber Street in the order of 60 trips two way whilst those on Wagonia Drive would be less than 50. Trips then distribute across a number of routes to access the broader road network with recent local traffic management measures onto the New England Highway ensuring the safe movement of traffic into and out from Kootingal.

Proposed Development

The proposal allows for a residential subdivision to be developed, with up to 23 lots and two separate access points, the northern one as an extension of Coach Street and the southern being an extension of Orchid Drive.

Lot 1 has direct access to Denman Avenue with the remaining lots having access to the internal roads only. Lot 10 allows for a larger lot (5703m²) within the subdivision which may allow for a medium density development with up to 12 dwellings.

The lots shall provide for residential development to be provided in accordance with the Council DCP that will allow for off street parking within each lot. Lot 1 may suit the development of a childcare centre which would be subject to a separate development application and assessment. The traffic associated with this would primarily be local traffic passing the site and so would not be a significant generator of additional traffic.

Impact at site access points

Both accesses are extensions to existing roads and so shall see two way movements along the road. These access points create straight section of road allowing good forward visibility. As such there is no requirement to assess the sight lines at these access points.

It is considered that the site access shall operate in a safe and appropriate manner.



Photo 3 – View along Coach Street to road extension for northern site access



Photo 4 – View north along Orchid Drive to road extension for southern site access



Photo 5 – View south from subject site towards Orchid Drive southern site access

The lot with access to Denman Avenue is on a straight length of this road. Based on AS2890.1 Off street parking, for the frontage speed limit of 50 km/h the sight distance requirement is 65 metres desirable, with a minimum of 45 metres. The sight distance to either the left or right for a driver exiting the site exceeds 125 metres, which is in



excess of the requirement from AS2890 for a driveway, whether domestic or commercial. The width of the site frontage is adequate to allow for a driveway to be located in accordance with AS2890.1 Figure 3.1 taking into consideration Willow Park Drive, a No Through Road, opposite.

Traffic demands and impact

The project allows for the development of up to 23 lots. Based on the updated traffic surveys from TfNSW, the site could generate:

Single dwelling lots - 7.4 trips per dwelling per day, 0.71 trips per lot in the AM peak and 0.78 trips per lot in the PM.

Medium density dwellings – Daily vehicle trips = 4-5 per dwelling Weekday peak hour vehicle trips = 0.4-0.5 per dwelling.

Larger units and town houses (three or more bedrooms): Daily vehicle trips = 5.0-6.5 per dwelling Weekday peak hour vehicle trips = 0.5-0.65 per dwelling

This would give: 22 single lots 162 trips per day, 16 trips in the AM peak and 17 trips in the PM peak.
 12 medium density (assume 3 bedroom) 78 trips per day, 8 trips in AM and PM peaks.
 Total 240 trips per day (120 inbound/120 outbound) 24 trips in AM and 25 trips in PM peak.

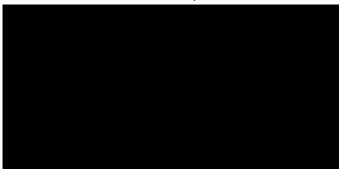
Traffic from the site shall access the local amenities within Kootingal via Reginald Drive and Barber Street or via Orchid Drive and Wagonia Drive. These roads carry low traffic flows and the additional traffic associated with the project shall have a minor impact upon the overall operation of these roads. Based on observations on site, both of these roads currently carry less than 100 vehicles per hour, well within the desirable environmental limit of 300 vehicles per hour as a collector type road. The additional 13 trips two way at either access in the peak hours, allowing distribution of development traffic evenly to both the north and south of the subdivision, will mean the total future flows will remain within these limits.

The impact of these additional trips onto the New England Highway will have a minimal impact on this road with recent upgrades to intersections allowing for the safe movement of traffic including right turns from the highway.

Conclusions

From the review of the site plans and our work on site it is considered that the proposal shall have a minor and acceptable impact upon the local road network. The access points are straight extensions of existing local streets and allow for safe traffic movements in and out of the site. Lot 1 can also connect via a suitable driveway to Denman Avenue.

Yours sincerely,



Director

Version	Date	Description	Prepared by	Reviewed and Approved for Issue
Ver01	27/2/23	Draft		
Ver02	27/3/24	Final		

Attachment A – Site plan

