Our Ref: STH10/00063/03

Contact: Andrea Boes 4221 2771 Your Ref: MP09 0088 File: 10/06041-2



The General Manager Department of Planning & Infrastructure GPO Box 39 Sydney NSW 2001

Attention: Sarah Waterworth

SHOALHAVEN CITY COUNCIL - MAJOR PROJECT 09_0088 - MIXED USE SUBDIVISION, WEST CULBURRA - EXHIBITION OF EA FOR CONCEPT PLAN

Dear Sir/Madam

Reference is made to your letter dated 17 April 2013 regarding the subject project application forwarded to Roads and Maritime Services (RMS) for consideration.

RMS has reviewed the submitted information and has concerns regarding the additional traffic generated by the subject development and the increased pressure on the classified road network. In this regard, RMS offers the following comments for the Department's consideration:

- RMS notes the traffic generation resulting from the full development of the site is estimated to be 573 vehicle movements in the peak hour as per Section 7.1.1 of GTA Consultant's *Traffic Impact Assessment*.
- RMS has undertaken further analysis using SIDRA to assess the likely impacts of full development of the subject site on the intersection of the Princes Highway and Kalandar Street. This assessment, based on the Friday AM 120th highest hour, indicated that the Average Delay would increase from the current 86.4 seconds for all vehicles to 145.2 seconds for all vehicles. The analysis indicated that the Degree of Saturation would increase from the current 1.049 for all vehicles to 1.175. The long term impact of the development on the road network has not been assessed.
- The above analysis indicated that the subject development will likely have a very significant impact on the intersection of the Princes Highway and Kalandar Street. The proponent should identify suitable infrastructure required to ameliorate these impacts on the network as a result of the subject development. These should be submitted to the Department and forwarded to RMS for comment.

- The proponent should carry out further traffic analysis based on full development of the site. The analysis should include 10 year projected traffic volumes including background traffic growth and likely traffic volumes with and without the development. The impacts on the network of full development of the site should be assessed prior to determination of the project application for concept approval.
- RMS notes there are a number of signalised intersections on the Princes Highway north of Kalandar Street. For accurate representation of the likely impacts of the subject development on the highway, the proponent should undertake corridor modelling with the use of a program such as LinSig to include the coordinated nature of intersections at this location in the traffic analysis.
- RMS is responsible for all permanent speed zoning in NSW regardless of the classification of the road. RMS objects to the suggested speed zone change on Culburra Road. Speed zones should be intuitive to the driver, with the road environment and adjacent land uses effectively informing the driver of the speed zone. On this basis, RMS considers that the existing 100km/hr speed zone at this location is appropriate and should be maintained. Without appropriate changes to the road environment along the relevant section of Culburra Road, a lower speed zone would likely lead to compliance and enforcement issues.
- Council should seek to reduce the number of access points to Culburra Road where
 possible. All access to stage 5 should be via the roundabout and the new collector
 road if possible. Research indicates that increased access density correlates highly
 with increased crash rates, and on this basis, accesses should be consolidated
 wherever possible.
- The proponent should ensure that Safe Intersection Sight Distance is available at all new intersections in accordance with Austroads *Guide to Road Design Part 4a: Unsignalised and Signalised Intersections* Table 3.2, in both directions.

0 7 JUN 2013

If you have any questions please contact Andrea Boes on 02 4221 2771.

Yours faithfully

Brian Lefoe

Road Safety and Traffic Manager

Network Management, Southern Region

Cc – The General Manager, Shoalhaven City Council (via email)

Roads & Maritime Services