

Our ref: STH09/1787/42 Contact: Hayley Sarvanandan 4221 2423 Your ref: MP09_0082 MOD 4

15 October 2019

Casey Joshua Regional Assessments NSW Department of Planning and Environment BY EMAIL: council@shellharbour.nsw.gov.au

MODIFICATION TO THE CONCEPT PLAN FOR CALDERWOOD (MP 09_0082 - MOD 4)

Dear Casey

Roads and Maritime Services (RMS) refers to your correspondence dated 24th September 2019 regarding the subject development modification.

RMS has reviewed the information provided focussing on the impact of the state road network. For this development, the key state road is the Illawarra Highway/Tongarra Road.

RMS notes the following:

- The modification as proposed will generate additional traffic (i.e. increase in residential development yield from 4,800 to 6,000 would generate additional traffic.) The impact of this traffic needs to be considered and adequately mitigated.
- The additional development will have access via Calderwood Road, Broughton Avenue and Escarpment Drive, all of which connect to the Illawarra Highway.
- The proposed modification includes signalised intersection upgrades to both Illawarra Highway/Broughton Avenue (Attachment 1) and Calderwood Road/Tripoli Way intersections (Attachment 2).

The application does not provide enough information to assess the development modification. RMS requires the matters outlined in Attachment 3 to be addressed.

If you have any questions please contact Hayley Sarvanandan on 4221 2423.

Please ensure that any further email correspondence is sent to development.southern@rms.nsw.gov.au.

Yours faithfully

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Chris Millet Manager Land Use Southern Region

Attachment 1



Attachment 2



Insufficient details have been provided to make a proper assessment of the intersection treatments at this stage. The following matters need to be addressed.

Illawarra Highway and Broughton Avenue

• The proposed phasing at this intersection should be modified to provide diamond operation on Tripoli Way and Broughton Avenue instead of split approach phasing. Diamond operation may provide a more efficient intersection operation and reduce delays on the Illawarra Highway. This will need to be modelled. In addition, the filter option for the right turns from the Illawarra Highway approaches into the side roads needs to be removed from the modelling as it unlikely to be allowed. Note:

The diamond operation for the side road approaches would require a realignment of the Tripoli Way approach slightly west. To streamline the process, RMS would be happy to comment on the consultant's revised modelling before the consultant proceeds to preparing updated designs.

- RMS is concerned with the alignment of the Tripoli Way extension with respect to sight lines on the southbound approach to the traffic signals. Sight lines need to be shown on the plan to demonstrate compliance with Austroads standards.
- The layout plan for the proposed treatment for the intersection of the Illawarra Highway, Tripoli Way and Broughton Avenue does not show the road/property boundaries clearly. RMS believes the dotted red line (Proposed site boundary) to be misleading). RMS requests only the property boundaries be shown.

Calderwood Road and Tripoli Way

• The layout plan for the proposed treatment for the intersection of the Tripoli Way and Calderwood Road does not show the road/property boundaries clearly. RMS believes the dotted red line (Proposed site boundary) to be misleading). RMS requests only the property boundaries be shown.

Infrastructure commitment and delivery

As previously advised during the meeting held on the 15th August 2019 between Lendlease, Cardno and RMS, once the scope of the upgrades for the above intersections is agreed to, RMS believes the developer's commitments to provision of state road infrastructure, including the nature of the upgrades, the timing and the planning mechanisms, need to be clarified and agreed to (by RMS and DPIE) prior to the proposed modifications to the concept plan. In this regard, and as previously stated, RMS believes strong consideration should be given to opportunities to have these upgrades delivered as a works in kind.