

**Amended Traffic Impact Assessment (GTA Consultants, Reference N148780, Issue B, dated 2/05/18) and updated SIDRA modelling**

The following matters need to be addressed:

Trip Distribution

- There are different trip distribution assumptions between the northern access intersections (Armstrong and Rixon – 80% NB, 20% SB) and southern intersections (Macquariedale, King and Church – 70% NB, 30% SB). RMS believes a higher proportion of northbound trips from the northern residents to be counter intuitive without further information. Rixon Road is only 500m from Macquariedale Road and as such it would be unlikely that northern residents would have increased desire to travel north given Appin Town Centre (which includes an IGA, public school etc), is located between these two access points; and
- As the proposed development only includes residential dwellings, RMS would expect that during AM and PM peaks that all precincts would either have similar travel patterns (equivalent proportion of northbound / southbound trips) or northern residents would have a higher proportion of southbound trips to access Appin town centre. Justification is required for this difference. Where appropriate, adjustments need to be made to site generated traffic at the intersection of Appin Road and Macquariedale Road.

Site Generated Traffic

- There are inconsistencies within the mid-block flows (refer to Figure 5.1, p12), between upstream and downstream intersections. Most significant is AM northbound between Church St and King St (30 vehicles) above.

Intersection Operation

*General*

- From an operational perspective, there are excessive delays at the intersections of minor roads with Appin Road (e.g. LoS F as shown in Table 5.7). RMS is concerned that this will result in a safety issue as drivers will take unnecessary risks to enter Appin Road.

*- Appin Road / Church Street:*

- The flows within the '3.5% + dev' model are equivalent to the '3.5% base' model. This appears to be an error and is also reflected in the last page of the TIA (p81 – 82, see west leg volumes); **and**
- Approach and exit cruise speeds in the model are set at 60km/h where current sign posted speed at this location is 50km/h. The modelling needs to be amended to reflect the posted speed.

*- Appin Road / King Street:*

- The amended TIA states that *“the assessment assumes that all intersection arrangements would be retained except for the provision of a west leg at Church Street*

*and upgrade to roundabout*". This conflicts with the updated SIDRA modelling for Appin Road/King St which shows an amended intersection design (i.e. short northbound & southbound right turn lanes in each direction). If the intersection layout is changing then concept designs that address the requirements as detailed in Attachment 3 under the heading 'Level of Detail' are required by RMS prior to finalisation of the PP. If an amended intersection layout is not being proposed as part of the PP the modelling needs to be amended prior to finalisation of the PP to remove the short southbound right turn lane;

- There is a bus stop 20m north of this intersection. It is unclear if this will impact upon intersection design (e.g. will it be possible to place a bypass lane here as detailed in the updated SIDRA and what impacts will this have on swept paths and visibility); and
- Gap acceptance used is inconsistent when compared to that used for the Appin Road/Macquariedale Road SIDRA intersection model (i.e. 2 lane / 4 lane major road).

*Appin Road / Macquarie Road:*

- The amended TIA states that *"the assessment assumes that all intersection arrangements would be retained except for the provision of a west leg at Church Street and upgrade to roundabout"*. This conflicts with the updated SIDRA modelling for Appin Road/Macquariedale Road which shows an amended intersection design (i.e. short southbound right turn lane). If the intersection layout is changing then concept designs that address the requirements as detailed in Attachment 3 under the heading 'Level of Detail' are required by RMS prior to finalisation of the PP. If an amended intersection layout is not being proposed as part of the PP the modelling needs to be amended prior to finalisation of the PP to remove short northbound and southbound right turn lanes in each direction.