



5 July, 2019

The Anglican Schools Corporation  
Level 3, 8 Woodville Street  
Hurstville  
NSW 2220

Attention: Dennis Macan, Capital Works Manager

Dear Sir,

**REVIEW OF TRAFFIC IMPACT ASSESSMENT FOR  
STATE SIGNIFICANT DEVELOPMENT APPLICATION  
MAMRE SOUTH PRECINCT – WAREHOUSE & LOGISTICS HUB  
657 – 703 MAMRE ROAD, KEMPS CREEK**

Reference is made to our recent discussions and your request for this Practice to undertake a review of the Traffic Impact Assessment dated 13 May 2019 prepared by Ason Group with respect to a State Significant Development Application for Mamre South Precinct – Warehouse and Logistics Hub at 657 – 703 Mamre Road, Kemps Creek.

The review is understood to have been commissioned with respect to concerns for potential impacts of the proposal on the future safety and efficiency of the surrounding road network, with particular consideration to the educational precinct situated on the northern side of Bakers Lane, approximately 500m to the east of the development site, including Mamre Anglican School.

The following findings / comments are provided following our review of the Traffic Impact Assessment prepared in support of the Application:

1. Section 1.2 of the Traffic Impact Assessment specifies that a Construction Traffic Management Plan (CTMP) for the Proposal is not part of the scope of the assessment, rather stating that it is expected that a CTMP will be prepared prior to the issue of a Construction Certificate. It is generally considered that a development of this scale would necessitate at the very minimum, a preliminary CTMP to be prepared prior to determination. The preliminary CTMP should provide appropriate construction management initiatives which aim to minimise / eliminate potential impacts of construction activities on the safety and efficiency of the nearby educational precinct.
2. Section 3.4 of the Traffic Impact Assessment specifies that on-site observations confirm a significant school traffic demand through the intersection of Mamre Road and Bakers Lane, particularly during the PM peak hour. Section 3.5 refers to traffic surveys of the intersection of Mamre Road and Bakers Lane during weekday AM and PM peak periods, which were utilised as the basis for existing and future intersection performance. The specific extent of these surveys are however not specified. Whilst it is expected that the AM peak surveys captured the school start period, it is not clear that the PM peak surveys adequately captured the school finish period (typically 2:30pm - 4:00pm).

Similarly, Section 4.2 of the Traffic Impact Assessment refers to future base case scenario 2036 AM and PM peak hour traffic demands obtained from Roads & Maritime Services. The exact hourly periods modelled should be outlined to ensure they adequately capture the school finish period.

3. Section 3.7 of the Traffic Impact Assessment presents that the junction of Mamre Road and Bakers Lane currently operates with a poor level of service during the PM peak. Whilst an upgrade to the intersection is proposed as part of the Application, Section 5.5 indicates that post development modelling of the junction maintains an unacceptable level of service of 'F' during the PM peak hour.
4. Post Potential Master Plan 2036 modelling of the intersection of Mamre Road and Southern Link contained within Section 7.4 of the Traffic Impact Assessment indicates operation near capacity during both the AM and PM peak hours.
5. Further to the above analysis, some concern is held with respect to traffic signal cycle times adopted for some intersections under certain scenarios (presented within Appendix 5 of the Traffic Impact Assessment). Traffic signals governing intersections on State Roads which carry considerable traffic demands such as Mamre Road typically operate with cycle times in excess of 100 seconds. There are however numerous examples where signalised intersections along Mamre Road have been modelled with cycle times less than 100 seconds, which are unlikely to be adopted in reality. The adoption of reduced cycle times can result in the presentation of a more efficient operational performance than that which would prevail in the likely event that longer cycle times are implemented. The following provides a summary of the examples where a traffic signal cycle time of less than 100 seconds have been adopted:
  - The junction of Mamre Road and James Erskine Drive has been modelled under existing conditions with a cycle time of 60 and 80 seconds during the AM and PM peak hours, respectively.
  - The junction of Mamre Road and Southern Link has been modelled under 2036 Base conditions with a cycle time of 75 seconds during the PM peak hour.
  - The junction of Mamre Road and Southern Link has been modelled under future 2036 conditions incorporating the Application with a cycle time of 85 seconds during the PM peak hour.
  - The junction of Mamre Road and Mare West Precinct has been modelled under future conditions incorporating the Application with a cycle time of 50 seconds during both AM and PM peak hours.
  - The junction of Mamre Road and James Erskine Drive has been modelled under future conditions incorporating the Application with a cycle time of 60 and 80 seconds during the AM and PM peak hours, respectively.

The above cycle times, and thus the reported intersection performances, should be confirmed by Roads & Maritime Services as being appropriate.

Submitted for your consideration.

Yours sincerely,



Morgan Stanbury  
**Director**  
**Traffic Engineer**