

Executive Summary

In 2007, Albury City Council (ACC) undertook a comprehensive Land Use Strategy to assess the potential of releasing over 2,000Ha of rural land for urban use and development of approximately 500Ha of existing zoned residential land within the Thurgoona Wirlinga Precinct. Having adopted the Strategy, and rezoned significant rural areas east of Elizabeth Mitchell Drive for urban development, ACC commissioned RPS and its sub consultants to prepare a Precinct Structure Plan to provide an urban development structure/pattern that would facilitate a co-ordinated approach to land development in Thurgoona Wirlinga. As part of the Precinct Structure Plan, a Traffic and Transport Study (prepared by TTM Group) identified the need for an additional East-West road connection between Elizabeth Mitchell Drive and Kerrs Road along with other road network upgrades in order to accommodate the forecast growth in traffic. A recommendation of the study was that further investigation be carried out to determine a preferred alignment for the new East-West link road in terms of the need to address the strategic planning requirements.

Based on updated traffic data as well as the original TTM report data (including ACC agreed assumptions and refinements), a review of the need to provide an additional East-West connection has been carried out along with an investigation into the preferred alignment in order to best support and facilitate the region's proposed urban growth through to 2030-2050 as envisaged in the Thurgoona Wirlinga Precinct Structure Plan.

Based on the available data in terms of forecast trip generation levels as a result of the proposed development along with existing traffic volumes, the study has concluded that in line with the TTM report, a new link road along with upgrades to existing routes along Thurgoona Drive and the Riverina Highway are necessitated and that ACC should secure an East-West road corridor for the purpose of long-term planning of future traffic demand.

The following considerations have been made in regards to recommending whether a new East-West connection should be provided:

- the demonstrated capacity limitations with the existing road network (even with an upgrade to Thurgoona Drive) assuming equally attractive roads;
- the forecast that some roads will be over capacity at peak times for various directions of travel when vehicles are distributed to unconstrained roads;
- intersections will typically control capacity along a mid-block section and potentially make any major mid-block upgrade ineffective;
- the need for an appropriate level of service for the future and a safety net based on total available capacity;
- the potential for additional traffic to be generated by the development on top of that recognised as part of this assessment, for instance 8,000 additional houses and the school;
- the potential need for an alternate route to the Major Neighbourhood Centre located at the intersection of Kerrs Road and Riverina Highway given that 25% of the daily externally focussed generated traffic can be expected to make internal precinct trips to such locations as the Major Neighbourhood Centre;
- the public transport, walking and cycling mode share for external trips is unlikely to differ from the current low levels as set out in the TTM report; and
- the high level nature of this assessment without any network modelling.

Noting the above, it is recommended that consideration be given to safe guarding a new road corridor through the precinct and in due course, as future development occurs, of constructing a new single carriageway road. The need to provide a new dual carriageway road is subject to ACCs desire to provide an adequate Level of Service (LoS) and should be based on continuous monitoring of future traffic growth throughout the area. The recommendation to provide a new East-West link, along with improvements to the Thurgoona Drive and Riverina Highway (see below) is generally consistent with the TTM report.

The approach adopted is based on forecasting future demand and providing for this. It should be reiterated that a predict and provide approach such as this is likely to further encourage private vehicle use and any infrastructure upgrades should be considered in light of state/ local policies and strategies in terms of sustainable transport. For instance, the provision of an agreed limited level of service to road users, more dense residential land uses in conjunction with enhanced public transport alternative modes of transport plus other financial measures to discourage car use in town centres (such as appropriate parking charges) may make car use less desirable and hence reduce the need for major infrastructure development.

Given the need to provide a route in the future, a series of potential road alignments have been developed, which have been assessed against five key project objectives that have been identified by ACC:

- Environmental impact;
- Constructability and Geometric Design;
- Safety of road users;
- Traffic efficiency; and
- Socio-Economic impact.

For all East-West connector alignments investigated, all options will require some degree of land acquisition and will also, as a minimum, have an impact on environmentally significant Crown Lands. The impact on vegetation and Aboriginal heritage would also need to be further investigated through specialist studies for all options. Mitigating treatments that should be investigated in any future detailed road design include wildlife crossings and/or vegetated overpasses.

Further, all options investigated also require a new bridge crossing to accommodate 1 in 100 year flood levels recommended within the Eight Mile Creek Flood Study (URS, 2012) for all new bridges. It is suggested that ACC review this requirement to determine whether this road link road can be built to withstand a lower flood design levels in order to significantly reduce cost of the bridge construction. It has been assumed a 50m bridge would be built within the flood zone, with the remaining flood plain being taken up by drainage structures such as culverts.

Based on results of the assessments, route options 4 and 5 were scored as the joint individual preferred alignments. Notwithstanding this, a review of the different elements and sections that make up both of these routes has resulted in the development of a hybrid option (Option 6) comprising the western part of Option 4 (CH 0 to CH 1500) and the eastern part of Option 5 (CH 1500 TO CH 3300). An assessment of this option has indicated that it better meets ACCs stated objectives. As part of this preferred alignment traverses Crown Lands this should be further investigated in respect to environmental sustainable designs that minimise potential construction impacts and negotiations should occur with the land owner. For the preferred Option 6, the following land acquisitions will be required:

- 103,432m² of private land;
- 0m² of undeveloped road reserve; and
- 16,228m² of Crown Land.

The combined cost of the road and bridge/drainage structure depends on the final bridge option chosen, but is estimated to be up to \$27.5 Million.