

The Engineering Heritage Committee of Sydney Division of Engineers Australia comments on the currently exhibited proposal for Windsor Bridge replacement as below.

1. The major work will have very long term implications for the routing of traffic through this area and for conserving the heritage values of not only Thompson Square but the town of Windsor, of which the Square is an integral part. The opportunity should be taken now to resolve the heritage and traffic issues by completely removing the bridge route from the Thompson Square area. Leaving the route through the Square area, at very best, can only postpone problems for future generations. There is no doubt that eventually another crossing will be required that better copes with through traffic
2. An important factor in the decision-making process is the heritage status of the existing Windsor Bridge. Newspaper reports at the time of construction mentioned that it was the first reinforced concrete bridge in New South Wales to be constructed whereby the girders were precast in other than their final position. Sources of information such as this are sometimes questionable but reference to the Register of Australian Historic Bridges is definitely supportive of this view. Whilst precasting of similar units is commonplace in modern times, in 1922 -- which was only within the third decade of properly-designed reinforced concrete – it was definitely a novelty.

The cast-iron piers, from the previous century, also have substantial heritage merit. Other sources have suggested means of overcoming the graphitization damage so that the bridge would be enabled to be used at very least for traffic of light loading. In the event that the bridge is demolished, the mandatory archival recording of the State significant structure should be augmented by the preservation of at least one of the concrete beams for display and signage nearby, as in the case of similar previous projects.

3. Based on the accumulation of information that has come to light in recent times, it is now apparent that the dismissal of “Option 7” (blue line, via North Street) was an error of judgment. Using this option takes the route outside the Windsor central precinct and also greatly alleviates the horrendous traffic and safety problems at the George Street roundabout which would not allegedly be fixed until some distant Stage II of the existing proposal, well into the future. Some adverse opinions to Option 7 have been expressed on the grounds of landscape deterioration but the quality of the existing landscape around Option 7 makes this difficult to discern. The cited speed of traffic is 60 km/h so that a curve of 80 metres radius at the intersection of Court Street and Windsor Road would just fit in immediately north

of the bridge to conform to Austroads guidelines. A similar curve would, of course be required at the intersection of North Street and Palmer Street.

This committee has strong preference for “Option 6” (red line) originally displayed but certain difficulties are recognized. Firstly the route of the option -- as shown -- passes too close to the Tebbutt Observatory. Secondly, there is the need for another bridge. However, considering what is at stake in this project, an additional cost, within the bounds of reason, is justified.

4. The Committee does not have the resources to properly review the alternative scheme, to the west, put forward by Mr Pearson and Mr Wedgwood but, in view of the eminence of these gentlemen in this field, it should be carefully considered.
5. The “star” comparisons in Table 4-2 of Volume 1, given for a few options, shows two stars for “Option 1” in line 3 which relates to pedestrian safety and also in line 1 for “design codes”. This is misleading because the hazardous roundabout at George Street would remain until Stage II in the indeterminate future and these entries should therefore be zero stars.

Application Number: SSI – 4951

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Support/Object to: Whilst recognizing and appreciating the extensive work that has been carried out to date, this committee cannot support the project as it stands. This is because there are yet valid approaches to explore with regard to the future of the existing bridge and the impact of related new road construction.