

Date: 12 May 2016

memo

To: Metro North West RRC (17 May 2016)

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Business Area: CityLink Tulla Widening Project (CTW Project) File no: QD3457036

**Subject: Lemon Scented Gums & Design Impacts at Flemington Rd Interchange**

Message:

## 1. PURPOSE

To seek approval from the MNW RRC to endorse the recommendation from the option analysis undertaken (attached) summarising the engineering attributes of the preferred intersection arrangement.

## 2. LOCALITY PLAN



### 3. BACKGROUND

A reference design was produced as part of the initial CTW Project deal that included a conforming design that required removal of all the trees. The approval process to remove these trees was based on City of Melbourne (CoM) *Tree Retention and Removal Policy 2012* which was part of Transurban and its Contractor (CPB) responsibility to manage. Due to community sentiment, City of Melbourne has declined to provide a permit for removal of these trees.

VicRoads and CoM have entered into a Road Management Agreement in accordance with section 15 of the RMA. Under this agreement, it is clear that VicRoads has the ability to manage the traffic islands on Flemington road, including those on which the relevant trees are located. While the CoM's *Tree Removal and Retention Policy 2012* is potentially inconsistent with the agreement, and is not contemplated in the agreement, only the agreement has binding force and hence it prevails over the Policy in all cases.

Ordinarily, it would be expected that the agreement and the policy should be read together, and that the agreement would only be relied on contrary to the policy in the case of a clear inconsistency between them. However, in this case, because the CoM may adopt a view of the proposed designs which is inconsistent with the view of VicRoads acting as a coordinating road authority, an inconsistency is likely to arise and will therefore mean that VicRoads' view prevails.

Please refer to the following attachments for further details on options considered from technical perspective:

- (i) CPB Report
- (ii) CPB Option Summary Matrix
- (iii) CPB Option 4 vs IFC Summary
- (iv) Listing of departures(non-conformances) approved by the State either at the time of the contract negotiations with Transurban or through the design development stage

### 4. DISCUSSION

#### **(a) Removal of all trees (IFC stage)**

- The design is at IFC stage and has been reviewed and approved by the Independent Reviewer. The design has also been reviewed by Transurban and VicRoads, including Project Team, Technical Services (on relevant attributes), Network Policy & Standards Signage Team (Viseth Uch), MNW Maintenance/Operations Team (Robert Kemp & Ron Williams) and Traffic Signals West Design Team (Martin Chelini).
- The IFC design provides the best outcome from design and engineering perspective. The design meets the relevant design standards including appropriate allowances for pedestrian, cyclist and tram users.
- The IFC takes in to consideration the constrained area and balances all required movements at and around this intersection.
- There are no additional costs associated with this design as this design was based on reference design.

#### **(b) Retention of 1 No. Lemon Scented Gum (Option 4)**

- Option 4 in the CPB report and in the summary matrix describes the benefits, detriments, risks and non-conformances.
- Significant re-work will be required to develop this option which will include, but not limited to, the following:
  - Variation to contract documents (Transurban/VicRoads Deed, Transurban/VicRoads/Independent Review Transurban/CPB Deed),
  - Design development,
  - Approvals from Yarra Trams (platform impacted),
  - Utility Authorities (significant relocation required),

- VicRoads teams (Technical Services, MNW Maintenance & Traffic Signals Teams),
- Construction staging (ensuring minimal root damage),
- Programming impact (current indication is 6 months programming impact),
- Traffic management and additional lane closures,
- Approval of design by Independent Reviewer, including approval by VicRoads on additional non-conformances,
- Others (community consultation, Ministerial briefings, etc.)
- Arborist report update to be included from root damage and tree life expectancy perspective. Discussion was held on the Arborist's commentary provided on Option 4 which indicated that the impact of any construction works in close proximity to the tree will be detrimental to the root system.
- The current indication from Transurban is that this option and re-scoping of the works will cost approximately \$5m (\$4m for service relocation works and rest will be D&C costs). Transurban could also pursue additional costs for delay or request extension of time.

## 5. RECOMMENDATION

Based on the option analysis, additional design non-conformances required for Option 4 and safety concerns for road users, pedestrians and cyclists it is recommended that the MNW RRC endorse the IFC design as the preferred solution. The project team will then continue the negotiations with Transurban and CPB to agree on the best way forward for the removal of the trees.

## 6. DISCUSSION

### RRC attendees:

MNW RRC – David Teague, Steve Di Cicco, Glenys Osborne, Paula Williams  
 CTW Project – Peter Holcombe-Henley, Nancy Joseph, Warren Bradshaw, Dipal Sorathia  
 Statewide Communications – Damian Booth (dialed in)

### Discussion:

Project team led the RRC group through the background, context and current status of the issue. The group discussed each potential non-conformances (including detriments/risks) for Option 4 in detail as noted in the table below. The outcomes are categorised in the following two categories:

- **Acceptable** on the basis of this being a standalone non-conformance
- **Not acceptable** on the basis of this being a standalone non-conformance

Non-conformance	Discussion	Outcome
Reduction in the design speed for the intersection from 60km/h to 50km/h	The reduction of speed is not considered to make an impact on the behavior of the motorist. Motorists along the Mt Alexander Rd/Flemington Rd will be driving a very short section of 50km/h in a 60km/h section. Also, the motorists exiting the freeway will have driven in to this section from an 80km/h freeway speed limit.	<b>Not acceptable</b>
Expected relaxation required for ride quality and vehicle stability for Peel Street bound traffic due to retaining the existing kerb line	Ride quality is considered not to be overly impacted by Option 4 as the trees and the root system are an existing condition and with no significant pavement works the ride quality should not be any worse off than the current condition.	<b>Acceptable</b>
Vehicle tracking of adjacent 19m semi's doesn't meet the desirable 1m body separation (minimum of 295mm achieved) based on Austroads Guide to Road Design	Vehicle tracking non-conformance is considered a significant compromise.	<b>Not acceptable</b>

Part 4A Figure 7.3		
Northern footpath width reduced to 1.74m from the existing 2.5m (kerb to property boundary)	With the footpath width reduction and the traffic lanes being closure to the footpath, likelihood of pedestrians stepping on to the roadway is increased. Hence, a pedestrian fence may be required. However, providing a fence will further reduce the footpath width to be less than 1.5m footpath. This is considered a compromised outcome from the 2.5m footpath currently available and to be retained in proposed IFC design.	<b>Acceptable</b>  (Melbourne City Council, Cyclist groups, and other relevant stakeholders approval will be required prior to agreement on reduction of the footpath.)
Increased height of kerb required to suit extension of cross fall due to widening and match existing footpath	As the design is not developed it is not clear the impact of the increased kerb to drainage and road safety impacts. If this results in increasing existing drainage flow-path issue then it will not be considered favorably.	<b>Not acceptable</b>
Flow width issue adjacent to northern kerb.	Flow width issue is considered a significant safety compromise.	<b>Not acceptable</b>
Vertical geometry differential between lanes (mainly 4 & 5) will require relaxation of vehicle stability requirement.	Vehicle stability will create great safety concerns as this will occur adjacent to the tram platform. Also, there is no significant room for recovery or regaining control. It is not considered safe to have vertical geometry differential amongst lanes on one direction.	<b>Not acceptable</b>
Radius of only 110m for the lane closest to the tram stop which is below the 165m required for 60km/h (at 3% crossfall) can be achieved. The radius is also formed of compound horizontal curves leaving the exit ramp.	The tight radius and compound horizontal curves is considered a significant non-conformance.	<b>Not acceptable</b>

Following the discussion the group concluded that the cumulative impact of all the non-conformances when reviewed in light of not acceptable non-conformances and existing design departures will adversely impact the acceptable non-conformances and will likely to make them not acceptable.

## 7. ENDORSEMENT

Following a robust discussion on each non-conformance and taking into consideration existing design departures, project, O&M, safety, operational and reputational attributes the group agreed that on balance the impacts of Option 4 non-conformances are significant and is not supported. Hence the IFC design is the preferred solution.

<b>Peter Holcombe-Henley</b> A/Project Director – CTW Project Date:	<b>David Teague</b> A/Regional Director – MNW Date:

### Attachments:

CPB Option 4 plan & CPB IFC plan