

Item No: C0618 Item 9

Subject: OLD CANTERBURY RD & EDWARD ST, DULWICH HILL - PROPOSED
INTERSECTION SIGNALISATION CONCEPT DESIGNS

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SUMMARY

At its meeting of 22nd May 2018, Council deferred consideration of the Local Traffic Committee recommendation for the selection of a concept option for the signalization of the Old Canterbury Rd/ Edward Street/ Weston St intersection, Dulwich Hill, pending a site inspection by Councillors. A site inspection was held on Thursday, 31st May 2018.

The recommendation of the Local Traffic Committee Meeting held on 1st May 2018 is resubmitted for Council determination.

RECOMMENDATION

THAT the recommendation of the Local Traffic Committee for Item LTC0518 Item 2, Old Canterbury Rd, Dulwich Hill – Proposed Traffic Signals Concept Design Plans, be adopted.

BACKGROUND

As part of the development of the Summer Hill Flour Mills at 2-32 Smith Street, Summer Hill, the RMS has required the developer to install traffic signals at the intersection of Old Canterbury Road and Edward Street. Concurrent with the planning for the new signals, intersection design options have been developed to consider existing and future needs for the operation of the intersection. A copy of the report to the Local Traffic Committee is provided as **Attachment 1** and the Committee minutes dealing with this item as **Attachment 2**.

In considering the Local Traffic Committee recommendation concerning options for the signalization of Old Canterbury Rd (LTC0518 Item 2) Council, at its meeting of 22nd May 2018, resolved:

1. *That Council receive a further report in respect to Item 2 on the implementation of the safety improvements at Windsor and Old Canterbury Roads, including recommendations for further appropriate measures (whether by Council or RMS) to improve safe access for turning onto Old Canterbury Road from Dulwich Hill; and*
2. *Item 2 be deferred to allow Councillors to undertake a site inspection.*

A site inspection was held on Thursday 31st May 2018.

FINANCIAL IMPLICATIONS

The detailed design and construction of the intersection and traffic signals is to be undertaken and funded by developers in 2018/19. Works outside the intersection associated with the Greenway would be funded by the Greenway Capital Budget and implemented in coordination with the traffic signals in 2018/19.

OTHER STAFF COMMENTS

The Local Traffic Committee considered 3 options for the intersection signalization project:

- **Option 1: A four-leg signalized intersection** providing access in and out of Weston Street and provision of a bi-directional shared path on the eastern side of Weston Street and closure of the Old Canterbury Road service road.
- **Option 2: Signalised intersection with closure of Weston Street southbound** at its interface with Old Canterbury Road and provision of a bi-directional shared path on the eastern side of Weston Street and closure of the Old Canterbury Road service road.
- **Option 3 Signalised intersection with full closure at Weston Street** at its interface with Old Canterbury Road, and implementation of a shared zone in the Old Canterbury Road service road.

The advantages and disadvantages of the three options are summarized below:

	Option 1: Full access at Weston Street	Option 2: Out only at Weston Street	Option 3: Full closure at Weston Street
Performance of intersection	Acceptable performance (LOS C & D)	Good performance (LOS B)	Best performance (LOS B & A)
Queue lengths at intersection (Old Canterbury Rd)	Long queue lengths (275m/475m)	Long queue lengths (240m/ 260m)	Acceptable queue lengths (155m)
Turn movements onto Old Canterbury Road	Signalised turn onto Old Canterbury Road at Weston Street	Signalised turn onto Old Canterbury Road at Weston Street	Maintains priority controlled turn onto Old Canterbury Road at Windsor Road
Resident access to service road	Closes service road to residents	Closes service road to residents	Maintains service road open to residents
Resident access to Weston Street	Maintains resident access to Weston Street from Old Canterbury Road	Closes resident access to Weston Street from Old Canterbury Road. Up to 15 second delay.	Closes resident access to Weston Street from Old Canterbury Road. Up to 15 second delay.
Potential increase in Traffic volumes on Windsor and Weston	Increases traffic volumes in Weston Street (approx. 125%, 300 vpd; 280 – 630 vpd)	Increases traffic volumes in Weston Street (approx. 125%, 300 vpd; 280 – 630 vpd)	Increases traffic volumes in Windsor Road (approx. 20%, 200 vpd; 1170 to 1400vpd)
Traffic volumes on Edward and Channel	Increases traffic volumes in Edward Lane and Channel Street	Increases traffic volumes in Edward Lane and Channel Street	Increases traffic volumes in Edward Lane and Channel Street
Resident parking	Loss of 12 parking spaces	Loss of 10 parking spaces	No Loss of parking spaces
Parking on Old Canterbury Road	Loss of up to 18 parking spaces in afternoon peak	Loss of up to 18 parking spaces in afternoon peak	Loss of up to 18 parking spaces in afternoon peak
Safety of pedestrians and cyclists	Least safe for pedestrians and cyclists	Somewhat safe for pedestrians and cyclists	Safest for pedestrians and cyclists

Recognising that no one option resolved all the desired outcomes from the signalization project, the Traffic Committee, on balance, has recommended Option 3 given it:

- provides the best operational performance for the intersection
- maintains resident access to properties in the Old Canterbury Road service road.
- has no net loss in parking spaces in the residential streets
- has the least impact arising from traffic re-distribution
- is safest for the volume of pedestrians and cyclists being directed into Weston St from the Greenway.

The Committee recognised that the major disadvantage of Option 3 is that it does not provide a signalised environment for motorists to exit the neighbourhood onto Old Canterbury Rd.

To ameliorate this issue the Committee recommended investigation of a suite of measures to improve the traffic safety of the Windsor Road and Old Canterbury Road intersection including:

- Removal of the existing pedestrian refuge in Old Canterbury Road to encourage pedestrians to use the proposed signals at Edward Street or existing signals at Junction Road
- Installation of extended “No Stopping” zone on Old Canterbury Road at Windsor Road to provide improved sight lines when exiting from Windsor Road.
- Installation of “No Right Turn” signage on Old Canterbury Road for west bound lanes at Spencer Street to reduce the turning movements at the Old Canterbury, Windsor and Spencer Street intersection (subject to RMS approval of a Traffic Management Plan)
- Installation of “Keep Clear” pavement marking in the east bound lanes on Old Canterbury Road at Windsor Road to facilitate easier vehicle entry into queueing traffic.
- Coordination of traffic signal controls on Old Canterbury Road at Edward Street and Junction Road to maximise gaps in traffic between platooning vehicles.

These would be investigated in parallel with the detailed design and reported back to the Traffic Committee.

PUBLIC CONSULTATION

Results of public consultation are outlined in the report to the Traffic Committee, Attachment 1.

ATTACHMENTS

1. Item LTC0518 Item 2, Report to Local Traffic Committee
2. Minutes of Traffic Committee 22 May 2018, LTC0518 Item 2