

ITEM 6B - PROPOSED CHANGES TO THE SCOPE OF THE A647 LPTIP SCHEME ON BRADFORD ROAD

Background

WSP are supporting LCC with interventions proposed at Dawsons Corner as part of the Corridor Improvement Programme (CIP) and along Bradford Road as part of the A647 LPTIP corridor proposals. These two schemes and funding streams have both complementary objectives (in relation to bus and active modes) and competing objectives (in relation to general traffic). In order to better understand the interactions and necessary trade-offs between the two schemes, outputs from local junction models have been used to build a VISSIM microsimulation model covering this section of the A647.

In July this year, WSP notified LCC's client teams that the latest VISSIM model outputs suggested the proposed combination of bus lanes and junction upgrades across both schemes created extensive westbound queues propagating from Thornbury Barracks through the Dawsons Corner junction. This queuing was attributed to a loss of westbound capacity from the cumulative impact of several sections of new westbound bus lane. This resulted in internal blocking within Dawsons Corner and delays at the junction which would compromise the scheme's ability to deliver against the CIP objectives.

Work done to address this issue since July

LCC instructed WSP to test an alternative proposal for this section of the A647 and Dawsons Corner incorporating the following changes:

- Removal of the westbound bus lane within and to the west of Thornbury Barracks, thus increasing capacity within the junction by allowing three lanes of ahead traffic to pass through the junction rather than two lanes (where Lane 1 would be restricted to left / ahead only for buses).
- Increasing the length of the westbound bus lane proposed under CIP between Dawsons Corner and Thornbury Barracks (beyond the previous extent of the Dawsons Corner scheme) to ensure that buses are likely to clear the traffic signals within Thornbury Barracks within a single cycle and without encountering excessive delays.

The performance of this new option as tested in the VISSIM model can be summarised as follows:

- Network level average delay per vehicle and total travel time decreases in the AM peak compared to the previous preferred option and the existing situation – in line with CIP objectives. Similar results were observed between the previous preferred option and this new alternative option in the PM peak.
- Average bus journey time decreases between Dawsons Corner and Thornbury Barracks in both AM and PM peaks compared to the previous preferred option and the existing situation – in line with both LPTIP and CIP objectives.

Proposed next steps for the A647 LPTIP proposals

There are no proposed changes to the LPTIP plans for the eastbound carriageway between Thornbury Gyratory and Dawsons Corner. Several sections of the existing near side general traffic lane will be converted into an eastbound bus lane by the LPTIP contractor.

It is proposed several sections of bus lane previously planned for the westbound carriageway between Thornbury Gyratory and the Bradford boundary as part of the LPTIP programme be removed from the scope of works and replaced with the introduction of peak period parking restrictions only. Appended to this note are annotated drawings which clearly indicate which sections of bus lane this change relates to.



LPTIP's chosen contractor, Bam Nuttall, are working to understand the consequences this change will have in terms of design and construction costs. Discussions to date suggest the changes will result in a modest net saving of around £65,000 from the scheme.

A separate note is being presented to the CIP Programme Board proposing the CIP funded plans for Dawsons Corner be amended to incorporate an extended section of westbound bus lane between Dawsons Corner and Thornbury Barracks (ending 100m east of the westbound stop line). This bus lane will be delivered by the CIP contractor.

Since LPTIP proposals for the section where the new bus lane extension is proposed include peak period parking restrictions (which will continue to be delivered through LPTIP in advance), the additional cost of providing the extended bus lane through CIP will be minimal as no civils work will be required and the effective restrictions to parking and loading will remain unchanged. Based on discussions with those involved in both projects/programmes and having reviewed the VISSIM model outputs, it is clear this bus lane is better delivered and funded as part of CIP after the LPTIP scheme on the corridor has been implemented.

Decision request

To approve the proposed changes to scope of the LPTIP scheme, involving removal of the westbound bus lane to the west of Thornbury Barracks and its replacement with peak period parking restrictions only.

An extension to the westbound bus lane previously proposed as part of the Dawsons Corner scheme further to the west to cover the approach to the Thornbury Barracks junction is to be delivered as part of the CIP scheme, supplementing the peak period parking restrictions that will be delivered through LPTIP along this section in advance.