



## SHEFFIELD CITY COUNCIL Individual Cabinet Member Decision

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**Report of:** Executive Director, Place

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**Date:** 13 August 2015

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**Subject:** Chesterfield Road Key Bus Route – Outcome of Public Consultation.

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**Author of Report:** Andrew Marwood – 0114 273 6170

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### **Summary:**

This report sets out officer responses to comments received during the public re-consultation exercise, following the development of a revised layout for Chesterfield Road between Thirwell Road and Windsor Road. The revisions were made to try and minimise the impact on Albert Road and Plantation Road following a number of objections, mostly about side roads and turning movements, during the first round of public consultation in November, 2014. The amended layout still delivers improvements to bus journey times and reliability whilst at the same time addresses the concerns of objectors to the original proposals.

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### **Reasons for Recommendations:**

The revised scheme described in this report will contribute to improvements in the punctuality and reliability of bus services on Chesterfield Road and, as part of the Better Buses projects, across the city. The scheme also gives improved accessibility to bus stops and should reduce congestion and improve road safety, especially for pedestrians and cyclists.

The revised proposals address the majority of concerns raised by objectors to the original proposals.

Full funding for this scheme can only be secured, via the Better Buses Partnership Board, once the total cost is more certain. Enquiries with Utility companies and specialist sub-contractors are ongoing but indications are that funding will be available; this being a scheme that the bus operators feel will deliver huge benefits.

**Recommendations:**

- Approve and implement the re-designed scheme to introduce a peak hour bus lane from Windsor Road to Thirwell Road as show on drawing number SD/1449/LT107/C02 REVA (see appendix 'A').
- Make the Traffic Regulation Order relating to the proposed waiting restrictions and bus lane in accordance with the Road Traffic Regulation Act 1984.
- To note the ongoing positive discussions with properties fronting the scheme and the potential need for CPO proceedings should negotiations prove fruitless.
- Inform all parties responding to the re-consultation accordingly.

**Background Papers:**

**Appendix 'A'** – SD/1449/LT107/C02 REV A – Scheme Plan

**Appendix 'B'** – Original Proposals (Nov 2014) – (SD/1449/LT107/C01).

**Appendix 'C'** – Revised Scheme Proposals (May 2015) – (SD/1449/LT107/C01 REV A)

**Appendix 'D'** - Consultation responses.

**Appendix 'E'** – Calculations of time savings resulting from the proposed Chesterfield Road bus lane.

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**Category of Report:** OPEN

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## Statutory and Council Policy Checklist

<b>Financial Implications</b>
Cleared by: Andrea Snowden
<b>Legal Implications</b>
Cleared by: Nadine Wynter
<b>Equality of Opportunity Implications</b>
Cleared by: Annemarie Johnston
<b>Tackling Health Inequalities Implications</b>
NO
<b>Human rights Implications</b>
NO:
<b>Environmental and Sustainability implications</b>
NO
<b>Economic impact</b>
NO
<b>Community safety implications</b>
NO
<b>Human resources implications</b>
NO
<b>Property implications</b>
NO
<b>Area(s) affected</b>
Gleadless Valley
<b>Relevant Cabinet Portfolio Leader</b>
Terry Fox
<b>Relevant Scrutiny Committee if decision called in</b>
Culture, Economy and Sustainability
<b>Is the item a matter which is reserved for approval by the City Council?</b>
NO
<b>Press release</b>
NO

## CHESTERFIELD ROAD KEY BUS ROUTE 2014/15 – OUTCOME OF PUBLIC CONSULTATION.

### **1.0 SUMMARY**

- 1.1 A scheme, which proposes to introduce a peak hour bus lane between Windsor Road and Thirwell Road together with associated traffic regulation orders, was consulted on in November 2014. A number of objections were received during the consultation, including a petition. The objections focused largely on the revised access arrangements for Albert Road, Plantation Road and Thirwell Road. Following the concerns raised during the initial consultation, officers have been working closely with the community, to address the concerns.
- 1.2 This report sets out officer responses to comments received during the public re-consultation undertaken in May/June 2015, following the development of a revised scheme (Appendix 'A'). It also seeks approval for the revised scheme which contributes to improvements in the punctuality and reliability of bus services on Chesterfield Road, together with improved accessibility to bus stops.

### **2.0 WHAT DOES THIS MEAN FOR SHEFFIELD PEOPLE?**

- 2.1 The Chesterfield Road Key Bus Route (KBR) is one of the corridors being progressed to improve Sheffield's public transport facilities. Improvements to the bus routes in this part of the city will reduce delays in bus travel, help to make travel by public transport to and from the City more reliable, and improve the accessibility of public transport services, contributing to making the City a '*Great Place to Live*'.

### **3.0 OUTCOME AND SUSTAINABILITY**

- 3.1 It is anticipated that when the proposals are in place they will improve the reliability and accessibility of bus services on Chesterfield Road, particularly those heading towards the City Centre. Together with accessibility improvements to a number of bus stops between Windsor Road and Thirwell Road, these measures will provide the missing link between current bus priority measures in the area, making journeys by bus a more attractive travel option and help to reduce reliance on the private car.
- 3.2 The proposals will address queuing delays for buses at a key location, improving journey times and contributing to the reduction in harmful exhaust emissions.

## **4.0 REPORT**

### **Introduction**

- 4.1 The purpose of the Chesterfield Key Bus Route (KBR) is to improve bus journey times, service reliability and punctuality (Appendix 'E'), tackle congestion hotspots, enable enforcement of existing restrictions and improve passenger access, safety and information at bus stops.
- 4.2 Reliability is one of the main factors given by people as the reason they don't use public transport. Interventions are also being made on other key routes throughout the city, for example the North Sheffield corridor between the Wicker and Ecclesfield. Together these projects make public transport, throughout the city, more attractive which has a knock on effect of reducing congestion, improving air quality and improving employment opportunities.
- 4.3 The improvements are supported by the Sheffield Bus Partnership, comprising First Group, Stagecoach, Sheffield Community Transport, South Yorkshire Passenger Transport Executive and Sheffield City Council.

### **Proposed Measures**

- 4.4 The scheme proposes to create two continuous inbound lanes (a peak hour bus lane and a lane for general traffic) by widening Chesterfield Road into land fronting Porcelanosa, B&M and Lidl. Outside of weekday peak hours general traffic would be able to use the bus lane. The scheme also provides an opportunity to make improvements to three existing controlled crossings, improving the environment for pedestrians and cyclists.
- 4.5 Implementation of the scheme will require the acquisition of various parcels of land adjacent to the highway. Transfer procedures have commenced with regard to the relevant areas required, by way of negotiation supported by compulsory purchase orders.

### **Public Consultation (November 2014)**

- 4.6 During November 2014, residents and businesses were consulted about the proposals and the appropriate Traffic Regulation Orders were advertised. An overview of those proposals can be seen in appendix 'B' (larger, more detailed plans will be available on request and at the meeting). During the consultation period a total of 19 objections were received as well as a petition containing 566 signatures. There were also a total of 18 other comments / queries and a total of 14 letters / emails / phone calls indicating support.
- 4.7 Analysis of the objections received, including the petition, highlighted that the main area of concern involved the proposed restrictions for Albert Road, Thirwell Road and Plantation Road. Residents and businesses were concerned that access and connectivity between the community would be compromised. The petition stated that *'We object to the current plans as the proposed changes will cause significant detriment to us, the plans need to be designed such that the safety of our community using Plantation Road is*

*not compromised*'.

- 4.8 All representations made received full responses during November and December 2014.
- 4.9 In the early part of 2015, officers met with some of the objectors and community interest groups and then looked at various options to resolve their concerns. In April/May 2015 a revised scheme was developed.

#### **Public Consultation (June 2015)**

- 4.10 Following discussions with the lead petitioner, residents, businesses and community groups a revised scheme (Appendix 'C') was consulted on in May/June 2015 (detailed plans will be available on request and at the meeting). All those who had previously commented on the proposals were provided with a revised plan and letter detailing the changes. In summary the changes from the original design included:
- Plantation Road – Now proposed to remain two way (as existing).
  - Albert Road – Now proposed to remain two way (as existing).
  - Inbound bus lane to terminate short of the Saxon Road junction to assist both right turning traffic and inbound traffic.
  - 'Keep Clear' moved back on Saxon Road to allow two vehicles to wait at the give-way line.
- 4.11 In response to the re-consultation a total of 6 emails were received together with 5 phone calls from local residents. One of the emails was from the lead petitioner who indicated that the concerns of those who signed the petition had now been resolved. Of the other comments received a total of 2 objections to the scheme still remain. The objections and officer responses can be seen in 'Appendix' D.

#### **Other Consultees**

- 4.12 The emergency services, Veolia and South Yorkshire Passenger Transport Executive (SYPT) were consulted on the proposals and subsequent revision. No objections were received.

### **Relevant Implications**

- 4.13 The cost of the measures on the Chesterfield Road KBR is currently estimated to be in the region of £3m. A sum of £514,013 has already been allocated to the project for 2015/16. The remainder would be secured through the Sheffield Bus Partnership Board should the scheme go ahead.
- 4.14 The City Council will need confirmation of full funding before the Chesterfield Road can be implemented. In this regard investment in improved public transport facilities has been made possible by a Government award, to SYPTE, of approximately £18m of “Better Bus Area” funding (BBA2), in support of the Sheffield Bus Partnership. SYPTE administer the fund. The Sheffield Bus Partners are currently reviewing BB2 allocations in the light of emerging priorities. Indications are that the benefits calculated to result from the proposed improvements strongly justify the required funding.
- 4.15 An Equality Impact Assessment (reference 537) has been carried out for the Transport Capital 2015/16 programme. The conclusion was that the works are fundamentally equality neutral affecting all local people equally regardless of age, sex, race, faith, disability etc. However, some aspects will be positive, e.g. for the young, elderly and disabled as some of the proposed measures improve accessibility. No negative equality impacts have been identified.
- 4.16 The Council has the power to make a Traffic Regulation Order under section 1 of the Road Traffic Regulation Act 1984 for reasons that include the avoidance of danger to persons or other traffic using the road; to facilitate the passage on the road of traffic (including pedestrians); and to prevent the use of the road by vehicular traffic of a kind which is unsuitable to the existing character of the road. However before the Council can make an Order it must consult the relevant bodies in accordance with the Local Authorities Traffic Orders (Procedure) (England and Wales) Regulations 1996. It must also publish notice of its intention in a local newspaper. These requirements have been complied with. Although there is no requirement for public consultation, extensive consultation has taken place and the Council has considered and responded to all objections received.
- 4.17 The Council has the power to widen highways under section 72 of the highways Act 1980 and to enter into agreements for the dedication of part of the adjoining land for highway purposes. Some of the land is in private ownership and transfer procedures are underway via negotiation supported by compulsory purchase orders.

## **5.0 ALTERNATIVE OPTIONS CONSIDERED**

- 5.1 Between the first and second consultation, officers looked at various options to address the objections received which were based around the proposed changes to access at Albert Road and Plantation Road. Feasibility studies were undertaken on various options including signalling the junction and creating a new access road to the rear of the Red Lion public house. The option of the access road was discounted due to cost of acquiring the land and construction. Signalling the Albert Road junction would lead to further delay on Chesterfield Road and therefore was also discounted.
- 5.2 The preferred option, as shown in Appendix 'A', is considered to be the best solution when trying to achieve a balance which suits various user groups while at the same time satisfying road safety requirements.

## **6.0 REASONS FOR RECOMMENDATIONS**

- 6.1 The revised scheme described in this report will contribute to improvements in the punctuality and reliability of bus services on Chesterfield Road and, as part of the Better Buses projects, across the city. The scheme also gives improved accessibility to bus stops and should reduce congestion and improve road safety, especially for pedestrians and cyclists.
- 6.2 The revised proposals address the majority of concerns raised by objectors to the original proposals.
- 6.3 Full funding for this scheme can only be secured, via the Better Buses Partnership Board, once the total cost is more certain. Enquiries with Utility companies and specialist sub-contractors are ongoing but indications are that funding will be available; this being a scheme that the bus operators feel will deliver huge benefits.

## **7.0 RECOMMENDATIONS**

- 7.1 Approve and implement the re-designed scheme to introduce a peak hour bus lane from Windsor Road to Thirwell Road as show on drawing number SD/1449/LT107/C02 REVA (see appendix 'A').
- 7.2 Make the Traffic Regulation Order relating to the proposed waiting restrictions and bus lane in accordance with the Road Traffic Regulation Act 1984.
- 7.3 To note the ongoing positive discussions with properties fronting the scheme and the potential need for CPO proceedings should negotiations prove fruitless.
- 7.4 Inform all parties responding to the re-consultation accordingly.

Simon Green  
Executive Director, Place

14 July 2015



## Albert Road and Saxon Road

We have reviewed the layout of this junction in response to the comments received by local residents and businesses. We are proposing to keep the proposed one way layout on Saxon Road, however the access to and from Albert Road is now proposed to remain as existing. Traffic movements at this location should be improved by removing the difficult cross movement from Albert Road to Saxon Road. Pedestrians and Cyclists will be able to use the relocated crossing which will move further towards Albert Road.

## Thirlwell Road and Plantation Road

We previously proposed changes to these streets following proposals to change Albert Road and Saxon Road. Following a review of the layout and taking in to consideration the comments received we now propose to keep the layout as existing.

## Changes for pedestrians, cyclists and bus passengers

The scheme provides an opportunity to make improvements to three existing controlled pedestrian crossings.

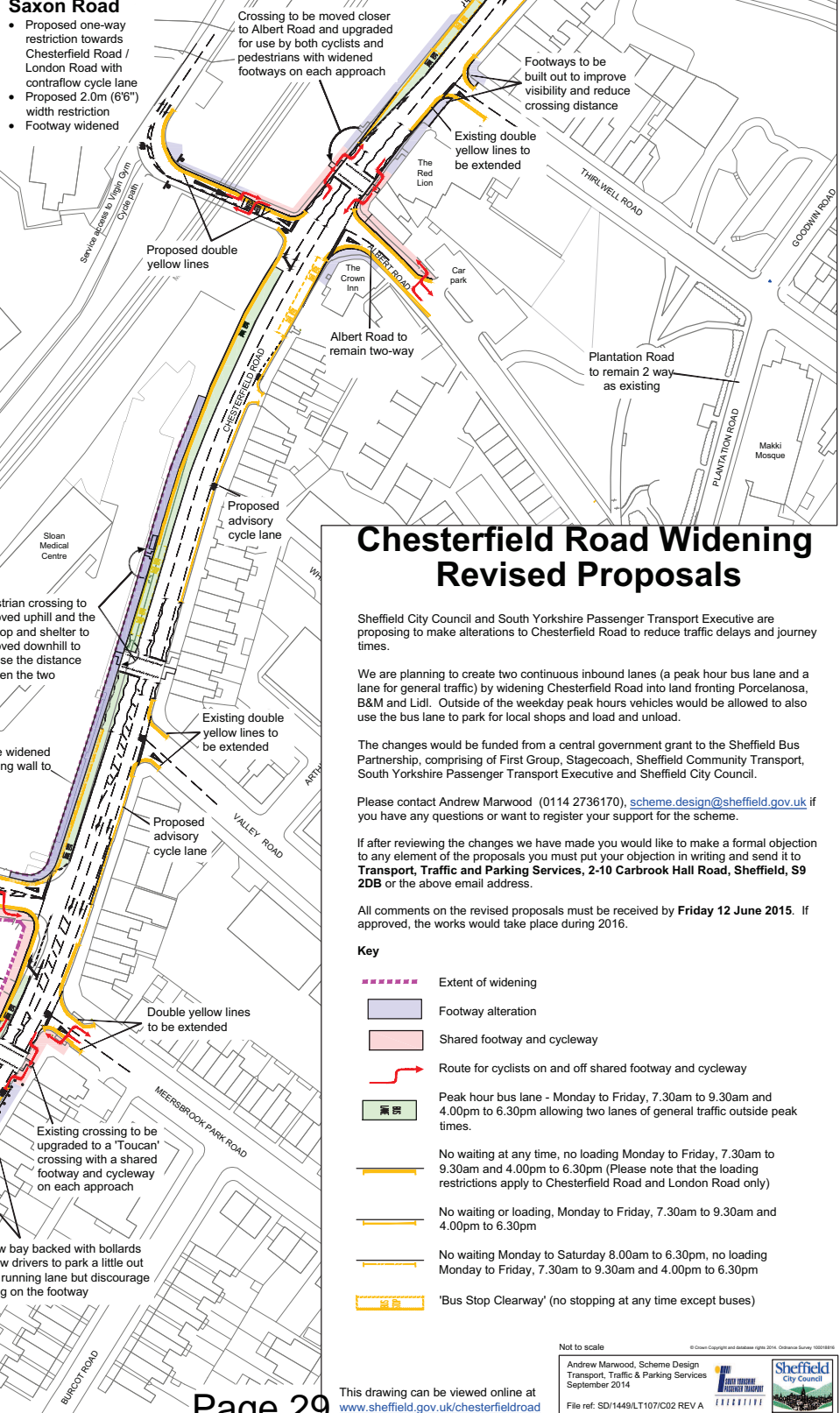
The crossings near the junctions with Meersbrook Park Road and Albert Road would be upgraded to 'Toucan' crossings, for use by both pedestrians and cyclists, with widened shared footways/cycleways on the approaches. The crossing near Albert Road would be moved closer to the junction.

Buses serving the inbound bus stop immediately north of Valley Road regularly block the middle crossing when letting passengers on and off. It is therefore proposed to increase the distance between the crossing and the bus stop by moving the crossing uphill and the bus stop downhill by a few metres.

## APPENDIX 'A' - SCHEME PLAN

### Saxon Road

- Proposed one-way restriction towards Chesterfield Road / London Road with contraflow cycle lane
- Proposed 2.0m (6'6") width restriction
- Footway widened



## Chesterfield Road Widening Revised Proposals

Sheffield City Council and South Yorkshire Passenger Transport Executive are proposing to make alterations to Chesterfield Road to reduce traffic delays and journey times.

We are planning to create two continuous inbound lanes (a peak hour bus lane and a lane for general traffic) by widening Chesterfield Road into land fronting Porcelanosa, B&M and Lidl. Outside of the weekday peak hours vehicles would be allowed to also use the bus lane to park for local shops and load and unload.

The changes would be funded from a central government grant to the Sheffield Bus Partnership, comprising of First Group, Stagecoach, Sheffield Community Transport, South Yorkshire Passenger Transport Executive and Sheffield City Council.

Please contact Andrew Marwood (0114 2736170), [scheme.design@sheffield.gov.uk](mailto:scheme.design@sheffield.gov.uk) if you have any questions or want to register your support for the scheme.

If after reviewing the changes we have made you would like to make a formal objection to any element of the proposals you must put your objection in writing and send it to Transport, Traffic and Parking Services, 2-10 Carbrook Hall Road, Sheffield, S9 2DB or the above email address.

All comments on the revised proposals must be received by **Friday 12 June 2015**. If approved, the works would take place during 2016.

### Key

- Extent of widening
- Footway alteration
- Shared footway and cycleway
- Route for cyclists on and off shared footway and cycleway
- Peak hour bus lane - Monday to Friday, 7.30am to 9.30am and 4.00pm to 6.30pm allowing two lanes of general traffic outside peak times.
- No waiting at any time, no loading Monday to Friday, 7.30am to 9.30am and 4.00pm to 6.30pm (Please note that the loading restrictions apply to Chesterfield Road and London Road only)
- No waiting or loading, Monday to Friday, 7.30am to 9.30am and 4.00pm to 6.30pm
- No waiting Monday to Saturday 8.00am to 6.30pm, no loading Monday to Friday, 7.30am to 9.30am and 4.00pm to 6.30pm
- 'Bus Stop Clearway' (no stopping at any time except buses)

Not to scale

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This drawing can be viewed online at [www.sheffield.gov.uk/sheffieldroad](http://www.sheffield.gov.uk/sheffieldroad)

Andrew Marwood, Scheme Design  
Transport, Traffic & Parking Services  
September 2014

File ref: SD/1449/LT107/C02 REV A



# Chesterfield Road widening

## APPENDIX 'B'

### Key

- Section to be widened ---
- Proposed peak hour bus lane ---
- Existing peak hour bus lane —
- Permitted traffic manoeuvre →
- Pedestrian crossing ↔
- Bus stop ●

The end of **Saxon Road** to be made one-way towards Chesterfield Road (except for cyclists). Footway to be widened. Vehicles over 2m (6'6") wide would be prohibited from using the one-way section

Pedestrian crossing to be moved closer to Valley Road and the nearby inbound bus stop to be moved downhill

Access to the Broadfield Road and Nether Edge areas via Little London Road

Northwest side of **Chesterfield Road** to be widened to accommodate an extra inbound lane

**Heeley Retail Park**

Access to and from the Broadfield Road and Nether Edge areas

Inbound bus stop to be moved south-west, closer to the pedestrian crossing

Pedestrian crossing to be moved closer to Albert Road and upgraded for use by both pedestrians and cyclists. Nearby footways to be widened

**Plantation Road** to be made one-way towards Albert Road. Footway to be widened for use by both pedestrians and cyclists

**Albert Road** to be made one-way from the lower car park entrance towards Chesterfield Road.

Pedestrian crossing to be upgraded for use by for use by both pedestrians and cyclists

A more detailed drawing can be viewed online at [www.sheffield.gov.uk/chesterfieldroad](http://www.sheffield.gov.uk/chesterfieldroad)

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# Chesterfield Road Widening - Revised Proposals

## Key

- Section to be widened ---
- Proposed peak hour bus lane ---
- Existing peak hour bus lane —
- Permitted traffic manoeuvre →
- Pedestrian crossing ↔
- Bus stop ●

The end of **Saxon Road** to be made one-way towards Chesterfield Road (except for cyclists). Footway to be widened. Vehicles over 2m (6'6") wide would be prohibited from using the one-way section

Pedestrian crossing to be moved closer to Valley Road and the nearby inbound bus stop to be moved downhill

Access to the Broadfield Road and Nether Edge areas via Little London Road

Northwest side of **Chesterfield Road** to be widened to accommodate an extra inbound lane

**Heeley Retail Park**

Access to and from the Broadfield Road and Nether Edge areas

Inbound bus stop to be moved south-west, closer to the pedestrian crossing

Pedestrian crossing to be moved closer to Albert Road and upgraded for use by both pedestrians and cyclists. Nearby footways to be widened

**Plantation Road** to remain two way as existing

**Albert Road** to remain two way as existing

Pedestrian crossing to be upgraded for use by both pedestrians and cyclists

A more detailed drawing can be viewed online at  
[www.sheffield.gov.uk/chesterfieldroad](http://www.sheffield.gov.uk/chesterfieldroad)

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# APPENDIX 'D' – CONSULTATION OBJECTIONS AND OFFICER RESPONSES

## **Objection 1**

My concerns about the previous elements around Plantation Road and Albert Road appear to have been taken into account in the new design. This appears to be a better solution.

The other key point in this letter related to the reduced connectivity between Meersbrook and Nether Edge which will occur through making Saxon Road a one-way route - unfortunately this is not addressed in the new scheme. Since this is a wider issue which is also relevant to the proposed Chesterfield Road improvements, I have copied this email to Louise Haigh, MP for Heeley.

The routes across to Abbeydale Road and Nether Edge are important for many people who live locally and are already limited; indeed connectivity was previously diminished a few years ago when the Little London Road was made one-way. The pedestrian and cycling routes between these two areas are also poor. The proposed scheme design does not offer alternatives or significant improvements to reduce this effect and therefore will further reduce connectivity between Meersbrook and Abbeydale Road/Nether Edge. The railway line, Chesterfield Road, and the River Sheaf collectively form a barrier between these two areas; it would be of great benefit to local communities if the routes between these two otherwise closely-linked areas (for pedestrians, cyclists and drivers) could be improved and it would be unfortunate if the scheme does not contribute more meaningfully to this objective.

## **Officer Response 1**

Many thanks for the response to the re-consultation and revised plans.

A number of objections were received regarding the restricted movements on Albert Road and Plantation Road during the first consultation and we have worked hard in the last few months to address these concerns by amending the design, keeping two way movements as existing.

During a review of the layout with the Council's safety audit team they expressed concerns about any likelihood of retaining the two cross movements, therefore in the interests of road safety the proposal still removes the ability to travel from Chesterfield Road / Albert Road in to Saxon Road. As a result this link for vehicular traffic would be lost, however, we feel that the significant improvements to the links in and around this junction for pedestrians and cyclists are valuable and would actually increase and improve connectivity between Meersbrook and Nether Edge for these more sustainable road user groups. In essence there are safer / alternative (despite being a little further to travel) routes for the very low number of vehicles

making the manoeuvre which you refer to (approximately 21 in the morning peak hour). The same survey, which was carried out last July, picked up 13 cycles during the same hour so improving the link for this user group seems sensible.

## **Objection 2**

1. I object to the scheme.
2. The pinch point at Heeley Bridge remains at two lanes, so there will be no benefit to journey times from the scheme, the delays being just that bit further down the road. It's just moving the queues.
3. Undoubtedly these major works in a heavily built up area and on busy arterial route will create extraordinary construction difficulties and disrupt local life, businesses and travel for a long period.
4. There will be some land take from the Lidl and Medical Centre car park for the new retaining wall. This car park is well used all day and parking and manoeuvring space is already limited. There is not enough space as it is. Also the builders are going to want to take lots of parking spaces to facilitate construction for months on end.
5. Moving crossings and bus stops a few yards will make trivial difference and is unnecessary. Footway build-outs, excess yellow lines and bollards have not helped elsewhere and serve to restrict movement and clutter the street scene. There are too many one-ways in the area already.

## **Officer Response 2**

1. This is noted and will be reported
2. The queue for general traffic may move further downstream, however for buses the scheme will get them quicker and more reliably to this point. I completely agree that Heeley Bridge would benefit from a possible widening, providing better links into the city for all users (particularly those on the bus). The cost and land take issues in and around this area would however be significant, but I do think this is worth investigating for the future, should further funding be made available. This is only part of the current and future improvement strategy for these important transport corridors and there is every likelihood that other areas of congestion will be investigated in the future.
3. The construction of the works would be phased and a number of options investigated with our own Structures Team and our construction partners (Amey), to assess the least disruptive way of constructing the wall and associated carriageway widening. We will be engaging with a number of businesses/residents in the area to ensure we keep them up to date with any planned disruption. We have already accepted that due to the sensitive nature of the area we may not be able to undertake the cheapest/quickest options.

4. We are currently in talks with Lidl / Medical centre with regards to the scheme and ways which we can help them manage the car park during the works. Following the scheme and working with the two businesses we hope to retain at least the same number of spaces currently available in the car park. This could be through a re-design on the layout.

5. Some of the crossings have been in place for a long time and are not necessarily reflective of current and future pedestrian / cyclist desire lines. To add to this, positioning of current bus stops and crossing points creates visibility issues for crossing pedestrians. We feel the re-location of crossings / stops is necessary to improve the environment for all users, not just buses on the move. As part of this scheme we are not proposing excessive lengths of double yellow lines and the bollards are also only proposed to assist pedestrians who shouldn't have to share space with parked vehicles. The detail of these features can be varied relatively easily.

## APPENDIX 'E' - CALCULATED EXPECTED OUTCOMES

PROJECT	Chesterfield Road	
INTERVENTION	Heeley Bottom Bus Lane	
TIME PERIOD	AM Peak (07:30 - 09:30), PM Peak (16:30 - 18:30)	
SERVICES AFFECTED	TBC	
NUMBER OF BUSES/HOUR	TBC	
DIRECTION	Inbound	
SERVICE SAMPLED	20 & 20A	
DATA PERIOD	04/11/2013 - 13/12/2013	
BUS STOPS	Heeley Retail Park (37021125) to The Bridge Inn (37023298)	
DISTANCE BETWEEN STOPS	0.495 Miles	
ANNUAL PATRONAGE ON WHOLE CORRIDOR	TBC	
ANNUAL PATRONAGE AFFECTED	TBC	

MEASURE	DATA SOURCES & COMMENTARY	PRIMARY TARGET	BASELINE (Date)		TARGET
Average Bus Journey Time		Reduce	mins		mins
		Reduce	3.94		2.80
		Reduce	From	2.66 to	5.22
Average Bus Journey Time Variability		Reduce	From	1.96 to	3.22
		Increase	mph		mph
		Increase	7.54		10.60
Average Bus speed (including dwell)		Increase	11.45		13.88*

EXPECTED OUTCOMES				
Reduction in Average bus journey time	am peak	pm peak	am peak	1.14 mins
				0.45 mins
				1.10 mins
Reduction in average journey time variability	pm peak			0.06 mins
Increase in average bus speed	am peak	pm peak		3.1 mph
				2.4 mph

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