# HILLS ROAD AND HUNTINGDON ROAD, CAMBRIDGE, CYCLEWAYS

To: Economy and Environment Committee

Meeting Date: 8<sup>th</sup> July 2014

From: Graham Hughes, Executive Director – Economy, Transport

and Environment

Electoral divisions: Bar Hill, Castle, Coleridge and Queen Edith's

Forward Plan ref: Not applicable Key decision: No

Purpose: To note the details of proposed segregated cycleways on

Huntingdon Road, Girton and Hills Road, Cambridge, and

to consider the implementation of the schemes.

Recommendation: Committee are asked to approve subject to Traffic

**Regulation Orders:** 

a) the implementation of a kerb segregated cycleway on Huntingdon Road where space permits, and a raised

segregated cycleway elsewhere;

b) the implementation of a raised segregated cycleway on

Hills Road;

c) the introduction of island bus stops on both routes;

d) the introduction of a cycling zebra crossing on

Huntingdon Road in the vicinity of Oxford Road, subject to

Department for Transport (DfT) approval: and

e) the advertisement of the necessary Traffic Regulation

Orders.

Officer contact:		Member contact:	
Name:	Mike Davies	Name:	Councillor Ian Bates
Post:	Team Leader – Cycling Projects	Post:	Chairman
E mail:	mike.davies@cambridgeshire.gov.uk	E mail:	ian.bates@cambridgeshire.gov.uk
Tel:	01223 232773	Tel:	01223 699173

#### 1. INTRODUCTION

- 1.1 Economy and Environment Committee considered a report at its May meeting on the response to public consultation on options to introduce segregated cycle facilities on Huntingdon Road and Hills Road.
- 1.2 At the meeting, despite a good amount of support from the public consultation, some public speakers and committee members raised a range of concerns about detailed aspects of the schemes, particularly around the interaction between cyclists and passengers at the floating or island bus stops. It was resolved to defer making a decision, and to receive a report at the next meeting, with more detailed proposals that would be developed to take into account the issues raised by members.
- 1.3 Since the last meeting officers have undertaken further discussions with key stakeholders, and have progressed the details on both of the schemes, to take into account the concerns raised.

#### 2. BACKGROUND

- 2.1 The growth of housing, business activity and the economy generally will put increasing pressure on the transport network in Cambridge. Investing in good quality, safe, cycling infrastructure, alongside other transport improvements, will encourage more people to cycle, thus building in vital additional capacity to the transport network.
- 2.2 The Cycle City Ambition programme funded by the Department for Transport (DfT) offers the opportunity to fund good quality, ambitious cycling infrastructure. The programme for Cambridgeshire comprises seven schemes in total, including Huntingdon Road and Hills Road in Cambridge. Four schemes in South Cambridgeshire are currently being constructed, and will be completed by September. A further scheme in Trumpington Road is currently the subject of consultation.
- 2.3 Overall funding from DfT of £4.1million was confirmed in August 2013, and the funding has to be claimed back by May 2015, making for very challenging timescales.
- 2.4 The options for Huntingdon Road and Hills Road were developed in conjunction with key stakeholders. A public consultation was undertaken in March and reported to Committee on 27<sup>th</sup> May.

#### 3. PROPOSALS

- 3.1 The detailed proposals are shown on a series of large colour plans which have been made available to members prior to the meeting, and will be displayed at the meeting. The plans are also available on the Council's website at the following web addresses:
  - www.cambridgeshire.gov.uk/hills-road
  - www.cambridgeshire.gov.uk/huntingdon-road

- 3.2 In both schemes the cycleway will be at least 2.1 metres wide, surfaced in red asphalt and with priority over side roads. Cyclists would travel on a direct, quick, continuous route, without the need to negotiate obstacles such as parked cars, and there would be no conflict with pedestrians or motor vehicles. Pedestrians should benefit from reduced pavement cycling, and motorists would enjoy the benefit of not having to interact with cyclists.
- 3.3 In Huntingdon Road Option 3 from the consultation has been developed further as the proposed way forward, and offers the safety of kerb segregation (as shown in Plan 1) where the road is wider (the Girton end), and a raised cycleway (as shown in Plan 2) where there is less road width. This compromise option means that existing right turn lanes, pedestrian refuges, verges and footway widths are all retained whilst offering some kerbed segregation as well.
- 3.4 In Hills Road Option 2 from the consultation, a raised cycleway, has been further refined. The raised cycleway option would allow emergency vehicles to pass more easily than the kerbed segregation option. This option would also be less visually intrusive than the kerbed segregated option. No right turn lanes would be lost or narrowed, and existing pedestrian refuges would be retained, as would the existing widths of verge and footway in most cases.
- 3.5 A significant issue for cyclists with conventional cycle lanes is the conflict between buses and cyclists which occurs at bus stops, with buses blocking the cycle lane, giving cyclist the option of either waiting behind the bus or overtaking in the general traffic flow. This can lead to cyclists and buses repeatedly having to pass each other as they progress along the road, and is particularly challenging for more vulnerable cyclists, such as the young or elderly. Island or floating bus stops are proposed in both schemes to remove this conflict.

## 4. ADDRESSING THE ISSUES RAISED

## Island or floating bus stops

- 4.1 Concerns were raised at the last meeting of the Economy and Environment Committee about the possible conflicts between cyclists and pedestrians boarding and alighting from buses. There was particular concern regarding the more vulnerable bus users.
- 4.2 The developed proposals address these issues through the detail of the design, which gives very clear demarcation between footway, bus stop and cycleway. It is considered that this will be safer and better for users, than existing arrangements of bus stops and cycleways already in the city, which are described below.
- 4.3 All of the bus stop islands will be at least 2 metres in width and all waiting facilities (flag, timetable, shelter, seats and real time passenger information) will be sited on the island. This will allow pedestrians to make their way to the bus stop in their own time, and avoids the situation where boarding passengers have to cross the cycleway as the bus arrives at the stop. Similarly it provides sufficient space for passengers to alight from the bus

- before crossing the cycleway.
- 4.4 The cycleway will be clearly delineated past the stop by kerbs and red surfacing except at the designated crossing point, where the cycleway will rise up to give a level crossing point. Tactile paving will mark the crossing point together with a contrasting surface colour, to highlight the crossing point to all users and assist visually impaired pedestrians.
- 4.5 As the cycle lane approaches the bus stop it will deviate to the left and narrow to 1.5 metres in width, there will then be a short ramp up to the level pedestrian crossing point. The deviation, narrowing, ramp and change in surface type will all serve to alert cyclists to the need to be mindful of pedestrians, in addition to the presence of the bus stop itself, and cyclists and pedestrians will have full visibility of one another when approaching the stop.
- 4.6 These design details are taken from those used in Brighton, London and other parts of the UK without reported or recorded problems of conflict between cyclists and pedestrians. Such stops are commonplace in Holland.
- 4.7 In Cambridge a floating bus stop has been in place in Wadloes Road, Abbey Ward, since 1966, which requires passengers to cross the cycle lane from the shelter to the bus without any change in the cycleway, and in more recent years such a stop was installed in Cherry Hinton Road (near to its junction with Hills Road). There have been no accidents or reported problems at these sites.
- 4.8 Elsewhere in Cambridge there are a number of locations where a cycle lane goes behind a bus stop and effectively there is an 'at grade' floating bus stop in place. Examples can be found in Barton Road and Milton Road. Again there is no change in the cycle path nor is there a designated crossing point to alert cyclist to the possibility of pedestrians crossing. There have been no accidents or reported problems at these sites.
- 4.9 Members also raised concerns about the impact of the bus stops on traffic flow. In London, island stops have generally been deployed on dual carriageways so buses that are stopped do not prevent the flow of traffic. The Cambridge situation is different as there are few urban dual carriageways. It is already the case that buses stopping on Hills Road and Huntingdon Road require other traffic to wait and find an opportunity to safely overtake and this will remain the case with the introduction of island bus stops. As congestion is primarily a function of junction capacity, waiting for a bus at a stop between junctions has little or no impact on overall journey times.
- 4.10 A typical island bus stop detail is shown in Plan 3.

## Kerb upstand detail

4.11 Concern was raised that should cyclists have to leave or rejoin the raised path as a result of an obstruction then the 'bullnose' type kerb proposed, which has an overall upstand of 25mm, might present a hazard if crossed at an oblique angle. The design has been revised to deploy a kerb laid to provide a 1 in 5 slope. This would still provide a 25mm level difference, but with a much

reduced transition. This type of kerb will be much easier and safer for cyclists joining and rejoining the cycleway. The revised design is shown in Plan 2.

## **Drainage**

4.12 Concern was raised about the impact of the new kerblines on drainage. New gullies will be installed as part of the scheme and connected into the existing infrastructure. Gully positions are shown on the large plans. A full CCTV drainage survey will be undertaken to ascertain the condition of the existing drainage systems, and any sections of the existing infrastructure which are found to be defective will be repaired as part of the scheme.

## 5. HUNTINGDON ROAD SPECIFIC ISSUES

- 5.1 Central traffic islands at two locations in the original proposals would have prevented motor vehicles from overtaking stationary buses. These features have been removed from the proposals, and thus if the road ahead is clear motor vehicles will be able to pass stationary buses.
- 5.2 Residents expressed concern about the possible loss of trees as part of the scheme. The detailed design confirms that no trees need to be felled or put at any form of risk as part of the scheme. A tree survey has been undertaken to record the condition of all trees.
- 5.3 A number of new cycle routes will be created as part of the Cambridge North West and Darwin Green developments. It was suggested that cyclists could use these in preference to Huntingdon Road. Huntingdon Road is a straight direct route, already well established for cycling. The new routes through the developments may be quieter, but they will be much less direct, and thus it is safe to assume that a growing number of trips by bike will remain on Huntingdon Road. While the new routes will be welcome additions to cater for the growth of cycling, these will be complementary to the improvements on Huntingdon Road.
- 5.4 The proposals have been revised to relocate the bus stop from Howes Place to outside NIAB (National Institute of Agricultural Botany). The road is wider here and a much better island stop can be provided with a bus shelter. The new location is nearer to the new housing at Darwin Green and thus there is potential to increase bus patronage and make bus travel an attractive and convenient option for the new development.
- 5.5 Proposals for the cycling zebra crossing have now been finalised. This will assist people such as those on the school run get across Huntingdon Road at peak times as they currently experience difficulties.
- A significant number of respondents considered that the scheme should extend beyond Oxford Road. If budget permits it would be relatively straight forward to extend the new, wider cycle lane surface to Histon Road/Victoria Road, but to retain an 'at grade' cycle lane rather than a raised lane due to the slower traffic speeds and adjacent car parking areas in this length. The Traffic Signals team are starting to develop proposals to improve the Castle Street/Northampton Street junction which would also improve the overall

- Girton to city centre journey for cyclists.
- 5.7 Since the last meeting of the Economy and Environment Committee, officers have met with Girton Parish Council, County and District Councillors to discuss their concerns and how these are being addressed through the detailed designs.

## 6. HILLS ROAD SPECIFIC ISSUES

- 6.1 The bus stop opposite the Sixth Form College has both a large number of buses stopping and large numbers of cyclists, and the resulting conflicting movements have given rise to concerns. As a result of the recent redevelopment of the area space is available to provide a stop long enough for two buses to stop, and of greater width to accommodate the larger volume of bus passengers alighting at this stop.
- The original committee report did not contain information on pedestrian numbers. Daily flows of pedestrians in this length of Hills Road equate to around 2,400 per day, with 4,000 cyclists and 13,000 motor vehicles, though there are specific areas near to educational establishments that are very busy.
- 6.3 There is some concern that the scheme will result in traffic delays and traffic re-routing to adjacent streets. Given the existing stop-start nature of Hills Road associated with existing controlled pedestrian crossings, bus stops and situations where right turning vehicles hold up other traffic, it is considered very unlikely that there would be any increase in either overall delays or rerouting of traffic into adjacent streets. The adjacent streets are generally traffic calmed or full of parked cars and hence unattractive as 'rat runs'.
- 6.4 Since the last meeting of the Economy and Environment Committee, officers have met with locally elected representatives for Queen Edith's ward to discuss their concerns and how these are being addressed through the detailed designs.

## 7. TRAFFIC REGULATION ORDERS

- 7.1 The Traffic Regulation Orders (TROs) for both schemes have been identified. For Huntingdon Road in the length that will have segregation by level difference, and for Hills Road, a no waiting at any time restriction will be needed. Existing mandatory cycle lanes will need to be revoked for both roads. There may be some statutory processes to be undertaken if bus stops need to be moved, and in establishing the cycling zebra. Objections to TROs will be considered by the Highways and Community Infrastructure Committee.
- 7.2 A peak time loading ban would ensure that the raised cycle lanes are free of loading vehicles at the busiest times. To enforce the TRO loading restriction signs placed at 70 metre intervals would be necessary. On balance officers are minded not to include the loading ban, because of the many signs that would be needed, but instead to monitor the cycleways once completed to see if the loading ban is necessary.

#### 8. CONCLUSION AND RECOMMENDATION

- 8.1 The proposed schemes are an opportunity to implement schemes of the highest quality, fully funded by the DfT, that will attract and encourage those who are less confident to take up cycling in preference to always using their car.
- 8.2 In line with this challenge the proposals are ambitious and represent a step change in provision. As such they introduce a number of features, which, while commonplace elsewhere, are new to Cambridge. Inevitably this raises concerns among those unfamiliar with these features. Officers have sought to address these concerns through engagement with key groups and local members and through the careful development of the details of the designs to minimise the risks that give rise to these concerns.
- 8.3 Cambridge is fortunate in that cycling is a mode of transport used by all sectors of society and all ages, including the young and the old, who themselves are vulnerable road users, and both of the routes under consideration are well used by school children. The proposals will provide greater security for these vulnerable road users as conflict between cyclists and motor vehicles will be largely removed.
- 8.4 The proposals also provide benefits for other road users, especially pedestrians who will not have to share footways with cyclists who lack the confidence to cycle on the road; a particular concern of elderly and frail pedestrians.
- 8.5 Overall the proposals will sharply reduce the level of conflict experienced by vulnerable road users, and have the potential to provide a model for a new standard of segregation between pedestrians, cyclists and motorised traffic across the city and in other towns across the County.
- 8.6 It is therefore recommended that members approve the schemes for implementation.

## 9. ALIGNMENT WITH CORPORATE PRIORITIES

# 9.1 Developing the local economy for the benefit of all

More people cycling contributes to a healthier population, improved productivity, reduced traffic congestion, reliability of journey times and adds capacity into an already constrained road network, all of which contributes to economic improvements.

## 9.2 Helping people live healthy and independent lives

Currently many people feel unsafe cycling, although cycling is potentially a form of economic, reliable transport that allows them to access employment or training and hence independence, and the opportunity to incorporate active travel into their lives.

# 9.3 Supporting and protecting vulnerable people

Good cycling infrastructure including segregated lanes and island bus stops potentially means less cycling on footways and less conflict with elderly and disabled people.

#### 10. SIGNIFICANT IMPLICATIONS

#### 10.1 Resource Implications

The schemes are capital funded by the DfT from an overall programme budget of £4.1million. There is flexibility but the scheme budgets are £1.2m for Hills Road and £625,000 for Huntingdon Road. The schemes are being designed to ensure minimal maintenance and ongoing revenue costs.

# 10.2 Statutory, Risk and Legal Implications

There are no significant implications within this category.

# 10.3 Equality and Diversity Implications

There are no significant implications within this category.

# 10.4 Engagement and Consultation Implications

A thorough and extensive period of consultation and engagement has been undertaken for both schemes.

#### 10.5 Public Health Implications

More people cycling and walking undoubtedly contributes to improved public health. The Public Health team strongly support the proposals.

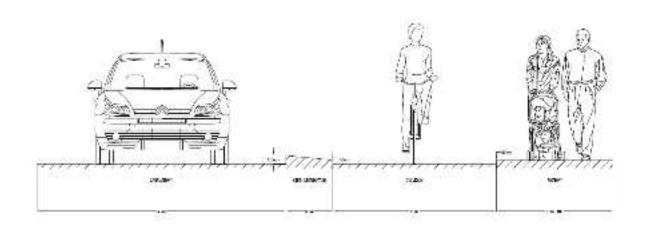
## 10.6 Localism and local member engagement

There has been extensive public and stakeholder consultation.

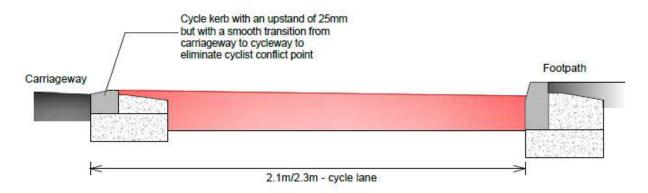
The Project Team have engaged with, and updated local members throughout the scheme development and consultation process.

Source Documents	Location
Consultation responses.	A Wing, Floor 2
Report to the Environment & Economy Committee, 27 <sup>th</sup>	Castle Court,
May 2014	Cambridge

**PLAN 1** – Showing Option 1, kerbed segregation



PLAN 2 – Showing Option 2, segregation by level difference



Cycle Kerb Detail

PLAN 3 – Showing typical 'island' bus stop detail

