



**GREATER
CAMBRIDGE
PARTNERSHIP**

Growing and sharing prosperity

Delivering our City Deal

MILTON ROAD: BUS, CYCLING AND WALKING IMPROVEMENTS
FINAL DESIGN

Report to: Greater Cambridge Partnership Joint Assembly

27th February 2019

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1. Purpose

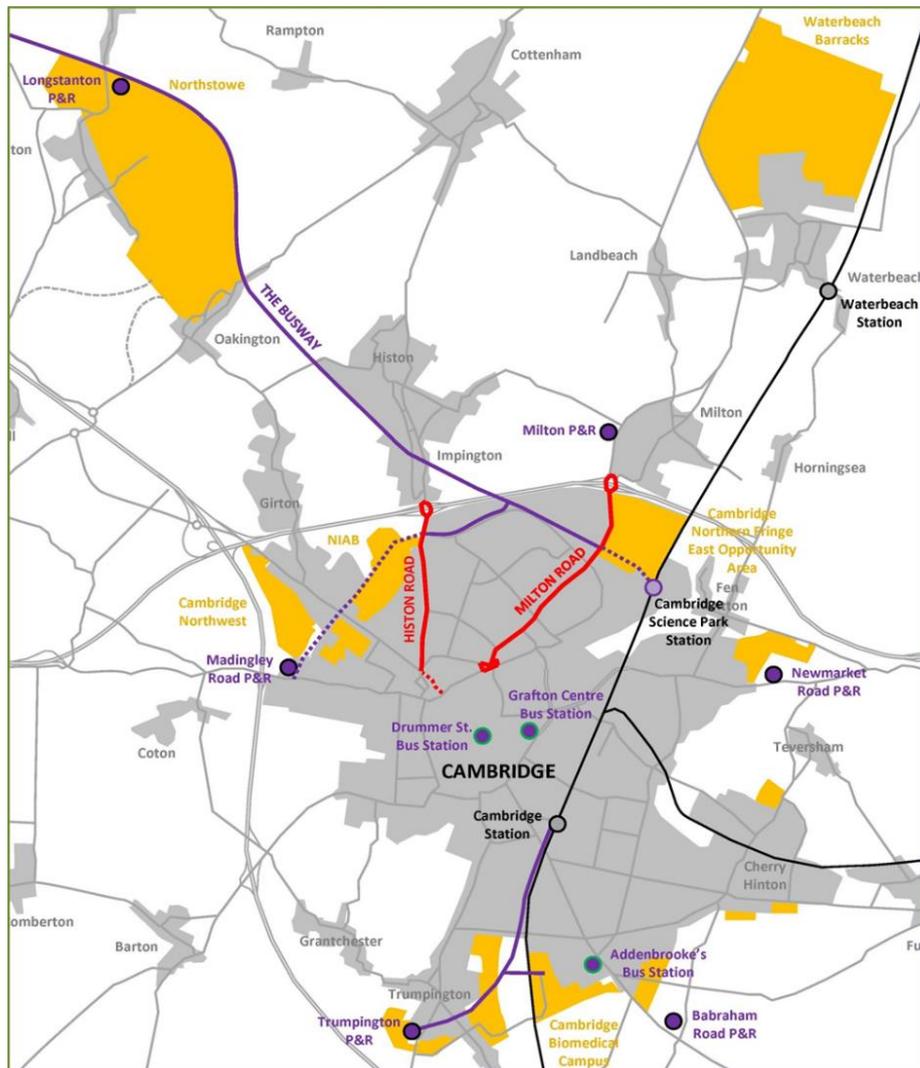
- 1.1. The Milton Road scheme supports the Greater Cambridge Partnership's (GCP's) transport vision of implementing improved public transport routes to encourage more people to use sustainable transport modes instead of the private car. This is part of a wider public transport strategy which aims to support the feasibility of delivering proposed housing and employment growth at Cambridge Northern Fringe, Ely, Cambridge Science Park, Northstowe and Waterbeach (collectively around 27,000 new homes and 9,800 new jobs between 2011 and 2031).
- 1.2. The report sets out the final design (**Appendix A**) for Milton Road that includes modifications to the previously approved design following public consultation feedback. In developing the final design, the consultants design team have worked closely with the County Council's road safety and signals teams to ensure that all aspect conform with current regulations, are considered safe, and provide a good balance in terms of functionality for all users.
- 1.3. The report also presents the landscaping strategy and designs for the various landscape areas along Milton Road. These have been developed following further engagement with the Local Liaison Forum (LLF) in January 2019 and in partnership with Cambridge City Council.
- 1.4. The Joint Assembly is asked to comment on the report.

2. Key Issues and Considerations

- 2.1. The project has the following key objectives:
 - a) Comprehensive priority for buses in both directions wherever practicable;
 - b) Safer and more convenient routes for cycling and walking, segregated where practical and possible;
 - c) Enhance the environment, streetscape and air quality;
 - d) Additional capacity for sustainable trips to employment/education sites;
 - e) Increased bus patronage and new services; and
 - f) Maintain or reduce general traffic levels.
- 2.2. **Figure 1** indicates the length of Milton Road under consideration and shows its setting within the wider strategic context. The Milton Road Histon Road Draft Stage 1 Report 25.09.15 sets out the strategic and planning background, and broader context for the scheme.

- 2.3. The strategic nature of the Milton Road scheme is recognised, particularly as the route links outwards towards the Milton Park & ride site and onwards to the Waterbeach development.

Figure 1: Milton Road in the Wider Area Context



- 2.4. In July 2018, the Executive Board approved the preliminary design for Milton Road for public consultation. The consultation took place in the autumn of 2018. Consultation leaflets were delivered to over 15,000 houses in north Cambridge and the village of Milton. Three formal consultation events took place that were all well attended. Almost 900 responses were received.

- 2.5. The consultation analysis report will be published online when complete. In summary, all aspects consulted on received more support than opposition with most aspects of the design receiving significant support. The qualitative aspects of the consultation were of significant value in fine-tuning the final proposals.

3. Options and Emerging Recommendations

- 3.1. Following the analysis of the consultation feedback and extensive dialogue with the County Council's Road Safety, Signals and Cycling Projects Teams, modifications have been made to the design. These modification have been presented and discussed further at an LLF workshop held on 22nd January 2019. The following paragraphs set out the key changes that have been made with reasons.

Relocation of outbound bus stop near Westbrook Place.

- 3.2. The previous position of the bus stop slightly obstructed a residential access and also was not ideal given the new design layout including a crossing near to Westbrook place. The bus stop has been relocated closer to Gilbert Road where there is sufficient space.

Addition of signalised crossing near Westbrook Place and subsequent changes to the design of Gilbert Road junction.

- 3.3. Representation made during the consultation period highlighted the significant local interest in placing a crossing near to Westbrook place to improve access for pedestrians and cyclists. The project team also felt that this option would give more space for a segregated off road solution for Pedestrians and Cyclists on the outbound approach to the Gilbert Road junction that is more consistent with the rest of the scheme.
- 3.4. Following extensive discussions with Road Safety, Signals and Cycling officers, and further discussion at the LLF workshop and with representatives of Camcycle, it is proposed to use a Toucan Crossing for the outbound crossing of Gilbert Road. The crossing will have a segregated approach but essentially the crossing area is legally defined as dual use, thus allowing cyclists to legally make the left turn into Gilbert Road during the Pedestrian and Cycle signal phase.
- 3.5. It is also proposed to slightly narrow the inbound cycle lane in the vicinity of the junction in order to slow cyclists and to provide additional space to pedestrians, especially those waiting in the crossing area.

Additional space for pedestrians and cyclists at Elizabeth Way roundabout and removal of shared use areas in favour of full segregation.

- 3.6. Feedback from the public consultation put forward a strong argument to reduce carriageway widths at the entry points to the Elizabeth Way roundabout in order to enable increased space and achieve full segregation of the footpath and cycleway that circumnavigates the roundabout. In the modified design, the additional space and segregation has been possible to achieve by reducing lane widths on the Milton Road outbound and Elizabeth Way approaches to the roundabout, and by reducing the Milton Road inbound approach to a single lane. Traffic modelling demonstrates that these modifications do not significantly impact the capacity of the roundabout for vehicular traffic.

Positioning of the inbound bus stop position near Arbury Road junction.

- 3.7. The new position takes into account the potential future requirement for a dropped kerb access into an adjacent property.

Slight modifications to the Arbury Road Junction

- 3.8. The same approach for pedestrian and cycle crossings as used at the Gilbert road/Milton road junction is proposed for the Arbury Road/Union Lane junction with Milton Road. In this case Toucan Crossings will be used for both the inbound and outbound crossings. The Toucan Crossings will have a segregated approach but essentially the crossing area is legally defined as dual use, thus allowing cyclists to legally make the left into Arbury Road and Union Lane during the Pedestrian and Cycle signal phase.

Addition of signalised crossing near Downhams Lane

- 3.9. The consultation response set out a preference for a crossing point near to Downhams Lane.

Positioning of the outbound bus stop position near Downhams Lane.

- 3.10. The consultation highlighted that the proposed location of the bus stop was adjacent to a building of local interest. The stop has therefore been re-positioned to a more appropriate location nearby.

Re-worked design for the area around Woodhead Drive to enhance the outbound bus lane, shorten the inbound bus lane, and provide an uncontrolled crossing.

- 3.11. The question was raised at consultation events as to why we had retained right-hand filter lanes for Woodhead Drive and Kendal Way. Questions were also raised as to whether the outbound bus lane approaching the Kings Hedges junction was long enough to provide any benefit. The consultants have looked at this area in more detail and have modelled the effects of removing the right hand filter lanes. They are satisfied that there is no significant change in the capacity as a result. A new arrangement is therefore proposed that removes the filter lanes, assigns additional length to the outbound bus lane and shortens the inbound bus lane. The new arrangement allows for an uncontrolled crossing point with a central island between the start points of each bus lane.

New design option for pedestrians and cyclists at Kings Hedges junction.

- 3.12. It is proposed to modify the design around the junction to follow the popular approach recently proposed for the Gilbert/Warwick Road junction with Histon Road. This allows for fewer conflict points between pedestrians and cyclists while maintaining full segregation.

Treatment of the outbound pavement between Ascham Road and Ramsden Square

- 3.13. The previous design included a shared use pavement on the outbound side of the road from Ascham Road to Ramsden Square. Strong concerns were raised during the consultation, mainly from pedestrians, highlighting the fact that given cyclists were being provided a new, completely segregated inbound lane, we should not be encouraging them to share the pavement with pedestrian for the whole length of Milton Road. Following further discussion at the LLF workshop it is proposed to shorten the length of shared use pavement to include only the section between Ascham Road and Elizabeth Way Roundabout. It is felt that this compromise will still allow for the flow of school children on bicycles, many of whom access Milton Road via Highworth Avenue. However this arrangement will promote the proper usage of the inbound cycle lane for the majority of cyclists, and thus a better environment for pedestrians on the outbound side of Milton Road.

Other Key Design Considerations

- 3.14. The Design Team has incorporated facilities to allow cyclists to legally access signalised crossing points from nearby side roads by including short two way sections.
- 3.15. The design includes mini zebra crossings on the cycleway at all locations where pedestrians need to formally cross the cycle lane to access signalised crossings.

Landscape and Environment

- 3.16. The scheme will result in existing trees being replaced with a fully considered and developed tree planting design along the length of Milton Road, taking into account relevant design

guidance, in particular that developed by the Tree Design Advisory Group (TDAG) <http://www.tdag.org.uk/about-tdag.html>. The tree planting strategy is set out in **Appendix B**.

- 3.17. Designs for the main landscaping opportunity areas were considered at the recent LLF workshop. The designs are set out in **Appendix B** alongside the landscape strategy for Milton Road.

Cost Benefit.

- 3.18. The consultants WSP have prepared a cost benefit analysis of the scheme which has indicated a benefit to cost ratio (BCR) in the range of 2.3 to 4.2
- 3.19. The current estimated cost for the project remains on track to be delivered within its overall budget of £23M as reported to the July Executive Board meeting.

4. Next Steps and Milestones

- 4.1. Subject to the decision made by the Executive Board, officers plan to follow the broad programme set out below:

April 2019	Commence Detailed Design
August 2019	Appoint Contractor (packaged with Histon Road)
January 2020	Detailed Design Complete
March 2020	Executive Board decision to commence construction
April 2020	Commence construction
Winter 2021	Scheme Complete – this is the subject of further timetabling work

List of Appendices

Appendix A	Final Technical Design Layout and Key Features
Appendix B	Landscaping Strategy

Background Papers

Title	Link
Milton Road Histon Road Draft Stage 1 Report 25.09.15	https://citydeal-live.storage.googleapis.com/upload/www.greatercambridge.org.uk/transport/transport-projects/Milton_Road_Histon_Road_Draft_Stage_1_Report_25.09.15.pdf
Executive Board agenda and minutes November 2015	http://scamsb.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6537&Ver=4
Executive Board agenda and minutes June 2016	http://scamsb.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6632&Ver=4
Executive Board agenda and minutes July 2017	http://scamsb.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6856&Ver=4
Executive Board agenda and minutes July 2018	http://scamsb.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6856&Ver=4
2018 Consultation Analysis Report	(To follow)