

# Appendix 2

## Waterbeach Greenway Review



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October 2016

A report for

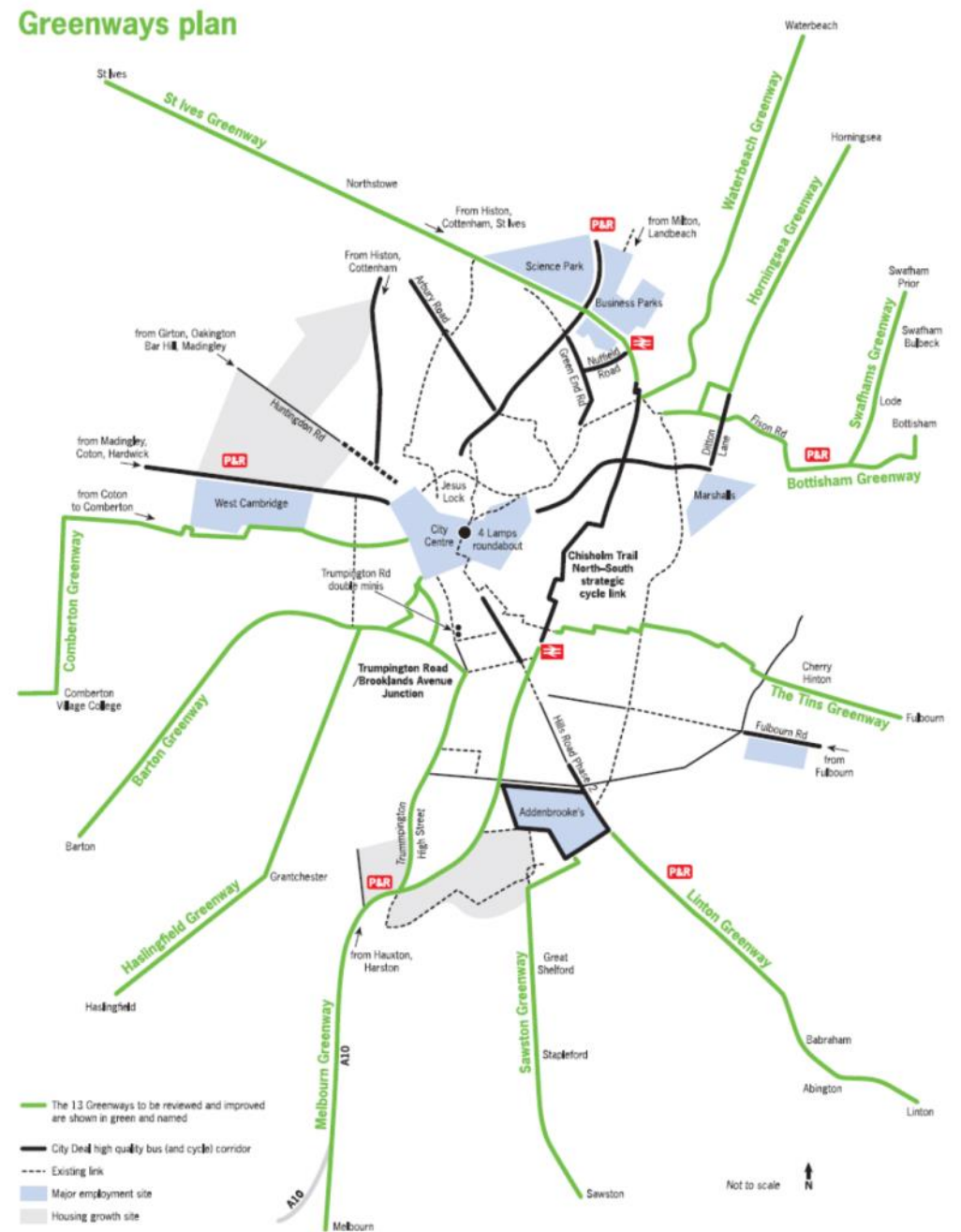


Cambridgeshire  
County Council

# Introduction

This report is based on fieldwork carried out in 2016 to review the Greenway network around Cambridge as shown here.

An overview of the Greenways is covered in the Cambridge Area Greenways Review Main Report with each Greenway covered in detail in an Appendix.



## Waterbeach Greenway

There is an existing Waterbeach Greenway which follows the River Cam from Fen Road to the Bridge Inn and then continues to Waterbeach Station. This is a delightful route used by commuters, those on leisure trips and those following the rowing along this popular stretch of river.

The existing path is generally below the expected width of a Greenway and the surface has deteriorated significantly over the years since it was built. In addition the final link into Waterbeach is difficult.

If Waterbeach expands significantly as has been proposed as part of the South Cambridgeshire Local Plan 2014 Submission there will be great demands on the Greenway and there is also likely to be a demand for a more direct route than the existing route along the river. With the population living west of the railway a new route that does not involve crossing the railway could be a good option.

The three main options investigated have been:

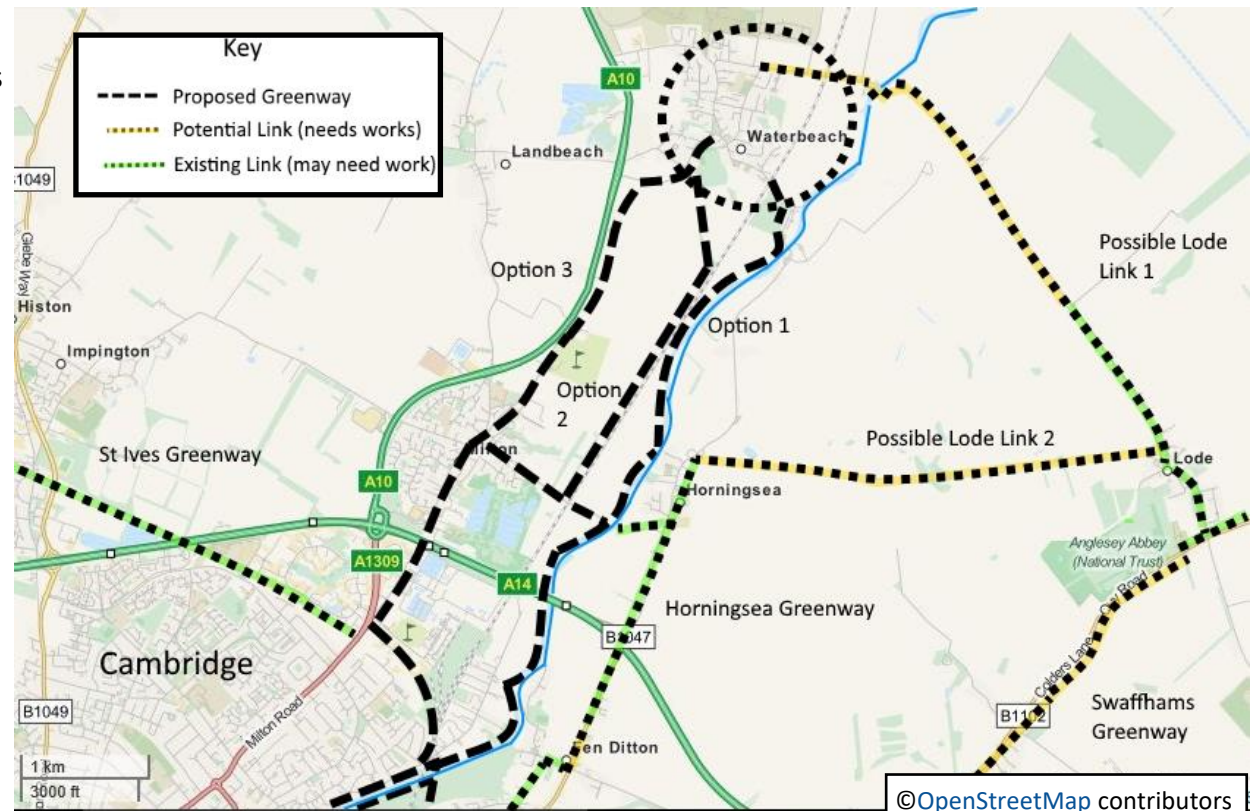
**Option 1** — Improvements to the existing Greenway

**Option 2** — A new route following the railway line, approximately on an alignment that was due to be delivered as part of Cambridge Rowing Lake plans.

**Option 3** — A new route following the A10 corridor but set away from the road.

A number of options in Waterbeach have been explored as well as links with the Horingsea, Swaffhams and St Ives Greenways.

Due to the interest in this corridor it is possible that there will be changes in priorities and this report will need to be reviewed regularly, to ensure that it fits in with the latest position.



Plan showing the alignment of options investigated for the Waterbeach Greenway and links



View of the existing Greenway

## The case for Works

Waterbeach is approximately 8km / 5 miles from central Cambridge and even closer to major employment sites like the Science Park. It is on a busy and congested road corridor, so there is a strong case for investing in good alternatives to the car, particularly given the likely increase in population expected in Waterbeach as it grows. Waterbeach Business Park is an important employment area and is seeking to grow so access to Waterbeach is also important.



View of High Street, Milton

## Trip Generators and the focus of the Study

The existing Waterbeach Greenway (towpath route) currently connects the area near Waterbeach Station with an important location in Cambridge from where there are good connections across the City. The Greenway bypasses Milton, although it has connections with the village. The start of the Greenway in Cambridge means that it should link well with the Chisholm Trail and the St Ives Greenway as well as Cambridge North Station.

Key destinations that have been considered are:

- Chesterton and Stourbridge Common in Cambridge.
- Cambridge North Station
- Employment, education and residential areas near Cambridge Science Park
- Milton
- Milton Park & Ride site
- The River Cam
- Waterbeach Station
- Waterbeach
- Links to Horningsea and Lode

With the predicted growth of Waterbeach and potential relocation of Waterbeach Station there will be a need for detailed work on links with the wider area including the new developments as well as Waterbeach Business Park and Denny Abbey as well as Stretham, Ely, Landbeach and Cottenham.

## Summary

It is not possible to find one individual route that would link all of the potential destinations in a direct attractive manner, due to the significant barrier created by the railway line, so there is a case for more than one route.

### Option 1

The existing Greenway follows the towpath and is generally 1.8m wide from Fen Road/Water Street, Cambridge to Baits Bite Lock. From Fen Road, Milton to Waterbeach the path width varies between 1.2m and 1.5m. The path surface is believed to be crushed limestone and it has deteriorated with a large number of low spots meaning that it is suffering water damage. The Greenway was visited on a wet day and puddles were numerous — see photo below with puddles marked



### Option 1 (continued)

In order to bring the existing Greenway up to standard it will need widening to at least 2m and resurfacing, to provide a better all weather surface. If a blacktop surface is considered inappropriate a surface dressing could be applied. This will increase the cost and give a poorer riding surface but may be considered more appropriate. Between Fen Road, Milton and Waterbeach a new alignment is likely to be necessary in places to achieve the required width. This will depend on landowner's agreement.



*Tar spray and chippings were added to a sealed blacktop surface on this path near Lode.*

## Option 2

This alignment has not been fully surveyed on the ground but the ends have been examined and the potential alignment is clearly visible from the train and it looks achievable with landowner and planning support. The route would need a completely new path and the obvious alignment would be to follow Car Dyke from Cambridge Road, Waterbeach to the railway and then follow the railway line to Fen Road Milton, which could either link back to a widened and resurfaced towpath (see Option 1) or could link to Milton, including Milton Country Park. There should be space for a 3m wide sealed path from Waterbeach to Milton at least.

## Option 3

This alignment is closest to the ideal desire line and connects well with Milton and the most populated parts of Waterbeach. There is however already a path that follows the A10 which is not at all pleasant, being narrow and close to busy traffic (see below). A route that ran parallel, but away from the road would be far more attractive and would work well, but is subject to landowner's agreement. Highways work is also needed through Milton.



Cambridge Area Greenways Review (V5) Waterbeach Greenway — Appendix 2

October 2016

## Links

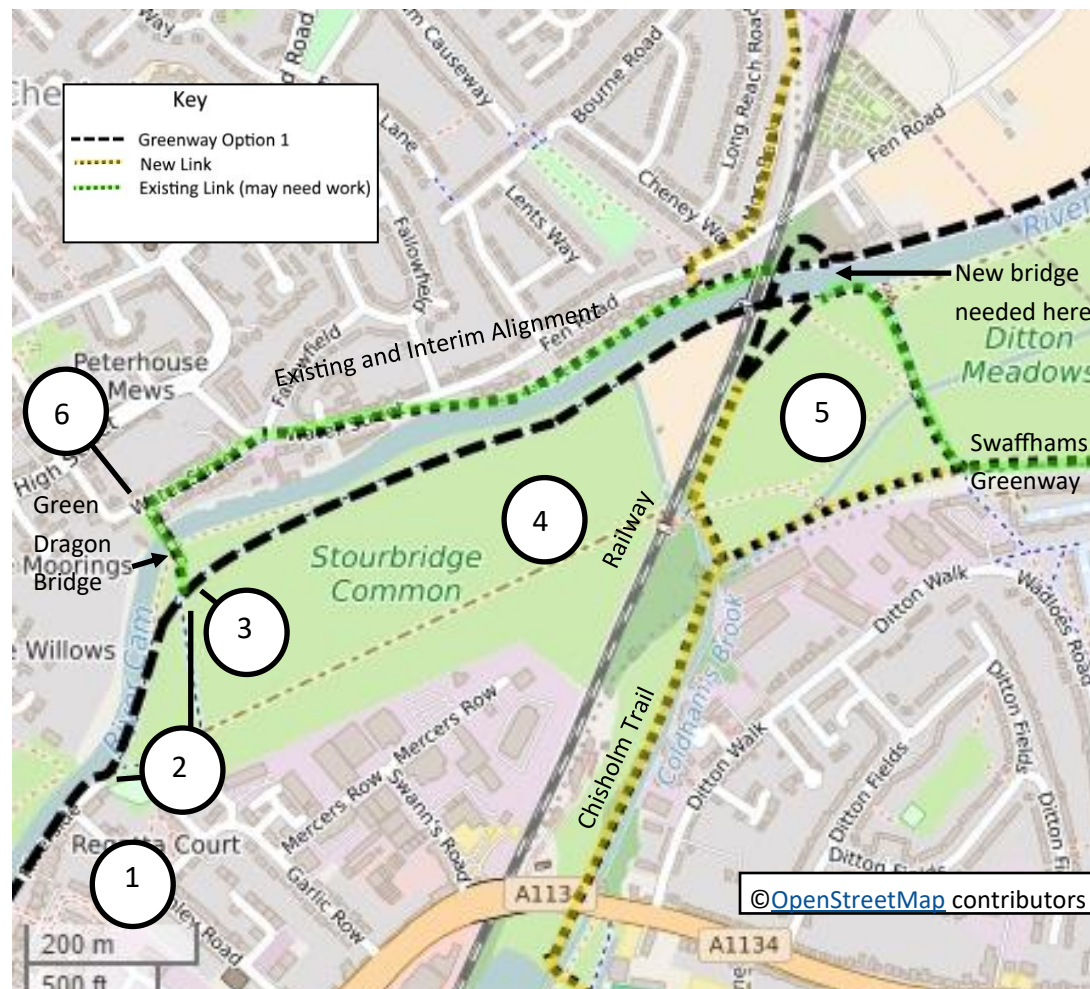
Waterbeach generally lies to the west of the railway but there are a number of interesting links to the east, so good connections across the railway are needed, which are likely to involve existing level crossings. Station Road itself is quite a challenging environment with the road being very busy and large numbers of parked cars. It is important that there is a good route to Waterbeach station and this report looks at options for this. New routes will be needed to link with new developments as Waterbeach grows, as well as links with Waterbeach Business Park and Denny Abbey, Stretham, Ely, Landbeach and Cottenham.

A link with Horningsea is examined as part of this report and this is likely to involve a new bridge over the river, which will be expensive. A link between Horningsea and Lode is covered in the Horningsea Greenway report. A direct link from Waterbeach to Lode via Bottisham Lock has been a long standing ambition, but needs landowner's agreement.

## Route Details and Maps

### • Waterbeach Greenway Option 1 Map 1.1

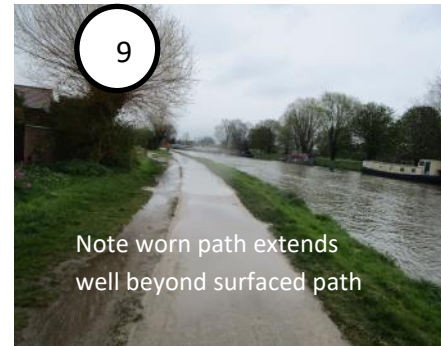
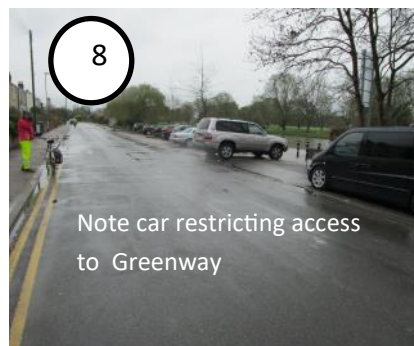
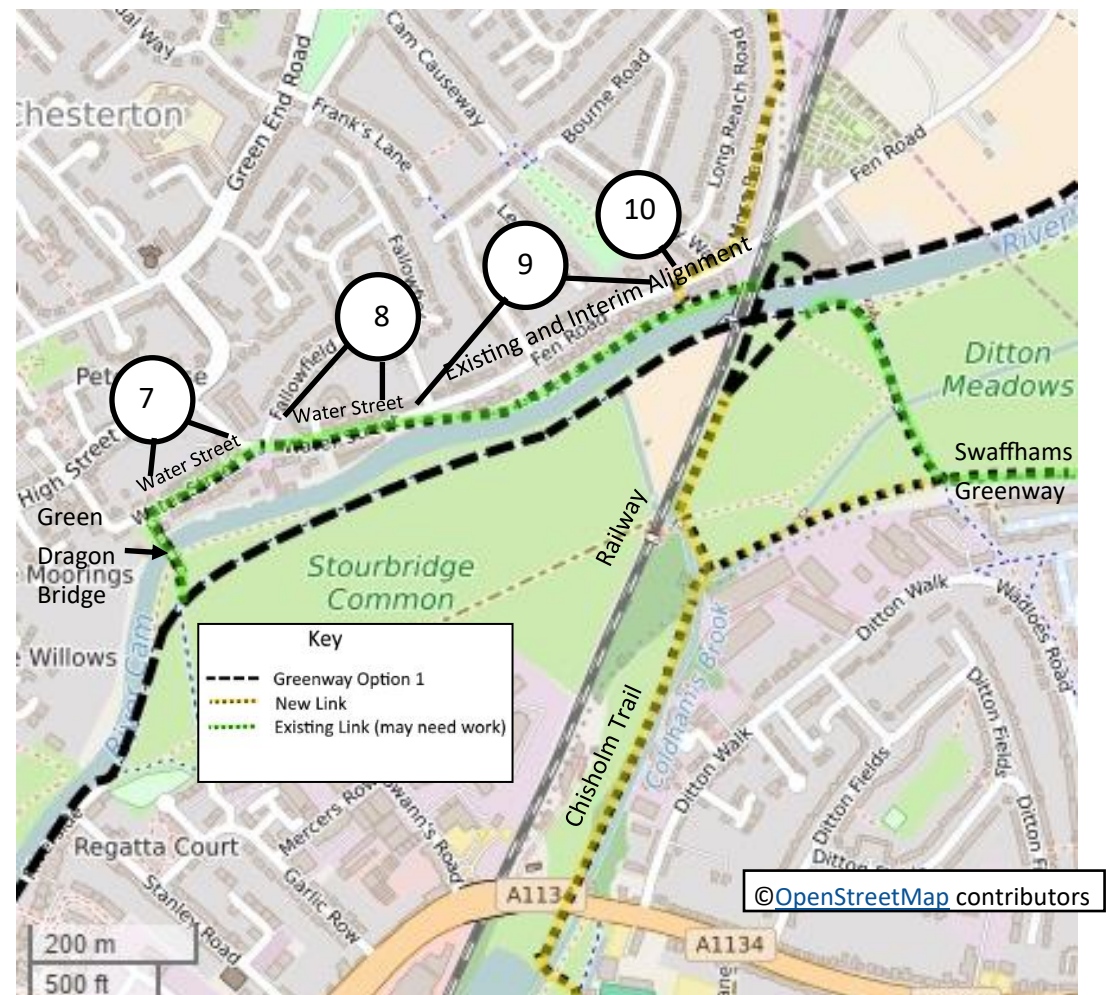
1. Route along Riverside — quiet road. See Swaffhams Greenway report.
2. Route on Stourbridge Common. At entrance to Common there is some sign duplication. *A review of signage would be beneficial and reduce clutter.* The path between Riverside and the existing Green Dragon bridge is busy and at only 2.5m is narrow for the current usage. *Ideally the path should be widened to 3.5 m or 4m over this stretch.*
3. Route junction point. There is some duplication of signage and it will need changing when Cambridge North Station opens. *A review of signage would be beneficial and reduce clutter.*
4. Existing Jubilee Cycleway — recommended alignment once new river bridge by railway is complete. See Swaffhams Greenway report.
5. Chisholm Trail and new bridge over river subject to planning and other approvals.
6. Green Dragon Bridge. At 2.6m this bridge is narrow, but adequate. No changes recommended at present, but when the new river bridge besides the railway is completed re-route to that alignment. Interim Route via Water Street, Fen Road and existing path



Cambridge Area Greenways Review (V5) Waterbeach Greenway — Appendix 2

- **Waterbeach Greenway Option 1 Map 1.2**

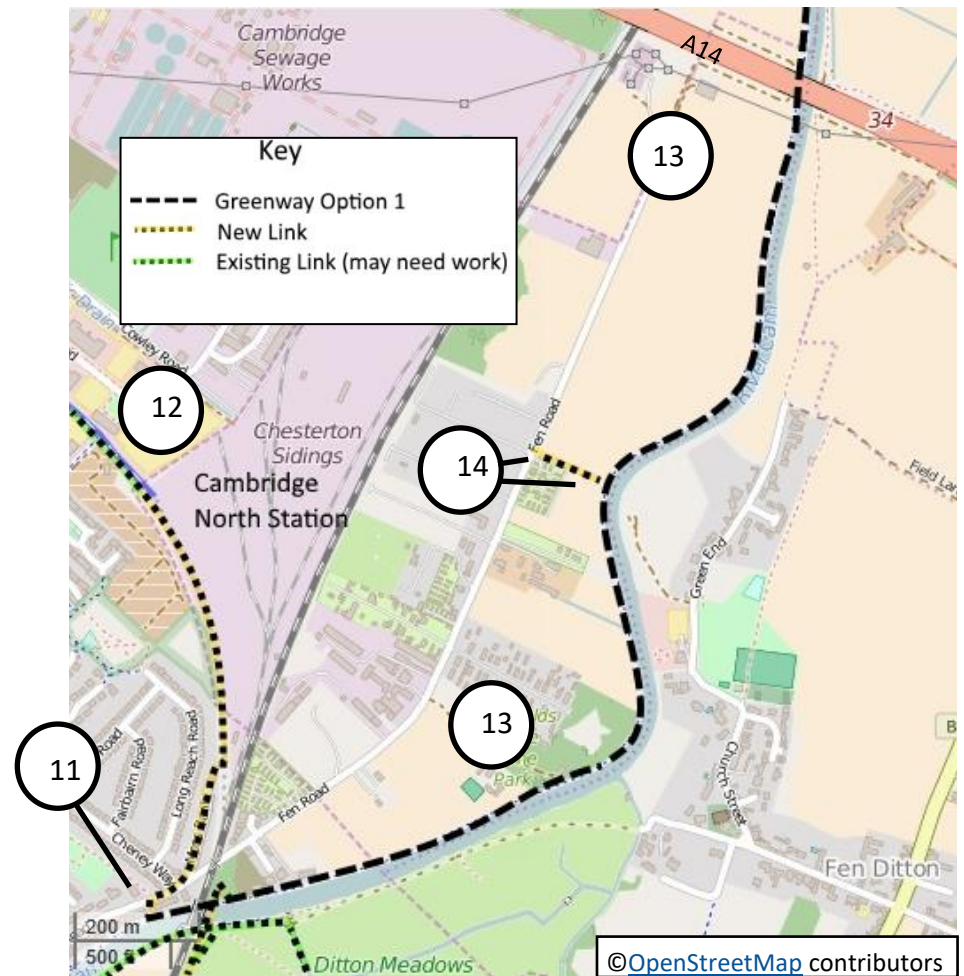
7. Route along Water Street quiet road. The junction between the bridge and Water Street is not clear. *Add a raised table at the interface between Green Dragon Bridge and Water Street.*
8. Route along Water Street/Fen Road. This wide road is already traffic calmed and has some faded cycle lanes marked on, but these are close to parked cars and not ideal. A segregated cycleway is planned. *Complete new facility at earliest opportunity.* There are two links to the Greenway at both sides of the parking by Fallowfield. *Add raised tables at both ends of car parking and add additional bollards to prevent parking on footways near here.*
9. Existing riverside Greenway. Generally the path is 1.8m wide and in poor condition. At one point the path splits. The land adjoining the path is heavily worn. *Widen path to 2.5m—3m over this length as far as Chisholm Trail if possible and resurface. Proposed surface asphalt with tar spray and chippings added.*
10. Important link to Fen Road, Cambridge North Station and St Ives Greenway. Planned as part of Chisholm Trail works.





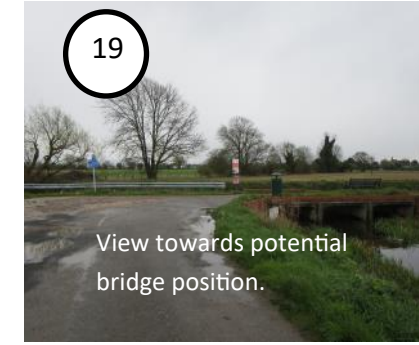
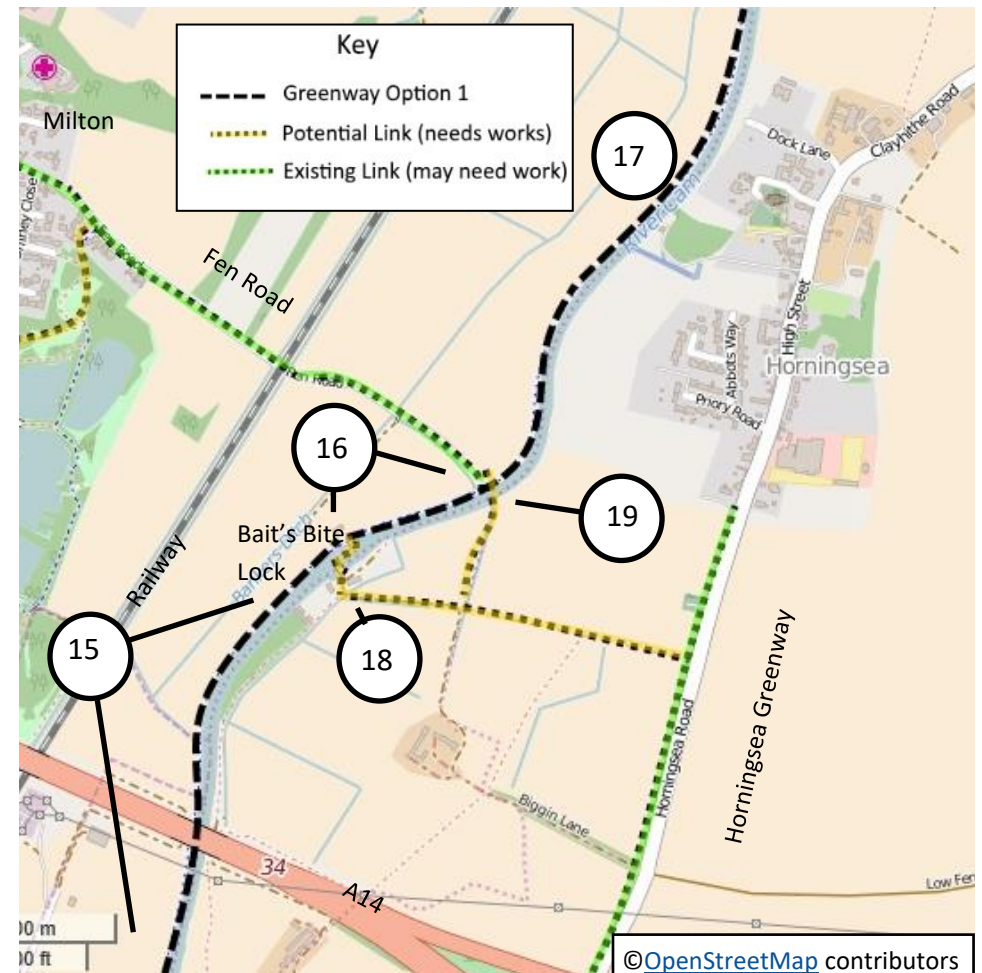
- **Waterbeach Greenway Option 1 Map 2**

11. Link to Fen Road and Cambridge North Station. See Chisholm Trail report. Station due to open in 2017.
12. Existing link to Milton Road and St Ives Greenway. Already built but not open for use yet.
13. Existing riverside greenway. Generally the path is 1.8m wide and in poor condition. *Widen path to 2m over this length. Proposed surface asphalt with tar spray and chippings surface dressing added.* Route continues under A14. *Potential seating location near A14.*
14. Link to Fen Road — unsurfaced and in poor condition including large amounts of rubbish. This is the only link for residents of Fen Road. *Suggest surface to 2m minimum. Some barriers are likely to need to be retained in order to restrict vehicular access.*

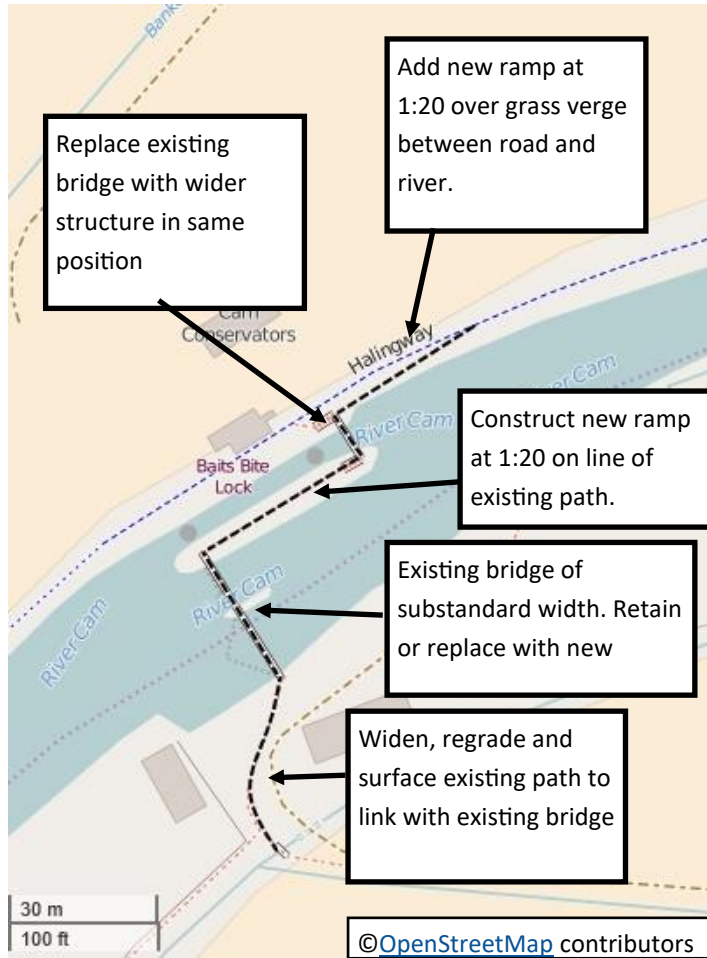


- **Waterbeach Greenway Option 1 Map 3.1**

- Existing riverside greenway. Generally the path is 1.8m wide and in poor condition until it reaches the car park area by Baits Bite Lock. *Widen path to 2m to car park and resurface through car park. Proposed surface asphalt with tar spray and chippings surface dressing added.*
- Road to Baits Bite Lock approx. 2.7m wide.
- Over this whole length from Fen Road to Waterbeach the path width varies from 1.1m to 1.6m. It would be difficult to widen the path to 2m due to the proximity of trees. If a new path was constructed away from the riverbank behind trees that could be constructed to a good width 2.5m minimum and with a good surface. Alternatively widen the path where possible and resurface in a similar manner to 15. If Option 3 proceeds this could be a reasonable option but without Option 3 a new alignment may be needed. *Resurface or construct new path.*
- Baits Bite Lock is a useful link. *See following page.*
- Potential new bridge. Preferred to 18. *See following page.*

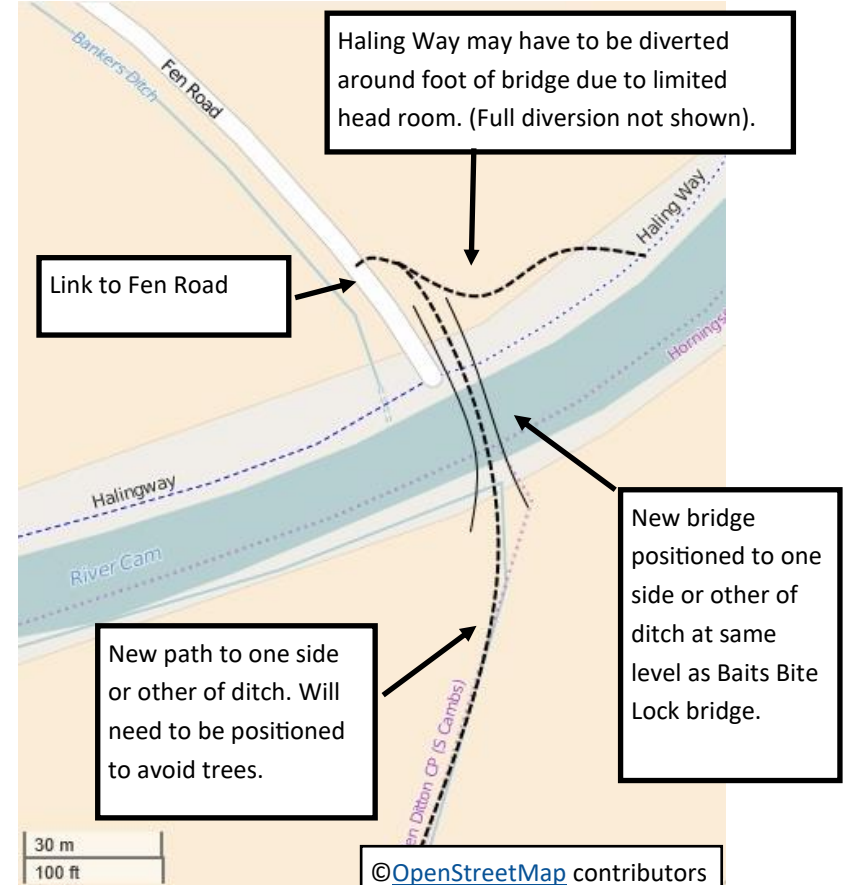


Baits Bite Lock



Both options are subject to landowner's, planning and EA agreement.

New bridge by Fen Road

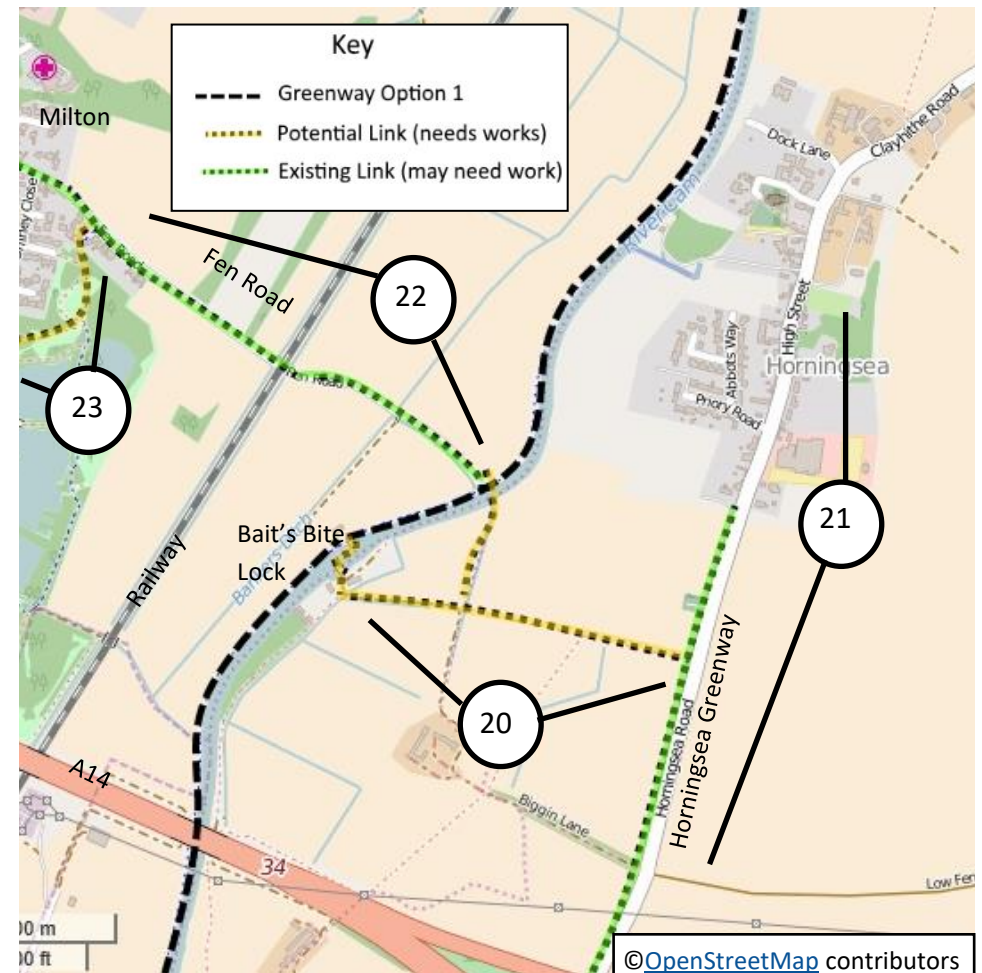


Baits Bite Lock is already used by cyclists and walkers travelling to/from the Horningsea direction. It is narrow and has steps, but is the only river crossing for some way so is popular. To provide a crossing that has no steps and is to a standard suitable for cyclists and the disabled would require major works as detailed above. A new bridge as shown right would in many ways be the easier option.

A new alignment and bridge is in many ways simpler than trying to adapt Baits Bite Lock crossing. Environment Agency (EA) and landowner requirements are likely to be demanding. A new bridge offers potential for horse usage, subject to landowner's agreement.

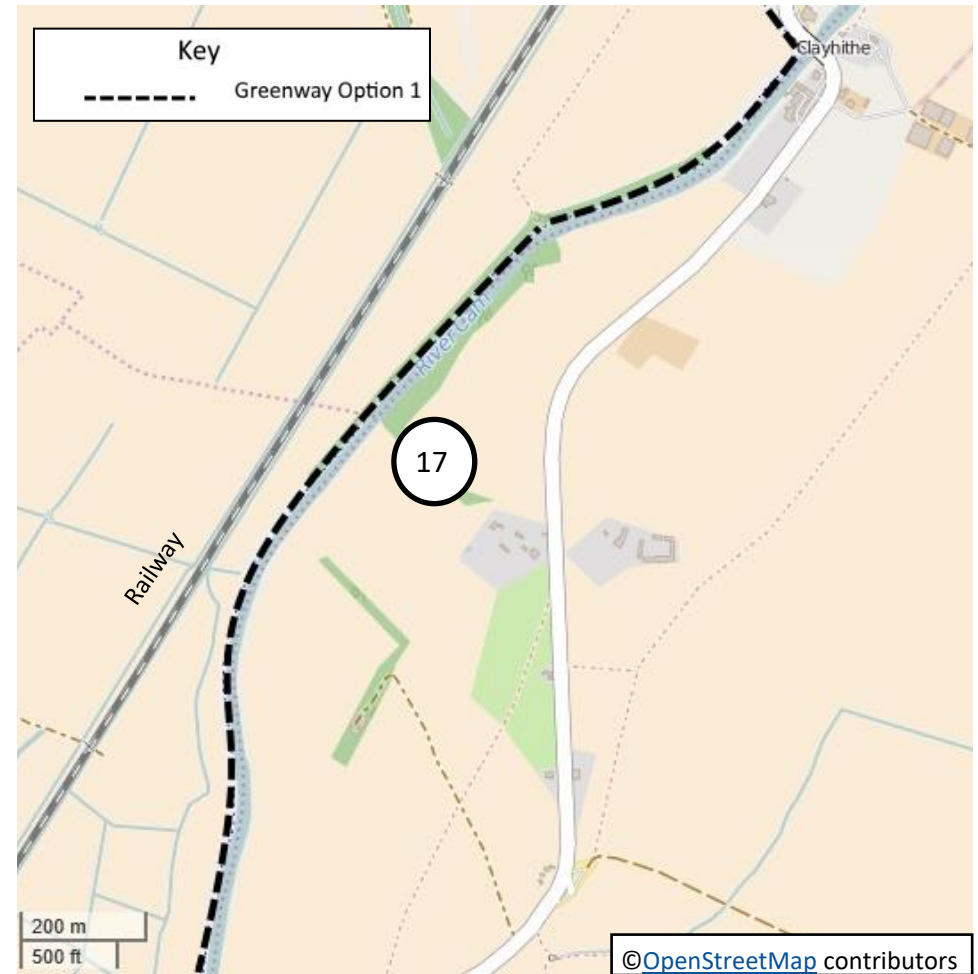
- **Waterbeach Greenway Option 1 Map 3.2**

20. Existing path to Horningsea Road. This is well used but unsurfaced and would require surfacing to at least 2m. *Surface path along existing field edge alignment.* Subject to landowner's agreement.
21. Horningsea Greenway.
22. Fen Road is an important link to Milton, the Science Park and the St Ives Greenway.
23. Milton Country Park. A route through the park would be more direct and attractive than an on-road route, but requires a good surface, to be really useful. A sealed surface to minimum 2.5m would provide a useful and attractive link with the Jane Coston Bridge over the A14.

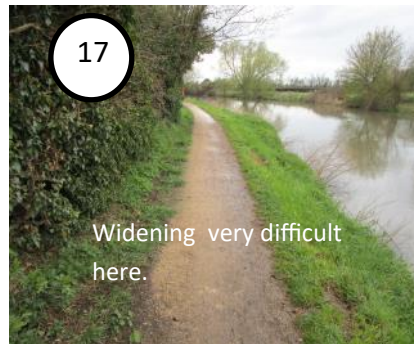


- **Waterbeach Greenway Option 1 Map 4**

17. Over this whole length from Fen Road to Waterbeach the path width varies from 1.1 m to 1.6m . It would be difficult to widen the path to 2m due to the proximity of trees. If a new path was constructed away from the riverbank behind trees that could be constructed to a good width 2.5m min and a good surface. Alternatively widen the path where possible and resurface in a similar manner to 15. If Option 3 proceeds this could be a reasonable option but without Option 3 a new alignment may be needed. *Resurface or construct new path.*



Widening would be possible here.



Widening very difficult here.



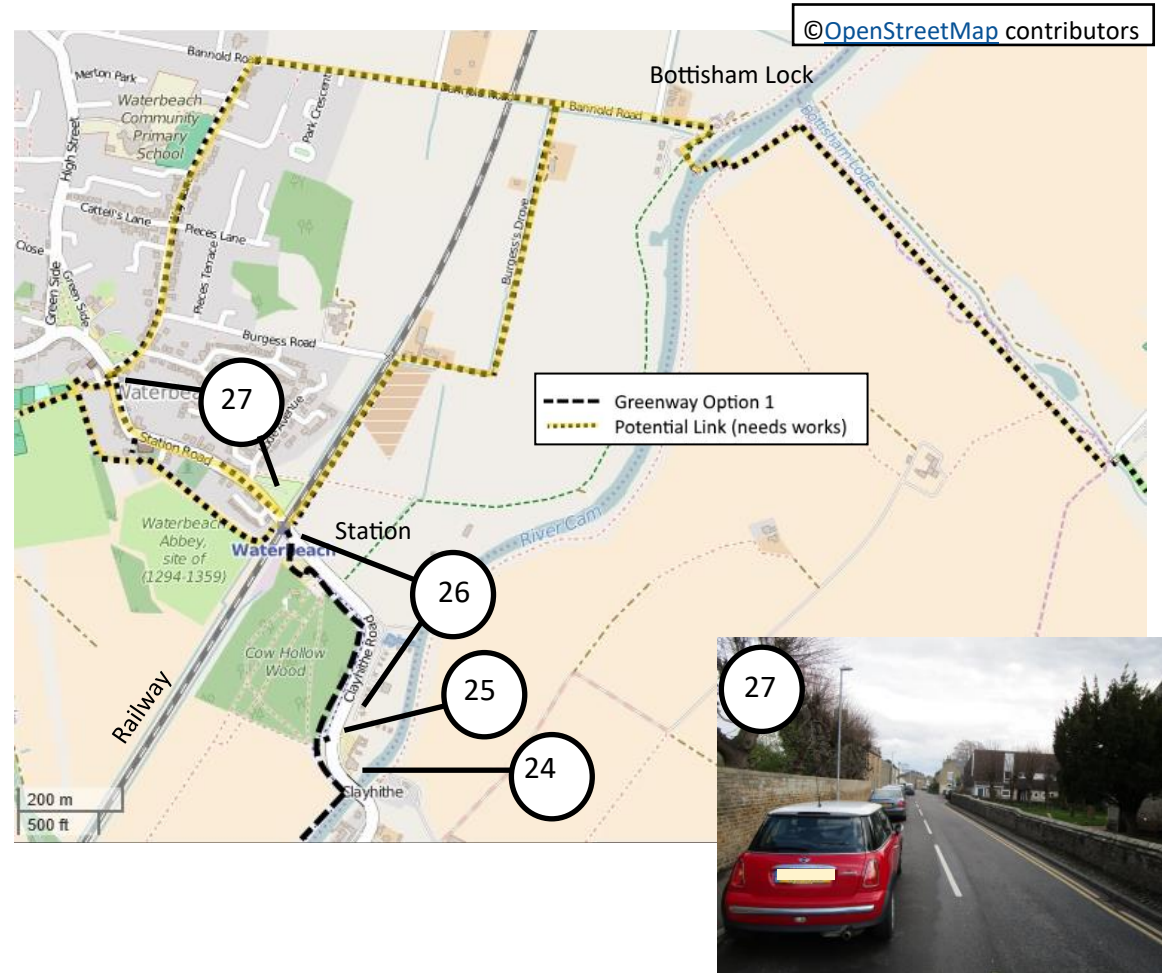
Note field edge space available behind tree subject to landowner's agreement



Along much of the route there is a farm access track, which could be used as a path with a new farm access track adjacent.

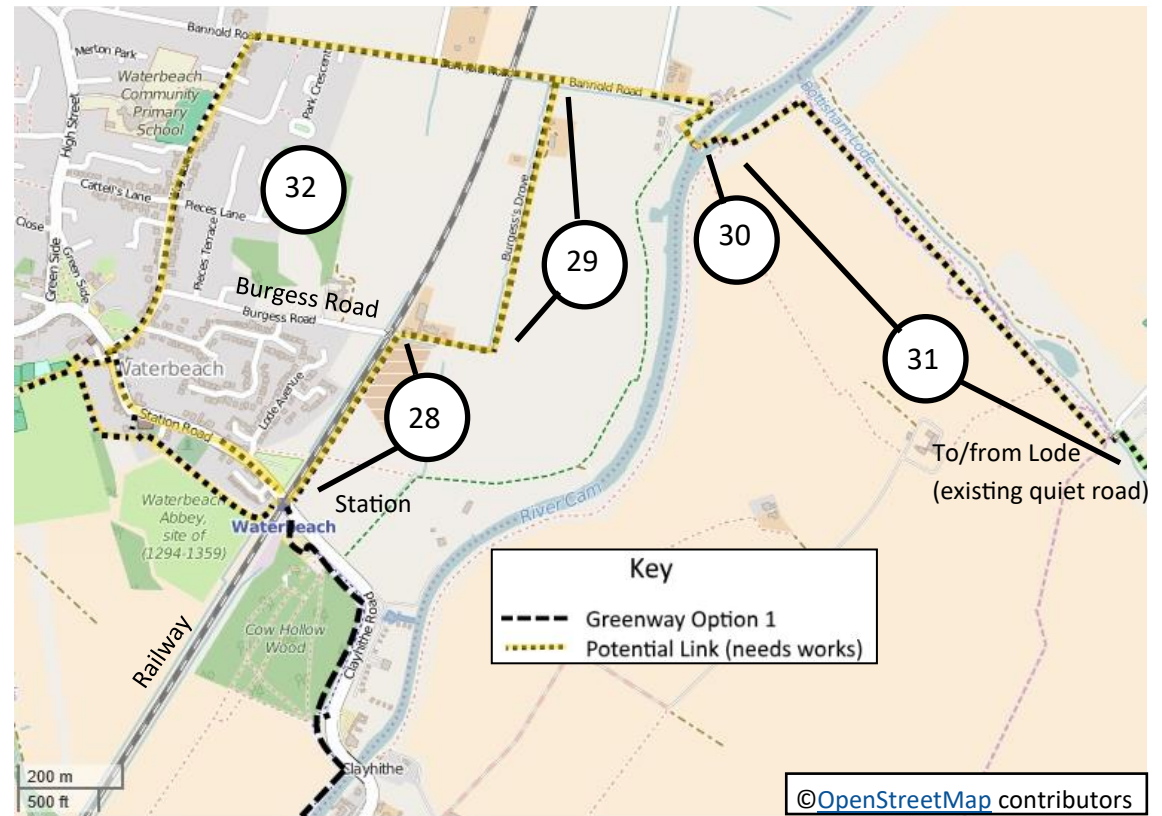
- **Waterbeach Greenway Option 1 Map 5.1**

24. Ramp up to Clayhithe Road. *Surface existing path.*
25. Recommended link with Clayhithe Road.
26. Path along grassed strip below road. The path varies in width from 1m upwards. *Widen path to 2m and surface path. Remove redundant gate by entrance to car park.* The existing route ceases near the level crossing. There is a lack of space here and there are many constraints working near level crossings. *Construct shared use footway from car park to level crossing, re-allocating road space as needed.*
27. Station Road is busy and with lots of parked cars is difficult to cycle along, but speeds are slow. There is no easy solution. An alternative route to the south-west of the road appears possible and could be a very pleasant route but has only been partially surveyed and given that it is further than the road route and may be hard to access there are doubts about its value.



- **Waterbeach Greenway Option 1 Map 5.2**

28. Potential route following Public footpath would need surfacing, regrading and barriers changing. There is a potentially useful link with Burgess Road, but Network Rail are unlikely to support increased usage of this level crossing. As the population in Waterbeach grows 28 and 29 could be a very valuable alignment particularly since it avoids Station Road.
29. Burgess Drove is partially surfaced but would need surfacing to road standard if used. (See comments above).
30. Bottisham Lock could be adapted more easily than Bait's Bite Lock. If a bridge at 19 goes ahead together with a good Horningsea–Lode link this would be low priority. See sketch on following page.
31. A surfaced link is needed to any improved river crossing. The suggested alignment would be set away from the public footpath and is subject to landowner's agreement.
32. *Route through Waterbeach should be designated 20mph.*



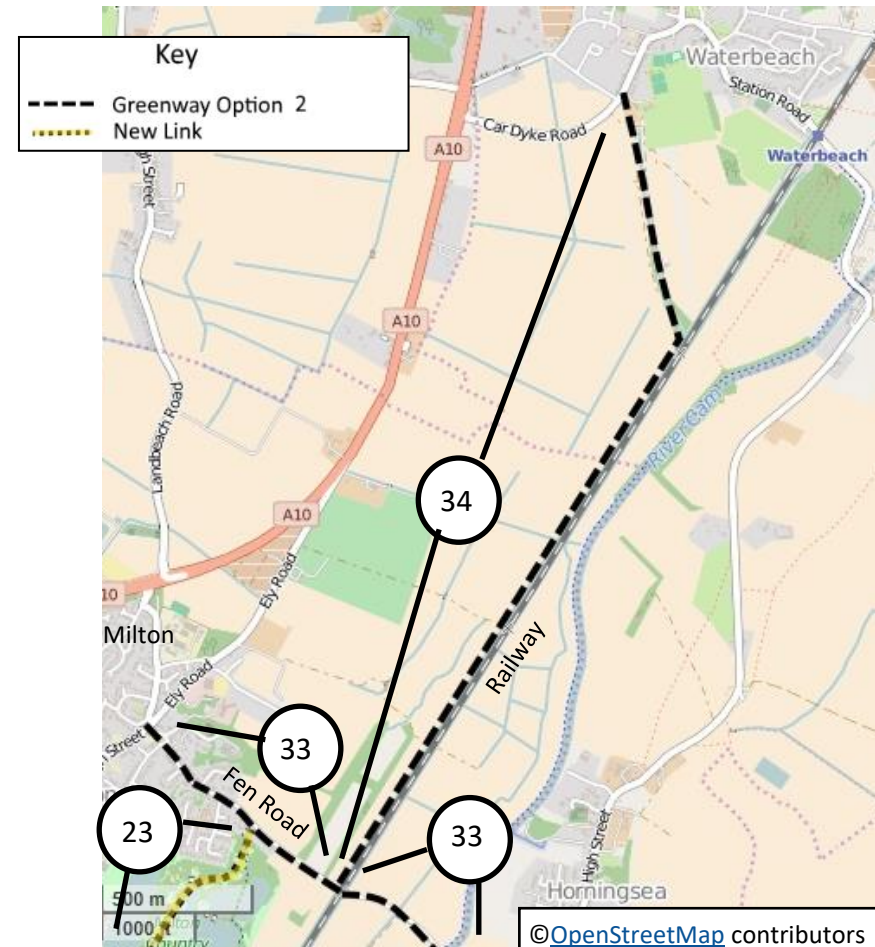
**Bottisham Lock** could be adapted more easily than Bait's Bite Lock, as shown below. However the merits of doing this are dependent on the onward link and alternatives. If a bridge near Bait's Bite Lock goes ahead together with a good Horningsea-Lode link that is likely to be a better option than adapting Bottisham Lock.





- **Waterbeach Greenway Option 2 Map 1**

- 23. Milton Country Park. A route through the park would be more direct and attractive than an on-road route, but requires a good surface, to be really useful. A sealed surface to minimum 2.5m would provide a useful and attractive link with the Jane Coston Bridge over the A14.
- 33. Route along Fen Road provides important link with Milton and Milton Country Park and potential river crossing.
- 34. Route besides railway only surveyed from the train. A route along a similar alignment has been proposed as part of Cambridge Sports Lake plans. The current state of plans is unknown but the Trust was working to secure agreements from landowners. Ideally for a new path a 6-10m strip of land would be agreed for a landscaped greenway following the railway. The route can follow the railway boundary and would need to cross ditches and pass around a few trees and the house on Fen Road.



This option has potential for horse usage and subject to agreement could possibly be dedicated as a bridleway.



The Centre of Waterbeach

- **Waterbeach Greenway Option 2 Map 2**

- 35. Car Dyke is a Roman Canal and a protected corridor so any works will need to be agreed with planning and heritage teams. There are wide strips of land adjoining the former canal and a number of paths so there are a lot of options on both sides of the waterway.
- 36. Link with Cambridge Road via Recreation Ground access road.
- 37. Cambridge Road is the obvious link into the centre of Waterbeach but an option via the Recreation Ground is possible. These are considered as part of Option 3.

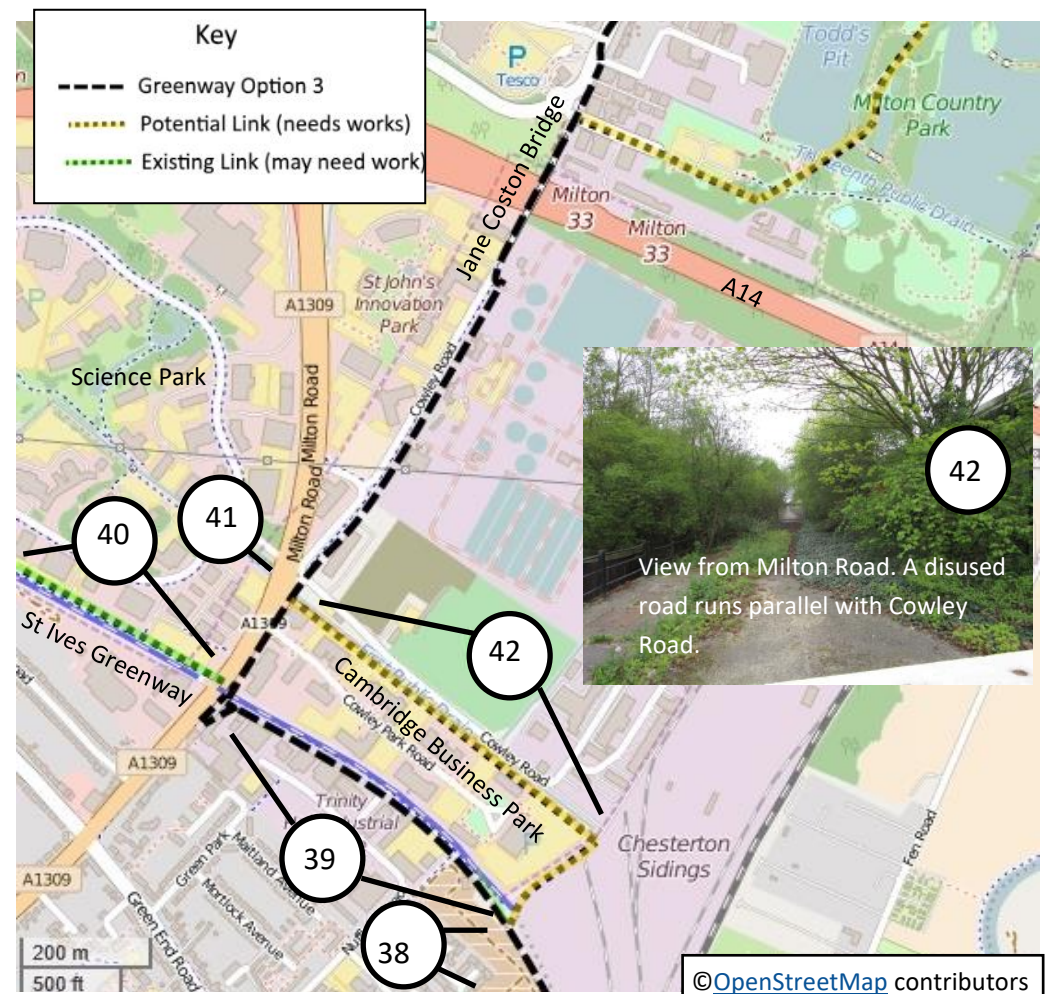
*View looking north on eastern side of Car Dyke. An access track runs part of the way along the route accessing stables and other facilities.*

*View looking south on western side of Car Dyke. A well worn path can be seen.*



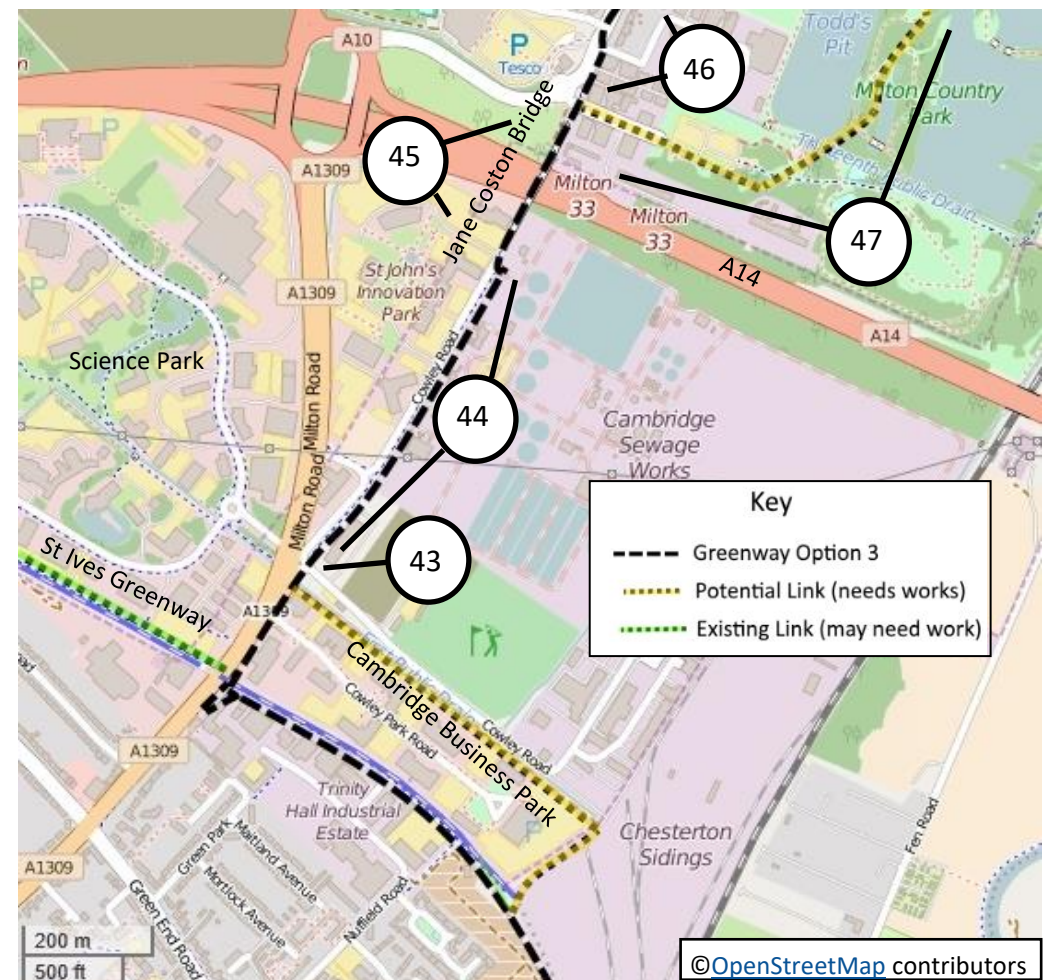
- **Waterbeach Greenway Option 3 Map 1.1**

38. Route past Cambridge North Station leading to new bridge over River Cam and links with other Greenways. To be delivered as part of Chisholm Trail and Station proposals.
39. Existing path built but not yet open. (3.8m wide) The path continues towards Milton after turning away from Milton at Milton Road then looping back and under the busway.
40. St Ives Greenway. This links with 39 using an existing toucan crossing of Milton Road.
41. Existing toucan crossing of Cambridge Business Park entrance.
42. For those going between Milton/the Science Park and Cambridge North Station a route following this approximate alignment would be better than 39 and 41 because it avoids the loop arrangement at Milton Road and the crossing of the Business Park entrance. There is an existing track for most of the route. Details within the station area would need more work. *This important link needs works and is being planned as part of the Station scheme.*



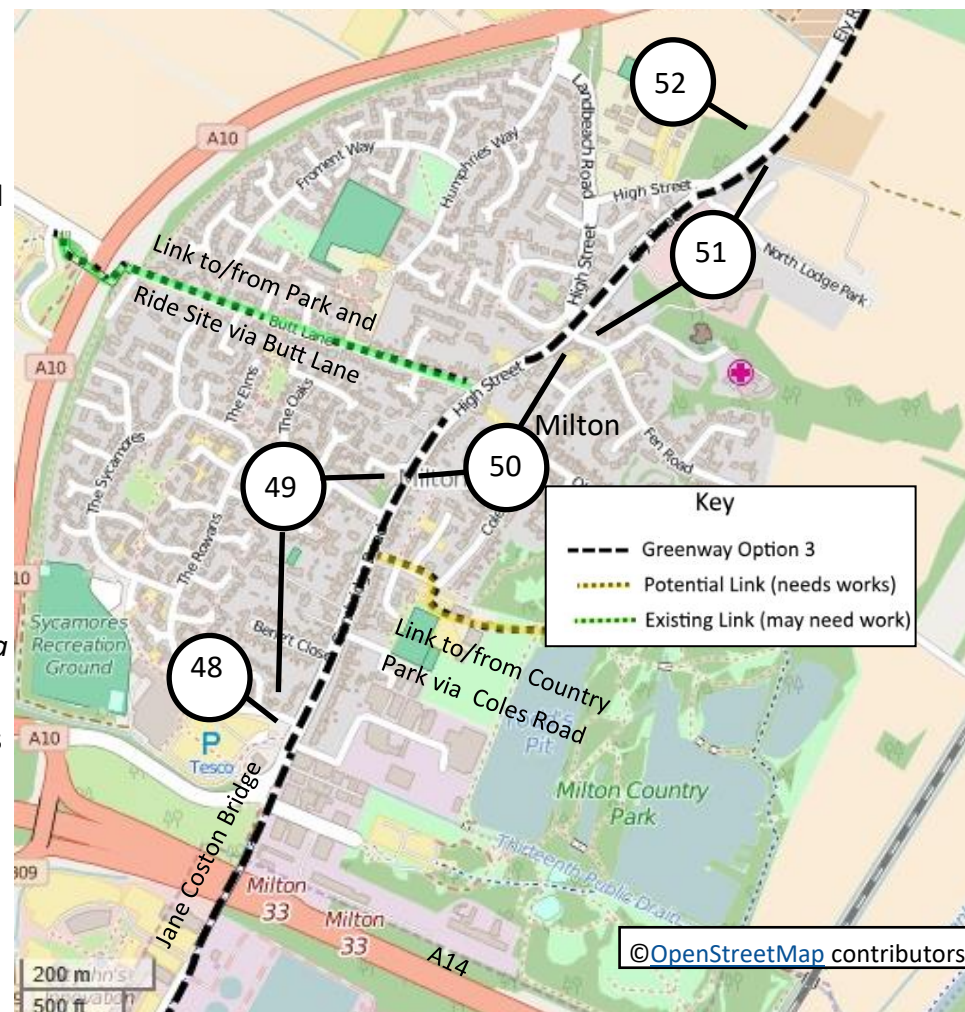
- **Waterbeach Greenway Option 3 Map 1.2**

43. Existing toucan crossing of Cowley Road. Space is tight on the northern side. *Consider re-allocation of road space to increase the space available and coherence of walking and cycling routes. Remove guard railing if possible.*
44. Segregated route adjacent to Cowley Road. Space is restricted and there are large numbers of parked cars. *If restrictions on street parking are introduced this would be a good opportunity to consider re-allocation of road space to improve provision along this section.*
45. Jane Coston Bridge over A14. A very good facility.
46. The bridge links well initially with Milton, but then provision becomes very variable.
47. Milton Country Park is a valuable local asset. As a potential route for commuters it could offer a good route to Fen Road, but it is let down by the quality of the paths and the access at this point, which passes through an industrial estate with a high presence of HGVs. For cyclists and pedestrians access to the Country Park via Coles Road Recreation Ground may be a better option. (See Option 3 Map 2).



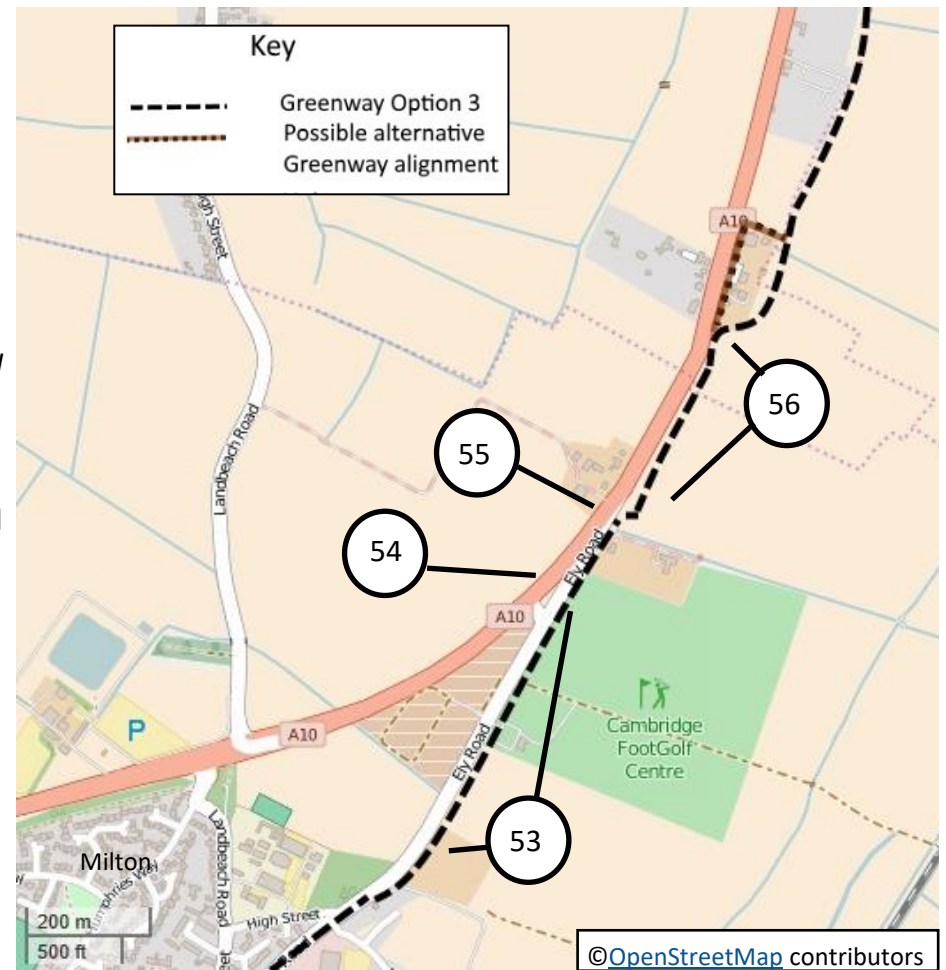
- **Waterbeach Greenway Option 3 Map 2**

48. Add Raised Table at Winship Road junction for link between on road and of road facility.
49. Through Milton the best option for cyclists is likely to be on the road and the road should be designated 20mph. Over this length cycle lanes can be added, ideally as the Hills Road and Huntingdon Road hybrid cycle lanes installed in 2015/16, but other options will need to be considered and car parking will need to be addressed. Add cycle lanes for continuous route.
50. Over the narrower part of the High Street a shared space arrangement may be the best option. Review arrangements in High Street for safe, continuous route.
51. As the road widens out there is space for cycle lanes. Add cycle lanes in a similar manner to 49. Assuming a high quality on-road route is achieved remove off-road provision along this length. Existing off-road provision is of inconsistent width and provision at side road crossing is not as good as has been achieved in Cambridge recently.
52. Create new link between on-road and off-road facilities. The best point may be at the existing road narrowing.



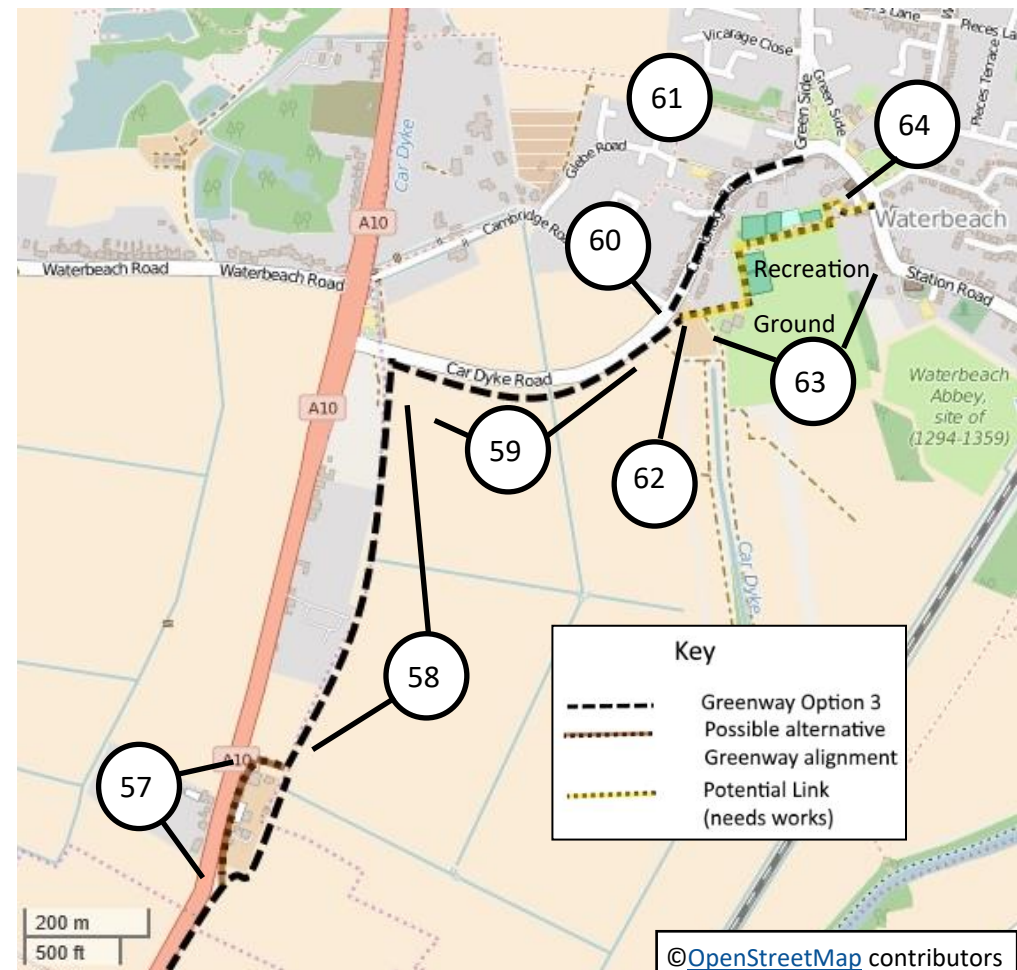
- **Waterbeach Greenway Option 3 Map 3**

53. *Construct shared use facility to east of Ely Road. There is an existing path 1.4m wide with no segregation from the carriageway. It is recommended that a new path 3m wide with minimum 0.5m segregation from the carriageway is provided. This will need to cross the entrance to the Foot Golf site in a well designed arrangement. It may be possible to construct a new path behind the hedge line, which could be a good route, but for a relatively quiet road like this a highway solution should be possible. Consider options for reallocation of road space including possibly making the road one-way to allow creation of good quality path.*
54. *Short length of route in A10 verge. May need to re-allocate space from slip road to get good width.*
55. *Re-organise field entrance gate to get access to land behind hedge, subject to landowner's agreement.*
56. *Construct field edge path 3m wide minimum subject to landowner's agreement. For this route to be successful it needs to be set away from the busy A10 which would not be an attractive environment for cycling or walking.*



- **Waterbeach Greenway Option 3 Map 4**

- 57. This part of the route may be difficult due to the proximity of farm buildings and the land usage. If a route behind these properties is not possible it appears that there is highway space for a road side route but the highway boundary is unclear. This should be considered as a last resort and the preferred option is to the east of the properties subject to landowner's agreement. *Construct 3m wide path.*
- 58. *Construct field edge path 3m wide minimum subject to landowner's agreement.*
- 59. Preferred alignment on field edge near Car Dyke Road. As 58.
- 60. *Construct gateway feature and raised table for interface between on-road and off-road facility.*
- 61. *Route through village should be 20mph.*
- 62. A link to the recreation ground would be useful. There is a potential route across scrub behind the bus shelter.
- 63. Route through Recreation Ground unlikely to be suitable for commuter use, unless paths are re-aligned and widened and the entrances altered. Not considered a priority but the existing route may be a useful link for some.
- 64. A new entrance to the Recreation Ground avoiding the approach between sheltered housing is possible. Links to the station are considered with Option 1.



## Recommendations

- Progress Option 3 including:
  - ◇ Improve route through Milton with on road cycle lanes and traffic calming for approximately 1.1 km.
  - ◇ Create new off-carriageway route to north of Milton by re-allocating road space for approximately 600m.
  - ◇ Undertake negotiations with landowners to allow a new route to be constructed to the east of the A10 away from the highway, between the northern edge of Milton and the southern edge of Waterbeach, over a distance of approximately 1800m.
- If possible resurface the existing towpath route. (Option 1)
- Develop proposals and case for a new River Cam bridge to north of Bait's Bite Lock for link with Horningsea Greenway.
- Progress ideas for links with new developments in Waterbeach and links with Waterbeach Business Park and Denny Abbey as well as Stretham, Ely, Landbeach and Cottenham.