Appendix 1

Greenway Standards

Nigel Brigham & Associates
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What is a Greenway?

The Brief for this Review suggested that Greenway routes should have:

- An all weather, hard surface (generally tarmac) of width of at least two metres.
- Where the routes follow roads these should preferably have less than 2,000 motor vehicle movements per day, and preferably be subject to 20mph speed limits.
- Where busier roads are crossed, there should be a suitably safe means of crossing the road.

There is also an expectation that Greenways should be attractive and a pleasant experience for users.

The County Council does not have a strict definition of Greenways and the Brief has generally been used as a minimum, but there are some cases where this review has taken a pragmatic approach:

- Historically some paths were built at 1.8m width (based on a former 6ft standard) and where these paths are coping with existing usage and in good condition widening to 2m is not considered a high priority.
- Where there is a pinchpoint on a route where the width is constrained over a short distance this may be considered acceptable if necessary for the success of the overall route.

Where Greenways follow quiet roads it is possible that no changes are needed, but in villages or towns a 20mph designation may be appropriate. In some cases roads can be formally designated as Quiet Lanes or cycle symbols added to the carriageway surface.

There are many definitions of Greenways and it is not surprising that Cambridgeshire or others do not have to find one single definition for good reasons:

- Greenways are often in sensitive areas and there may occasionally need to be some changes of specification to reflect this.
- Greenways often need private land or need to fit into existing situations where the amount of land available for a path may vary and is unpredictable.
- The requirements for a Greenway will vary greatly from location to location. For instance the 3m wide path besides the busway between Cambridge Station and Trumpington is very busy and congested at times and would benefit from widening, but outside the City a 3m path would be more than adequate.
- Pedestrians, dog walkers, horse-riders, cyclists, wheelchair users and others all have different space requirements and Greenway requirements will vary depending on usage.
- It is very hard to define what makes an attractive Greenway, because this will vary from location to location and is dependent on many factors including views from the Greenway. A good Greenway will be attractive and also vary along its length to provide interest for users.
Various bodies have attempted to define Greenways.

The definition adopted by the European Greenways Association is:

“Greenways are communication routes reserved exclusively for non-motorised journeys, developed in an integrated manner which enhances both the environment and quality of life of the surrounding area. These routes should meet satisfactory standards of width, gradient, and surface condition to ensure that they are both user-friendly and low-risk for users of all abilities. In this respect, canal towpaths and disused railway lines are a highly suitable resource for the development of greenways.” Lille Declaration, 12 September 2000

Sustrans who have built more greenways than any other organisation in the UK describe various kinds of greenways in their guide adding that:

“ The UK has an incomparable inventory of ancient roads, tracks and footpaths, all of which provide an invaluable resource for walking, riding and cycling. Greenways may be thought of as an updating of this network, with high capacity paths for everyday journeys leading from the countryside right to our town centres. “

Cycling UK policy for where there are off-road facilities is:

Traffic-free routes should be provided away from roads, e.g. using parks and open spaces, canal and riversides. These should form direct and convenient connections to the wider road network and to key destinations, and should have good riding surfaces.

Traffic-free routes away from roads should add to, not substitute for, the creation of safe, convenient and pleasant cycling conditions on or adjacent to the road network, so that cyclists have easy access to the full range of destinations that other road users can get to.
Greenways and horses

Pedestrians, cyclists, wheelchair users and horse-riders are often grouped together as vulnerable road users. Whilst all the groups are different they share in common the potential dangers that they face from road traffic. The groups also often have access to Greenways and need to share the space in a way that works well for all users.

All Greenways considered in this review are intended for use by cyclists, pedestrians, including wheelchair users; all generally sharing space with each other. On occasions where the route follows a quiet road there may be opportunities for pedestrians to use a footway while it may be more appropriate for cyclists to use the carriageway. In this situation horse-riders would also have rights to use the public highway. This review focuses on routes for cyclists and pedestrians that go right into Central Cambridge with a strong emphasis on journeys to work, however there are also a number of opportunities to benefit horse-riders and where appropriate these should be taken.

Where a proposed Greenway follows a right of way that already has rights for horse-riders the needs of horse-riders have to be considered carefully including surfacing, widths and heights. For the Greenway to work well as a transport corridor it will need a good hard surface, but where space is available a softer alternative for horse-riders is recommended.

The British Horse Society (BHS) produces detailed guidance on surfacing (Advice on Surfaces for Horses) and it raises important issues about surfacing and points out that:

“The ideal path surface preferred by horses and their riders or drivers will therefore be:

• Non slip
• Resilient, with some give (25 to 50mm at point load)
• Well drained
• Adequate bearing capacity to avoid erosion or poaching
• Free from stones, especially if angular or sharp edged

On paths where horses are legally included and may be a common user – bridleways and restricted byways – a surface more appropriate to their use than to motor traffic or cycles should be provided. If this is not practical, or other users are in the majority then a compromise, in consultation with local BHS representatives, may be reached, preferably in providing parallel surfaces for different users. “

Many of the Greenways included in this review will need new rights and will involve discussions with landowners. The St Ives Greenway was one such route, which was dedicated as a bridleway. In that case the sealed surface has been accepted by all users and works well.

Where new Greenways are being established or existing Greenways are being changed it is important that opportunities to include horses are considered. This may mean that the Greenway needs more land than without horses.

For permissive routes or new routes the British Horse Society recommends “On paths such as cycle tracks or permissive paths where horses are included as vulnerable road users but are not the majority user, a less than ideal equestrian surface may be acceptable where such a path gives equestrians a route free of motor vehicles. Recent successes have occurred using resin-bound rubber crumb to provide a hard surface that can look like tarmac, is easily used by cycles and wheelchair users but is also excellent under foot for pedestrians and riders. This is a surface that the BHS recommends for shared use construction. “ This is unlikely to be the view of all cyclists—surfacing and widths are always sensitive issues but extremely important for all users and need to be determined on a case by case basis.
Quality Standards for Cycling

Recommended widths and surfaces for cycling vary, but it is very clear from experiences across Cambridgeshire and elsewhere that a good quality surface is important for users. This is well summed up in LTN 2/08 produced by Department for Transport in 2008. “The type and quality of surface affects the comfort and attractiveness of a route and the wholelife costs of the project. An initially high capital cost for a good-quality specification may minimise maintenance and repair costs over the long term. Some of the most common treatments are considered in Table 8.3.”

Table 8.3 identifies Asphalt or bituminous as the preferred surface.

Making Space for Cycling does not have a specific definition or standard for greenways but does refer to facilities following major roads between urban areas:

“Cycle tracks along major roads must always be fully segregated with a distance of between 4 and 8 metres from the main carriageway. This provides sufficient overlooking from cars to provide visual safety whilst also being far enough away to reduce the noise of the traffic. Ideally trees should be planted in this space. Paths need to be designed to the high standard shown in the picture .... They should be smooth, generally uninterrupted, and designed to avoid the need for maintenance. They should be a minimum of 5m metres wide, and have a marked centre line, to allow a faster cyclist to overtake a slower one safely without conflict with oncoming cyclists. Smooth surfacing should be used to ensure a solid foundation, and they should be designed to avoid weed growth at the edges or from under the path. In summary, such longer-distance paths should enable cyclists to travel as fast as they are able (i.e. up to 25mph).”
Quality Standards for Cycling

Where a route would also be used by horse riders or ramblers, an additional 3 metres of regularly cut grass can help reduce conflicts between people cycling and other users. These routes should be designated as bridleways.

...... Major roads unfortunately provide barriers to permeability and therefore cycle tracks should be built on both sides of a major road where there are few places to cross safely

Making Space for Cycling also refers to facilitating short-cuts and pleasant off-road leisure routes in relation to new developments:

There may be cases where specific cycling and walking routes can be created to act as shortcuts between parts of a development. For instance, such links are very useful between the corner of a development and a primary street at the edge of a development or joining up other parts of the built-up area.

Such routes should be at least 5 metres wide to ensure that people walking and cycling have enough space to pass each other safely. Bear in mind that natural interaction is best when people can talk to each other, i.e. two-abreast, hence the need to avoid a narrow width.

Public art is often featured on such routes.

When sufficiently wide, sometimes these paths are best split into separate walking and cycle areas, separated by a painted centre line or even a sloped kerb with a 50mm upstand between the two surfaces. If space permits, an area of grass between the two may be appropriate.
Quality Standards for Greenways

As has been mentioned previously there is no one standard for Greenways. A great Greenway will be popular with a wide variety of users, but there is no one simple definition as to how to create a great Greenway. The Sustrans Greenways Guide is the most comprehensive guide on Greenways and puts strong emphasis on continuity and the quality of the environment around the Greenway, as well as on the surface, continuity for all and the space available (see right).

"Above all the path surface must be fit for purpose and, in particular, must be suitable for attracting the numbers of people who we hope will use the Greenway. There is little point building a poor surface, which deters popular use and makes a mockery of the money spent on the overall project. The width of the surface must accommodate the range of users planned for. In practice this means a shared use surface (nearly always for pedestrians, cyclists, buggies and wheelchairs) generally ranging from 2.0m in rural areas to 3.0m and wider in urban areas.

Just as important as the path width itself is the space either side of the path – its verges and visual space to fence or boundaries. “

It is unlikely that the 5m minimum width recommended in Making Space for Cycling will be achieved in the Cambridge Area Greenways, but it is important that the Greenways do not compromise too much on width or surfacing. The success of many of the existing Greenways in the Cambridge area means that some recently built Greenways are now in need of widening, with the risk that users will be deterred from using them. Failure to deliver Greenways of good quality will mean that they do not achieve the levels of usage that they could.

The Sustrans guide includes as an Appendix a reference list of all Guidelines. (See Page 9)

Camcycle website also includes a helpful list of Reference material and official guidance.

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Cambridgeshire Examples

This report quotes good practice nationally and internationally, but some of that good practice is based on Cambridgeshire examples and these are an excellent basis on which to develop a complete network. Whilst this report highlights gaps in the Greenway network it does also highlight good examples.

These examples include:

- **Green corridors through Cambridge** and particularly some of the riverside paths and bridges such as the Riverside Bridge itself. These corridors provide continuity, they provide short-cuts and they are away from traffic in attractive environments and are an important part of the high levels of cycling in Cambridge.

- **The West Cambridge University new route.** The new facility that is featured in the Comberton report is very high quality and sets a good precedent for new development in Cambridge. At present the new paths suffer from lack of continuity and the fact that the area is only partially developed, but it provides an excellent basis for successful development.

- **The Guided Busway corridors.** Both the Trumpington and the St Ives corridors provide continuity over long distances with good quality surfacing and consequently high levels of usage, with people travelling considerable distances on a regular basis.

Cambridgeshire has a lot to be proud of but a lot still to do.
Guidelines and Sources of Information

- Advice on Surfaces for Horses, the British Horse Society, 2015
- Cycle Friendly Design and Overview. Cycling UK 2012
- Dimensions of Width, Area and Height, the British Horse Society, 2015
- Horses and Highway Surfacing, a Guidance Note for Highway Authorities, County Surveyors Society/ British Horse Society, ENG 03/05
- Lancashire – the cyclists’ county; A code for planning, designing and maintaining roads and tracks for cyclists. Lancashire County Council, 2005.
- Ontwerpwijzer fietsverkeer. CROW, the Netherlands, 2006.
- Greenways Guide—Sustrans 2012

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