3 Green Routes and Canal Towpaths

Description

Birmingham has a number of paths that are available for cycling that do not lie within highways. This includes routes through public open space, links and alleyways running between buildings (which may or may not be designated highway land), canal towpaths (usually owned and managed by the Canal and River Trust), and Green Routes and other paths and tracks within land owned and managed by the Council. Cyclists are also entitled to use bridleways and restricted byways that form a part of the public rights of way network, and may have permissive access to privately owned land such as educational campuses. There are various legal mechanisms that relate to access for pedal cycles including the Highways Act, Cycle Tracks Act and local Byelaws, and designers should always check on the local circumstances to determine the correct procedures.

Design Objectives

- Create a 2.0m wide space for cyclists to travel in one direction (2.5m for unsegregated two-way use shared with pedestrians). These are the minimal requirements and should be increased to allow for overtaking on heavily used routes and for cycling two abreast on leisure routes.
- Minimise stopping and starting (at crossings and junctions with carriageways) to smooth the flow of cyclists along the route.
- Provide sufficient width to overtake other cyclists and pedestrians without slowing down or leaving the surfaced facility.
- Provide centre line markings to divide opposing flows on heavily used routes.
- Provide separate space for cyclists and pedestrians where their movements are likely to conflict, or a shared surface width of at least 3.0m to enable users to pass at a safe and comfortable distance. There is a high speed differential between pedestrians and cyclists who may be going up to 7x faster. Where forward visibility is restricted (and at other places where there is a desire to moderate the speed of cyclists), a width of 2.5m is acceptable on the understanding that this will be less comfortable and convenient for all users at the busiest times.
- Provide adequate maintenance to periodically clear routes of fallen leaves and overhanging branches where they are bordered by trees and shrubs.
- Provide lighting for routes intended for year round commuter use (or provide a signed lit alternative route). Solar stud lighting is acceptable where street lighting is undesirable for environmental reasons.
- Minimum kerb radius of 6.0m at corners.
- Crossfall of up to 3% to facilitate drainage.
- Gradients of 5% preferred for ramps connecting to subways, canals etc (see also DfT 'Inclusive Mobility' guidance on this issue).
- For leisure routes, create a 'memorable' experience using sculpture, providing benches at viewpoints, and providing information about the locality (history, nature, nearby attractions).





Re-graded ramped access to Birmingham Canal Old Line towpath, sealed aggregate surface (but requires widening and removal of overhanging branches to bring up to cycle route standard)



Eroded gravel path on slope in Selly Oak Park. Sealed surface is more expensive but may have reduced overall costs when maintenance is considered

Design Principles

- Convenient. Direct, step and barrier free connections to the highway network.
- Useable in all seasons. Always use a sealed surface in urban areas to facilitate allweather cycling and minimise maintenance costs. Provide lighting (or a lit alternative route) at commuting times.
- Safe from crime. Avoid (where possible) lengthy stretches that are not overlooked by adjacent properties or have no access points to help minimise personal security concerns. Keep a clear margin alongside the path free of vegetation to improve visibility and ensure that full surface width is available for users. Provide adequate lighting.

Riding surface

Highways standard machine laid tarmac offers the most durable and comfortable surface. A resin bonded aggregate finish may be preferred to give the appearance of a gravel path on canal towpaths and open spaces. Some 'luminous' products are now available that may be helpful in areas where street lighting is unacceptable due to environmental concerns.

Unsealed gravel surfacing is not recommended on steeper gradients as it is easily washed away and the resulting gulleys can be hazardous. Unsealed surfacing is also not suitable for regular commuting because it makes clothes and bicycles dirty, adding to the difficulty of cycling.

Lighting

Highways standard lighting can be used where this is desirable, particularly where there is a known risk of crime. However this is expensive to install and operate, and may be intrusive in residential areas. Solar LED studs have been used along sections of the Rea Valley Route to help mark out the edge of the path in dark conditions. These generally work well but can fail due to water ingress. The operating costs and maintenance liability should always be considered.



Managing Conflicts

Access Barriers. Access barriers are sometimes installed to prevent motorcycles getting onto cycle and pedestrian routes. These barriers often also exclude other users (hand-cycles, tandems, tricycles, child trailers, some wheelchairs and mobility scooters) and cause delays and inconvenience on popular routes. They should therefore be introduced only when there is a persistent problem of illegal access that cannot be resolved by enforcement.

Speed Humps. It can be helpful to add humps at junctions between shared routes and footpaths to remind users to slow down.



Speed hump at junction of footpath and shared path in a park.



Access barriers are not compatible with high volumes of cycle use and exclude people with child seats, trailers and mobility scooters.





There are many areas such as parks and Green Routes where unsegregated shared-use is the 'best' design solution that can be achieved, but where high levels of pedestrian activity are anticipated. Additional signs such as the one above can help to remind cyclists to ride with due consideration for others, particularly where pedestrian-only paths cross a shared path.

Common hazards

The main hazards for cyclists along link sections of a route are:

- Surface defects due to inadequate maintenance or poor quality construction such as potholes, loose slabs, poor drainage, fallen leaves.
- Insufficient space to overtake slower cyclists / pedestrians on shared paths.
- Meeting opposing cyclists/pedestrians at blind corners and other areas with poor forward visibility.



- Street furniture or vegetation within a track causing a width restriction and hazard in dark conditions.
- Crime and fear of crime due to restricted access points, poor visibility and lack of lighting.

Wheeling Ramps

Wheeling ramps may be required alongside steps where cycle access is being improved at an *existing* footbridge or stepped access to a route where space is restricted, they should not usually form part of the design of *new* infrastructure other than at building entrances such as basement cycle parks or at a new access point to an existing feature such as a towpath or Green Route. The ramp can be provided as a metal channel bolted to the step or by infilling the side of the steps to create a smooth ramp. The channel should normally be placed on the right hand side of the steps for 'upwards' movement (which enables the cycle to be carried on the right side of the body with the chain well away from clothing).



Simple concrete wheeling ramp to cycle parking at building entrance



Access from canal towpath at Cambridge St



Typical 'bolt on' metal channel on railway footbridge

Legal aspects of creating cycle routes away from roads

Urban footpath: An existing footpath may be suitable for shared use by cyclists and pedestrians as part of development of the cycle route network. This is typically



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maintainable highway not adjacent to carriageway and not on the definitive map, with or without cycle prohibition order. There may be a need to allow cyclists and pedestrians to use part or the entire width.

Procedure - Cycle Tracks Act 1984 (CTA) to convert all [or part] to shared use

The Cycle Tracks Act 1984 states that a highway authority may designate "any footpath for which they are highway authority", or part of it, as a cycle track. There is no qualification of the footpath i.e. no mention of it being a 'definitive' footpath (appearing on the definitive footpath map) or an 'urban' footpath (surfaced highway as found in urban areas and created after the drawing up of the definitive map). This is interpreted as meaning that any footpath which forms part of the highway, whether or not surfaced or maintained by the highway authority, is a 'footpath' for the purposes of the CTA and should be converted by its application.

Separate planning consent is not needed since CTA 3(10) states that the local authority has the power to carry out any physical works necessary and that any change of use that would have constituted development within the meaning of the Town and Country planning Act 1971 is deemed to be granted under Part III of that Act.

However, if the footpath is not converted but the existing surface is widened such that the cycle track is created alongside and segregated from the existing footpath then the use of the CTA does not apply:

Note: It is generally considered that in these circumstances segregation by some form of physical delineation is appropriate. This is because cyclists have no 'right' to cycle on the remaining section of footway and without definition of 'their' path (by a white line etc.) are likely to do so. This also casts doubt on the value of retaining a narrow strip (often too narrow to walk upon) of the definitive footpath, when converting under the CTA, if the resulting user paths cannot be defined because of the chosen surface materials (e.g. crushed stone). This practice is sometime used to overcome objections that the creation of the cycle track will result in the removal of the footpath from the 'definitive map'.

The Town and Country Planning Act 1990 (TCP) s.55 (b) and the Town and Country Planning Act (General Permitted Development Order) 1995 (GPDO) (Part 13 A) give(s) a local highway authority the ability to maintain and improve a 'road' maintainable at public expense without the need to seek planning approval. The GPDO enables such an authority to 'improve' a highway by doing works immediately adjacent to the existing highway without the need to apply for planning approval. These abilities are interpreted as meaning that no statutory procedures have to be completed to create a cycle track alongside a surfaced urban footpath - see cover photograph for an example. It is, however, good practice to consult with existing users, local residents and adjoining landowners and give prior notification of carrying out the works to create the cycle track.

Any byelaw or order prohibiting cycling must be removed prior to (or in parallel with other procedures) the conversion of a footpath to a cycle track. Whilst, strictly speaking, this may not be necessary if a cycle track is to be created alongside the footpath, the presence of any form of prohibition, supported by signs to give it effect, can appear illogical and lead to confusion over user rights.

Naturally, it is also necessary for the highway authority to acquire the land either by purchasing it (compulsorily if required) or achieving a dedication to the highway from the owner. However, since the wording of any dedication is usually along the lines of (the



landowner) 'hereby freely dedicates the land shown coloured pink on the attached plan to the highway maintainable at public expense' it is not necessary to state the purpose for which the land is to be subsequently used i.e. as carriageway, footway or cycle track etc as this is determined by the authority. This is analogous to the highway authority purchasing land/taking a dedication to widen an existing carriageway and create a footway alongside it. Whilst the plans used for the transaction/dedication agreement could well be extracts from the scheme plans, it does not require further action to formally 'create the footway/additional carriageway in order to give the police the power to enforce offences under the Road Traffic Regulation Acts.

Similarly, agreements under Highways Act 1980 s38 between developers and highway authorities generally have similar wordings that confirm that the developers are owners of the land identified on the drawings and through the agreement are dedicating the land, shown on the drawings, to the highway maintainable at public expense. Such plans invariably indicate the nature of the works to be undertaken and, therefore, the future use of the land e.g. bridge, carriageway etc but again, there is no requirement to dedicate as one form of use and then for the authority to go through other procedures to establish the status of each element of the additions to the highway network.

Definitive Footpath: This is a footpath that is included on the definitive map of public rights of way. There may be a requirement to widen it and/or convert it for shared use by cyclists and pedestrians.

Procedure - Cycle Tracks Act 1984 (to convert all or part of footpath to shared use).

The procedure is the same as for other urban footpaths. If the land is not owned by the highway authority it must ensure that the landowner has consented in writing [CTA s3] and any land lying outside the width of the existing footpath which needs to be acquired for the purposes of constructing the cycle track has been dedicated to/purchased by the highway authority to enable widening to take place.

Where it is proposed that the line of a public footpath is to be diverted to achieve a more appropriate alignment so that it may then be converted to a cycle track leaving no isolated pedestrian rights of way, the diversion of the footpath should be confirmed before the order is made under the CTA.

A landowner may give permission for cyclists to use land occupied by a definitive footpath to avoid the use of the Cycle Tracks Act or because it wishes to retain control of the land. However, it is understood that the DfT takes the view that if the landowner is also the highway authority it should abide by the spirit of the Act and make an order. If the authority does not wish the land to become highway, for example where it runs through a public park or the long term use of the land is undecided, then it is advised to publish details of its proposals and consult with all stakeholders as though it were making an order.

Public footpath which terminates at the rear of a footway and conversion of the footway crossing (to enable cyclists to reach the carriageway)

Procedure - Cycle Tracks Act and Highways Act. The conversion of the public footpath should be dealt with in the same way as any other i.e. the CTA. The footway should be converted by using the powers available under the Highways Act 1980. This Act does not say in s65 that such a cycle track must be of a minimum length or travel in any direction relative to the carriageway. This may be interpreted as permitting the conversion of the short length of footway necessary to achieve a crossing.



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Example of off-road cycle track along line of a footpath that crosses the footway of the road.

A 'footway' not part of the public highway

Procedure - varies. A 'footway' outside the highway boundary has by definition no highway status and cannot, therefore, be treated as a footway as defined by the Highways Act 1980. This situation could arise where the footway (and accompanying carriageway) was originally created by a housing authority but not subsequently adopted as public highway. Similarly, it might occur in the case of a development that allows public access but the means of access are not adopted as highway e.g. on a major business or retail park.

The conversion of such a feature can, therefore, only be dealt with as a permissive route or the authority will have to find a way for it to be adopted as highway by some means, with the owner's co-operation, and then converted.

This is a complex issue and should be dealt with locally on a case by case basis.

Footbridges and Underpasses

Procedure - Cycle Tracks Act 1984 or Highways Act 1980

The procedures employed will be based upon the circumstances under which these features were created. Where these are not clear, local judgement will be required as to whether the footbridge or subway acts as a footpath or a footway.

Path (Bridleway) Creation

Procedure - Highways Act 1980 s26

Section 30(1) of the Countryside Act 1968 gives the public the right to ride a bicycle on any bridleway, but in exercising that right, cyclists must give way to pedestrians and persons on horseback. The act places no obligation on the highway authority to 'improve' the surface to better accommodate cycle use. The Highways Act provides powers to create bridleways by means of a 'public path creation order'

Widening the highway adjacent to a bridleway to create a surfaced cycle track

Procedure - TCPA and GPDO. This is similar to widening a footpath as described above except that the highway to be widened is a bridleway and not a footpath.

Conversion of a footpath alongside a watercourse/river/canal



Procedure - varies. Cycle tracks created alongside a watercourse by the conversion of a public footpath will inevitably require engineering works, if only in the form of signs. In addition to the use of the Cycle Tracks Act or planning approval (if access is based on permissive rights) it may be necessary to obtain consent under the Water Resources Act 1991 - contact the Environment Agency for more information. In some regions and in most circumstances the agreement of the Internal Drainage Board will be required where any work impacts upon its operations.

In the case of footpaths alongside canals, it appears that the Canal and River Trust's powers to introduce a byelaw prohibiting cycling take precedence over any highway rights. It is, therefore, recommended that contact be made with the local office to discuss the best means of achieving cycle access.

Cycling is permitted on most towpaths within the city council area unless there are physical constraints that prevent safe cycling.

Prevention of use of cycle tracks by motor vehicles

(Cycle tracks created through use of Town & Country Planning Act)

Procedure - none necessary. The Cycle Tracks Act s2(1) used to make this an offence but this was superseded by s21 of the Road Traffic Act 1988. This offence does not take account of how the cycle track was created. Creation by the use of Town and Country Planning legislation is not relevant to this issue any more than if the same legislation had been used to create a carriageway which forms part of the highway. To give an example, once a bypass has been created through the use of a planning application and all of the other statutory procedures, there is no need for further orders to ensure that, for example, the police can enforce the national speed limit or other similar offences.

In other words, so long as the correct creation procedures have been properly followed and the necessary signs have been erected to denote that the highway at that point is a cycle track then no further orders are necessary for the police to enforce the requirements of the Road Traffic Act.

