Introduction

This document is one of 22 Annexes to the main HS2 Cycleway Project Report. It sets out the preferred routes which were identified in workshops, refined in subsequent field surveys and then discussed further with local authorities.

The detailed mapping shows the different traffic free and on road sections, and includes brief notes and photographs describing points of particular interest along the route.

Background to the First Stage

In January 2014, the Department for Transport (DfT) commissioned consultants, Royal HaskoningDHV, to carry out a Feasibility Study into creating a series of world class cycling routes from London to Birmingham, Manchester and Leeds. The project considers a study area that is generally three miles either side of the planned HS2 Rail alignment, and was conceived as an opportunity to deliver excellent local facilities for communities along the whole length of the proposed railway.

It is envisaged that each section of cycle route would serve as an important facility at a local level, connecting where people live to where they want to go to: and by linking the individual sections together, a continuous long distance could be created that would provide an attractive leisure and tourism facility as well.

As far as possible the project was also to enhance pedestrian routes, and in some cases bridleways too, all within the context of creating continuous, safe and attractive routes which would encourage the public to cycle for local trips, for leisure and as tourists.

The report of this first phase of work was completed in December 2014. It included a total of 18 detailed annexes, of which this is one, each of which described a section of the preliminary route options in some detail. The routes themselves were derived from discussions with local authorities and other interested bodies, backed up by cycling the routes as far as this was possible.

In order to avoid too much repetition in the text and explanation of details, a selection of photographs of appropriate arrangements and details from both the UK and the Netherlands is included here to indicate the sort of quality of route the HS2 Cycleway aspires to realise.
Second Stage

The second stage of the study was carried out during 2015. It comprised meeting with the local Highway Authorities and with the principal institutional landowners, such as Network Rail and the Canal & River Trust. Following on from these meetings, and any necessary further fieldwork, the route proposals were revised, and a series of "workbooks" prepared covering the details of how the proposed cycleway would interact with Network Rail, HS2 and others. In addition 4 further Annexes were prepared covering links to the Peak District, and HS3 cycle routes from Manchester to Liverpool, Sheffield and Leeds.

This Manchester route needs to give as direct a route as possible from the city centre to the airport. At the same time we have avoided running for too great a distance alongside major roads – simply because the noise and stress is not conducive to popular everyday cycling – but have rather taken in Oxford Road through the University, and a number of significant parks, so as to create an attractive and memorable route which will be popular with a wide range of different users and tasks.

Frequently Asked Questions

How will it be funded?
As the project is still in the feasibility stage, no specific funding commitments have been made; part of this study has been to determine the likely costs. However, should the project be commissioned, it is envisaged that it would be funded by DfT separately to current funding packages.

How will it be delivered, practically and politically?
Part of this feasibility study has been to identify potential delivery models. We have recommended that the local Highway Authority takes the lead, backed up by a central support team to handle commonly difficult matters such as land assembly.

How will it affect current funding streams?
It is not expected that this project would affect current funding streams, so that this project would be in addition to existing cycle infrastructure investment. It would, though, be advantageous to badge current schemes as part of the National Cycle Route

When will it be delivered?
This feasibility study has identified a potential delivery programme based on the dialogue with local authorities. Should the project be commissioned, we expect certain sections will be able to be delivered relatively quickly whilst others may take longer. Alternatively, funding arrangements could dictate that certain sections are delivered in a particular order. The findings of the feasibility study will help inform these decisions.
Design Standards - Summary

A set of design standards was developed as part of the first stage of the feasibility study. These are available as a separate document. The design standards strongly emphasise the need for continuity and integration of cycle infrastructure, and that facilities should be appealing to the end user and also consider the needs of non-users. The design standards are a working document, and will be reviewed throughout this stage of the feasibility study in order to best take into account differing local contexts.

The design standards are consistent with the project’s overall aim of the National Cycleway being a domestic exemplar of what high-quality integrated modern cycling infrastructure looks like: safe, direct, coherent, comfortable and attractive. The design standards also emphasise that adaptability will be important as the UK grows its cycling mode-share.

A strong focus is on the best practice seen in places with high levels of utility cycling like the Netherlands and Denmark. Attention is also paid to inclusivity, which not only covers all potential types of cyclists – including those with mobility impairment – but accessibility for all types of other users who will interact with the infrastructure. Benefits to the wider community should also be encouraged: even if individuals do not directly use the route for transport or leisure purposes, the design should take the opportunity for place-making along the route to improve the attractiveness of town centres or other areas through which the route passes.

The default position of the design standards is that cyclists should be afforded their own dedicated space with physical separation from other users. This is an effort to move away from infrastructure strategies that default to a shared use path, or on-carriageway facilities with limited protection from motor vehicles on busy roads. The design standards, however, do allow for sharing with motor traffic, pedestrians or equestrians in certain circumstances – normally where volumes are low. Steps may nevertheless be required to engineer these conditions where they are not currently present. It is likely that many extant greenways through open space or in the countryside which are shared with pedestrians and equestrians would already be suitable for use by the National Cycleway with few changes necessary. In more built-up environments, however, the design standards promote the implementation of dedicated infrastructure for cyclists, consistent with the best practice found elsewhere in the world where cycling for everyday journeys is commonplace.

The design standards acknowledge the varied contexts of the areas through which the route is likely to pass. Quality of infrastructure should be highest where potential for the route to be used is greatest, which is in urban areas or between sizeable settlements in rural areas. However, designs should not be put forward that prevent further expansion as usage grows or new journey possibilities are created that stimulate demand for movement.
Throughout the section of HS2 Cycleway route described in these notes, it is intended that the overall route is created to the highest standards of design, of surface, of continuity and attractiveness all based on current best practice guidelines, including the Dutch CROW manual. The following examples drawn from England and Holland indicate what is intended, even though the brief descriptive notes attached to the route section maps may not explicitly say so. The photographs are loosely arranged to run from the town to the countryside ending up with the all-important junction and crossings details. These are required at each and every intersection with trafficked roads.

0 The HS2 Cycle route will start in the traffic calmed core of the town where cyclists share the road space on equal terms with motor vehicles. (Massluis)

1 Almost without exception cyclists will be permitted 2 way down one way streets in order to maximise their direct networks. (Gouda)

2 Sympathetic treatment of main street in typical small town

3 Closure of main street to traffic. (Rotterdam)

4 Typical English town with “pedestrianised” town centre already paved to delineate cyclists. (Stafford)

5 The Embankment, London, showing the space created for the Cycle Superhighway

6 Where space is limited the removal of the central white line and introduction of advisory cycle provision emphasises the presence of cyclists. (Gouda)

7 One lane of the road made into a two way cycling track (Redcliffe Bridge, Bristol)

8 Reallocation of road space through residential development to create 2 way cycle route. (Breda)
9 Cycle track set well back from main road and separated by avenue trees. (Rotterdam)

10 Wide promenade in urban park. (Tamworth)

11 New cycle track in Warwick University grounds with lighting

12 Typical railway path, 2.5m wide rural areas, 3.0m minimum urban areas. (Derby, Melbourne)

13 Wide towpath on Calder navigation

14 Narrow 2m wide towpath on Erewash Canal; note sealed surface with appropriate coloured gravel

15 Typical National Route in rural areas on lightly trafficked road. (Boxtel to Eindhoven)

16 Typical measures to show traffic on lightly trafficked rural roads on routes advertised for cyclists

17 Quiet lane approaching Lichfield – 20mph

18 Typical minor cul-de-sac in Holland, links to ongoing path for cyclists. No motor vehicles permitted except farm vehicles
19 Similar farm access on the way to Waddesdon

20 National Cycle route (LF) parallel to main road in rural Holland. (LF13 Alphen)

21 Stone based cycle route through National Forest near Ashby-de-la-Zouch

22 Field boundary path with cattle grid and wicket gate approaching Kenilworth

23 Single stage toucan crossing of dual carriageway in Aylesbury

24 Dual use crossing of side road in Gouda

25 Cycling zebra at Aylesbury

26 Priority crossing of side road at Gouda

27 Path continuing parallel to main road (Gouda). Note the crossing is arranged on the desire line
28 Priority crossing in Rotterdam

29 Continuity of route on London Cycle Superhighway to Canary Wharf

30 Direct priority crossing in Lancaster

31 Direct crossing in York on the desire line

32 Treatment of approaches to splitter island at roundabout in Aylesbury

33 New shared use bridge over railway at Aylesbury Station

34 Tank Top bridleway bridge over M1

35 Major new cycle route attached to railway bridge approaching Nijmegen

36 Wide, on the level, underbridge at Tamworth
HS2 Cycleway: Proposed Route Manchester Piccadilly to Manchester International Airport

This route sets out to achieve three main ideas: running through the University via the Council’s Cycling Ambition Oxford Road Scheme; to connect as many parks and open spaces south of the Whitworth Art Gallery as possible to make a Green Avenue leading up to the Whitworth; and to make as direct a route as possible to the Airport for employees and visitors who may wish to cycle.

As with the whole HS2 Cycle Route, but perhaps of even greater importance here, is the need to ensure a continuous route of high quality, free from barriers and with reasonable priority at all road crossings and junctions. If such a route can be achieved emulating the best of Dutch designs, then high levels of cycling can be expected.

The following notes describe the salient points along this proposed route.

1. Within the whole Core City Centre cycling will be encouraged by reducing volumes of traffic, maintaining slow speeds, allowing cycling contraflow on all one-way streets and generally making the areas as permeable as possible. The HS2 Cycle route will deliver cyclists into this central area from the northern end of the City’s Cycling Ambition Oxford Street, and from Piccadilly via Dale Street.

2. The London Road/Fairfield Street link and crossing needs enhancing to provide a smooth route through to Echo Street for its link through under the railway arch.

3. Attractive promenade on the south side of the railway arches.

4. Widen the east side footway of Sackville Street to provide a traffic free route to link up with the existing greenway under the Mancunian Way. This footway or preferably the roadside itself needs avenue trees to emphasise that this is a core University route.

5. Move back the fences either side of the subway to bring in all the grassed slopes of the Mancunian Way for public use.

6. Wide space under the viaduct.

7. Provide enhanced priority over the slip road to Mancunian Way.

8. Cross Brook Street on existing lights. Revise the arrangement to achieve a single stage direct over crossing.

9. The Grosvenor Street north side cycle track is one way and narrow. It could be trebled in width to allow for two way cycling by a combination of taking road space and slimming down the raised reservation. This should be planted with single trees.

10. Join the Oxford Road scheme which aims to provide high quality continuous cycle tracks either side of the road at least as far as Whitworth Park.

11. Join existing west side path as soon as possible in the new scheme.

12. Whitworth Art Gallery.

13. Wide route along frontage of park.

14. Run through Whitworth Park and make up link to cross Moss Lane for Heald Place.

15. Cut off through traffic along Heald Place as far as possible and redesign street to be a series of Home Zones planted up to take the HS2 Cycleway through to Platt Fields Park. The next road to the west, Parkfield Street, would be an alternative or possibly greener route.
16 Provide raised table zebra crossing of Platt Lane and widen south side footway to reach Park entrance.

17 Wide drives and existing cycle route through Park.

18 Continue around lake for attractive views.

19 There are a number of options for this crucial new entrance on the south side of the park. The survey identified three opportunities for negotiating which need to be put in hand to make a link at least 3m wide through to Hart Road.

20 Cross Wilbraham Road with raised zebra via exiting central island to reach Carrington Road cul-de-sac.

21 Existing link to Fallowfield Loop Line needs widening out over a short 15m section.

22 Fallowfield Railway Path is a linear park. It is particularly wide, including as it does the footprint of the Thirlmere Aqueduct on its southern boundary.

23 Link to Metro Station at Werburgh’s Road and through to Chorlton.

24 Existing link to Mauldeth Road West. Cross road with carriageway narrowings and raised zebras.

25 Route through Hough End Fields to be a tree lined promenade to the proposed bridge over the Metro. The first part could follow the remains of Framley Road. Ideally it would then divide the football pitches.

26 Make long earthworks ramp to proposed bridge to land alongside allotments and in wide verge of Winterman’s Road. This road can be used when the Cemeteries are closed.

27 Main Drive through Cemetery to Nell Lane.

28 Provide gentle raised zebra crossing of Nell Lane on the line of the Cemetery Drives. This will be appropriate for funeral corteges.

29 Wide Drive through Southern Cemetery makes for a memorable section of the overall route. There are particularly well maintained gardens south of the Chapel.

30 Enhance the existing pelican crossing to reach Maitland Avenue. Plant this up as avenue all the way to Chorlton Water Park.
31 Follow existing steeply dropping track around Lake. The first slope needs easing.

32 Bailey Bridge crosses the Mersey with views of the Trans Pennine Trail.

33 Tarmac access road is almost traffic free.

34 This section of Willenham Road under the M60 is only used by buses going northwards and the occasional access vehicles. Bollard it off down the centre line with cyclists using the western half for a two way route.

35 Yew Tree Lane has more traffic than expected. Remove centre line and add cycle lanes or widen south side path.

36 Rackhouse Road needs treatment to minimise traffic and enhance cycling.

37 Enhance existing Sale Road pelican, possibly move it a little to the west for a better alignment, build the path from the south direct to the crossing to reduce diversion.

38 Wythenshawe Road. This requires a raised zebra crossing to emphasise the entrance to this highlight of the whole route.

39 Wythenshaw Park starts as a wide drive but the southern section of path could be usefully widened.

40 Altrincham Road. Enhance existing pelican to single stage toucan.

41 Follow the side road and provide raised table crossing of Haybarn Road by the shops.

42 Create wide 2 way cycling route on east side of Hall Lane where there is ample width on the railway bridge.
HS2 Cycleway: Manchester Piccadilly to Manchester International Airport

43 Baguley Hall is a feature along this section. Aim to gain width for the east side path to make this route a memorable promenade to and from the Hall.

44 Turn into Porlock Road and provide raised zebra crossing of Blackcarr Road for direct route via wide footway along Wendon Road. Or via Bracken Drive and widen tramside path to Wendon Road junction.

45 Build good crossing phase for cyclists and pedestrians into this junction of Hollyhedge Road and Metro.

46 Follow residential roads, or make new path through open space to reach existing cycling bridge over the M56.

47 Make new northwards facing ramp to reach bridge which provides excellent crossing of M56.

48 Rebuild path as a 3m wide greenway all the way around to the Simonsway toucan crossing.

49 Excellent route through park – once barriers are removed.

50 Provide raised zebra crossing of Cotefield Road.

51 The open park continues all the way to the Portway.

52 Portway – raised zebra required, and removal of barriers to Painswick Park.

53 Existing cycle route goes through BMX area.

54 Thorley Lane is NOT suitable for cycling. Provide raised zebra and construct new path in wide margin on south side of lane.

55 Put in signals at crossing of Outwood Lane west.

56 Clear back overhanging vegetation including all low ground cover around avenue trees to open up existing route to International Station.