Recommended possible main National Cycleway associated with HS2
additional or alternative routes
local links and connections

Route maps and notes  December 2015

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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.

Although this section is not particularly direct it does provide key radial routes in and out of Northwich, Winsford, Middlewich, Sandbach and Crewe. Each section will be of great value to the local community, and taken altogether they make for an interesting recreational and tourist route.

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 Cycleroute (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
B04

Priority crossing in Rotterdam
Continuity of route on London Cycle Superhighway to Canary Wharf
Direct priority crossing in Lancaster
Direct crossing in York on the desire line
Treatment of approaches to splitter island at roundabout in Aylesbury
New shared use bridge over railway at Aylesbury Station
Tank Top bridleway bridge over M1
Major new cycle route attached to railway bridge approaching Nijmegen
Wide, on the level, underbridge at Tamworth
HS2 Cycleway: Knutsford to Crewe Section

This section is particularly interesting in that it threads through a number of towns which are each within easy cycling distance of the next – 10kms or so – Knutsford, Northwich, Winsford, Middlewich, Sandbach and Crewe. The HS2 Cycleway would deliver a route of the highest quality through each town to its centre where residents want to go, and a link to each station. The line of HS2 Rail is crossed three times but is unlikely to make any essential contribution except by way of accommodating cycling tracks in anticipated bridge works.

This section of the route starts in Tatton Park, just to the north of Knutsford, where the 4km long Drive is as magnificent a space for cycling as can be found anywhere in England. Tatton Park (National Trust) has an extensive network of good roads which cyclists may use. The main Knutsford Drive is wonderfully attractive but it leads into King Street, the main shopping street, which is one way northwards and narrow. Moorside though could be signed on the way south.

Although Knutsford is not a large town, it is the confluence of a number of major roads and the best way of achieving a through route, and indeed local permeability, is not immediately obvious. Hopefully a consensus will emerge for the benefit of local everyday trips and visitors alike.

1 Knutsford Drive
1a The Estate Road coming into the end of Teal Avenue might offer an interesting local circuit, although the path from the railway bridge across to Church Walk would need to be reconstructed.
2 King Street is one way northwards, but Moorside/Church Walk could be arranged for the southwards cycling route leading to the station.
3 The optimum way of achieving a good cross town route needs to be discussed. There are no “obvious” solutions so something rather radical will be required.
4 Cranford Avenue and Westfield Drive offer the best residential roads past local schools.
5 Short length of new path in wide verge of Northwich Road A5033.
6 Attractive and lightly trafficked Sudlow Lane leads to an easy crossing of the M6.
HS2 Cycleway: Knutsford to Crewe Section

7 Plumley Moor Road is fairly busy and a careful detail is required for its crossing.
8 Existing tarmac access road to Moss Farm.
9 Rough farm road needs to be reconstructed.
10 Concrete construction on the “salt farms” roads. Spacious bridge under A556. At their west end Lostock Hollow, notices state that these roads are closed overnight, but whether this does include cyclists is not clear.
11 Station entrance.
12 Construct path along boundary of railway lands/car park/industrial area.
13 This is a complex point where the route needs to cross the main road, Griffeths Road, and over the canal to reach its towpath on the far side. There is open industrial land here with complexes of pipes carrying brine to the works, and it may be that space can be found for this link. Note point 21 suggesting that the path continues across industrial land to pass under the railway on Works Lane.
14 Follow the Trent and Mersey Canal path.
14a A direct link for Lostock Gralam would have to be fashioned in the verge, gaining width from the main road if necessary.
14b Likewise Higher Wincham would greatly benefit from a direct link to cross the canal by an existing bridge. This has to cope with open fields and industrial areas.
15 Link on existing tracks and planned redevelopments which should endeavour to take the HS2 Cycling route via a core avenue.
16 Past Neumann’s Flashes on existing path.
17 Witton Mill Bridge. This road does act as a connection for cycling routes to canal and Nature Park.
18 Existing paths.
19 Existing bridge and paths to the Anderton Nature Park and the historic Anderton Lifts.
20 The best link through the town centre again demands vision and consensus. Some options are shown on the inset plan, right.
21. The main road from Lostock Graham is completely unsuitable for cycling. We consider that it is impracticable to construct a good quality cycling route along the road itself. A route parallel to the railway can be achieved. To start the best solution would be to fly over the main road and the canal at a point a little south of the pipe bridge (as the road drops below the level of the canal) and then to follow the existing track to Works Lane (public footpath).

22. After crossing Works Lane, the railway land widens, passing under more pipe bridges and eventually reaches a large area of sparse woodlands on former sidings and passes an attractive Flash or Pool.

23. The path continues on railway land behind industrial buildings, where useful local links are possible, and then the route can run into the station area itself and join Victoria Road to cross over the railway at Vicarage Lane.

24. Vickers Way then ends in excellent traffic free paths either side of the foot of the railway viaduct.

25. Existing toucan crossing of London Road is necessary because of the poor sight lines past the piers of the viaduct. The path then continues all the way from the Town centre to the Riverside.

26. This path around the Backwater has been built too narrow to allow for much expansion in walking and cycling traffic and should be carefully reconstructed to give a good 3m width.

27. Connect 2 swing bridge links to schools and Hartford providing a route through to the Town Centre bypassing the main Chester Road. Note the present crossing of the Weaver Navigation lock gates may need to be widened in due course. Extending this link to Hartford Station on the WCML would be very valuable.

28. Improve all these links so as to make the core HS2 Cycleway as accessible as possible.

29. There is a good path here but it is crowded by Development Lands open space. The fencing needs to be moved back all through here so as to enable this section of the Weaver Way to act as a real promenade for the town and green lung for its residents.

30. The path is constrained by newly planted hedges which again need to be planted a good 3m further back to allow for much more path here.

31. Excellent wide space and high bridge under A556 with an existing ramped link to Hartford Road residents.
HS2 Cycleway: Knutsford to Crewe Section

31a This section of the Weaver Way is due for reconstruction and it would be good if it could be constructed to the 3m standard sought from Northwich.

31b It may be possible to develop this link under the railway and the A556 to reach this edge of Hartford and its station on the WCML.

31c The crossing of the Vale Royal Locks and potential link to Whitegate would be a useful connection for that community.

32 The path is good, if rather narrow beyond Vale Royal Locks. A number of awkward barriers through to Winsford will need to be modified (5 in all).

33 Useful crossing of Weaver Navigation to Bradford Road here as well as track up hillside to Moulton with its optional road route towards Northwich. The riverside path improves again beyond this point.

34 Really interesting path through active salt mining area, and close by river.

35 Climb up to the level of Winsford through reclaimed tips now parkland.

36 Rearrange crossing of this industrial road so as to reduce additional climb and to give priority of crossing.

37 Existing path stays on the high ground.

38 A new crossing of Wharton Park Road to reach Kingsway is vital.

39 Existing signed route goes steeply downhill on shared pavement for awkwardly arranged toucan crossing of the road at Winsford Bridge to reach riverside paths. This needs to be rearranged to be on the desire line. The route west past High Street through Town Park to reach the centre of town is a most important link.

40 Link past stadium, playing fields and park to reach Ledward Street. Alternatively, or additionally, improve existing NCN5 route around south of town.

41 Lodge Drive has a wide footway which could be made up for shared use. Cross Crook Lane and link through to Ribble Avenue.

42 Wide footway along Station Road and provide crossing of Middlewich Road to reach Winsford Station.
Winsford Station to Middlewich

This is a most important link and section of the HS2 Cycleway proposals because Middlewich, although it has a railway, has no station. The distance from the centre of Middlewich to the Station via the canal is 4.7kms; a possible route associated with a future new road could reduce this to 4.2kms – both well within everyday cycling range.

The canal route currently followed by NCN5 has so many compromises that its viability is limited. HS2 Cycleway provides an opportunity to overcome the barriers and put in place a route which would genuinely change the travelling geography for local people.

43 In order to avoid Clive Green Lane, which is a HGV diversionary route, it is crucial to negotiate a field edge link to Rilshaw Lane which passes under the WCML.

44 The second link required is in railway land, adjacent to the fence, to reach Clive Back Lane.

45 Most attractive back lane passes under railway twice. But this route is rather circuitous.

46 This direct route should be incorporated on a separate cycletrack into any new road scheme even though there are a number of issues to resolve either end to make a complete and direct link from Middlewich to Winsford. The prosaically named “Road Two” provides an existing link over the railway to the town centre.

47 Alternatively negotiate a field edge route to avoid Clivegreen Lane and then direct to the canal at Park Farm.

48 This wide green lane needs to be constructed with a sound surface suitable for agricultural vehicles. Negotiate a triangle of land at this corner so as to make a level link to the canal towpath to replace current steps and barrier.

49 This is a generally reasonable towpath (photo left) but the canal side does need widening by a number of detailed measures so as to construct a good path generally 2.5m wide.

50 Leave ample width at HS2 Rail crossing.

51 Stanthorne Lock is a major obstacle on the present path with a very narrow approach towpath and steep climb under the farm accommodation bridge. Acquire field edge land to bypass all this and cross the farm road at grade.

52 There is generous path width over the aqueduct crossing the A530.

53 Excellent green lane branches off towpath towards Newtonia and Town Centre.

54 Follow St. Anne’s Road and St. Anne’s Avenue to bypass narrow towpath and difficult junction details on the canal system.

55 Provide crossing of Booth Lane A533 main road and link to Trent and Mersey canal for Sandbach.
Middlewich and Sandbach

The Sandbach Link provides an alternative for people from Middlewich to reach a station on the line to Manchester, 6kms away from Middlewich. The minor roads are reasonably direct, but Werrington Lane in particular has quite a lot of traffic. By contrast the canal bank is wide enough for a good traffic free path almost all the way and moreover one which is clearly visible from the adjacent main road giving motorists the chance to see alternative ways of travelling.

54 Follow St. Anne’s Road and St. Anne’s Avenue to bypass narrow towpath and difficult junction details on the canal system.

55 Provide crossing of Booth Lane A533 main road and link to Trent and Mersey canal for Sandbach.

56 The towpath runs parallel to and close to the road, separated by a low bank. If this was removed then the path could comfortably be 2.5m wide. Include provision for safe crossings of the road to adjacent housing.

57 This is a very low bridge. Either the towpath will need to be rebuilt below canal water level, or an at grade toucan light crossing is needed.

58 A range of choices for gaining bank width including replanting the boundary hedge.

59 Minor roads currently used by cyclists.

60 Leave the canal and cross on Oakwood Lane. At the junction of Moss Lane negotiate to enter the housing site currently under development.

61 Follow new residential roads and links to reach Foundry Lane with its good bridge over the railway.

62 Make new easily graded ramp from just east of bridge down to station car park and entrance.

63 Continue on Foundry Lane – traffic free - to run along Station Road for a few metres into Ebnor Road.

64 Either join School Lane or link through to William Foden Close.

65 Use green lane to reach Middlewich Road.

66 Widen south side footway for shared use with priority crossings of side roads for town centre.
**Middlewich and Sandbach**

Sandbach and Station to Crewe Station is 5 miles, a comfortable distance to cycle to work if there were a good route. The current signed route runs through Wheelock Heath and Haslington and is both circuitous and busy. A direct, largely traffic-free route has long been sought. The final stretch of the route into Crewe will be affected by the details of HS2 Rail. This route could be one of the feeder routes to the planned station.

67 Come south either on the canal towpath or on adjacent rough land as far as Hall Lane to cross the canal and join the towpath.

68 Abbey Road has the potential for a wide tree lined promenade on its south east side.

69 Just beyond Lodge Road industry crowds the verge and a short length of new path is needed to join the Wheelock Rail Trail. At the same time take steps to minimise traffic on Elworth Road in order that it can act as a feeder to the Trail.

70 The Wheelock Rail Trail is a valuable resource for Sandbach. Link under the road by the canal.

71 As far as Brook Farm the railway has a considerable width on the northwest side sufficient for a good path and their own works access.

72 Between Brook Farm and Railway Farm there is a local access road leading off Clay Lane where a crossing provision may be needed.

73 A field edge is required once past Railway Farm where care is needed with farm access.

74 Again a considerable width of empty railway/industrial land is available.

75 Pass under railway on existing track and follow New Green Lane.

76 A field edge path from New Green Lane will require a short fragment of railway land to reach Sydney Road.

77 Existing good path in open space. Links to adjacent streets are required.

78 Cross Hungerford Road and make connection to existing cycle track down west side of Macon Way – enhance details at junctions.

79 Precise details to reach Station need to be determined depending upon HS2 Rail designs.

80 Link to Town Centre required.

During further discussion it was felt that it would be preferable to connect Sandbach direct to Crewe via a new route along the corridor of the A534. This would be a field edge route (possibly on the north side of the road). At the northern end it could possibly continue to the town centre via the corridor of the brook. This could connect via the canal for an almost traffic free route, or traffic calming measures on the Crewe Road through Wheelock could make for a more direct route. At the southern end it connects to existing Crewe cycling routes. Links to Haslington can readily be achieved, via Bradleley Hall Road, for example.