

Scheme Name	Gateways into Tring and Berkhamsted	
	Cycling	
Scheme Reference	08	
Problem References	B04	Cycle Lane requires extending on London Road
	B05	Conflict on Tring Road, New Rd and Darrs Lane due to excessive vehicular speed
	B07	Widening of London Rd for cycle lane has created speeding and hazardous conditions
	B13	Narrow roads on gateways into Berkhamsted means conflict between cyclists and drivers
	B18	Little cycle specific provision throughout the town
	B31	Cycling on Gravel Path is dangerous, especially on the ascent and becomes a Level 3+ due to its steep ascent and subsequent slow speed of cyclists on the narrow carriageway
Links to other schemes:	UTP	28

Context



Location Plan – Gateways in Tring and Berkhamsted

Gateways are used to indicate the entry into a particular area where a driver’s behaviour should change, for example the entry to a village or residential area. They are usually accompanied by a reduction in the speed limit. Horizontal traffic calming often forms part of the gateway feature, which can often cause conflict for cyclists as carriageways are narrowed and cyclists can be ‘squeezed.’

Gateways are currently provided at a number of locations (**Figure 1**):

- Tring Road, Northchurch
- London Road, Berkhamsted
- Kingshill Way, Berkhamsted
- Aylesbury Road, Tring
- Tring Road, Cow Roast (west)
- Tring Road, Cow Roast (east)

The Northchurch gateway (**Figure 2**) can be hazardous to navigate as a cyclist. A short length of cycle lane is present on approach to the gateway in both directions. However, a kerb buildout is also present at the gateway and this impedes the cycle lane, forcing cyclists into the general traffic lane. The presence of a line of paving setts across the carriageway also detracts from a comfortable and safe ride through the gateway. A similar configuration is provided on Kingshill Way at the gateway, with a kerb buildout adjacent to the gateway feature (**Figure 3**).

The London Road gateway to the east of Berkhamsted (**Figure 4**) can also be uncomfortable for cyclists as the central islands can cause cyclists to be 'squeezed' through the gateway. The central islands also prevent vehicles from overtaking cyclists; however the islands serve to protect right turning motorists in to London Road slip road and Garden Field Lane.

No collisions are reported for the most recent five year period (March 2007 to February 2012) in the vicinity of the Northchurch, Kingshill Way or London Road gateways (refer to **Figure 14**). However the perception of conflict for cyclists can deter journeys by bicycle. Improving these gateways will both serve to highlight the presence of cyclists to motorists and make users feel more comfortable using an on carriageway facility.

The gateways at Cow Roast and Aylesbury Road were deemed to be sufficient and were not highlighted during consultation to be an issue for cyclists. It is therefore proposed that these are retained in the current arrangement.

For cycle journeys to the north east of Berkhamsted, linking to the Ashridge Estate, Gravel Path represents a major barrier to cycling. The steep inclines together with the speeds of vehicles, alongside narrow carriageway widths across the railway bridge make it difficult and uncomfortable to navigate as a cyclist. This was highlighted as an issue during stakeholder consultation.

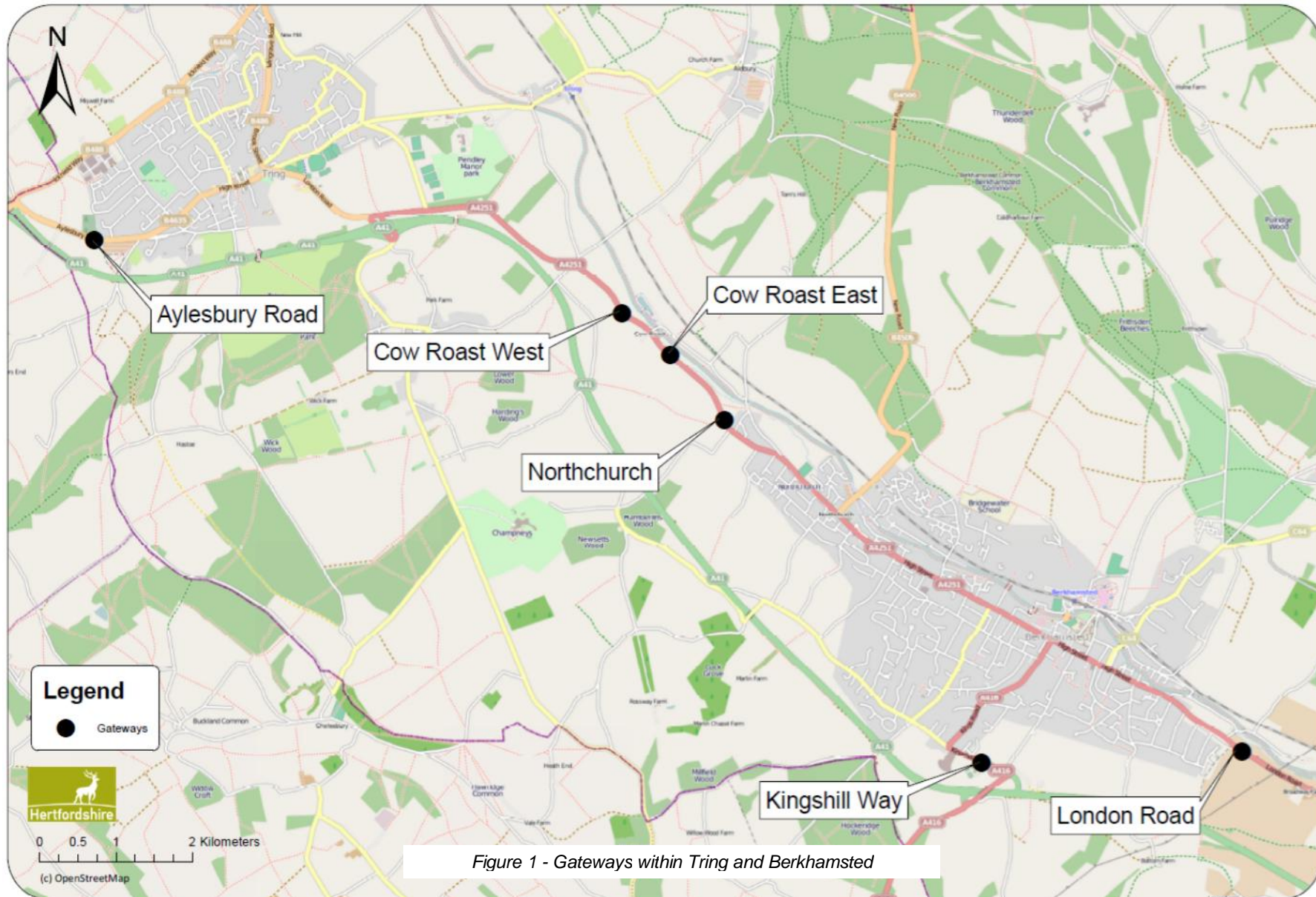


Figure 1 - Gateways within Tring and Berkhamsted



Figure 2 – Tring Road, Northchurch Gateway



Figure 3 – Kingshill Way Gateway, Tring



Figure 4 – London Road Gateway, Berkhamsted


Gateways are administered under the Traffic Advisory Leaflet 13/93 and are discussed in the LTN 2/08 Cycle Design Guidance. There are key principles that cover the use of gateways, including the following:

- Visibility – the location of a gateway should be situated so it is not encountered suddenly. A gateway should be visible over at least the stopping distance for the 85th percentile of the approach speed.
- Islands – these can be used to separate lanes of traffic or to provide refuges for cycle lanes.
- Horizontal elements – build-outs, chicanes, pinch points can support contrasting coloured surfacing and markings to enhance the affect that the carriageway is narrowed.
- Vertical elements – should not be used in isolation from horizontal elements but can provide suitable physical presence at gateways
Signs – appropriate to the location, signs should be conspicuous and at the start of a speed limit zone.

TAL 01/97 gives various forms of cycle bypasses for road narrowings. These require a minimum carriageway width of 11.0m to maintain cyclists' alignment. These scenarios should be used wherever possible to provide the most cycle-friendly scenario at gateways.

The options have been developed to fulfil the following overarching LTP Objectives:


- Enhance quality of life, health and the natural, built and historic environment for all residents
- Improve transport opportunities for all and achieve behavioural change in mode choice.


Measures/Components			
Ref	Description	Assessment of Suitability	Cost
08.1	Remove central islands at London Road Gateway, Berkhamsted	<p>The central islands at London Road make conditions uncomfortable for cyclists, as overtaking vehicles can cause cyclists to be forced to the nearside, particularly as motorists can mistake edge of carriageway markings for cycle lanes. Figure 8 shows the indicative existing arrangement.</p> <p>To provide more space for cyclists the three sets of central islands could be removed, whilst retaining the central hatching. This would give overtaking motorists sufficient space without requiring cyclists to move over to the nearside. This could be considered during the routine resurfacing programme.</p>  <p><i>Figure 5 – Central Island to be removed</i></p> <p>Following further investigations, despite no collisions taking place at this location during the past five years (Figure 14 shows all collisions in Berkhamsted), right turning collisions led to island provision in the first instance. Care therefore needs to be taken to ensure improvements for cyclists are not at the detriment of road safety.</p> <p>NOT DELIVERABLE</p>	



08.2	Provide cyclist warning signs in vicinity of gateways	<p>Both the Kingshill Way and Northchurch Gateways can provide an uncomfortable environment for cyclists. It is proposed to implement Cycle Warning Signs to TSRGD diag. No 950 on approach to the Northchurch and Kingshill Way gateways to provide a simple cost effective measure to increase the conspicuity of cyclists.</p> <p>This could represent a two stage approach with further works undertaken following an assessment of the effectiveness of the signs in improving conditions for cyclists.</p> <p>Deliverability – Less than 1 year SIMPLE</p>	£2,000 to £3,000
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08.3	Reconfigure Northchurch and Kingshill Way gateways in Berkhamsted to improve conditions for cyclists	<p>Following implementation of proposals outlined the 08.2, the following options are should be considered if further measures are required to allow for an improved environment for cycling:</p> <p>Northchurch Gateway (Figure 2):</p> <ul style="list-style-type: none"> • Remove kerb buildout and provide an arrangement similar to that outlined in Figure 9; • Remove existing transverse carriageway granite setts and replace with asphalt to match surrounding carriageway to improve ride quality for cyclists. <p>Kingshill Way Gateway (Figure 3):</p> <ul style="list-style-type: none"> • Remove kerb buildout and provide an arrangement similar to that outlined in Figure 10. Existing carriageway widths (approximately 6.2m) mean it may not be possible to provide cycle lanes, therefore cycle logos should be provided in the centre of the lane through the feature to both encourage cyclists to adopt the primary position and to highlight the presence of cyclists to motorists. <p>Typical details for cycle friendly gateways are shown in Figures 9 and 10. Coloured surfacing should be considered on a site by site basis as required to further increase conspicuity.</p> <p>These options should be implemented as part of ongoing carriageway maintenance to allow for efficiency savings</p> <p>Deliverability: 1 to 2 years STANDARD</p>	£14,000 to £18,000
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<p>08.4</p>	<p>Removal of existing inadequate cycle facilities in vicinity of gateways in Berkhamsted</p>	<p>Existing green surfacing at the London Road gateway into Berkhamsted (see Figure 4) and further into Berkhamsted at Bank Mill Lane (see Figure 6) require removal as these are not formal cycle facilities. The facility at Bank Mill Lane does not provide any benefit to cyclists and should be removed. Consideration should then be given to providing a 1.5m advisory lane, subject to confirmation of sufficient widths, in order to connect to the inter-urban route from Hemel Hempstead as outlined in 08.5.</p>  <p><i>Figure 6 – Removal of green markings opposite Bank Mill Lane</i></p> <p>The cycle bypass at Northchurch, close to the Darr’s Lane junction, causes cyclists to merge into moving traffic (see Figure 7). This facility should be considered for removal. A substandard mandatory cycle lane (circa 1.0m wide) is also provided westbound, west of Darrs Lane. It is recommended this should be removed if a minimum 1.5m cycle lane cannot be provided, as part of routine maintenance / programmed carriageway resurfacing.</p> <p>Figure 11 shows an indicative proposed arrangement to replace the cycle bypass at Darrs Lane, which will enable cyclists to adopt a primary riding position while also providing horizontal deflection to reduce speeds through the area. This deflection could be achieved either through footway widening, which would also benefit pedestrians, or carriageway hatching as a more cost effective measure.</p>	<p>£50,000 to £60,000</p>
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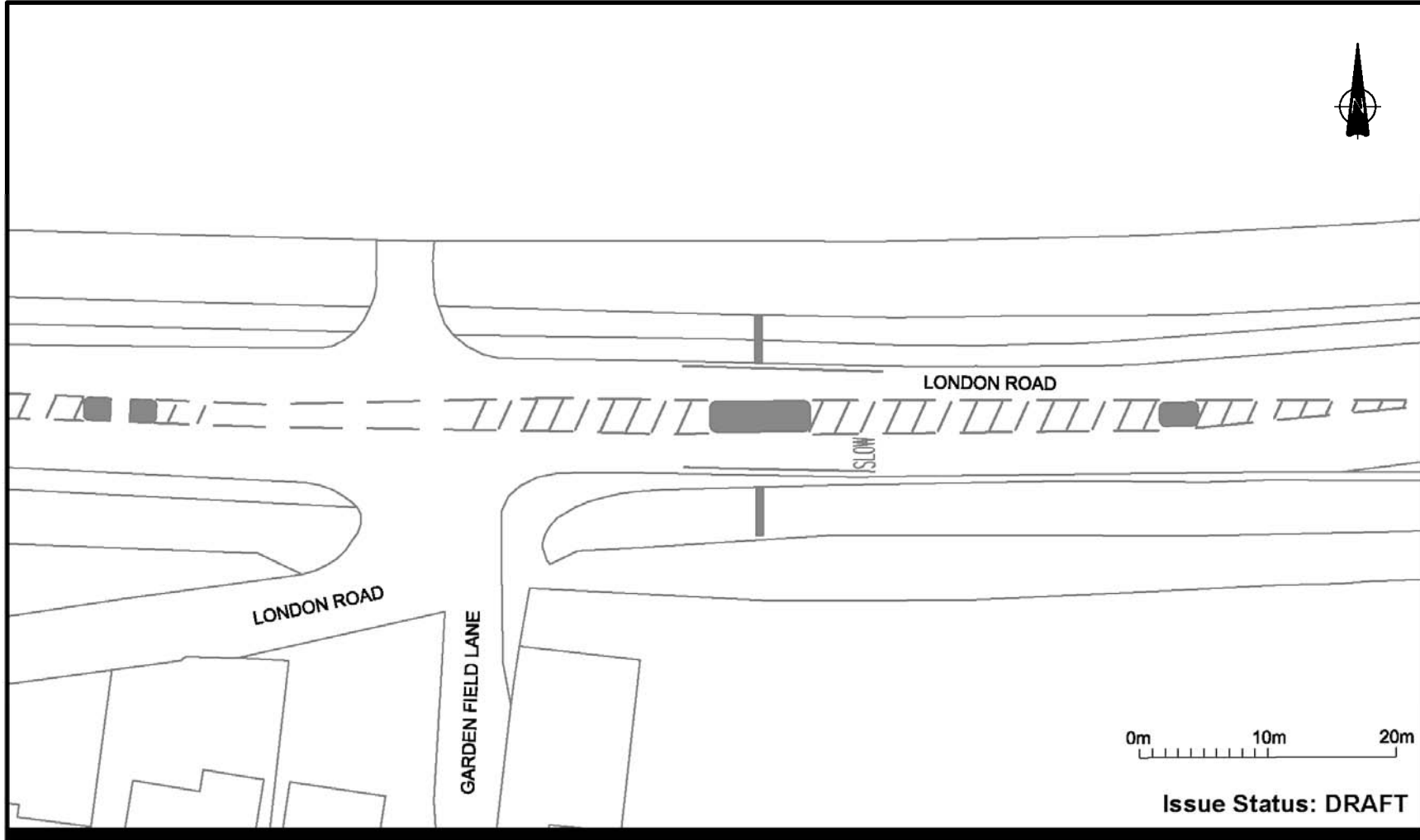
		 <p style="text-align: center;"><i>Figure 7 – Cycle bypass at Northchurch</i></p> <p>Deliverability: 1 to 2 years STANDARD</p>	
08.5	Provision of inter-urban cycle facilities connected to Gateways in vicinity of Tring and Berkhamsted	<p>A lack of specific cycle provision on London Road and Tring Road was raised as an issue during stakeholder consultation and again at public consultation. There is an opportunity to improve provision of cycle facilities in the proximity of the Berkhamsted and Northchurch gateways.</p> <p>From Wharf Lane, Cow Roast, there is the opportunity to provide an off-carriageway shared use facility along the southern footway of Tring Road (approximately 800m), connecting the Chilterns Cycleway to the Grand Union Canal Towpath. The Chilterns Cycleway leaves the towpath at Dudswell Lane but cyclists can continue along the towpath until Wharf Lane where the proposed facility will pick them up. This will then connect with Newground Road and the northern loop of the Chilterns Cycleway (see Figure 12).</p> <p>An inter-urban facility could be provided on the northern footway of London Road from Bank Mill Lane to Little Heath Lane (approximately 1700m). This facility would be shared use for its length with suitable access and egress points and appropriate signing (Figure 13).</p> <p>Given the low footfall on these routes, and in keeping with the surrounding environment, the</p>	£6,000 to £8,000

		<p>footway could be upgraded to shared use with existing footway widths maintained. The provision of signage and dropped kerbs provided at the three field accesses opposite Garden Field Lane and east and west of Broadway Farm would allow cyclists to utilise the route. While widths will be below those outlined in the Roads in Hertfordshire design guidance, minimal upgrades will provide a usable and cost effective facility to improve the interurban cycle network and provide a route suitable for cyclists to Bikeability Level 1 (Figure 15 and 16).</p> <p>Deliverability: 1 to 2 years STANDARD</p>	
08.6	Cycle warning sign on Gravel Path	<p>Cycling on Gravel Path is uncomfortable and considered unsafe for cyclists, particularly on the ascent.</p> <p>It is proposed to implement a Cycle Warning Sign to TSRGD diag. No 950 on the existing lighting column on the downhill approach to Gravel Path to highlight presence of northbound cyclists to motorists.</p> <p>Deliverability – Less than 1 year SIMPLE</p>	£1,000 to £3,000
Supporting Evidence of Measures/Components			
Refer to Figures 11-15 below.			

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Project Management Initials: Designer: MJA Checked: HCG Approved: ADR ISO A4 210mm x 297mm



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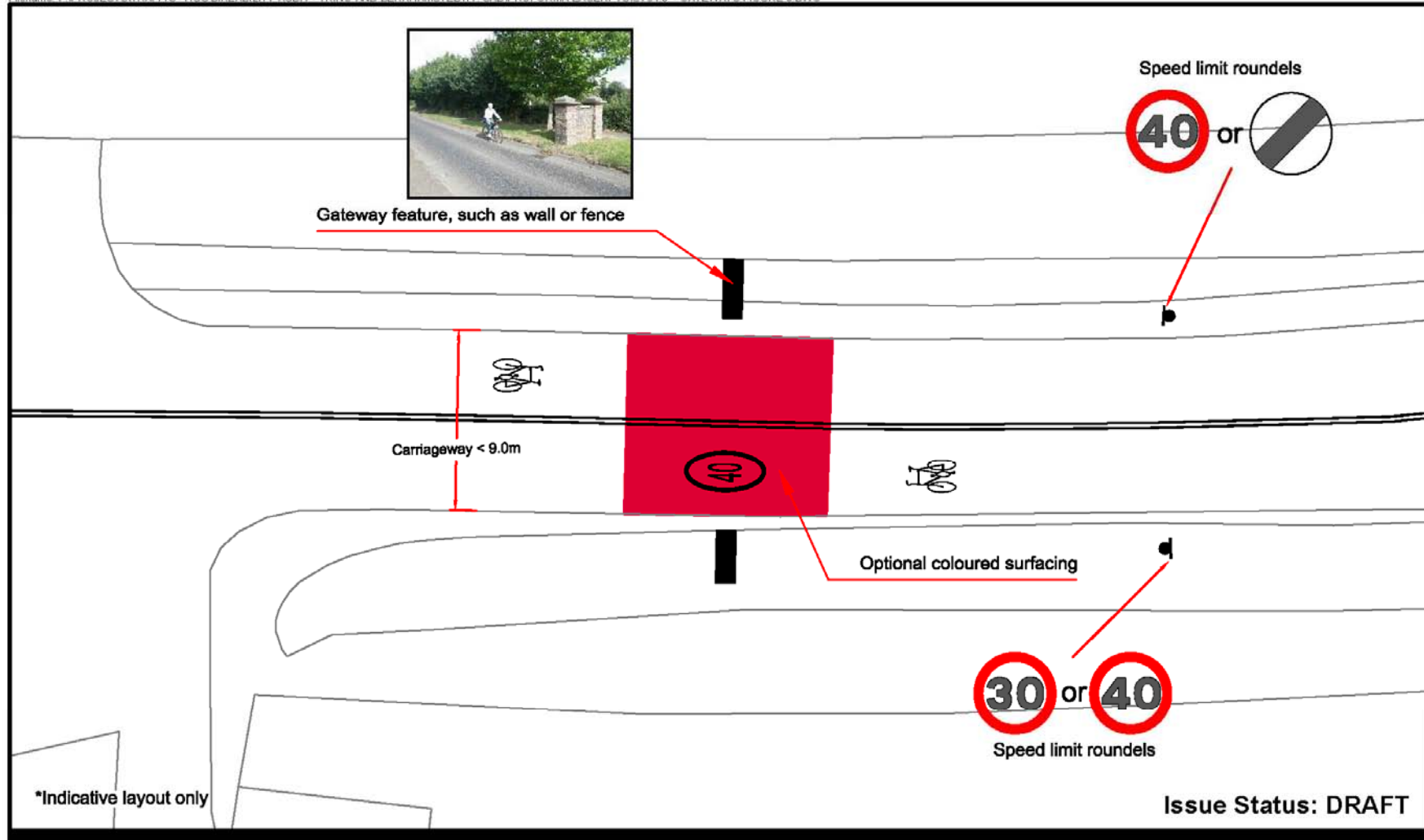
Figure 8 - London Road, Berkhamsted Indicative Existing Gateway Layout

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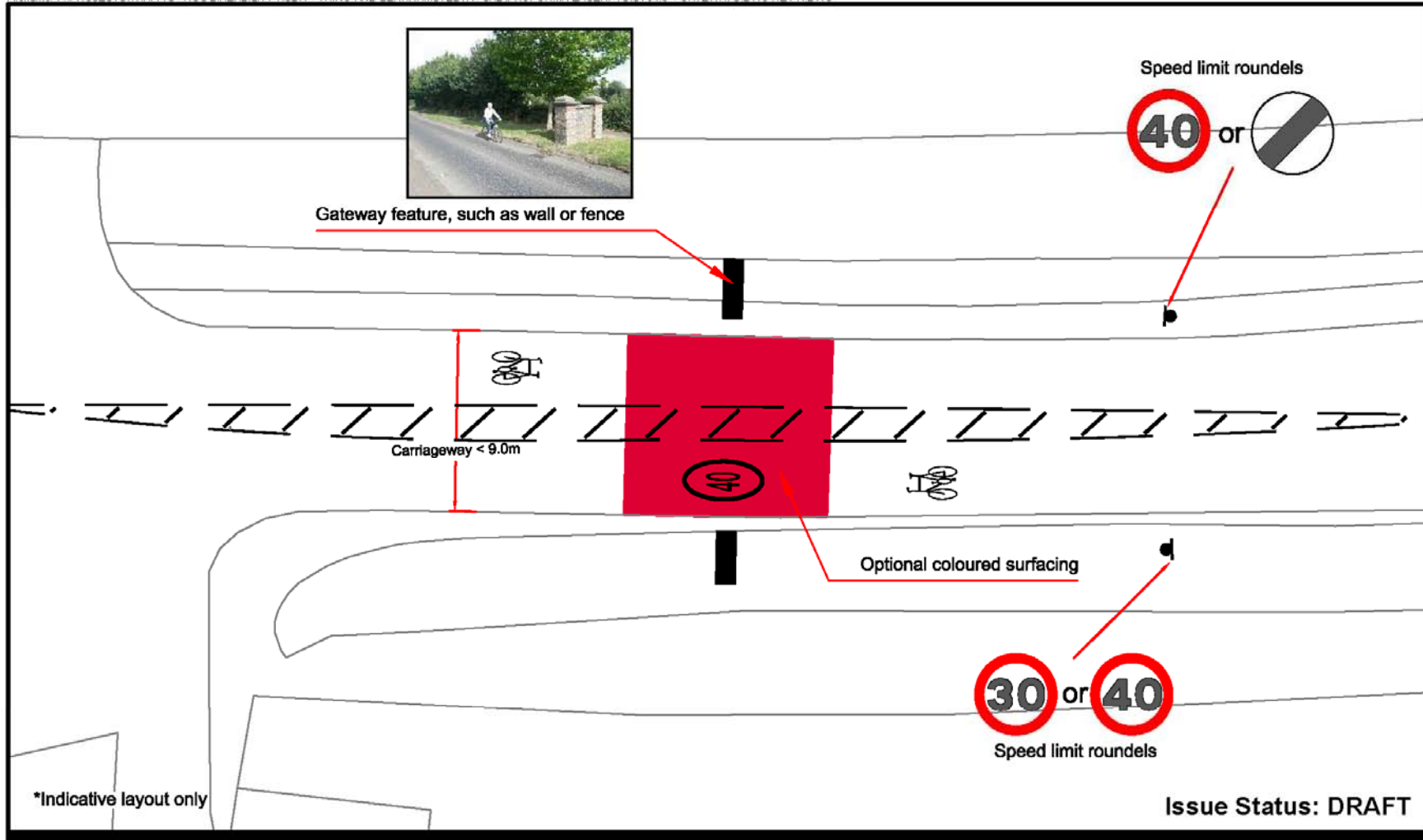


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Figure 9 - Indicative Gateway layout for carriageway width < 9.0m

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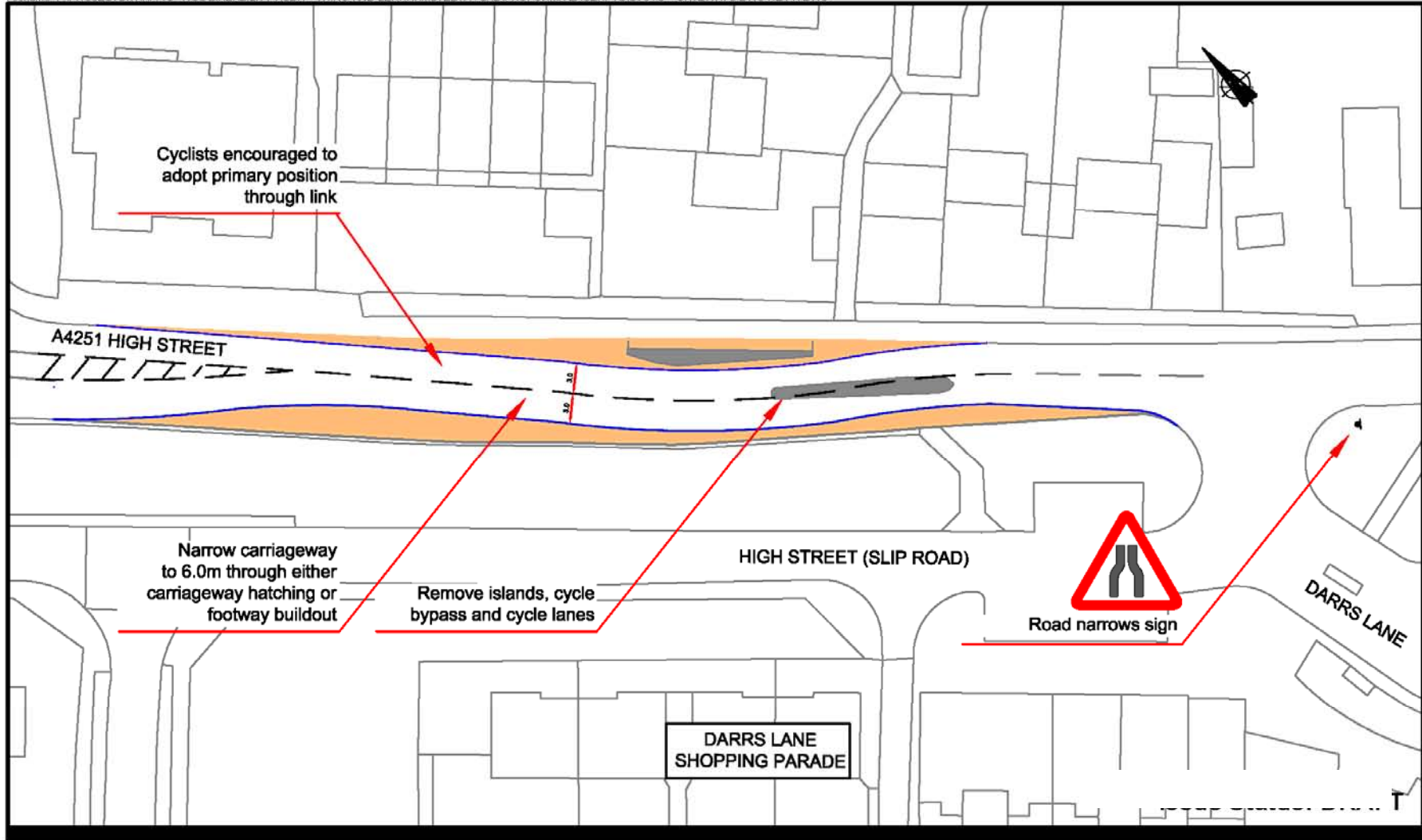
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Figure 10 - Indicative Gateway layout for carriageway width < 9.0m

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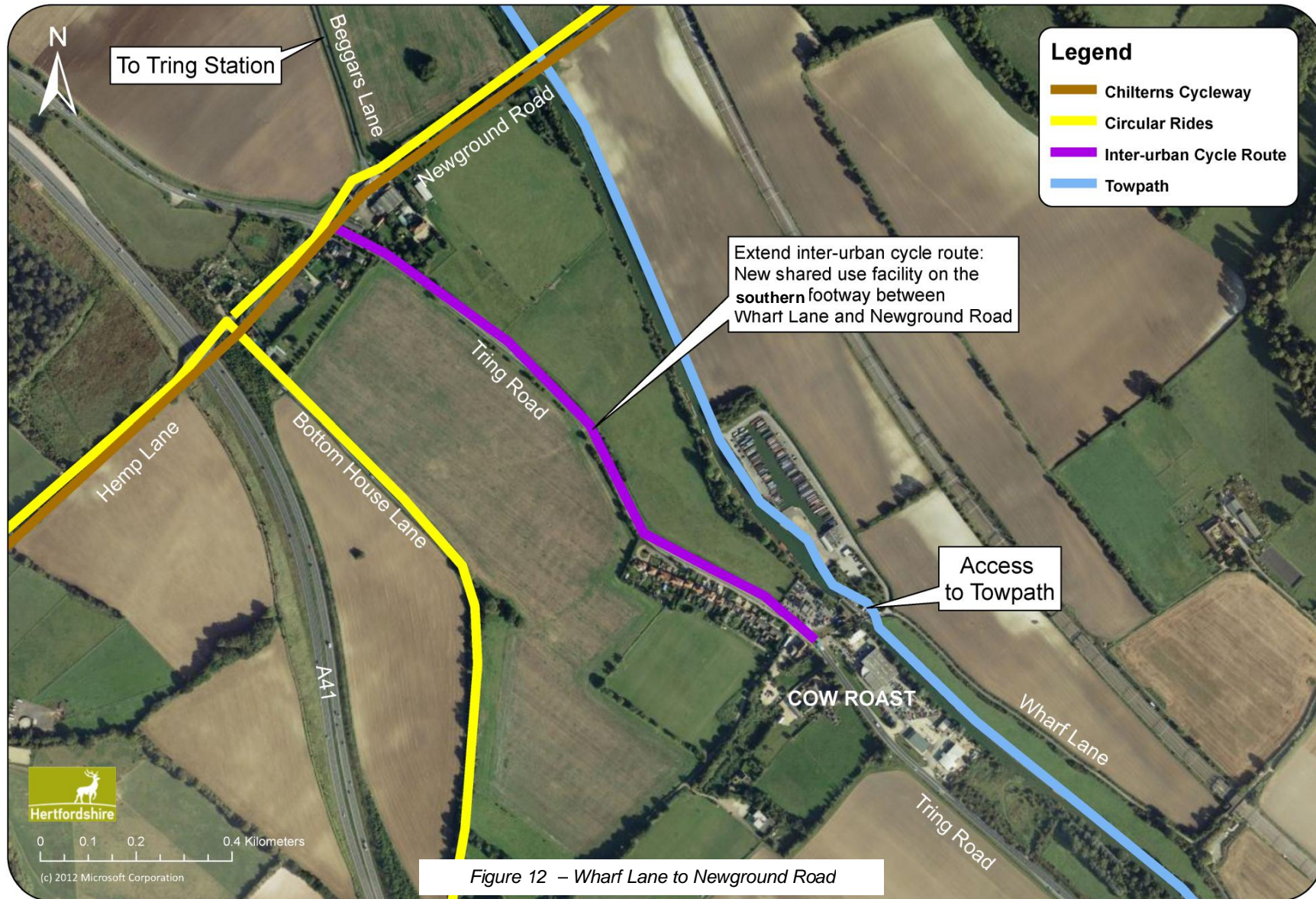


Figure 11 - Indicative layout removal cycle bypass and mandatory cycle lane

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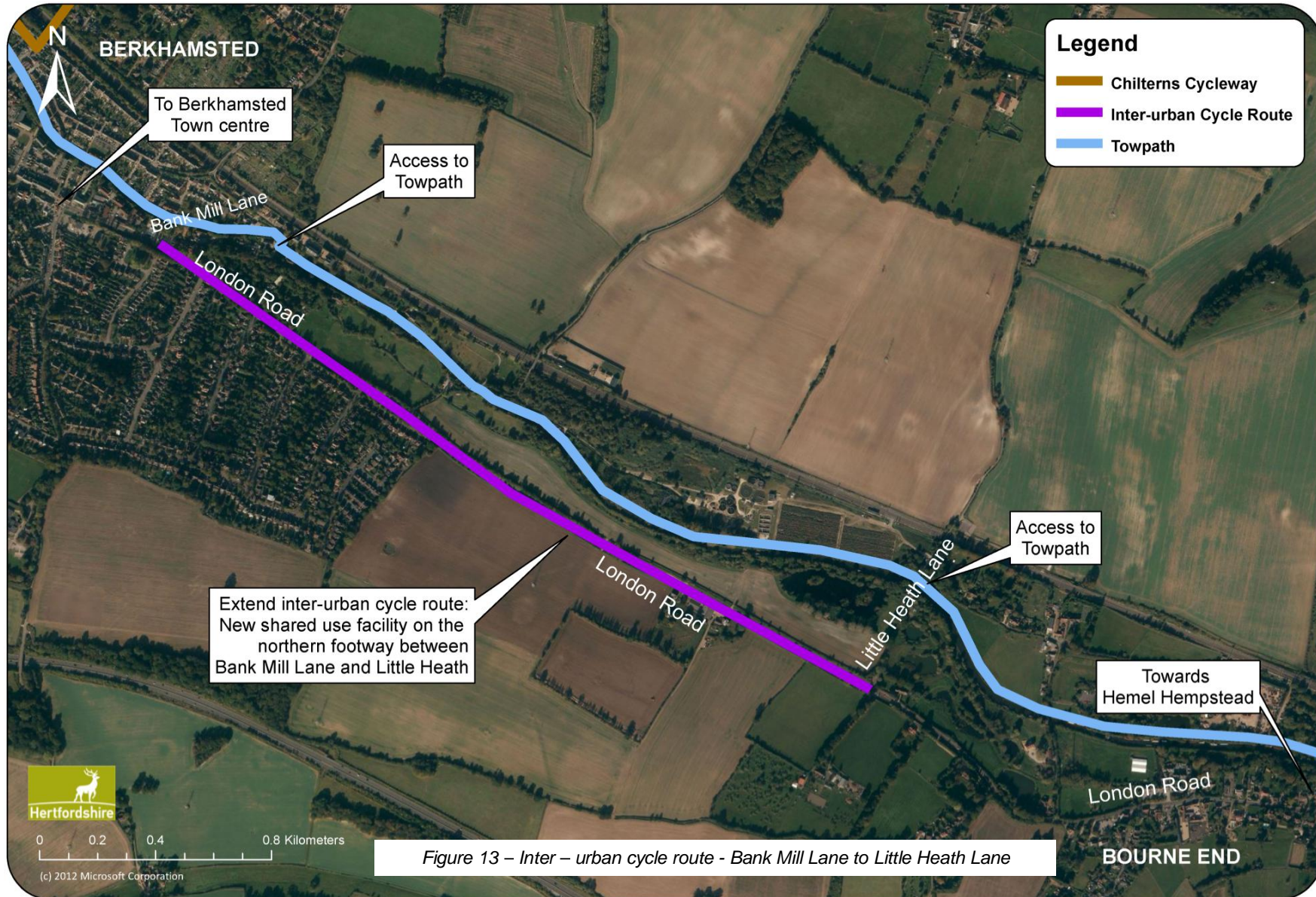
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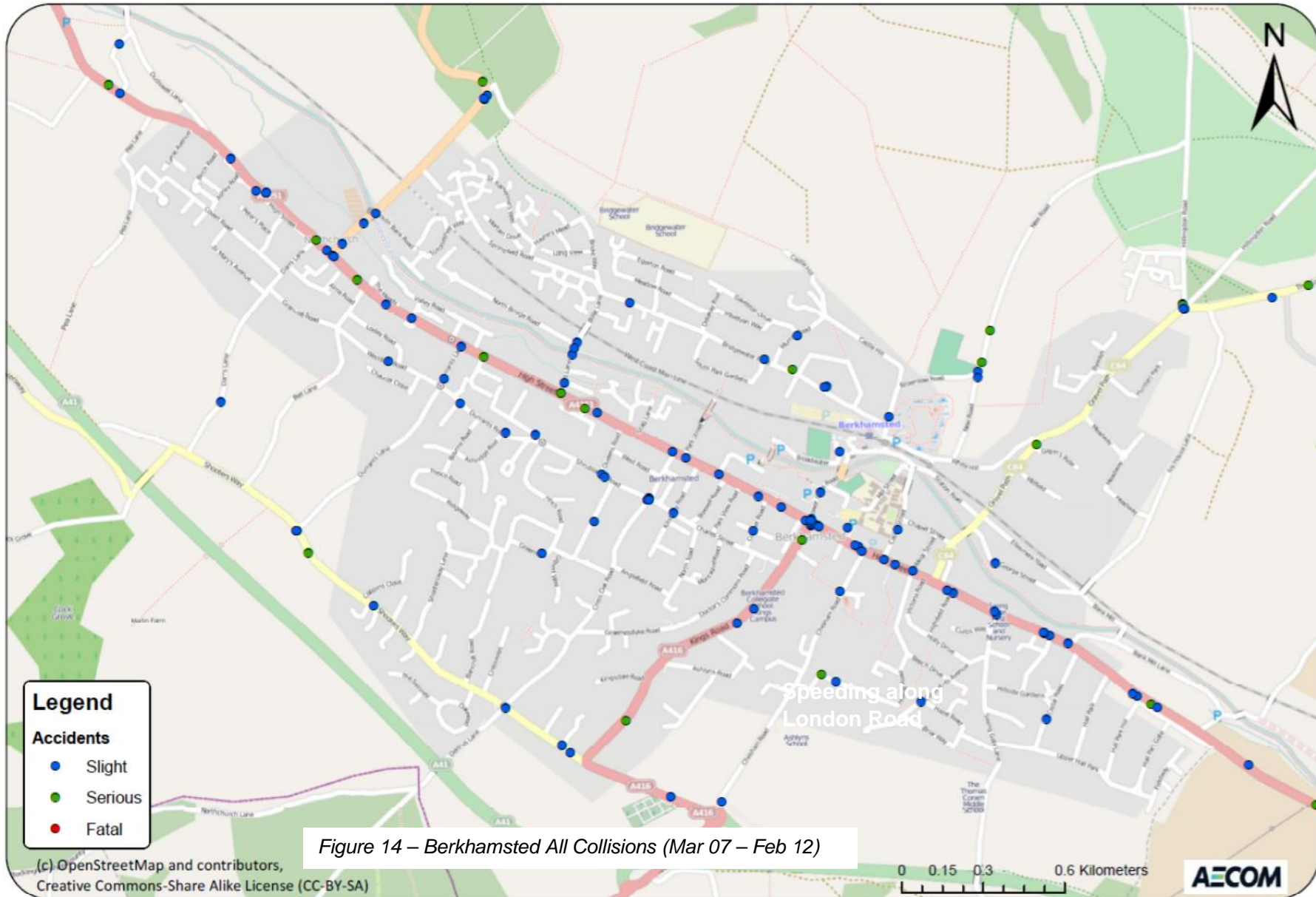


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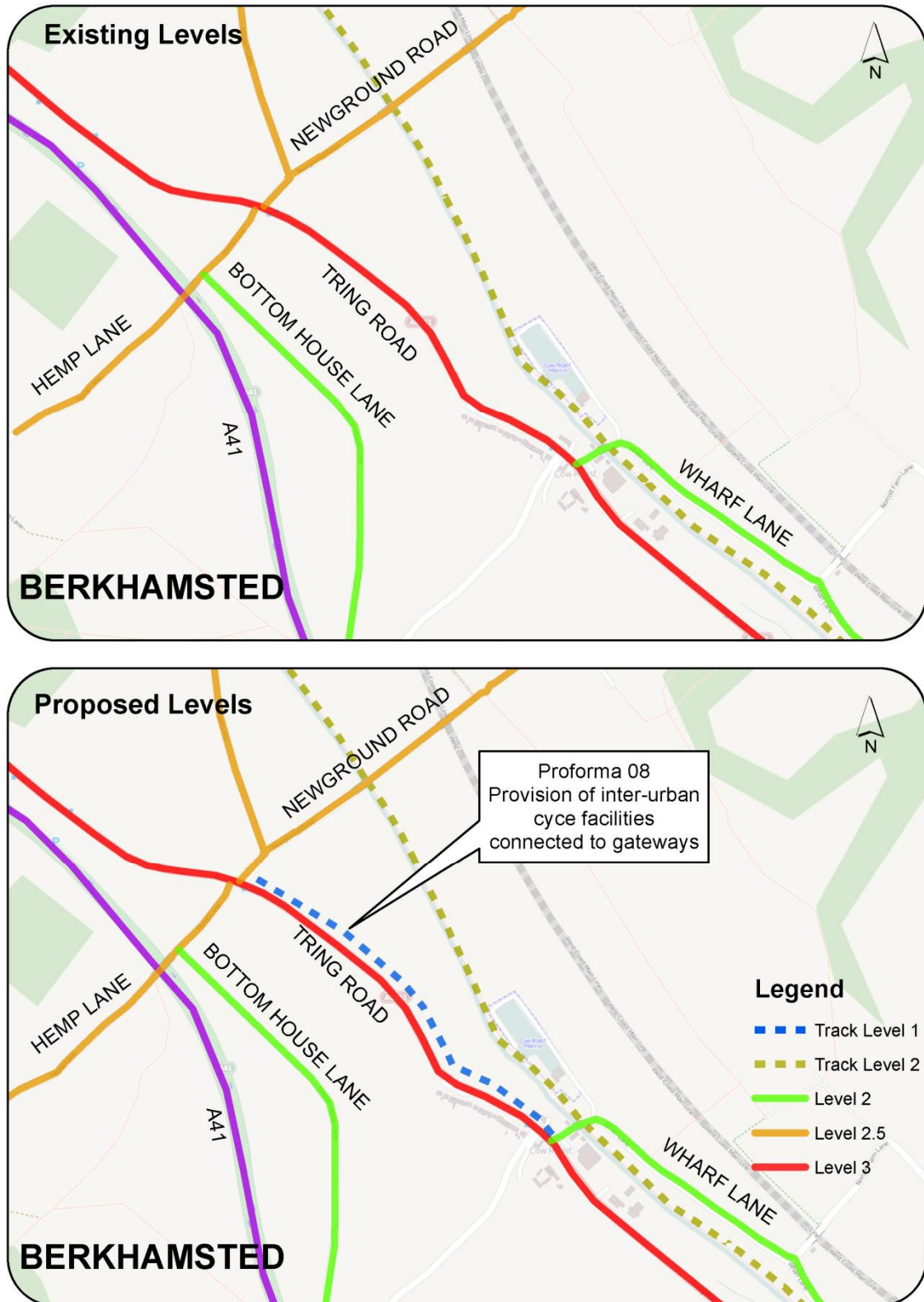


Figure 15 – Wharf Lane to Newground Road Before and After Bikeability Levels

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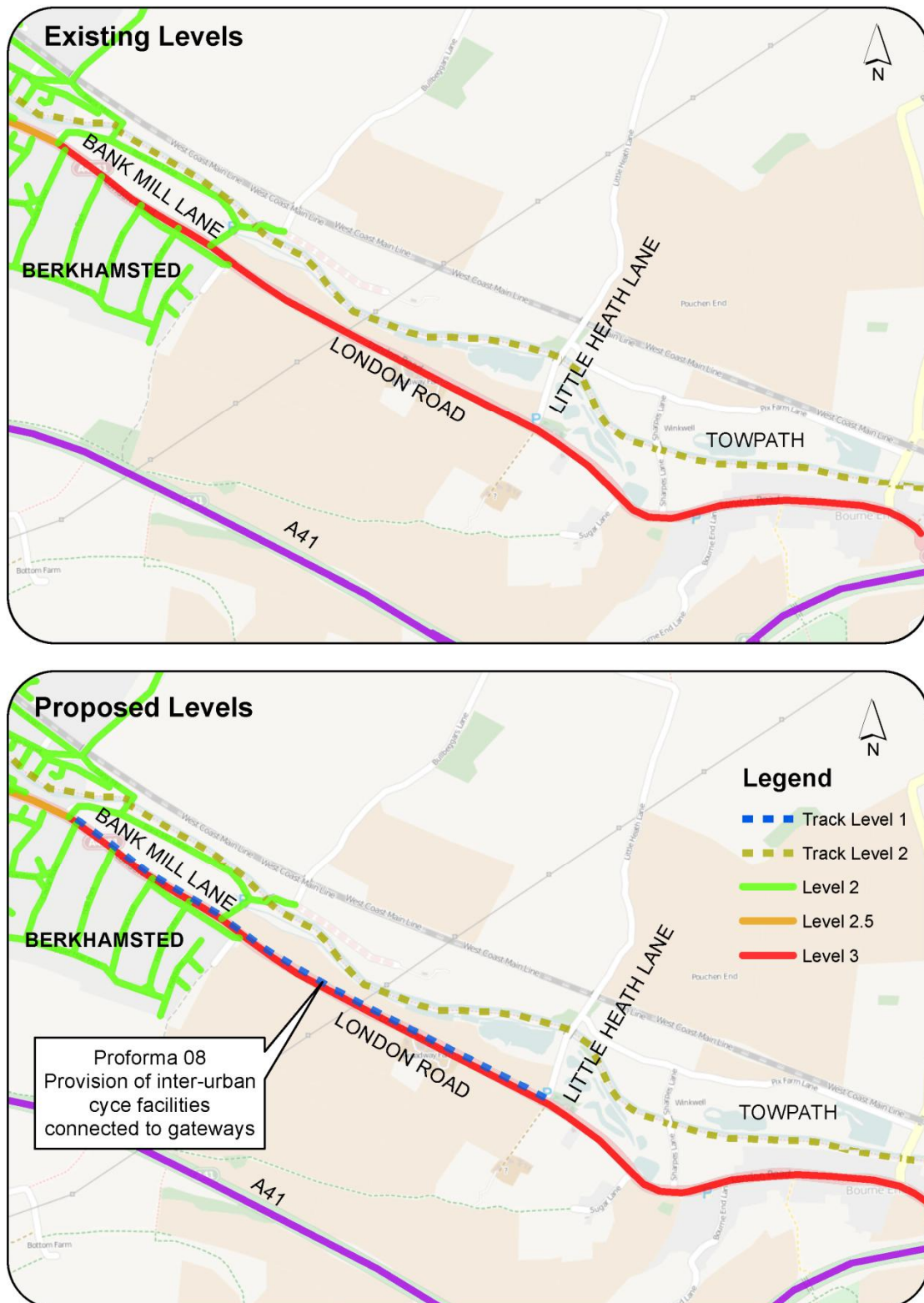


Figure 16 – London Road Berkhamsted, Before and After Bikeability Levels

Preferred Option

It is recommended that measures 08.2 and 08.6 should be implemented as quick wins to increase cyclists' conspicuity. Following an assessment of the effectiveness of measure 08.2, further work as outlined 08.3 may then be required to improve safety at the gateways.

Measures 08.4 and 08.5 should be progressed subject to funding, to improve conditions for cyclists at gateways and in the surrounding areas. Provision of an off-carriageway facility will enable an inter-urban route to be provided suitable for Bikeability Level 1 cyclists.

It is recommended that Measure 08.1 is not progressed as the islands serve to protect right turning vehicles and removal is likely to increase potential collision risk.

Contribution to Objectives / Indicators	UTP Objectives	<ul style="list-style-type: none"> • Promote active travel modes throughout the study area to encourage active and healthy lifestyles; • Improve connectivity within and between local towns through a complete network of walking and cycling facilities
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Outline Cost Analysis of Preferred Option or Options

Design and Implementation	Indicative Cost*	Notes
08.2	£2,000 to £3,000	
08.4	£50,000 to £60,000	
08.5	£6,000 to £8,000	
08.6	£1,000 to £3,000	
TOTAL COST FOR DELIVERY	£59,000 to £74,000	

*Costs provided by HCC

Maintenance Liability	High Medium Low	
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Deliverability of Preferred Option	Simple – ‘quick win’, could be delivered within 1 year
	Standard – could be delivered in 1 to 2 years, in line with IWP
	Complex – could not be delivered in 2 years, has some issues that require resolution before design

Other Information/Additional Notes:

Existing highway dimensions are based on OS mapping provided by HCC and / or site measurements. It is recommended further survey work is carried out to provide a full assessment of available widths during feasibility design.