

Scheme Name	Marketing of electric bikes in Tring and Berkhamsted	
	Cycling	
Scheme Reference	11	
Problem References	B17	Inclines – height range from 110m to 160m above sea level – therefore 50 metres variance in levels across the town – some areas too steep to propose realistic cycle measures
Links to other UTP schemes:	10	

Context

The Department for Transport has awarded a grant of £868,000 from its Local Sustainable Transport Fund (LSTF) for a three year project to increase car-free tourist travel from gateway towns in the Chilterns, linking with the Chilterns Cycleway. The bid was submitted by Wokingham Borough Council on behalf of a range of partners including the Chilterns Conservation Board, Chilterns Society and CTC.

These Gateway towns include Tring and Berkhamsted and the areas will benefit from investment in improved cycle links, better signage on cycling routes, more cycle parking and provision of bike hire facilities at railway stations and major attractions. One of the elements of the application for funding was the provision of electric bicycles in order to support the use of sustainable forms of transport for tourism.



Figure 1 – Gravel Path looking south

It is an aspiration that while the funding is focused predominantly on leisure cycling, the subsidy may create the opportunity to utilise electric bicycles for short journeys within the towns.

Berkhamsted is characterised by steep gradients, which constitute a major barrier to cycling in the town. In certain locations (Gravel Path, Chesham Road, Bridle Way, Swing Gate Lane) gradients are such that the implementation of specific cycle measures would prove futile. The provision of an electric bicycle hire scheme within Berkhamsted would alleviate many of the issues posed by the inclines, and should make cycling a viable

option to the car, both for leisure and utility cycling.

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

- Improve transport opportunities for all and achieve behavioural change in mode choice;
- Reduce transport’s contribution to greenhouse gas emissions and improve its

resilience

Measures/Components			
Ref	Description	Assessment of Suitability	Cost
11.1	Marketing	<p>Following the implementation of an electric bicycle scheme within Tring and Berkhamsted, a suitable marketing campaign should be developed to raise awareness of the scheme. This could be in the form of an area cycle map highlighting key routes and information on electric bicycle locations. This should assist in combating the obstacles posed by inclines on either side of the valley.</p> <p>Personalised travel planning, in line with Sustrans' TravelSmart should also consider promotion of electric bicycles in allowing residents to choose to cycle with the two towns.</p> <p>Ensure appropriate wayfinding is provided to direct cyclists to electric bicycle hubs and provide additional promotional signage opportunities. Further details of wayfinding and PTP proposals can be found in Scheme Proforma 10.</p> <p>Deliverability – More than 2 years COMPLEX</p>	TBC
Supporting Evidence of Measures/Components			
Refer to Figures 2 – 4.			

Elevation Data

Total Ascent:	167 ft	0.4 m
Total Descent:	0 ft	526 ft
Start Elevation:	359 ft	
End Elevation:	526 ft	<input checked="" type="radio"/> Elevation
Min Elevation:	359 ft	<input type="radio"/> Gradient
Max Elevation:	530 ft	Back

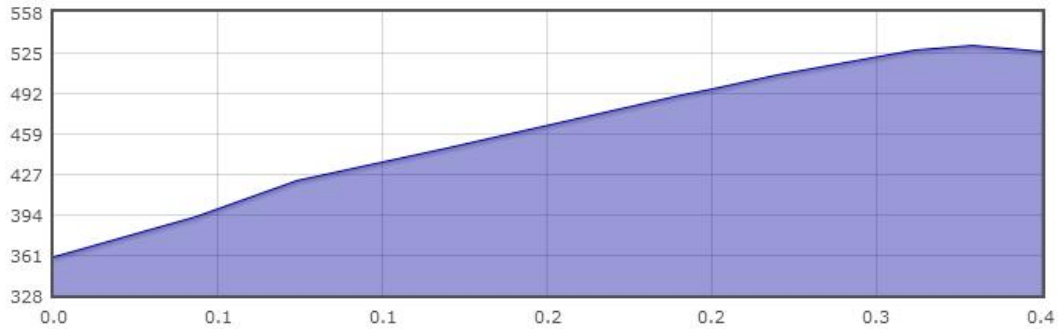


Figure 2 – Gravel Path Elevation (www.bikehike.co.uk)

Elevation Data

Total Ascent:	173 ft	
Total Descent:	15 ft	
Start Elevation:	347 ft	
End Elevation:	505 ft	<input checked="" type="radio"/> Elevation
Min Elevation:	346 ft	<input type="radio"/> Gradient
Max Elevation:	520 ft	Back

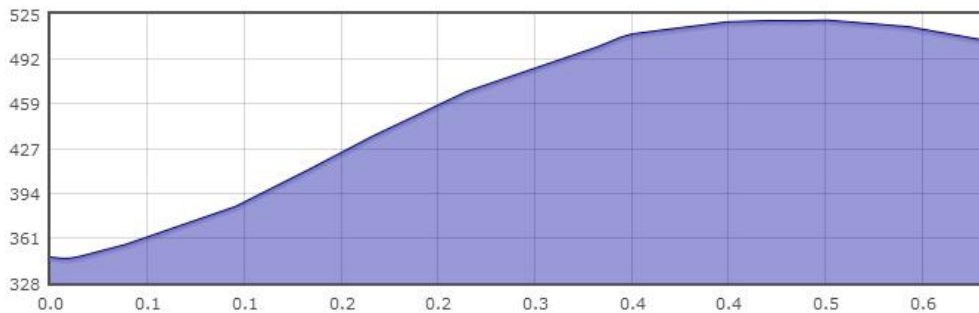


Figure 3 – Swing Gate Lane Elevation (www.bikehike.co.uk)



Figure 4 – Typical Example of an Electric Bicycle

Preferred Option

Measure 11.1 should be considered following implementation of an electric bicycle scheme. This will follow further work to be undertaken as part of the Chilterns Cycleway Sustainable Gateways project to develop a package of holistic measures to promote cycling and other sustainable modes of transport throughout both towns.

Contribution to Objectives / Indicators	UTP Objectives	<ul style="list-style-type: none"> • Improve connectivity between transport modes to allow for greater transport flexibility • Promote active travel modes throughout the study area to encourage active and healthy lifestyles
--	----------------	---

Outline Cost Analysis of Preferred Option or Options

Design and Implementation	Indicative Cost	Notes
11.1	TBC	Costs cannot be established at this stage
TOTAL COST FOR DELIVERY	TBC	

Maintenance Liability	High Medium Low	
------------------------------	-----------------------	--



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
Delivery Issues	Further development required in coordination with the Chilterns Cycleway Sustainable Gateways project to ensure a user friendly scheme is implemented.

Other Information/Additional Notes:

Project Officer for Chilterns Cycleway Sustainable Gateways project currently being appointed by Wokingham Borough Council. HCC to liaise accordingly.

Scheme Name	Link to Pitstone Village from Tring Station Cycling	
Scheme Reference	12	
Problem References	T02	Link needed between Pitstone to Tring Station, utilising the Tring Gateway Station Project
Links to other UTP schemes:	07, 10, 14	

Context

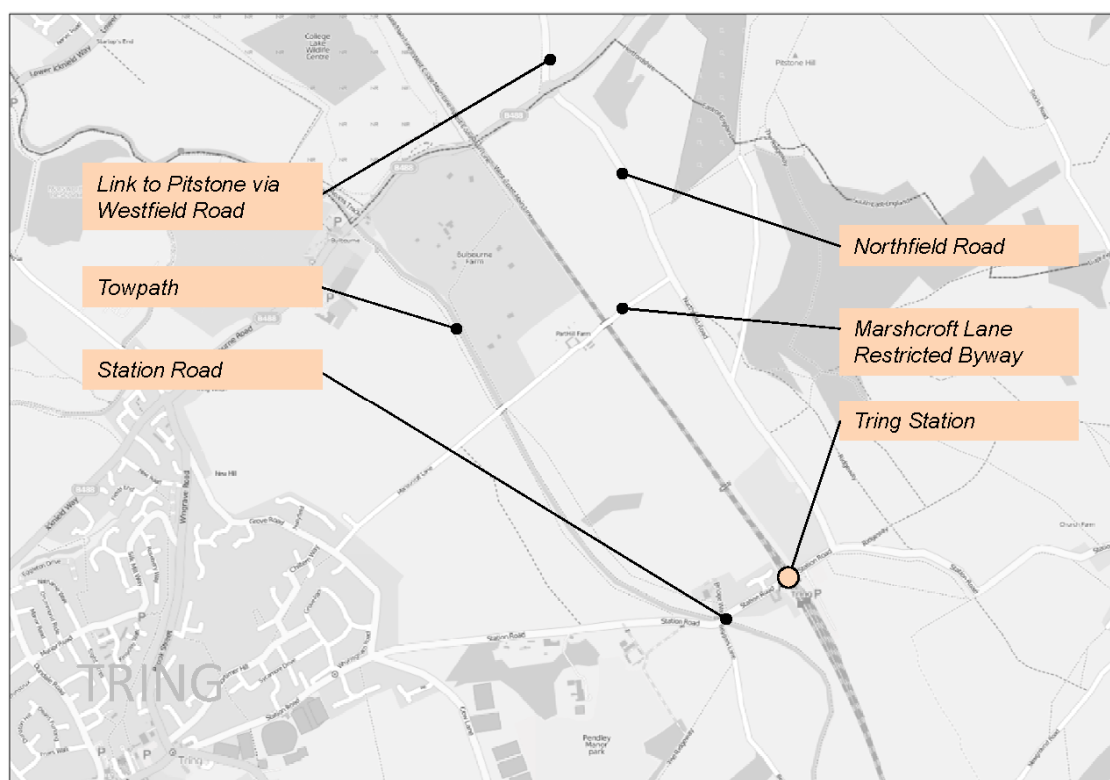


Figure 1 – Pitstone Location Plan

Pitstone is an expanding village with a large housing development on former cement works, located 3.8 miles to the northeast of Tring. Although Pitstone is located within Buckinghamshire, a key outcome of the Bikeability Audit is to identify a suitable link from Pitstone to Tring Station, as no clear route currently exists for this desire line.

South of Pitstone village, Westfield Road is subject to national speed restrictions, with a good quality segregated cycle track provided on the eastern footway up to the Upper Icknield Way roundabout. The off-carriageway facility continues through the roundabout but terminates within 50 metres on Upper Icknield Way and Northfield Road (Figures 2 – 4). Both roads are also subject to a 60mph speed limit, as is Station Road, until east of the Station bridge, where a 30mph restriction is in operation.



Figures 2 – 4 Existing facilities Northfield Road, Westfield Road and Upper Icknield Way Roundabout

South of Upper Icknield Way no link is provided for cyclists. Section 106 funding is likely to be available in order to provide a facility to meet the planning requirements of the Pitstone development. This link will utilise the Tring Gateway Station Project to improve sustainable access from the town and the new development at Pitstone to Tring Station.

The link to Pitstone was highlighted through Stakeholder consultation, particularly the high speeds, carriageway condition and lack of specific cycle provision on Northfield Road.

As part of Stage 2, alternative alignments to Northfield Road to connect to Tring Station have been investigated, including use of Upper Icknield Way to connect to the Towpath. Carriageway widths at the railway bridge and limited opportunities to widen or provide off carriageway facilities on Upper Icknield Way deem this alignment unfeasible.

Marshcroft Lane intersects Northfield Road approximately 850m from the Upper Icknield Way Roundabout. It is designated as a 'Restricted Byway' which legally allows for use by cyclists, pedestrians and horse riders, but restricts use by motorised vehicles (CTCs' Briefing 5C, August 2010 gives more information on the byway designation).

Two private properties / farms are located east and west of the railway line, and cyclists would be required to dismount and navigate through a gate (**Figure 5**) in order to use this route. The surface condition of Marshcroft Lane is poor in the vicinity of the railway line (**Figure 6**) and any formalised routing here would require the surfacing to be improved.

The towpath condition between Station Road and Marshcroft Lane was deemed to be poor in places (**Figure 7**) and improvements would be required to promote this route as a viable link from Pitstone to the station. Cycles would also be required to dismount at Bridge 135 to access Station Road from the towpath.

The options developed aim to fulfil the following overarching LTP Objectives:

- Support economic development and planned dwelling growth;
- Improve transport opportunities for all and achieve behavioural change in mode choice;
- Enhance quality of life, health and the natural, built and historic environment for all residents.



*Figure 5 – Gate at
Marshcroft Lane*



*Figure 6 – Surface condition on
Marshcroft Lane*




*Figure 7 – Towpath between Station
Road and Marshcroft Lane*





Measures/Components			
Ref	Description	Assessment of Suitability	Cost
12.1	On-road link to Pitstone via Northfield Road	<ul style="list-style-type: none"> • Provide a signed on carriageway cycle link on Northfield Road from the shared use footway at the Upper Icknield Way Roundabout: <ul style="list-style-type: none"> ▪ Provide cycle warning signs; ▪ Provide cycle logos to TSRGD diag. No. 1057 to highlight route to motorists; ▪ Refresh central white lines to encourage good lane discipline • Resurface carriageway to a suitable depth to improve ride quality for cyclists; undertake carriageway investigatory works to assess carriageway composition and condition and provide surfacing improvements accordingly. Due to the existing concrete construction of the carriageway, provision of an asphalt surfacing is likely to be extremely costly. • Refer to Proforma 10 for signage improvements <p>These measures would provide for commuter cyclists (skilled to Bikeability Level 3) only and improve conditions for those who already use this route from Pitstone to the station.</p> <p>Traffic volumes, classifications and speed surveys will be required at feasibility stage to fully assess this option.</p> <p>NOT DELIVERABLE</p>	
12.1a	Reduce Northfield Road speed limit to 40mph between the Upper Icknield Road Roundabout and Station Road to make conditions safer for cycling on carriageway.	<p>To complement the measures outlined in 12.1 the option to reduce the speed limit on Northfield Road to 40mph could be considered to make conditions more conducive to cycling.</p> <p>In order to successfully implement a reduced speed limit, the existing 85th percentile speed would need to be <47mph, with an average speed of <39mph, in accordance with HCC's Speed Management Strategy. This would allow a new speed limit to be enforceable without additional speed reduction measures (for example horizontal or vertical traffic calming</p>	

		<p>measures).</p> <p>Site observations show that the required existing speeds as outlined above cannot be achieved. Traffic Master data indicates the existing 85th percentile speed to be 49mph. It is therefore unfeasible to reduce the speed limit on Northfield Road without additional traffic calming measures.</p> <p>TrafficMaster data provides an average speed across a link, including congestion at junctions, thus providing only an insight into speed conditions on highway sections, without reflecting actual speeds that vehicles reach between junctions. As a result, further speed surveys would be required to validate the TrafficMaster data and to fulfil requirements for changes to speed limits.</p> <p>NOT DELIVERABLE</p>	
12.2	Off-road link to Pitstone via Northfield Road	<ul style="list-style-type: none"> • Provide a minimum 2.0m shared use facility on the eastern footway for the full length of Northfield Road (2100m). Given the low pedestrian footfall and the tidal nature of cycle usage, it is envisaged that a 2.0m shared use facility would provide a sufficient Level 2 facility.¹ • Land acquisition is likely to be required in places to gain the required widths. Figure 12 shows the locations where a 2.0m footway could not be provided within the existing highway boundary. At all of these locations, the verge is between 1.6 and 2.0m, therefore some land take would be required to implement a 2.0m facility. • In keeping with the surrounding environment, the shared use path could be constructed using a recycled crushed concrete. This would be in keeping with the rural nature of the road, providing a usable cost effective facility to improve the link to Pitstone. Further investigation should be undertaken to ensure 	£180,000 to £200,000

¹ Level 2 - Roads / cycle tracks suitable for cyclists at Bikeability level 2.

		<p>provision of a durable, environmentally sensitive solution is implemented in line with Roads in Hertfordshire design guidance.</p>  <p><i>Figure 8 – Formalise route on eastern side of Northfield Road with 2.0m shared use path</i></p> <ul style="list-style-type: none"> • Provide a dropped kerb on Station Road northeast kerblines at Northfield Road to link to the new shared use facility and enable cyclists on to the carriageway to continue westbound towards the station. • Provide cycle warning signs to TSRGD diag. No. 950 on Station Road. • Refer to Proforma 10 for signage improvements <p>Deliverability – more than 2 years COMPLEX</p>	
12.3	Marshcroft Lane Link from Pitstone to Tring Station	<p>Assess the feasibility of providing a signed route between Pitstone and Tring Station via Northfield Road, with cyclists turning right in to Marshcroft Lane (a restricted byway), then utilising the canal towpath to link to the off-carriageway facility provided on Station Road:</p> <ul style="list-style-type: none"> • Provide a new shared use 2.0m path between Upper Icknield Way roundabout and Marshcroft Lane for approximately 850m. Due to the anticipated usage and low footfall, an upgraded facility could be constructed using a recycled crushed concrete to provide a usable, cost effective facility suitable for this link. Further investigation should be undertaken to ensure provision of a durable, environmentally sensitive solution is implemented in line with Roads in 	£100,000 to £150,000

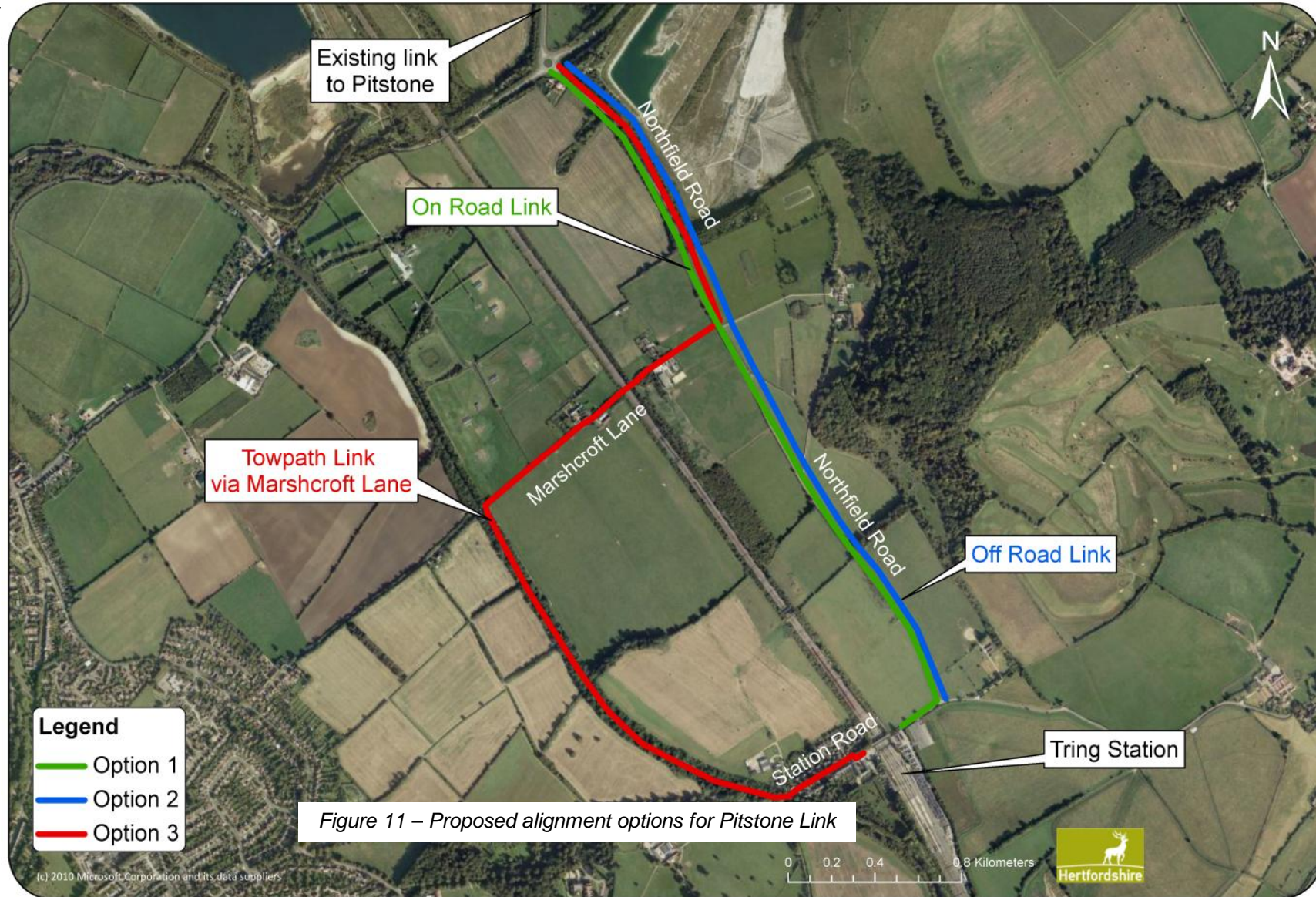
		<p>Hertfordshire design guidance.</p> <ul style="list-style-type: none"> • Provide an uncontrolled crossing / dropped kerb facility to enable cyclists to access Marshcroft Lane from the new shared use path (Figure 9).  <p><i>Figure 9 – Provide a crossing point on Northfield Road to access Marshcroft Lane</i></p> <ul style="list-style-type: none"> • Sign cyclists along Marshcroft Lane to the tow path (approximately 850m). Surfacing improvements will be required to ensure a good quality ride surface for cyclists (see Figure 6). • Liaise with properties on Marshcroft Lane to assess if any access improvements to gate entry can be provided to aid cyclists through the link (see Figure 5). • Cyclists to utilise the towpath between Marshcroft Lane and Station Road – this will need to be upgraded to provide a year round usable facility (see Figure 7). • Provide a wheeling channel at the steps at Station Road to facilitate access. Cyclists would be required to dismount, however this is deemed safer than providing a ramp, as the gradients would encourage cycling at speed. • Provide signing from the towpath to the station, with cyclists using the existing off-carriageway facilities on Station Road. 	
--	--	---	--

		 <p><i>Figure 10 – Existing towpath access from Station Road – wheeling channel required</i></p> <p>Deliverability – more than 2 years COMPLEX</p>	
12.4	Marketing Campaign to raise awareness of Pitstone cycle link	<p>To complement the measures as outlined above, and particularly if an on carriageway facility is provided, a marketing campaign within Pitstone Village should be employed to raise awareness of the presence of cyclists on Northfield Road and Station Road. Additional marketing material should be provided at Tring Station / Tring Station car park to highlight the presence of cyclists to motorists.</p> <p>This measure can serve to both highlight the presence of cyclists on semi-rural roads, and act as a cycling promotional measure to emphasize the health and environmental benefits of cycling.</p> <p>Deliverability – less than 1 year SIMPLE following implementation of a preferred link.</p>	£2,000 - £4,000
Supporting Evidence of Measures/Components			

Tring, Northchurch and Berkhamsted UTP
Scheme Proforma 12



AECOM

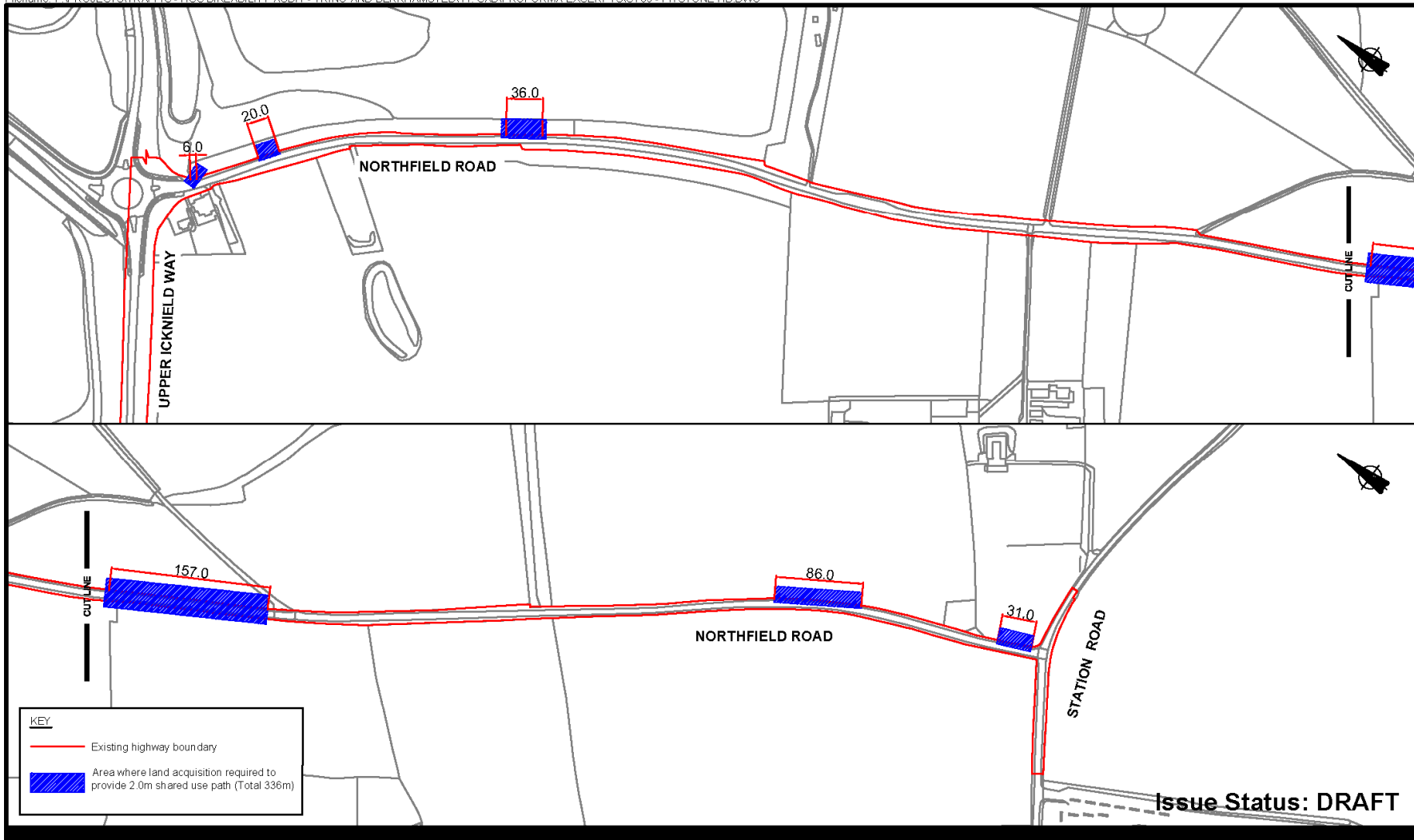


Tring, Northchurch and Berkhamsted UTP Scheme Proforma 12



Last saved by: GARRICKHC(2012-11-16) Last Plotted: 2012-11-16
 Filename: F:\PROJECTS\TRAFFIC - HCC BIKEABILITY AUDIT - TRING AND BERKHAMSTED\11_CAD\PROFORMA EXCERPTS\CY09 - PITSTONE HB.DWG

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

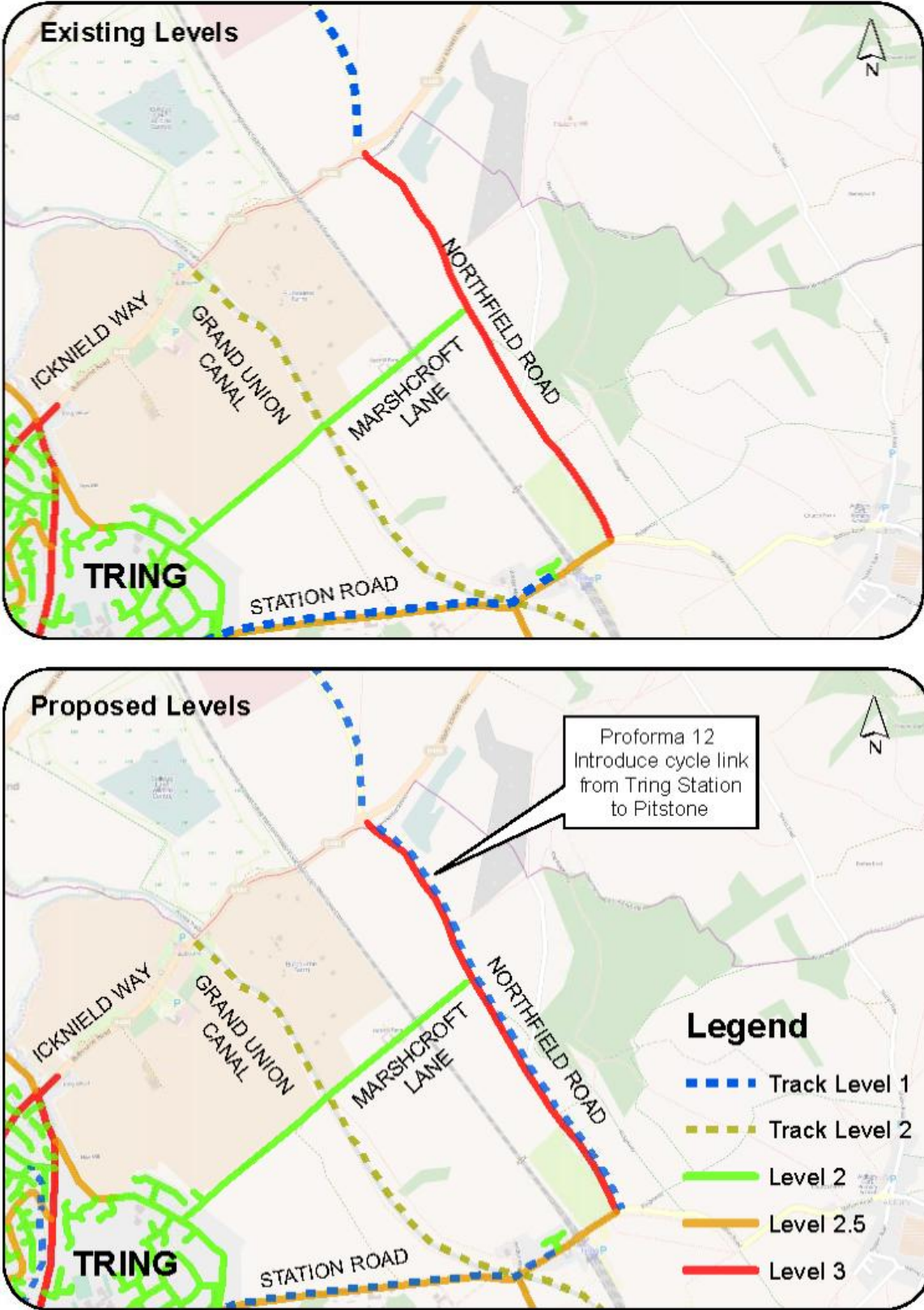


**Tring and Berkhamsted
Urban Transport Plan**
 Hertfordshire County Council
 Project No.: 60267074 Date: 2012-09-24



Figure 12 - Locations for Potential Land Acquisition

(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)





Preferred Option

Option 12.2 is considered to provide the best facility for cyclists between Pitstone and Station Road. The environmental impact of high level hedge removal would need to be assessed against the benefits of this provision, alongside land acquisition requirements. This would enable a Bikeability Level 1 facility to be provided between Pitstone and Station Road.

There are a number of issues that would need to be overcome in order to progress Option 12.3 as a practical alternative to Northfield Road. This includes provision of surface treatment improvements, access through farmland and the requirement for cyclists to dismount twice to use this link. The route also deviates from the natural desire line between Pitstone and Tring Station. For these reasons this option is not recommended to be progressed.

Due to the speeds on Northfield Road, Scheme 12.1 is not recommended on safety grounds. As highlighted above, 12.1a is unfeasible given the current speeds on Northfield Road.

12.4 should be considered with all options as a softer measure to both promote cycling within Pitstone and raise awareness of the link.

Contribution to Objectives / Indicators	UTP Objectives	<ul style="list-style-type: none"> • Improve connectivity between transport modes to allow for greater transport flexibility • 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
--	----------------	---

Outline Cost Analysis of Preferred Option or Options

Design and Implementation	Indicative Cost*	Notes
12.2	£180,000 to £200,000	This includes 4200 sqm of new footway with edging, traffic management, design fees and contingencies. No land acquisition allowed for within the cost.
12.4	£3,000 to £5,000	
TOTAL COST FOR DELIVERY	£183,000 to £205,000	

*All costs provided by HCC

Maintenance Liability	High Medium Low	
------------------------------	-----------------------	--

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
Delivery Issues	<p>Some land acquisition would be required to progress Option 12.2 as at certain locations the potential widths for shared use provision are circa 1.6m. There is limited scope to widen the footway into the carriageway.</p> <p>All options proposing off-carriageway facilities will require removal of verge to provide a formalised path.</p>

Other Information/Additional Notes:

Schemes shown in grey have been considered but are not deemed to be feasible and are not recommended to be progressed.

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.

Pitstone is located within Buckinghamshire, therefore any measures within Pitstone require coordination with Buckinghamshire CC.

TrafficMaster data provides an average speed across a link, including congestion at junctions, thus providing only an insight into speed conditions on highway sections, without reflecting actual speeds that vehicles reach between junctions. As a result, further speed surveys would be required to validate the TrafficMaster data and to fulfil the requirements for changes to speed limits.

Scheme Name	Cycle Track extension – Station Road / London Road / Brook Street, Tring Cycling	
Scheme Reference	13	
Problem References	B04	Cycle Lane requires extending on London Road
	B18	Little cycle specific provision throughout the town
	T07	Cycle track maintenance is poor on link between Tring Station and London Road, some surface issues
	T12	Cycle track on Station Road ends at junction with London Road
	T13	Crossing of Brook Street is difficult via Zebra crossing with poor link to market
Links to other schemes:	UTP	10, 22

Context

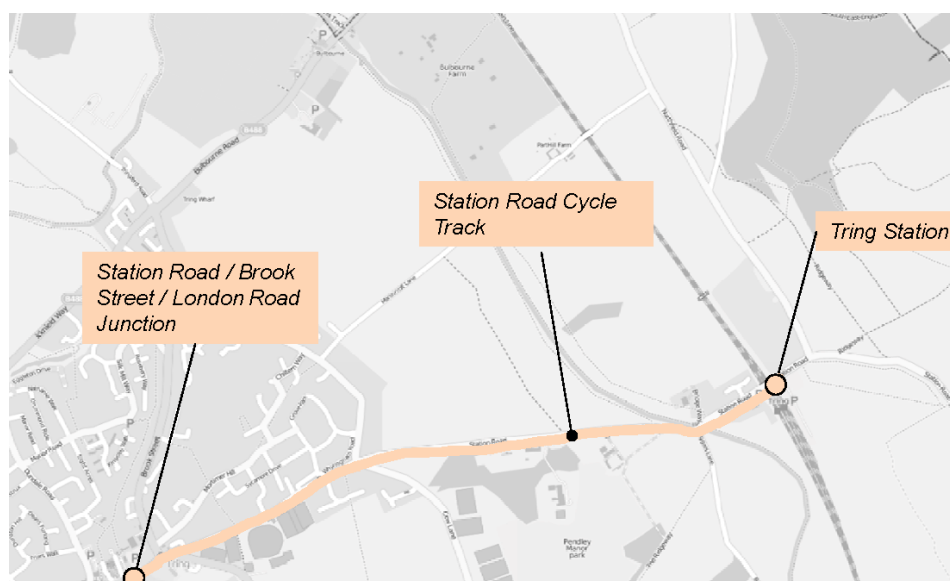


Figure 1 – Location Plan

Station Road is a two way single carriageway road running east to west, linking Tring Station to Tring town centre. An off-carriageway cycle facility is provided extending over the 2.5km link between the Station and London Road. This comprises of a mix of segregated and shared use facilities on the northern side of the carriageway. The width of the cycle facility varies but in many places the segregated track is below the 1.5m minimum recommended width from ‘Roads in Hertfordshire’ design guidance. This facility ends at London Road, with no onward provision to the town centre.

There are a number of locations along Station Road where the cycle track is in poor condition, with worn surfacing and ponding issues. This was noted in stakeholder

consultation to potentially deter cyclists from using the facility. Provision of a high quality, clear and direct route to Tring Station is important to encourage cycling in the town.

The Stage 1 consultation process highlighted the need for an improved link between the existing segregated facility on Station Road and the High Street and Brook Street, to improve continuity of the cycle network.



Figure 2 – Termination of cycle track on London Road



Figure 3 – Brook Street Zebra Crossing


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

- Improve transport opportunities for all and achieve behavioural change in mode choice;
- Enhance quality of life, health and the natural, built and historic environment for all residents
- Reduce transport's contribution to greenhouse gas emissions and improve its resilience



Measures/Components			
Ref	Description	Assessment of Suitability	Cost
13.1	Extend segregated cycle track to Brook Street	<p>Extend the existing cycle facility from Station Road through to Brook Street. Immediately south of the current facility there are some level differences in the footway. However, it would be possible to extend the segregated facility adjacent to the carriageway, with the pedestrian footway to the north of the cycle track. Some footway reprofiling may be required.</p> <p>Figure 6 shows the existing highway boundary, highlighting some land acquisition is likely to be required. Relocation of street furniture (minimum two lighting columns, illuminated sign post and street name plate) would also be necessary.</p> <p>A minimum width of 3.5m would be necessary to provide a 2.0m two way cycle track with 1.5m adjacent footway. Refer to Figure 7. However, given that the movements to the station are tidal, and the probability of two cyclists and a pedestrian passing simultaneously are low, a narrower facility could be considered.</p> <p>This would link to a crossing (see below) in order to connect to the proposed upgraded Footpath 41 (see proforma 22) for an alternative alignment to Brook Street.</p> <p>This facility would extend the existing Bikeability Level 1 track to Brook Street (Figure 9).</p> <p>Deliverability – more than 2 years COMPLEX</p>	£20,000 to £25,000
13.2	Provide shared use footway from Station Road to Brook Street	<p>Alternatively, south of the existing facility, a shared use footway could be considered to link to Brook Street. This would require less land take from the grass verge as an absolute minimum 2.0m shared use footway could be provided, given the pedestrian footfalls and number of cyclists.</p> <p>NOT DELIVERABLE</p>	N/A

13.3	Provide an alternative alignment via High Street	<p>Sign cyclists from the termination of the existing segregated facility, via the uncontrolled crossing on Station Road and through to the High Street via the wide footway on the southern side of Station Road.</p> <p>Southwest of the London Road roundabout, a jug handle with dropped kerb should be considered to allow cyclists back on to the carriageway on the High Street. Cyclists can then be signed in to the car park to access the market and Footpath 41 for an alternative alignment to Brook Street (refer to 22 for details). Refer to Figure 8.</p> <p>The central island on Station Road would also require widening to allow for a minimum 2.0m wide facility suitable for cyclists.</p> <p>Deliverability - 1 to 2 years STANDARD</p>	£15,000 to £20,000
13.4	Improve Link to High Street via Market	<p>To complement measures 13.1 / 13.2, it would be necessary to provide improved facilities for cyclists across Brook Street:</p> <ul style="list-style-type: none"> • Provide a raised entry treatment across Mortimer Hill to increase cyclists' conspicuity and slow down vehicles approaching the junction (Figure 6). • Investigate the potential to reduce the kerb radius on the northern corner of Mortimer Hill to increase footway widths at the Pelican crossing. • Following confirmation of highway boundary extents, remove existing fencing and widen footway to allow for cycle link in to Tring Market Place. This allows cyclists to connect to Footpath 41 as an alternative alignment to Brook Street (refer to 22 for details). <p>Deliverability – more than 2 years COMPLEX</p>	£20,000 to £25,000
13.5	Provide a cycle friendly Zebra crossing at Brook St to link to the	<p>Zebra crossings do not permit use by cyclists. It is proposed to upgrade the existing Zebra crossing to provide a cycle friendly Zebra (or 'Tiger' crossing), in line with Sustrans 'Cyclists' Use of Zebra Crossings Technical Information</p>	£40,000 to £55,000

	market	<p>Note No. 17 (September 2011). This would require DfT authorisation in order to provide a facility that allowed use by cyclists without having to dismount.</p> <p>Due to the proximity of the Mortimer Hill Junction to the location of the existing crossing facility, it is not possible to provide a controlled crossing in place of the existing Zebra (20 metres minimum distance is required between side road and stop line to safely provide a crossing as per LTN 2/95).</p> <p>Deliverability – more than 2 years COMPLEX</p>	
13.6	Make the facility shared-use rather than segregated during maintenance renewal.	<p>There are a number of locations along Station Road where the existing segregated facility is in a poor condition. This may deter cyclists from using the facility.</p> <p>It is considered that although the width of the existing facility is below that recommended by Roads in Hertfordshire, it is sufficient for the current and anticipated number of cyclists. In accordance with 'Roads in Hertfordshire' design guidance, shared facilities should be considered only as a last resort.</p>  <p>It is</p> <p style="text-align: center;"><i>Figure 4 – Station Road Cycle Track</i></p>	£6,000 to £8,000

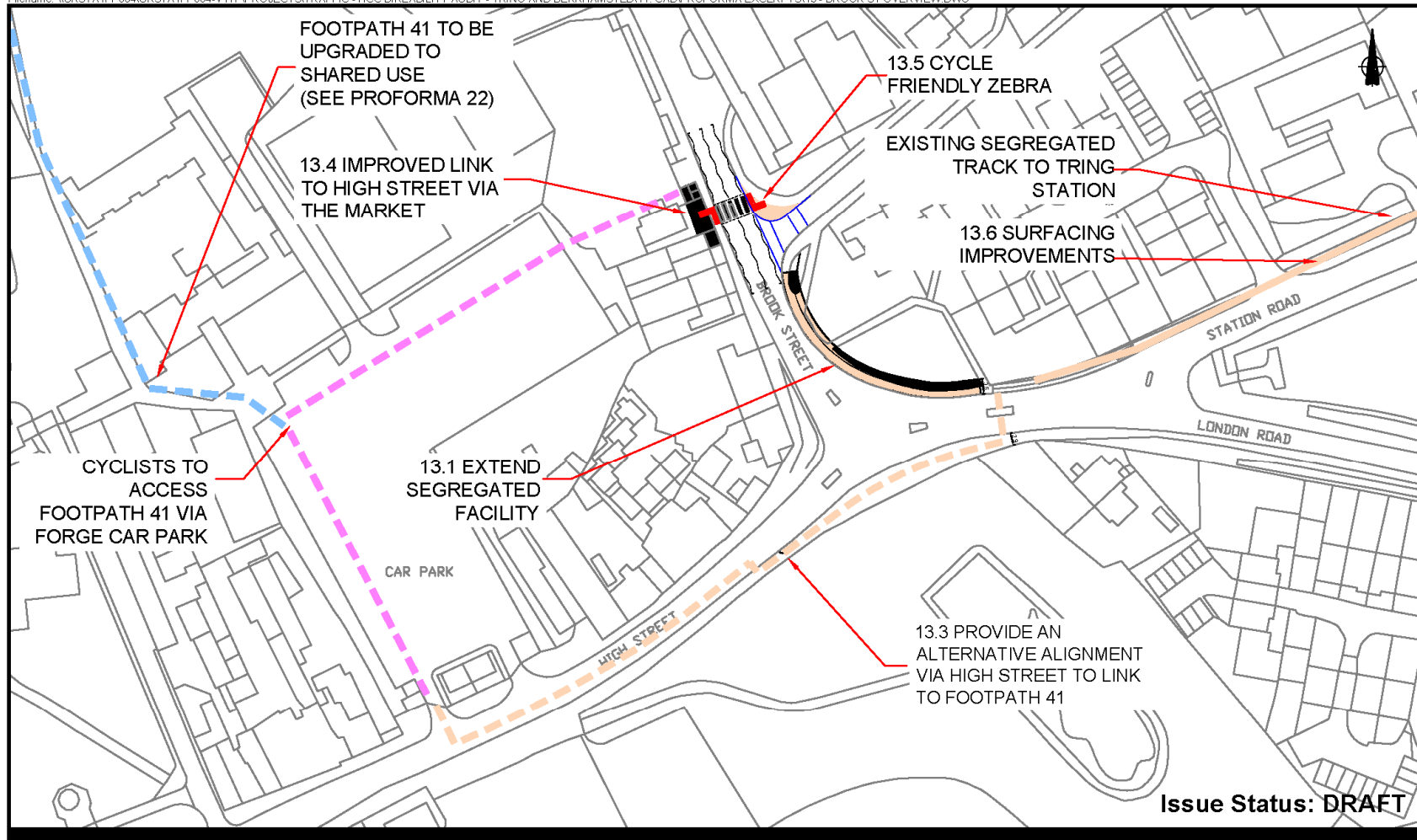


		<p>suggested that the currently segregated facility are retained as existing, with surface condition improvements as required as part of ongoing maintenance.</p> <p>In future in locations where widths are below the minimum standard, a shared use footway could be considered. However, care must be taken not to provide a 'piecemeal' facility as continuity in provision is important. This should be investigated as part of ongoing maintenance.</p> <p>Deliverability - 1 to 2 years STANDARD</p>	
<p>Supporting Evidence of Measures/Components</p>			
<p>Refer to Figures 5 – 8.</p>			

Tring, Northchurch and Berkhamsted UTP Scheme Proforma 13



Last saved by: GARRICKHC(2013-01-16) Last Plotted: 2013-01-16
 Filename: \\UKSTA1FP004\UKSTA1FP004-VITP\PROJECTS\TRAFFIC - HCC BIKEABILITY AUDIT - TRING AND BERKHAMSTED\11_CAD\PROFORMA EXCERPTS\13 - BROOK ST OVERVIEW.DWG
 Project Management Initials: Designer: MJA Checked: HCG Approved: ADR ISO A4 210mm x 297mm



Tring and Berkhamsted Urban Transport Plan
 Hertfordshire County Council
 Project No.: 60267074 Date: 2012-09-24



Figure 5 - Location of Proposed Measures



Figure 6 – HCC Highway Boundary

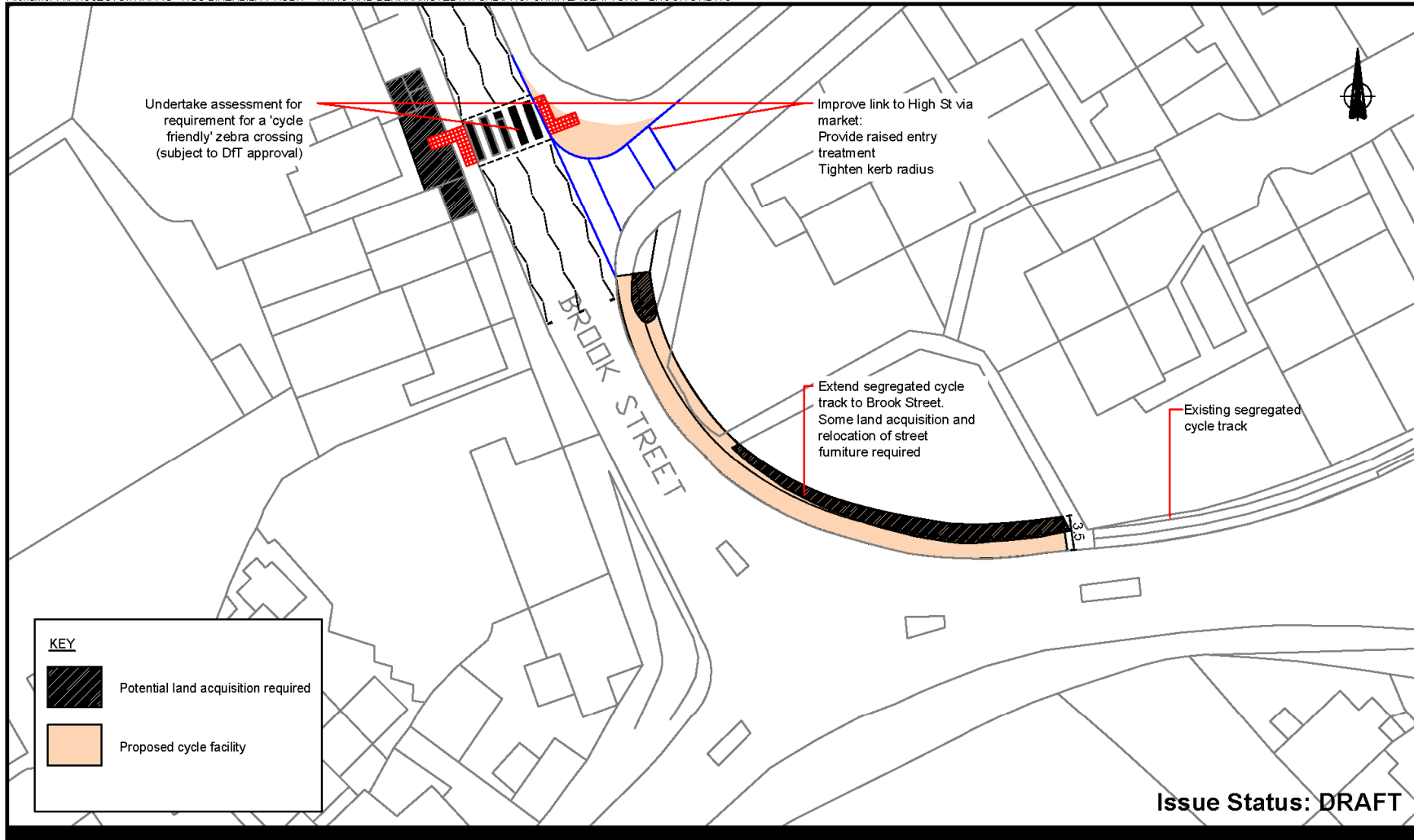
Tring, Northchurch and Berkhamsted UTP Scheme Proforma 13



AECOM

Last saved by: GARRICKHC(2012-11-14) Last Plotted: 2012-11-14
Filename: F:\PROJECTS\TRAFFIC - HCC BIKEABILITY AUDIT - TRING AND BERKHAMSTED\11 - CAD\PROFORMA EXCERPTS\13 - BROOK ST.DWG

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



**Tring and Berkhamsted
Urban Transport Plan**
Hertfordshire County Council
Project No.: 60267074 Date: 2012-09-24



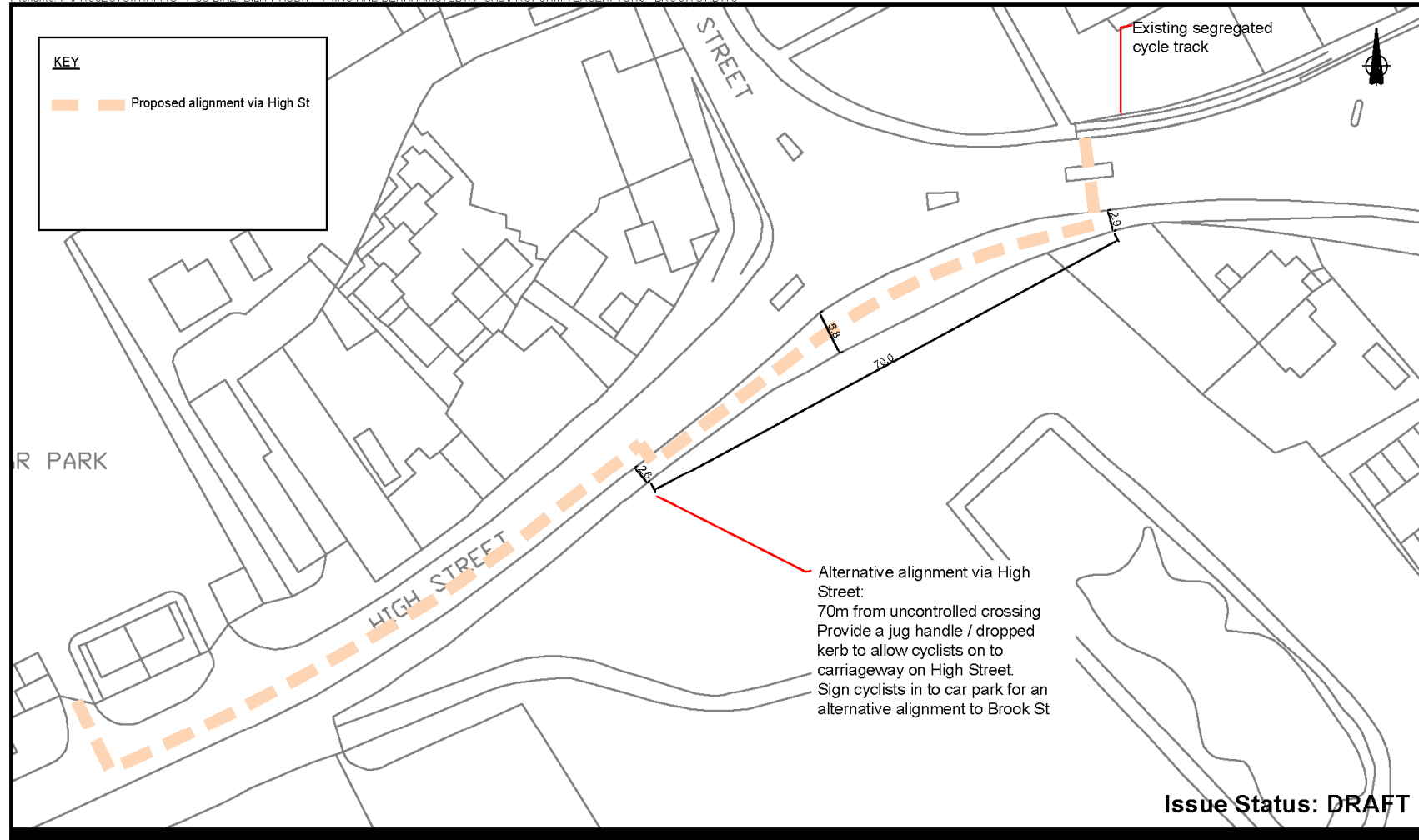
Figure 7 - Concept design for extended segregated facility

Tring, Northchurch and Berkhamsted UTP Scheme Proforma 13



Last saved by: GARRICKHC(2012-11-14) Last Plotted: 2012-11-14
 Filename: F:\PROJECTS\TRAFFIC - HCC BIKEABILITY AUDIT - TRING AND BERKHAMSTED\11_CAD\PROFORMA EXCERPTS\13 - BROOK ST.DWG

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



**Tring and Berkhamsted
 Urban Transport Plan**
 Hertfordshire County Council
 Project No.: 60267074 Date: 2012-09-24



Figure 8 - Signed off carriageway route to the High Street

(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

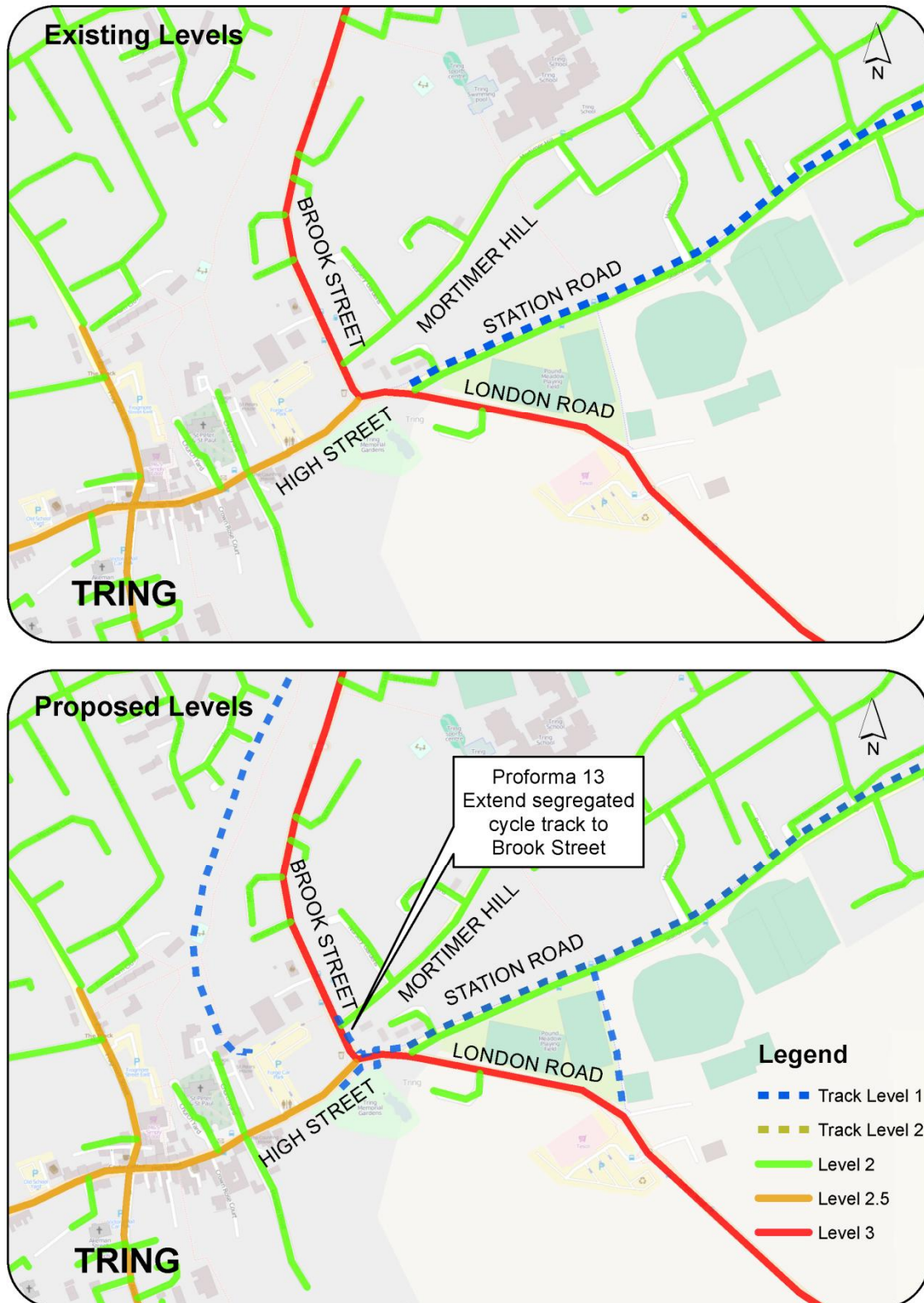


Figure 9 – Before and After Bikeability Levels



Preferred Option

It is recommended that Option 13.3 could be implemented as a quick win, as it represents the most cost effective measure to allow cyclists to access the High Street and provides a link to an alternative alignment to Brook Street via Footpath 41, without land acquisition or any major civils works.

Cycle origin-destination surveys should be carried out as part of the feasibility design process to ascertain the key desire lines for cyclists and select a preferred option accordingly. Following this further investigation and confirmation of land acquisition requirements, the most appropriate option as outlined above should be progressed.

13.6 should be considered during routine maintenance to ensure a good quality facility is provided.

All measures serve to improve and extend the existing Bikeability Level 1 route between Tring Station and Tring Town Centre.

Contribution to Objectives / Indicators	UTP Objectives	<ul style="list-style-type: none"> • Improve connectivity between transport modes to allow for greater transport flexibility; • Promote active travel modes throughout the study area to encourage active and healthy lifestyles.
--	----------------	---

Outline Cost Analysis of Preferred Option or Options

Design and Implementation	Indicative Cost*	Notes
13.3	£15,000 to £20,000	
13.6	£6,000 to £8,000	
TOTAL COST FOR DELIVERY	£21,000 to £28,000	

*Costs provided by HCC

Maintenance Liability	High Medium Low	
------------------------------	-----------------------	--

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
Delivery Issues	Land take / confirmation of highway boundary required to implement measures 13.1, 13.2, 13.4 and 13.5.

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.

Schemes shown in grey have been considered but are not deemed to be feasible and are not recommended to be progressed.