

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised; and
Auditor's View on the Design Organisation Response.**



Proposed Highway Works along Wych Lane Fareham

Client:
i-Transport

Client reference:
ITB10353-022

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

E: office@fenley.co.uk
www.fenley.co.uk

Report Status 4

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1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	July 2022
Document reference and revision:	RSA-22-075-4
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	Hampshire County Council
Design Organisation:	i-Transport
Project Sponsor:	Miller Homes and Bargate Homes

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	JJF			4 th July 2022
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	ZB	JJF	7 th July 2022
2	Stage 1 Road Safety Audit Report format amended to incorporate a row for inclusion of a Design Organisation Response in order to maintain a concise record of items raised		JJF		7 th July 2022
3	Design Organisation Response incorporated		Matthew Craddy on behalf of i-Transport		25 th July 2022
4	Auditor's View on the Design Organisation Response		JJF		26 th July 2022

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	A2	Item Location Plan
	A3	Drawings associated with the Design Organisation Response

2.0 INTRODUCTION

2.1 This report has been prepared by Fenley Road Safety Limited and results from a Stage 1 Road Safety Audit of three options associated with highway works proposed along Wych Lane in Fareham. It is understood that the development proposals associated with the scheme that is subject to this document includes the provision of circa. 375 dwellings on a parcel of land to the west of Tukes Avenue and east of Newgate Lane East. The works proposed as part of the three options, include the following which are not compared by the Audit Team but are included within separate tables to allow for easy comparison by the Design Organisation and Overseeing Organisation;

Option 1 as illustrated on drawing ITB10353-GA-039 – Table 1

- Widening of existing footway to provide 3.0m shared surface between Tukes Avenue and Henry Court Way with a narrowed section reducing to 2.0m for circa 50m just north of Dale Drive;
- Corduroy paving in appropriate places;
- Cyclists to enter/exit proposed shared surface at junction with Tukes Avenue; and
- Cycle markings to be provided through existing junctions.

Option 2 as illustrated on drawing ITB10353-GA-040 – Table 2

- Widening of existing footway to provide 3.0m shared surface between Tukes Avenue and Dale Drive, and then for circa 35m from Henry Court Way southbound – between these points cyclists to enter/exit proposed shared surface to carry on carriageway with centreline removed and advisory cycle lanes added as per LTN 1/20 Section 6;
- Corduroy paving in appropriate places;
- Cyclists to enter/exit proposed shared surface at junction with Tukes Avenue;
- Cycle markings to be provided through existing junctions.

Option 3 as illustrated on drawing ITB10353-GA-041 – Table 3

- Cyclists to cycle on carriageway with cycle markings;
- Widening of existing footway to 3.0m for circa 35m from Henry Court Way southbound, with cyclists to enter/exit proposed shared surface in area of existing connection through to Woodside;
- Corduroy paving in appropriate places; and
- Cycle markings to be provided through existing junctions.

2.2 The Audit Brief identifies that the proposals do not include any Departures from Standard, whether related to strategic decisions or otherwise.

- 2.3 The Road Safety Audit was undertaken during June and July 2022 in accordance with the initial and updated Road Safety Audit Brief and provided on the 21st June and 5th July 2022 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Miller Homes and Bargate Homes. The Road Safety Audit comprised of a site visit as well as an examination of the documents provided which are identified in **Appendix A1**. The Audit Team were satisfied that that the Audit Brief was sufficient for the purpose of the Audit instructed.
- 2.4 The Road Safety Audit has been undertaken by an Audit Team whose qualifications and experience accord with the requirements of GG119 and have been approved by Mr George Carpenter of the Highway Development Agreements Team at Hampshire County Council to undertake Road Safety Audits of all stages within the County. The Audit Team consists of the following members:
- Audit Team Leader**
Jamie Fenning *BSc(Hons), MIHE, MCIHT, MSoRSA, Highways England RSA Certificate of Competency*
Road Safety / Highway Engineer
- Audit Team Member**
Zane Beswick *MCIHT, MSoRSA*
Road Safety / Highway Engineer
- 2.5 The site visit associated with this Road Safety Audit was undertaken during the afternoon of Tuesday 28th June 2022 between the hours of 18:30 and 20:00. The site visit involved walking and driving around the local highway network for a 90-minute period whilst observing the local infrastructure and current off-peak traffic and parking conditions. The weather during the site visit was overcast, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic was also observed to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles as well as an emergency response vehicle. The traffic flow was moderate and free flowing.
- 2.6 The terms of reference of this Road Safety Audit are as described in GG119. The scheme has been examined and this report compiled, only with regard to the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. All comments and recommendations are referenced to the design drawings supplied with the Audit Brief and the location of road safety concerns raised have been illustrated beneath the items along with relevant photographs for clarity, where appropriate, as well as on the Location Plan attached at **Appendix A2**.


Design Organisation Response

- 2.7 In accordance with national standards, this Road Safety Audit was finalised and issued to the Design Organisation as per the Road Safety Audit Report Template within Appendix D of GG119, which can be provided upon request from either the Audit Team or Design Organisation. The format of the Audit Report was subsequently revised to incorporate these paragraphs under the sub-heading as well as sufficient space beneath the items and recommendation, within Section 4, for the inclusion of a Design Organisation Response. This is generally contained within a separate Design Organisation Response Report but is included within this document in order to maintain a single record of all problems, recommendations and responses for the benefit of a concise Road Safety Audit trail to be held on file for Quality Assurance purposes.
- 2.8 The Design Organisation Response has been prepared by:
Name: Matthew Craddy
Position / Organisation: Associate, i-Transport
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.
- 2.10 Upon the request of the Design Organisation and following receipt of the Design Organisation Response with any associated drawings, the Road Safety Audit Team Leader has provided a further comment on the item raised. The “Auditor’s View on the Design Organisation Response” is included within a row beneath each item, for clarity.

3.0 ITEMS RAISED IN ANY PREVIOUS ROAD SAFETY AUDITS

- 3.1 Fenley Road Safety Limited have not been made aware of any previous road safety audits associated with the scheme subject this document. The Audit Team has, however, previously undertaken a Stage 1 Road Safety Audit of a proposed roundabout along Newgate Lane East which is to form the vehicular access to the associated development as well as a series of further Stage 1 Road Safety Audits of schemes associated with proposed development; ref: RSA-22-056, 072, 073 and 074.

4.1 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT - Option 1 - ITB10353-GA-039

A.1	LOCAL ALIGNMENT
	<i>No Road Safety Concerns regarding LOCAL ALIGNMENT have been raised at this stage</i>
A.2	GENERAL
A.2.1	PROBLEM
Location:	Scheme
Summary:	Street furniture will be an obstruction to pedestrians and cyclists
Acc Type:	Cyclist / pedestrian collisions with street furniture
<p>Wych Lane accommodates a number of items of street furniture, to include street lighting columns, signposts, cabinets, wooden stakes and a bin, within the verge as well as the existing facility which is signed to the north as a shared footway cycleway. The proposals include the formalisation of the shared footway cycleway along Wych Lane as well as a link to / from a cul-de-sac off Woodside. The Audit Team noted from the site visit, that a number of items of street furniture are situated within the verge and footway at the location of the proposed shared facility. Street furniture within or on the boundary of a shared footway cycleway could become an obstruction to pedestrians and cyclists which could lead to falls and personal injuries.</p>	
RECOMMENDATION:	
It is recommended that all items of street furniture within the area of the proposed widening are relocated appropriately.	
<p>Location Plan: (NB: Not all items of street furniture are illustrated below, more are present)</p> 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – street furniture within the proposed area of works to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p><i>Confirmation that all items of street furniture within the area of the proposed will be relocated if necessary, addresses the road safety concern at this stage.</i></p>	

A.2.2	PROBLEM
Location:	Wych Lane
Summary:	Proposals will have an impact on existing watercourse
Acc Type:	Cyclist / pedestrian fall and personal injury
<p>Wych Lane passes across a culvert to the north of a footpath link to a Woodside cul-de-sac where railings are present alongside the existing shared footway cycleway. The proposals include the widening of an existing section of shared footway cycleway along Wych Lane to the north of the footpath link. The Audit Team are concerned that the proposed widening is situated beyond the existing railing, where the ground falls away steeply and the headwall is present. The proposed scheme could have an impact on the stability of the ground / integrity of the culvert, leading to surface failure which may result in pedestrian and cyclist falls as well as personal injuries.</p>	
RECOMMENDATION:	
It is recommended that the width of the existing shared facility besides the watercourse is retained.	
Location Plan:	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – proposed widening has been removed in this section and existing width retained.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p>Confirmation that the proposed widening has been removed from the proposal, addresses the road safety concern at this stage.</p>	
A.3	JUNCTIONS
	No Road Safety Concerns regarding JUNCTIONS have been raised at this stage
A.4	WALKING, CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Wych Lane
Summary:	Proposed shared facility may not be adequate for the expected demand
Acc Type:	Cyclist pedestrian type collisions
<p>Signage along Wych Lane in proximity to Henry Court Way identifies a shared footway cycleway is present to the west of the carriageway. No measures are present that identify the end of the route and therefore the Audit Team are unaware where the existing shared facility starts / finishes,</p>	

however to the south of the link from / to a Woodside cul-de-sac, the width of the facility reduces to circa. 2 metres. The proposals widen the existing facility and formalise the shared facility to the north of Tukes Avenue to 3.0 metres reducing to the existing width adjacent to properties 12 to 24. Whilst a localised reduction in width of a shared footway cycleway to 2.0 metres is generally acceptable across a short lightly trafficked section, the Audit Team is concerned that the width of the proposed shared facility is not adequate to accommodate the pedestrian and cyclist traffic that can be expected, particularly as an employment zone is situated to the north and an education establishment is situated to the south. An inadequate width shared footway cycleway could lead to cyclist pedestrian collisions.

RECOMMENDATION:

It is recommended that the width of the proposed shared facility is increased.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Agree – the width of the road has been reduced to a minimum of 5.5m and the proposed shared footway/cycleway between properties 12 and 24 widened to provide a maximum width of 2.5m. There is a good level of visibility between these points and there will be a low number of movements in this area.

It should be noted that the current widths on Wych Lane (just south of Dale Drive) is less than 5.5m and operates sufficiently. Therefore, there is the option to reduce Wych Lane further to provide a wider footway between properties 12 and 24. Exact details to be discussed with HCC at detailed design stage.

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

Confirmation that the width of the existing facility will be increased will allow additional space for a cyclist to pass a pedestrian. It is understood that the expected pedestrian and cyclist flows are low and therefore this addresses the road safety concern at this stage. It is understood that the proposed footway cycleway can be increased further if necessary whilst ensuring adequate carriageway width similar to that to the south.

A.4.2	PROBLEM
Location:	Wych Lane
Summary:	Pedestrians and cyclist are not informed of the change in nature
Acc Type:	Cyclist and pedestrian type collisions
<p>A number of links are present to the west of Wych Avenue that allow access to Woodside. The proposals include the widening of the existing facility along the western side of Wych Avenue to provide a shared footway cycleway. The Audit Team is concerned that pedestrians and cyclists travelling between the existing links and proposed shared facility are not made aware of the change in nature of the facility. A pedestrian, particularly with impaired vision, not becoming aware that the nature of their route has changed and a cyclist illegally utilising a footpath / way could cross paths leading to cyclist pedestrian collisions.</p>	
RECOMMENDATION:	
<p>It is recommended that measures are provided to highlight the transition from a footway / path to a shared facility.</p>	
Location Plan:	
 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – corduroy paving to be provided to provide transition from a footway to a shared footway/cycleway</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p><i>Confirmation that corduroy paving will be provided where appropriate, addresses the road safety concern at this stage.</i></p>	
A.4.3	PROBLEM
Location:	Tukes Avenue J/W Wych Lane
Summary:	Cyclist may enter the junction suddenly
Acc Type:	Vehicle to cyclist type collisions
<p>The simple priority junction of Tukes Avenue with Wych Lane accommodates dropped kerbs around the northern radius in close proximity to the give-way road markings and a grass verge with full height kerbs around the southern radius. The proposals include the formalisation of a shared footway cycleway along the western side of Wych Lane to the north of Tukes Avenue and</p>	

include the provision of corduroy tactile paving where it meets the existing footway to the north of Tukes Avenue as well as a cycle on / off-slip where the existing dropped kerbs are present. The Audit Team have concerns that cyclists utilising the facility will enter the Tukes Avenue carriageway suddenly. It is acknowledged that vehicular traffic will be slowing on approach to the give-way line, however, the driver / rider could be looking to the right to observe oncoming traffic in order to proceed without stopping and may not become aware of a cyclist approaching the slip / entering the carriageway leading to a cyclist pedestrian collision.

RECOMMENDATION:

It is recommended that the on / off-slips are relocated along Tukes Avenue to ensure that traffic approaching the give-way will become aware of a cyclist wishing to enter the carriageway.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Agree – design has been updated accordingly to relocate the on/off slips for cyclists further back along Tukes Avenue to ensure traffic approaching the give-way will become aware of a cyclist within to enter the carriageway

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

Confirmation that the proposed on / off-slip has been relocated, addresses the road safety concern at this stage.

A.4.4	PROBLEM
Location:	Wych Lane
Summary:	No level access is provided for north and southbound cyclists between the proposed facility and carriageway
Acc Type:	Cyclist fall and personal injury

Wych Lane accommodates signage to the north which denotes that a shared footway cycleway is present to the west of the carriageway. The proposals include the formalisation of a shared footway cycleway along the western side of Wych Lane to the north of Tukes Avenue and provide a cycle on / off-slip along the northern radius at the Tukes Avenue junction as well as advisory cycle lanes with red coloured surfacing across the simple priority junctions that highlight the presence of cyclists. No cyclist facilities are provided along Wych Lane to the south of Tukes

Avenue and therefore cyclists are likely to be within the carriageway. The Audit Team have concerns that no level access is provided between the carriageway and formalised footway cycleway to the north of Tukes Avenue, which could lead to a cyclist attempting to mount / dismount the shared facility where full height kerbs are present. A cyclist attempting to mount / dismount the shared facility where full height kerbs are present could result in a fall and personal injury.

RECOMMENDATION:

It is recommended that an on / off-slips is provided along Wych Lane north of the junction with Tukes Avenue.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Agree – Design has been revised accordingly to provide on/off slips along Wych Lane to the north of the junction with Tukes Avenue

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

Confirmation that on / off-slips have been provided, addresses the road safety concern at this stage.

A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Wych Lane
Summary:	Existing street lighting columns are situated within the area of the proposed widening
Acc Type:	Vehicle to cyclist / pedestrian collisions

Wych Lane is subject to street lighting with columns situated either side of the carriageway at the back edge of an existing facility which is signed as a shared footway cycleway to the north. The proposals include works to widen of the existing facility to formalise the shared footway cycleway. A number of existing street lighting columns are situated within the area of works and may be relocated in response to item A.2.1, however, the Audit Team is concerned that the relocation of the existing street lighting column will have an adverse impact on the level of lighting should they be relocated. Vehicles are generally driven during the hours of darkness with headlights

illuminated, however, a footpath is present on the eastern side of the carriageway which commences / terminates at a shared driveway known as Dale Drive where there is likely to be a pedestrian desire line across the carriageway, although no crossing point is provided. Insufficient lighting could result in a driver / rider not becoming aware of a pedestrian attempting to cross the carriageway at a safe distance and lead to a vehicle to pedestrian / cyclist collision.

RECOMMENDATION:

It is recommended that street lighting columns are relocated appropriately to ensure that the level of lighting is adequate, particularly at locations where pedestrians cross and cyclists enter the carriageway.

Location Plan: (NB: Not all street lighting columns are illustrated below, more are present)



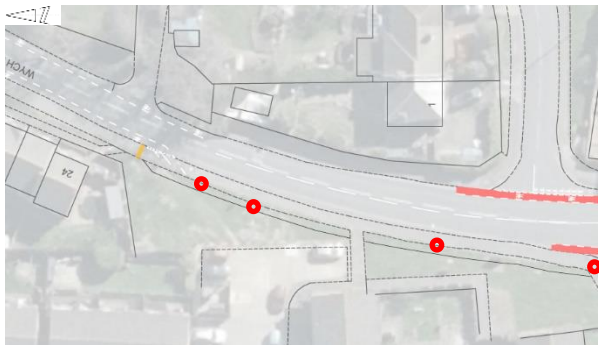

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Agree – Street lighting to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

Confirmation that street lighting will be relocated accordingly, addresses the road safety concern at this stage.

4.2 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT - Option 2 - ITB10353-GA-040

A.1	LOCAL ALIGNMENT
	<i>No Road Safety Concerns regarding LOCAL ALIGNMENT have been raised at this stage</i>
A.2	GENERAL
A.2.1	PROBLEM
Location:	Scheme
Summary:	Street furniture will be an obstruction to pedestrians and cyclists
Acc Type:	Cyclist / pedestrian collisions with street furniture
<p>Wych Lane accommodates a number of items of street furniture, to include street lighting columns, signposts, cabinets, wooden stakes and a bin, within the verge as well as the existing facility which is signed to the north as a shared footway cycleway. The proposals include the formalisation of the shared footway cycleway along Wych Lane as well as a link to / from a cul-de-sac off Woodside. The Audit Team noted from the site visit, that a number of items of street furniture are situated within the verge and footway at the location of the proposed shared facility. Street furniture within or on the boundary of a shared footway cycleway could become an obstruction to pedestrians and cyclists which could lead to falls and personal injuries.</p>	
RECOMMENDATION:	
It is recommended that all items of street furniture within the area of the proposed widening are relocated appropriately.	
<p>Location Plan: (NB: Not all street furniture are illustrated below, more are present)</p>  	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – street furniture within the proposed area of works to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p><i>Confirmation that all items of street furniture within the area of the proposed will be relocated if necessary, addresses the road safety concern at this stage.</i></p>	

A.2.2	PROBLEM
Location:	Wych Lane
Summary:	Proposals will have an impact on existing watercourse
Acc Type:	Cyclist / pedestrian fall and personal injury
<p>Wych Lane passes across a culvert to the north of a footpath link to a Woodside cul-de-sac where railings are present alongside the existing shared footway cycleway. The proposals include the widening of an existing section of shared footway cycleway along Wych Lane to the north of the footpath link. The Audit Team are concerned that the proposed widening is situated beyond the existing railing where the ground falls away steeply and the headwall is present. The proposed scheme could have an impact on the stability of the ground / integrity of the culvert, leading to surface failure which may result in pedestrian and cyclist falls as well as personal injuries.</p>	
RECOMMENDATION:	
It is recommended that the width of the existing shared facility besides the watercourse is retained.	
Location Plan:	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
Agree – proposed widening has been removed in this section and the existing width retained.	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
Confirmation that the proposed widening has been removed from the proposal, addresses the road safety concern at this stage.	
A.3	JUNCTIONS
	No Road Safety Concerns regarding JUNCTIONS have been raised at this stage
A.4	WALKING, CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Wych Lane
Summary:	Cyclists are unlikely to access the proposed short section of shared footway cycleway
Acc Type:	Cyclist pedestrian type collisions
Signage along Wych Lane in proximity to Henry Court Way identifies a shared footway cycleway is present to the west of the carriageway. No measures are present that identify the end of the	

route and therefore the Audit Team are unaware where the existing shared facility starts / finishes, however to the south of the link from / to a Woodside cul-de-sac, a short section of the facility reduces to circa. 2 metres. The proposals include the widening of the existing facility to the north and south of properties 12 to 24 to 3.0 metres, the formalisation of the short section as a shared facility, the provision of on / off slips and retention of the existing width as a footway adjacent to the properties, with measures provided to denote the transition. It is unlikely that cyclists will leave and enter the carriageway via the on / off slips but rather continue along the 2.0 metre wide section outside properties 12 to 24, which is not adequate enough to accommodate pedestrians and cyclists. An inadequate width shared footway cycleway could lead to cyclist pedestrian collisions.

RECOMMENDATION:

It is recommended that the existing footway is upgraded to a shared facility

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Disagree – Appropriate surface treatment in the form of corduroy to be provided to deter cyclists, and a coloured surface is proposed for the cycle lanes to further highlight their presence. In addition, white lining, corduroy and signage in line with TSRGD will be provided.

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022

The revised proposal to provide a red coloured surface along the proposed advisory cycle lanes will encourage cyclists to enter the carriageway where appropriate.

A.4.2 PROBLEM

Location: Wych Lane

Summary: Pedestrians and cyclist are not informed of the change in nature

Acc Type: Cyclist and pedestrian type collisions

A number of links are present to the west of Wych Avenue that allow access to Woodside. The proposals include the widening of the existing facility along the western side of Wych Avenue to provide a shared footway cycleway. The Audit Team are concerned that pedestrians and cyclists travelling between the existing links and proposed shared facility will not become aware of the change in nature of the facility. A pedestrian, particularly with impaired vision, not becoming aware

that the nature of their route has changed and a cyclist illegally utilising a footpath / way could cross paths leading to cyclist pedestrian collisions.

RECOMMENDATION:

It is recommended that measures are provided to highlight the transition from a footway / path to a shared facility.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.

Agree – corduroy paving to be provided in appropriate locations to provide transition from a footway to a shared footway/cycleway

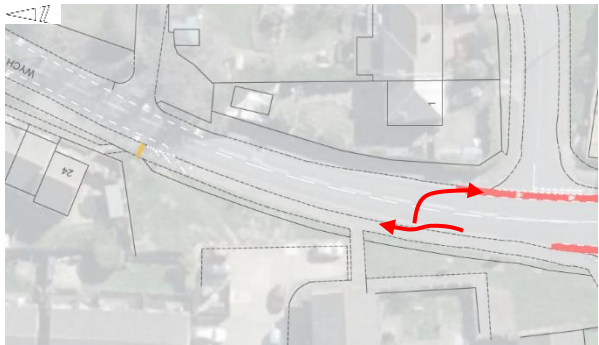

AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022


Confirmation that corduroy paving will be provided where appropriate, addresses the road safety concern at this stage.

A.4.3	PROBLEM
Location:	Tukes Avenue J/W Wych Lane
Summary:	Cyclist may enter the junction suddenly
Acc Type:	Vehicle to cyclist type collisions


The simple priority junction of Tukes Avenue with Wych Lane accommodates dropped kerbs around the northern radius in close proximity to the give-way road markings and a grass verge with full height kerbs around the southern radius. The proposals include the formalisation of a short section of the shared footway cycleway along the western side of Wych Lane to the north of Tukes Avenue and include the provision of corduroy tactile paving where it meets the existing footway to the north of Tukes Avenue as well as a cycle on / off-slip where the existing dropped kerbs are present. The Audit Team have concerns that cyclists utilising the facility will enter the carriageway suddenly. It is acknowledged that vehicular traffic will be slowing on approach to the give-way line, however, the driver / rider could be looking to the right to observe oncoming traffic in order to proceed without stopping and may not become aware of a cyclist approaching the slip / entering the carriageway leading to a cyclist pedestrian collision.


RECOMMENDATION:	
It is recommended that the on / off-slips are relocated along Tukes Avenue to ensure that traffic approaching the give-way will become aware of a cyclist wishing to enter the carriageway.	
Location Plan:	
 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25 th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8 th July 2022.	
Agree – design has been updated accordingly to relocate the on/off slips for cyclists further back along Tukes Avenue to ensure traffic approaching the give-way will become aware of a cyclist within to enter the carriageway	
AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
Confirmation that the proposed on / off-slip has been relocated, addresses the road safety concern at this stage.	
A.4.4	PROBLEM
Location:	Wych Lane
Summary:	No level access is provided for north and southbound cyclists between the proposed facility and carriageway
Acc Type:	Cyclist fall and personal injury
<p>Wych Lane accommodates signage to the north which denotes that a shared footway cycleway is present to the west of the carriageway. The proposals include the formalisation of a shared footway cycleway along the western side of Wych Lane to the north of Tukes Avenue to property numbers 12 to 24 and provide a cycle on / off-slip along the northern radius at the Tukes Avenue junction as well as advisory cycle lanes with red coloured surfacing across the simple priority junctions to highlight the presence of cyclists. No cyclist facilities are provided along Wych Lane to the south of Tukes Avenue and therefore cyclists are likely to be within the carriageway. The Audit Team have concerns that no level access is provided between the carriageway and formalised footway cycleway to the north of Tukes Avenue which could lead to a cyclist attempting to mount / dismount the shared facility where full height kerbs are present. A cyclist attempting to mount / dismount the shared facility where full height kerbs are present could result in a fall and personal injury.</p>	

RECOMMENDATION:	
It is recommended that an on / off-slips is provided along Wych Lane north of the junction with Tukes Avenue.	
Location Plan:	
 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25 th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8 th July 2022.	
Agree – Design has been revised accordingly to provide on/off slips along Wych Lane to the north of the junction with Tukes Avenue	
AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
Confirmation that on / off-slips have been provided, addresses the road safety concern at this stage.	
A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Wych Lane
Summary:	Existing street lighting columns are situated within the area of the proposed widening
Acc Type:	Vehicle to cyclist / pedestrian collisions
<p>Wych Lane is subject to street lighting with columns situated either side of the carriageway at the back edge of an existing facility which is signed as a shared footway cycleway to the north. The proposals include works to widen the existing facility to formalise sections of the shared footway cycleway. A number of existing street lighting columns are situated within the area of works and may be relocated in response to item A.2.1, however, the Audit Team is concerned that the relocation of the existing street lighting column will have an adverse impact on the level of lighting should they be relocated. Vehicles are generally driven during the hours of darkness with headlights illuminated, however, a footpath is present on the eastern side of the carriageway which commences / terminates at a shared driveway known as Dale Drive where there is likely to be a pedestrian desire line across the carriageway, although no crossing point is provided and on / off-slips are proposed where cyclists access the carriageway. Insufficient lighting could result in a driver / rider not becoming aware of a pedestrian or cyclist attempting to cross / enter the carriageway at a safe distance and lead to a vehicle to pedestrian / cyclist collision.</p>	

RECOMMENDATION:
It is recommended that street lighting columns are relocated appropriately to ensure that the level of lighting is adequate, particularly at locations where pedestrians cross and cyclists enter the carriageway.
Location Plan: (NB: Not all street lighting columns are illustrated below, more are present)

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25 th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8 th July 2022.
Agree – Street lighting to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.
AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022
Confirmation that street lighting will be relocated accordingly, addresses the road safety concern at this stage.

4.3 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT - Option 3 - ITB10353-GA-041

A.1	LOCAL ALIGNMENT
	<i>No Road Safety Concerns regarding LOCAL ALIGNMENT have been raised at this stage</i>
A.2	GENERAL
A.2.1	PROBLEM
Location:	Scheme
Summary:	Street furniture will be an obstruction to pedestrians and cyclists
Acc Type:	Cyclist / pedestrian collisions with street furniture
<p>Wych Lane accommodates a number of items of street furniture, to include street lighting columns, signposts, cabinets, wooden stakes and a bin, within the verge as well as the existing facility which is signed to the north as a shared footway cycleway. The proposals include the widening of an existing section of shared footway cycleway along Wych Lane in proximity to a link to / from a cul-de-sac off Woodside. The Audit Team noted from the site visit, that a number of items of street furniture to include a signpost and street lighting column are situated within the verge and footway at the location of the proposed widening. Street furniture within or on the boundary of a shared footway cycleway could become an obstruction to pedestrians and cyclists which could lead to falls and personal injuries.</p>	
RECOMMENDATION:	
It is recommended that all items of street furniture within the area of the proposed widening are relocated appropriately.	
Location Plan:	
	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – street furniture within the proposed area of works to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p><i>Confirmation that all items of street furniture within the area of the proposed will be relocated if necessary, addresses the road safety concern at this stage.</i></p>	

A.2.2	PROBLEM
Location:	Wych Lane
Summary:	Proposals will have an impact on existing watercourse
Acc Type:	Cyclist / pedestrian fall and personal injury
<p>Wych Lane passes across a culvert to the north of a footpath link to a Woodside cul-de-sac where railings are present alongside the existing shared footway cycleway. The proposals include the widening of an existing section of shared footway cycleway along Wych Lane to the north of the footpath link. The Audit Team are concerned that the proposed widening is situated beyond the existing railing where the ground falls away steeply and the headwall is present. The proposed scheme could have an impact on the stability of the ground / integrity of the culvert, leading to surface failure which may result in pedestrian and cyclist falls as well as personal injuries.</p>	
RECOMMENDATION:	
It is recommended that the width of the existing shared facility besides the watercourse is retained.	
Location Plan:	
	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – proposed widening has been removed in this section and existing width retained.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p>Confirmation that the proposed widening has been removed from the proposal, addresses the road safety concern at this stage.</p>	
A.3	JUNCTIONS
	No Road Safety Concerns regarding JUNCTIONS have been raised at this stage
A.4	WALKING, CYCLING AND HORSE RIDING
	No Road Safety Concerns regarding WALKING, CYCLING AND HORSE RIDING have been raised at this stage

A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Wych Lane
Summary:	Existing street lighting column is situated within the area of the proposed widening
Acc Type:	Vehicle to cyclist / pedestrian collisions
<p>Wych Lane is subject to street lighting with columns situated either side of the carriageway at the back edge of an existing facility which is signed as a shared footway cycleway to the north. The proposals include works to widen a section of the existing facility to the north to accommodate pedestrians and cyclists. An existing street lighting column is situated within the area of works and may be relocated in response to item A.2.1, however, the Audit Team is concerned that the relocation of the existing street lighting column will have an adverse impact on the level of lighting should it be relocated. Vehicles are generally driven during the hours of darkness with headlights illuminated, however, the proposals include the provision of an on / off-slip in proximity of the existing column and therefore cyclists will be exiting onto the carriageway. Insufficient lighting could result in a driver / rider not becoming aware of a cyclist entering the carriageway at a safe distance, which could lead to a vehicle to pedestrian / cyclist collision.</p>	
RECOMMENDATION:	
It is recommended that the street lighting column is relocated appropriately to ensure that the level of lighting is adequate.	
Location Plan:	
 	
<p>DESIGN ORGANISATION RESPONSE provided by i-Transport on the 25th July 2022 following formal issue of this Stage 1 Road Safety Audit on the 8th July 2022.</p>	
<p>Agree – existing street lighting column to be relocated accordingly – exact details to be agreed with HCC at detailed design stage.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022</p>	
<p>Confirmation that street lighting will be relocated accordingly, addresses the road safety concern at this stage.</p>	

5.0 STAGE 1 ROAD SAFETY AUDIT TEAM STATEMENT

5.1 We certify that this Road Safety Audit has been carried out in accordance with GG119.

Audit Team Leader

Name: **Jamie Fenning** *BSc (Hons), MIHE, MCIHT, MSoRSA, HE RSA Certificate of Competency*

Signed: 

Position: Road Safety / Highway Engineer

Organisation: Fenley Road Safety Limited

Date: 26th July 2022

Audit Team Member

Name: **Zane Beswick** *MCIHT, MSoRSA*

Signed: 

Position: Road Safety / Highway Engineer

Organisation: Fenley Road Safety Limited

Date: 8th July 2022

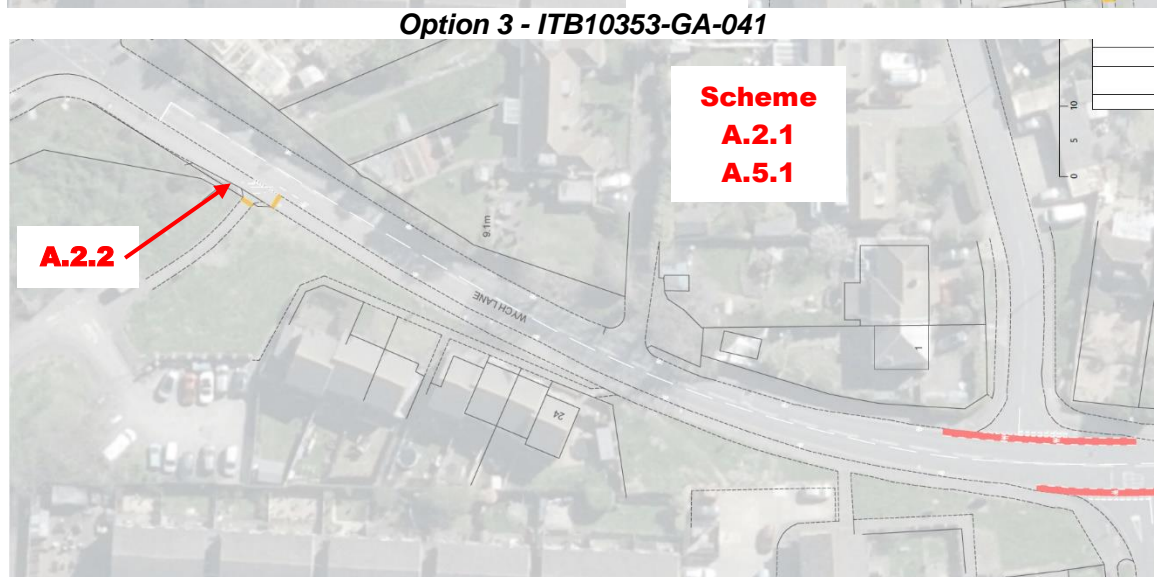
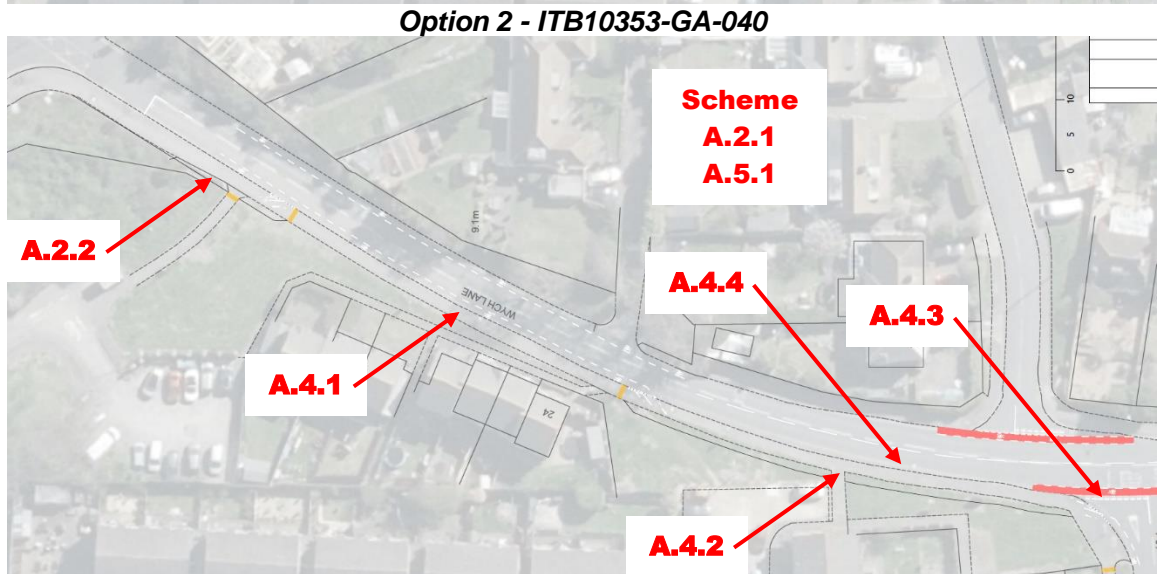
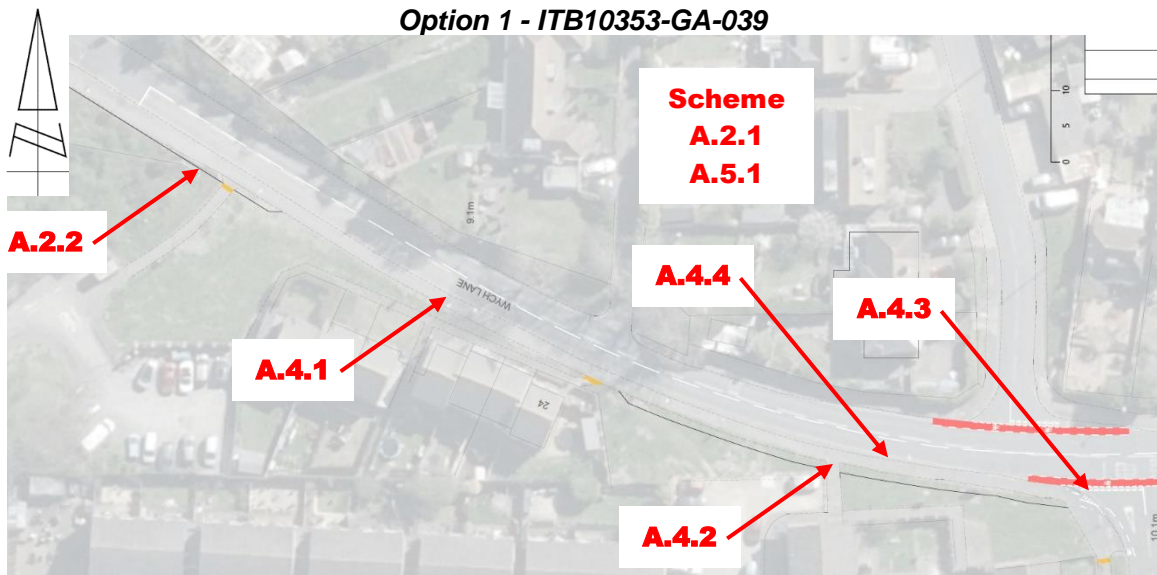
Appendix A1

Documents and Drawings provided for this Stage 1 Road Safety Audit

<u>Audit Stage</u>	<u>Doc. No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB10353-022	-	GG119 Stage 1 Road Safety Audit Brief
	ITB13747-009	A	Non-motorised User Audit
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB10353-GA-039	-	Proposed Cycle Improvements to Wych Lane Option 1
	ITB10353-GA-040	-	Proposed Cycle Improvements to Wych Lane Option 2
ITB10353-GA-041	-	Proposed Cycle Improvements to Wych Lane Option 3	

Appendix A2

Item Location Plan



Appendix A3

Drawings associated with the Design Organisation Response

<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB10353-GA-039	A	Proposed Cycle Improvements to Wych Lane Option 1
	ITB10353-GA-040	A	Proposed Cycle Improvements to Wych Lane Option 2
	ITB10353-GA-041	A	Proposed Cycle Improvements to Wych Lane Option 3

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