

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 Longfield Lane to Westfield Avenue Fareham

Client:
i-Transport

Client reference:
ITB10353-020

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Report Status 4

Job no	RSA-22-073	Issue no	4	Date	July 2022
Prepared by	JJF	Verified by	ZB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-22/RSA-22-073-4				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	July 2022
Document reference and revision:	RSA-22-073-4
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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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 proposed highway works proposed along Longfield Avenue, Fort Fareham Road, Trafalgar Court, Fairfield Avenue, St Michaels Grove 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 and presented within the Audit Brief, include the following;
- Upgrade the existing footway between Fort Fareham Road and B3385 Newgate Lane to a segregated footway/cycleway (2.0m/2.0m), with a hardstrip between kerb and edge of footway/cycleway:
 - At the junction with Fort Fareham Road the route will end where cyclists will join the carriageway. Appropriate road markings and traffic signs:
 - The same process is to occur at the junction with B3385 Newgate Lane:
 - Improvements to Fort Fareham Road and along Fairfield Avenue (which includes Trafalgar Court) in the form of on road cycle markings through junctions, Wayfinding signage at Junction of Fairfield Avenue with St Michaels Grove:
 - There is a section between Fort Fareham Road (to the north) and Trafalgar Court which is joined by a footway. This is to be upgraded to a shared use route with appropriate markings and signage: and
 - The existing National Cycle Network 236 along Anne's Grove and the potential to convert the existing wide footway along St Michaels Grove between Fort Fareham Road and Redlands Lane to a shared use route.
- 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 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

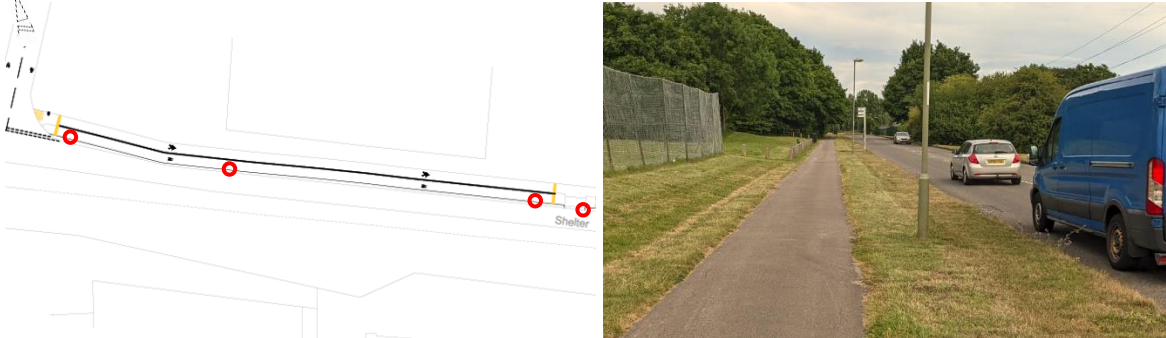
and responses for the benefit of a concise Road Safety Audit trail to be held on file for Quality Assurance purposes.

- 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, 074 and 075.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

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>Longfield Avenue, Fort Fareham Road, Trafalgar Court, Fairfield Avenue and St Michaels Grove accommodate a number of items of street furniture to include street lighting columns, signposts, cabinets and boxes within the verge besides the carriageway as well as the existing footway. The proposals include provision of a segregated footway cycleway along Longfield Avenue and St Michaels Grove as well as between Fort Fareham Road and Trafalgar Road. 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 or segregated 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, is relocated appropriately.	
<p>Location Plan: (NB: Not all street lighting columns 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 – all street furniture to be relocated accordingly. Exact details to be agreed at detailed design stage and agreed with HCC.</p>	
<p>AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022</p>	
<p><i>Confirmation that items of street furniture will be relocated as necessary, addresses the road safety concern at this stage.</i></p>	

A.2.2	PROBLEM
Location:	Trafalgar Court
Summary:	Existing parking will restrict access to the proposed cyclepath
Acc Type:	Cyclist vehicle collisions, falls and personal injuries
<p>Trafalgar Court is a small cul-de-sac that serves circa 50 dwellings as well as a small community centre. An existing footpath link is present between the footways of Fort Fareham Road and Trafalgar Court. The proposals include the widening of the existing footpath to upgrade the link to a footpath cyclepath and includes the provision of on / off-slips to allow level access between the facility and carriageways. The on / off-slip that is to be provided off Trafalgar Court is to be provided off the end of the existing turning head. During the site visit associated with this Audit, parking was observed to take place within the existing turning head which would obstruct the proposed on / off-slip. Parking at a location where cyclists access a carriageway, could lead to cyclist collisions with a parked vehicle or user fall and personal injuries as a cyclist diverts to a location where full height kerbs are present.</p>	
RECOMMENDATION:	
It is recommended that measures are introduced to prevent vehicles from parking in proximity of the turning head	
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 – we have reviewed the design to take account of this comment and others identified within the Stage 1 RSA and reviewed the highway boundary data. In light of this we have revised the route to come through Elizabeth Court, through to Tudor Court and onto Trafalgar Court which is a more preferred route, which provides wayfinding and a proposed 3m section of off-road cycle route between Elizabeth Court and Tudor Court.</p>	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
<p><i>Confirmation that an alternative route has been provided addresses the road safety concern at this stage.</i></p>	

A.2.3	PROBLEM
Location:	St Michaels Grove
Summary:	Existing parking restricts the width of the proposed footway cycleway
Acc Type:	Cyclist pedestrian collisions
<p>St Michaels Grove accommodates a lay-by which is approximately 3.5 metres deep and is utilised for perpendicular parking as well as footways which are approximately 3 metres wide. The proposals include the upgrade of the existing footway to a shared footway cycleway along the east side of St Michaels Grove. Due to the width of the lay-by which is inadequate to accommodate perpendicular parking, observations show that vehicles overhang both the carriageway and footway. Vehicles overhanging the proposed shared footway cycleway will restrict the width available for pedestrians and cyclists which could lead to cyclist pedestrian collisions.</p>	
RECOMMENDATION:	
It is recommended that the existing footway is not upgraded to a shared facility	
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 – existing footway to remain as a footway.	
AUDITOR'S VIEW OF DESIGN ORGANISATION RESPONSE dated 26 th July 2022	
Confirmation that the existing footway will not be upgraded to a shared footway cycleway, addresses the road safety concern at this stage.	
A.2.4	PROBLEM
Location:	St Michaels Grove
Summary:	Intervisibility between cyclists and vehicles / pedestrians egressing driveways is limited
Acc Type:	Vehicle to cyclist and cyclist to pedestrian collisions
<p>St Michaels Grove provides access to dwellings situated either side with walls and fences as well as hedgerows providing boundary treatments. The majority of property frontages along St Michaels Grove have been converted to provide off-street parking with dropped kerb vehicular crossovers. The proposals include the upgrade of the existing footway along the east side of the St Michaels Grove carriageway, to a shared footway cycleway. The provision of the shared facility</p>	

will lead to cyclists travelling along the existing footway where intervisibility to / from vehicles and pedestrians egressing driveways / footpaths, is limited which could lead to a vehicle to cyclist and cyclist to pedestrian collision.

RECOMMENDATION:

It is recommended that an adequate level of intervisibility is achievable at all private accesses.

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 – existing footway to remain as a footway.

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

Confirmation that the existing footway will not be upgraded to a shared footway cycleway, addresses the road safety concern at this stage.

A.3 JUNCTIONS

A.3.1 PROBLEM

Location: Trafalgar Court junction with Fairfield Avenue

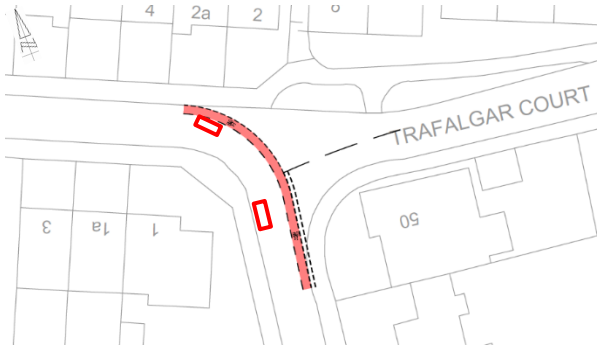

Summary: Proposed Advanced Stop Line may impact on signal timings


Acc Type: Side impact and head-on type collisions


Trafalgar Road meets the circa. 5 metre wide Farfield Avenue at a simple priority junction off the outside of a circa 90° bend in the road where forward visibility is restricted. The proposals include the provision of a red surfaced 1 metre advisory cycle lane on Fairfield Avenue across the priority junction to highlight the potential for cyclists to be passing. Traffic generally avoids advisory cycle lanes and as such, the Audit Team are concerned that a eastbound vehicle approaching the bend in the road and avoiding the area will leave insufficient space for an opposing vehicle to pass which could lead to sideswipe or head-on type collisions.

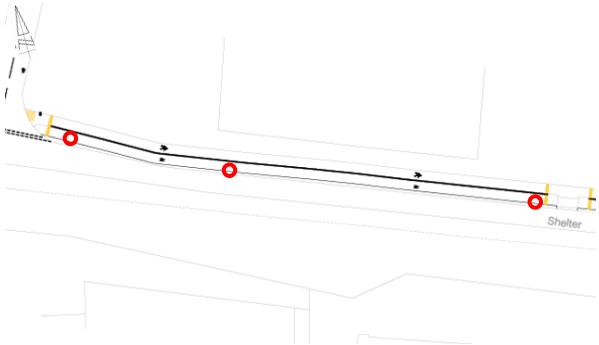

RECOMMENDATION:

It is recommended that the existing give-way line and proposed advisory cycle lane are relocated to ensure that the existing carriageway width around the bend in the road is retained

<p>Location Plan:</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 – The design has been revised to remove the proposed advisory cycle lane so that the existing width around the bend is retained.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022</p>	
<p>Confirmation that the advisory cycle lane has been removed from the proposals, addresses the road safety concern at this stage.</p>	
A.4	WALKING, CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Fort Fareham Road
Summary:	Visibility between a cyclist and approaching vehicle is restricted by a mature tree
Acc Type:	Vehicle cyclist type collisions
<p>The verge to the west of Fort Fareham Road accommodates a number of mature trees in the vicinity of where the carriageway bends by circa 120°. The proposals widen an existing footpath to the northwest of Fort Fareham Road to upgrade the existing facility to a shared footway cycleway and include the provision of a cycle on / off-slip. The proposed on / off-slip is situated to the south of a mature tree south of the existing bend in the road at a location where on-street parking takes place on the eastern side of the carriageway. The Audit Team is concerned that visibility between users of the proposed shared footpath cyclepath approaching the on / off-slip and approaching southbound traffic passing parked vehicles is limited at a critical point which could lead to a cyclist entering the carriageway when it is not safe to do so, resulting in vehicle to cyclist collisions.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that the proposed on / off-slip is relocated to maximise intervisibility</p>	

<p>Location Plan:</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 – we have reviewed the design to take account of this comment and others identified within the Stage 1 RSA and reviewed the highway boundary data. In light of this we have revised the route to come through Elizabeth Court, through to Tudor Court and onto Trafalgar Court which is a more preferred route, which provides wayfinding and a proposed 3m section of off-road cycle route between Elizabeth Court and Tudor Court.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022</p>	
<p>Confirmation that an alternative route has been provided, addresses the road safety concern at this stage.</p>	
A.4.2	PROBLEM
Location:	Longfield Avenue
Summary:	Existing refuge island is of inadequate width to accommodate cyclists
Acc Type:	Vehicle cyclist type collisions
<p>The Longfield Avenue arm of the roundabout junction with Newcourt Lane and Davis Lane accommodates a series of refuges that allow pedestrians and cyclists to cross the carriageway in stages. The proposals include the provision of a segregated footway cycleway along Longfield Avenue and the widening of an existing small section of shared facility leading to the uncontrolled crossing point to the north. The Audit Team is concerned that the proposed widening of the approach to the crossing point will lead to pedestrians and cyclists attempting to cross where dropper kerbs are currently provided which accommodate an upstand in excess of 6mm, mimicked across the uncontrolled crossing / refuges. An upstand in excess of 6mm along a pedestrian desire line, could be a trip hazard leading to falls and personal injuries.</p>	
<p>RECOMMENDATION:</p>	
<p>It is recommended that the existing dropped kerbs are extended appropriately and width of the remainder of the existing uncontrolled crossing, increased uniformly.</p>	

<p>Location Plan:</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 – the design has been updated to extend the existing dropped kerbs appropriately and the width of the remainder of the existing uncontrolled crossing, increased uniformly – exact details to be undertaken at detailed design stage appropriated.</p>	
<p>AUDITOR’S VIEW OF DESIGN ORGANISATION RESPONSE dated 26th July 2022</p>	
<p>Confirmation that the width of the existing uncontrolled crossing is to be increased to ensure consistency, addresses the road safety concern at this stage.</p>	
A.5	TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Longfield Avenue
Summary:	Existing street lighting columns are situated within the area of the proposed widening
Acc Type:	Vehicle to cyclist / pedestrian collisions
<p>Longfield Avenue benefits from a footway along the northern side of the carriageway, which is offset by a grass verge, as well as street lighting with columns situated within the grass verge both sides of the carriageway. The proposals include the widening of the existing footway of Longfield Avenue to provide a segregated 2 metre footway and cycleway with a 0.5 metre hardstrip provided between the proposed facility and carriageway. A number of existing street lighting columns along Longfield Avenue 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 columns will have an adverse impact on the level of lighting should they be relocated 4.5 metres from the carriageway. Vehicles are generally driven during the hours of darkness with headlights illuminated, however, a bus stop is present either side of the carriageway which is where a pedestrian desire line across the carriageway is present. Insufficient lighting could result in a driver / rider not becoming aware of a pedestrian or cyclist at a safe distance and lead to a vehicle to pedestrian / cyclist collision.</p>	

<p>RECOMMENDATION:</p> <p>It is recommended that street lighting columns are relocated outside the proposed segregated facility to ensure that the level of lighting is adequate, particularly at locations where pedestrians cross and cyclists enter the carriageway.</p>
<p>Location Plan: (NB: Not all street lighting columns 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 – existing street lighting columns to be positioned appropriately – 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 the existing street lighting columns are to be relocated appropriately, 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	ITB10353-020	-	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-043	-	Proposed cycle improvements to Longfield Avenue between B3393 Newgate lane and Fort Fareham Road
	ITB10353-GA-044	-	Proposed cycle improvements to Redlands Lane from Longfield Avenue to St Michaels Grove
	ITB10353-GA-045	-	Potential cycle improvements to St Michaels Grove between Fairfield Avenue to The Gillies

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-043	A	Proposed cycle improvements to Longfield Avenue between B3393 Newgate lane and Fort Fareham Road
	ITB10353-GA-044	A	Proposed cycle improvements to Redlands Lane from Longfield Avenue to St Michaels Grove
	ITB10353-GA-045	A	Potential cycle improvements to St Michaels Grove between Fairfield Avenue to The Gillies

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