

Technical Note

Project No: ITB13091
Project Title: The Landings, Ford Airfeild
Title: Stage 1 Road Safety Audit
Ref: DS/ITB13091-034 TN
Date: 23 November 2020

SECTION 1 Summary

- 1.1 Planning application F/4/20/OUT has been submitted to Arun District Council for consent for development of up to 1,500 dwellings, 60-bed care home, up to 9,000sq of employment floorspace, local centre of up to 900sqm of retail commercial and 1,450sqm of community/leisure floorspace, land for a two-form entry primary school, public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including the demolition of existing buildings and part removal of existing runway hardstanding.
- 1.2 West Sussex County Council (WSCC), as the local highway authority, provided a 2nd response to the application dated 12 October 2020. As part of this response, Stage 1 Road Safety Audits (RSA) were requested for all highway schemes/improvements.
- 1.3 The RSAs have been undertaken in accordance with the adopted WSCC Road Safety Audit Policy by an independent Auditor. A total of 6 RSAs have been prepared and are appended to this Technical Note. The presented audits and associated drawings are as follows:
- **Appendix A:** RSA-20-069-3 comprising Yapton Road Access Roundabout and works along Rollaston Park and Burndell Road, including revisions of **Drawings ITB13091-GA-041, GA-202 and GA-203;**
 - **Appendix B:** RSA-20-089-3 comprising Burndell Road and Bilsham Road compact roundabout and works along Bilsham Road, including revisions of **Drawings ITB13091-GA-027 and GA-062.**
 - **Appendix C:** RSA-20-090-3 comprising North End Road compact roundabout with Main Road and priority junction with Ford Lane, including revisions of **Drawings ITB13091-GA-026, GA-028 and GA-063;**

- **Appendix D:** RSA-20-091-3 comprising Ford Lane development access roundabout, including revisions of **Drawings ITB13091-GA-004 and GA-054;**
- **Appendix E:** RSA-20-092-3 comprising works along Ford Road and Station Road, including revisions of **Drawings ITB13091-GA-006, GA-007, GA-010 and GA-400;** and
- **Appendix F:** RSA-20-093-3 comprising works along Horsemere Green Lane and Church Lane, including revisions of **Drawings ITB13091-GA-058 and GA-600.**

1.3.1 The matters identified by the Auditor have been addressed in accordance with the Auditor Recommendation or, where appropriate, identified as being a matter to be addressed as part of the Section 278 Detailed Design (e.g. design of drainage, lighting etc).

1.3.2 On the basis of the attached documentation, all outstanding technical matters relating to the design of the site accesses and off-site highway improvements have been resolved, and the proposed development accords with paragraph 108 of the National Planning Policy Framework by providing safe and suitable access to all users.

APPENDIX A. RSA-20-069-3 AND DRAWINGS

Road Safety Audit Report

Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.



Proposed Yapton Road Access Roundabout & works along Rollaston Park and Burndell Road Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-069	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-069-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-069-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			9 th September 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	23 rd September 2020
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			23 rd September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			7 th October 2020

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Stage 1	A1	Documents and Drawings provided for this Road Safety Audit
	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 a proposed access roundabout along Yapton Road as well as highway works along Rollaston Park and Burndell Road in Ford, Arundel. The works include a 40 metre ICD four arm roundabout as well as pedestrian and cyclist improvements and are to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 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 September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Redrow Homes and Wates Developments. 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. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

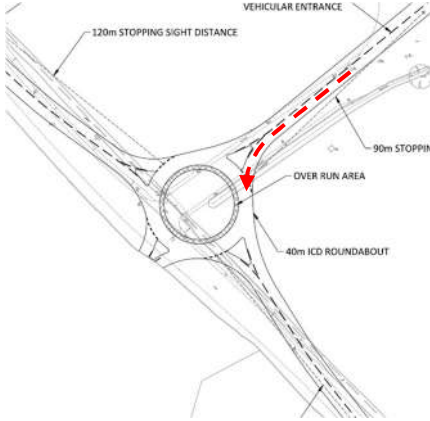
- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 2pm and 5:45pm. The site visit involved walking and driving around the local highway network for a 225-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles were also observed.
- 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: Dominic Smith
Position / Organisation: Associate Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.
- 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 proposals.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

A.1	LOCAL ALIGNMENT
A.1.1	PROBLEM
Location:	Proposed Roundabout, Yapton Road
Summary:	Development access arm falls towards the proposed roundabout
Acc Type:	Junction overshoot
Yapton Road is a two-way single carriageway north-south link between Brundell and the A259 and that is subject to a 40mph speed limit with the land to the east at a higher level. The proposals are to provide a four arm 40 metre roundabout along Yapton Road with the eastern arm allowing access to the development site and the western arm taking the form of a stub arm to provide access to agricultural fields to the west. Due to the existing topography of the site, it is likely that the eastern development access arm is to fall towards the proposed roundabout. The scheme drawings provided with the Audit Brief do not include level information to identify the proposed gradient, however, a significant fall on approach to a roundabout could lead to junction overshoot type incidents.	
RECOMMENDATION:	
It is recommended that all approaches to the roundabout be set at a maximum gradient of 1 in 25.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020	
Accepted, the gradient will be addressed as part of the detailed design for the Section 278 Agreement.	
A.2	GENERAL
A.2.1	PROBLEM
Location:	Proposed Roundabout, Yapton Road
Summary:	Existing utility covers will be an obstruction to vehicles
Acc Type:	Loss of control
Yapton Road accommodates a number of utility covers within the existing verge as well as the carriageway. Following the proposed works, a number of the utility covers will be located within	

the carriageway and will become an obstruction if not adjusted adequately and become a skid hazard should their frictional surface properties be insufficient, resulting in loss of control type incidents.

RECOMMENDATION:

It is recommended that existing utility covers are relocated / adjusted appropriately

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted, the utility covers design will be addressed at the detailed design stage.

A.2.2 PROBLEM

Location: Proposed Roundabout, Yapton Road

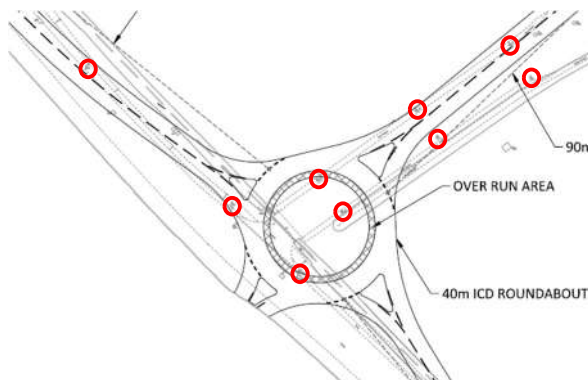
Summary: Introduction of proposals impact on the surface water drainage network

Acc Type: Loss of control

The carriageway within the vicinity of the proposed works is bounded by soft verges which accommodate gullies. The proposals realign / widen the existing carriageways and introduce a three-arm roundabout. No details have been provided to identify that the existing surface water drainage network is to be modified in accordance with the proposals or that provision will be made to accommodate the additional surface water that is generated. An inadequate surface water network could result in ponding during inclement conditions which may give rise to loss of control type incidents which would be exacerbated during freezing conditions.

RECOMMENDATION:

It is recommended that an adequate surface water drainage system is provided

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted, the drainage system will be addressed at the detailed design stage for the Section 278 Agreement.

A.2.3 PROBLEM

Location: Drake Grove

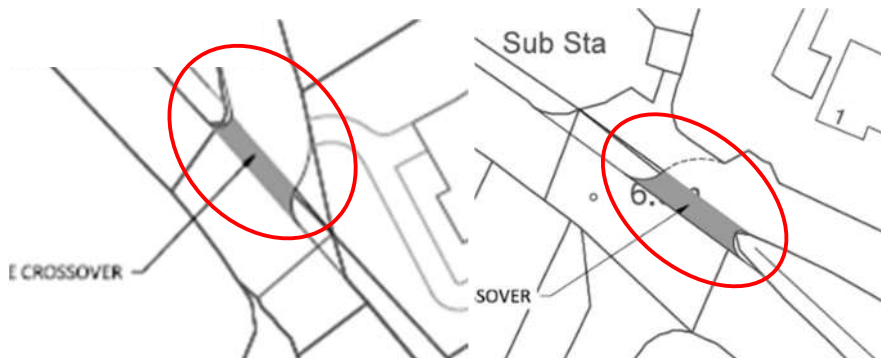
Summary: Proposals will not allow for the smooth transition of pedestrians or vehicles

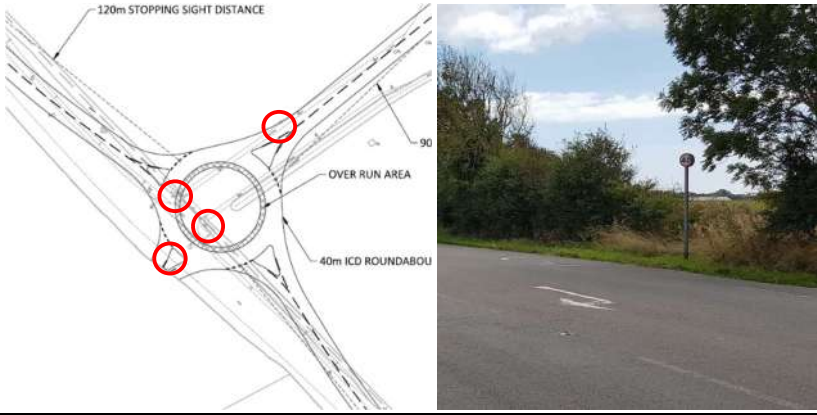
Acc Type: Pedestrian trip and fall, vehicular loss of control

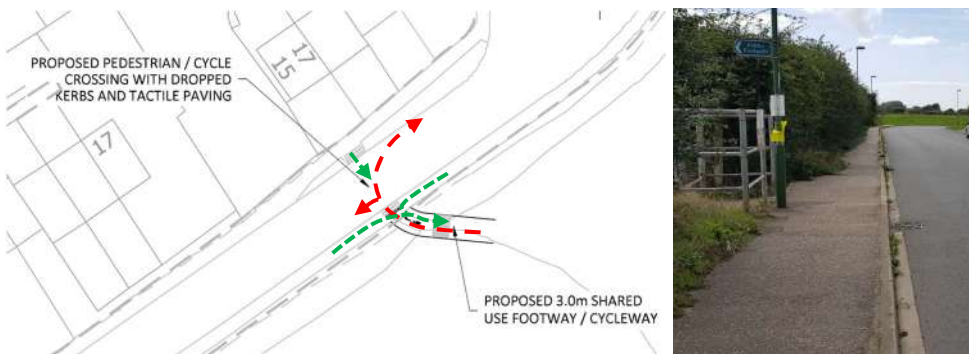
The speed limit of Yapton Road reduces from 40mph to 30mph approximately 60 metres to the south of Rollaston Park and continues as Burndell Road which benefits from a footway along the eastern side of the carriageway. The proposals include works to existing crossing points, providing dropped kerbs and tactile paving, as well as, the resurfacing of the Drake Grove priority accesses to provide vehicular crossovers. No details have been provided to identify how the vehicular crossovers will be formed to allow for the smooth transition for pedestrians and vehicles which could give rise to trips and falls. If existing levels are to be retained, the nature of the access is unlikely to change and as such, vehicles may assume priority over pedestrians which could give rise to vehicle pedestrian collisions.

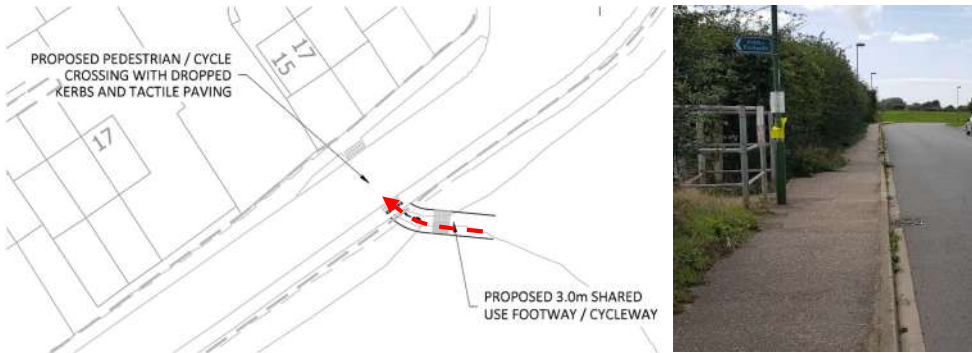
RECOMMENDATION:

It is recommended that the Drake Grove accesses are reduced in width and crossing points with tactile paving, are provided to ensure pedestrians proceed with caution

Location Plan:

	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22 nd September 2020	
Accepted, the design has been amended to incorporate the recommendation of the Auditor and include the reduced width of the accesses along with the crossing points with tactile paving. This is shown on revised drawings ITB13091-GA-202A and ITB13091-GA-203A.	
A.2.4	PROBLEM
Location:	Proposed Roundabout, Yapton Road
Summary:	Defunct traffic signs may become an obstruction or collision objects
Acc Type:	Vehicle collision with street furniture
Street furniture to include signage and telegraph/electric poles are present within the existing verge of Yapton Road and the existing access. The proposals provide a roundabout junction and realign Yapton Road such, that the existing items of street furniture will be located within the path of a vehicle or within 450mm of the carriageway. The obsolete signs and telegraph poles could therefore become an obstruction to vehicles or a distraction to drivers approaching the junction.	
RECOMMENDATION:	
It is recommended that irrelevant signs / posts are removed and that any new signs are placed at least 450mm from the carriageway as well as outside visibility envelopes and mounted where possible on street lighting columns wherever possible to minimise street clutter.	
Location Plan:	
	

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22 nd September 2020	
Accepted, the removal of any irrelevant signs / posts and the location of any new signs will be addressed at the detailed design stage.	
A.3	JUNCTIONS
	<i>No Road Safety Concerns regarding JUNCTIONS have been raised at this stage</i>
A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Rollaston Park proposed pedestrian / cyclist access
Summary:	Visually impaired pedestrians could step into the path of a cyclist without warning
Acc Type:	Cyclist-pedestrian collisions
Rollaston Park benefits from a footway either side of the carriageway with a footway also provided from the application site leading towards the carriageway. The proposals modify and widen the existing footpath from the proposed development to provide a 3-metre shared use footway cycleway with the benefit of corduroy paving to warn pedestrians of the potential for cyclists and introduce a dropped kerb crossing point with tactile paving directly adjacent to the footpath cyclepath. Cyclists are likely to continue beyond the corduroy paving in order to access the Rollaston Park carriageway. Pedestrians particularly the visually impaired, stepping from a footway or crossing point to a shared facility without warning, could walk into the path of a cyclist raising the risk of a cyclist-pedestrian collision.	
RECOMMENDATION:	
It is recommended that the crossing point and corduroy paving are relocated to ensure that pedestrians travelling from a footway become aware of cyclists	
Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22 nd September 2020	
Accepted, the design has been amended to incorporate the recommendation of the Auditor and include the relocation of the crossing point and corduroy paving. This is shown on revised Drawing ITB13091-GA041A.	

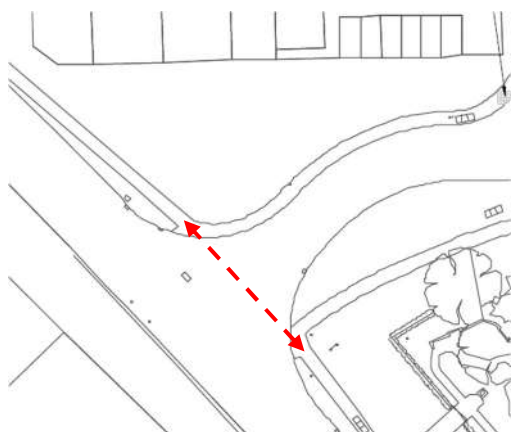
A.4.2	PROBLEM
Location:	Rollaston Park proposed pedestrian / cyclist access
Summary:	Users of wheeled devices could continue onto the carriageway suddenly
Acc Type:	Vehicle-non-motorised user and rear end collisions
Rollaston Park provides access to a number of residential developments as well as an industrial estate and accommodates a footway along either side of the carriageway with the footway along the northern side terminating prior to the industrial estate. The proposals modify and widen the existing footpath from the proposed development to provide a 3-metre shared use footway cycleway with the benefit of corduroy paving to warn pedestrians of the potential for cyclists and introduce a dropped kerb crossing point with a cyclist give-way line and tactile paving directly adjacent to the footpath cyclepath. A user of a wheeled device such as a child on a scooter or a cyclist approaching the crossing point may continue across the carriageway without slowing for approaching traffic raising the risk of vehicle user collisions or rear end impact collisions where an approaching driver brakes suddenly.	
RECOMMENDATION:	
It is recommended that staggered barriers are provided to ensure users slow.	
Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020	
Accepted, the design has been amended to include the staggered barriers and this is shown in Drawing ITB13091-GA-041A.	
A.4.3	PROBLEM
Location:	Yapton Road footway
Summary:	Kerbs with an upstand in excess of 6mm will become an obstruction to pedestrians
Acc Type:	Pedestrian trips and falls
The scheme drawings provided with the Audit Brief identify that dropped kerb uncontrolled crossing points that benefit from tactile paving, are to be provided along local pedestrian desire lines. However, an existing crossing point is present at the junction of Rollaston Park with Yapton Road that is likely to be along the pedestrian desire line where kerbs with an inappropriate upstand have been provided without tactile paving. Kerbs with an upstand in excess of 6mm will become	

an obstruction to pedestrians particularly the mobility impaired which could give rise to trips and falls and the lack of tactile paving could result in a pedestrian entering the carriageway when it is not safe to do so.

RECOMMENDATION:

It is recommended that the dropped kerb are adjusted with a maximum upstand of 6mm and tactile warning is provided.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted, the design has been amended to incorporate these recommendations and this is shown on revised Drawing ITB13091-GA-201A.

A.5 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

A.5.1 PROBLEM

Location: Scheme

Summary: No street lighting details have been provided with the Audit Brief

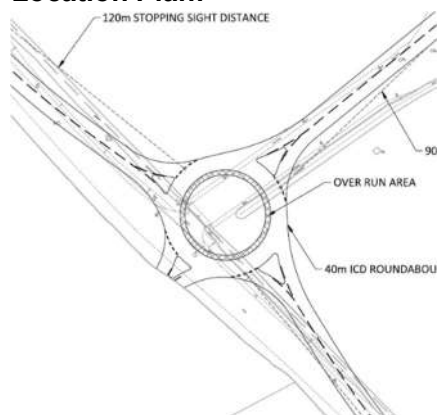
Acc Type: Vehicle loss of control

Yapton Road is rural in nature, subject to a 40mph speed limit and does not benefit street lighting. The proposals introduce a 40 metre ICD roundabout and realigns the approach carriageways. The scheme drawings provided with the Audit Brief do not identify that street lighting is to be provided. As such, the driver of a vehicles approaching the junction may not become aware of the proposed roundabout at a safe distance which could give rise to heavy braking resulting in loss of control type incidents as well as junction overshoots.

RECOMMENDATION:

It is recommended that street lighting is provided

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted, the need for street lighting will be considered alongside the Overseeing Organisation (WSCC) as part of the detailed design stage.

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

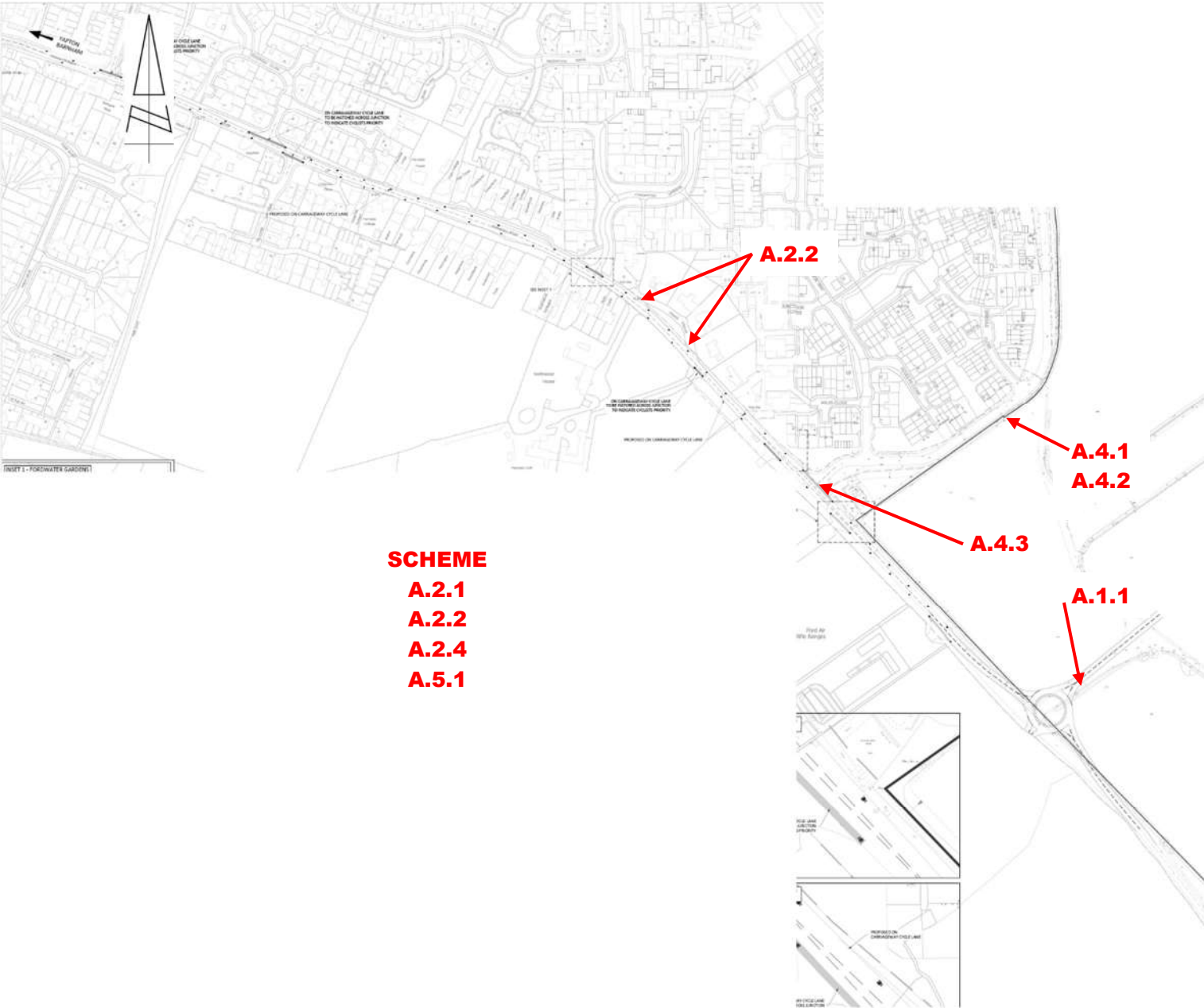
Appendix A1

Documents and Drawings provided for this Stage 1 Road Safety Audit

Audit Stage	Doc. No.	Rev	Title
Stage 1	DS/ITB13091-032		Road Safety Audit Brief
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-001	E	Potential Southern Vehicular Access from Yapton Road
	ITB13091-GA-041	-	Rollaston Park Pedestrian / Cycle Access
	ITB13091-GA-059	-	Potential Pedestrian / Cyclist Improvements
	ITB13091-GA-060	-	Potential Pedestrian / Cyclist Improvements
	ITB13091-GA-200	-	Key Plan – Route 2 Burndell Road – From Rollaston Park to Downview Road
	ITB13091-GA-201	-	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 1 of 4
	ITB13091-GA-202	-	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 2 of 4
	ITB13091-GA-203	-	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 3 of 4
	ITB13091-GA-204	-	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 4 of 4

Appendix A2

Item Location Plan

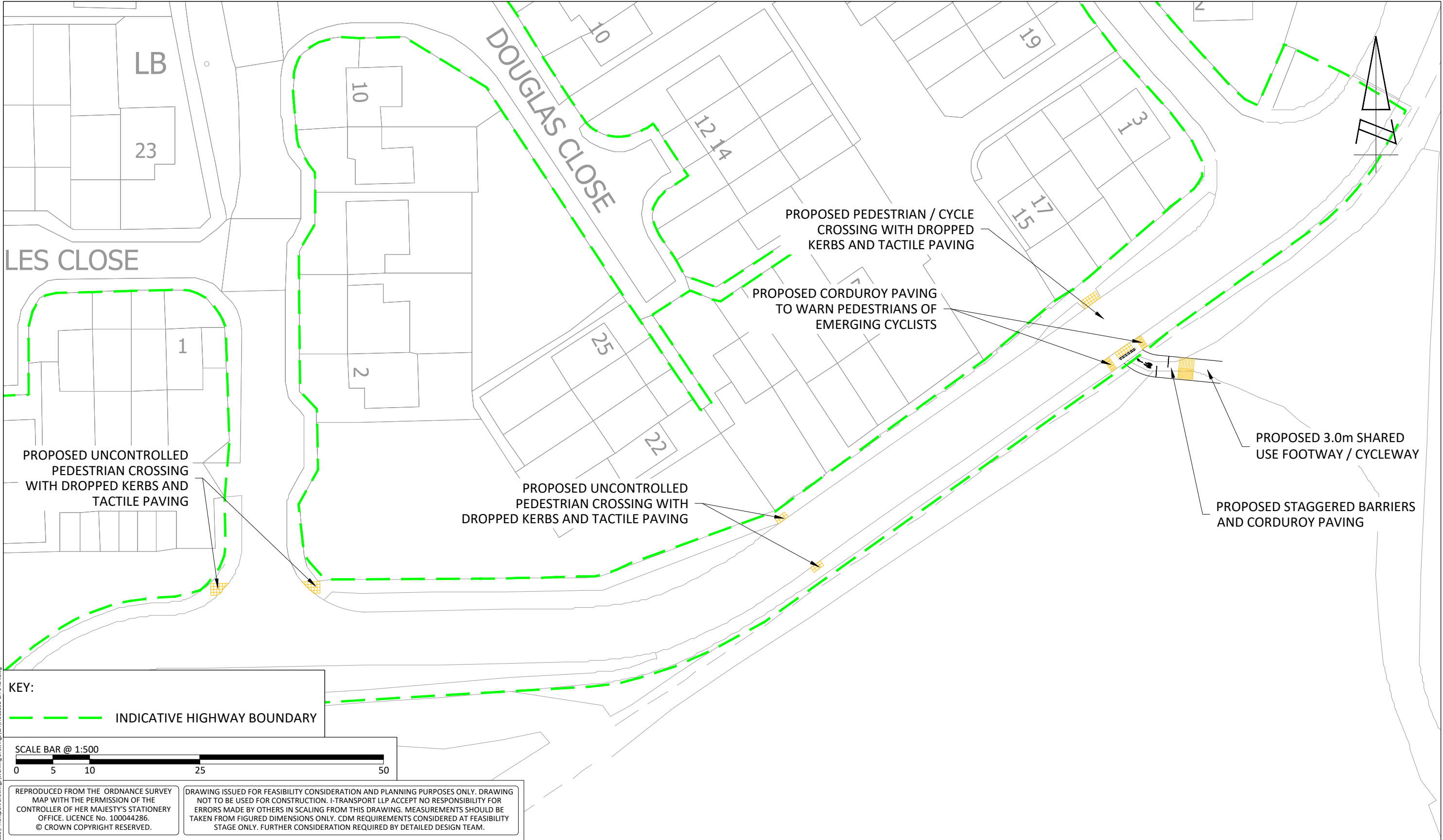


Appendix A3

Drawings associated with the Design Organisation Response

<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB13091-GA-041	A	Rollaston Park Pedestrian / Cycle Access
	ITB13091-GA-202	A	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 2 of 4
	ITB13091-GA-203	A	Route 2 – Burndell Road from Rollaston Park to Downview Road Sheet 3 of 4

fenley



KEY:

— — — — — INDICATIVE HIGHWAY BOUNDARY

SCALE BAR @ 1:500

0 5 10 25 50

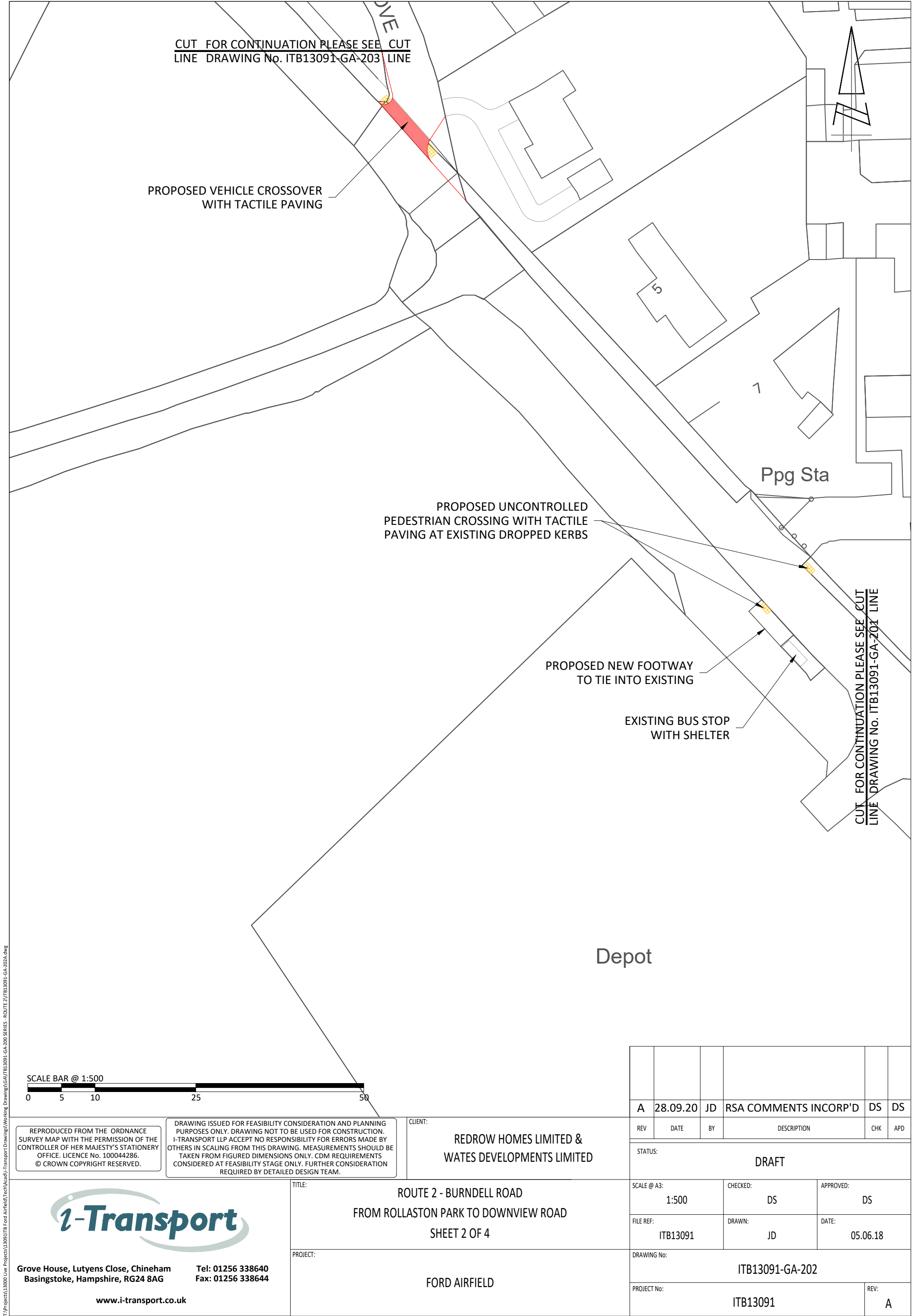
REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286. © CROWN COPYRIGHT RESERVED.

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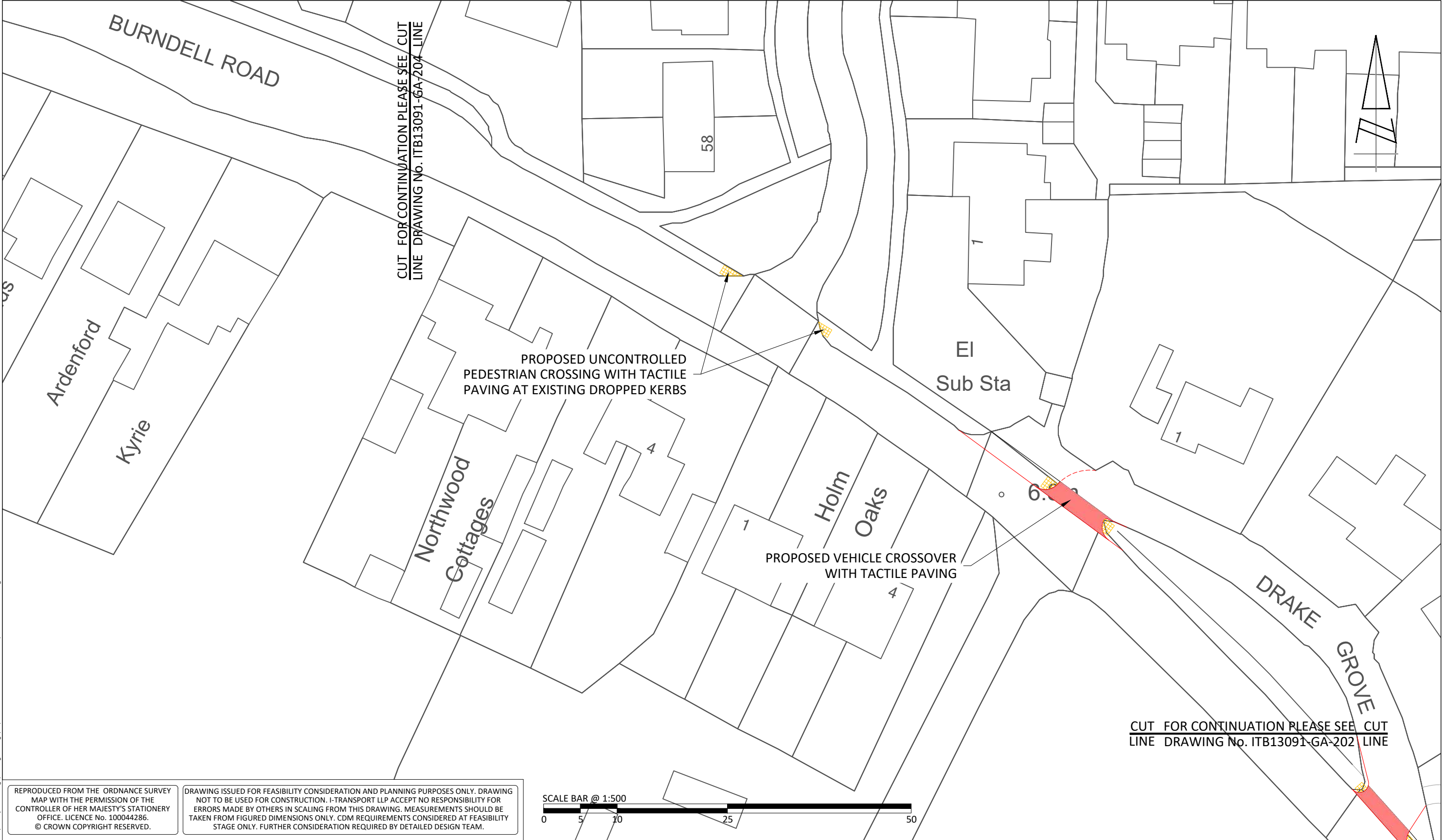
 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 Fax: 01256 338644 www.i-transport.co.uk								TITLE:		SCALE @ A3: 1:500	CHECKED: DS	APPROVED: DS		
		A	28.09.20	JD	RSA COMMENTS INCORP'D	DS	DS	PROJECT:		FORD AIRFIELD	REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED	FILE REF: ITB13091	DRAWN: SH	DATE: 10.05.19
		REV	DATE	BY	DESCRIPTION	CHK	APD	DRAWING No: ITB13091-GA-041						
		STATUS: DRAFT						PROJECT No: ITB13091				REV: A		

REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: DRAFT					

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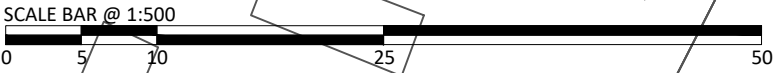


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REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286. © CROWN COPYRIGHT RESERVED.

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 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 Fax: 01256 338644 www.i-transport.co.uk							TITLE: ROUTE 2 - BURDELL ROAD FROM ROLLASTON PARK TO DOWNVIEW ROAD SHEET 3 OF 4		SCALE @ A3: 1:500	CHECKED: DS	APPROVED: DS	
	A	28.09.20	JD	RSA COMMENTS INCORP'D	DS	DS	PROJECT: FORD AIRFIELD		CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED	FILE REF: ITB13091	DRAWN: JD	DATE: 05.06.18
	REV	DATE	BY	DESCRIPTION	CHK	APD	DRAWING No: ITB13091-GA-203		PROJECT No: ITB13091		REV: A	
	STATUS: DRAFT											

APPENDIX B. RSA-20-089-3 AND DRAWINGS

Road Safety Audit Report

Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.



Proposed Burndell Rd and Bilsham Rd Compact Roundabout & works along Bilsham Rd Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032-2

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-069	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-089-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-089-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			9 th September 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	23 rd September 2020
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			23 rd September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			7 th October 2020

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	A.2 General	
	A.3 Junctions	
	A.4 Walking, Cycling and Horse Riding	
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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 a proposed compact roundabout at the junction of Bilsham Road with Burndell Road and works along Bilsham Road in Ford, Arundel. The works include a 20metre ICD three arm compact roundabout as well as pedestrian and cyclist improvements and are to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 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 September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Redrow Homes and Wates Developments. 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. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 2pm and 5:45pm. The site visit involved walking and driving around the local highway network for a 225-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles were also observed.
- 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**.

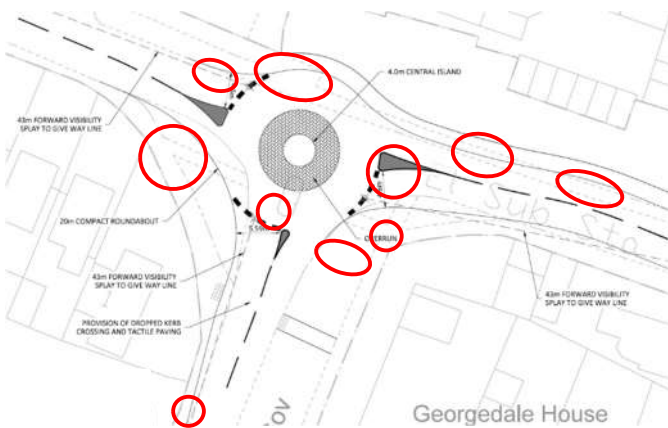
Design Organisation Response

- 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: Dominic Smith
Position / Organisation: Associate Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.

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 proposals.

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:	Existing utility covers will be an obstruction to vehicles and pedestrians
Acc Type:	Loss of control
The existing mini roundabout junction of the Bilsham Road with Burndell Road accommodates a number of utility covers within the existing footway and verge as well as the carriageway. The proposals increase the Inscribed Circle Diameter and provide a compact roundabout with a 4 metre central island with an overrun area. Following the proposed works, some of these utility covers will be located within the carriageway and will become an obstruction if not adjusted adequately or become a skid hazard should their frictional surface properties be insufficient, resulting in loss of control type incidents.	
RECOMMENDATION:	
It is recommended that existing utility covers are relocated / adjusted appropriately	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020	
Accepted – utility covers to be addressed as part of the detailed design.	
A.2.2	PROBLEM
Location:	Proposed Roundabout
Summary:	Introduction of proposals impact on the surface water drainage network
Acc Type:	Loss of control
The carriageway in the vicinity of the proposed works is bounded by kerb with a network of road gullies to cater for the surface water that falls onto the carriageway. The proposals realign / widen	

the existing carriageways and upgrade a three-arm mini roundabout to a compact roundabout. No details have been provided to identify that the existing surface water drainage network is to be modified in accordance with the proposals or that provision will be made to accommodate the additional surface water that is generated. An inadequate surface water network could result in ponding during inclement conditions which may give rise to loss of control type incidents which would be exacerbated during freezing conditions.

RECOMMENDATION:

It is recommended that an adequate surface water drainage system is provided and that no gullies are provided along the expected path of a vehicle.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted, the drainage system will be addressed at the detailed design stage for the Section 278 Agreement.

A.2.3 PROBLEM

Location: Proposed Roundabout, B2132, B2233, Burndell Road

Summary: Defunct traffic signs may become an obstruction or collision objects

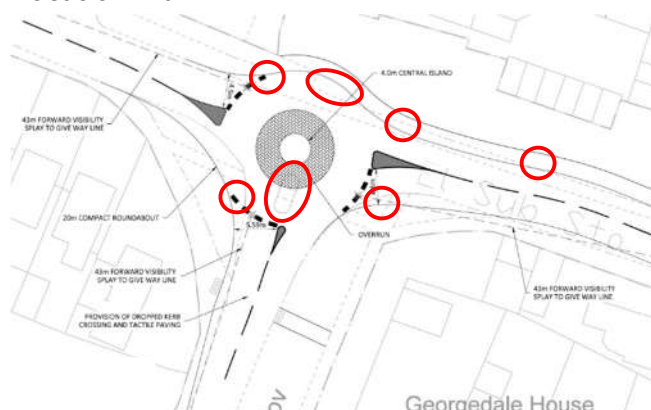
Acc Type: Vehicle collision with street furniture

Street furniture to include bollards, signage, telegraph/electric poles and street lighting columns are present within the existing footways, verge and traffic islands in proximity to the Bilsham Road mini roundabout junction with Burndell Road. The proposals upgrade the existing junction to a compact roundabout and realign the carriageways such, that existing items of street furniture will be located within the path of a pedestrian, vehicle or within 450mm of the carriageway. The obsolete signs and telegraph poles could become a distraction to drivers approaching the junction and become an obstruction to vehicles, as well as pedestrians.

RECOMMENDATION:

It is recommended that irrelevant signs and posts are removed and that any new signs are placed away from visibility envelopes and mounted where possible on street lighting columns to minimise street clutter.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted – removal and positioning of signs to be considered as part of the detailed design.

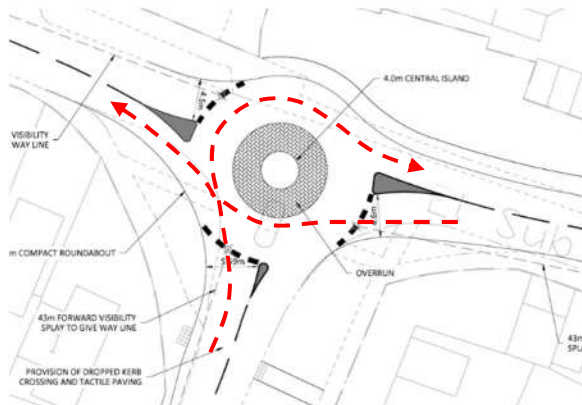
A.2.4	PROBLEM
Location:	Proposed Roundabout
Summary:	Carriageway may be of insufficient width to allow for service vehicles and expected manoeuvres
Acc Type:	Loss of control, sideswipes and vehicle pedestrian / cyclist collision

The existing mini roundabout junction of Bilsham Road with Burndell Road accommodates a flat paved central island as well as painted splitter islands on Burndell Road and a physical pedestrian refuge on Bilsham Road. The proposals increase the size of the roundabout to form a 20 metre ICD compact roundabout with a physical 4 metre diameter central island with painted splitter islands on each approach. The central island of the compact roundabout forms a physical restriction and may render the compact roundabout impassable by large vehicles to include the passenger service vehicles and refuge / recycling collection vehicles as well as articulated vehicles that appear to service the local co-op along Burndell Road to the west. Should the junction be insufficient to accommodate the expected vehicles, a large vehicle may strike a kerbed feature increasing the likelihood of loss of control type incidents or maybe required to reverse raising the risk of vehicle-pedestrian collisions or a collision with a vehicle.

RECOMMENDATION:

It is recommended that the junction allows for the expected manoeuvres.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted - the junction allows for all expected manoeuvres as shown in Drawing ITB13091-GA-062.

A.2.5 PROBLEM

Location: Northern footway, Burndell Road

Summary: Proposed footway will cut into an existing embankment

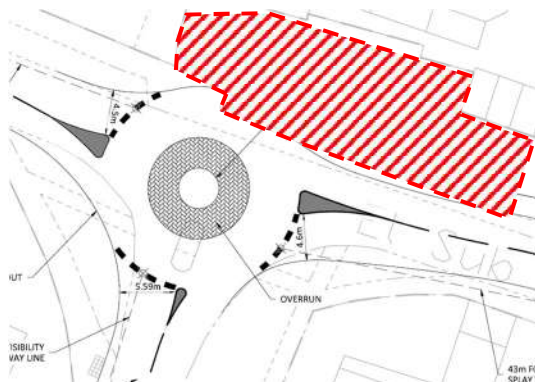
Acc Type: Vehicle pedestrian collision and pedestrian trips and falls

In proximity of the Bilsham Road mini roundabout with Burndell Road, the land along the northern side forms an embankment approximately 1 metre higher than the level of the existing carriageway. The proposals realign the carriageway and footway to allow the provision of the 20 metre ICD compact roundabout which will cut into the embankment. No details are illustrated on the scheme drawings to identify that the land will be regraded and as such, the embankment could slip into the footway and carriageway which may give rise to pedestrians stepping into the carriageway to avoid the area which increases the likelihood of vehicle-pedestrian collisions. Debris could also fall into the carriageway giving rise to loss of control incidents.

RECOMMENDATION:

It is recommended that the land is regraded sufficiently.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted – levels and grading to be reviewed as part of the detailed design.

A.3 JUNCTIONS

A.3.1 PROBLEM

Location: Proposed Roundabout

Summary: Drivers may not become aware of the compact roundabout and physical central island

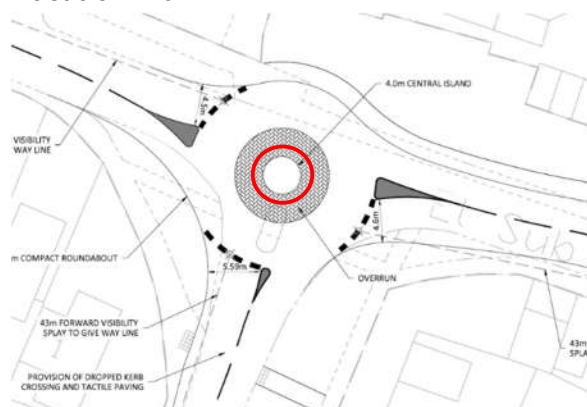
Acc Type: Vehicle loss of control

The junction of Bilsham Road with Burndell Road is street lit and benefits from mini roundabout and give-way signage on each approach as well as a pedestrian refuge on Bilsham Road and painted splitter islands on Burndell Road. The proposals provide a 20-metre ICD compact roundabout to include a 4-metre kerbed central island, an overrun area and painted splitter islands on each arm relocating the existing uncontrolled crossing further south along Bilsham Road. The scheme drawing provided with the Audit Brief does not include any measures to highlight the presence of the physical central islands or the junction itself and as such, there is a risk that drivers will not become aware of the kerbed features at a safe distance which could give rise to a vehicle striking the physical island and a loss of control type incidents.

RECOMMENDATION:

It is recommended that measures are provided in order to increase the conspicuity of the compact roundabout and the central island.

Location Plan:



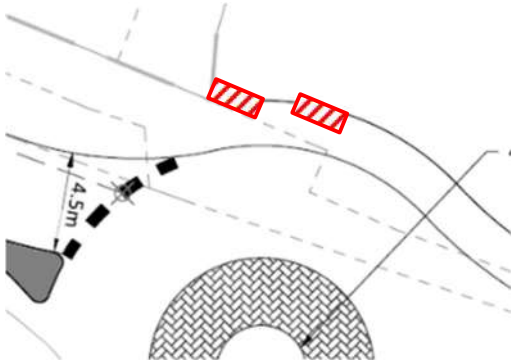
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted – signage has been introduced on the approach to the junction and the treatment of the central island will be considered further alongside the Overseeing Organisation as part of the detailed design. Amendments are shown on Drawing ITB13091-GA-027C.

A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Proposed Roundabout, Burndell Road
Summary:	No crossing points are provided along pedestrian desire lines
Acc Type:	Vehicle-pedestrian collision and pedestrian trips and falls
The existing mini roundabout junction of Bilsham Road with Burndell Road benefits from a number of uncontrolled crossing points to include a pedestrian refuge along Bilsham Road and a dropped kerb crossing point across Burndell Road to the east. The proposals include the provision of a compact roundabout in place of the mini and provide a dropped kerb uncontrolled crossing point to the south across Bilsham Road; however, the scheme drawings do not provide any measures to serve existing desire lines across Burndell Road. It is likely that pedestrians travelling between the local residential developments and local amenities will attempt to cross Burndell Road either side of the roundabout where they would be required to negotiate full height kerbs, which will increase the likelihood of trips and falls and could give rise to vehicle-pedestrian collisions.	
RECOMMENDATION:	
It is recommended that a safe route for pedestrians is provided.	
Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22 nd September 2020	
Accepted – tactile paving and dropped kerbs have been introduced on drawing ITB13091-GA-027C. In addition, a narrowing of the footway in the western side of the Bilsham Road carriageway (showing as 0.83m) has been corrected and returned to its existing width.	
A.4.2	PROBLEM
Location:	Northern footway, Burndell Road
Summary:	Telecoms junction box is likely to become an obstruction to pedestrians
Acc Type:	Pedestrian trips and falls
A pair of a cabinets are situated on the edge of the northern footway of the mini roundabout. Along with the street furniture observed and discussed within item A.2.3 above, the cabinets will become an obstruction for pedestrians travelling along the realigned footway, particularly the visually impaired who are unlikely to become aware of the feature.	

RECOMMENDATION:

It is recommended that the telecoms junction boxes are relocated to the back edge of footway.

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22nd September 2020

Accepted – relocation of services/utilities to be progressed as part of detailed design.

A.4.3**PROBLEM**

Location: Burndell Road

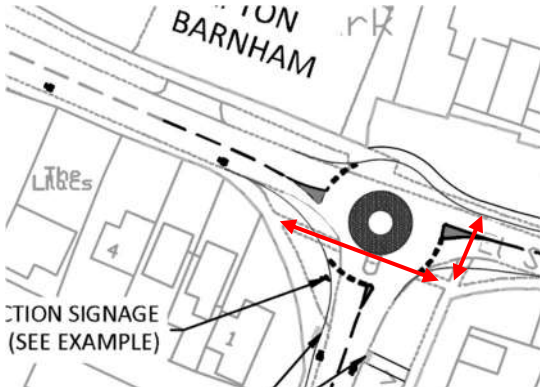
Summary: Existing footways link to the proposed carriageway where no crossings are provided

Acc Type: Pedestrian trips and falls

The existing pedestrian infrastructure within the vicinity of the existing mini roundabout provides a number of footways through grass verges, dropped kerbs and crossing points in order to serve desire lines across the junction. The scheme drawing provided with the Audit Brief identifies that a dropped kerb crossing point with tactile paving is to be provided on Bilsham Road and that the existing footways through the verges will be retained. The footways through the verges will lead a pedestrian to a full height kerb where no crossing is provided. A pedestrian attempting to cross at a full height kerb may give rise to trips and falls.

RECOMMENDATION:

It is recommended that the sections of footway are removed and grass verge reinstated where appropriate

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 22 nd September 2020	
Accepted – redundant footways/crossings will be removed and returned to verge.	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
	<i>No Road Safety Concerns regarding ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING have been raised at this stage</i>

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

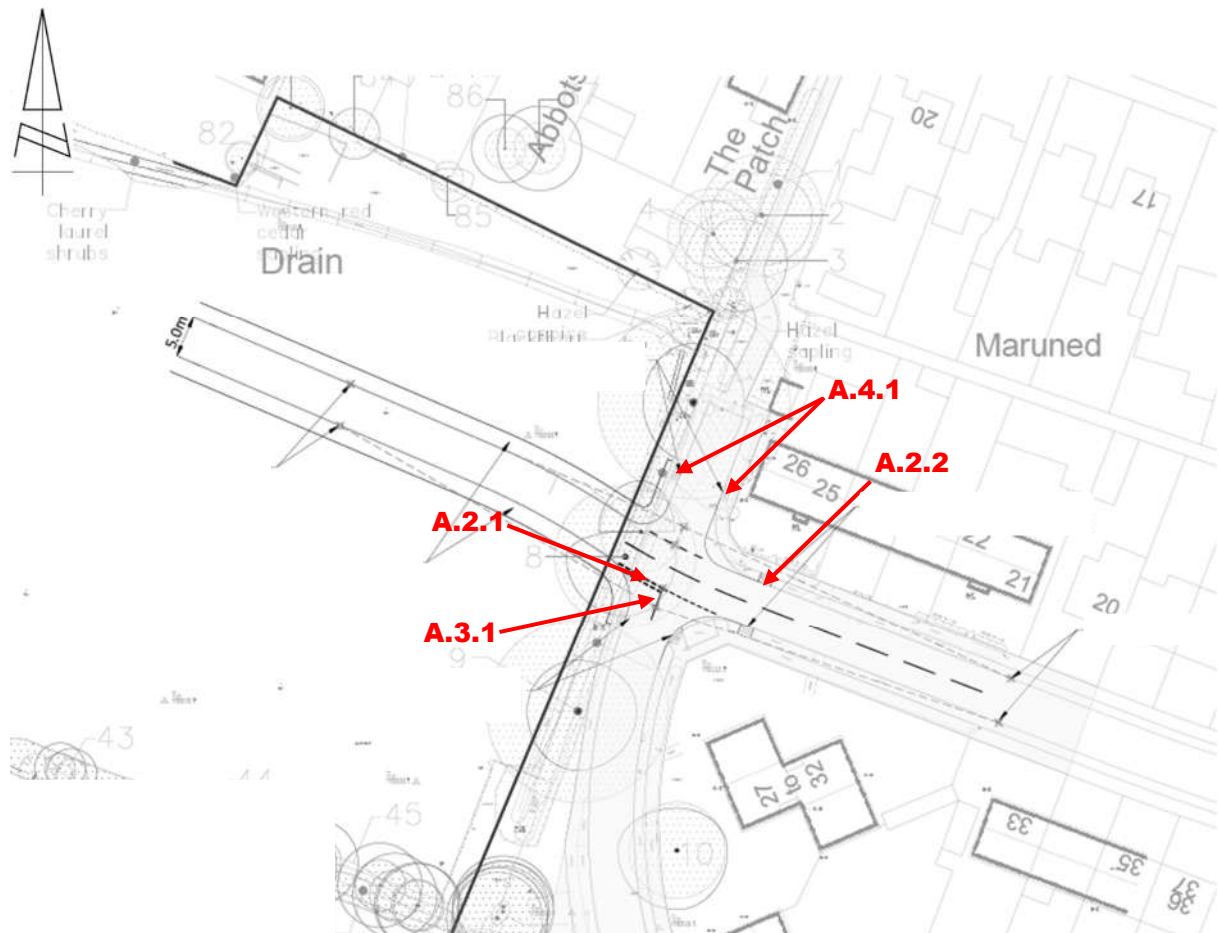
Appendix A1

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	DS/ITB13091-032	-	Road Safety Audit Brief 2
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-027	-	Bilsham Road / Burndell Road Roundabout Mitigation Scheme
	ITB13091-GA-061	-	Potential Pedestrian / Cyclist Improvements

Appendix A2

Item Location Plan

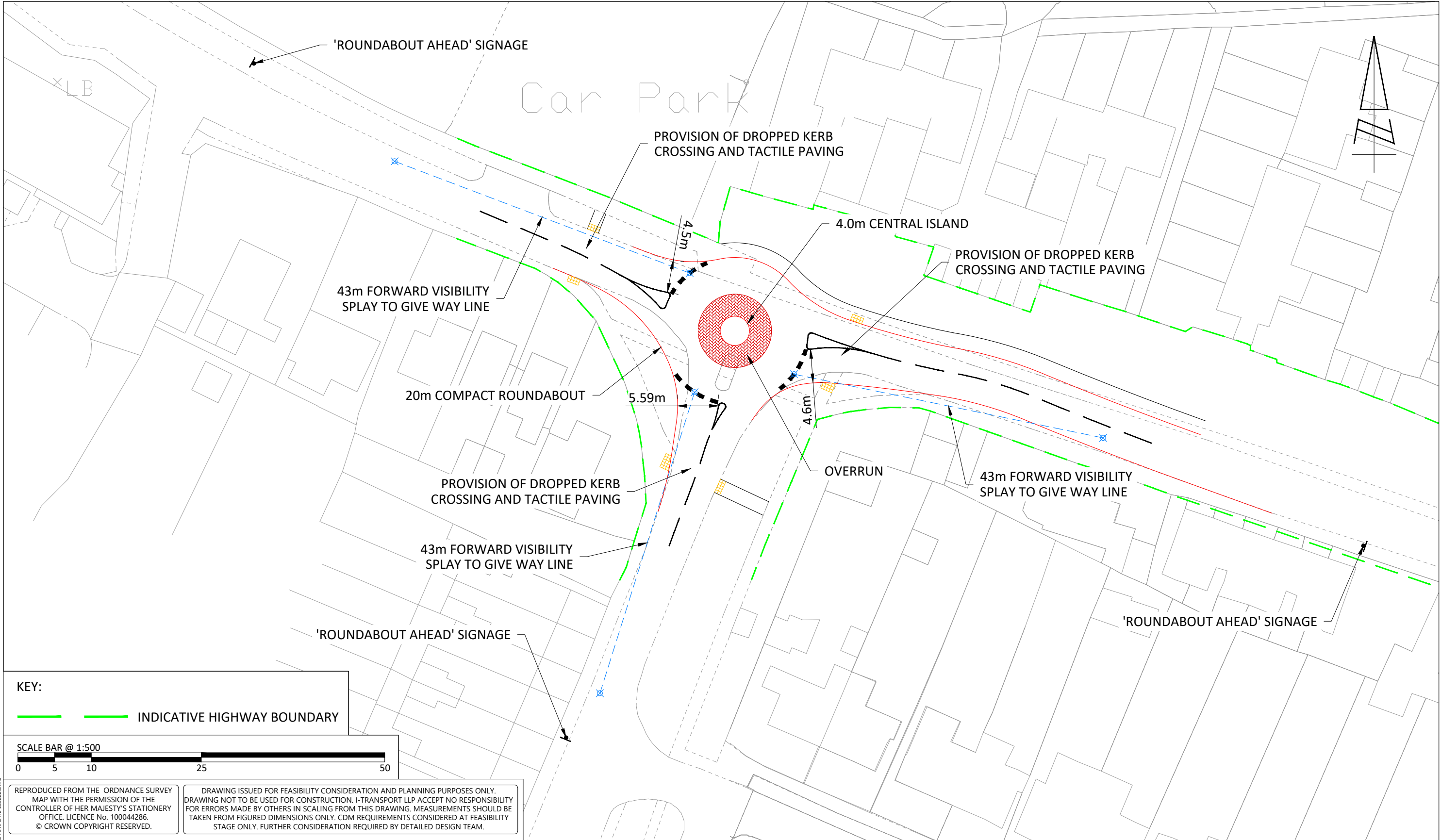


Appendix A3

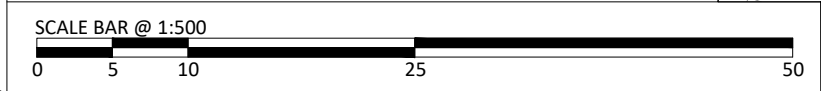
Drawings associated with the Design Organisation Response

<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB13091-GA-027	C	Bilsham Road / Burndell Road Roundabout Mitigation Scheme
	ITB13091-GA-062	-	Bilsham Road / Burndell Road / Main Road Roundabout swept paths analysis

fenley



KEY:
INDICATIVE HIGHWAY BOUNDARY

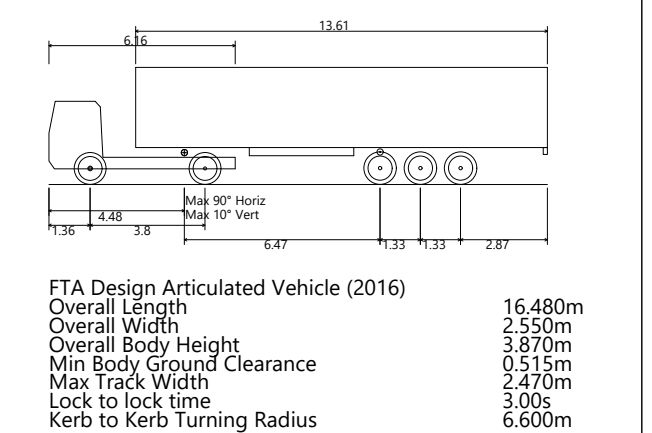
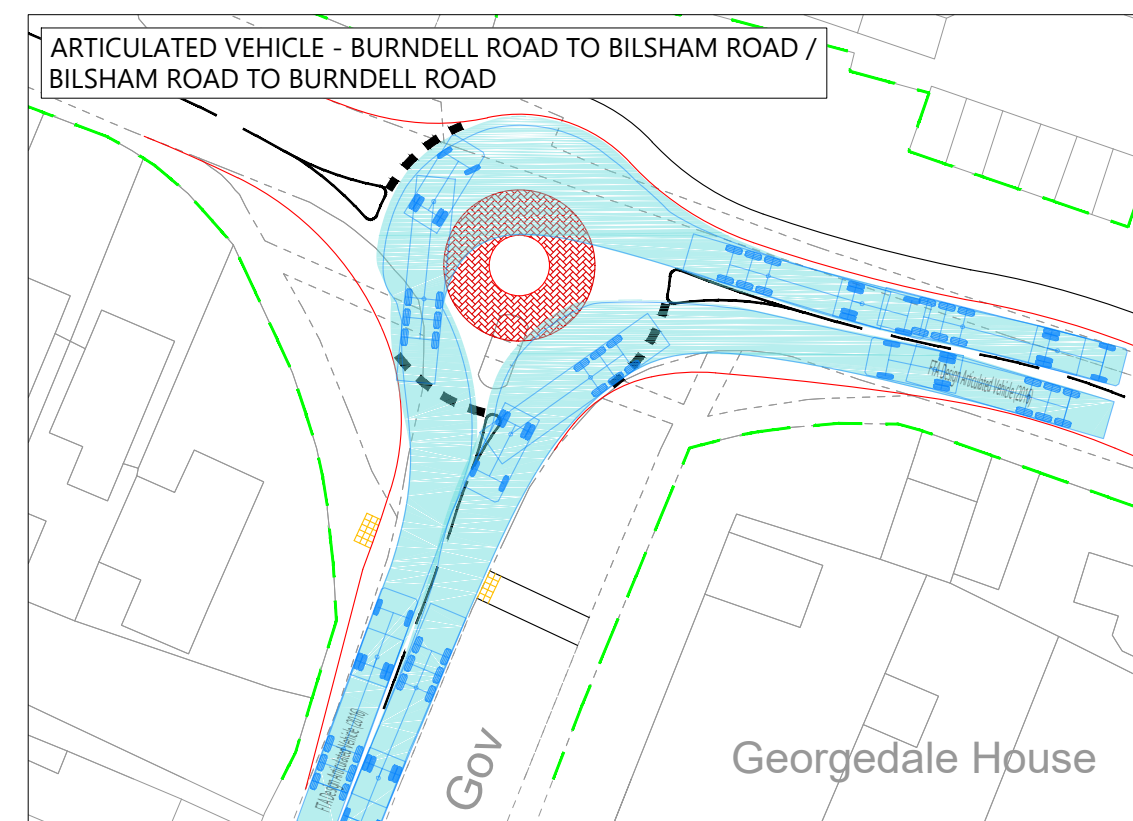
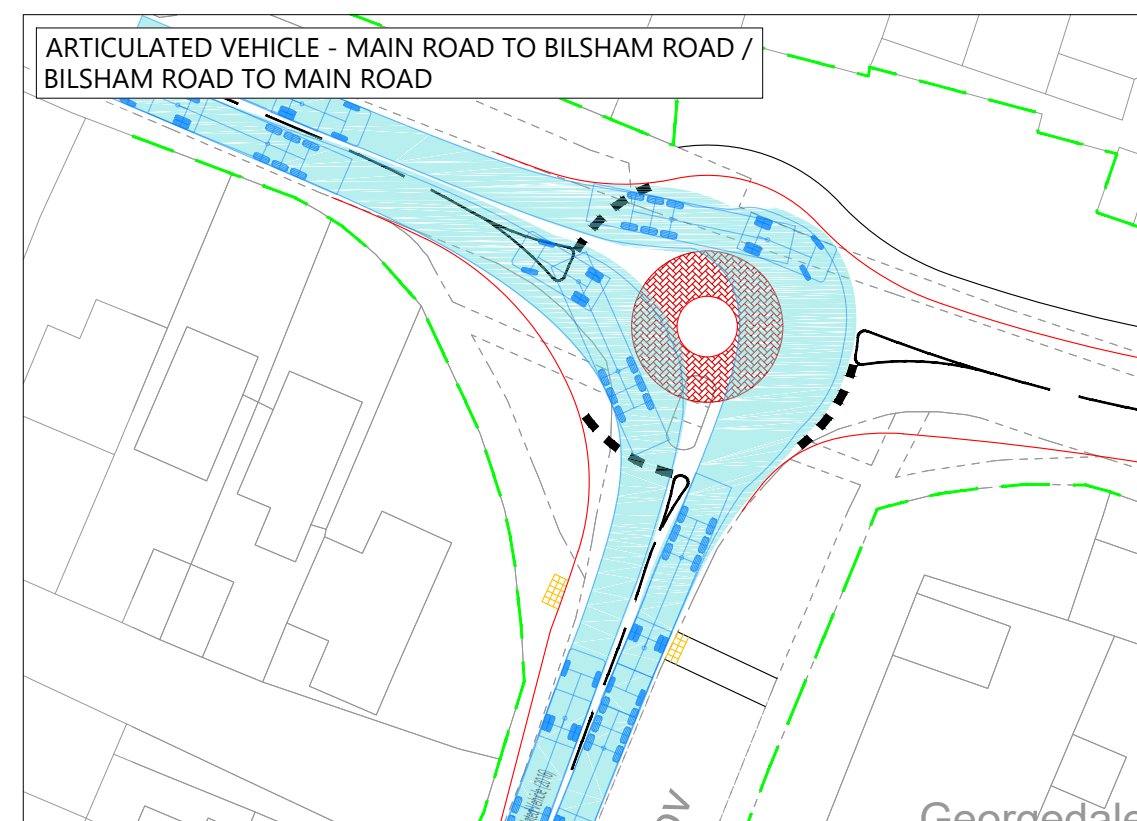
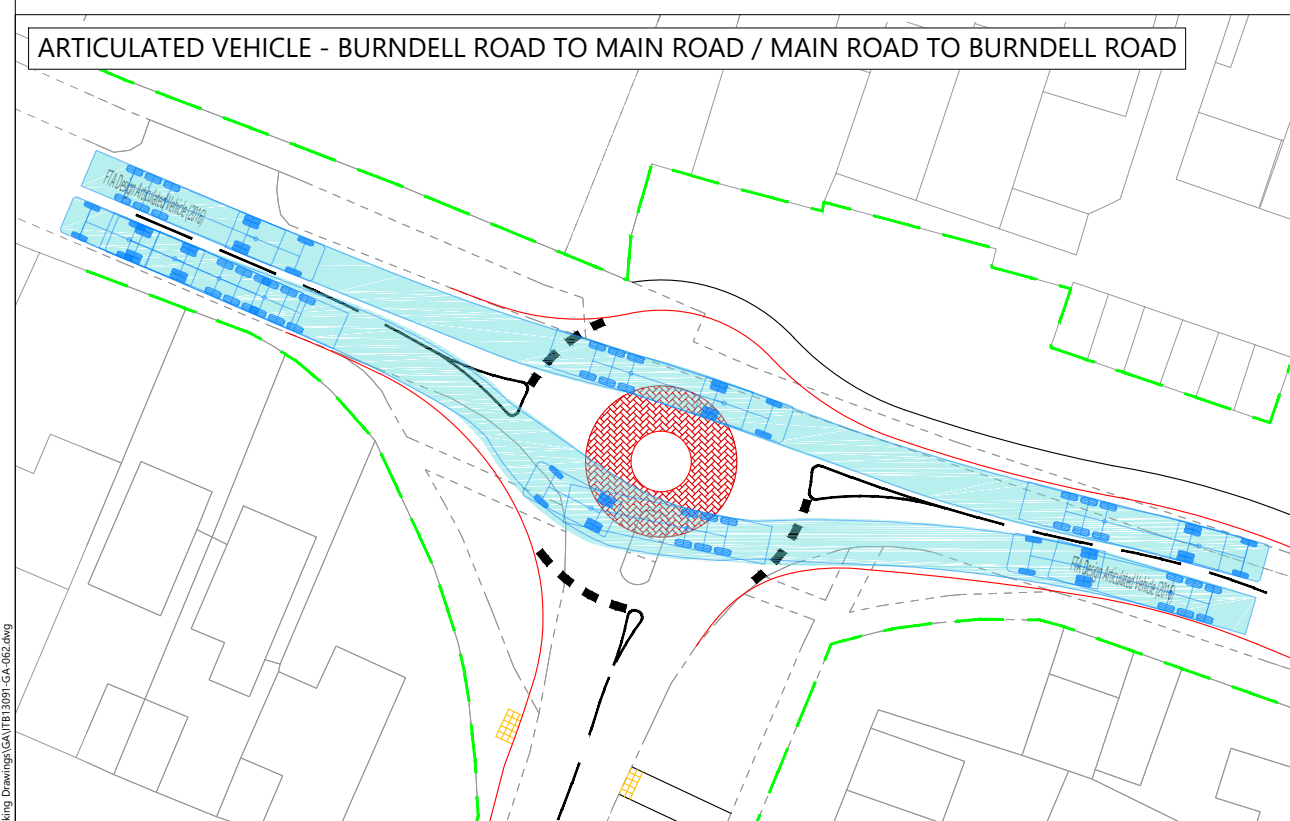
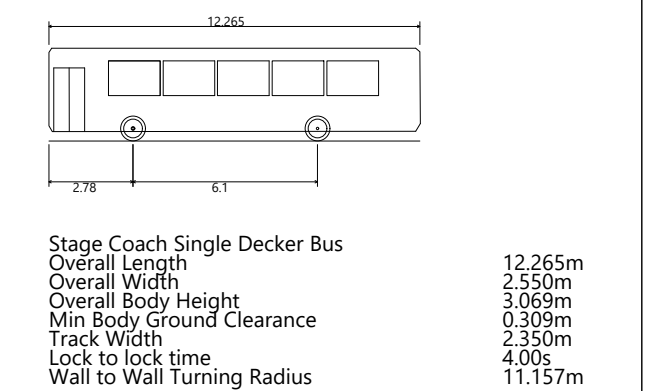
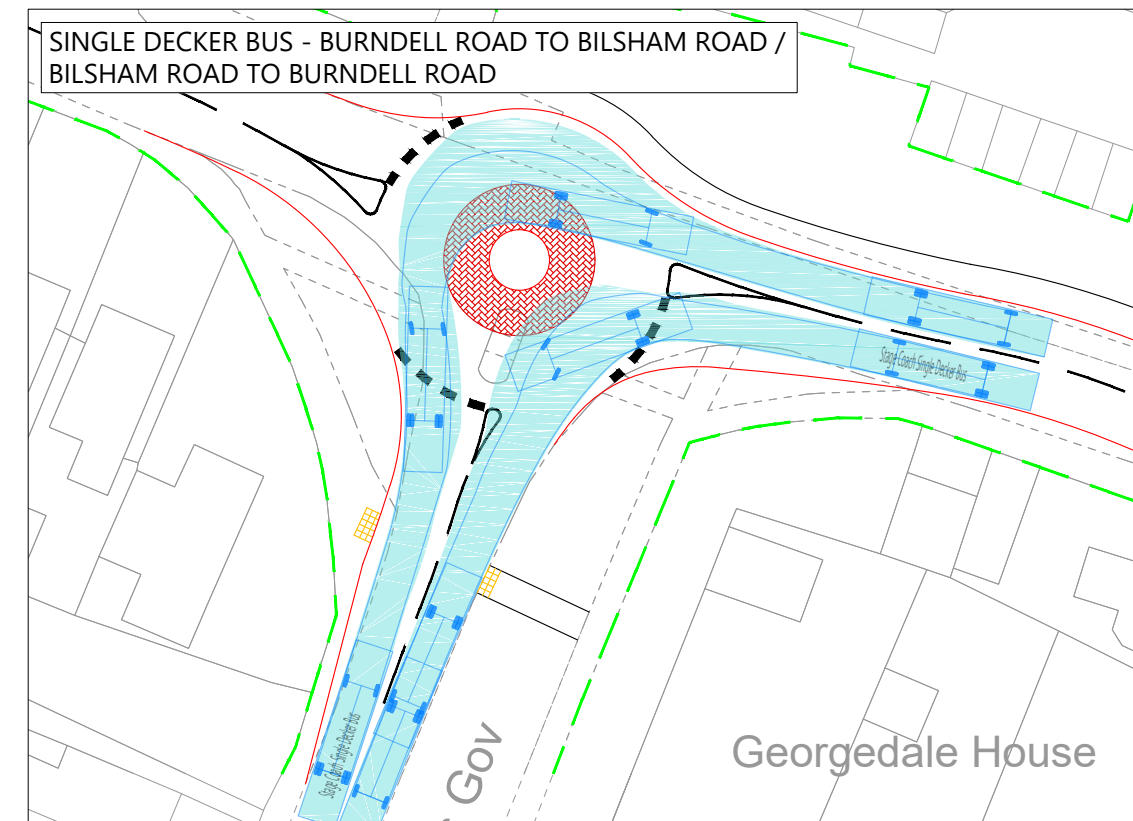
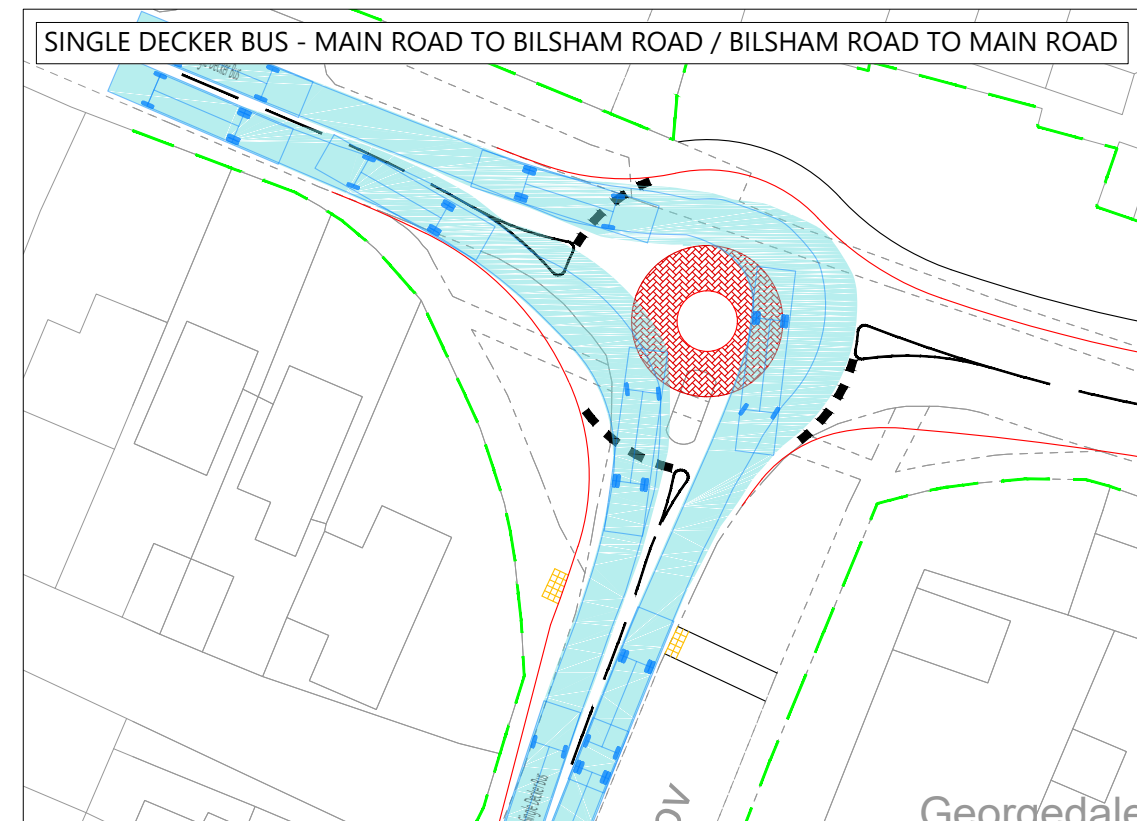
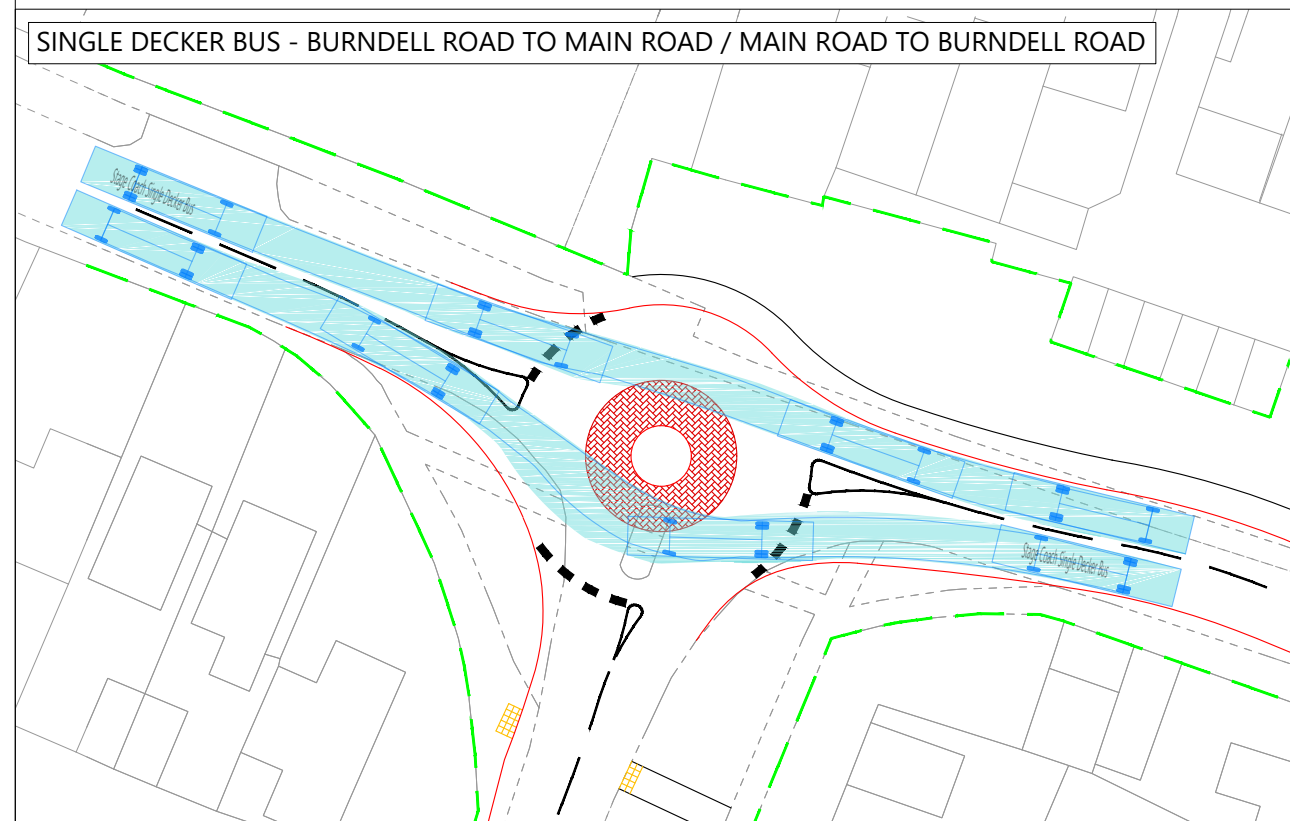
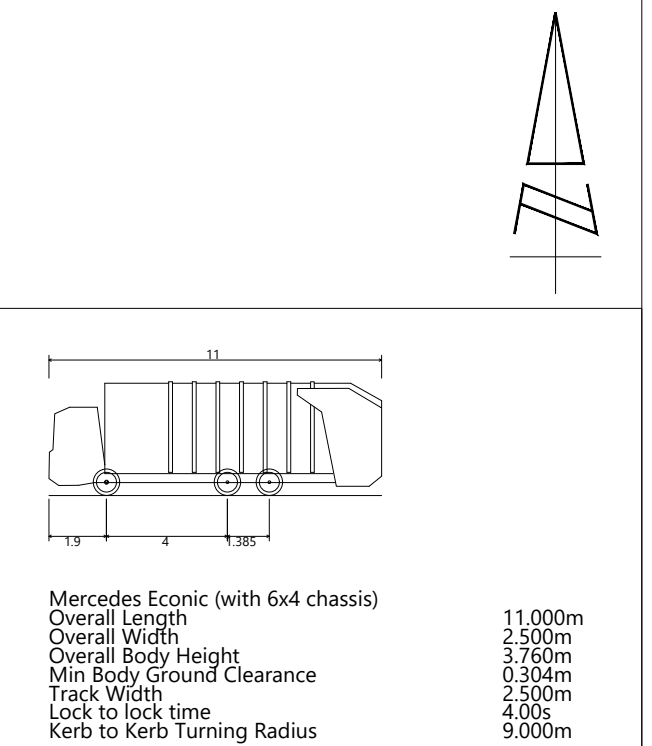
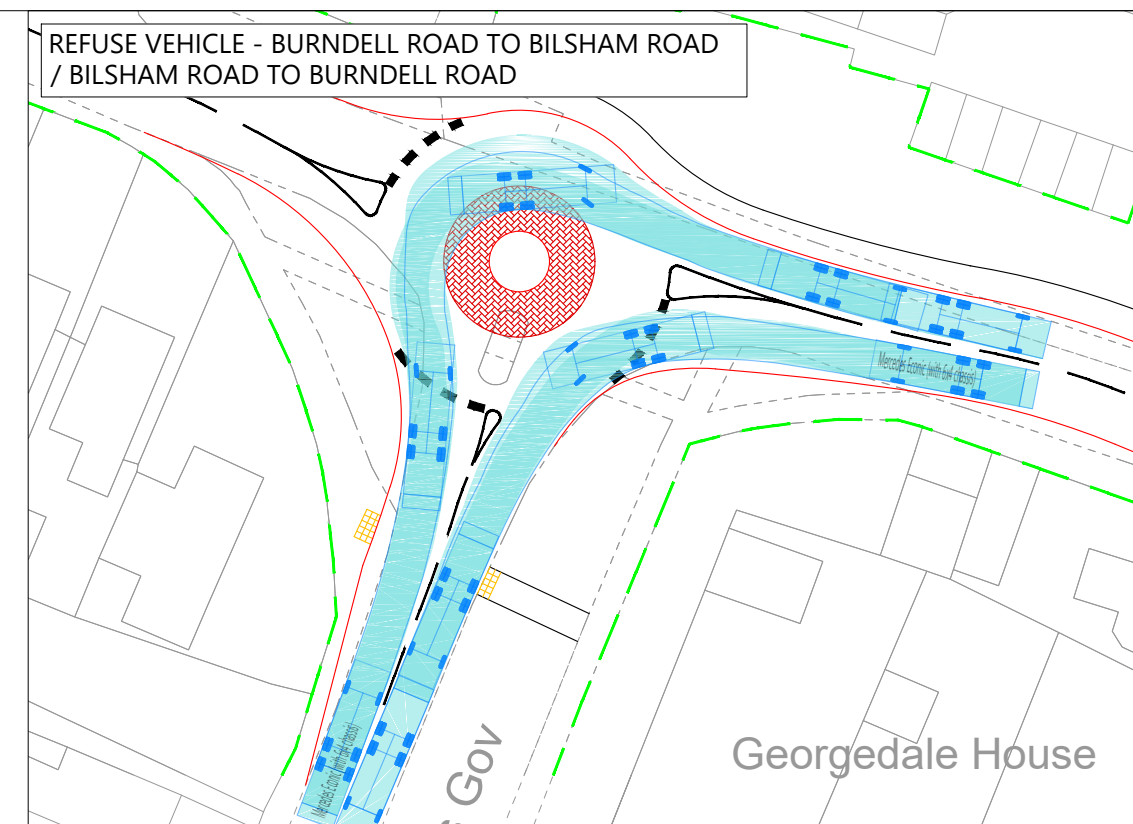
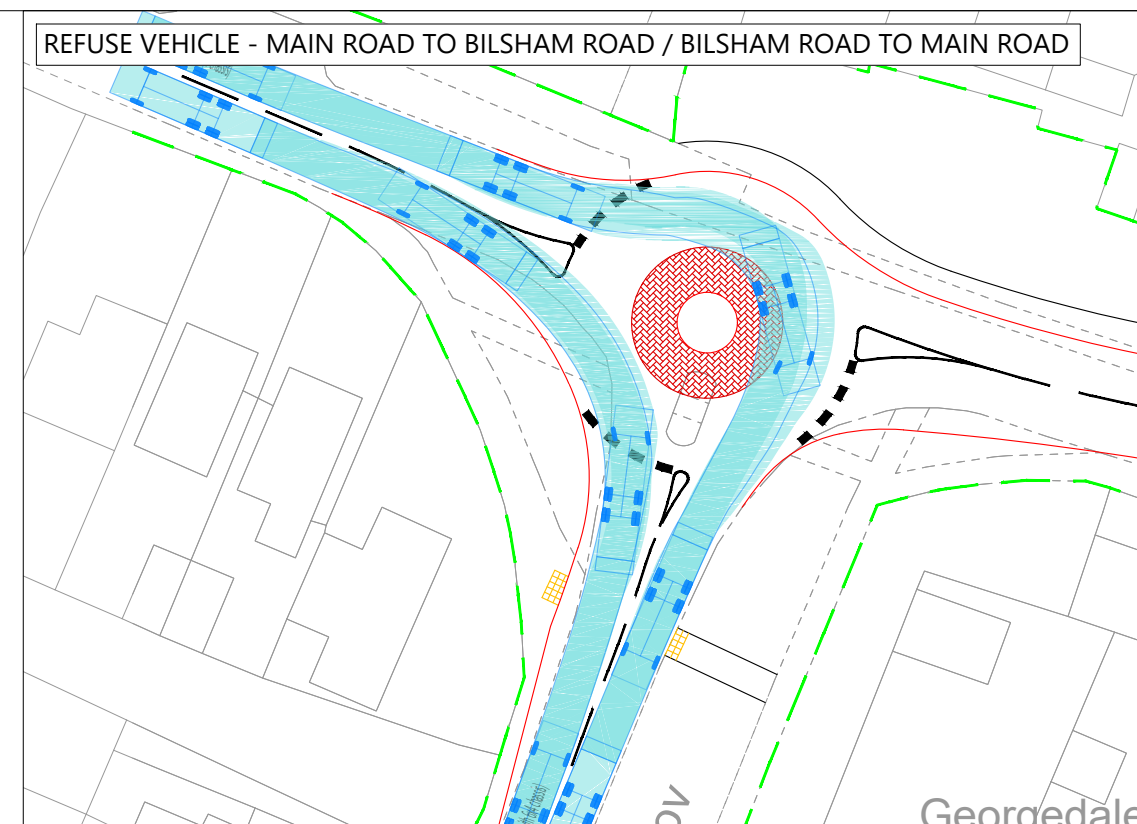
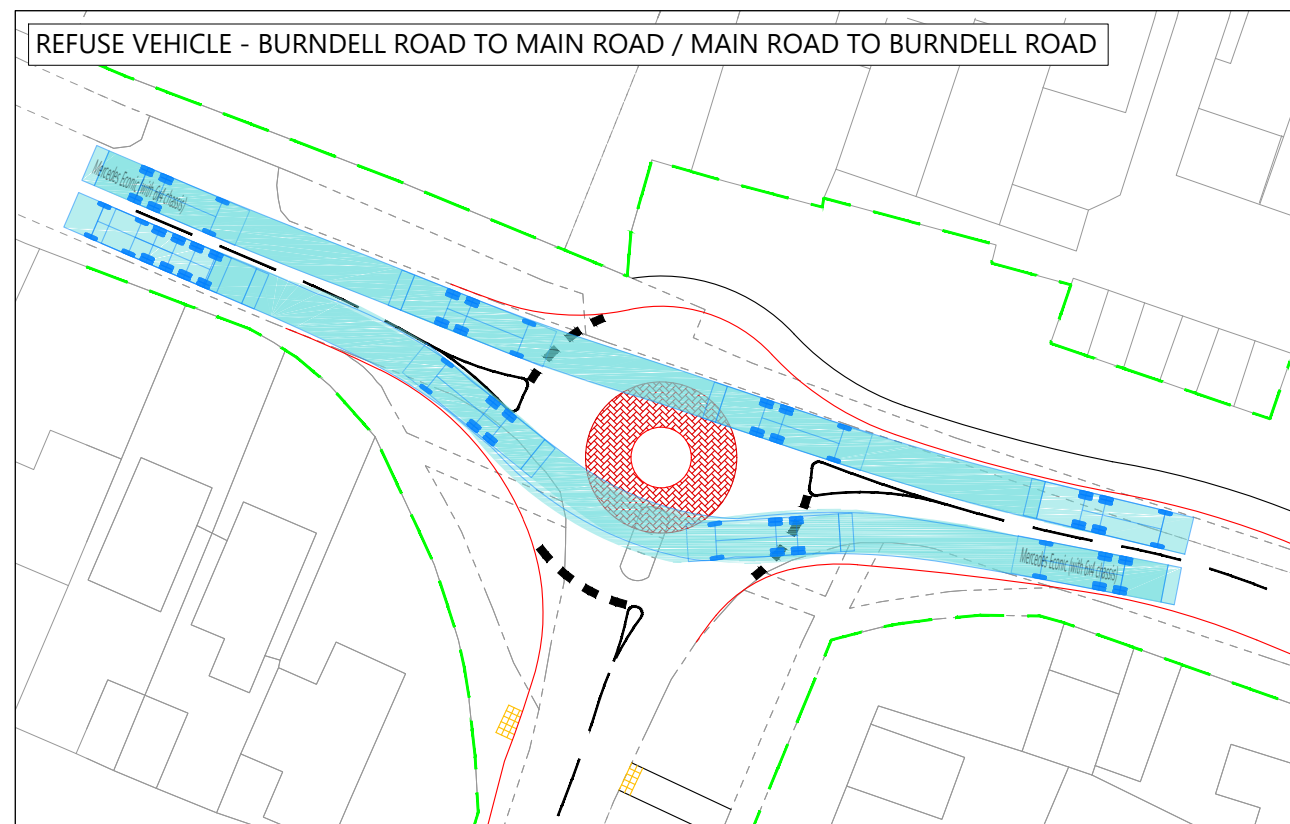


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 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG www.i-transport.co.uk								TITLE: BILSHAM ROAD / BURNDELL ROAD ROUNDABOUT MITIGATION SCHEME		DRAWN: SH		CHECKED: DS		APPROVED: DS									
		C		08.10.20		JD				PED CROSSINGS ADDED		DS		DS									
		B		01.10.20		MC				SOUTHERN ARM REVISED		DS		DS									
		A		28.09.20		JD				RSA COMMENTS INCORP'D		DS		DS									
REV		DATE		BY		DESCRIPTION		CHK		APD		PROJECT: FORD AIFIELD				CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED				PROJECT No: ITB13091			
STATUS:		FOR INFORMATION																		DRAWING No: ITB13091-GA-027			

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STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

SCALE BAR @ 1:500



Grove House, Lutyens Close, Chineham
Basingstoke, Hampshire, RG24 8AG
Tel: 01256 338640
www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION		
STATUS:					

TITLE:	BILSHAM ROAD / BURNDILL ROAD SWEPT PATH ANALYSIS - REFUSE VEHICLE /
PROJECT:	FORD AIRFIELD

BILSHAM ROAD / BURDELL ROAD / MAIN ROAD ROUNDABOUT
SWEPT PATH ANALYSIS - REFUSE VEHICLE / SINGLE DECKER BUS / ARTICULATED VEHICLE

DRAWN:	CHECKED:	APPROVED:
JD	DS	DS
PROJECT No:	SCALE @ A2:	DATE:
ITB13091	1:500	28.09.20
DRAWING No:		REV:
ITB13091-GA-062		-

APPENDIX C. RSA-20-090-3 AND DRAWINGS

Road Safety Audit Report

Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.



Proposed North End Rd Compact Roundabout with Main Rd & priority junction with Ford Ln Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032-3

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-090	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-090-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-090-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

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	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 a proposed compact roundabout at the junction of North End Road with Main Road and highway works at the junction of Ford lane with North End Road in Ford, Arundel. The works include a 20metre ICD three arm compact roundabout as well as pedestrian and cyclist improvements and are to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 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 September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Redrow Homes and Wates Developments. 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. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 2pm and 5:45pm. The site visit involved walking and driving around the local highway network for a 225-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles were also observed.
- 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**.

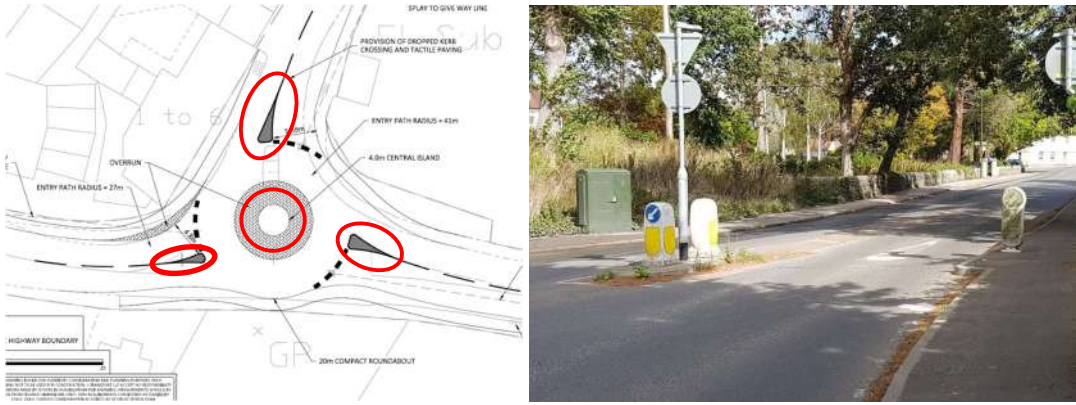
Design Organisation Response

- 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: Dominic Smith
Position / Organisation: Associate Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.

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 proposals.

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:	Proposed Roundabout
Summary:	Drivers approaching the compact roundabout junction may not become aware of the need to give way at a safe distance
Acc Type:	Loss of control and junction overshoots
The existing mini roundabout of North End Road with Main Road is subject to a 30mph speed limit, is street lit and accommodates give-way and mini-roundabout signage as well as reflective bollards situated on physical splitter islands which together increase the conspicuity of the junction. The proposals increase the diameter of the junction to provide a 20-metre compact roundabout with a 4-metre central island surrounded by a 4 metre overrun area and road marking splitter islands on each arm. Due to the alignment of each approach, a driver may not become aware of the junction at a safe distance which could give rise to late braking and loss of control incidents as well as junction overshoots and a vehicle striking the central island.	
RECOMMENDATION:	
It is recommended that measures are provided to ensure approaching drivers become aware of the junction, need to give-way and physical central island.	
Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted, appropriate signage will be provided on the approach to the roundabout and this is shown on revised Drawing ITB13091-GA-026B.	

ARUN DISTRICT COUNCIL E/4/20/OUT



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 1st October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

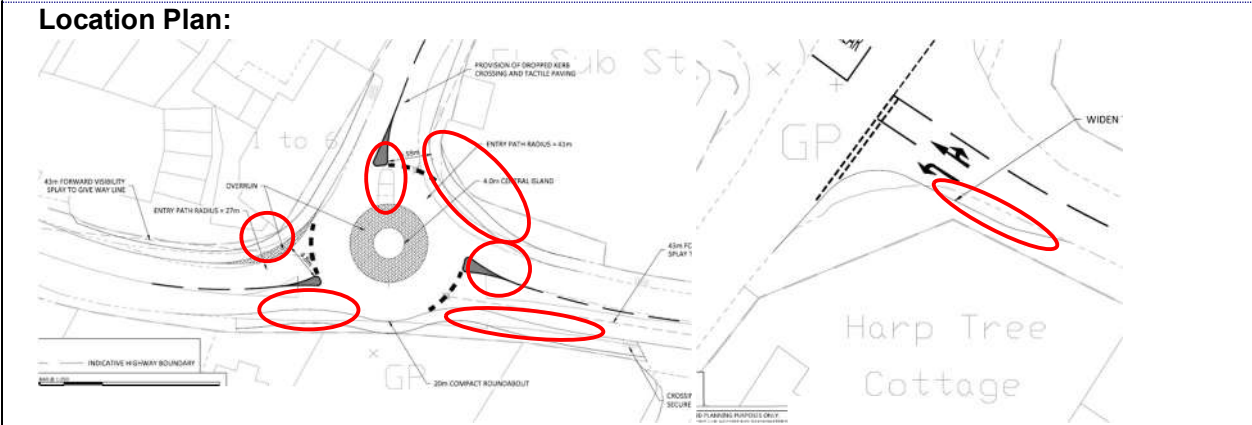
Accepted, the details of the water drainage system will be dealt with during the detailed design stage.

A.2.3	PROBLEM
Location:	Scheme
Summary:	Defunct traffic signs may become an obstruction or collision objects
Acc Type:	Vehicle collision with street furniture

Street furniture to include bollards, signage, cabinets and telegraph/electric poles are present within the existing footways and verge of Main Road, North End Road and Ford Lane. The proposals increase the width of the Ford Lane carriageway in order to extend a left turn lane and provide a 20-metre ICD roundabout junction requiring realignment of the North End Road and Main Road carriageways. A scheme impact on a number of items of street furniture that could become an obstruction to vehicles or a distraction to drivers approaching the junction.

RECOMMENDATION:

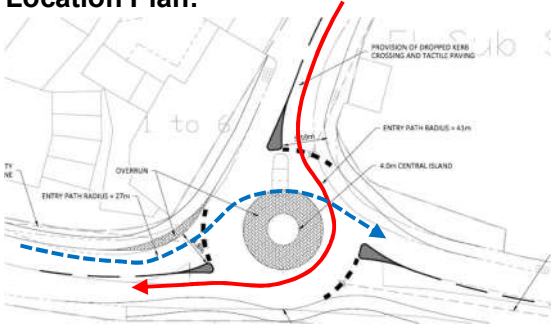
It is recommended that irrelevant signs and posts are removed and that any new signs are placed away from visibility envelopes and mounted where possible on street lighting columns to minimise street clutter.





Accepted, the location of the new signs will be dealt with at the detailed design stage.

Location Plan:

	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 1 st October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted, the location of the utility covers will be dealt with at the detailed design stage.	
A.2.5	PROBLEM
Location:	Proposed Roundabout
Summary:	Carriageway may be of insufficient width to allow for service vehicles and expected
Acc Type:	Loss of control, sideswipes and vehicle pedestrian / cyclist collision
The existing mini roundabout junction of North End Road with main Road accommodates a flat painted central island with physical island on each arm. The proposals increase the size of the roundabout to form a 20 metre compact roundabout with a physical 4 metre diameter central island as well as a 4 metre overrun area and painted splitter islands on each arm. The central island of the compact roundabout forms a physical restriction and may render the compact roundabout impassable by large vehicles to include the passenger service vehicles and refuge / recycling collection vehicles as well as articulated vehicles that appear to service the local co-op along Burndell Road to the east. Should the junction be insufficient to accommodate the expected vehicles, a large vehicle may strike a kerbed feature increasing the likelihood of loss of control type incidents or maybe required to reverse raising the risk of vehicle-pedestrian collisions or a collision with a vehicle.	
RECOMMENDATION:	
It is recommended that the junction allows for the expected manoeuvres.	
Location Plan:	
	
	

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted, the junction allows for all expected manoeuvres as shown in Drawing ITB13091-GA-063.

A.3 JUNCTIONS
A.3.1 PROBLEM

Location: Main Road, B2233 & North End Road, B2132

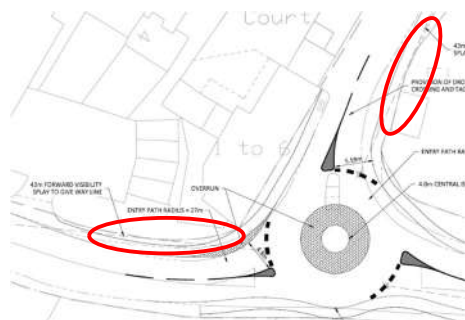
Summary: Drivers approaching the roundabout may not become aware of the junction at a safe distance

Acc Type: Vehicle loss of control

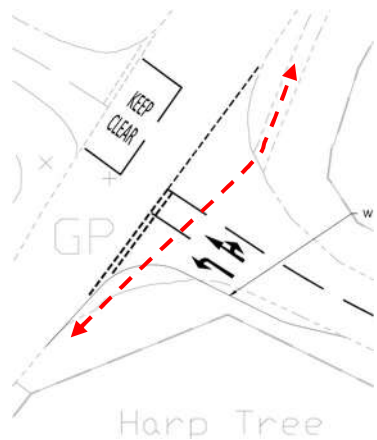
The highway network in proximity of the North End Road mini roundabout junction with Main Road is subject to a 30mph speed limit and accommodates vegetation in the verges which is overgrown and encroaching the public highway in places. The proposals subject to this Stage 1 Road Safety Audit include the provision of 20-metre ICD compact roundabout that includes painted splitter island on each approach in place of the mini roundabout with physical splitter islands on each approach. The scheme drawing illustrates that 43 metre forward visibility splays are achievable to the give-way of both the North End Road and Main Road approaches in accordance with the 30mph speed limit of the road. However, due to the existing alignment of the approaches and presence of the overhanging vegetation, the level of forward visibility is limited. Insufficient visibility for a vehicle approaching a give-way line of the entry to the roundabout could give rise to heavy braking, loss of control type incidents and junction overshoots.

RECOMMENDATION:

It is recommended that physical splitter island that can relevant signage are provided to increase the conspicuity of the compact roundabout

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted, the physical splitter islands will be made more visible and details of this will be provided at the details design stage.

A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Ford Lane
Summary:	Full height kerbs will be an obstruction to pedestrians
Acc Type:	Pedestrian trips and falls
North End Road provides a footway along the eastern side of the carriageway. The proposals reduce the width of the Ford Lane bell mouth and extend an existing two lane. The scheme drawing provided with the Audit Brief does not identify that dropped kerbs are to be provided where pedestrians are required to cross the carriageway. Whilst full height kerbs will become an obstruction to pedestrians particularly the mobility impaired or those walking with buggies and children on a scooter, the lack of a tactile warning could result in a visually impaired pedestrian entering the carriageway when it is not safe to do so which raises the risk of a vehicle-pedestrian collision.	
RECOMMENDATION:	
It is recommended that a safe route with dropped kerbs with a maximum upstand of 6mm and tactile paving are provided where appropriate.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted, the pedestrian route has been upgraded with the auditors recommendations and this is shown on revised Drawings ITB13091-GA-028 C	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
	<i>No Road Safety Concerns regarding ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING have been raised at this stage</i>

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

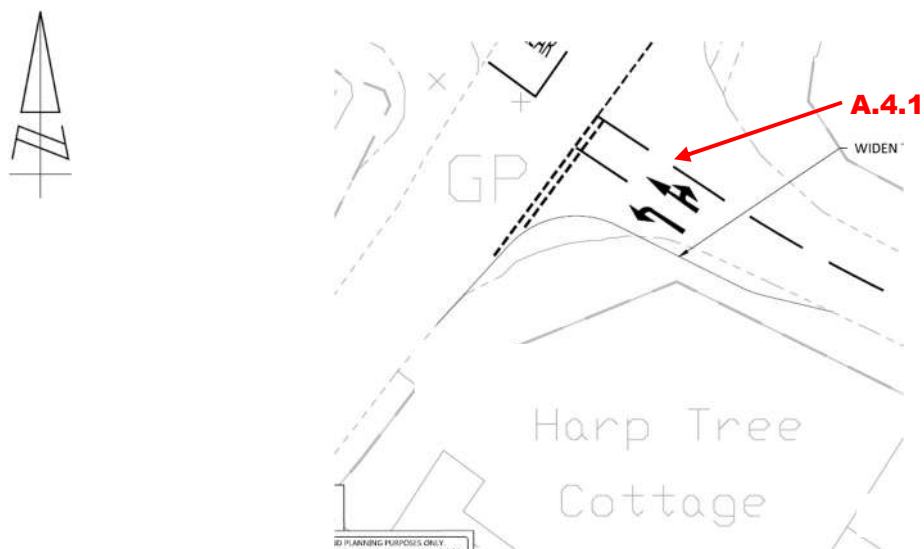
Appendix A1

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	DS/ITB13091-032		Road Safety Audit Brief 3
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-026	A	North End Road / B2233 Roundabout Mitigation Scheme
	ITB13091-GA-028	B	Ford Lane / North End Road Improvement

Appendix A2

Item Location Plan

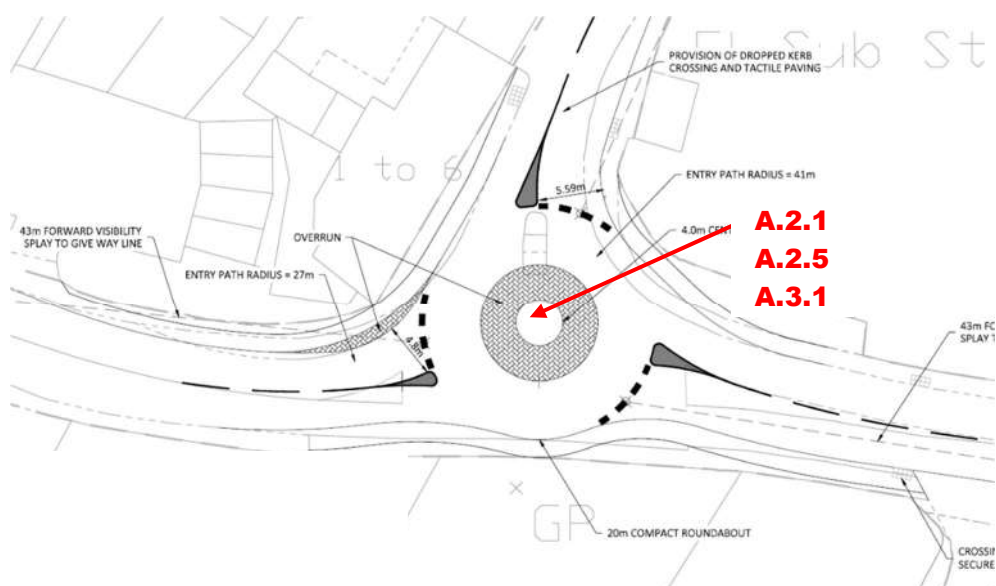


SCHEME

A.2.2

A.2.3

A.2.4

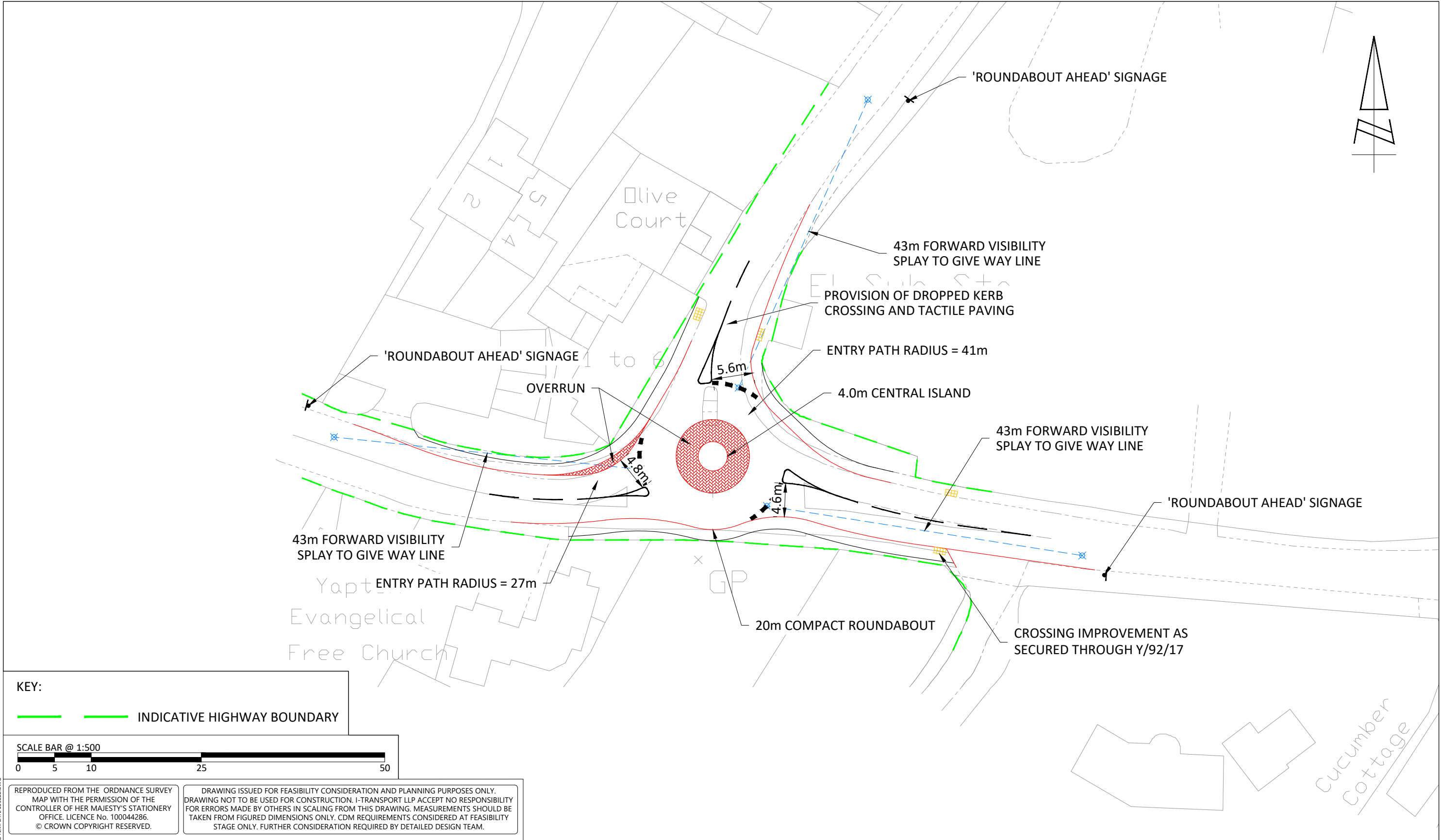


Appendix A3

Drawings associated with the Design Organisation Response

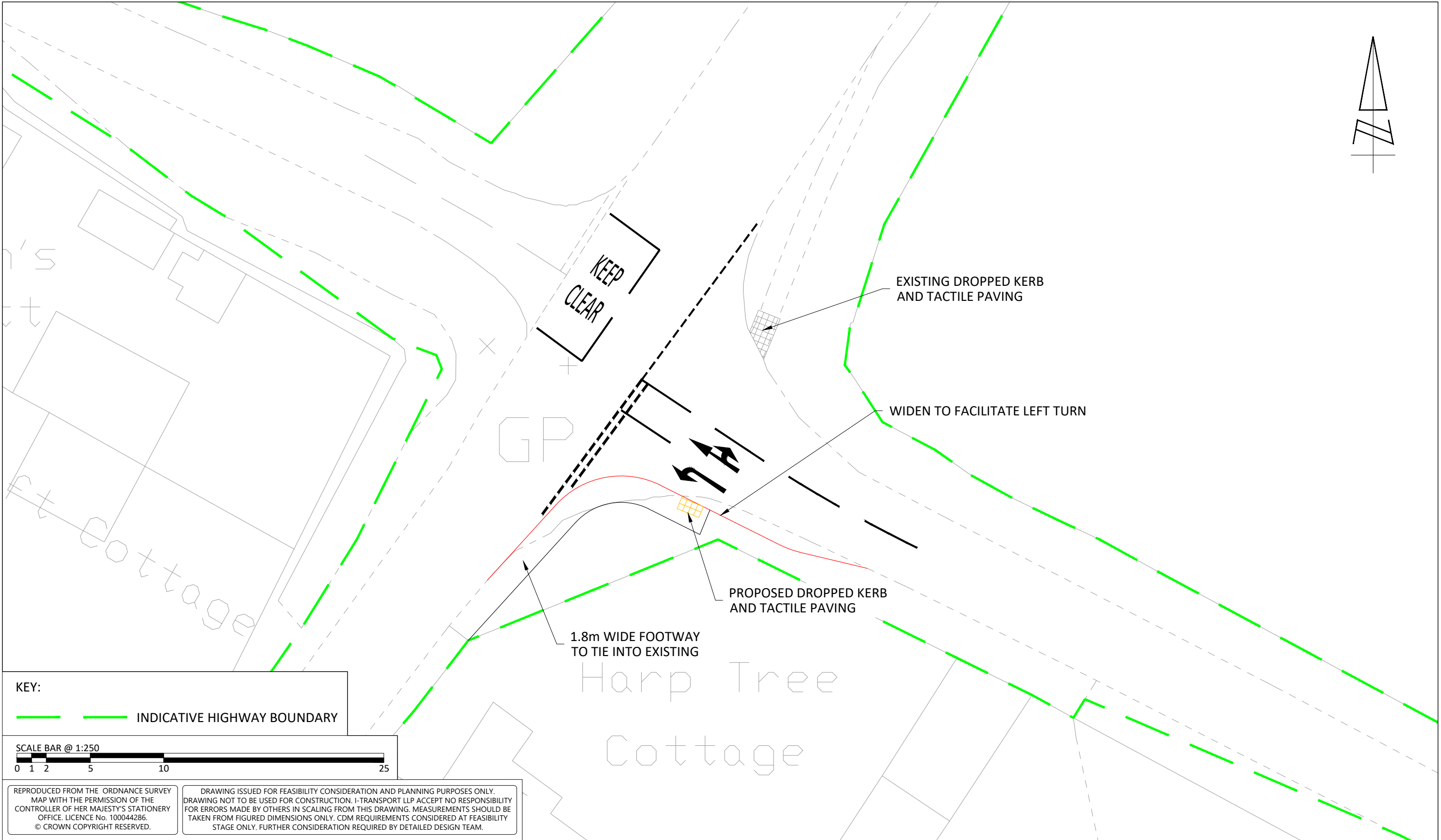
<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB13091-GA-026	A	North End Road / B2233 Roundabout Mitigation Scheme
	ITB13091-GA-028	B	Ford Lane / North End Road Improvement
	ITB13091-GA-062/3	-	North End Road / B2233 Roundabout Swept Path Analysis

fenley



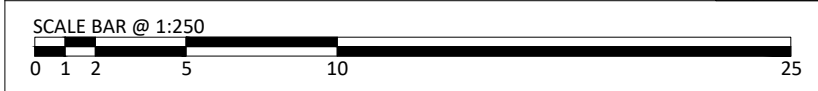
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		B	28.09.20	JD	RSA COMMENTS INCORP'D JUNCTION AMENDED	DS	DS	SCALE @ A3: 1:500		DATE: 21.12.18		
		A	15.07.20	JD		DS	DS					
		REV	DATE	BY	DESCRIPTION	CHK	APD	PROJECT: FORD AIFIELD		CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED		PROJECT No: ITB13091
STATUS: FOR INFORMATION										DRAWING No: ITB13091-GA-026		REV: B

T:\Technical\AutoCAD\Templates\A3\IT-ALL OFFICES DRAWING TEMPLATE 180222.DWG



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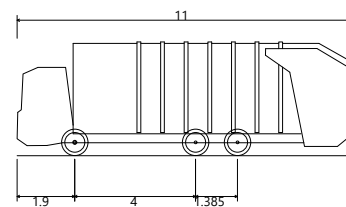
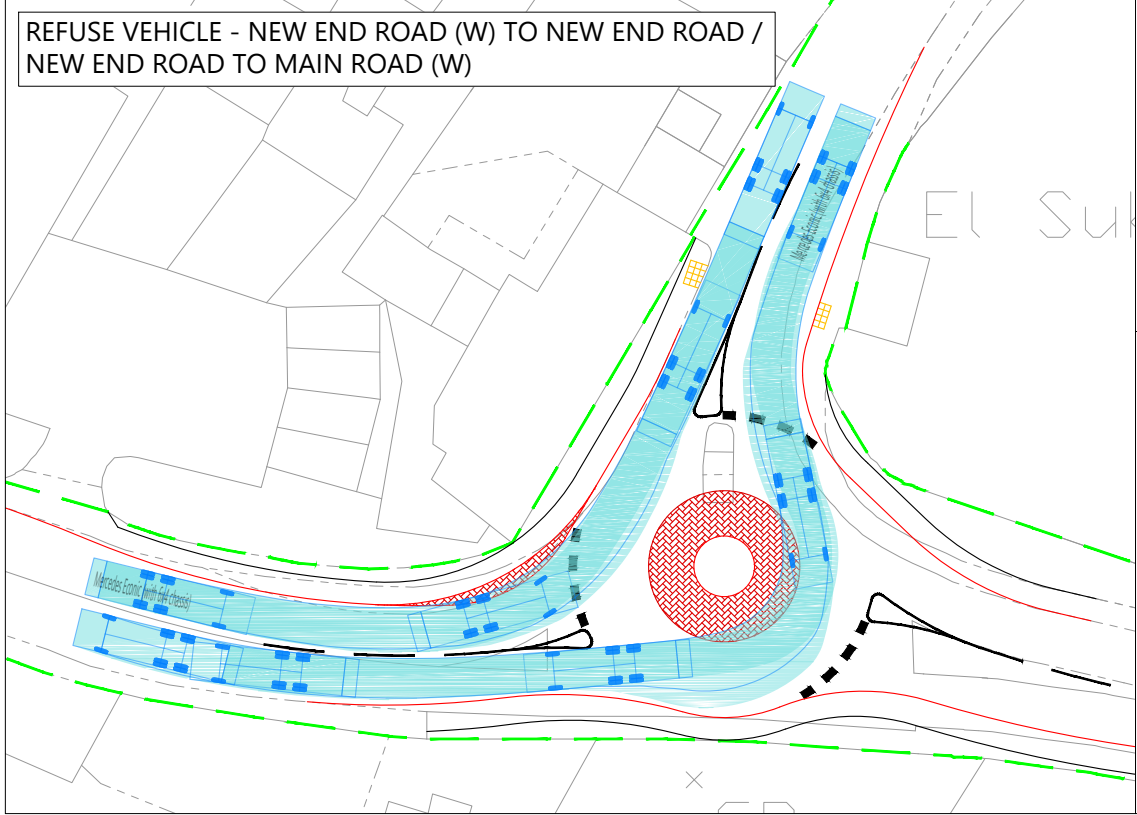
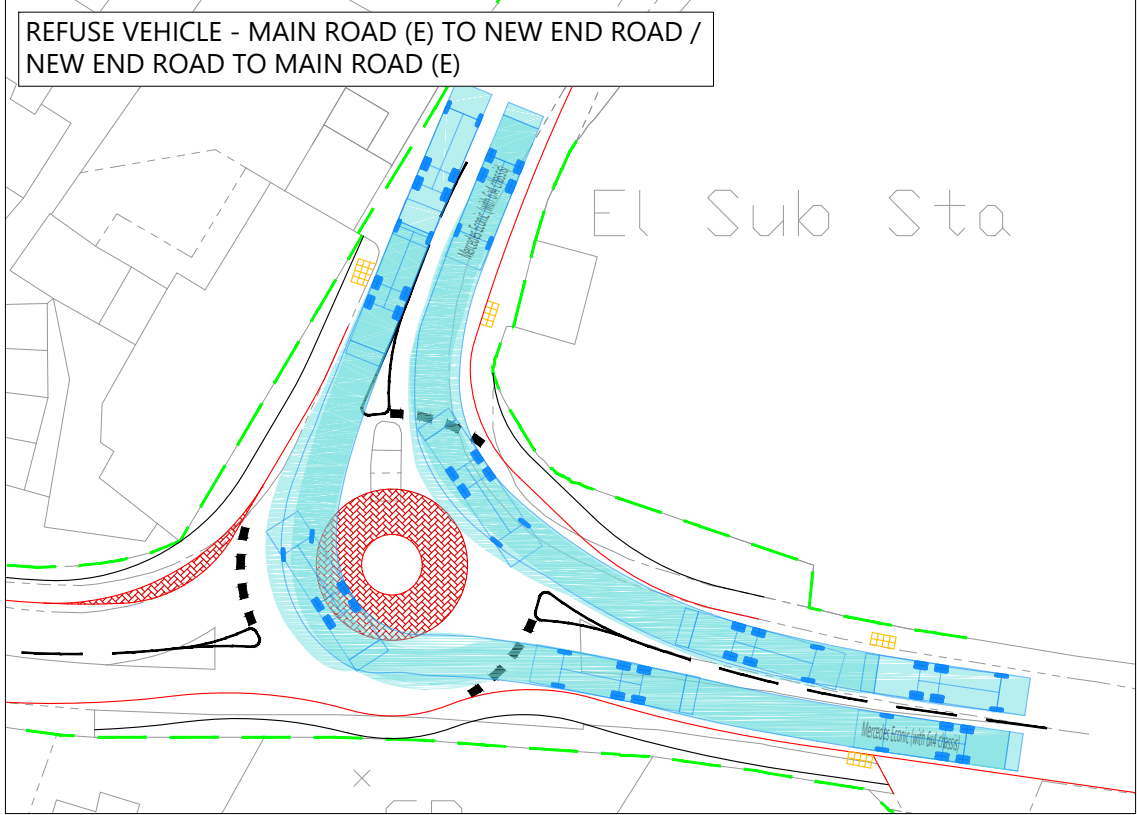
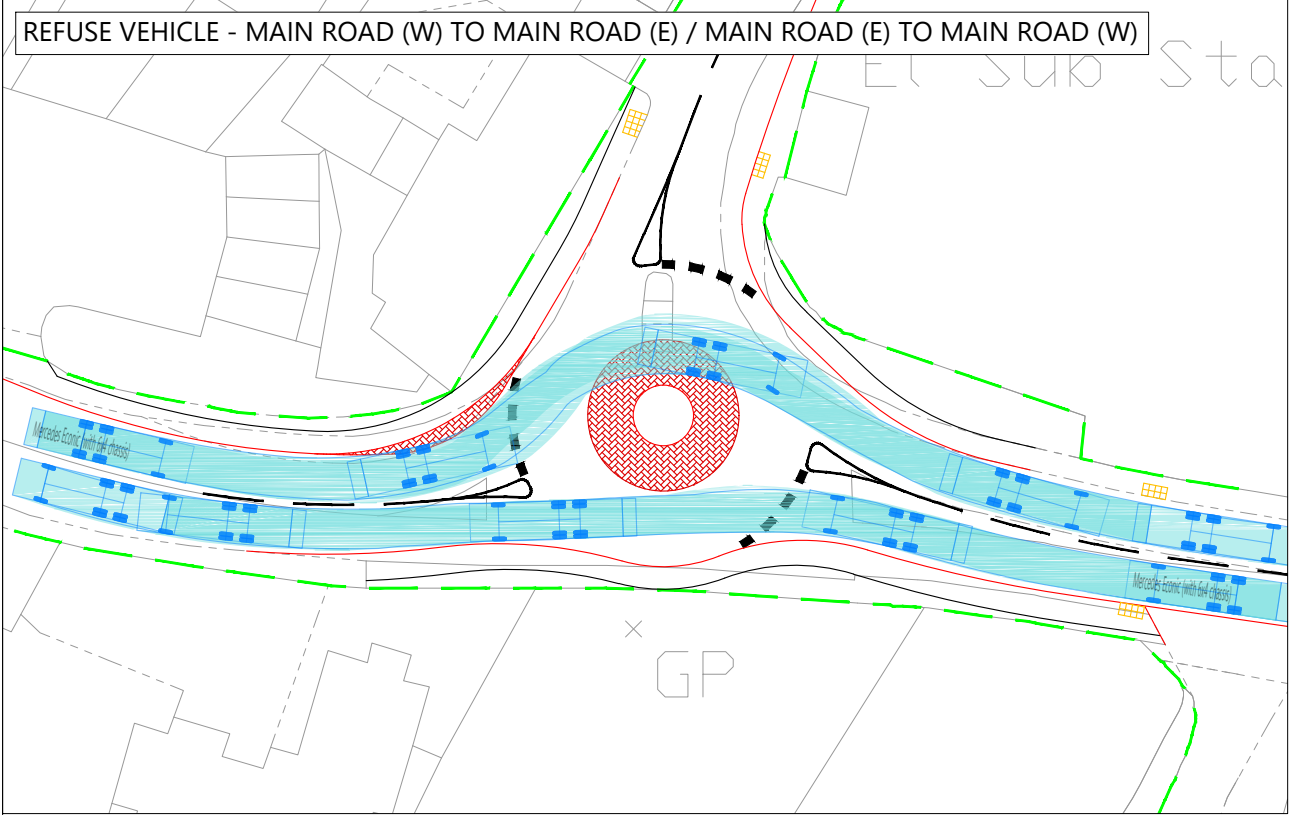
—— INDICATIVE HIGHWAY BOUNDARY



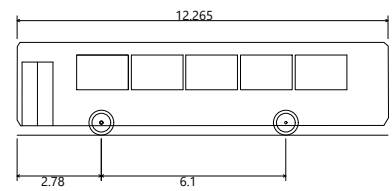
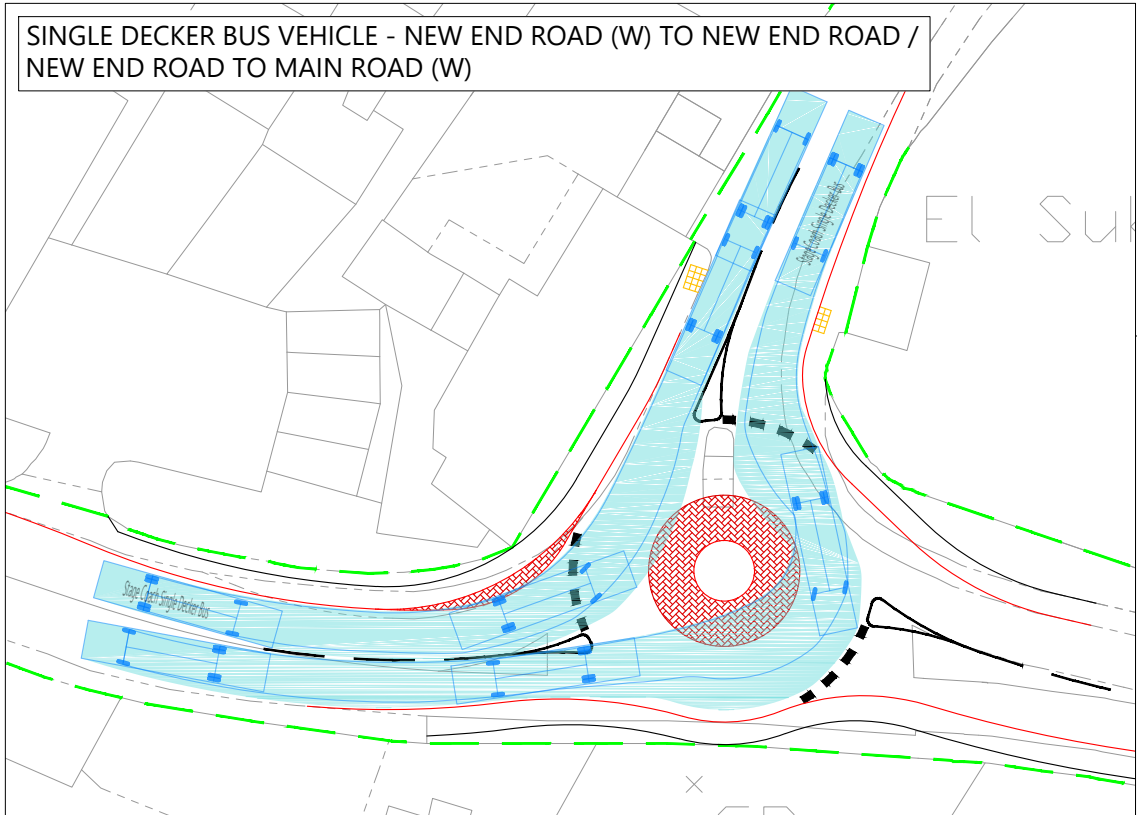
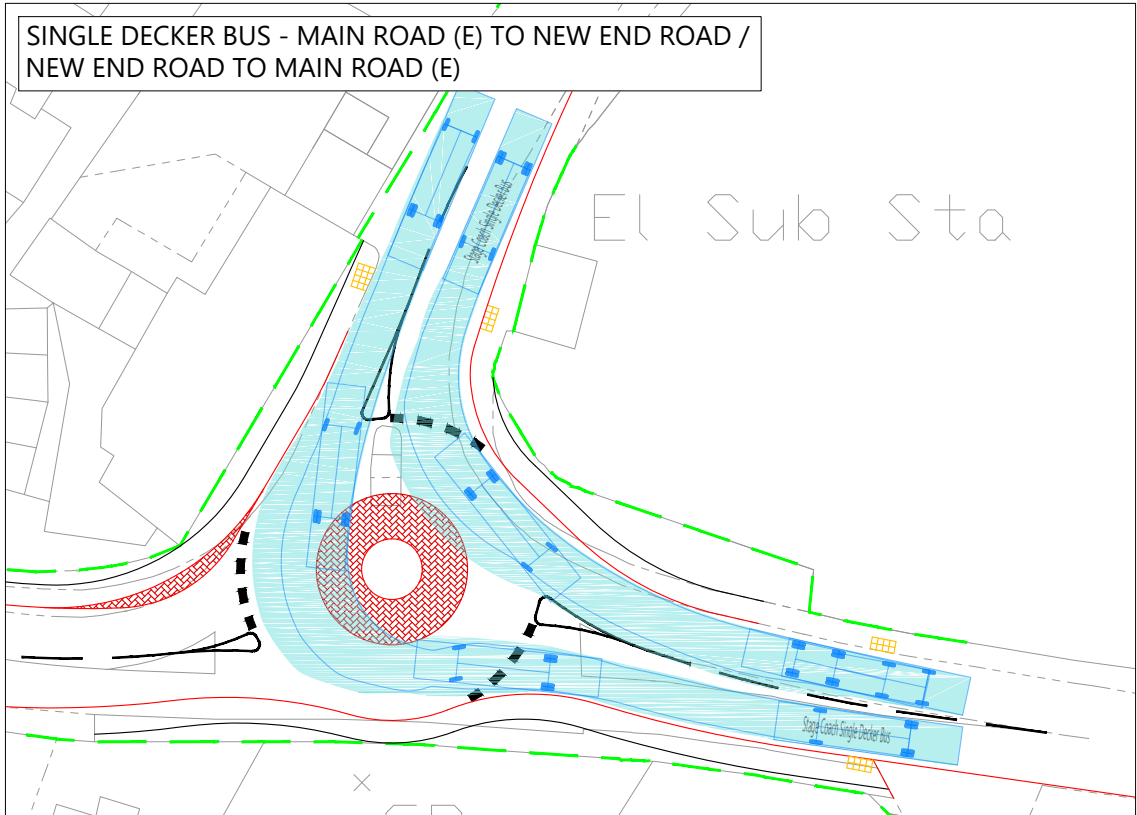
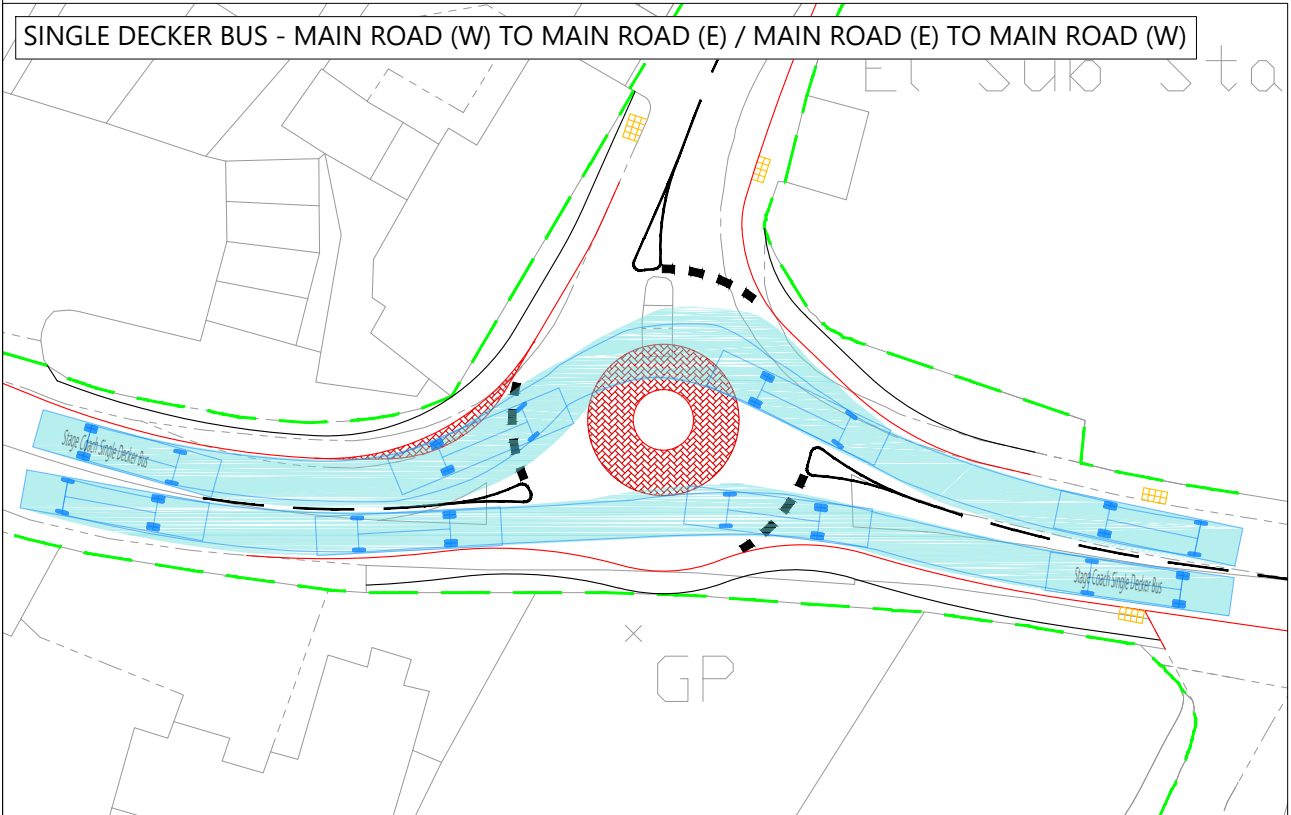
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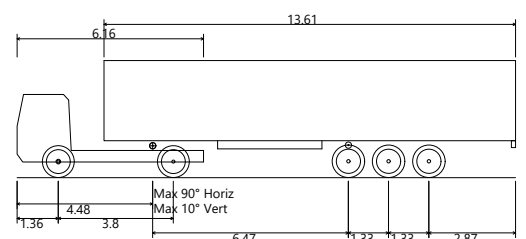
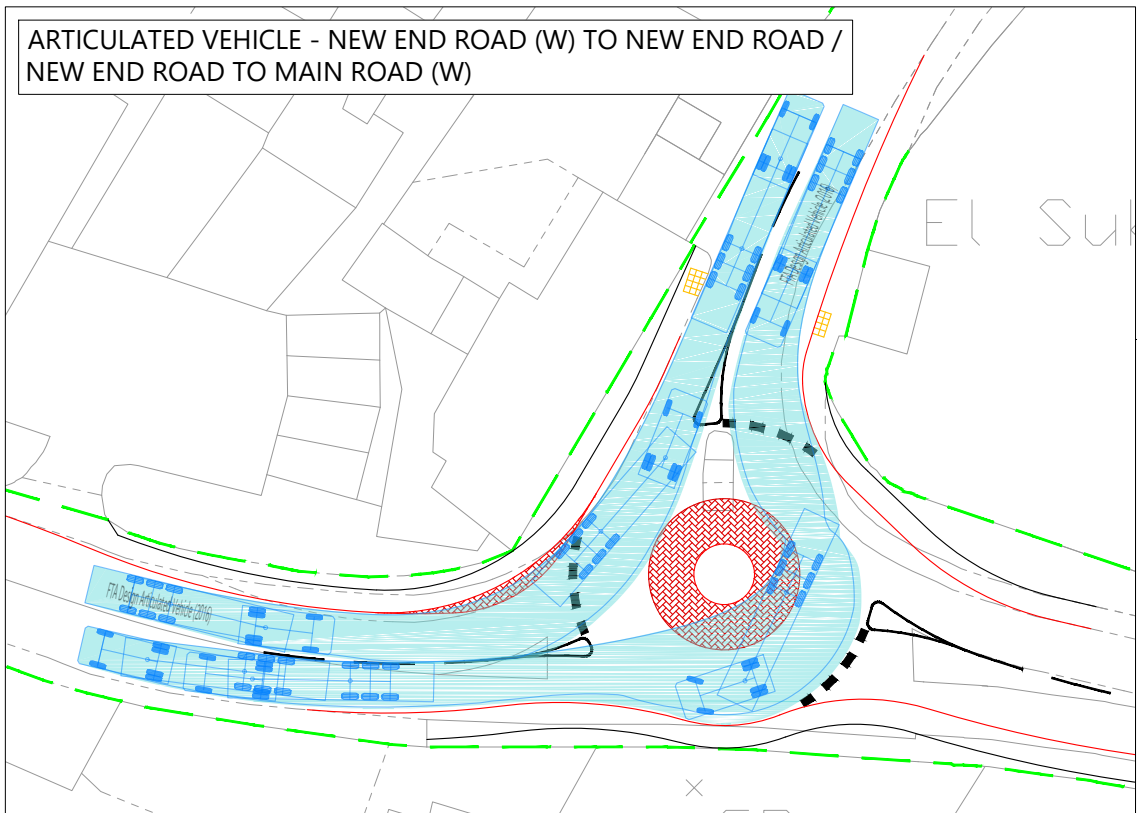
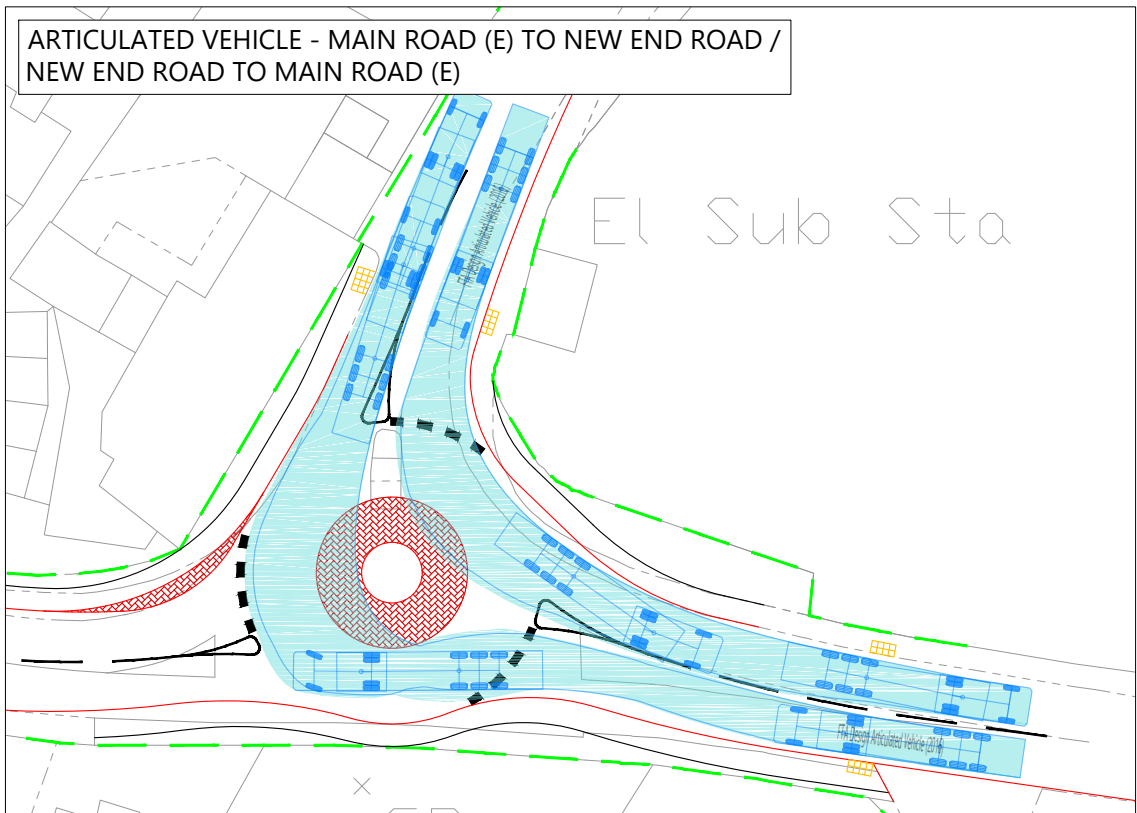
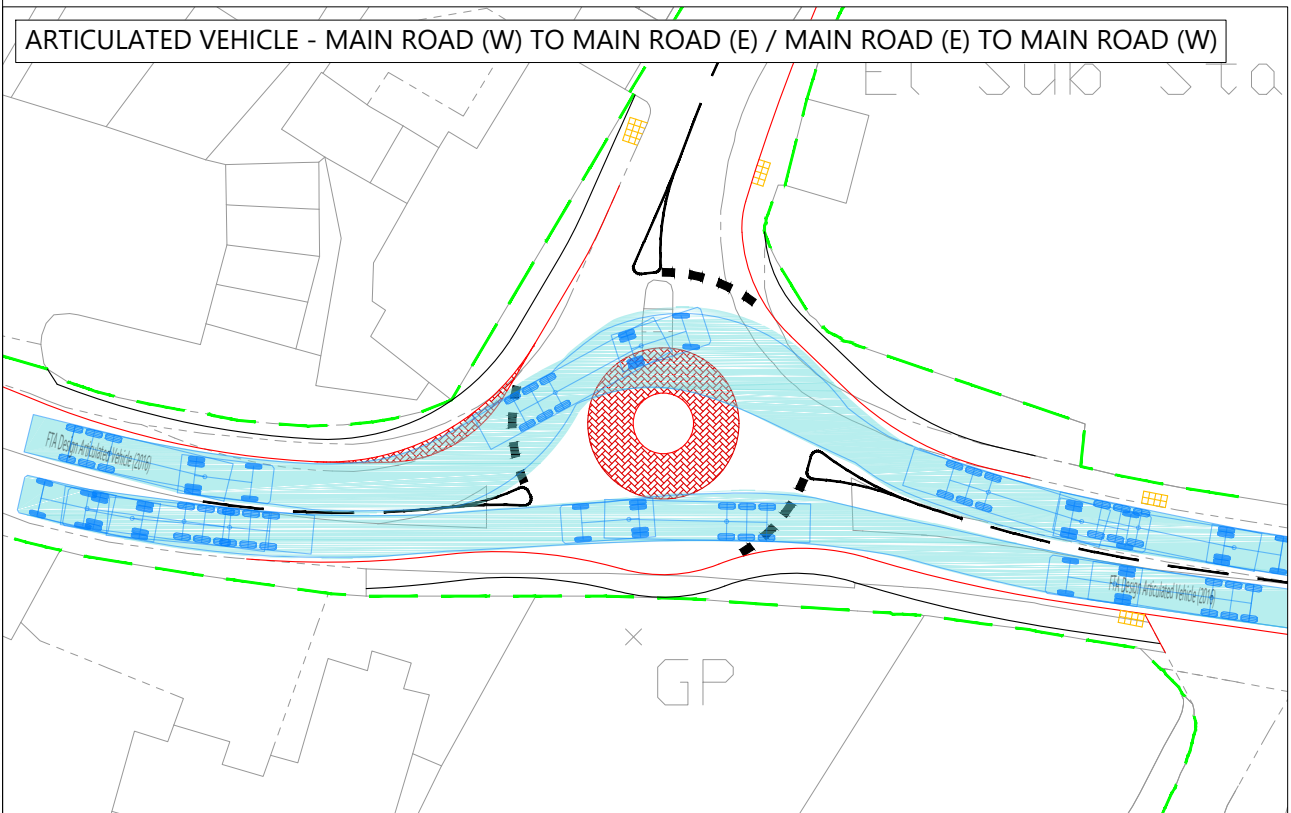
 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 www.i-transport.co.uk		C	28.09.20	JD	RSA COMMENTS INCORP'D AMENDMENTS TO JUNCTION AMENDMENTS TO JUNCTION	DS	DS	TITLE: FORD LAND / NORTH END ROAD IMPROVEMENT	DRAWN: SH		CHECKED: DS	APPROVED: DS		
		B	15.07.20	JD		DS	DS		SCALE @ A3: 1:250		DATE: 21.12.18			
		A	19.08.19	JD		DS	DS							
		REV	DATE	BY		DESCRIPTION	CHK		APD	PROJECT: FORD AIFIELD		CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED		PROJECT No: ITB13091
		STATUS: FOR INFORMATION							DRAWING No: ITB13091-GA-028					



Mercedes Eonic (with 6x4 chassis)
Overall Length 11.000m
Overall Width 2.500m
Overall Body Height 3.760m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.000m



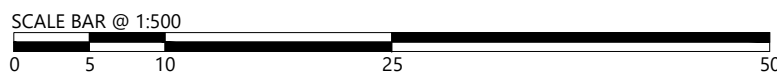
Stage Coach Single Decker Bus
Overall Length 12.265m
Overall Width 2.550m
Overall Body Height 3.069m
Min Body Ground Clearance 0.309m
Track Width 2.350m
Lock to lock time 4.00s
Wall to Wall Turning Radius 11.157m



FTA Design Articulated Vehicle (2016)
Overall Length 16.480m
Overall Width 3.550m
Overall Body Height 3.870m
Min Body Ground Clearance 0.515m
Max Track Width 2.470m
Lock to lock time 3.00s
Kerb to Kerb Turning Radius 6.600m

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APPENDIX D. RSA-20-091-3 AND DRAWINGS

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.**



Proposed Ford Lane Development Access Roundabout and associated works Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032-4

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-091	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-091-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-091-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			9 th September 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	23 rd September 2020
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			23 rd September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			7 th October 2020

Contents:

1.0	Project Details	1
2.0	Introduction	2
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4.0	Items Raised in this Stage 1 Road Safety Audit	4
	A.1 Alignment	
	A.2 General	
	A.3 Junctions	
	A.4 Walking, Cycling and Horse Riding	
	A.5 Road Signs, Carriageway Markings and Lighting	
5.0	Audit Team Statement	10

Appendices:

Stage 1	A1	Documents and Drawings provided for this Road Safety Audit
	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 a proposed development access roundabout and associated works along Ford Lane in Ford, Arundel. The works include the provision of a 40 metre ICD four arm roundabout as well as the realignment of Ford lane adjacent to Wicks Cottages in order to provide a footway and are to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 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 September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Redrow Homes and Wates Developments. 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. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 2pm and 5:45pm. The site visit involved walking and driving around the local highway network for a 225-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles were also observed.
- 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**.

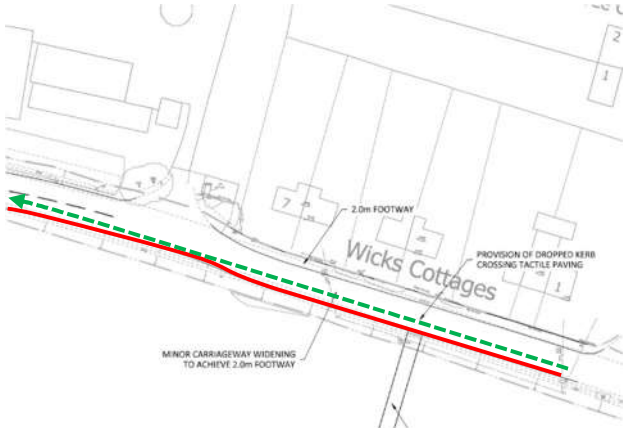
Design Organisation Response

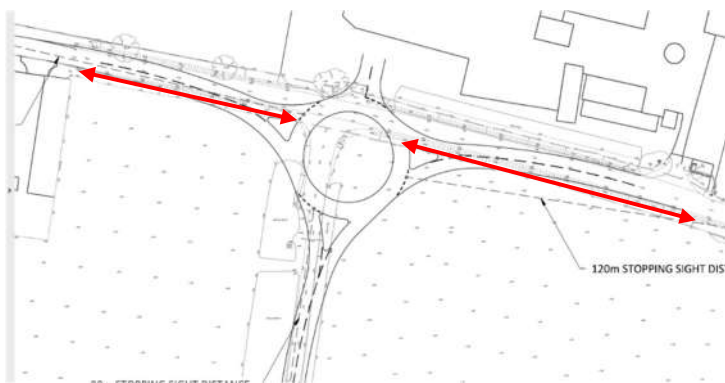
- 2.7 In accordance with national standards, this Road Safety Audit was finalised and issued to the Design Organisation as per the Road Safety Audit Report Template within Appendix D of GG119, which can be provided upon request from either the Audit Team or Design Organisation. The format of the Audit 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: Dominic Smith
Position / Organisation: Associate Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.

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 proposals.

4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

A.1	LOCAL ALIGNMENT
A.1.1	PROBLEM
Location:	Ford Lane
Summary:	Southbound vehicles could encroach the kerbline which forms a reverse curve
Acc Type:	Loss of control
Ford Lane is a two-way single lane carriageway road which accommodates a number of accesses to local residential, agricultural and commercial properties. The proposals subject to this Stage 1 Road Safety Audit include the realignment of the Ford Lane carriageway in order to provide a 4-arm roundabout with the southern arm forming the development access and northern arm allowing access to a proposed anaerobic digestate plant. The scheme realigns each of the Ford Lane approaches and introduces a footway along the frontage of Wicks Cottages to the north of Ford Lane to the east of the proposed roundabout. The scheme drawing provided with the Audit Brief identifies that the provision of the footway on the northern side of the carriageway will introduce a kink in the alignment. The driver of a vehicle continuing along this section of Ford Lane may not become aware of the kink at a safe distance and could clip the edge of the carriageway / kerb which could give rise to loss of control type incidents.	
RECOMMENDATION:	
It is recommended that the transition allows for a smooth alignment.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted – the transition has been amended to allow for a smooth alignment and shown in drawing ITB13091-GA-054 Rev A.	

A.2	GENERAL
A.2.1	PROBLEM
Location:	Ford Lane
Summary:	Land alongside proposed works may slip into proposed carriageway
Acc Type:	Vehicle loss of control and pedestrian fall
The land along the southern side of the Ford Lane carriageway is in excess of 1 metre higher than the level of the existing carriageway with an embankment present beyond a grass verge of approximately 1 metre or abutting the carriageway in places. The proposals realign the carriageway and introduce a 4-arm roundabout with an inscribed circle diameter of 40-metres. The proposals cut into the land which could slip onto the carriageway and provide an uneven surface, as well as, reducing the effectiveness of the carriageway surface to ensure sufficient frictional properties on approach to a give-way. Reduced frictional properties along the carriageway where vehicles are likely to be braking, could give rise to overshoot type incidents.	
RECOMMENDATION:	
It is recommended that the land is retained sufficiently.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – retention to be considered further as part of the detailed design.	
A.2.2	PROBLEM
Location:	Ford Lane
Summary:	Introduction of proposals impact on the surface water drainage network
Acc Type:	Vehicle loss of control
The Ford Lane carriageway in the proximity of the proposed works is cambered with surface water falling to the channels and soft verges either side, a pair of gullies are provided to the west of the access for the adjacent commercial site to the south. The proposals realign and widen the existing carriageways to introduce a 4-arm roundabout and as such, the proposals will increase the amount of surface water that falls onto the carriageway and is required to drain. No details have been provided to identify whether the proposed works will be formed with kerbs or soft verges,	

nonetheless, the increase in the amount of surface water generated, could result in ponding which may give rise to loss of control type incidents which would be exacerbated during freezing conditions.

RECOMMENDATION:

It is recommended that an adequate surface water drainage network is provided.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – surface water drainage to be addressed as part of the detailed design.

A.2.3 PROBLEM

Location: Scheme

Summary: Existing utility covers will be an obstruction to vehicles

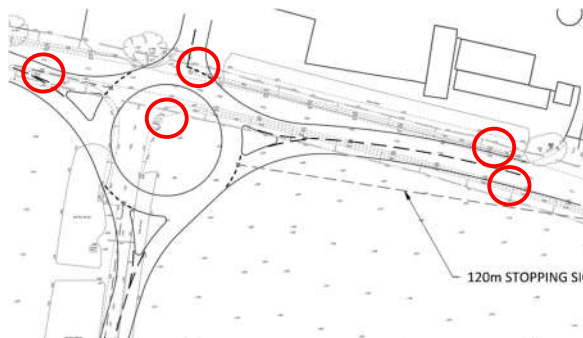
Acc Type: Loss of control

Ford Lane accommodates a number of utility covers within the existing verge and carriageway. The proposals realign Ford Lane and provide a 4-arm roundabout in order to provide access to the development to the south, as well as a proposed anaerobic digester plant to the north. Several utility covers are located within the area of realigned carriageways and will become a hazard if not adjusted adequately and become a skid hazard should their frictional surface properties be insufficient, resulting in loss of control type incidents.

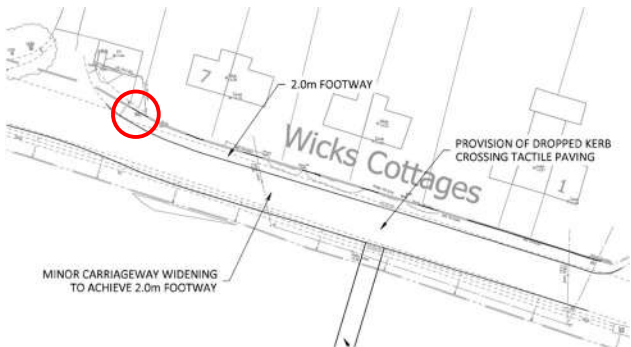
RECOMMENDATION:

It is recommended that existing utility covers are relocated / adjusted appropriately

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – utility covers to be addressed as part of the detailed design.	
A.2.4	PROBLEM
Location:	Proposed roundabout, Ford Lane
Summary:	Traffic entering the proposed roundabout may attempt to turn right into oncoming traffic
Acc Type:	Head-on collisions
Ford Lane is two-way single lane carriageway that is rural in nature. The proposals introduce a 4-arm roundabout with an inscribed circle diameter of 40-metres with a development access arm to the south and the fourth arm to the north which is to provide access to the proposed anaerobic digestate plant. The arm to the east, south and west of the roundabout accommodates a splitter island that guides vehicles to the left around the proposed roundabout and deters a right turning movement. However, a vehicle approaching from the north meets the circulatory at a give-way that does not benefit from a splitter island. No details of the proposed signage is provided at this stage, however the driver of a southbound vehicle may not be aware of the nature of the roundabout junction and direction of traffic which may lead to an attempt to turn right onto the circulatory carriageway that could result in head-on collisions with vehicles travelling along the roundabout.	
RECOMMENDATION:	
It is recommended that measures are provided to ensure that vehicle do not attempt to turn right onto the circulatory	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – circulatory signage has been introduced at the approach to the roundabout and shown in revised drawing ITB13091-GA-004 Rev B.	
A.3	JUNCTIONS
	<i>No Road Safety Concerns regarding JUNCTIONS have been raised at this stage</i>

A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Proposed footway, Ford Lane
Summary:	Existing signage will become an obstruction to pedestrians
Acc Type:	Vehicle-pedestrian collision and pedestrian trips and falls
The verge on each side of Ford Lane accommodates a number of road signs with minimal headroom, as no pedestrian facilities are present. The proposals provide a 2-metre footway fronting a number of dwellings known as Wicks Cottages, along the northern side of Ford Lane, and as such, an existing road sign will become an obstruction to pedestrians. Such an obstruction could be struck by a pedestrian or force one to enter the carriageway suddenly raising the risk of vehicle collisions with pedestrians as well as trips and falls on the full height kerbs.	
RECOMMENDATION:	
It is recommended that signage is relocated, and headroom increased accordingly.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – signage to be considered as part of the detailed design.	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
A.5.1	PROBLEM
Location:	Scheme
Summary:	No street lighting details have been provided with the Audit Brief
Acc Type:	Vehicle loss of control
Ford Lane is rural in nature and does not benefit street lighting. The proposals introduce a 40 metre ICD roundabout along Ford lane and realign the approach carriageways. The scheme drawings provided with the Audit Brief do not identify that street lighting is to be provided. As such, the driver of a vehicles approaching the junction may not become aware of the proposed roundabout at a safe distance which could give rise to heavy braking resulting in loss of control type incidents as well as junction overshoots.	
RECOMMENDATION:	
It is recommended that street lighting is provided	

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – need for lighting to be considered alongside the Overseeing Organisation as part of the detailed design.

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

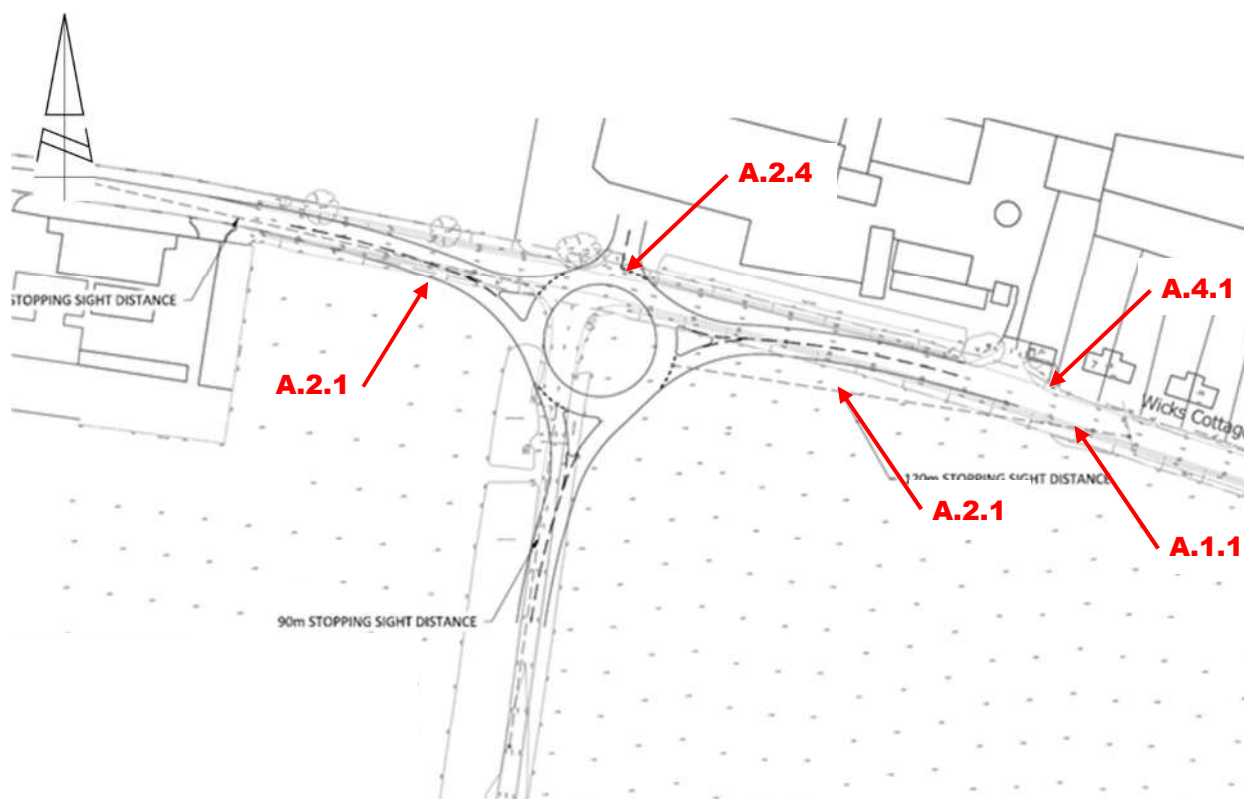
Appendix A1

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	DS/ITB13091-032		Road Safety Audit Brief 4
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-004	A	Potential Site Access Arrangement – 3 Arm 40m ICD Roundabout
	ITB13091-GA-054	-	Potential Footway Option Along Ford Lane

Appendix A2

Item Location Plan



SCHEME

A.2.2

A.2.3

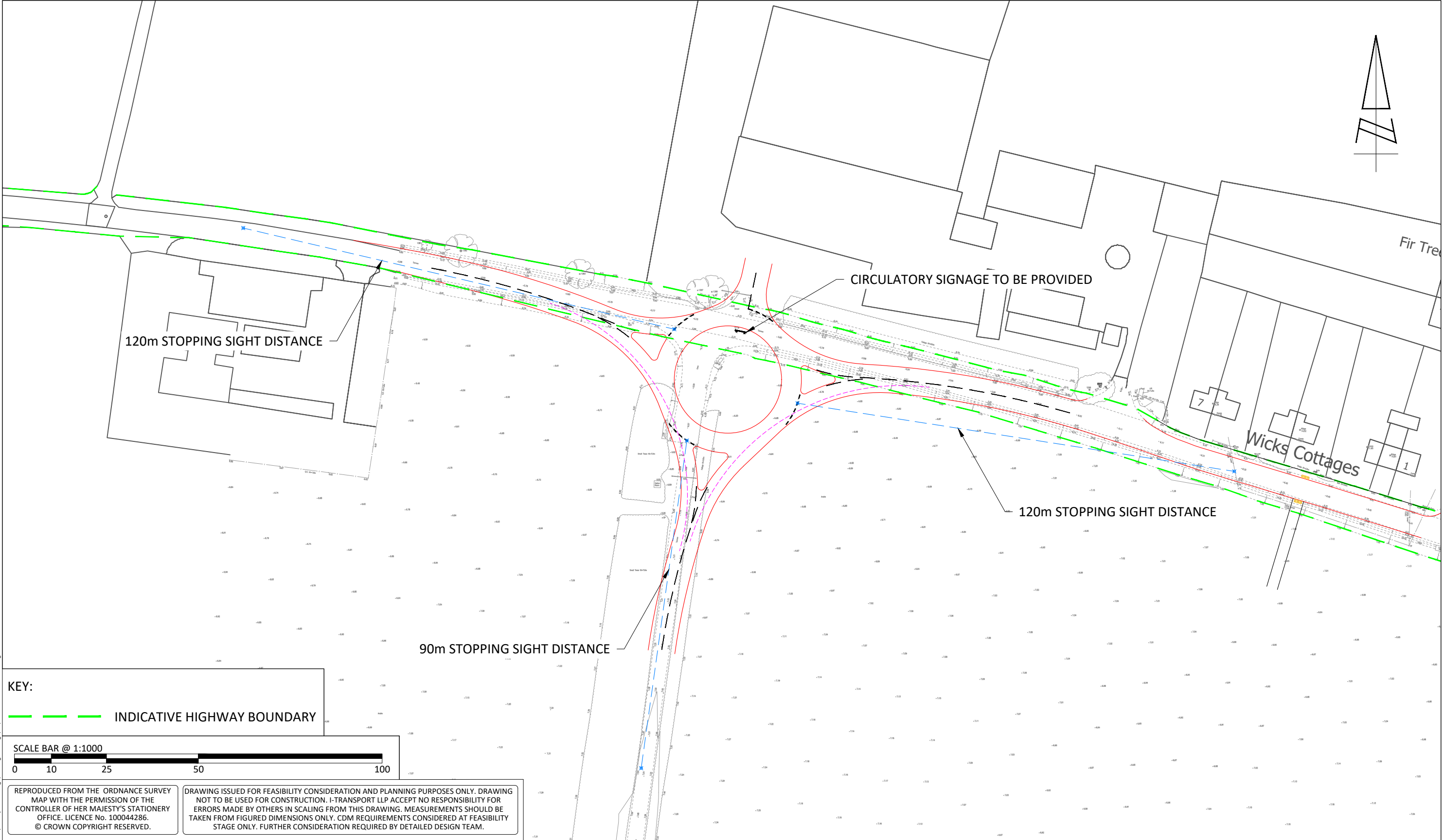
A.5.1

Appendix A3

Drawings associated with the Design Organisation Response

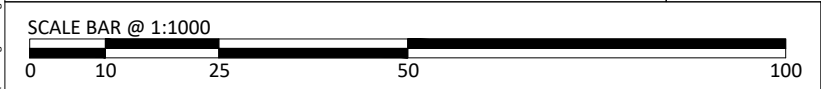
<u>Audit Stage</u>	<u>Drawing No.</u>	<u>Rev</u>	<u>Title</u>
Stage 1	ITB13091-GA-004	B	Potential Site Access Arrangement – 3 Arm 40m ICD Roundabout
	ITB13091-GA-054	A	Potential Footway Option Along Ford Lane

fenley



T:\Projects\13000 Live Projects\13091\ITB Ford Airfield\Tech\Acad\1-Transport Drawings\Working Drawings\GA\ITB13091-GA-004 Rev B.dwg

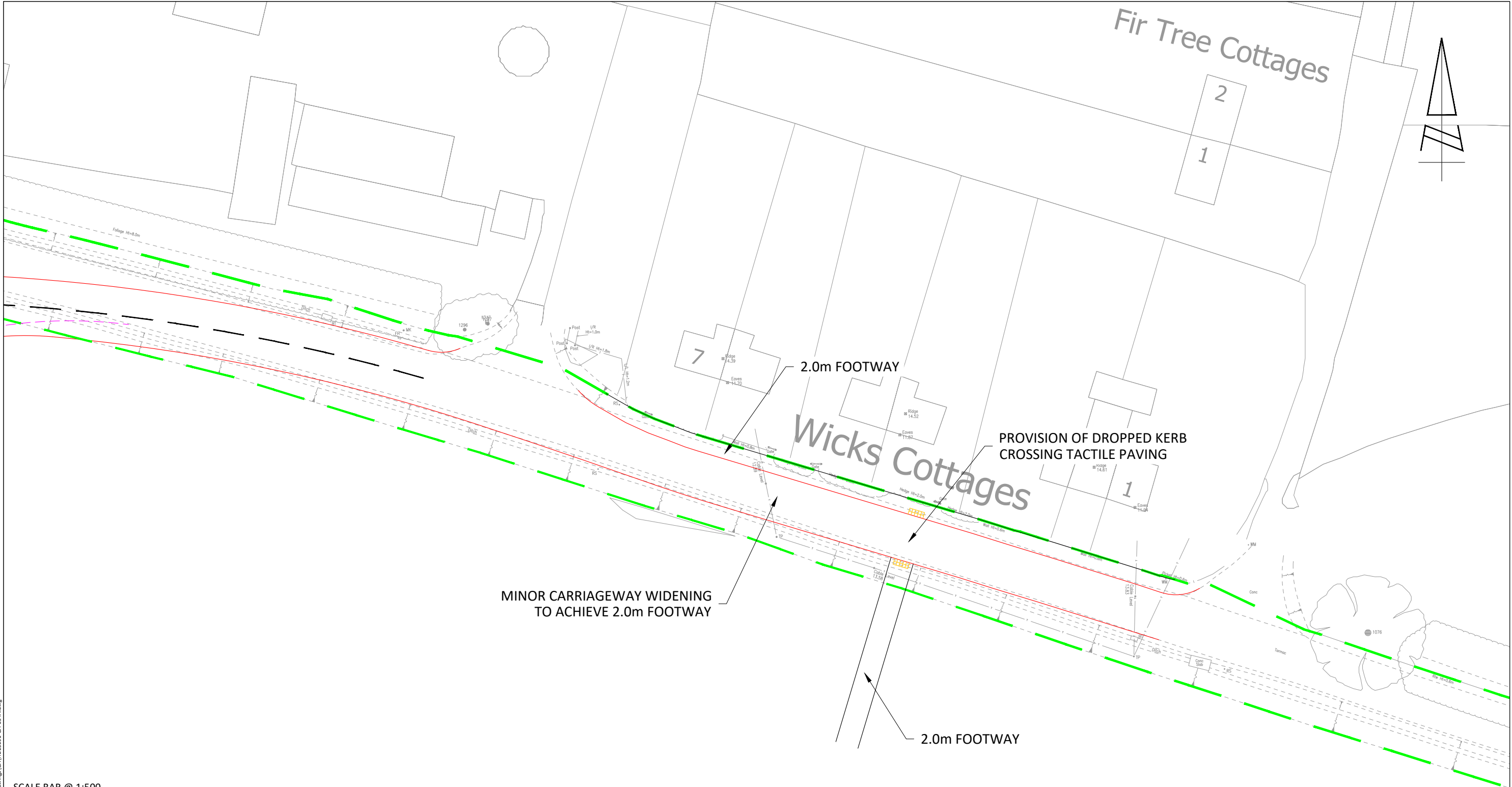
KEY:
INDICATIVE HIGHWAY BOUNDARY



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DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 Fax: 01256 338644 www.i-transport.co.uk								TITLE: POTENTIAL SITE ACCESS ARRANGEMENT - 3 ARM 40m ICD ROUNDABOUT		SCALE @ A3: 1:1000	CHECKED: DS	APPROVED: DS	
		B A	02.10.20 08.11.18	JD SH	RSA COMMENTS INCORP'D MINOR AMENDMENTS	DS DS	DS DS	PROJECT: FORD AIRFIELD		CLIENT: REDROW HOMES LIMITED & WATES DEVELOPMENT LIMITED	FILE REF: ITB13091	DRAWN: SH	DATE: 15.06.18
		REV	DATE	BY	DESCRIPTION	CHK	APD	DRAWING No: ITB13091-GA-004		PROJECT No: ITB13091			REV: B
		STATUS: DRAFT											



SCALE BAR @ 1:500

0 5 10 25 50

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DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

 Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG Tel: 01256 338640 www.i-transport.co.uk							TITLE:	POTENTIAL FOOTWAY OPTION ALONG FORD LANE			DRAWN:	SH	CHECKED:	DS	APPROVED:	DS					
	A	02.10.20	JD	RSA COMMENTS INCORPORATED			DS	DS	PROJECT:			PROJECT No:			SCALE @ A3:		DATE:				
	REV	DATE	BY	DESCRIPTION			CHK	APD				ITB13091			1:500		10.09.19				
	STATUS:							FORD AIRFIELD				REDROW HOMES LIMITED & WATES DEVELOPMENTS LIMITED			DRAWING No:			REV:			
	FOR INFORMATION														ITB13091-GA-054			A			

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APPENDIX E. RSA-20-092-3 AND DRAWINGS

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.**



Proposed works along Ford Rd and Station Rd Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032-5

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-092	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-092-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-092-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			9 th September 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	23 rd September 2020
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			23 rd September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			30 th October 2020

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3.0	Items Raised in any previous Road Safety Audits	3
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	A.2 General	
	A.3 Junctions	
	A.4 Walking, Cycling and Horse Riding	
	A.5 Road Signs, Carriageway Markings and Lighting	
5.0	Audit Team Statement	17

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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 proposed highway works along Ford Road and Station Road in Ford, Arundel. The works include the provision a footway cycleway to the west of the carriageway between the access to a waste management site and Ford Train Station to the north to include a refuge across Ford Lane and Ford Road which connects with a 3 metre wide footpath through a field to a path alongside the River Arun to the east. The scheme is to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 2.2 The Audit Brief identifies that the proposals do not include any Departures from Standard, whether related to strategic decisions or otherwise.
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Audit Team Member

Farouk Bhatti *MCIHT*
Road Safety Auditor

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- 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**.

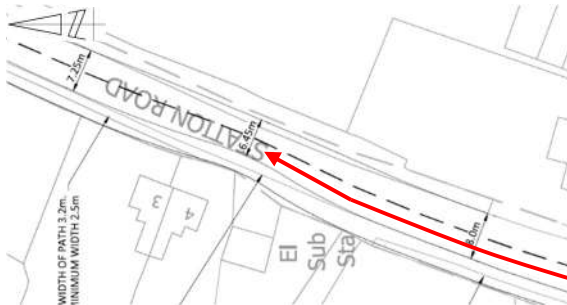
Design Organisation Response

- 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.
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 Name: Dominic Smith
 Position / Organisation: Associate Partner, i-Transport LLP
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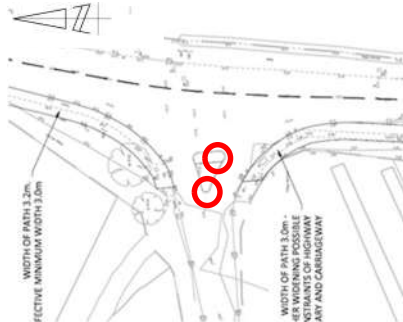
4.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

A.1	LOCAL ALIGNMENT
A.1.1	PROBLEM
Location:	Station Road
Summary:	Proposed carriageway reduces suddenly
Acc Type:	Sideswipe and loss of control type incidents
To the north of Ford Lane, Station Road is a wide two-way single carriageway road that is subject to a 40mph speed limit and observes a traffic flow of approximately 600 vehicles during the peak hours. The proposals provide a footway cycleway along the western side of the carriageway which reduces the existing carriageway width in places to include adjacent to property numbers 3 and 4 where the width reduces to 6.45 metres. No road safety concerns are raised with regard to the proposed width, however, the scheme drawings provided with the Audit Brief, illustrate an abrupt change which could give rise to a vehicle clipping the kerb and loss of control type incidents or sideswipes.	
RECOMMENDATION:	
It is recommended that allow for a smooth alignment.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – a smooth alignment has been incorporated into drawing ITB13091-GA-007B.	
A.2	GENERAL
A.2.1	PROBLEM
Location:	Proposed access arrangement, Ford Lane
Summary:	Drivers manoeuvring at the junction may not become side road may not become aware of the refuge island at a safe distance
Acc Type:	Loss of control
In the proximity to the proposed works, both Ford Road and Ford Lane are unlit rural two-way carriageways. The proposals illustrated on the scheme drawings provided with the Audit Brief, remove the existing right turn facility associated with Ford Lane and provide a refuge island on the side road. Drivers travelling from Ford Road as well as along Ford Lane and approaching the splitter island may not become aware of the feature at a safe distance increasing the likelihood of vehicles striking the kerb of the feature and loss of control type incidents.	

RECOMMENDATION:

It is recommended that measures are provided in order to increase the presence of the refuge island.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

The right hand turn lane is not to be removed as part of the works; the existing markings have been added to the drawing. Right turning manoeuvres for articulated vehicles have been tracked to ensure they are compatible with the island, and additional markings introduced. Additional measures (e.g. signage) to further highlight the presence of the island will be considered as part of the detailed design.

A.2.2 PROBLEM

Location: Ford Road

Summary: Existing railings associated with the substation transformer

Acc Type: Vehicle collisions and loss of control

A substation transformer with a 2-metre high perimeter steel fence is present to the east of Ford Road on the inside of a bend in the carriageway which appears to be approximately 1 metre from the channel line. The proposals widen and realign the Ford Road carriageway at this location and slacken the bend in the road such the steel fencing will be abutting the carriageway. Items of street furniture within 450mm of a live carriageway will become an obstruction to vehicles and an errant vehicle is at risk of colliding with the feature.

RECOMMENDATION:

It is recommended that the fence line is relocated accordingly in order to provide a sufficient margin.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

The alignment of the road has been adjusted to provide a margin of 0.5m between the edge of the carriageway and the railing, as shown on drawing GA-010 Rev B.

A.2.3 PROBLEM

Location: Proposed Ford Lane access arrangement and Station Road / Ford Road

Summary: Infrastructure may be of insufficient width to allow for service vehicles and expected manoeuvres

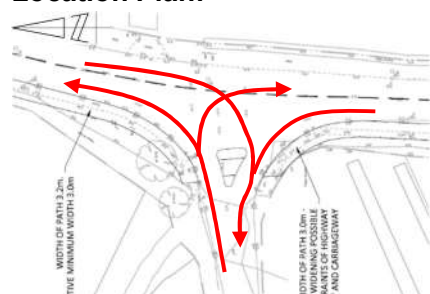
Acc Type: Sideswipes and rear end collisions

Ford Road and Station Road are wide two-way single carriageway roads that are sufficiently wide to allow for all types of vehicles and the junction of Ford Lane with takes the form of a large bellmouth that allows for all movements. The scheme subject to this Stage 1 Road Safety Audit provides a footway cycleway to the west Ford Road and Station Road by reducing the carriageway width retains and includes the provision of a refuge island that is shaped to encourage left turns at the priority junction with Ford Lane. No swept path analysis has been provided with the Audit Brief to identify that the infrastructure is adequate for the expected vehicle to manoeuvre. Should the carriageways and proposed priority junction arrangement be insufficient for the expected vehicles to manoeuvre, a large vehicle may strike the kerbed feature increasing the likelihood of loss of control and sideswipe type incidents or may be required to reverse a significant distance raising the risk of vehicle-pedestrian collisions.

RECOMMENDATION:

It is recommended that the proposed carriageway and junction are adequate for the expected vehicle manoeuvres.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Tracking has been undertaken to ensure the junction is adequate to accommodate all manoeuvres. The shape of the island has been altered as not to restrict manoeuvres by larger vehicles turning right into Ford Lane, and hatching included to the immediate east and west of the island to delineate useable road space.

A.2.4 PROBLEM

Location: Scheme

Summary: Existing utility covers will be an obstruction to vehicles

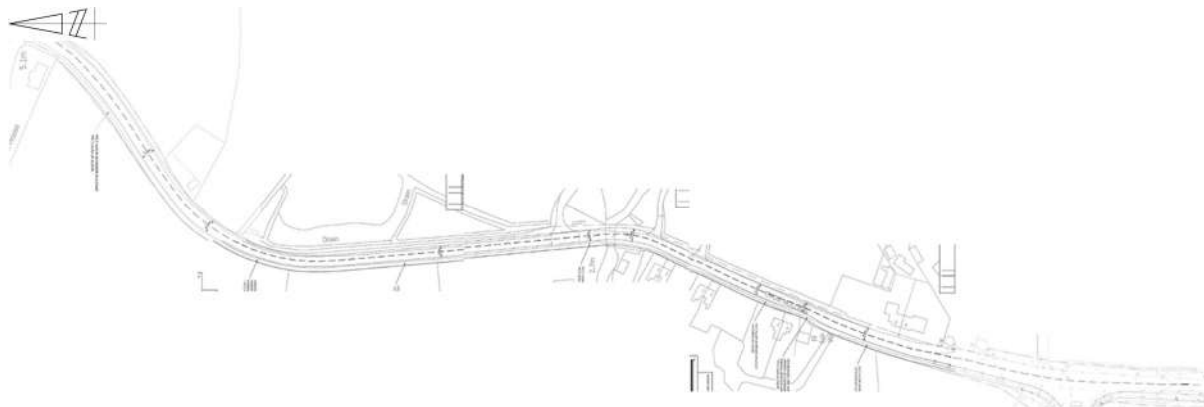
Acc Type: Loss of control

Ford Lane, Ford Road and Station Road accommodate a number of utility covers within the existing verge as well as the carriageway. Following the proposed works, a number of the utility covers will be located within the carriageway and will become an obstruction if not adjusted adequately and become a skid hazard resulting in loss of control type incidents should their frictional surface properties be insufficient.

RECOMMENDATION:

It is recommended that existing utility covers are relocated / adjusted appropriately

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – matter will be addressed as part of the detailed design.

A.2.5 PROBLEM

Location: Scheme

Summary: Introduction of proposals impact on the surface water drainage network

Acc Type: Loss of control

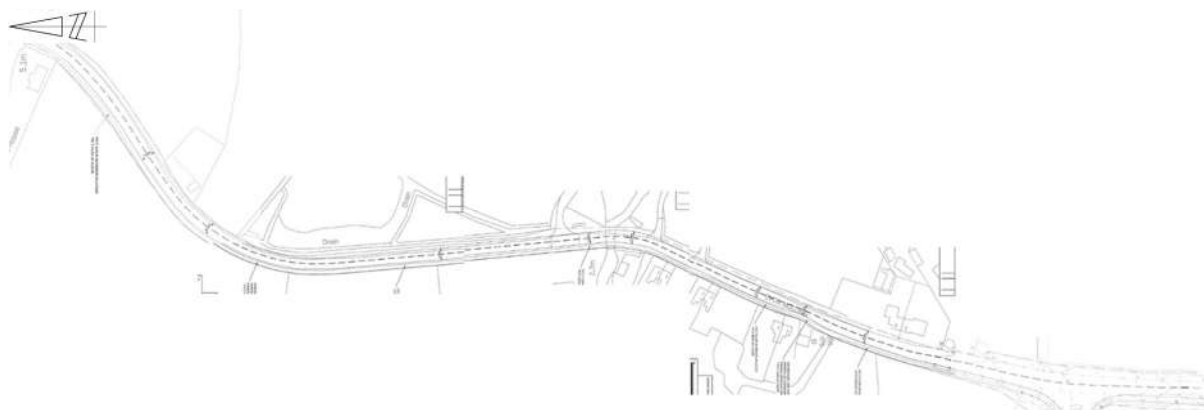
The carriageway of the highway network within the vicinity of the proposed works is bounded by a mix of soft verges and kerbing where gullies are provided. The proposals realign / widen the existing carriageways and introduce a 3-metre footway / cycleway along the western side of the carriageway. No details have been provided to identify that the existing surface water drainage network is to be

modified in accordance with the proposals or that provision will be made to accommodate the additional surface water that is generated. An inadequate surface water network could result in ponding during inclement conditions which may give rise to loss of control type incidents which would be exacerbated during freezing conditions.

RECOMMENDATION:

It is recommended that an adequate surface water drainage system is provided

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – matter to be addressed as part of the detailed Section 278 design.

A.3 JUNCTIONS

A.3.1 PROBLEM

Location: Ford Road

Summary: Vehicles may attempt to pass a stationary vehicle waiting to turn right on the carriageway

Acc Type: Rear end impact collision and sideswipes

Ford Road is a two-way single carriageway road that is subject to a 40mph speed limit and benefits from the provision of a right turn lane for vehicles entering Ford Lane. The proposals provide a refuge island along Ford Lane at the priority junction and replace the right turn lane along Ford Road with a road centreline. The removal of the right turn lane could give rise to stationary vehicles within the carriageway waiting to turn right and rear impact collisions.

RECOMMENDATION:

It is recommended that the existing right turn lane is retained

Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – right hand turn lane is retained and existing markings have now been included on the base OS Mappin for drawing ITB13091-GA-006 Rev B.	
A.3.2	PROBLEM
Location:	Ford Lane priority junction
Summary:	Egressing vehicles may encroach the Ford Road carriageway
Acc Type:	Overshoot type collision
The existing Ford Lane priority junction of with Ford Road / Station Road accommodates give-way road lines, markings and signage. The proposals subject to this Stage 1 Road Safety Audit, are to intensify the use of the existing Ford Lane priority junction with the traffic generated by an element of the associated development. The scheme drawings provided with the Audit Brief include the provision of a pedestrian refuge island on Ford Lane, and a road centreline marking along Station Road / Ford Road, but do not identify that any carriageway markings are to be provided along the Ford Lane carriageway or at its junction with Ford Road / Station Road. The driver of a vehicle travelling along Ford Lane to the junction may not therefore become aware of priorities or be guided appropriately to ensure sufficient space is available for opposing vehicles which could give rise to junction overshoot type incidents as well as sideswipes and head-on collisions .	
RECOMMENDATION:	
It is recommended that road markings are provided to ensure sufficient guidance	
Location Plan: 	

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – marking have been included on drawing ITB13091-GA-006 Rev B.

A.3.3 PROBLEM

Location: Existing access to Ford Airfield

Summary: Insufficient space is available to accommodate the proposed / existing land markings

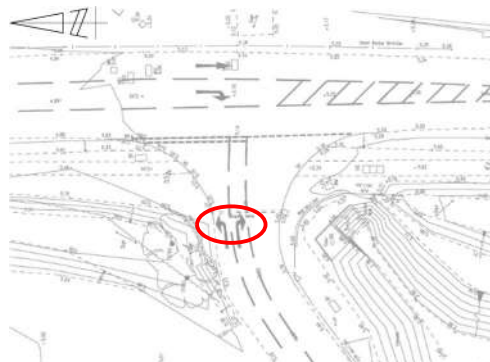
Acc Type: Sideswipe type incident

The scheme drawings illustrate the existing eastern access to the Ford Airfield which accommodates a right and left lane on exit as well as a right turn lane along Ford Road that allows vehicle to wait within the carriageway without having an impact on the free flow of traffic. Observations made during the site visit, show that although the Ford Airfield access is marked with a left and right turn lane, insufficient space is available to accommodate two lanes of traffic. As such, the provision of the existing markings and an increase in the amount of traffic as a result of the proposed redevelopment, could give rise to sideswipe type collisions.

RECOMMENDATION:

It is recommended that road markings are provided to ensure sufficient guidance

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – the road markings will be considered further as part of the S278 detailed design.

A.4 WALKING CYCLING AND HORSE RIDING

A.4.1 PROBLEM

Location: Proposed crossing point, Ford Road

Summary: A road gully is present along the proposed pedestrian crossing point

Acc Type: Pedestrian trips and falls

Ford Road benefits from a network of road gullies that provide for the drainage of surface water. Following implementation of the proposed uncontrolled crossing from the existing footway to the west of Ford Road to a proposed 3 metre footpath link, one of these gullies will be situated within the path of pedestrian crossing the carriageway at the crossing point. Gullies within a pedestrian

desire line will be an obstruction particularly for the infirm and mobility impaired. The gully grate could also be hazardous for users of wheeled devices and give rise to falls

RECOMMENDATION:

It is recommended that the gully is relocated away from the desire line.

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – the matter will be considered as part of the detailed S278 design.

A.4.2 PROBLEM

Location: Proposed pedestrian crossing, Ford Road

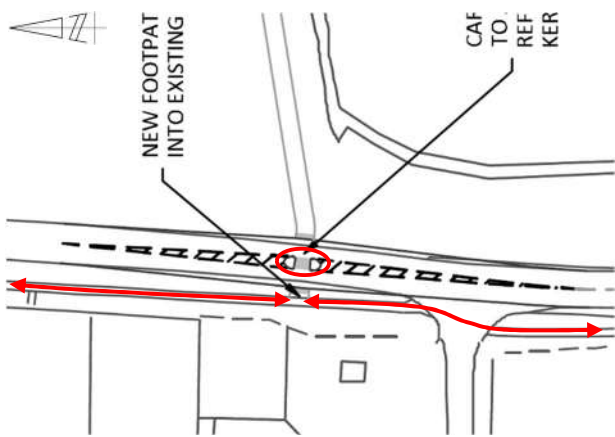
Summary: Proposed refuge island is inadequate for cyclists

Acc Type: Vehicle-cyclist collisions

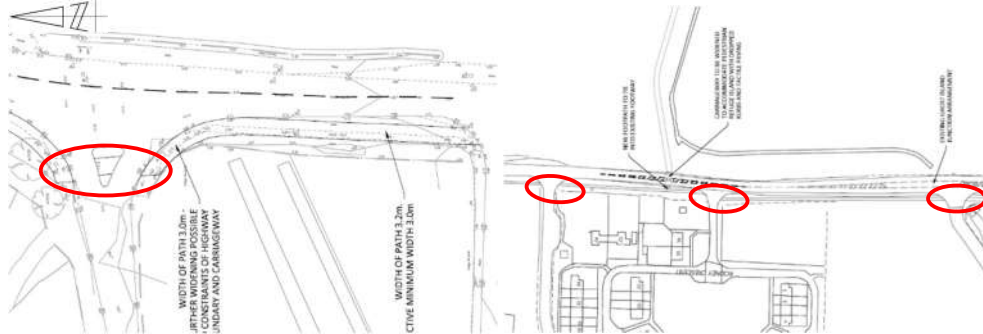
Ford Road accommodates a footway along the western side of the carriageway as well as dropped kerbs at crossing points. The proposals realign and widen the Ford Road carriageway in order to provide a pedestrian refuge to link between the footway and a new 3 metre footpath through a field which links with footpath 206 that is present to the west of the River Arun. Although the scheme drawings note that the link is a footpath, the Audit Brief identifies that it is a shared use facility. Either way, it is likely that the proposed 3 metre link would be utilised by cyclists, however, the footway leading to the crossing point is insufficient in width as is the proposed refuge. Cyclists utilising a footway that is not a designated shared use facility, could give rise to cyclist pedestrian collisions and a bicycle encroaching the through lanes at a refuge, is likely to result in a vehicle collision cyclist collision.

RECOMMENDATION:

It is recommended that the footway is upgraded as appropriate and that the refuge is widened to accommodate cyclists.

Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – the crossing and associated infrastructure has been amended to accommodate cyclists.	
A.4.3	PROBLEM
Location:	Ford Road, Ford Lane & Ford Airfield crossing point
Summary:	Full height kerbs will be an obstruction to pedestrians
Acc Type:	Pedestrian trip and fall
Ford Road accommodates a footway along to the western side of the carriageway. The proposals include the provision of an uncontrolled crossing point with a pedestrian refuge across Ford Road, as well as, increasing the width of the existing footway to the north of the access to a waste management site, providing a shared surface footway / cycleway with an effective minimum width of 3.0-metres. The scheme drawings do not identify that a crossing point is to be provided across the Ford Airfield, Industrial Estate / Waste Management or Rodney Crescent accesses and do not illustrate the provision of dropped kerbs or tactile paving. Whilst full height kerbs will become an obstruction to pedestrians particularly the mobility impaired or those walking with buggies and children on a scooter, the lack of a tactile warning could result in a visually impaired pedestrian entering the carriageway when it is not safe to do so which raises the risk of a vehicle-pedestrian collision. The pedestrian desire lines take the form of a direct crossing where pedestrians will be walking towards a crossing. As such, a pedestrian with a large stride who is walking along the footway, could, step over an 800mm depth of tactile paving.	
RECOMMENDATION:	
It is recommended that dropped kerb crossing points with a maximum upstand of 6mm are provided along desire lines with tactile warning with a sufficient minimum depth of 1.2 metres where appropriate.	

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – tactile paving has been introduced at junctions on the desire lines as shown in drawings GA-400 Rev A and 006 Rev B.

A.4.4 PROBLEM

Location: Scheme

Summary: No warning is provided to inform users of the transition from a footway to footway cycleway

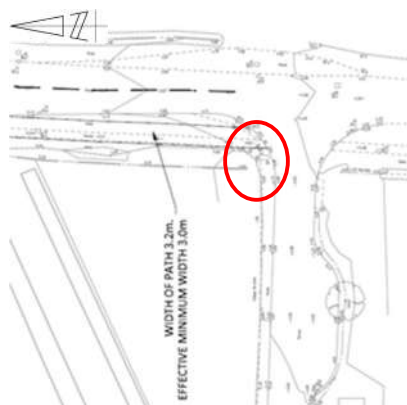
Acc Type: Cyclist pedestrian collision

Ford Road benefits from a footway along the western side of the carriageway. The proposals modify and widen the existing footpath from Ford Rail Station to the north to the crossing point of the Waste Management site situated to the south of the Ford Lane junction, providing a 3-metre shared use footway / cycleway. No measures are provided to identify that the shared facility terminates and as such, cyclists are likely to continue along the existing footway. Pedestrians particularly the visually impaired, stepping from a footway to a shared facility without warning, could walk into the path of a cyclist raising the risk of a cyclist-pedestrian collision.

RECOMMENDATION:

It is recommended that appropriate warning signage and tactile surface is provided

Location Plan:



DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – an appropriate location for termination of the cycle route is to be agreed with overseeing organisation as part of the Section 278 detailed design, with corduroy paving/end of route identification included where required.

A.4.5 PROBLEM

Location: Proposed footway / cycleway, Ford Road

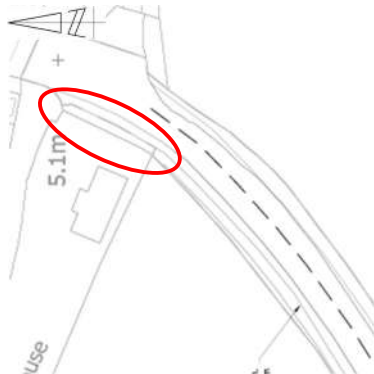
Summary: Width of the facility may be too narrow for users to pass one another

Acc Type: Pedestrian collision, trips or falls Cyclist collision with another cyclist or pedestrian

The proposals provide a 3.0 metre shared footway / cycleway in place of the existing pedestrian link along the western side of Ford Road stretching between Ford Lane to the south and the Ford Railway Station to the north. The scheme drawings provided with the Audit Brief illustrate that the proposals realign the Ford Road carriageway in order to provide the proposed 3.0-metre wide pedestrian feature. However, the proposals subject to this Stage 1 Road Safety Audit retain the localised narrowing of the footway at the location where the facility meets the railway crossing point and station access. Due to the presence of a bend in the road, overhanging debris and vegetation associated with a residential dwelling on the western side of the footway / cycleway, a cyclist will not have clear visibility of users attempting to access the footway in order to determine if sufficient space is available to pass. A cyclist approaching the localised narrowing could therefore collide with a pedestrian or cyclist utilising the footway / cycleway.

RECOMMENDATION:

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

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Realignment of the carriageway has been identified to provide a smooth transition round the bend to enable widening of the footway to provide connectivity of the route to the railway station as shown in drawing GA-010 Rev B.

A.4.6 PROBLEM

Location: Proposed pedestrian crossing, Ford Road

Summary: Users of wheeled devices could continue onto the carriageway suddenly

Acc Type: Vehicle-non-motorised user and rear end collisions

The scheme subject to this Stage 1 Road Safety Audit includes a 3.0-metre footpath forming a link between the existing footway along the western side of Ford Road and public footpath 206 which runs along the west side of the River Arun. The proposed 3.0-metre footway terminates at a proposed crossing facility that benefits from dropped kerbs and tactile paving where a link is provided to the land either side of the carriageway. The scheme drawings provided with the Audit Brief do not identify that the proposed links are to be utilised by cyclists; however, a user of a wheeled device such as a child on a scooter or cyclist approaching the crossing point over the 40mph Ford Road, may continue across the carriageway without slowing for approaching traffic raising the risk of vehicle user collisions or rear end impact collisions where an approaching driver brakes suddenly.

RECOMMENDATION:

It is recommended that measures are provided to ensure users slow when approaching the Ford Road carriageway.

Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 28th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted – staggered barriers have been included and shown in drawing GA-400 Rev A.	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
	<i>No Road Safety Concerns regarding ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING have been raised at this stage</i>

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

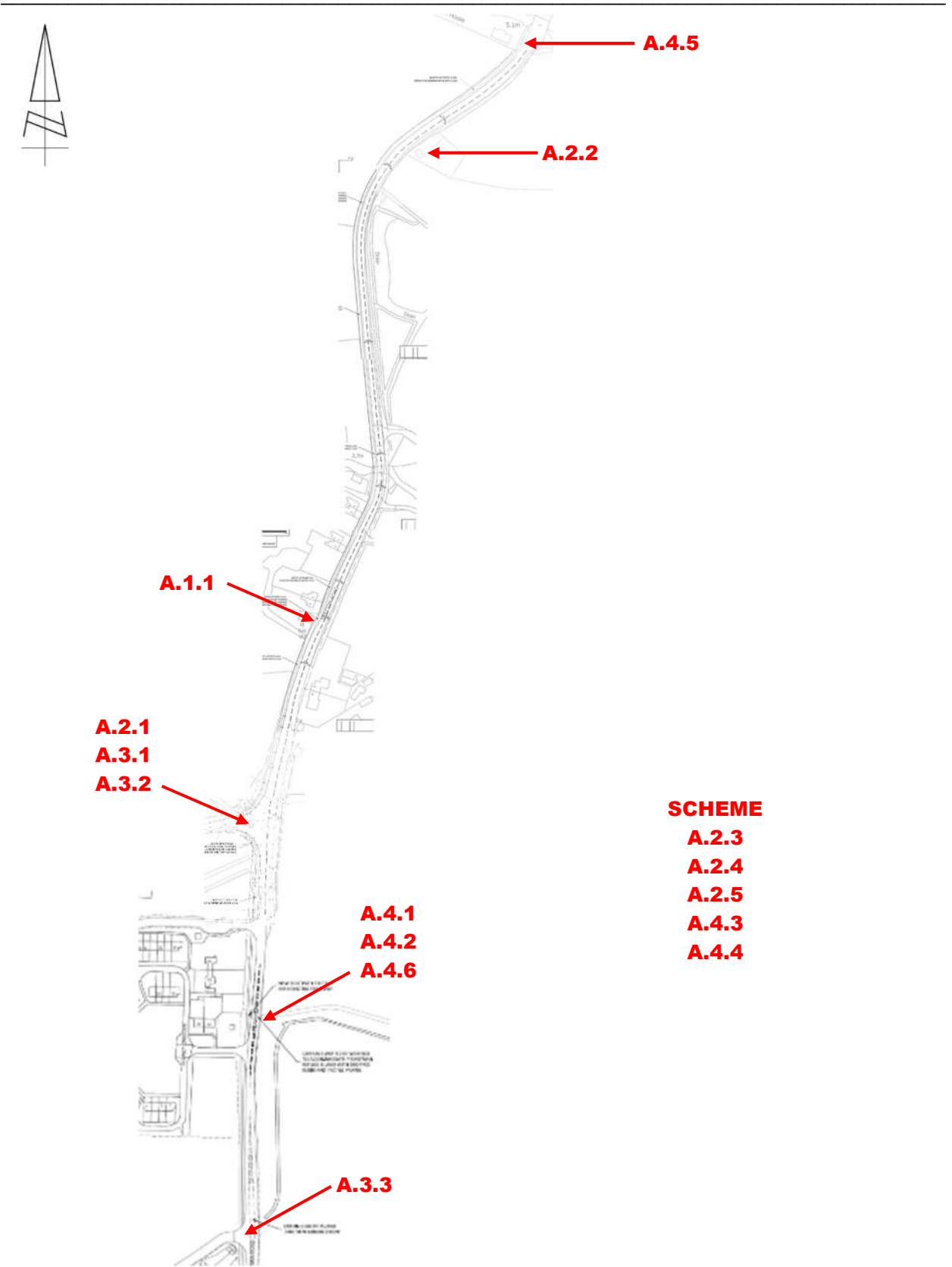
Appendix A1

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	DS/ITB13091-032		Road Safety Audit Brief 5
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-006	A	Pedestrian Footway / Cycle Route – Sheet 1 of 5
	ITB13091-GA-007	-	Pedestrian Footway / Cycle Route – Sheet 2 of 5
	ITB13091-GA-008	-	Pedestrian Footway / Cycle Route – Sheet 3 of 5
	ITB13091-GA-009	-	Pedestrian Footway / Cycle Route – Sheet 4 of 5
	ITB13091-GA-010	-	Pedestrian Footway / Cycle Route – Sheet 5 of 5
	ITB13091-GA-021	-	Ford Airfield Geometry Eastern Access onto Ford Road
	ITB13091-GA-400	-	Key Plan – Route 4 Ford Road to River Arun Public Right of Way

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	ITB13091-GA-006	B	Pedestrian Footway / Cycle Route – Sheet 1 of 5
	ITB13091-GA-007	B	Pedestrian Footway / Cycle Route – Sheet 2 of 5
	ITB13091-GA-010	B	Pedestrian Footway / Cycle Route – Sheet 5 of 5
	ITB13091-GA-400	A	Key Plan – Route 4 Ford Road to River Arun Public Right of Way

fenley



KEY:

INDICATIVE HIGHWAY BOUNDARY



WIDTH OF PATH 3.2m.
EFFECTIVE MINIMUM WIDTH 3.0m

WIDTH OF PATH 3.0m -
NO FURTHER WIDENING POSSIBLE
DUE TO CONSTRAINTS OF HIGHWAY
BOUNDARY AND CARRIAGEWAY

WIDTH OF PATH 3.2m.
EFFECTIVE MINIMUM WIDTH 3.0m

34

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SURVEY MAP WITH THE PERMISSION OF THE
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CLIENT:

REDROW HOMES LIMITED &
WATES DEVELOPMENTS LIMITED

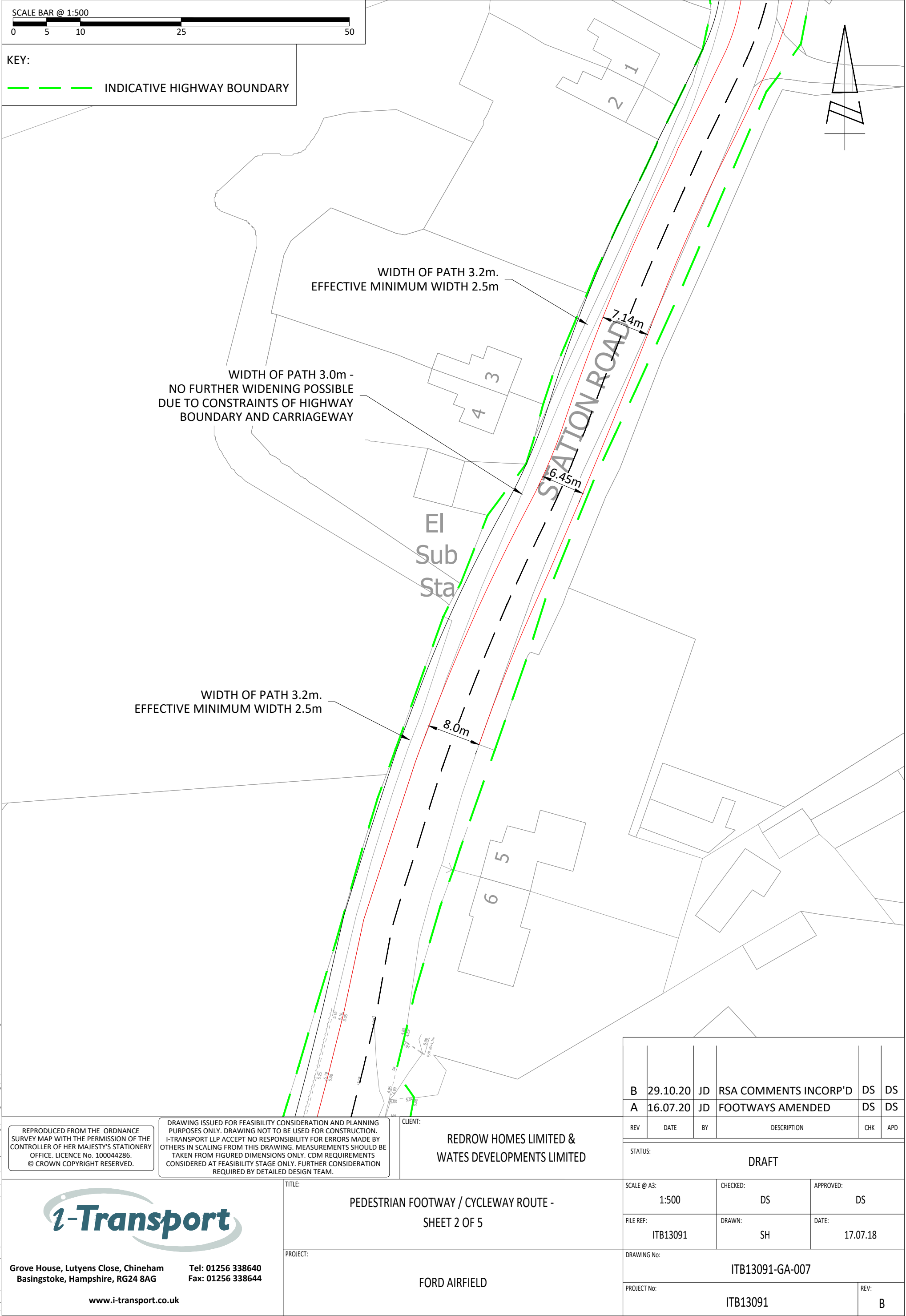
TITEL

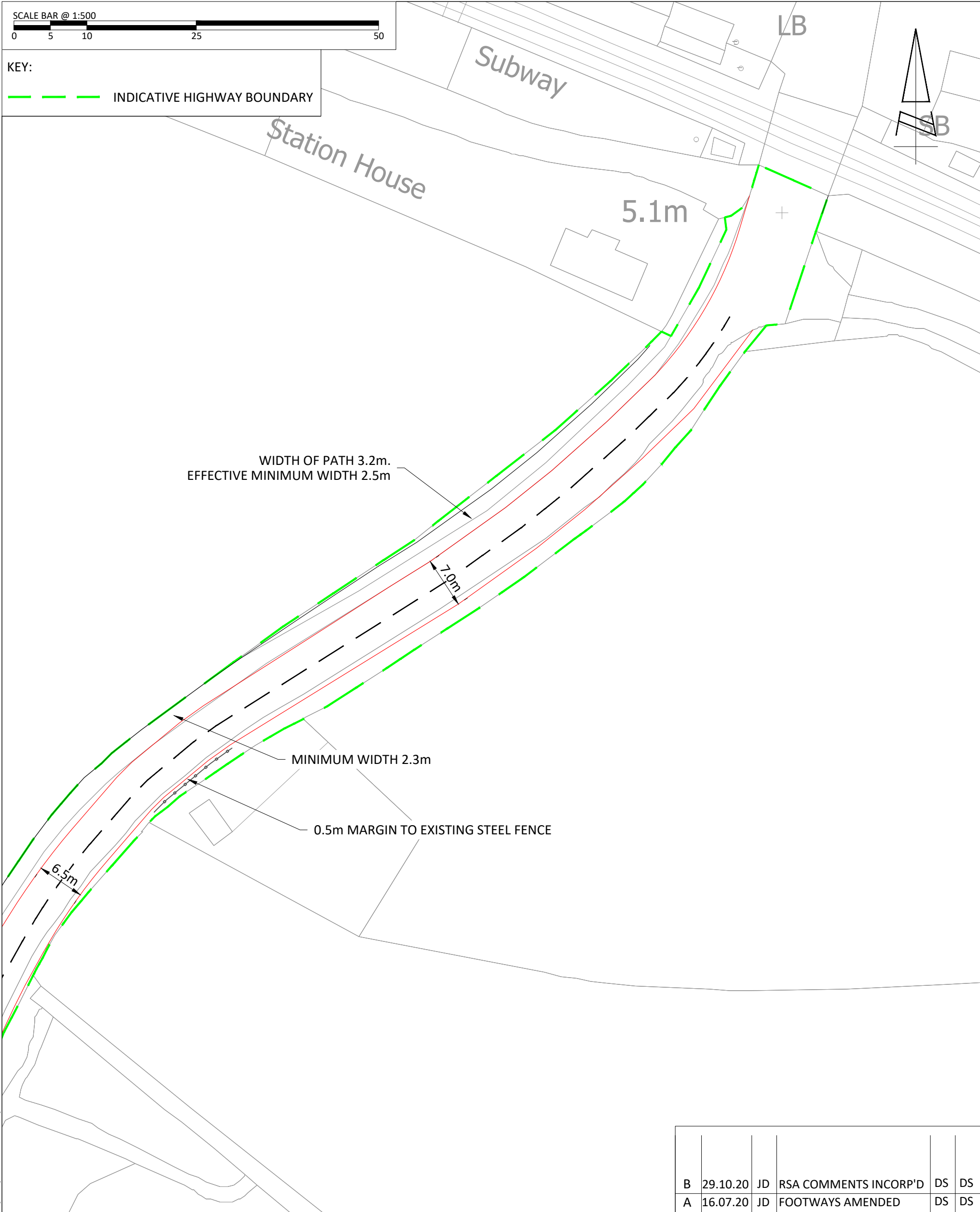
PEDESTRIAN FOOTWAY / CYCLEWAY ROUTE -
SHEET 1 OF 5

PROJECT:

FORD AIRFIELD

B	29.10.20	JD	RSA COMMENTS INCORP'D	DS	DS
A	16.07.20	JD	FOOTWAYS AMENDED	DS	DS
REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: DRAFT					
SCALE @ A3: 1:500		CHECKED: DS		APPROVED: DS	
FILE REF: ITB13091		DRAWN: SH		DATE: 17.07.18	
DRAWING No: ITB13091-GA-006					
PROJECT No: ITB13091				REV: B	





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REQUIRED BY DETAILED DESIGN TEAM.

CLIENT:

REDROW HOMES LIMITED &
WATES DEVELOPMENTS LIMITED

B	29.10.20	JD	RSA COMMENTS INCORP'D	DS	DS
A	16.07.20	JD	FOOTWAYS AMENDED	DS	DS
REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS:

DRAFT

SCALE @ A3:	CHECKED:	APPROVED:
1:500	DS	DS
FILE REF:	DRAWN:	DATE:
ITB13091	SH	17.07.18
DRAWING No:	ITB13091-GA-010	
PROJECT No:	ITB13091	REV: B



Grove House, Lutyens Close, Chineham
Basingstoke, Hampshire, RG24 8AG

Tel: 01256 338640
Fax: 01256 338644

www.i-transport.co.uk

TITLE:

PEDESTRIAN FOOTWAY / CYCLEWAY ROUTE -
SHEET 5 OF 5

PROJECT:

FORD AIRFIELD



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--	--

Grove House, Lutyens Close, Chineham
Basingstoke, Hampshire, RG24 8AG

REV	DATE	BY	DESCRIPTION	CHK	APD
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ITB13091-GA-400

APPENDIX F. RSA-20-093-3 AND DRAWINGS

Road Safety Audit Report

**Incorporating
Stage 1 Completion of Preliminary Design;
Design Organisation Response to items raised.**



Proposed works along Horsemere Green Lane and Church lane Ford Airfield

Client:
i-Transport

Client reference:
ITB13091-032-6

Fenley
2 Blaenant
Emmer Green
READING
RG4 8PH

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

Report Status 3

Job no	RSA-20-093	Issue no	3	Date	November 2020
Prepared by	JJF	Verified by	FB	Approved by	JJF
Filename and Path	Fenley/Road Safety Audits/RSA-20/RSA-20-093-3				

1.0 PROJECT DETAILS

Report Title:	Stage 1 Road Safety Audit
Date:	November 2020
Document reference and revision:	RSA-20-093-3
Prepared by:	Fenley Road Safety Limited
On behalf of the Overseeing Organisation:	West Sussex County Council
Design Organisation:	i-Transport LLP
Project Sponsor:	Redrow Homes Ltd and Wates Developments Ltd

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
0	Stage 1 Road Safety Audit drafted for Audit Team discussions	FB			9 th September 2020
1	Stage 1 Road Safety Audit finalised and issued to the Design Organisation	JJF	FB	JJF	23 rd September 2020
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			23 rd September 2020
3	Design Organisation Response incorporated	Dominic Smith on behalf of i-Transport			7 th October 2020

Contents:

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2.0	Introduction	2
3.0	Items Raised in any previous Road Safety Audits	3
4.0	Items Raised in this Stage 1 Road Safety Audit	4
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	A.2 General	
	A.3 Junctions	
	A.4 Walking, Cycling and Horse Riding	
	A.5 Road Signs, Carriageway Markings and Lighting	
5.0	Audit Team Statement	10

Appendices:

Stage 1	A1	Documents and Drawings provided for this Road Safety Audit
	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 proposed highway works along Horesemere Green Lane and Church Lane in Ford, Arundel. The works include the provision of dropped kerb crossing point along Horesemere Green Lane as well as the provision of a missing footway link and 3 metre wide footway cycleway along the east side of Church Lane linking to the roundabout with the A259 to the south. The scheme is to facilitate a mixed use development of the Ford Airfield to provide circa 1,500 dwellings, a 60 bed care home, up to 9,000sq.m of employment floorspace, a local centre and a primary school as well as amenities and facilities.
- 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 September 2020 in accordance with the Road Safety Audit Brief provided, on the 10th August 2020 by the Design Organisation, i-Transport, on behalf of the Project Sponsor, Redrow Homes and Wates Developments. 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. 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

Farouk Bhatti *MCIHT*
Road Safety Auditor

- 2.5 The site visit associated with this Road Safety Audit was undertaken by the Audit Team Leader and Audit Team Member, during the afternoon of Wednesday 26th August 2020 between 2pm and 5:45pm. The site visit involved walking and driving around the local highway network for a 225-minute period whilst observing local infrastructure and current traffic conditions. The weather during the site visit was clear with scattered clouds, the road surface was dry and visibility was good. A number of pedestrians and cyclists were observed during the site visit. Vehicular traffic to include motorcycles, cars, passenger service vehicles, light and heavy goods vehicles were also observed.
- 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**.

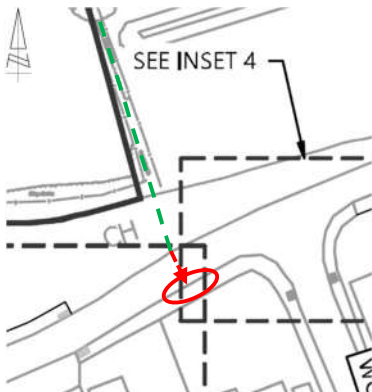
Design Organisation Response

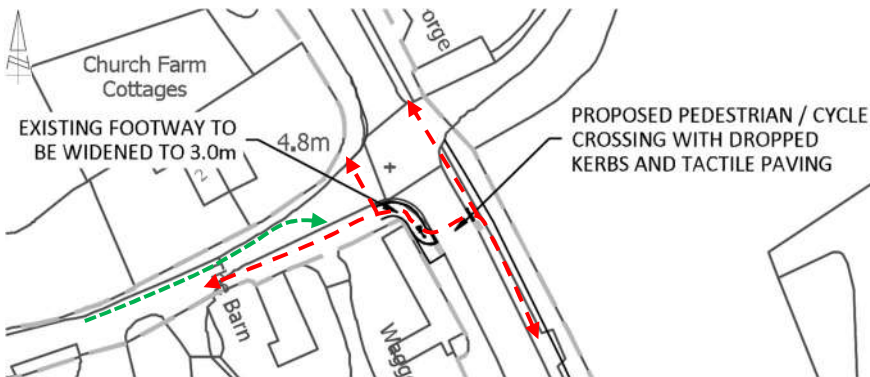
- 2.7 In accordance with national standards, this Road Safety Audit was finalised and issued to the Design Organisation as per the Road Safety Audit Report Template within Appendix D of GG119, which can be provided upon request from either the Audit Team or Design Organisation. The format of the Audit 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: Dominic Smith
Position / Organisation: Associate Partner, i-Transport LLP
- 2.9 Any drawings or documents associated with the Design Organisation Response are listed at **Appendix A3**, if applicable.

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 proposals.

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
	<i>No Road Safety Concerns in GENERAL have been raised at this stage</i>
A.3	JUNCTIONS
	<i>No Road Safety Concerns regarding JUNCTIONS have been raised at this stage</i>
A.4	WALKING CYCLING AND HORSE RIDING
A.4.1	PROBLEM
Location:	Public footway north of Horsemere Green Lane
Summary:	Insufficient/incomplete pedestrian crossing facility
Acc Type:	Pedestrian trips and falls
The scheme drawing provided with the Audit Brief identifies that sections of footway and a number of dropped kerb crossing points with tactile paving are to be provided along Horsemere Green Lane to provide a continuous facility where is currently broken. However, an existing public footpath is present off the north side of Horsemere Green Lane just the east of the proposed footway along the northern side. No dropped kerbs are provided at present allowing users of the footpath, easy and level access to the existing footway network and therefore pedestrians are required to negotiate full height kerbs. Full height kerbs could be a trip hazard for pedestrians, in particular, those who may rely on the use of tactile paving due to impaired visibility increasing the likelihood of trips and falls.	
RECOMMENDATION:	
It is recommended that dropped kerb crossing point is provided.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted – a dropped kerb crossing has been provided and shown in amended drawing ITB13091-GA-058 Rev A.	

A.4.2	PROBLEM
Location:	Proposed shared pedestrian / cyclist facility, Horesemere Green Lane & Church Lane
Summary:	Incomplete cyclist facilities are provided
Acc Type:	Vehicle-cyclist collisions and falls
The pedestrian infrastructure in the proximity of the proposed works provides a number of crossing points benefitting from dropped kerbs and tactile paving. The scheme drawing provided with the Audit Brief illustrates that a pedestrian / cyclist crossing point with tactile paving is to be provided on Church Lane linking the proposed 3.0-metre footway cycleway along the east side of Church Lane to a facility around the southern radius of Horesemere Green Lane. However, no details have been provided for the continuation or termination of the shared facility to the north or beyond the proposed crossing point facility along Horesemere Green Lane. As such, cyclists will be required to negotiate full height kerbs in order access the carriageway which could increase the likelihood of cyclist falls and vehicle-cyclist collisions.	
RECOMMENDATION:	
It is recommended that further measures are provided in order to allow cyclists to continue their journey.	
Location Plan:  	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020	
Accepted – additional measures have been incorporated for continuation of cyclist journeys and shown on drawing ITB13091-GA-600 Rev A. Facilities are provided facilities to cross Church Lane and subsequently re-join the northbound carriageway to continue journeys on carriageway, similarly, facilities are provided to enable southbound journeys to leave the carriageway and join the route. Facilities are also provided to enable cyclists to leave/join the Horesemere Lane carriageway and cross as necessary.	

A.4.3	PROBLEM
Location:	Proposed shared footway / cycleway, Horsemere Green Lane & Church Lane
Summary:	Visually impaired pedestrians could step into the path of a cyclist without warning
Acc Type:	Cyclist-pedestrian collisions
Church Lane and Horsemere Green Lane benefit from a footway one side of the carriageway, albeit there are some locations along Horsemere Green Lane where a footway is not present. The proposals include the provision of a 3.0-metre shared footway cycleway along the eastern side of Church Lane and southern side of Horsemere Green Lane at its junction, as well as providing a dropped kerb and tactile paving uncontrolled crossing point on Church Lane. However, no measures are proposed to inform users of the change of use where a footway meets the shared footway cycleway. Pedestrians, particularly the visually impaired, stepping from a footway to a shared facility without warning, could walk into the path of a cyclist raising the risk of a cyclist-pedestrian collision.	
RECOMMENDATION:	
It is recommended that sufficient warning is provided to highlight the change of use.	
Location Plan: 	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020 Accepted – corduroy paving and signage has been introduced to alert users to the change of use. The amendments are shown in drawing ITB13091-GA-600 Rev A.	
A.4.4	PROBLEM
Location:	Scheme
Summary:	Utility covers within a pedestrian desire line will be an obstruction
Acc Type:	Pedestrian trips and falls
Church Lane, Horsemere Green Lane and Yapton Road accommodate a number of utility covers within the existing footways, verges, and carriageways. Following the proposed works, a number of the utility covers will be located within the proposed footways and will become an obstruction and trip hazard if not relocated or adjusted adequately.	

RECOMMENDATION:

It is recommended that existing utility covers are relocated / adjusted appropriately

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – utility covers will be addressed as part of the detailed design.

A.4.5 PROBLEM

Location: Yapton Road

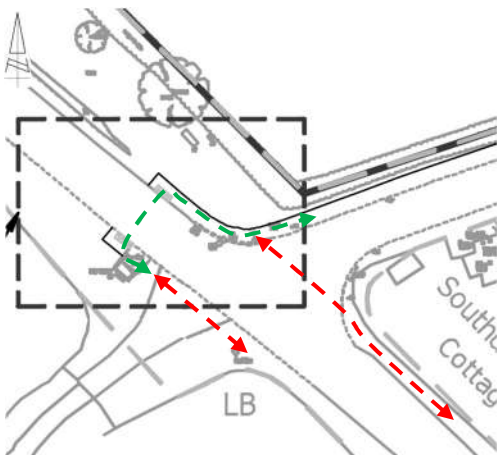
Summary: Pedestrian desire lines are present along Yapton Road

Acc Type: Pedestrian trips and falls and vehicle-pedestrian collisions

Yapton Road is subject to a 40mph speed limit and accommodates bus stops, allowing access to a service linking to destinations between Chichester and Littlehampton. No footway links are provided to the existing bus stops or an existing post box. The proposals provide a footway along the north side of Horsemere Green Lane to an uncontrolled crossing point allowing for pedestrians access to the bus stop on the western side of Yapton road, associated with a northbound service. However, pedestrians travelling to the bus stop associated with a southbound service would be required to walk within the verge of carriageway which could give rise to trips and falls or vehicle pedestrian collisions.

RECOMMENDATION:

It is recommended that a safe route for pedestrians is provided.

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23rd September 2020

Accepted – a pedestrian route has been incorporated into the design to allow for pedestrian access and is shown in drawing ITB13091-GA-058 Rev A.

A.4.6 PROBLEM

Location: Scheme

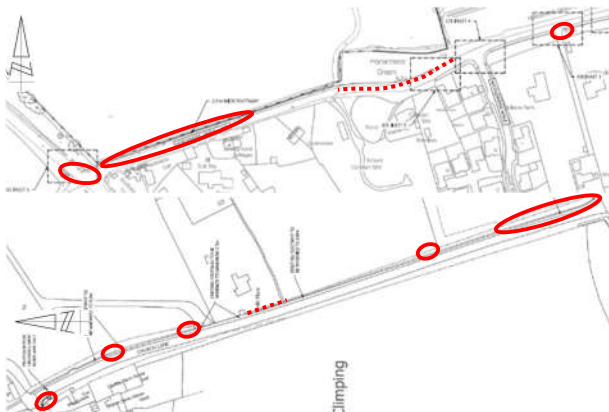
Summary: Existing signposts and street furniture will be an obstruction to users

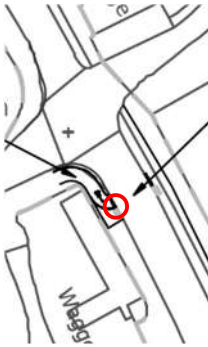
Acc Type: Pedestrian / cyclist collision with post

Street furniture to include wooden fencing, bollards, signage, telegraph/electric poles and street lighting columns are present within the existing footways and verges of the Church Lane, Horsemere Green Lane and Yapton Road. The proposals provide new sections of footways along pedestrian desire lines and widen sections of footway to allow for an upgrade to a footway cycleway. Existing items of street furniture will be located within the path of a pedestrian or cyclist. Signs, fencing and telegraph poles within a footway / cycleway will be an obstruction particularly for the visually impaired and could result in a pedestrian or cyclist striking the item of street furniture.

RECOMMENDATION:

It is recommended that signposts are located outside of non-motorised user facilities.

Location Plan:

DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – the provision and relocation of signage will be considered further as part of the detailed design.	
A.4.7	PROBLEM
Location:	Apple Tree Walk & Church Lane
Summary:	Road gullies within a pedestrian desire line will be an obstruction
Acc Type:	Pedestrian trips and falls
The carriageway in the vicinity of the proposed works benefits from a network of road gullies that provide for the drainage of surface water. Following implementation of the proposed crossing points, a number of these gullies will be situated within the path of pedestrian or cyclist crossing the carriageway. Gullies within a pedestrian desire line will be an obstruction particularly for pedestrians with high heels. The gully grates could also be hazardous for users of wheeled devices and give rise to falls.	
RECOMMENDATION:	
It is recommended that the gullies are relocated away from the desire line.	
Location Plan:    	
DESIGN ORGANISATION RESPONSE provided by i-Transport on the 7 th October 2020 following formal issue of this Stage 1 Road Safety Audit on the 23 rd September 2020	
Accepted – gullies and water drainage to be considered further as part of the detailed design.	
A.5	ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING
	<i>No Road Safety Concerns regarding ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING have been raised at this stage</i>

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: 23rd September 2020

Audit Team Member

Name: **Farouk Bhatti** MCIHT

Signed:



Position: Road Safety Engineer

Organisation: Fenley Road Safety Limited

Date: 23rd September 2020

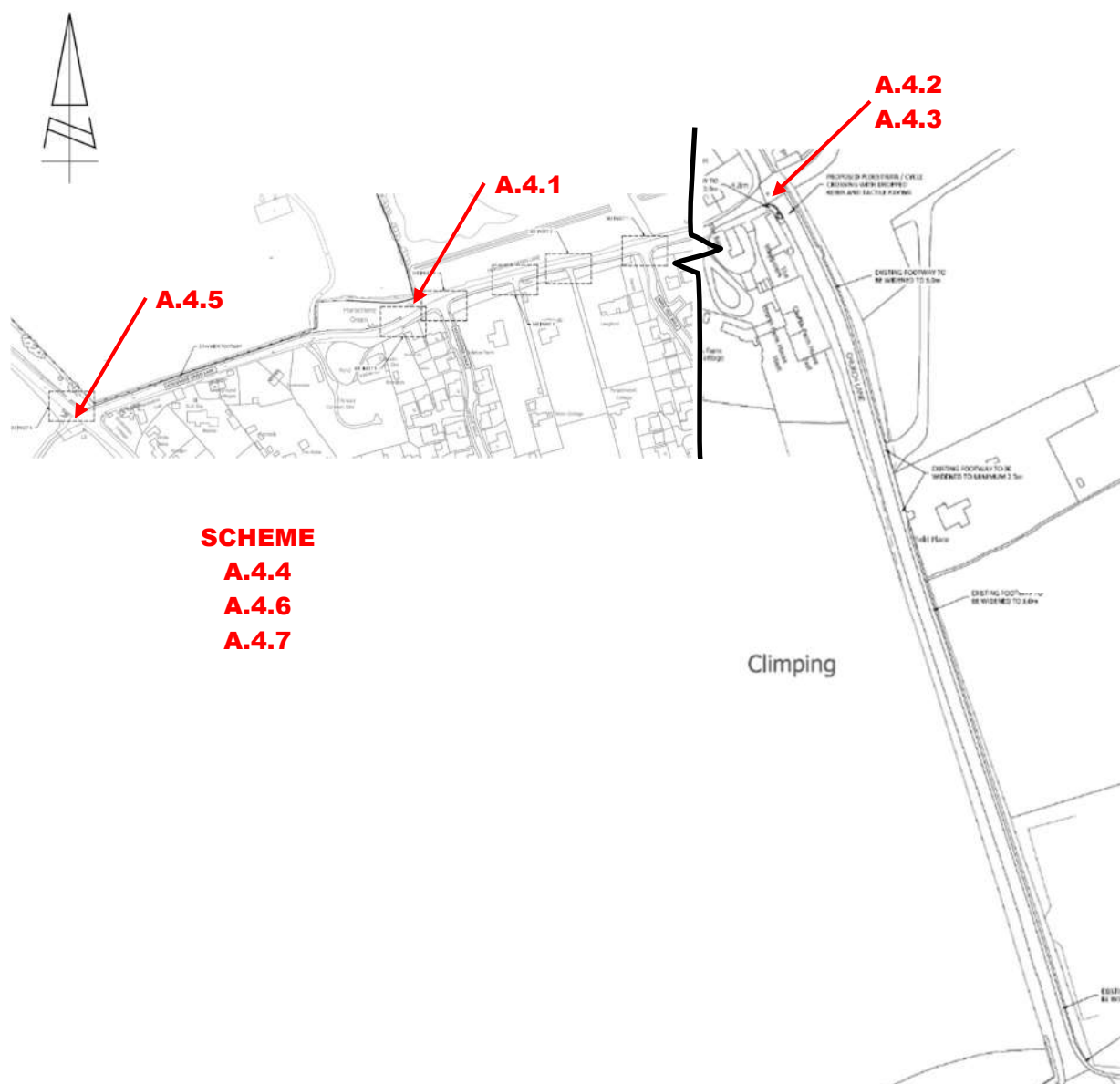
Appendix A1

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	DS/ITB13091-032		Road Safety Audit Brief 6
	DS/EF/AI/ITB13091-003E R	-	Transport Assessment
	<u>Dwg No.</u>	<u>Rev</u>	<u>Title</u>
	ITB13091-GA-058	-	Potential Pedestrian / Cyclist Improvements
	ITB13091-GA-600	-	Key Plan – Route 6 Church Lane – From Horsemere Green Lane to A259 Crookthorn Lane

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	ITB13091-GA-058	A	Potential Pedestrian / Cyclist Improvements
	ITB13091-GA-600	A	Key Plan – Route 6 Church Lane – From Horesemere Green Lane to A259 Crookthorn Lane

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