

BRAINTREE FLAGSHIP CYCLE ROUTE

STAGE 1 ROAD SAFETY AUDIT

Dated	24 th June 2019
Registration Code:	8145
Replicon Code:	E08-084N-007

1.0 INTRODUCTION

- 1.1 This report has been produced as a result of a Stage 1 Road Safety Audit (RSA) on the proposed Braintree Flagship Cycle Route. The audit has been carried out at the request of Connor Burr Assistance Project Manager at Jacobs (Contact: connor.burr@jacobs.com). The audit was undertaken during June 2019.
- 1.2 For the purpose of this audit, Connor Burr, is considered the “Project Sponsor” for this scheme and Marina Palasopoulou (Jacobs) is considered the “Designer”.
- 1.3 The purpose of this scheme is to provide improvements to existing cycling infrastructure. The proposal looks at existing use, condition and restrictions, to create a fast, continuous route and to encourage cycling for all users.
- 1.4 The RSA Team was formed of members of the Essex County Council/ Ringway Jacobs Partnership Road Safety Engineering Team (based at Seax House, Chelmsford, Essex, CM1 1QH). This report was prepared by those officers. The RSA Team membership was as follows:
- Adrian Carden (RSA Team Leader) - Road Safety Engineer; and
 - Gary Webster (RSA Team Member) - Road Safety Engineer;
- 1.5 The terms of reference for the RSA are as described in Chapter 2 of HD 19/15. The Audit Team has examined and reported only on the road safety implications of the proposals and has not examined or verified the compliance of the design to any other criteria. This safety audit does not perform a ‘technical check’ function on these proposals.
- 1.6 The Stage 1 RSA comprised an examination of the drawings and RSA brief provided by the design organisation, and a visit to the site on the afternoon of Thursday 13th June 2019. During the visit the weather was cool and partly cloudy, and the road surface was dry.
- 1.7 All comments and recommendations are referenced to the preliminary design drawing provided (where applicable) and the locations have been indicated on problem location plan appended to this report.
- 1.8 No previous Road Safety Audits have been undertaken on the proposed scheme.
- 1.9 Documents/drawings Provided:
- Essex Highways RSA Brief - Dated 30th May 2019;
 - B355376A-11-00-004 Rag analysis of proposed improvements Sheet 1 of 2;
 - B355376A-11-00-005 Rag analysis of proposed improvements sheet 2 of 2;

2.0 DEPARTURES FROM STANDARD

- 2.1 No details of any departures from standards have been provided to the Audit Team.

3.0 REVIEW OF PERSONAL INJURY COLLISION HISTORY

- 3.1 Personal injury collision data for the last five year period (01/05/2014 to 30/04/2019) for the proposed route has been reviewed and indicates that there has been five collisions recorded within the extents of the carriageway sections of the proposed route. There is no pattern to the collisions. There have been no reported collisions throughout the existing off carriageway facility.

4.0 ITEMS RAISED DURING THIS STAGE 1 RSA

4.1 GENERAL

4.2 PROBLEM

Location: Throughout the extents of the scheme

Summary: Potential for collisions between cyclists and pedestrians

Throughout the extents of the proposed route there is a mixture of tactile paving corduroy paving and a lack of appropriate signing. This could be confusing for pedestrians, particularly those who are visually impaired and could lead to conflict and collisions between cyclists and pedestrians.

RECOMMENDATION

It is recommended that a review of all shared/segregated cycle/pedestrian facilities is undertaken and remedial works made as part of the proposed scheme.

4.3 PROBLEM

Location: Proposed shared use facility to the south of Flitch Way

Summary: Potential for collisions between cyclists and pedestrians

During the site visit it was observed that the surface of the existing shared use facility is in poor condition and appears to be subsiding (See RSA1 Image 1 below). Further deterioration of the surface could lead to cyclists losing control and colliding with pedestrians and/or other cyclists.



RSA1 Image 1 – Existing shared facility surface

RECOMMENDATION

It is recommended that improvements are made to these facilities as part of these proposed to provide a suitable surface.

4.4 PROBLEM

Location: Existing segregated cycle/footway facility on Tortoiseshell Way

Summary: Potential for collisions between cyclists and pedestrians and trip hazard for pedestrians

During the site visit it was observed that the surface of the existing segregated facility on Tortoiseshell Way is in poor condition (See RSA1 Images 2 and 3 below). Further deterioration of the surface could lead to cyclists losing control and colliding with pedestrians and/or other cyclists. It could also present a trip hazard to pedestrians particularly those with mobility or visual impairment.



RSA1 Image 2



RSA1 Image 3

RECOMMENDATION

It is recommended that improvements are made to these surfaces as part of the proposed scheme.

4.5 PROBLEM

Location: Existing segregated cycle/footway facility on Tortoiseshell Way

Summary: Potential for collisions between cyclists and pedestrians

It was noted at the time of the site visit that there is low hanging vegetation obstructing the existing segregated facility on Tortoiseshell Way (see RSA1 Image 4 below). If not removed the vegetation cyclists may make sudden deviations in order to avoid striking the branches. This could lead to collisions with other cyclists or pedestrians.



RSA1 Image 4 – low hanging vegetation.

RECOMMENDATION

It is recommended that the vegetation is cut back/removed and maintained on a regular basis.

4.6 PROBLEM

Location: Existing segregated cycle/footway facility on B1256 London Rd Rbt.

Summary: Slip hazard for cyclists and pedestrians

During the site visit it was noted that there was a low area with standing water within the existing segregated facility adjacent to the roundabout at the junction of the B1256 and London Rd. (See RSA1 Image 5 below). In conditions of freezing weather this standing water could form to ice and present a hazard for both cyclists and pedestrians.



RSA1 Image 5 – Standing water within existing facility

RECOMMENDATION

It is recommended that improvements are made to these facilities as part of the proposed scheme.

4.7 PROBLEM

Location: Existing segregated cycle/footway facility to south of B1256 London Rd Rbt.

Summary: Potential for collisions between cyclists and pedestrians and trip hazard for pedestrians

It was noted at the time of the site visit that the surface of the existing shared use facility to south of B1256 London Rd Rbt. is poor condition (See RSA1 Image 6) Further deterioration of the surface could lead to cyclists losing control and colliding with pedestrians and/or other cyclists. It could also present a trip hazard to pedestrians particularly those with mobility or visual impairment.



RSA1 Image 5 – Surface in poor condition

RECOMMENDATION

It is recommended that improvements are made to these facilities as part of the proposed scheme.

4.8 THE ALIGNMENT

No Road Safety Problems identified

4.9 THE JUNCTIONS

No Road Safety Problems identified

4.10 NON MOTORISED ROAD USERS

4.11 PROBLEM

Location: Existing shared use facility in St Johns Avenue

Summary: Potential for injury to cyclists

During the site visit it was observed that the existing shared use facility in St Johns Avenue is immediately adjacent to an extremely steep embankment to an adjacent watercourse (see RSA1 Images 6 & 7 below). The Audit Team have concerns that cyclists or pedestrians, particularly young children, moving close to the edge of the shared facility may not be aware of the steep embankment and could fall leading to serious injuries.



RSA1 – Images 6 & 7 – Steep embankment close very to shared use facility

RECOMMENDATION

It is recommended that a pedestrian barrier is provided along this section of the cycle route.

4.12 PROBLEM

Location: Existing shared use facility in Tortoiseshell Way

Summary: Potential for collisions between cyclists and road traffic

During the site visit it was observed that there were a number of vehicles parked immediately adjacent to the crossing point on Tortoiseshell Way (See RSA1 Image 8 below). These parked vehicles present an obstruction to inter-visibility between cyclists/pedestrians and approaching motorists. This could lead to cyclists/pedestrian entering the carriageway and into the path of oncoming vehicles leading to injury.



RSA1 Image 8 – Vehicles parked close to crossing point

RECOMMENDATION

It is recommended that Waiting Restrictions are implemented in the vicinity of the crossing point to ensure that suitable inter-visibility between cyclists/pedestrians and motorists is provided.

4.13 PROBLEM

Location: Existing shared use facility in Tortoiseshell Way at junction with Meadow Park

Summary: Potential for collisions between cyclists and road traffic

Where the existing shared use facility crosses the junction of Meadow Park, the inter-visibility between north-east bound cyclists/pedestrians and approaching motorists is obstructed by vegetation and a small building within the Meadow Park grounds. With increased use of the shared facility this could result in an increased risk of collisions between north-east bound cyclists/pedestrians and traffic leaving Meadow Park. It is appreciated that this issue is an existing situation, however, if the route is being promoted to pedestrians and cyclists, there is likely to be an increase in the number of users.

RECOMMENDATION

It is recommended that any vegetation to the corner of the junction is cut back/removed and maintained on a regular basis. It is also recommended that the owners of Meadow Park are contacted to arrange for the implementation of warning signs for drivers leaving Meadow Park.

4.14 PROBLEM

Location: Existing shared use facility in Tortoiseshell Way at junction with London Rd

Summary: Potential for collisions between cyclists and pedestrians at bus stop

It was noted during the site visit that there is a worn track which circumvents the pedestrian guard rail at the junction of the existing shared use facility at Tortoiseshell Way and London Rd. (See RSA1 Image 9 below). Whilst there are no reported incidents at this location if the route is to be promoted to pedestrians and cyclists, there is likely to be an increase in the number of users. This could increase the likelihood of conflict and collisions between south-west bound cyclists and pedestrians at the bus stop area.



RSA1 Image 9 – Worn track adjacent to Bus Stop

RECOMMENDATION

It is recommended that additional panels of Pedestrian Guard Rail are installed to prevent the circumnavigation of the existing railings.

4.15 PROBLEM

Location: Existing shared use facility in London Road

Summary: Potential for collisions between cyclists/pedestrians and road traffic

Drawing B355376A-11-00-004 shows a note stating “*Short Term: Remove existing pedestrian guardrail. Remove lining, tactiles and signing associated with segregation and replace with unsegregated equivalents. Trim back vegetation to improve visibility. Provide toucan crossing*”. The Audit Team are concerned that if the Pedestrian Guard Rail is removed, pedestrians/cyclists wishing to travel onward to Great Notley High School or the Black Notley cycle route may choose a direct route across London Road and into the path of oncoming traffic (See RSA1 Image 10 below). It should also be noted that there is already an existing Toucan Crossing facility at this location (See RSA1 Image 11 below).



RSA1 Image 10



RSA1 Image 11

RECOMMENDATION

It is recommended that the existing pedestrian guard rail and Toucan crossing are retained.

4.16 SIGNING, LIGHTING, ROAD MARKINGS

4.17 PROBLEM

Location: Off carriageway section of existing facility within Tortoiseshell Way adjacent to River Brain

Summary: Increased risk of collisions between cyclists and pedestrians in dark conditions.

During the site visit it was observed that a lighting column within the green space area of Tortoiseshell Way had been damaged and removed (See RSA1 Image 12 overleaf). Whilst it is appreciated that this likely to be a maintenance issue, failure to provide an appropriate level of

lighting throughout the facility could lead to collisions between cyclists and pedestrians as well as increased security risk.



RSA1 Image 12

RECOMMENDATION

It is recommended that a review of all lighting is carried out for the extents of this scheme.

5.0 ADDITIONAL COMMENTS MADE DURING THIS STAGE 1 RSA

- 5.1 It was noted at the time of the site visit that there is a worn track where the proposed route joins the Flitch Way (See RSA1 Image 13 below). This would appear to be a desire line for existing users. It is recommended that the worn track is formalised as part of this scheme in order to ease transition from Flitch Way onto the proposed facility.



RSA1 Image 13

6.0 AUDIT TEAM STATEMENT

We certify that this audit has been undertaken in accordance with HD 19/15

AUDIT TEAM LEADER

Adrian Carden
Road Safety Engineer
Road Safety Engineering Team
Essex County Council/Ringway Jacobs
Seax House
Chelmsford
Essex, CM1 1QH

Signed: 

Date: 21/06/2019

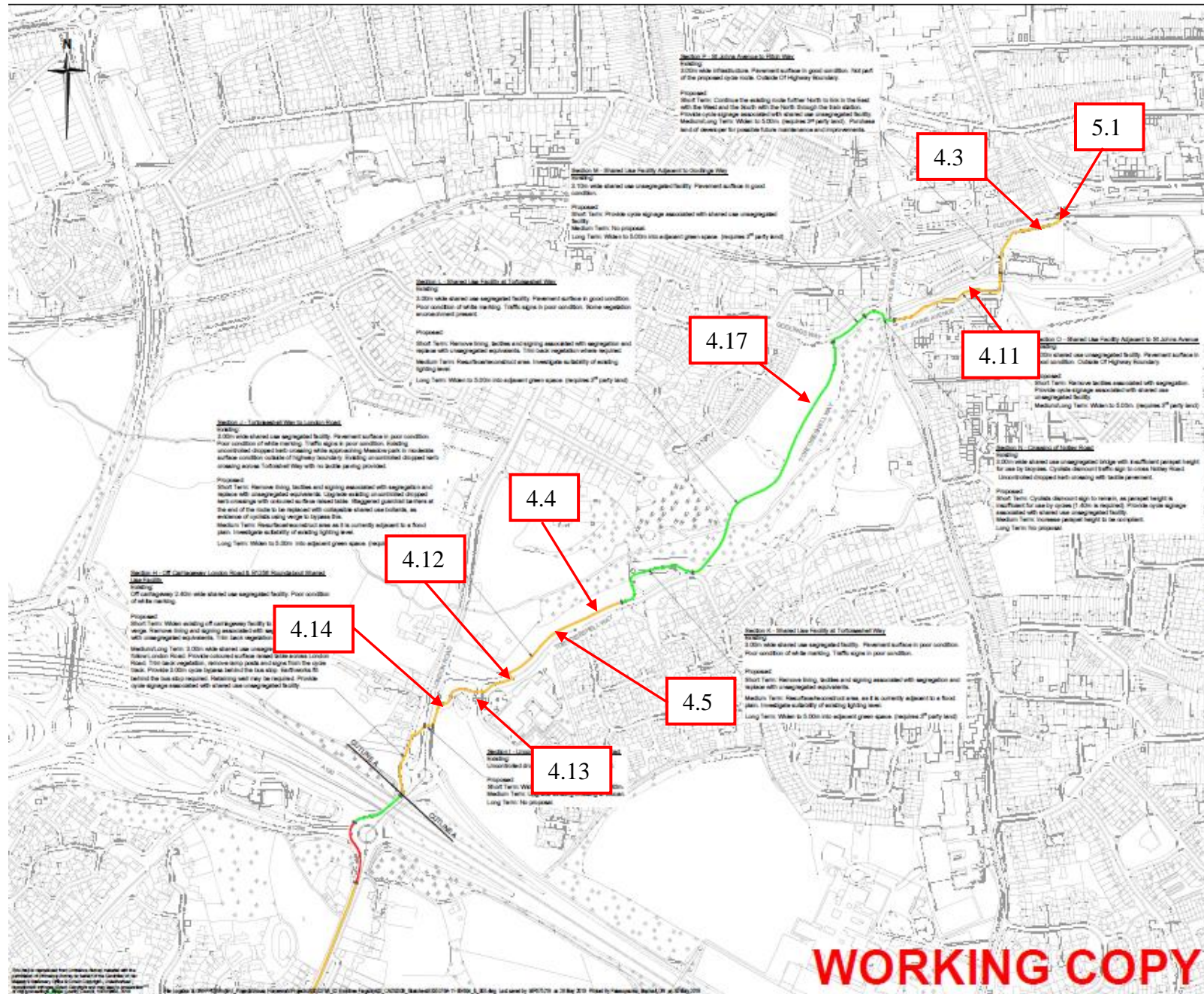
AUDIT TEAM MEMBER

Gary Webster
Road Safety Engineer
Road Safety Engineering Team
Essex County Council/Ringway Jacobs
Seax House
Chelmsford
Essex, CM1 1QH

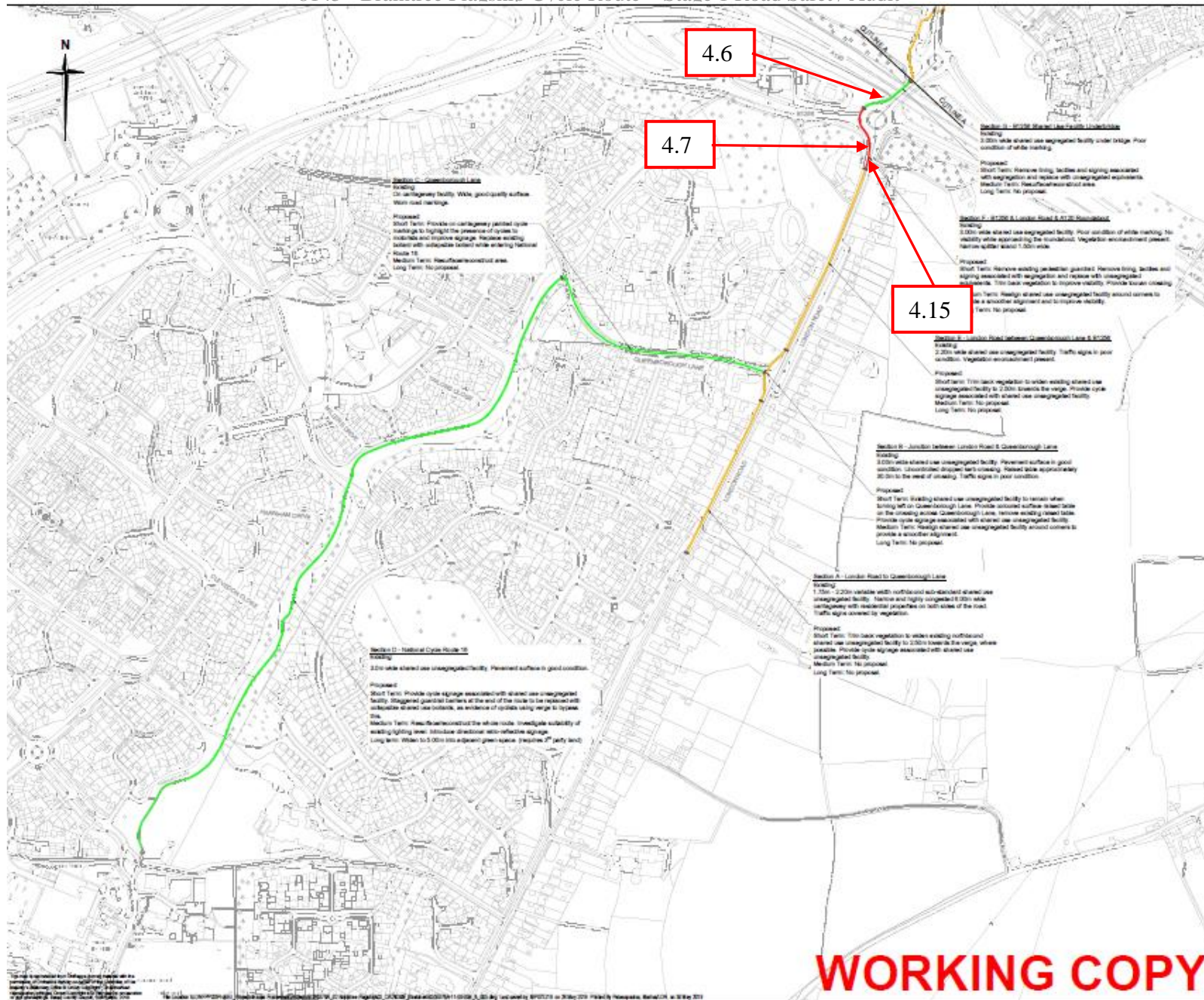
Signed: 

Date: 24/06/2019

7.0 STAGE 1 ROAD SAFETY AUDIT – PROBLEM LOCATION PLAN (PROBLEM 4.2 applies to the extents of the scheme)





8145 - Braintree Flagship Cycle Route – Stage 1 Road Safety Audit





WORKING COPY

APPENDIX A

Road Safety Audit Designers Response (Stage 1 RSA)			 	
* Designers Response to be read in conjunction with the Audit Report:				
Safety Audit Problem Number/ Summary	RSA Recommendation	Designers Response to Recommendation: Acceptance details + design proposals OR Rejection details + alternative design proposals	Audit Team Comments following designers response	Exception Report Required
DESIGN TEAM REPRESENTATIVE		ROAD SAFETY AUDIT TEAM LEADER		
Name*:		Name:		
Position:		Position:		
Signed:		Signed:		
Date:		Date:		

*The design team have carefully considered the problems and recommendations raised as part of this Road Safety Audit Report.

APPENDIX B

Road Safety Audit Exception Report		 	
Please read in conjunction with Appendix A Designers Response and Road Safety Audit Report			
Safety Audit Problem Number	Designers Response to rejected RSA Recommendation:	Audit teams Comments following designers response	Project Sponsor Statement
PROJECT SPONSOR			
Name:	Position:	Signed:	Date:
Additional Comments:			

SENIOR ROAD SAFETY ENGINEER DECISION IF ARBITRATIONAL REVIEW REQUIRED			
Name:	Position:	Signed:	Date:
<i>The Project Sponsor Statement as part of this Exception Report is accepted</i> <i>The Project Sponsor Statement as part of this Exception Report is rejected:</i> <i>(please delete as appropriate)</i> <i>Arbitrational Review Required: Yes / No</i> <i>(please delete as appropriate)</i>			

8145 - Braintree Flagship Cycle Route – Stage 1 Road Safety Audit

ARBITRATIONAL REVIEWER			
Name:	Position:	Signed:	Date:
<i>The Project Sponsor Statement as part of this Exception Report is accepted (*):</i> <i>The Project Sponsor Statement as part of this Exception Report is rejected: (**):</i>			

(*)Following acceptance the Project Sponsor will instruct the design team accordingly

(**) Following rejection the Project Sponsor will obtain the final decision from ECC commissioning team.

ECC COMMISSIONING TEAM (FINAL DECISION)			
Name:	Position:	Signed:	Date:
<i>This Exception Report is accepted</i> <i>This Exception Report is rejected:</i>			