



The Old Council Yard
Heddingham Road
Great Yeldham
Essex, CO9 4HS

Wrottesley Road Safety Improvement

Combined Stage 1 & 2 Road Safety Audit

Ref: 16HH-RSA-01

Prepared for:



Brent Council



Steer

By:

Capital Traffic

Prepared by: Jonathan Thompson, Audit Team Member

Checked by: Andy Haunton, Audit Team Leader

Approved by: Andy Haunton, Audit Team Leader

Version	Status	Date
A	Audit report issued to Client	7 th January 2019
B	Steer comments issued to LB Brent	30 th January 2019

1.0 INTRODUCTION

1.1 Commission

- 1.1.1 This report results from a Combined Stage 1 & 2 Road Safety Audit carried out on the proposed road safety improvements to the Wrotesley Road / Harrow Road junction in Brent, NW10.
- 1.1.2 The Audit was undertaken by Capital Traffic in accordance with the Audit Brief confirmed on 19th December 2018. It took place at the Great Yeldham offices of Capital Traffic during early January 2019 and comprised an examination of the documents provided as listed in Appendix A, plus a visit to the site of the proposed scheme.
- 1.1.3 The visit to the site of the proposed scheme was made between 11:00 and 12:00hrs on 3rd January 2019. During the site visit, the weather was overcast and the existing highway surfaces were dry. Vehicular traffic flows were observed to be moderate, with traffic fully clearing from each arm of the junction during each phase. Pedestrian flows were seen to be quite low and only a few cyclists were noted.

1.2 Terms of Reference

- 1.2.1 The Terms of Reference of this Audit are as described in TfL Procedure SQA-0170 dated May 2014. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and how it impacts on all road users and has not examined or verified the compliance of the designs to any other criteria. However, 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 without touching on technical audit. An absence of comment relating to specific road users / modes in Section 3 of this report does not imply that they have not been considered; instead the Audit Team feels they are not adversely affected by the proposed changes.
- 1.2.2 This Safety Audit is not intended to identify pre-existing hazards which remain unchanged due to the proposals; hence they will not be raised in Section 3 of this report as they fall outside the remit of Road Safety Audit in general as specified in the procedure SQA-0170. Safety issues identified during the Audit and site visit that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in Section 4 of this report.
- 1.2.3 Nothing in this Audit should be regarded as a direct instruction to include or remove a measure from within the scheme. Responsibility for designing the scheme lies with the Designer and as such the Audit Team accepts no design responsibility for any changes made to the scheme as a result of this Audit.
- 1.2.4 In accordance with TfL Procedure SQA-0170, this Audit has a maximum shelf life of 2 years. If the scheme does not progress to the next stage in its development within this period, then the scheme should be re-audited.
- 1.2.5 Unless general to the scheme, all comments and recommendations are referenced

to the detailed design drawings and the locations have been indicated on the plan located in Appendix B.

- 1.2.6 It is the responsibility of the Design Organisation to complete the Designer's response section of this Audit report. Where applicable and necessary it is the responsibility of the Client Organisation to complete the Client comment section of this Audit report. Signatures from both the Design Organisation and Client Organisation must be added within Section 5 of this Audit report. A copy of which must be returned to the Audit Team.

1.3 Main Parties to the Audit

1.3.1 Client Organisation

Client contact details: Brent Council

1.3.2 Design Organisation

Design contact details: Lee Deacon - Steer

1.3.3 Audit Team

Audit Team Leader: Andy Haunton – Capital Traffic

Audit Team Member: Jonathan Thompson – Capital Traffic

Audit Team Observer: None

1.3.4 Other Specialist Advisors

Specialist Advisor Details: None appointed

1.4 Purpose of the Scheme

- 1.4.1 The scheme proposes to provide an additional pedestrian crossing phase at the Wrotesley Road / Harrow Road signalised junction.

1.5 Special Considerations

- 1.5.1 None noted.

2.0 ITEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1 The Audit Team is not aware of any other road safety audits having been carried out on the proposals.

3.0 ITEMS RAISED AT THIS COMBINED STAGE 1 & 2 ROAD SAFETY AUDIT

3.1 JUNCTIONS

3.1.1 PROBLEM

Location: A – Wrotesley Road stop line.

Summary: Increased risk of nose-to-tail shunts.

Forward visibility along Wrotesley Road towards the stop line is significantly constrained by the vertical alignment, passing over a hump-backed railway bridge. The proposed cycle reservoir will further reduce visibility towards the vehicular stop line as drivers crest the bridge. Hence, this may increase the risk of shunt collisions between vehicles cresting the bridge and others ahead queuing back from the stop line.



RECOMMENDATION

Delete the proposed cycle reservoir from this arm of the junction.

Design Organisation Response	Accepted / Part Accepted / Rejected
<p>The existing stop line is not visible on the approach to the junction, but the existing layout attempts to address this through the provision of an advance warning sign outside Nos. 3 and 5 Wrotesley Road, backing boards on the (taller than usual) signal heads and anti-skid on the approach. The proposed cycle reservoir on Wrotesley Road approach will move the stop line back by 5m, and as the warning and signals (unchanged) are the primary indicators in advance of the junction, it is</p>	

suggested that the inclusion of the ASL will not significantly change the risk. It is therefore recommended to introduce the ASL as per the design provided.

Client Organisation Comments

There is an upcoming resurfacing programme to refresh the junction area. The suggested section of Wrottesley Road would be included for the extension of the anti-skid surfacing on Wrottesley Road.

End of list of problems identified and recommendations offered in this Combined Stage 1 & 2 Road Safety Audit

4.0 ISSUES IDENTIFIED DURING THE COMBINED STAGE 1 & 2 ROAD SAFETY AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

Safety issues identified during the audit and site inspection that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in this section. It is to be understood that, in raising these issues, the Audit Team in no way warrants that a full review of the highway environment has been undertaken beyond that necessary to undertake the Audit as commissioned.

4.1 ISSUE

Location: B – Wrottesley Road approach to the junction.

Summary: Drivers approaching the junction to turn right along the wrong side of the carriageway.

Reason considered to be outside the Terms of Reference: Existing issue.

During the site visit one driver was seen approaching the Wrottesley Road junction along the wrong side of the carriageway, intending to turn right. The driver's confusion appeared to have arisen from a combination of the vertical and horizontal alignments, the worn state of the road markings and a directional sign indicating lanes at the junction. This may have been a one-off or rare occurrence, but could have resulted in an injury collision if other road users had not drawn the drivers' attention to their error. It is recommended that this circumstance be investigated further; however, refreshing of all the road markings approaching the junction along Wrottesley Road may help to avert similar future occurrences.



Design Organisation Response	Accepted / Part Accepted / Rejected
The road markings approaching the junction will be refreshed as part of this scheme and/or the forthcoming resurfacing works.	
Client Organisation Comments	
Accepted.	

4.2 ISSUE

Location: Overall junction area.

Summary: Poor condition of highway assets.

Reason considered to be outside the Terms of Reference: Existing maintenance issue.

The carriageway surface on the Wrotesley Road approach and road markings generally around the junction are in a poor state of repair. Pedestrian guard railings (PGR) in several locations have sustained collision damage. It is recommended that maintenance of these highway assets should be carried out when the improvement scheme is implemented. With respect to the PGR, this could take the form of removal subject to an appropriate assessment having been made.



Design Organisation Response	Accepted / Part Accepted / Rejected
The road markings approaching the junction will be refreshed as part of this scheme and/or the forthcoming resurfacing works.	
Client Organisation Comments	
Accepted.	

5.0 SIGNATURES AND SIGN-OFF

5.1 AUDIT TEAM STATEMENT

We certify that we have examined the drawings and documents listed in Appendix A. to this Safety Audit report. The Road Safety Audit has been carried out in accordance with TfL Procedure SQA-0170, with the sole purpose of identifying any feature that could be removed or modified in order to improve the safety of the measures. The problems identified have been noted in this report together with associated suggestions for safety improvements that we recommend should be studied for implementation.

No one on the Audit Team has been involved with the design of the measures.

AUDIT TEAM LEADER:

Name: Andy Haunton BEng (Hons) MCIHT FSoRSA Signed: 

Position: Director Date 07/01/2019

Organisation: Capital Traffic

Address: The Old Council Yard, Hedingham Road, Great Yeldham,
Essex CO9 4HS

Contact: enquiries@capitaltraffic.co.uk (01787 237 509)

AUDIT TEAM MEMBER:

Name: Jonathan Thompson IEng FIHE MSoRSA Signed: 

Position: Director Date 07/01/2019

Organisation: Capital Traffic

Address: The Old Council Yard, Hedingham Road, Great Yeldham,
Essex CO9 4HS

Contact: enquiries@capitaltraffic.co.uk (01787 237 509)

5.2 DESIGN TEAM STATEMENT

In accordance with SQA-0170, I certify that I have reviewed the items raised in this Combined Stage 1 & 2 Road Safety Audit report. I have given due consideration to each issue raised and have stated my proposed course of action for each in this report. I seek the Client Organisations endorsement of my proposals.

Name: Lee Deacon

Position: Associate Director

Organisation: Steer

Signed: 

Dated: 30/01/19

5.3 CLIENT ORGANISATION STATEMENT

I accept these proposals by the Design Organisation.

Name: Annesley Tennent

Position: Traffic Engineer

Organisation: LB of Brent

Signed: 

Dated: 30 January 2019

APPENDIX A

Documents Forming the Audit Brief

DRAWING NUMBER

23185201-SDG-HGN-100-DR-D-01001 - REV B

DRAWING TITLE

OPTION 1

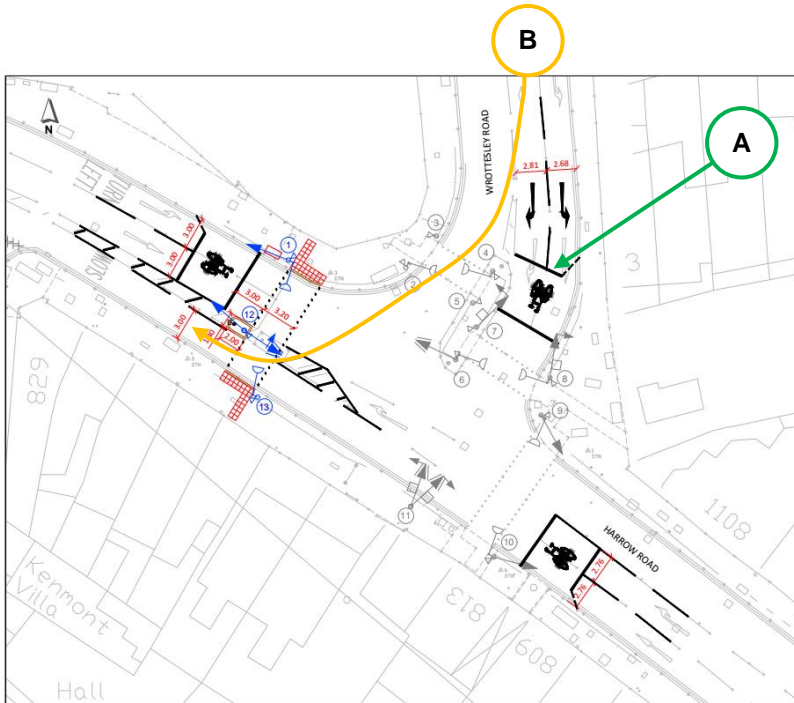
DOCUMENTS

- Safety Audit Brief
- Site Location Plan
- Traffic signal details
- TfL signal safety checklist
- Departures from standard
- Previous Road Safety Audits
- Previous Designer Responses
- Collision data
- Collision plot
- Traffic flow / modelling data
- Pedestrian flow / modelling data
- Speed survey data
- Other documents

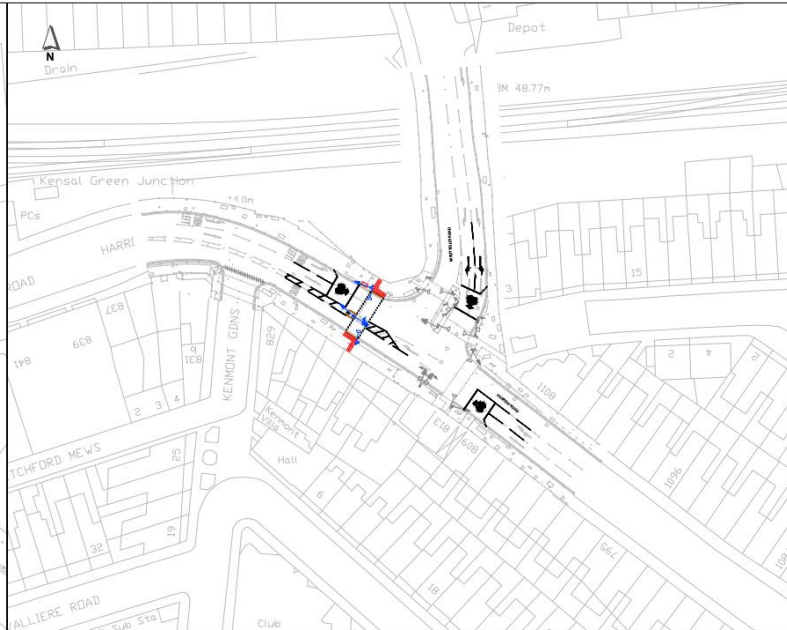
DETAILS (where appropriate)

APPENDIX B

Problem Locations



SCHEME PLAN
SCALE 1:200

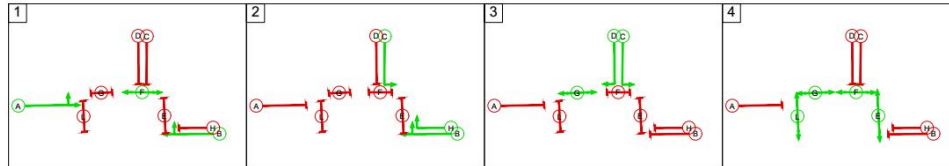


SCHEME PLAN
SCALE 1:500

- NOTES:**
- EXISTING FEATURES ARE SHOWN IN GREY AND PROPOSED FEATURES IN BOLD, UNLESS OTHERWISE STATED.
 - DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT REFER TO THE PROJECT MANAGER FOR CLARIFICATION.
 - SIGNAL POLE LOCATION IS INDICATIVE.

- KEY:**
- PROPOSED ROAD MARKINGS
 - PROPOSED KERLINE
 - ▨ PROPOSED RED BLUSTER TACTILE PAVING
 - B PROPOSED KEEP LEFT RETRO-REFLECTIVE BOLLARD
 - ➡ PROPOSED PRIMARY TRAFFIC SIGNAL POLE LOCATION
 - ➡ PROPOSED SECONDARY TRAFFIC SIGNAL POLE LOCATION
 - ⊞ PROPOSED PUSH BUTTON
 - ⊞ PROPOSED TWO ASPECT FARSIDE PEDESTRIAN SIGNAL

Proposed Signal Staging Diagram:



DRAFT

B	12/06/18	TACTIC ISLAND AMENDMENTS	DDB	PVC	LMD
A	08/05/18	ASX ADDRD PEDESTRIAN AMENDMENTS	DDB	PVC	LMD
P1	19/01/18	ORIGINAL ISSUE	DDB	PVC	LMD
Rev.	Date	Comments	Des	Chk	App

steer davies gleave
t +44 (0)20 7910 5000 e sdginfo@sdgworld.net

Client:
BRENT COUNCIL

Project Title:
WROTTESELEY ROAD SAFETY IMPROVEMENTS

Drawing Title:
OPTION 1

Status:
WORK IN PROGRESS

Drawing Number:	Scale:	Suitability
23185201	1:500	S0
Rev:	Rev:	Size:
B	B	A1



01001