

ROAD SAFETY AUDIT RESPONSE REPORT

A27 ARUNDEL ROAD / B2132 YAPTON LANE - EXTENSION OF A27 RIGHT TURN LANE

STAGE 1

30 August 2017

PREPARED BY:

i-Transport for Wates Developments
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On behalf of:

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AUTHORISATION SHEET

Project: A27 Arundel Road / B2132 Yapton Lane - extension of A27 right turn lane

Report Title: Stage 1 Road Safety Audit Response Report

PREPARED BY:

Name: Tim Wall

Position: Design Team Leader

Signed: *Tim Wall*

Organisation: i-Transport for Wates Developments

Date: 30 August 2017

APPROVED BY:

Name: David Bowie

Position: Project Sponsor

Signed:

Organisation: Highways England

Date:

Route Number: A27

Road Name: Arundel Road

Scheme: A27 Arundel road / B2132 Yapton Lane - extension of A27 right turn lane

Road Safety Audit: Stage 1

1 INTRODUCTION

- 1.1 This Road Safety Audit Response Report relates to the Stage 1 Road Safety Audit Report for the A27 Arundel Road / B2132 Yapton Lane - extension of A27 right turn lane. The Stage 1 Road Safety Audit was produced by M & S Traffic Ltd (reference IT/11324RT/1/BS) and is dated 27 August 2017.
- 1.2 The Stage 1 Road Safety Audit Brief comprised of a set of the preliminary design drawings, a summary of the general details of the scheme including traffic flows, 5-year crash data, predicted queue lengths, Non-Motorised User context and Audit Reports, assembled by the Design Team for the scheme and sent by the Overseeing Organisation Project Sponsor (David Bowie) to the Road Safety Audit Team for examination. The Road Safety Audit Report was prepared and issued by the Road Safety Audit Team Leader, Bryan Shawyer of M & S Traffic Ltd.
- 1.3 The proposed scheme comprises the extension of the right turn lane on the western A27 arm approach to Yapton Lane. The right turn lane is currently approximately 110m in length and it is proposed to extend this to 220m in order to bring the design of the right turn lane in line with DMRB TD42/95 standards (for a design speed of 120kph). The right turn lane will then comprise; a 110m deceleration lane, an 80m turning length and a 30m direct taper.
- 1.4 The Design Team have carefully considered the problems and recommendations in the Stage 1 Road Safety Audit Report. This Road Safety Audit Response Report includes all of the problems and recommendations raised by the Road Safety Audit Team, as well as the Design Team's response to these issues.

KEY PERSONNEL

1.5 Overseeing Organisation

Project Sponsor – David Bowie (Highways England)

1.6 Road Safety Audit Team

Road Safety Audit Team Leader – Bryan Shawyer (M & S Traffic Ltd)
Road Safety Audit Team Member – Martin Morris (M & S Traffic Ltd)

1.7 Design Organisation

Design Team Leader – Tim Wall (i-Transport LLP)
Design Team Member – Matthew Craddy (i-Transport LLP)
Design Team Member – Zane Beswick (i-Transport LLP)
Design Team Member – Scott Harvey (i-Transport LLP)

2 ITEMS RAISED AT THE STAGE 1 ROAD SAFETY AUDIT

2.1 GENERAL

2.2 PROBLEM

Location: A - A27 eastbound approach to junction.

Summary: Ponding of surface water combined with carriageway profile changes could lead to loss of control accidents.

The kerblines on the centre reservation are being amended as part of these proposals. Consequently, the position of the existing gully on the westbound carriageway may be in an unsuitable position to achieve positive carriageway drainage, leading to possible ponding. Ponding on the carriageway could lead to loss of control accidents in wet or icy conditions.

Recommendation:

That horizontal and vertical profiles should be such that water is shed, or that the gully is relocated to prevent ponding.

Design Team Response:

Agreed – At the Detailed Design Stage a full drainage design will be prepared to ensure that positive drainage of the central turning area is achieved, and any necessary changes to gully positions will be identified and included in the design. It is expected that the gully located on the A27 westbound, which takes water from the central reserve area, will be relocated as part of the proposals. This is indicated on Drawing ITB11320-GA-014 Rev C.

The Stage 2 Road Safety Audit will consider the detail of the drainage design including the location of the westbound gully.

2.3 THE ALIGNMENT

2.4 No Problems Raised

2.5 THE JUNCTIONS

2.6 No Problems Raised

2.7 NON-MOTORISED USERS (NMUs)

2.8 No Problems Raised

2.9 SIGNING AND LIGHTING

2.10 PROBLEM

Location: B – A27 eastbound approach to junction.

Summary: Position and specification of a local direction sign could compromise road safety.

There is an existing local directional sign in the central reservation, indicating destinations and distances for right turning traffic, see figure 1 below, where no details of the relocation or removal of this sign have been provided. Amendments to the central reservation may position this sign in the carriageway running lane. Further, the sign is not passive and is situated at the end of a right turn lane, which is proposed to be extended, where there is potential for greater approach speeds. In the event of a loss of control accident, collision with a non-passive sign could increase the severity of the accident.

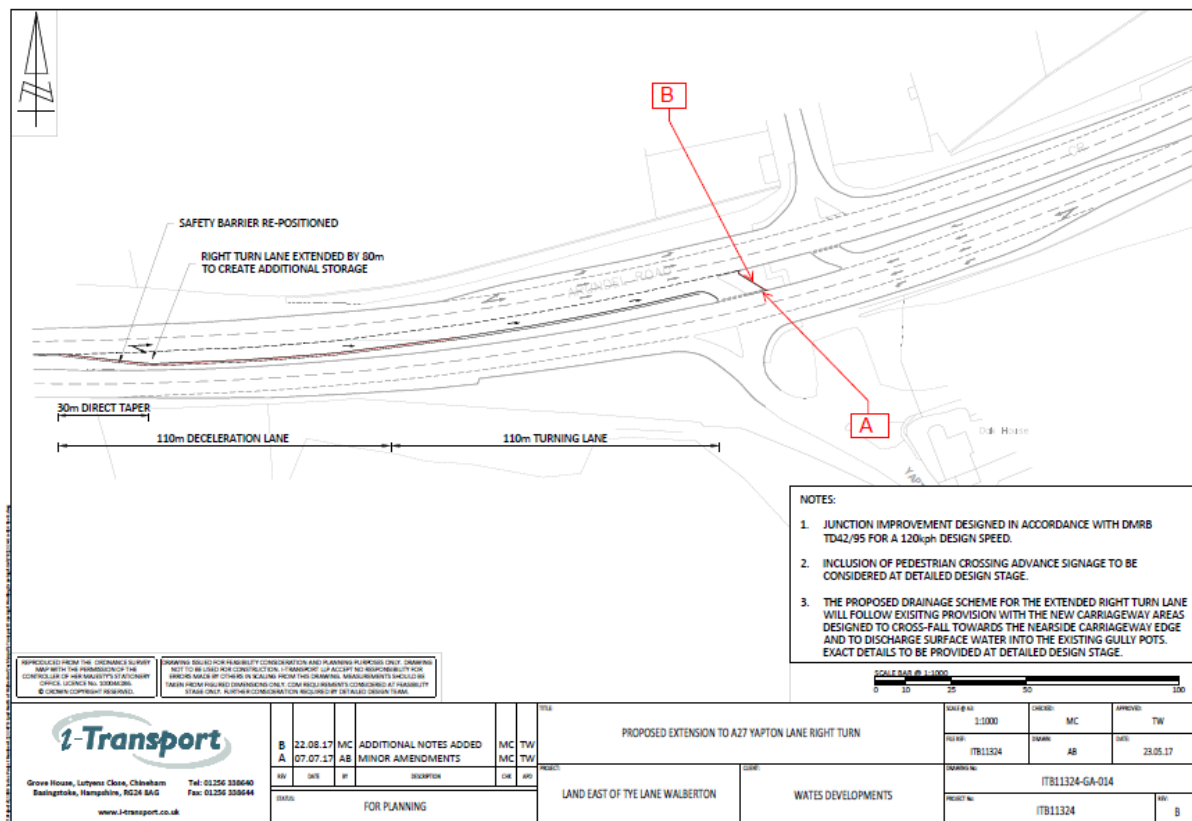
Recommendation:

That the sign should be repositioned within the verge area of the central reservation and that this sign should be passive.

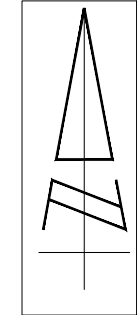
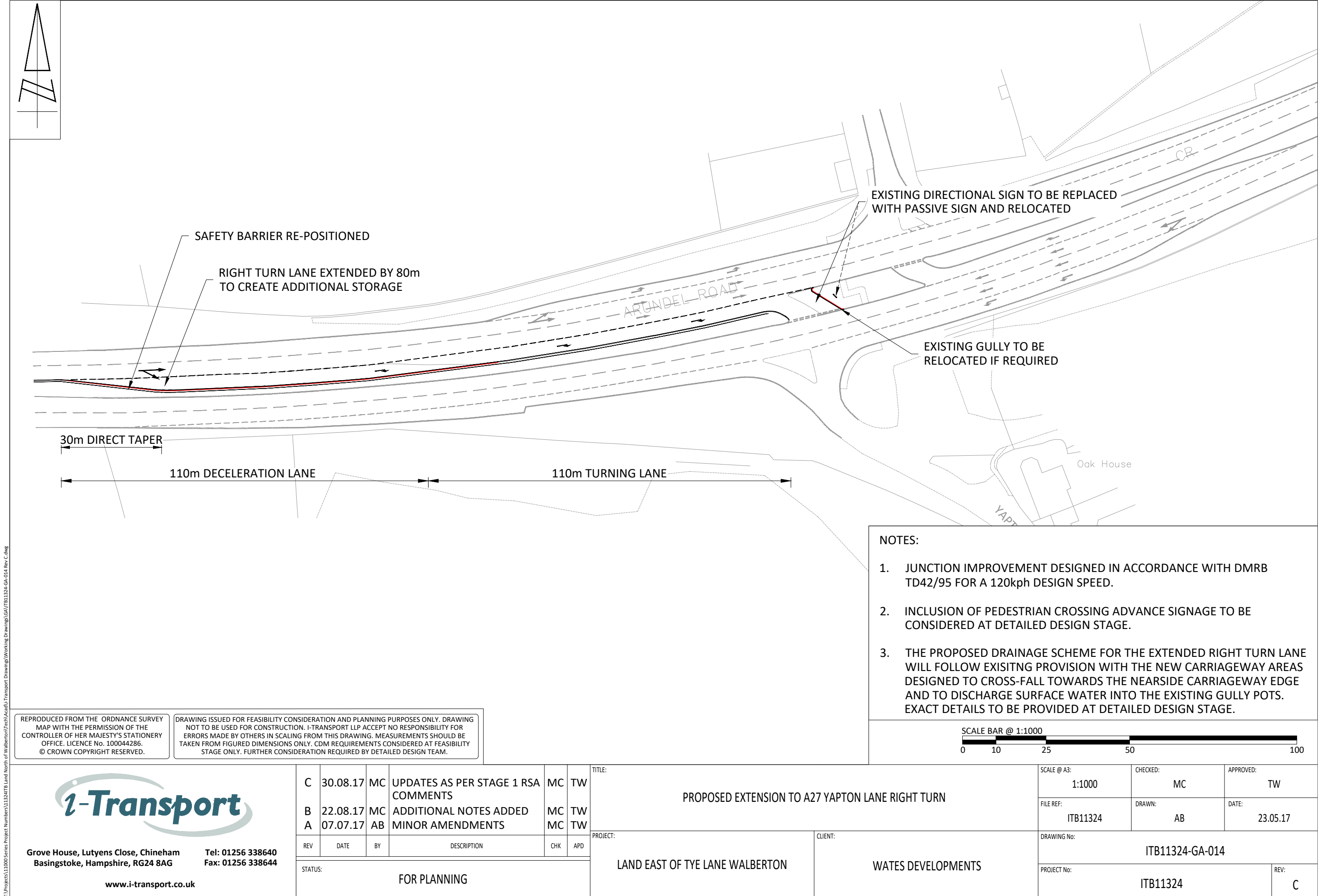
Design Team Response:

Agreed – The sign will be replaced with a passive sign and relocated into the adjacent verge area. This is indicated on Drawing ITB11320-GA-014 Rev C.

Appendix A – Problem Location Plan from Stage 1 Road Safety Audit



Appendix B – Updated Design Drawings to reflect Designers Response



EXISTING DIRECTIONAL SIGN TO BE REPLACED
WITH PASSIVE SIGN AND RELOCATED

SAFETY BARRIER RE-POSITIONED

RIGHT TURN LANE EXTENDED BY 80m
TO CREATE ADDITIONAL STORAGE

EXISTING GULLY TO BE
RELOCATED IF REQUIRED

30m DIRECT TAPER

110m DECELERATION LANE

110m TURNING LANE

NOTES:

1. JUNCTION IMPROVEMENT DESIGNED IN ACCORDANCE WITH DMRB TD42/95 FOR A 120kph DESIGN SPEED.
2. INCLUSION OF PEDESTRIAN CROSSING ADVANCE SIGNAGE TO BE CONSIDERED AT DETAILED DESIGN STAGE.
3. THE PROPOSED DRAINAGE SCHEME FOR THE EXTENDED RIGHT TURN LANE WILL FOLLOW EXISITNG PROVISION WITH THE NEW CARRIAGEWAY AREAS DESIGNED TO CROSS-FALL TOWARDS THE NEAR SIDE CARRIAGEWAY EDGE AND TO DISCHARGE SURFACE WATER INTO THE EXISTING GULLY POTS. EXACT DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

SCALE BAR @ 1:1000



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C	30.08.17	MC	UPDATES AS PER STAGE 1 RSA COMMENTS	MC	TW
B	22.08.17	MC	ADDITIONAL NOTES ADDED	MC	TW
A	07.07.17	AB	MINOR AMENDMENTS	MC	TW
REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: FOR PLANNING					

TITLE: PROPOSED EXTENSION TO A27 YAPTON LANE RIGHT TURN		SCALE @ A3: 1:1000	CHECKED: MC	APPROVED: TW
PROJECT: LAND EAST OF TYE LANE WALBERTON		FILE REF: ITB11324	DRAWN: AB	DATE: 23.05.17
CLIENT: WATES DEVELOPMENTS		DRAWING No: ITB11324-GA-014		
		PROJECT No: ITB11324		REV: C