



**Road Safety Audit
Stage 1**

**Housing Development
Warburton Lane, Trafford
Combined Site Accesses**

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Road Safety Audit Stage 1

Housing Development Warburton Lane, Trafford Combined Site Accesses

Report Produced for; -

Redrow Homes

Report Produced by; -

Jonathan Birkett

Report Dated; -

28 November 2018

Report Reference; -

JHB/CSWLRSA1Rev0

Road Safety Audit Team Leader; -

Jonathan Birkett



Housing Development, Combined Site Accesses, Warburton Lane, Trafford Safety Audit Stage 1

Contents Amendment Record

This report has been issued & amended as follows:

Issue	Revision	Description	Date	Signed
1	0	Draft Report	21.11.18	JB
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This report has been circulated, as follows:

Person	Organisation	No. of Copies	Date
	Redrow Homes	Electronic	28.11.18
T Harrigan	SCP	Electronic	28.11.18
G Kidd	JHB Consultancy Ltd	Electronic	28.11.18



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Appendix A - Documents Forming the Brief

Appendix B – Problem(s) Location Plan(s)



1 Introduction

1.1 Commission and Terms of Reference

- 1.1.1 This report has been prepared in response to a request to undertake a Stage 1 Road Safety Audit (i.e. carried out prior to detailed design) by Redrow Homes. The scheme submitted for Audit are the proposed new ghost island right turn priority accesses to both the western and eastern sites, A6144 Warburton Lane, Trafford. The Audit is only of the new ghost island junctions and not the Section 38 internal road layout. Warburton Lane is subject to a 40mph speed limit which includes street lighting.
- 1.1.2 The audit comprised an examination of documents forming the Audit Brief and an examination of the site. The documents were made available to the Road Safety Audit Team by Tony Harrigan (SCP) on the instructions of Redrow Homes on behalf of the Highway Authority Trafford Council. The total documents forming the Audit Brief are listed in **Appendix A**.
- 1.1.3 Generally, the Brief comprised:
- Brief.
 - Drawing.
- 1.1.4 Collision data was not available. However, the Audit Team looked at the most recent 5 years of collision data on the Crashmap website. There have been no collisions along the proposed site frontage.
- 1.1.5 Traffic count data was not available.
- 1.1.6 Speed data was not available.
- 1.1.7 It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit Stage 1 requested.
- 1.1.8 The Road Safety Audit Team membership approved by Redrow Homes on behalf of the Highway Authority was:
- JONATHAN BIRKETT IENG MICE MSORSA
Holder of Certificate of Competency
Road Safety Audit Team Leader
- GILLIAN KIDD
Road Safety Audit Team Member



- 1.1.9 The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in **Appendix A** of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.
- 1.1.10 The site was visited on the afternoon of 15 November 2018 at 13:10 for 45 minutes. The weather was fine, and the road surface was dry.
- 1.1.11 The Terms of Reference are as described in the Highways Agency's Design Manual for Roads and Bridges document GG119 'Road Safety Audit '. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been 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. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 1.1.12 Furthermore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.
- 1.1.13 It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.
- 1.1.14 In the event of a collision and any resulting legal action, JHB Consulting Ltd would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

1.2 Purpose of the scheme

- 1.2.1 Construction of a new development with number of changes to the road network including:
- A new ghost island priority access junctions,
 - Road markings,
 - Reduction in speed limit to 30mph,
 - NMU facilities.



1.3 Departures or Relaxations from Standards

- 1.3.1 No Departures or Relaxations from Standard were submitted to the Road Safety Audit Team.



2 Problems Raised at this Combined Stage 1/2 Road Safety Audit

2.1 General

2.1.1 PROBLEM 1

Location: Access junctions.

Summary: Details of tracked movements, are not provided on the drawings. Inappropriate turning movements can result in increased vehicle collisions.

Details of the swept paths of vehicles are not provided for the new layout of the access junctions. Inappropriate turning movements can result in vehicles crossing the centre line, mounting kerbs or encroaching onto NMU facilities resulting in an increased risk of NMU/vehicle and vehicle/vehicle collisions.

RECOMMENDATION: Provide swept path movements at all locations.

2.1.2 PROBLEM 2

Location: Access junctions.

Summary: Inappropriate drainage may lead to ponding resulting in standing water resulting in loss of control type collisions.

The drawing shows that there are changes proposed to the existing road layout with localised widening. There does not appear to be any details about what the proposals are with regards drainage. Ponding water can result in an increased risk of loss of control type collisions and at certain times of year standing water will freeze resulting in sheets of ice. Vehicles manoeuvring in the turning could lose control resulting in an increased risk of collisions.

RECOMMENDATION: Provide appropriate drainage at all locations where changes to the road layout and new carriageway are proposed.

2.1.3 PROBLEM 3

Location: Access junctions.

Summary: Reduced or obstructed visibility splays can result in an increased risk of failure to give way type collisions.

Existing trees and vegetation line the eastern side of Warburton Lane **Photograph 1** below.



Photo 1: Existing Vegetation

The vegetation will obstruct visibility between vehicles at the new site access any vehicles travelling along Warburton Lane resulting in an increased risk of failure to give way type collisions.

RECOMMENDATION: Remove all vegetation that can obstruct visibility or has the ability to grow and obstruct visibility in the future.

2.2 Junctions

2.2.1 PROBLEM 4

Location: Access junctions.

Summary: Details of the dimensions and sizes of the new junctions are not provided, the provision of substandard junction layouts can lead to an increased risk of shunts, loss of control and lane change collisions.

Examination of the drawings does not fully allow the Audit Team to understand what standards have been used to design the ghost island junctions. Turning Lengths, Deceleration Lengths, and Direct Tapers are not dimensioned.

Providing priority junctions that do not comply with the relevant standards can result in an increased risk of shunt, lane change and loss of control type collisions.

RECOMMENDATION: During the detailed design process ensure that the new junctions fully comply with the relevant design standards.

2.3 Non-motorised Users (NMU)

2.3.1 PROBLEM 5

Location: Access junctions.

Summary: Inappropriate NMU facilities could lead to NMU/vehicle collisions and confusion to partially sighted NMUs and an increased risk of slips/trips and falls.



Examination of the drawings show that details of gradients and kerb up stands have not been provided and that there is no proposal to include an uncontrolled crossing of the site access.

If inappropriate facilities are provided, then there is an increased risk of NMU/vehicle collisions as well as slips/trips and falls.

RECOMMENDATION: Ensure that appropriate dropped crossing points are provide in accordance with *Guidance on the Use of Tactile Paving Surfaces [DfT]*.

2.3.2 PROBLEM 6

Location: Pedestrian islands.

Summary: Inappropriate width pedestrian refuge islands could result in an increased risk of NMU/vehicle collisions.

The drawings appear to show that the proposed pedestrian refuge islands may be too narrow resulting in NMUs with pushchairs not being able to be accommodated fully within the islands resulting in an increased risk of NMU/vehicle collisions.

RECOMMENDATION: At detailed design look to provide a minimum pedestrian refuge width of 2.0m which will allow NMUs with pushchairs to be fully accommodated within the crossing.

2.4 Traffic Signing, Road Markings & Street-lighting

2.4.1 PROBLEM 7

Location: Throughout the site.

Summary: Inappropriate levels of lighting can lead to an increased collision risk.

The drawings provided do not clearly show if alterations to the existing street lighting are proposed and what lighting will be provided along the site frontage and ghost island junctions. The scheme will include two new junctions and increase both the night time usage and the number of vehicles/NMUs using the proposed road network once the development is constructed. This may result in the new junctions and NMU crossing points being in shadow leading to possible conflicts during the hours of darkness.

RECOMMENDATION: Ensure that suitable lighting provision is provided as part of the detailed design process.

**End of list of Problems identified and Recommendations
offered in this Stage 1 Road Safety Audit**




3 Road Safety Audit Team Statement

I certify that this Audit has been carried out in the spirit of HD 19/15.

ROAD SAFETY AUDIT TEAM LEADER

JONATHAN BIRKETT

10 Watkin Avenue
Old Colwyn
Conwy, LL29 9NN


Signed: 

Dated 28.11.18...

ROAD SAFETY AUDIT TEAM MEMBER

GILLIAN KIDD

Road Safety Auditor,

Signed: 

Dated 28.11.18...



Appendix A

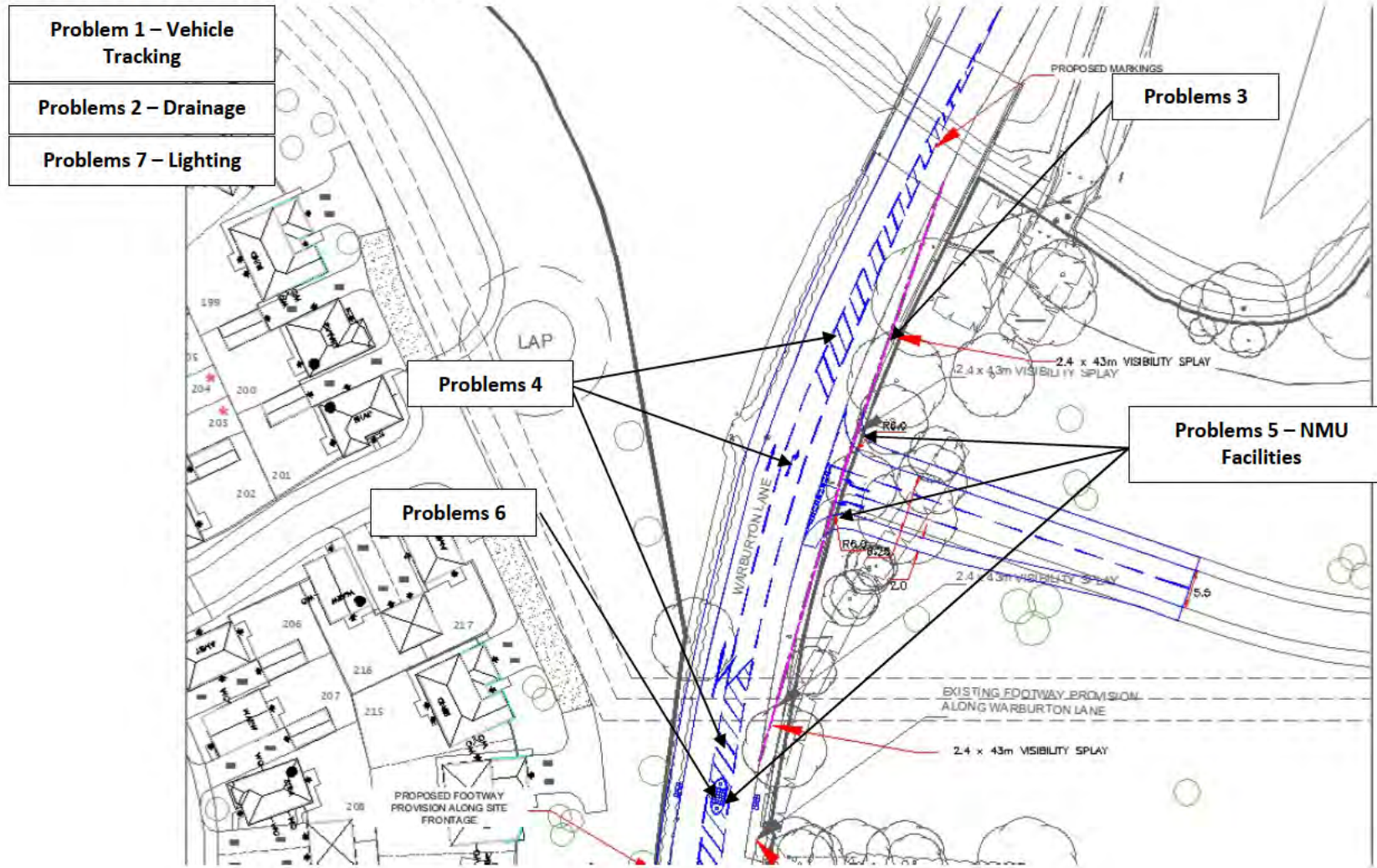
The following Drawings and Documents formed the Road Safety Audit Brief.

Documents

SCP/16544/FO10 Layout Drawing

Appendix B

Drawings: Problem Location Plan Eastern Access



Drawings: Problem Location Plan Western Access

