



Stage 1 Road Safety Audit Report (Feasibility)

**Toddington Lane /Spine Road
Junction, Littlehampton
S278 Highway works**

**Produced for:
Persimmon Homes**

Date: 12th January 2022

DOCUMENT REGISTER

Project Name: Toddington Lane/ Spine Road, Littlehampton

Report Title: Stage 1 (Feasibility) Road Safety Audit

Date: 12th January 2022

Client: Persimmon Homes

Audit Team	Name	Position	Date
Audit Team Leader:	Peter Ronald	Director	12/01/2022
Audit Team Member:	Paul Salmon	Road Safety Auditor	12/01/2022
Approved By:	Peter Ronald	Director	12/01/2022

Revision History					
Revision	Date	Description	Audit Team Leader	Audit Team Member	Approved
-	12/01/2022	Draft	PR	PS	PR
A	12/01/2022	Final	PR	PS	PR

Prepared By: **Traffic Management Consultants Ltd**

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1. Table of Contents

1. Executive Summary.....	4
2. Introduction.....	4
3. Risk Assessment.....	5
4. Historical Summary	6
5. Existing Environment	6
6. Collision Data	6
7. Survey Information	6
8. Audit Assessment	7
9. Nil Response/Comments	9
10. Non-Motorised User Report (NMU's).....	9
11. Audit Team Statement	10
12. Appendix A – List of Documents.....	10
13. Identified Road Safety Audit Matters	11
14. Designer's and Auditor Response to Stage 1 Road Safety Audit.....	12

1. Executive Summary

- 1.1 This scheme is promoted by Persimmon Homes. This Road Safety Audit is supplied under the provisions of the Safety Audit request dated 21st December 2021.

2. Introduction

- 2.1 This report results from a Stage 1 (Feasibility) Road Safety Audit request for the new amended junction at Toddlington Lane with the new development spine road, Littlehampton

2.2 Audit Team Membership

The Audit Team comprised the following individuals:

Peter Ronald I.Eng, AMICE, MCIHT, MSoRSA, (HE - RSA Cert of Comp)
(Audit Team Leader)

Paul Salmon, MCIHT, MSoRSA
(Audit Team Member)

The Audit also comprised an examination of the drawings provided by Mayer Brown and any additional support documents completed by the Audit Team as listed in the Appendices. All safety issues are with reference to the scheme as implemented.

2.3 Audit Site Visit

A site visit was carried out on Tuesday 11th January 2022 between 4.30pm and 5.30pm by the Audit Team. The weather conditions were cloudy and dry.

2.2 Strategic Decisions

The Audit Team has not been advised of any Strategic Decisions made by the local Highway Authority or by the local Planning Authority.

2.3 Audit Brief

The Audit Team were not provided with an Audit Brief

2.4 Terms of Reference

The terms of reference of the audit are based on "Guidelines For the Safety Audit of Highway Schemes" published by the Institution of Highways and Transportation, other guidance references are the Traffic Signs Regulations and General Directions 2016, and GG 119 Design Manual for Roads and Bridges.

The Audit Team has examined and reported only on the road safety implications of the scheme and has not 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 or other guidance documents.

2.5 **Audit Recommendations**

Recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified road safety audit matters, and in no way imply that a formal design process has been undertaken.

There may be alternative measures of addressing a problem which would be equally acceptable or superior in achieving the desired degree of mitigation and these should be considered by the designer when responding to this report.

2.6 **Scope of Road Safety Audits**

Road Safety Audit shall only be concerned with Road Safety Matters, i.e. *an element of the existing road environment or proposed road environment that could potentially contribute to a road traffic collision or features that could present a risk of injuries to road users.*

Road Safety Audit is not a technical check that the design conforms to standards and/or best practice guidance.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Road Safety Audit does not consider structural safety.

Road Safety Audit does not cover health and safety issues concerning road workers during the construction phase but may cover the future maintenance and operation of the road.

Road safety matters resulting from the operation of facilities for highway maintenance that affect road users shall be included in the scope of Road Safety Audit.

The needs of all road users shall be assessed when undertaking Road Safety Audits.

3. **Risk Assessment**

- 3.1 Each of the Auditors' responses is classified as either a 'Problem' or a 'Nil Response/Comment'. Items classified as a 'Problem' denote matters likely to result in significant road safety hazards. Items marked as 'Nil Response/Comment' are less serious but worthy of consideration by the Designer and/or by the Overseeing Organisation.

- 3.2 Although all of the problems identified are considered to be of sufficient importance to require action, the table below shows their relative urgency based on the risk perceived by the Safety Auditors. The level of risk assigned to each problem is largely subjective and is only intended as a guide to assist the client in determining the priority of the road safety matters raised.

Severity / Risk Level	Probability				
	Frequent	Probable	Occasional	Remote	Improbable
Catastrophic	****Problem**** (Urgent)				
Critical		**Problem** (High Risk)			
Major			**Problem** (Medium Risk)		
Minor				*Problem* (Low Risk)	
Negligible					Comment

4. Historical Summary

- 4.1 Unknown.

5. Existing Environment

- 5.1 Toddlington Lane is a single carriageway local distributor road that links through from Mill Lane to A259 in the south at Littlehampton . There are no footways present at the junction and no street lighting. A 30 mph speed limit is present introduced by order . The current T junction layout gives Toddlington Lane priority for traffic coming from the level crossing to the south around a 90 degree bend to the left with the existing lane to the east giving way.
- 5.2 There are a couple of private driveway accesses located in the vicinity of the junction

6. Collision Data

- 6.1 The Audit Team have not been provided with any recorded injury collision data as part of this road safety audit. However, interrogation of www.crashmap.co.uk indicates that there have been no personal injury collisions at the junction that is the subject of this audit during the 2016 - 2020 five-year period.

7. Survey Information

- 7.1 None provided.

8. Audit Assessment

8.1 The table below summarises the findings from this audit which are described in detail within the following pages.

Identified locations of Road Safety Audit Matters are indicated on drawings within **Appendix A** to the rear of this report.

	Item	Comments	Notes
A1	General		
A1.1	Departures from Standards		None reported
A1.2	Cross-sections		
A1.3	Cross-sectional Variation		
A1.4	Drainage		Not detailed
A1.5	Landscaping		
A1.6	Public Utilities/ Services Apparatus		
A1.7	Lay-bys		
A1.8	Access		
A1.9	Emergency Vehicles		
A1.10	Future Widening		
A1.11	Adjacent Development		
A1.12	Basic Design Principles	Comment	(9.1) No vehicle tracking analysis produced on new layout
A2	Local Alignment		
A2.1	Visibility		
A2.2	New/Existing Road Interface		
A2.3	Vertical Alignment		
A3	Junctions		
A3.1	Layout	Problem	(8.1) Insufficient space for right turning vehicles out of Tulley Cottages to wait at give way line without blocking southbound lane
A3.2	Visibility	Problem	(8.2) Reduced visibility of left turning vehicles from spine road for vehicles exiting Tulley Cottages
A4	Non-Motorised User Provision		
A4.1	Adjacent land		
A4.2	Pedestrian/cycle routes provided		
A4.3	Facilities adequate		
A4.4	Separation from carriageway		
A4.5	Special requirements elderly/young infirm		

A4.6	Tactile paving/guardrails		
A4.7	Junctions		
A4.8	Routes clear of obstruction		
A4.9	Equestrians		
A5	Road Signs, Carriageway Markings And Lighting		
A5.1	Signs		
A5.2	Lighting		Not detailed
A5.3	Poles and Columns		
A5.4	Road Markings		

8.1 *Problem* (Item A3.1)	
Location:	Access to Tulley Cottages
Summary:	Access located close to junction give way resulting in insufficient space from right turn vehicles to wait before give way line
There is a vehicle access to Tulley Cottages that appears too close to Toddington Lane give way. Right turning vehicles out of the access appear to have insufficient space to turn out and wait without blocking back across the south bound lane. Carry out vehicle swept path analysis to show right turn vehicles can turn out of access and wait without blocking across southbound traffic lane	
TYPE OF CONFLICT/COLLISION	
Vehicles blocking Toddington Lane south bound lane resulting in collisions	
RECOMMENDATION	
Carry out vehicle swept path analysis to ensure access can be used safely without blocking south bound lane	

8.2 *Problem* (Item A3.2)	
Location:	Toddington Lane /Tulley Cottages access
Summary:	Reduced visibility to right of oncoming left turn vehicles from spine road at access
There is reduced visibility to the right of left turning vehicles from the spine road for vehicles exiting Tulley Cottages access. Ensure adequate visibility is provided at access	
TYPE OF CONFLICT/COLLISION	
Collisions due to reduced visibility at access	
RECOMMENDATION	
Ensure adequate visibility is provided at access	

9. Nil Response/Comments

9.1 No vehicle tracking produced on road layout

10. Non-Motorised User Report (NMU's)

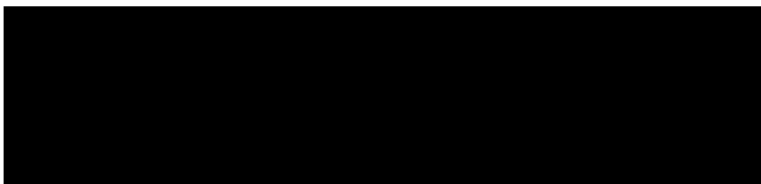
10.1 This report has not identified any road safety matters affecting NMU's that should be resolved.

11. Audit Team Statement

I certify that we have examined the drawings listed within **Appendix A** and that the site has been inspected. The examination has been carried out with the sole purpose of identifying road safety matters that can be addressed in order to improve the safety of the scheme.

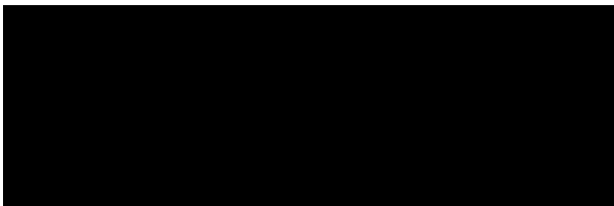
The problems identified have been noted in the report together with associated safety improvement suggestions that we recommend should be studied for implementation.

I can confirm that we have not been involved with the scheme design.



Peter Ronald
(Audit Team Leader)

12th January 2022



Paul Salmon
(Audit Team Member)

12th January 2022

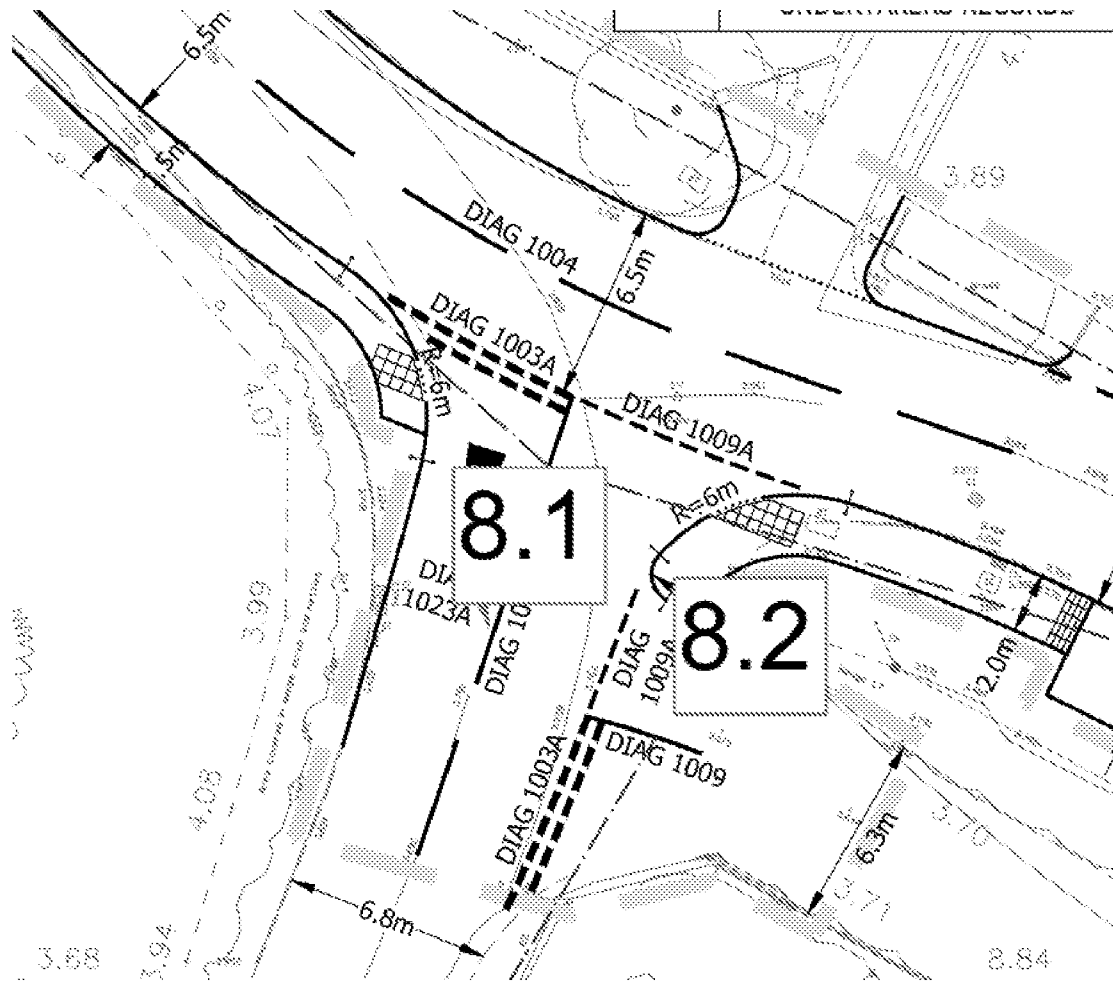
12. Appendix A – List of Documents

Drawings

Title	Drg No	Revision
General Arrangement Sheet 3 of 3	A/PHLITTLE-MAIN.1/10-3	T5

Other Documents

13. Identified Road Safety Audit Matters location plan



14. Designer's Response to Stage 1 Road Safety Audit

Stage 1 (Feasibility) Road Safety Audit DESIGNER'S ROAD SAFETY AUDIT RESPONSE Scheme Name: Toddington Lane / Spine Road Junction		
The issues categorised in this road safety audit as 'Problem' matters are those causing serious concern and are summarised below. The purpose of this form is for the scheme Designer or Overseeing Organisation to respond to the 'Problem' matters. Responses should be returned to Traffic Management Consultants. 'Comments' in this report are made for the benefit of the Designer and are not referred to below.		
RSA Matter	Summary of RSA Problem	Designer's Response
8.1	Access located close to junction give way resulting in insufficient space from right turn vehicles to wait before give way line	
8.2	Reduced visibility of oncoming left turn vehicles at access	

AUDIT TEAM RESPONSE

8.1

8.2

Persimmon Homes Thames Valley

North Littlehampton, Toddington Lane / Spine Road Junction (S278 Works)

Stage 1 RSA – Road Safety Audit Response Report



Stage 1 RSA - Road Safety Audit Response Report

- 1.1 This report results from receipt of a Stage 1 RSA Report, undertaken by Traffic Management Consultants dated 12th January 2022.
- 1.2 The Designer's Response to the 'Problems' highlighted are indicated in the table below:

Item	Problem	Recommendation	Designer's Response	Overseeing Organisation Response	Agreed RSA Action
8.1	Location: Access to Tulley Cottages Summary: Access located close to junction give way resulting in insufficient space from right turn vehicles to wait before give way line. Type of Conflict/Collision: Vehicles blocking Toddington Lane south bound lane resulting in collisions.	Carry out vehicle swept path analysis to ensure access can be used safely without blocking south bound lane.	Accepted. A vehicles swept path analysis has been carried out for a large car exiting Tulley Cottages turning right and waiting behind another large car. The tracking shows the rear of a car waiting behind another car encroaches slightly onto the other lane. However, there is still sufficient room for vehicles travelling south bound.		

Persimmon Homes Thames Valley

North Littlehampton, Toddington Lane / Spine Road Junction (S278 Works)

Stage 1 RSA – Road Safety Audit Response Report



Item	Problem	Recommendation	Designer's Response	Overseeing Organisation Response	Agreed RSA Action
8.2	Location: Toddington Lane / Tulley Cottages access Summary: There is reduced visibility to the right of left turning vehicles from the spine road for vehicles exiting Tulley Cottages access. Ensure adequate visibility is provided at access. Type of Conflict/Collision: Collisions due to reduced visibility.	Ensure adequate visibility is provided.	Accepted. A visibility splay to the right of vehicles existing Tulley Cottages has been shown on the revised drawings. Please note this visibility is fundamentally unchanged in the revised junction. Visiblty to the right is restricted by the presence of a hedge between Tulley Cottages and the Spine Road. There is a sign post within the visibility splay, which, however, doesn't reduce visibility significantly.		

Persimmon Homes Thames Valley

North Littlehampton, Toddington Lane / Spine Road Junction (S278 Works)

Stage 1 RSA – Road Safety Audit Response Report



On behalf of the Design Organisation I certify that:

- 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

Name:	
Signed:	
Position:	
Organisation:	
Date:	

On behalf of the Overseeing Organisation I certify that:

- 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Design Organisation; and
- 2) The agreed RSA actions will be progressed.

Name:	
Signed:	
Position:	
Organisation:	
Date:	

Persimmon Homes Thames Valley

North Littlehampton, Toddington Lane / Spine Road Junction (S278 Works)

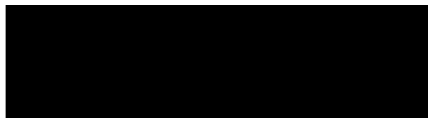
Stage 1 RSA – Road Safety Audit Response Report



Prepared by:

Name: Ivan Cosmai

Signed:



Position: Engineer

Organisation: Mayer Brown Limited

Date: 22/02/2022

Revision: P1