



Road Safety Audit Stage 1

Internal Road Layout

Hulbert Road

Havant

Hampshire

Date: November 2025

Report produced for: Paul Basham Associates

Report produced by: M & S Traffic

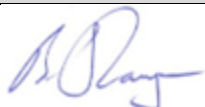
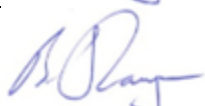
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Project Title	Hulbert Road, Havant
Report Title	Road Safety Audit Stage 1
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Status	Final

Record of Issue

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Revision – 0	Bryan Shawyer	Martin Morris		24 th November 2025
Revision – 1	Bryan Shawyer	Martin Morris		23 rd December 2025
Designers Response				
Authority Response				

Distribution

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1 INTRODUCTION

- 1.1 This report describes a Stage 1 Road Safety Audit carried out on a proposed internal road layout associated with a 100-unit residential development off Hulbert Road, Havant.

The Audit was requested by the design organisation, Paul Basham Associates, The Bothy, Cams Hall Estate, Fareham, PO16 8UT on behalf of the Hampshire County Council, as the Overseeing Organisation.

- 1.2 The Audit Team membership was as follows:

Audit Team Leader

Bryan Shawyer, B.Eng. (Hons), MSc, MCIHT, MSoRSA
National Highways Approved RSA Certificate of Competency

Audit Team Member

Martin Morris, PGD, MCIHT, MSoRSA
National Highways Approved RSA Certificate of Competency

- 1.3 The audit was undertaken in accordance with GG 119, The Design Manual for Roads and Bridges. The documents available at the time the report was compiled are detailed in Appendix A.
- 1.4 The Audit took place at the Gillingham offices of M&S Traffic in November 2025 and comprised an examination of the documents provided as listed in Appendix A. A joint site visit and inspection were undertaken on the 20th November 2025 between 10:00 and 10:30 hours. Weather conditions at the time were overcast and the site was closed to traffic.
- 1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings. It has not been examined or verified for compliance with any other standards or criteria. This safety audit does not perform any "Technical Check" function on these proposals. It is assumed that the Project Sponsor is satisfied that such a "Technical Check" has been successfully completed prior to requesting this safety audit.
- 1.6 The auditors have not been informed of any Departures from Standard.
- 1.7 All comments and recommendations are referenced to the detailed drawings, and the locations have been detailed relating to the plans supplied with the audit brief, Appendix B.

2 SAFETY ISSUES RAISED AT PREVIOUS AUDITS

2.1 No previous Audits were supplied for assessment.

3 ITEMS RAISED AT THE STAGE 1 AUDIT

3.1 General

3.1.1 PROBLEM

Location: Basin and swale as annotated on Appendix B.

Summary: Lack of restraint system could increase the severity of a loss of control collision.

There are a basin and a swale that are adjacent and perpendicular to the carriageways. No details have been provided of any proposed vehicle restraint systems, to prevent vehicles that exit the carriageway from going down the embankment into these features. Should vehicles leave the carriageway, the severity of a loss of control collision could be increased, and the occupants may risk drowning.

RECOMMENDATION

It is recommended that a road restraints risk assessment for local roads be undertaken to determine whether protection is needed, and that protection be installed should the assessment show that it is required.

3.1.2 PROBLEM

Location: Entry to the development.

Summary: Inappropriate vehicle speed limit could lead to side impact collisions, vehicle to pedestrian collisions, or collisions with parked vehicles.

A national speed limit currently applies to this section of Hulbert Road, where the junction and forward visibility splays within the development are based on a 20mph design speed for Development Roads (Manual for Streets). This could lead to inappropriate vehicle speeds within the residential development, which has been designed for a lower speed. Inappropriate vehicle speeds could lead to side impact collisions, vehicle to pedestrian collisions, or collisions with parked vehicles.

RECOMMENDATION

It is recommended that a 20mph speed limit be installed on entry to the development.

3.1.3 PROBLEM

Location: Turning heads as annotated on Appendix B.

Summary: Inappropriate parking could lead to collisions with parked vehicles, or vehicle to pedestrian collisions.

Turning heads are proposed as part of the development; however, without parking controls these turning heads may be subject to parking and obstruction, particularly in the evening periods. Parking in the turning heads could restrict movements and lead to large vehicles reversing or shunting. This could lead to collisions with parked vehicles, or vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that parking control measures be installed in the turning heads.

3.2 Local Alignment

3.2.1 PROBLEM

Locations: Bends as annotated on Appendix B.

Summary: Lack of forward visibility could lead to collisions with parked vehicles, collisions with emerging vehicles, or rear end shunts.

At the locations as annotated on Appendix B the forward visibility splays fall outside the highway boundary, where unmaintained landscaping or landscaping features could cause a visibility obstruction. Obstructions to visibility within the visibility splays should be avoided, as insufficient visibility could lead to collisions with parked vehicles, collisions with emerging vehicles, or rear end shunts.

RECOMMENDATION

It is recommended that there should be no physical obstruction of the visibility splays, and that the height of landscaping features be 600mm or less.

3.3 Junctions

3.3.1 PROBLEM

Locations: Junctions as annotated on Appendix B.

Summary: Restricted visibility could increase the risk of side impact collisions.

At the annotated locations, parking bays lie within visibility splays, a vehicle parked in these spaces could provide a visibility block and reduce visibility for road users exiting the junctions.

This could increase the risk of side impact collisions, though it is recognised that vehicle speeds are likely to be low due to the geometric alignment of the development.

RECOMMENDATION

It is recommended that the parking bays be relocated so that they do not impede the visibility splays or that they be removed. Alternatively, speed reduction measures should be introduced so that vehicle speeds are commensurate with achievable visibility splays.

3.3.2 PROBLEM

Location: Junction as annotated on Appendix B.

Summary: Restricted visibility could increase the risk of side impact collisions.

Visibility splays have been provided for assessment; however, there is concern that the northern splays could pass over land that has landscaping features. Landscaping features in excess of 600mm height could restrict visibility, increasing the risk of side impact collisions, though it is recognised that vehicle speeds would likely be low.

RECOMMENDATION

It is recommended that the height of any landscaping features should be 600mm or less.

3.4 Non-Motorised User Provision

3.4.1 PROBLEM

Location: Pedestrian crossing points as annotated on Appendix B.

Summary: Insufficient pedestrian/traffic intervisibility could lead to vehicle to pedestrian collisions.

There is concern that the parking bays may restrict pedestrian/traffic intervisibility. A parked vehicle in the visitor bays could mask a child pedestrian at the crossings, where restricted intervisibility could lead to vehicle to pedestrian collisions. However, it is recognised that vehicle speeds would likely be low.

RECOMMENDATION

It is recommended that the parking bays should not impede upon the pedestrian/traffic intervisibility splays at the crossing points.

3.4.2 PROBLEM

Location: Proposed priority crossing points as annotated on Appendix B.

Summary: Lack of pedestrian/cyclist/traffic intervisibility could increase the risk of vehicle to pedestrian/cyclist collisions.

Pedestrian/cyclist/traffic intervisibility splays have been provided for assessment; however, there is concern that these splays could pass over land that has landscaping features. Landscaping features more than 600mm height could restrict intervisibility, increasing the risk of vehicle to pedestrian/cyclist collisions. However, it is recognised that the vehicle speeds would likely be low.

RECOMMENDATION

It is recommended that the height of any landscaping features should be 600mm or less.

3.5 Road Signs, Carriageway Markings and Lighting

3.5.1 PROBLEM

Location: Proposed development.

Summary: Insufficient street lighting could increase the risk of vehicle to pedestrian collisions or side impact collisions.

At this early stage in the design no details of street lighting have been provided for assessment. Insufficient street lighting may reduce the visibility of pedestrians during the hours of darkness, particularly at the junctions or crossing points. This could increase the risk of vehicle to pedestrian collisions or side impact collisions.

RECOMMENDATION

It is recommended that a plan showing the light distribution be provided for assessment at the Stage 2 Safety Audit.

4 ISSUES IDENTIFIED DURING THE AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

4.1 Any issues that the Audit Team wish to bring to the attention of the Client Organisation, which are not covered by the road safety implications of this audit have been included in the following section. These issues could include maintenance items, operational issues or poor existing provisions. It should be understood however, that in raising these issues, the Audit Team do not warrant that a full review of the existing highway environment has been undertaken beyond the scope of the audit.

4.2 The Audit Team had no issues to raise within this section.

5 AUDITOR TEAM STATEMENT

5.1 We certify that this audit has been carried out following the principles of GG 119.

Audit Team Leader

Bryan Shawyer
BEng (Hons), MSc, MCIHT, MSoRSA
National Highways Approved RSA Certificate of Competency

Signed:  Date: 23/12/2025

Audit Team Member

Martin Morris
PGD, MCIHT, MSoRSA
National Highways Approved RSA Certificate of Competency

Signed:  Date: 23/12/2025

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APPENDIX A

List of drawings and documentation submitted for auditing:

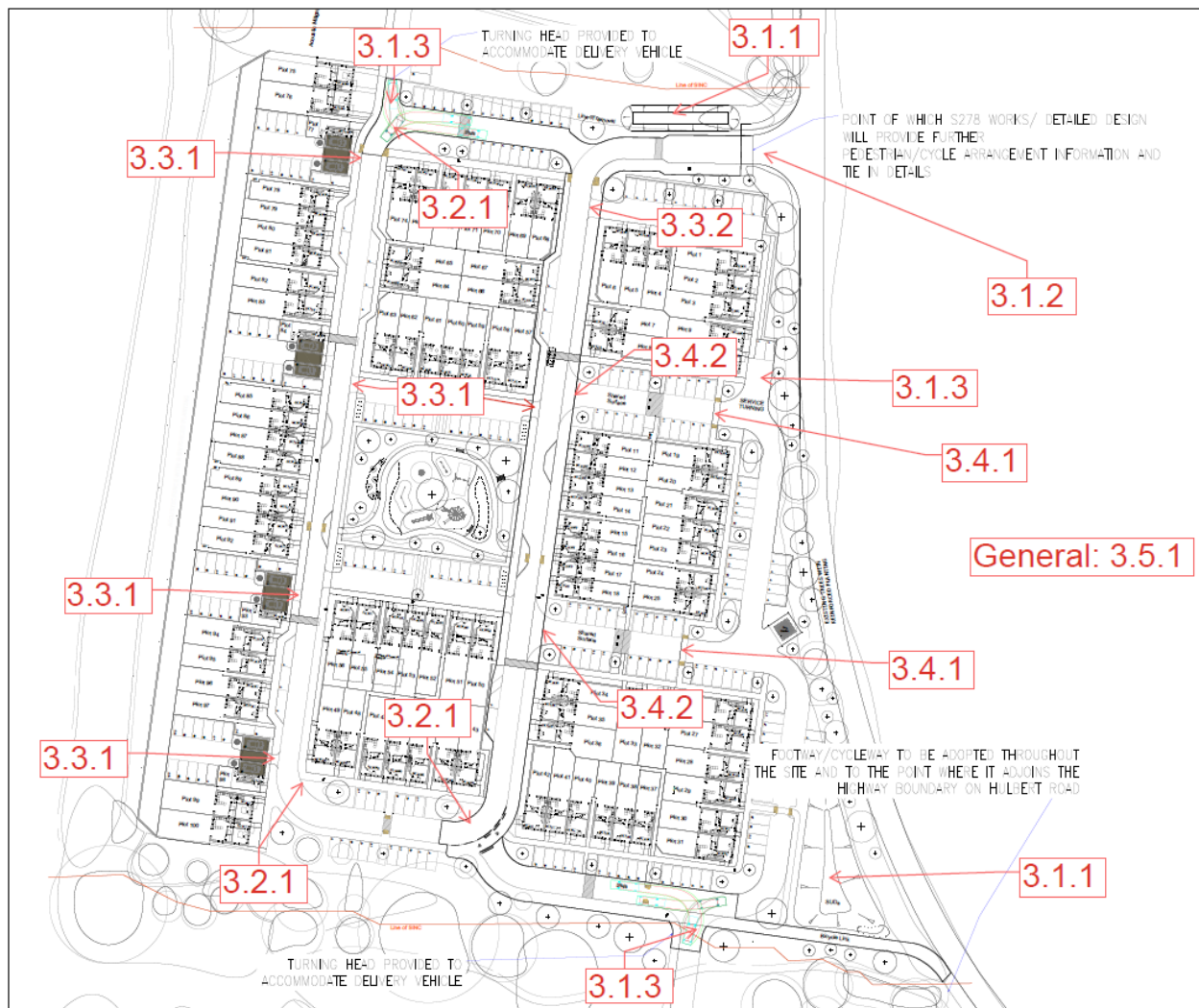
Drawing Number	Title
020.0923-0001 P08	INTERNAL VISIBILITY SPLAYS
020.0923-0002 P08	FORWARD VISIBILITY SPLAYS
020.0923-0003 P09	REFUSE VEHICLE TRACKING
020.0923-0004 P08	FIRE TRENDER TRACKING
020.0923-0005 P06	INTERNAL ROAD TRACKING
020.0923-0006 P03	CAR PARKING SPACES TRACKING
020.0923-0007 P02	DIMENSION PLAN
020.0923-0008 P02	PEDESTRIAN PLAN
020.0923-0009 P02	EXTENT OF ADOPTION PLAN
23.121.011 F	HULBERT ROAD, SITE LAYOUT - BLOCK

Supporting Documentation:

- Covering emails Paul Basham Associates.

APPENDIX B

Plan attached showing the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

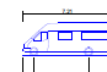


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GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS, DETAILS AND SPECIFICATIONS.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. ALL FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS. DO NOT SCALE THIS DRAWING.
4. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

VEHICLE PROFILE



7.5t Panel Van	7.200m
Overall Length	2.10m
Overall Width	2.54m
Overall Body Height	0.315m
Min Body Ground Clearance	1.865m
Track Width	4.50s
Lock to lock time	7.200m
Kerb to Kerb Turning Radius	



P02	UPDATED LAYOUT	19.12.25	TAF	SSN
P01	FIRST ISSUE	05.11.25	SKB	JAM
Rev	Description	Date	By	App'd
01	05.11.25	SKB	JAM	-
PBA Project Number		Scale		
020.0923		1:1000 (AT A3)		
PBA Drawing No:		020.0923-0009		Revision
				P02

QM52011v8/210723/JAM

Project Name:
**HULBERT ROAD
HAVANT**

Project Phase:
PRELIMINARY

TbE
EXTENT OF ADOPTION PLAN

paul basham
associates

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Client
BRICS
DEVELOPMENT

APPENDIX C: Road Safety Audit Decision Log.

Auditors: Bryan Shawyer (Team Leader) and Martin Morris (Team Member).

Scheme: Hulbert Road, Havant

Date Audit Completed: 23rd December 2025

This response is to a Stage 1 Road Safety Audit to the design standard detailed within GG 119 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

RSA Problem	RSA Recommendation	Design Organisation response)	Overseeing Organisation response	Agreed RSA action
3.1.1 Location: Basin and swale as annotated on Appendix B. Summary: Lack of restraint system could increase the severity of a loss of control collision. There are a basin and a swale that are adjacent and perpendicular to the carriageways. No details have been provided of any proposed vehicle restraint systems, to prevent vehicles that exit the carriageway from going down the embankment into these features. Should vehicles leave the carriageway, the severity of a loss of control collision could be increased, and the occupants may risk drowning.	It is recommended that a road restraints risk assessment for local roads be undertaken to determine whether protection is needed, and that protection be installed should the assessment show that it is required.	Accepted – through the detailed design process a risk assessment will be carried out. Notwithstanding this, suitable barriers will be in place to ensure vehicles do not fall into the embankment.		

3.1.2 Location: Entry to the development. Summary: Inappropriate vehicle speed limit could lead to side impact collisions, vehicle to pedestrian collisions, or collisions with parked vehicles. A national speed limit currently applies to this section of Hulbert Road, where the junction and forward visibility splays within the development are based on a 20mph design speed for Development Roads (Manual for Streets). This could lead to inappropriate vehicle speeds within the residential development, which has been designed for a lower speed. Inappropriate vehicle speeds could lead to side impact collisions, vehicle to pedestrian collisions, or collisions with parked vehicles.	It is recommended that a 20mph speed limit be installed on entry to the development.	Accepted – the development will be posted as a 20mph speed limit, subject to the approval of HCC highways. The design speed of the development is 20mph and entry features and road narrowing when entering the development will reduce vehicle speeds.		
3.1.3 Location: Turning heads as annotated on Appendix B. Summary: Inappropriate parking could lead to	It is recommended that parking control measures be installed in the turning heads.	Not accepted – The internal road network will provide access to the parcels of land to the north and south of the site and will need to retain access and will not be ‘turning heads’.		

collisions with parked vehicles, or vehicle to pedestrian collisions. Turning heads are proposed as part of the development; however, without parking controls these turning heads may be subject to parking and obstruction, particularly in the evening periods. Parking in the turning heads could restrict movements and lead to large vehicles reversing or shunting. This could lead to collisions with parked vehicles, or vehicle to pedestrian collisions.				
3.2.1 Locations: Bends as annotated on Appendix B. Summary: Lack of forward visibility could lead to collisions with parked vehicles, collisions with emerging vehicles, or rear end shunts. At the locations as annotated on Appendix B the forward visibility splays fall outside the highway boundary, where unmaintained	It is recommended that there should be no physical obstruction of the visibility splays, and that the height of landscaping features be 600mm or less.	Accepted – all forward visibility splays will be in the proposed highway adoption extent and any vegetation/obstructions will be maintained to under 600mm		

landscaping or landscaping features could cause a visibility obstruction. Obstructions to visibility within the visibility splays should be avoided, as insufficient visibility could lead to collisions with parked vehicles, collisions with emerging vehicles, or rear end shunts.				
3.3.1 Locations: Junctions as annotated on Appendix B. Summary: Restricted visibility could increase the risk of side impact collisions. At the annotated locations, parking bays lie within visibility splays, a vehicle parked in these spaces could provide a visibility block and reduce visibility for road users exiting the junctions. This could increase the risk of side impact collisions, though it is recognised that vehicle speeds are likely to be low due to the geometric alignment of the development.	It is recommended that the parking bays be relocated so that they do not impede the visibility splays or that they be removed. Alternatively, speed reduction measures should be introduced so that vehicle speeds are commensurate with achievable visibility splays.	Not accepted – visibility splays have been shown to 2m by 25m and offset of 300mm as per HCC TG3. There are minimal instances where visibility splays from the parking courtyards go through visitor parking bays on the western access road. To the north of the site, the splays encroach a small section of the parking area, but vehicles will be parked outside of the splays and there will be no or very minimal obstruction. There are two instances outside Plots 94-97 where the splays encroach one space which would be obstructed if a vehicle was parked in the visitor bay. Manual for Streets 2 suggests that 10.7.1 “in some circumstances, where speeds are low some encroachment may be acceptable”. As speeds will be low in this location, due to the 20mph design speed and horizontal deflection and active frontage, it is considered that the minor encroachment in this instance		

		is acceptable. MfS 2 also continues that “the absence of wide visibility splays at minor accesses will encourage drivers to emerge more cautiously” which aids in reducing speeds throughout the development. When balancing the constraints on site and the Local Planning Authority's request that visitor parking numbers remain, the minor encroachment has been minimised to two visibility splays across the site is considered acceptable.		
3.3.2 Location: Junction as annotated on Appendix B. Summary: Restricted visibility could increase the risk of side impact collisions. Visibility splays have been provided for assessment; however, there is concern that the northern splays could pass over land that has landscaping features. Landscaping features in excess of 600mm height could restrict visibility, increasing the risk of side impact collisions, though is recognised that vehicle speeds would likely be low.	It is recommended that the height of any landscaping features should be 600mm or less.	Accepted - Any vegetation or landscaping shown within the visibility splays will be maintained to below 600mm in height. Confirmation has been provided from the project team's landscape architects that this is the case and thus visibility will not be compromised.		

3.4.1 Location: Pedestrian crossing points as annotated on Appendix B. Summary: Insufficient pedestrian/traffic intervisibility could lead to vehicle to pedestrian collisions. There is concern that the parking bays may restrict pedestrian/traffic intervisibility. A parked vehicle in the visitor bays could mask a child pedestrian at the crossings, where restricted intervisibility could lead to vehicle to pedestrian collisions. However, it is recognised that vehicle speeds would likely be low.	It is recommended that the parking bays should not impede upon the pedestrian/traffic intervisibility splays at the crossing points.	Not accepted – Pedestrians at this point will have priority over vehicles and intervisibility splays for vehicles of 2m by 2m can be achieved as per HCC TG3 3.7.2		
3.4.2 Location: Proposed priority crossing points as annotated on Appendix B. Summary: Lack of pedestrian/cyclist/traffic intervisibility could increase the risk of vehicle to pedestrian/cyclist collisions.	It is recommended that the height of any landscaping features should be 600mm or less.	Accepted - Any vegetation or landscaping shown within the visibility splays will be maintained to below 600mm in height. Confirmation has been provided from the project team's landscape architects that this is the case and thus visibility will not be compromised.		

Pedestrian/cyclist/traffic intervisibility splays have been provided for assessment; however, there is concern that these splays could pass over land that has landscaping features. Landscaping features more than 600mm height could restrict intervisibility, increasing the risk of vehicle to pedestrian/cyclist collisions. However, it is recognised that the vehicle speeds would likely be.				
3.5.1 Location: Proposed development. Summary: Insufficient street lighting could increase the risk of vehicle to pedestrian collisions or side impact collisions. At this early stage in the design no details of street lighting have been provided for assessment. Insufficient street lighting may reduce the visibility of pedestrians during the hours of darkness, particularly at the junctions or crossing	It is recommended that a plan showing the light distribution be provided for assessment at the Stage 2 Safety Audit.	Accepted - A plan showing street lighting would be provided for the Stage 2 safety audit – however it should be noted that an external lighting technician involved in the project has stated that <i>Hampshire won't want any lighting on adopted roads in this area from our conversations with their Senior Lighting Design Engineer, due to the area being an E1 environment they will want to preserve the area. We can of course propose low level Dark Skies lighting that will be for wayfinding only around the site, but this will not comply to a standard and will have to be privately maintained'</i>		

points. This could increase the risk of vehicle to pedestrian collisions or side impact collisions.				
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APPENDIX D: DESIGN ORGANISATION STATEMENT

PROJECT NAME: Hulbert Road, Havant, Road Safety Audit Stage 1	
On behalf of the Design Organisation, I certify that: 1) The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Overseeing Organisation	
Name	Tom Fisher
Signed	T. Fisher
Position	Associate
Organisation	Paul Basham Associates Ltd
Date	02.01.26

APPENDIX E: OVERSEEING ORGANISATION STATEMENT

PROJECT NAME: Hulbert Road, Havant, Road Safety Audit Stage 1	
On behalf of the Overseeing Organisation, I certify that: 1) The actions identified in response to the problems raised in this RSA have been discussed and agreed with the Design Organisation; and 2) The agreed RSA actions will be progressed.	
Name	
Signed	
Position	
Organisation	
Date	