

Project Details

Report Title:	Review of a Stage 1 RSA
Location:	Brandon Stadium, Speedway Lane, Coventry
Date:	12/07/2022
Document reference and revision	RSA3285
RSA Team Leader:	Marcus Alford-Longley (Lead Author)
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1.0 INTRODUCTION

- 1.1 This report results from a review of a Stage 1 Road Safety Audit on the proposed residential development of up to 137 dwellings along with a sports pitch, pavilion and associated car park will be provided with access from Rugby Road. The internal layout will consist of carriageway widths between 5.0m and 6.0m and footways will continue through the development. The original RSA report was carried out by Mott MacDonald This review was requested by John Glendinning, (Development Management Group, Warwickshire County Council)
- 1.2 No member of the Audit Team has been involved with the design process.
- 1.3 No site visit has been carried out on the location, only a desk review of the original audit conducted by Mott MacDonald which was carried out on the 26th April 2022.
- 1.4 The drawings and documents supplied for audit are listed in Appendix A. An annotated plan showing the location of any problems identified is located in Appendix B.
- 1.5 The audit has been carried out in accordance with Warwickshire County Council's safety audit procedure largely following procedures recommended in document GG119 – 'Road Safety Audit' of Highways England's Design Manual for Roads and Bridges but allowing a notes/observations section covering matters of lesser importance for information/guidance of others who might be involved in the scheme.
- 1.6 The Audit Review Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. On occasion, the Audit Review Team might have recourse to refer to the design standards, simply for information. All comments and recommendations are referenced to the design drawings and documents supplied with the subject audit or its brief. For any recommendations there may be alternative methods of addressing a problem which could equally acceptable in achieving the desired elimination or mitigation aims and these should be considered when responding to this report.

- 1.8** In accordance with Warwickshire County Councils Road Safety Audit procedures, it is a requirement that the Design Team in conjunction with the Project Sponsor prepare a Response Report, in response to the recommendations made within this Audit Review. This should be completed, and a copy of the final report sent to the Audit Review Team Leader for their information by **09 August 2022**. All responses should be submitted using Appendix D template of Warwickshire County Council's Road Safety Audit procedures only.
- 1.9** For any recommendations that are not being adopted, the Design Team or Project Sponsor should notify the Audit Team Leader and discuss these issues to try to achieve a mutually agreed solution. If an agreement cannot be reached, the Project Sponsor should then submit an Exception Report to the Assistant Director for Communities for their decision. If an Exception Report is required, a narrative of the exchanges between the Design Team, Project Sponsor and Audit Team Leader should be detailed and submitted alongside the Road Safety Audit Response Form and Exception Report to the Head of Transport and Highways for their information.

2.0 PROPOSALS

The proposed scheme consists of a new residential development of up to 137 dwellings along with a sports pitch, pavilion and associated car park will be provided with access from Rugby Road. The internal layout will consist of carriageway widths between 5.0m and 6.0m and footways will continue through the development.

3.0 DEPARTURES FROM STANDARD

No departures from standards were notified to the original Road Safety Audit team or the Audit review team

4.0 ITEMS ARISING FROM PREVIOUS STAGE 1 AUDIT

- 4.1** The road safety aspects of the proposed residential development and associated works were the subject of comment in the 26/04/2022 Stage 1 Road Safety Audit Report conducted and written up by Mott MacDonald. These items still remain have been addressed by the designer and are referred to again in the Road Safety Audit Report.

4.2 Problem 1.01

Location – Scheme wide

Summary: *Lack of links between footways and footpaths may result in pedestrians walking on uneven ground leading to trips and falls.*

A footpath is proposed to circulate the development, however there would appear to be only one connection (located on the northern side) which links to the footways within the development. It is likely that a development of this size will generate pedestrian movements between the footways within the development and the footpath outside of the development. A failure to provide appropriate links may result in pedestrians walking on uneven ground which may lead to trips and falls.

Recommendation: *Provide suitable links between the footways within the development and footpaths that circulate the development.*

Designers Response: *The auditor's recommendation is accepted. In addition to connections being provided to the north, south and west, additional links have been shown to the east as set out on the revised site layout plan attached as Appendix B. These are located opposite plots 76 and 105.*

Reviewers Comments: Accept the auditor's problem and the recommendation is appropriate for all of the points above. The Review Team accepts the Designers response to this problem and will be subject to comment at the Stage 2 detailed design RSA.

Problem 1.02

Location – *Internal layout dwellings 73 to 76.*

Summary: *Lack of visibility for dwellings 73 to 76 may result in conflict.*

Dwellings 73 to 76 are located on a bend in the carriageway which is described as a Green Lane (5.0m in width). Apart from the road width, the Audit Team do not have information on what this Green Lane represents. Although it is noted that traffic flows and vehicle speeds are likely to be low, the Audit Team is concerned that inter-visibility between exiting and approaching vehicles may be insufficient, increasing the risk of conflict between turning and ahead traffic.

Recommendation: *Confirm visibility splays are appropriate for expected vehicle speeds. Additional speed reducing features may be required to further lower speeds*

Designers Response:

2.2 The auditor's recommendation is accepted and the visibility at these plots has been reviewed further.

2.3 Importantly, there are two factors regarding visibility one of which is junction visibility and the other is the stopping sight distance (SSD) and whilst both are calculated using the same measurements the purpose of them is different. The junction visibility is provided to ensure that a driver exiting the junction can see an appropriate distance along the carriageway so that they can make an informed decision of whether they consider it is safe to pull out and the distance is based on the time taken for an approaching vehicle to stop. Traditionally this has been measured to the nearside kerb line or as per Manual for Streets 2 (MfS2) to the nearside edge of the vehicle track. Both allow for an overtaking vehicle to be seen.

2.4 In terms of the SSD MfS states that "The stopping sight distance (SSD) is the distance within which drivers need to be able to see ahead and stop from a given speed. It is calculated from the speed of the vehicle, the time required for a driver to identify a hazard and then begin to brake (the perception–reaction time), and the vehicle's rate of deceleration. For new streets, the design speed is set by the designer. For existing streets, the 85th percentile wet-weather speed is used".

2.5 Clearly, therefore, the importance of this is to ensure an approaching driver can see any vehicle likely to emerge from a driveway into the path of their vehicle. As demonstrated on Drawing 16115-18 attached as Appendix C,

the forward visibility splays have been derived based on a 15mph design speed which is considered reasonable on this section given its alignment and its status within the overall development scheme. The drawing demonstrates minor encroachment on the front of some of the development plots and it is proposed that residents of those plots would be prevented from planting anything above 0.6m where the splays are shown. This would be secured through the Section 106 Agreement.

Reviewers Comments: Accept the auditor's problem and the recommendation is appropriate for all of the points above. The Review Team accepts the Designers response to this problem and will be subject to comment at the Stage 2 detailed design RSA.

Problem 1.03

Location – *Residential roads near all-weather pitch.*

Summary: *Vehicles may park on-street restricting access and preventing turning movements leading to conflict.*

An all-weather pitch is proposed as part of the development for which the Audit Team do not have the full details in relation to the parking. The Audit Team is concern that should insufficient parking be provided, vehicles may park on the residential roads and potentially within the turning heads. Parking within the turning heads may restrict access to driveways and prevent road users from being able to turn which may result in inappropriate turning movements increasing the potential for conflict. Significant numbers parking on-street may restrict the free flow of traffic or should vehicles park partly on the footway, pedestrians may be forced into the carriageway, increasing the risk of conflict.

Recommendation: *Provide sufficient off-street parking for the all-weather pitch. Parking restrictions may be required, particularly within the turning heads.*

Designers Response: *The auditor's recommendation is accepted. The level of parking has been informed by discussions with potential operators and is considered to represent an appropriate level of parking to accommodate expected demand. Consequently, it is considered unlikely that overspill parking onto residential streets would occur in practice. It is proposed however that the demand for car parking associated with the all-weather pitch will be monitored and the need for further restrictions kept under review.*

Reviewers Comments: Accept the auditor's problem and the recommendation is appropriate for all of the points above. The Review Team accepts the Designers response to this problem and will be subject to comment at the Stage 2 detailed design RSA.

5.0 ITEMS RAISED AT THIS AUDIT REVIEW.

5.1 PROBLEM	
Location:	Scheme Extents
Summary:	Pedestrian/vehicle conflict.
<p>The proposed plans do not show any form of designated pedestrian crossing points along the footways within the development to allow the members of the public to access the opposite footways. This could lead to pedestrians crossing the carriageway at inappropriate locations, while trying to negotiate full height kerbs. This could lead to pedestrian/vehicle conflict resulting in injury.</p>	
Recommendation:	
<p>It is recommended that the design is reviewed and designated pedestrian crossing points are installed within the development on the pedestrian desire line</p>	

6.0 AUDIT REVIEW TEAM STATEMENT

We certify that this road safety audit has been carried out in accordance with GG 119 with some relaxations as per WCC Road Safety Audit procedures.	
Road Safety Audit Team Leader	
Name:	Marcus Alford-Longley
Signed:	
Position:	Senior Engineer
Date:	12/07/2022
Road Safety Audit Team Member	
Name:	Dana Loxley
Signed:	
Position:	Senior Engineer
Date:	12/07/2022

APPENDICES

APPENDIX A

LIST OF DRAWINGS AND DOCUMENTS PROVIDED FOR AUDIT

List of documents e.g. Brief, PIC Data, Traffic Flows, Departures, Previous RSA’s, and Designers Responses.

Drawings	
Drawing Number	Description of Drawing
	 16115-13 Designers Response to Safety Audit Stage 1.pdf  100414124-TPN-ITD-048-A.pdf  Highways Response to WCC Comments (FINAL).pdf  Transport Assessment_FINAL_REV1.pdf
Other Documents	
Drawing Number	Description of Drawing

APPENDIX B

LOCATION PLAN OF IDENTIFIED PROBLEMS

Problem 5.1 relates to the whole scheme.

Problems 1.01, 1.02 & 1.03 are from the original RSA being reviewed

