

Road Safety Audit Stage 3

A458 / Ridout Rd Cross Houses Shrewsbury

27/05/2022



Document Control Sheet

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- Note; Cover photograph Roundabout at A458/Ridout Rd Cross Houses

Contents

1. Introduction.....	4
1.1. Commission and Terms of Reference	4
1.2. Scheme description.....	5
1.3. Audit Management.....	5
2. Items Raised at Previous Road Safety Audits.....	6
3. Items Raised at this Stage 3 Road Safety Audit.....	7
4. Audit Team Statement.....	13
Appendix A: Observations & Non Safety Related issues	14
4.1. Observation.....	14
Appendix B: Scheme Documentation Reviewed.....	16
Appendix C: Scheme Location Plan.....	17
Appendix D: Problem Location Plan	18

Tables

Table 1: Audit Team Membership.....	2
Table 2: List of documents	12

1. Introduction

1.1. Commission and Terms of Reference

1.1.1 This report results from a Stage 3 Road Safety Audit carried out on a new roundabout to provide access to a housing development on Ridout Road Cross Houses. The audit was undertaken at the request of Ffion Horton of Shropshire Council.

1.1.2 The Audit Team membership approved and appointed by Ffion Horton of Shropshire Council for this audit was:

Membership	Name	Details
Audit Team Leader	Nick Newton	C Eng, FIHE, FCHIT, FSoRSA, RegRSA(IHE)

Table 1: Audit Team Membership

1.1.3 the Audit Team leader holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119.

1.1.4 It is confirmed that this is a Stage 3 Road Safety Audit and was undertaken in accordance with Shropshire Councils Road Safety Audit policy which is structured based on the principal requirements of GG119. The audit comprised an examination of the documents provided, and these are listed in **Appendix B**.

1.1.5 Any issues raised in the audit will also be identified by means of a problem location plan contained in **Appendix D**.

1.1.6 A site visit was completed by the audit team during daylight hours on Tuesday 17th May 2022 between 15:00pm and 16:30pm. The weather was overcast, and the road surface was dry.

1.1.7 The site was also visited during the hours of darkness between 10:00pm and 10:25pm. The weather at the time of the visit was dry

1.1.8 A representative of West Mercia Police was invited to take part in the road Safety Audit but was unable to attend due to other commitments. It is understood that they may have visited the site independently, but no comments have been received for inclusion in this report.

1.1.9 At the time of the Audit. Traffic was moderate with no cyclists or pedestrians observed during the Audit.

1.1.10 The terms of reference of the audit are as principally described in GG119. The 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.

1.1.11 All comments contained in the report with regard to Traffic Signs will be in accordance with the Traffic Signs Regulations and General Directions 2016 (TSRGD), along with relevant chapters of the Traffic Signs Manual (TSM). Diagram numbers will be referred to if necessary.

1.1.12 The comments and suggestions for road safety improvements made in this report are aimed to address matters that might have an adverse effect on road safety in the context of the chosen design. To clearly explain a safety problem or a recommendation to resolve a problem, the Audit Team may, on occasion use a photograph, or refer to a Design Standard. In addition, the Audit Team may provide an illustrative sketch to clarify a recommendation particularly in the event of a complex recommendation. Such sketch illustrations do not represent any design solution.

1.1.13 No audit brief was provided for this Stage 3 Road Safety Audit but information supplied within the email of instruction was that some road safety issues with regard to the layout of the mini island and particularly the central dome of the island had been raised as a possible concern.

- 1.1.14 No departures from standards relating to the scheme were provided to the Audit Team.
- 1.1.15 Traffic data and collision data were not directly supplied to the Audit Team for consideration.
- 1.1.16 Interrogation of the County Councils collision database for the five-year period (2017 to 2021), indicates that there has no recorded personal injury collisions in the vicinity of the proposed new access.

1.2. Scheme description

- 1.2.1 The new roundabout is located on the A458 Cross Houses Shrewsbury. The junction was previously a mini-Roundabout. The new roundabout is less than 4m but is kerbed and cannot be driven over. There is an overrun area distinguished by coloured road surface and a concentric ring consisting of a solid white line
- 1.2.2 There are also overrun areas which consist of red surfacing bounded by a solid white line on two exit arms of the roundabout (Ridout Road and the unclassified road from Atcham).
- 1.2.3 The central island has traffic signs to TSRGD Diagram 515 with blue disc direction signs to TSRGD Diagram 606 which are illuminated for all approaches to the roundabout
- 1.2.4 The junction is a four-arm roundabout on the A458, also serves a new housing development served of Ridout Road and an unclassified road connecting the A458 with the B4380 at Atcham
- 1.2.5 Three approaches have a designated splitter island prior to entering the circulatory carriageway. The fourth arm serving the Housing development (Ridout Road) does not have any form of splitter island either kerbed or painted.
- 1.2.6 A footpath bounds both the development side of the junction and the A458 there are formal crossing points with tactile paving on all arms of the roundabout
- 1.2.7 The junction is within a 30mph speed limit which has the benefit of street lighting

1.3. Audit Management

- 1.3.1 Upon issue of the final version of the Road Safety Audit report, the Design Team should prepare a Road Safety Audit response report (Decision log). This is outlined in Appendix F of GG119, where an example template is available. This should be done in collaboration with the overseeing organisation. The report should incorporate the following:
 - Decision Log, spreadsheet as detailed in Appendix F of GG119, where each problem and recommendation in the Road Safety Report are reiterated.
 - In the Decision Log, a response should be provided by the design team and overseeing organisation for each problem raised in the RSA report, together with an agreed action.
- 1.3.2 The response report should be produced and finalised within one month of the issue of the RSA report. A copy of the response report should be issued to the RSA Team for information purposes.
- 1.3.3 Any non-safety and maintenance related issues which fall outside the scope of the safety audit report which the Audit Team may wish to draw to the attention of the overseeing organisation have been excluded from the main body of the report, but have been included in **Appendix A**.

2. Items Raised at Previous Road Safety Audits

- 2.1.1 No previous Road Safety Audits have been supplied to the Road Safety Audit Team as part of the documentation to be considered. It is assumed that no previous audits have been undertaken and therefore there are no outstanding issues to be considered in this section of the report.

3. Items Raised at this Stage 1 Road Safety Audit

3.1. Problem

Location: Approach to new roundabout from unclassified Atcham Road.

Summary: Risk of failure to give way and loss of control incidents.

Although there is a temporary sign (Diag 7014) to warn motorists of the new roundabout ahead. It is located too close to the give way line to be effective. In addition to this the sign is obscured by vegetation and cannot be readily seen.

The lack of warning in advance of the junction may cause the motorist to excessive breaking or failure to give way. This may result in side impact collisions with vehicles already on the circulatory carriageway or nose to tail collisions arising from sudden breaking



Photograph 1: Warning of new roundabout on unclassified road from Atcham, too close to junction and obscured by vegetation

Recommendation

This sign should be repositioned and made clearly visible for approaching vehicles

3.2. Problem

Location: Unclassified road from Atcham at giveaway on roundabout.

Summary: Inappropriate sign may cause confusion and driver hesitancy

The original existing sign post for the mini roundabout sign has been re-used to mount a roundabout warning sign (TSRGD Diag 510). This sign should be in advance of the junction to warn motorists of a junction ahead. By placing this sign at the give way line is inappropriate and may cause driver confusion or hesitancy resulting in sudden breaking and nose to tail collisions



Photographs 2: inappropriate position of warning sign of roundabout ahead sign

Recommendation

That the sign should be relocated to a more suitable location in advance of the roundabout. Due to the nature and alignment of the road it may also be beneficial to have a supplementary distance plate mounted below the warning sign denoting the distance to hazard

3.3. Problem

Location: A458 Westbound approach to island (Towards Shrewsbury).

Summary: Risk failure to give way

There is no deflection on the approach to the roundabout for vehicles travelling west towards Shrewsbury. The overrun area to accommodate the turning manoeuvres of HGVs around the roundabout, also allows motorists to take the 'racing line' through the junction. (See also Problem 3.4)

This could result in failure to give way and side impact collisions with vehicles already on the circulatory carriageway heading into the new development



Photograph 3: Lack of deflection on approach (Westbound) to roundabout towards Shrewsbury

Recommendation

Provide appropriate speed reducing measures such as 'SLOW' road markings for northbound vehicles prior to negotiating the junction. (See also problem 3.4)

3.4. Problem

Location: A458 Eastbound approach to roundabout (Towards Cressage).

Summary: Risk failure to give way.

There is no deflection on the approach to the roundabout for vehicles travelling west towards Shrewsbury. The overrun area to accommodate the turning manoeuvres of HGVs around the roundabout, also allows motorists to take the 'racing line' through the junction. (See also Problem 3.4)

This could result in failure to give way and side impact collisions with vehicles already on the circulatory carriageway heading into the new development



Photograph 4: Lack of deflection prior to roundabout

Recommendation

Provide appropriate speed reducing measures such as 'SLOW' road markings for northbound vehicles prior to negotiating the junction. (See also problem 3.3)

3.5. Problem

Location: Circulatory carriageway between A458 and Ridout Road.

Summary: Risk of loss of control collisions.

The kerb alignment and over run area for the roundabout has resulted in a large expanse of carriageway which is continuously unused. This has led to a build up of detritus material lying within the circulatory carriageway. This may cause some vehicles to lose control, particularly powered two wheeled vehicles who may momentarily lose control with the rider becoming unseated. This could result in injury to vulnerable road users



Photograph 5: Build up of detritus material on circulatory carriageway

Recommendation

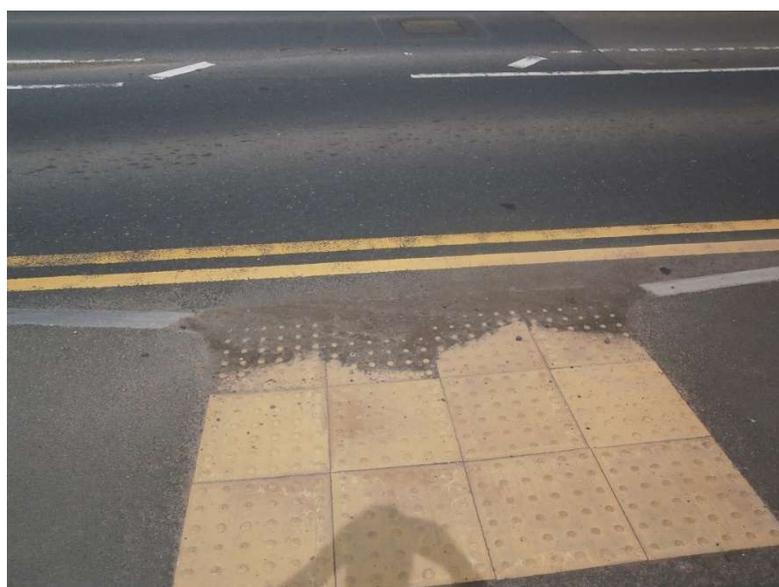
The road surface around this junction should be subject to routine maintenance regime of being regularly swept to keep the circulatory carriageway free from a build-up of detritus material.

3.6. Problem

Location: Pedestrian crossing point to east of roundabout on A458.

Summary: Risk of slip trip and fall collisions.

The pedestrian crossing point on the A458 to the east of the roundabout has a build up of detritus material indicating that the carriageway is not draining correctly. The build-up of detritus material may result in a build up of water which may freeze in the winter months. This could lead to slip trip and fall incidents.



Photograph 5: Build-up of detritus material at crossing point on A458 east of roundabout

4.0 Audit Team Statement

We certify that this audit has been carried out generally in accordance with the principles of GG119.

Road Safety Audit Team Leader

Nick Newton C Eng, FIHE, FCHIT, FSoRSA, Reg RSA
(HE RSA Cert Comp)

Signed:



Shropshire Council

Date: 27/05/2022

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Appendix A: Observations & Non-Safety Related issues

3.7. Observation

Location: A458 eastbound approach to roundabout (Towards Cressage)

Summary: Redundant road sign post from previous mini roundabout sign

The previous post and illumination unit for the mini roundabout sign on the approach to the roundabout is still insitu although the sign has been removed. This should be removed.



Photograph 6: Redundant signpost at give way to roundabout (Eastbound towards Cressage)

3.8. Observation

Location: A458 eastbound approach to roundabout (Towards Cressage)

Summary: Redundant road sign post from previous mini roundabout sign

The previous post and illumination unit for the mini roundabout sign on the approach to the roundabout is still insitu although the sign has been removed. This should be removed.



Photograph 7: Redundant signpost at give way to roundabout (Westbound towards Shrewsbury)

3.9. Observation

Location: Verges either side of access road to development

Summary: Redundant roadside infrastructure

Signs to advertise the development had been removed from the grass verges on Ridout Road. There were still remnants Sign posts holes and cable trunking for the development signage which visible and exposed in the grass verge.

These should be removed and the verge made good

Appendix B: Scheme Documentation Reviewed

No documentation was provided for this road safety Audit.

Appendix C: Scheme Location Plan

Please refer to the following page for a plan illustrating the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

The location of the scheme is shown below

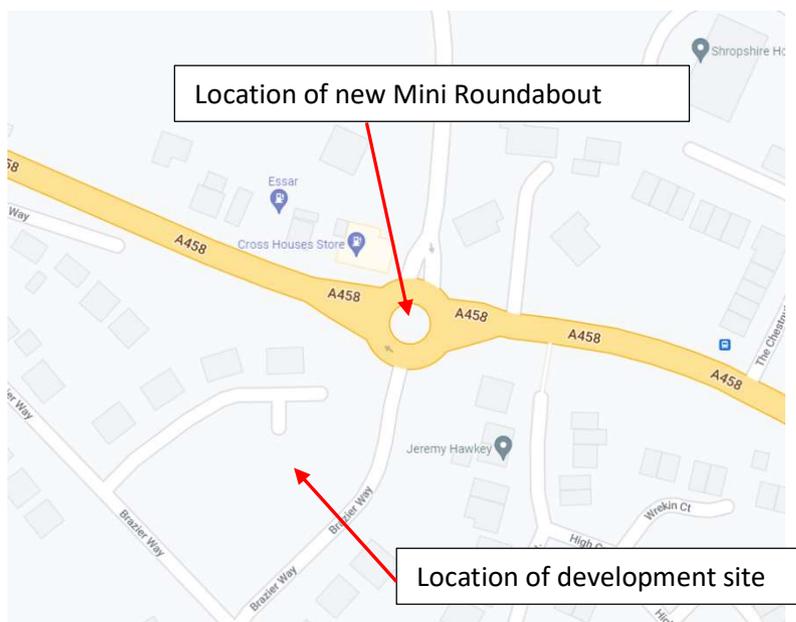


Figure 1: Location Plan



Figure 2: Site Plan

Appendix D: Problem Location Plan

