



M69 JUNCTION 2 / B4668, HINCKLEY

OCTOBER 2024

[illegible]

PROPOSED HINCKLEY RAIL INTERCHANGE ACCESS ROAD

M69 JUNCTION 2 / B4668, HINCKLEY

STAGE 1 ROAD SAFETY AUDIT

OCTOBER 2024

REPORT REF: 24-1363.01-RSA1C

CLIENT: BWB Consulting

ENGINEER: Midlands Road Safety Ltd

TEL: [REDACTED]

EMAIL: [REDACTED]@midlandsroadsafety.co.uk

Revision	Date of Issue	Author	Checked
C	28.10.2024	CB	SP
B	18.10.2024	CB	SP
A	30.08.2024	CB	SP
First Issue	05.03.2024	CB	SP
Draft (Internal)	23.02.2024	CB	SP

COPYRIGHT

The contents of this document must not be copied or reproduced in whole or part without the written consent of Midlands Road Safety Ltd. This document has been produced for the sole use of the Client in accordance with the terms of appointment.

CONTENTS		Page Number
1.	INTRODUCTION	2
2.	SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS	4
3.	SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT	5
4.	ADDITIONAL CONSIDERATIONS	8
5.	AUDIT STATEMENT	9

APPENDICES

- A. DRAWINGS AND DOCUMENTS REVIEWED
- B. SITE LOCATION AND PROBLEM IDENTIFICATION PLANS

REGISTRATION OF AMENDMENTS

DATE	REVISION	CHANGE
28.10.2024	C	Cover and Appendix B site plans updated to latest revision (HRF-BWB-LSI-D4-DR-CH-00100 P06).
16.10.2024	B	Updated acoustic fence drawing (HRF-BWB-GEN-XX-CH-SK182 P03) provided alongside RRRAPs for B4669 eastbound approach to M69 Junction 2 and the A47 northbound (new access road between the M69 and first internal roundabout junction subject to a 40mph speed limit). No additional safety problems identified at this stage.
29.08.2024	A	Report amended following approval of National Highways RSA Brief and receipt of updated drawings to include signing strategy and retaining feature details.

1. INTRODUCTION

1.1 This report comprises an Stage 1 Road Safety Audit (RSA) on a link road and access junctions for the proposed Hinckley Rail Interchange, to the west of Junction 2 on the M69 in Hinckley, Leicestershire. The works include;

- Amendments to the M69 junction 2 roundabout to provide the primary access to include an additional arm alongside signalisation;
- Creation of a secondary access via a new three-arm roundabout junction with the B4668 Leicester Road to the west of the site;
- Construction of a new 40mph distributor link road through the site, with an initial dual carriageway section between the M69 and western site access (approximately 990m) to accommodate the majority of the development traffic, followed by approximately 1,500m of single carriageway to accommodate largely local traffic; and
- Provision of a shared cycle route adjacent to the road and links for pedestrians to access the existing Public Right of Way network and Burbage Common.

1.2 The report, which relates to the site access junctions and the A47 Link Road, was requested by BWB Consulting on behalf of Tritax Symmetry (Hinckley) Limited. The Overseeing Organisations are Leicestershire County Council and National Highways. The Project Sponsor who approved the Road Safety Audit Brief on behalf of Leicestershire County Council is Rebecca Henson. The Project Sponsor who approved the Road Safety Audit Brief on behalf of National Highways, is Lucia Hogg.

1.3 The Audit Team Membership was as follows:

Audit Team Leader

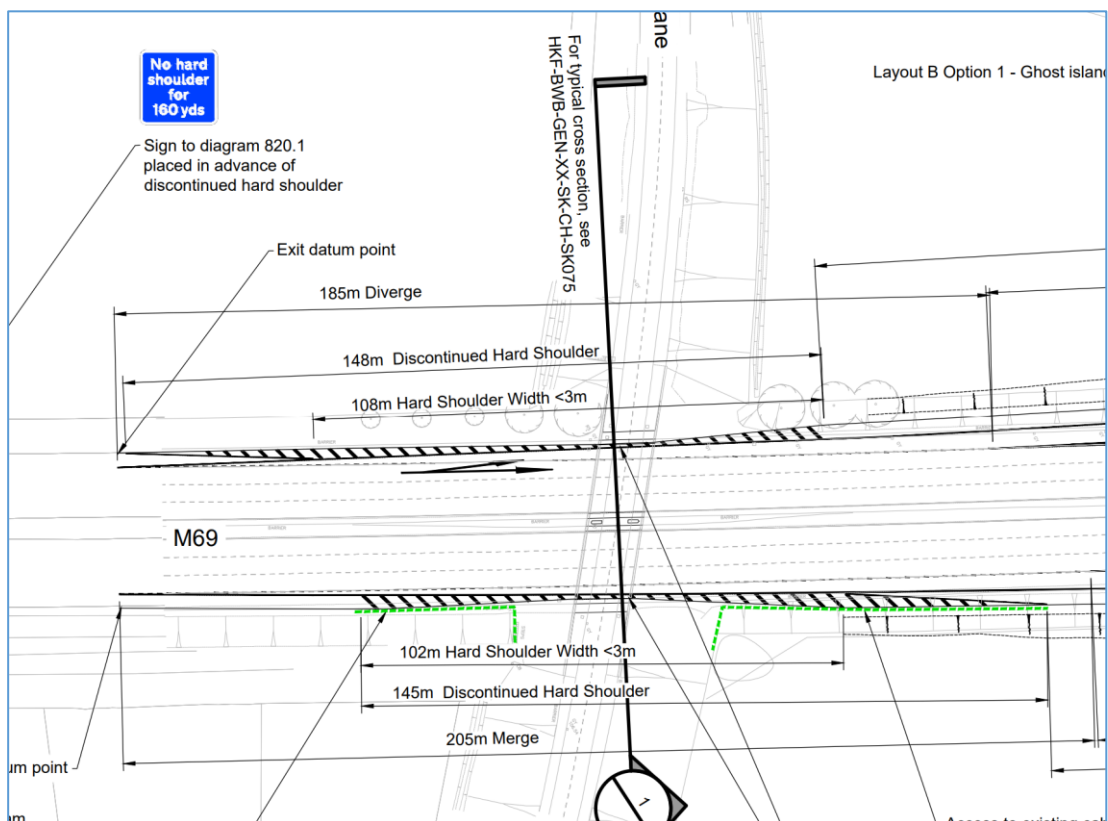
Chris Berry, MSc Transport Planning, MSoRSA, NH RSA Certificate of Competency

Audit Team Member

Simon Prescott, MIHE NH RSA Certificate of Competency

1.4 A site inspection was carried out by the Audit Team together on Monday 3rd October 2023 between the hours of 11:25 and 11:45 (B4668 junction), and between 15:00 and 15:35 (M69 junction and link road junction). During the site visit the weather conditions were overcast and the road surface was damp. Traffic flows were observed as being light, with no pedestrians and one cycle movement being observed.

- 1.5 An additional site inspection was carried out by the Audit Team together on Tuesday 27th August 2024 between the hours of 14:15 and 15:00. During the site visit the weather conditions were sunny and the road surface was dry. Traffic flows were observed as being moderate, with no pedestrians and no cycle movements being observed. This site visit was also attended by Gregg Allgood from the Safety Improvement Team at National Highways alongside Lucia Hogg, Assistant Project Manager and Gurinderbir Singh Padam, Project Manager for Third Party Works at National Highways.
- 1.6 The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. A list of these can be found in Appendix A. The auditors have been made aware of two departures from design standards. Whilst the submission for these departures remains in preparation, the two departures are:
- Proposed section of discontinuous hard shoulder of new south facing diverge slip at M69 J2; and
 - Proposed section of discontinuous hard shoulder of new north facing diverge slip at M69 J2.
- 1.7 The location of these departures is detailed below:



- 1.8 Having reviewed the implications of these departures on the safety of the network, whilst amendments to the existing vehicle restraint system will be required to accommodate the works no indication is shown on plan of this. It will be essential that working widths and containment levels past identified hazards are maintained and that adequate protection is afforded to maintenance and emergency workers operating in this area. The formal departures report will be awaited before commenting further.
- 1.9 The audit has been carried out in accordance with the principals of the National Highways document GG 119 'Road Safety Audit'.
- 1.10 The Audit Team have examined and reported solely on the road safety implications of the scheme as presented and not examined or verified the compliance to any alternate criteria.
- 1.11 All comments and recommendations in this report are referenced to the Audit Brief where provided, and detailed drawings supplied. Where appropriate a list of "Additional Considerations" will follow from any safety problems raised. These are not identified safety problems but generalised comments to assist in the design and safety audit process.
- 1.12 Midlands Road Safety Ltd has ensured that this report has been carried out independently with no member of the Audit Team membership directly linked to the scheme design.

2. SAFETY PROBLEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1. The safety aspects of the scheme were the subject to comment in an Interim Stage 1 Road Safety Audit (ref 23-1363.01-RSA1) carried out by Midlands Road Safety Ltd in October 2023. This interim report raised six safety problems.
- 2.2. Whilst each problem has been addressed within the RSA Response Report (HRF-BWB-HGN-RSA-RP-CH-001) it was felt by the Audit Team that Problem 1, 2 remain outstanding and is/are therefore repeated as Problem 1 within this Stage 1 Road Safety Audit report.
- 2.3. It is recommended that the Overseeing Organisation review both the previous Road Safety Audit and RSA Response Report to ensure that they are in agreement that the actions taken mitigate the previous safety problem as raised within the Interim Stage 1 Road Safety Audit report.

3. SAFETY PROBLEMS RAISED IN THIS ROAD SAFETY AUDIT

M69 Junction 2 / B4668 Roundabout Terminal Junctions

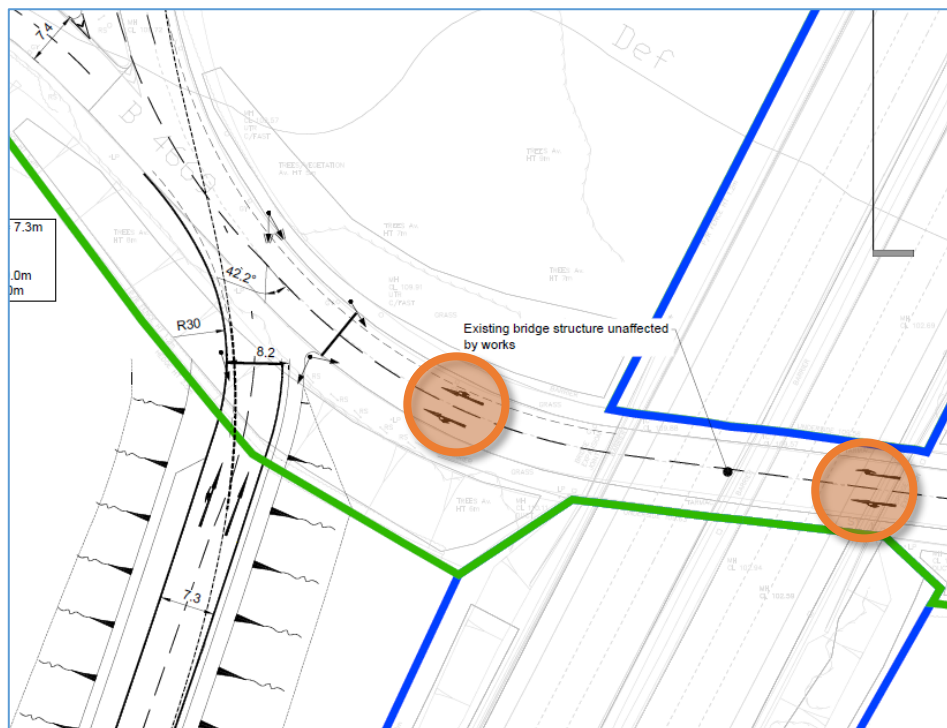
3.1. The Audit Team has identified four safety problems to be addressed.

3.2. **Problem 1**

Location: M69 J2 southern circulatory carriageway.

Summary: Confusing road markings risk side swipe type collisions.

Around the southern carriageway of the circulatory the lane destinations show an “ahead” and a “right turn” arrow. However, approaching the junction and on the approaches before this point, “ahead” and “ahead and right” arrows are shown. This could lead to late lane changes, sudden and unexpected braking and side swipe type collisions due to driver confusion and late decision making as a result of confusing and misleading lane destinations.



Recommendation:

It is recommended that the markings are amended so that they are consistent with the available movements around the southern half of the circulatory and on the westbound link road exit.

3.3. Problem 2

Location: M69 southbound approach to the new signalised junction.

Summary: Poor forward visibility of signals risks late braking and junction overshoot type collisions.

The southbound off-slip approach to the proposed signals at Junction 2 has a significant vertical and horizontal alignment change on the approach to the current Give-Way line. There is a concern that, given these changes and the existing signing infrastructure, that forward visibility towards the signal heads will not be provided for vehicles.



Recommendation:

It is recommended that the signals are located and designed, including raised poles and/or gantry signals if needed, so as to provide adequate forward visibility for approaching vehicles. Furthermore, it is recommended that the signing on the approach is amended so as not to pose an obstruction.

3.4. **Problem 3**

Location: M69 southbound approach to the new signalised junction.

Summary: Amended stop line position risks loss of control type collisions and shunts.

The provision of the stop line at the signalised off-slip means that the existing high friction surfacing will be substandard in length. This could lead to loss of control collisions or shunts involving late breaking vehicles.

Recommendation:

It is recommended that, as part of the detailed design, the length of high friction surfacing is amended to consider the amended stop line position.

3.5. **Problem 4**

Location: M69 southbound approach to the junction.

Summary: Amended signing missing diversion information risks late manoeuvres and shunts / side swipe collisions.

Whilst it is appreciated that the sign design is at a preliminary stage, the proposed signing eliminates / does not include the existing diversion route symbol. This could result in confusion for drivers following the diversion route, resulting in late lane changes and shunt type collisions.

Recommendation:

It is recommended that, as part of the detailed design, the diversion route symbols are included where appropriate.

Proposed Link Road

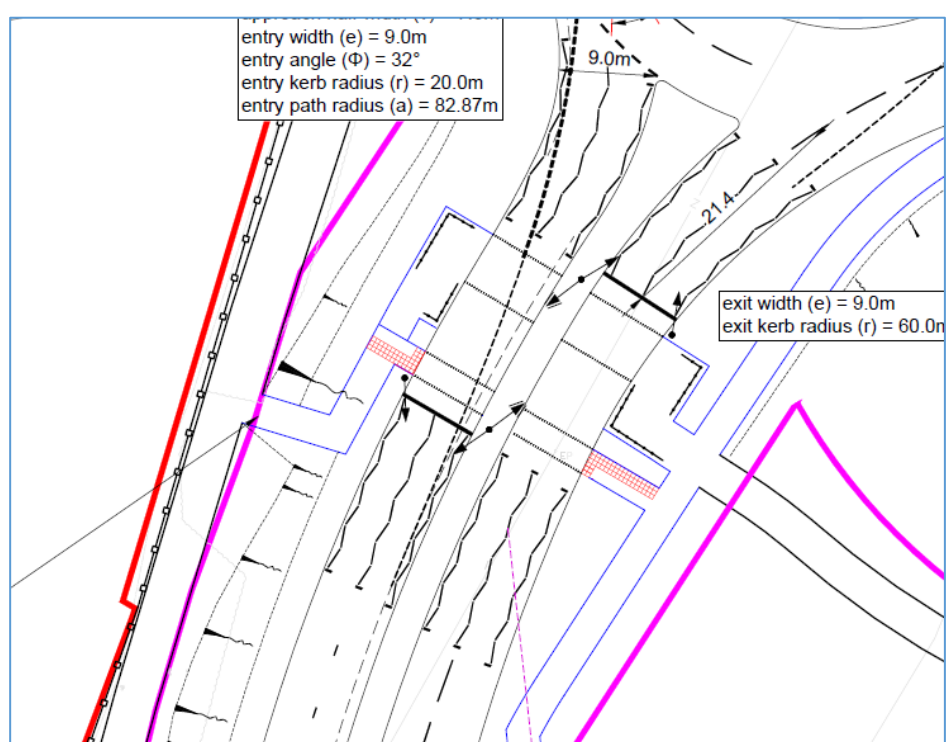
3.6. The Audit Team has identified no safety problems to be addressed.

End of the 'Safety Problems' in this Section of the Report

4. ADDITIONAL CONSIDERATIONS

4.1. Additional Observation 1

Between J2 on the M69 and the first internal roundabout it is proposed to install a Pegasus crossing. The crossing is shown as a single stage crossing for all users, with the roundabout to the north shown as only a two-arm junction at this time. The crossing is approximately 18m in length - as part of the detailed design it should be ensured that the crossing timings and on-crossing detection account for slow moving equestrians, especially as the central splitter island is not of sufficient width for equestrian or cyclists to safely wait.



5. AUDIT STATEMENT

- 5.1. We certify that the terms of reference of the audit are as described in GG 119 and that no member of the Audit Team was directly linked to the scheme design.

5.2. **AUDIT TEAM LEADER:**

Chris Berry – MSc, MSoRSA, NH RSA Certificate of Competency

Director

Midlands Road Safety Ltd


Signed: 

Date: 28.10.2024

5.3. **AUDIT TEAM MEMBER:**

Simon Prescott, MIHE NH RSA Certificate of Competency

Road Safety Consultant working on behalf of Midlands Road Safety Ltd

Signed: 

Date: 28.10.2024

APPENDIX A

The following documents and drawings were provided for the purposes of this road safety audit.

Drawings

Number	Title	Rev
HRF-BWB-GEN-XX-SK-CH-SK130	M69 J2 Street Lighting Strategy	P02
HRF-BWB-HGN-HW01-DR-CH-0100	General Arrangement Sheet 1	P02
HRF-BWB-HGN-HW02-DR-CH-0100	General Arrangement Sheet 2	P02
HRF-BWB-HGN-HW03-DR-CH-0100	General Arrangement Sheet 3	P02
HRF-BWB-HGN-HW04-DR-CH-0100	General Arrangement Sheet 4	P02
HRF-BWB-HGN-HW05-DR-CH-0100	General Arrangement Sheet 5	P02
HRF-BWB-HGN-HW06-DR-CH-0100	General Arrangement Sheet 6	P02
HRF-BWB-HGN-HW06-DR-CH-0115	Vehicle Tracking Roundabout 3	P01
HRF-BWB-HGN-HW07-DR-CH-0100	General Arrangement Sheet 7	P03
HRF-BWB-HGN-HW07-DR-CH-0115	Vehicle Tracking Bus Interchange	P02
HRF-BWB-HGN-HW08-DR-CH-0100	General Arrangement Sheet 8	P02
HRF-BWB-HGN-HW08-DR-CH-0115	Vehicle Tracking Roundabout 2	P01
HRF-BWB-HGN-HW09-DR-CH-0100	General Arrangement Sheet 9	P02
HRF-BWB-HGN-HW09-DR-CH-0115	Vehicle Tracking Roundabout 1	P01
HRF-BWB-HGN-HW10-DR-CH-0100	General Arrangement Sheet 10	P02
HRF-BWB-HGN-HW10-DR-CH-0115	Vehicle Tracking Junction 2 West	P01
HRF-BWB-HGN-HW11-DR-CH-0100	General Arrangement Sheet 11	P02
HRF-BWB-HGN-HW11-DR-CH-0115	Vehicle Tracking Junction 2 East	P01
HRF-BWB-HSN-HW01-DR-CH-1230	Road Sign Strategy	P01
HRF-BWB-HSN-HW20-DR-CH-1230	Road Sign Strategy	P01
HRF-BWB-LSI-D1-DR-CH-00100	Highway Plans Sheet 1	P05
HRF-BWB-LSI-D1-DR-CH-00105	Highway Plans Long Section Sheet 1	P02
HRF-BWB-LSI-D2-DR-CH-00100	Highway Plans Sheet 2	P04
HRF-BWB-LSI-D4-DR-CH-00100	Highway Plans Sheet 3	P05
HRF-BWB-LSI-D7-DR-CH-00100	Highway Plans Sheet 7	P04
HRF-BWB-LSI-D8-DR-CH-00100	Highway Plans Sheet 8	P05
HRF-BWB-GEN-XX-SK-CH-SK079	Merge Slip Road Retaining Wall – Sheet Piles	P03
HRF-BWB-GEN-XX-SK-CH-SK043	M69 Directional Signage	P01
HRF-BWB-GEN-XX-SK-CH-SK049	M69 J2 South Facing Slip Roads Merge and Diverge Layout	P03
HRF-BWB-GEN-XX-SK-CH-SK143	Forward Visibility	P01
HRF-BWB-GEN-XX-SK-CH-SK144	Forward Visibility	P01
HRF-BWB-GEN-XX-CH-SK182	Work No.7 A47 Acoustic Fence Location	P03
HRF-BWB-HML-M69-DR-CH-0150	General Arrangement	P02
HRF-BWB-HML-M69-DR-CH-0151	General Arrangement	P02

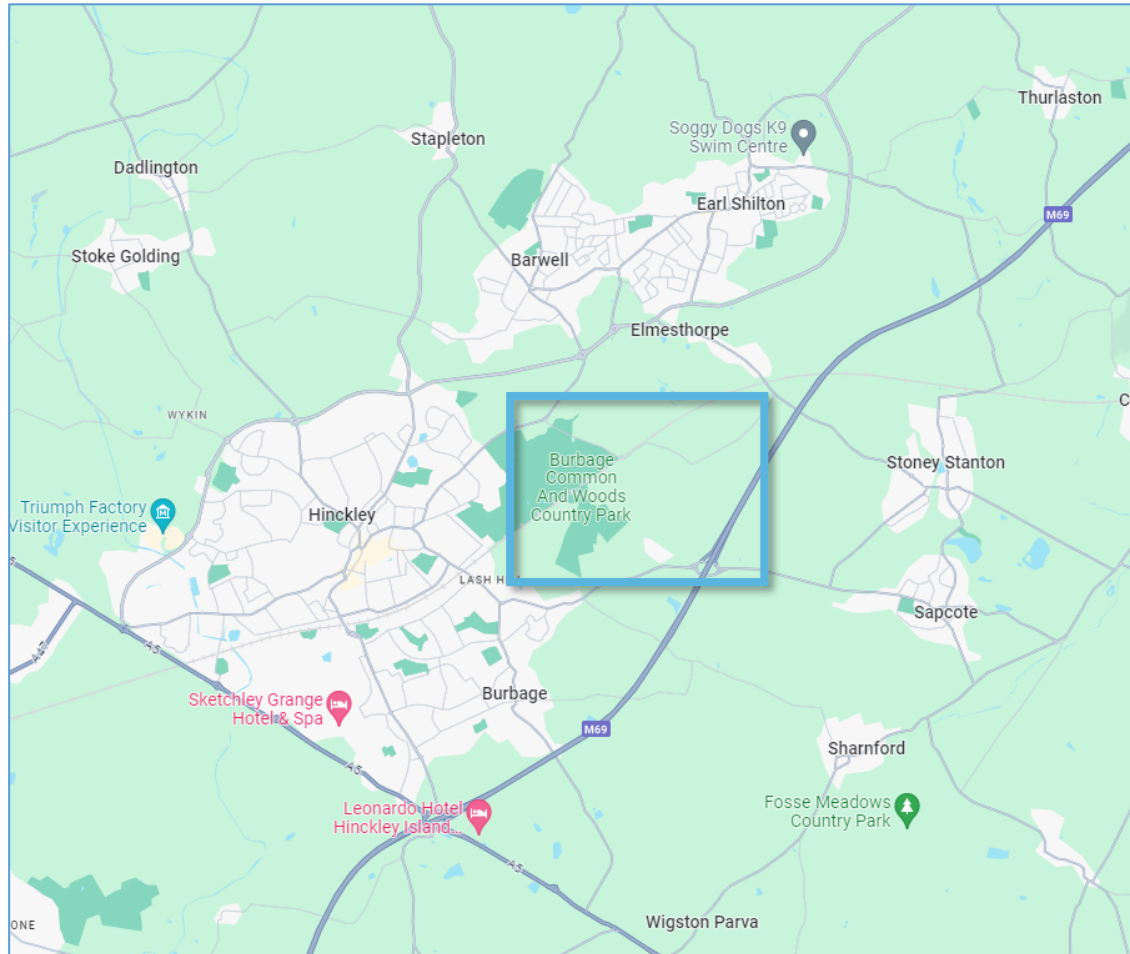
Documents

Author	Title	Rev	Date
BWB Consulting	Road Safety Audit Brief	P04	09.07.2024
BWB Consulting	Road Safety Audit Brief	-	15.02.2024
BWB Consulting	Interim RSA1 Response Report	-	04.01.2024
BWB Consulting	WCHAR	P2	25.10.2022
BWB Consulting	Transport Assessment	06	03.2023
BWB Consulting	Geometric Design Strategy Record	P02	09.02.2024
BWB Consulting	Collision Data Analysis	P01	24.10.2023
BWB Consulting	RRRAP – A47 NB	P01	10.10.2024
BWB Consulting	RRRAP – B4669 EB	P01	10.10.2024

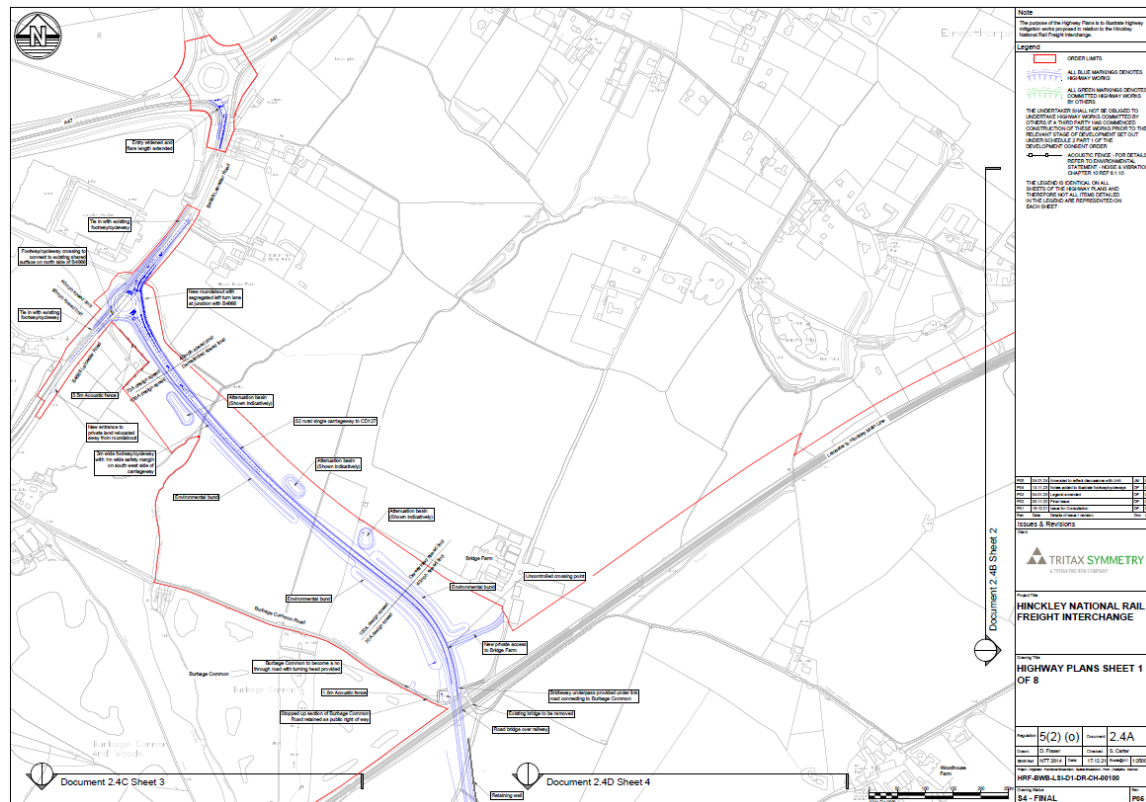
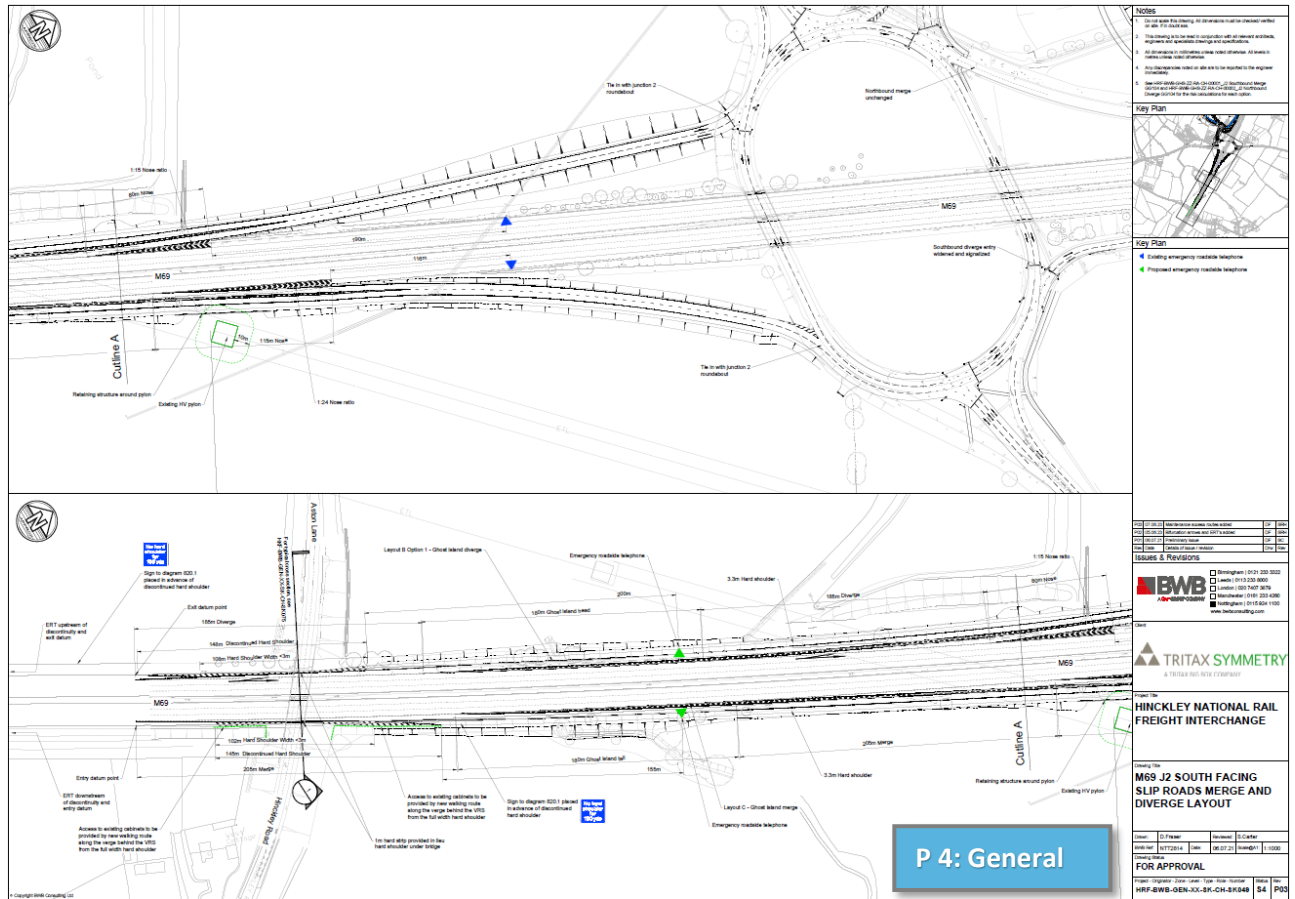
APPENDIX B

The location of any problems/observations that have been identified in Section 3 of this report can be seen on the extracts of the drawings supplied to the Audit Team, as listed in Appendix A.

Figure 1 – Site Location



[Mapping source; Google Maps]





Midlands Road Safety Ltd

29 Arboretum Street, Nottingham NG1 4JA

T: +44 (0) 7791121104

E: enquiries@midlandsroadsafety.co.uk

W: www.midlandsroadsafety.co.uk