

Tritax Symmetry (Hinckley) Limited

# **HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE**

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## **The Hinckley National Rail Freight Interchange Development Consent Order**

Project reference TR050007

## **Appendix 14 - Gibbet Hill Mitigation Road Safety Audit Stage 1**

Revision: 01

**December 2024**

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations  
2009 Regulation 5(2)(q)

**TRANSPORT & INFRASTRUCTURE PLANNING**

National Highways  
Hinckley Rail Freight Interchange  
Gibbet Hill Roundabout, Leicestershire  
Stage 1 Road Safety Audit

## **TRANSPORT & INFRASTRUCTURE PLANNING**

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October 2024

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## FIGURES

Figure 1: Location of problems identified in this audit

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Appendix 1: List of Documents Supplied to the Audit Team

## 1. INTRODUCTION

- 1.1 This report comprises a Stage 1 Road Safety Audit (RSA) undertaken on capacity improvements to the Gibbet Hill roundabout which forms the junction between the A5, A426, Rugby Road and Gibbet Lane. The A5 and the roundabout junction is under the jurisdiction of National Highways (NH) while the A426 are under the jurisdiction of the local highway authority, Warwickshire County Council.
- 1.2 This scheme has been designed to inform a contribution by the Hinckley National Rail Freight Interchange (HNRFI) Applicant to a wider improvement scheme at this junction. The Audit focuses on potential localised widening of the A426 roundabout entry and the A5 northbound approach entry.
- 1.3 The Audit Team members are listed in Section 3.0. The audit took place at the Nottingham office of BWB Consulting Limited between 9<sup>th</sup> and 22<sup>nd</sup> October 2024.
- 1.4 National Highways (NH) were invited to participate in the RSA. They were provided with the design information and have undertaken their review separately. The feedback received from NH has been considered as part of the report.
- 1.5 The Audit comprised an examination of the drawings, documents and information provided by the Design Team, who have prepared the general arrangement drawings for this section of the project. The information received by the Audit Team is listed in **Appendix 1**.
- 1.6 A daylight examination of the site was undertaken by the Audit Team between 1130 and 1230 hours on 18<sup>th</sup> October 2024. During the site visit the weather was fine and dry.
- 1.7 Traffic flows on the A5 were high, as were flows on the A426 where queues on the eastbound approach were frequently observed. No cyclist movements were observed during the site visit although pedestrians were witnessed moving between the layby immediately to the south of the roundabout on the A5, and the businesses within the garage located between the Gibbet Lane and A5 south arms.
- 1.8 The terms of reference of the audit are as described in GG 119. The Audit 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.
- 1.9 All comments and recommendations refer to the highway proposal drawings and the locations have been indicated in **Figure 1**.
- 1.10 In summary, the proposals include localised widening of the A426 eastbound entry, Gibbet Lane entry and the A5 northbound entry, increasing the entry lanes from one to two at those arms.

## 2. ITEMS RAISED AT THIS STAGE 1 AUDIT

### Problem

2.1 Location: A426 northeast bound entry

Summary: Potential elevated entry paths due to the relaxed kerb radius leading to loss of control

The audit team is concerned with the proposed nearside kerb line on the A426 entry. The increased entry path radius is likely to impact on the entry speeds of vehicles using the roundabout. Reducing the entry path deflection leads to elevated vehicular speeds on entry which in turn could lead to loss of control collisions at the roundabout.

### Recommendation

Review the proposed deflection in the nearside lane to ensure that the proposed entry path radius is not detrimental to entry speeds.

### Problem

2.2 Location: General to the scheme

Summary: Potential loss of control resulting from ineffective drainage and associated ponding within the carriageway.

There are various locations around the roundabout where there is significant vegetation and debris established in the channel lines of the carriageway which indicates likely ineffective drainage. If the drainage at and around the junction does not operate effectively there is an increased risk of surface water ponding which in turn could lead to loss of traction and loss of control, particularly in periods of freezing weather.

### Recommendation

Review the drainage at the junction and revise as part of the scheme.

## Problem

2.3 Location: General to the scheme

Summary: Potential collisions associated with insufficient circulatory width

The formalisation of the two lane entries from A5 northbound, A426 eastbound and Gibbet Lane is likely to increase the occurrence of vehicles, particularly HGVs, using the circulatory carriageway two abreast. While the swept path drawings supplied to the RSA team suggest that this is achievable, site observations showed that there is evidence of significant overrun of the central island kerb line (on both the west and east sides) suggesting that there is insufficient width on the circulatory to safely accommodate two HGVs. This is compounded by the lack of road markings on the roundabout circulatory and all exits from the roundabout are single lane. Collectively this could lead to an increase in collisions on the circulatory, and side swipe collisions at the exits as two vehicles attempt to leave the roundabout at the same time.

There is also a risk of an increase in HGVs overrunning the verge and central island bringing mud onto the carriageway which is particularly hazardous for powered two wheelers.

## Recommendation

Review the swept path at the junction taking into consideration what could be happening in reality at present at the roundabout and if necessary, revise the kerb lines around the circulatory to ensure sufficient width is provided as part of the scheme.

## Problem

2.4 Location: General to the scheme

Summary: Potential collisions resulting from a lack of road markings

There is a general lack of road markings on the approaches to and exits from the roundabout. Increasing the number of entry lanes in turn increases the number of vehicles on the negotiating the roundabout at any one time. Many of the users will be unfamiliar with the area and the lack of road markings could lead to incorrect positioning resulting in late lane changes or hesitation which in turn could result in collisions.

## Recommendation

Provide sufficient road markings on approach to, exits from and on the circulatory of the roundabout.



## **Problem**

2.5 Location: Areas of carriageway widening – A426 and A5 northbound entry

Summary: Potential collisions with street furniture

The localised widening and formalisation of two lane entries at the A426 and A5 reduces the offsets to street furniture and assets located within the nearside verges. At the A5 northbound entry, it was also noted that there is a level change towards the back of the verge to the land adjacent. In the event of a collision in these locations there is an increased risk of an errant vehicle colliding with street furniture or entering the adjacent field all of which will result in increased severity of injuries to vehicle occupants.

## **Recommendation**

Assess the need for relocation of street furniture or the need for protection using VRS, by undertaking a RRRAP assessment.

### 3. AUDIT TEAM STATEMENT

3.1 We certify that this audit has been undertaken in accordance with GG 119.

#### AUDIT TEAM LEADER

**██████████ MSc FCIHT**

Highways England approved Certificate of Competency

Associate Director

BWB Consulting Ltd

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Signed: ██████████

Date: 22 October 2024

#### AUDIT TEAM MEMBER

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Highways England approved Certificate of Competency

Director

BWB Consulting Ltd (address above)

Signed: ██████████

Date: 22 October 2024

## **FIGURES**

## **APPENDICES**

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## Appendix 1: List of Documents Supplied to the Audit Team

Document / Drawing	Title	Revision
HRF-BWB-GEN-XX-DR-TR-114	Gibbet Hill HNRFI Mitigation GA	P02
HRF-BWB-GEN-XX-DR-TR-115	Gibbet Hill HNRFI Mitigation Visibility	P01
HRF-BWB-GEN-XX-DR-TR-134	Gibbet Hill BWB Mitigation Swept Paths	P02
TR050007 6.2.8.1	Appendix 8.1 Transport Assessment	V9.0





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