

## **BRYN LANE ROUNDABOUT, WREXHAM PROPOSED HIGHWAY MITIGATION WORKS**

### **STAGE 1 ROAD SAFETY AUDIT**

610/2024/121/01 Rev 1

5 April 2024

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|-------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Report Title:</b>                      | Bryn Lane Roundabout, Wrexham – Proposed Highway Mitigation Works<br>Stage 1 Road Safety Audit |
| <b>Date:</b>                              | 5 April 2024                                                                                   |
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| <b>Prepared by:</b>                       | Six Ten Highways & Traffic Ltd                                                                 |
| <b>On behalf of:</b>                      | Prime                                                                                          |

## Disclaimer note

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## 1.0 INTRODUCTION

- 1.1 This report results from a preliminary design Stage 1 Road Safety Audit (RSA) carried out on the proposed highway mitigation works at Bryn Lane Roundabout, Wrexham at the request of Prime the designer of the scheme who provided the audit information, and although there was no formal 'audit brief' the RSA team has accepted that sufficient information has been provided to undertake the Stage 1 RSA. The audit team has been approved by the Overseeing Organisation Wrexham County Borough Council to carryout RSAs on their highway network.
- 1.2 The Road Safety Audit Team was as follows:
- Jon Preston MCIHT MSoRSA  
Audit Team Leader
- Tristan Brooks\* Bsc (Hons), MBA, CMILT, MCIHT, MSoRSA, HE RSA Cert of Comp  
Audit Team Member
- 1.3 Audit Team members marked with an asterisk above hold a Highways England approved Certificate of Competency (CoC) in Road Safety Audit, in accordance with Article (1–3) of EC Directive 2008/96/EC.
- 1.4 The audit took place at the St Helens office of six:TEN Highways and Traffic between 25 March 2024 and 5 April 2024. The Road Safety Audit was undertaken in accordance with the Road Safety Audit information provided. The audit comprised an examination of the documents provided as detailed in Appendix One.
- 1.5 The Audit Team visited the site together on Tuesday 26 March 2024 between 09:45hrs and 10:15hrs. During the site visit the weather was overcast and the carriageway surface was damp. During the site visit traffic movements in the vicinity of the proposed highway works were moderate with some pedestrian and no cyclist movements observed.
- 1.6 Bryn Lane roundabout is currently subject to a 40mph speed limit and is street lit.
- 1.7 The terms of reference of the audit are as described in GG 119 Rev.2. 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. This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Collision Investigation, Road Safety Engineering and Road Safety Audits.
- 1.8 The proposed highway mitigation works in summary includes:
- Amendments to the road markings on Bryn Lane Roundabout to provide a dedicated left-turn from Abenbury Way onto Industrial Estate Road.
- 1.9 The Audit Team have not been informed of any Departures from Standard for the proposed scheme nor have they been made aware of any previous RSA's undertaken on the scheme.
- 1.10 Personal injury collision data provided to the audit team shows there has been three personal injury collisions on/near Bryn Lane Roundabout during the five-year period 2018 – 2022. One collision was classed as serious in severity and resulted in one casualty. The remaining two collisions were classed a slight in severity and resulted in two casualties.

- 1.11 The scheme has been examined and this report compiled only regarding the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 1.12 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG 119 Rev 2, and in no way, imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

## **2.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT**

### **2.1 General**

**2.1.1** No road safety issues identified at this stage.

### **2.2 Local Alignment**

**2.2.1** No road safety issues identified at this stage.

### **2.3 Junctions**

**2.3.1** No road safety issues identified at this stage.

### **2.4 Walking, Cycling and Horse Riding**

**2.4.1** No road safety issues identified at this stage.

### **2.5 Traffic Signs, Carriageway Markings and Lighting**

#### **2.5.1 Location: Abenbury Way approach to the roundabout**

##### **Problem**

**Summary: Increased risk of late lane-change/side swipe type collisions due to lack of guidance regarding the dedicated left-turn lane**

The drawing provided for audit shows that the length of the two-lane section on the Abenbury Way approach to the Bryn Lane Roundabout is relatively short and that only one set of directional arrow road markings are proposed, which are located approximately 5m from the roundabout give-way line. The proposed directional road marking arrows will regularly be masked by vehicles waiting to enter the roundabout, resulting in a lack of guidance for drivers approaching on Abenbury Way that the nearside lane is a left-turn only lane. This may result in an increased risk of late lane-change/side swipe type collisions.

##### **Recommendation**

It is recommended that the length of the two-lane section on the Abenbury Way approach to the Bryn Lane Roundabout is increased, and upright lane destination traffic signs and additional directional arrow road markings are provided.

### 3.0 ROAD SAFETY AUDIT TEAM STATEMENT

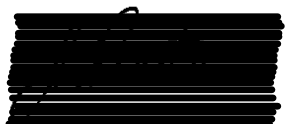
We certify that the audit has been carried out in accordance with DMRB GG119 Rev 2.

#### AUDIT TEAM LEADER

Jon Preston MCIHT MSoRSA

Director

six:TEN Highways & Traffic Ltd

Signed: 

Date: 5 April 2024

#### AUDIT TEAM MEMBER

Tristan Brooks Bsc (Hons), MBA, CMILT, MCIHT, MSoRSA, HE RSA Cert of Comp

Traffic & Road Safety Engineer

six:TEN Highways & Traffic Ltd

Signed: 

Date: 5 April 2024

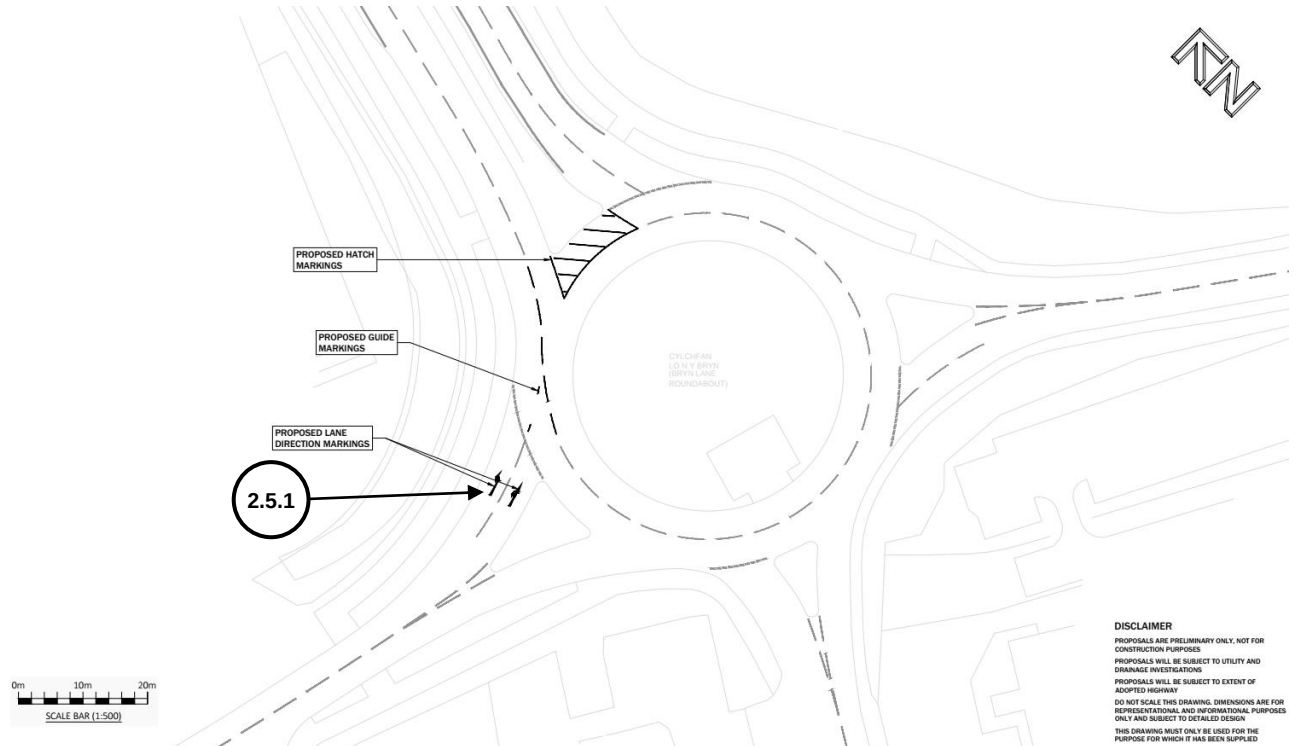
## **APPENDIX ONE**

### **4.0 LIST OF DRAWINGS AND DOCUMENTS SUPPLIED BY THE DESIGN ORGANISATION**

- P21066-200 – Bryn Lane Roundabout Mitigation
- Traffic Flow Diagrams Kingmoor, Wrexham Industrial Estate
- 5 year (up to December 2022) Personal Injury Collision Data

## APPENDIX TWO

### 5.0 PROBLEM LOCATION PLAN



## APPENDIX THREE

### 6.0 PHOTOGRAPHS



6.1 General view looking east on Abenbury Way towards Bryn Lane Roundabout.

## APPENDIX FOUR

### 7.0 PERSONAL INJURY COLLISION LOCATION PLAN

