





Road Safety Audit Stage 2

Proposed Zebra Crossing Bathwick Hill, Bath September 2015

Bath and North East Somerset Incorporating the Designer's Response



Road Safety Audit Stage 2

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Bath and North East Somerset

2nd Floor, Civic Centre, Market Walk, Keynsham, BS31 1FS

Incorporating the Designer's Response



Issue and revision record

| Revision | Date | Originator | Checker | Approver | Description | Standard |
|----------|------------|-------------|-------------|------------|-------------|----------|
| Α | 07/09/2015 | R J Collins | A J Coleman | J A Castle | First Is: | sue |
| | | Laws | Et | Bele | | |

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1 Introduction

This report describes a Stage 2 Road Safety Audit undertaken on the proposed installation of a Zebra Crossing. The crossing will be located on Bathwick Hill / Oakley near the junctions with Copseland and North Road in Bath and provides a link to the University of Bath.

The audit has been carried out by Mott MacDonald at the request of their client, Bath and North East Somerset Council (BANES).

The audit took place at the Birmingham office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

A visit to the site was completed on Tuesday 25th August 2015 at 18:00 hrs. During the site visit, the weather conditions were overcast and the road surface was damp.

It is confirmed that this is a Stage 2 Road Safety Audit and the audit was undertaken upon completion of the detailed design. It is also confirmed that the audit was carried out in accordance with the requirements of the Highways England Departmental Standard HD19/15.

The Audit Team consisted of:

A Coleman BA (Hons), MCIHT, MSoRSA (Team Leader)

Mott MacDonald

R Collins BA (Hons), MSc (Team Member)

Mott MacDonald

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently the auditors accept no responsibility for the design or construction of the scheme.

All of the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Designer's Response to the audit should be kept on file for future reference.



Bath & North East Somerset Council have specifically requested the Audit Team consider the impact of the proposed works on road safety along Oakley (see Request for Stage 2 Road Safety Audit). The Audit team consider that the scheme will not have a detrimental impact on road safety along Oakley.

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.



2 Items Raised at this Stage 2 Audit

This section describes any road safety related issues identified by the Audit Team during this Stage 2 Road Safety Audit that are associated with the scheme as presented in **Appendix A**.

2.1 **Problem 2.1**

Location: Zebra crossing west of Copseland.

Summary: Cyclist conflict with pedestrians using zebra crossing.

Dropped kerbs are proposed on North Road for cyclists to join a shared footway/cycleway that extends beyond the crossing on the north-eastern side of Bathwick Hill. However, no dropped kerbs are proposed for cyclists to re-enter the carriageway on Bathwick Hill/Oakley. The existing dropped kerbs on Bathwick Hill to the east of Copseland are to be removed which means the only dropped kerbs for cyclists to return to the carriageway are at the zebra crossing. It is unlikely that cyclists will dismount as they will continue on the north-eastern carriageway as no shared use facility is proposed on the south-western side of the crossing. This could result in collisions between pedestrians and cyclists.

Cycle collisions with motor vehicles may also occur as drivers may not expect cyclists to be joining the carriageway at this location.

Alternatively, cyclists may use a full height kerb to enter the carriageway which could lead to cycle loss of control collisions.

Recommendation

It is recommended that consistent facilities are provided for cyclists to enable them to leave and re-join the carriageway. Cycle facilities should be clearly signed and marked with way-finding signs also provided. If it is anticipated that cyclists are to use the zebra crossing, then it should be a minimum 3.0m in width.

Designer's Response

Agree – The zebra crossing will be increased to a 3 metre width



2.2 **Problem 2.2**

Location: North-eastern side of Zebra crossing.

Summary: Visually impaired pedestrians may miss crossing.

On the north-eastern side of the zebra crossing red tactile paving in an 'L' shape has been shown, however, it is not shown to extend to the back of the footway. Visually impaired pedestrians from North Road or Oakley/The Avenue may not detect the crossing and instead may cross at an inappropriate less safe location, which could result in collisions between pedestrians and vehicles.

Recommendation

The tactile paving should extend to the back of the footway.

Designer's Response

Agree – The tactile will be extended to the back of the footway



3 Audit Team Statement

We certify that this audit has been carried out in accordance with the Highways England Departmental Standard HD 19/15.

Audit Team Leader

A J Coleman BA (Hons), MCHIT, MSoRSA

Signed:

Date: 7th September 2015

Road Safety Engineer Mott MacDonald 35 Newhall Street Birmingham B3 3PU

Audit Team Member

R Collins BA (Hons), MSc

Signed:

Date: 7th September 2015

Road Safety Engineer Mott MacDonald 9 Portland Street Manchester M1 3BE



Appendices

| Appendix A. | List of Documents Reviewed_ | |
|-------------|-----------------------------|--|
| Annendix B | Location Key Plan | |



Appendix A. List of Documents Reviewed

A.1. Drawings

Drawings Reviewed by Audit Team

| Drawing | Rev | Title |
|-------------|-----|------------------------------------|
| TC4057/111 | Α | Proposed Zebra Crossing – option 9 |
| TC4057/120 | - | Signing details |
| HSD1298/110 | A | Zebra crossing arrangements |

A.2. Documents

Documents Reviewed by Audit Team

| Document | Rev | Title |
|--------------|-----|---|
| Unreferenced | - | C0748 Bathwick Hill Turning Count |
| Unreferenced | - | C0748 Bathwick Hill Pedestrian & Cycle Analysis |
| Unreferenced | - | C0748 Bathwick Hill ATC results |
| Unreferenced | - | Request for Stage 2 Road Safety Audit |



Appendix B. Location Key Plan

