



safer roads for everyone

Phase 9, Heyford Park, Upper Heyford, Bicester

S.38 Works

Road Safety Audit Stage 1

on behalf of Dorchester Living

TMS reference no: 14436

Phase 9, Heyford Park, Upper Heyford, Bicester S.38 Works Road Safety Audit Stage 1

1. Introduction

- 1.1 This report describes a Stage 1 Road Safety Audit carried out on S.38 Works in association with a proposed residential development off Camp Road in Upper Heyford near Bicester on behalf of Dorchester Living. The audit was carried out on the 28th of August 2018 in the offices of TMS Consultancy.
- 1.2 The audit team members were as follows:-

Audit Team Leader

Robert Cycles - BSc (Hons), MIHE, MCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
Senior Road Safety Consultant, TMS Consultancy

Audit Team Member

Amy Sutherland - BSc (Hons) MCIHT, MIHE
Highways England Approved RSA Certificate of Competency
Assistant Engineer, TMS Consultancy

- 1.3 The audit comprised an examination of the documents listed in **Appendix A**. Information not available at the time of the audit was traffic or collision data. The site was visited by the Audit Team on the 28th of August 2018 at 1pm. The weather was fine and dry. Traffic flows were low. Pedestrian and cycle flows were very low.
- 1.4 The terms of reference of the audit are as described in HD 19/15. 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 design to any other criteria.
- 1.5 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence. The locations of specific problems are referenced on the plan in **Appendix B**.



- 1.6 The scheme consists of the erection of 297 residential dwellings comprising of a mix of open market and affordable housing, together with associated works including provision of new priority give way junctions, internal road layout, vehicular accesses and pedestrian accesses, public open space, landscaping, utilities and infrastructure off Camp Road between Kirtlington Road and Izzard Road.

2. Items resulting from this Stage 1 Audit

Note: This Road Safety Audit relates only to the S.38 works. It is noted that existing features along Camp Road will need to be modified to safely accommodate the development. This includes the priority road narrowing that is located in front of a proposed smaller vehicle access and the right turn lane, central island and existing access junction located opposite the proposed western access.

2.1 PROBLEM

Location – General – Swept Path Analysis

Summary: Potential loss of control or damage only collisions

The swept path analysis shows that large vehicles turning left out of the western access onto Camp Road and right into the development from Izzard Road could strike the kerbs of the central traffic islands and could also collide with vehicles parked in designated parking spaces within the development outside plots P699, P700, P651, P652, P725, P726, P738, P546-P549. This could lead to loss of control or damage only type collisions occurring.

RECOMMENDATION

The geometry should be amended as appropriate to ensure likely vehicles have sufficient margin for error when manoeuvring through the site and turning into and out of the development from Camp Road and Izzard road.

Care should be taken as part of the detailed design to ensure street furniture is not positioned in areas likely to be overrun by the dynamic envelope of larger vehicles.

2.2 PROBLEM

Location – General – Smaller accesses onto Camp Road

Summary: Increased risk of pedestrian and cycle collision and trips and falls

Inter-visibility between pedestrians and cyclists crossing the smaller vehicular accesses off Camp Road will be restricted by dense tall hedge line increasing the risk of pedestrian and cyclist collisions. In addition, the numerous junctions along Camp Road also break up the route for pedestrians and cyclists increasing the risk of trips and falls using the crossings.

RECOMMENDATION

Foliage should be removed to provide adequate inter-visibility at the crossing points and junctions although ideally, the smaller accesses should be redesigned to give priority to pedestrians and cyclists.

2.3 PROBLEM

Location – General – Internal pedestrian crossing points and routes

Summary: Increased risk of pedestrian trips and falls

There are no internal pedestrian crossing points shown within the development. Pedestrians crossing the internal layout along likely desire lines are likely to trip and fall negotiating raised kerbs or crossing soft ground if no footway stems are provided. Pedestrians, especially the mobility impaired or those with prams could trip and fall walking across rumble strips.

RECOMMENDATION

Pedestrian crossing points should be provided at likely pedestrian desire lines and at junctions to cater for all pedestrian movements. It should be ensured that any pedestrian crossing is not provided across any rumble strip. Where pedestrian routes are provided perpendicular to rumble strips, they should be designed with a flush area to allow pedestrians with wheelchairs and pushchairs a smooth level bypass.

2.4 PROBLEM

Location – General - Footways

Summary: Increased risk of trips and falls for pedestrians

Several of the footway junctions are designed in a north-south, east-west 90-degree configuration. If the connecting footways are not located on the likely desire lines, pedestrians will cut the corners across the verge to connect to adjacent footways. Over time the verges will erode resulting in uneven ground and raised upstands of edging kerbs.

RECOMMENDATION

Where possible footways should be provided along likely desire lines and the footway junctions should be splayed or appropriate radii provided.

2.5 PROBLEM

Location – General – Cycle facilities

Summary: Potential increased risk of cycle collisions

It is not known if any of the footways throughout the development are intended to be shared use footway cycleways. A lack of suitable facilities for cyclists can increase the risk of cyclist collisions occurring.

RECOMMENDATION

Cycle facilities should be provided throughout the development along likely desire lines.

2.6 PROBLEM

Location – Western access junction

Summary: Potential risk of head on or side swipe type collisions

The western access junction is proposed directly opposite an existing priority junction. Right turning vehicles travelling along Camp Road to turn into the existing or proposed junction could conflict with one another resulting in head on or side swipe type collisions.

RECOMMENDATION

The location of the western access junction should be adjusted to ensure that right turning traffic for the proposed or existing junction do not conflict with one another.

2.7 PROBLEM

Location – Footway adjacent to attenuation pond

Summary: Potential hazard for all users

The embankment slope for the attenuation pond is shown to be at the rear edge of the adjacent footway. Pedestrians who inadvertently step off the back of the footway could trip and fall down the embankment slope. The attenuation pond is also located close to the edge of carriageway and could pose a hazard to the occupants of errant vehicles, especially if the road is extended as part of a future building phase.

RECOMMENDATION

A level verge area should be provided between the rear of the footway and embankment slope for the attenuation pond. A risk assessment should also be carried out to consider the need to provide a suitable restraint system as part of the detailed design.

3. **Audit Team Statement**

We certify that the terms of reference of the road safety audit are as described in HD 19/15.

Audit Team Leader

Robert Cyples - BSc (Hons), MIHE, MCIHT, MSoRSA
Highways England Approved RSA Certificate of Competency
Senior Road Safety Consultant, TMS Consultancy

Signed 

Date 30th August 2018

Audit Team Member

Amy Sutherland - BSc (Hons) MCIHT, MIHE
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Assistant Engineer, TMS Consultancy

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Date 30th August 2018

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Appendix A

Documents Examined:

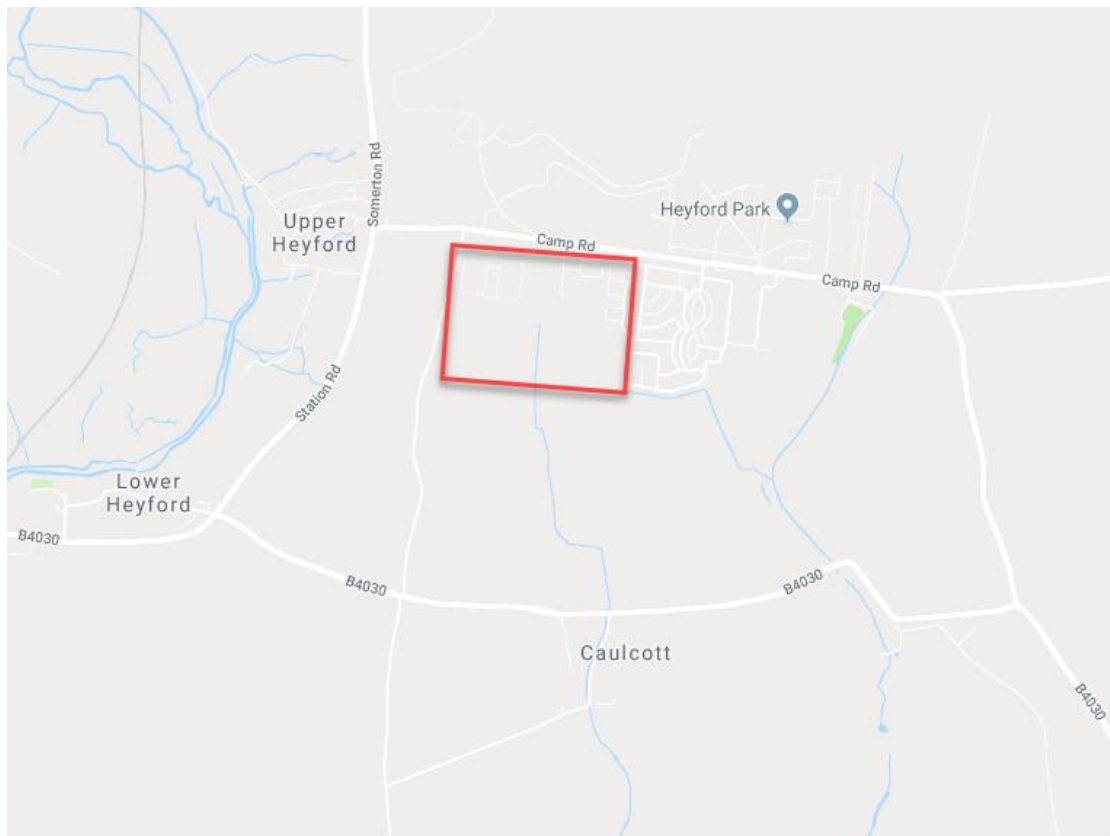
 0521-PH9-102 D Planning Layout-A0L.PDF

 0521-PH9-105-1 C Vehicle Tracking Layout-A0L-DRAFT FOR APPROVAL.pdf

Appendix B

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:



Client: Dorchester Living

Scheme: Phase 9, Heyford Park, Upper Heyford, Bicester

