

Road Safety Answers

Road Safety Audit Stage 1

Bexstone House, Eastergate, West Sussex

Client: Bright Plan

Road Safety Answers reference no: RSA172

This content of this document is copyright of Road Safety Answers Ltd
Registered address: 17 McDermott Road, Borough Green, Sevenoaks, Kent, TN15 8SA
www.roadanswers.co.uk
VAT registration number: 258 9498 33



Scheme: Boringham Manor, Exeter, Devon
Client: Bright Plan (Highways Authority: West Sussex County Council)

Control Sheet

	Name	Date	Signature
Author	Paul Martin	10/10/2019	
Checker	Kevin Seymour	11/10/2019	
Authoriser	Paul Martin	11/10/2019	

Report Version

RSA Report Ref.	Version	Date of Issue
RSA172	Final	11/10/2019



1. Introduction

1.1 This report describes a Stage 1 Road Safety Audit carried out on the preliminary design for Section 278 highway improvements on Barnham Road, Eastergate, for Bright Plan consultants on behalf of West Sussex County Council. The audit was carried out in the office of Road Safety Answers Ltd during October 2019.

1.2 The audit team members were as follows: -

Paul Martin - BSc (Hons), CEng, FCIHT, FSoRSA, IEng, MICE
HE Approved RSA Certificate of Competency (2013)
Director, Road Safety Answers Ltd

Kevin Seymour - BSc, PG Dip TS, MCIHT, MSoRSA
HE Approved RSA Certificate of Competency
Road Safety Consultant

1.3 The audit comprised an examination of the documents listed in **Appendix A**, and included the drawings supplied by Sam O'Halloran of Bright Plan. The site was visited by the Audit Team, together, on Thursday 10th October, 2019, between 10.30 and 11.00 hours. The weather was fine and the road surface was dry. Traffic, cycle and pedestrian flows were light on Barnham Road.

1.4 The terms of reference of the audit are as described in the UK's national standard for road safety audit, GG 119 (recently replaced 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 the problems described in this report are considered by the audit team to require action to improve the safety of the scheme and minimise accident occurrence.

1.6 The purpose of the scheme is to provide Section 278 highway improvements to serve a new development on Barnham Road, Eastergate.

1.7 The scheme consists the following elements:

- A right turn lane on Barnham Road, with 3.0m wide through lanes and a 3.0m wide right turn lane,
- A pedestrian refuge at each end of the right turn lane, each with a width of 2.0m, retaining lane widths on each side that vary from 3.0m to 3.2m,



Location: Barnham House - Barnham, West Sussex

Client: Bright Plan (Highways Authority: West Sussex County Council)

- A widened access to Bexstone House, with 6.0m radii kerbs onto Barnham Road, and visibility splays of 2.4m by 55m westwards and 56.8m eastwards, based on the measured 85th percentile speeds and the formula for required visibility in Manual for Streets,
- A 1.8m wide footway on the eastern side of the access road, connecting to the eastern pedestrian refuge, and hence to the existing footway on the north side of Barnham Road.

1.8 No details of street lighting and surface water drainage have been provided at this preliminary stage of the design. These issues are not, therefore, considered further in this report unless their omission in the design is likely to lead to a safety problem.

1.9 The auditors are not aware of any earlier road safety audits having been carried out on these, or similar, proposals.

2.2 PROBLEM

Location: B – East of the eastern pedestrian refuge.

Summary: Risk of vehicle/pedestrian collisions.

Due to the bend in Barnham Road to the east of the site and vegetation alongside, visibility for a pedestrian, stepping from the southern kerb to use the uncontrolled crossing, will be poor (photo 2), increasing the risk of vehicle/pedestrian collisions.



Photo 2: Looking west from the southern side of Barnham Road at the proposed crossing location

RECOMMENDATION

On the southern side of Banham Road, to the east of the eastern crossing point, the trees and vegetation should be cut back to achieve adequate visibility to approaching vehicles for a pedestrian waiting to cross from the southern tactile paving.

Design Team Response:

Trees and vegetation will be cut back to achieve adequate visibility to approaching vehicles for a pedestrian waiting to cross from the southern tactile paving.

Client Officer Response:

2.3 PROBLEM

Location: C – East of the proposed, widened, site access.

Summary: Risk of side impact collisions with large vehicle leaving the development.

To the east of the site access the trees just behind the visibility splay have low branches that are likely to obstruct visibility for drivers of large vehicles (photo 3), increasing the risk of side impact collisions with westbound vehicles passing the site.

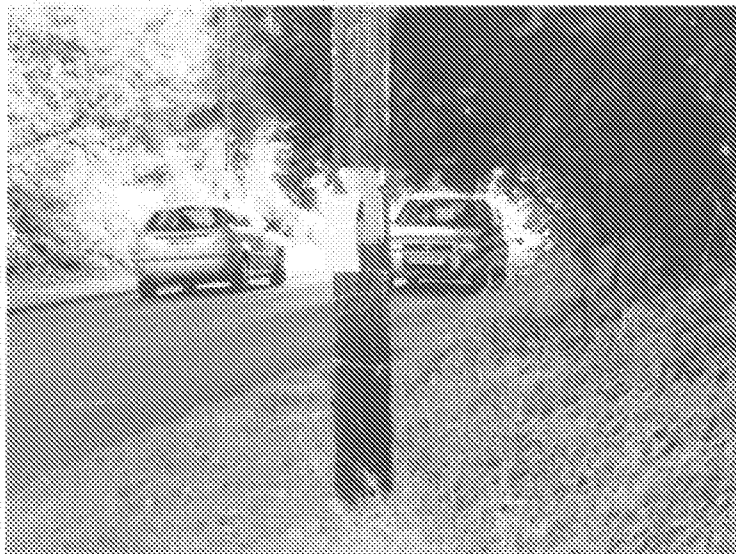


Photo 3: Looking east from the site access

RECOMMENDATION

The low branches should be removed to a minimum height of 2m above the carriageway.

Design Team Response:

The low branches will be removed to a minimum height of 2m above the carriageway.

Client Officer Response:

2.4 PROBLEM

Location: D – Both uncontrolled pedestrian crossing points.

Summary: Risk of pedestrian trips and falls.

The width of tactile paving on each side of Barnham Road, at each crossing, is less than on the pedestrian refuges, giving poor guidance to vision impaired and blind pedestrians. This increases the risk of pedestrian trips and falls as the vision impaired pedestrian encounters a transition kerb on the far side of the road when crossing from the central refuge.

RECOMMENDATION

The width of tactile paving on the footways should match that of the pedestrian refuges.

Design Team Response:

Width of tactile paving on the footways matches that of the pedestrian refuges.

Client Officer Response:

2.5 PROBLEM

Location: E – South side of Barnham Road, west of the site access.

Summary: Risk of darkness related collisions.

There are two lamp columns that will require relocating further into the verge to accommodate the carriageway widening. One of these, approximately 10m west of the site access, is already located within the canopy of the mature trees on the southern side of Barnham Road (photo 4), obstructing its illumination of the carriageway at night. This will only get worse once it is relocated further to the south, increasing the obstruction of illumination and the consequent risk of darkness related collisions.



Photo 4: Lamp column on the south side of Barnham Road, just west of the site access



Coltamp, Poxford, Milton, Minors, West Sussex
Client: Bright Plan (Highways Authority: West Sussex County Council)

RECOMMENDATION

The tree branches should be cut back so that the illumination from the relocated lamp columns is not obstructed.

Design Team Response:

Tree branches will be cut back so that the illumination from the relocated lamp columns is not obstructed

Client Officer Response:



Scenario: Barnham Road, Barnham, West Sussex

Client: Bright Plan (Highways Authority: West Sussex County Council)

2.6 PROBLEM

Location: F – Western uncontrolled pedestrian crossing point.

Summary: Risk of pedestrian trips and falls.

The western refuge is close to the public footpath, which is also the vehicular access that serves the properties to the east of this refuge, on the northern side of Barnham Road. Larger vehicles turning right from this access may not be able to do so without striking the kerbing of the refuge, or overrunning the southern kerblines of Barnham Road. Such overrunning would damage the kerbs, the tactile paving and the footway, increasing the risk of pedestrian trips and falls. It would also risk damaging the wheels of the vehicles turning right.

RECOMMENDATION

A swept path analysis should be carried out for cars and vans and the location of the pedestrian refuge, and/or width of the road, amended if necessary to avoid vehicle overrun of the refuge or footway.

Design Team Response:

A swept path analysis has been carried out demonstrating concurrent movements of 4.6t light van's the access and a 7.5t panel van accessing and egressing from the vehicular access.

Client Officer Response:



Consultant: Paul King Martin - Birmingham - Road Solutions

Client: Brighton Plan (Highways Authority: West Sussex County Council)

3. Audit Team Statement

We certify that this road safety audit has been carried out in accordance with GG 119.

Audit Team Leader

Paul Martin - BSc (Hons), CEng, FCIHT, FSoRSA, IEng, MICE
HE Approved RSA Certificate of Competency (2013)
Director, Road Safety Answers Ltd

Signed

Date 11/10/2019

Audit Team Member

Kevin Seymour - BSc, PG Dip TS, MCIHT, MSoRSA
HE Approved RSA Certificate of Competency
Road Safety Consultant

Signed

Date 11/10/2019

Road Safety Answers Ltd
17, McDermott Road
Borough Green
Sevenoaks
Kent, TN15 8SA



Author: Engineer, Project Engineer, Road Safety

Client: Bright Plan (Highways Authority: West Sussex County Council)

4. Design Team and Client Organisation Statements

Design Team Leader

I certify that I have reviewed the items raised in this Stage 1 Safety Audit report. I have given due consideration to each issue raised and have stated my proposed course of action for each in this report. I seek the Client Organisation's endorsement of my proposals.

Name: Samuel O'Halloran

Organisation: Bright Plan Ltd

Signed: 

Date: 22/10/2019

Client Organisation Project Manager

I certify that I have reviewed the comments and actions proposed by the Design Team Leader and, in this report, I have stated my agreement, or alternative proposal, or acceptance of the risk associated with the problem.

Name:

Organisation:

Signed:

Date:



Source: Harrison House, Liphiggin, Warrumbungle
Client: Bright Plan (Highways Authority: West Sussex County Council)

Appendix A

Drawings and Documents Examined:

2019-6112-001 Rev -.pdf

2019-6112-002 Rev -.pdf

Appendix B

The following plan shows the location of the scheme



[illegible]

