



# Woodhead Road Honley

Road Safety Audit

Stage 1

October 2018


Project No: 773

**Designers Resonse**

---

Author: Alison Cockayne

## Quality Management

<b>Author:</b> Alison Cockayne Principal Road Safety Engineer MIHE, BSc (Hons), HE Cert Comp.	Signed:  Date: 26 <sup>th</sup> October 2018
<b>Reviewer:</b> Kevin Moran Senior Engineer	Signed:  Date:
<b>Revision</b>	0 – Issued 26 <sup>th</sup> October 2018
<b>Remarks</b>  <b>Designers Response:</b> <b>Paul Howarth</b> <b>Paragon Highways</b> MCIHT MIHE	<b>November 2018.</b>

# Contents

1.	Introduction.....	4
1.1.	Request for Road Safety Audit.....	4
1.2.	Scheme Description .....	5
1.3.	Description of Locality .....	5
1.4.	Supporting Information .....	5
1.5.	Departures from Standard.....	5
1.5.1.	The Audit Team are not aware of any departures from standard.....	5
2.	Matters Raised at Previous Road Safety Audits .....	7
2.1.	Previous Audits .....	7
3	Items Identified at This Stage 1 Road Safety Audit .....	8
	GENERAL.....	8
3.1.1	PROBLEM 1 .....	8
3.1.2	PROBLEM 2 .....	8
	JUNCTIONS .....	9
3.1.3	PROBLEM 3 .....	9
	NON-MOTORISED USER PROVISION .....	10
3.1.4	PROBLEM 4 .....	10
3.1.5	PROBLEM 5 .....	10
	LIGHTING, SIGNING & LINING .....	11
3.1.6	PROBLEM 6 .....	11
3.1.7	PROBLEM 7 .....	11
3.1.8	PROBLEM 8 .....	12
3.1.9	PROBLEM 9 .....	12
	APPENDIX A – LIST OF DOCUMENTS PROVIDED .....	13
	APPENDIX B – PROBLEM LOCATION PLAN .....	14

# 1. Introduction

## 1.1. Request for Road Safety Audit

1.1.1. AC Road Safety Audits have been asked on behalf of Paragon Highways to carry out a Stage 1 Road Safety Audit on the proposed residential development off the A6024, Woodhead Road, Honley.

1.1.2. The overseeing Local Authority for the scheme is Kirklees Metropolitan Council.

1.1.3. The Audit Team comprised:

<b>Alison Cockayne</b>	[Audit Team Leader for this Audit]
MIHE, BSc (Hons) Civil Engineering	
HE Cert. Comp	Principal Road Safety Engineer
<b>Kevin Moran</b>	[Audit Team Member for this Audit]
	Senior Engineer

1.1.4. This Audit was undertaken in accordance with HD 19 /15 'Road Safety Audit', which forms part of Volume 5 of the Design Manual for Roads and Bridges. It comprised an examination of the drawings and documents as provided with the audit brief; details of which are listed at **Appendix A**.

1.1.5. Alison Cockayne holds a Road Safety Certificate of Competency meeting the requirements of the European Directive 2008/96 EC and HD19/15 Annex J.

1.1.6. The Audit Team has examined and reported only on the road safety implications for the scheme as presented, and has not examined or verified the compliance of the designs to any other standards or criteria. The comments and suggestions for road safety improvements made in this report are aimed to address matters that might have an adverse effect on road safety in the context of the chosen design. To clearly explain a safety problem or recommendation to resolve a problem, the Audit Team may refer to a Design Standard.

1.1.7. A site visit was carried out on Monday 22<sup>nd</sup> October 2018 at 18:00 hrs. The weather conditions were fine, visibility good and the road surface was dry. Vehicle and pedestrian volumes were low.

1.1.8. Any safety related issues resulting from the Stage 1 Road Safety Audit identified on the scheme are reported in **Section 3**. Problem locations have been marked on the Problem Location plan given at **Appendix B** or as listed on drawings accompanying each individual identified problem.

1.1.9. Where the Audit Team has identified potential existing road safety design problems within this area, that fall outside the scope of the audit brief, these matters are reported under **Section 4** of this report. The Design Organisation and Contracting Authority should give due regard to the matters raised.

## 1.2. Scheme Description

1.2.1. The proposed residential development comprises approximately 50 dwellings and includes the following

- A new junction arrangement at Woodhead Road including Give Way lining, a new pedestrian refuge and a new right turn lane;
- A new short section of footway along the east side of Woodhead Road;
- A new internal residential access road;
- Slight realignment of the existing cycle lane.

## 1.3. Description of Locality

1.3.1. General Description

The potential development is proposed on a site to the south-east of Honley, which is a small village in the district of Kirklees (Huddersfield). The area is semi-rural off a main road that runs between Honley and Holmfirth. There is an existing footway on Woodhead Road on the west side of the road but no footway on the opposite side. There are two bus stops in the vicinity of the site, one in each direction. Relevant factors which may affect Road Safety

The following factors have been initially identified that may affect road safety

- Lack of footways and dropped crossings
- No street lighting.
- Speed of traffic on Woodhead Road

## 1.4. Supporting Information

1.4.1. No collision data, speed or traffic volume data were supplied.

## 1.5. Departures from Standard

1.5.1. The Audit Team are not aware of any departures from standard.

**Figure 1** indicates the extents of the scheme considered under this Stage 1 Road Safety Audit in accordance with the Audit Brief.



## 2. Matters Raised at Previous Road Safety Audits

### 2.1. Previous Audits

2.1.1. The Audit Team are aware of a previous stage 1 audit carried out in July 2014 relating to the highway works on Woodhead Road and the new junction access to the development. It did not take account of any works within the site boundary.

2.1.2 A number of problems were identified and as a result the scheme was amended to design out some of the issues. Any matters that are still considered to be a problem will be included in section 3 of this report.

### 3 Items Identified at This Stage 1 Road Safety Audit

#### GENERAL

##### 3.1.1 PROBLEM 1

**Location:** New Access Road - Full Length

**Summary:** Risk of flooding / standing water resulting in vehicles losing control.

**Detail:** No drainage detail has been shown within the development or at the new junction with Woodhead Road. Failure to adequately drain the area could lead to loss of control collisions due to skidding, especially as the site is on an incline and during icy conditions in the winter months.

**Recommendation:** Ensure there is adequate drainage especially at all the junctions within the site, at the new junction with Woodhead Road and at any low spots within the highway.

**Design Team Response (1):**

Accepted – Drainage design to be prepared by Drainage Engineer.

**Road Safety Audit Team Response (1):**

##### 3.1.2 PROBLEM 2

**Location:** Cul-de-sacs within development site.

**Summary:** Risk of collisions with refuse vehicle.

**Detail:** Swept path analysis has been shown for most of the site but it is unclear whether a refuse vehicle can access the first, second and third cu-de-sac safely especially at the junctions with the main spine road. Vertical tracking and long sections have only been detailed for two of the 5 cul-de-sacs so it is also unclear whether the gradients are acceptable and can be safely negotiated by a larger vehicle. It appears that a refuse vehicle will have to reverse from the fourth cul-de-sac as there is no turning facility which increases the risk of a collision with other vehicles or pedestrians.

**Recommendation:** Ensure all movements are safe in and out of the cul-de-sacs especially for larger vehicles and the gradients can be negotiated.

**Design Team Response (1):**

Bin collection points to be provided at the junction of the private drives with the main spine road.

Maximum gradient of the private drives to be 1 in 8 unless agreed otherwise with KMC.

**Road Safety Audit Team Response (1):**

## JUNCTIONS

### 3.1.3 PROBLEM 3

**Location:** New Access Road at j/w Woodhead Road

**Summary:** Risk of collisions between vehicles exiting the site and vehicles travelling along Woodhead Road due to lacking visibility.

**Detail:** The visibility splay at the new access road at its junction with Woodhead Road is not shown and given the speed of traffic on Woodhead Road and the restricted visibility from the adjacent trees (See images below) there is a risk of collisions with vehicles pulling out of the junction into the path of an oncoming car.



**Recommendation:** Ensure the visibility splay is adequate for the speed of the road and all obstructions in the verge removed or vegetation cut back sufficiently.

**Design Team Response (1):**

Visibility splays shown on the drawing 2.4 x 160 metres.

**Road Safety Audit Team Response (1):**

## NON-MOTORISED USER PROVISION

### 3.1.4 PROBLEM 4

**Location:** New Access Road – Full Length.

**Summary:** Risk of pedestrian / vehicle collisions and / or pedestrian trips and falls.

**Detail:** There are no footway details shown or dropped crossings at any of the junctions within the development site. Failure to provide provision for them could lead to pedestrians walking in the carriageway or tripping and falling whilst negotiating full height kerbs.

**Recommendation:** Provide adequate and safe provision for pedestrians within the development site.

**Design Team Response (1):**

Accepted this information to be provided at the detailed design stage.

**Road Safety Audit Team Response (1):**

### 3.1.5 PROBLEM 5

**Location:** New Access Road – Full Length.

**Summary:** Risk of pedestrian trips and falls.

**Detail:** The gradient of the footway throughout the development appears to be 1 in 16 for most of its length. This may be difficult for vulnerable road users to negotiate especially those in wheelchairs over such a long length. They may lose control or slip and fall especially in inclement weather conditions.

**Recommendation:** Ensure the gradient of the footway is acceptable to all road users.

**Design Team Response (1):**

Maximum gradient for the spine road to be agreed with KMC Highways. Previously agreed 1 in 8 - subject to justification.

**Road Safety Audit Team Response (1):**

## LIGHTING, SIGNING & LINING

### 3.1.6 PROBLEM 6

**Location:** Woodhead Road on both approaches to new junction at proposed development.

**Summary:** Risk of collisions resulting from inappropriate overtaking.

**Detail:** Drawing No. 773-01 Rev H shows some new hatching, a new right turn pocket and direction arrows. The existing lining on Woodhead Road includes a double white system (See image below) which starts along the frontage of the site and carries on through the bends to the south, which has not been included in the proposals. It was observed on site that vehicles often travel well in excess of the posted speed limit and make dangerous overtaking manoeuvres along this straight section of road. If the double white lines do not extend far enough as they do now there is a risk that vehicles will try and overtake as soon as they can after the bend increasing the risk and severity of a collision.



**Recommendation:** Include the double line system in the proposed layout.

**Design Team Response (1):**

Accepted – drawing amended.

**Road Safety Audit Team Response (1):**

### 3.1.7 PROBLEM 7

**Location:** At build-out at chainage 150.00

**Summary:** Risk of collisions with traffic calming build-out.

**Detail:** The proposals show a build-out on the new access road and although it has Give-Way lining there are no signs on the build-out to increase its conspicuity. Given that the approach to the build-out is downhill and is positioned immediately after a bend it is considered it will need highlighting even further to reduce the risk of collisions at this location.

**Recommendation:** Provide signs on the build-out.

**Design Team Response (1):**

Build out removed.

### Road Safety Audit Team Response (1):

#### 3.1.8 PROBLEM 8

**Location:** New Access Road at Jj/w Woodhead Road

**Summary:** Risk of collisions between passing cyclists and vehicles exiting estate road.

**Detail:** There is an advisory cycle lane on the east side of Woodhead Road which is to remain as part of the proposals. It was highlighted in the previous audit that there is a risk of collisions if vehicles exiting the side road are unaware of the cycle lane, especially whilst concentrating on seeking a gap to turn out of the estate. It was recommended that cycle symbols are included either side of the junction as part of the proposals.

**Recommendation:** To highlight the cycle lane further a sign to diagram no. 962.1 to TSRGD 2016 could be installed on the side road.

### Design Team Response (1):

Accepted.

### Road Safety Audit Team Response (1):

#### 3.1.9 PROBLEM 9

**Location:** New Access Road - full length.

**Summary:** Risk of vehicle / pedestrian collisions due to lack of street lighting.

**Detail:** There is no street lighting detail shown within the development. A lack of adequate street lighting could lead to vehicle collisions and / or collisions with pedestrians. There is also the risk of pedestrians tripping and falling if they are unable to see any street furniture.

**Recommendation:** Provide adequate street lighting for the proposed development and at the junction with Woodhead Road.

### Design Team Response (1):

Accepted – Detailed design to be undertaken by the Local Authority Street Lighting Design Team.

### Road Safety Audit Team Response (1):

## APPENDIX A – LIST OF DOCUMENTS PROVIDED

Drawing Number	Revision	Title
773 -01	H	Woodhead Road, Honley – Long Section & Visibility
773 -02	H	Woodhead Road, Honley – Road 1 Long Section / Vertical Tracking
773 -03	H	Woodhead Road, Honley – Road 2 & 3 Long Section / Vertical Tracking
773 -04	H	Woodhead Road, Honley – Vehicle Tracking

# APPENDIX B – PROBLEM LOCATION PLAN

