OPTIMA
Intelligent Highways Solutions

Barnsley Road, Denby Dale
Proposed S278 & S38 works
Combined Stage 1-2 Road Safety Audit

March 2022 (Initial Issue)

Prepared on behalf of

Yorkshire Country Properties

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Quality Management

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Prepared by	M Whittaker			
Signature	Redacted			
Checked by	E Green			
Signature	Redacted			
Authorised by	M Whittaker			
Signature	Redacted			

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1. Introduction and Background

1.1 PROJECT DETAILS

Table 1.1 Project Details

Report title	Combined Stage 1-2 Road Safety Audit
Date	28th March 2022
Document reference and revision	220328 Initial Issue
Prepared by	Optima Highways
On behalf of	Kirklees Council

1.2 INTRODUCTION

1.2.1 Optima Highways and Transportation Consultancy Ltd (Optima) has been appointed to undertake a combined Stage 1-2 Road Safety Audit of a proposed access arrangements and internal layout of a residential development on land to the north of Barnsley Road, Denby Dale.

1.2.2 The Road Safety Audit has been carried out by experienced Road Safety Engineers employed by Optima who are independent from the design. The Road Safety Audit Team membership consisted of:

Martin Whittaker FIHE MSoRSA

Road Safety Audit Team Leader (Director, Optima)

Elizabeth Green BEng MSc CEng MICE FCIHT

Road Safety Audit Team Leader (Associate Director, Optima)

1.3 PREVIOUS ROAD SAFETY AUDITS

1.3.1 The Road Safety Audit Team has not been made aware of any previous Road Safety Audits.

1.4 SCHEME DETAILS

1.4.1 The proposed works include the formation of a new ghost island, all movements junction and internal adopted road layout serving 34 dwellings.

1.4.2 The following drawings set out within Table 1.2 were provided to the Audit Team for the purposes of the Audit:

Table 1.2 Drawings

Designer	Drawing No.	Title
Kirklees Council	-	Section 38 Site Access
Kirklees Council	6713	Proposed Lighting BS5489-1:2020 Lighting Class P5
Haigh Huddlestone	E18/7371/005-01B	Road & Sewer Long Sections
Haigh Huddlestone	E18/7371/021B	External Works Plan
Haigh Huddlestone	E18/7371/022B	Section 38 Plan
Haigh Huddlestone	E18/7371/023-01A	Section 278 – Extent of Works
Haigh Huddlestone	E18/7371/023-02	Section 278 – Proposed Road Levels
Haigh Huddlestone	E18/7371/023-03	Section 278 – White Lining
Haigh Huddlestone	E18/7371/023-04	Section 278 – Kerbing Plan
Haigh Huddlestone	E18/7371/023-05	Section 278 – Kerb Setting Out
Haigh Huddlestone	E18/7371/023-06	Section 278 – Road Construction Details
Haigh Huddlestone	E18/7371/023-07A	Section 278 – Cross Sections
Haigh Huddlestone	E18/7371/030	Road Contour Plan
Haigh Huddlestone	E18/7371/034	Fire Appliance Tracking

1.4.3 The following additional information has also been supplied to the Road Safety Audit Team.

- Road Safety Audit Brief dated 24th March 2022 issued by Haigh Huddlestone; and
- VIA Solutions Transport Statement dated May 2019.

1.5 TERMS OF REFERENCE AND AUDIT DETAILS

1.5.1 This Road Safety Audit has been undertaken in accordance with GG 119 and a Road Safety Audit brief prepared by the Design Organisation and agreed with the Overseeing Organisation.

1.5.2 The above plans and information have been examined prior to the site visit, analysed in detail on site and at the offices of Optima following the visit.

1.5.3 A Site visit was carried out by the Road Safety Audit Team on Thursday 24th February 2022 between the hours of 10:00 and 10:30. The weather was fine/dry, however the road surface was wet. Low traffic and pedestrian volumes were observed along Barnsley Road.

1.5.4 The Road Safety Audit considers and reports only on the safety implications of the proposed scheme as presented and has not examined or verified the compliance of the designs to any other criteria. Comments made in this report relate to points which are considered to be worthy of attention in respect of safety.

1.5.5 Recommendations included within this report are intended to identify proportionate means of eliminating or mitigating the concern raised and should not be regarded as being prescriptive design solutions. There may be alternative methods of addressing a problem that would be equally acceptable and these should be considered in full by the Designer.

1.5.6 The reference and location of problems have been indicated on the plans contained at Appendix A, where appropriate.

2. Items Raised at Stage 1-2 Road Safety Audit

Table 2.1 Problem 1

PROBLEM	
Location	Proposed turning heads.
Summary	The proposed turning heads may lead to large vehicles reversing over excessive distances.
The proposed development is a cul-de-sac with two turning heads to accommodate refuse collection and delivery vehicles. The swept path analysis provided only includes a fire tender, which is particularly tight and relies on the visitor spaces, situated within the turning head, being unoccupied. The Kirklees Highway Design Guide states that the refuse vehicle is 11.85m in length, which is much larger than the 8.6m fire tender used to test the turning heads, therefore refuse collection vehicles or delivery vehicles may be considerably less manoeuvrable than the vehicle utilised in the analysis. The proposed turning heads as currently designed may lead to larger vehicles reversing over excessive distances into the path of oncoming traffic.	
Recommendation	
It is recommended that the turning heads are tested using a standard Kirklees refuse vehicle and increased in size accordingly.	

3. Audit Team Statement

3.1.1 We certify this Road Safety Audit has been carried out in accordance with GG 119.

Road Safety Audit Team Leader

Name: Martin Whittaker FIHE MSoRSA

Position: Director

Organisation: Optima Highways & Transportation Ltd

Date: 31st March 2022

Redacted

Signed:..... ..

Road Safety Audit Team Member

Name: Elizabeth Green BEng MSc CEng MICE FCIHT

Position: Associate Director

Organisation: Optima Highways & Transportation Ltd

Date: 31st March 2022

Redacted

Signed:.....

Appendices

Appendix A Problem Location Plan



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- Extent of area to be adopted
- Adoptable carriageway
- Footpaths / Footways / Cycleways
- Paved verges / Margins
- Highway adoptable drainage (inc. gullys & connections)
- Highway landscaping
- Street lighting
- Public sewers and lateral drains
- Background detail

Quantity	Symbol	Type of Lighting Unit
2		Proposed 6 metre Steel column with Spigot Mounted LED6 OrangeTek IGNIS mini 20 MPH 4.0_70_203_2168_2 (13w) 2.17klm lantern @ 5 degree tilt
6		Proposed 6 metre Steel column with Spigot Mounted LED6 OrangeTek IGNIS mini 20 MPH 4.0_70_203_2168_2 (13w) 2.17klm lantern

NOTE

Lighting column erections should only be called off once the adoptable back edge (pin kerb) has been installed on site and there are levels to work to.

The footway wearing course should not be laid until the lighting column/s have been erected and serviced.

Rev B Highway retaining wall omitted from Barnsley Road Street lighting added. 24.03.22 HH

Rev A updated to suit proposed engineering plan 10.01.22 HH

Haigh Huddleston & Associates

Civil Structural Engineering Consultants

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Client
YORKSHIRE COUNTRY PROPERTIES

Project
BARNSLEY ROAD, DENBY DALE

Detail
SECTION 38 PLAN

Dwn	Chkd	Date	Scale	Dwg No.
CW		AUG-21	1:500@A2	E18/7371/022B