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Highways, Transportation & Safety Consulting

Proposed Housing Development Northorpe Lane, Mirfield

Road Safety Audit: Stage 1 S278 and S38

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Road Safety Audit: Stage 1 S278 and S38

Report Produced for:	Kirklees MBC
Report Produced by:	Jonathan Birkett
Report Dated:	30 June 2021
Report Reference:	MAL/NLMRSA1Rev1
Road Safety Audit Team Leader:	Jonathan Birkett



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1 Introduction

1.1 General

This report has been prepared in response to a request to undertake a Stage 1 Road Safety Audit (i.e., carried out prior to detailed design), by Kirklees MBC on behalf of Newett Homes. The scheme submitted for Audit is the proposed new residential development Northorpe Lane, Mirfield. This Road Safety Audit includes both the S278 (External) and S38 (Internal) works.

Northorpe Lane is a Cul-de-Sac, is subject to a 30mph speed limit and is street lit.

The audit comprised an examination of documents forming the Audit Brief and an examination of the site.

1.2 Documents Forming the Brief

The documents were made available to the Road Safety Audit Team by Andrew Moseley (AMA), on the instructions of Kirklees MBC, on behalf of the developer Newett Homes. The total documents forming the Audit Brief are listed in Appendix 1:

Generally, the Brief comprised:

- Verbal Brief.
- Drawings.

1.3 Collision Traffic and Speed Data

Collision data was not available. The Audit Team examined data held on the “Crashmap” website. Examination of the data shows that there have been no personal injury collisions on the surrounding roads in close proximity to the site.

Traffic count data was not available.

Speed data was not available.

1.4 Details of Site Visit

A site inspection was undertaken on Thursday 10 June 2021 between 08:00 and 08:30. The RSA team arrived separately on site to ensure that social distancing was observed as part of the Coronavirus Pandemic and guidance provided by Public Health England. The Audit Team spent 30 minutes on site understanding the proposed works and their interaction with the local road network.

During the site visit the weather was dry and fine. No incidents were noted during the site visit.

1.5 RSA Team and Format

It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit Stage 1 requested.

The Road Safety Audit Team membership approved was:

JONATHAN BIRKETT IENG MICE FIHE MSORSA

Holder of Certificate of Competency

Road Safety Audit Team Leader

G KIDD BSc (HONS) MIHE

Road Safety Audit Team Member

The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in Appendix 1 of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.

The Terms of Reference are as described in the Highways England Design Manual for Roads and Bridges document GG119 'Road Safety Audit'. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

Furthermore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.

In the event of a collision and any resulting legal action, Meraki Alliance Ltd would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

1.6 Departures or Relaxations from Standards

No departures from standard have been provided to the RSA Team.

2 Items Raised at Stage 1 Road Safety Audit

This section details the findings of this Stage 1 Road Safety Audit for the S278 and S38 works. All locations of identified problems are illustrated on the plans included at **Appendix 2**.

2.1 RSA Problems S278

PROBLEM		1
Location:	Site access.	
Summary:	A lack of suitable uncontrolled crossings will increase both the risk of pedestrian trips and falls as well as pedestrian-vehicle collisions.	
The drawings provided do not show any crossing facilities across the new site access onto Northorpe Lane. There is an existing footway along the eastern side of Northorpe Lane that the new access will bisect. A lack of suitable uncontrolled crossings will increase both the risk of pedestrian trips and falls as well as pedestrian-vehicle collisions.		
RECOMMENDATION		
Ensure that appropriate tactile paving layouts and dropped crossing points are provide in accordance with Guidance on the Use of Tactile Paving Surfaces [DfT].		

PROBLEM		2
Location:	Site access and parking bay.	
Summary:	Inappropriate drainage may lead to ponding water resulting in loss of control type collisions.	
A new priority-controlled access and parking bay will be constructed as part of the development. Ponding water can result in an increased risk of loss of control type collisions and at certain times of year standing water will freeze resulting in ice, vehicles manoeuvring in the turning could lose control resulting in an increased risk of collisions as well as pedestrians slipping and falling.		
RECOMMENDATION		
Provide appropriate drainage at all locations where changes to the road layout is proposed.		

PROBLEM		3
Location:	Site access and parking bay.	
Summary:	Inappropriate levels of lighting can lead to an increased collision risk.	
The drawing provided does not clearly show if alterations to the existing street lighting is proposed. The scheme will include a new access junction and changes to include a parking bay. The development will increase both the night-time usage and the number of vehicles/NMUs using the proposed road network once constructed. This may result in the new access junction and parking bays being in shadow leading to possible conflicts during the hours of darkness.		
RECOMMENDATION		
Ensure that suitable lighting provision is provided		

PROBLEM		4
Location:	Site access.	
Summary:	Details of vehicle tracked movements are not provided on the drawings. Inappropriate carriageway widths and turning radii can result in increased vehicle collisions as well as pedestrian-vehicle collisions.	
Details of the swept paths of vehicles, are not provided on the drawings. Inappropriate carriageway widths and junction radii can result in vehicles failing to safely negotiate the new junction arrangement increasing the risk of both vehicle and pedestrian-vehicle collisions.		
RECOMMENDATION		
Provide swept path movements the new site access.		

2.2 RSA Problems S38

PROBLEM		5
Location:	Internal roads.	
Summary:	Inappropriate drainage may lead to ponding water resulting in loss of control type collisions.	
A new internal road layout will be constructed as part of the development. Ponding water can result in an increased risk of loss of control type collisions and at certain times of year standing water will freeze resulting in ice, vehicles manoeuvring could		

lose control resulting in an increased risk of collisions as well as pedestrians slipping and falling.
RECOMMENDATION
Provide appropriate drainage at all locations where new road layout is proposed.

PROBLEM		6
Location:	Internal roads.	
Summary:	Inappropriate levels of lighting can lead to an increased collision risk.	
The drawing provided does show any street lighting. The scheme will include new access roads and junctions. The development will increase both the night-time usage and the number of vehicles/NMUs using the proposed road network once constructed. This may result in the new access roads being in shadow leading to possible conflicts during the hours of darkness.		
RECOMMENDATION		
Ensure that suitable lighting provision is provided.		

PROBLEM		7
Location:	Internal roads.	
Summary:	Details of vehicle tracked movements are not provided on the drawings. Inappropriate carriageway widths and turning radii can result in increased vehicle collisions as well as pedestrian-vehicle collisions.	
Details of the swept paths of vehicles are not provided on the drawings. Inappropriate carriageway widths and junction radii can result in vehicles failing to safely negotiate the new road layout increasing the risk of both vehicle and pedestrian-vehicle collisions.		
RECOMMENDATION		
Provide swept path movements on the internal road network.		

PROBLEM		8
Location:	Internal roads.	

Summary:	Excessive gradients can increase the risk of loss of control type collisions.
Details of carriageway cross sections and long sections are not currently available. The Audit Team noted that the site is on a steep hillside with cross site height difference between Northorpe Lane and the furthest extents of the site of up to 25m. These differences in height can result in steep access roads that during poor weather can increase the risk of drivers losing control.	
RECOMMENDATION	
At Stage 2 RSA provide details of gradients of all internal roads.	

**END OF PROBLEMS IDENTIFIED AND RECOMMENDATIONS PRESENTED IN THIS
STAGE 1 ROAD SAFETY AUDIT**

3 Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG119	
ROAD SAFETY AUDIT TEAM LEADER	
NAME:	JONATHAN BIRKETT
SIGNED:	
POSITION:	DIRECTOR
ORGANISATION	MERAKI ALLIANCE LTD
DATE:	30 JUNE 2021
ROAD SAFETY AUDIT TEAM LEADER	
NAME:	GILLIAN KIDD
SIGNED:	
POSITION:	AUDIT TEAM MEMBER
ORGANISATION	MERAKI ALLIANCE LTD
DATE:	30 JUNE 2021

Appendix 1 – Audited Documents and Drawings

2021-91914_+Proposed+Site++Block+Layout_874689

AMA_20983_SK004

Appendix 2 – Problem Location Plan





