

**Road Safety Audit
Stage 1**

**Proposed Development
Lidl Store
Bodhyfryd Wrexham**

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**Road Safety Audit
Stage 1**

**Proposed Development
Lidl Store
Bodhyfryd Wrexham**

Report Produced for; -

Lidl UK GmbH

Report Produced by; -

Jonathan Birkett

Report Dated; -

04 November 2018

Report Reference; -

JHB/LPSWRSA1/Rev1

Road Safety Audit Team Leader; -

Jonathan Birkett

Lidl Store, Bodhyfryd Wrexham Road Safety Audit –Stage 1

Contents Amendment Record

This report has been issued & amended as follows:

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Report Circulation Record

This report has been circulated, as follows:

Person	Organisation	No. of Copies	Date
Lidl UK	Lidl UK GmbH	Electronic	04.11.18
Jim Budd	SCP	Electronic	04.11.18
G Kidd	JHB Consultancy Ltd	Electronic	04.11.18

Contents

Page

1	Introduction	1
2	Items Raised at this Stage 1 Road Safety Audit	4
3	Road Safety Audit Team Statement	7

Appendix A - Documents Forming the Brief

Appendix B – Problem(s) Location Plan(s)

1 Introduction

1.1 Commission and Terms of Reference

- 1.1.1 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 Lidl UK GmbH. The scheme submitted for Audit is the Proposed Store Development, Bodhyfryd, Wrexham on the site of the North Wales Police Station. The road in the vicinity of the proposed store is within a 20mph zone and is street lit.
- 1.1.2 The audit comprised an examination of documents forming the Audit Brief and an examination of the site during daylight hours. The documents were made available to the Road Safety Audit Team by Jim Budd (SCP) on the instructions of Lidl UK GmbH on behalf of the Highway Authority Wrexham County Borough Council. The total documents forming the Audit Brief are listed in **Appendix A**.
- 1.1.3 Generally, the Brief comprised:
- Brief.
 - General arrangement drawings and vehicle tracked plots.
 - Wrexham Council Highways Response 03.09.18 Ref EP/DC/PP/2018/0675
 - Queue data.
- 1.1.4 As part of the Road safety Audit process details of the drive through usage has been provided by SCP in relation to Wrexham Council Highways Response with regards to queues forming from the drive through onto the local highway network. Details provided by SCP indicate that the maximum queue recorded at this type of drive through has been eight vehicles in length which could still cause an issue.
- 1.1.5 Collision data was unavailable. However, the audit team examined “Crashmap” and determined that there has been a single slight personal injury collision in the most recent five years of accident data available between 2013 and 2017.
- 1.1.6 The location of the collision recorded was at the roundabout junction of the proposed store access and existing Police Station access.
- 1.1.7 No traffic data or speed data has been provided.
- 1.1.8 It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit requested.

- 1.1.9 The Road Safety Audit Team membership approved by Lidl UK GmbH on behalf of the highway authority was:

JONATHAN BIRKETT IENG MICE MSORSA
Holder of Certificate of Competency
Road Safety Audit Team Leader

GILLIAN KIDD
Road Safety Audit Team Member

- 1.1.10 The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in **Appendix A** of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.
- 1.1.11 The site was visited on the morning of 19 October.2018. It was dry and sunny for the daytime Audit.
- 1.1.12 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.
- 1.1.13 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.
- 1.1.14 It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.
- 1.1.15 In the event of a collision and any resulting legal action, JHB Consulting 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.

1.2 Purpose of the scheme

1.2.1 The scheme consists of the following work:

- Construction of a new Lidl store and Coffee Shop with drive-through and localised widening of the existing junction with improved pedestrian linkage to the site.

1.3 Departures or Relaxations from Standards

1.3.1 No Departures or Relaxations from Standard were submitted to the Road Safety Audit Team.

2.0 Problems Raised at this Stage 1 Road Safety Audit

2.1 General

2.1.1 PROBLEM 1

Location: New road layout and site access junction.

Summary: Inappropriate drainage may lead to ponding water resulting in resulting in loss of control type collisions.

The drawing shows that the current access from the roundabout will be widened to accommodate vehicles associated with the proposed development. Ponding water can result in an increased risk of loss of control type collisions and at certain times of year and standing water will freeze resulting in sheets of ice. Vehicles manoeuvring in the turning could lose control resulting in an increased risk of collisions.

RECOMMENDATION: Provide appropriate drainage at all locations where changes to the road layout and new carriageway are proposed.

2.1.2 PROBLEM 2

Location: Drive through.

Summary: Vehicles queuing for drive through may block the main access resulting in an increased risk of shunt type collisions.

The designer's SCP have told the Audit Team that the drive through will be associated with a coffee shop and as such from experience does not generate the same level of drive through traffic as a fast food type restaurant. Details of similar types of drive through have been provided by SCP and the queues range between five and eight vehicles in length.

From the drawing provided it is difficult to fully determine how many vehicles can queue at the drive through before blocking back of the main access from the roundabout will occur, a rough estimate of between six and seven vehicles could queue before blocking back becomes an issue.

However, should queues exceed the capacity of the drive through then vehicles could block the main access resulting in an increased risk of shunt type collisions.

RECOMMENDATION: Consider moving the collection point to a position that allows additional storage for the drive through and provides a minimum of 40m storage. Also consider altering the road markings where appropriate.

2.2 The Alignment

No problems identified.

2.3 Junctions

No problems identified.

2.4 Non-motorised Users (NMU)

2.4.1 PROBLEM 3

Location: Roundabout.

Summary: Inappropriate NMU facilities could lead to NMU/vehicle collisions and an increased risk of slips/trips and falls.

Examination of the drawings show that details of gradients and kerb up stands have not been provided.

If inappropriate facilities are provided, then there is an increased risk of NMU/vehicle collisions as well as slips/trips and falls.

RECOMMENDATION: Ensure that appropriate dropped crossing points are provide in accordance with *Guidance on the Use of Tactile Paving Surfaces [DfT]*.

2.4.2 PROBLEM 4

Location: Roundabout.

Summary: Inappropriate NMU facilities could lead to NMU/vehicle collisions and confusion to partially sighted NMUs.

The drawing shows red tactile in locations where new uncontrolled crossings are to be provided, in situations where uncontrolled crossings are provided "Buff" tactile paving should be used as standard.

If inappropriate facilities are provided, then there is an increased risk of partially sighted NMUs becoming confused resulting in an increased risk of NMU/vehicle collisions.

RECOMMENDATION: Ensure that appropriate tactile paving is provide in accordance with *Guidance on the Use of Tactile Paving Surfaces [DfT]*.

2.5 Traffic Signing, Road Markings & Street-lighting

2.5.1 PROBLEM 5

Location: Throughout the site.

Summary: Inappropriate levels of lighting can lead to an increased collision risk.

The drawings provided do not clearly show if alterations to the existing street lighting are proposed. The scheme will include localised changes with carriageway widening and it is also anticipated that the development will increase both the night time usage and the number of vehicles/NMUs using the proposed road network once the development is constructed. This may result in the new access and NMU crossing points being in shadow leading to possible conflicts during the hours of darkness.

RECOMMENDATION: Ensure that suitable lighting provision is provided.

End of list of Problems identified and Recommendations offered in this Stage 1 Road Safety Audit
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3 Road Safety Audit Team Statement

I certify that this Audit has been carried out in the spirit of GG119.

ROAD SAFETY AUDIT TEAM LEADER

JONATHAN BIRKETT

10 Watkin Ave
Old Colwyn
Colwyn Bay, LL29 9NN



Signed:

Dated 04.11.18...

ROAD SAFETY AUDIT TEAM MEMBER

GILLIAN KIDD

Road Safety Auditor,



SIGNED.....

Dated 04.11.18...

Appendix A

The following Drawings and Documents formed the Road Safety Audit Brief.

Drawings

-  180808_16055 AD 110 - PROPOSED SITE PLAN.pdf
-  SCP_18111_ATR01 - based-on_181016_16055_AD_110.pdf
-  SCP_18111_ATR02 - based-on_181016_16055_AD_110.pdf
-  SCP_18111_ATR03 - based-on_181016_16055_AD_110.pdf
-  SCP_18111_ATR04 - based-on_181016_16055_AD_110.pdf
-  SCP_18111_D01 - based-on_181016_16055_AD_110.pdf

Appendix B

Drawings: Problem Location Plan



