



Stage 3 Road Safety Audit Report (Post Construction) (FINAL)

**Aldi Store
A474 Neath Abbey Road, Neath
S278 Highway Works
(Designers response)**

**Produced for:
Entran
Date: December 2021**



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DOCUMENT REGISTER

Project Name: Aldi Store, A474 Neath Abbey Road, Neath - S278 Highway Works.

Report Title: Stage 3 Road Safety Audit (FINAL).

Date: 19th December 2021.

Client: Entran.

Audit Team	Name	Position	Date
Audit Team Leader:	Peter Ronald	Director	19/12/2021
Audit Team Member:	Paul Salmon	Road Safety Auditor	19/12/2021
Approved By:	Peter Ronald	Director	19/12/2021

Revision History					
Revision	Date	Description	Audit Team Leader	Audit Team Member	Approved
-	19/12/2021	Draft	PR	PS	PR
A	19/12/2021	Final	PR	PS	PR
B	20/12/2021	Auditor response added	PR		

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1. Executive Summary

- 1.1 This scheme is promoted by Aldi Stores Ltd. This Road Safety Audit is supplied under the provisions of the Safety Audit request dated 3rd December 2021.

2. Introduction

- 2.1 This report results from a Stage 3 Road Safety Audit conducted on the construction of a new Aldi Store with access from the A474 Neath Abbey Road, Neath, on land in front of CSN Precision Engineering. The works include construction of a new side road 'T' junction and access road, together with localised widening and ghost right turn lane.

2.2 Audit Team Membership

The Audit Team comprised the following individuals:

Peter Ronald I. Eng., AMICE, MCIHT, MSoRSA, (HE - RSA Cert of Comp).
(Audit Team Leader)

Paul Salmon MCIHT. MSoRSA
(Audit Team Member)

Also in attendance:

Delyth Thomas from Neath Port Talbot County Borough Council.
Paul Daniells from South Wales Police.

2.3 Audit Site Visit

A site visit was conducted on Wednesday 15th December 2021 by the Audit Team between 3.30pm and 4.30pm. The weather was overcast and dry. Traffic flows were high, and limited pedestrian / cycle movements were observed. Vehicle speeds were perceived to be within the posted speed limit along Neath Abbey Road.

The Audit also comprised an examination of the drawings provided by Craddys, and any additional support documents completed by the Audit Team as listed in **Appendix A**. All safety issues are with reference to the scheme as implemented.

2.4 Strategic Decisions

The Audit Team has not been advised of any Strategic Decisions made by the local Highway Authority or by the local Planning Authority.

2.5 Audit Brief

The Audit Team were not provided with an Audit Brief by the Local Authority.

2.6 Terms of Reference

The terms of reference of the audit are based on "Guidelines For the Safety Audit of Highway Schemes" published by the Institution of Highways and Transportation, other guidance references are the Traffic Signs Regulations and General Directions 2016, and GG 119 Design Manual for Roads and Bridges.

The Audit Team has examined and reported only on the road safety implications of the scheme and has not verified the compliance of the designs to any other criteria. However, 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 or other guidance documents.

2.7 **Audit Recommendations**

Recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified road safety audit matters, and in no way imply that a formal design process has been undertaken.

There may be alternative measures of addressing a problem which would be equally acceptable or superior in achieving the desired degree of mitigation and these should be considered by the designer when responding to this report.

2.8 **Scope of Road Safety Audits**

Road Safety Audit shall only be concerned with Road Safety Matters i.e., *an element of the existing road environment or proposed road environment that could potentially contribute to a road traffic collision or features that could present a risk of injuries to road users.*

Road Safety Audit is not a technical check that the design conforms to standards and/or best practice guidance.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Road Safety Audit does not consider structural safety.

Road Safety Audit does not cover health and safety issues concerning road workers during the construction phase but may cover the future maintenance and operation of the road.

Road safety matters resulting from the operation of facilities for highway maintenance that affect road users shall be included in the scope of Road Safety Audit.

The needs of all road users shall be assessed when undertaking Road Safety Audits.

3. Risk Assessment

- 3.1 Each of the Auditors' responses is classified as either a 'Problem' or a 'Nil Response/Comment'. Items classified as a 'Problem' denote matters likely to result in significant road safety hazards. Items marked as 'Nil Response/Comment' are less serious but worthy of consideration by the Designer and/or by the Overseeing Organisation.
- 3.2 Although all the problems identified are of sufficient importance to require action, the table below shows their relative urgency based on the risk perceived by the Safety Auditors. The level of risk assigned to each problem is largely subjective and is only intended as a guide to assist the client in determining the priority of the road safety matters raised.

Severity / Risk Level	Probability				
	Frequent	Probable	Occasional	Remote	Improbable
Catastrophic	****Problem**** (Urgent)				
Critical		***Problem*** (High Risk)			
Major			**Problem** (Medium Risk)		
Minor				*Problem* (Low Risk)	
Negligible					Comment

4. Historical Summary

- 4.1 The site was open space in front of CSN Precision Engineering.

5. Existing Environment

- 5.1 The A474 Neath Abbey Road is a single carriageway classified road that links north from the large roundabout junction with the A4230 to Cadoxton Road and onto Cadoxton and Rhyddings.
- 5.2 It has a footway along its southeast side in the vicinity of the new store and has a system of street lighting that introduces a 30mph speed limit. The speed limit reduces to 20mph to the northeast of the store access, continuing to the northeast.

6. Collision Data

- 6.1 The Audit Team have not been provided with any recorded injury collision data as part of this road safety audit. However, interrogation of www.crashmap.co.uk indicates that there have been no personal injury collisions on Neath Abbey Road in the vicinity of the new junction during the 2016 - 2020 five-year period.

7. Survey Information

7.1 None provided.

8. Audit Assessment

8.1 The table below summarises the findings from this audit which are described in detail within the following pages.

Identified locations of Road Safety Audit Matters are indicated on drawings within **Appendix B** to the rear of this report.

No.	Item	Comments	Notes
C1	General		
C1.1	Departures from Standards		
C1.2	Drainage		
C1.3	Climatic Conditions		
C1.4	Landscaping	Problems	(8.1) Level difference to rear of footway causing trip hazard. (8.2) Deep hole in verge adjacent to new footway
C1.5	Public Utilities/Services Apparatus		
C1.6	Lay-bys		
C1.7	Access		
C1.8	Skid Resistance		
C1.9	Agriculture		
C1.10	Fences and Road Restraint Systems		
C1.11	Adjacent Developments and Roads		
C1.12	General Problems		
C2	Local Alignment		
C2.1	Visibility		
C2.2	New/Existing Road Interface		
C3	Junctions		
C3.1	Layout		
C3.2	Visibility		
C3.3	Signing		
C3.4	Road Markings		
C3.5	T, X and Y junctions		
C3.6	All roundabouts		
C3.7	Mini Roundabouts		
C3.8	Traffic Signals		
C4	Non-Motorised User Provision		
C4.1	Adjacent Land		
C4.2	Pedestrians	Problems	(8.3) Tactile paving laid with excessive gradient. (8.4) Insufficient depth of tactile paving installed (Not as detailed) (8.5) Trip hazard on new footway surfacing

C4.3	Cyclists		
C4.4	Equestrians		
C5	Road Signs, Carriageway Markings and Lighting		
C5.1	ADS and Local Traffic Signs	Problem	(8.6) No loading time plates not installed to ensure loading ban is enforceable
C5.2	Variable Message Signs		
C5.3	Lighting		
C5.4	Road Markings	Comment	(9.1) Central hatching cross hatch marking extends too far into junction needs to be reduced by one cross marking. (This can be carried out when carriageway resurfacing works are carried out)
C5.5	Poles and Columns		

8.1 *Problem* (Item C1.4)	
Location:	Neath Abbey Road. Northeast corner into side road
Summary:	Trip hazard at rear of footway due to level difference on verge.
 There is a level difference to the rear of the footway and the verge that will result in a trip hazard for pedestrians should they deviate slightly from the route. Undertake remedial works to remove trip hazard from rear of new footway by infilling verge.	
TYPE OF CONFLICT/COLLISION	
Pedestrians tripping over edge of footway.	
RECOMMENDATION	
Undertake remedial works to rear of footway to remove trip hazard by infilling verge.	

8.2 *Problem* (Item C1.4)	
Location:	Neath Abbey Road. Southwest corner into side road
Summary:	Deep hole directly adjacent to new footway
	
There is a deep hole adjacent to the new footway. This will cause a problem for any pedestrian that may wander from the rear of the new footway. Infill hole/verge adjacent to new footway	
TYPE OF CONFLICT/COLLISION	
Pedestrians falling down hole /verge adjacent to footway.	
RECOMMENDATION	
Infill hole /verge adjacent to new footway.	

8.3 *Problem* (Item C4.2)	
Location:	Neath Abbey Road / new access road junction, southwest side.
Summary:	Excessive gradient on tactile paving at pedestrian crossing point.
	
The gradient of the tactile paving and footway at the pedestrian crossing point appears to be greater than the 1/12 that is acceptable. This will result in problems for Non-Motorised Users (NMUs) travelling along the footway, particularly manual wheelchair users.	
TYPE OF CONFLICT/COLLISION	
Pedestrians losing their balance / stability issues for wheelchair users.	
RECOMMENDATION	
Regrade footway and reinstall the tactile paving to remove excessive gradient.	

8.4 *Problem* (Item C4.2)	
Location:	Neath Abbey Road across side road
Summary:	Insufficient depth of tactile paving installed at ahead / in line pedestrian crossing points (Not as detailed).
 There are ahead / in-line pedestrian crossing points installed with an inadequate depth of tactile paving (Not as detailed). Current guidance recommends a minimum depth of three full rows of tactile paving (1200mm) at ahead / in-line crossings to ensure that the crossing point is detected by visually impaired pedestrians walking at speed.	
TYPE OF CONFLICT/COLLISION	
Vehicle / pedestrian collision due to visually impaired pedestrians not detecting tactile paving and walking out into the carriageway without due care.	
RECOMMENDATION	
Increase depth of tactile paving to a minimum of three full rows at crossing points as detailed.	

8.5 *Problem* (Item C4.2)	
Location:	Neath Abbey Road. Footway along store frontage
Summary:	Trip hazard on uneven footway surfacing
 New footway surfacing has been installed. There is a trip hazard on the new surfacing that will result in pedestrians tripping over and falling into the adjacent carriageway. Carry out remedial works to remove trip hazard on footway surfacing.	
TYPE OF CONFLICT/COLLISION	
Pedestrians tripping over uneven footway surfacing.	
RECOMMENDATION	
Undertake remedial works to remove trip hazard on footway.	

8.6 *Problem* (Item C5.1)	
Location:	Neath Abbey Road & side road
Summary:	No loading restriction time plates not installed to back up markings as legally required
	
A new No loading restriction has been installed around the junction. There are no time plates installed to back up the no loading restriction as legally required to ensure the restriction is legal and can be enforced. Install missing time plates.	
TYPE OF CONFLICT/COLLISION	
Illegal unenforceable loading restriction.	
RECOMMENDATION	
Install missing time plates where required.	

9. Nil Response/Comments

- 9.1 Central hatching cross bar extends too close into junction resulting in right turning vehicles into side road undercutting turn and conflicting with vehicles exiting side road. The carriageway surfacing is being resurfaced after being rejected by the Local Authority this change can be implemented at the same time.



10. Non-Motorised User Report (NMUs)

- 10.1 This report has identified road safety matters affecting NMUs that should be resolved.

11. Audit Team Statement

I certify that we have inspected the site. The inspection has been conducted with the sole purpose of identifying road safety matters that can be addressed to improve the safety of the scheme.

The problems identified have been noted in the report together with associated safety improvement suggestions that we recommend should be studied for implementation.

I can confirm that we have not been involved with the scheme design.



Peter Ronald
(Audit Team Leader)

19th December 2021



Paul Salmon
(Audit Team Member)

19th December 2021

12. Appendix A - List of Documents

Drawings

Title	Drawing number	Revision
S278 / 38 Agreement Engineering Layout	E1379 CDY XX XX DR D 0010	C01
S278 / 38 Signage & Road Marking	E1379 CDY XX XX DR D 0012	C01

13. Appendix B - Identified Road Safety Audit Matters Location Plan



14. Appendix C - Designer's and Auditor Response to Stage 3 Road Safety Audit (Interim)

Stage 3 Road Safety Audit (FINAL) DESIGNER'S ROAD SAFETY AUDIT RESPONSE Scheme Name: Aldi Store, Neath Abbey Road, Neath - S278 Highway Works.		
The issues categorised in this road safety audit as 'Problem' matters are those causing serious concern and are summarised below. The purpose of this form is for the scheme Designer or Overseeing Organisation to respond to the 'Problem' matters. Responses should be returned to Traffic Management Consultants. 'Comments' in this report are made for the benefit of the Designer and are not referred to below.		
RSA Matter	Summary of RSA Problem	Designer's Response
8.1	Trip hazard at rear of footway due to level difference on verge.	Agree – Landscape contractor to place additional verge material to eliminate level difference at back of footway.
8.2	Deep hole directly adjacent to new footway	Agree – Landscape contractor to fill large hole in between footway and infiltration basin.
8.3	Excessive gradient on tactile paving at pedestrian crossing point.	Agree – Contractor to install double length dropper kerbs (thus reducing gradient) as per approved design and detail.
8.4	Insufficient depth of tactile paving installed at ahead / in line pedestrian crossing points (Not as detailed).	Agree – Contractor to install additional row of blister tactile paving as per approved design and detail.
8.5	Trip hazard on uneven footway surfacing	Agree – Contractor to removed excess material creating trip hazard.
8.6	No loading restriction time plates not installed to back up markings as legally required	Disagree – Signage for the 'no loading at any time' restriction was not proposed, as permitted by Section 13.4.12 of Traffic Signs Manual Chapter 3.

AUDIT TEAM RESPONSE

- 8.1 Agreed
- 8.2 Agreed
- 8.3 Agreed
- 8.4 Agreed
- 8.5 Agreed
- 8.6 Agreed (Local authority to agree)