

ATKINS

Member of the SNC-Lavalin Group

Adamstown Boulevard

Phase 1 Road Safety Audit

Adamstown Station & Boulevard Ltd

April 2022



Notice

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Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 0	Draft	DR	DR	CP	CP	April 2022
Rev 1	Updated with designer responses	CP	CP	CP	CP	April 2022

Client signoff

Client	Adamstown Station & Boulevard Ltd
Project	Adamstown Boulevard Phase 1
Job number	5150924
Client signature / date	<i>V. Mullen</i> 27.04.2022

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1. Introduction

1.1. Background

This report describes the findings of a Phase 1 Road Safety Audit associated with the Adamstown Boulevard.

The scheme will see the development of the Adamstown Boulevard Tile Phase 1 development with a series of internal roads and standalone plots for various buildings. The development will be located just north-west of the Adamstown train station and west of the R120 in Co. Dublin.

The Audit has been completed by Atkins on behalf of Adamstown Station & Boulevard Ltd.

1.2. Site Inspection

A site visit was carried out on 07/04/22. The majority of the site is a greenfield with access available along Station Road to the south. During the site visit traffic levels noted on the existing roads serving the surrounding areas was at very low levels. Pedestrian and cyclist activity was not noted.

Weather conditions were overcast. Road surfaces were damp.

1.3. The Team

The Road Safety Audit Team members were as follows:

- **Team Leader:** Colin Prendeville BEng (Hons) CEng MIEI CIHT
- **Team Member:** Daniel Rice B.sc (Hons) MIEI

1.4. The Design

The following drawing were examined as part of the Stage 1 Road Safety Audit process:

Table 1-1 – Design Team Drawings List

Drawing Number	Drawing Title	Revision
5150924/HTR/10/DR/0105	Road Layout – Key Plan	-
5150924/HTR/10/DR/0106	Road Layout – Sheet 1 of 4	-
5150924/HTR/10/DR/0107	Road Layout – Sheet 2 of 4	-
5150924/HTR/10/DR/0108	Road Layout – Sheet 3 of 4	-
5150924/HTR/10/DR/0109	Road Layout – Sheet 4 of 4	-
5150924/HTR/10/DR/0110	Junction Layout – Key Plan	-
5150924/HTR/10/DR/0111	Junction Layout – Sheet 1 of 4	-
5150924/HTR/10/DR/0112	Junction Layout – Sheet 2 of 4	-
5150924/HTR/10/DR/0113	Junction Layout – Sheet 3 of 4	-
5150924/HTR/10/DR/0114	Junction Layout – Sheet 4 of 4	-
5150924/HTR/10/DR/0115	Junction Visibility – Key Plan	-
5150924/HTR/10/DR/0116	Junction Visibility – Sheet 1 of 4	-
5150924/HTR/10/DR/0117	Junction Visibility – Sheet 2 of 4	-
5150924/HTR/10/DR/0118	Junction Visibility – Sheet 3 of 4	-

5150924/HTR/10/DR/0119	Junction Visibility – Sheet 4 of 4	-
5150924/HTR/10/DR/0120	Cross Section – Key Plan	-
5150924/HTR/10/DR/0121	Cross Sections – Sheet 1 of 4	-
5150924/HTR/10/DR/0122	Cross Sections – Sheet 2 of 4	-
5150924/HTR/10/DR/0123	Cross Sections – Sheet 3 of 4	-
5150924/HTR/10/DR/0124	Cross Sections – Sheet 4 of 4	-
5150924/HTR/10/DR/0125	Vehicle Tracking – Fire Engine – Sheet 1 of 2	-
5150924/HTR/10/DR/0126	Vehicle Tracking – Fire Engine – Sheet 2 of 2	-
5150924/HTR/10/DR/0127	Vehicle Tracking – Refuse Truck – Sheet 1 of 2	-
5150924/HTR/10/DR/0128	Vehicle Tracking – Refuse Truck – Sheet 2 of 2	-
5150924/HTR/10/DR/0129	Vehicle Tracking – Bus	-

1.5. Audit Brief

The Design Team provided the background to the scheme and summary of the requirements were outlined by the Design Team in a pre-audit meeting to the Audit Team prior to the audit being undertaken.

1.6. Road Safety Audit Compliance

Procedure and Scope

This Road Safety Audit has been carried out in accordance with the procedures and scope set out in TII publication number **GE-STY-01024 - Road Safety Audit**.

As part of the road safety audit process, the Audit Team have examined only those issues within the design which relate directly to road safety.

Compliance with Design Standards

The road safety audit process is not a design check, therefore verification or compliance with design standards has not formed part of the audit process.

Minimizing Risk of Collision Occurrence

All problems described in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and minimise the risk of collision occurrence.

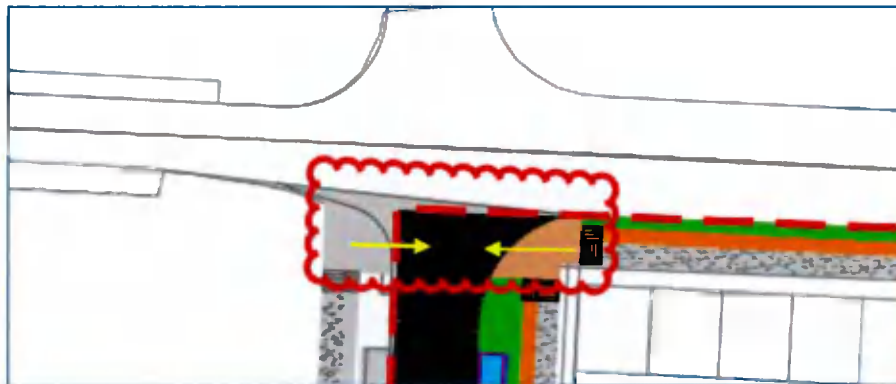
2. Road Safety Issues Identified

2.1. Problem: Missing Crossing Provision at Junction

Location: North West of Site

There is no crossing provision for pedestrians trying to cross East – West at the location shown in Figure 2-1. This may lead to pedestrians trying to cross the road in a location which is unsafe to do so and may result in them being struck by a vehicle.

Figure 2-1 – No Pedestrian Crossing Provision



Recommendation

The designer should provide appropriate crossing facilities for pedestrians to cross at the junction.

2.2. Problem: Cyclist and Pedestrian Confusion in Shared Spaces

Location: Throughout the scheme

The provision of ladder and tramline tactile paving throughout the scheme is sporadic and confusing. This could lead to cyclists and pedestrians being unsure whether they are in a shared area or not leading to collisions.

Figure 2-2 – Ladder and Tramline paving provided in a shared area.



Figure 2-2 shows a location where ladder and tramline paving has been provided in the middle of an area which is understood to be a shared area on either side.

Figure 2-3 – Location where Pedestrians Enter Shared Area

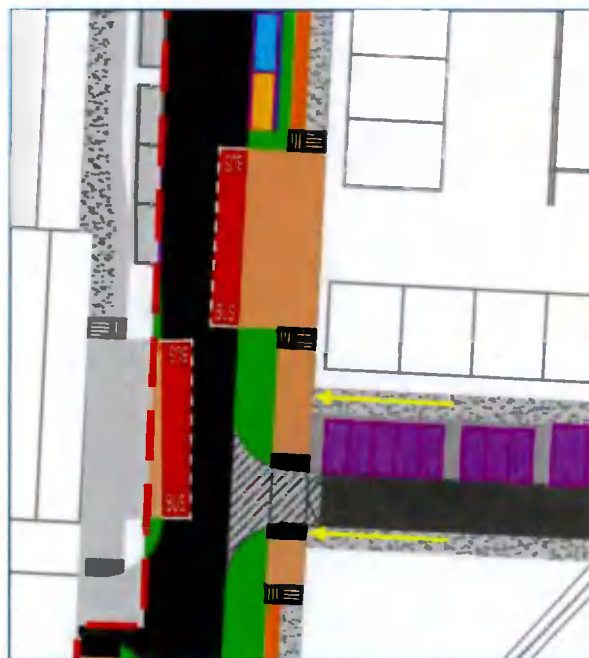


Figure 2-3 shows an example of a location where pedestrians could enter a shared area without being aware it is shared.

Recommendation

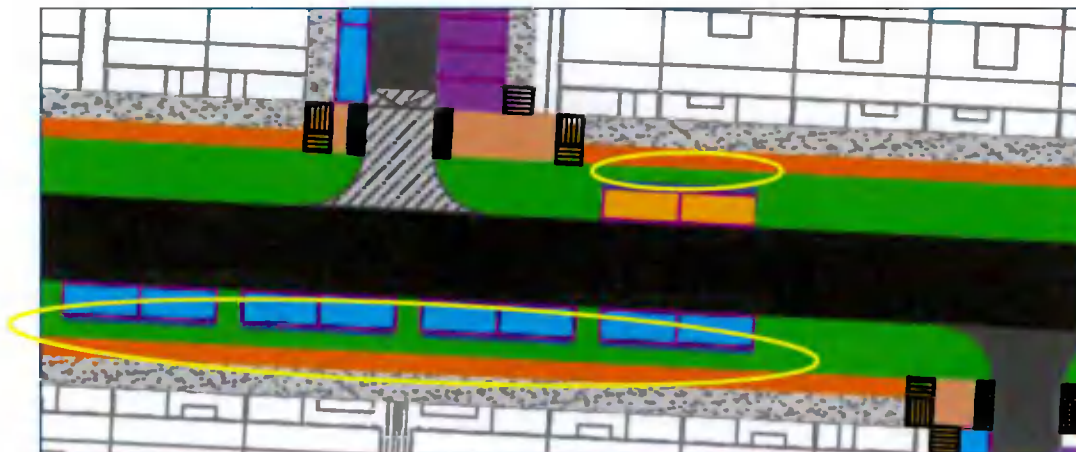
The designer should ensure that all shared areas are denoted correctly for both cyclists and pedestrians with a consistent approach provided across the scheme.

2.3. Problem: Access to Parking Space

Location: Throughout Scheme

The proposed scheme shows parking bays which are separated from the footpath with a grass verge as shown in Figure 2-4. This could lead to pedestrians slipping and falling on the grass particularly in wet conditions or pedestrians may be forced to use the carriageway to access the parking spaces and possibly result in them being struck by a vehicle.

Figure 2-4 – Example of Grass verges Separating Footpath and Parking Bays



Recommendation

The designer should ensure that safe access to all parking areas is provided throughout the scheme.

2.4. Problem: Priority Control at Junctions

Location: Junctions 1, 2 and 3

The proposals indicate courtesy crossings on the main north-south streets for the scheme. It appears unlikely that these will adequately allow for safe crossing of these roads and may lead to conflict with pedestrians and vehicles. Additionally the side road shows a controlled crossing, drivers may move on a green signal on the side road and enter the main road when it is unsafe to proceed. This may lead to shunt and side-impact conflict.

Figure 2-5 – Signalised Junction No.1

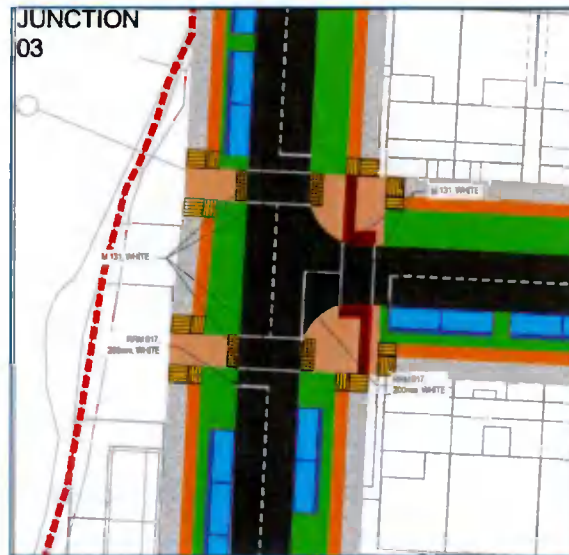


Figure 2-6 - Signalised Junction No. 2

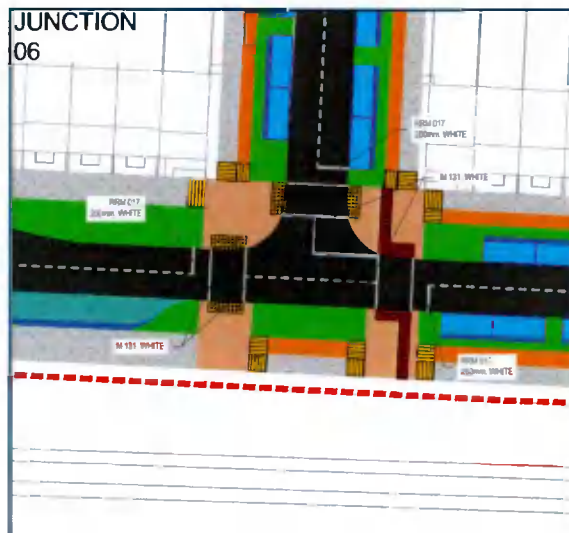
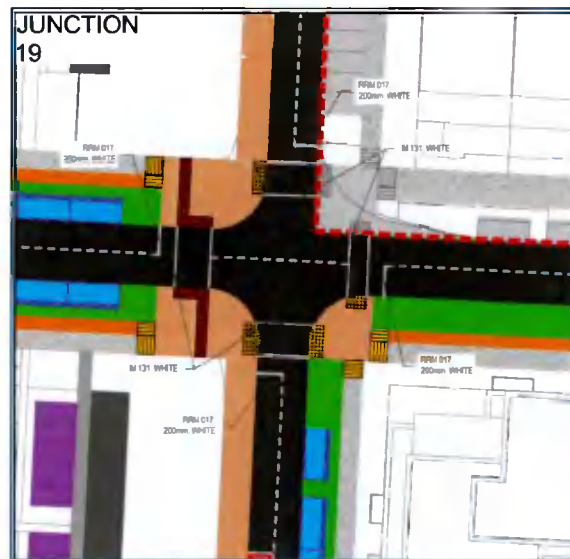


Figure 2-7 - Signalised Junction No.3



Recommendation

The designer should review the junction strategy ensuring these will cater for the likely demand, provide adequate control and not lead to potential confusion for both pedestrian and vehicles users.

2.5. Problem: Visibility at Pedestrian Crossings

Location: Throughout the scheme at junctions

A number of proposed uncontrolled crossings will likely have visibility issues due to parked vehicles directly beside the crossing points. Footpath users particularly smaller individuals including children are unlikely to be able to see vehicles and similarly vehicles will be unable to see children that are attempting to cross. Poor visibility may lead to pedestrians trying to cross the carriageway without being sure it is safe to do so and could lead to them being struck by an oncoming vehicle.

Figure 2-8 - Visibility Issue Location No.1



Recommendation

The designer should relocate/set-back the parking to help improve visibility at the proposed uncontrolled crossings.

2.6. Problem: Pedestrian Crossing Provision

Location: South of Scheme

The north south roads to the south of the scheme appears to extend over a relatively long distance. There is no crossing provision made on these roads for those who may wish to move east to west. The scheme includes parking, housing and commercial developments on each side of these roads. It is reasonable to assume that people may desire to cross the road. Without adequate provision, conflict may arise when crossing at undesigned locations.

Figure 2-9 – Potential Desire Lines East-West



Recommendation

The designer should assess the proposed layout and buildings/expected building use and determine the likely demand and need to provide pedestrian crossings along the roads highlighted above.

3. Audit Team Statement

3.1. Certification

We certify that we have examined the drawings listed in Chapter 1 of this Report.

3.2. Sole Purpose

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design which could be removed or modified in order to improve the road safety aspects of the scheme.

3.3. Implementation of RSA Recommendations

The problems identified herein have been noted in the Report together with their associated recommendations for road safety improvements. We (the Audit Team) propose that these recommendations should be studied with a view to implementation.

3.4. Audit Team's Independence to the Design Process

No member of the Audit Team has been otherwise involved with the design of the measures audited.

3.5. Road Safety Audit Team

Colin Prendeville

Audit Team Leader
Road Safety Engineering Team
ATKINS

Signed: *Colin Prendeville*

Date: 26th April 2022

Daniel Rice

Audit Team Member
Road Safety Engineering Team
ATKINS

Signed: *Daniel Rice*

Date: 26th April 2022

4. Designer's Response

4.1. Preparing a Response to the Road Safety Audit

The Designer should prepare an Audit Response for each of the recommendations using the Road Safety Audit Feedback Form attached in Appendix A.

When completed, this form should be signed by the Designer and returned to the Audit Team.

4.2. Returning the Feedback Form

Please return the completed Road Safety Audit Feedback Form attached in Appendix A of this report to the following email or postal address:

Email address: colin.prendeville@atkinsglobal.com

Postal address: Road Safety Engineering Team
Atkins
150 Airside Business Park
Swords
Co Dublin
K67 K5W4

Telephone: 00 353 (0)1 810 8000

The Audit Team will consider the Designers response and reply indicating acceptance or otherwise of the Designers response to each recommendation.

4.3. Triggering the Need for an Exception Report

Where the Designer and the Audit Team cannot agree on an appropriate means of addressing an underlying safety issue identified as part of the audit process, an Exception Report must be prepared by the Designer on each disputed item listed in the audit report.

Appendices



Appendix A. Road Safety Audit Feedback Form

Scheme: Adamstown Boulevard
Audit Stage: Stage 1 Road Safety Audit
Date Audit Completed: 22/04/2022

Paragraph No. in Safety Audit Report	To be completed by the Designer			To be completed by the Audit Team
	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative Measures accepted by Auditors (yes/no)
2.1	Y	Y		
2.2	Y	Y		
2.4	Y	Y		
2.5	Y	Y	Parking to be adjusted to take account of appropriate visibility splay for the design speed of the road in accordance with DMURS	
2.6	Y	Y	Demand for crossing to be assessed an if required appropriate crossing provision provided.	

Signed by the Designer: 

Date: 27.04.2022

Signed by the Audit Team Leader: *Colin Penckeville*

Date: 27.04.2022

Signed by the Client: *V. Mullen*

Date: 27.04.2022

Appendix B. Auditor Approvals

Colin James Prendeville
Atkins House
150 Lakeside Drive
Airside Business Park
Swords, Co.Dublin

Date: 22/06/2021

Ref: CP3369500

re: APPROVAL AS ROAD SAFETY AUDITOR

Dear Colin James Prendeville,

You meet the qualification and experience requirements for Road Safety Audit as follows:

Scheme Category	Audit Team Status	Team Leader Expiry Date
Road Scheme	Team Leader	31/05/2023
Development Scheme	Team Leader	31/05/2023

The above assessment is based on information supplied and the qualification and experience requirements of National Roads Authority in accordance with HD 19 "Road Safety Audit". Further approval through RSAAS must be sought for the proposed road safety audit team for each audit undertaken on a National Road.

Yours sincerely,

Lucy Curtis

Regional Road Safety Engineer
roadsafetyaudits@tii.ie

Daniel Rice
 Atkins House
 150 Lakeside Drive
 Airside Business Park
 Swords, Co.Dublin

Date: 23/09/2021

Ref: DR7438162

re: APPROVAL AS ROAD SAFETY AUDITOR

Dear Daniel Rice,

You meet the qualification and experience requirements for Road Safety Audit as follows:

Scheme Category	Audit Team Status	Team Leader Expiry Date
Road Scheme	Team Member	
Development Scheme	Team Member	

The above assessment is based on information supplied and the qualification and experience requirements of National Roads Authority in accordance with HD 19 "Road Safety Audit". Further approval through RSAAS must be sought for the proposed road safety audit team for each audit undertaken on a National Road.

Yours sincerely,

Lucy Curtis

Regional Road Safety Engineer
roadsafetyaudits@till.ie

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