

ATKINS

Member of the SNC-Lavalin Group

Adamstown District Centre Phase 2 Block G Amendment

Stage 1 Road Safety Audit

Quintain Developments Ireland Ltd

October 2021



Notice

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Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
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Rev 1	Final	CJP	CJP	ST	CJP	11/10/2021

Client signoff

Client	Quintain Developments Ireland Ltd
Project	Adamstown District Centre Phase 2 Block G
Job number	5150924

Client signature / date	 Margo Grogan 12.10.2021
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1. Introduction

1.1. Background

This report describes the findings of a Stage 1 Road Safety Audit associated with the proposed Adamstown District Centre Phase 2 Block G Amendment, Adamstown, Dublin.

The Audit has been completed by Atkins on behalf of Quintain Developments Ireland Ltd.

1.2. Proposed Development Description

The proposed development comprises the following:

- Repositioning of landscaped communal courtyard of Block G from first floor level to ground floor level due to removal of podium parking at level 0, and the consequential relocation of 83no. car parking spaces to within the Block F car park and to on-street locations immediately adjacent to Block G, including ancillary site development and landscape works.
- The introduction of 9 no. ground floor units, facilitated by the removal of the podium from the core.
- A minor reduction to the overall provision of residential units from 185 to 184no. apartment units.
- The provision of an additional unit and changes to the unit mix on Level 1.
- Adjustments to the location of the bicycle, plant, and waste stores serving Block G.
- Adjustments to Block G2 consisting of a minor reduction to the footprint of the Block by 0.6m, the removal of setback to the North (level 5) and adjustments to the Southern gable.

This application seeks permission for these minor design changes to the development permitted under SDCC Reg Ref SDZ21A/0007.

1.3. Site Inspection

The site inspection was carried out on Thursday 7th of October 2021 by the Audit Team. Weather conditions during the site inspection were overcast and cool; road surfaces were damp. Traffic and pedestrian activity was low at the time. The area for development is predominantly a green field site with some roads that will bound the development already in place. The subject site is currently boarded by plywood sheeting to prevent access to the site.

1.4. The Team

The Road Safety Audit Team members were as follows:

- Team Leader: **Colin Prendeville** C.Eng MIEI, CIHT, P.Cert (RSA)
- Team Member: **Shane Tobin** BA BAI P.Cert(RSA) CEng MIEI

1.5. The Design

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

Table 1-1 – Design Team Drawings List

Sheet List Table		
DRAWING_NO	TITLE	T_REV
5150924 / HTR / 07 / DR / 0000	COVER SHEET	B
5150924 / HTR / 07 / DR / 0001	SITE LOCATION MAP	B
5150924 / HTR / 07 / DR / 0100	STREET TYPOLOGY	C
5150924 / HTR / 07 / DR / 0101	ROAD LAYOUT	C
5150924 / HTR / 07 / DR / 0102	JUNCTION - LOCATION PLAN	C
5150924 / HTR / 07 / DR / 0103	JUNCTION LAYOUT	C
5150924 / HTR / 07 / DR / 0104	JUNCTION VISIBILITY	B
5150924 / HTR / 07 / DR / 0105	FIRE TENDER VEHICLE TRACKING - PUMP APPLIANCE	C
5150924 / HTR / 07 / DR / 0106	REFUSE VEHICLE TRACKING	C
5150924 / HTR / 07 / DR / 0108	CROSS SECTIONS	B
5150924 / HTR / 07 / DR / 0109	TOUCAN CROSSING LAYOUT	C
5150924 / HTR / 07 / DR / 0111	TABLE TOP RAMP TYPICAL DETAILS	B
5150924 / HTR / 07 / DR / 0112	TYPICAL ROAD SECTIONS AND CONSTRUCTION DETAILS	C
5150924 / HTR / 07 / DR / 0113	FIRE TENDER VEHICLE TRACKING - HIGH REACH APPLIANCE	C

1.6. Audit Brief

The background to the scheme and reasons for the Stage 1 Road Safety Audit were outlined by the Design Team in a preaudit electronic mail to the audit team prior to the audit being undertaken.

1.7. 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: Junction Radii Leading to Higher Speed

Location: Junction 1 and Junction 2

The proposed radii of 6m may lead to higher driving speeds. This may increase the risk of conflict with crossing pedestrians, or other road users, where drivers are travelling through the junctions at higher speed.

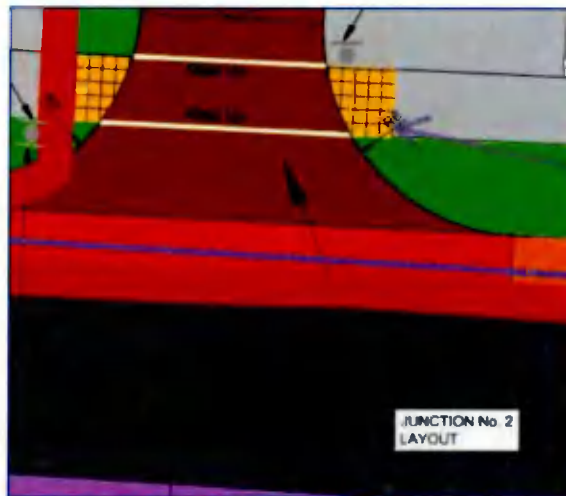


Figure 2-1 – 6m Junction Radii

Recommendation

The Design Team should investigate the provision of smaller radii to encourage slower driving speeds through the junctions.

2.2. Problem: Wide Junction Leading to Conflict

Location: Centre of Scheme

There is a junction located towards the centre of the scheme that appears to be wide. The width of the junction is in the region of 7-8m which will be challenging for pedestrians to cross safely and may lead to relatively higher vehicle speeds where there may be an increased risk of conflict.



Figure 2-2 – Junction at Centre of Scheme

Recommendation

The Design Team should review the proposed layout and introduce measures to reduce the risk of conflict and length of crossing for vulnerable road users. The provision of a raised table across the junction should also be considered.

2.3. Problem: Bus Stop In front of Pedestrian Crossing

Location: Station Road

The drawings indicate a temporary bus stop may be provided on Station Road, as shown in Figure 2-3. When a bus is stopped here it may block visibility to the pedestrian crossing and/or signals to the east. Vehicles passing/overtaking the stopped bus may fail to see the red light ahead, and could collide with pedestrians crossing or other road users at the junction.

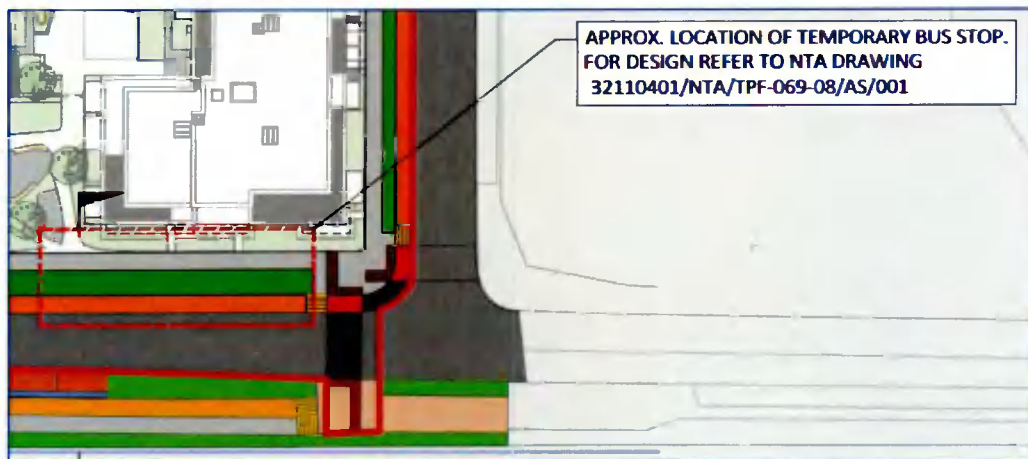


Figure 2-3 - Proposed Temporary Bus Stop

Recommendation

The Design Team should consult with the NTA on the proposed temporary bus stop location and ensure visibility to the pedestrian crossing is not adversely affected.

2.4. Problem: Potential for Informal Crossing

Location: Junction 1

The termination of the footways at Junction 1, as highlighted in Figure 2-4, may encourage pedestrians to cross at an undesignated point in the junction. This could lead to trips/falls as the ramp transition will result in a low kerb upstand at this location, which may be unseen by those crossing.

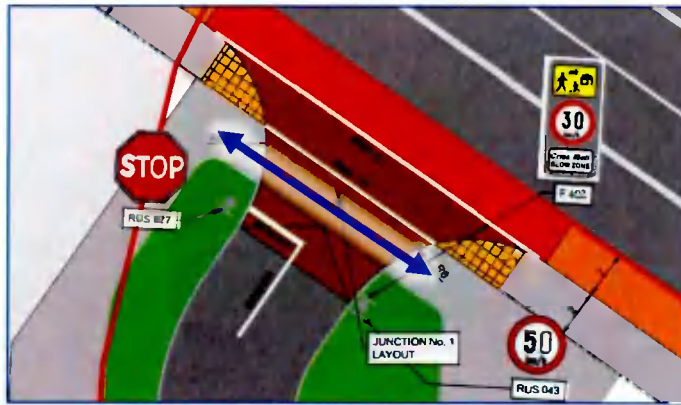


Figure 2-4 - Junction No 1 crossing

Recommendation

The Design Team should propose means to discourage crossing here, such as extending the grass verge northwards, up to the designated crossing point.

2.5. Problem: Kerb Destabilising Cyclists

Location: Junction 1 and 2

The cycle path is proposed to be raised by 50mm across Junction 1 and 2, with a further 50mm vertical difference to the raised crossing; as shown in Figure 2-5. A bevelled 50mm kerb is proposed between the cycle path and raised crossing. Left turning cyclists will be crossing this kerb at an acute angle, as shown in Figure 2-6. This may cause the front wheel of the bicycle to lose traction as it is crossing the face of the concrete kerb, particularly in wet/icy conditions, which could destabilise the cyclist resulting in a fall.

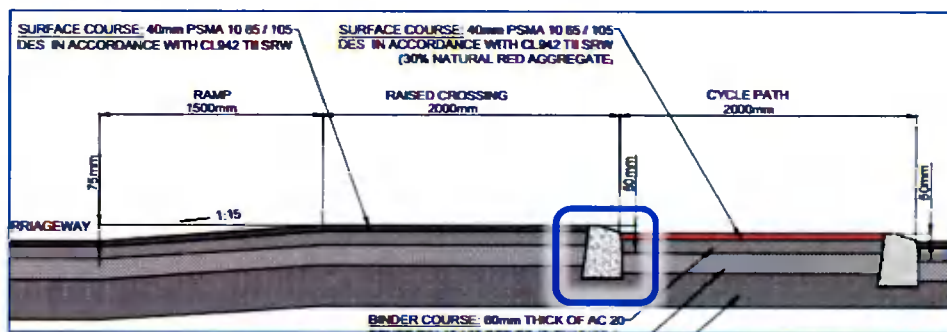


Figure 2-5 - Kerb between raised crossing and cycle path

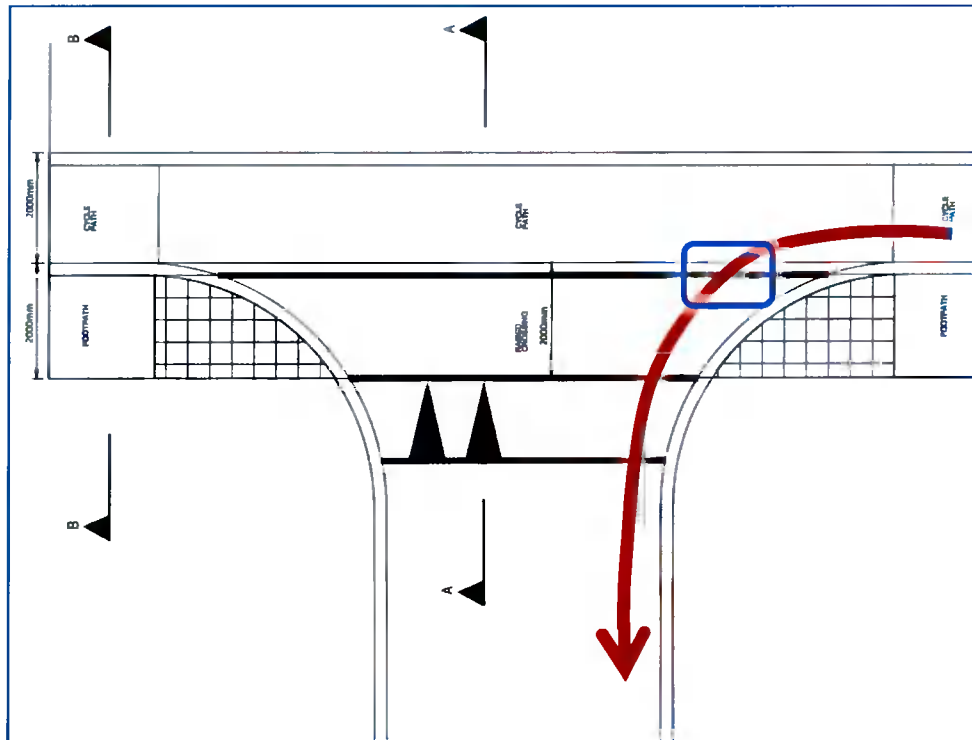


Figure 2-6 - Potential path of cyclists, and angle crossing 50mm splayed kerb

Recommendation

The Design Team should review the proposed raised crossing detail with consideration for left turning cyclists.

2.6. Problem: Undesignated Pedestrians Crossings

Location: Various Scheme Wide

The landscaping has been discontinued in a number of locations within the scheme along the road edge. These may be seen by some as crossing points and lead to some crossing at undesignated locations and may surprise some drivers and may lead to conflict.



Figure 2-7 – Missing Landscaping

Recommendation

The Design Team should extend the landscaping in these areas to encourage pedestrians to cross at the designated crossing points only.

2.7. Problem: Visibility at Pedestrians Crossings

Location: Pedestrian Crossing

The presence of parked cars may lead to restricted visibility at the pedestrian crossings; particularly a larger vehicle such a van, truck or jeep. This may lead to drivers conflicting with pedestrians attempting to cross.

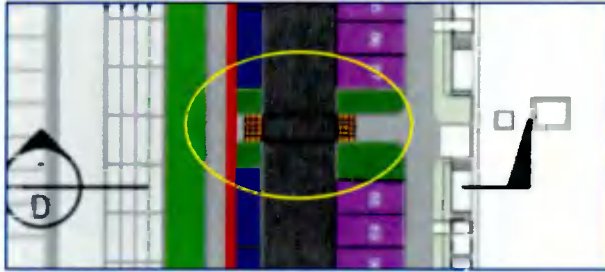


Figure 2-8 – Parking at Crossing Points

Recommendation

The Design Team should ensure adequate visibility is provided at the crossing points only; this may be achieved by setting back the adjacent car parking spaces.

3. Audit Team Statement

3.1. Certification

We certify that we have examined the drawings and documents 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 Sign-Off

Colin Prendeville

Audit Team Leader
Road Safety Engineering Team

ATKINS

Signed:



Date: 07/10/2021

Shane Tobin

Audit Team Member
Road Safety Engineering Team

ATKINS

Signed:



Date: 07/10/2021

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:

Road Safety Engineering Team,
Atkins,
Atkins House,
150 Airside Business Park,
Swords,
Co Dublin,
Ireland.

Tel: 00 353 (0)1 810 8000

Email: colin.prendeville@atkinsglobal.com

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 District Centre Phase 2 Block G Amendment

Audit Stage: Stage 1 Road Safety Audit

Date Audit Completed: 11/10/2021

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	N	The concern is noted however the 6m junction radii provided onto external roads is to provide for ease of access for larger vehicles serving the development, refuse and delivery vehicles; these are expected to be higher in magnitude due to the presence of the apartment blocks. This aligns with SDCC Road departments junction radii recommendations. The layout will allow entry and exit of a small and large vehicle at the same time without blocking of the junction which could lead issues between opposing traffic. The provision of the raised table is deemed the key factor in reducing speed and highlight the crossing thereby negating the concern associated with the 6m radius.	Yes
2.2	Y	Y	The entrance is to a Multi-storey car park. At detailed design stage the introduction of a raised crossing at this location to be investigated to give pedestrian priority.	Yes
2.3	Y	Y	Prior to installation and operation of this temporary bus stop the Design Team will consult with the NTA on the proposed temporary bus stop location and ensure visibility to	Yes

			the pedestrian crossing is not adversely affected	
2.4	Y	Y	Crossing to be adjusted	Yes
2.5	Y	Y	Raised crossing detail to be reviewed at detailed design stage	Yes
2.6	Y	Y	Landscape areas to be extended to reduce uncertainty over informal crossing locations.	Yes
2.7	N	N	Road has been designed in compliance with DMURS principles as allow traffic low speed environment, with a design speed of 30kph.	Yes

Signed by the Designer:



Date: 08/10/2021

Signed by the Audit Team Leader:



Date: 11/10/2021

Signed by the Client:



Date: 12.10.2021

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