

**ATKINS**

Member of the SNC-Lavalin Group

# Proposed Residential Development at Bearna

Stage 1 & 2 Road Safety Audit

Burkeway Homes Ltd.

July 2020



# Notice

This document and its contents have been prepared and are intended solely for Burkeway Homes Ltd. information and use in relation to the Proposed Residential Development at Bearna.

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## Document history

Revision	Purpose description	Origin-ated	Checked	Reviewed	Author-ised	Date
Rev 0	Draft Issue	JW	JW	MD	MD	04/06/2020
Rev 1	Final Issue	JW	JW	MD	MD	24/06/2020
Rev 2	Final Issue	JW	JW	MD	MD	17/07/2020

## Client signoff

Client	Burkeway Homes Ltd.
Project	Proposed Residential Development at Bearna
Job number	5197317

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## Figures

No table of figures entries found.

# 1. Introduction

## 1.1. Background

This report describes the findings of a Stage 1 & 2 Road Safety Audit associated with the Proposed Residential Development at Bearna.

The Audit has been completed by Atkins on behalf of Burkeway Homes Ltd..

## 1.2. Site Inspection

The site inspection was carried out on Tuesday 3<sup>rd</sup> June 2020 by the Audit Team.

Weather conditions during the site inspection were sunny and dry; road surfaces were dry.

## 1.3. The Team

The Road Safety Audit Team members were as follows:

- Team Leader: Martin Deegan BEng (Hons) MSc CEng MICE
- Team Member: Jason Walsh BEng (Hons) PCert (RSA) CEng MIEI

## 1.4. The Design

The following drawing was examined as part of the Road Safety Audit (RSA) process:

**Table 1-1 - Drawing List**

Drawing No	Drawing Title	Revision Status
B861-OCSC-XX-XX-C-DR-0100	General Arrangement	P02
B861-OCSC-XX-XX-C-DR-0101	Proposed Plan & Profile	P02
B861-OCSC-XX-XX-C-DR-0102	Cross Section (1 of 3)	P01
B861-OCSC-XX-XX-C-DR-0103	Cross Section (2 of 3)	P01
B861-OCSC-XX-XX-C-DR-0104	Cross Section (3 of 3)	P01
B861-OCSC-XX-XX-C-DR-0106	Proposed Levels	P02
B861-OCSC-XX-XX-C-DR-0107	Proposed Longsection (1 of 2)	P02
B861-OCSC-XX-XX-C-DR-0108	Proposed Longsection (2 of 2)	P02

## 1.5. 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: Gradients on Driveways and Footpaths

**Location:** Along L1321 Road

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0101

With the installation of the proposed footpath there will be level differences between some of the high-level gardens and the proposed footway. This could result in the following:

- a) Steep gradients at tie-ins between existing driveways and the proposed footway
- b) Inappropriate cross falls on the proposed footway

**Recommendation**

The Design Team should ensure that tie-in gradients between the proposed footway and the existing driveways are minimized and fall within industry standards.

### 2.2. Problem: Impact on 'Over the Edge' Drainage

**Location:** Along L1321 Road

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0101

The existing road uses an 'over the edge' drainage system which will be impacted upon by the provision of raised kerbs and a new footway. This could lead to surface water being retained within the carriageway leading to potential discomfort for pedestrians and aquaplaning for vehicles.

**Recommendation**

The Designer should ensure that adequate drainage interventions are provided to minimize the risk of surface water being retained within the carriageway.

### 2.3. Problem: Footpath Connectivity

**Location:** Main Development Access Junction off L1321 Road

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0101

It is unclear if the proposed footpath extends to the existing section of footpath provided at the main development junction. Lack of connection will result in difficulties for pedestrians and conflicts with vehicles.

**Recommendation**

The Designer should ensure that the connection with the existing section of footpath is provided.

### 2.4. Problem: Crossing Facilities

**Location:** Main Development Access Junction off L1321 Road

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0101

The existing crossing at the main development access junction does not appear to include the provision of tactile paving. This can result in difficulties for visually impaired pedestrians.

**Recommendation**

The Designer should ensure that the crossing is provided with appropriate tactile paving.

## 2.5. Problem: Provision of Pedestrian Linkage

**Location:** Within Development Site

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0100

The main pedestrian route serving the development has a break in footpath provision on the right-hand side adjacent the open space.



This could result in pedestrians walking in traffic lanes in conflicts with vehicles accessing and departing the development.

### **Recommendation**

The Designer should provide a footpath connection at this location.

## 2.6. Problem: Pedestrian Crossing Facilities

**Location:** Within Development Site

Provisions for pedestrians to cross the road carriageway along key desire lines at internal road junctions do not appear to have been prescribed. This could lead to conflicts between pedestrians and vehicles.

### **Recommendation**

The Design Team should provide pedestrian crossings at internal junctions to service key desire lines. Such measures might include dropped kerbs with appropriate level of tactile paving or raised crossings.

## 2.7. Problem: Speed Control Measures

**Location:** Within Development Site

Provisions for speed control measures have not been proposed, raised tables at key locations or raised crossings. Lack of speed control measures may result in inappropriate vehicle speeds.

### **Recommendation**

The Designer should consider the use of speed control measures at key locations within the development.

## 2.8. Problem: Provision for Refuse Vehicle

**Location:** Within Development Site

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0100

Refuse Vehicles may be required to manoeuvre and reverse on many of the spur streets throughout the site. Some of these spur streets do not appear to include turning heads and which could result in lengthy reversing manoeuvres.

**Recommendation**

The Designer should ensure adequate turning facilities are provided for Refuse Vehicles where required.

## 2.9. Problem: Safety of Road Users During Construction

**Location:** Existing Development Site

**Drawings Ref:** B861-OCSC-XX-XX-C-DR-0100

The passage of construction vehicles through the existing development site could lead to increased risks for residents and road users.

**Recommendation**

The Designer should ensure that a Construction Traffic Management Plan is developed in advance of the works commencing on site.



## 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

**Martin Deegan**

Audit Team Leader  
Road Safety Engineering Team

**ATKINS**

Signed:



Date: 4<sup>th</sup> June 2020

**Jason Walsh**

Audit Team Member  
Road Safety Engineering Team

**ATKINS**

Signed:



Date: 4<sup>th</sup> June 2020

## 4. Designers 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: [martin.deegan@atkinsglobal.com](mailto:martin.deegan@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:** Proposed Residential Development at Bearna

**Audit Stage:** Stage 1 & 2 Road Safety Audit

**Date Audit Completed:** 4<sup>th</sup> June 2020

To be completed by the Designer				To be completed by the Audit Team
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures or comments	Alternative Measures accepted by Auditors (yes/no)
2.1	Yes	Yes	To be addressed in detail design	
2.2	Yes	Yes	To be addressed in detail design	
2.3	Yes	Yes	Connections will be provided.	
2.4	Yes	Yes	To be addressed in detail design	
2.5	No	No	It's an existing road and footpath and no proposed works intended to be done at that stretch.	Yes - monitor pedestrian movements along this link for conflicts upon opening of development
2.6	Yes	Yes	To be addressed in detail design	
2.7	No	No	Speed control measures are not required as there is no stretches of long straights.	Yes - consideration at detail design for provision of raised crossings for pedestrian priority at key locations
2.8	No	No	Autotrack has been done using the refuse truck and it works as required for waste collection.	Yes
2.9	No	No	Please note that the designer will make the client and the PSDP aware of this risk through design risk assessment and ask them to address the same through preliminary health and safety plan.	Yes

**Signed by the Designer:**  
Punit Gria  
Senior Engineer  
O'Connor Sutton Cronin



**Date:** 19<sup>th</sup> June 2020

**Signed by the Audit Team Leader:**

**Date:** 24<sup>th</sup> June 2020

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