

2021

Stage 1/2 Road Safety Audit



Prepared by: JdK



Stage 1/2 Road Safety Audit

The Green Quarter SHD at Cartrontroiy, Kilnafaddoge and Lissywollen, Ardnaglug (townlands), Athlone, Co. Westmeath

Document Control Sheet

| | |
|---------------------|--------------------------------|
| Client: | Avenir Homes Ltd. |
| Document No: | 211_035-ORS-XX-XX-RP-TR-7d-002 |
| Date: | 09/12/2021 |

| Revision | Status | Author: | Reviewed by: | Approved By: | Issue Date |
|----------|--------|---------|--------------|--------------|------------|
| P01 | S2 | JdK | DMC | DMC | 09/12/2021 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



Contents

| | | |
|----------|---|-----------|
| 1 | Introduction..... | 3 |
| 2 | Description of the Proposed Development | 4 |
| 3 | Problems Raised from the Road Safety Audit | 6 |
| 3.1 | Potential Problem Identified..... | 6 |
| 4 | Audit Team Statement..... | 9 |
| | Appendix A – Inspected Documentation | 10 |
| | Appendix B – Designer Response Form | 11 |

1 Introduction

This report documents the findings of a Stage 1/2 Road Safety Audit (RSA) carried out with respect to a proposed mixed use residential development at Cartronroy, Kilnafaddoge and Lissywollen, Ardnaglug (townlands), Athlone, Co. Westmeath.

The audit team conducted the site visit on Tuesday the 23rd of November 2021. The audit was carried out in the offices of ORS on Wednesday the 24th of November 2021.

The audit team comprised of the following people:

Team Leader:

David McCormack BEng (Hons), Dip Eng, CEng, MIEI

Team Member:

Johannes de Klerk BEng, MIEI

During the site visit the weather was damp with wet road conditions. The section of link road connecting the proposed site to the existing road network was not constructed at the time of conducting this audit. The surrounding traffic levels noted to be low across the audit period.

Previous Road Safety Audits were not available for review. The audit team reviewed the following drawings provided by the project design team.

- 211_035-ORS-Z0-00-DR-TR-700 Traffic (ORS)
- 211_035-ORS-Z0-00-DR-C-400 - Civil Services Layout (ORS)
- ATH-HJL-S-XX-DR-A-0003 Proposed Site Plan (HJL)
- DKP-M79-2002 Lighting Layout (DKP)
- L206 Landscape Layout

Documents/information not supplied:

- (A) Collision Data
- (B) Speed Survey
- (C) Traffic Count Data
- (D) Departures from standards

The terms of reference / procedure for the Audit were as per the relevant sections of the **Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024**. The audit examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the designs to any other criteria. The Road Safety Audit should not be treated as a design check.

The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the scheme and minimise accident occurrence.

All comments, references and recommendations in this safety audit are in respect of the review of information supplied by the Design Team.

2 Description of the Proposed Development

The proposal put forward Avenir Homes Limited is for the construction of a mixed-use residential development of 122No. residential units with ancillary creche, 46No. student apartments consisting of 283 bed spaces, and all associated site development works.

The proposed development will provide for two new vehicular accesses as well as pedestrian entrances onto Lissywollen Avenue east-west access road (as permitted under An Bord Pleanála Reference ABP-309513-21). Minor modifications to ABP-309513-21 are proposed to cater for these access points, alterations to cycle/pedestrian paths, the removal of a central island to facilitate the south-eastern entrance, and provision of bus stop infrastructure. Ancillary site works include public and communal open spaces, hard and soft landscaping, pedestrian / cycleways, car parking, cycle parking, bin storage, public lighting, solar panels, ESB substation and supporting distribution kiosks, and all other ancillary works above and below ground. The proposal includes pedestrian and cycle linkages onto the Old Rail Trail Greenway to the south and Blackberry Lane (L40061) to the west.

Please refer to **Figure 2.1** below for the location plan and **Figure 2.2** proposed scheme design layout prepared by the project design team.



Figure 2.1: Location Plan – (source – Google Maps)

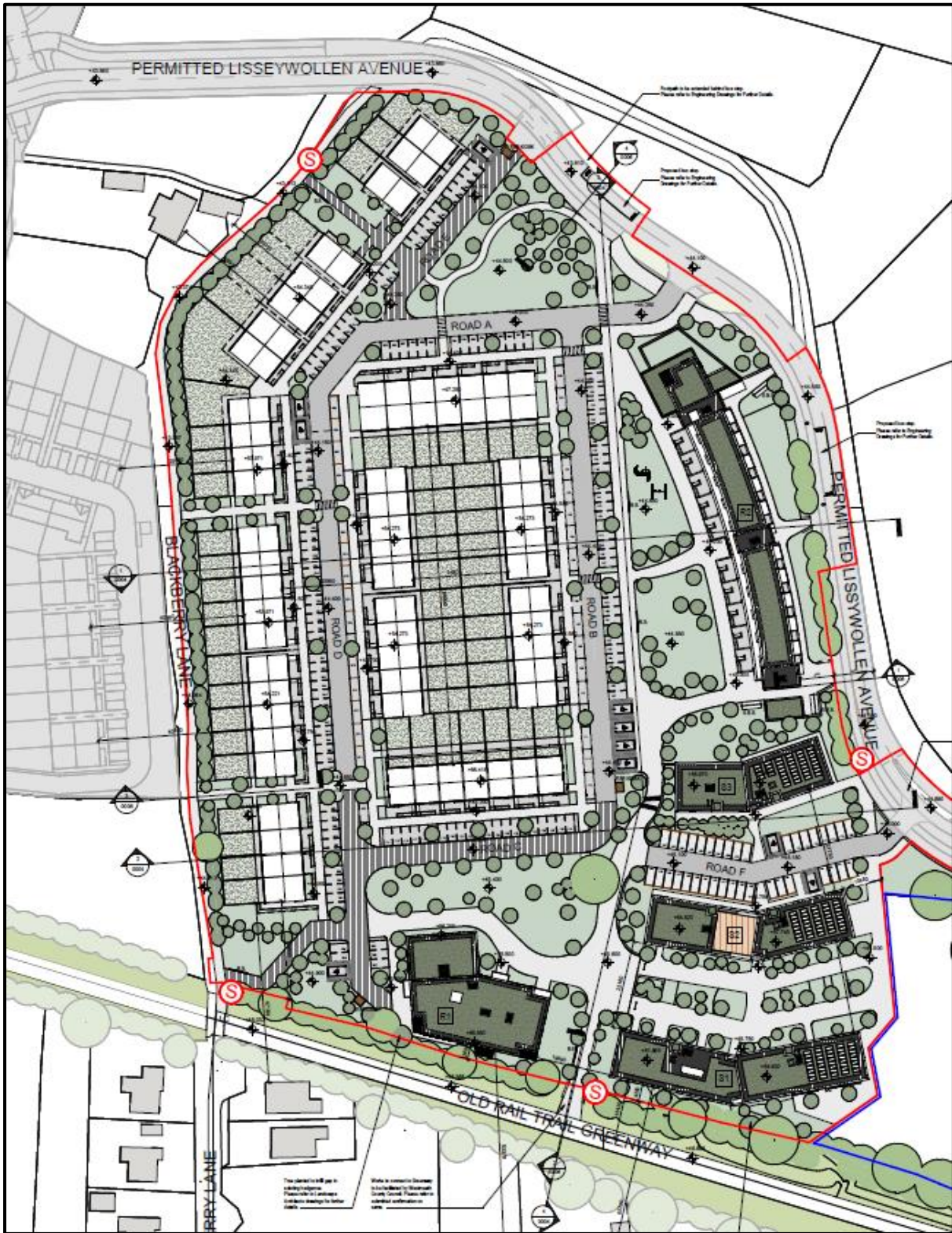


Figure 2.2: Site Plan Layout – (source – HJL)

3 Problems Raised from the Road Safety Audit

The following are problems and recommendations to address the safety issues associated with the proposal. The recommendations are proposed to the designer of the scheme to reduce any safety risks associated with it.

3.1 Potential Problem Identified

Problem No. 01: Lighting

Location: General Site Layout

The audit team note from the drawings provided that the position of some lighting columns appears to be located within cycle paths and next to parallel parking spaces which may cause conflict with cyclists and may make it difficult for car doors to open. This could result in possible injury to vulnerable users.

Recommendation:

The design team should ensure that the locations of all lighting columns are reviewed at detailed design stage and to ensure that positioning of columns does not cause any obstruction or hazard to vulnerable users

Problem No. 02: Drainage

Location: Internal Site Layout

The audit team note from the drawings provided that there is no provision for specifications relating to road surface gradients, drainage channels and gullies throughout the proposed development. Insufficient drainage may lead to issues of ponding in areas of the development, including the forming of ice during cold periods which poses a risk of slips, trips or falls to vulnerable road users.

Recommendation:

The design team should ensure that details and locations of all drainage gullies etc are provided for across the site and positioned strategically to avoid the risk of ponding across the site.

Problem No. 03: Signage & Road Markings

Location: Cycle Paths

The audit team note that there is a lack of signage and markings for the shared paths and cycle track on the drawings provided. Signage and markings aid in informing road users of the right of way at road crossings and presence of vulnerable road users. Inadequate signage and road markings may lead road users becoming confused resulting in vehicle-cycle or pedestrian-cycle conflicts causing injury.

Recommendation:

The design team should ensure that additional signage and markings are provided for in line with National Cycle manual guidelines and the applicable Road Traffic Sign Manual.

Problem No. 04: Landscaping

Location: Internal Site Layout

The audit team note from the drawings provided that the landscaping within the site may impact the visibility of road users at pedestrian crossings and internal junctions. High bushes and shrubbery should be avoided in areas where visibility is to be maintained to ensure that drivers are clearly able to see any pedestrians at designated crossing locations. This could potentially lead to instances of pedestrians-vehicle collisions resulting in injury.



Recommendation:

The design team should ensure that any proposed landscaping does not impact visibility at junctions or along internal roads and in particular at pedestrian crossing points.

Problem No. 05: Pedestrian Disabled Access

Location: Internal Site Layout

The audit team note that 'drop kerbs' and tactile paving are not identified at disabled parking areas and pedestrian paths at various locations within the site. Disabled access parking spaces are required to facilitate users with specific mobility needs. The omission of dropped kerbs will require vulnerable road users to travel in the roadway putting them at risk with vehicle conflicts and injury.

Recommendation:

The design team should ensure that details and locations of all 'drop kerbs' are provided for at all pedestrian crossing points and at disabled parking areas.

Problem No. 06: Pedestrian Permeability

Location: Internal Site Layout

The audit team note from the drawings provided that 'dropped kerbs' pedestrian crossings shown below are not matched with an opposite receiving paths. Pedestrian crossings for roads need to be located opposite one another in order to allow visually impaired road users safety cross a road in the most efficient space of time. Inappropriate placed dropped kerbs may lead to vehicle pedestrian conflict, resulting in injury.

Recommendation:

The design team should consider repositioning pedestrian paths to ensure all crossing locations align with a receiving path directly opposite the roadway.

Problem No. 07: Vehicle Access to Pedestrian Paths

Location: Throughout Site

The audit team note from the drawings provided that no measures to restrict vehicle access to pedestrian paths are specified. Vehicles may inadvertently enter pedestrian paths in the absence of physical barriers resulting in possible pedestrian-vehicle conflicts causing injury.

Recommendation:

The design team should consider the use of physical barriers to restrict vehicle access to emergency access routes along pedestrian paths without restricting emergency vehicle movements in case of emergency.

4 Audit Team Statement

We certify that we have examined the drawings listed in Appendix A and examined the site by means of a site visit. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the safety of the scheme. The issues that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Audit Team Leader: David McCormack: BEng (Hons), Dip Eng, CEng, MIEI
ORS

Signed: 

Date: 08th December 2021

Audit Team Member: Johannes de Klerk : BEng, MIEI
ORS

Signed: 

Date: 8th December 2021

Appendix A – Inspected Documentation

The audit team reviewed the following drawings and documents provided by the project design team.

- (1) 211_035-ORS-Z0-00-DR-TR-700 Traffic (ORS)
- (2) 211_035-ORS-Z0-00-DR-C-400 - Civil Services Layout
- (3) ATH-HJL-S-XX-DR-A-0003 Proposed Site Plan (HJL)
- (4) DKP-M79-2002 Lighting Layout (DKP)
- (5) L206 Landscape Layout



Engineering a Sustainable Future

Dublin | Cork | Galway | Mullingar | Donegal | London

o: +353 1 5242060 | e: info@ors.ie | w: www.ors.ie

Appendix B – Designer Response Form



Road Safety Audit Feedback Form

Job: 211035 – Mixed use residential development at Cartronroy, Kilnafaddoge and Lissywollen, Ardnaglug (townlands), Athlone, Co. Westmeath.

Stage of Audit: Stage 1/2

Date Audit Completed: 8/12/2021

Table with 5 columns: Problem Reference in Safety Audit Report, Problem Accepted (Yes/No), Recommendation Accepted (Yes/No), Alternative Option (Describe) (Only complete if recommendation not accepted), To Be Completed Audit Team Leader. Rows P1-P7.

Signed: [Signature] Design Team Leader Date: ...10/12/2021.....

Signed Off ... [Signature] ...Audit Team Leader Date: ...10/12/2021.....

Signed Off..... [Signature] Employer/ Employer's representative Date:09/12/2021.....