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# Road Safety Audit, Stage 1/2

53No Unit Residential Development, Rockbrae House, Bray, Co Wicklow

Project No: P3852

Date: 11.04.25

Revision: B 30.06.25

Issued By: Stephen McGinnity

Checked By: Muriel Kerr

Consulting Civil & Structural Engineers - Environmental & Traffic Engineers - Project Managers - PSDP



# Road Safety Audit Stage 1/2

#### 1. Introduction

- 1.1 This report describes a Stage 1/2 Road Safety Audit carried out on the proposed 53No unit residential development at Rockbrae House, Bray, Co Wicklow. The audit was carried out on the 10<sup>th</sup> of April 2025 in the office of the Road Safety Department of McMahon Associates.
- 1.2 The audit team members were as follows:-

Team Leader: Muriel Kerr, BEng CEng MIEI, MCIHT;

Team Member: Peter McMahon, BEng MEngSc CEng FIEI MICE;

Team Member: Stephen McGinnity, MEng CEng MIEI

- 1.3 The audit comprised an examination of the documents relating to the scheme, which is listed in Appendix A. The site was visited by the Audit Team on 4<sup>th</sup> April 2025. The weather was dry but overcast.
- 1.4 This Stage 1/2 audit has been carried out in accordance with the relevant sections of TII GE-STY-01024. The team has 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 design to any other criteria.

In accordance with GE-STY-01024, the Audit Team are independent of the scheme design.

- 1.5 All of the 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 accident occurrence.
- 1.6 The development consists of 2No apartment blocks and 9 residential unit and associated access roads, with a new vehicular access junction and new pedestrian access with Vevay Road (R761).
- 1.7 Photographs from the site visit are included in Appendix C for reference.



## 2. Items resulting from this Stage 1/2 Audit

## 2.1 Problem: Link to existing cycleway

There is a risk of cyclist from the proposed development not being able to safely access the existing cycleway.

#### Recommendation

It is recommended that the existing cycle way is shown on the drawings and provisions such as dropped kerbs provided to allow cyclist to safely join the cycleway from the proposed development.

## 2.2 Problem: Dropped kerb provision at existing entrance

There is a risk of vehicles using the existing dropped kerb arrangement (Photo 1) at the proposed pedestrian access location and coming into conflict with cyclist or pedestrians.

#### Recommendation

It is recommended that the dropped kerb provision at the existing entrance is reduced so to prevent vehicle access. Consideration should also be giving to providing a staggered pedestrian guardrail to prevent vehicles using the pedestrian access route.

#### 2.3 Problem: Existing traffic sign at proposed access junction

Existing advanced warning clashes with proposed access junction (Photo 2) and not shown on the drawings as being relocated. There is a risk of the advanced warning sign being moved to an inappropriate location during the construction phase.

#### Recommendation

It is recommended that the advanced warning sign is relocated and the appropriate location shown on the tender drawings.



## 2.4 Problem: Cycle route within the development

There is a risk of conflict between cyclist and vehicles due to ambiguity over cycle routes within the development

## Recommendations

It is recommended that the cycle route within the development is defined and how it connects with bicycle storage facilities and the existing cycle route on the public road.

#### 2.5 Problem: Colour contrast at car parking spaces

There is a risk of cars parking in an irregular and unsafe manner due to the lack of colour contract in the permeable paving defining the parking spaces.

#### Recommendations

It is recommended that a different colour paver is provided to define the car parking spaces.

## 2.6 Problem: Dwarf wall to rear of car parking spaces

There is a risk of parking cars striking the dwarf wall to rear of the car parking spaces opposite Units 52 and 53

#### Recommendations

It is recommended that wheel stops are provided.

## 2.7 Problem: EV Charging Provision

There is a risk of less abled people not being able to access the EV Charging station layout

#### Recommendations

It is recommended that the parking bay dimensions and the location of the Charging Station is as per ZEVI Universal Design Guidelines for Electric Vehicle Charging Infrastructure.



## 2.8 Problem: Street lighting provision

There is a risk of pedestrians falling in the dark and into the path of oncoming vehicles, due to the lack of street lighting.

#### Recommendations

It is recommended that adequate street lighting is provided within the development.

## 2.9 Problem: Water ponding at raised tables

There is a risk of water ponding at the raised tables and freezing during cold conditions and becoming a hazard for road users.

#### Recommendations

It is recommended that the raised tables are included on the drainage drawings and suitable drainage provided to ensure water does not pond.

#### **Observations**

The following items are road safety issues outside of the proposed development Consideration should be given to addressing these as part of the proposed development or raising with the relevant department of Wicklow County Council.

- At the crossroads of Charnwood and Sans Souci Wood with Vevay Road, the pedestrian crossing provisions are substandard, with insufficient tactile provision in some locations (Photos 3 and 4), no tactile paving in other locations (Photos 5 and 6) and uneven surfacing (Photo 7).
- Surface of existing cycleway in poor condition (Photo 8)



#### 3. Audit Team Statement

We certify that we have examined the drawings and other information listed in Appendix A. 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 problems that we have identified have been noted in the report, together with suggestions for improvement that in our opinion should be studied for implementation.

## **Audit Team Leader**

Muriel Kerr, BEng CEng MIEI, MCIHT; Principal Engineer

Signed Muriel Kerry

Date 10<sup>th</sup> April 2025

## **Audit Team Members**

Peter McMahon, BEng MEngSc CEng FIEI MICE; Director

Stephen McGinnity, MEng, CEng MIEI Civil Engineer

#### **McMahon Associates**

The Mill Building, Newtown Link Rd, Greenhills, Drogheda, Co. Louth

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# Appendix A

## **List of Drawings Examined:**

- P3852 C-01A Indicative Site Layout
- P3852 C-02C Indicative Drainage Layout Sheet 1
- P3852 C-03B Indicative Drainage Layout Sheet 2
- P3852 C-04B Indicative Watermain Layout
- P3852 C-05A Indicative Site Levels
- 20250132 ROC-P-02 Proposed Site Layout Plan
- 20250132 ROC-P-13 Proposed Landscaping and Boundaries

# Appendix B

# **SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORTS**

**Scheme:** 53No Unit Residential Development, Rockbrae House, Bray, Co Wicklow

**Date Audit Completed:** 10<sup>th</sup> April 2025

| Paragraph<br>No. In Safety<br>Audit Report | Problem accepted (yes/no) | Recommended<br>measure<br>accepted<br>(yes/no) | Alternative measures (describe)   | Alternative<br>measure<br>accepted by<br>Safety Auditor<br>(yes/no) |
|--|---------------------------|--|---|---|
| 2.1  | Yes                       | No   | The intention is for cyclists to access the existing cycleway from the development roadway, therefore dropped kerbs from footway to cycleway not required. Existing cycle way will be shown on drawings.  |   |
| 2.2  | Yes                       | No   | Existing dropped kerb to be removed completely and replaced with upstand kerb as the existing entrance will only be used by pedestrians. Landscape and hardscape to be reviewed at detailed design stage for visibility of entrance, to ensure vehicles don't attempt to use the wide pedestrian access.  |   |
| 2.3  | Yes                       | Yes  |   |   |
| 2.4  | Yes                       | No   | The existing drop kerb at the proposed pedestrian entrance will be changed to an upstand kerb so no ambiguity will exist over cycle route. Cyclists will use the roadway. The main bicycle storge shed is accessed directly from the roadway. The other bicycle racks are located adjacent to the roadway and will be accessed via the drop kerbs and short section of footway. |   |
| 2.5  | Yes                       | Yes  |   |   |

| 2.6 | Yes | Yes |   |  |
|-----|-----|-----|---|--|
| 2.7 | Yes | No  | The ZEVI guidance recognises there may be limitation in locations like those serving the needs of residents and not all guidelines may be achievable. The EV charging spaces in the development are for use by private residents. The proposed EV spaces are sized according to Traffic Signs Manual Chapter 7 Road Markings Section 7.6.17, 6m long by 4.8m wide. To ensure there is 1200mm wide manoeuvring space for less abled people, the charging station can be set back out of the buffer zone. |  |
| 2.8 | Yes | Yes |   |  |
| 2.9 | Yes | Yes |   |  |

| Signed:ఏ | insad McCoory           | Designer          |
|----------|-------------------------|-------------------|
|          | Date 15.04.2025         |                   |
| Signed:  | Muriel Kerr  16.04.2025 | Audit Team Leader |
| Signed:  | 15.04.2025              | Employer          |



# Appendix C - Photos



Photo 2







Photo 4



Road Safety Audit Stage 1/2



# Photo 5





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# Photo 7





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