



Stage 1 Road Safety Audit

**Glenveagh Homes Residential Development, Circular Road,
Ennis, Co Clare**

On behalf of Tobin Consulting Engineers

Prepared By:

CST Group Chartered Consulting Engineers
1, O'Connell Street, Sligo, F91 W7YV
+353 (0)71 919 4500 info@cstgroup.ie www.cstgroup.ie

July 2022

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1. Introduction

- 1.1. This report describes a Stage 1 Road Safety Audit carried out on behalf of Tobin Consulting Engineers on a residential development for Glenveagh Homes off Circular Road, Ennis, Co Clare.
- 1.2. The audit was carried out between 12th and 19th July, 2022.
- 1.3. The audit team were as follows:

Team Leader:
Francis Fidgeon, Chartered Engineer, BE CEng MIEI
Certificate of Competency in Road Safety Audits (UCD, 2013)
TII Auditor Ref. FF74289

Team Member:
Philip Bayfield, Chartered Engineer, BE MSc CEng MIEI
TII Auditor Ref. PB106343
- 1.4. The audit comprised an examination of the drawings relating to the scheme supplied by the design office. A site visit was carried out by Philip Bayfield on 12th July, 2022 between the hours of 2 and 3pm and by Francis Fidgeon on 19th July, 2022 between the hours of 7 and 8pm. Weather conditions during the inspections were dry and the road surface was dry. Traffic conditions were considered moderate/light with cars, light goods and HGVs. Photographs were taken during the inspections.
- 1.5. This Stage 1 audit has been carried out in accordance with the relevant sections of the Transport Infrastructure Ireland (TII) Publication (Standard) GE-STY-01024 (Dec 2017) 'Road Safety Audit'. The audit 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.
- 1.6. **Appendix A** describes the documents examined by the Audit Team.
Appendix B contains the Audit Feed Back Form. The Designer shall consider the Audit Report and prepare a Designer Response to each of the recommendations, using the Feedback Form. The response shall state clearly whether each recommendation is accepted, rejected, or whether an alternative recommendation is proposed. Copies of the Designer Response shall be sent to the Employer and the Audit Team. The Audit Team shall then consider the Designer Response and indicate on the Feedback Form whether the Designer's response to each recommendation is accepted. The completed Report contains the completed Feedback Form with signatures of all three parties involved - Designer, Audit Team Leader and Employer.
- 1.7. It is assumed the 3m wide routes through and to the west of the site are shared cyclepath/footpaths. Details at interfaces with footpaths, etc should be reviewed in a Stage 2 Road Safety Audit.
- 1.8. 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.

2. Items Resulting from Previous Stage 1 Audit

We were not made aware of any previous audits.

3. Items Resulting from This Stage 1 Audit

3.1 Collision Data

Collision data has not been supplied with this scheme.

Road Collision Data is not currently available on the Road Safety Authority Database, and therefore the audit team has no access to the historical collision information for this site and / or adjacent roads.

3.2 General Problems / Problems at Multiple Locations

3.2.1 Keep-right Arrows at One-way Yielding

Problem: In areas where carriageway narrowing and one-way yielding is proposed as traffic calming, no Keep-right arrows are shown.

Hazard: Motorists unaware of the road build-out may strike the kerb and lose control.

Recommendation: Provide Keep-right arrows.

3.2.2 One-way Yielding Length

Problem: In areas where carriageway narrowing and one-way yielding is proposed as traffic calming, the length of carriageway narrowing appears excessive.

Hazard: Motorists at both ends are asked to yield and they may be too far from each other to give each other a cue as to who should proceed first. Where both might proceed simultaneously one would need to reverse and may strike pedestrian.

Recommendation: Ensure the length of carriageway narrowing is not excessive.

3.2.3 Shared Surface Areas close to junctions

Problem: We are unsure if the shared surface areas are raised relative to general carriageway level. If this is the case some of the ramps of the shared surface areas could be positioned in the location of vehicles wheels when they are stopped at the junction.

Hazard: Vehicles could accidentally roll into the path of oncoming traffic.

Recommendation: Ensure any such ramps are located so that accidental rolling forward cannot occur.

3.2.4 Tight Radii on Bends

Problem: Some of the bends have very small radii.

Hazard: Motorists may be forced to the opposite side of the carriageway and opposing motorists may not expect this and head-on collision could result.

Recommendation: Ensure radii are sufficient for general car use.

3.2.5 Turning Heads for Bin Lorries

Problem: Some longer cul-de-sacs appear to have insufficient turning heads for refuse truck turning.

Hazard: Reversing may be required, and pedestrians could be struck.

Recommendation: Ensure sufficient turning areas for trucks are provided where necessary.

3.2.6 Forward Visibility

Problem: The forward visibility around some tight bends could be restricted by parked vehicles.

Hazard: Adequate stopping sight distance may not be provided, and collision could result.

Recommendation: Ensure parked vehicles will not restrict forward visibility.

3.2.7 Cycleway “ramps”

Problem: The cycleway “ramps” to the N85 may be too steep.

Hazard: Cyclists/wheelchair users/pram-pushers could lose control and approach the N85 too fast and collide with traffic on the N85.

Recommendation: Ensure the “ramp” is not too steep/adequate measures are employed to control users of the “ramp”.

3.2.8 Blister Paving on Shared Surface

Problem: The blister paving on the 3m wide shared surface does not extend for the full width.

Hazard: Partially-sighted/blind users may be walking close to the edge and miss the paving and walk into the path of oncoming traffic.

Recommendation: Ensure the blister paving is wide enough to capture relevant users.

3.3 Problems at Specific Locations

3.3.1 Junction with Circular Road

Problem: The junction radii appear large.

Hazard: Pedestrians who cross within the junction have a longer crossing than with tighter radii and traffic could enter/exit at greater speed than with tighter radii. Collisions with pedestrians could result.

Recommendation: Ensure the junction radii are small in accordance with DMURS.

3.3.2 Dropped kerbs at junction with Circular Road

Problem: The dropped kerbs at the junction with Circular Road are beyond the back of the junction radii and at a remove from the junction.

Hazard: Some pedestrians who would otherwise avail of this facility may choose to cross within the mouth of the junction and trip into the carriageway.

Recommendation: Provide the dropped kerbs and tactile on the desire line, which is likely closer to the junction.

3.3.3 Pedestrian Parking Space at No 21

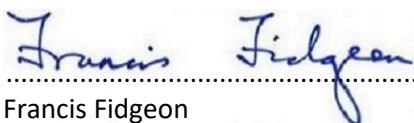
Problem: There is a pedestrian crossing located directly in line with the parking space at No 21.

Hazard: Cars reversing out may hit a pedestrian using the crossing.

Recommendation: Relocate the crossing.

4. 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 which we recommend should be studied for implementation. No one in the Audit Team has been involved with the scheme design as shown in Appendix A.

Signed 
Francis Fidgeon
Chartered Engineer
Audit Team Leader

Date *..22 July 2022*

Signed 
Philip Bayfield
Chartered Engineer
Audit Team Member

Date *..22 July 2022*

Appendix A List of Documents Examined

DOCUMENT REF / NAME:	RECEIVED FROM:	DATE:
11269-2112-Proposed Road Layout Sheet 1 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2113-Proposed Road Layout Sheet 2 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2114-Proposed Road Layout Sheet 3 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2115-Autotrack Analysis Large Car Sheet 1 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2116-Autotrack Analysis Large Car Sheet 2 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2117-Autotrack Analysis Large Car Sheet 3 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2118-Autotrack Analysis Refuse Sheet 1 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2119-Autotrack Analysis Refuse Sheet 2 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2120-Autotrack Analysis Refuse Sheet 3 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2121-Autotrack Analysis Fire Truck Sheet 1 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2122-Autotrack Analysis Fire Truck Sheet 2 of 3	TOBIN Consulting Engineers	05/07/2022
11269-2123-Autotrack Analysis Fire Truck Sheet 3 of 3	TOBIN Consulting Engineers	05/07/2022

Appendix B RSA Feedback Form

Document History

Revision	R0	R0							
Purpose of Issue: P=Preliminary PG=Progress C=Comment I=Information PL=Planning T=Tender CN=Construction	C	PL							
Date:	22 07 22	29 07 22							
Originator:	FF	FF							
Checked By:	PB	PB							
Approved By:	FF	FF							

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ROAD SAFETY AUDIT FEEDBACK FORM

CST Group Chartered Consulting Engineers
1, O'Connell Street, Sligo, F91 W7YV, Ireland

Scheme: Glenveagh Homes Residential Development, Circular Road, Ennis, Co Clare

Audit Stage: 1 Date Audit Completed: 22/07/2022 Route No. _____ Our Ref :122239

TO BE COMPLETED BY DESIGNER				TO BE COMPLETED BY AUDIT TEAM LEADER
Paragraph No. in Safety Audit Report	Problem accepted (Yes/No)	Recommended measure accepted (Yes/No)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by Auditors (Yes/No)
3.2.1	YES	YES		
3.2.2	YES	YES		
3.2.3	YES	YES		
3.2.4	YES	YES		
3.2.5	YES	YES		
3.2.6	YES	YES		
3.2.7	YES	YES		
3.2.8	YES	YES		
3.3.1	YES	YES		
3.3.2	YES	YES		
3.3.3	YES	YES		

Signed: Brian Heaney Designer Date: 29/07/2022
Brendan Heaney
TOBIN Consulting Engineers

Signed: Francis Fidgeon Audit Team Leader Date: 29/07/2022
Francis Fidgeon
CST Group Chartered Consulting Engineers

Signed: Colm Mc Eldersney Employer Date: 29/07/2022
For Glenveagh Homes