

Title: **Stage 1 Road Safety Audit**

For;

**Proposed Residential Development, Cairnbrook,
Glenamuck Road, Carrickmines, Co. Dublin.**

Client: **Waterman Moylan**

Date: **July 2022**

Report reference: **1544R01**

VERSION: **FINAL (29-7-2022)**

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CONTENTS SHEET

Contents

1.0	Introduction	2
2.0	Background	3
3.0	Issues Raised in This Road Safety Audit.....	5
3.1	Problem.....	5
3.2	Problem.....	5
3.3	Problem.....	6
3.4	Problem.....	7
3.5	Problem.....	8
3.6	Problem.....	9
3.7	Problem.....	9
4	Observations	10
4.1	Observation.....	10
5	Audit Statement	11
	Appendix A.....	12
	Appendix B	13
	Appendix C.....	16

St 1 RSA – Glenamuck Road South, SHD

1.0 Introduction

This report was prepared in response to a request from Ms. Laura Ruiz Garrido, Waterman Moylan Consulting Engineers, for a Stage 1 Road Safety Audit for the proposed Strategic Housing Development at Cairnbrook, Glenamuck Road, Carrickmines, Co. Dublin.

The Road Safety Team comprised of;

Team Leader: **Norman Bruton**, BE CEng FIEI, Cert Comp RSA

TII Auditor Approval no. NB 168446

Team Member: **Owen O'Reilly**, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng MIEI

TII Auditor Approval no. OO1291756

The Road Safety Audit comprised of an examination of drawings and other material provided and a site visit by the Audit Team, on the 22nd of July 2022. The weather at the time of the site visit was dry, and the road surface was also dry.

This Stage 1 Road Safety Audit has been carried out in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

A separate cycle audit is being carried out by the Design team to ensure compliance with the 'Standards for cycle Parking and Associated Cycling Facilities for New Developments (2018)'. This road safety audit includes an audit of the road safety of cyclists as well as all other road users.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within this safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

The information supplied to the Audit Team is listed in **Appendix A**.

The feedback form is contained in **Appendix B**.

A plan drawing showing the problem locations is contained in **Appendix C**.

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2.0 Background

It is proposed to construct a residential development of 167 units on a green field site at Cairnbrook, off Glenamuck Road in Carrickmines.

Vehicular pedestrian and cyclists would be via the existing cul-de-sac residential Cairnbrook housing development. A secondary pedestrian and cyclist access is proposed to the north east corner of the site.

The Glenamuck District Road Scheme, The Glenamuck Road South and the Enniskerry road are planned by the Local Authority.

The speed limit within the proposed development will be 30km/hr.

The site location and site extents plans are shown below.



St 1 RSA – Glenamuck Road South, SHD



No data was available from the Road Safety Authority’s website on historic collisions due to a review of policy taking place.

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3.0 Issues Raised in This Road Safety Audit.

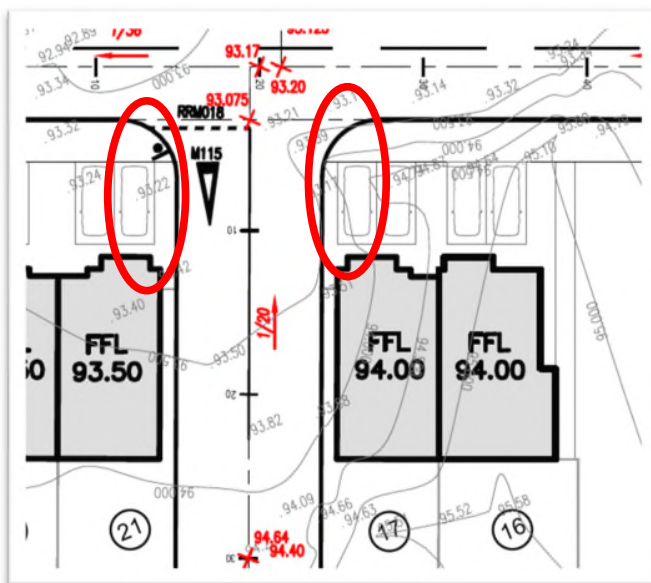
3.1 Problem

LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

The parking spaces at units 21 & 17 are very close to the internal junction. Drivers reversing out of these spaces may not be able to check for traffic approaching from all directions which could lead to collisions.



RECOMMENDATION

It is recommended that the spaces be kept further away from the junction.

3.2 Problem

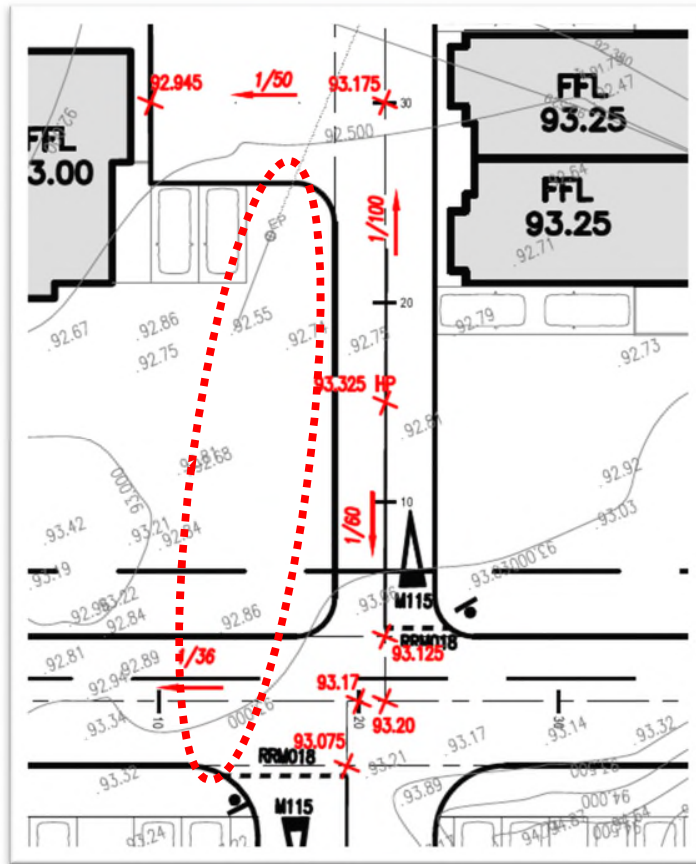
LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

There are no footpaths shown connecting to units 22, 23 & 24. This could lead to pedestrians colliding with turning vehicles or walking across the green area resulting in slips and falls.

St 1 RSA – Glenamuck Road South, SHD



RECOMMENDATION

It is recommended that a footpath be provided linking to the main footpath network with crossing points or that a shared use Street be provided with a transition zone for pedestrians to join the footpath network at the interface with the non-shared street.

3.3 Problem

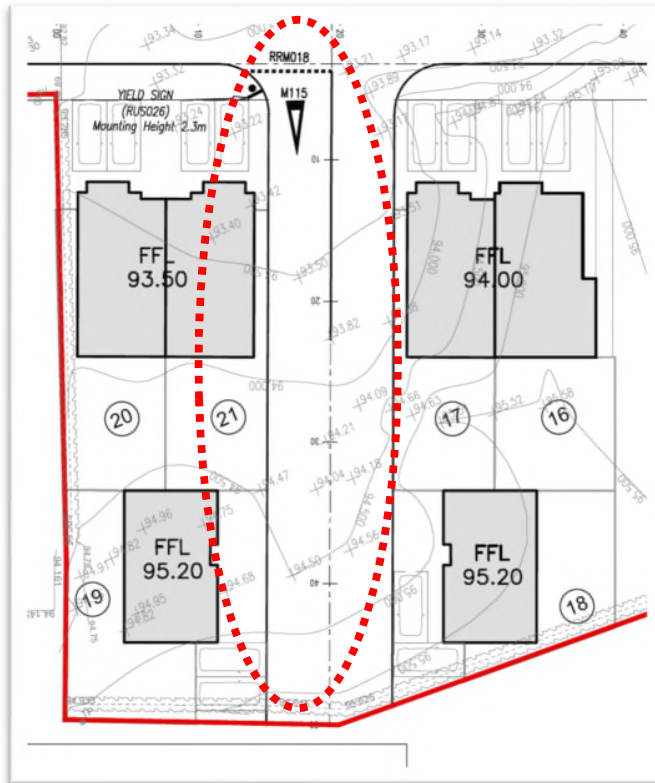
LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

There are no footpaths shown connecting to units 16 to 21. This could lead to pedestrians colliding with passing vehicles.

St 1 RSA – Glenamuck Road South, SHD



RECOMMENDATION

It is recommended that a footpath be provided linking to the main footpath network with crossing points or that a shared use Street be provided with a transition zone for pedestrians to join the footpath network at the interface with the non-shared street.

3.4 Problem

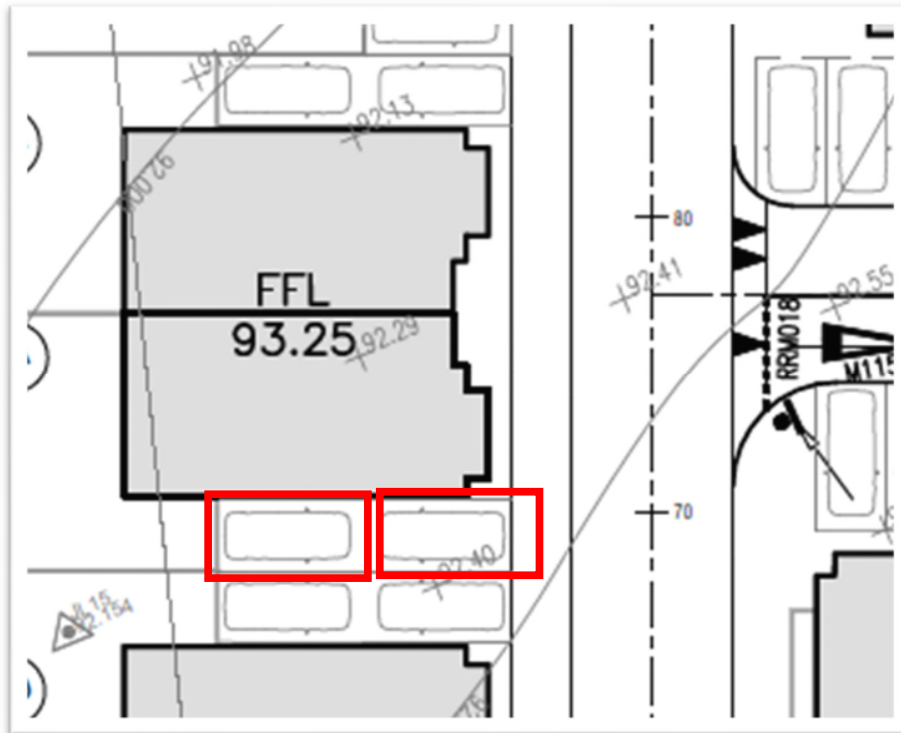
LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

It is proposed to have stacked parking at some units. Residents may park their vehicles on the footpath to avoid having to move vehicles to let others out. Parked vehicles on the footpath are hazards for pedestrians especially the mobility impaired, blind or partially sighted.

St 1 RSA – Glenamuck Road South, SHD



Example only

RECOMMENDATION

It is recommended that the stacked parking be removed.

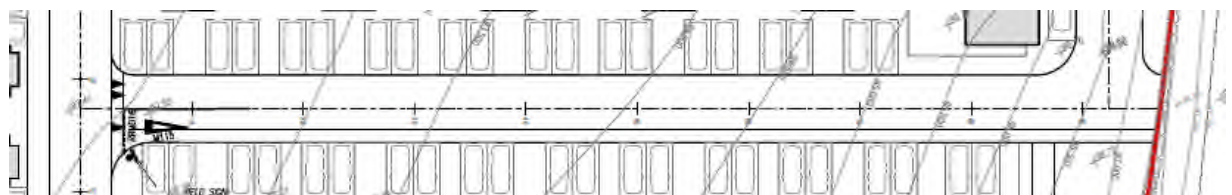
3.5 Problem

LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

There are no footpaths along the side roads off the main internal access road. It may be intended that these roads will be shared use streets. It appears however that these streets will be extended in the future and may contain excessive traffic or even through traffic which would not be suitable as a shared street.



Example only

St 1 RSA – Glenamuck Road South, SHD

RECOMMENDATION

It is recommended that footpaths be provided should future extensions be possible.

3.6 Problem

LOCATION

Drawing 21-111 P010 June 2022- Roads layout & general layout Plan.

PROBLEM

There are some uncontrolled pedestrian crossings to the rear of on-curtilage parking spaces. Reversing drivers may not see small children in their rear view mirrors and vehicle loads may lead to the tactile paving being cracked which could result in a trip hazard.



Example only

RECOMMENDATION

It is recommended that the crossing points be moved away from parking spaces.

3.7 Problem

LOCATION

Existing Cairnbrook residential road.

PROBLEM

It was observed during the site visit that the existing Cairnbrook road has areas of designated on-street parking. Drivers currently use an informal give take system when meeting at these areas. When the

St 1 RSA – Glenamuck Road South, SHD

additional units are constructed and occupied there is a risk that vehicles will meet at the parking areas and the remaining carriageway will not be wide enough to accommodate both, resulting in side-swipe collisions.



RECOMMENDATION

It is recommended that an analysis of the on-street parking be made with respect to the additional traffic volumes and the potential need for some intermittent passing bays.

4 Observations


4.1 Observation

Road widths and drainage details have not been provided to the Audit Team.

5 Audit Statement

We certify that we have examined the site on the 22-7-2022. The examination has been carried out with the sole purpose of identifying any aspects of the design which could be added, removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions which we would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton Signed: 
(Audit Team Leader) Dated: 29-7-2022

Owen O'Reilly Signed: 
(Audit Team Member) Dated: 9-7-2022

Appendix A

List of Material Supplied for this Audit;

- Drawing -111-P017 – Roads Markings and Signage-Sheet 1 of 2
- Drawing -111-P018 – Roads Markings and Signage-Sheet 2 of 2
- Drawing -111-P070-Swept Path Analysis – Fire Tender
- Drawing -111-P071-Swept Path Analysis – Refuse Vehicle
- Drawing -111-P010 – Roads Layout and Levels – GA Plan
- Drawing -111-P011 – Roads Layout and Levels – Sheet 1 of 3
- Drawing -111-P012 – Roads Layout and Levels – Sheet 2 of 3
- Drawing -111-P013 – Roads Layout and Levels – Sheet 3 of 3
- Traffic and Transport Assessment
- Travel Plan

Appendix B

Feedback Form

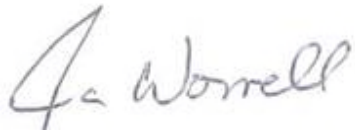
ROAD SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORT

Scheme: Glenamuck road SHD

Stage: Stage 1 Road Safety Audit

Date Audit (Site Visit) Completed: 22-7-2022

Paragraph No. in Quality Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1	Y	N	Layout has been amended to shared area to address this matter	Yes
3.2	Y	N	Layout has been amended to a homezone to address this matter	Yes
3.3	Y	N	Layout has been amended to a homezone to address this matter	Yes
3.4	Partially	N	In order to obtain the required density and ensure effective land use stacked parking has been provided	Yes
3.5	Partially	N	The area in question is a homezone	Yes
3.6	y	y		
3.7	Y	Y	The existing parking areas are provided in short sections, and promote traffic calming along these sections of roadway. The residual 4.1m carriageways is sufficient for two cars to pass, and infrequent larger vehicles (refuse, fire tender etc.) are required to operate as a shuttle system where there is opposing traffic in such scenarios. If considered necessary, the kerb can be setback into the verges to increase the residual road width to 4.5 m which is sufficient for HGV and cars to pass.	



Signed.....

Design Team Leader

Date.....29/07/22.....



Signed.....
Audit Team Leader

Date.....29/7/2022.....



Signed.....
Employer/Developer

Date.....29/7/22.....

Appendix C

Problem Location Plan.

SHEET 3

SHEET 1

Problem 3.4
example

Problem 3.2

Problem 3.5

Problem 3.7

Problem 3.5

Problem 3.3

Problem 3.6
example

Problem 3.1

SHEET 2

GLENAMUCK COTTAGES

