

Title: **QUALITY AUDIT**

**INCLUDING**

**Road Safety Audit Stage 1-2, Access Audit, Cycle Audit and  
Walking Audit.**

**For;**

**Proposed Clonburriss SDZ Site for Kelland Homes Ltd.**

Client: **Kelland Homes Ltd.**

Date: **April 2022**

Report reference: **1470R01**

VERSION: **FINAL (8-11-2022)**

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## CONTENTS SHEET

### Contents

1.0	Introduction .....	2
2.0	Background .....	3
3.0	Issues Identified in This Quality Audit.....	6
3.1	Problem.....	6
3.2	Problem.....	7
3.3	Problem.....	8
3.4	Problem.....	8
3.5	Problem.....	9
4	Observations .....	9
4.1	Observation.....	9
5	Quality Audit Statement.....	10
	Appendix A.....	11
	Appendix B.....	12
	Appendix C.....	14

## 1.0 Introduction

This report was prepared in response to a request from Mr. Ronan Kearns, Pinnacle Consulting Engineers, for a Quality Audit for the proposed residential development of part of the Clonburris Strategic Development Zone (SDZ) on behalf of Kelland Homes Ltd.

The Quality Audit has been carried out in accordance with the guidance in the Design Manual for Urban Roads and Streets (DMURS), produced by Department of Transport Tourism and Sport in March 2013 and as updated in June 2019.

This portion of the Quality Audit is a design stage audit and includes a Stage 1&2 Road Safety Audit (in accordance with TII Publication GE-DTY-01024, dated December 2017), an access audit, a walking audit and a cycling audit. (i.e. aspects of a Quality Audit carried out independent of the Design Team and generally included as appendices to the overall Audit)

The Road Safety and Quality Audit Team comprised of;

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

**TII Road safety Auditor approval number: NB 168446**

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

**TII Auditor Approval no. OO 1291756**

This portion of the Quality Audit involved the examination of drawings and other material and a site visit by the Audit Team, on the 28<sup>th</sup> of April 2022. The weather at the time of the site visit was dry and the road surface was also dry.

The problems raised in this Quality Audit may belong to more than one of the categories of Audit named above. A table has been provided at the start of Section 3 of this report detailing which category of audit each problem is associated with.

Recommendations have been provided to help improve the quality of the design with regard to the areas described above. A feedback form has also been provided for the designer to complete indicating whether or not he/she will accept those recommendations or provide alternative recommendations for implementation.

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

A feedback form for the Designer to complete is contained in **Appendix B**.

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

Bruton Consulting Engineers carried out the Road Safety Audit for the roads infrastructure for the SDZ at planning stage in association with DBFL Consulting Engineers (Report refs 864 R01- Stage 1 RSA and 864 R02 Stage 2 RSA dated January 2022). It is assumed that safety issues raised in the Stage 2 RSA will be mitigated at the construction stage as committed to in the feedback form.

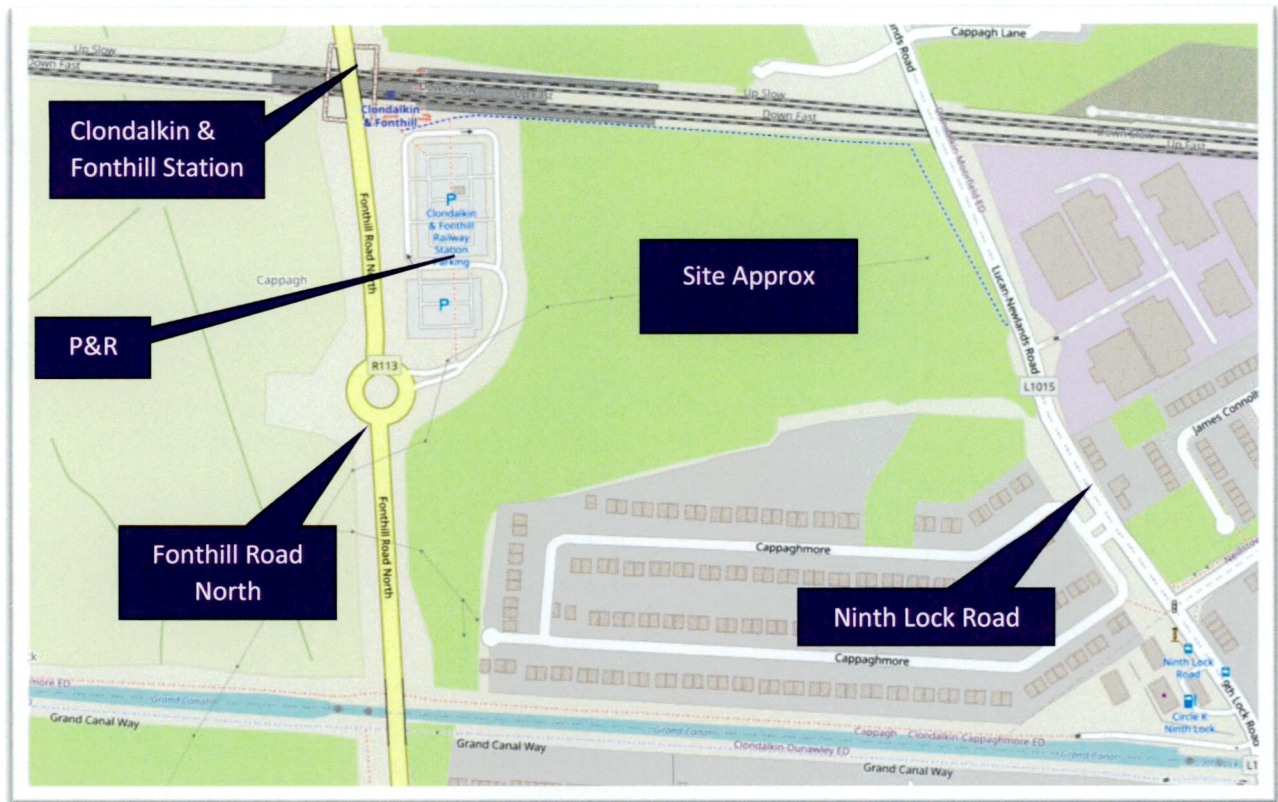
## 2.0 Background

It is proposed to construct part of the residential scheme associated with Clonburris SDZ. The area involved would connect with Ninth Lock Road and would have residential development both north and south of the distributor road/Link Road. The site is bounded to the West by the Clondalkin Fonhill Park and Ride site to the north by the railway line and pedestrian route to the train station from Ninth Lock Road.

The Distributor road layout, cross section etc. has been determined during the SDZ planning. The focus of this Quality Audit is generally on the development as a stand-alone scheme including the internal layout and connectivity.

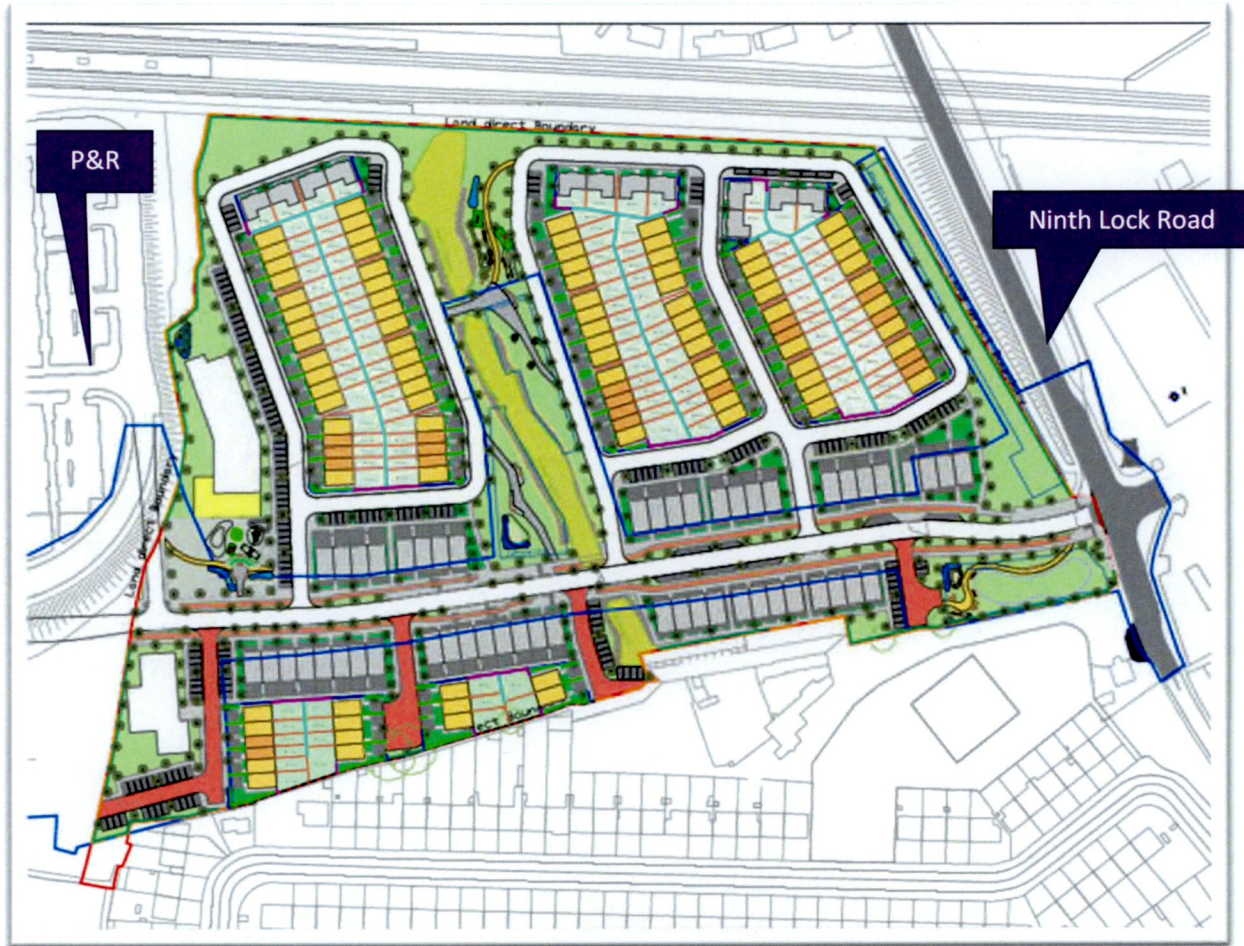
The design speed within the development is 30km/hr.

The site location map is shown below.



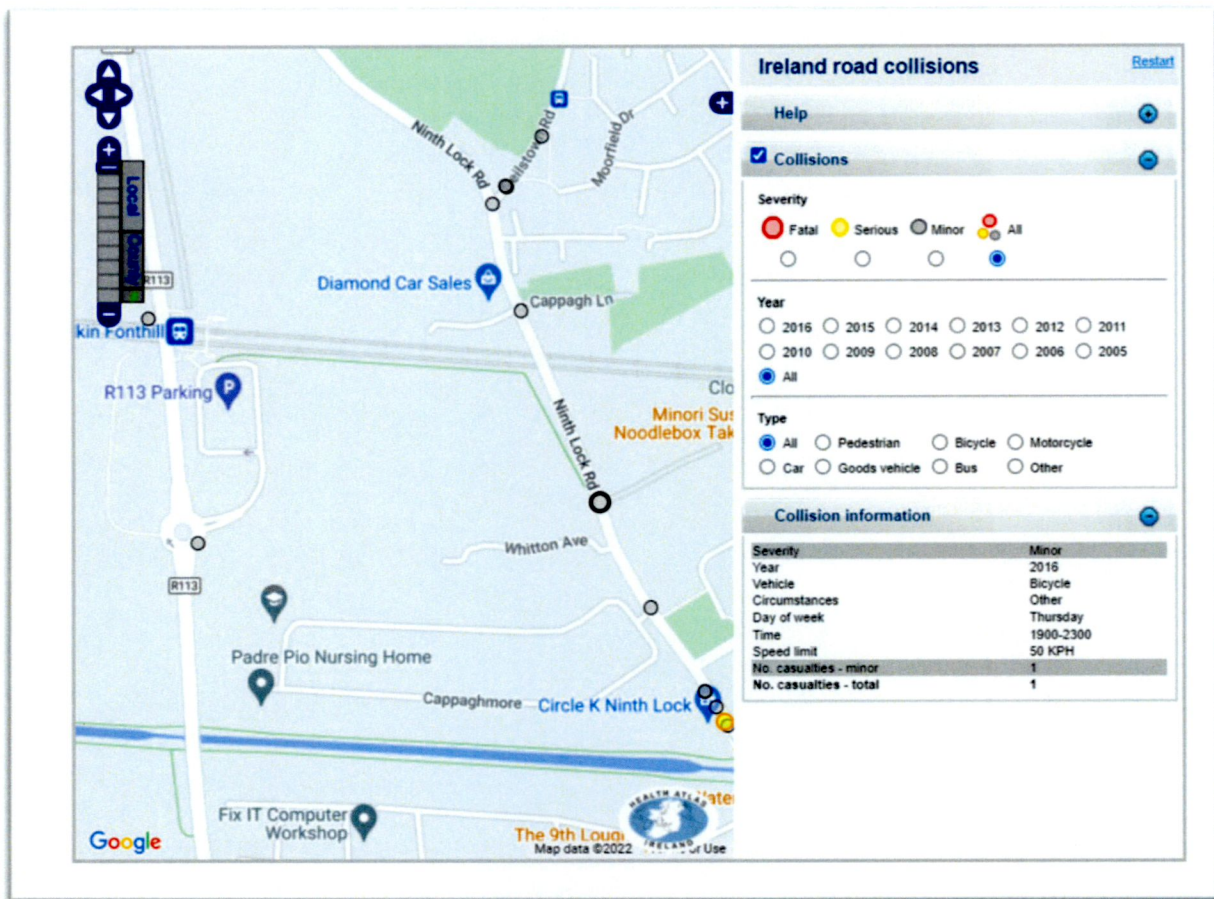
Site Location Map (image courtesy of openstreetmap.org)

The overall scheme extents is shown in the drawing extract below.



The Road Safety Authority’s website ([www.rsa.ie](http://www.rsa.ie)) shows that there was one minor injury collision recorded on Ninth Lock Road adjacent to the proposed junction in the 12-year period, 2005 to 2016.

The vast majority of this development is in a green field site.



### 3.0 Issues Identified in This Quality Audit.

Summary Table of Problem Categories

Problem Reference	Access Audit	Walking Audit	Cycling Audit	Road Safety Audit	Quality Audit
3.1	✓	✓	✓		✓
3.2	✓	✓			✓
3.3			✓	✓	✓
3.4			✓	✓	✓
3.5				✓	✓

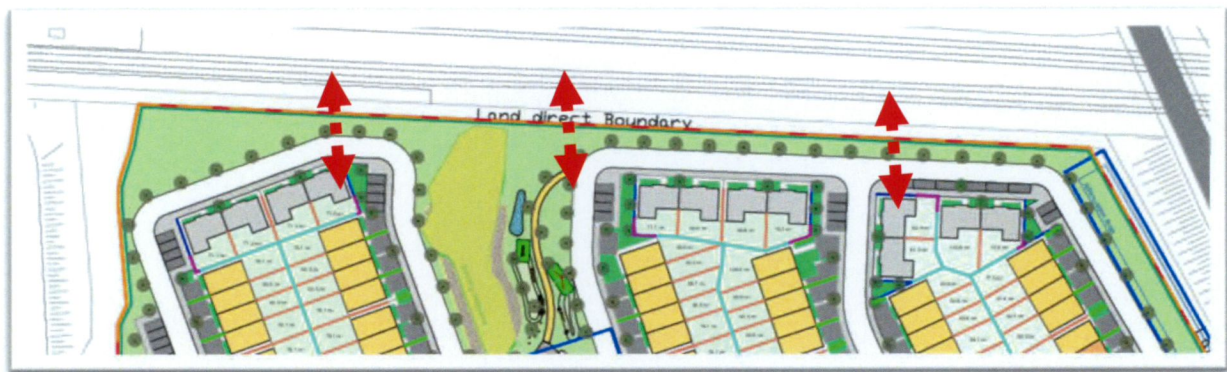
#### 3.1 Problem

*LOCATION*

Drawing – Landscape Masterplan – Ronan Mac Diarmada + Associates Ltd, Northern boundary.

*ISSUE*

There are no proposed pedestrian or cyclist links to the path at the northern boundary of the site leading to the train station. This lack of permeability may lead to unofficial routes without hard standing which could lead to trip/slips and falls.



*Red arrows are indicative only to illustrate the issue*

*RECOMMENDATION*

It is recommended that a number of pedestrian and cycle links be provided to the existing shared use path.

### 3.2 Problem

#### LOCATION

Drawing - Landscape Masterplan – Ronan Mac Diarmada + Associates Ltd, Perpendicular parking along Road 1.

#### ISSUE

There is perpendicular parking along Road 1 with intermittent landscaped areas between parking bays. There are no other access points for pedestrians, particularly the mobility impaired including those pushing buggies or in wheelchairs to access the apartment block except at the extreme ends of the parking which may be a long way from the desire line.



*Red arrows are indicative only to illustrate the issue*

#### RECOMMENDATION

It is recommended that intermittent access points for pedestrians be provided.



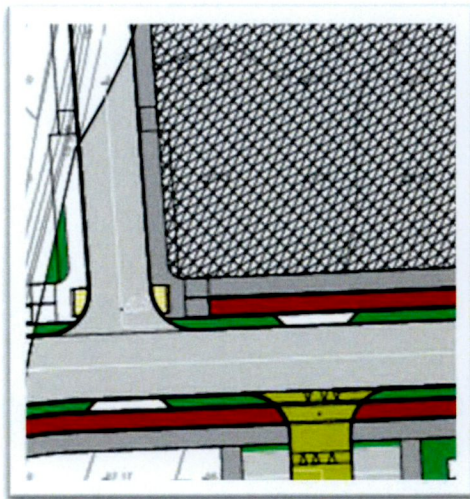
### 3.3 Problem

#### LOCATION

Drawing P200306-PIN-XX-DR-D-0001-SI P01, P&R realigned access.

#### PROBLEM

It is proposed to realign the access to the Clondalkin & Fonthill Train Station Park and Ride. It is proposed to provide a footpath only along the access road. There is an existing shared use footway/cycle track to the facility.



#### RECOMMENDATION

It is recommended that facilities be provided for cyclists along the access road.

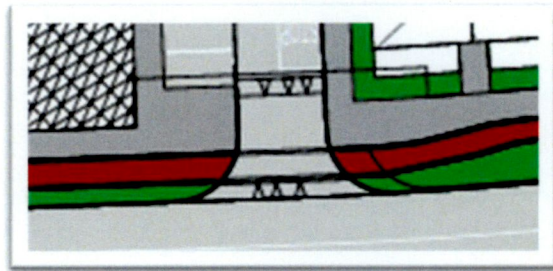
### 3.4 Problem

#### LOCATION

Drawing P200306-PIN-XX-DR-D-0001-SI P01, junctions with distributor road.

#### ISSUE

It is unclear if the cycle tracks along the distributor road will be coloured at the various accesses throughout the development. A lack of colour contrast may not alert drivers of the possibility of crossing cyclists.



*Example only*

*RECOMMENDATION*

It is recommended that coloured surfacing be used on the cycle tracks as they cross the accesses.

### 3.5 Problem

*LOCATION*

Drawing P200306-PIN-XX-DR-D-0021-SI P01, Signage.

*ISSUE*

The posted speed limit on the Link Road/Distributor Road is expected to be 50km/hr. The design speed within the development is 30km/hr. Drivers may not adjust their speed without adequate warning.

*RECOMMENDATION*

It is recommended that 30km/hr signs be provided at the access points to the development.

## 4 Observations

### 4.1 Observation

Drainage, Long section, and lighting details have not been provided to the Audit Team.

## 5 Quality Audit Statement

This portion of the Quality Audit has been carried out in accordance with the guidance given in DMURS and takes into consideration the principles approaches and standards of that Manual.

The quality 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: *Norman Bruton*  
(Quality Audit Team Leader)    Dated: 8-11-2022

Owen O'Reilly                      Signed: *Owen O'Reilly*  
(Quality Audit Team Member) Dated: 8-11-2022

## Appendix A

### List of Material Supplied for this Quality Audit;

Drawing P200306-PIN-XX-DR-D-0010-S1-P01 - AutoTrack Layout - Fire Tender  
Drawing P200306-PIN-XX-DR-D-0011-S1-P01 - AutoTrack Layout - Refuse Vehicle  
Drawing P200306-PIN-XX-DR-D-0020-S1-P01- RCD South Dublin  
Drawing P200306-PIN-XX-DR-D-0021-S1-P01- RCD Signage & Road Markings  
Drawing P200306-PIN-XX-DR-D-0022-S1-P01- RCD Kerb Details  
Drawing P200306-PIN-XX-DR-D-0023-S1-P01- RCD Joints  
Drawing P200306-PIN-XX-DR-D-0024-S1-P01- RCD Ramp Details  
Drawing PL 001-PLA-02-Proposed Site Plan-  
Drawing 22\_0322-CBR-BBSC-X-X-DR-E-6001-PROPOSED ESB KIOSK SUBSTATIONS  
Drawing 22\_0322-CLB-BBSC-X-0-DR-ME-6000-SITE MAPS  
Drawing 1577 - Rev B - Clonburris - Landscape Masterplan - RMDA-Dwg No.1  
Drawing 17749-5000-REV B-Preliminary Roads and BEW Layout  
Drawing P200306-PIN-XX-DR-D-0001-S1-P01-General Layout  
Drawing P200306-PIN-XX-DR-D-0002-S1-P01 - Sight Lines  
Drawing P200306-PIN-XX-DR-D-0003-S1-P01 - SSD - Fire Tender  
Drawing P200306-PIN-XX-DR-D-0004-S1-P01 - SSD - Refuse Vehicle

## Appendix B

### Feedback Form

**QUALITY AUDIT FORM – FEEDBACK ON QUALITY AUDIT REPORT**

Scheme: Clonburris SDZ  
 Quality Audit- Stage 1 (Planning)  
 Date Audit (site visit) Completed 28-4-2022

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	Yes	Yes		
3.2	Yes	Yes		
3.3	Yes	Yes		
3.4	Yes	Yes		
3.5	Yes	Yes		

Signed  .....  
 Design Team Leader

Date *08/11/22* .....

Signed *Herman Bruton* .....  
 Audit Team Leader

Date: 8-11-2022 .....

## Appendix C

### Problem Location Plan.

