

# Stage 1 Road Safety Audit

**Residential Development, Cairns Road, Sligo** 

On behalf of Novot Holdings Ltd

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

March 2022

Civil Structural Traffic



## **Table of Contents**

Docu	iment History	. 3
1.	Introduction	. 4
2.	Items Resulting from Previous Stage 1 Audit	. 5
3.	Items Resulting from This Stage 1 Audit	. 6
4.	Audit Team Statement	12

Appendix A	List of Documents Examined	13
Appendix B	RSA Feedback Form	14



## **Document History**

RO	R1							
С	PL							
02	04							
03	03							
22	22							
SS	SS							
FF	FF							
SS	SS							
	C 02 03 22 SS FF	C         PL           02         04           03         03           22         22           SS         SS           FF         FF	C         PL           02         04           03         03           22         22           SS         SS           FF         FF	C         PL           02         04           03         03           22         22           SS         SS           FF         FF	C         PL            02         04            03         03            22         22            SS         SS            FF         FF	C     PL        02     04       03     03       22     22       SS     SS       FF     FF	C     PL        02     04       03     03       22     22       SS     SS       FF     FF	C     PL         02     04         03     03         22     22         SS     SS         FF     FF

© CST Group 2022



## 1. Introduction

- 1.1. This report describes a Stage 1 Road Safety Audit carried out on behalf of Novot Holdings Ltd on a proposed residential development at Cairns Road, Sligo.
- 1.2. The audit was carried between 25<sup>th</sup> February 2022 and 2<sup>nd</sup> March 2022.
- 1.3. The audit team were as follows:

### Team Leader:

Stuart Summerfield, HNC (Civil) MCIHT FSoRSA Certificate of Competency in Road Safety Audits (SoRSA, 2015) TII Auditor Ref. SS73290

### Team Member:

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

- 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 both Audit Team members together on 25<sup>th</sup> February 2022 between the hours of 08:45-09:15. Weather conditions during the inspection were fine and the road surface was damp. Traffic conditions were considered light with cars and light goods vehicles. Only a single pedestrian was observed and no cyclists. Photographs were taken during the inspection.
- 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 shows the location of the problems identified by the Audit Team.

**Appendix C** contains the Audit Feedback 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. 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

No previous audit has been offered for reference.

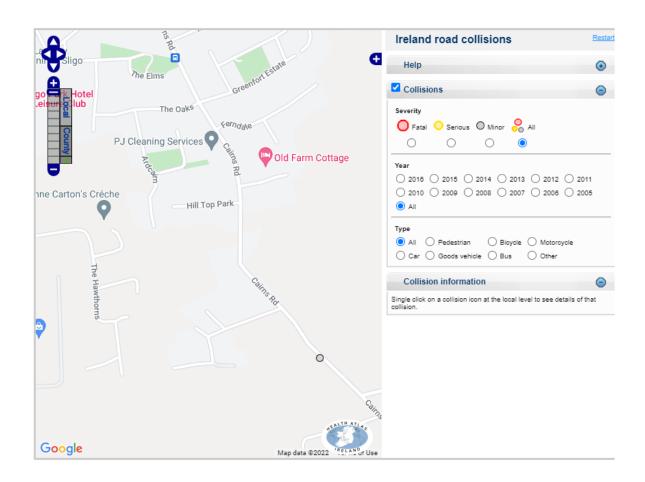


## 3. Items Resulting from This Stage 1 Audit

## 3.1 Collision Data

Collision data has not been supplied with this scheme.

Road Collision Data available on the Road Safety Authority Database, within the period 2005 to 2016, recorded zero collisions in the immediate vicinity of the proposed site.





## **3.2 General Problems / Problems at Multiple Locations**

#### 3.2.1 Cairns Road – Drainage

**Problem:** There does not appear to be any positive drainage within Cairns Road. The provision of a footpath to the development side of the road will remove the existing over the edge drainage path.

Hazard: Ponding and possible freezing of surface water may result in skid collisions.

**Recommendation:** Provide positive drainage on Cairns Road for the full extent of the proposed footpath.

#### 3.2.2 Tree Provision – Pedestrian Visibility

**Problem:** The proposed layout shows what appears to be tree planting between the footpath and carriageway. Generally, driveway access is to the development side the footpath.

**Hazard:** There is risk that the trees may shield pedestrians from view of drivers intending to access the driveway. Pedestrian impacts may result.

**Recommendation:** Ensure full visibility of pedestrians on the footpath is provided.

#### 3.2.3 Tree Provision – Vehicular Visibility

**Problem:** The proposed layout shows what appears to be tree planting between the footpath and carriageway.

**Hazard:** There is risk that the trees may shield the view of drivers intending to exit the driveway to oncoming traffic. Vehicular impacts may result.

**Recommendation:** Ensure sufficient visibility for exiting traffic from driveways is provided.



## 3.3 Problems at Specific Locations

#### 3.3.1 Development Road – Long Straight

**Problem:** The development incorporates a long straight length of carriageway.

**Hazard:** Long straight carriageways have a poor history of high vehicle speeds. Errant impacts with other road users may result in serious injury.

**Recommendation:** Redesign the roads to ensure users speeds are appropriate for a residential area.

#### **3.3.2** Approach to development entrance from the south

**Problem:** Cairns Road to the south of the development is very wide and undefined. The proposed development footpath projects further forward than the adjacent house front wall.



**Hazard:** Northbound Cairns Road drivers may follow the line of the boundary wall and impact with the new footpath.

**Recommendation:** Ensure the protruding footpath is conspicuous to approaching drivers.



## 3.3.3 Cairns Road – Footpath Linkage

**Problem:** The proposed footpath on Cairns Road to the north of the development does not abut the existing footpath network.



**Hazard:** Pedestrians may decide to step into the carriageway, rather than attempt to cross the grassed (possibly muddy) verge. Impact from motorised traffic may result.

**Recommendation:** Ensure a suitable width footpath linkage is provided.

### 3.3.4 Cairns Road – Utility Pole

**Problem:** There is a utility pole within the carriageway adjected to the development site. The existing stone wall to the south of the pole will be removed by the development.



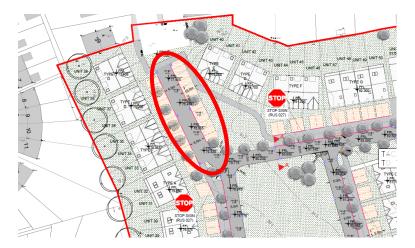


**Hazard:** The existing wall may offer protection to the pole from northbound traffic. Removal of the wall may increase the risk of vehicle strikes of the pole.

**Recommendation:** Relocate the pole outside of the carriageway.

#### 3.3.5 Access Road for Units 33-43

**Problem:** There is no footpath adjacent to the carriageway in this area. It is therefore assumed this carriageway is intended to be a shared use surface. There is no obvious change in the character, level or surface finish to this area.

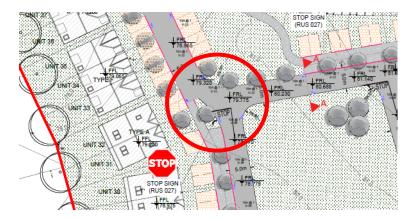


**Hazard:** The motorist is likely to drive in this area as if they were on a standard carriageway, without due care for NMU traffic. Impacts may result.

**Recommendation:** Redesign this area such that the motorists will easily understand they are within a shared use area.

#### 3.3.6 Junction control in front of Units 31/32

**Problem:** Further to Problem 3.3.4 above, users exiting a shared-use zone are likely to yield to all other users in the area, however motorists traveling north passing units 29-31 are instructed to stop at the junction.



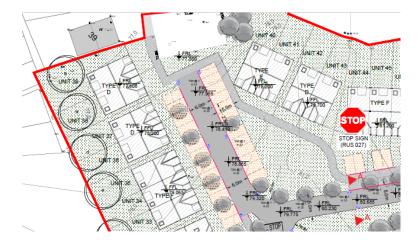


**Hazard:** Users from both roads may initially stop waiting for the other to move, and then both may proceed at the same moment. Impact may result.

**Recommendation:** Amend the junction priority to show the stop sign / line on the shared-use area.

### 3.3.7 Shared Use Area – Turning

**Problem:** There is no turning room for the bin wagon within the shared-use area. Furthermore, if car drivers find there is no vacant parking spaces they may be required to reverse over long distances.



Hazard: The reversing vehicle may impact with pedestrians / cyclists in the area.

**Recommendation:** Provide a turning head or link the carriageway through to the Ard Cairn estate.



## 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 ..... Stuart Summerfield Audit Team Leader

Signed .... ~ Francis Fidgeon Chartered Engineer Audit Team Member



# Appendix A List of Documents Examined

DOCUMENT REF / NAME:	<b>RECEIVED FROM:</b>	DATE:
JOD Drawing 6665-JOD-XX-ZZ-DR-C-700-006 D.01	Jennings O'Donovan	21.02.2022
Proposed Road Layout Plan		
JOD Drawing 6665-JOD-DR-C-703-001 DP1	Jennings O'Donovan	21.02.2022
Proposed Junction Layout and Sightlines.		



Appendix B RSA Feedback Form

## **ROAD SAFETY AUDIT FEEDBACK FORM**

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

Scheme:

Residential Development at Cairns Road Sligo = Novot Holdings Ltd

Audit Stage: 1 Date Audit Completed: 02/03/2022

Route No. Our Ref :122146|R1

TO BE COMP	TO BE COMPLETED BY AUDIT TEAM LEADER			
Paragraph No. n Safety Audit Report Problem Recommended Cescribe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended (Yes/No) Report Cescribe 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	Additional gullies have been provided along the new footpath to provide positive drainage from Cairns Road	
3.2.2	Yes	Yes	The planting that will be provided will ensure that full visibility of pedestrians on the footpath is provided.	
3.2.3	Yes	Yes	The planting that will be provided will ensure that full visibility of pedestrians on the footpath is provided.	
3.3.1	Yes	Yes	The road layout/design now incorporates a raised pedestrian crossing prior to the first internal junction as you enter the site that will reduce traffic speeds.	
3.3.2	Yes	Yes	We have amended the kerb line to the South side of the proposed entrance, it now closely ties into the boundary wall to the south and will ensure that the footpath kerb line is conspicuous to approaching drivers.	
3.3.3	Yes	Yes	The proposed footpath now ties into the existing footpath as shown on the updated roads drawing.	
3.3.4	Yes	Yes	The Utility pole will be removed and services undergrounded along the proposed entrance as part of the works.	
3.3.5	Yes	Yes	The proposed shared use area will consist of a raised table with flush kerbs and with a coloured surface course.	
3.3.6	Yes	Yes	The junction priority has been amended as per recommendations.	
3.3.7	Yes	Yes	Autotrack Analysis has been undertaken on a refuse and fire truck reversing back into the shared area. The above noted change in priority of the junction will help	

## **ROAD SAFETY AUDIT FEEDBACK FORM**

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

TO BE COMPL	TO BE COMPLETED B 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)
			to safely facilitate this further. The ground levels, required pedestrian connectivity to Ard Cairn and the relatively short length of this shared area made it extremely prohibitive in locating a turning head for a refuse truck in this area. We have however included a small turning head that will be used for a car to turn in the event that all parking spaces are occupied. This is shown on the updated roads drawing.	

Forhes Date: 04/03/82 Signed: Designer Mark Forbes Jennings O'Donovan Ad Signed: Audit Team Leader Date: 04/03/2022 Stuart Summerfield CST Group Chartered Consulting Engineers Date: 04/03/22 Signed: Employer Live Paul Maguire

Novot Holdings Ltd