# MWP

# PROPOSED CLOONMORE REGENERATION LRD ACCESS, CLOON MORE, TRALEE, COUNTY KERRY

Stage 1 DMURS Road Safety Audit

Tulfarris CG Ltd.

August 2023



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## **Appendices**

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Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Status
23824	6005	А	14/08/2023	S Quigley	S Doyle	S Quigley	DRAFT
23824	6005	А	24/08/2023	S Quigley	S Doyle	S Quigley	FINAL

#### MWP, Engineering and Environmental Consultants

Address: Park House, Bessboro Road, Blackrock, Cork, T12 X251

#### www.mwp.ie









#### 1. Introduction

This report details the findings of a Stage 1 DMURS Road Safety Audit carried out on the proposed Cloonmore Regeneration LRD (Large Residential Development) access, Cloon More, Tralee, County Kerry. The audit was commissioned by Tulfarris CG Ltd.

#### **Audit Team**

MWP's Road Safety Auditors carried out the Audit. The Audit Team members were as follows:

Sean Doyle, BE CEng MIEI MWP
Seamus Quigley, BE CEng MIEI MCIHT MWP

MWP inspected the site on the  $11^{th}$  August 2023, between 10.50 a.m. and 11.30 a.m., on foot and in a car, during dry weather conditions. Record photographs were taken.

#### Location

The proposed residential development site is located at Cloon More, Tralee, on the east side of the town centre. The existing site includes three dwelling houses, associated outhouses and sheds, and vehicle accesses at the north of the site on the R875 Regional Road at Boherbee. Cloonmore Avenue extends along the south and south west (locally) of the site. An aerial view north of the proposed site is provided in Figure 1.

A circa 2.0 metres wide footway is provided along the north boundary of the site on the R875 at Boherbee, which forms the Boherbee Roundabout junction with the R878 John Joe Sheehy Road, approximately 30 metres west of the site. Zebra controlled pedestrian crossings are provided on the R875 on both sides of Boherbee Roundabout with pedestrian refuge on the central traffic splitter islands. A pedestrian crossing facility is also provided on the John Joe Sheehy Road at Boherbee Roundabout.

West of Boherbee Roundabout, the R875 has a priority T-junction on its south side with Mitchels Road. Mitchels Road has a 30 km/hour Slow Zone speed limit with traffic calming measures and a three tonnes vehicle restriction.

Mitchels Road has a priority T-junction with the Ballymullen Clash Relief Road Phase 1. The Ballymullen Clash Relief Road Phase 1 extends north to Cloonmore Avenue, which provides access to the recently completed and opened Gaelcholáiste Chiarraí, and both include footway and cycleway facilities, and lighting standards. The vehicle access layout at Gaelcholáiste Chiarraí includes a one-way internal clockwise arrangement with separate entrance and exit junctions on Cloonmore Avenue. Ballymullen Clash Relief Road Phase 1 and Cloonmore Avenue are located within the 30 km/hour Slow Zone. Two Zebra Stripe road marking pedestrian crossing facilities are provided on Cloonmore Avenue, with dished footways and tactile paving.

Cloonmore Avenue has a 7.3 metres wide road carriageway between its Ballymullen Clash Relief Road Phase 1 junction and its Gaelcholáiste Chiarraí exit junction. North of its Gaelcholáiste Chiarraí exit junction, Cloonmore Avenue has a 6.0 metres wide road carriageway, with footways along both side, adjacent to the south west of the proposed site. The east side footway extends to the Zebra Stripe road marking pedestrian crossing.





Figure 1: Proposed Site Aerial View North

#### **Proposed Scheme**

The proposed residential development comprises a total of 147 residential units, including 51 one-bedroom apartments, 78 two-bedroom apartments, 14 two-bedroom townhouses and four three-bedroom townhouses.

Access is proposed via Cloonmore Avenue, at the south west of the site. A pedestrian and cycle access is proposed at Boherbee at the north of the site. It is proposed to close the existing site vehicle accesses at Boherbee.

#### **Audit Information**

The drawings and other documents provided to carry out the Audit are listed in Appendix A.

This Audit has been carried out in the context of the relevant sections of the TII Road Safety Audit GE-STY-01024 December 2017 and TII Road Safety Audit Guidelines GE-STY-01027 December 2017, and in accordance with the Government's Design Manual for Urban Roads and Streets (Version 1.1) May 2019 (DMURS). The Auditors have examined and reported only on those features of the design considered to have road safety implications and have not examined or verified the compliance of the scheme to any other criteria.

Section 2 of this report presents the findings of the Stage 1 DMURS Road Safety Audit carried out on the proposed Cloonmore Regeneration LRD access, Cloon More, Tralee, County Kerry. The Designer's Feedback is provided in Appendix B.



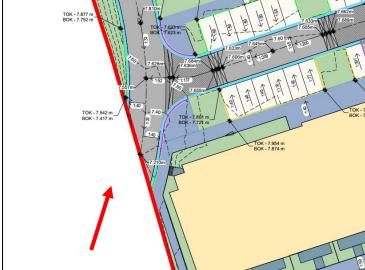
#### 2. Findings of the Stage 1 DMURS Road Safety Audit

#### **Vulnerable Users**

#### 2.1 Problem – Incomplete Details of Footway Tie-In

The details provided for audit of the proposed development footway tie-in on Cloonmore Avenue, located outside the planning application red line boundary, are incomplete. The existing east (site) side footway on Cloonmore Avenue extends to the Zebra Stripe road marking pedestrian crossing, south of the proposed access location. Inadequate facilities for pedestrians could put them at risk of trips, falls and consequent injuries. Pedestrians could step out into the road carriageway into the path of vehicles, putting them at risk of vehicle impacts and injuries.





#### Recommendation:

It is recommended that an appropriate footway tie-in should be provided on Cloonmore Avenue.



#### 2.2 Comment - Potential Conflicts for Pedestrians Accessing School

The existing Cloonmore Avenue footway at the Gaelcholáiste Chiarraí entrance is located on the east side of the school entrance, and on the inside (east) of the two-way off-carriageway cycleway, with no defined pedestrian crossing location at the school entrance. There is no footway along the south side of Cloonmore Avenue on the west side of the school entrance. There is no defined crossing location on Cloonmore Avenue, for pedestrians accessing between the school entrance and the proposed development site. There is an existing horizontal curve on Cloonmore Avenue, between the school entrance and proposed development site.

Although located outside the extent of the proposed access scheme presented for audit, the proposed residential development could generate school pupils and others accessing Gaelcholáiste Chiarraí as pedestrians. The proposed development shared walkway and cycleway would also facilitate access, through the proposed site, to and from Gaelcholáiste Chiarraí, further increasing pedestrian movements. Inadequate facilities for pedestrians could put them at risk of trips, falls and consequent injuries. Pedestrians could step out onto the road carriageway into the path of vehicles, putting them at risk of vehicle impacts and injuries. Pedestrians, including children, crossing Cloonmore Avenue at undefined locations could be at risk of vehicle impacts and injuries.



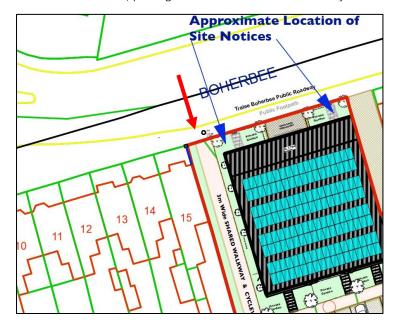
#### Recommendation:

It is recommended that appropriate facilities and treatments should be provided on Cloonmore Avenue, in consultation with Kerry County Council, as appropriate, commensurate with expected user demand.



#### 2.3 Comment – Potential Conflicts For Pedestrians and Cyclists

Although a Stage 2 item, the access arrangement for the proposed 3.0 metres wide shared walkway and cycleway, at the existing footway along Boherbee, could result in potential conflicts for pedestrians and cyclists. The existing footway is dished for an existing site access at the proposed shared access location. The proposed walkway and cycleway would also facilitate access, through the proposed site, to and from Gaelcholáiste Chiarraí. Cyclists accessing the site could conflict with pedestrians using the Boherbee footway, putting them at risk of conflicts and consequent injuries. Pedestrians, including children, could step out onto the R875 road carriageway, putting them at risk of vehicle impacts and injuries. Cyclists accessing to and from the R875 road carriageway could conflict with vehicles, putting them at risk of collisions and injuries.



#### Recommendation:

It is recommended that appropriate signage, road markings and other treatments should be provided in developing the detailed design, for the proposed shared access, with reference to DMURS, the DoT Traffic Management Guidelines and the NTA National Cycle Manual.

#### 2.4 Comment - Potential Conflicts for Pedestrians With Vehicles Parking on Footway

During the site inspection, a vehicle was parked on the Boherbee footway and footway buildout, immediately west of the proposed site; and located on the pedestrian desire line between the Zebra controlled pedestrian crossing at Boherbee Roundabout and the Boherbee footway. Vehicles parked on, and accessing, the footway could result in impact hazards and conflicts for pedestrians, including the mobility and visually impaired and pedestrians with children's buggies, putting them at risk of injuries. Pedestrians, including children, could step out onto the R875 road carriageway, putting them at risk of vehicle impacts and injuries.





#### Recommendation:

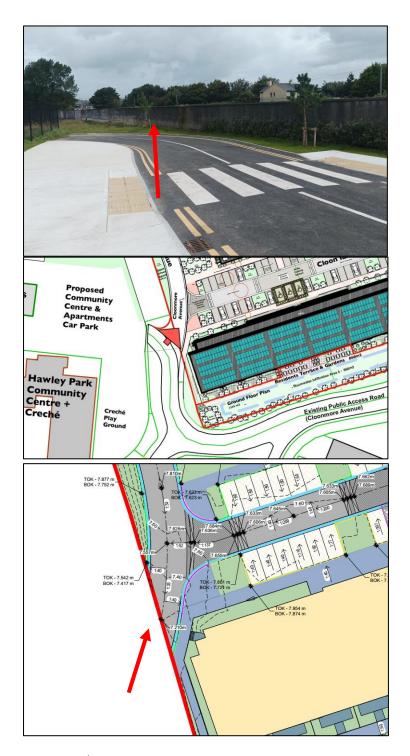
Although located outside the extent of the proposed access scheme presented for audit, the proposed residential development would increase pedestrian movements along the Boherbee footway at this location. The proposed development shared walkway and cycleway would also facilitate access, through the proposed site, to and from Gaelcholáiste Chiarraí, further increasing pedestrian movements. It is recommended that Kerry County Council should provide appropriate treatments, such as bollards, to prevent parking on the existing footway.

#### **Layout and Visibility**

#### 2.5 Problem - Incomplete Details of Access Junction

The details provided for audit of the proposed development access junction on Cloonmore Avenue are incomplete, including priority, horizontal tie-in radii, vertical levels and drainage. Unclear junction priority and inadequate horizontal tie-in and kerb radii could result in conflicts, collisions and potential injuries for vehicle occupants and other users. An inadequate vertical junction tie-in and vehicle dwell area could result in conflicts, including vehicles rolling into the path other vehicles, collisions, material damage and injuries. An inappropriate junction priority, with a junction tie-in significantly off square, could require drivers to look through significantly in excess of 90 degrees, restricting visibility and increasing the risk of vehicles pulling out into the path of other users, resulting in potential collisions and injuries. Inadequate junction drainage could result in ponding and ice during cold weather, putting users at risk of slips, falls, skidding and injuries.





#### Recommendation:

It is recommended that an appropriate access junction should be provided, with reference to DMURS.

#### **Drainage**

Refer to item 2.5 above. No further issues.



#### 3. Audit Team Statement

We certify that we have inspected the site and examined the drawings and other information listed in Appendix A of this report. The inspection and examination have been carried out for the sole purpose of identifying any features of the design that could be removed, or modified, in order to improve the safety of the scheme. The problems we have identified are noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Signed:	Date: _	24/08/2023
Sean Doyle BE CEng MIEI Audit Team Member		
For and on behalf of MWP		
Engineering and Environmental Consultants Reen Point		
Blennerville		
Tralee County Kerry		
, ,		
		24/08/2023
Signed: Seams Ougle-	Date: _	

Seamus Quigley, BE CEng MIEI MCIHT Audit Team Member For and on behalf of MWP Engineering and Environmental Consultants Park House Mahon Technology Park Blackrock Cork



# **Appendix A**

# **List of Documents Provided for Audit**



#### **Drawings:**

John Phelan Architects

Drawing Title: Site Layout Plan

Drawing Number: 2301-PA-03 Date: 2<sup>nd</sup> August 2023

**MWP** 

Drawing Title: Site Levels And Road Layout (Sheet 1 Of 2)

Drawing Number: 23824-MWP-01-00-DR-C-0101 Rev: P01 Date: 08.08.23

**MWP** 

Drawing Title: Site Levels And Road Layout (Sheet 2 Of 2)

Drawing Number: 23824-MWP-02-00-DR-C-0102 Rev: P01 Date: 08.08.23

#### **Other Documents:**

John Phelan Architects

DMURS Design Statement, Cloonmore Date: 5<sup>th</sup> May 2023



# **Appendix B**

**Designer's Feedback** 

## ROAD SAFETY AUDIT FEEDBACK FORM



SCHEME: PROPOSED CLOONMORE REGENERATION LRD ACCESS, CLOON MORE, TRALEE, COUNTY KERRY

ROUTE(S): CLOONMORE AVENUE AND R875 REGIONAL ROAD (BOHERBEE)

AUDIT STAGE: STAGE 1 DMURS DATE AUDIT COMPLETED: AUGUST 2023

Paragraph		To Be Completed by Audit Team Leader		
No. in Safety Audit	Problem Accepted (Yes/ No)	Recommended Measure Accepted (Yes/ No)	Describe Alternative Measure(s).  Give Reasons for Not Accepting Recommended  Measure	Alternative Measures Accepted by Auditors (Yes/ No)
2.1	Yes	Yes	Recommendation accepted. A Site Entrance Drawing 23824-MWP-00-00-DR-C-0104 has now been provided to show the proposed entrance and the existing footpath tie in detail. The proposed footpath tie in detail is subject to approval of KCC.	
2.2	Yes	Yes	Audit Comment Only. Developer to provide drop kerb or other appropriate facilities and treatments on Cloonmore Avenue subject to agreement with KCC.	
2.3	Yes	Yes	Audit Comment Only. The pedestrian/cyclist entrance has since been widened. 2 cycle chicane calming measures have been implemented to reduce the speed of cyclists and hence reduce cyclist - pedestrian conflict. Further treatments can be implemented in the detailed design subject to agreement with KCC.	
2.4	Yes	Yes	Audit Comment Only. Appropriate treatments such as bollards to be implemented at the proposed pedestrian/cyclist entrance on Boherbee road subject to agreement with KCC.	
2.5	Yes	Yes	A Site Entrance Drawing 23824-MWP-00-00-DR-C-0104 and Site Lines Drawing 23824-MWP-00-00-DR-C-010 have now been provided to show the proposed entrance details including priority, horizontal tie-in radii, vertical levels and drainage.	

SIGNED:	IAN BROSNAN	DESIGNER	DATE:	24/08/2023

# **ROAD SAFETY AUDIT FEEDBACK FORM**



SIGNED: Searm Outle Audit Team Leader Date: 24/08/2023

SIGNED: TIM COWHIG EMPLOYER DATE: 24/08/2023