

# Bloodmill Rd Extension Limerick

Proposed Bloodmill Rd Extension  
at Towlerton, Ballysimon, Limerick



## Stage 1 Road Safety Audit

July 2023



**MHL & Associates Ltd.**  
Consulting Engineers



## DOCUMENT CONTROL SHEET

|                       |   |
|-----------------------|---|
| <b>Client</b>         | Limerick City & County Council                                    |
| <b>Project Title</b>  | Proposed Bloodmill Rd Extension at Towleron, Ballysimon, Limerick |
| <b>Document Title</b> | Report for Stage 1 – Road Safety Audit                            |
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| Revision | Status         | Author | Reviewed By | Approved By | Date       |
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| R01      | Client Issue   | J Daly | B Murphy    |             | 13/07/2023 |
| R02      | Planning Issue | J Daly | B Murphy    |             | 25/07/2023 |
|          |                |        |             |             |            |

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RSA Feedback Form

## 1. INTRODUCTION

M.H.L. & Associates Ltd. Consulting Engineers have been engaged by Limerick City & County Council to prepare a Stage 1 Road Safety Audit (RSA) for the proposed extension to Bloodmill Rd at Towlerton, Ballysimon, Limerick. This Stage 1 Road Safety Audit will be submitted as part of a statutory planning process for the proposed works.

The aim of the project is to realign the existing Bloodmill Road through agricultural lands to link with the recently constructed developer provided link road section. The completed road will link Groody Road to Childers Road and open up zoned lands for development. Approximately 60m of new road corridor will be constructed in agricultural lands and approximately 200m of existing road corridor will be widened into adjacent agricultural lands.

The project will involve:

- Construction of approx. 260m of new road corridor with a 6.2m wide carriageway, 2x2m footpaths 2x2m landscaped verges and 2x2m off-road cycle tracks.
- The construction of a new surface water drainage system.
- The installation of a new public lighting system.
- The construction of a new culvert across the Towlerton Stream where the existing newly constructed link road terminates.

The site is located on the south-eastern side of Limerick City, refer to Figure 1.1. The existing Bloodmill Road is approximately 1.6km long and connects Childers Road to Ballysimon Road.

Approximately 60m of new road corridor will be constructed in agricultural lands and approximately 200m of existing road corridor will be widened into adjacent agricultural lands.

See Figure 1.1 Site Location Map. Figure 1.2 shows the site extents on aerial photography and Figure 1.3 & 1.4 shows the site layout for the proposed works

The Audit Team consists of James Daly (team member, TII Ref No. **JD1351495**) & Brian Murphy (Team member, TII Ref No **BM283765**) of MHL Consulting Engineers.

The team made a site visit on Tuesday 13<sup>th</sup> June 2023. The weather was dry at the time of the visit.

Information provided to assist the Audit consists of the drawings and documents listed in Appendix B. The information provided was considered adequate in terms of detail for the purpose of carrying out a Stage 1 road safety audit.

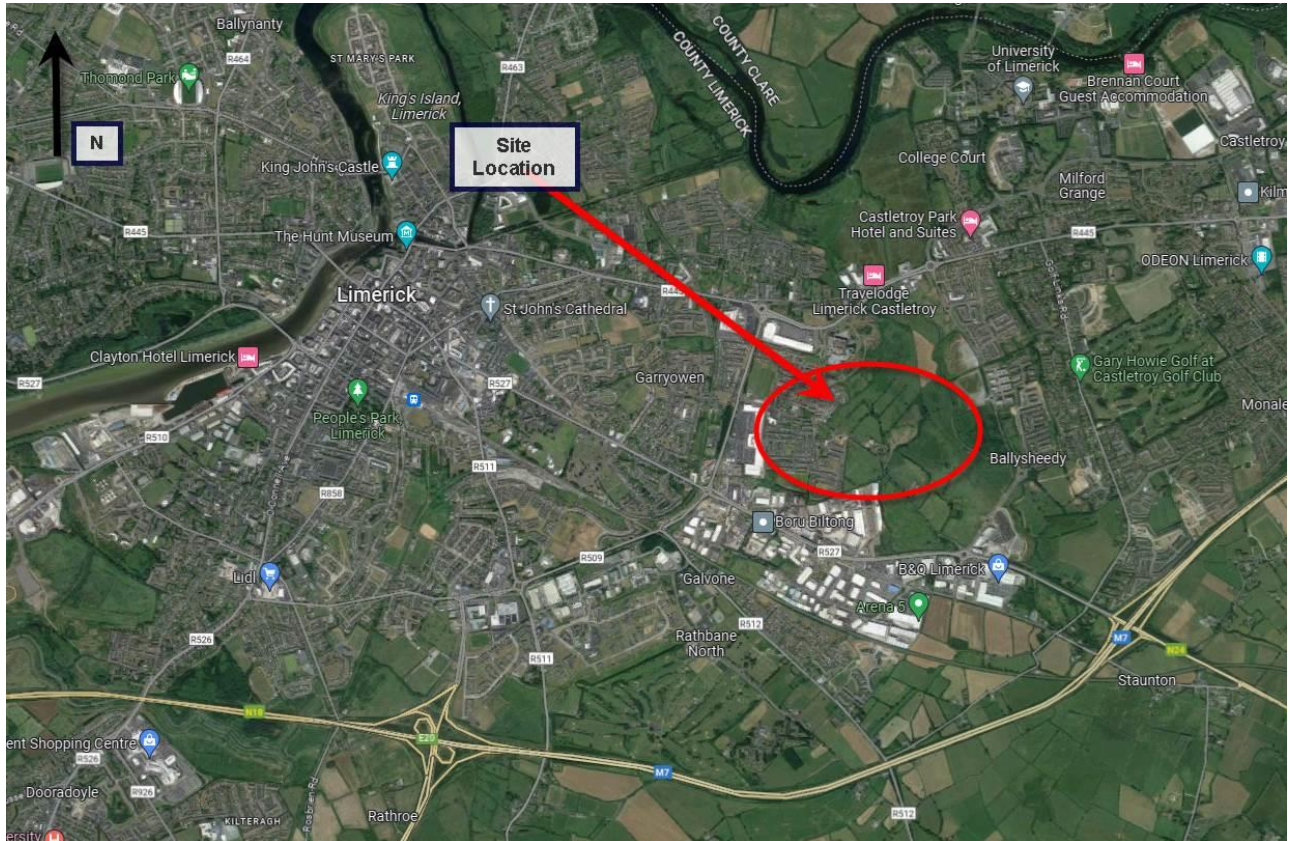
No previous Road Safety Audit report was provided in relation to the development.

At the time the Audit was carried out, access to road safety data was unavailable as The Road Safety Authority is in the process of reviewing its road traffic collision (RTC) data sharing policies and procedures.

The Audit has been carried out in accordance with the relevant sections of TII Publication GE-STY-01024 (formerly NRA HD 19/15), "Road Safety Audit". The scheme has not been examined or verified for compliance with any other standards or criteria. The team drove the local road network and walked the road along the site road boundaries and compiled a list of

road safety problems and associated recommendations which are presented in this report. Appendix A contains some photographs of the site.

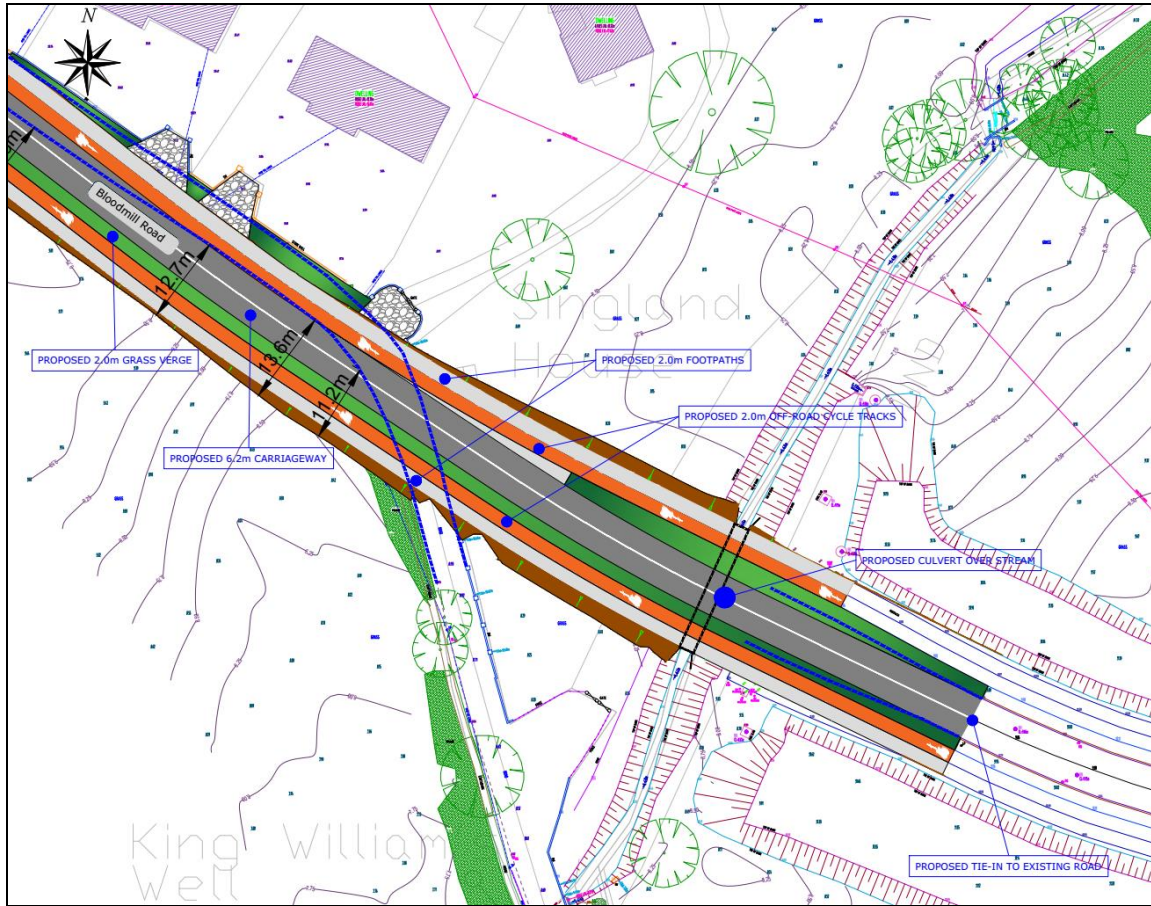
An Audit Team Statement is included at the end of the Report. Appendix C contains the Safety Audit Feedback Form.



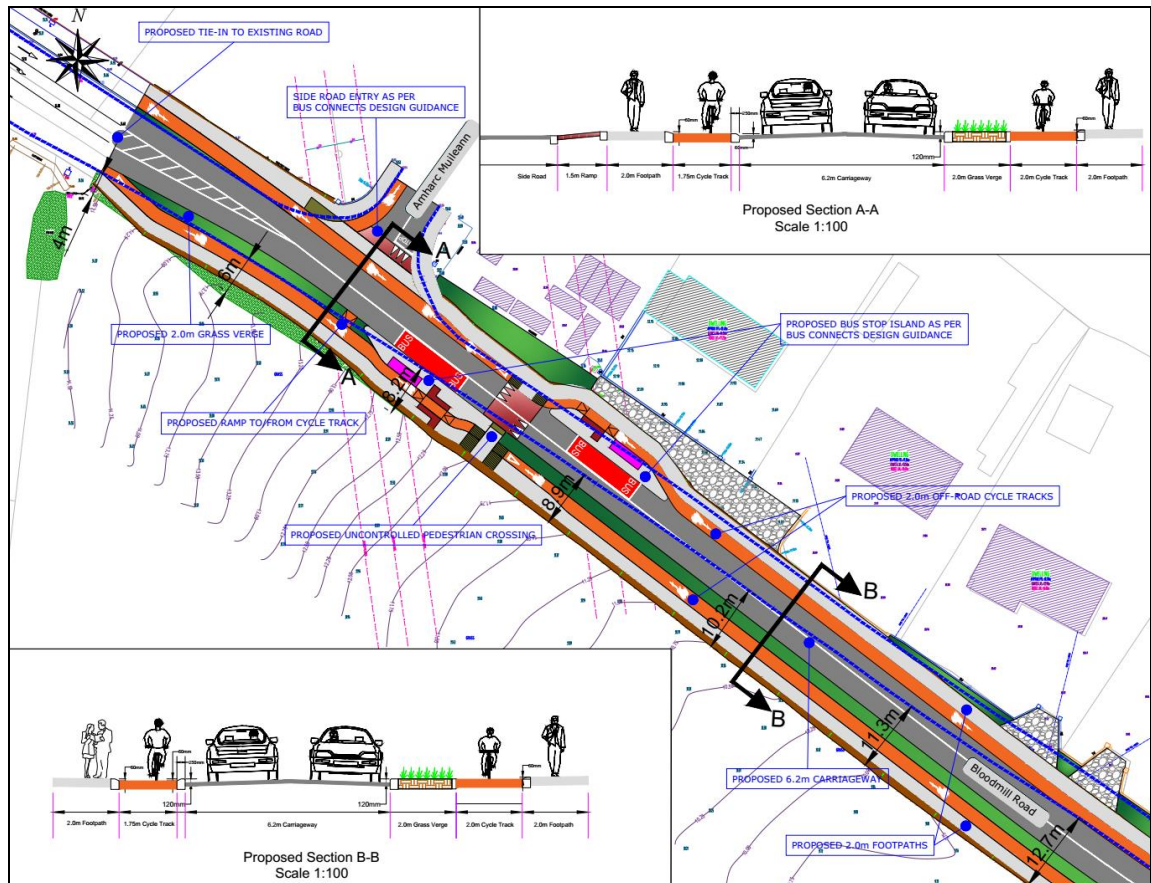
**Figure 1.1 – Site Location Map**



**Figure 1.2 – Site Extents**



**Figure 1.3 – Proposed Road Layout**



**Figure 1.4 – Proposed Road Layout**

## 2. AUDIT ISSUES

### 2.1.PROBLEM: NO PUBLIC LIGHTING SHOWN

No details have been provided of any proposed lighting scheme along the length of the proposed works. Failure to provide adequate public lighting presents security issues for vulnerable road users as well as being a road safety hazard for pedestrians falling at night or not being seen by passing vehicles. The design team should consider any existing Public Lighting at the extents of the scheme.

#### Recommendation 1

Ensure an adequately designed lighting scheme is provided for the project and is designed to the appropriate standards.

### 2.2.PROBLEM: ROAD DRAINAGE PROPOSAL

The audit team noted that the storm drainage design has been carried out but the location of road gullies should be reviewed. No road surface water Gullies appear to be shown at the lowest vertical point on the road Lack of road surface drainage could lead to surface water ponding and could lead to collisions between vehicles or vehicles and pedestrians due to aquaplaning on water ponds following periods of heavy rainfall. Ref to Fig 2.1

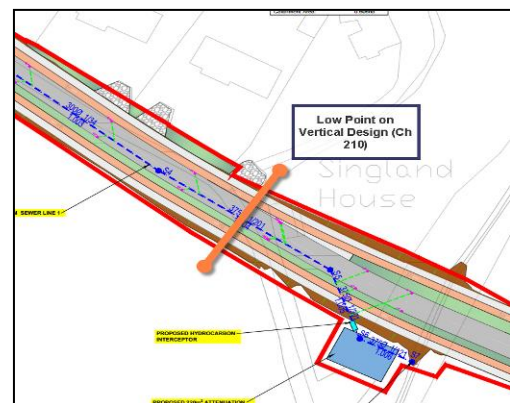


Fig 2.1

#### Recommendation 2

Provide adequate road surface water drainage along the length of the scheme.

### 2.3.PROBLEM: TACTILE PAVING DETAILS AT ENTRANCE TO AMHARC MUILEANN

The drawing issued to the audit team, does not appear to show tactile paving on the eastern side of the uncontrolled pedestrian crossing at the entrance to Amharc Muileann. Failure to provide the appropriate tactile paving at pedestrian crossing may lead to confusions around priority at the crossing. This could lead to collisions between vehicle drivers and vulnerable road users.

#### Recommendation 3

The design team should review the use of Tactile Paving on both sides of this junction.

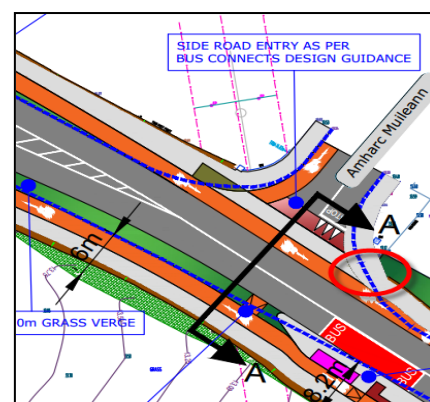


Fig 2.2

**2.4.PROBLEM: JUNCTION ENTRY RADII TO AMHARC MUILEANN**

The drawings provided to the audit team, do not show the proposed junction radii at the junction of Bloodmill Rd and Amharc Muileann. Failure to provide adequate junction radii could lead to vehicles existing and entering the development at an excessive speed. Large junction radii also increase the distances for pedestrians to cross the junction and may lead to collision between pedestrians and vehicles entering and exiting. Refer to Fig 2.1 & 2.2

**Recommendation 4**

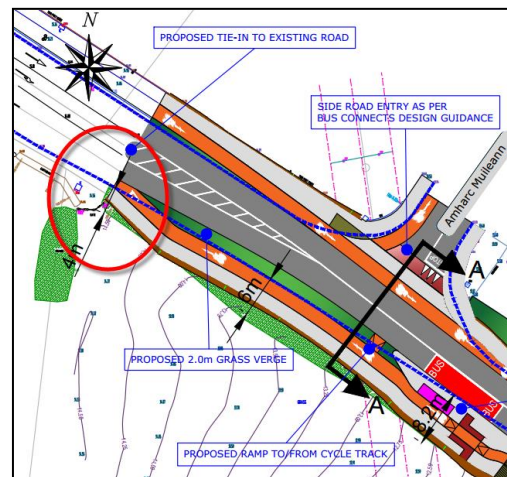
Ensure that adequate junction radii are provided at the junction of Bloodmill Rd and Amharc Muileann.

**2.5.PROBLEM: CYCLE TRACK TRANSITION TO BLOODMILL RD AT WESTERN END**

The drawings submitted for audit don't show how cyclist will exit the proposed cycle track to Bloodmill Rd at the western extents of the scheme. This could lead to potential collisions between cyclists and vehicles travelling on Bloodmill Rd. Refer to Figure 2.3 which shows the Western end of the Cycle Track

**Recommendation 5**

The proposed access/egress points for cyclists' should be clarified/reviewed to minimise the interaction between vulnerable road users and vehicles



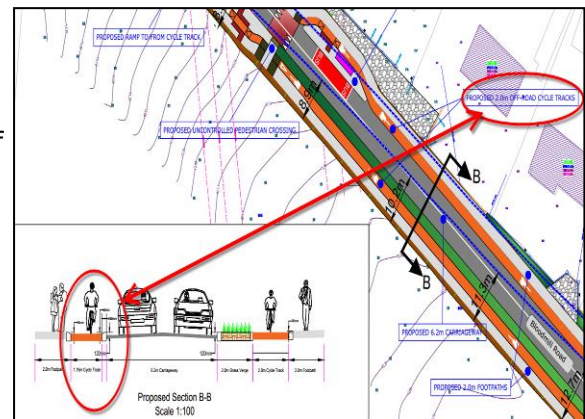
**Fig 2.3**

**2.6.PROBLEM: PROPOSED WIDTH OF CYCLETRACK**

The drawings submitted for audit appear to show a discrepancy in the width of the Cycle Track on the Northern side of Bloodmill Rd. The Plan view shows a width of 2.0m and the cross section a width of 1.75m. Refer to Figure 2.4

**Recommendation 5**

The design team should provide clarity as to the proposed cycle track width.



**Fig 2.4**



### 3. AUDIT TEAM STATEMENT

We certify that we have examined the drawings and documents listed in the Appendix to this Report. The examination has been carried out with 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 identified have been noted in this report, together with associated safety improvement suggestions, which we recommend should be studied for implementation. The Auditors have not been involved with the scheme design.

Mr James Daly, BEng MIEI

Signed:  .....

Date: 05/07/2023

Mr Brian Murphy BE CEng MIEI

Signed:  .....

Date: 05/07/2023

## Appendix A – Site Photographs



**Photo A1: Existing Link Rd at Eastern Extent of scheme**



**Photo A2: Tie in location at Western extent of scheme**



**Photo A3: Existing Bloodmill road**



**Photo A4: Existing Bloodmill road at Western Tie in**



**Photo A5: Existing Greenfield lands through which the road will go**

## **Appendix B – Drawings & Documents Submitted for Information**

**Drawings AND DOCUMENTS submitted for information**

| <b>DRAWINGS BY: MHL &amp; Associates Ltd</b> |             |  |               |
|--|-------------|--|---------------|
| <b>Ref.</b>                                  | <b>Date</b> | <b>Drawing Title</b>                     | <b>Scale</b>  |
| BR-SLM-P01                                   | JULY 2023   | Site Location Map                        | NTS @ A3      |
| BR-LA-P01                                    | JULY 2023   | Proposed Layout Plans Sheet 1 of 3       | 1:1000 @ A3   |
| BR-LA-P02                                    | JULY 2023   | Proposed Layout Plans Sheet 2 of 3       | 1:500 @ A3    |
| BR-LA-P03                                    | JULY 2023   | Proposed Layout Plans Sheet 3 of 3       | 1:500 @ A3    |
| BR-DR-P01                                    | JULY 2023   | Proposed Drainage Layout Sheet 1 of 2    | 1:250 @ A3    |
| BR-DR-P02                                    | JULY 2023   | Proposed Drainage Layout Sheet 2 of 2    | 1:250 @ A3    |
| BR-DR-P03                                    | JULY 2023   | Proposed Drainage Longsection            | 1:500 @ A3    |
| BR-VD-P01                                    | JULY 2023   | Preliminary Vertical Design Sheet 1 of 3 | 1:1000 @ A3   |
| BR-VD-P02                                    | JULY 2023   | Preliminary Vertical Design Sheet 2 of 3 | As Shown @ A3 |
| BR-VD-P03                                    | JULY 2023   | Preliminary Vertical Design Sheet 3 of 3 | As Shown @ A3 |
|  |             |  |               |
|  |             |  |               |
|  |             |  |               |
|  |             |  |               |

## **Appendix C– RSA Feedback Form**



# Road Safety Audit Feedback Form

Scheme: Bloodmill Rd Extension Limerick

Audit Stage: 1

Date Audit Completed: 13/06/2023

| Paragraph No. in Safety Audit Report | To be completed by the Designer |                                       |  | To be Completed by Audit Team Leader                          |
|--------------------------------------|---------------------------------|---------------------------------------|--|---|
|                                      | Problem accepted (yes/no)       | Recommended measure accepted (yes/no) | Describe alternative measure(s). Give reasons for not accepting recommended measure.<br>Only complete if recommended measure is not accepted | Alternative measures or reasons accepted by auditors (yes/no) |
| 2.1                                  | Yes                             | Yes                                   |  |   |
| 2.2                                  | Yes                             | Yes                                   |  |   |
| 2.3                                  | Yes                             | Yes                                   |  |   |
| 2.4                                  | Yes                             | Yes                                   | Junction radii will be reduced to 6m   |   |
| 2.5                                  | Yes                             | Yes                                   | Cycle track transition to carriageway to be re-designed  |   |
| 2.6                                  | Yes                             | Yes                                   | Cycle track width to be clarified on all drawings  |   |
|                                      |                                 |                                       |  |   |

Signed:

*D. O'Connell*

Designer

Date 05/07/2023

Signed:

*James Daly*

Audit Team Leader

Date 05/07/2023

Signed: \_\_\_\_\_

Employer

Date \_\_\_\_\_