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Quality Audit Response Document
Proposed Residential Development
Drumlark, Co. Cavan

Client: Drumlark Investments Ltd
Job No. D111
February 2024


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## QUALITY AUDIT RESPONSE DOCUMENT

## PROPOSED RESIDENTIAL DEVELOPMENT, DRUMLARK, CO. CAVAN

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1.0 INTRODUCTION
$\qquad$

Appendix A: Quality Audit by RoadPlan


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### 1.0 INTRODUCTION

Cronin \& Sutton Consulting Engineers (CS Consulting) have been commissioned by Drumlark Investments Ltd to prepare a Quality Audit Response Document for a proposed 145-unit Large-scale Residential Development (LRD) at Drumlark, Cavan.

This document is a response to items addressed in the Quality Audit (incl. Road Safety Audit, Walking Audit and Cycling Audit).

The following responses are made to clarify the recommendations of the Quality Audit carried out by RoadPlan for the proposed 145-unit Large-scale Residential Development (LRD) at Drumlark, Cavan.

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### 2.0 RESPONSE TO QUALITY AUDIT

The Quality Audit undertaken by RoadPlan includes an access, cycling, walking and road safety audit. The following sections outline responses to all items raised within the Quality Audit.

### 2.1 Road Safety Audit

## Item 5.1

Visibility for a driver exiting the proposed development may be restricted by the existing roadside hedges either side of the access. Inadequate visibility may contribute to a turning collision at the access. There is a particular risk in relation to visibility to the right: due to the curvature of the L-1532 south of the access a short section of road (and any vehicle thereon) may be concealed from the view of the exiting driver.

## Suggestion:

Ensure that adequate visibility splays are provided for drivers exiting the development.

## Response to Item 5.1

Unobstructed sightlines of 59 m in both directions of L1532 shall be achieved as measured from a set-back of 2.4 m in accordance with DMURS. Sightline envelope shall remain free of any obstructions. Please refer to CS Consulting drawing no D111-CSC-XX-XX-DR-C-0025 for further details

## Item 5.2

The L-1532 is lit but there is a gap in the lighting to the immediate north of the access to the Gallops (there is an overhead ESB service crossing the road and a risk of arcing would arise if a lighting column were located adjacent to the wires). This is also the location at which the pedestrian


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crossing is proposed. The risk of pedestrian collisions would increase if the crossing were inadequately lit. In addition, street lighting is not shown to be provided within the proposed development. Road safety would be enhanced with the provision of street lighting.

## Suggestion:

- Ensure that the Zebra crossing (and all other pedestrian crossings) is adequately lit.
- Provide adequate street lighting within the proposed development.


## Response to Item 5.2

The proposed zebra crossing shall be adequately lit. Street lighting shall be provided within the proposed development.

## Item 5.3

Traffic speeds may be higher than desirable on the northern sections of Roads 2 and 3; the horizontal curvature of the roads may not adequately constrain speed. Higher speeds increase road safety risk, particularly for vulnerable road users.

## Suggestion:

Provide additional traffic calming measures on these sections of road to constrain speed.

## Response to Item 5.3

Additional traffic calming measures in the form of raised tables/ ramps have been provided along Roads 2 and 3. Refer to drawing D111-CSC-XX-XX-DR-C-0025 for further details.

## Item 5.4

Some turning heads at the ends of cul-de-sacs appear too small to provide sufficient space in which a refuse vehicle could turn. If large vehicles need to reverse, they could pose a hazard to vulnerable road users. It is acknowledged that, in the case of short cul-de-sacs, the refuse vehicle would turn at the adjacent junction.

## Suggestion:

Ensure that turning heads are large enough to be used with ease by refuse vehicles.

## Response to Item 5.4

Turning heads shall be large enough to be used with ease by refuse vehicles. Please refer to CS Consulting drawing no. D111-CSC-XX-XX-DR-C0012 for details.

## Item 5.5

When roads are constructed across steeply sloped ground there is a risk that there may be steep, high drop-offs from road edges, posing a risk to the occupants of run-off-road vehicles. Nothing in the design indicates that such hazards will be present but there is not sufficient detail in the drawings to be certain that they will not.

## Suggestion:

Ensure that low gradients are provided to any side slopes at road edges so that roadsides are forgiving.


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## Response to Item 5.5

Low gradients shall be provided at side slopes at road edges so that roadsides are forgiving.

## Item 5.6

A raised table is shown to be provided on the L-1532 at the vehicular access to the site, and the proposed Zebra crossing to the south of that location is also shown to be raised. Speeding drivers may lose control if they strike ramps unexpectedly.

## Suggestion:

Provide Road Hump warning signs in advance of the ramps.

## Response to Item 5.6

Road Humps warning signs shall be provided in advance of the ramps. Please refer to CS Consulting Drawing no. D111-CSC-XX-XX-DR-C-0025 for further details.

### 2.2 Walking Audit

Item 6.1

There are no crossing facilities provided to cater for pedestrians accessing the creche from the proposed footpath provided along Road 5.

Suggestion:

Provide a simple crossing of Road 5 at an appropriate location.

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## Response to Item 6.1

Uncontrolled pedestrian crossing has now been provided on Road 5.

Item 6.2

Tactile paving is not shown to be provided on the east side of the proposed Zebra crossing beside the access to The Moorings to enable a visually impaired user to differentiate between the footway and the cycleway.

Suggestion:

Provide Corduroy tactile paving at the interfaces between the shared area and the footway and cycleway.

## Response to Item 6. 2

Corduroy tactile paving shall be provided at the interfaces between the shared surface area and the footway and cycleway. Refer to drawing D111-CSC-XX-XX-DR-C-0025 for further details.

Item 6.3

There is no pedestrian crossing or footpath provided to the bin storage facility provided at the south side of the development.

## Suggestion:

Ensure adequate facilities are provided for pedestrians to access the bin storage facility.

## Response to Item 6.3

Adequate facilities are provided for pedestrians to access the bin storage facility. Refer to drawing D111-CSC-XX-XX-DR-C-0025 for further details.


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### 2.3 Cycling Audit

## Item 7.1

Bicycle parking is provided within the proposed development; however, cyclists may have difficulty accessing the bicycle parking spaces if they are required to cross a high kerb to access the bicycle parking area.

Suggestion:

Provide dropped kerbs at appropriate locations to ensure ease of access bicycle parking.

## Response to Item 7.1

Dropped kerb shall be provided to ensure ease of access to bicycle parking. Refer to drawing D111-CSC-XX-XX-DR-C-0025 for further details.

Item 7.2

A raised table is proposed at the development access. Abrupt ramps reduce the attractiveness of cycleways and can be hazardous if very steep.

Suggestion:

Ensure that the slopes of ramps are adequate to provide for the easy and safe movement of cyclists.

Response to Item 7.2

The slope of the cycle ramp shall be less than $5 \%$ to cater for easy and safe movement for cyclists. Please refer to CS Consulting drawing no. D111-CSC-XX-XX-DR-C-0025 for details.

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### 2.4 Accessibility Audit

## Item 8.1

Accessible parking spaces are provided within the residential development; however, dropped kerbs or tactile paving are not shown to be provided to enable a mobility impaired pedestrian to access with ease the footpath adjacent to the accessible parking space.

## Suggestion:

Provide dropped kerbs and tactile paving to enable mobility impaired pedestrians to directly access the adjacent footpath.

## Response to Item 8.1

Dropped kerbs and tactile paving shall be provided to enable mobility impaired pedestrians to directly access the adjacent footpath. Please refer to CS Consulting drawing no. D111-CSC-XX-XX-DR-C-0025 for details.

Item 8.2

At EV charging spaces, the locations of the charging equipment are not shown. If cables trail across footways they could be a hazard to mobility impaired pedestrians.

Suggestion:

At all locations where EV chargers are to be provided, ensure that cable will not trail across footways and that the charging equipment does not obstruct footway width.


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## Response to Item 8.2

All the EV Chargers shall be located such that the cable will not trail across footways and the charging equipment does not obstruct footway widths. Please refer to CS Consulting drawing no. D111-CSC-XX-XX-DR-C-0025 for details.

## Item 8.3

The footways along the access road to the development have a longitudinal gradient of 1 in 12, steeper than is adequate for universal access. An alternative pedestrian route is shown to be provided for pedestrian and cyclists; however, the gradients of the shared path are not indicated on the drawing. If they are too steep universal access may be restricted.

## Suggestion:

Ensure that the slopes of the shared path are not so steep as to constrain universal access, and that adequate dwell areas are provided.

## Response to Item 8.3

The gradient of the proposed shared surface shall be $5 \%$, and this shared surface is designed in accordance with Cycle Design Manual 2023. Please refer to CS Consulting Drawing no. D111-CSC-XX-XX-DR-C-0025 for further details.

Item 8.4
Some of the roads within the development may be steeper than is adequate for universal access. If they are too steep universal access may be restricted.

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## Suggestion:

Ensure that each dwelling can be accessed via paths that are not so steep as to constrain universal access, and that adequate dwell areas are available.

## Response to Item 8.4

The road levels and scheme design levels have been modified to ensure each dwelling can be accessed via paths that are not so steep as to constrain universal access. Please refer to CS Consulting Drawing no. D111-CSC-XX-XX-DR-C-0001 for further details.

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## Appendix A: Quality Audit by RoadPlan

## PROPOSED HOUSING DEVELOPMENT AT DRUMLARK, CO. CAVAN

## Stage 1 Quality Audit

(Incorporating a DMURS Street Design Audit, and Audits of Accessibility, Cycling, Walking and Road Safety)
for

## CS Consulting

February 2024

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## DOCUMENT CONTROL SHEET

| Project Title | Proposed Housing Development at Drumlark, Co Cavan |
| :--- | :--- |
| Project No. | $23190-01$ |
| Client | CS Consulting |
| Document Title | Stage 1 Quality Audit |
| Document No. | $23190-01-001$ |


| Status | Author(s) | Reviewed By | Approved By | Issue Date |
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| Draft 1 | GF/DD | GF/DD | DD | $17 / 01 / 2024$ |
| Draft 2 | GF/DD | GF/DD | DD | $30 / 1 / 2024$ |
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|  |  |  |  |  |

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## 1. INTRODUCTION

1.1 Roadplan Consulting has been commissioned by CS Consulting to carry out a Quality Audit of a proposed development at Drumlark, Co. Cavan.
1.2 The proposed development comprises the construction of 145 no. residential units. The development will also include dedicated car parking spaces, bike parking spaces, bicycle stores, bin stores, and allotment gardens.
1.3 The development is situated north of the town centre of Cavan. The site lies adjacent to L1532, between the L1532/ L1513 Junction and L1532/ L5538 Junction. The site is accessed from the L1532.
1.4 Figure 1 below is a layout drawing of the development. The L1532 has a speed limit of 60 $\mathrm{km} / \mathrm{h}$ in the area of the proposed development.


Figure 1.1 - Site Location Map and Site Layout for the development
2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.
2.2 Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.
2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.
2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.
2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.
2.6 DMURS states that Quality Audits should consist of the following parts:

- DMURS Street Design Audit
- Individual Design Audits
- Quality Audit Report

In the case of this report the individual design audits comprise an RSA, an Accessibility audit, a Walking audit and a Cycle audit.
3. METHODOLOGY
3.1 The Audit Team was as follows:

- Dermot Donovan,
- George Frisby,
- Jince Philip Zachariah,

Chartered Engineer, FIEI
Chartered Engineer MIEI
Observer
3.2 Road safety, non-motorised users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- how the scheme is experienced by those entering it and moving around within the street, including how this affects road user behaviour; and
- any other issues considered relevant to each constituent element of the Quality Audit process.
3.3 The site visit for this quality audit was carried out on $21^{\text {st }}$ December 2023.

The documents provided for the audit were:

| Drawing Number | Rev | Drawing Title |
| :--- | :---: | :--- |
| D111-CSC-XX-XX-DR-C-0001 | P4 | Proposed Road Layout |

Copies of these audited drawings are contained in Appendix A.
Details of drainage or road lighting are not provided. It is assumed that adequate layouts will be provided for each.

The proposed development shows carriageway and cycle tracks over the existing roadside ditches. It is assumed that there is no retaining walls constructed within the clear zone.
A bus bay is shown to be provided in the future immediately south of the proposed Zebra crossing on the L-1532. The design of the bay is not shown in detail, and it is not included in this audit.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on https://www.dmurs.ie/supplementary-material) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

## 4. STREET DESIGN AUDIT

| CONNECTIVITY |  |  |
| :---: | :---: | :---: |
| Key Issues | Key DMURS Reference | Audit Suggestion |
| Strategic routes/major desire lines been identified and are clearly incorporated into the design. | 3.1 - Integrated Street Network <br> 3.2.1 - Movement Function <br> 3.3.1 - Street layouts <br> 3.3.4 - Wayfinding | No Comment |
| Multiple points of access are provided to the site/place, in particular for sustainable modes. | 3.3.1 - Street Layouts <br> 3.3.3 - Retrofitting ${ }^{1}$ | 3.3.1 - A single vehicular access point is provided to the development from L1532 together with pedestrian access from L1532. <br> 3.3.3 - It is recommended to revise the layout to provide accesses to bike parking facilities and bin storage facilities to improve the safety of user groups (see Section 6.1, 6.3). |
| Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice. | 3.3.1 - Street Layouts <br> 3.3.2 - Block Sizes <br> 3.4.1 - Vehicle Permeability | 3.3.1 - A single vehicular access point is provided to the development from L1532 along with pedestrian access facilities from L1532. |
| Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures. | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 3.4.1 - Vehicle Permeability | No Comment |

[^0]
## SELF-REGULATING STREET ENVIRONMENT

| Key Issues | Key DMURS Reference |
| :--- | :--- |
| A suitable range of design speeds have | 3.2.1 - Movement Function |
| been applied with regard to context and | 3.2.2 - Place Context |
| function. | 4.1.1 - A Balanced Approach to Speed ${ }^{2}$ |
|  |  |
|  |  |
|  |  |
| The street environment will facilitate the | 4.2.1 - Building Height and Street Width |
| creation of a traffic clamed environment | 4.2.2 - Street Trees |
| via the use of 'softer' or passive | 4.2.3 - Active Street Edges |
| measures.3 | 4.2.4 - Signage and Line Marking |
|  | 4.2.7 - Planting |
|  | 4.4.2 - Carriageway Surfaces |
|  | 4.4.9 - On-Street Parking |
|  | Advice Note 1 - Transitions and Gateways |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Audit Suggestion

3.2.1 - There is no through road network in the development. The surrounding road network comprises roads with various traffic calming features.
4.1.1 - The proposed development access is connected to a local road with posted speed limit of $60 \mathrm{~km} / \mathrm{h}$. However, there should be appropriate speed regulation and traffic calming measures on the proposed residential development site.
4.2.1 - No information on building heights is provided within the drawings.
4.2.2 - Street trees and soft landscaping is proposed within the integrated design strategy for the proposed development. Planting creates a sense of place and unique character to each streetscape. Care should be taken to ensure the street trees do not block visibility splays at the proposed junctions and pedestrian crossings.
4.2.4 - Adequate signage and road markings should be provided according to the TSM.
4.4.2 - No information on pavement surfaces is provided within the drawings. Care should be taken to

[^1]| SELF-REGULATING STREET ENVIRONMENT |  |  |
| :---: | :---: | :---: |
| Key Issues | Key DMURS Reference | Audit Suggestion |
|  |  | provide appropriate types of pavement surfaces for the safe and efficient movement of all user groups. <br> 4.4.9 - The proposed residential development includes 228 dedicated parking spaces with no provisions for on-street parking. |
| A suitable range of design standards/ measures have been applied that are consistent with the applied design speeds. | 4.4.1 - Carriageway Widths <br> 4.4.4 - Forward Visibility <br> 4.4.5 - Visibility Splays <br> 4.4.6 - Alignment and curvature <br> 4.4.7 - Horizontal and Vertical Deflections <br> Advice Note 1 - Transitions and Gateways | 4.4.1 - It is unclear if widths are adequate for refuse trucks at certain cul-de-sacs. <br> 4.4.5 - Visibility splays at all junctions should be kept clear of all obstructions including parked vehicles, and vegetation. |


| PEDESTRIAN AND CYCLING ENVIRONMENT |  |  |
| :---: | :---: | :---: |
| Key Issues | Key DMURS Reference | Audit Suggestion |
| The built environment contributes to the creation of a safe and comfortable pedestrian environment. | 4.2.1 - Building Height and Street Width <br> 4.2.3 - Active Street Edges <br> 4.2.5 - Street Furniture <br> 4.4.9 - On-Street parking | 4.2.5 - Information on streetlights is provided within the drawings. It is assumed that lighting will be provided. |
| Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements. | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 4.2.5 - Street Furniture <br> 4.3.1 - Footways, Verges and Strips <br> 4.3.2 - Pedestrian Crossings | 4.2.5 - Footpaths are generally 2 m width. Shared are wider. |
| Cycling facilities will cater for cyclists of all ages and abilities. | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 4.3.5-Cycle facilities | 4.3.5 - Cycle facilities: Cycle facilities and bicycle parking are provided. |
| The particular needs of visually and mobility impaired users been identified and incorporated in the design. | 4.2.5 - Street Furniture <br> 4.3.1 - Footways, Verges and Strips <br> 4.2.5 - Street Furniture <br> 4.3.2 - Pedestrian Crossings <br> 4.3.4 - Pedestrianised and Shared Surfaces | 4.3.1 - Dropped kerbs should be provided at all areas where pedestrians generally access the footpaths, particularly at disabled parking spaces. |


| VISUAL QUALITY |  |  |
| :---: | :---: | :---: |
| Key Issues | Key DMURS Reference | Audit Suggestion |
| The landscape plan responds to the street hierarchy and the value of the place. | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 4.2.2 - Street Trees <br> 4.2.7 - Planting <br> Advice Note 1 - Transitions and Gateways | 4.2.7 - Trees are shown to be provided along the access road. |
| Street furniture is orderly placed. | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 4.2.5 - Street Furniture <br> 4.3.1 - Footways, Verges and Strips | No comment |
| The use of signage and line marking has been minimised. | 3.2.1 - Movement Function. <br> 3.2.2 - Place Context. <br> 4.2.4 - Signage and Line Marking. | No comment |
| Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place? | 3.2.1 - Movement Function <br> 3.2.2 - Place Context <br> 4.2.6 - Materials and Finishes <br> 4.2.8 - Historic Contexts <br> 4.3.2 - Pedestrian Crossings <br> 4.4.2 - Carriageway Surfaces <br> Advice Note 2 - Materials and Specifications | No comment |

ADDITIONAL COMMENTS

## 5. ROAD SAFETY

### 5.1 Issue

Visibility for a driver exiting the proposed development may be restricted by the existing roadside hedges either side of the access. Inadequate visibility may contribute to a turning collision at the access. There is a particular risk in relation to visibility to the right: due to the curvature of the L-1532 south of the access a short section of road (and any vehicle thereon) may be concealed from the view of the exiting driver.


## Suggestion

Ensure that adequate visibility splays are provided for drivers exiting the development.

### 5.2 Issue

The L-1532 is lit but there is a gap in the lighting to the immediate north of the access to the Gallops (there is an overhead ESB service crossing the road and a risk of arcing would arise if a lighting column were located adjacent to the wires). This is also the location at which the pedestrian crossing is proposed. The risk of pedestrian collisions would increase if the crossing were inadequately lit. In addition, street lighting is not shown to be provided within the proposed development. Road safety would be enhanced with the provision of street lighting.


## Suggestion

- Ensure that the Zebra crossing (and all other pedestrian crossings) is adequately lit.
- Provide adequate street lighting within the proposed development.


### 5.3 Issue

Traffic speeds may be higher than desirable on the northern sections of Roads 2 and 3; the horizontal curvature of the roads may not adequately constrain speed. Higher speeds increase road safety risk, particularly for vulnerable road users.

## Suggestion

Provide additional traffic calming measures on these sections of road to constrain speed.

### 5.4 Issue

Some turning heads at the ends of cul-de-sacs appear too small to provide sufficient space in which a refuse vehicle could turn. If large vehicles need to reverse, they could pose a hazard to vulnerable road users. It is acknowledged that, in the case of short cul-de-sacs, the refuse vehicle would turn at the adjacent junction.


## Suggestion

Ensure that turning heads are large enough to be used with ease by refuse vehicles.

### 5.5 Issue

When roads are constructed across steeply sloped ground there is a risk that there may be steep, high drop-offs from road edges, posing a risk to the occupants of run-off-road vehicles. Nothing in the design indicates that such hazards will be present but there is not sufficient detail in the drawings to be certain that they will not.

## Suggestion

Ensure that low gradients are provided to any side slopes at road edges so that roadsides are forgiving.

### 5.6 Issue

A raised table is shown to be provided on the L-1532 at the vehicular access to the site, and the proposed Zebra crossing to the south of that location is also shown to be raised. Speeding drivers may lose control if they strike ramps unexpectedly.


## Suggestion

Provide Road Hump warning signs in advance of the ramps.

## 6. WALKING

## 6. 1 Issue

There are no crossing facilities provided to cater for pedestrians accessing the creche from the proposed footpath provided along Road 5.


## Suggestion

Provide a simple crossing of Road 5 at an appropriate location.

## 6. 2 Issue

Tactile paving is not shown to be provided on the east side of the proposed Zebra crossing beside the access to The Moorings to enable a visually impaired user to differentiate between the footway and the cycleway.


## Suggestion

Provide Corduroy tactile paving at the interfaces between the shared area and the footway and cycleway.

## 6. 3 Issue

There is no pedestrian crossing or footpath provided to the bin storage facility provided at the south side of the development.


## Suggestion

Ensure adequate facilities are provided for pedestrians to access the bin storage facility.

## 7. CYCLING

## 7. 1 Issue

Bicycle parking is provided within the proposed development; however, cyclists may have difficulty accessing the bicycle parking spaces if they are required to cross a high kerb to access the bicycle parking area.


## Suggestion

Provide dropped kerbs at appropriate locations to ensure ease of access bicycle parking.

## 7. 2 Issue

A raised table is proposed at the development access. Abrupt ramps reduce the attractiveness of cycleways and can be hazardous if too steep.


## Suggestion

Ensure that the slopes of ramps are adequate to provide for the easy and safe movement of cyclists.

## 8. ACCESSIBILITY

## 8. 1 Issue

Accessible parking spaces are provided within the residential development; however, dropped kerbs or tactile paving are not shown to be provided to enable a mobility impaired pedestrian to access with ease the footpath adjacent to the accessible parking space.



## Suggestion

Provide dropped kerbs and tactile paving to enable mobility impaired pedestrians to directly access the adjacent footpath.

## 8. 2 Issue

At EV charging spaces, the locations of the charging equipment are not shown. If cables trail across footways they could be a hazard to mobility impaired pedestrians.


## Suggestion

At all locations where EV chargers are to be provided, ensure that cable will not trail across footways and that the charging equipment does not obstruct footway width.

## 8. 3 Issue

The footways along the access road to the development have a longitudinal gradient of 1 in 12 , steeper than is adequate for universal access. An alternative pedestrian route is shown to be provided for pedestrian and cyclists; however, the gradients of the shared path are not indicated on the drawing. If they are too steep universal access may be restricted.


## Suggestion

Ensure that the slopes of the shared path are not so steep as to constrain universal access, and that adequate dwell areas are provided.

## 8. 4 Issue

Some of the roads within the development may be steeper than is adequate for universal access. If they are too steep universal access may be restricted.

## Suggestion

Ensure that each dwelling can be accessed via paths that are not so steep as to constrain universal access, and that adequate dwell areas are available.

## 9. QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Housing Development at Drumlark, Co. Cavan
Document Number: 23190-01-001
Date Audit Completed: 29 ${ }^{\text {th }}$ January 2024

| Paragraph No. in Safety Audit Report | To Be Completed By 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. Only complete if recommended measure is not accepted. | Alternative measures or reasons accepted by auditors (yes/no) |
| 5.1 | YES | YES | ----------------- | ------------- |
| 5.2 | YES | YES | ------------------------------- | ----- |
| 5.3 | YES | YES | ------------- | ------------- |
| 5.4 | YES | YES | ------------------------- | ------- |
| 5.5 | YES | YES | ------------------- | ------- |
| 5.6 | YES | YES | --- | ------------- |
| 6.1 | YES | YES | ------------------- | -------- |
| 6.2 | YES | YES | --------------------------- | ----------- |
| 6.3 | YES | YES | ----------------------------- | ---------- |
| 7.1 | YES | YES | ------------------- | --------- |
| 7.2 | YES | YES | ---------------------------- | --------- |
| 8.1 | YES | YES | --------------------- | --------- |
| 8.2 | YES | YES | --------------------------------- | ---------- |
| 8.3 | YES | YES | --------------------------------- | ------------- |
| 8.4 | YES | YES | ---------------------------- | ----------- |

Safety Audit
Signed off

## Design Team Leader

Print Name - Niall Barrett
Date 12/02/2024


Print Name BRENMDAN...COSGGOVE
Date


## Safety Audit

Signed off ......... Ce mot Snovan.......... Audit Team Leader
Print Name ...Dermot Donovan .......... $\quad$ Date ...21/2/24...............

Please complete and return to: $\quad \begin{aligned} & \text { Roadplan Consulting, } \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \text { Kilkenny }, \text { Ormonde Road } \\ & \text { E-mail: }\end{aligned}$
info@roadplan.ie



[^0]:    ${ }^{1}$ When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).

[^1]:    ${ }^{2}$ Refer also to the National Speed Limit Guidelines
    ${ }^{3}$ In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.

