



DMURS Compliance Statement

Proposed Large Residential
Development at Castlelands,
Mallow, Co. Cork

Reside (Castlepark) Ltd

October 2024

HDC1340/14

Hegsons Design Consultancy Limited

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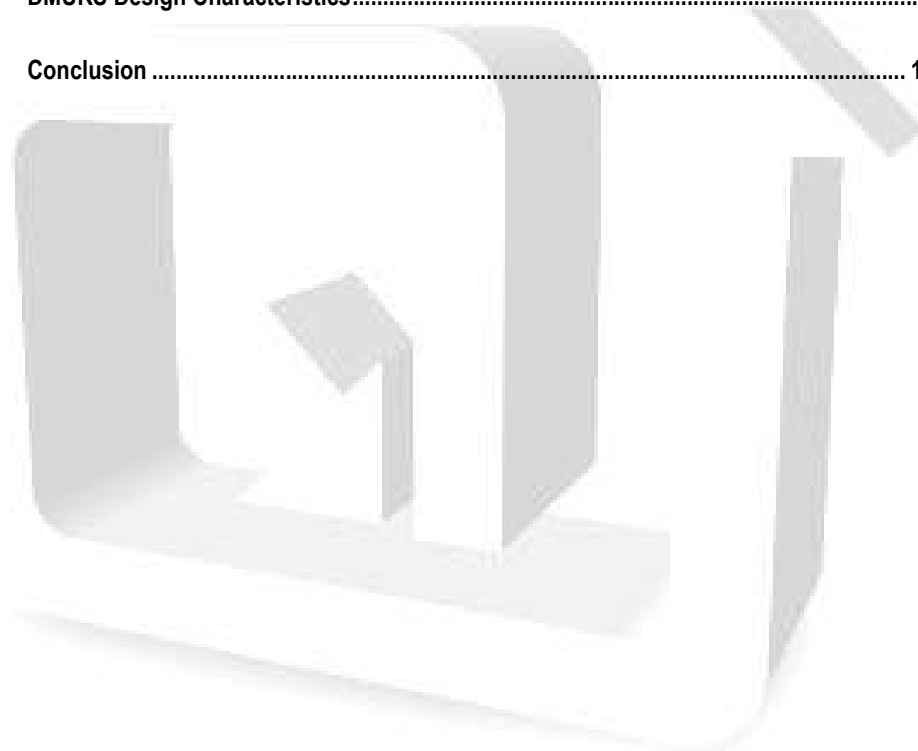


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Contents

1	Introduction.....	2
1.1	Introduction.....	2
1.2	Subject Site	2
2	DMURS Objectives & Principles.....	4
2.1	DMURS Objectives	4
2.2	DMURS User Hierarchy	4
2.3	DMURS Design Principles.....	5
3	DMURS Design Characteristics.....	7
4	Conclusion	10



1 Introduction

1.1 Introduction

Hegsons Design Consultancy Limited were commissioned by Reside (Castlepark) Limited to prepare of a DMURS Compliance Statement in support of its planning application for the proposed development of 469 No. residential units, 1 No. Crèche on site and an upgrade of the existing former lodge at Castlepark, Castlelands, Mallow, Co Cork.

This DMURS Compliance Report seeks to outline the specific design features that have been incorporated within the proposed residential development design with the objective of ensuring an integrated design that is compliant with guidelines as set out by DMURS.

The Design Manual for Urban Roads and Streets (DMURS) is a guidance document published by the Department of the Environment and is accompanied by the Urban Design Manual published in 2019. The purpose of both guidelines is to produce an integrated multi-disciplinary focus on the design of positive, sustainable residential environments.

“Streets are (or ought to be) living spaces, an integral part of the community and a focus of many activities that link together people’s lives. The way in which streets are managed and used promotes or discourages a sense of community and makes them an attractive or unattractive place to live...”

Source: DMURS 2019

The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected to a well-designed infrastructure which delivers safe, convenient and attractive streets in addition to promoting a real and viable alternate to single-user car-based journeys. The design team considers that the proposed development is consistent with both the principles and guidance outlined in the Design Manual for Urban Roads and Streets (DMURS) 2019.

1.2 Subject Site

The subject site is located within lands at St. Joseph’s Road, Mallow, Co. Cork. The is located approximately 800m east of Mallow town centre. The site is bordered by existing residential developments to the west and north and green fields to the south and east. Mallow GAA complex is located approximately 1.2km north-east of the site. The land use in the area is generally a mix between residential and agricultural.

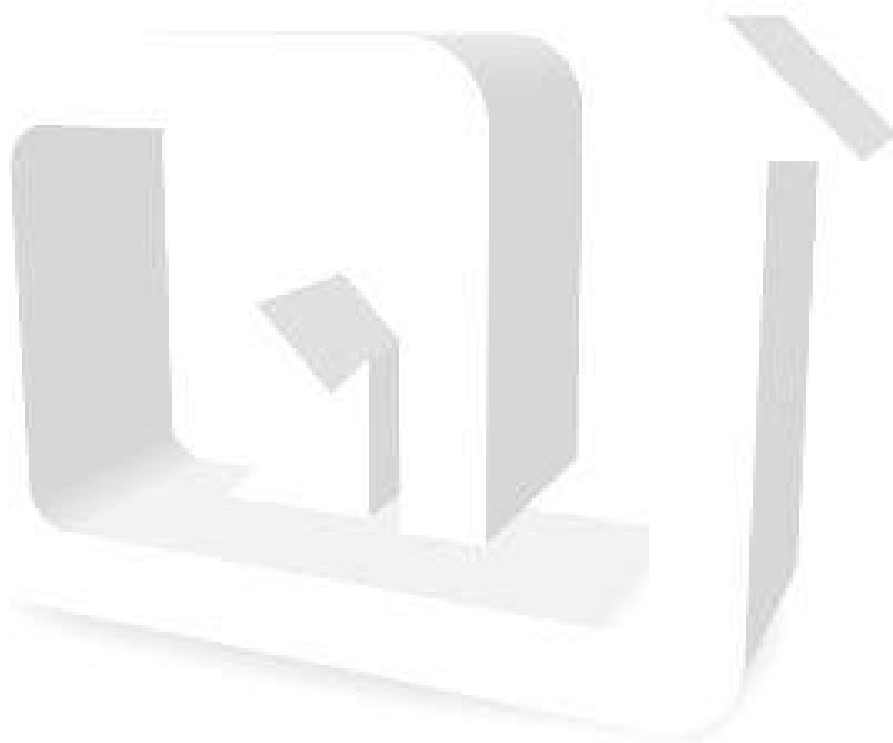
The proposed development is a large residential development consisting of 469 No. residential units, 1 No. Crèche on site and an upgrade of the existing former lodge. The LRD comprises of 5no. development phases namely 1a, 1b, 1c, phase 2 and phase 3. Phase 1a and 1b of this LRD are being assessed under a different planning application 24/04519. The layout is outlined on a series of architectural, engineering and landscaping plans that should be viewed in conjunction with this report.

The main entrance from St Joseph’s Road is an existing vehicular access to Castle Crest, with new access points to the proposed development to be formed along the existing Kingsfort Avenue and Maple Square to access local streets which disperse traffic to various parts of the site. These link streets are designed in line with DMURS. A Road Safety Audit and Quality Audit have been carried out on the proposed scheme and how it integrates with the surrounding

neighbourhood. All recommendations of the audits have been incorporated in the current design of the proposed scheme.

The site layout will be prepared following detailed consultation of the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities, the Urban Design Manual and the Design Manual for Urban Roads and Streets (DMURS) and TII NRA Road Safety Audit HD 19/15 March 2015.

Furthermore, the layout has taken note of the policies and objectives set out in the Cork County Development Plan 2022-2028 and the proposal has regard to Cork County Council's Design Guide, 'Making Places: A Design Guide for Residential Development'.



2 DMURS Objectives & Principles

2.1 DMURS Objectives

DMURS sets out design guidance and standards for constructing new and reconfigured existing urban roads and streets. It also sets out practical design measures to encourage more sustainable travel patterns in urban areas.

The primary objectives of DMURS are as follows:

- Prioritise pedestrians and cyclists in urban settings without unduly compromising vehicular movement.
- Provide good pedestrian permeability and connectivity in urban environments in order to encourage walking.
- Implement speed reduction measures to provide safe interaction between pedestrians, cyclists and motorists.
- Create attractive streetscapes through the design of roads and footpaths with careful consideration given to landscaping and selection of surface finishes.

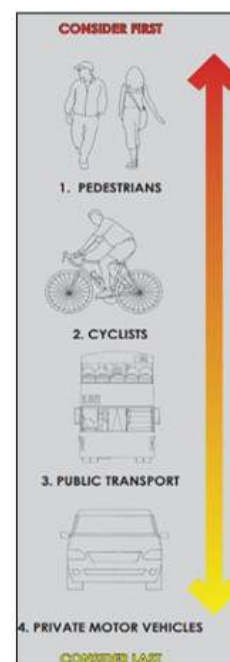
The public areas fronting and within the proposed development have been designed by the multidisciplinary design team to accommodate pedestrians and cyclists in accordance with the appropriate principles and guidelines set out in DMURS.

2.2 DMURS User Hierarchy

DMURS set outs a clear user hierarchy for scheme designers which prioritises sustainable forms of transport. Walking is the most sustainable form of transport with all journeys beginning / ending on foot. By prioritising design for pedestrians, the number of short journeys taken by car can be reduced, public transport made more accessible and the delivery of walkable communities addresses issues of social equity. DMURS reveals that cyclists must be afforded a high priority as trips by bicycle have the potential to replace motor vehicles as an alternative means of transport for short to medium range trips.

The movement of buses should be prioritised over other motorised vehicles according to DMURS whilst the placement of private motor vehicles at the bottom of the user hierarchy is not anti-car but acknowledges that a balanced solution is required with the needs of the car no longer taking priority over (i) the needs of other users or (ii) the value of place within the proposed residential development and across the local receiving environment.

The design team have adhered closely to this hierarchy, by assigning higher priority to the movement of pedestrians and cyclists within the development and implementing self-regulating streets which actively manage vehicle movements within a low speed, high-quality residential environment.



2.3 DMURS Design Principles

DMURS sets out four core design principles which designers must consider in the design of roads and streets. These four core principals are set out below, together with a commentary setting out how these design principals have been incorporated into the masterplan design.

2.3.1 Design Principle No. 1: Connected Networks

“Design Principle 1: To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.”

[Design Manual for Urban Roads and Streets]

The site layout has been carefully designed to ensure that the focus on connectivity is centred on pedestrians and cyclists. The provision of high levels of connectivity for pedestrians and cyclists, to include footpath along all roads and a dedicated 4.0m key ‘Greenway’ and 3.0m cycle facilities throughout the site, are intended to promote walking and cycling by making them a more attractive option to the private car. The site is in close proximity to surrounding developments and Mallow town centre.

DMURS promotes the “consolidation of development along strategic connections and around nodes (including city, town and village centres)”. The site is the natural infill between the existing town centre and the western suburbs, in line with Section 3.1 of DMURS.

2.3.2 Design Principle No. 2: Multi-Functional Streets

“Design Principle 2: The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.”

[Design Manual for Urban Roads and Streets]

The road, street and building layout has been designed to enhance the streets use for both pedestrians, cyclists and vehicles. Open space proposals have been designed to complement and enhance this hierarchy. The open spaces also allow for the provision of visitor bicycle parking which provides for alternative mobility solutions and provides multifunction spaces. Footpath are incorporated into the road network which will encourage this multi-functional use and create balance.

The adopted design approach sets out an appropriate balance between the functional requirements of different network users whilst enhancing the sense of place. The implementation of self-regulating streets, inclusion of raised tables, actively manages movement by offering real modal and route choices in a low speed, high quality residential environment.

The design of the scheme proposals has actively sought to ensure there are no long straight sections of carriageway with the provision of strategically placed traffic calming features (i.e. junctions, raised tables / entries, etc) located at an appropriate frequency and distance.

2.3.3 Design Principle No. 3: Pedestrian Focus

“Design Principle 3: The quality of the street is measured by the quality of the pedestrian environment.”
[Design Manual for Urban Roads and Streets]

The design of the scheme has placed a particular focus on the pedestrian and cyclist. The streetscape has been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance pedestrians' sense of safety and well-being. The site design incorporates well thought out pedestrian facilities such as generous footpaths, pedestrian crossings and shared spaces along with the potential for inter-connectivity with adjoining residential development and future lands and to the river walkway to the south.

High quality materials and finishes are proposed throughout the scheme, both in the buildings and hard and soft landscaping. The selected materials will provide a collection and palette of colours and textures which will contrast with each other and enhance the streetscape and pedestrian environment.

Provision is made for private cars – both access and parking – but this is secondary, and the primary focus is on the pedestrian in keeping with DMURS. Shared surfaces are an effective way of calming traffic and this has been proposed in the form of 'Homezones' within the entire proposed development.

2.3.4 Design Principle No. 4: Multi-Disciplinary Approach

“Design Principle 4: Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.”
[Design Manual for Urban Roads and Streets]

The proposed site layout has been undertaken by a team comprising architects, landscape architects, engineers, ecologists, transport advisors and planners. The combined expertise of this multi-disciplinary team has been brought to bear on the design of the development, including the streetscapes therein.

Following careful and deliberate consideration by the multi-disciplinary design team, we are pleased to commend this development as being compliant with DMURS and its vision for attractive, liveable places.

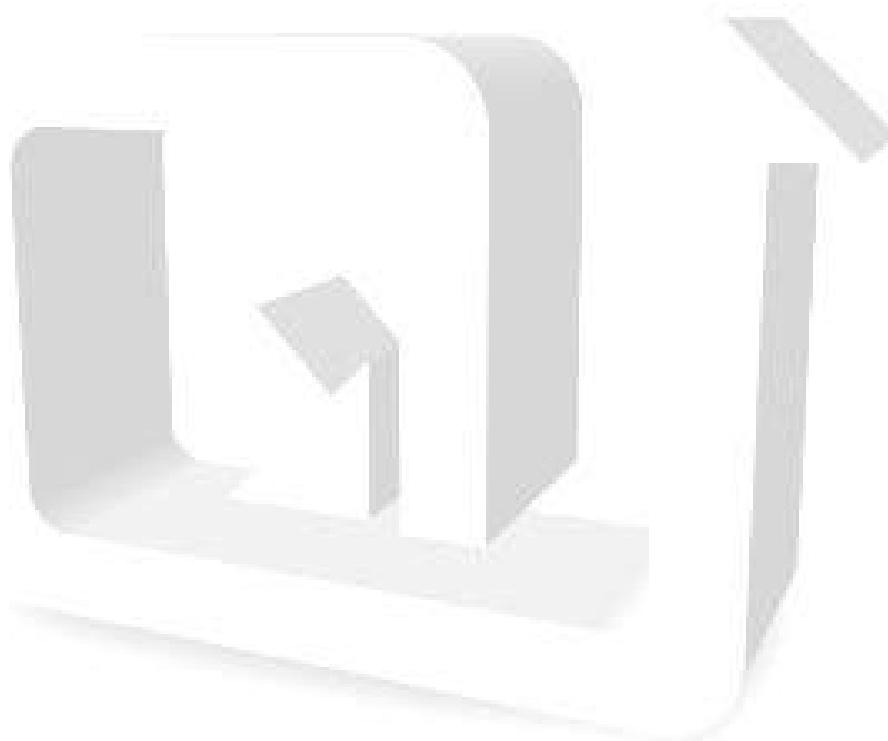
3 DMURS Design Characteristics

The following table outlines the design features that have been incorporated within the proposed residential scheme with the objective of delivering a design that is in full compliance with the relevant requirements of the Design Manual for Urban Roads and Streets (DMURS) 2019.

Design Element	DMURS Review
Place Function	<ul style="list-style-type: none"> DMURS seeks “the design of residential streets strikes the right balance between the different functions of the street, including a sense of place”. Additionally, the development should incorporate “measures to ensure satisfactory standards of personal safety and traffic safety”. The proposals incorporate the desires of DMURS in this context, including frequent crossing points and junctions, horizontal deflections, narrow carriageways, minimised signage and road markings, reduced visibility splays, on-street parking, tighter corner radii large hard and soft street scape. The proposals have been assessed for safety by way of a Stage 1 / 2 Road Safety Audit.
Street Layout	<ul style="list-style-type: none"> The site layout provides for good connection between streets, ensuring good permeability for all road users within the development and good legibility. Maximum connectivity and permeability for pedestrians and cyclists is achieved as all parts of the site are linked by footpaths and narrow / low trafficked road to enable safe cycle movements. Future potential connections to adjoining development and lands are also incorporated into the scheme design.
Traffic Congestion	<ul style="list-style-type: none"> DMURS recommends the use of permeable traffic-calmed networks, as “the most balanced way of addressing traffic congestion” A permeable traffic-calmed strategy has been adopted for the proposed development in the form of entry treatments and shared surface areas.
Approach to Speed	<ul style="list-style-type: none"> The design speed within the proposed development is 30km/h. This approach is consistent with DMURS which specifies that “where vehicle movement priorities are low, such as on local streets, lower speed limits should be applied (30km/h)”. Vehicle speeds are controlled by the use of short lengths of straight road, tight radii and surface materials in the ‘Homezone’.
Signage and Line Marking	<ul style="list-style-type: none"> DMURS notes that minimal signage is required on local streets due to their low speed and low movement function.
Lighting	<ul style="list-style-type: none"> LED luminaires will be utilised and positioned to ensure a uniform lighting spread is achieved and ensure dark corners are avoided. This will ensure the development is attractive and safe during hour of darkness. Lighting design shall comply with BS 5489.
Materials and Finish	<ul style="list-style-type: none"> DMURS states that designers should use ‘contrasting materials and textures to inform pedestrians of changes to the function of space (i.e. to demarcate verges, footway, strips, cycle paths and driveways) and in particular to guide the visually impaired’. The range of proposed materials for this

	development is in line with the requirements of DMURS. The palette of materials and finishes selected from a tried and tested range of robust, good quality materials. Finishes are used to define vehicular surfaces from pedestrian / shared use area and are used throughout the scheme to calm traffic within the site.
Footways	<ul style="list-style-type: none"> Footways widths are a minimum of 2.0m in compliance with DMURS for the space. High quality and slip resistant materials will be used and gradients are sufficiently shallow to make the development accessible for users of all abilities.
Pedestrian Crossings	<ul style="list-style-type: none"> DMURS considers pedestrian crossings to be “one of the most important aspects of street design as it is at this location that most interactions between pedestrians, cyclists and motor vehicles occur”. The proposals include for pedestrian crossings are key nodes within the proposed development in order to promote pedestrian activity and place the pedestrian higher than the motorist in the mobility pyramid.
Corner Radii	<ul style="list-style-type: none"> Corner radii of “local streets” within the development are in compliance with DMURS best practice. The use of tight radii will assist in traffic calming and also enable pedestrians to cross the road both close to their desire line and with as short a travel path as possible.
Shared Surfaces	<ul style="list-style-type: none"> Shared surface streets and junctions are integrated spaces where pedestrians, cyclists and vehicles share the main carriageway. In the context of the proposed development, DMURS recognises the use of shared surfaces where “movement priorities are low and there is a high place value in promoting more liveable streets such as on local streets within neighbourhood”.
Carriageway Widths	<ul style="list-style-type: none"> The width of the “local streets” within the development are 5.5m with car parking accessed directly off the carriageway. Associated footpaths and a dedicated cycle facility (3.5m-4.0m wide) is provided through the site.
Carriageway Surfaces	<ul style="list-style-type: none"> A mix of surface materials is proposed for the development in order to achieve colour changes where pedestrian activity within the carriageway is increased, as stated in DMURS this should assist in achieving low speeds (i.e. <30kph).
Junction Design	<ul style="list-style-type: none"> The junctions within the proposed development are designed with reduced kerb radii, raised tables and also include pedestrian crossing facilities.
Forward & Junction Visibility	<ul style="list-style-type: none"> Forward and junction visibility is provided in compliance with the desire of DMURS for a 30km/h speed limit. Excessive visibility is restricted at locations where further speed control is desired.
Traffic Calming	<ul style="list-style-type: none"> Traffic calming is achieved by incorporating tight radii bends and raised internal junctions. The change in surface level and road texture will operate as a traffic calming mechanism and alert drivers of a change in driving conditions from the public road to a reduced speed limit area.

Parking / Loading	<ul style="list-style-type: none"> In providing the required number of parking spaces adjacent to dwellings, DMURS measures have been adopted include the provision of perpendicular parking on each individual dwelling plot.
Multi-Disciplinary Design Team	<ul style="list-style-type: none"> In accordance with the requirement in DMURS, the design of the development has been prepared by a multi-disciplinary design team, including but not limited to architects', planners, engineers and transport advisors.
Road Safety Audit	<ul style="list-style-type: none"> A Stage 1 / 2 Road Safety Audit of the proposed design of the site and access arrangements has been prepared.



4 Conclusion

The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected to a well-designed infrastructure which delivers safe, convenient and attractive streets in addition to promoting a real and viable alternate to single-user car-based journeys.

The public areas within the proposed development have been designed by the multi-disciplinary design team to accommodate pedestrian and cyclist in accordance with the appropriate principles and guidelines set out in the Design Manual for Urban Roads and Streets (DMURS) 2019.

Various aspects of the scheme design have been assessed and follows guidelines set forth in DMURS. Based on this assessment, certain concluding remarks can be made:

- The scheme has a Place Value associated with neighbourhoods with expected pedestrian/cyclist activities to be moderate – high.
- The scheme provides a street layout prioritising easy navigation for pedestrians and cyclists while promoting sustainable transportation through strategically placed access points for active travel modes.
- Optimized block sizes throughout the residential development comply with DMURS requirements, enhancing permeability for pedestrians and cyclists while maintaining density.
- The building height and street width ratios ensure a strong sense of enclosure, as recommended by DMURS.
- On-street activity is promoted within the internal layout of all internal Local Streets in the development through the availability of pedestrian footpaths on majority of the perimeter of the development.
- The development proposes comprehensive landscaping and tree planting along the length of internal Local Streets throughout the site. This creates a greater emphasis to promote 'softer' landscape elements, which promotes a greener 'living' character.
- The development has been designed to incorporate features that ensure drivers recognise that they must proceed with caution within a low-speed environment and that they are sharing the space with non-motorised users. This is made possible with the planting of trees, the presence of courtyards in the development, and by applying differing materials and finishes within the design philosophy.

It is our opinion that the design team considers that the proposed development is consistent with both the principles and guidance outlined in the Design Manual for Urban Roads and Streets (DMURS) 2019. The proposed site layout therefore promotes and prioritises walking and cycling. While car parking has been provided, it is the objective of this layout to positively encourage users of the area to use the many safe and attractive pedestrian and cycle routes.

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