

DMURS Compliance Statement

Proposed Large Scale Residential
Development, Broomfield West,
Midleton, Co. Cork

Castle Rock Homes (Midleton) Ltd



November 2023

HDC1296/04

Hegsons Design Consultancy Limited

Dublin | Cork | London | Bedford | Wendover | Buxton | Saint-Denis-Le-Gast



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Contents

1	Introduction.....	2
2	DMURS Objectives & Principles.....	4
3	DMURS Review	7
4	Conclusion	10



1 Introduction

1.1 Introduction

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 approximately 1.3km from the town of Midleton on the northern site of the town, and it abuts the substantially complete Blossom Hill Housing development being carried out by Castle Rock Homes (Midleton) Ltd.

Midleton is a busy Cork County Town with a rapidly growing population and sits at the end of the Cork-Midleton rail line and along the N25 East Parkway. In the context of the town the site would be considered elevated and is accessed via established routes through the established residential area of Broomfield, Midleton.

The subject site is located at Broomfield Midleton, Co. Cork. The site is located to the north of Midleton town and to the east of the R626. The site is bound by Broomfield Village to the south and agricultural lands to the east. The subject site is bound on the north and western side by the L-7630 Broomfield Road and the Midleton Water Treatment Plant. Access to the subject site can currently only be achieved via L-7630 Broomfield Road which runs along the northwestern boundary of the site and connects to the R626 via Avoncore Place.

The section of the L-7630, known as Avoncore Place, forms an arm of the signal-controlled junction at the R626 / Northern Relief Road. The road is subject to a 50kph speed limit and provides access to the Broomfield residential area. To the north, the road becomes L-7630 Broomfield Road which has recently been upgrade form a rural in nature road which provided local access to residential properties to a 5.5m – 7.0m wide road with a 2.0m wide footpath along the western side. The road, which has recently been upgraded as part of the new Park Hill View residential development (Council Ref: 18/7236), is traffic calmed and is subject to an 80kph speed limit at present.

Access to the proposed development is via 4 proposed access points off the L-7630 Broomfield Road. The accesses will take the form of priority junction and provide access to various numbers of residential dwellings. The proposed accesses will accommodate all vehicular, pedestrian and cycle movements to and from the proposed development.

Southern Lands:

- Proposed Access No. 1: South Access – 52 dwellings, Creche & community use
- Proposed Access No. 2: North Access – 74 dwellings

Northern Lands:

- Proposed Accesses No. 3 & No. 4: – 146 dwellings

The proposed development will consist of a large scale residential development consisting of the development of 272 No. residential units, creche and all associated ancillary developments works at Broomfield West, Midleton, Co. Cork.

The proposal for the 272 No dwellings units is for a mix of 4-bedroom semi-detached dwellings, 3-bedroom semi-detached dwellings, 2, 3 & 4 bedroom terraced dwellings, 2, 3 & 4 bedroom terraced mews style dwellings, 2 bed duplexes and 1 bed apartments.

The proposed development layout has been prepared following detailed consultation of the Sustainable Recreational Development in urban areas (2009), the Urban Design Manual and the Design Manual for Urban Roads and Streets (DMURS).

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 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.

2.2.1 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 are intended to promote walking and cycling by making them a more attractive option to the private car.

The site is well connected to the surrounding developments and Midleton 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 northern suburbs, in line with Section 3.1 of DMURS.

Due to the topography of the site, the site design includes the provision of retaining walls and both stepped and ramped pedestrian and cycle access routes in order to improve the permeability of the overall site.

2.2.2 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. Walkways 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 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 entries, etc) located at an appropriate frequency and distance.

2.2.3 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 ‘Homezone’ / shared spaces.

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.

2.2.4 Design Principle No. 4: Multi-Disciplinary Approach

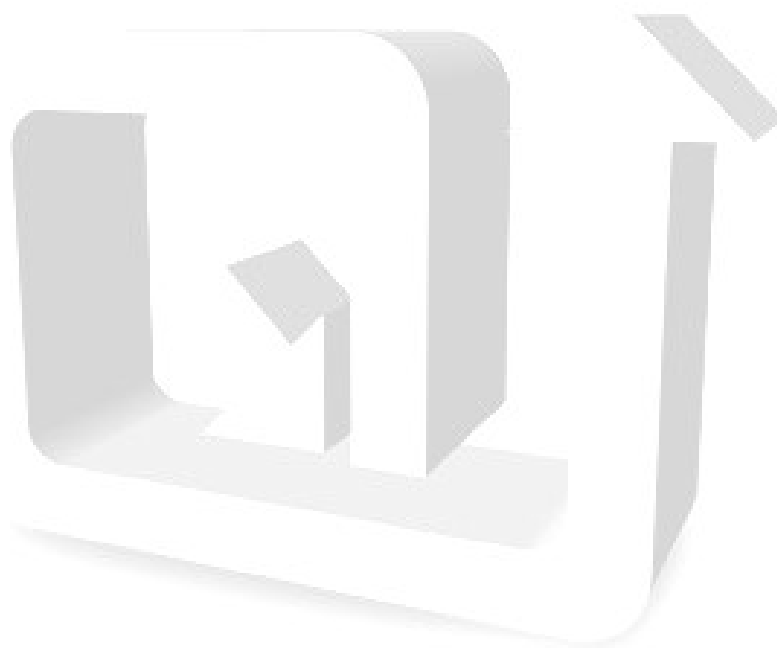
“Design Principle 4: Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.”

[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 Review

The following table outlined 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.
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 / homezones 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 includes for pedestrian crossings 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.
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 incorporated on the site zones and breaking any continuous runs of parking into smaller groups along with planting and crossing areas to break the visual continuity of the parking.

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's 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.

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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