TECHNICAL NOTE		
MHL Project Number:	21107TT	
Project Title:	Residential Development Bessborough	
Author:	Ken Manley BE CEng MIEI HDip Envm Eng FConsEl	MHL
Date:	23/03/2022	
Subject:	Statement of Consistency  'DMURS Compliance'	
Document Status:	For Circulation	

Please submit a statement indicating, in the prospective applicant's opinion, the proposal is consistent with the Design Manual for Urban Roads and Streets (Department of Transport, Tourism and Sport & Department of Environment, Community and Local Government, 2013).

#### Introduction

The stated objective of DMURS is to achieve better street design in urban areas. This will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant. It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places.

The implementation of DMURS is intended to enhance how we go about our business; enhance how we interact with each other and have a positive impact on our enjoyment of the places to and through which we travel.

Based on discussions with the local authority regarding the Traffic and Transport Assessment, a single DMURS compliance statement comprising both phases was deemed appropriate to ensure a consistent reporting approach.

### Creating a Sense of Place

Four characteristics represent the basic measures that should be established in order to create people-friendly streets that facilitate more sustainable neighbourhoods. Each of these characteristics are set out in the sections below together with a commentary setting out how the proposed residential development complies with each of these characteristics.

#### 1. Connectivity

"The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected."

In order of importance, DMURS prioritises pedestrians, cyclists, public transport then private cars. The proposed development has been designed with careful consideration for pedestrians and cyclists as well as facilitating ease of access for vehicular traffic. The site is very well located in terms of connectivity to pedestrian footpaths and off-road cycle facilities which provide a link to public transport and local services such as retail stores, the Church, the Local National/Secondary Schools and the Retail Centre in Mahon Point (a large local employer).

The proposal includes a new pedestrian/cycle bridge over the adjoining Passage West





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Greenway to the east, connecting into the existing down ramp from Mahon providing direct access to the greenway and wider areas, as well as new pedestrian access to Bessborough Estate to the north including upgrades to an existing pedestrian crossing on Bessboro Road. These proposals in addition to Local Authority works currently being carried out on Skehard Road these will significantly reduce future resident's dependency on the private car.

All new footpaths will be dished at all entrances and crossings with tapered/dropped kerbs and tactile paving used on approaches in accordance with the design guidelines for use with tactile paving. This is to accommodate wheelchair access and guide the visually impaired safely through the development.

Future connectivity to adjoining lands is also proposed at a number of locations within the site. Internally within the scheme each developed area has multiple options of connectivity for each of the different modes of travel, maximising accessibility to the various amenities provided as part of the scheme, refer to Landscape Architect's drawings for further detail. The quality of these routes has been carefully considered to ensure their viability in terms of desire lines and to ensure users will feel comfortable and safe when availing of these facilities. In line with planning policy access routes to adjacent lands are catered for at a number of locations (refer to site layout drawing).

Public transport provision is currently catered for with a range of high frequency bus routes (202, 215, 215A, 219).

Vehicular access to the site is accommodated by means of a single access point onto the Bessboro Road via Junction 4.

A comprehensive Traffic & Transportation Assessment carried out by MHL Consulting Engineers is included as part of this application. The scope of this assessment has been agreed with the Local Authority and will demonstrate the impact of the development on the local roads network.

#### 2. Enclosure

"A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge. The use of street trees can also enhance the feeling of enclosure."

The proposed development has been designed so that residential units are overlooking the main access routes to the development, circulation areas within the development and the public open space. High quality landscaping and tree planting are





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proposed within the scheme with the retention of mature trees and hedge-grows along existing ditch lines.

The development of home-zones, areas overlooked by on-street housing, which include shared surfaces, active open spaces and traffic calming elements throughout the scheme will help to deliver sustainable neighbourhoods, instilling a sense of ownership for residents and encouraging visitors to respect speed limits, pedestrian/cycle facilities and parking areas.

The design team have ensured that all public open spaces and pedestrian/cycle links are overlooked by housing elements ensuring passive surveillance for individual areas are achieved.

### 3. Active Edge

"An active frontage enlivens the edge of the street creating a more interesting and engaging environment. An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings."

The development has been designed so that the residential units front onto the circulation roads, with driveways and planting. The open spaces within the development will enhance activity and enliven the areas between the proposed buildings. As outlined in the attached Site Layout Drawings pedestrian movement between neighbourhoods is possible via multiple routes and in many instances in the absence of vehicular traffic. In addition to encouraging walking as a viable mode of travel the provision of these links ensures an 'Active Edge' is achieved in most locations.

## 4. Pedestrian Activities/Facilities

"The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being. Good pedestrian facilities (such as wide footpaths and well-designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity."

As outlined in the items above, the proposed development has been designed to provide excellent pedestrian connectivity. The residential units are all located so that they front directly onto the active edges/open spaces, which will provide passive surveillance to enhance pedestrians feeling of safety and wellbeing. The public open spaces have been designed to cater for all age groups with a special emphasis on ensuring all areas are accessible for persons with varying degrees of mobility.





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Throughout the site, pedestrian routes are generally 2.0m wide or greater which provide adequate space for two people to pass comfortably. DMURS identifies a 1.8m wide footpath as being suitable for areas of low pedestrian activity and a 2.5m footpath as being suitable for low to moderate pedestrian activity. It is considered that a 2m wide footpath is appropriate for the proposed development. Footpaths are designed to have a maximum gradient of 1:20. Where footpaths are combined with cycle routes a 3.0m minimum combined facility is provided. Pedestrian crossings are located along identified desire lines at regular intervals and will be formed with the recommended dropped kerbs, signage, and tactile paving.

A comprehensive public lighting scheme has been designed in conjunction with the landscape architect to ensure all public areas meet the minimum requirements in terms of Lumens. Good quality public lighting will encourage the use of pedestrian facilities ensuring that walking is promoted within the scheme.

There is a network of inter-connecting footpaths on the public road network in the area around the site, providing access to the local transport links and amenities. These amenities include schools, shops, churches, and sports facilities.

Evident from the proposed layout is the looped nature of all pedestrian facilities linking various internal amenities within the site. Additionally, the proposed pedestrian/cycle bridge provides an important link for the lands in the vicinity of the development to the wider footpath network, including the Passage West Greenway. The proposed bridge width of 3.15m is considered appropriate to allow simultaneous use by both pedestrians and cyclists. The design team are confident that the proposed layout will encourage users of all ages to avail of the surrounding network of paths to undertake regular exercise thus achieving one of the desired outcomes from a DMURS perspective.

### • KEY DESIGN PRINCIPLES

DMURS sets out four core design principles which designers must have regard 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 design of the proposed residential development.

### **Design Principle 1: Pedestrian Activity/Facilities**

"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."





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As described previously the proposed development 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 is intended to promote walking and cycling by making them a more attractive option to the private car. Streets and Roads within the scheme have been sized to create a definitive hierarchy, each with its own specific character and function, achieved using colour contrasted surfacing, raised traffic platforms and other traffic calming elements such as pedestrian crossings, signing and lining.

### **Design Principle 2: Multi-Functional Street**

"The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment."

The layout of roads and streets are designed to ensure that the design speed within the development is a maximum 30kph with home-zones and local access areas designed to 15kph. Road cross sections proposed range from 6.0m where street parking is present to 5.1m-4.8m on development access roads. Traffic calming is achieved by limiting forward visibility through chicanes, landscaping and on-street parking as well as raised colour contrasted platforms. The use of signage, tighter corner radii (3-5m radius), frequent pedestrian crossings and multiple junctions within the scheme achieve a self-regulating environment for all road users.

The benefit of creating a low-speed environment, in addition to road safety gains, is the minimisation of noise and air pollution within the development. An internal road safety audit, in accordance with DMURS principles will be carried out and will be included in the full application.

The road network presents a number of pedestrian prioritisation areas by including raised junction tables at critical junctions. These shared areas, along with the removal of long straight roads will ensure traffic vehicular speeds are controlled.

The proposed scheme also incorporates a high-quality LED public lighting scheme, with lighting levels refined to the specific uses of carriageway and footpath and recreational areas. The scheme is compliant with relevant design standards.

### **Design Principle 3: Pedestrian Focus**

"The quality of the street is measured by the quality of the pedestrian environment."

Connectivity throughout the scheme is heavily weighted towards the pedestrian. There are excellent pedestrian links to the public road network, Passage West Greenway, public transport services, and amenities. The open spaces have been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance





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pedestrians' sense of safety and well-being within this area.

# **Design Principle 4: Multi-disciplinary Approach**

"Greater communication and co-operation between design professionals through promotion plan-led multidisciplinary approach to design."

The design team have worked closely with the appointed Cork County Council application team through the Section 247 meetings to ensure that the scheme is supported by the Planning Authority. All team members are committed to delivering a high-quality development which complies with the recommendations of DMURS.

