

Galway County Council

Residential Development, Baile an Chlair Claregalway, Co. Galway

DMURS – Statement of Consistency Design Manual for Urban Roads and Streets (2019)



Residential Development, Baile an Chlair, Claregalway, Co. Galway

DMURS - Statement of Consistency with Ministerial Guidance DMURS (2019)

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1.0 INTRODUCTION

TOBIN Consulting Engineers were appointed to provide design consultancy services for the proposed residential development at Baile an Chlair, Claregalway, in Galway City (Figure 1). As part of these services, TOBIN were required to provide a statement of consistency with Ministerial Guidance in relation to the Design Manual for Urban Roads and Streets (DMURS) 2019.

Planning permission is sought by **Galway County Council** for development on a site extending to 2.71 hectares on lands to the east of R381 Road, Claregalway, Co. Galway.

The proposed development will consist of the construction of:

- 1. 88 residential units comprising:
 - 2 no. 4 bedroom two storey houses
 - 19 no. 3 bedroom two storey houses
 - 18 no. 2 bedroom two storey houses
 - 15 no. 3 bedroom apartments
 - 21 no. 2 bedroom apartments
 - 13 no. 1 bedroom apartments
- 2. Creche (21 children)
- 3. Two estate entrances, one from R381 (to Oranmore) and one from the L7110.
- 4. Children's playground to Lakeview Road
- 5. Landscaped amenity public open space
- 6. IW pumping station
- 7. ESB substation
- 8. All necessary site development works

This statement of consistency confirms that the streets proposed as part of the Residential development in Baile an Chlair, Claregalway Co. Galway have been designed in accordance with the principles and guidance as set out in the Design Manual for Urban Roads and Streets (DMURS) 2019.



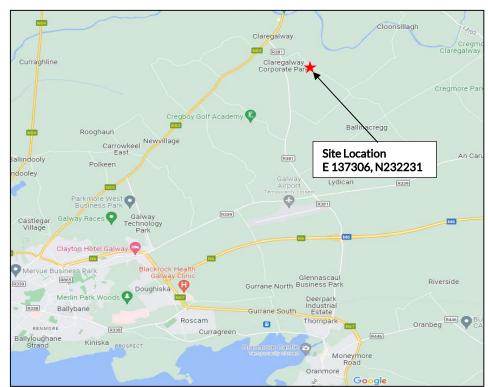


Figure 1-Site Location

1.1 DMURS (2019) Design Principles

1.1.1 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.

The site is situated within the 'Residential' zoned lands. The overall proposed layout of the development has adhered to the restrictions in the Galway City Development Plan by ensuring the residential areas are located within the areas outlined in the development plan and with consideration of the adjoining developments and surrounding areas.

The objective of this zoning is to "Protect the character of these areas by ensuring new development has regard to the prevailing pattern, form and density of these areas and to protect the characteristics of these areas through development standards and guidelines."

The development proposes to develop a sustainable residential development in the area with strong links to the adjacent developments and recreational and amenity zones in line with the assigned zone in the Galway City Development plan 2017-2023.

The site is currently a green field site that forms part of a wider for the area under the ownership of the applicant. The extent to which this application pertains is shown outlined in red throughout the documents and drawings included in this application.

The residential use and associated open space proposed will complement the current residential developments surrounding the site and ensure sustainable development in Claregalway.





The main design objectives of the strategic housing development are as follows:

- Create a series of strong links to the adjacent amenities while providing a new local centre along the R381 road.
- Provide a new community creche adjacent to the main development entrance to the south of the site. Keeping in line with the nature of the section of the development, the Creche is located on the south of the site in an area where vehicular movements will be slower and away from the main thoroughfare of the site.
- Ensure site layout is optimised to provide passive surveillance to open areas which will discourage anti-social behaviour.
- Ensure the layout and design allow for pedestrian permeability for access to the larger recreational areas for all residents including outdoor gym, green areas for ball games and a significant network of walking tracks.
- Retention of large portions of existing mature trees and vegetation where possible to provide a sense of maturity to the development as a whole and retain its sylvan character.

The above objectives are in accordance with the principles of DMURS 2019 and the layout for the proposed housing scheme has been carefully developed to provide residential clusters which centre around open public spaces. Additionally, the development is completed with several varied walking routes which provide excellent permeability throughout the entirety of the development.

The street networks within the development have been designed to maximise connections between local areas and services. Weaving pedestrian routes are present along the northern section of the development including interconnection between cul de sacs. This ensures pedestrians living in the cul de sacs can access the main walking routes, creche and commercial units by the shortest route (i.e., along northern boundary).

A high degree of permeability and legibility have been provided with the proposed layout creating a legible network of streets and footways which are easy to navigate for both drivers and pedestrians. The overall design delivers a road network that is generally linear in nature. Upon completion, there will be safe pedestrian connectivity to the adjoining public local roads (R381 and Lakeview). This will provide safe access to public services and amenities as shown in (Figure 3 and Figure 4).





Figure 2-Main Walking Routes

The main pedestrian and cyclist accesses route to the proposed development will be from the proposed new entrances off R381/ Lakeview Road. Once outside the extent of the development, pedestrians shall utilise the existing pedestrian arrangements. See Figure 4 below for walking distances and bus routes. Similarly, cyclists will utilise the main accesses route in the west and south of the site and share the main accesses roads with vehicular traffic in accordance with section 4.3.1 Mixed/ Shared Streets.





Figure 3-Main Walking Routes within development

The site is organised around a number of large public open space situated mainly along the northern and eastern extents of the site. All public areas are well serviced by interconnected footways. This will provide plenty of activity as residents come and go, thus creating an active area which highlights to vehicle drivers that they are driving through an urban area with a high frequency of pedestrian / cyclist activity.

The site will be accessed by vehicles from R381 and Lakeview Road. It is proposed that pedestrian links to the recreation and amenities zones located within the development will be permeable and enhance the connectivity between existing and proposed recreation and amenity zones within the surrounding areas.

1.1.2 Design Principle 2

The promotion of multifunctional streets that balance the needs of all users within a self-regulating environment.

DMURS 2019 prioritises pedestrians, with cyclists, public transport and private cars following in order of importance. The road network design throughout the proposed development consists generally of short stretches. These deliberately incorporated road features not only create a pleasing experience for the pedestrians and drivers but creates a passive method for controlling the speed of the vehicular movements throughout the development. The internal road network is also designed to be lightly trafficked and as a low-speed environment where cyclists can share the carriageway with vehicles as identified in Section 4.3.5 of the DMURS document.

A number of passive speed control measures such as raised junctions, pedestrian un-controlled crossings points and changes in surface material are proposed throughout the development. There is 1No. raised junctions servicing the site to ensure slowing of vehicles and pedestrian safety when crossing. There are also 6No. pedestrian un-controlled crossings points located at key crossing areas to ensure same. These measures, along with 5 different areas of shared surfaces, create further traffic





calming measures throughout the development. This allows easy accessibility for all pedestrians to access all areas of the development.

The development provides a good mix of both on street and 'on-curtilage' parking for residents.

There are in total 144 car parking spaces provided including 6 Disabled parking spaces. These are broken down as following:

- Dwelling Units, 133 parking spaces.
- Creche, 11 parking spaces.

The on-street parking proposed largely follows the proposed mix of parallel and perpendicular model as noted in the section 4.4.9, 'on-street parking and loading' of DMURS 2019. See figure 4 for a typical example of parallel and perpendicular parking.

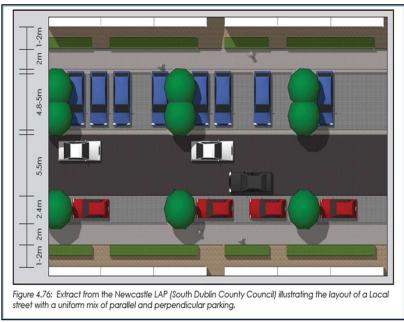


Figure 4- Extract from Section 4.4.9 DMURS 2019

Adequate on street parking is provided in close proximity to the apartment block and creche facility in the south of the site. This was purposefully designed to allow enough car parking spaces at all times during the day/night. During office hours, typically, a large number of spaces dedicated to the apartment block should free up for the retail and creche to avail off and vice-versa.

The main form of parking for homeowners in the development shall be 'on-curtilage'. This has been specifically designed to align with homeowner's preference to have their private vehicles positioned within the limitations of the individual site ownership and to avoid a feeling of over dominance associated with having the majority of parking located on-street. Figure 5 illustrates the street surfaces.





Figure 5 - Proposed Development Site Layout

Pedestrians, cyclists, and vehicular traffic will be integrated in this proposed development as per section 1.7.1 of the National Cycle Manual (NCM). There are proposed shared surfaces throughout the development to help highlight same, the integration of cyclist & pedestrians onto the road, Figure 6.

A total of 248 bicycle parking spaces will be provided throughout the development located near the apartment blocks, houses and creche to help promote cycling. All bicycle stores are abutting footpaths or roads for accessibility.



Figure 6-Section of shared surface for pedestrian, cyclist and motorist



Pedestrians can gain access to all areas of the proposed development. They can gain access through R381 and Lakeview Road by way of 2m wide footpaths. The site is served by 2m wide footpaths throughout the development and continuously served with controlled and uncontrolled crossings. This will result in a continuous pedestrian route from all locations within the proposed development and to the other local developments.

In accordance with section 4.3.5 of DMURS, which refers to the NCM, this proposed development promotes cycling as a sustainable form of transport and seek to rebalance design priorities to promote a safer and more comfortable environment for cyclists. To achieve these goals, the NCM recognises the importance of slowing vehicular traffic within cities, villages, and the design advocates many of the measures contained within this manual, such as narrow vehicular carriageways and tighter corner radii.

Figure 4.52 from the NCM (Figure 7 below), provides an overview of the integration and segregation of cycle traffic within the carriageway based on vehicle speeds and traffic volumes. On lightly-trafficed/low speed streets, as proposed on this develoment, deisgners are generally directed to create shared streets where cyclists and motor vehicles share the carriageway, as shown by the green symbol in the figure below.

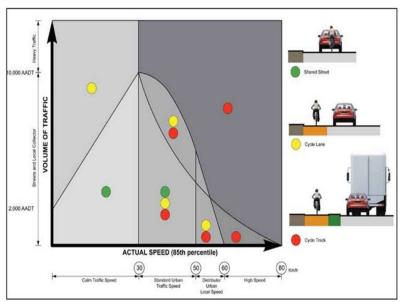


Figure 7-Extract from national Cycle Manual

Therefore, shared cycle and vehicle surface shall be provided within the proposed development in line with the guidelines. For commuter journeys, cycling can be considered as a feasible means of transport for those working within 8km of the development. Parkmore Business & Technology Park is located approximately 6km from the proposed development. This represents a 20 min cycle time for the average cyclist from the proposed estate.



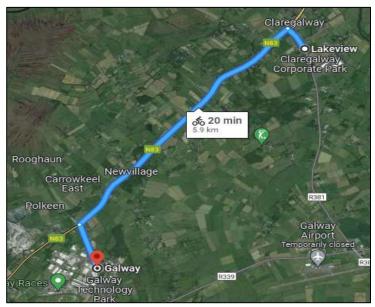


Figure 8-Cycle time from Development to Parkmore Business & Technology Park

1.1.3 Design Principle 3

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

Vertical deflections or raised crossings areas have been positioned throughout the proposed development at specific considered locations to promote lower speed limits in addition to providing suitable crossing points for pedestrians. As identified in Section 4.3.2 of DMURS, "crossings are 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 raised crossings shall provide the pedestrian with a sense of priority over vehicular movements at these interfaces, reference Drawing no.11171-2003 for details. While footways adjacent to the roads have been provided through the development, a further independent network of footways is included through the open spaces away from vehicular routes as illustrated on Architectural drawings and Landscaping drawing.

The pedestrian crossings located throughout the development are strategically positioned along key travel desire lines with the crossings having a minimum width of 2.0 m wide in accordance with DMURS guidelines. Pedestrian footways adjacent to the carriageways are minimum 2.0m wide with the footway meandering through the open spaces. Road widths throughout the development are predominantly 6.0m wide in accordance with the guidance in DMURS (2019) section 4.4.1. Refer to Drawing 11171-2003 which illustrates the proposed crossing location throughout the site.





Figure 9-Example of pedestrian crossings within Development

DMURS suggests that measures should be considered that reduce the dominance of the vehicle in favour of pedestrian and cyclists having dominance within a street. The internal layout of the proposed development incorporates a number of design features such as distinctive surface materials and colours which will establish a sense of place while increasing the overall safety of providing a shared surfacing for all road users. The inclusion of a shared paved vehicular and an abundance of planting/vegetation will also encourage lower vehicle speeds throughout the development and give the pedestrian a sense of priority as shown in the context of the site in Figures 10-12 below which demonstrates the quality of the pedestrian environment.

Strategically placed planting is known to have a positive effect on drivers to help reduce speeds through residential areas and this philosophy has been adopted during the detailed landscaping design.



Figure 10-Example of raised pedestrian crossings





Figure 11-Example of street surfaces

1.1.4 Design Principle 4

Greater communication and cooperation between design professionals through the promotion of a plan led, multidisciplinary approach to design.

The design of the proposed housing development has been carried out taking into account considerations from many disciplines including Town Planning, Architecture, Landscape Architecture, Engineering, and the Environment specialists.

The design team have progressed through several iterations of the layout in line with comments received from each discipline while also taking into consideration comments received from Galway County Council to arrive at a solution which meets the guidance outlined in the DMURS.

Discussions were held with Galway County Council during preplanning meetings and feedback received during the meetings was brought through to subsequent revisions of the site layout. The design team has strived to work in a collaborative manner to culminate in proposals that ultimately reflect a positive design which both satisfies the Developers objectives and meets the Council's requirements.

The resulting layout provides a development of high standard which incorporates spatial requirements and considers relevant plans and policies.



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