

Castlemartyr

Universal Design Statement

Proposed Residential Development at
Gortnahomna More (Townland), Castlemartyr, Co. Cork



Table of contents

1.0	Introduction	3
2.0	Summary of Proposed Development	4
3.0	The 7 Principles of Universal Design	8
	3.1 Equitable Use	8
	3.2 Flexibility in Use	9
	3.3 Simple and Intuitive Use	9
	3.4 Perceptible Information	10
	3.5 Tolerance for Error	11
	3.6 Low Physical Effort	11
	3.7 Size and Space Approach and Use	12
4.0	Conclusion	13

1.0 Introduction

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability. This includes public places in the built environment such as buildings, streets or spaces that the public have access to; products and services provided in those places; and systems that are available including information and communications technology (ICT).

(Disability Act, 2005)

Deady Gahan Architects have been appointed by Marshall Yards Development Company Ltd. to produce this Statement of Compliance with Universal Design to accompany the Large Scale Residential Development (LRD) planning application to Cork County Council for the proposed development of 150 no. residential units and associated site works at Gortnahomna More (Townland), Castlemartyr, Co. Cork.

There is also a childcare facility in the form of a 68-child crèche situated along the primary local street of the site. It has been placed adjacent this primary local street to allow for convenient accessibility to the N25 and the wider community.

2.0 Summary of Proposed Development

The proposed development has been designed to provide high-quality houses that will contribute positively to Castlemartyr and deliver much needed housing to Cork. The proposed residential development is located in Castlemartyr, which is east of Cork City. The subject site is situated approximately 31 kilometres east of Cork City Centre.

The housing mix will focus on providing affordable homes for both individuals and families alike and it includes 150 no. residential units comprising:

- 04 No. 2 bed / 3-person bungalows
- 56 No. 2 bed / 3-person townhouses
- 35 No. 3 bed / 4-person townhouses
- 08 No. 3 bed / 5-person townhouses
- 01 No. 4 bed / 7-person townhouse
- 39 No. 3 bed / 5-person semi-detached units
- 07 No. 4 bed / 7-person semi-detached units

The proposed residential scheme of 150 units has a density of 37.5 units/HA considered on a net developable area of 4.0 Ha. There is also a childcare facility in the form of a 68-child crèche situated along the primary local street of the site. It has been placed adjacent this primary local street to allow for convenient accessibility to the N25 and the wider community.

Connectivity, legibility and permeability are some of the main key themes of the scheme and develops from the wider surrounding area to the local environment. Permeability and connections between the variety of public open spaces within the site and potential connections to the surrounding housing schemes will be incorporated throughout the site. Existing trees and hedgerows both within the scheme and along the boundaries will be kept and integrated into the landscaping concept where possible.

In the local context, the provision for connections from the proposed development to Castlemartyr village centre will foster a sense of identity and community for the area. The primary local street runs from the N25, through the northern 'existing residential zoned lands' and into the development. The internal connections within the proposed development will provide easy access from the dwellings to the proposed amenities and are a crucial element in providing passive surveillance and promote active neighbourhoods. As the proposed scheme is designed to create permeable connections with the surrounding context, a range of pedestrian routes and potential connections have been incorporated into the layout connecting the proposed site to the neighbouring lands to the north and west.

The existing topography of the site is steeply sloped in some locations, particularly in the southern section of the site, with a level difference of 10 metres from south to north. The proposed buildings area arranged in line with the existing contours to minimise the visual impact on the surrounding environment and to reduce the cut and fill and the movement of ground on site.

To ensure the visual integration of the site, the proposed development will promote the protection and enhancement of natural features on site, including trees and hedgerows. These features are integrated within the development to emboss the identity of the proposal. Particular attention was placed in the design of high quality public open spaces throughout the site to create a strong and well connected network of usable and enjoyable green areas, pedestrian paths, play areas. These features will enhance/contribute in creating a sense of place.

The trees and hedgerows within the site have been incorporated into the public realm and along boundaries to create visual and physical connections between the dwellings and act as way points on the site. Large open spaces are located in various locations around the site and act as node points as you progress through the development. These open spaces are carefully positioned in order to take full advantage of the sites natural features and to expand upon the existing smaller public open spaces within the scheme. There are also some green areas and a pocket parks along important boundaries to address the existing trees and hedgerows.

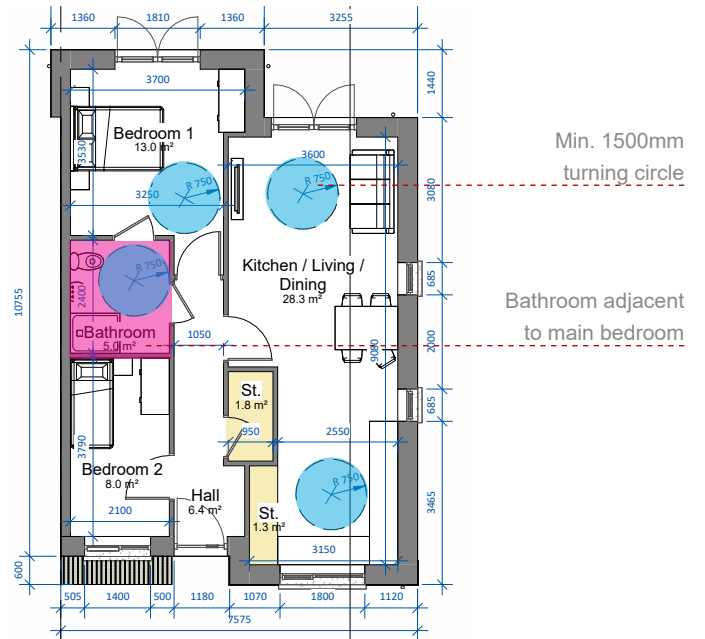
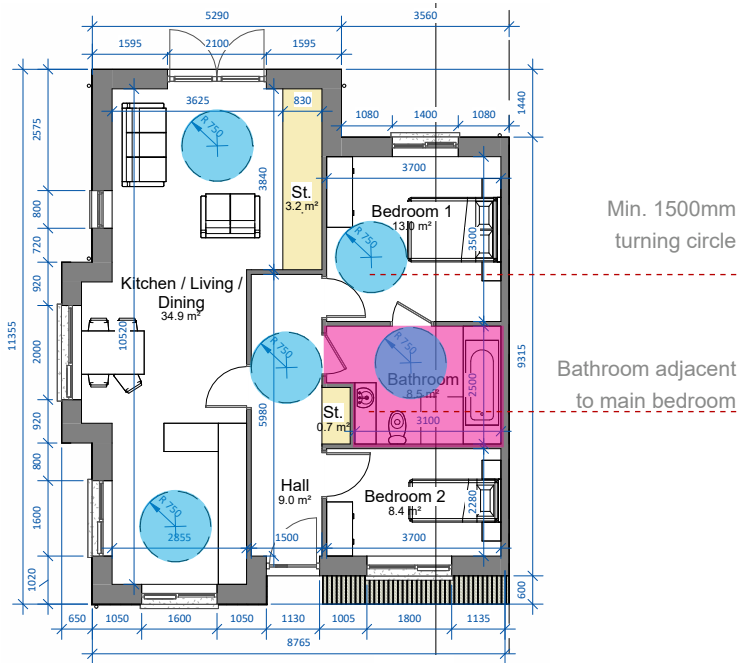
All the open spaces will be enhanced by the creation of active and architecturally appropriate urban frontages, designed having particular regard to the site context and the topographical nature of the site. The proposed dwellings are also orientated to overlook the open spaces, provide opportunities for passive surveillance of these areas and create strong edges within the scheme. The open spaces vary with a mix of soft and hard landscaping to further enhance the quality of life in the area. Distinct corner units with individual features address the main corners along the main streets and on the open spaces to provide distinctiveness to the site. The variety and quality of the proposed open spaces support active neighbourhoods within the site as well as promoting connections and integration with the adjacent new and proposed settlements of Castlemartyr.

04 no. Bungalow units have been located to form a small plaza area in the north western section of the scheme in order to satisfy the Universal Design Guidelines for Homes in Ireland. These units have been designed to cater for a range of end users of any age, size, ability or disability. These units have been designed to allow for flexibility and ease of adaptability to meet peoples changing needs over time in a cost effective and sustainable way. All of these units are located in an accessible area with level access and are fully Universal Design compliant. The location of the units to the west of the site allow for ease of access and approach, while being integrated within the community in a smaller section of the site to identify the units easily.



Proposed Bungalow Units

Bungalow Layout with U.D. elements incorporated



3.0 The 7 Principles of Universal Design

Care has been taken in the design of the proposed development to address each Principle of Universal Design. Each Principle has been addressed below and references the Technical Guidance Documents Part M regarding Access and Use.

3.1 Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b. Avoid segregating or stigmatizing any users.
- 1c. Provisions for privacy, security, and safety should be equally available to all users.
- 1d. Make the design appealing to all users.

DESIGN APPROACH

- The same means of access to buildings within the scheme is provided around the development where possible.
- All dwellings are accessed via the ground floor and are designed to provide Part M compliant access via front door for visitors.
- The majority of dwelling houses are provided with on curtilage car parking located in close proximity to the front door.
- All the bungalow units are designed to provide Part M compliant access and have the car parking located nearby.
- The majority of the streets and footpaths are designed in accordance with TGD Part M: Min 1:21 gradient pathways with tactile and visual aids at street crossing and seating and rest areas which assist with passive security.
- External amenity spaces have been designed in order to appeal to all users and in accordance with TGD Part M.
- The crèche is located to the north of the site and it is situated along the primary local street of the scheme. It has been placed adjacent to this to allow for convenient accessibility for the development and the wider community.

3.2 Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a. Provide choice in methods of use.
- 2b. Accommodate right- or left-handed access and use.
- 2c. Facilitate the user's accuracy and precision.
- 2d. Provide adaptability to the user's pace.

DESIGN APPROACH

- The proposed development provides for a wide variety of house types including: 3/4 bed semi-detached units, 2/3/4 bed townhouse units and 2 bed bungalow units.
- Each of these unit types are compliant with the Building Regulations, in particular TGD Part M Access and Use and TGD Part D Materials and Workmanship.
- Houses have been designed to provide for adaptability as resident requirements change over time. Provisions includes for:
 - Level access or gently sloping (max 1:21) is provided from car parking space to front door
 - The majority of living rooms are located at entrance level
 - Two storey houses are designed to allow for horizontal and vertical extension for the provision of additional space if so required
 - Internal spatial design is such as to provide adequate space for wheelchair turning and all units have an accessible bathroom.

3.3 Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a. Eliminate unnecessary complexity.
- 3b. Be consistent with user expectations and intuition.
- 3c. Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- 3e. Provide effective prompting and feedback during and after task completion.

- Pedestrian and cycle routes throughout the development provide direct connectivity between destination points on desire lines. Particularly important are the connections of this internal network with the pedestrian paths on the N25.
- The majority of pedestrian and cycle routes are provided with a gradient of less than 1:20. All streets and footpaths are DMURS compliant.
- A clear street hierarchy provides a consistent appreciation of place and way finding.
- Node houses that well address the corners are situated at prominent positions to provide landmark points to assist way finding.
- The entrance doors are easily located with familiar features such as entrance canopies and pop-out front doors.
- Each unit is designed in such a way as to eliminate unnecessary complexity. Typical layouts are designed in order to promote easy access to each unit and intuitive navigation within.
- Each unit has defined entrances to provide clearly established ingress points.
- The crèche is located to the north along the primary local street to provide easy access from both the entire development and from adjoining developments. The creche has adequate drop off space, with allocated parking and disabled parking spaces located near the entrance door to enhance accessibility.

3.4 Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- 4c. Maximize "legibility" of essential information.
- 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

- A selection of different coloured surfaces and sections of raised tables have been introduced to the design to clearly identify hazards such as street crossing, the variations will be visual and tactile.
- Variation in materials, architectural expressions and colours assist in providing legibility between the different character areas and the neighbourhoods.
- Clear signage will assist in way finding and be provided in compliance with TGD Part M.

3.5 Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b. Provide warnings of hazards and errors.
- 5c. Provide fail safe features.
- 5d. Discourage unconscious action in tasks that require vigilance.

- Different coloured surfaces and sections of raised tables have been introduced to clearly identify hazards such as street crossing and level changes.
- The streets have been designed in accordance with DMURs to aid in traffic calming and the use of Shared Surfaces increase pedestrian priority within the development.
- Landscaping is used to minimise risk at embankments.

3.6 Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- 6a. Allow user to maintain a neutral body position.
- 6b. Use reasonable operating forces.
- 6c. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.

- Pedestrian routes have been designed to minimise gradient and mitigate the requirement of extensive excavation/change of levels.
- All pedestrian routes are provided with a gradient of less than 1:20 to ease accessibility and to reduce fatigue.
- The majority of units have parking provided within its curtilage or in close proximity to allow for easy access to the unit.

3.7 Size and Space Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

- Each unit has been designed in accordance with TGD Part M and allow for easy access and use both internally and externally.
- All open spaces will be provided with public seating in order to appease all users.

4.0 Conclusion

The proposed development has been designed so that it can be accessed, understood and used by the widest possible extent of people, regardless of their age, size, and disability. This includes buildings, houses, streets, footpaths, pedestrian routes and open spaces.