



Universal Design Report

In respect of a:

Strategic Housing Development



BARNHILL GARDEN VILLAGE

Residential Development

Application Site:

Lands at Barnhill, County Dublin

Applicant:

Alanna Homes Ltd & Alcove Ireland Four Ltd

June 2022

Job Ref: 1408/4



1.0 INTRODUCTION

This Universal Design Report has been prepared in support of a strategic housing development proposed by Alanna Homes Ltd. and Alcove Ireland Four Ltd., (the Applicants) for a new residential development, on lands at Barnhill, Co. Dublin.

This Strategic Housing Development (hereafter 'SHD') planning application is for planning permission for a residential development of 1,243 units, a creche and village retail centre.

The 2020 Sustainable Urban Housing: Design Standards for New Apartments – Guidelines for Planning Authorities (hereafter referred to as the “*Apartment Guidelines*”) contain a requirement to include details on the management and maintenance of apartment schemes. This is set out in Sections 6.11 to 6.14 under “*Operation & Management of Apartment Developments*”.

Specifically, Section 6.13. of the Apartment Guidelines requires that applications for apartment developments shall:

“include a building lifecycle report which in turn includes an assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents”.

This Universal Design Report document sets out to address the requirements of Section 6.13 of the Apartment Guidelines. The report is broken into two sections as follows:

- Section A:** An assessment of long-term running and maintenance costs as they would apply on a per residential unit basis at the time of application
- Section B:** Measures specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents

2.0 SCHEME DESIGN

Due to the prominent location of the site addressing Hansfield Railway Station, at an important node in the local environs, the proposed development has been designed to become a focal point in the local neighbourhood, opening up this, otherwise rural/ agricultural to the public through the creation of a new residential quarter. The design and positioning of the proposed buildings create a strong urban form providing a legible development with village centre, school, public open space and associated amenities. The proposed development creates a high-quality residential development with a strong sense of place and community, and accordingly is designed with universal access as a core design strategy.



3.0 APPLICATION OF PART M OF THE SECOND SCHEDULE OF THE BUILDING REGULATIONS FOR THE PROPOSED WORKS.

The proposed development scheme has been designed to comply with the requirements of Part M of the Building Regulations 2010, as follows:

1. Approximately 6.7% of the total amount of car parking spaces provided to Apartment Blocks are designated as accessible car parking bays. These bays are designed to meet the guidance in Section 1.1.5 of TGD M 2010 and exceed the minimum requirement of 5%;
2. Various accessible internal landscaped areas and home zones are provided throughout the site and are designed to meet the guidance in Section 1.1 of TGD M 2010;
3. Where pedestrian crossings are proposed throughout the site they shall meet the guidance in Section 1.1.4 of TGD M 2010;
4. Adequate access routes are provided from all designated car parking facilities to the main entrances of the apartment blocks serving the vertical circulation cores of each. The routes are designed in accordance with Section 1.1.3 of TGD M 2010, with 1,800mm by 1,800mm level landings provided at all accessible entrances;
5. All common area entrances to Apartment Blocks 1 & 2 are designed in accordance with the guidance in Section 1.2 and Table 2 of TGD M 2010;
6. Internal corridors, floor finishes and doors within communal areas of Block 1 & 2 are designed in accordance with Section 1.3 of TGD M 2010 with 1.80M turning areas provided at adequate intervals throughout each building's common area;
7. At least 1 No. passenger lift and 1 No stairs suitable for ambulant disabled people is provided in a vertical circulation core of each Apartment Block serving all floors within these buildings. The lifts are designed in accordance with the guidance in Section 1.3.4.2 of TGD M 2010 and stairs in accordance with Section 1.3.4.3 of TGD M 2010. Only 1 No. Apartment Unit located at first floor level in Block 1: No. 113 is accessed via stairs only however the design complies with Section 1.3.4.3 of TGDM 2010.
8. All communal facilities within or surrounding Apartment Blocks 1 & 2 are provisioned as accessible to meet the needs of all users in accordance with the guidance in TGD M 2010;
9. Apartment Blocks 1 & 2 and dwellings are designed to meet the guidance in Section 3 of TGD M 2010 (including 1.20Mx120M level landings at apartment entrances and 800mm wide doors at entrances to apartments);
10. An accessible WC, suitable for visitors, is provided at entry level within each apartment and dwellings. Each has been designed in accordance with Section 3.4 of TGD M 2010, providing adequate space for sideways transfer from a wheelchair.

4.0 UNIVERSAL DESIGN GUIDELINES FOR HOMES IN IRELAND

The following illustrations have been extracted from the Universal Design Guidelines for Homes in Ireland:

NDA Publication and set out the principal UD design quality features that have been adopted in our design and layout of proposed dwellings and apartment units throughout the scheme.

4.1 The Need for Universally Designed Homes

“UD Home design builds upon social and technological advancements in Ireland and internationally. The consultation process with stakeholders that informs these guidelines highlighted a need for better quality housing design for everyone in Ireland for the future”.

4.2 Informing Future National Policy and Practice

“The provision of UD Homes guidance is to inform the cultural change needed in the planning and delivery of quality homes and sustainable communities. The Guidelines therefore include the wider neighbourhood context of the home location, recognising the importance of social interaction, community and local services.”

4.3 UD Home Design Quality Features

Section 1 – Home Location and Approach

- Homes integrated into the neighbourhood, with clear, safe, routes from bike, car or public transport to the entrance of the home.
- Space designated near entrances for accessible car-parking and a drop-off space for an adult carrying a child, carrying shopping, someone on crutches, a person in a wheelchair, an older person or a person with visual difficulties.

Section 2 – Entering and Moving About the Home

- Level thresholds at doorways for simple, easy movement and ease of cleaning and maintenance.
- Wide front door and internal doors for ease of movement for all.
- More spacious entrances and hallways for multipurpose uses and ease of movement within the home.

Section 3 – Spaces for Living

- Flexible or open-plan layouts with some ‘soft-spots’ like internal walls that can easily be removed for cost effective adaptation as the family expands or contracts.
- Reinforced walls and ceilings as ‘hard-spots’ around the toilet, shower and bath to support the ease of installation of handrail and drop down supports as required.
- Enough space in a bedroom for easy manoeuvring and access to an adjacent bathroom.
- Flexible space in living rooms for social interaction.



- Enough space for a kitchen to adapt easily for different layouts
- A toilet at entrance floor level that can adapt to a shower room.
- Enough space for integrating space for laundry, storage and refuse.

Section 4 – Elements and Systems

- Sockets, light switches and window sills at levels that are within easy reach and view for everyone.
- Details like lever door handles and taps that are easier to use for everyone, especially young children.
- Easy control and use of systems and the capability to integrate smart entertainment, energy efficiency and security systems or assistive technologies.
- Choice of materials and colour, with fittings and finishes that are easy to use, maintain and are attractively and smartly designed.
- Optimised use of natural light, ventilation and energy efficiency.

5.0 BUILDING FOR EVERYONE: UNIVERSAL DESIGN APPROACH

5.1 Access and Approach

All dwellings are accessed via a Part M compliant route from internal plot and car parking space to the front door. Apartments located on other than ground floor are accessed via a lift and Part M compliant stairs. Changes of levels within a storey are avoided.

The proposed scheme provide for pedestrian environment which is safe for all to use, easy to understand and consistent to include:

- Dished kerbs on opposite sides of the road at crossing points.
- Adequate parking facilities and designated parking spaces.
- Disabled compliant footpaths and ramps.
- Entrance lobbies sized to allow for wheelchair movement.
- Floor finishes that are firm and slip resistant to be selected.
- All corridors within the apartment blocks designed to accommodate wheelchair users and ease of movement.

5.2 Flexibility

There are a variety of different house types and apartment types to cater for the needs of a wide range of end users. All efforts have been made to cater for flexibility for internal alterations and adaptability (including attic conversion option and rear annex option). All dwellings will be fully compliant with part M. All proposed residential units will be energy-efficient and equipped for challenges anticipated from a changing climate.



5.3 Simple and Intuitive Concept

Overall site layout is defined with clear and distinct routes. Home zones interconnect by means of internal pathways. Internally, the dwellings and apartments use traditional layouts making navigation intuitive. Units have intuitively and traditionally arranged circulation, interconnecting bedrooms, living space and washrooms. The public spaces will be well lit and all ramped and stepped routes in the scheme will be clearly visible or well signed with proper light to steps. Tactile surfaces will be provided to pathways, stairs and platforms to assist visually impaired.

5.4 Perceptible Information

Where signage is provided, they will be in compliance with TGD Part M and be as clear, short and concise as practicable with a combination of capital and lower letters. Signage shall not create a hazard within a circulation route in accordance with BS 8300.

Tactile paving will also be used in the detail design of the landscaping to identify crossings and other hazards. Material selection for the public areas of apartment buildings will also ensure that visual contrasts are provided as required by Part M.

5.5 Tolerance and Circulation

The design aims to minimise hazards and caters for a wide range of uses and abilities. Tactile paving with dropped kerbs will be used to warn users of road crossings and other hazards. Raised shared surface areas, home zones, tabletops, curvature to roads and traffic speed reduction measures, all provide for a low speed traffic environment, to increase safety for all.

5.6 Physical Effort

In the interest of providing the scheme with low physical effort, the scheme has been designed to be sympathetic with the existing topography of the site. Easy and level access to all communal areas for disabled people will be provided. The residential units propose open plan arrangements to kitchen and living area to facilitate easier circulation. Access to communal facilities will be direct and unobstructed, any storage facilities will suit people with different reach range and people with mobility difficulties.

5.7 Building Management

Good management will be provided for effective functioning of Apartment Blocks under a management company structure.

- Evacuation plans will be set by the management of the estate.
- Procedures will be in place for undertaking scheduled maintenance and repairs.
- External access routes will be kept clear of overhanging vegetation, fallen leaves and litter.
- External lighting will be well maintained at all times.
- All equipment and machinery will be tested and serviced regularly.
- On-going review of policies.