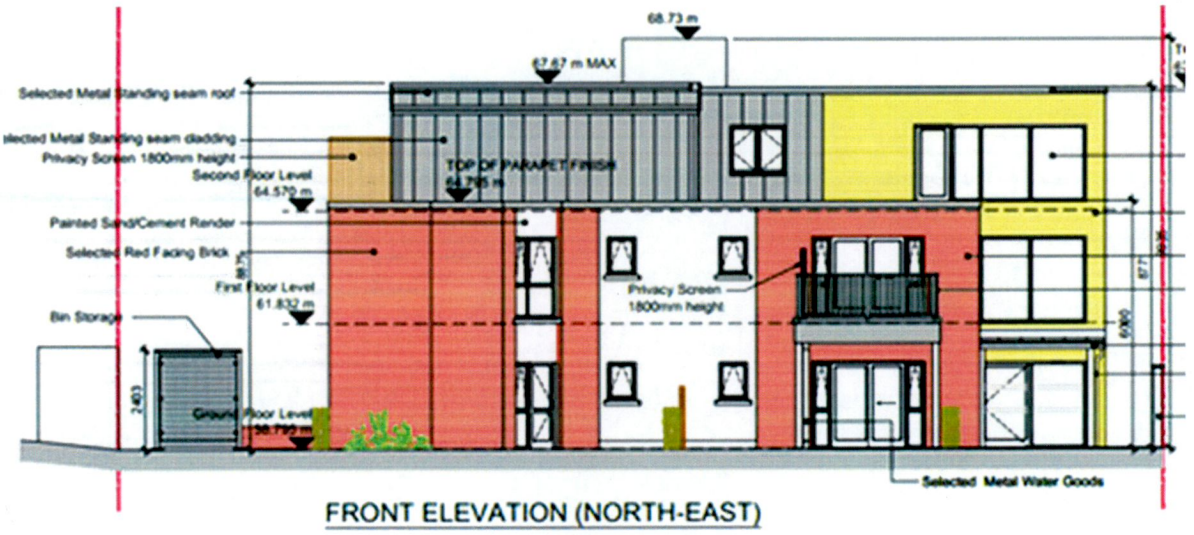
walsh associates
ARCHITECTS & PROJECT MANAGERS

Building Lifecycle Report

Proposed Apartment Development @
Old Nangor Road, Clondalkin, Dublin 22

For

Dublin Simon Community.



FRONT ELEVATION (NORTH-EAST)
Scale 1:100

Rev 0

October 2022

Contents

Disclaimer

Without Prejudice to the generality of this Building Lifecycle report, provides information which is indicative and subject to change following a review when a more detailed specification of scope of works becomes available and it is intended that this study would form the basis of pre-application discussions with the planning department and other relevant authorities

0.0 Introduction

The 2018 adopted *Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (December 2020)* provide policy guidance on the operation and management of apartment developments, to include a statement of the aim of certainty regarding their long-term management and maintenance structures.
This certainty is to be provided via legal and financial arrangements supported by effective and appropriately resourced maintenance and operational regimes.
The Guidelines state that consideration is to be given matters of the long-term running costs and the manner of compliance of the proposal which should now be considered as part of any assessment of a proposed apartment development to achieve this policy objective, planning applications for apartment developments now need to include a *Building Lifecycle Report* with the Multi- Unit Developments Act, 2011; these are to include 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 specific measures have been considered to effectively manage and reduce costs for the benefit of residents.

Section 6.13 of the Apartment Guidelines 2018 requires that apartment applications 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"
"demonstrate what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents."

This Building Life Cycle Report document sets out to address the requirements of Section 6.13 of Apartment Guidelines 2020, and is divided into 2 sections:

Section 01
Assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application.

Section 02
Demonstrate what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.

0.1 Proposed Development

The proposed apartment development will be comprised of 10 No. apartment units designed to the highest standards as Social Housing properties. These are arranged over 3 Storeys comprising of 1-bedroom units. All apartments are level access via ground floor or a lift and are therefore can be accessed by disabled people. Total gross floor area of the apartment block equates to 696.3sqm.
All units will have a heat pumps installed, split units with the external units in the rear gardens or at the balconies.
Externally the development includes a detached recycling/ refuse area of 7.4 sqm and a bicycle parking including minimum 10no. rack spaces for residents & visitors.
7 car parking spaces are provided externally to the front of the building, with the EV ready infrastructure to be provided to these. There is 1no. Disabled space provided at Ground level externally.
External communal amenity spaces at ground level to the front of the building of 188.4 sqm.

SECTION 1:

AN ASSESSMENT OF LONG-TERM RUNNING AND MAINTENANCE COSTS AS THEY WOULD APPLY ON A PER RESIDENTIAL UNIT BASIS AT THE TIME OF APPLICATION.

1.1 Long-Term Running Costs

The aim of the developer (Dublin Simon Community) is to manage and minimise potential unnecessarily high running costs on a per residential unit basis.

1.2 Property Management of the Common Areas of the development

Common Areas of the development will be maintained by The Dublin Simon Community 'Asset and Facilities Management Department'.

The property portfolio of Dublin Simon Community is managed by the Asset and Facilities Management Department.
Independent Living Units are provided and maintained in compliance with the standards required by the Housing (Standards for Rented Houses) Regulations 2017 (S.I. 17/2017) and amended in the Housing (Standards for Rented Houses) Regulations 2019 (S.I. 137/2019).
The primary responsibilities of the Asset and Facilities Management Department include.

- Implementing an Asset Management Strategy covering all aspects of the management of the built stock.
- Ensuring building standards are maintained through continual auditing of all stock, identifying necessary corrective actions and implementing the required solutions.
- Delivering responsive repair and maintenance services to all property
- Maximising all opportunities to Implement Environmental Sustainability into new and existing housing stock.

The maintenance and management of all building stock is included in the annual budget provision and reviewed bi-annually.
Service charges are included in the rental income from the properties.
All Dublin Simon Community property is financially sustainable
Lifecycle costs and sinking fund provision in place.

For general maintenance & repairs, Dublin Simon Community provide property services to the portfolio through the use of in-house maintenance operatives and appointed external contractors where required.

Waste management is provided by external providers and the cost is included in the income from the property. All tenants are responsible for the correct use of the waste management services and facilities.

The property portfolio of Dublin Simon Community is managed by means of a continual rolling strategy, property strategy and financial management plan. All buildings are audited and included in the organisational asset management database. Financial provision is ring-fenced for the lifecycle costs of each property and is reviewed and updated annually. This ensures continued compliance with the required provisions of the Multi Unit Development Act 2011.

As an approved Housing Body, providing social housing, the activities of the delivery and management of property is regulated by the AHBRA (Approved Housing Body Regulatory Authority) and is audited by AHBRA annually. This ensures compliance with all regulatory requirements.

SECTION 2

MEASURES SPECIFICALLY CONSIDERED BY THE PROPOSER TO EFFECTIVELY MANAGE AND REDUCE COSTS FOR THE BENEFIT OF RESIDENTS.

The following are an illustration of the energy measures that are planned for the units to assist in reducing costs for the occupants.

2.1 Building Design

Measure	Description	Benefit
Daylighting to apartments	A daylight and sunlight was based on the BRE 'Site Layout Planning for Daylight and Sunlight' Design Guide (2nd edition), 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2022)'	Reduces the requirement, and therefore expense, for continuous artificial lighting.
External Lighting	The proposed lighting scheme within the development consists of LED public lighting poles mounted fittings. Each light fitting shall be controlled via an individual Photoelectric Control Unit (PECU). The operation of the lighting shall be on a dusk-dawn profile. Refer to Douglas Carroll's proposals.	Lighting will be designed to achieve the required standards, provide a safe environment for pedestrians, cyclists, and vehicular traffic, provide surveillance and limit the impact of the artificial lighting on surrounding existing flora and fauna. Having PECU allows for the optimum operation of lighting which minimizes costs

2.2 Landscape

Paving and Decking Materials	Sustainable, robust materials, with high slip resistance to be used for paving. Durable and hardwearing equipment (e.g. fencing, enclosures etc.) to be used throughout.	Robust materials and elements reduce the frequency of required repair and maintenance.
Soft Landscape	Planting proposals have been formulated to complement the local setting as well as being fit for purpose in respect of private and public realm uses and spatial constraints imposed by garden sizes and the width of planting strips. Native tree species have been selected for planting across	Reduction in the frequency of required soft landscape maintenance

	open spaces while non-native species have also been selected where spatial constraints are a factor. Refer to AIT proposals,	
Site Layout	High quality landscaping both hard surface (for the car parking and pavements) and soft landscaping with planting and trees. The landscaping will be fully compliant with the requirements for Part M / K of the Technical Guidance Documents and will provide level access and crossings for wheelchair users and pedestrians with limited mobility. Designated car parking including accessible & visitor car parking reduces the travel distances for visitors with reduced mobility.	Plenty of room for cyclists and pedestrians along with car spaces provides a good balance between pedestrians and car users. Wheelchair user-friendly.
Maintenance & Management	Maintenance and management requirements have been considered through the design process. Complex planting arrangements have been omitted thus avoiding onerous maintenance and management requirements	Estate maintenance costs reduced
Balconies & openable windows	Use of balconies & openable windows allow individuals to clean windows themselves	Reduces the cost and reliance on 3rd party contractors for cleaning & maintenance.
Sustainability & Biodiversity	Sustainability aspects of the proposed development include the use of native trees where possible across the site. Other species have been carefully selected for compatibility with the size of available spaces which is an important factor in long term management of the scheme. The overall objective is to enhance the biodiversity potential of the site in addition to providing seasonal interest and variety.	Enhanced sustainability of long-term estate management

2.3 Energy & Carbon Emissions

Measure	Description	Benefit
BER Certificates	A Building Energy Rating (BER) certificate will be provided for each dwelling in the proposed development when complete which will provide detail of the energy performance of the apartments. A BER is calculated through energy use for space and hot water heating, ventilation, and lighting and occupancy. It is proposed to target an NZEB rating for the apartments this will equate to the following emissions: • 10 kWh/m2/annum to energy use for domestic hot water heating, space heating/ cooling; or • 4 kWh/m2/annum of electrical energy; or • A combination of these which would have equivalent effect.	A BER rating is a reduction in energy consumption and running costs.

Fabric Energy Efficiency.	The U-values being investigated will be better than the minimum requirements set out by the current regulatory requirements of the Technical Guidance Documents Part L, 'Conservation of Fuel and Energy Buildings other than Dwellings'. Thermal bridging at junctions between construction elements and at other locations will be minimised in accordance Paragraphs 1.2.4.2 and 1.2.4.3 within the Technical Guidance Documents Part L and the TGD Acceptable Construction Details.	Lower U-values and improved air tightness is being considered to help minimise heat losses through the building fabric, lower energy consumption and thus minimise carbon emissions to the environment.

2.4 Low Energy Technologies Considered.

Measure	Description	Benefit
Air to water heat pump	An air to water heat pump system is proposed for heating and hot water of all units. These will be a split unit with internal heat pump + external condenser fan for each dwelling.	The heat pumps are cheaper to run than direct electric heating or other traditional methods such as oil or gas boilers. Reduce energy bills and improve the energy classification of a building. Very low noise emissions and reduced heating time. Minimal maintenance due to efficient design.
Low energy LED Lighting	Shall be designed and specified in accordance with the BER requirements in each unit and in the landlord areas in accordance with Part L.	Lower consumption of energy and therefore lower carbon emissions.
Centralized ventilation system or similar. (Positive input Ventilation)	Centralized ventilation system will be considered to provide ventilation with low energy usage.	Centralized ventilation system provides continuous ventilation with low energy usage. Central extract operates at a low trickle speed constantly and ramp up in response to an increase in humidity from wet areas. Demand control ventilation incorporates automated wall vents which open/close dependent on internal humidity conditions.
ECAR Charging Points	Ducting shall be provided from a local landlord distribution board to designated E-car charging car park spaces. This will enable the management company the option to install E-car charging points within the carpark to cater for E-car demand of the residence. This system operates on a single charge point access card. A full re charge can take from one to eight hours using a standard charge point.	Providing the option of E-car charging points will allow occupants to avail of the ever-improving efficient electric car technologies.

2.5 Materials & Materials Specification.

The practical implementation of the Design and Material principles has informed design of building facades, internal layouts and detailing of the proposed apartment/duplex buildings.

The proposed envelope of the building is a mix of brick and durable render finish, with high performance triple-glazed alu-clad windows and doors & thermally broken aluminium. These materials are considered durable and
would not require regular replacement or maintenance.
It is expected that a sinking fund allowance will account for future major maintenance and upgrade costs.

The Apartment Building is designed in accordance with the Building Regulations, in particular Part D 'Materials and Workmanship', which includes all elements of the construction. The Design Principles and Specification are applied to both the apartment units and the common parts of the building and specific measures taken include:

Measure	**Description**	**Benefit**
Implementation of the Design and Material principles to the design of the proposed development.	Materials have been selected with a view to longevity, durability and low maintenance with Consideration given to Building Regulations and include reference to BS 7543:2015 'Guide to Durability of Buildings and Building elements, Products and Components'.	Longevity, durability and low maintenance of materials
Brickwork to the envelope.	Red /Brown brick & Yellow /Buff outer leaves.	Requires minimal maintenance and does not require regular replacement.
Portions of Rendered facade	Good quality self coloured render is the preferred option.	Maintenance free render system.
Installation of factory finished high quality alu-clad windows and apartment doors.	Powder coated finish Aluclad in general & Aluminium entrance doors to communal spaces	Requires minimal maintenance and does not require regular replacement.
Flat roofs	'SBS' warm Bitumen roof system	25 year warranty & minimum 50 year lifecycle on the SBS system.
Zinc cladding & roofing	Metal standing seam system	100 year minimum lifespan 50 year materials warranty 30 year installation & workmanship warranty.

2.6 Waste Management

Measure	**Description**	**Benefit**
Construction and demolition waste management plan.	The waste management plan will be prepared in conjunction with the successful contractor and will be developed in line with the Waste Management Act (1996), the Eastern & Midlands Regional Waste Management Plan (2015-2021) and the Department of Environment and National Construction and Demolition Waste Council policy statements. Excavated material from the site will be disposed off site to a licensed facility. Excavated topsoil will be retained in a stock pile for re-use in the landscaping of the site.	The report will demonstrate how the scheme has been Designed to comply with best practice.

Storage of non-recyclable waste and recyclable household Waste	Inclusion of a covered & locked bin storage area for the apartment building. Domestic waste management strategy: Grey and Green bin distinction. Competitive tender for waste management collection.	Easily accessible by all residents and minimizes potential littering of the scheme.

2.7 Human Health and Well Being

Measure	Description	Benefit
Natural Daylight	The design, separation distances and layout of the apartments have been optimised for the ingress of natural daylight/sunlight to the proposed dwellings to provide good levels of natural light.	Reduces reliance on artificial lighting thereby reducing costs.
Private open space	Provision of private open space	Facilitates interaction with outdoors, increasing health benefits.
Security	The scheme is designed to incorporate good passive surveillance. Secure bicycle storage areas. Secure external storages and bin stores.	Access to all residents to reduce the risk of crime, littering within the scheme and reduction of potential waste charges.

2.8 Transport and Accessibility

Measure	Description	Benefit
Access to Public Transport.	Old Nangor is a two-way carriageway with footpath either side no cycle lanes along the road. There are numerous public transport options close by, There is a regular Dublin bus route passing the site itself on the Old Nangor road (X55) as well as serviced bus stops in Clondalkin Village only minutes walk from the site (L54,W2,60,58,D3). Train station (Clondalkin Fonthill) is located within 3km.	The availability, proximity and ease of access to high quality public transport services contributes to reducing the reliance on the private motor vehicle for all journey types.

2.9 Management

Measure	Description	Benefit
Residents Manual	Once a tenant is allocated to an apartment, a homeowner pack will be provided which will include: - Homeowner manual – this will provide important information for the purchaser on details of their new property. It typically includes details of the property such as MPRN information in relation to connect with utilities and communication providers, contact details for all relevant suppliers and User Instructions for appliances and devices in the property. - A Residents Pack prepared which will typically provide information on contact details for the Managing agent, emergency contact information, transport links in the area and a clear set of rules and regulations. Also reference Section 1 above for DSC Facilities Management arrangements.	Residents are as informed as possible so that any issues can be addressed in a timely and efficient manner.

End.