**Building Life Cycle Report** 



SHD DEVELOPMENT AT KILNAHUE GOREY For GERARD GANNON PROPERTIES

March 2022

Connolly Architects **RIAI** 

#### INTRODUCTION

Sections 6.11 to 6.14 of the newly published *Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities* relates to the 'Operation and Management of Apartment Developments'.

Section 6.13 of the Apartment Guidelines 2020 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 Lifecycle Report sets out to address the requirements of Section 6.13 of Apartment Guidelines 2020.

#### DEVELOPMENT

The proposed development comprises 421 dwellings of which 133 are Detached, Semi-Detached and Terraced dwellings. The balance of the dwellings is within multi-user blocks comprising

60 Duplex Apartments all with own door access. 228 Apartments in 9 Blocks

The Apartments are designed into a range of Unit Types in One, Two- and Three-Bedroom configurations which will meet the needs of a range of owner / occupants

All of the Duplex Block Apartments and 58.6 % Of the Apartment Block Units will be dual aspect dwellings.

#### Contents

- **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.
- Section 2 Outline of measures considered by the proposer to effectively manage and reduce costs for the benefit of residents.

## **SECTION 1**

# 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 PROPERTY MANAGEMENT OF THE COMMON AREA OF THE DEVELOPMENT

The development will be directly managed by Gerard Gannon Properties or a property management company will be engaged to ensure that all property management functions are dealt with for the development and that the running and maintenance costs of the common areas of the development are kept within the agreed annual operational budget.

The property management company will enter into a contract directly with the owner's management company for the ongoing management of the built development. This contract will be for a minimum of three years and in the form prescribed by the PSRA.

The property management company will also have the following responsibilities for the apartments within the development once constructed:

- Formation of an owner's management company. The company will be a company limited by guarantee having no share capital. All future purchasers will be obliged to become members of the owner's management company.
- Preparation of annual service charge budget for the development common areas.
- Fair and equitable apportionment of the annual operational charges
- Engagement of independent legal representation on behalf of the owner's management company in keeping with the MUD act, including completion of the developer owner management company agreement and transfer of common areas.
- Transfer of documentation in line with schedule 3 of the MUD act.
- Estate management.
- Third party contractor's procurement and management.
- Owners management company reporting.
- Accounting services.
- Corporate services.
- Insurance management.
- After hours services.
- Staff administration.

#### 1.2 SERVICE CHARGE ANNUAL BUDGET

The property management company has several key responsibilities including the preparation of the service charge budget for the development for agreement with the owner's management company. The service charge budget will cover such items as cleaning, landscaping, refuse management, utility bills, insurance, maintenance, and security in accordance with the Multi User Development Act 2011.

The service charge budget will also include an allowance for a sinking fund and this allowance will be determined following the review of the building investment fund report prepared by / for the owner's management company. The building investment fund report, once adopted by the owner's management company, determines an adequate estimated annual cost provision requirement based on the needs of the development over a 30-year cycle period. The building investment fund report will identify those works which are necessary to maintain, repair and enhance the premises over the 30-year life cycle period, as required by the Multi User Development Act 2011.

In line with the requirements of the 2 Multi User Development Act 011 the members of the owner's management company will determine and agree each year at an AGM of the members the contribution to be made to the sinking fund, having regard to the building investment fund report produced.

# **SECTION 2**

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

#### 2.1 ENERGY USE AND CARBON EMISSIONS

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

Measure	Description	Benefit
BER Certificates	A BER certificate will be provided for each dwelling in the proposed development which will provide detail of the energy performance of the dwellings. It is proposed to target an A2/A3 rating for the apartments, equating to the following emissions: A2 - 25 to 50 kWh / $m^2$ /year with CO <sub>2</sub> emissions c. 10kg CO <sub>2</sub> / $m^2$ / year. A3 - 51 to 75 kWh / $m^2$ /year with CO <sub>2</sub> emissions c. 10kg CO <sub>2</sub> / $m^2$ / year.	Reduction in energy consumption and running costs.
Fabric Energy Efficiency	The U-values of the building fabric will be in line with the requirements set out in the regulatory requirements of TGD Part L. Thermal bridging at junctions between construction elements and at other locations will be minimised in accordance with TGD Part L.	Lower U-values and improved air tightness will be incorporated to minimise heat losses through the building fabric and lower the energy consumption.
Energy efficient labelled white goods	The white good package planned for provision in the apartments will be of a very high standard and have a high energy efficiency rating: Oven - A+ Fridge / freezer - A+ Dishwasher - AAA Washer / dryer - B	The provision of high rated appliances in turn reduces the amount of energy consumption.

External lighting	The proposed lighting scheme within the development consists of pole mounted fittings as indicated on drawings. Each light fitting shall be controlled with an individual photoelectric control unit. The
	operation of the lighting shall be on a dawn to dusk profile.

The site lighting has been designed to provide a safe environment for pedestrians, cyclist and moving vehicles, to deter anti-social behaviour and to limit the environmental impact of artificial lighting on existing flora and fauna in the area.

Individual photoelectric control units allow for the optimum operation of lighting, reducing energy consumption and costs.

### 2.1.1 LOW ENERGY TECHNOLOGY

The following low energy measures and technologies will be considered during the design development:

Air to Water Heating	Heat Pumps contribute to lower energy consumption and improved sustainability. These will be installed in All Houses and Duplex Apartments	The use of ATW will increase energy efficiency and lower operational costs.
Exhaust Air Heating	Exhaust Air Heat Pumps with ducted circulation will contribute to lower energy consumption and improved sustainability. These will be installed in All Apartments	The use of EAHP will increase energy efficiency and lower operational costs and remove need for externally mounted equipment
	Natural ventilation will be incorporated wherever possible.	Low noise impact for occupants and adjacent dwellings. Reduced energy consumption and maintenance of mechanical units.
Mechanical ventilation and heat recovery	Mechanical heat recovery ventilation will be provided where natural ventilation is not feasible.	Reduced energy consumption and lower operational costs.
Photovoltaic solar panels	Photovoltaic panels may be considered on south facing roofs.	Reduced energy consumption and lower operational costs.

Electric car charging points

In accordance with public policy ducting from landlord distribution board to designated electric car charging parking spaces will be provided.

This will provide the option of electric car charging points and allow occupants electric car ownership and use.

#### 2.2 BUILDINGS

The proposed Apartment and Duplex Buildings have been designed in compliance with the Building Regulations.

The following particular measures have been taken to enhance the Lifetime performance of the buildings:

Design Measures	Benefit
Daylighting to circulation areas	Reduced energy consumption through reduced requirement for artificial lighting.
Lighting to communal areas	Lighting to Communal / Circulation Areas within the Apartment Buildings will be powered by roof mounted photovoltaic panels where practicable
Natural ventilation to circulation areas	Reduced energy consumption through reduced requirement for mechanical ventilation,
	Reduced capital costs, maintenance costs and future replacement costs.
External paved and landscaped areas	Lower maintenance materials selected.
Communal circulation areas	The communal access areas are all naturally lit All of the Duplex units have own door access which will encourage occupants to carry out maintenance and redecoration and participate in the maintenance of the remainder of their property.

#### Material Specification Measures

Benefit

Due consideration is given to the requirements of the Building Regulations and to BS 7543: 2015 *Guide to Durability of Buildings and Building Elements,* which provide guidance on the durability, design life and predicted service life of buildings and their component parts.

Use of natural stonework facing to masonry and clay face brickwork for all communal buildings – Apartments and Duplex.	Reduced on-going maintenance requirement.
envelope.	Reduced on-going maintenance requirement.
Use of factory finished uPVC / alu-clad windows and doors and glass balconies.	Reduced on-going maintenance requirement.

Use of roof coverings with proven durability and performance.

Use of 'Green' flat roofs on eight of the Apartment Buildings	Reduced on-going maintenance requirement. Improved sustainability in stormwater management
Landscape Measure	Benefit
Use of robust, high-quality paving and decking materials, with high slip resistance.	Reduced on-going maintenance requirement.
Durable and robust play equipment, features, fencing, etc. to be used throughout.	Reduced on-going maintenance requirement.

#### 2.3 WASTE MANAGEMENT

Measure Description	Benefit
The application is accompanied by a Construction Waste Management Plan.	The report demonstrates how the project has been designed to comply with best practice.
The application is accompanied by an Operational Waste Management Plan.	The report demonstrates how the project has been designed to comply with best practice.
Domestic waste management strategy (including adequate bin storage provision):	

- Residual waste, recyclable waste and compostable waste distinction.
- Competitive tender for waste management system.
- Reduced waste and reduction in potential waste management charges.

## 2.4 HEALTH AND WELL-BEING OF OCCUPANTS

Measure Description	Benefit
The design, layout and separation distances of the duplex blocks have been designed to optimise the ingress of natural daylight / sunlight.	Reduced reliance on artificial lighting and reduction in associated costs.
The layout of the development is designed to incorporate passive surveillance.	Reduction in potential security / management costs. All duplex units are designed with secure, passively surveyed, own door access.
All units will comply with the requirements of Part M / Part K of the Building Regulations.	Reduction in the level of adaptation potentially necessitated by the future circumstances of occupants.
Generous provision of public / communal shared amenity space.	Facilitates community interaction, socialisation and play.

#### 2.5 RESIDENTIAL MANAGEMENT

#### **Measure Description**

On purchase a homeowner pack will be provided for the occupants which will include

A Homeowner manual which will provide important information for the purchaser on details of their new property / dwelling. It typically includes details of the property such as the MPRN and GPRN, information in relation to connections with utilities and communication providers, contact details for all relevant suppliers, and user instructions for appliances, devices and energy system in the dwelling.

A Residents' pack prepared by the owners' management company which will typically provide information on contact details for the managing agent, emergency contact information, information on transport links in the area, and a clear set of regulations and rules associated with the development.

#### Benefit

Information provided to residents will allow them to be as informed as possible so that any issues can be addressed in an efficient and convenient manner.