





## Designer's Statement

*"The good house develops styles and grows with its inhabitants, the style of the house being the style of the family, not the architect"- Adolf Loos*

As designers we must remember that housing is not in isolation but is a contributing typology to our landscape. Architects have a moral obligation to design buildings which adhere to sustainable values, creating structures which have a long-life span and are loose fit. This is to ensure they can accommodate the evolving changing patterns of inhabitant's life's and needs. The design brief for the "home of the future" called for an innovative affordable housing scheme designed for the mass market; demonstrating how both social and technological ambitions can be met by intelligent design. The development is required to factor in futurology by considering the demographic and technological changes that will occur to Sligo's mass market in the next 10-20 years.

This application seeks to build on the principles of renewable design, creating a house that is an appropriate model for the construction of new developments across Ireland. The ambition is to design an exemplar dwelling which exceeds the Gold Standard of the 2016 technical standards, demonstrating to the UK construction industry that the demanding requirements of the 2016 technical standards can be achieved with acceptable cost limits by using modern methods of construction. This involves an innovative construction process showcasing an unprecedented level of thermal insulation, airtightness and energy-use derived from renewable sources, all within a budget which aims to prove that this form of construction can be adopted at a mass market level. The proposed design and construction techniques have been devised to be affordable, flexible and repeatable by the volume house building industry in Ireland. It looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design. This complex will result in a vast change as to how architects design dwellings for the general public and how occupants engage in these spaces.

The application site for the project is located in Sligo's city centre, just off "Holborn St" adjacent to Milligan Court Apartment Block; and currently lies dormant as a car park. The scheme brings a derelict site back into a productive use, with attractive and accessible routes in and out for both pedestrians and cyclists. The Development's layout makes it easy for a bus to serve the scheme and activities generated by the development will contribute to the quality of life in its locality. Key environmental features of the site guided the design process and influenced the resolution of the scheme's complex requirements. The sloping of the land was a major contributor to the scheme of the proposal's final layout. The generosity of the site allowed a large multiblock development to be created with an adjacent community garden.

The concept of the units evolved following an analysis of the sites urban context and was informed by its growing community needs. It became apparent through research that in densely populated areas (such as Sligo) loneliness is rising, and communal life is at an overall poor standard. Due to the economic crisis and new governmental policies, humans have become more and more dependent on their direct living environment. We have developed into a society that has become rather individualistic: we hardly know our neighbours and often have more friends on Facebook than in 'real life'. Citizens contribute to basic social

services for both themselves as well as for those around them. A number of elements including lack of social interaction and an overall absence of community spirit within the local area suggested a need for a space designed to create and support local communities. This became the focal point of the design and drove many of the final design decisions. The whole composition is intended to promote a healthy and positive community well-being, which is environmentally friendly and economically affordable to the local population. In order to fulfil this aim the number of homes enjoying dual aspect is maximised. The proposal revolves around a key social block which houses a public retail space and a multifunctional room in addition to a shared amenities space (encompassing washing machines and tumble dryers) This is directed at reducing the overall energy consumption and carbon footprint of the development. All living units branch off from this centralised space, with blocks orientated to embrace solar gain and distant views. As inhabitants move away from the public central block, the spaces slowly become more private/intimate. There is a range of public, communal and private amenity spaces and facilities for users of different ages. The arrangement creates a residential district with various circulation routes positioned around strategically placed landscaping. Circulation and green space will maximise user interaction, creating positive spaces where users wish to dwell and socialise. This will ensure a local community can blossom and thrive.

In order to strengthen the link dwellers make with their homes, the form of the units follows a minimalistic cuboidal shape with a series of protruding forms. Its angular profile and symmetry will be highly recognisable to all; a design suitable for the mass market. The structures are distinct and relatable, allowing users to establish connections with it and its surroundings. Their additive form makes connections to a series of building blocks stacked upon each other, a symbolisation to the different blocks of people which make up a community. The structure is devised to respect and become nestled within its natural environment; with its three-story composition being similar in scale to its surrounding buildings. However it still has recognisable features so that people can describe where they live and form an emotional attachment to the place.

A good home is designed to make inhabitants feel safe and secure within its boundaries, which inspired the idea that the proposed building should appear stable and solid in its site. The innovative “Home of the future”, has a modern materialisation, manifested from locally sourced materials, celebrating the sustainable materials available in Ireland. The use of materials and features that currently exist around the site will result in a building that is borne from its site and sits comfortable in its urban setting. The design exploits the innate quality of the materials in terms of scale, texture and colour. The materials and finishes gradually change from textured reclaimed wood to smooth plastered white walls, reflecting their contrasting properties (similar to the diversity found within a society). The materials are encouraged to weather over the lifespan of the dwelling’s, allowing the built form to evolve through time.

The modular approach to the project allows the units to be pre-finished in a factory, removing any on-site installation and the waste generated by such works. The overall architectural language of the development is clean and simple, boasting the actual structure and materials used in the building, instead of covering them in ornate designs.

The layout is kept open planned, with few partitions to ensure the spaces accommodate a wide range of mixed users. This loose-fit design allows for adaption and subdivision, such as

the creation of an annex or small office. The roof of the proposed complex's will be clad in angled solar panels, to collect rainwater for re-harvesting. Several will also house community gardens enveloped by grass floors, acting as a natural thermal insulate whilst also aiding the districts biodiversity. Homes are designed to prevent sound transmission by appropriate positioning on the site and acoustic insulation. Windows are sited to avoid views into the home from other houses and the street; with adequate privacy being allocated to ground floor units. All units incorporate sufficient storage spaces for the sorting and storage of recyclables and bicycles, in an attempt to promote local eco-friendliness. Apartment blocks are energy-efficient and well- equipped for the challenges anticipated by our changing climate.

Landscaped areas surround the complex, designed to provide amenity and biodiversity; whilst also protecting the spaces from its climatic elements. Buildings, gardens and public areas are laid out to exploit the best solar orientation and facilitate their easy and regular maintenance. Care was taken over the siting of flues, vents and bin stores, with a sustainable urban drainage system also being incorporated onsite. All public open space is overlooked by surrounding homes so that the amenities is owned by the residents and feels safe to use. A public community garden is placed to the rear of the block and houses a playpark free of use for the local neighbourhood. This play area is sited where children can be overlooked to be kept safe and shall incorporate modern technology (such as piezoelectric plates) to generate electricity whilst children play. Small wind turbines will also be present as an efficient source of renewable energy to meet the growing electric demands of the district. Fresh fruit and vegetables grown in polytunnels and plant boxes within the garden will allow residents greater access to nutritious organic food, improving their overall health and well-being whilst also reducing their food miles. It will positively impact on the urban micro-climate and help improve its air and soil quality. Furthermore, the biodiversity of plants and animals will be widened, and neighbourhood waste will be reduced.