9.0 Adaptability

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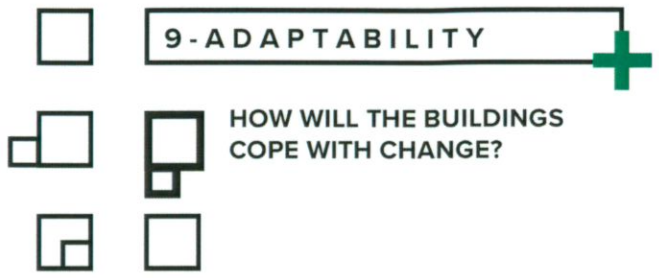
9.1 Adaptability



The development provides a mix of units which can be reconfigured to adapt to the changing life cycles and personal needs of residents.

Also, the apartments either meet or exceed the minimum standard for Build To Sell (BTS) unit size and can be adapt to follow the needs of the future residents.

The architectural style of the new building is contemporary and reflects the modern requirements to balance lighter, elevations with the need to satisfy energy reducing objectives.

This chapter sets out the principles that the Design Team have incorporated to date with these same principles guiding future decision making as the development proceeds to tender and construction phases.

What is Adaptability?

Adaptability refers to the capacity of buildings to accommodate substantial change. Over the course of a building's lifetime, change is inevitable, both in the social, economic and physical surroundings, and in the needs and expectations of occupants. All other things being equal, a building that is more adaptable will be utilized more efficiently, and stay in service longer, because it can respond to changes at a lower cost. A longer and more efficient service life for the building may, in turn, translate into improved environmental performance over the lifecycle.

The concept of adaptability can be broken down into a number of simple strategies that are familiar to most designers:

- Flexibility, or enabling minor shifts in space planning;
- Convertibility, or allowing for changes in use within the building; and
- Expandability, (alternatively shrink-ability) or facilitating additions to the quantity of space in a building.

In practice these strategies can be achieved through changes in design, and through the use of alternative materials and technologies. Adaptability is closely related to – but different from – two other design strategies that attempt to enhance long-term environmental performance:

- **Durability:** selecting materials, assemblies and systems that require less maintenance, repair and replacement. Since durability extends the useful lifetime of materials and technology in a building, it is complimentary to adaptability.
- **Design for Disassembly:** making it easier to take products and assemblies apart so that their constituent elements can more easily be reused or recycled. Designing for disassembly can reduce the costs and environmental impact associated with adapting buildings to new uses. It is also possible to reduce overall environmental costs by purposely designing a building for a shorter life, and for easier disassembly and reuse of components and materials.

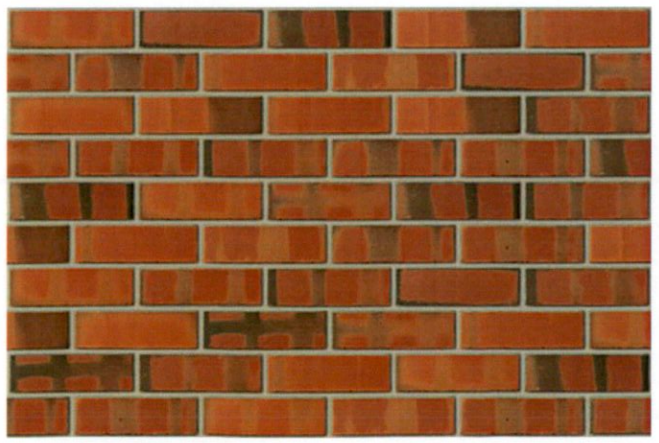
Independence to Integrate systems (or layers) within a building in ways that allow parts to be removed or upgraded without affecting the performance of connected systems.

Upgradability

Choose systems and components that anticipate and can accommodate potential increased performance requirements.

Lifetime compatibility

Do not encapsulate, or strongly interconnect short lifetime components with those having longer life times. It also may be advantageous to maximize durability of materials in locations where long lifetimes are required, like structural elements and the cladding. Durable claddings and foundations can greatly facilitate adaptability, often tipping the scale in favour of conversion over demolition.



9.0 Adaptability

9.1 Adaptability

Record Keeping

Ensure that information on the building components and systems is available and explicit for future use. It will assist effective decision making with regard to conversion options and prevent costly probing exercises.

Are There Trade-offs Between Adaptability and Quality?

It may be necessary to explicitly recognize the possibility of trading-off adaptable building designs for improvements in overall quality of design and construction. Aesthetically pleasing, long-lasting buildings can be so enjoyable that people will adapt their needs to the existing form of the building, rather than renovate or demolish the structure. This extends building life and improves the use of space in a similar manner to adaptable designs. It means that adaptability in design may be of greatest importance for those buildings that lack high quality design and construction features.

The impact of quality on longevity of buildings has been explored by Stewart Brand in his book How Buildings Learn. Brand divides buildings that learn (namely those that survive changing circumstances abnormally well), into what he describes as low road and high road buildings. About the former he says, "nobody cares what you do in there" or in other words the building is so devoid of aesthetic value that building owners and users have no regrets about altering the building to fit any new purpose. On the other hand 'high road' buildings are those that because of their fine features deserve and receive unusual care and attention. Often these features include durable cladding, well considered detailing, high quality interior finishes, operable windows, numerous private well-lit rooms, and so on. Such buildings may go through major changes in use, despite their relatively low capacity to physically adapt to change.

The high quality materials including a variety of brickwork, metal cladding combined with stone to selected commercial frontages ensure durability which combined with fine brick detailing which includes inset brickwork facade elements reinforce the architectural design quality of the building forms proposed within the Green Vale scheme. Please see chapter 12 for further detail outlining proposed materials and finishes.

Trade-offs between adaptability and quality may be especially problematic with design of interior finishes and furnishings. Over the lifetime of a building, the cost of interior finishes may exceed by several times the entire cost of all other elements of a building. While the potential for reductions in costs, embodied energy and emissions is great, it is not clear that more adaptable spaces will actually reduce investments in fit-out. In fact flexible spaces may encourage re-fitting of spaces for reasons of fashion, and thereby contribute to increased lifetime costs and environmental loadings.

The Design Team working on the Scholarstown project led by C+W O'Brien Architects, consider the adaptability of the buildings being of paramount importance and as such it forms part of the design process at all stages of the project. When it comes to residential properties this is more important and the ability to be able to adapt the properties at a later date is one of the many considerations that lead to a thoughtful and well considered design.

10.0 Privacy and Amenity

10.0 Privacy & Amenity

10.1 Privacy + Amenities

10 - PRIVACY+AMENITY

HOW DOES THE SCHEME PROVIDE A DECENT STANDARD OF AMENITY?

All the residential units have an area of usable public&communal open space, communal internal space and private open space in the form of balconies/gardens/terraces.

All the proposed private open spaces are in compliance with the minimum size and depth of 1.5 meters as per Sustainable Urban Housing - Design Standards for New Apartments (Dec 2020).

The proposed design considers the orientation of the development in order to maximise the solar gain and natural light aspect of eachunit, 55% of the total units are dual aspect.

The site layout creates a high quality open space on the north side of the site next to the main roads which provides c.2057 sqm in one large space. This equates to 30% of the site area.

Privacy and overlooking has been at the forefront in the design of the apartments and the positioning of balconies. The design ensures that people can seek privacy within their own dwellings while still having a connection to the outside.

Communal Amenity Space Required

32 One Beds @ 5 m^2	=	160 m^2
1 Two Bed Three Person @ 6 m^2	=	6 m^2
33 Two Bed Four Person @ 7 m^2	=	231 m^2
10 Three Beds @ 9 m^2	=	90 m^2
Total Required	=	**487 m^2**

Communal Amenity Space Provided

Internal	=	100 m^2
External (Public&Communal)	=	2057 m^2
Total Provided	=	**2157 m^2**

Precedent Images: Landscaped External Amenity Spaces

10.0 Privacy & Amenity

10.1 Privacy + Amenities

Public & Communal Open Spaces -

There are a number of activity areas provided throughout the gated communal open spaces for the residents. These spaces include the provision of

Open Space On The Ground Level

- Informal seating and social space for gathering.
- Pedestrianised walkways with spaces for rest and play.
- Natural planting and play area within the central lawns.
- Children's play area with equipment for a variety of ages.

The site layout has been considered to create the open space consisting of wide footpaths, informal gathering spaces, generously landscaped gardens, and play area, therefore linking the open space with the public by creating accessible and active areas for all users. It is proposed to combine the communal amenity space and public open spaces. The existing gates to the development will be retained for heritage value but left open . Facilities within the open space have been designed so that public access does not impinge on the amenity of residents, with seating and gathering areas located in a variety of locations, with more intimate spaces closer to the apartments.

External Open Spaces - Ground Floor Plan

Key

- Site Boundary
- Existing Entrances
- Proposed Entrance
- Combined Open Space

Public / Communal Open Space Assessment

3D Design Bureau were commissioned to carry out a comprehensive BRE daylight and sunlight assessment, along with an accompanying shadow study for Scholarstown House, in Dublin 16. 3DDB have been working with the design team throughout the design process with the aim of achieving the best possible outcomes in terms of sunlight and quality of the external amenity spaces and also maximizing the quality of daylight into the apartment units.

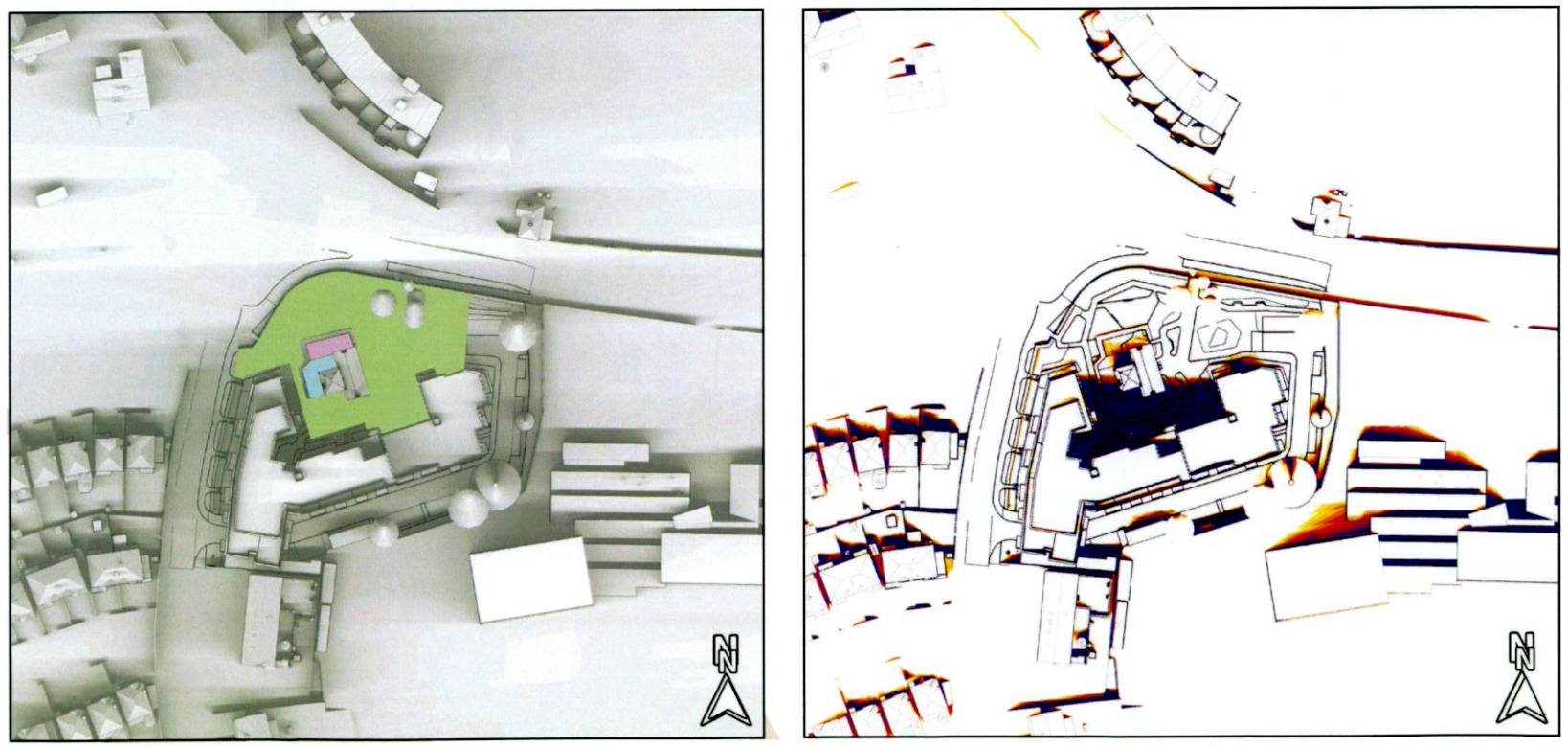
3DDB have prepared a Sun On Ground (SOG) analysis of the proposed outdoor amenity spaces, and Shadow Study imagery. The BRE Guidelines recommend that for a garden or amenity space to appear adequately sunlit throughout the year, at least half of it should recieve at least two hours of sunlight on March 21st.

The Sun On Ground (SOG) carried out on the proposed public/communal outdoor amenity space has presented acceptable levels of sunlight, in compliance with the BRE Guidelines.

Scheme Performance Results: Sun On Ground in Proposed Outdoor Amenity Areas

Table No. 7.1: SOG in Proposed Outdoor Amenity Areas Results:			
Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*
Amenity Area 1	66%	50.0%	BRE Compliant

* The BRE Guidelines recommend that for a garden or amenity to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on March 21st.



Above Left - Indication of the amenity areas that have been analysed,
Above Right - Area capable of receiving 2 hours of sunlight on March 21st shown in white

10.0 Privacy & Amenity

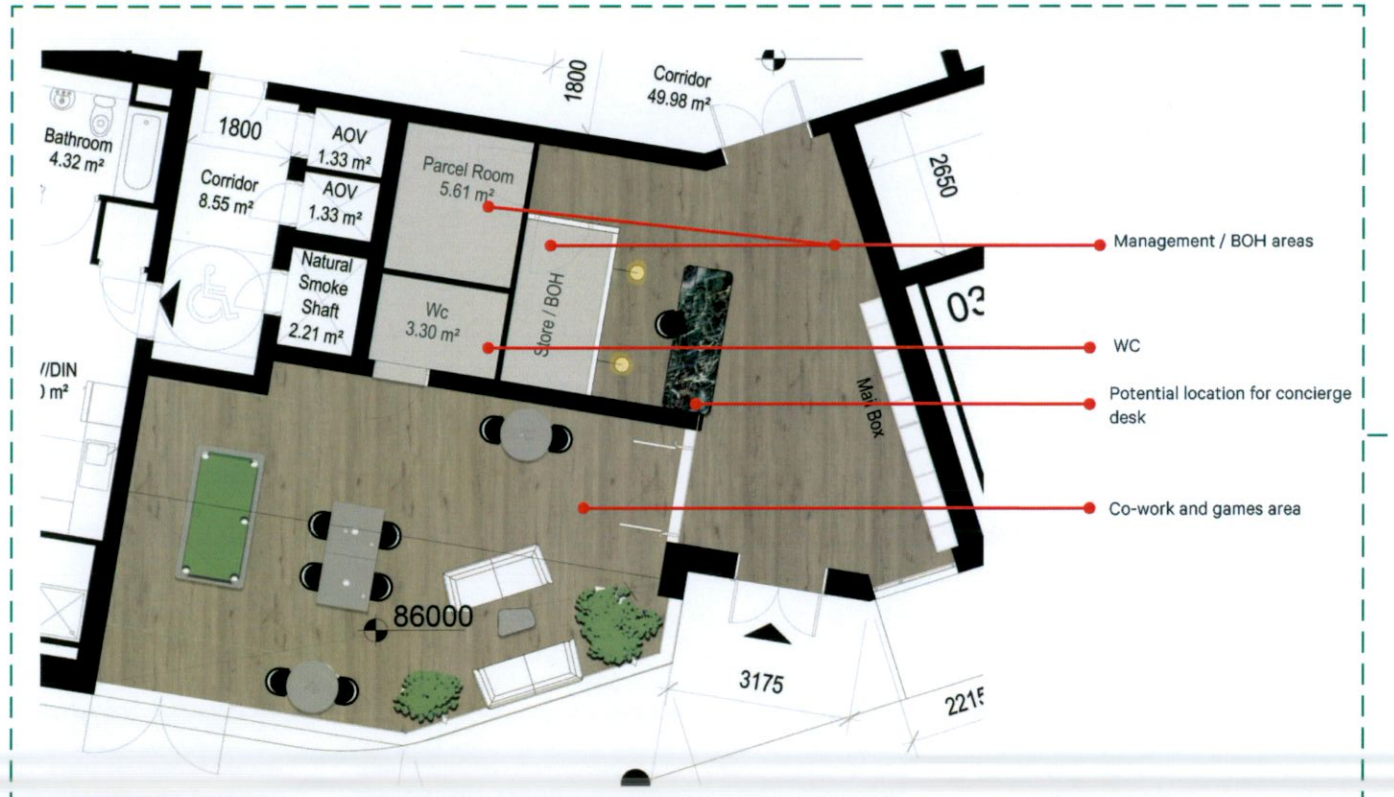
10.3 Internal Amenity Spaces

Internal Communal Amenity Space

in conjunction with the external amenity outlined previously, the provision of internal multi-functional spaces have been allocated to the ground and first floor of the new development. These spaces can cater for meeting spaces, working from home area, communal events, parties and play space.

Post pandemic has changed the way some people live and the suburban amenity spaces could be an attractive alternative area to utilize as an extension of the proposed apartments, in particular in relation to remote working.

A allocation of 73sqm to the ground floor is proposed to cater for a multitude of activities.



Ground Floor

CBRE

Key

- Site Boundary
- Internal Communal Amenity Space
- Reception Space

Ground Floor Plan

10.0 Privacy & Amenity

10.4 Multi Functional Space

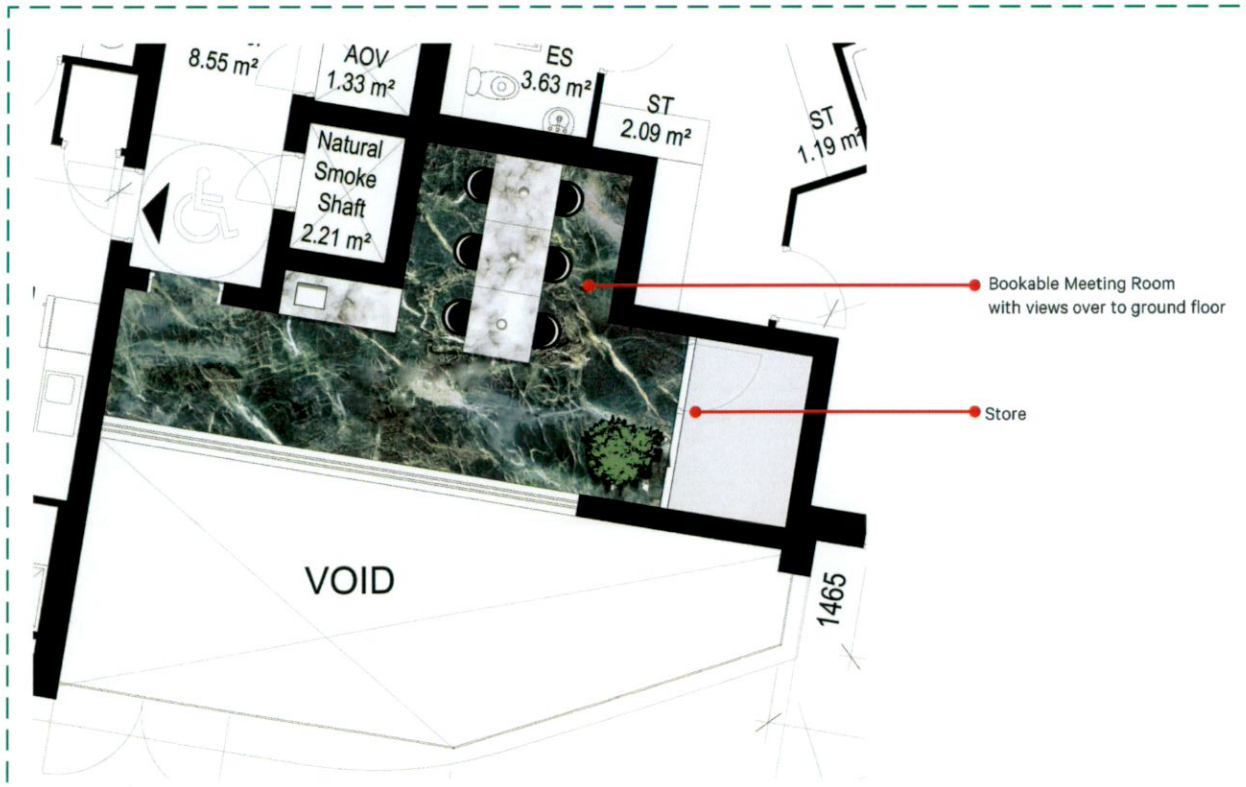
Multi-Purpose Community Space

The 27sqm amenity space located at first floor needs to remain flexible, in order to adapt to the needs of the tenant.

This space is effectively a modern alternative to the village hall.

This can be adapted for use as:

- A cinema
- A blank space (e.g. for yoga or exercise classes)
- A meeting room
- An open space with a kitchen (e.g. for a children's parties or other community group activities).
- A resident's lounge could also be provided, including small clusters of seats for residents to meet and chat.

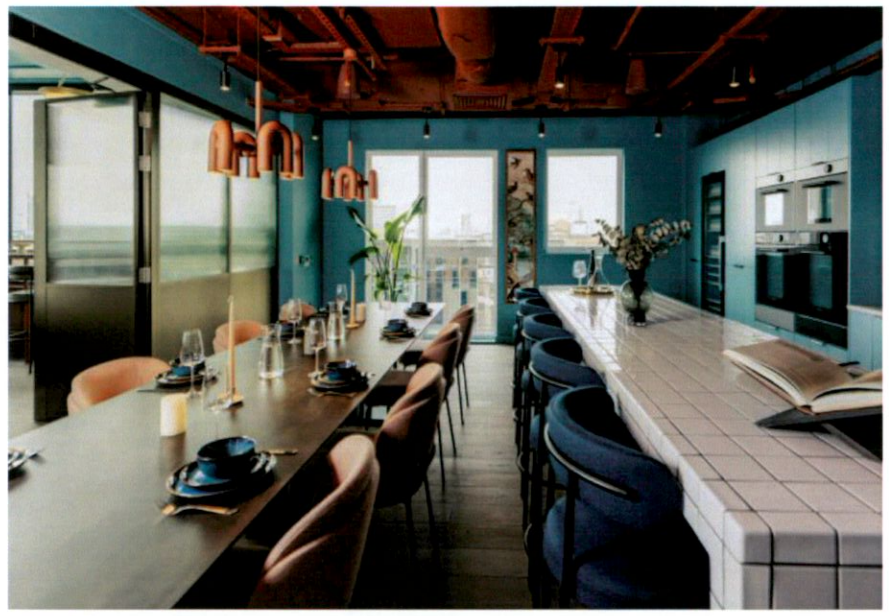


First Floor

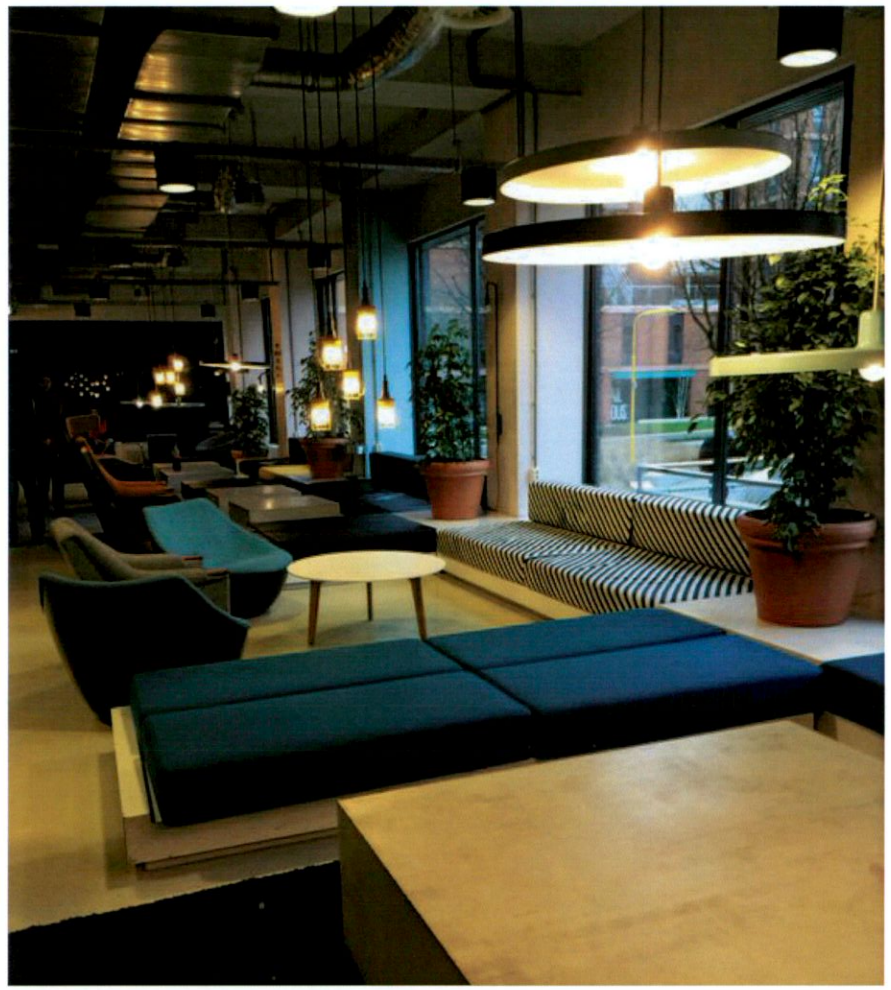
First Floor Plan

10.0 Privacy & Amenity

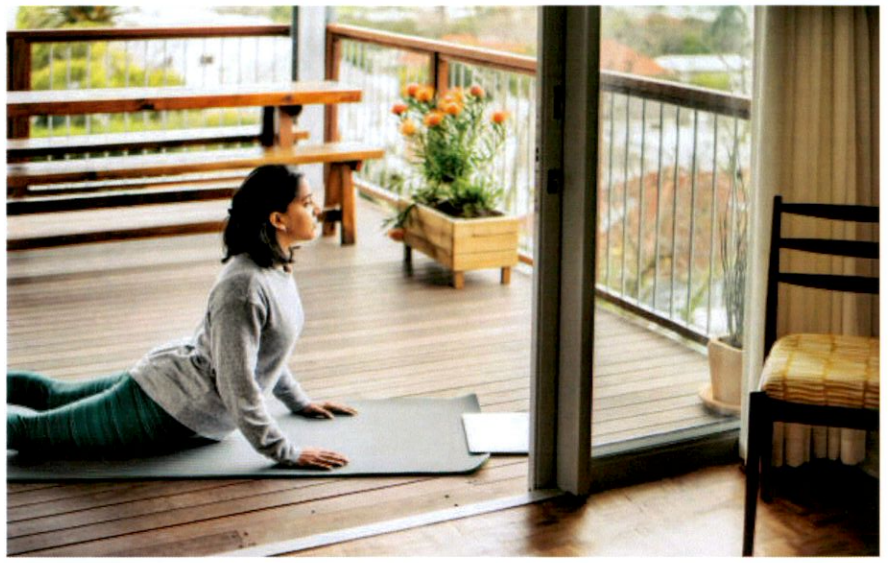
10.5 Precedence Images for Multi Functional Space



Relax/Meeting area



Reception/Meeting area



Relax Space

Lounge Space

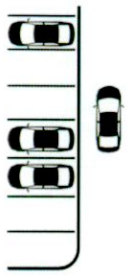
Post Facilities

Work Space

11.0 Parking

11.0 Parking

11.1 Parking



11 - PARKING

HOW WILL THE PARKING BE SECURE AND ATTRACTIVE?

The development has a low-car-traffic street design and has been designed to promote activity with pedestrian and bicycle friendly elements. A total of 40 no. car parking spaces are provided which includes:

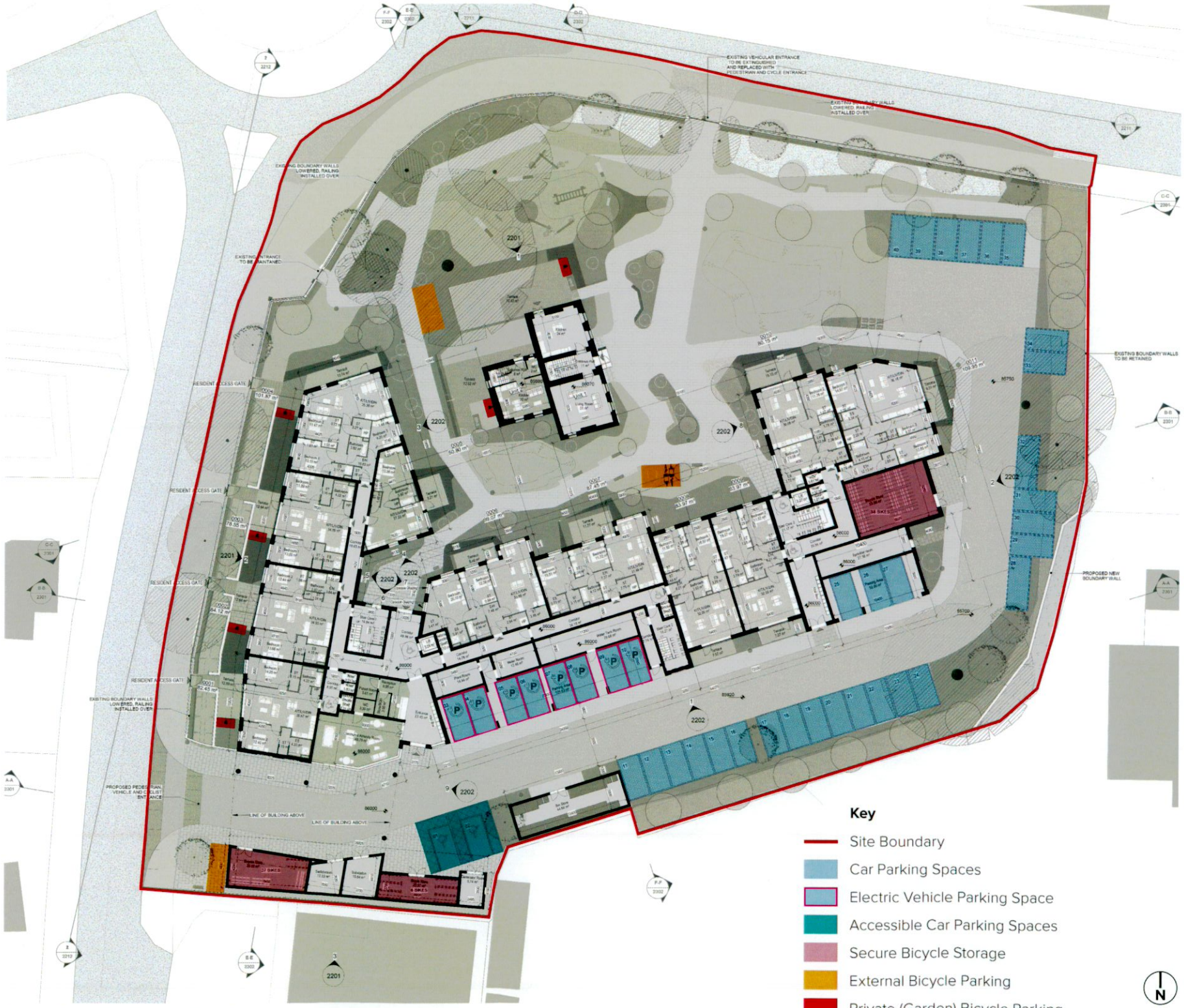
- 2 no. disabled car parking spaces
- 2 no. visitor car parking spaces

The majority of the car parking is located on grade to the southern side of the site which is accessed off Orlagh Road. Residents carparking is provided at Ground level. The adjacent graphic illustrates the L00 parking strategy.

A total of 136 bicycle parking spaces are provided within the development for the residents. These bicycle parking spaces are covered and secure as required by the Sustainable Urban Housing - Design Standards for New Apartments (Dec 2020). In addition to the above there are:

- 7 no. resident cargo cycle spaces provided.
- A total of 40 visitor bicycle parking spaces (2 visitor cargo cycle spaces are included) are integrated within the landscape strategy for use by visitors to the development.

All bicycle parking spaces are designed in accordance with the requirements of the National Cycle Manual, NTA (2011).



Ground Floor Plan: Car and Cycle Parking

11.0 Parking

11.1 Parking

Car Parking

The majority of the car parking is located on grade to the southern side of the site which is accessed off Orlagh Road. Residents carparking is provided at Ground level

A total of 40 no. car parking spaces are proposed including:

- 38 no. standard spaces and 2 no. disabled spaces (providing 5% parking)
- 8 no. (20%) Electric Vehicle 'EV' charging points will be included within the scheme. The remainder to the parking spaces will be constructed to be capable of accommodating future charging points. Please refer to Marson Consulting M&E drawing *'22119-MCE-ZZ-ZZ-DR-E-1001_EV CHARGING & TELECOM'* for locations and detail.

Bicycle Parking

Section 4.15 through to section 4.17 of "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2020)" discuss the importance of providing sufficient bicycle parking within apartment developments particularly in built-up developed areas where the provision for car-parking requirements is often reduced.

It is stated that a general minimum requirement of 1 bicycle storage space per bedroom be provided in apartment developments, and 1 bicycle storage space per 2 residential units be provided for visitor cycle parking.

In compliance with the above, the proposed development contains 136 secure bicycle parking spaces for the residents. 7 accessible/ cargo spaces and a total of 40 bicycle places at ground level for visitor parking, providing a total of 183 spaces.

The bicycle parking areas have been located to be easily accessible for residents and visitors entering both from the south west from Orlagh Grove and also from the North from Scholarstown Road cycle links which promotes the use of this sustainable transport method.

Accessible Car Parking Spaces On The Surface

Electric Charging Spaces

Cargo Bicycle Spaces

External Visitor Bicycle Parking