



White Pines Central

Build to Rent Development
Stocking Avenue,
Rathfarnham,
Dublin 16.

HOUSING QUALITY ASSESSMENT
May 2021

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The Design Team

Applicant	Ardstone Homes
Architect	Reddy Architecture + Urbanism
Planning Consultant	Planning Tom Phillips & Associates (TPA)
Engineer (Civil, Structural, Transport & Traffic)	DBFL Consultant Engineers (DBFL)
Engineer (Mechanical & Electrical)	O'Connor Sutton Cronin Consultant Engineers (OCSC)
Landscape Architect	Mitchell + Associates Landscape Architects (MA)
Verified Views & Visual Impact Assessment	Mitchell + Associates Landscape Architects (MA)
Daylight & Sunlight Analysis	O'Connor Sutton Cronin Consultant Engineers (OCSC)
Engineer (DAC Fire)	Warringtonfire (WF)
Consultant CGI's	3D Design Bureau (3DDB)
Waste Management	AWN Consultants



CGI VIEW OF BLOCKS D/E AND C2

Project Description

In summary, the proposed residential development will provide for 114 No. Build to Rent residential units in a mix of 1, 2 and 3 bed apartment and duplex units, across 6 No. separate blocks;

- Block A is a part 6 part 4 storey apartment block comprising 47 No. 1 and 2 bed units;
- Block B is a 3 storey duplex block comprising 11 No. 1, 2 and 3 bed units;
- Block C1 is 3 storey duplex block comprising 15 No. 1, 2 and 3 bed units;
- Block C2 is a 3 storey duplex block comprising 19 No. 1, 2 and 3 bed units;
- Block D is a 3 storey duplex block comprising 18 No. 2 and 3 bed units; and
- Block E is a 3 storey duplex block comprising 4 No. 2 and 3 bed units.

The proposed development will also consist of the provision of: 110 sqm residential amenity space in the lower ground floor of Block A; waste storage facilities; 98 No. car parking spaces and 198 No. bicycle parking spaces; boundary treatments and street lighting; the provision of Sustainable Urban Drainage systems (SUDs); 1 No. ESB substation; plant and switch rooms and all ancillary works and services necessary to facilitate construction and operation; changes in levels across the site; associated hard and soft landscaping; and all other associated site excavation; and infrastructural and site development works above and below ground. The development will be served by a vehicular access from Stocking Avenue via White Pines South on the western side of the site.” In support of the proposed development there is a residential amenities facility in the ground floor of Block A with direct level access from the western plaza. The Residential Amenity space in the form of a reception, lounge/ waiting area, and a multi-purpose recreational space and postal storage will be provided. The facility is served by a public plaza, located to the west of the building. In Block A the bicycle parking is located at ground floor level with direct access from the public plaza. In Blocks B, C1, C2 and D/E the bicycle parking is a combination of individual and shared secure bicycle parking located in the ground floor apartments front garden patio and in shared secure bicycle parking located at street level which serve the duplex apartments. There are also 34 visitor bicycle parking spaces located throughout the site.



LANDSCAPED MEADOW TO SOUTHERN BOUNDARY OF DEVELOPMENT

Site Statistics	
Total Site Area	2.17 ha
No. of Units	114
Total Gross Area – Proposed	10,846 sqm
Total Gross Area - Residential (inc. amenity)	9,179 sqm
Site Coverage	26% circa
Plot Ratio	2.03
Gross Density	53 units/ha approx.
Total Public Open Space	9,845 m ²



PUBLIC PLAZA TO BLOCK A

01 Executive Summary

This Housing Quality Assessment forms part of a Strategic Housing Development application for a Build to Rent (BTS) residential development White Pines Central, Stocking Avenue, Rathfarnham, Dublin 16

The proposed residential design is supported by high quality amenity spaces for residents along with a residents amenity facility in Block A.

The lands at White Pines Central (approx. 2.17 hectares) are located immediately to the south of Stocking Avenue in Woodstown located on the south side of the city, just south of the M50.

The lands are currently accessed from the roundabout on Stocking Avenue to the northern boundary of the site. Access to the site will be via a new road that was completed as part of the White Pines South development

The purpose of this document is to assess the residential element of the proposed development, including the amenity spaces and support facilities.



PUBLIC PLAZA TO BLOCK A



Figure 1 - PHOTOMONTAGE VIEW OF DEVELOPMENT IN CONTEXT

01 Executive Summary

In the current South Dublin County Council Development Plan 2016 2022 the site is zoned as RES N with the objective:

“To provide new residential communities in accordance with approved area plans”

The objectives of the overall scheme are to:

- Identify and mark the site entrance to the White Pines Central residential development at the Stocking Avenue roundabout
- Reinforce and promote the connections to the White Pines North and South residential developments
- Complete the overall Master Plan of 5 Phases of the applicants land holdings North and South of Stocking Avenue

It will involve: -

- Creation of a new public plaza to the west of the development
- Creation of a new public park to the east of the development
- Seamless interconnection to the White Pines South and North residential developments
- Enhancing pedestrian and cycle routes through the site to the surrounding neighbourhoods

Specifically, the scheme will deliver:

- Enhancement of urban edge to Stocking Avenue
- Create a Gateway building defining the site entrance from Stocking Avenue
- Increased pedestrian activity at street level throughout the day and night
- Greater passive surveillance at street level to all roads and public open spaces
- Completed master plan for the applicant

This Housing Quality Assessment provides a framework which quantifies each of the criteria required by the ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’ against the proposed development.

The ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’ specify planning policy requirements for: -

- Apartment Floor Areas
- Dual Aspect Ratios
- Floor to Ceiling Height
- Lift and Stair Cores
- Internal Storage
- Private Amenity Space
- Security Considerations

The guidelines have been issued by the Minister for Housing, Planning and Local Government under Section 28 of the Planning and Development Act 2000 (as amended). Planning authorities and An Bord Pleanála are required to have regard to the guidelines and are also required to apply any specific planning policy requirements (SPPRS) of the guidelines, within the meaning of Section 28 (1C) of the Planning and Development Act 2000 (as amended) in carrying out their functions.

Accordingly, where SPPRS are stated in the guideline document, they take precedence over any conflicting, policies and objectives of development plans, local area plans and strategic development zone planning schemes.

Where such conflicts arise, such plans should be amended by the relevant planning authority to reflect the content of these guidelines and properly inform the public of the relevant SPPR requirements.



Figure 2 - Close up of Block A Public Plaza

02 Policy Overview

The Project Summary

The proposed development will provide:

- 114 residential units in total, (53 units per Ha) designed to meet the residential standards for a Build to Rent (BTS) scheme that includes a series of public and communal open spaces.

The apartment mix comprises of: -

Block A

- 26 no. 1 bed Apartments
- 21 no. 2 bed Apartments

Blocks B, C1, C2 and D/E

- 6 no. 1 bed Apartments (own door)
- 3 no. 2 bed apartments (own door)
- 29 no. 2 bed Apartments (own door)
- 29 no. 3 bed Duplex Apartments (own door)

Communal Visual Open Space

1,521 sqm (7%)

Public Open Space

4,369 sqm (20.1%)

Further Usable Public Open Space below 110 KV Wayleave

3,955 sqm (18.2%)

Ancillary Facilities

- 123 sqm of Ancillary Support facilities:

Car and Bicycle Parking

- 98 on street car park spaces
- 190 secured bicycle parking spaces
- 34 public bicycle spaces for visitors to the development



Figure 3 - View of Landscaped Meadow of all Residential Blocks

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Apartment Mix

The mix of residential units within the entire scheme is outlined in the table below.

It is noted under the ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’ Specific Planning Policy Requirement, that residential schemes must satisfy specific BTS guidelines :

Planning Policy Requirement 1

Apartment developments may include up to 50% one-bedroom or studio type units (with no more than 20-25% of the total proposed development as studios) and there shall be no minimum requirement for apartments with three or more bedrooms.

Planning Policy Requirement 2

For all building refurbishment schemes on sites of any size, or urban infill schemes on sites of up to 0.25ha:

For schemes of 50 or more units, SPPR 1 shall apply to the entire development.

Planning Policy Requirement 3

Minimum Apartment Floor Areas:

- Studio apartment (1 person) 37 sq.m
- 1 bedroom apartment (2 persons) 45 sq.m
- 2 bedroom apartment (4 persons) 73 sq.m
- 3 bedroom apartment (5 persons) 90 sq.m

The majority of all apartments in any proposed scheme of 10 or more apartments shall exceed the minimum floor area standard for any combination of the relevant 1, 2 or 3 bedroom unit types, by a minimum of 10% (any studio apartments must be included in the total, but are not calculable as units that exceed the minimum by at least 10%)

Planning Policy Requirement 4

In relation to the minimum number of dual aspect apartments that may be provided in any single apartment scheme, the following shall apply:

In suburban or intermediate locations it is an objective that there shall generally be a minimum of 50% dual aspect apartments in a single scheme.

Planning Policy Requirement 5

Ground level apartment floor to ceiling heights shall be a minimum of 2.7m and shall be increased in certain circumstances, particularly where necessary to facilitate a future change of use to a commercial use

Policy Requirement 6

A maximum of 12 apartments per floor per core may be provided in apartment schemes.

DENSITY:

OVERALL [unit/ha]	52.5
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UNIT MIX

STUDIO	0	0%
1 BED APARTMENTS	32	28%
2 BED APARTMENTS	53	46%
3 BED DUPLEX	29	25%

114

OVERALL UNITS:

No of units

STUDIO - Block A	0
1 BED - Block A	26
2 BED - Block A	21
1 BED - Blocks B, C1, C2, D, E	6
2 BED - Blocks B, C1, C2, D, E	32
3 BED - Blocks B, C1, C2, D	29
TOTAL NUMBER OF UNITS	114
DUAL ASP TOTAL NUMBER	87
DUAL ASPECT TOTAL RATIO	76%

TOTAL 114

TOTAL no of 10% increased in size apartments: 68 (55.6%)

Figure 4 - Total Apartment Mix Schedule.



Figure 4 – Street View of Residential Blocks to Stocking Avenue

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Apartment Design

Apartment and multi-residential unit development design is constantly evolving and through learning from best practice around the globe, new forms of homes are being established that consider the emerging demographic household types and tenures.

There is now a greater need for studio, one bedroom, two bedroom and 3 bedroom apartments in the greater Dublin area.

The 2016 Census indicates that 1-2 person households now comprise a majority of households and this trend is set to continue, yet Ireland has only one-quarter the EU average of apartments as a proportion of housing stock. Ongoing demographic and societal changes mean the expanding categories of household that may wish to be accommodated in apartments include young professionals and workers generally and those families with no children.

The design and layout of unit types are also developing into open plan apartment layouts. These layouts are being made possible through the utilisation of a sprinklered fire prevention strategy which is becoming more and more common in new apartment developments.

The proposed layouts have been developed through consultation with fire consultant Warringtonfire and are based on proven layouts.



Figure 5 – Block A from Stocking Avenue Roundabout

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Apartment Floor Area

The proposed design offers a unique response to the contextual restrictions of this key site which results in a variety of differing unit types across the development.

We confirm that all units comply with the requirements of the Sustainable Urban Housing: Design Standards for New Apartments 2018, and a full schedule of all apartment areas is contained in Appendix A (Housing Quality Assessment Schedule) of this document with a plan layout of each apartment type included in Appendix C (Apartment Type Drawings).

All individual habitable rooms, floor areas and room widths comply or exceed the design guideline requirements



PHOTOMONTAGE VIEW OF WHITE PINES CENTRAL AND WHITE PINES SOUTH DEVELOPMENTS



Figure 6 - Typical Plan

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Dual Aspect Ratios

The scheme has been designed from the outset to provide good day light penetration into the individual apartment units, whilst simultaneously making considered efforts to protect the privacy and amenity of the adjacent properties. The proposed scheme also seeks to take advantage of the spectacular views across greater Dublin City and Dublin Mountains at high level.

Location

The site is considered to be a suburban green field site and close to high quality public transport links so it is a requirement to achieve a minimum of 50% dual aspect in accordance with section 3.17 of the Design Standards for New Apartments 2018.

“Where there is a greater freedom in design terms, such as in larger apartment developments on greenfield or standalone brownfield regeneration sites where requirements like street frontage are less onerous, it is an objective that there shall be a minimum of 50% dual aspect apartments

The combined apartment Block A and apartment/duplex apartment Blocks B, C1, C2 and D/E achieves 76% throughout the entire development.

The diagram on this page shows a first floor GA block plan and highlights the location of the dual aspect units on the floor plan.

The apartment layouts haven been carefully reviewed to establish the amount of daylight reaching each unit. Through an iterative process with OCSC, who have acted as daylight and sunlight consultants for the project, each building and apartment has been optimised to achieve the minimum standards where possible.



Figure 7 - First Floor layout showing dual aspect units

OVERALL UNITS: No of units

STUDIO - Block A	0
1 BED - Block A	26
2 BED - Block A	21
1 BED - Blocks B, C1, C2, D, E	6
2 BED - Blocks B, C1, C2, D, E	32
3 BED - Blocks B, C1, C2, D	29
TOTAL NUMBER OF UNITS	114
DUAL ASP TOTAL NUMBER	87
DUAL ASPECT TOTAL RATIO	76%

Figure 8 - Dual Aspect Ratio

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards



Figure 9 - CGI of Landscaped Meadow to Blocks A, B, C1, C2 and D/E

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Dual Aspect and Orientation

The corner apartments to each floor in Block A have been specifically designed to maximise the views from the apartments to the surrounding views.

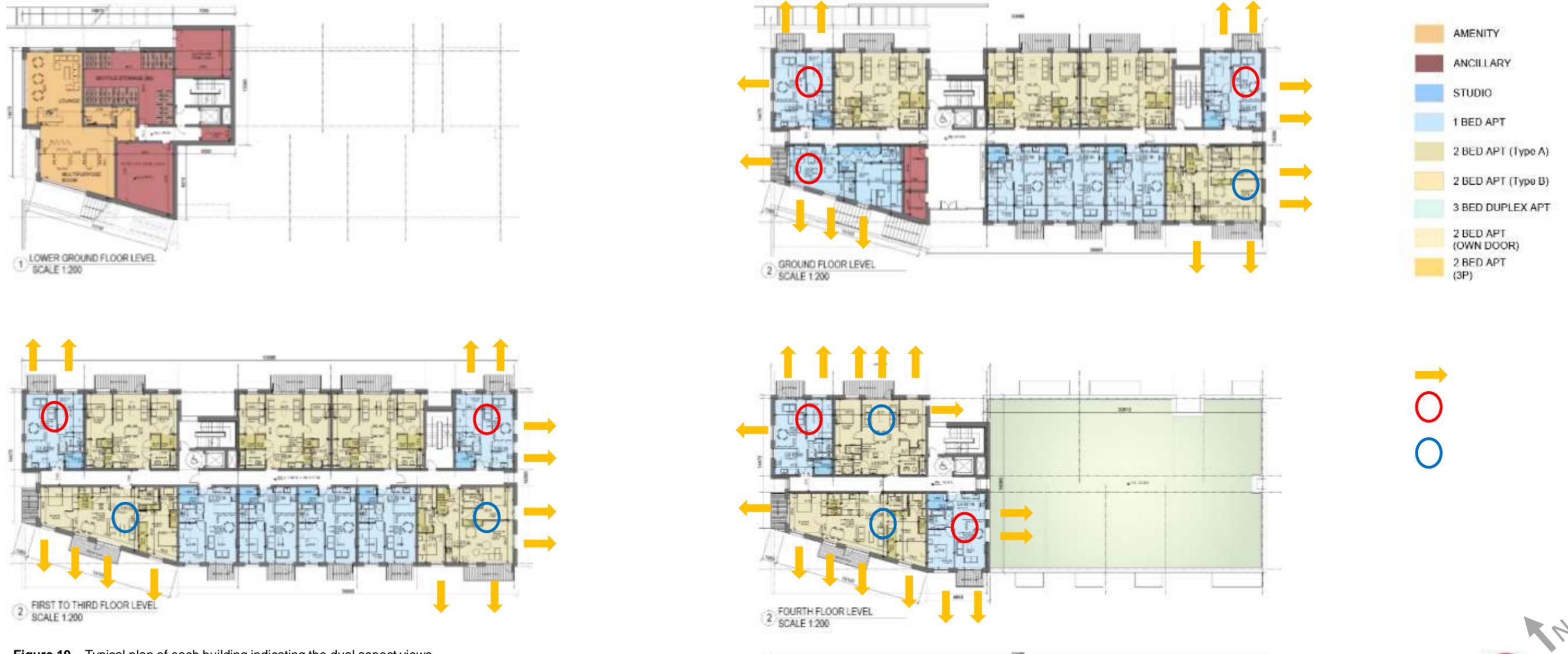
The living rooms have been designed to each corner of the block with full height glazing to maximise the views. Each room is also served with a balcony to allow for outdoor use.

A second window has also been provided to each corner unit and has been arranged to align with the dining table in the open plan living space. This allows the residents to enjoy the views from the kitchen/dining table.

Block A has 43% dual aspect apartments



BLOCK A DUAL ASPECT APARTMENTS TO DUBLIN CITYSCAPE, WESTERN PLAZA AND IRISH MOUNTAINS



03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

North East Facing Apartments

Whilst the overall percentage of dual aspect apartments is 76% across the development, with 43% dual aspect apartments there a number of north east facing apartments. There are a number of existing site factors which determined the aspect and orientation of Block A.

These are as follows: -

- The site is extremely narrow at the western end due to the overhead powerline clearway (34m) to the south and Stocking Avenue road to the north.
- There is a significant fall of 3 meters across the footprint of the block,.
- This location, adjacent to the roundabout was the ideal site for a gateway building, signifying the arrival point to the development
- The SDCC LAP identified this site as suitable for a public open space, again indicating the importance of the entrance to the site
- The best views from the site are north to the city and south to the mountains

All of the above factors when taken into consideration determined that Block A could only be aligned on an east west axis, running parallel to Stocking Avenue road.

The restrictive width of site, and the falls, made it impossible to kink the footprint of Block A to try and avoid any northeast facing apartments. We have introduced significant recesses within the northern façade to provide daylight to the dumbbell apartments within these locations. The windows to the bedrooms on opposing sides are arranged to avoid direct overlooking. Vertical fins will also be arranged to maximise the privacy between the units.

To supplement these measures the apartments have been generously sized at 80 sqm, and are open plan in design so as to maximise the views from the living accommodation. The balconies to these units have also been increased from 6m to 9sqm in size and will serve both the living room and the master bedroom. The glazing to the all the rooms will be full height, with the living room window 4 meters in width. The floor to ceiling height has also been increased to 2.55 m clear to all apartments within the block.

Furthermore the elevation of the site above sea level and its location affords incredible clear views from both the living rooms and the bedrooms to Dublin City, this combined with the above outlined supplemental design features to the apartments should mitigate the restricted dual aspect design of the apartments. These apartments have not been included in either our calculation of dual aspect for Block A (43%), or as part of the overall calculation for the development (76%)



VIEW TO DUBLIN CITY FROM BLOCK A APARTMENTS

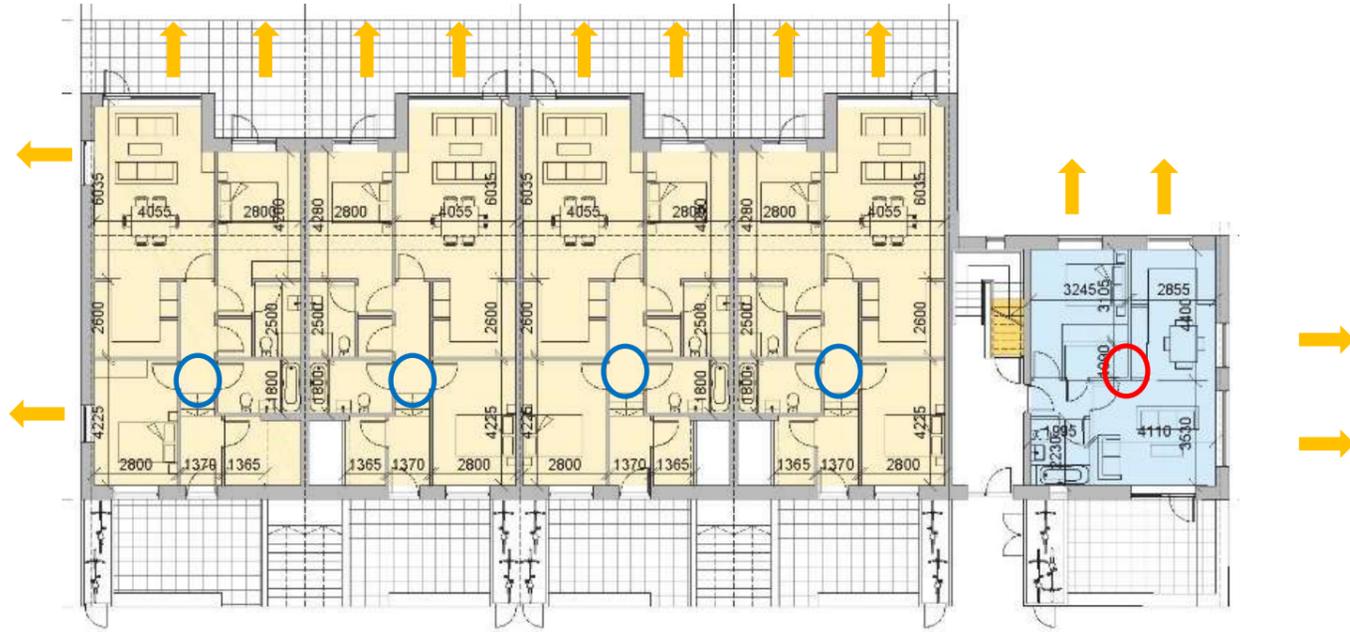


- LEGEND
- 1 BED DUAL ASPECT
 - 2 BED DUAL ASPECT
 - VIEW FROM ROOM
- TOTAL 43% DUAL ASPECT

Figure 11 - Typical floor layout showing north EAST facing units

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Dual Aspect Apartments



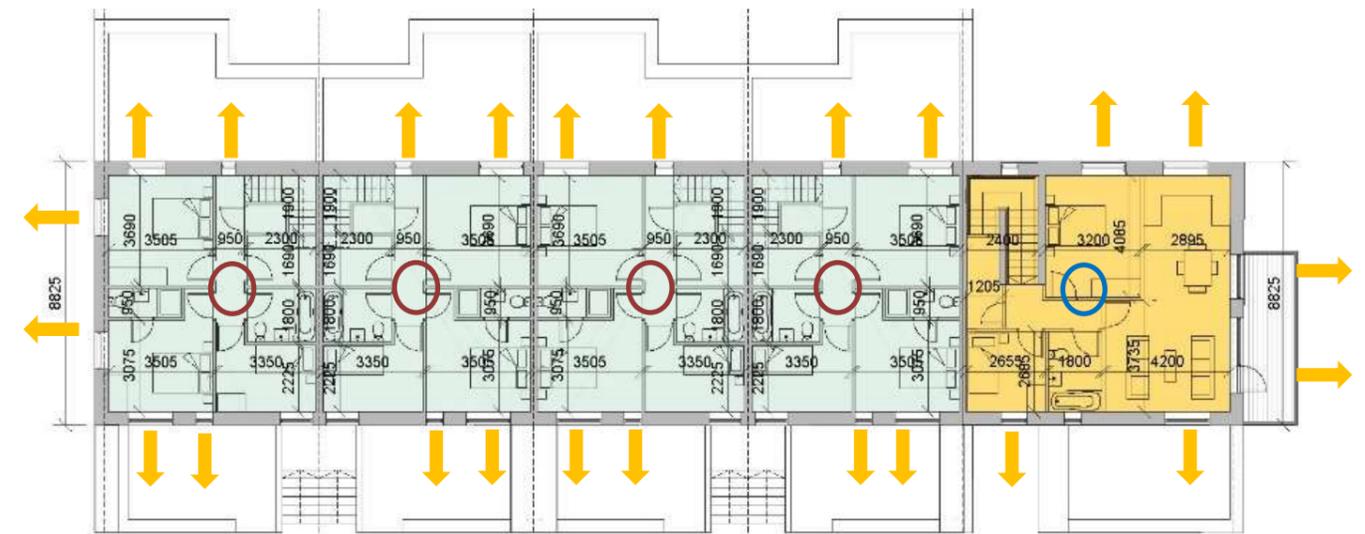
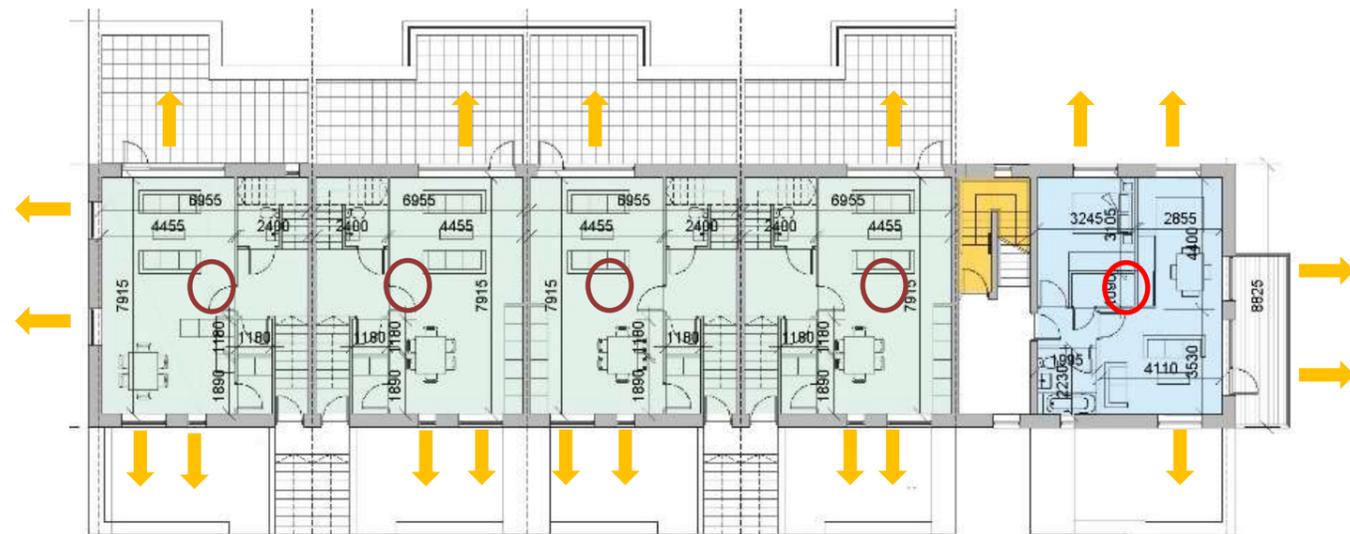
Dual Aspect Apartments / Duplex Apartments - Block B

The northern and southern end gables to the block have 270 degree views from the apartments. The living rooms to the ground floor apartment have been located to the west side of the block offering views to the communal garden which serves the block. The Duplex apartments are open plan at first floor with views to the street and communal open space.

For further information on the dual aspect apartments refer to the OCSC report on Daylight Analysis, which accompanies this planning application..



1 GROUND FLOOR LEVEL - SCALE 1:200

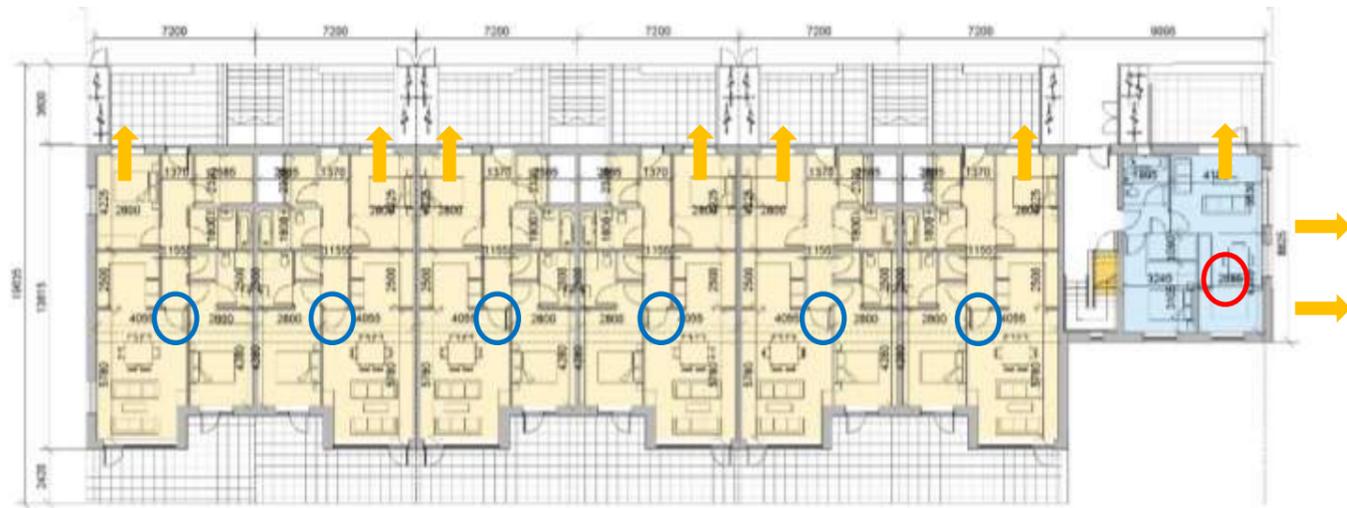


2 FIRST FLOOR LEVEL - SCALE 1:200

2 SECOND FLOOR LEVEL - SCALE 1:200

Figure 12 - Plan highlighting dual aspect apartments views in Block B

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards



1 GROUND FLOOR LEVEL - SCALE 1:200

Dual Aspect Apartments / Duplex Apartments - Block C1

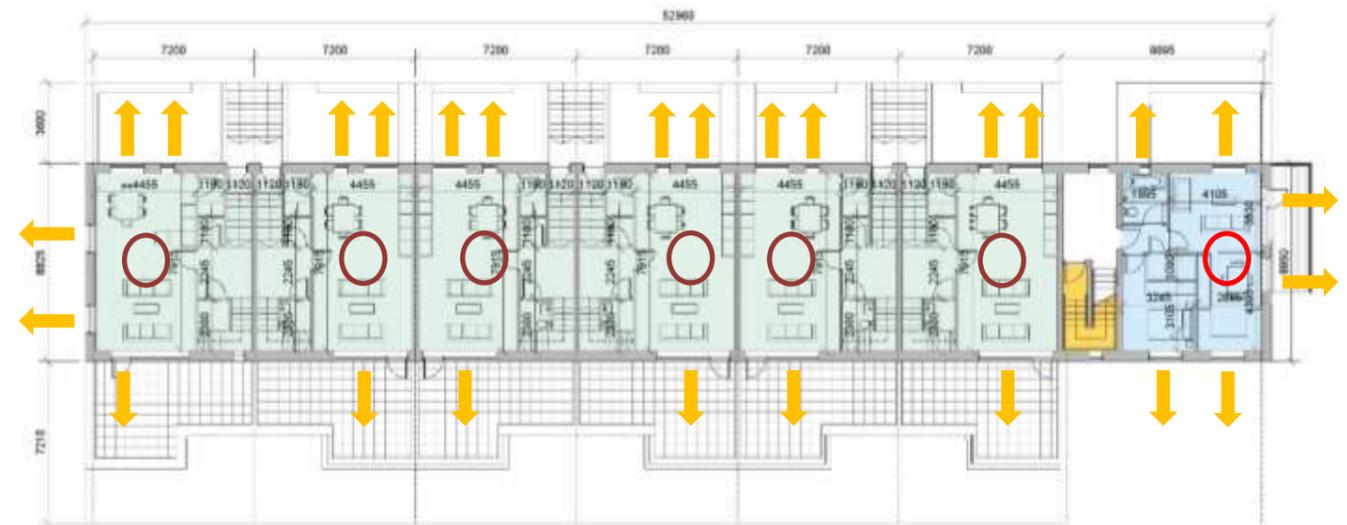
The northern and southern end gables to the block have 270 degree views from the apartments. The living rooms to the ground floor apartment have been located to the west side of the block offering views to the communal garden which serves the block.

The Duplex apartments are open plan at first floor with views to the street and communal open space.

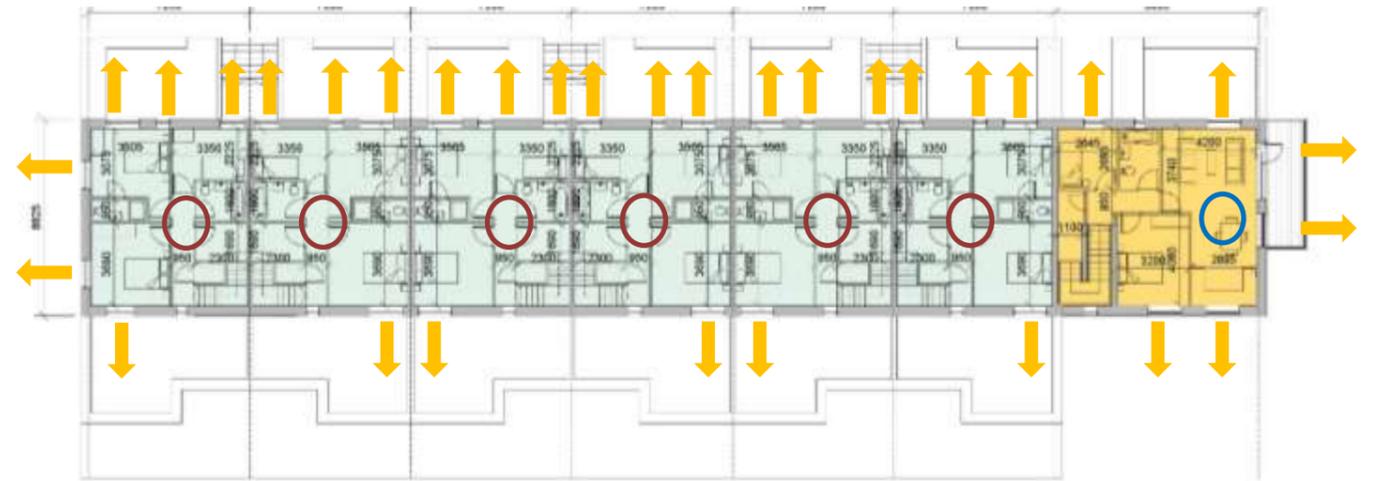
For further information on the dual aspect apartments refer to the OCSC report on Daylight Analysis, which accompanies this planning application..

- AMENITY
- ANCILLARY
- 1 BED APT
- 2 BED APT (Type A)
- 2 BED APT (Type B)
- 3 BED DUPLEX APT
- 2 BED APT (OWN DOOR)
- 2 BED APT (3P)

-
-
-
-



2 FIRST FLOOR LEVEL - SCALE 1:200



2 SECOND FLOOR LEVEL - SCALE 1:200

Figure 13- Plan highlighting dual aspect apartments views in Block C1.

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

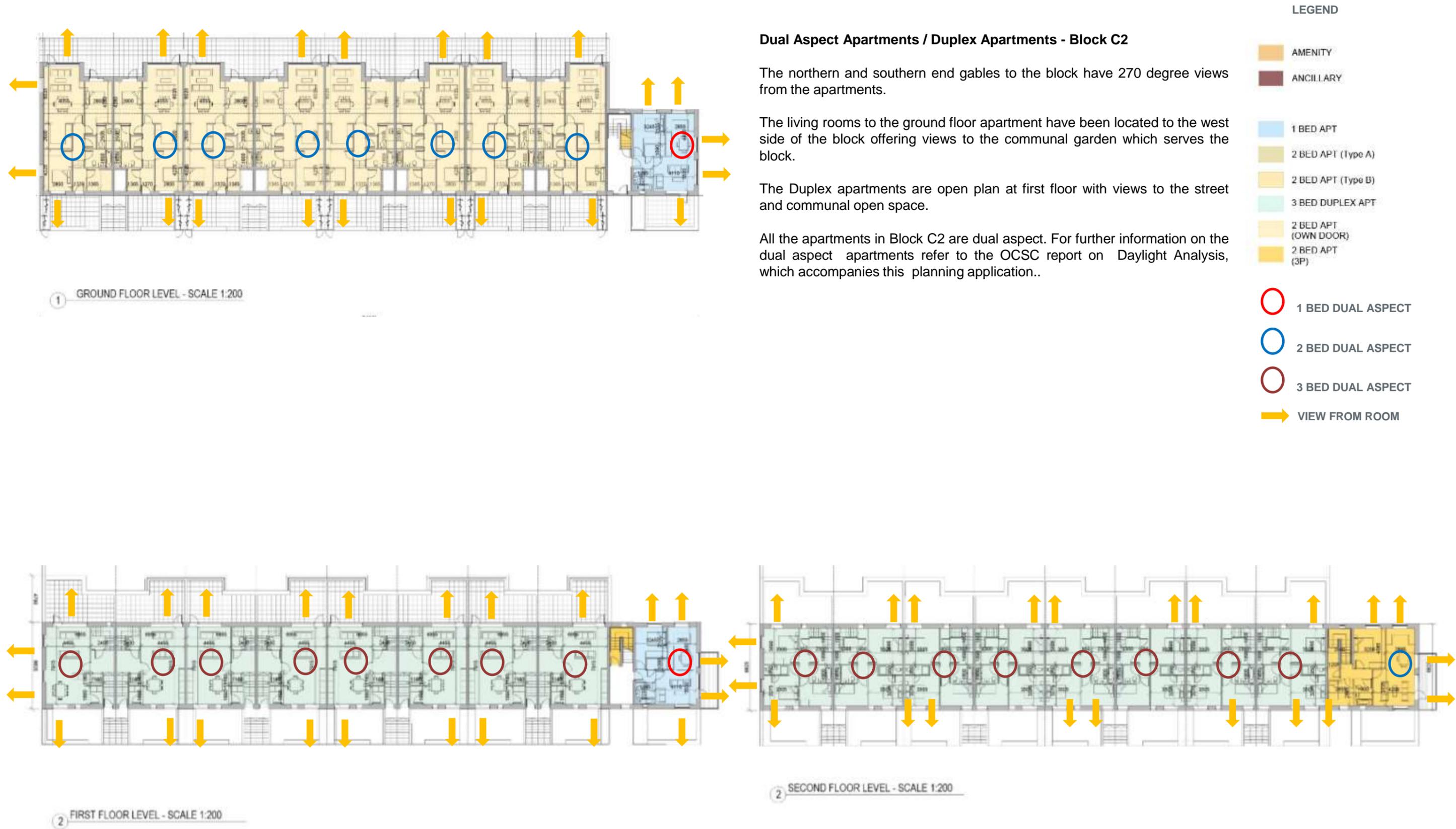
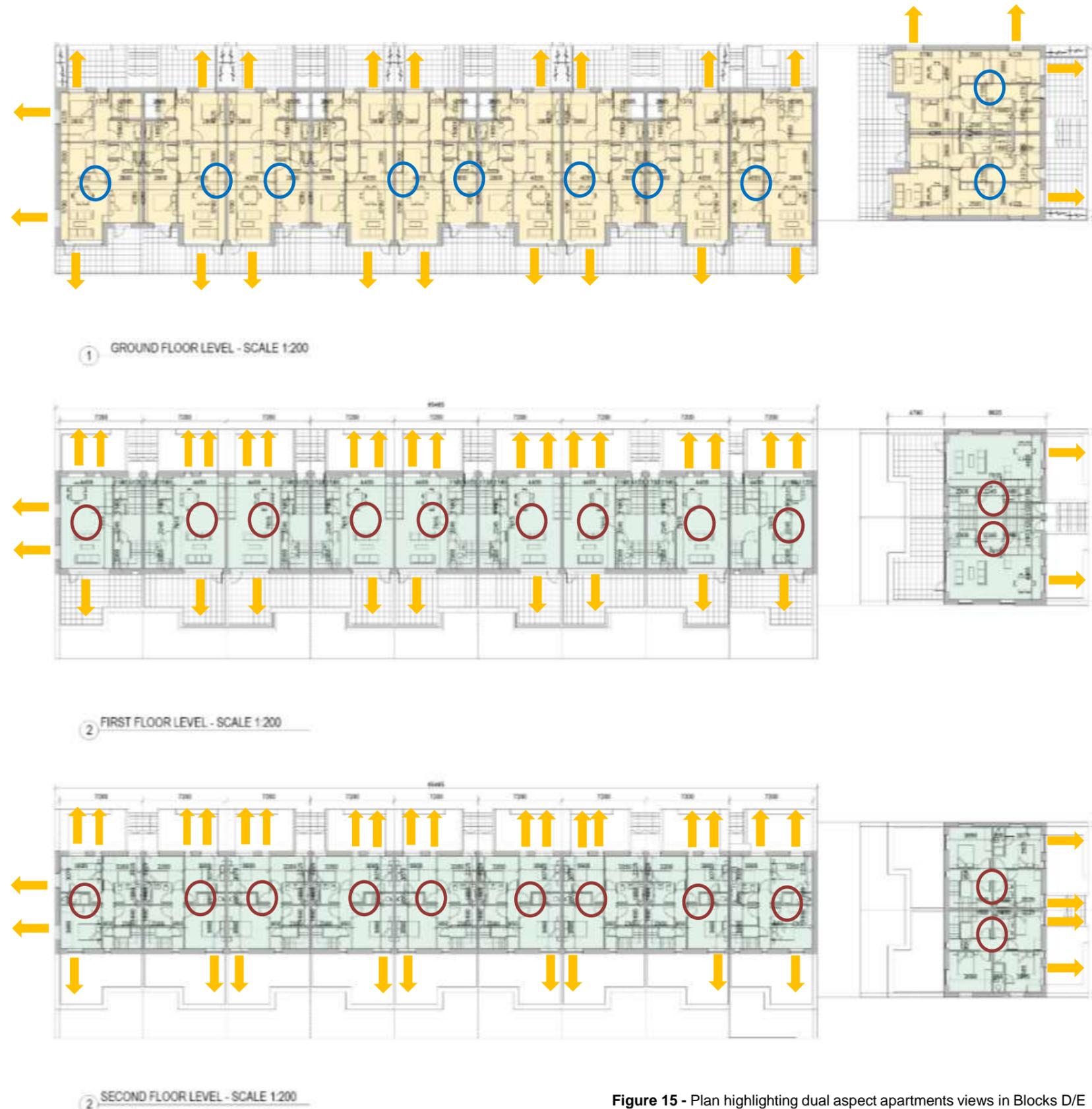


Figure 14 - Plan highlighting dual aspect apartments views in Block C2

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards



Dual Aspect Apartments / Duplex Apartments - Block D

The southern end gable to Block D has 270 degree views from the apartments. The northern end gable of the block will be dual aspect but will not have windows to the northern elevation to ensure overlooking and privacy will not be an issue.

The living rooms to the ground floor apartment have been located to the east side of the block offering views to the communal garden which serves the block.

The Duplex apartments are open plan at first floor with views to the street and communal open space.

Dual Aspect Apartments / Duplex Apartments - Block E

The living rooms to the ground floor apartment have been located to the east side of the block offering views to the communal garden which serves the block.

The Duplex apartments are open plan at first floor with views to the street and communal open space.

All the apartments in Blocks D and E are dual aspect. For further information on the dual aspect apartments refer to the OCSC report on Daylight Analysis, which accompanies this planning application..

LEGEND

- AMENITY
- ANCILLARY
- 1 BED APT
- 2 BED APT (Type A)
- 2 BED APT (Type B)
- 3 BED DUPLEX APT
- 2 BED APT (OWN DOOR)
- 2 BED APT (3P)
- 1 BED DUAL ASPECT
- 2 BED DUAL ASPECT
- 3 BED DUAL ASPECT
- VIEW FROM ROOM

Figure 15 - Plan highlighting dual aspect apartments views in Blocks D/E

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards



Figure 16 – Dual Aspect Apartments to Stocking Avenue

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Floor to Ceiling Heights

The Sustainable Urban Housing: Design Standards for New Apartment Guidelines 2018, Section 3.21 requires a minimum floor to ceiling height of 2.4m.

Where the ground floor units exist, they should look to achieve a minimum floor to ceiling height of 2.7m.

The following clearances are provided:

Apartment Block A

- Upper Ground Floor level apartments have 2.7 meter floor to ceiling height.
- Typical Upper Floor level apartments have 2.55 meter floor to ceiling height.

The Ground Floor to all blocks meets and exceeds the minimum clearance required as follows: -

Apartment/Duplex Apartment Blocks B & C2

- Blocks B & Block C2 residential apartments have a 3.4 meter floor to ceiling height.

Apartment/Duplex Apartment Blocks C1 & D/E

- Block C1 and Block D/E Block residential apartments have a 2.7 meter floor to ceiling height.

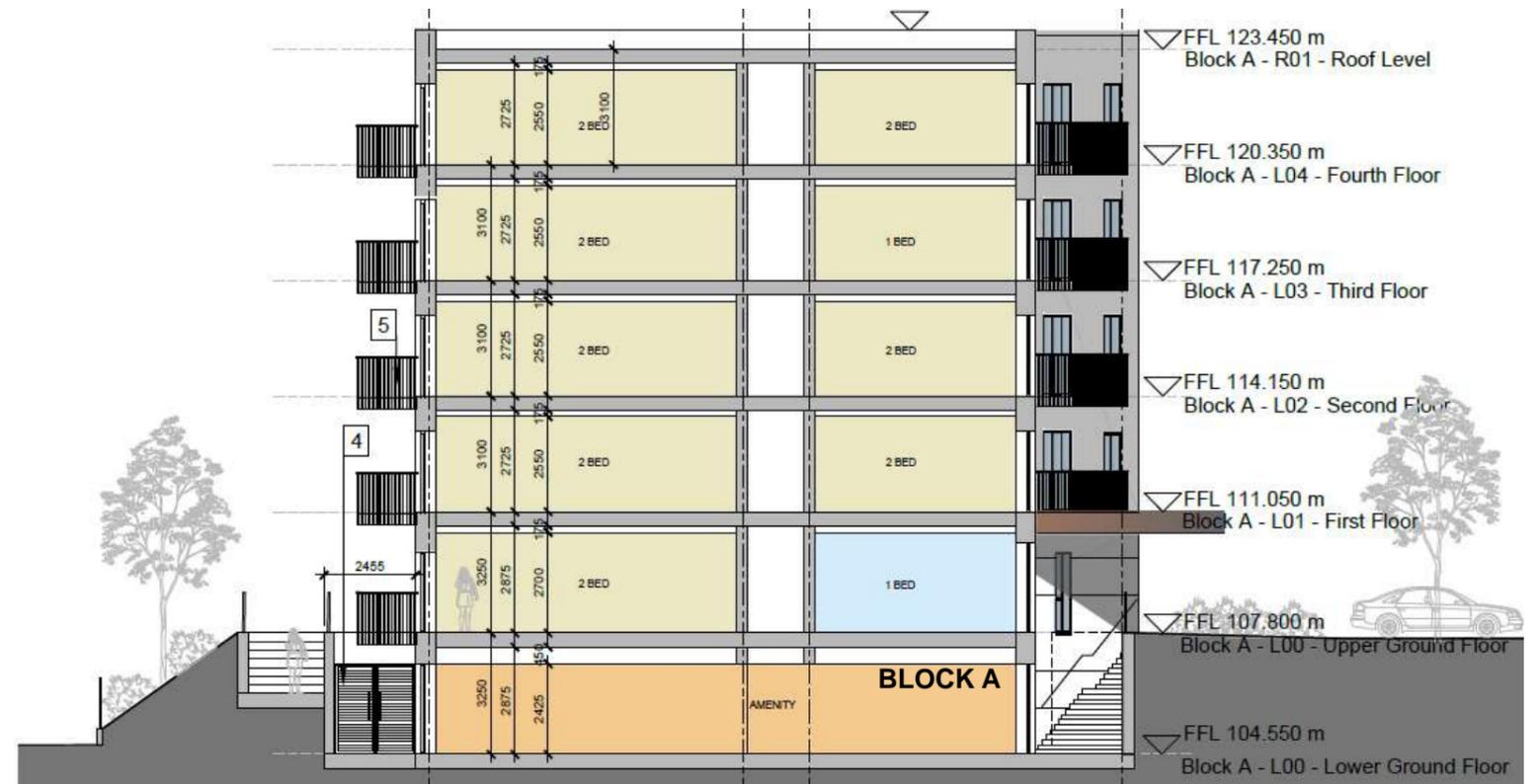


Figure 17 - Section indicating floor to ceiling levels in Block A



Figure 17a - Section indicating floor to ceiling levels in Block A



Figure 17b - Section indicating floor to ceiling levels in Block A

03 Compliance with Sustainable Urban Housing Design Standards: Apartment Design Standards

Lift and Stair Cores

The apartment Block A has been designed within the maximum of 12 units per core as stated in the Design Standards for New Apartments. There are 11 apartments served off the typical floors

All the residential blocks have been reviewed by the project fire consultant (Warringtonfire) and are in accordance with relevant statutory FSC requirements

Internal Storage

Storage requirements are provided entirely within the apartments. The storage provided exceeds that required for individual apartments as set out in Appendix 1 of the Sustainable Urban Housing: Design Standards for New Apartment guidelines 2018. The storage provided in each apartment is in addition to that provided in kitchen presses.

Where storage is provided in either bedrooms of living / dining / kitchen areas, it is space that is additional to the minimum aggregate floor areas for these room types. Individual storage rooms within an apartment do not exceed 3.5 sqm.

NZEB (Nearly Zero Energy Building)

The entire development will comply with the latest Part L building regulations for NZEB. This will be achieved by a combination of factors including: improved fabric performance, low water usage, low air leakage and mechanical ventilation heat recovery.

The heating system will consist of a combination of low & renewable energy technologies from the following:

- Air Source Heat pumps
- PV.

The final combination will be decided based on a detailed analysis using latest software from SEAI. The final BER for the apartments will all be a minimum A3.



Figure 18 - Typical plan with cores.



PHOTOMONTAGE VIEWS OF BLOCK A TO WHITE PINES SOUTH DEVELOPMENT



CGI VIEW BLOCK A



03 Compliance with Sustainable Urban Housing Design Standards: Apartments Design Standards

Private Amenity Space

It is a policy requirement of the Design Standards for New Apartments 2018 and SDCC Development Plan 2016-2022 that private open space in the form of balconies, winter gardens or patio areas.

'Where the apartment types do require balconies then the balconies should adjoin and have a functional relationship with the main living areas of the apartments. In certain circumstances, glass-screened 'winter gardens' may be provided. A minimum depth of 1.5 m is required for balconies, in one usable length to meet the minimum floor area requirement'

Appendix 1 of the Sustainable Urban Housing Design Standards for New Apartments sets out the following minimum floor areas for private amenity space:

- Studio: 4 sqm
- One Bed Apartment: 5 sqm
- Two Bed (3 person) Apartment: 6 sqm
- Two Bed (4 person) Apartment: 7 sqm
- Three Bed Apartment: 9 sqm

Residential Blocks

Block A – Ground Floor Level

At ground floor level in block A all apartments are served by a defined patio area located north and south of the block. These patios all meet and/or exceed the minimum requirements for 1 and 2 bed apartments.

Blocks B, C1, C2 and D/E – Ground Floor Level

At ground floor level in these blocks all the apartments are served by defined patio areas located to the front and rear of the apartments. These patios all meet and/or exceed the minimum requirements for 1 and 2 bed apartments.



Figure 19 – Ground Floor plan with private patios, terraces and balconies to the apartment units



03 Compliance with Sustainable Urban Housing Design Standards: Apartments Design Standards

Private Amenity Space

Residential Blocks

Block A– Upper Floor Levels

To the upper floor levels in block A all apartments are served by balconies located to the north and south of the block. These balconies all meet and/or exceed the minimum requirements for 1 and 2 bed apartments.

Blocks B, C1, C2 and D/E – Upper Floor Levels

At first floor level in these blocks all the duplex apartments are served by defined terrace areas located to the rear of the apartments.

These terraces all meet and/or exceed the minimum requirements for 1 and 2 bed apartments.

At first floor level the 1 bed apartment units to Blocks B, C1, C2 and D/E are served by balconies located to the north of the apartments.

At second floor level the 2 bed apartment units to Blocks B, C1, C2 and D/E are served by balconies located to the north of the apartments.

All the proposed apartments within the scheme have their own private amenity space in the form of balconies, patios or terraces.

The balconies, terraces and patios have all been arranged to afford an aspect to a significant public open space and/or communal open space as follows:-

- Block A has balconies looking north to Dublin City, West to the public plaza and south to the Dublin mountains
- Block B has ground floor apartments with patios looking east to the street, west to the communal open space and north to Dublin City
- Block C1 has ground floor apartments with patios looking west to the street, east to the communal open space and north to Dublin City
- Block C2 has ground floor apartments with patios looking east to the street, west to the communal open space and south to the north to Dublin City
- Block D has ground floor apartments with patios looking west to the street, east to the communal open space and north to Dublin City
- Block E has ground floor apartments with patios looking north to the public park and east / west to the communal open spaces

Please refer to section 4 of this report for commentary on Resident Services and Amenities to be provided for the residents within the development.



Figure 19A – First Floor plan with private terraces and balconies to the apartment units



03 Compliance with Sustainable Urban Housing Design Standards: Apartments Design Standards



Figure 20 - View of communal open space between Blocks C1 and C2

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Communal Facilities

This section of the report assesses the communal amenity elements of the development against the requirements of the Sustainable Urban Housing Standards for New Apartments listed below:

- Access and Services
- Communal Facilities
- Refuse Storage
- Communal Amenity Space
- Children's Play
- Bicycle Parking and Storage
- Car Parking

Access and Services

Access to all Block A will primarily be through the ground floor and first floor points of entry, to provide controlled points of access for residents, visitors and service providers. No user will have to pass through a secondary entrance to access their apartment. A Resident Services Manager will provide concierge and security services at the entrance of Block A.

The primary access route for all residents is usable by everyone, including children, people with disabilities and other people. Within Block A all levels are served by lift and stairs suitable for ambulatory disabled users.

Primary service risers are located in common areas for ease of access, no services transfer or run above ceilings of one apartment to reach another.

The stairs benefit from being naturally lit with daylight reaching the lift lobbies through glazed panels in the doors accessing the stairs. Corridors are wide to allow two people pass as a minimum, with short lengths and widening at key locations for ease of use by those with wheelchairs or children's buggies.

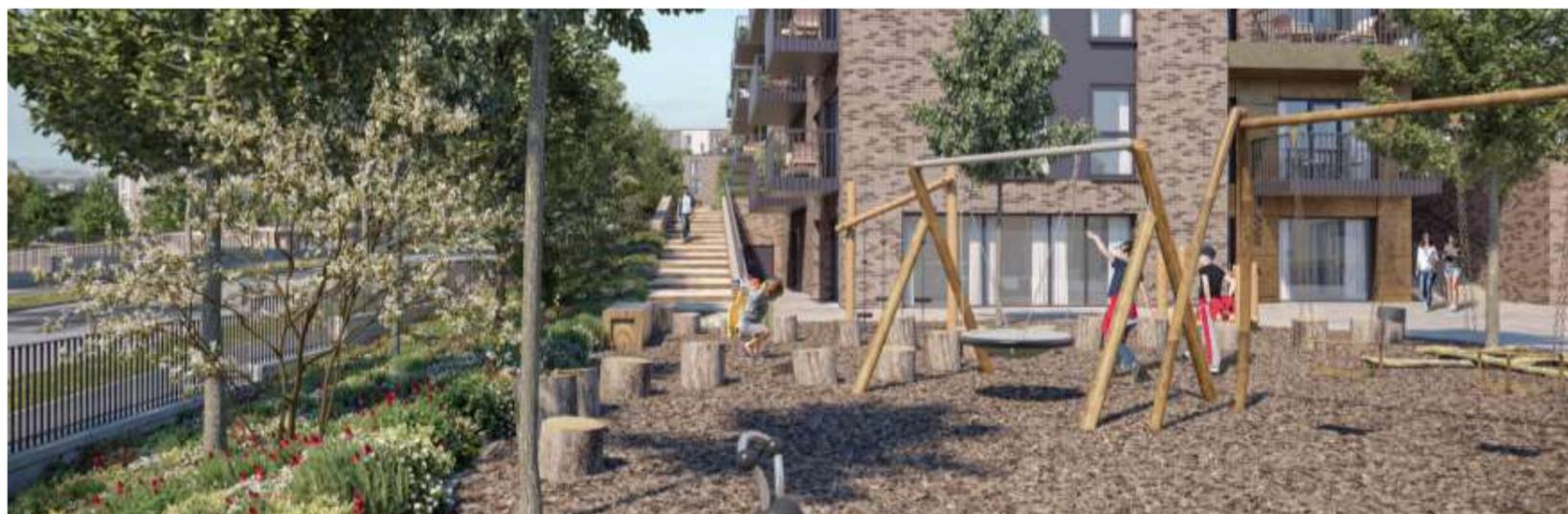
Service rooms are provided at the ground floor level in Block A to discreetly house the plant, water storage, switch and meter ancillary rooms.

Blocks B, C1, C2 and D are all own door access and the single point of access for each apartment and duplex apartment units.

Services to these residential blocks are located at the front door to apartment/duplex apartment unit.



Figure 21 - Ground Floor Plan showing communal Residential Amenity area in Block A



ACCESS TO RESIDENTIAL AMENITY FACILITY IN BLOCK A FROM PUBLIC PLAZA

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Resident Support Facilities

The residential amenity facility which will serve the entire development is located in the ground floor of Block A east of the public plaza and at the main site entrance to the development. The residents services and amenities are arranged on the ground floor of Block A in order to be conveniently located for all residents living within the development. The facility will include a concierge desk, residents lounge, multi purpose room and secure postal storage facilities all accessible from the public plaza.

Resident Services & Amenities

An appropriately scaled range of resident services and amenities are provided to enhance the quality of living for occupants and to also assist in establishing a sense of community for the residents.

The service and amenity is provided on the ground floor of Block A where a residents lounge is located at the west of the building facing onto the public plaza. This space will be flexible and will provide active frontage during the day, with users enjoying views towards the plaza.

A multi purpose room with lounge area for residents is also provided within the facility. There are also a concierge desk, parcel storage and toilet which will serve the amenity space. The lounge area also has direct access to a plaza which can be enjoyed by the residents for outdoor events and gatherings.

Commercial Amenities

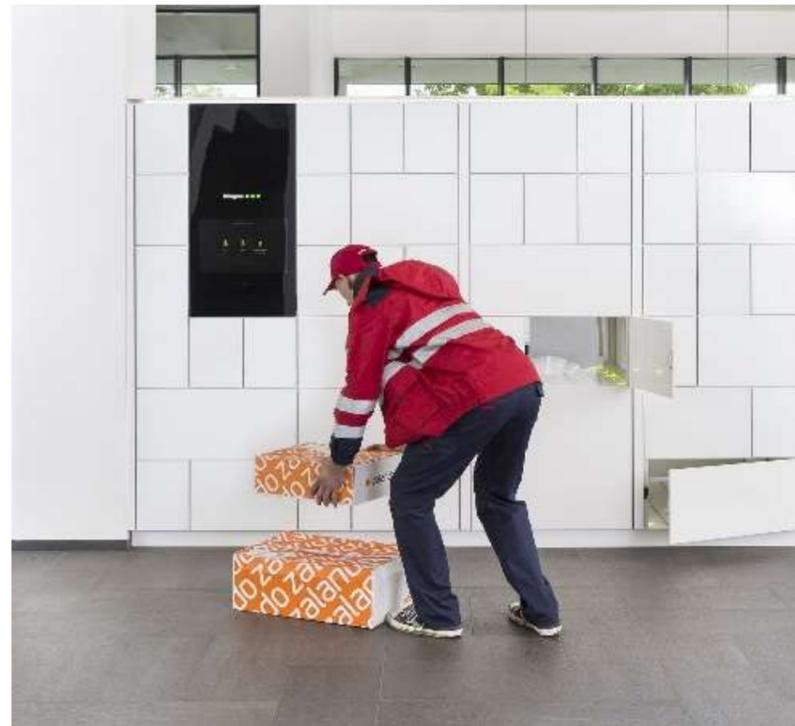
In accordance with the SDCC LAP for the lands adjacent to the subject site the applicant is currently constructing a new neighbourhood centre to the west of the subject site (completion due Q3 2021 subject to Government Covid restrictions).

This will provide a retail unit and creche to support the both the proposed residential development and the existing adjoining residential developments.

The location of the neighbourhood centre in close proximity to the residential development will result in greater usage by the residents and a more communal atmosphere to the surrounding residential developments.



Main Reception Lounge – CGI Sketch View Indicative Only



Parcel Storage – Indicative Only



Meeting/Multi-Purpose Room - Indicative Only

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities



Figure 22 - Example of informal residents lounge

04 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

Refuse Storage

The Operational Waste Management Plan for the development has been prepared by AWN Consulting with regard to the domestic waste management objectives of the South Dublin County Council Development Plan 2016-2022.

The objective of the Operational Waste Management Plan is to maximise the quantity of waste recycled by providing residents sufficient waste segregation at source infrastructure (3-bin systems in kitchens), waste reduction initiatives and waste collection and waste management information.

All communal waste storage areas shall be designed to accommodate a 3-bin system and shall include visible guidelines for residents on how to correctly segregate their wastes.

Each residential block will have access to their own respective bin store found in the following locations: -

- East of Block A
- North of Blocks B and C1
- North of Blocks C2 and D/E

The waste areas are easily accessed by residents, management staff and refuse collectors. Waste collection will be organised and monitored by the Development Management Company to avoid any disruption by waste trucks during collection. Please refer to Waste Management Report by AWN Consulting.

All the waste storage facilities are outside and will be adequately ventilated to minimize odours and potential nuisance from vermin/flies and ensuring the avoidance of nuisance any adjacent apartments.

Waste storage issues have been considered at the initial apartment design stage to ensure access for all, including people with disabilities.



Figure 23 - Ground floor plan with waste storage locations and routes from dwellings to waste storage highlighted



SCREENED BIN STORES WITHIN THE LANDSCAPED WALKWAY



SCREENED BIN STORES WITHIN THE LANDSCAPED STREETS



04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Communal Amenity Spaces

External communal amenity spaces for use by the residents of the scheme will be provided in a number of locations throughout the development.

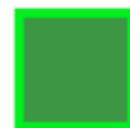
The required amount of communal amenity space for the resident is as follows: -

- Public Open Space with plaza and public park serving all residential blocks
- 4,369 m² public open space (20.1%)
- Visual and Communal open spaces serving all residential blocks
- 1,521 m² of visual amenity (7%),
- Usable Public Open Space (under powerline) serving all residential blocks
- 3,955 m² useable public open space (18.2%)
- Total = 9,845 m² (45.3%)

The above calculations show that a significant quantity required communal amenity is provided throughout the development to satisfy the required area.



Figure 24 - Proposed public, communal and visual amenity spaces.



Public Open Space



Public Open Space
(under powerlines)



Visual Amenity Space

04 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities



Figure 25 – CGI view of public open space (below powerlines) not included in public open space calculation

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities



Figure 26 – CGI view of Public Park to eastern site entrance

04 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities



04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities



Figure 28 – CGI view of Public Open Space and Communal Open Space to Blocks D/E

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities



Figure 28A – CGI view of Communal Open Space to Blocks C1 and C2

04 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

Security Consideration

The design of the apartment blocks will provide occupants and their visitors with a sense of safety and security.

We have reviewed and integrated the requirements of 'secure by design' into the development to ensure more durable and robust design. Passive supervision is key to ensuring security on site and the designs have been enhanced to remove blind corners, ensure windows in gables have aspect in different directions and ensure entrances are well lit.

The access to apartment block A will be controlled with electronic fob through a controlled point of access located at lower ground and ground floor levels.

Block A, located at the main entrance of the development houses the main residential amenity facility and monitors all access to this block.

Particular attention has been given to providing as much ground floor activation and animation as possible to the greatest proportion of facades as possible in order to provide passive surveillance and supervision through activity and movement of people in public and semi-public spaces.

Blocks A and E in particular have a direct relationship with the western public plaza and the eastern public park respectively. This will ensure active passive monitoring of the daily activities on these public open spaces.

The residential apartments at upper levels to all blocks also provide passive surveillance of all the public and communal open spaces, including the pedestrian walkway which passes along the northern edge of the development and the landscaped meadow which passes along the southern boundary of the development.



Figure 29 - CGI View of Landscaped Meadow to southern boundary of development



BLOCK A TO PUBLIC PLAZA



BLOCK E TO PUBLIC PARK

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Public Open Spaces

Public Plaza

The plazas at both vehicular entrances to the site act as a “Welcoming Mat” for the development. They are finished in high quality materials with high spec playground facilities in line with SDCC guidance. Formal seating opportunities as well as bike parking coupled with passive surveillance from the blocks will insure a safe and welcoming atmosphere.

Public Walkway

To create a network of external routes that allow for flexibility in movement, for social interaction and active play as well as spaces that are quiet and calming, spaces which allow a connection to different habitats and enable a tree and hedgerow planting structure to be established across the site. The site is wrapped in a woodland boundary and path which anchors the scheme to Stocking Avenue but also provides vital habitats and biodiversity. The planting scheme for the site has been designed in conjunction with the ecologist. It was imperative for us to provide universal access for all residents and visitors from the entrance of the scheme to each access point of each block. This is done by providing level access routes free of steps and ramps. All Blocks can be accessed without the need to negotiate steps which is a great feat considering the levels issues on the site.

Public Park

Over the last number of years M+A have been involved in the delivery of several schemes in the vicinity of this scheme including White Pines North and White Pines South. During these projects we have worked closely with SDCC Parks Department to provide less formal and more natural playing environments in line with their new requirements. Rather than providing fenced in flat play spaces with manufactured play equipment it is now preferred to have more free-flowing meandering play areas. These play spaces include incidental play opportunities to allow for social, imaginative and risk play that are incorporated into the landscapes contours and include mounding and tree planting. We also understand that a high quality play space is required and that tree logs lying on the ground is not what SDCC’s or our interpretation of what natural play is. As well as playgrounds we understand that open space areas are just as important. This allows kids and adults to use the flat open spaces however they wish i.e. kick-about.



Figure 30 – Landscape plan highlighting location of playgrounds/fitness areas

Landscape Meadow

Due to the power lines above this space will be devoid of trees above 3 meter tall but will contain swades of wildflower and long grasses that meander with a stepped ramp footpath. First established in the White Pines North scheme as a way of utilising the space above the water lines that run through the site, this wildflower meadow open space will now continue into the White Pines Central scheme. Planted in a meandering wave the wildflower creates pocket spaces for informal use. This wildflower meadow will tie the two scheme together and make them feel like one. The colour and form of the meadow creates great interest for the residents but is also a hub of pollinator activity.



Figure 30 – Grass Playground



Figure 30a – Adventure Playground



04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Car and Bicycle Parking

The parking has been generally arranged in 3 areas within the development.

Block A Car Parking

The residents dedicated car parking is located to the south of Block A.

The access to the car parking is through the White Pines South development along White Pines Dale.

All car parking spaces are level to allow easy access for residents to the main entrance to the block.

Blocks B and C1 Car Parking

The residents dedicated car parking is located to the east of the main access road.

The access to the car parking is through the White Pines South development along White Pines Dale.

All car parking spaces are level to allow easy access for residents to the front door of their apartment.

Blocks C2 and D/E Car Parking

The residents dedicated car parking is located to the east and west of the main access road.

The access to the car parking is through the White Pines South development along White Pines Dale.

All car parking spaces are level to allow easy access for residents to the front door of their apartment.

Electrical Car Spaces

Electric car charging will be provided to 10% of the surface car parking spaces indicated. In addition an allowance will be made in the overall power capacity for future provision of electric car charging to the car park spaces.



Figure 31 - Ground Floor Plan highlighting vehicle parking areas in green



LEVEL STREET PARKING TO BLOCKS C1 AND C2

04 Compliance with Sustainable Urban Housing Design Standards: Communal Facilities

Bicycle Parking

BLOCK A - Access to Bicycle Store at Lower Ground Floor Level

Indicated below are the multiple access/egress points from the development to the bicycle park zones. Visitor parking is arranged throughout the development in the public open spaces to serve the development.

BLOCK A - Primary Access/Egress - Primary Route 01

Access to the bike store is via the western plaza and along the northern edge of Block A. The access is level to the bike store where all residents in this block have dedicated secure bicycle parking

BLOCKS B & C1 - Access/Egress - Primary Route 02

Access to the bicycle stores is via the new pedestrian entrance of Stocking Avenue. Residents of the ground floor apartments will have secure dedicated bicycle parking located within their front garden patio. The residents in the apartments / duplex apartments above will share access to their dedicated secure bicycle parking located off the main access street.

BLOCKS C2 & D/E - Primary Access/Egress - Primary Route 3

Access to the bicycle stores is via the new pedestrian entrance of Stocking Avenue. The bicycle parking strategy is as per Blocks B and C1.

Blocks B, C1, C2 and D/E Secondary Access/Egress - Secondary Route 4

A secondary access route is provided from the main entrance of the development via footpath and ramps to White Pines Dale, and from there to their corresponding street.

Figure 32 - Ground Floor Plan highlighting bicycle routes and parking



- LEGEND**
- Secure Designated Bike Storage
 - Access/Egress Points
 - Travel Routes





Figure 33 – CGI view of Block A from Stocking Avenue

05 Appendix A - Housing Quality Assessment Schedule



PUBLIC OPEN SPACE TO BLOCK D/E

05 Appendix A - Housing Quality Assessment Schedule

Block	Unit No	Description	Level / Floor	Dwelling Unit Size (m ²)	Dwelling Unit Size Required (m ²)	Number of Bedrooms	Bed Spaces	Aggregate Living Area (m ²)	Aggregate Living Area Required (m ²)	Aggregate Bedroom Area (m ²)	Aggregate Bedroom Area Required (m ²)	Storage (m ²)	Storage Required (m ²)	Area of main Bathroom	Dual Aspect	External Comunal Amenity Provided	External Comunal Amenity Required	Private (Terrace/Balcoony) Space Provided	Private (Terrace/Balcoony) Space Required	Total Open Space Provided per Apartment
A	G-01	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	G-02	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	G-03	2 Bed Apartment	Ground Floor	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	G-04	2 Bed Apartment	Ground Floor	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	G-05	2 Bed Apartment	Ground Floor	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	G-06	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	G-07	2 Bed Apartment	Ground Floor	82.9	73.0	2	4	30.0	30.0	27.3	24.4	6.1	6.0	3.7	Y	38.1	7.0	8.7	7.0	46.8
A	G-08	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	G-09	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	G-10	1 Bed Apartment	Ground Floor	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L1-01	2 Bed Apartment	First	87.8	73.0	2	4	25.6	30.0	27.4	24.4	7.0	6.0	3.7	Y	38.1	7.0	14.5	7.0	52.6
A	L1-02	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	L1-03	2 Bed Apartment	First	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L1-04	2 Bed Apartment	First	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L1-05	2 Bed Apartment	First	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L1-06	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
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A	L1-08	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L1-09	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L1-10	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L1-11	1 Bed Apartment	First	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L2-01	2 Bed Apartment	Second	87.8	73.0	2	4	25.6	30.0	27.4	24.4	7.0	6.0	3.7	Y	38.1	7.0	14.5	7.0	52.6
A	L2-02	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	L2-03	2 Bed Apartment	Second	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L2-04	2 Bed Apartment	Second	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L2-05	2 Bed Apartment	Second	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L2-06	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
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A	L2-08	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L2-09	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L2-10	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L2-11	1 Bed Apartment	Second	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L3-01	2 Bed Apartment	Third	87.8	73.0	2	4	25.6	30.0	27.4	24.4	7.0	6.0	3.7	Y	38.1	7.0	14.5	7.0	52.6
A	L3-02	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	L3-03	2 Bed Apartment	Third	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L3-04	2 Bed Apartment	Third	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L3-05	2 Bed Apartment	Third	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	N	38.1	7.0	8.7	7.0	46.8
A	L3-06	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	L3-07	2 Bed Apartment	Third	82.9	73.0	2	4	30.0	30.0	27.3	24.4	6.1	6.0	3.7	Y	38.1	7.0	8.7	7.0	46.8
A	L3-08	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L3-09	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L3-10	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L3-11	1 Bed Apartment	Third	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	N	38.1	5.0	5.0	5.0	43.1
A	L4-01	2 Bed Apartment	Fourth	87.8	73.0	2	4	25.6	30.0	27.4	24.4	7.0	6.0	3.7	Y	38.1	7.0	14.5	7.0	52.6
A	L4-02	1 Bed Apartment	Fourth	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1
A	L4-03	2 Bed Apartment	Fourth	79.6	73.0	2	4	30.0	30.0	26.0	24.4	7.2	6.0	3.7	Y	38.1	7.0	8.7	7.0	46.8
A	L4-04	1 Bed Apartment	Fourth	49.8	46.0	1	2	26.7	23.0	11.7	11.4	3.0	3.0	3.7	Y	38.1	5.0	5.0	5.0	43.1

05 Appendix A - Housing Quality Assessment Schedule

B	BGF-01	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
B	BGF-02	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
B	BGF-03	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
B	BGF-04	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
B	BGF-05	1 Bed Apartment	Ground	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
B	BL1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
B	BL1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
B	BL1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
B	BL1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
B	BL1-06	1 Bed Apartment	First	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
B	BL1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
B	BL1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
B	BL1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
B	BL1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
B	BL2-06	2 Bed Apartment	Second	72.0	63.0	2	3	28.0	28.0	20.1	20.1	5.6	5.0		Y	38.1	6.0	9.5	6.0	47.6
C1	C1GF-01	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-02	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-03	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-04	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-06	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-08	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C1	C1GF-07	1 Bed Apartment	Ground	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
C1	C1L1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-06	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-08	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C1	C1L1-07	1 Bed Apartment	First	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
C1	C1L1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L1-06	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L1-08	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C1	C1L2-07	2 Bed Apartment	Second	72.0	63.0	2	3	28.0	28.0	20.1	20.1	5.6	5.0		Y	38.1	6.0	9.5	6.0	47.6

05 Appendix A - Housing Quality Assessment Schedule

C2	C2GF-01	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-02	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-03	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-04	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-05	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-06	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-07	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-08	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
C2	C2GF-09	1 Bed Apartment	Ground	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
C2	C2L1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-05	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-06	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-07	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-08	3 Bed DUPLEX	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
C2	C2L1-09	1 Bed Apartment	First	49.0	46.0	1	2	25.0	23.0	11.4	11.4	3.7	3.0	4.4	Y	38.1	5.0	9.5	5.0	47.6
C2	C2L1-01	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-02	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-03	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-04	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-05	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-06	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-07	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L1-08	3 Bed DUPLEX	First & Second	110.0	90.0	3	6													
C2	C2L2-08	2 Bed Apartment	Second	72.0	63.0	2	3	28.0	28.0	20.1	20.1	5.6	5.0		Y	38.1	6.0	9.5	6.0	47.6
D	DGF-01	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-02	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-03	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-04	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-05	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-06	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-07	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-08	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DGF-09	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	37.0	7.0	75.1
D	DL1-01	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-02	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-03	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-04	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-05	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-06	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-07	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-08	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
D	DL1-09	3 Bed DUPLEX B	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
E	EGF-01	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	60.0	7.0	98.1
E	EGF-02	2 Bed Apartment	Ground	80.2	73.0	2	4	30.0	30.0	25.2	24.4	6.0	6.0	5	Y	38.1	7.0	60.0	7.0	98.1
E	EL1-01	3 Bed DUPLEX A	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1
E	EL1-02	3 Bed DUPLEX A	First & Second	110.0	90.0	3	6	34.0	34.0	33.2	31.5	9.0	9.0	4.1	Y	38.1	9.0	25.0	9.0	63.1

05 Appendix B - Planning Statistics for the Scheme



EASTERN ENTRANCE TO PUBLIC PARK

05 Appendix B - Planning Statistics for the Scheme

OVERALL UNITS:

	No of units	Total Area
STUDIO - Block A	0	0.0
1 BED - Block A	26	1327.9
2 BED - Block A	21	1702.7
1 BED - Blocks B, C1, C2	6	254.0
2 BED - Blocks B, C1, C2, D, E	32	2541.8
3 BED - Blocks B, C1, C2, D, E	29	3190.0
TOTAL	114	8056.4
DUAL ASP TOTAL NUMBER	87	
DUAL ASPECT TOTAL RATIO	76%	

DENSITY:

OVERALL (units/ha)	52.5
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AREA (ha)	2.1734
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UNIT MIX

	No	%	Total Area
STUDIO	0	0%	0
1 BED APARTMENTS	32	28%	1621.9
2 BED APARTMENTS	55	48%	4244.5
3 BED DUPLEX	27	24%	3190.0
TOTAL	114		8056.4

External Bike & Bin Stores & CSB	173
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OVERALL UNITS AND AREAS:

	STUDIO	1Bed	2Bed	3 Bed Duplex	TOTAL Net Apartments Area	TOTAL Plant / Bin & Bike Stores Area	AMENITIES	TOTAL Gross Area (incl. circulation)
	NO	No	No	No	AREA	AREA	AREA	AREA
Total	0	32	53	29	9056	337	123	10048
Total No of Units			114					

BLOCK A - APARTMENT BLOCK

Apt type	area(m ²)
1 Bed (chamber)	67.9
1 Bed	50.4
2 Bed (chamber)	87.8
2 Bed	79.5

Total number of units	47
Number of dual asp units	20
Dual aspect ratio	43%

LEVELS	1 Bed Chamber	1Bed	2 Bed Chamber	2Bed Type A	TOTAL	Apartments aggregate area	Plant/Store/ Bike	AMENITIES	GROSS Internal Area (including all voids)	DUAL ASPECT
	NO	No	No	No		AREA	AREA	AREA	AREA	No
Lower GF	0	0	0	0	0	0.0	147	123	352	0
GF	1	5	0	4	10	637.9	17		882	4
1	0	6	1	4	11	708.2	0	0	891	4
2	0	6	1	4	11	708.2	0	0	891	4
3	0	6	1	4	11	708.2	0	0	891	4
4	0	2	1	3	4	268.1	0	0	349	4
SUM	1	25	4	17	47	3030.6	164	123	4296	20
TOTAL APARTMENTS	47	1260.0	351.2	1351.5		3030.6				43%

BLOCK B - DUPLEX

Apt type	area(m ²)
1 Bed	49.0
2 Bed/3p with stairs	72.0
2 Bed	80.2
3 Bed Duplex	110.0

Total no of units	11
Number of Dual asp units	11
Dual aspect ratio	100%

LEVELS	1Bed	2Bed/3p	2Bed	3Bed Duplex	Apartments aggregate area	Gross Internal Area	DUAL ASPECT
	No	No	No	No	AREA	AREA	No
GF	1		4		269.8	414	
1	1			4	561.0	297	
2		1				297	
SUM	2	1	4	4	930.8	1008	11
TOTAL NO UNITS	11	72	520.8	440	930.8		100%

BLOCK C1 - DUPLEX

Apt type	area
1 Bed	49.0
2 Bed/3p with stairs	72.0
2 Bed	80.2
3 Bed Duplex	110.0

Total number of units	15
number of dual asp units	15
Dual asp ratio	100.00%

LEVELS	1Bed	2Bed/3p	2Bed	3Bed Duplex	Apartments aggregate area	Gross Internal Area	DUAL ASPECT
	No	No	No	No	AREA	AREA	No
GF	1		6		530.2	586	
1	1			6	781.0	412	
2		1				412	
SUM	2	1	6	6	1311.2	1410	15
TOTAL NO OF UNITS	15	72	481.2	660	1311.2		100%

BLOCK C2 - DUPLEX

Apt type	area
1 Bed	49.0
2 Bed/3p with stairs	72.0
2 Bed	80.2
3 Bed Duplex	110.0

Total number of units	19
Number of dual asp units	19
Dual asp ratio	100.00%

DUAL ASPECT	LEVELS	1Bed	2Bed/3p	2Bed	3Bed Duplex	Apartments aggregate area	Gross Internal Area	DUAL ASPECT
No		No	No	No	No	AREA	AREA	No
	GF	1		6		690.6	759	
	1	1			8	1001.0	526	
	2		1				526	
	SUM	2	1	6	8	1691.6	1811	19
TOTAL NO OF UNITS		19	72	641.6	890	1691.6		100%

BLOCK D - DUPLEX

Apt type	area
2 Bed	80.2
3 Bed Duplex	110

Total number of units	18
Number of dual asp units	18
Dual asp ratio	100%

LEVELS	2Bed	3Bed Duplex	Apartments aggregate area	Gross Internal Area	DUAL ASPECT
	No	No	AREA	AREA	No
GF	9		721.8	778	
1		9	990.0	511	
2				511	
SUM	9	9	1711.8	1795	18
TOTAL APARTMENTS	18	990	1711.8		100%

BLOCK E - DUPLEX

Apt type	area
2 Bed	80.2
3 Bed Duplex	110

Total number of units	4
Number of dual asp units	4
Dual asp ratio	100%

LEVELS	2Bed	3Bed Duplex	Apartments aggregate area	Gross Internal Area	DUAL ASPECT
	No	No	AREA	AREA	No
GF	2		160.4	188	
1		2	220.8	112	
2				112	
SUM	2	2	380.4	393	4
TOTAL APARTMENTS	4	220	380.4		100%

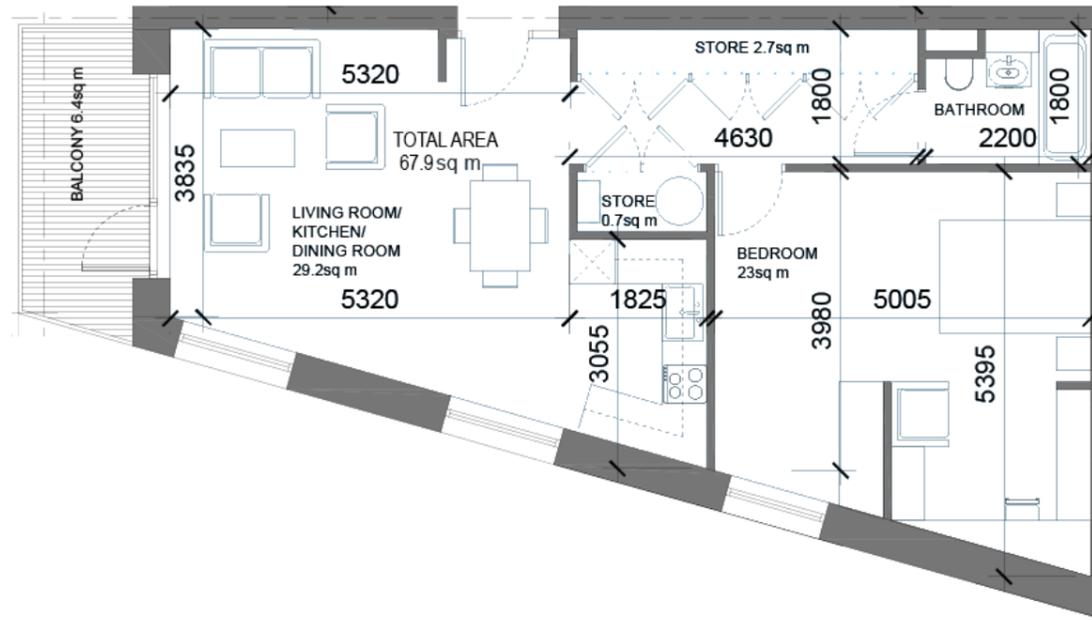
05 Appendix C - Apartment Type Drawings

BLOCK A

Typical 1 Bed Apartment – Corner Unit – Type 01 – 49.6 sqm



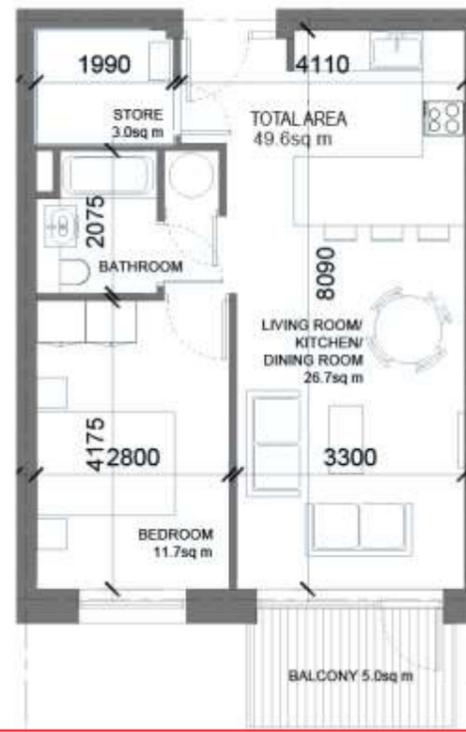
Oversized 1 Bed Apartment – Corner Unit – Type 02 – 67.9 sqm



Typical 1 Bed Apartment – Corner Unit – Type 04 – 49 sqm



Typical 1 Bed Apartment – Single Aspect – Type 06 – 49.6 sqm



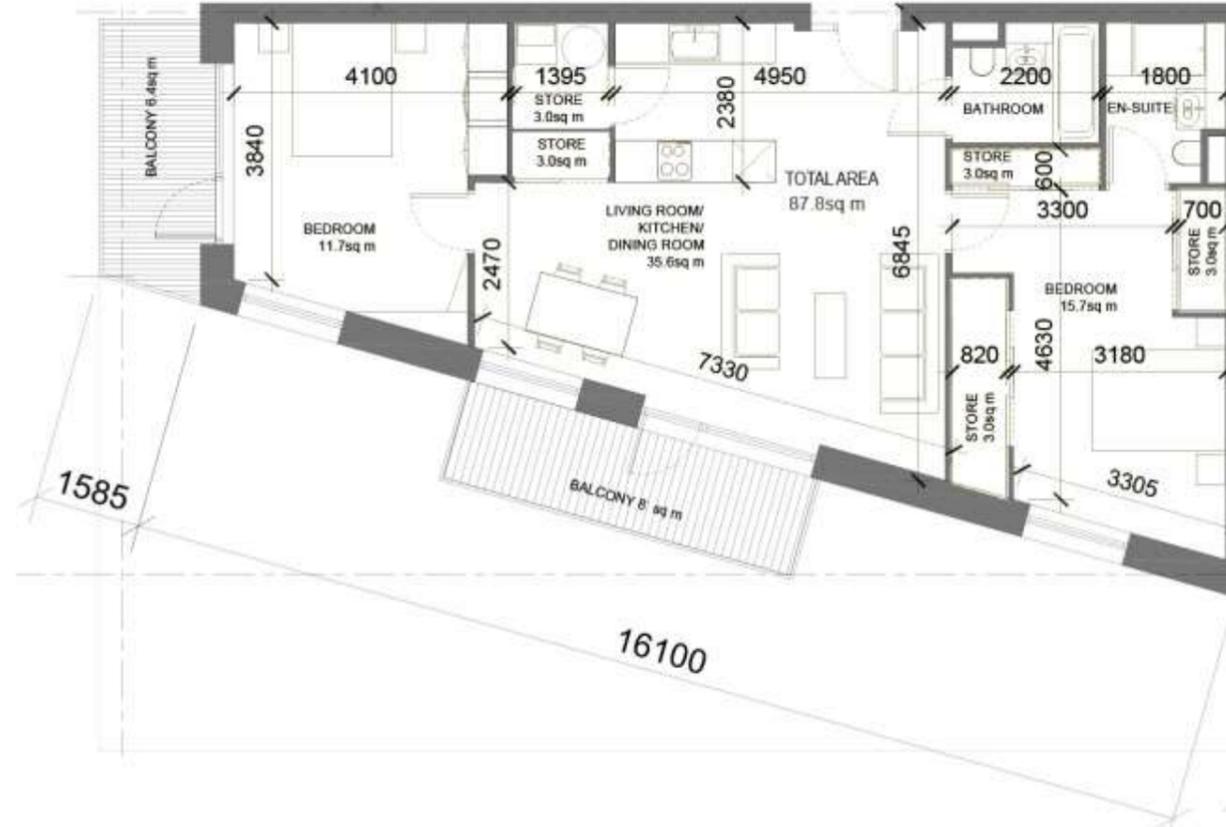
05 Appendix C - Apartment Type Drawings

BLOCK A

Typical 2 Bed Apartment – Corner Unit – Type 01 – 82.9 sqm



Typical 2 Bed Apartment – Corner Unit Type 02 – 87.8 sqm



Typical 2 Bed Apartment – Dumbbell Corner Unit Type 03 – 79.5 sqm



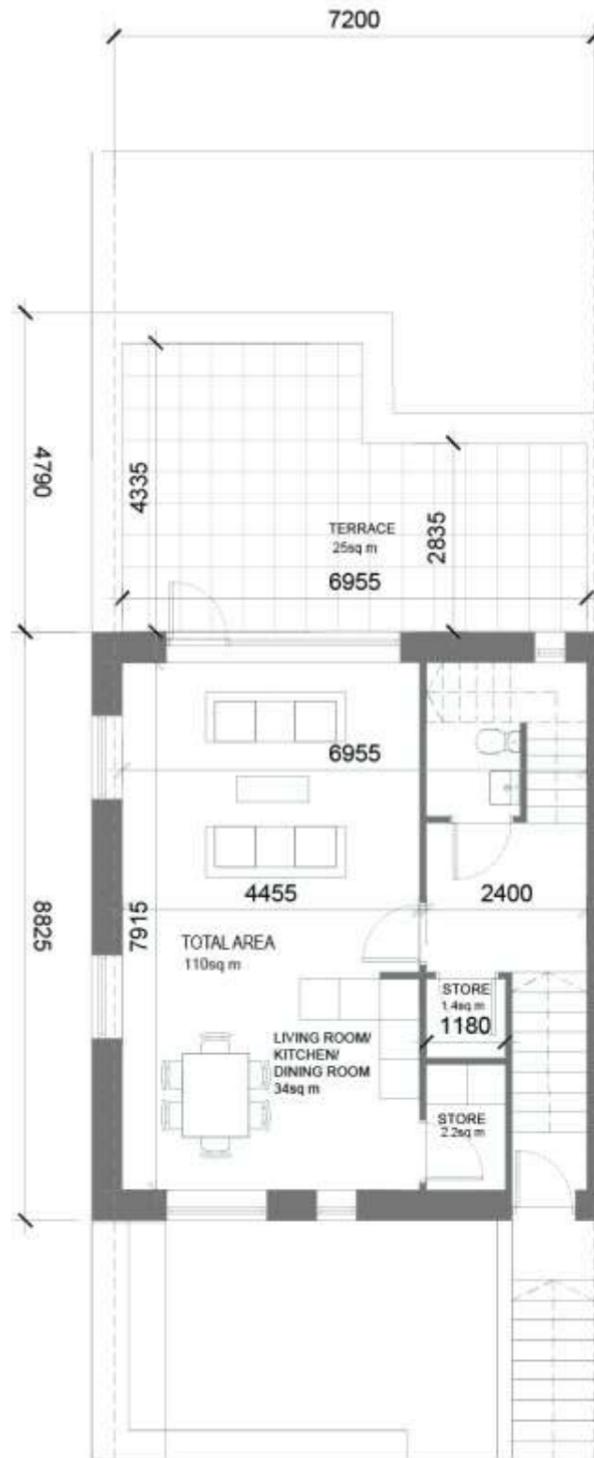
05 Appendix C - Apartment Type Drawings

BLOCKS B, C1, C2 AND D/E

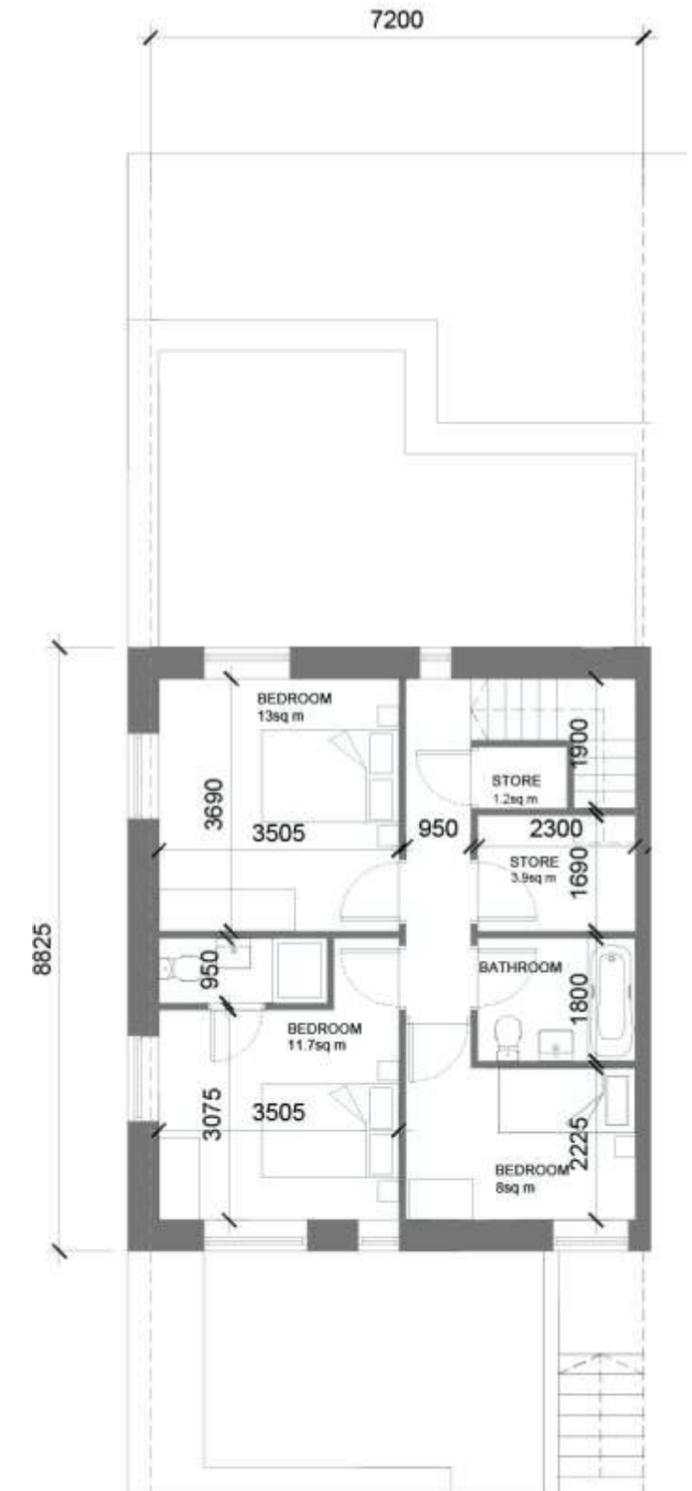
Typical 2 Bed Ground Floor Apartment – 80.2 sqm



3 Bed First Floor Duplex Apartment – 110 sqm



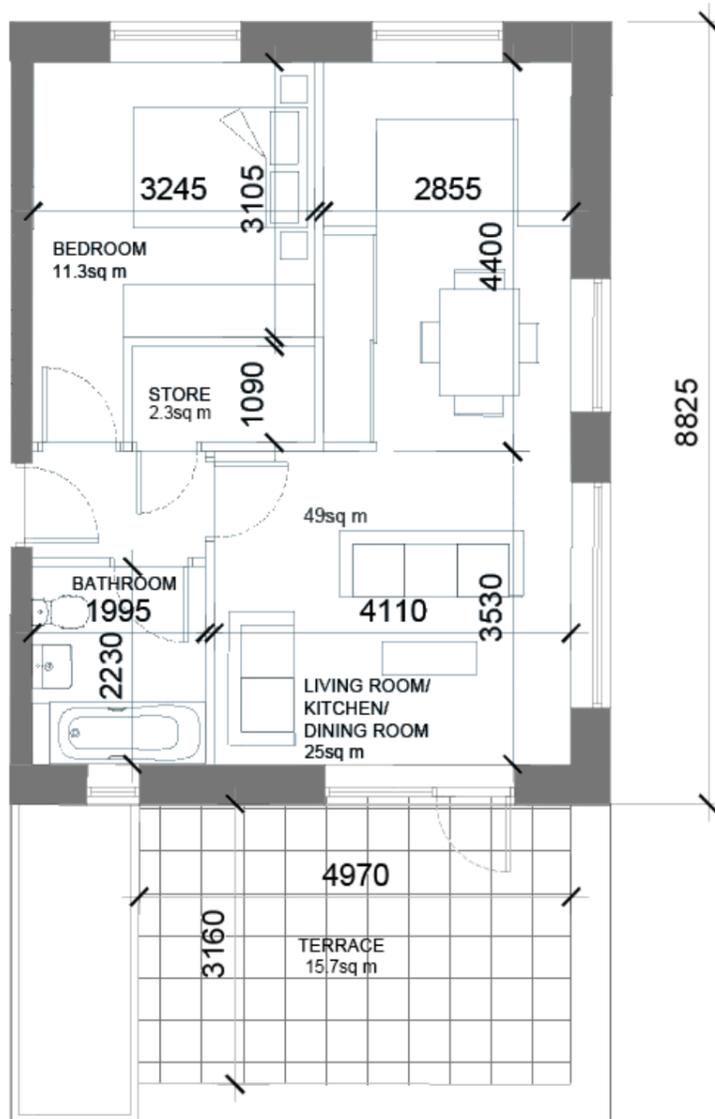
3 Bed Second Floor Duplex Apartment



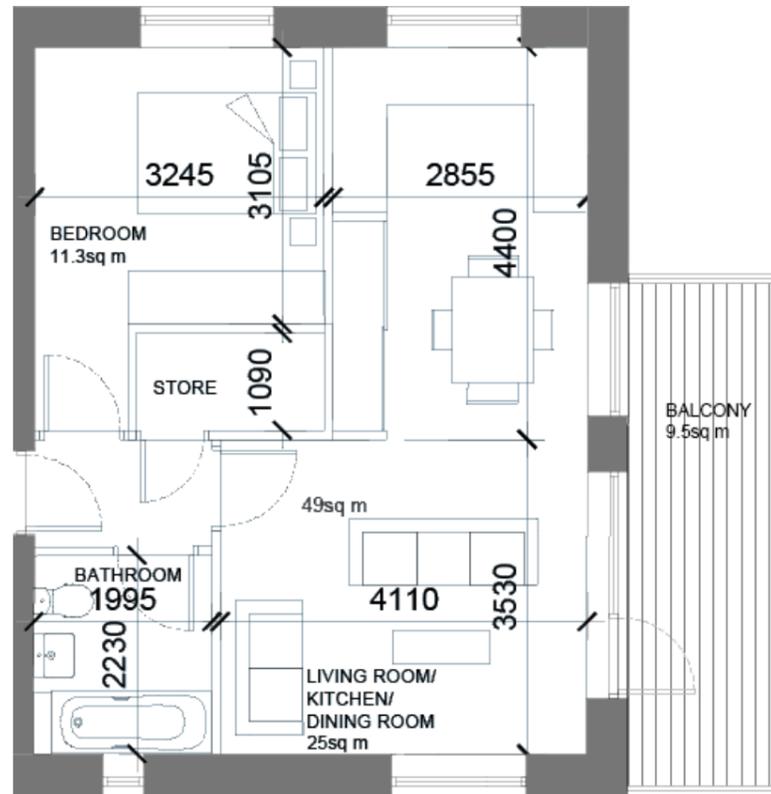
05 Appendix C - Apartment Type Drawings

BLOCKS B, C1 AND C2

Typical 1 Bed Ground Floor Apartment – 49 sqm



Typical 1 Bed First Floor Apartment – 49 sqm



Typical 2 Bed First Floor Second Floor Apartment – 72 sqm

