

Housing Quality Assessment

Henry J Lyons

THE RAILYARD APARTMENTS

Albert Quay East

Cork City



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Project Ref: 95-0491

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Progressive Commercial Construction Limited

Housing Quality Assessment submitted with the Planning Application for:

Residential Development at Albert Quay East, Cork City

for Progressive Commercial Constructions LTD.

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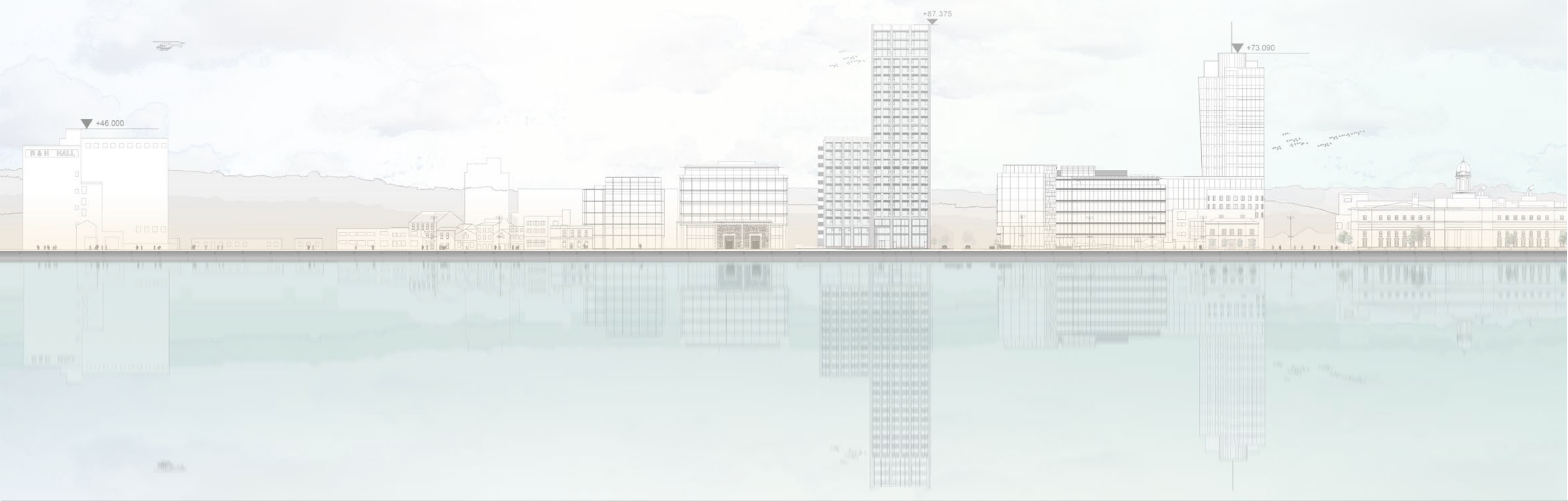
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Image 1.0 View of north-west corner of proposed development

This Housing Quality Assessment forms part of a planning submission for The Railyard Apartments, proposed development at Albert Quay, Cork City.

The purpose of this document is to assess the residential standards of the proposed amendments against the provisions of the Sustainable Urban Housing Standards for New Apartments set out by the government and is intended to be read in conjunction with all other supporting documentation.

The proposed development will comply with the site’s City Centre zoning objective, which supports the retention and expansion of a wide range of commercial, cultural, leisure and residential uses. In addition to providing high quality residential accommodation that meets the highest international standards, it also achieves many other significant objectives:

- The nationally important regeneration of Cork’s Docklands by providing residential units for the city centre and surrounding commercial area
- Professionally designed apartments which meet high standards of design and international standards
- A new public plaza and street which enhances the public realm and connectivity
- Provides residential units for the city centre which will help aid the city housing demand

Key Features:

The development is designed to be compliant with the following:

1. Sustainable Urban Housing: Design Standards for New Apartments (2023)
2. Urban Development and Building Height Guidelines for Planning Authorities (Dec 2018)
3. Urban Design Manual: A best practice guide
4. Cork City Development Plan 2022 - 2028
5. Proposed Architectural Conservation Area (ACA)

Key deliverables on these Policies which the proposed scheme will deliver include the following:

1. Provision of high quality accommodation providing 217 residential apartments. This will aid in the city’s demand for housing within the city centre.
2. Provision of uses such as; community/arts space and communal amenity areas will create active street frontages at ground level.
3. The external public spaces and main public plaza will aid in connecting the surrounding public spaces in the area.

The Development also takes guidance from the following documentation:

- Sustainable Urban Housing: Design Standards for New Apartments (2023)
- Best practice guidelines Quality Housing for Sustainable Communities (2007)
- Sustainable Residential Development in Urban Areas Guidelines for Planning Authorities (2009)
- Design Manual for Urban Roads and Streets or ‘DMURS’ (2019)

As part of the wider development of the Cork Docklands and adjoining sites, this development proposes to deliver a ‘best in class’ residential development designed to the apartment guidelines to meet end user requirements. This development will provide much needed residential apartment accommodation in a sustainable city centre location close to the main transportation hub.

The Project Summary

The proposed development site is a pivotal, transitional location between the city centre and the nationally important regeneration project that is Cork's Docklands. It is generally bound by Albert Quay East to the north, Albert Street to the west, Albert Road to the south, and the site of Navigation Square to the east.

The proposed development will provide 217 residential units in total, designed to meet the residential standards in a building that ranges in height from 8, 11 to 24 storeys over ground floor. The proposed building will comprise of:

- 25 no. 1 bed studio apartments
- 92 no. 1 bed apartments
- 3 no. 2 bed (3 person) apartments
- 85 no. 2 bed (4 person) apartments
- 12 no. 3 bed apartments

The proposed development will comprise of a ground floor community / arts space; public plaza; creche; bicycle spaces; plant/services, refuse storage area; and all associated site development, ancillary development, including ESB substations, and landscaping works.

The total site area proposed is 2744m²

The total gross floor area proposed is 22,063m²

The total site coverage percentage is 51%

Provision of public space, shared external residential amenity, site landscaping, site services and all associated site development works are also included in the development.

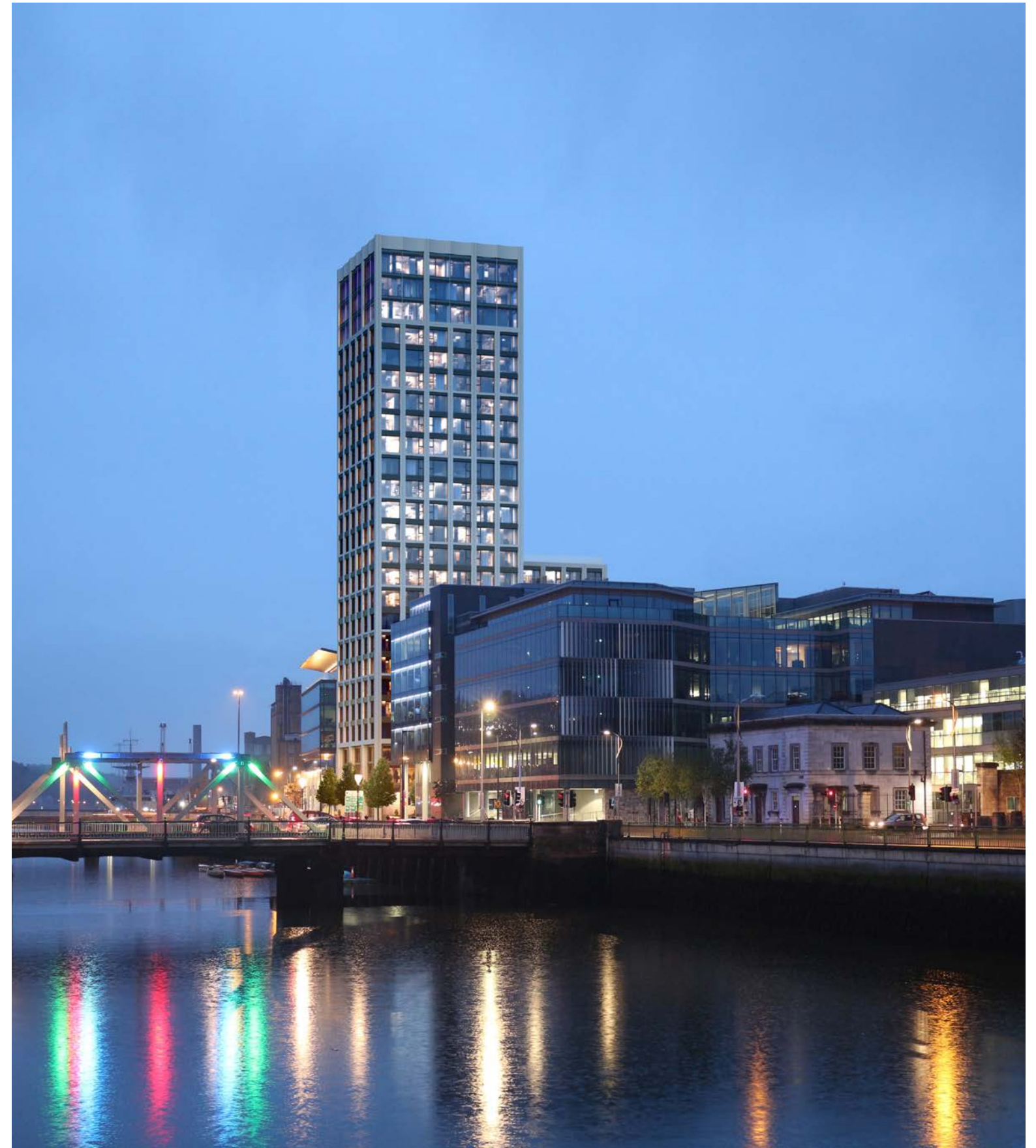


Image 1.3 View of west facade of proposed elevation - Evening Time

Housing Quality Assessment

This Housing Quality Assessment provides a framework which qualifies each of the criteria required by the ‘Sustainable Urban House: 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 regards 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.

The apartment types are shown on the following drawings for clarity which accompany this application:

- 950491_P1050_Unit Type Set Out Plans 1/2
- 950491_P1051_Unit Type Set Out Plans 2/2
- 950491_P1054_Unit Typologies 1/2
- 950491_P1055_Unit Typologies 2/2

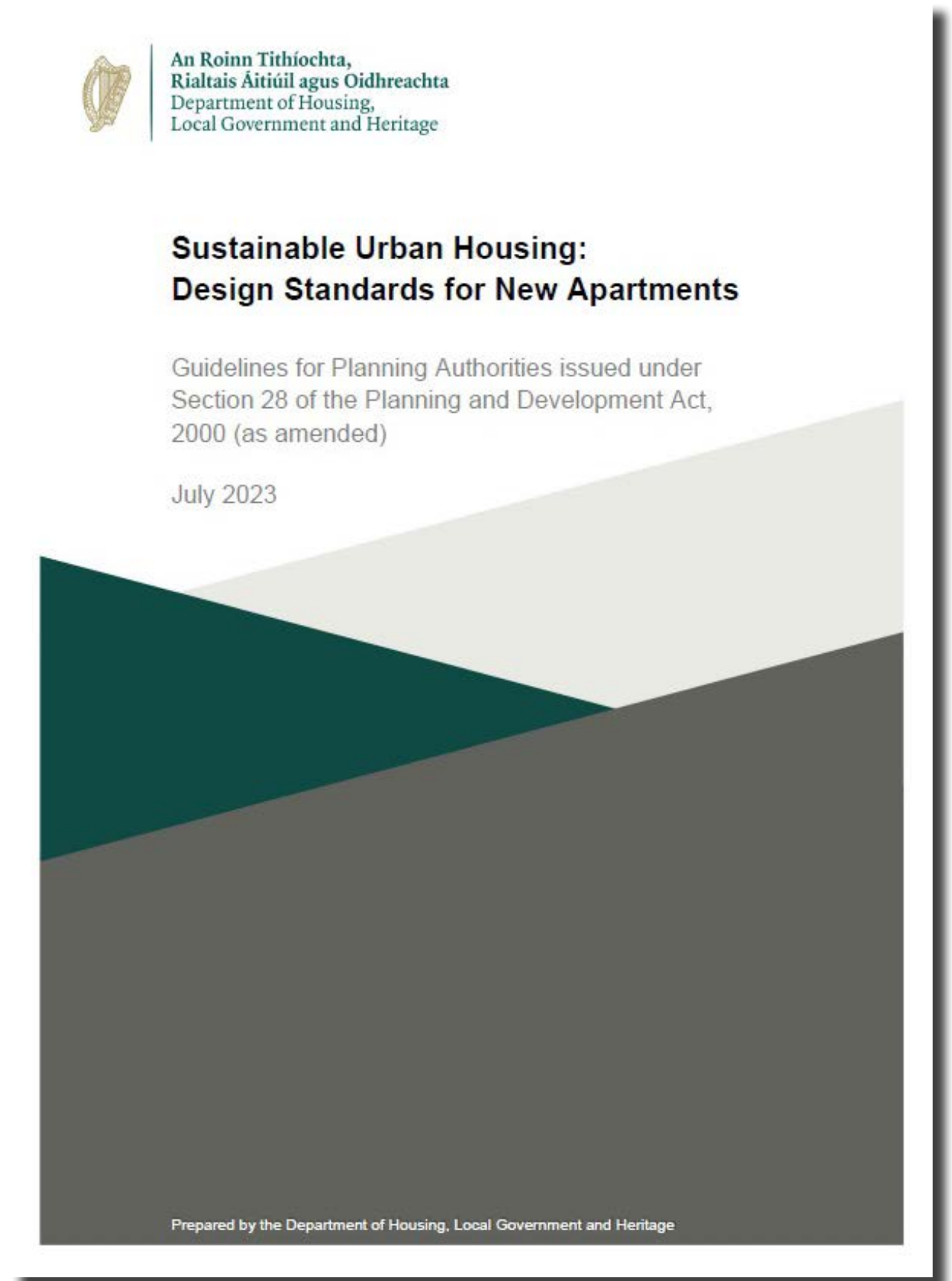


Image 2.0 Sustainable Urban Housing documentation cover

3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Henry J Lyons

Chapter Introduction:

This chapter will look at the following areas of interest against the provisions of the Sustainable Housing Standards for New Apartments:

3.1 - Apartment Mix

- Apartment Floor Areas
- Part V Residential

3.2 - Apartment Design

- Proposed Residential Mix
- Sunlighting/Daylighting
- Apartment Layouts - Typologies

3.3 - Aspect

- Calculation of Dual Aspect
- Orientation

3.4 - Ceilings, Cores & Storage

- Floor to Ceiling Height
- Lift and Stair Cores
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3.5 - Private Amenity Space

- Private Amenity Space Guidelines
- BTS Developments
- Proposed - Private Amenity

3.6 - Security Considerations

3.7 - Other Facilities

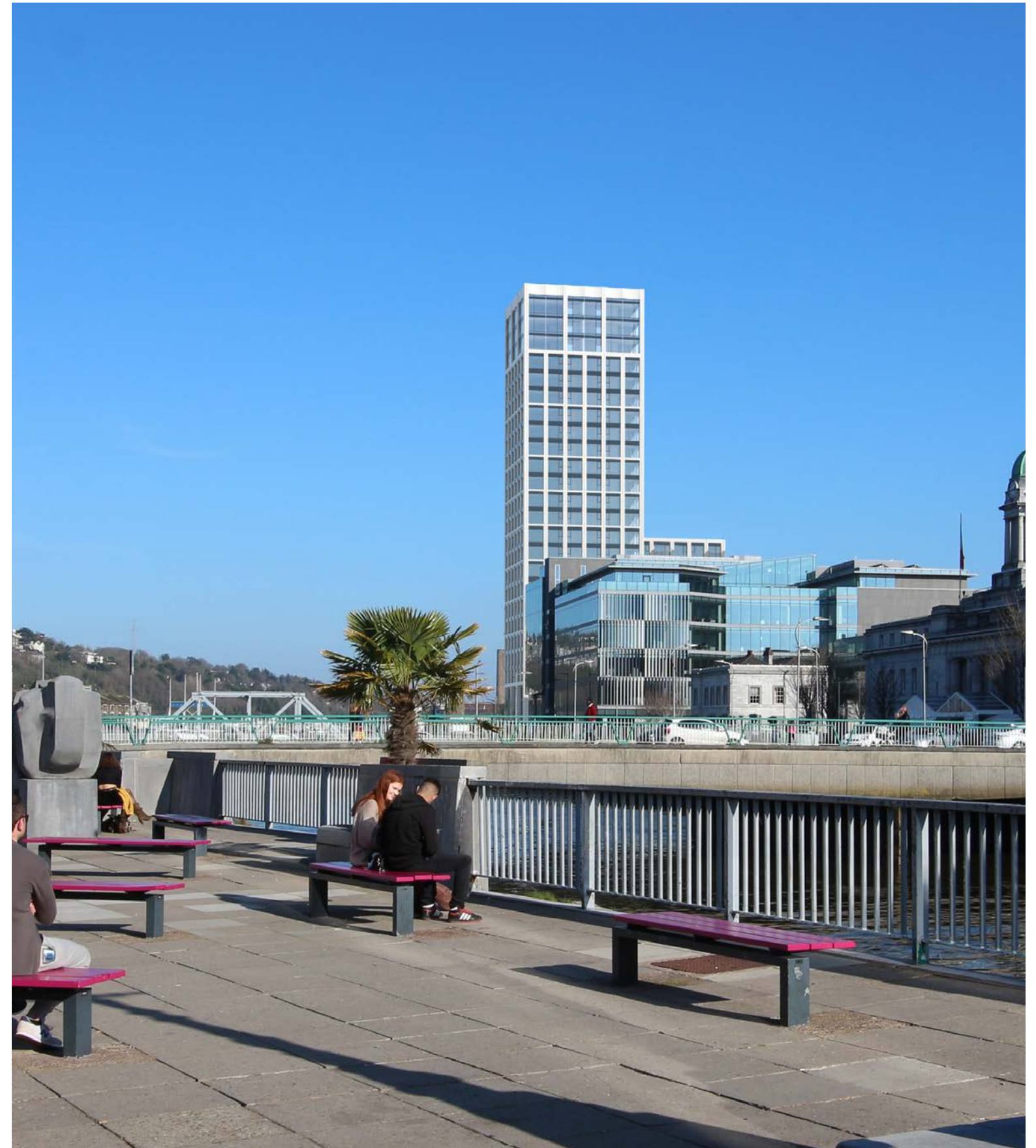


Image 3.0 North-west view of proposed development - Day time

3.1 Apartment Mix

Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Apartment Mix

Under the ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’ Specific Planning Policy Requirement, Section 2.2.1, is it noted that; the mix parameters that generally apply to apartments, do not apply to certain social housing schemes, as is proposed to be included in this instance.

In addition, the Guidelines state that these guidelines should be applied in a way that ensures delivery of apartments not built down to a minimum standard, but that reflect a good mix of apartment sizes. Accordingly, it is a requirement that the majority of all apartments in any proposed scheme of 10 or more apartments 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%). In this proposal all apartments exceed the minimum area by 10% and over to ensure an overall good quality development.

Please see Appendix A for the full detailed Housing Quality Assessment schedule.



Image 3.11 General floor plan layout showing unit types

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Apartment Floor Areas

In accordance with *Specific Planning Policy Requirement 3*, at the very least the minimum apartment floor areas have all been met in the proposed development.

Please see Appendix A for the full detailed Housing Quality Assessment schedule.

Units Per Floor						
Residential	Studio	1 Bed	2 Bed (3)	2 Bed (4)	3 Bed	Total
GROUND FLOOR LEVEL	0	0	0	0	0	0
Level 01	1	7	0	3	2	13
Level 02	1	7	0	3	2	13
Level 03	1	7	0	5	2	15
Level 04	1	7	0	5	2	15
Level 05	1	6	0	7	1	15
Level 06	1	6	0	7	1	15
Level 07	1	6	0	7	1	15
Level 08	1	6	0	7	1	15
Level 09	1	5	1	5	0	12
Level 10	1	5	1	5	0	12
Level 11	1	5	1	5	0	12
Level 12	2	1	0	2	0	5
Level 13	1	2	0	2	0	5
Level 14	1	2	0	2	0	5
Level 15	1	2	0	2	0	5
Level 16	1	2	0	2	0	5
Level 17	1	2	0	2	0	5
Level 18	1	2	0	2	0	5
Level 19	1	2	0	2	0	5
Level 20	1	2	0	2	0	5
Level 21	1	2	0	2	0	5
Level 22	1	2	0	2	0	5
Level 23	1	2	0	2	0	5
Level 24	1	2	0	2	0	5
TOTAL	25	92	3	85	12	217
Percentages	12%	42%	1%	39%	5.5%	
Target Percentages CCDP 2022	10%	30%		45%	20%	
Max / Min as per CCDP 2022	5% / 15%	25% / 35%		35%/55%	15%/25%	

Table 3.11 Apartment Numbers Per Floor Schedule

3.1 Apartment Mix

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Part V Residential

Table 3.1 outlines the proposed provision of Part V residential allocation within the development.

Part V of the Planning and Development Acts 2000 to 2020 has been amended by the Affordable Housing Act 2021. These changes to Part V primarily apply to land purchased on or after 1 August 2021. Any new planning permissions for housing development on that land will have a 20% Part V requirement.

A 10% Part V requirement will apply where land already has planning permission or was purchased between 1 September 2015 and 31 July 2021 and planning permission is granted before 31 July 2026.

The proposed development site has been purchased prior to 1 August 2021 therefore it follows the 10% allowance

The development provides 48no. residential units in total. The breakdown is as follows:

- 5 No. Studio apartments
- 27 No. 1 Bed apartments
- 4 No. 2 Bed apartments
- 12 No. 3 Bed apartments

These units are located throughout the building, and are proposed to be leased either by Cork City Council or an approved housing body to meet Part V requirements.

See appendix for Part V Units Location Plans

Part V Allocation					
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Total Units
Level 01					7
	1.03	C	2	82	
	1.04	D1	1	54	
	1.05	E	1	52	
	1.06	F	3	106	
	1.07	G	3	108	
	1.08	H	1	56	
	1.09	J1	2	83	
Level 02					5
	2.04	D1	1	54	
	2.05	E	1	52	
	2.06	F	3	106	
	2.07	G	3	108	
	2.08	H	1	56	
Level 03 - 04					12
	3.04, 4.04	D1	1	54	
	3.05, 4.05	E	1	52	
	3.06, 4.06	F	3	106	
	3.07, 4.07	G	3	108	
	3.08, 4.08	H	1	56	
	3.10, 4.10	P	1	50	
Level 05					6
	5.04	D1	1	54	
	5.05	E	1	52	
	5.06	F	3	106	
	5.07	U	2	81	
	5.08	V	2	89	
	5.10	P	1	50	
Level 06 - 08					12
	6.04, 7.04, 8.04	D1	1	54	
	6.05, 7.05, 8.05	E	1	52	
	6.06, 7.06, 8.06	F	3	106	
	6.10, 7.10, 8.10	P	1	50	
Level 09					1
	9.07	P	1	50	
Level 15 - 19					5
	15.02, 16.02, 17.02, 18.02, 19.02	Q	0 (STUDIO)	41	
TOTAL					48

Table 3.12 Part V apartments breakdown

3.2 Apartment Design

Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Safeguarding Higher Standards

As outlined in the ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’, there is a requirement that the majority of the overall units exceed the minimum standard area requirement by 10%.

All proposed units are exceeding the minimum standards by being 10% and more over the minimum standards.

Examples of such units can be seen here showing an oversized 1 Bed and 2 Bed (4Person).

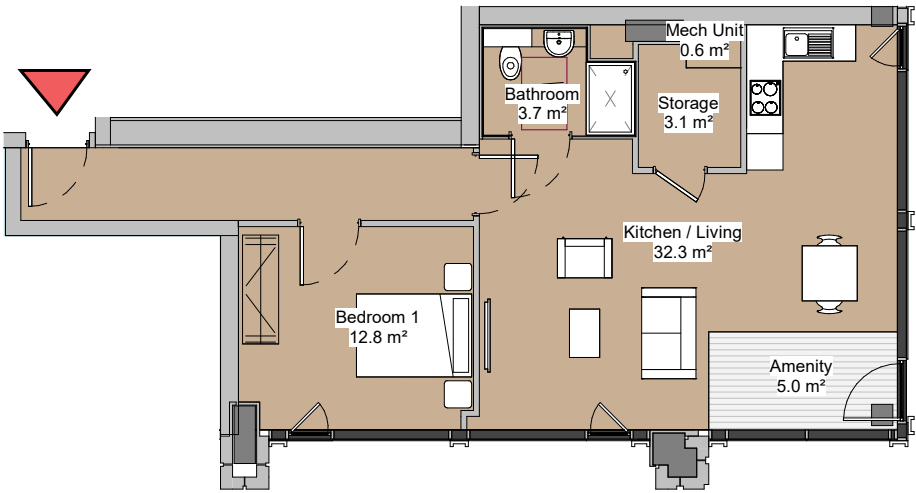
‘In the interests of sustainable and good quality urban development these guidelines should be applied in a way that ensures delivery of apartments not built down to a minimum standard, but that reflect a good mix of apartment sizes. Accordingly, it is a requirement that the majority of all apartments 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%).’

- Sustainable Urban Housing: Design Standards for New Apartments
Guidelines for Planning Authorities

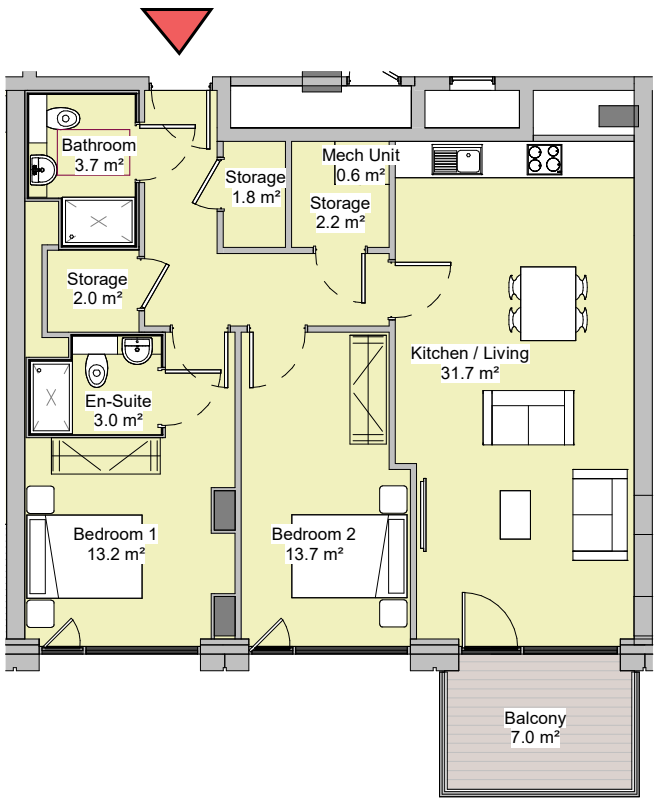
See Appendix for a full breakdown of units.

Accessibility

All units comply with Part M of the building regulations and are designed to be accessible by all.



1 BED
UNIT TYPE M
REQUIRED AREA: 45 sqm
PROVIDED AREA: 62 sqm
38% over minimum stds.



2 BED
UNIT TYPE V
REQUIRED AREA: 73 sqm
PROVIDED AREA: 89 sqm
22% over minimum stds.

3.2 Apartment Design

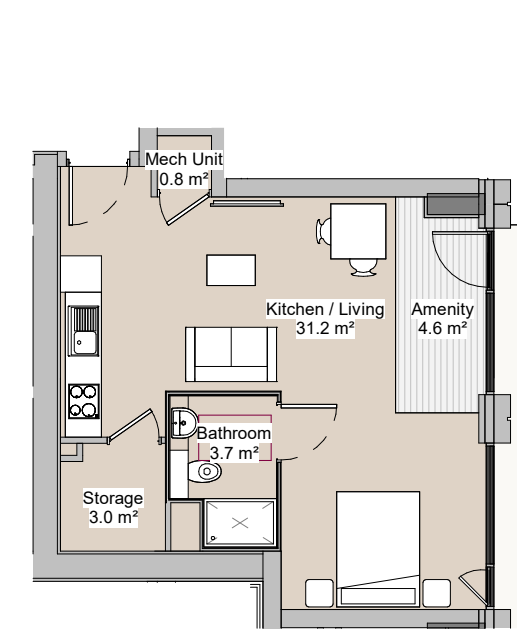
Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Apartment Layouts - Typologies

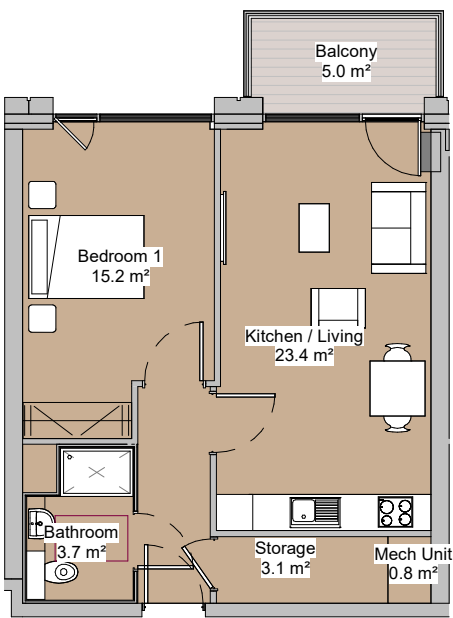
Shown are the four typical unit types found throughout the development. Apartment layouts have been standardised where possible for this urban infill. Variations occur, particularly around cores and terrace levels, where there are some non-typical types. We confirm that all units however comply with the requirements of the Sustainable Urban Housing: Design Standards for New Apartments, Appendix 1.

All individual rooms, floor areas and room widths comply or exceed the design guideline requirements. Additional floor area which has been discounted from the overall unit storage area has been provided for mechanical and electrical plant space.

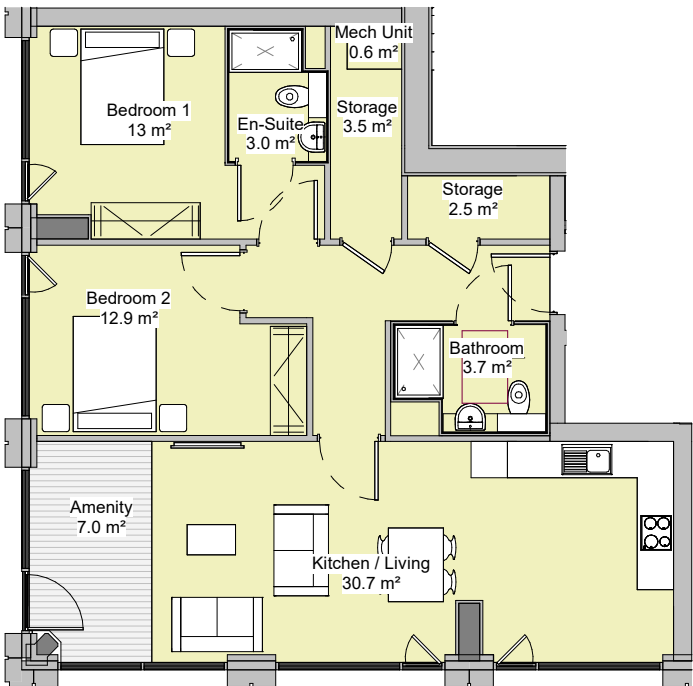
See Appendix for a full breakdown of each unit type.



Typical Studio Apartment - Type Q - 40m²



Typical 1 Bed Apartment - Type D1 - 54m²



Typical 2 Bed (4 Person) Apartment - Type S - 84m²



Typical 3 Bed Apartment - Type F - 106m²

3.2 Apartment Design

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

The Railyard, Albert Quay, Cork
Daylight, Sunlight and Overshadowing Study



Sunlighting/Daylighting

A sunlight and daylight report has been commissioned to be completed by IES consulting daylight engineers. The report focuses on measuring the daylight and sunlight impact to the existing surrounding buildings as well as the daylight and sunlight performance within the proposed development. In addition, the report will compare the performance of the proposed development when assessed against the permitted design. The following summarises their assessment on the proposed development:

Shadow Analysis: The shadow analysis illustrates there is no negative impact on any of the existing residential dwellings or their amenity areas. There is no additional shading when compared to the previously permitted scheme, as shown in the daylight, sunlight and overshadowing study on this page.

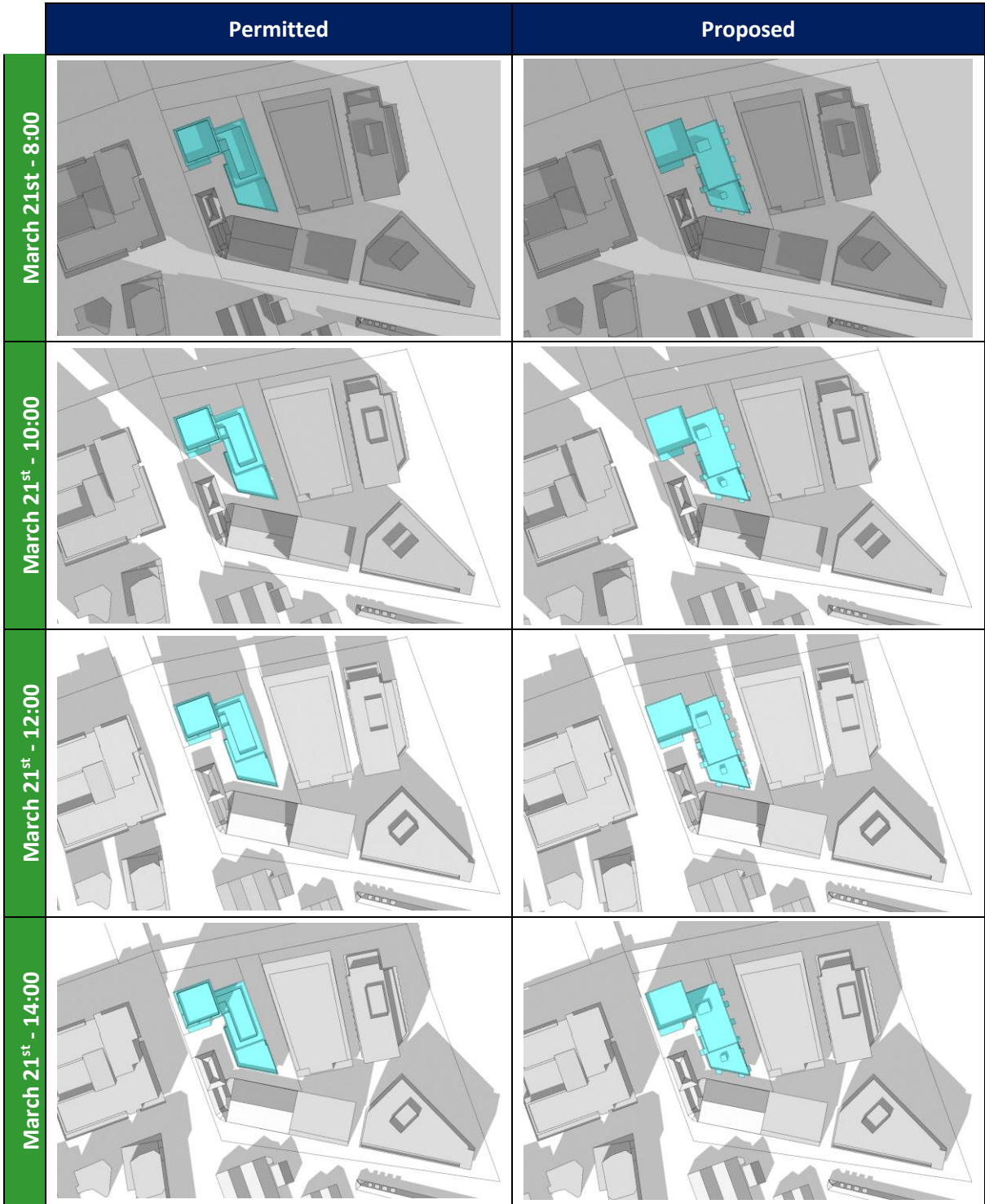
Sunlight to the Amenity Spaces: The results show that on March 21st, 28% of the proposed public plaza within the development site will receive at least 2 hours of sunlight over the total area. This result is as expected given the urban context of the plaza located between city centre buildings.

On March 21st, 96% of the combined proposed private amenity areas situated within the development site will receive at least 2 hours of sunlight over their total area. Thus, complying with the BRE recommendations. When considered individually, all private amenity areas are also exceeding the BRE guidelines.

For further information, please see accompanying IES sunlighting/daylighting report

5.1 Plan View

5.1.1 March 21st



3.3 Aspect

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Calculation of Dual Aspect Units

Specific Planning Policy Requirement (SPPR) 4 of the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities’ (2023), provides guidance with respect to the minimum number of dual aspect apartments that may be provided in any single apartment schemes. In accordance with these guidelines, it is policy requirement that apartment schemes deliver at least 33% of the units as dual aspect:

"A minimum of 33% of dual aspect units will be required in more central and accessible urban locations, where it is necessary to achieve a quality design in response to the subject site characteristics and ensure good street frontage where appropriate in."

Table 3.3 shown below outlines the number of dual aspect units (per level) achieving a total of 113 units or 53% of the overall scheme. The location of the proposed development being city centre, is therefore above the 33% requirement outlined within the policy mentioned above.

Development Aspect										
	Studio	1 Bed	2 Bed (3)	2 Bed (4)	3 Bed	Studio	1 Bed	2 Bed (3)	2 Bed (4)	3 Bed
	Dual					Single				
Total	1	39	3	59	12	24	53	0	26	0
% of 217 units	0.5%	18.0%	1.4%	27.2%	5.5%	11.1%	24.4%	0.0%	12.0%	0.0%
	53%					47%				

Table 3.3 Development Aspect Schedule

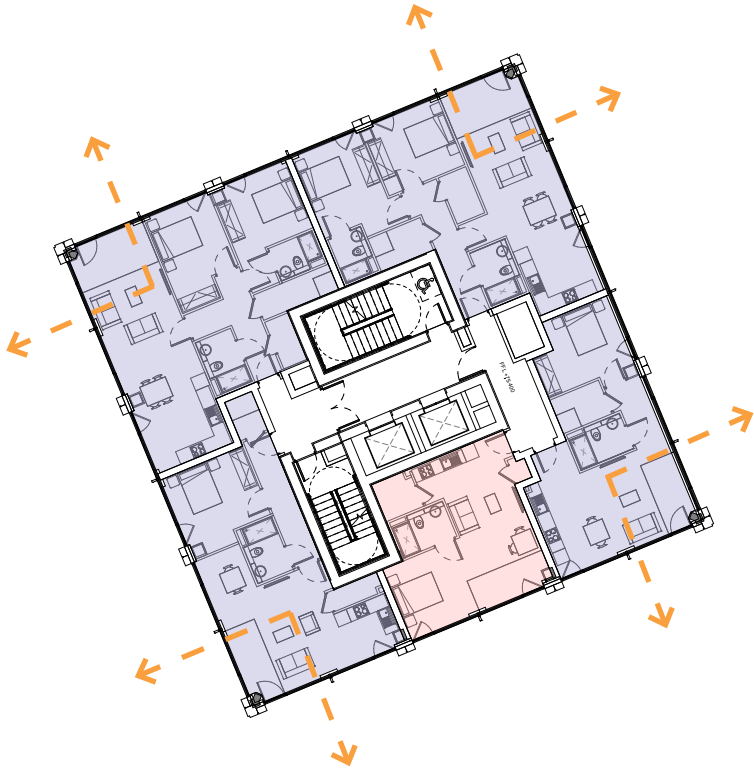


Image 3.31 Tower plan layout showing dual aspect units



Image 3.32 General floor plan layout showing dual aspect units

3.3 Aspect

Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Orientation

The aspect of all units has been considered throughout the development so as to maximise views and sunlight where possible. Overall, there is only one unit per floor from level 1 to level 11 that is single aspect north facing and this unit enjoys views of the river to compensate as outlined in the standards. Every other unit is dual aspect or orientated south/east/west. In general, units are orientated towards the river view or the public plaza below.

In the tower area of the development, four out of five units have dual aspect and the fifth unit is orientated towards the south.

- DUAL ASPECT
- NORTH FACING
- SOUTH FACING
- EAST / WEST FACING



Image 3.33 Tower plan layout showing dual aspect units

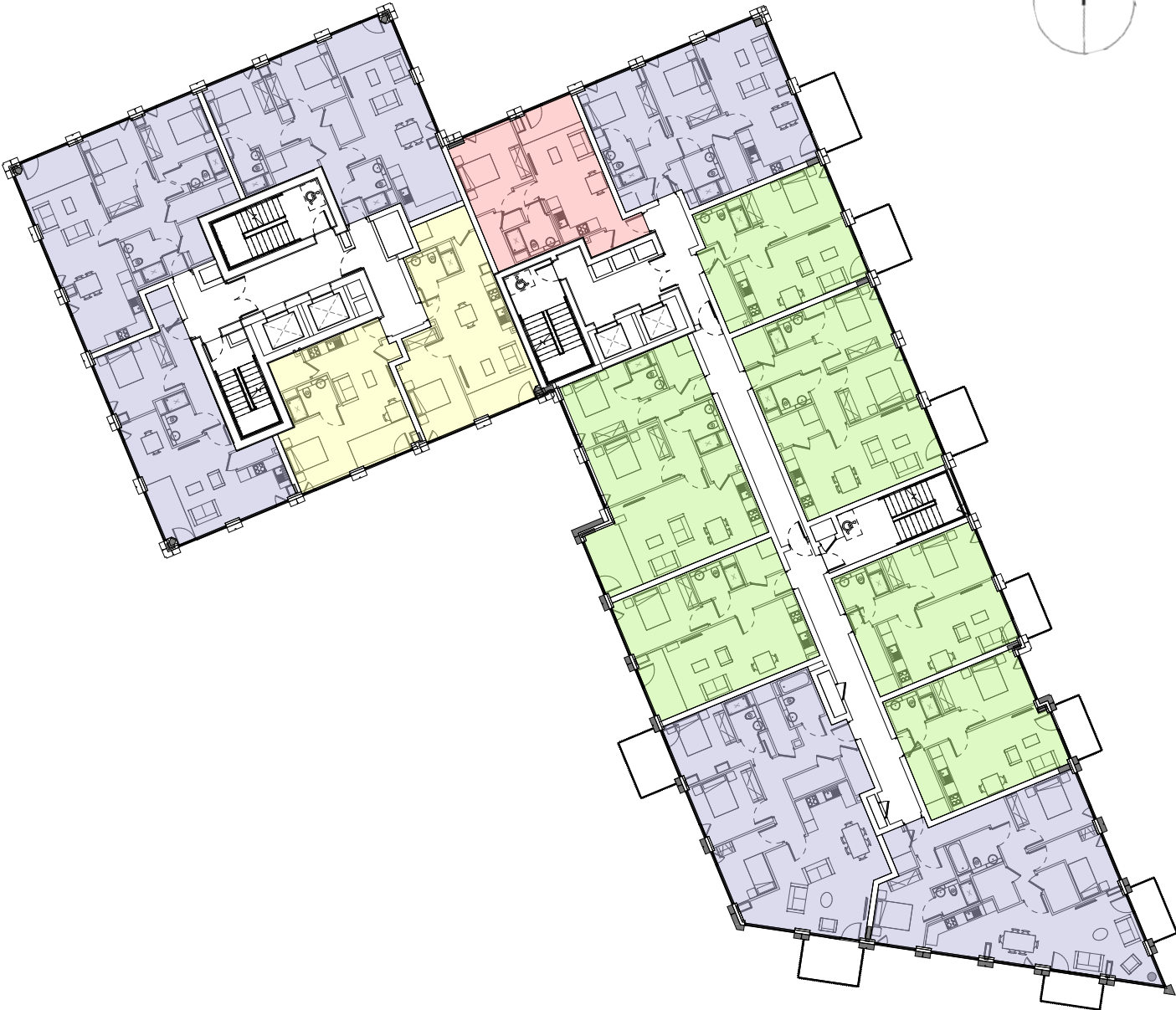


Image 3.34 General floor plan layout showing dual aspect units

3.4 Ceilings, Cores & Storage

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

- LIFT / STAIR CORE
- CIRCULATION

Floor to Ceiling Height

According to section 3.21 of the Sustainable Urban Housing: Design Standards for New Apartment Guidelines 2023, a minimum floor to ceiling height of 2.4m is to be achieved across all floor levels. There are no ground floor units proposed.

From the 1st floor upwards, the floor to ceiling heights achieved within the development units meet the requirements stated above, with 2.4m height minimum in all apartment units.

Lifts and Stair Cores

In accordance with *Specific Planning Policy Requirement 6*: "A maximum of 12 apartments per floor per core may be provided in apartment schemes." There are a total of 3 cores across the development, with 2 of them having both lift and stair cores. The tower core serves a maximum of 5 units (per floor) and runs from the ground floor to the roof level. The second core is located in the mid rise - low rise section of the development and runs from the ground floor to the 11th floor. This serves a maximum of 10 units (per floor). There is an additional third core located in the mid rise- low rise area of the development which is for fire escape.

Internal Storage

100% of the developments units have the required amount of storage outlined in the Sustainable Urban Housing: Design Standards for New Apartments entirely within the apartment.

The storage provided is in addition to kitchen presses and bedroom furniture and is in addition to minimum aggregate living/dining/kitchen or bedroom floor areas. Individual storage rooms within an apartment do not exceed 3.5m². Storage is additional to the plant requirement in each apartment.

See Appendix for a full breakdown of units.

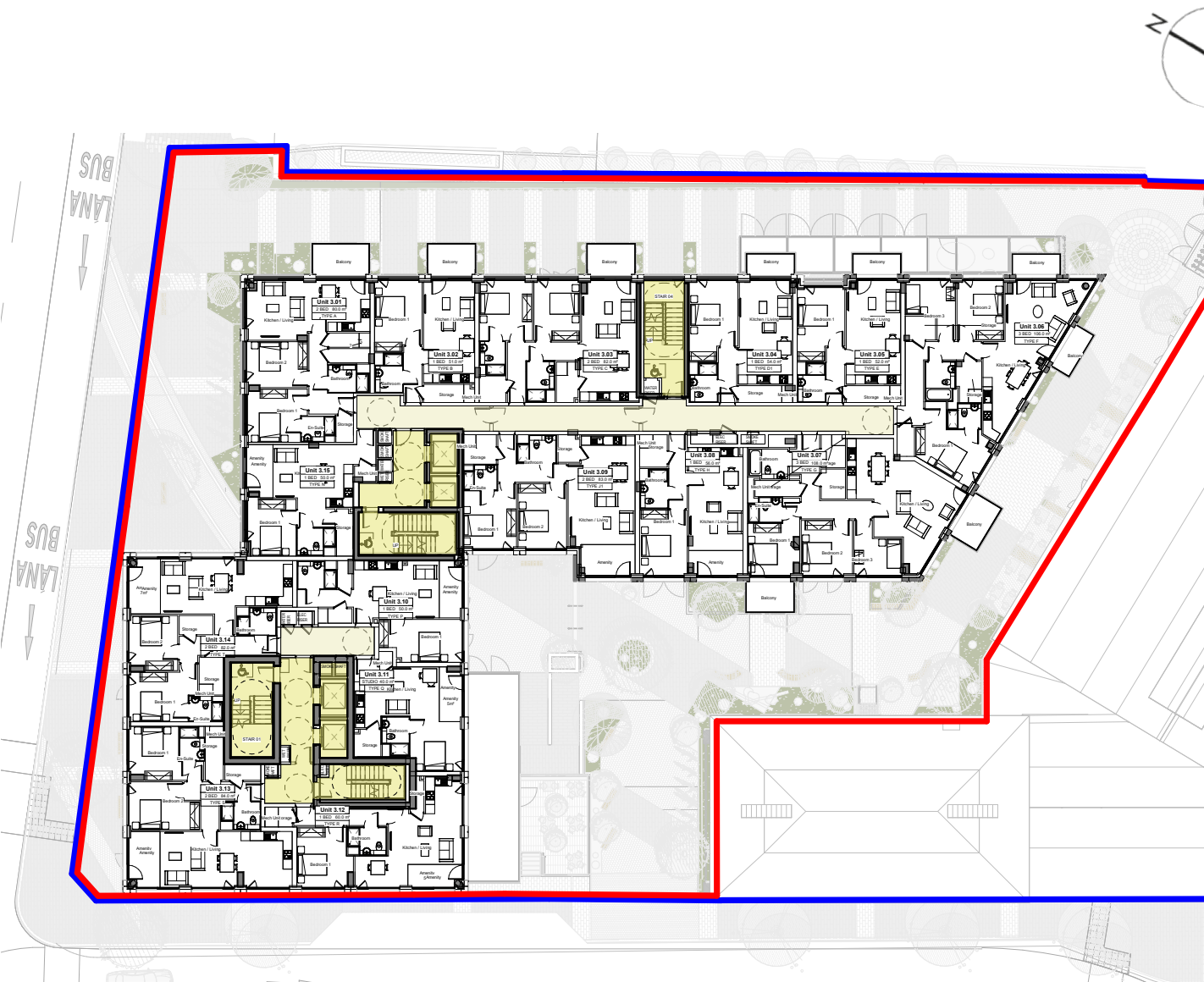


Image 3.41 Third Floor Layout Plan showing Cores & Circulation

3.5 Private Amenity Space

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Private Amenity Space Guidelines

The Design Standards for New Apartments 2022 outlines that private open space in the form of gardens or terraces for ground floor apartments and balconies at upper levels be provided in new developments. No ground floor units are proposed.

‘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 1.5m is required for balconies, in one usable length to meet the minimum floor area requirement.’

Given the nature of the proposal the proposed units are designed to have internalised private amenity or balconies. No ground floor units are proposed. All kitchen/ living/ dining spaces have direct access to the unit’s private amenity space. All balconies are a minimum depth of 1.5m, with a minimum standard 1.1m guarding to comply with Part K Building Regulations.

Provisions have been made within 64% of units for internalised private amenity to the required area adjacent to the main living space with sliding patio windows with integrated juliet balconies provided.

Through consultation with Cork City Council and design team consultants is was determined that external balconies to the North and on the tower block of the building would have a negative visual impact. It was also considered the exposed north river side of the building and the higher levels of the tower would create less than desirable environment for exposed external balcony use. These considerations created the provision for some units to include internalised private amenity.

The remaining 36% of units are provided with external balconies, they are located on the lower podium block not higher than Level 11, and are partially sheltered by neighbouring context and the proposed building itself.

By providing a mix of external and internal private amenity space tenants get an option to choose their preference. All units have access to the external terraces on Level 9 and 12 as well as the ground floor public space in addition to their private amenity space.

See Appendix for unit breakdown / floor areas for private amenity space

Private Amenity Space			
Private Amenity Space Provision (sq.m.)			
Ref: 'Cork City Development Plan 2022-2028' Ref: 'Sustainable Urban Housing : Design Standards for New Apartments, Guidelines for Planning Authorities', December 2022.			
	External Balconies	Additional Floor Area Within Unit With Juliette Balconies	Total
No of Units	78	139	217
%	36%	64%	100%

Table 3.3 Private Amenity Schedule

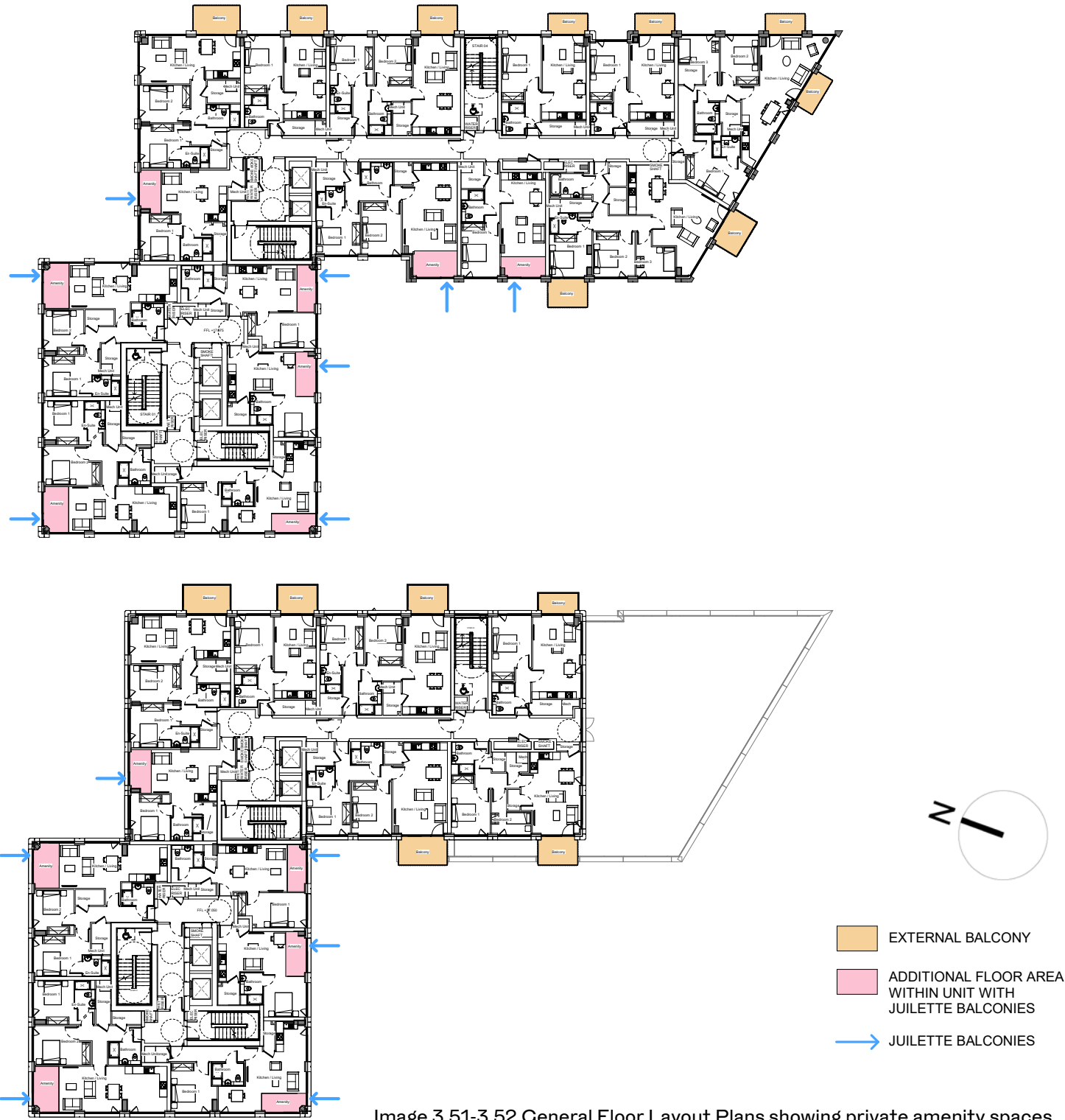


Image 3.51-3.52 General Floor Layout Plans showing private amenity spaces

Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Security Considerations

Security and safety are one of aspects of apartment design that need to be considered for all occupants and visitors of the development. There are no apartment units located on the ground floor, which is for communal amenity, community/arts, creche and plant space. Access to apartments are all via lift and stair cores. Access to apartments will be via a secure reception area and controlled lift and stair cases in order to provide a sense of security to all who occupy the building.

All ground floor external areas around the development enjoy passive supervision through over-looking and active ground floor uses. Due to the design of the development all routes to the building are overlooked and add an extra sense of safety to the development.



Image 3.11 View of external courtyard and walk-

3.7 Other Facilities

Compliance with Sustainable Urban Housing: Design Standards for New Apartments

Refuse Storage

The provision of refuse storage is located on the ground floor with access internally from the second stair core for the tenants. Refuse collection access is externally via the laneway to the east. Allowing collection trucks to reverse in at off-peak traffic hours.

In compliance with the Sustainable Urban Housing document, the following general design considerations were taken into account in the provision of refuse storage facilities within the proposed development:

- Sufficient communal storage area to satisfy the three-bin system for collection of mixed dry recyclables, organic waste and residual waste;
- Well ventilated storage areas to minimise odours and potential nuisance from vermin/flies etc.
- Provision in the layout for sufficient access for waste collectors, proximity of, or ease of access to, waste storage areas from individual apartments, including Part-M compliant accessibility for all.
- Receptacles will be re-usable and 1,100 litre capacity
- Suitable waste water drainage points will be installed in the receptacle bin storage area for cleaning and disinfecting purposes

Deliveries / Car Access

In addition to the Eastern Laneway a new 12m lay-by space is proposed to the west of the development on Albert Street; providing a dedicated set down delivery area.

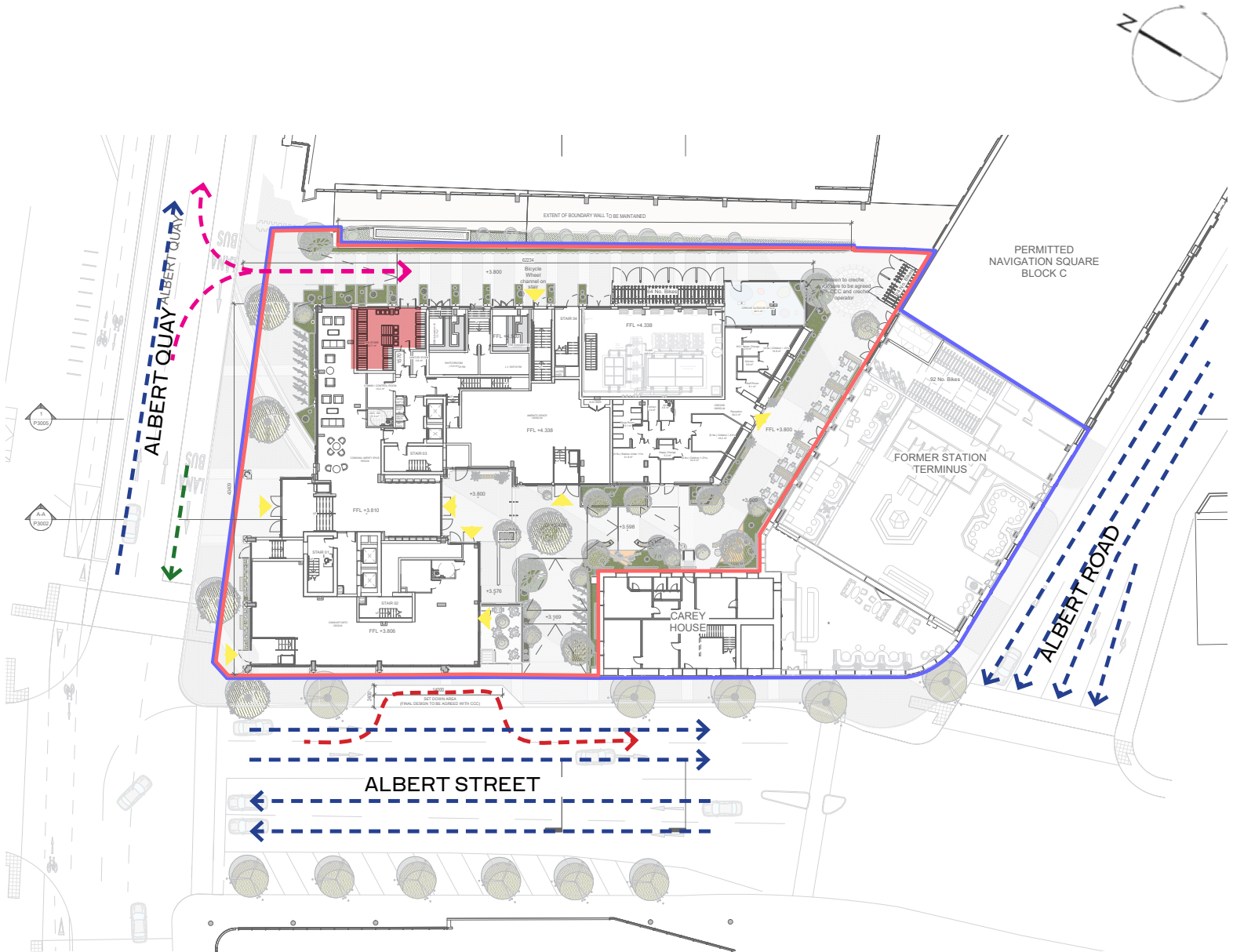


Image 3.71 Ground Floor access and facilities

- ENTRANCE
- PRIMARY TRAFFIC DIRECTION
- LAY-BY ACCESS
- REFUSE COLLECTION ACCESS
- BUS ROUTE DIRECTION
- REFUSE BIN STORE

3.7 Other Facilities

Compliance with Sustainable Urban Housing:
Design Standards for New Apartments

Bicycle Parking

Bicycle Parking facilities are located throughout the development, with a total of 340 secure cycle spaces which exceeds the Cork City Development Plan requirement. 160no. are to be located in a new lower ground floor level, accessed by a stepped ramp, 88no. are to be located on the eastern laneway and courtyard in a secure external bicycle enclosures and a further 92no. spaces are included in the former Terminus building.

An additional 24 no. external bicycle stand spaces parking in the public open space by the Albert Quay entrance to the building, for additional visitor parking.

Bicycle Parking Space Provision			
Bicycle Parking Requirement - CCC			
Ref: 'Cork City Development Plan 2022-2028'			
	Requirement	Proposed	Total
Standard Apartment	1 Per Unit	217 Units	217
Community / Arts Use	1 Per 200sq.m. GFA	208sq.m.	2
Creche	1 Per 25 Children	30 Children Creche	2
Carey House (Office)	1 Per 150sq.m. GFA	368sq.m.	3
Terminus (Restaurant)	1 Per 200sq.m. GFA	750sq.m.	4
Total Bicycle Spaces Required			228

Provided Bicycle Parking Spaces			
	Standard Size Space	Larger (Cargo Bike) Size Space	Total
Lower Ground Floor Bike Store	160		160
Ground Floor External Bike Enclosures	88		88
Bike Store in Terminus Building	88	4	92
Total Bicycle Spaces Provided			340

Table 3.7 Bicycle Parking Schedule

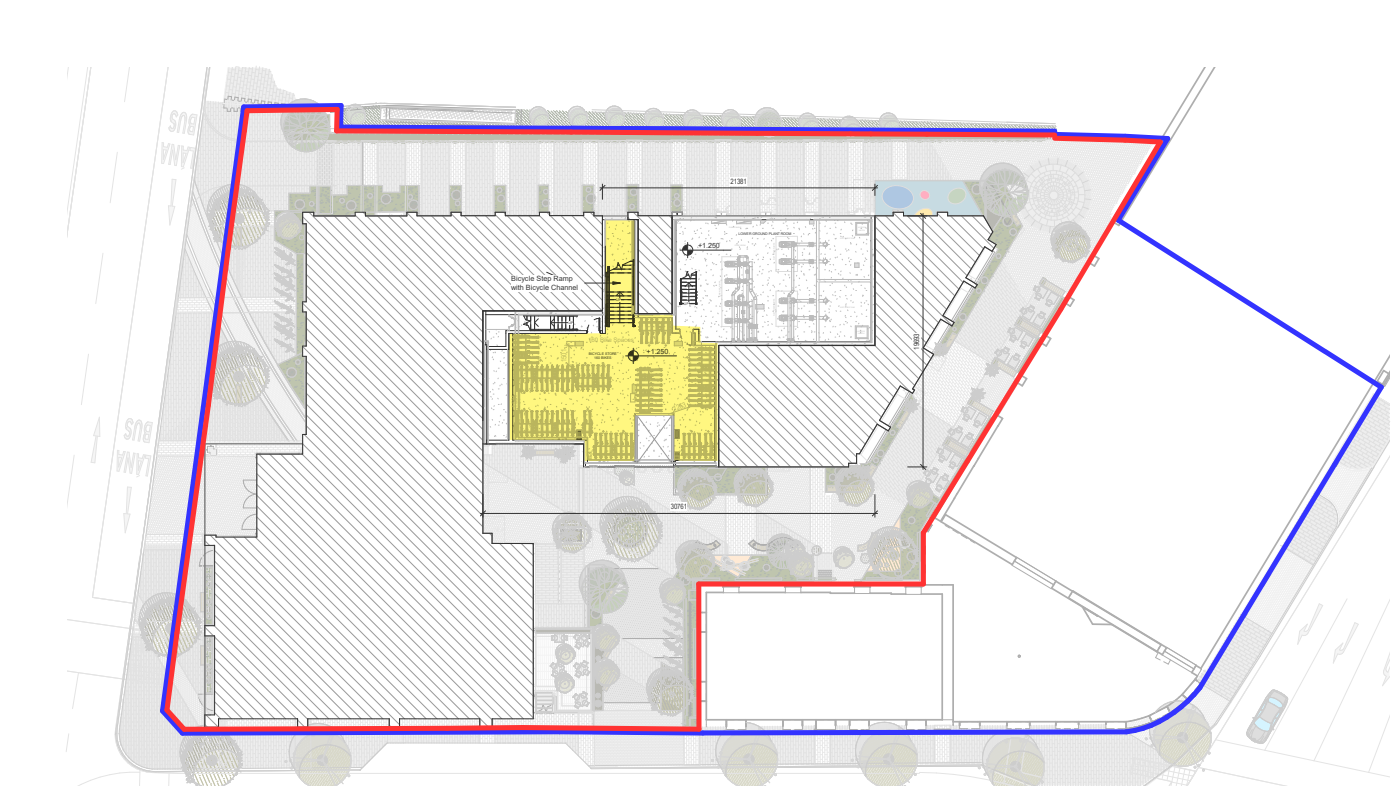


Image 3.72 Lower Ground Floor Bicycle Storage

- LOWER GROUND FLOOR BIKE STORE
- GROUND FLOOR EXTERNAL BIKE ENCLOSURE STORAGE

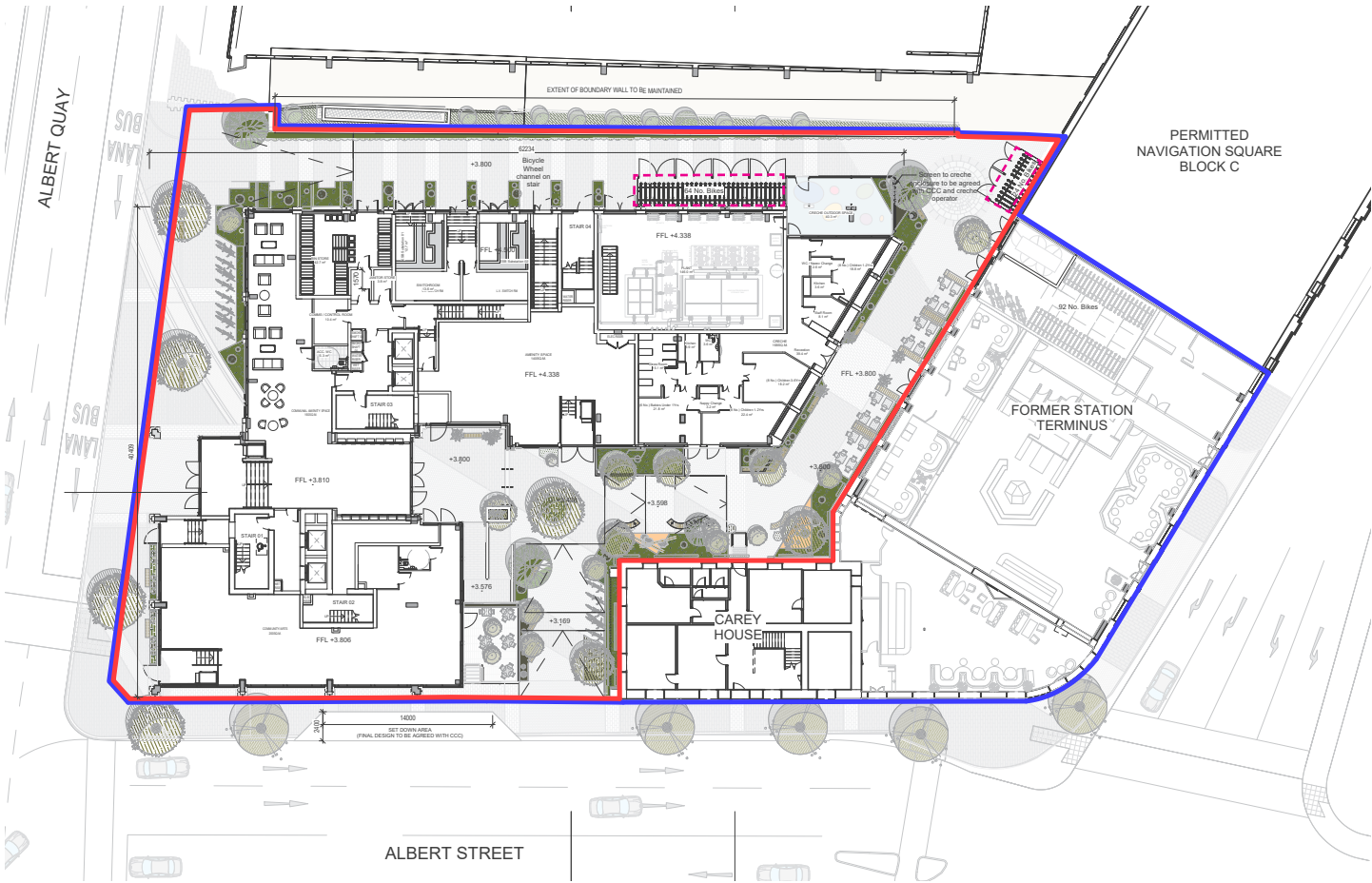


Image 3.73 Ground Floor Bicycle Storage

Chapter Introduction:

This chapter will look at the following areas of communal facilities against the provisions of the Sustainable Urban Housing: Design Standards for New Apartments.

The provision of shared amenities within the new development has been thoroughly considered. The Sustainable Urban Housing document sets communal amenity space requirement per apartment units. The proposed development provides in excess of the communal amenity requirement.

See schedule Table 4.0 for a list of residential communal amenity facilities that will be found within the proposed development.

The following sections will highlight the range of communal facilities and shared amenities proposed within the development that meet and comply with the Sustainable Urban Housing: Design Standards for New Apartments:

- 4.1 - Facilities and Internal Communal Amenity: Ground Floor
- 4.2 - Internal Communal Amenity: First & Second Floor
- 4.3 - External Shared Amenity (Public Realm)
- 4.4 - External Communal Amenity (Residential)

Communal Amenity						
Communal Amenity Space Requirement (sq.m.)						
Ref: 'Sustainable Urban Housing : Design Standards for New Apartments, Guidelines for Planning Authorities', December 2022.						
	Studio	1 Bed	2 Bed (3)	2 Bed (4)	3 Bed	Total
Area per Unit	4	5	6	7	9	
Proposed Unit No.	25	92	3	85	12	217
Total	100	460	18	595	108	1281
Provided Communal Amenity Space (sq.m.)						
Level	L00	L01	L02	L09	L12	Total
Internal Communal Amenity	300	143	165			608
External Communal Amenity				230	530	760
Total Communal Amenity						1368

Shared Amenity	
	GIA sq.m.
Level 00 - Lower Ground	
Bike Store	140
Level 00	
Community / Arts Use	200
Creche: Internal Area	168
Creche: Outdoor Area	40
Communal Amenity Space & Reception Area	160
Communal Amenity Space	140
Bin Store	42
External Bike Enclosures	40
Total	790
Level 01	
Communal Amenity Space	143
Level 02	
Communal Amenity Space	165
Level 09	
Communal Amenity: External Terrace	230
Level 12	
Communal Amenity: External Terrace	530
Total Area	1998

Table 4.0 Communal & Shared Facilities Schedule

4.1 Facilities and Internal Communal Amenity: Ground Floor

Henry J Lyons

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

Ground Floor - Entrance and Residential Shared Amenities

There are two entrances to the development located on the ground floor. The main entrance is to the north of the building off Albert Quay, and provides access to the two main lift and stair cores in the reception area. The second entrance leads from the reception out to the public plaza to the south of the development.

Located in the reception off the public plaza is a large communal lounge space for residents, overlooking Albert Quay. A communal amenity space is located off the public plaza and connected to the lift / stair core.

Public Facilities

The development has a number of public amenities on the ground floor:

The Creche has its own entrance from the south, along with a side entrance to the east to a covered outdoor play area.

A community / arts use space located on the corner of Albert Quay and Albert Street will provide public activation to the street. This is also accessed via an outdoor seating terrace at the Albert Street entrance to the public plaza.

The plaza connects the residential entrance foyer area, communal amenity spaces, creche, and community/arts space, creating an active public realm on the site.

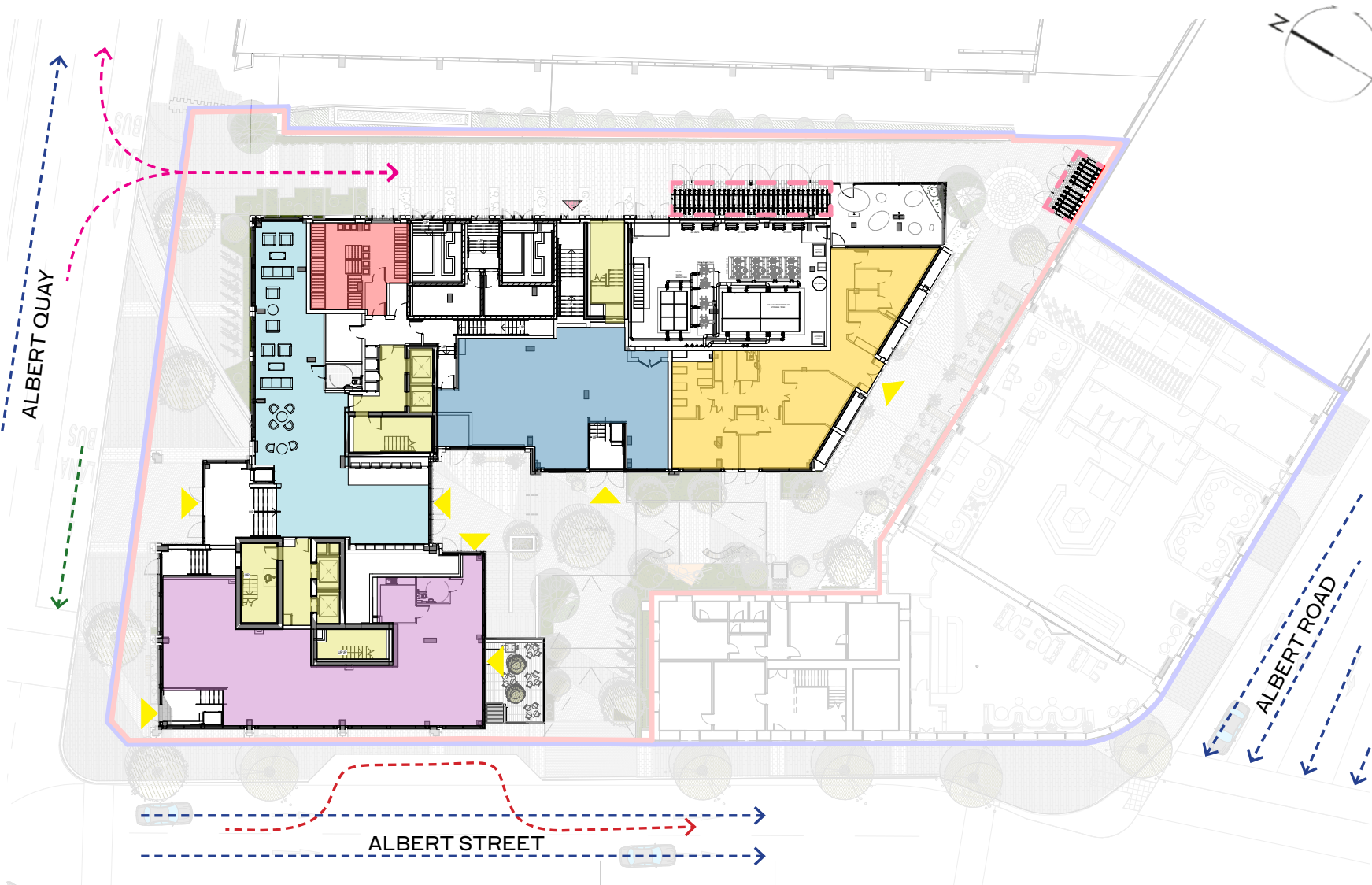
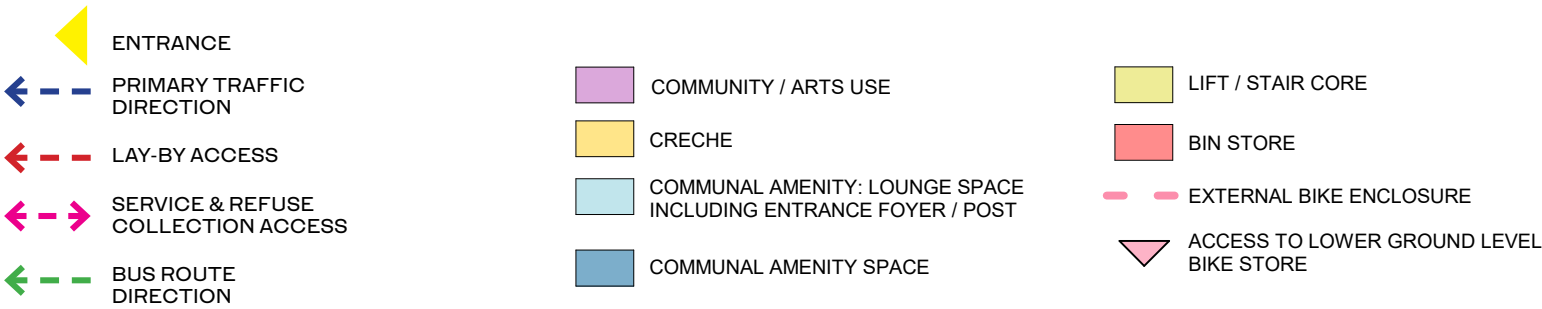


Image 4.11 Ground Floor Layout Plan - Amenities



4.2 Internal Communal Amenity: First & Second Floor

Henry J Lyons

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

First & Second Floor

The first and second floor levels consists of residential communal amenities and residential apartment units. As the residential element of the building will be private residential accommodation, so as to not have an adverse impact on the residents security and private residential amenity, no public access will be provided to the upper floors of the building. The first and second floor amenity is securely accessed via the main core. These general communal amenity spaces , are envisaged as lounge space for residents use, enjoying views over the river.

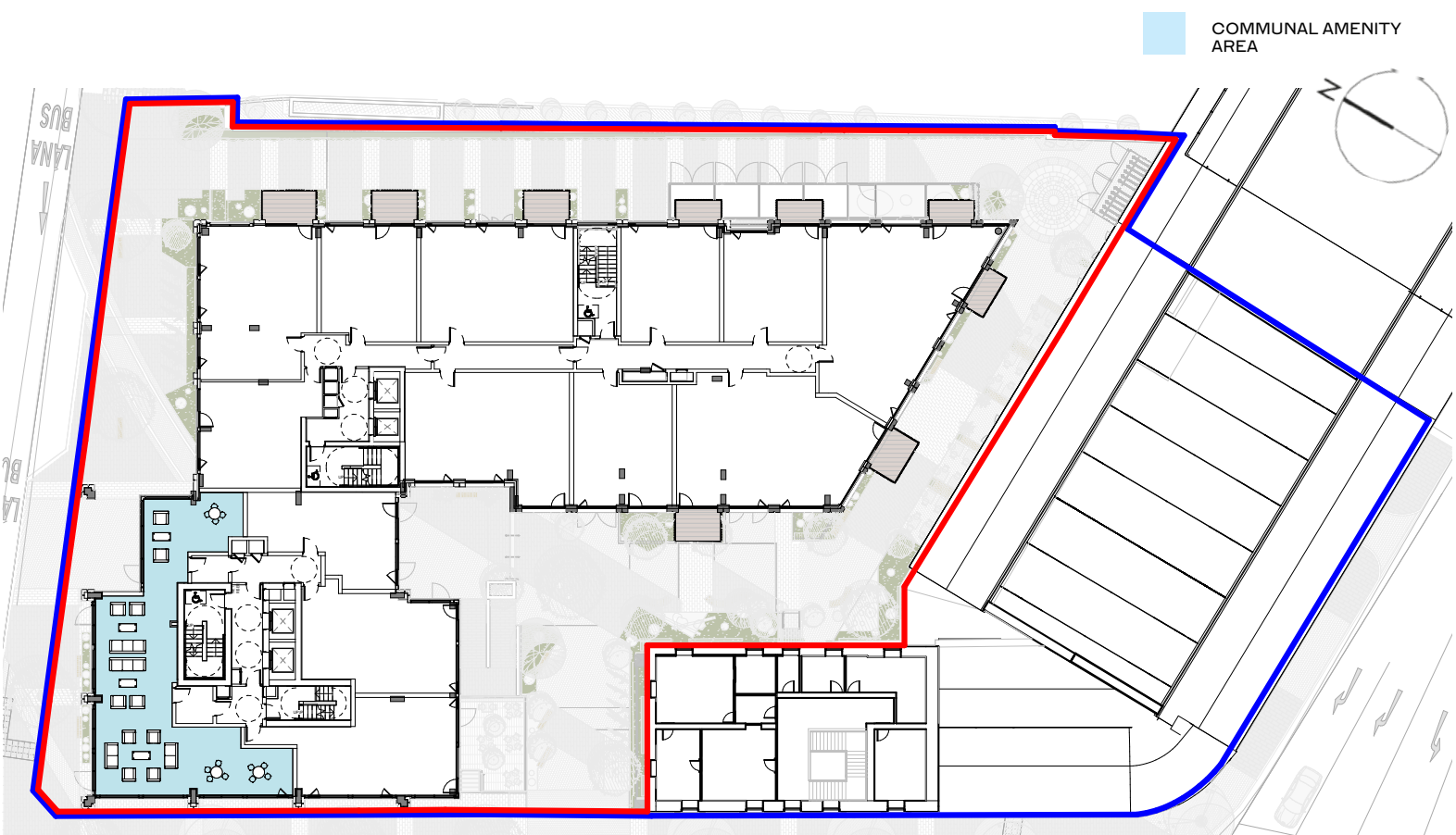


Image 4.21 First Floor Layout Plan

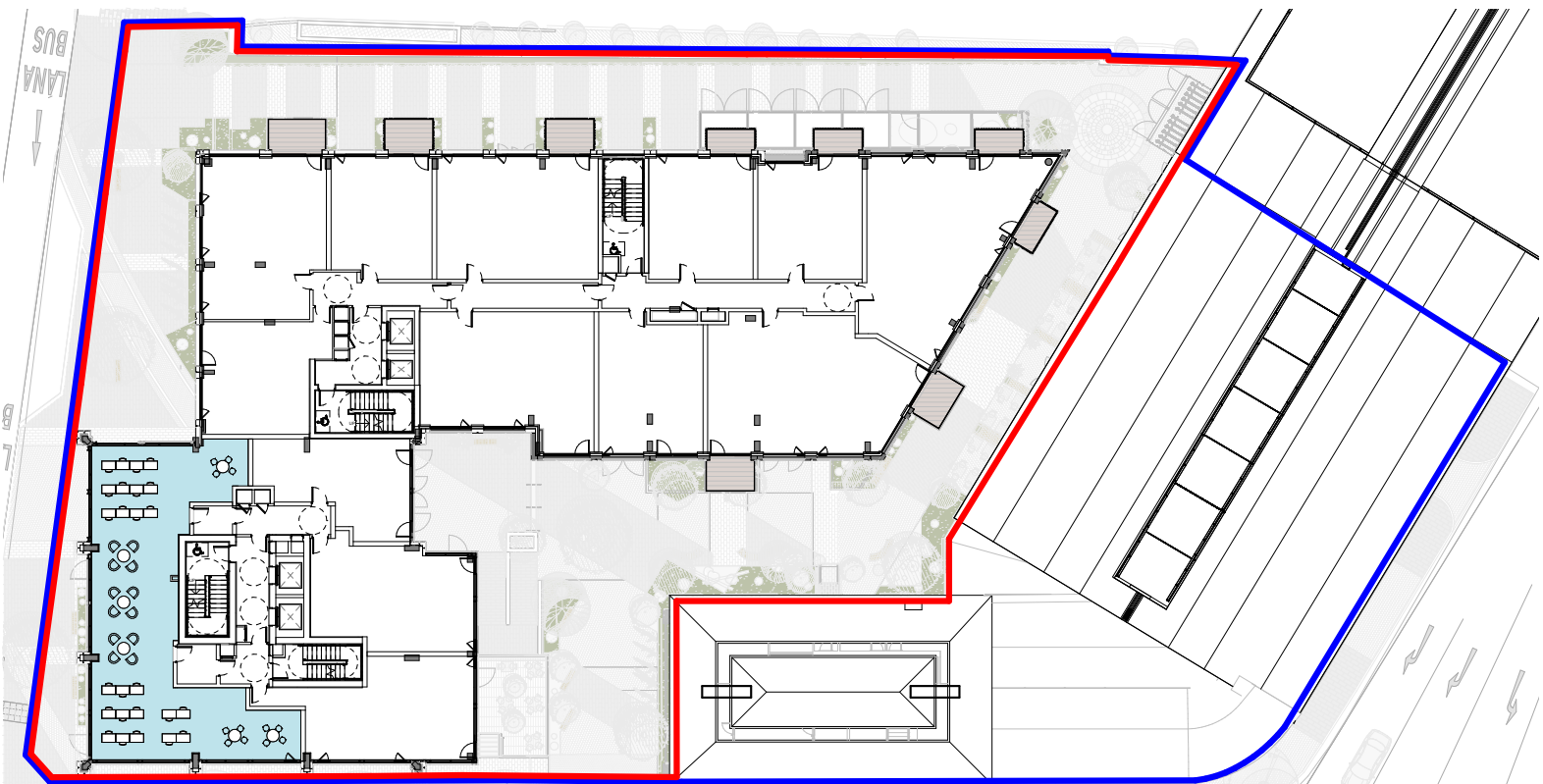


Image 4.22 Second Floor Layout Plan

4.3 External Shared Amenity (Public Realm)

Henry J Lyons

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

Streetscape

The streetscape surrounding the proposed site is also under going development in conjunction with the Cork Metropolitan Area Transport Strategy (CMATS).

A number of changes are proposed throughout the city, with the docklands seeing a more accessible and public transport friendly approach being taken. The introduction of cycle lanes and bus routes all along Albert Quay will promote public transport and more sustainable modes of transport in the city.

This will greatly impact the lives of residents within the development and give them greater ease of access to the city and with that, make the development easier to access too.

Provisions for the widening of the footpath surrounding the site has also been put forward.

The development will benefit greatly from all of the aforementioned along with the on street landscaping and bicycle spaces located to the north and west of the building. A number pedestrian crossings connect the building to Albert Quay, Albert Street and Albert Road, making the development highly accessible from all sides.

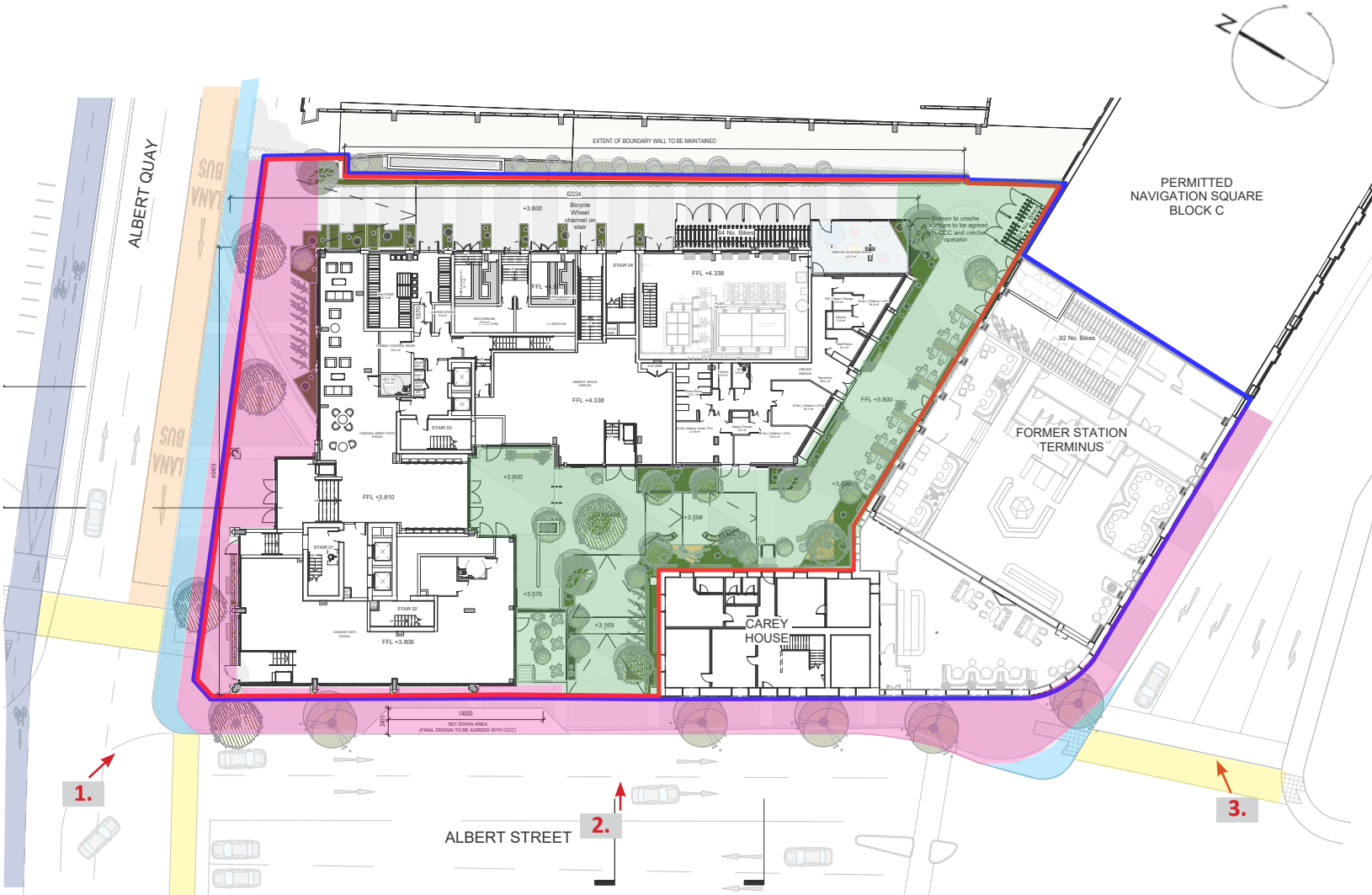


Image 4.31 Public Realm surrounding proposed development

4.3 External Shared Amenity (Public Realm)

Henry J Lyons

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

Ground Floor Courtyard - Public Plaza

External shared amenity spaces are an important part of the development. There is a mix of shared amenity spaces solely for residents along with a public plaza for both residents and the public to enjoy. The carefully designed landscape strategies which enhance these spaces are outlined below.

The landscape design strategy for Albert Quay focuses on:

- integrating the development in the wider urban setting.
- providing an open and inviting outdoor destination that is uplifting and usable.
- providing an accessible, easily navigable environment for the disabled and visually impaired.
- enhancing pedestrian permeability and ease of movement.
- strengthening sense of place.

These objectives are achieved by:

- greening of courtyard spaces with trees, wall-climbers, planters and planting beds at ground level.
- providing integrated timber slat seating throughout.
- careful consideration to needs of disabled and visually impaired persons in design of steps and furniture.
- providing bike rack storage for public use adjacent to reception area on Albert Quay.
- retention of existing historic railway track as heritage feature.
- providing tree-lined walkway/avenue that links and frames view of river Lee.
- careful selection of materials with regard to robustness, durability, ease of maintenance and compatibility with local setting.

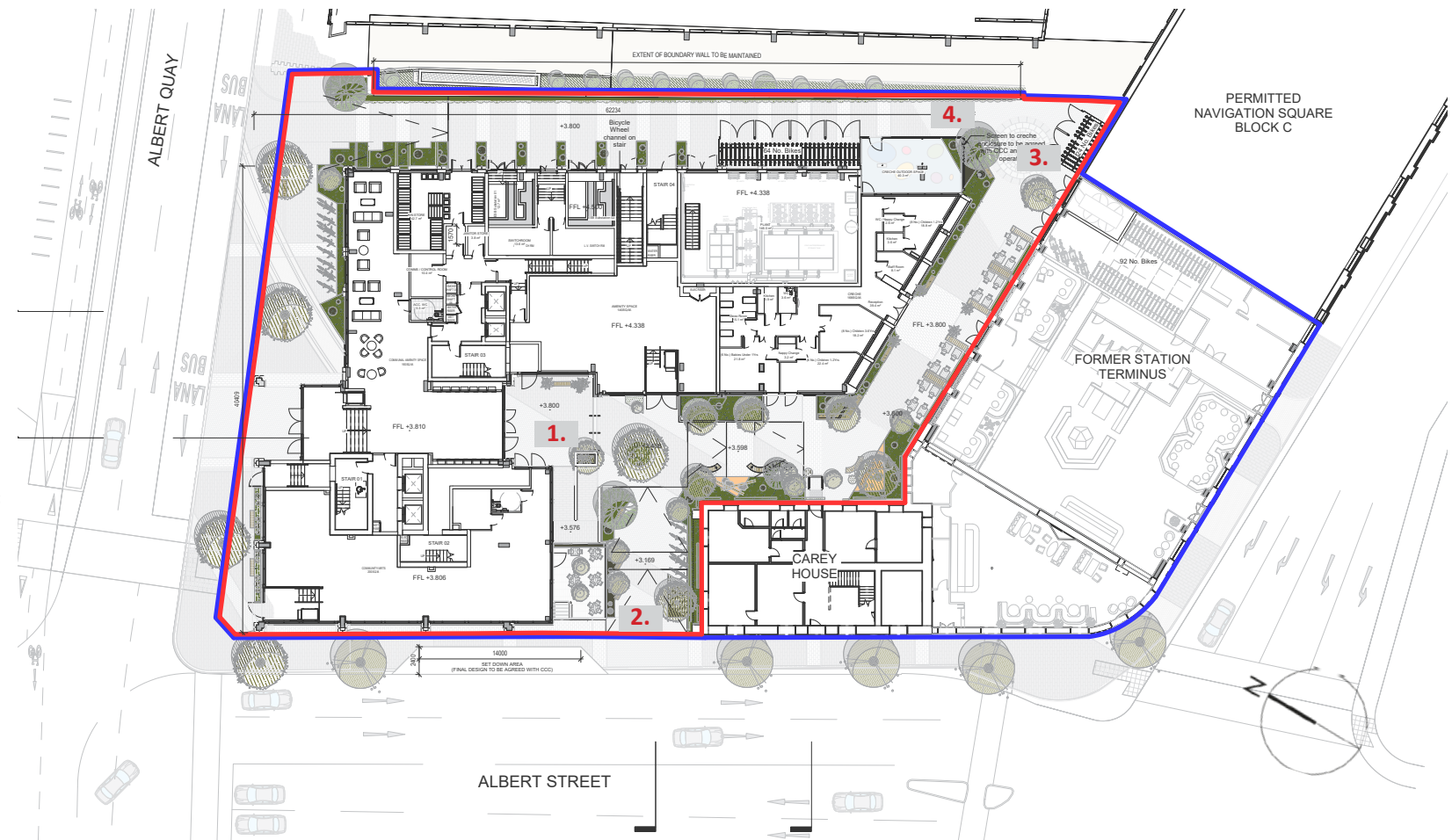


Image 4.7 Ground Floor External Amenity Plan - Public Plaza

4.4 External Communal Amenity (Residential)

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

Ninth Floor - Roof Terrace

The rooftop of the low rise section of the development houses the first external shared amenity - roof terrace on the 9th floor with an area of 243m².

Comprising of large format paving, flowering plants, the carefully designed layout creates a shared environment for all residents to enjoy.

Glazed guarding surrounds the space which prevents any obstruction of view to the surrounding environment and provides shelter and security for the residents while on the terrace.

Twelfth Floor - Roof Terrace

The second roof terrace is located on the 12th floor, the larger of the two, and has an area of 578m².

This shared amenity has a similar layout and materials used throughout. Like the terrace below on the ninth floor, a variety of shrubs and flowering plants, elevated planters frame the external amenity - providing different settings for residents to relax and socialise.



Image 4.8 Twelfth Floor Layout Plan- Communal Facilities

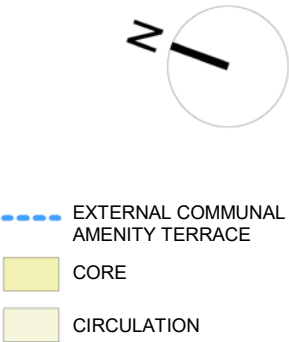


Image 4.9 Ninth Floor Layout Plan- Communal Facilities



Area Schedule Summary											
	GIA			Studio	1 Bed	2 Bed (3)	2 Bed (4)	3 Bed	Total		Dual Aspect %
	sqm	sqft		no.	no.	no.	no.	no.	no.		%
Lower Ground Floor	375	4,036		0	0	0	0	0	0	0	0%
Ground Floor Level	1335	14,370		0	0	0	0	0	0	0	0%
Level 01	1376	14,811		1	7	0	3	2	13	4	31%
Level 02	1398	15,048		1	7	0	3	2	13	4	31%
Level 03	1380	14,854		1	7	0	5	2	15	6	40%
Level 04	1380	14,854		1	7	0	5	2	15	6	40%
Level 05	1380	14,854		1	6	0	7	1	15	6	40%
Level 06	1380	14,854		1	6	0	7	1	15	6	40%
Level 07	1380	14,854		1	6	0	7	1	15	6	40%
Level 08	1380	14,854		1	6	0	7	1	15	6	40%
Level 09	1102	11,862		1	5	1	5	0	12	6	50%
Level 10	1102	11,862		1	5	1	5	0	12	6	50%
Level 11	1102	11,862		1	5	1	5	0	12	6	50%
Level 12	461	4,962		2	1	0	2	0	5	4	80%
Level 13	461	4,962		1	2	0	2	0	5	4	80%
Level 14	461	4,962		1	2	0	2	0	5	4	80%
Level 15	461	4,962		1	2	0	2	0	5	4	80%
Level 16	461	4,962		1	2	0	2	0	5	4	80%
Level 17	461	4,962		1	2	0	2	0	5	4	80%
Level 18	461	4,962		1	2	0	2	0	5	4	80%
Level 19	461	4,962		1	2	0	2	0	5	4	80%
Level 20	461	4,962		1	2	0	2	0	5	4	80%
Level 21	461	4,962		1	2	0	2	0	5	4	80%
Level 22	461	4,962		1	2	0	2	0	5	4	80%
Level 23	461	4,962		1	2	0	2	0	5	4	80%
Level 24	461	4,962		1	2	0	2	0	5	4	80%
TOTAL (new building)	22,063	233,447		25	92	3	85	12	217	114	53%
Percentages				12%	42%	1%	39%	6%			
Target Percentages CCDP 2022				10%	30%		45%	20%			
Max / Min as per CCDP 2022				5% / 15%	25% / 35%		35%/55%	15%/25%			

Unit Types - Breakdown						
Type no.	Quantity	Area (sq.m.)	Type Size	SUHG required Area (sq.m.)	Oversized Additional Floor Area (%)	Total Area sq.m.
K	2	47	Studio - 1 Bed	37	27%	94
Q	22	41	Studio - 1 Bed	37	11%	902
X	1	41	Studio - 1 Bed	37	11%	41
B	11	51	1 Bed	45	13%	561
D1	8	54	1 Bed	45	20%	432
D2	3	56	1 Bed	45	24%	168
E	8	52	1 Bed	45	16%	416
H	4	56	1 Bed	45	24%	224
L	2	62	1 Bed	45	38%	124
M	2	62	1 Bed	45	38%	124
N	11	50	1 Bed	45	11%	550
P	9	50	1 Bed	45	11%	450
R	22	60	1 Bed	45	33%	1320
Y	12	51	1 Bed	45	13%	612
W	3	73	2 Bed (3 Per)	63	16%	219
A	11	80	2 Bed (4 Per)	73	10%	880
C	11	82	2 Bed (4 Per)	73	12%	902
J1	8	83	2 Bed (4 Per)	73	14%	664
J2	3	83	2 Bed (4 Per)	73	14%	249
S	22	84	2 Bed (4 Per)	73	15%	1848
T	22	82	2 Bed (4 Per)	73	12%	1804
U	4	81	2 Bed (4 Per)	73	11%	324
V	4	89	2 Bed (4 Per)	73	22%	356
F	8	106	3 bed (5 Per)	90	18%	848
G	4	108	3 bed (5 Per)	90	20%	432
Total	217					14544

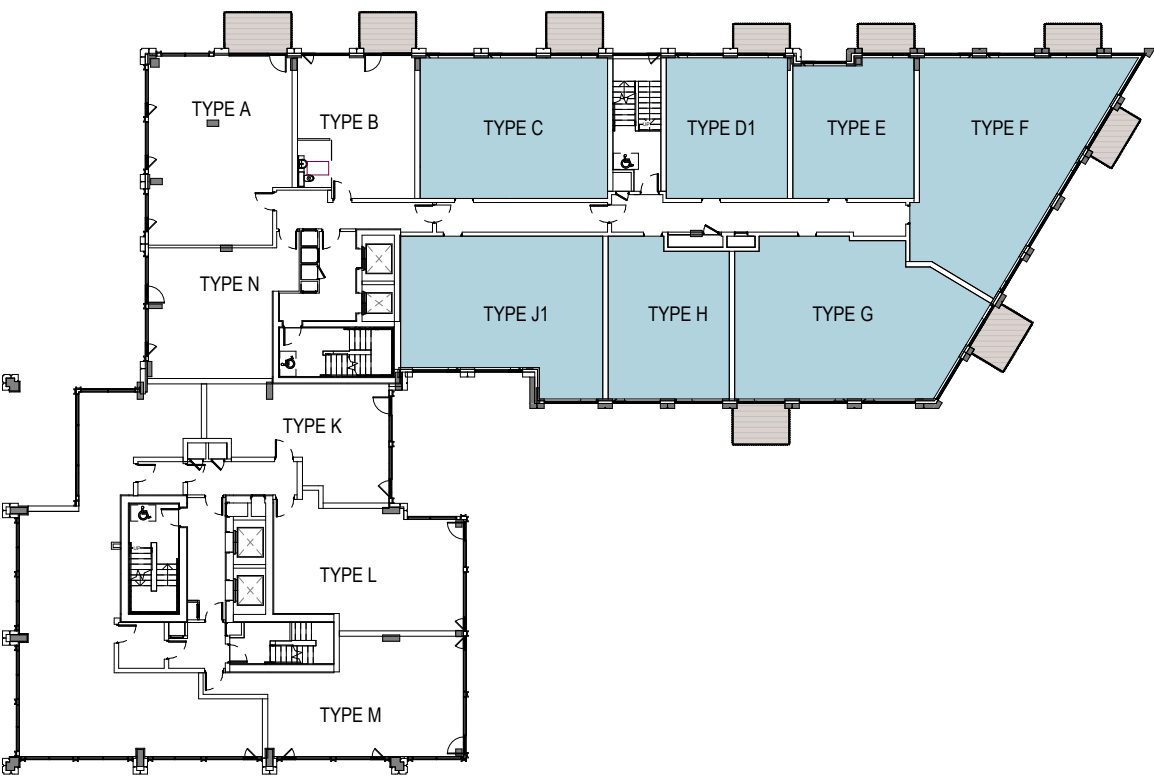
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m²)	Unit Area required (m²)	Bedroom Area	Bedroom Area required (m2)	Bedroom Aggregate Area	Bedroom Agg. required (m2)	Living Area (m²)	Living Area required (m²)	Private Amenity	Private Amenity required (m2)	Storage	Storage required (m2)	Aspect	
Level 00 - Lower Ground floor																	
Shared Amenity																	
Bike Store				140													
Level 00 - Ground floor																	
Shared Amenity																	
Community / Arts Use				200													
Creche: Internal Area				168													
Creche: Outdoor Area				40													
Communal Amenity Space & Entrance Foyer				160													
Communal Amenity Space				140													
Bin Store				42													
External Bike Enclousures				40													
Total				790													
Other																	
Back of House: Comms / Control Room, Janitor Store, Accessible WC				20													
Plant, Sub / Switch Stations				224													
Total				244													
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m²)	Unit Area required (m²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m²)	Living Area required (m²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect	
Level 01	1.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E	
						11.4	11.4										
	1.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E	
	1.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E	
						11.6	11.4										
	1.04	D1	1	54	45	15.2	11.4	15.2	11.4	23.4	23	5	5	3.1	3	E	
	1.05	E	1	52	45	13.5	11.4	13.5	11.4	23.5	23	5	5	3.1	3	E	
	1.06	F	3	106	90	15.7	13	36.5	31.5	36.4	34	10	9	9	9	Dual - S & E	
						11.7	11.4										
						9.1	7.1										
	1.07	G	3	108	90	13	13	33.8	31.5	36.9	34	14	9	9	9	Dual - S & W	
						11.9	11.4										
						8.9	7.1										
	1.08	H	1	56	45	13.1	11.4	13.1	11.4	23.5	23	5.4	5	3.1	3	W	
	1.09	J1	2	83	73	13.7	13	27	24.4	30	30	7	7	6	6	W	
						13.3	11.4										
	1.10	K	0 (STUDIO)	47	37	-	-	-	-	36.4	30	5	4	3	3	S	
	1.11	L	1	62	45	19.5	11.4	19.5	11.4	33.9	23	5.5	5	3.1	3	S	
	1.12	M	1	62	45	12.8	11.4	12.8	11.4	32.3	23	5	5	3.1	3	Dual - S & W	
	1.13	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N	
Total per Level	13		19	893	751			246.3	216	382.3	349	89.2	78	61.1	60		
Shared Amenity																	
Communal Amenity Space				143													

Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 02	2.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E
						11.4	11.4									
	2.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E
	2.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E
						11.6	11.4									
	2.04	D1	1	54	45	15.2	11.4	15.2	11.4	23.4	23	5	5	3.1	3	E
	2.05	E	1	52	45	13.5	11.4	13.5	11.4	23.5	23	5	5	3.1	3	E
	2.06	F	3	106	90	15.7	13	36.5	31.5	36.4	34	10	9	9	9	Dual - S & E
						11.7	11.4									
						9.1	7.1									
	2.07	G	3	108	90	13	13	33.8	31.5	36.9	34	14	9	9	9	Dual - S & W
						11.9	11.4									
						8.9	7.1									
	2.08	H	1	56	45	13.1	11.4	13.1	11.4	23.5	23	5.4	5	3.1	3	W
	2.09	J1	2	83	73	13.7	13	27	24.4	30	30	7	7	6	6	W
						13.3	11.4									
	2.10	K	0 (STUDIO)	47	37	-	-	-	-	36.4	30	5	4	3	3	S
	2.11	L	1	62	45	19.5	11.4	19.5	11.4	33.9	23	5.5	5	3.1	3	S
	2.12	M	1	62	45	12.8	11.4	12.8	11.4	32.3	23	5	5	3.1	3	Dual - S & W
	2.13	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N
Total per Level		13	19	893	751			246.3	216	382.3	349	89.2	78	61.1	60	
Shared Amenity																
Communal Amenity Space				165												
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 03 - 04	3.01 - 4.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E
						11.4	11.4									
	3.02 - 4.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E
	3.03 - 4.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E
						11.6	11.4									
	3.04 - 4.04	D1	1	54	45	15.2	11.4	15.2	11.4	23.4	23	5	5	3.1	3	E
	3.05 - 4.05	E	1	52	45	13.5	11.4	13.5	11.4	23.5	23	5	5	3.1	3	E
	3.06 - 4.06	F	3	106	90	15.7	13	36.5	31.5	36.4	34	10	9	9	9	Dual - S & E
						11.7	11.4									
						9.1	7.1									
	3.07 - 4.07	G	3	108	90	13	13	33.8	31.5	36.9	34	14	9	9	9	Dual - S & W
						11.9	11.4									
						8.9	7.1									
	3.08 - 4.08	H	1	56	45	13.1	11.4	13.1	11.4	23.5	23	5.4	5	3.1	3	W
	3.09 - 4.09	J1	2	83	73	13.7	13	27	24.4	30	30	7	7	6	6	W
						13.3	11.4									
	3.10 - 4.10	P	1	50	45	13.7	11.4	13.7	11.4	23	23	5.1	5	3	3	S
	3.11 - 4.11	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	3.12 - 4.12	R	1	60	45	13.1	11.4	13.1	11.4	28.1	23	5	5	3.2	3	Dual - S & W
	3.13 - 4.13	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	3.14 - 4.14	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
	3.15 - 4.15	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N
Total per Level		15	23	1039	897			292	264.8	422.7	409	102.4	92	73.1	72	

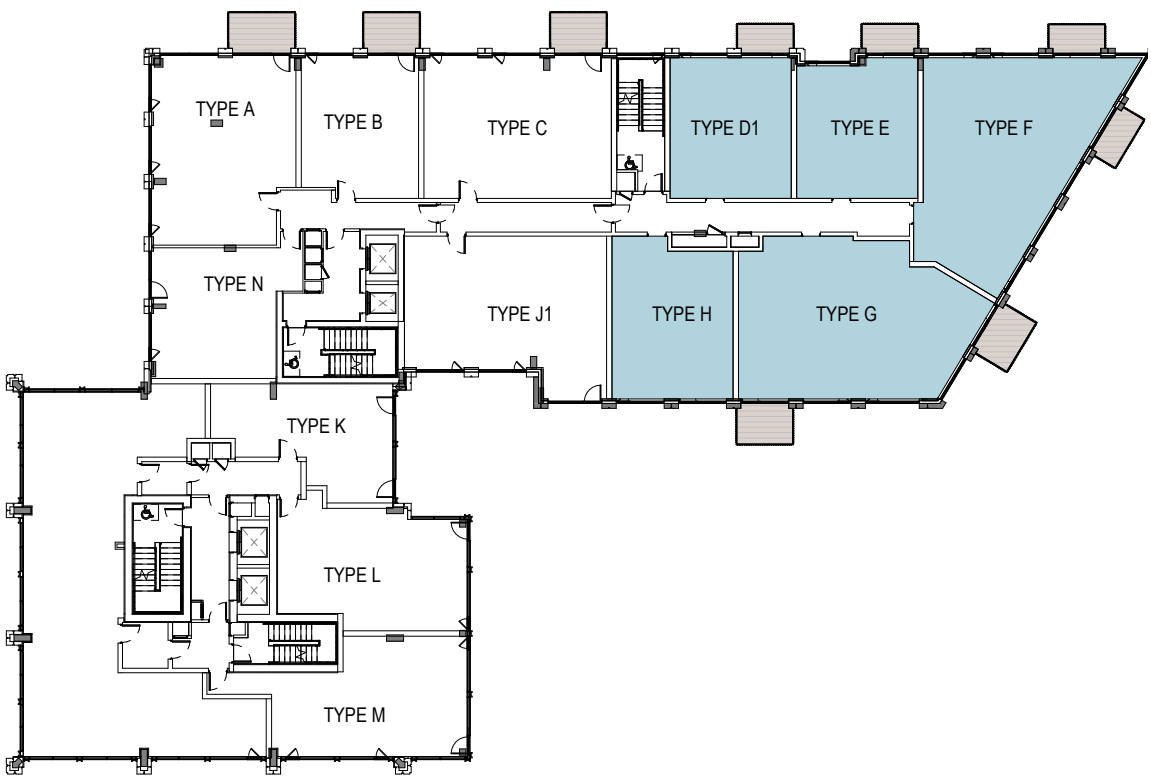
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 05 - 08	5.01 - 8.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E
						11.4	11.4									
	5.02 - 8.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E
	5.03 - 8.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E
						11.6	11.4									
	5.04 - 8.04	D1	1	54	45	15.2	11.4	15.2	11.4	23.4	23	5	5	3.1	3	E
	5.05 - 8.05	E	1	52	45	13.5	11.4	13.5	11.4	23.5	23	5	5	3.1	3	E
	5.06 - 8.06	F	3	106	90	15.7	13	36.5	31.5	36.4	34	10	9	9	9	Dual - S & E
						11.7	11.4									
						9.1	7.1									
	5.07 - 8.07	U	2	81	45	13	13	24.6	24.4	30	30	7	7	6	6	Dual - S & W
						11.6	11.4									
	5.08 - 8.08	V	2	89	45	13.2	13	26.9	24.4	31.7	30	7	7	6	6	W
						13.7	11.4									
	5.09 - 8.09	J1	2	83	73	13.7	13	27	24.4	30	30	7	7	6	6	W
						13.3	11.4									
	5.10 - 8.10	P	1	50	45	13.7	11.4	13.7	11.4	23	23	5.1	5	3	3	S
	5.11 - 8.11	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	5.12 - 8.12	R	1	60	45	13.1	11.4	13.1	11.4	28.4	23	5	5	3.2	3	Dual - S & W
	5.13 - 8.13	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	5.14 - 8.14	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
	5.15 - 8.15	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N
Total per Level	15		23	1045	852			296.6	270.7	424.3	412	97	92	73	72	
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 09	9.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E
						11.4	11.4									
	9.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E
	9.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E
						11.6	11.4									
	9.04	D2	1	56	45	14.7	11.4	14.7	11.4	24.1	23	5	5	3.1	3	Dual - S & E
	9.05	W	2 (2 BED 3 PERSON)	73	63	13	13	21.3	20.1	28	28	15	6	5.3	5	Dual - S & W
						8.3	7.1									
	9.06	J2	2	83	73	13.4	13	26.4	24.4	30	30	7	7	6	6	W
						13	11.4									
	9.07	P	1	50	45	13.7	11.4	13.7	11.4	23	23	5.1	5	3	3	S
	9.08	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	9.09	R	1	60	45	13.1	11.4	13.1	11.4	28.4	23	5	5	3.2	3	Dual - S & W
	9.1	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	9.11	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
	9.12	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N
Total per Level	12		14	742	645			203.5	187.7	308.4	300	78	65	51	50	
Shared Amenity																
Communal Amenity: External Terrace				230												

Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 10 - 11	10.01 - 11.01	A	2	80	73	13	13	24.4	24.4	30	30	8.3	7	6.3	6	Dual - N & E
						11.4	11.4									
	10.02 - 11.02	B	1	51	45	13.7	11.4	13.7	11.4	23	23	7	5	3.1	3	E
	10.03 - 11.03	C	2	82	73	13.4	13	25.0	24.4	30	30	7	7	6	6	E
						11.6	11.4									
	10.04 - 11.04	D2	1	56	45	14.7	11.4	14.7	11.4	24.1	23	5	5	3.1	3	Dual - S & E
	10.05 - 11.05	W	2 (2 BED 3 PERSON)	73	63	13	13	21.3	20.1	28	28	7	6	5.3	5	Dual - S & W
						8.3	7.1									
	10.06 - 11.06	J2	2	83	73	13.4	13	26.4	24.4	30	30	8.7	7	6	6	W
						13	11.4									
	10.07 - 11.07	P	1	50	45	13.7	11.4	13.7	11.4	23	23	5.1	5	3	3	S
	10.08 - 11.08	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	10.09 - 11.09	R	1	60	45	13.1	11.4	13.1	11.4	28.4	23	5	5	3.2	3	Dual - S & W
	10.10 - 11.10	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	10.11 - 11.11	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
	10.12 - 11.12	N	1	50	45	11.8	11.4	11.8	11.4	23	23	5	5	3.2	3	N
Total per Level	12		15	792	690			215.3	199.1	331.4	323	76.7	70	54.2	53	
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 12	12.01	X	0 (STUDIO)	41	37	-	-	-	-	30.8	30	4.5	4	3.3	3	Dual - S & E
	12.02	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	12.03	R	1	60	45	13.1	11.4	13.1	11.4	28.4	23	5	5	3.2	3	Dual - S & W
	12.04	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	12.05	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
Total per Level	5		5	308	265			64.3	60.2	151.1	143	28.1	27	21.5	21	
Shared Amenity																
Communal Amenity: External Terrace				530												
Level	Unit Number	Unit Type	No. Of Beds	Unit Area (m ²)	Unit Area required (m ²)	Bedroom Area (m2)	Bedroom Area required (m2)	Bedroom Agg. Area (m2)	Bedroom Agg. required (m2)	Living Area (m ²)	Living Area required (m ²)	Private Amenity (m2)	Private Amenity required (m2)	Storage (m2)	Storage required (m2)	Aspect
Level 13 - 24	13.01 - 24.01	Y	1	51	45	16.6	11.4	16.6	11.4	23.6	23	5	5	3	3	Dual - S & E
	13.02 - 24.02	Q	0 (STUDIO)	41	37	-	-	-	-	31.2	30	4.6	4	3	3	S
	13.03 - 24.03	R	1	60	45	13.1	11.4	13.1	11.4	28.4	23	5	5	3.2	3	Dual - S & W
	13.04 - 24.04	S	2	84	73	13	13	25.9	24.4	30.7	30	7	7	6	6	Dual - N & W
						12.9	11.4									
	13.05 - 24.05	T	2	82	73	13.9	13	25.3	24.4	30	30	7	7	6	6	Dual - N & E
						11.4	11.4									
Total per Level	5		6	318	273			80.9	71.6	143.9	136	28.6	28	21.2	21	

SITE STATISTICS - SUMMARY			
	m ²	%	Ha
Site Area	2744		0.2744
New Building Footprint Area	1408		
Site Coverage		51%	
Density (Units per hectare)			791
GFA New Building	22063		
Plot Ratio	8.0		
Apartments	No.	%	
Studio	25	12%	
1 Bed	92	42%	
2 Bed (3 Person)	3	1%	
2 Bed (4 Person)	85	39%	
3 Bed	12	6%	
Total	217	100%	
Dual Aspect	No.	%	
Dual Aspect Units Required	72	33%	
Dual Aspect Units Achieved	114	53%	
Publin open space - 10% requirment	m ²	%	
	1324	48%	
Communal Residential Amenity Space	m ²		
Communal Amenity Space Required	1281		
Provided - Internal	608		
Provided - External	760		
Total Communal Residential Amenity Space Provided	1368		



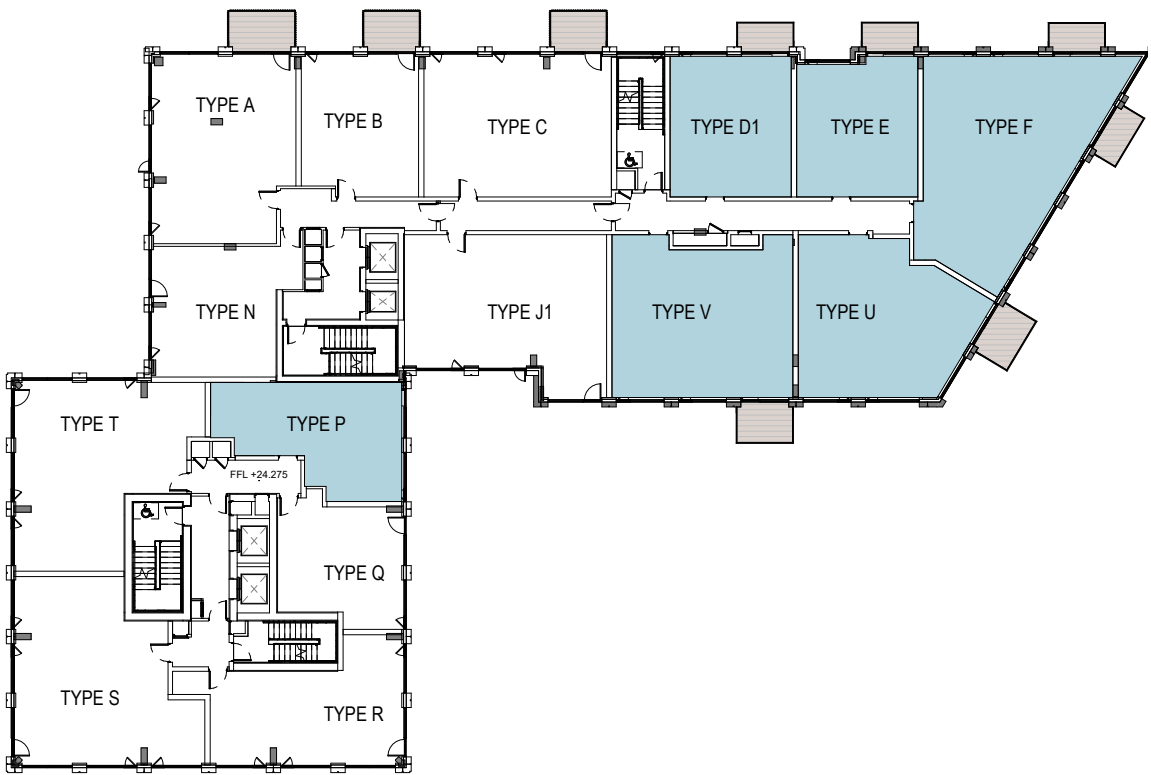
1 L01 PART V UNITS LAYOUT
1 : 200



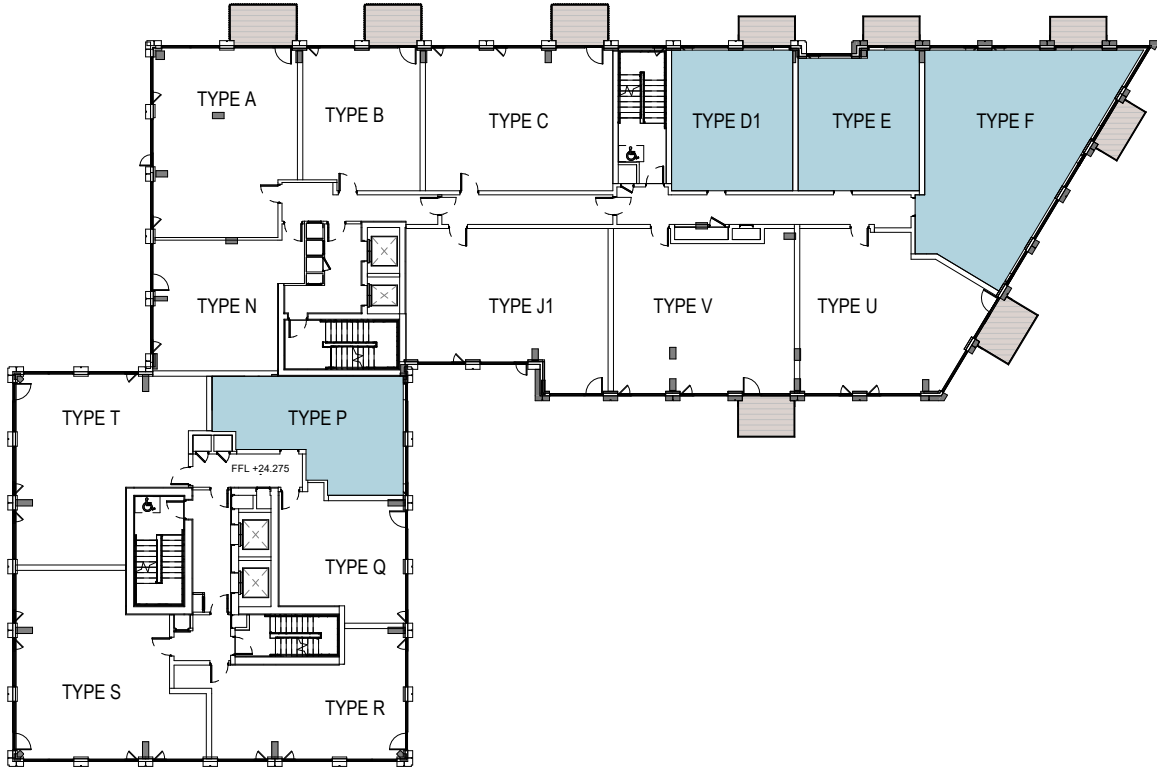
4 L02 PART V UNITS LAYOUT
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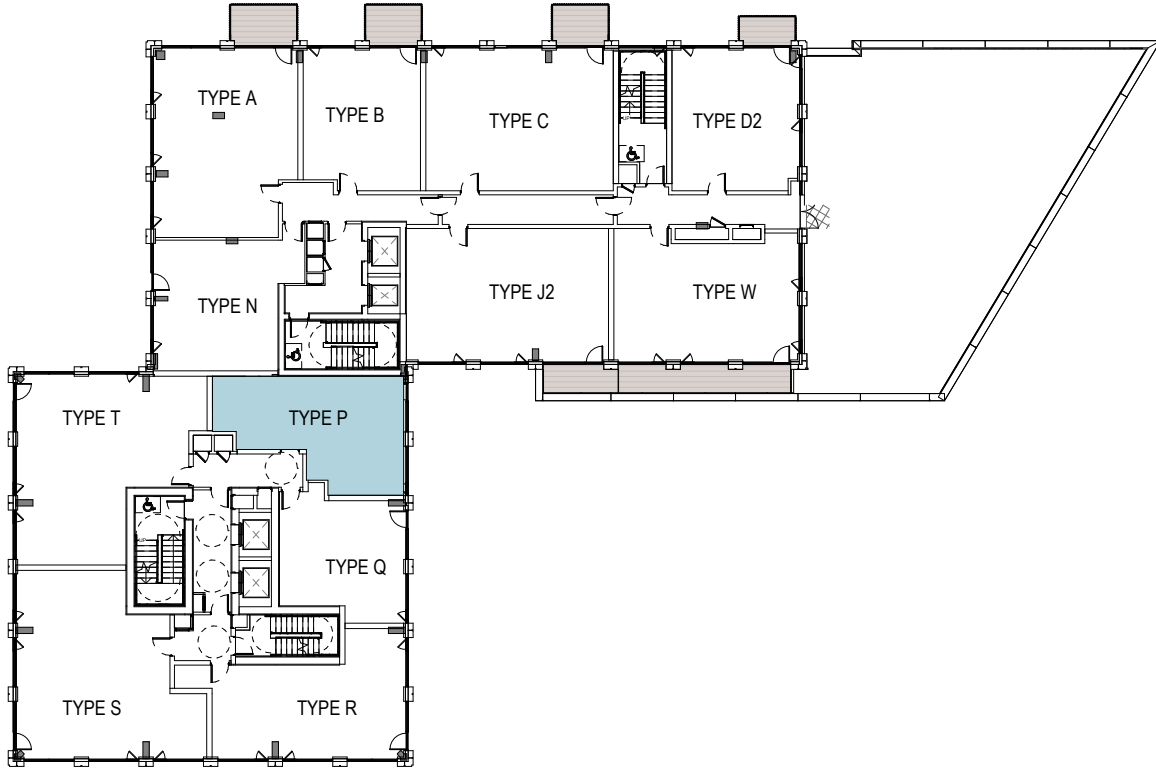
3 L03 - L04 PART V UNITS LAYOUT
1 : 200



2 L05 PART V UNITS LAYOUT
1 : 200



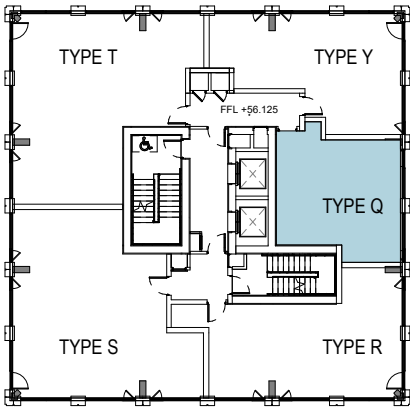
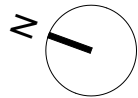
1 L06 - L08 PART V UNITS LAYOUT
1 : 200



2 L09 PART V UNITS LAYOUT
1 : 200

Legend:

■ PART V UNITS



3 L16 PART V UNITS LAYOUT
1 : 200