HKR ARCHITECTS

MALCLOSE LIMITED

Gowan House - PBSA Proposal

Design Statement

Naas Road, Dublin 12

August 2023

Executive Summary

Introduction

This document has been prepared by HKR Architects for the redevelopment of former industrial building and land on Naas Road, Dublin 12. The submitted on behalf of Malclose Limited, a subsidiary of Hollybrook Homes.

Project Description

Malclose Limited are applying to Dublin City Council for permission for a large-scale residential development principally comprising student accommodation at this 1.11 Ha site at Gowan House, Carriglea Business Park, Naas Road, Dublin 12, D12 RCC4.

The proposed development will principally consist of: the demolition of the existing two-storey office/ warehouse building (5,172 sq m); and the construction of a development in two blocks (Block 1 (eastern block) is part 2 No. storeys to part 15 No. storeys over lower ground floor and basement levels and Block 2 (western block) is part 9 No. storeys to part 11 No. storeys over basement); and the provision of 941 No. Student Accommodation bedspaces (871 No. standards rooms, 47 No. accessible rooms and 23 No. studios) with associated facilities, which will be utilised for short-term lets during student holiday periods. The 871 No. standard rooms are provided in 123 No. clusters ranging in size from 3 No. bedspaces to 8 No. bedspaces, and all clusters are served by a communal living/kitchen/dining room.

The development also provides: ancillary internal and external communal student amenity spaces and support facilities; cultural and community floor space (1,422 sq m internal and 131 sq m external); retail floorspace (250 sq m); communal and public open space; the daylighting of the culverted River Camac through the site; a pedestrian bridge link at first floor level between Blocks 1 and 2; vehicular access at the south-western corner; 7 No. car-parking spaces; 2 No. accessible car-parking spaces; 2 No. motorcycle parking; 2 No. set down areas to the west and south; bicycle stores at ground and lower ground floor levels comprising 941 No. spaces student spaces; 1 No. space for retail staff; 2 No. spaces for cultural and community staff ; 218 No. visitor external cycle parking spaces; bin stores; substation; hard and soft landscaping; roof gardens; green roofs; boundary treatments; plant; lift overruns; and all associated works above and below ground.

The gross floor area of the development is c. 33,140sqm comprising 30,386 sq m above lower ground and basement level.

The development will consist of:

- Demolition of existing buildings on site.
- Construction of a purpose built student accommodation development of 941 no. rooms, across three Blocks of 11 and 15 storeys, with a shoulder height of 10 storeys.
- Over 4,810 sqm of student amenities across various floors and terraces, with about a quarter being external amenity and the remainder being provided as internal amenity, offering the opportunity to provide different types of leisure space.
- Bicycle store, bin store, substation and plant rooms at ground floor and a small area of lower ground floor.
- Circa 1,550 sqm of cultural space at ground and basement floor providing active frontage along the new linear park.
- A new 250 sqm retail space fronting onto the new square
- New public access through the site providing a link between the North and the Carriglea development to the South.
- High quality, accessible and inclusive public realm.
- Daylighting River Camac at the center of the site with a riparian zone along the river

We believe that the overall proposals will make a worthwhile and attractive contribution to Naas Road and will have a positive and contextual place in the exciting new masterplan that is City Edge.

Key Figures for Proposal

Site Area (sqm)	11,298
Developable Site Area (sqm)	9,622
Plot ratio	3.2
Existing Site Coverage	29%
Proposed Site Coverage	36%
Cycle Parking Spaces - Student Internal	941 (including 5 cargo and 48 elctric bike stands)
Cycle Parking Spaces - Other Internal	3
Cycle Parking Spaces - Landscape	218
Car Parking	7
Accessible Car Parking	2

Internal Area (sqm)	
Cultural/ Community	**1422**
Student Amenity	**4027**
Plant	**369**
Bike Store	**876**
Retail	**250**
Electrical Room	**21**
Bin Store	**210**
Cores	**4797**

External Area (sqm)	
Cultural/ Community	**131**
Student Amenity	**1174**
Roof Plant	**807**
Existing Electrical Substation	**13**

TOTAL GFA	**33140**

871	**92.6%**	**Standard Room**	**Typical Room = 12.86 sqm**
47	**5.0%**	**Accessible Studio**	**Typical Accessible= 25 sqm**
23	**2.4%**	**Studio**	**Typical Studio = 25 sqm**
			TOTAL
			941

Site Location

Gowan House is located on Naas Road, the immediate outskirts of Dublin City, about 20 minutes drive from the city centre and 30 minutes by public transport or bicycle.

Site Location

The Naas Road lands identified in this application are strategically significant in the city context in that they offer a great opportunity for future regeneration and improved integration of the area into the emerging City Edge Framework.

The location is served by the M50 motorway and public transport such as and Luas Red Line, which can sustain future development.

N

Aerial Views

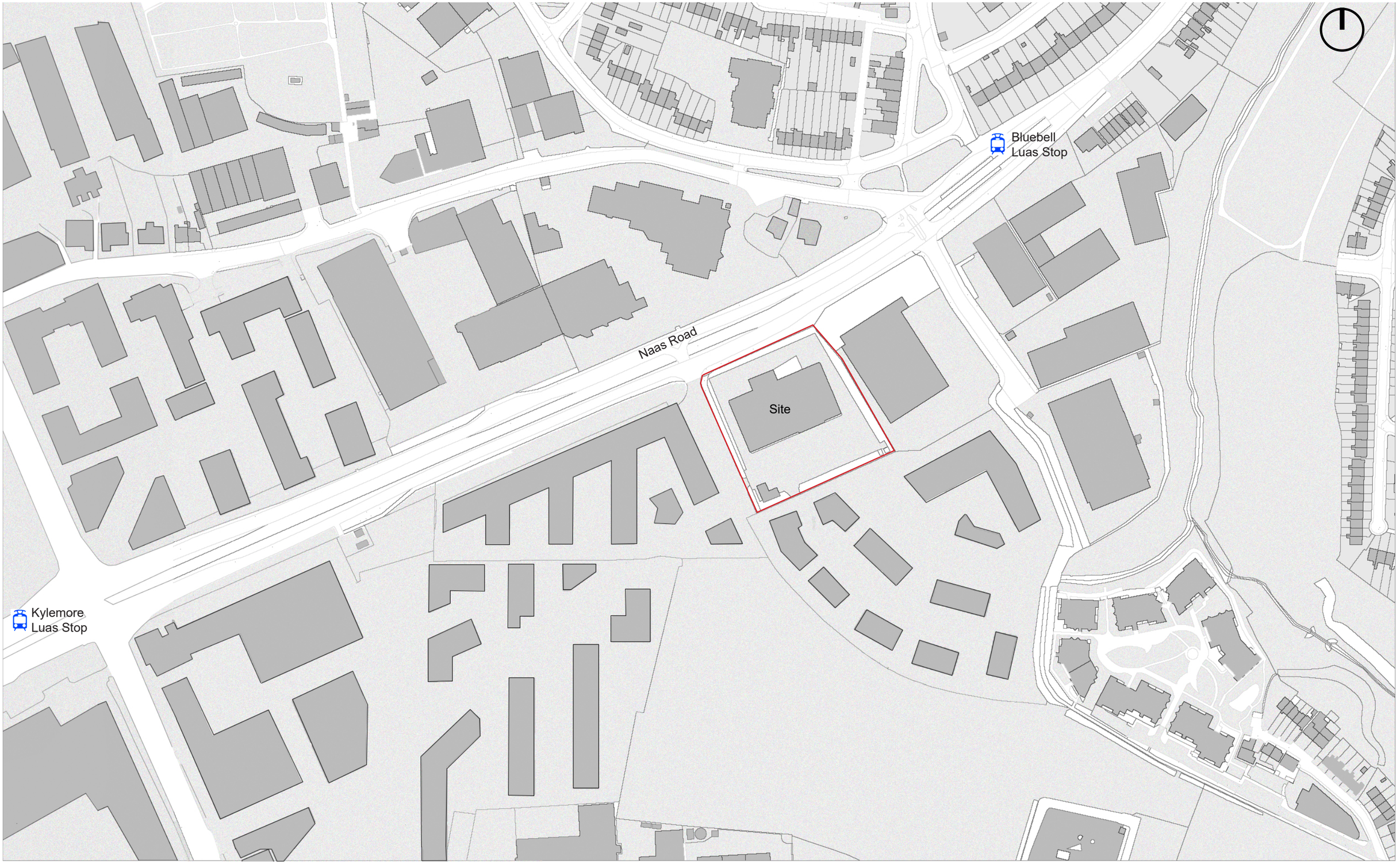
View From SW

View From SE

View From NE

View From NW

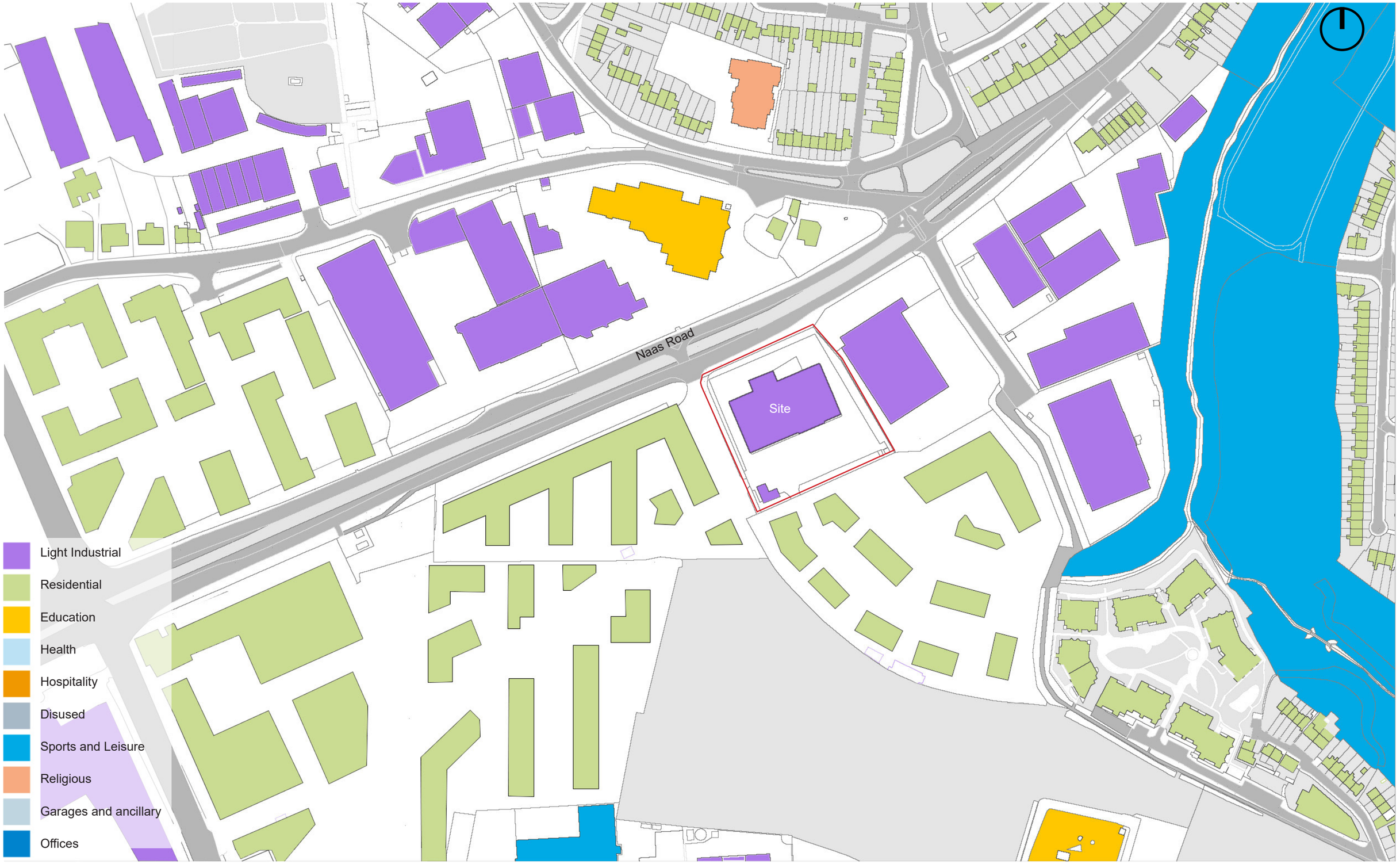
Contextual Analysis - Location Map



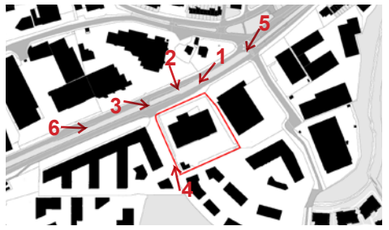
Contextual Analysis- Figure Ground

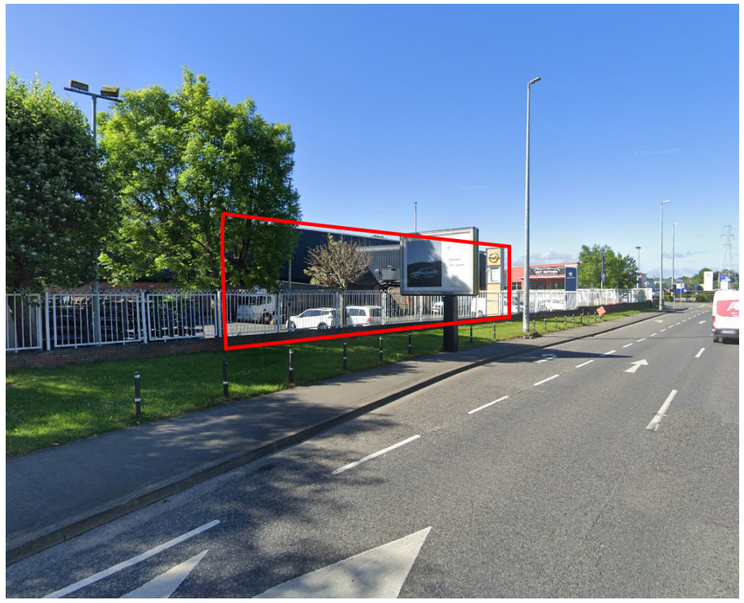
Contextual Analysis - Building Heights

Contextual Analysis - Permitted Land Use



Contextual Analysis- Site Photos



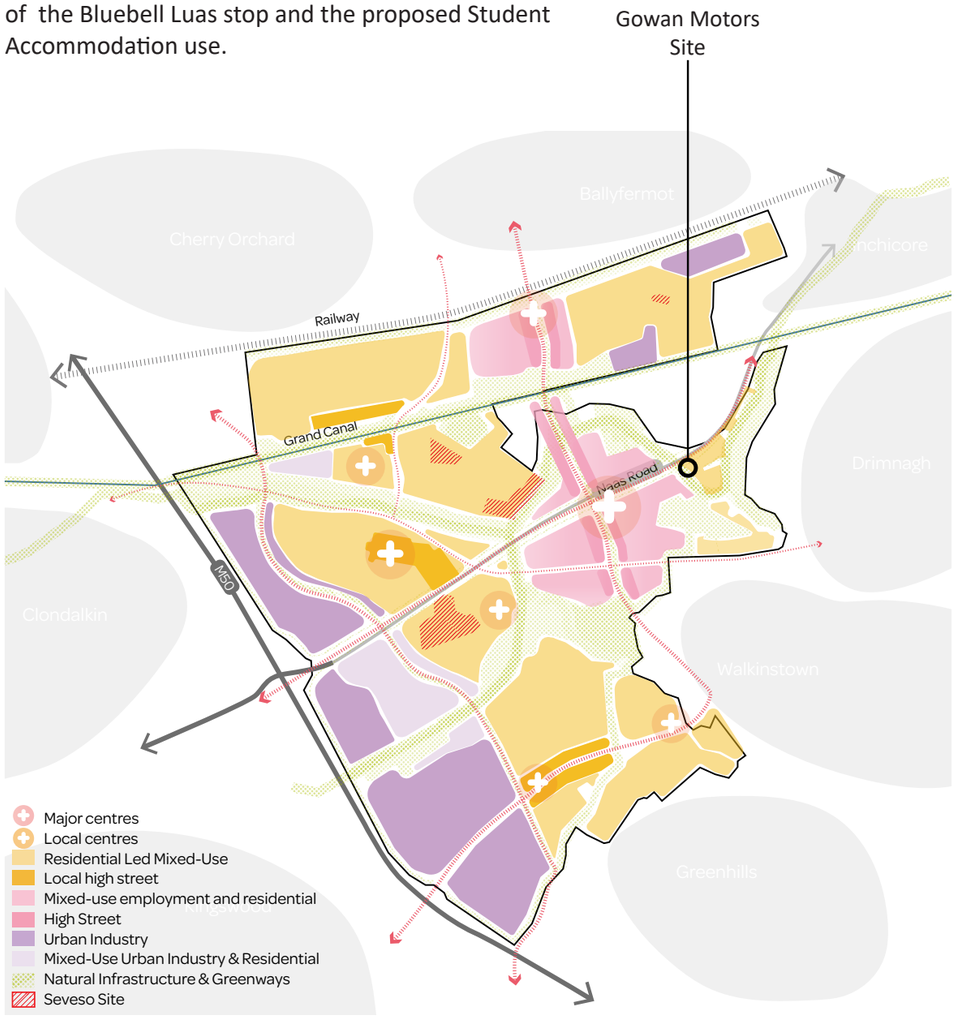


Contextual Analysis - City Edge Framework

The City Edge Framework provides a framework for the development of the Naas Road lands and will form the basis for a statutory LAP which is expected to be adopted in the future.

The subject site is identified as 'Residential-led Mixed Use'.

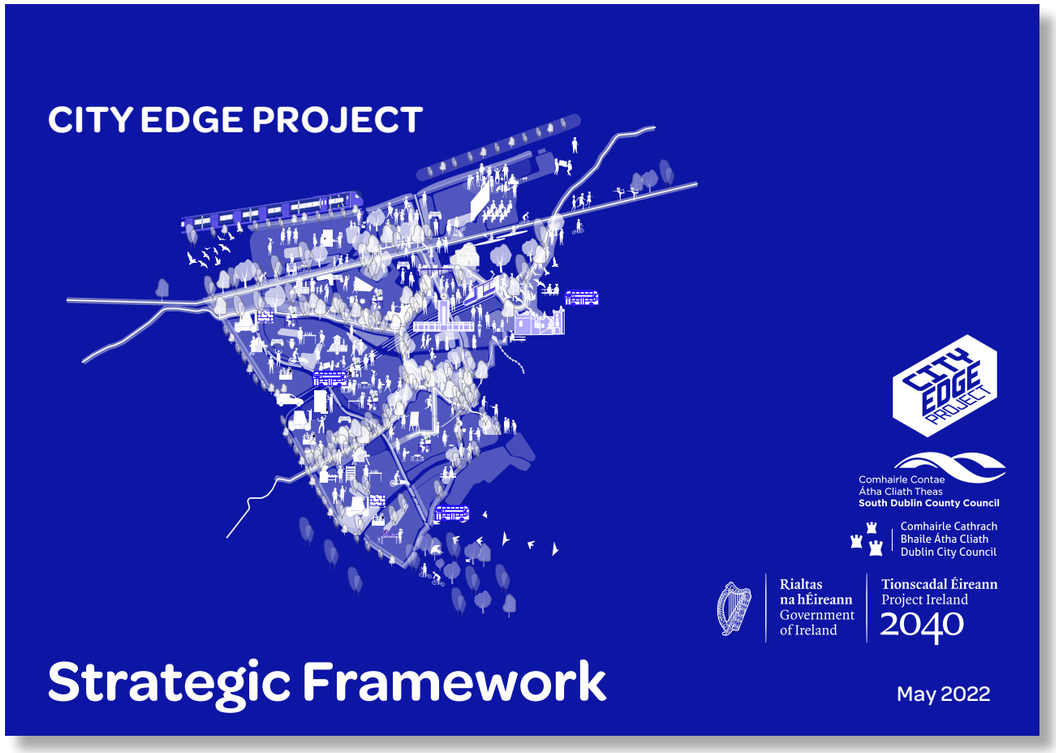
With regard to parking, City Edge is ultimately looking to provide schemes with zero parking in appropriate locations along high quality public transport corridors but in the immediate future is looking for a car-parking ratio of between 0-0.3 No. spaces per residential unit. The subject scheme proposes 7 car parking spaces on site due to its location within 150 metres of the Bluebell Luas stop and the proposed Student Accommodation use.



City Edge- Emerging Schemes

There are several schemes emerging through planning, some of which have already started on site. These are of similar scale to this proposed scheme and will be considered the context of the site for this study. The examples shown here can be found within approximately 500m of the proposed site.

- 1. Carriglea Industrial Estate, Muirfield Drive, Naas Road
- 2. Royal Liver Assurance Retail Park, Old Naas Road
- 3. Concorde, Naas Road, Walkinstown
- 4. SouthWest Gate, Naas Road



Residential-led Mixed Use

Locations will be residential-led with employment and community space. Employment space will be focused on urban workspace targeting small businesses and light industry designed to be attractive to occupiers and integrated with residential.

City Edge- Emerging Schemes

1. Carriglea Industrial Estate

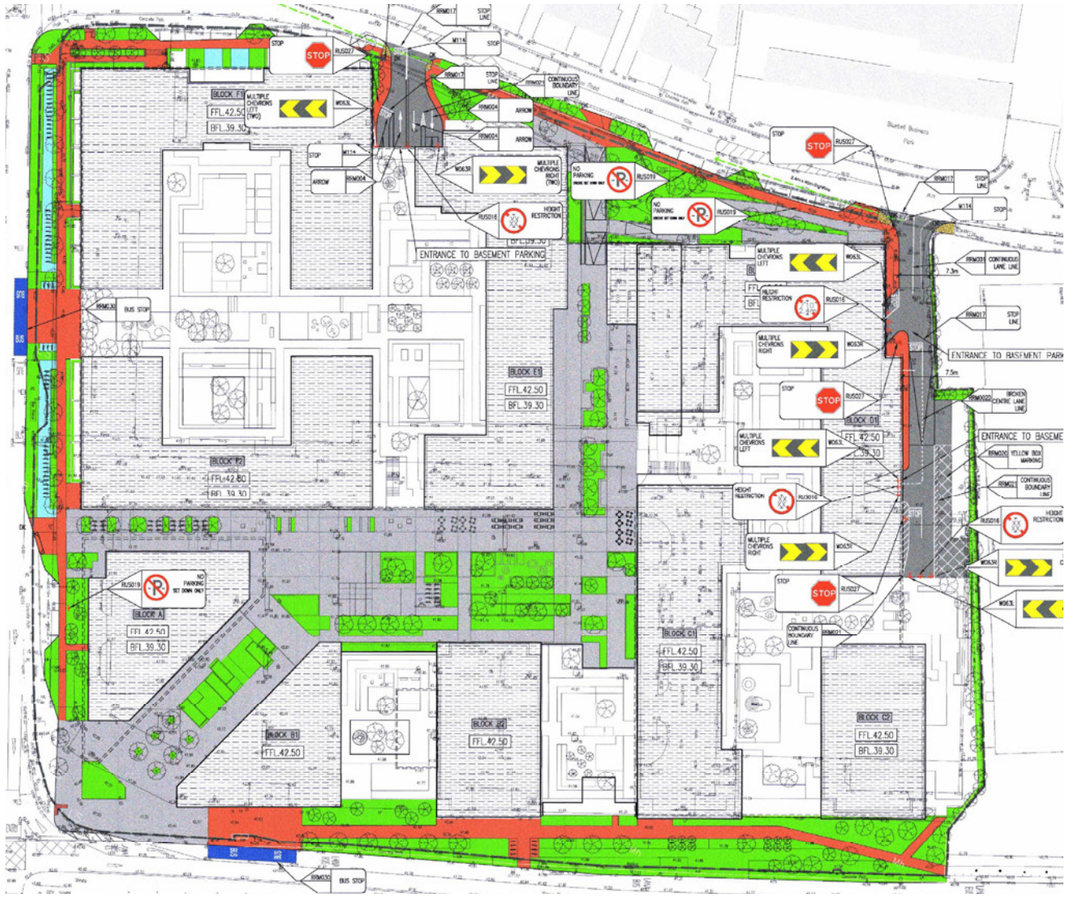
A Strategic Housing Development (SHD) comprising of circa 250 apartments in eight blocks ranging from five to eight storeys. This scheme is on site and nearing completion of construction.

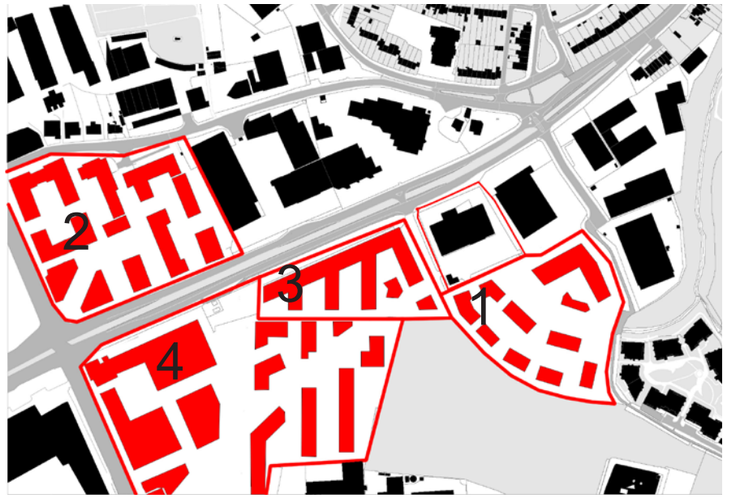
City Edge- Emerging Schemes

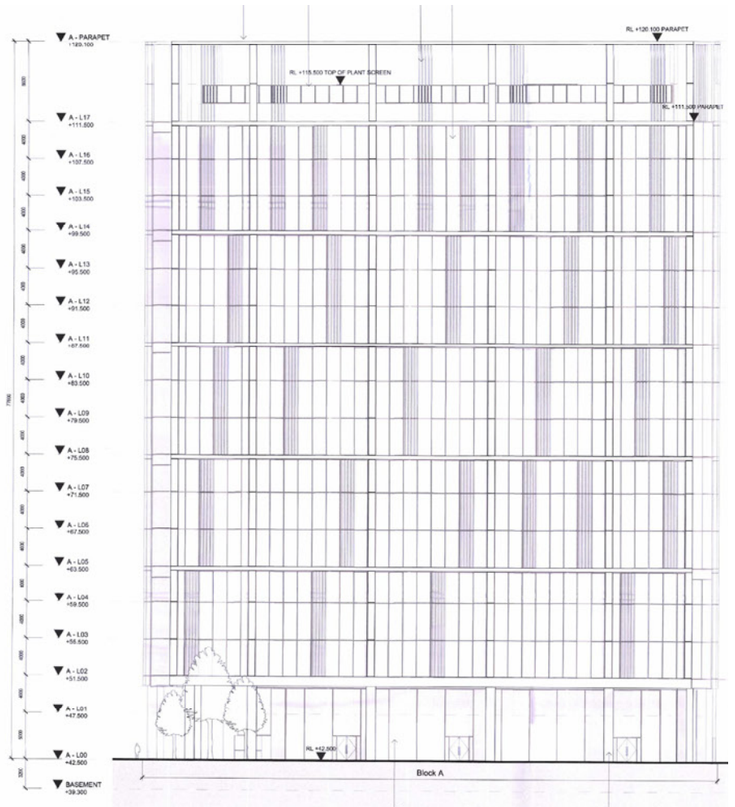
2. Royal Liver Assurance Retail Park

The development will comprise the demolition of single storey warehouse buildings sub-divided to comprise 8 retail / retail warehouse units, to provide a mixed-use development and all ancillary works; comprising 9 buildings ranging in height from 7 to 18 storeys. The residential component comprises 1,102 units consisting of Build-to-Rent Residential Development.

The 18 storey corner tower element of this scheme presents a 4m FFL to FFL level with a double height upper floor. The main building has an overall height of 77.6m





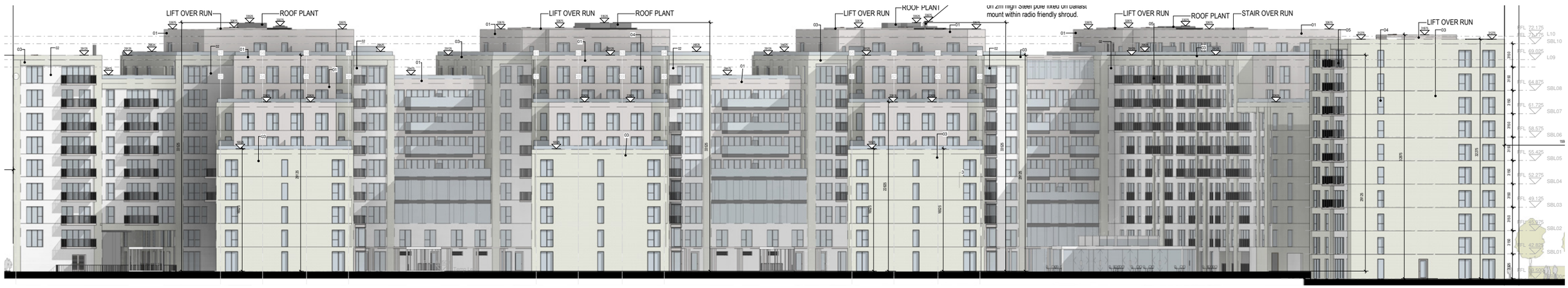


City Edge- Emerging Schemes

3. Concorde

Concorde Industrial Estate occupies one of the highest profile sites on the Naas Road, with a frontage of approximately 180 m. The entire site, which extends to approximately 1.89 hectares, currently contains 8 industrial units.

The permitted scheme consists of a mixed-use development to including 492 Build to Rent apartments, commercial units, crèche, landscaped open space, 238 car parking (200 in basement) 516 Bicycle parking spaces. The planning application was lodged in May 2019. Permission was granted in August 2019, with an additional 2 storeys granted in April 2022, taking the development up to 10 storeys.



City Edge- Emerging Schemes

4. SouthWest Gate

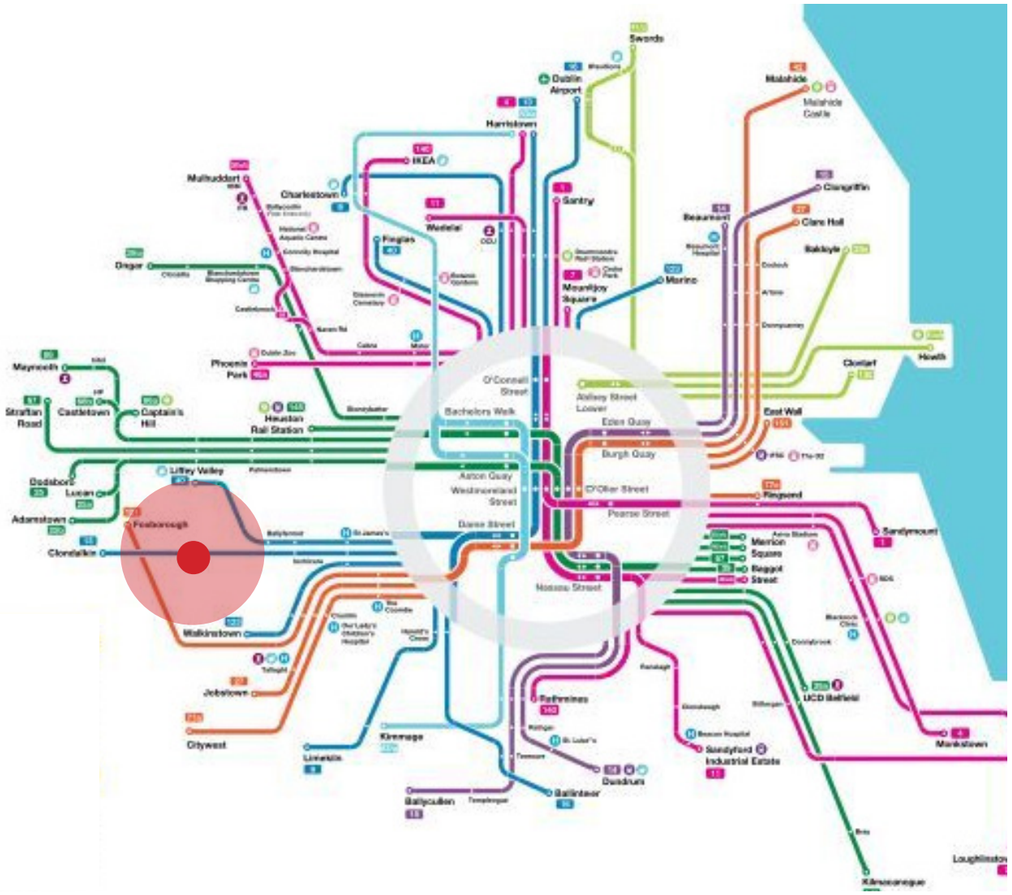
Mixed use development including part Build to Rent, across 13 no. blocks (Blocks A-L) ranging in height from 4-15 storeys over 3 no. basements with a cumulative gross floor area of 168,184.13 sq.m at this 6.921 hectare site to the east of Walkinstown Avenue at the junction of Walkinstown Avenue and Naas Road. The application area includes part of the 'Nissan Site' (6.429 hectares) and 0.492 hectares to accommodate works to facilitate connections to municipal services and works proposed to public roads.

Contextual Analysis

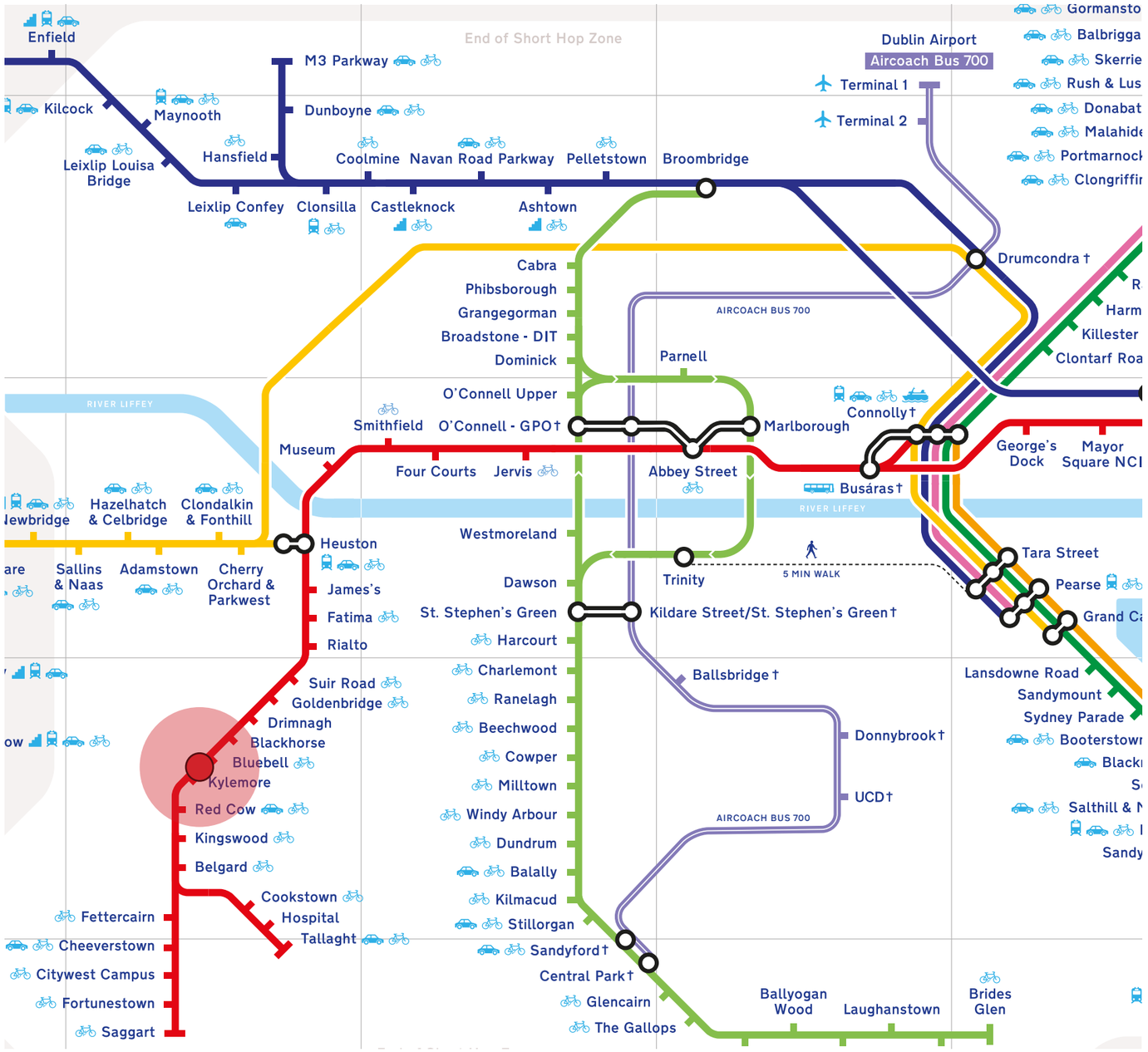
Access & Transport

The site has various public transport opportunities by Luas and bus. The red line Luas and Bluebell Luas stop is located within 150 metres of the site. Bus line 13 and Muirfield Drive bus stop is within 100 meters of the site.

Existing bus services



Existing tram services



Contextual Analysis - Site Constraints & opportunities

1. Proximity to Luas

The Bluebell Luas stop is approximately 150m to the East of the site and 500m from the Kylemore stop to the West. This provides an opportunity to make good use of public transport to and from the site.

2. Trunk Water Main

A 30” steel 1937 Trunk water main follows the easements of 10m to the West, and 5.5m to the East. This zone overlaps the Western boundary of the site by approximately 1.5m.

3. HV Circuit Power Cable

Underground power cables requiring buffer zone, extending 2m either side. Currently allowing approximately 5m along the Southern boundary.

4. ESB Substation

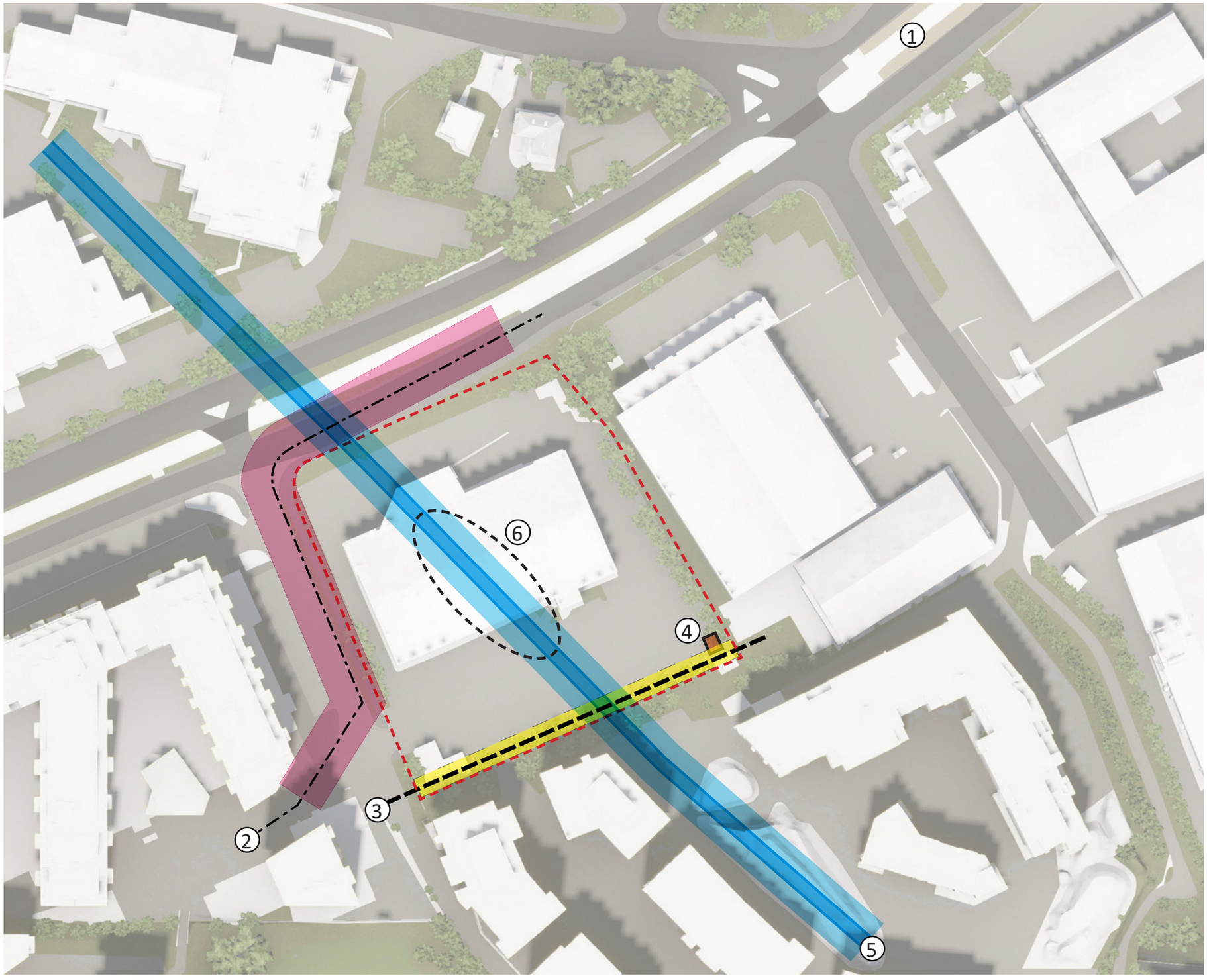
Following consultation with the relevant statutory undertaker, the design team will be retaining the electrical substation in its current location.

5. River Camac Culvert and Wayleave

Wayleave strip running diagonally through the Gowan Motors site, over which no building footprint can be constructed. This strip will be approximately 12.210m wide to account for the width of the culvert and allowance for wall thickness and the wayleave either side. (3.675m+0.3m+4.935m+0.3m+3.675m). This provides an opportunity to generate an exceptional public realm including daylighting the culverted river, and a chance to connect to the public realm of the Carriglea site to the South.

6. Daylighting River Camac

Opportunity to improve the natural environment in the area and promote more sustainable building development by deculverting/opening up the River Camac.



Masterplan

City Edge Framework - Context and Objectives

The proposed scheme has been developed to align with the vision and aspirations presented within the City Edge Strategic Framework. The proposed land use is aligned, and caters to future sectors, particularly higher education, as well as being accessible to current higher education institutions.

The proposals facilitate the future pedestrian and cycling crossings, identified in the map below as the Carriglea crossing, and with the sites' location near the Bluebell Luas stop, the site offers several of the key drivers for growth.

The scheme is one of the first proposals to address the daylighting of the culverted River Camac within the City Edge framework. The river runs diagonally through this is a relatively small site at 0.96 ha, which presents a significant challenge in terms of the remaining developable land versus the demands of opening up the River.

In order to meet the project brief as well as address policy aspirations, several innovative design measures were adopted. The design team maximised the amount of riparian zone being formed near river level, and in places (cultural use) located the façade/glazing in line with the retaining structure. The scheme offers an interesting experience to the public: a treetop walk at ground level. As a student, there is a further experience of the river to be had. This is across the student link bridge that connects block 1 to block 2offering an elevated view directly above the river Camac.

Note that the daylighting of the river improves the hydromorphological condition of the river. Refer to the Hydromorphological Qualitative Technical Assessment (HQTA) prepared by AWN Consulting.

Kylemore District

Cherry Orchard District

Red Cow District

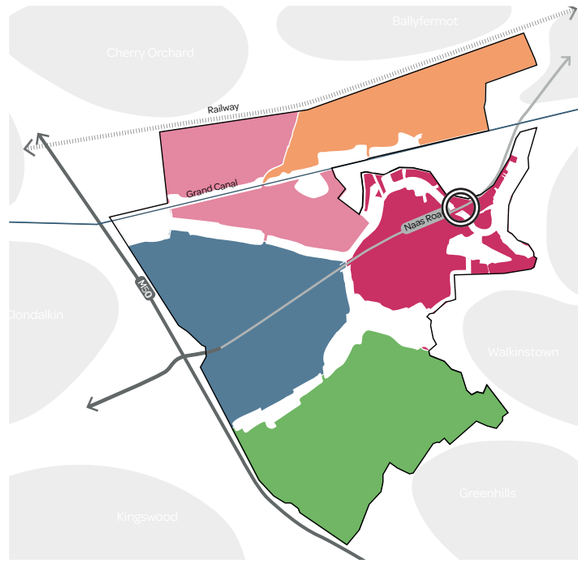
Greenhills District

Naas Road District

Existing Jobs:	4,353
Potential Jobs:	18,000 – 19,000

Future Sectors:
- Finance, Business and Professional Services
- Information & Communications / Tech
- Research & Development – MedTech, Life Sciences, Genomics etc
- Institutional use – Higher Education, Public Sector, Government etc
- Urban Workspace

Key Drivers for Growth:
- Sustainable Transport Infrastructure
- Placeshaping & Public Realm
- Blue and Green Infrastructure
- Proximity to Dublin City Centre



Land Use

Active Transport

EXISTING
Crossings at grade
Pedestrian & Cycling
Vehicular
Grade separated crossings
Pedestrian & Cycling
Vehicular

PROPOSED
Crossings at grade
Pedestrian & Cycling
Vehicular
Grade separated crossings
Pedestrian & Cycling
Vehicular

Deculverting

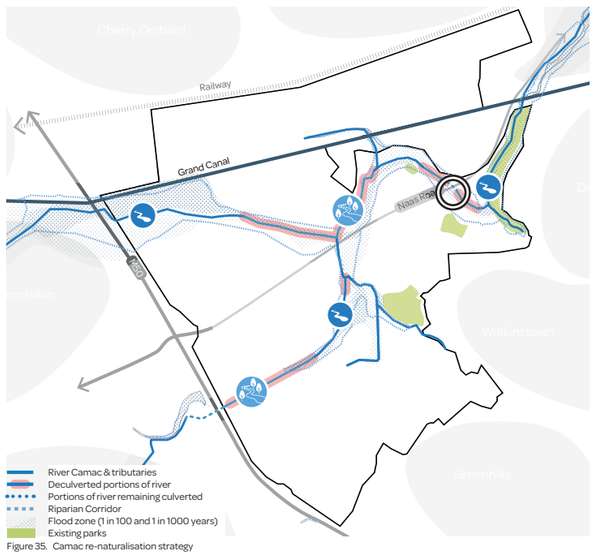
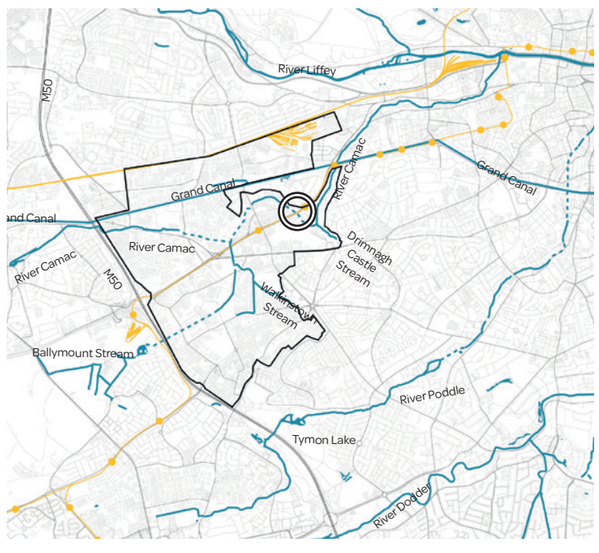


Figure 35. Camac re-naturalisation strategy

Mass Transport Node



Masterplan

Streetscape and relation to context

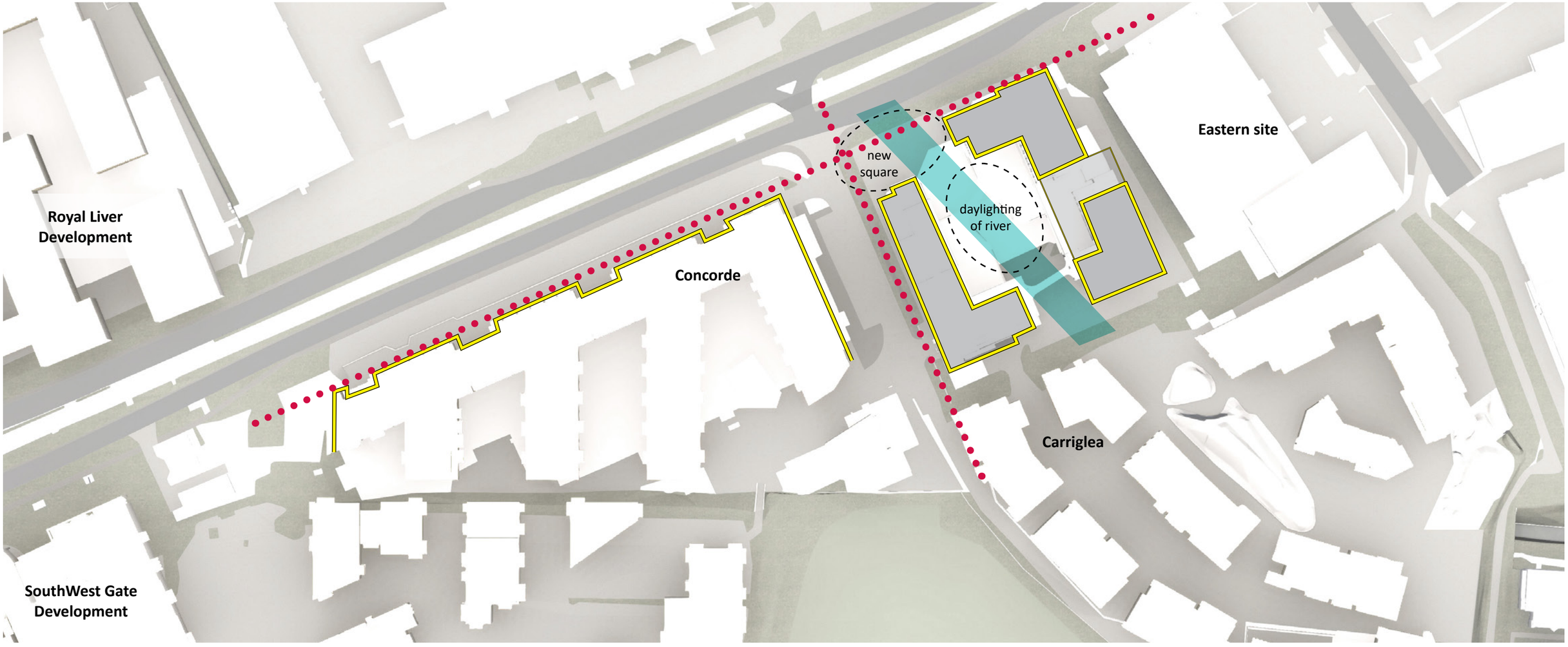
The site is located towards the Eastern end of the Naas Road district of the City Edge Framework.

The Typical urban design approach for a site in this type of location is to replicate the alignments of the surrounding buildings in order to complete the streetscape. In this case the River culvert erodes the NW corner of the site as this cannot be developed due to a wayleave related to the River Camac. This offers an opportunity to use that change in the rhythm of street pattern to open the site by forming a new public square and providing new connectivity through the site along the deculverted river and new riparian zone.

The proposed scheme relates to the surrounding townscape, both to the scheme currently being built on the Carriglea site to the South, and the emerging scheme of Concorde site to the West. The scheme gradually steps up in height from the Carriglea site becoming higher towards Naas Road, and the shoulder height of the scheme is directly relatable to the shoulder height of Concorde along Naas Road. As illustrated in the design statement, although the proposed scheme presents a ten storey shoulder height along the Naas Road, this is comparable to the nine storeys of the Concorde scheme due to the reduced floor to floor height achievable on PBSA schemes in comparison to those typically achieved on residential/ apartment schemes (2.7m vs circa 3.15m).

There are currently no planning proposals for the site located directly East if this application site, however, the design team believes that the current proposal does not impact the future development of the neighbouring site.

The proposals makes numerous positive contributions to emerging context, including high quality architectural design commensurate to the neighbouring schemes and policy aspirations, creation of a high quality public realm including a new public square, new connections through the site linking the Bluebell Luas stop to the South of the site, introduction of vibrant active frontage to the new public realm including retail/community/cultural uses, and a significant improvement to the blue infrastructure and biodiversity of the masterplan with the opening up of the River Camac culvert and the introduction of a carefully considered riparian zone.

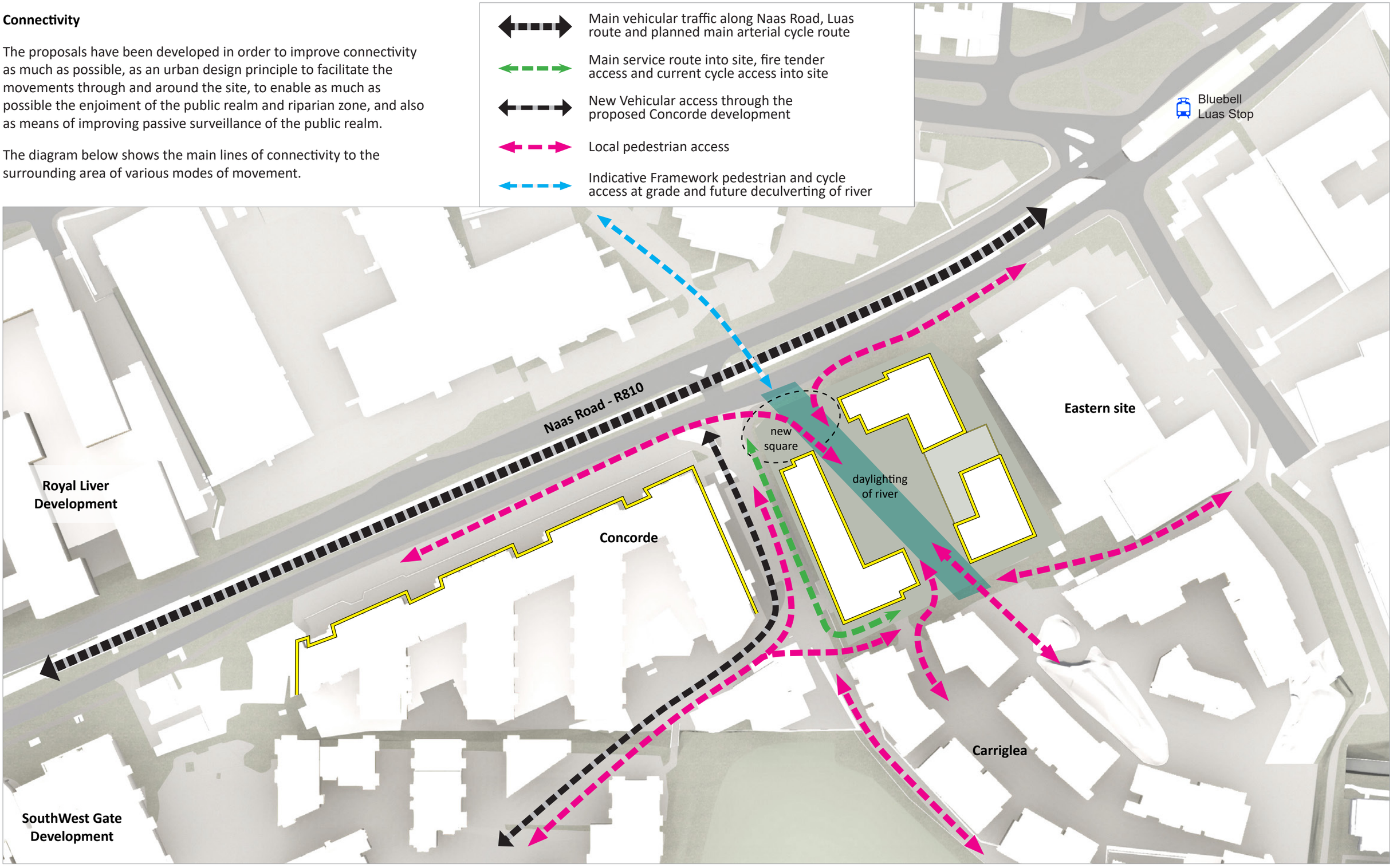


Masterplan

Connectivity

The proposals have been developed in order to improve connectivity as much as possible, as an urban design principle to facilitate the movements through and around the site, to enable as much as possible the enjoiment of the public realm and riparian zone, and also as means of improving passive surveillance of the public realm.

The diagram below shows the main lines of connectivity to the surrounding area of various modes of movement.



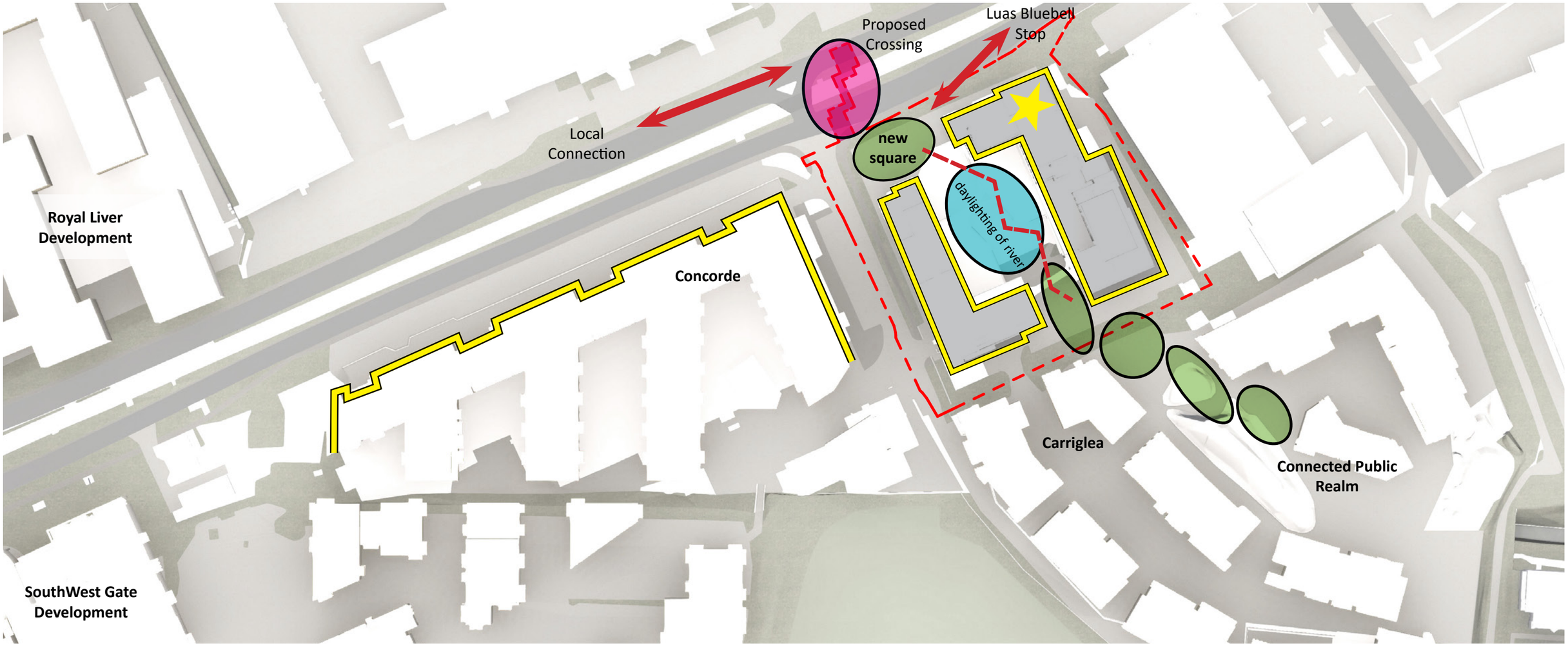
Design Proposition & Principles- Site Layout

General Approach to Site Layout & Connectivity

Like the Concorde development, the proposed scheme varies principally between circa 30m and 35m in height, however, as Gowan House is forming a new public square, its presence is marked by a 46.1m element. The new square creates a greater sense of permeability through the site. This allows the site to act as a connection to/from the surrounding area to the North of Naas Road, as well as connecting Luas commuters to the Carriglea site through the new square and exceptional public realm being provided, including the daylighting of the River Camac at the heart of the scheme.

Adding to the site's enhanced accessibility, a newly proposed public crossing is set to be implemented. This addition will further enrich the site's connectivity, solidifying its role as an integral part of the community and the broader transportation network.

Diagram illustrating new permeability of the site through a series of connected public spaces with a higher element of the scheme demarking the square and the intersection of movement through and around the with the open river



Design Proposition & Principles - Height

Height - Public Realm

The new public square is located at the intersection of Naas Road and is flanked to the South by commercial/ cultural use and to the East by main student entrance, bringing vibrancy and activity to square.

The square is emphasised and enclosed by the scheme buildings, with a 15 storey element demarking the pedestrian entrance to the student amenities, and giving legibility to the scheme.

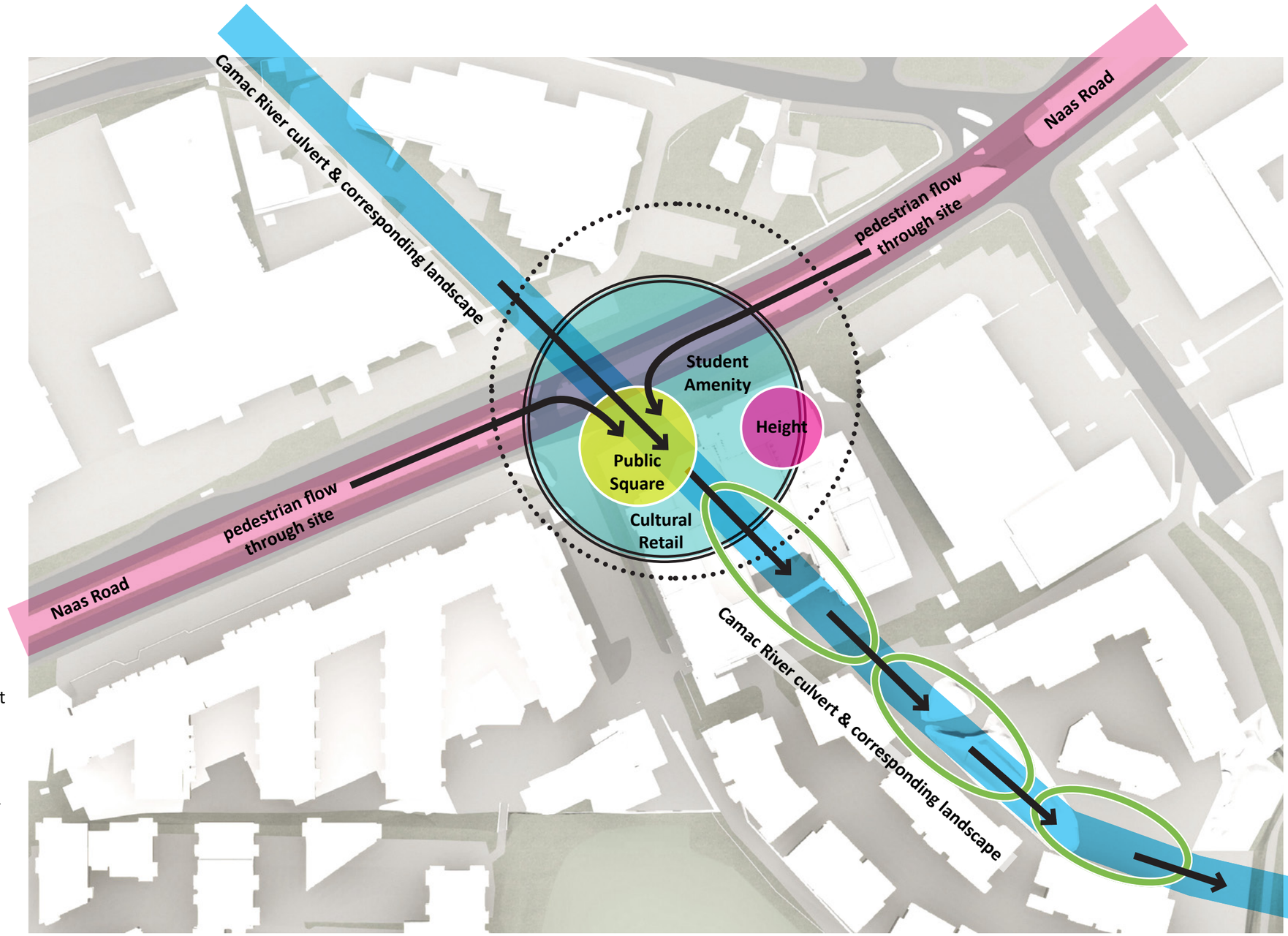
The highest point of the building is 46.1m. This is in keeping with the general scale of new development along the Naas Road, with building heights varying from circa 33m on the Concorde site to the 77.6m of the Royal Liver block A building.

The scale and use of the proposed scheme is appropriate to the nature of the public realm being created and suited to the site's good access to public transport.

Height - Modifier

A combination of the public square, daylighting of the River Camac with exceptional public access, local connectivity, site permeability and the presence of accessible high quality cultural, community and retail, provide an opportunity for a height modifier to one out of the four building cores.

This is a modest increase of the predominant adjacent building height from circa 33m to 46m. The height and massing other proposals are described further in other sections of this report.



Design Proposition & Principles

Height/Massing - View From South

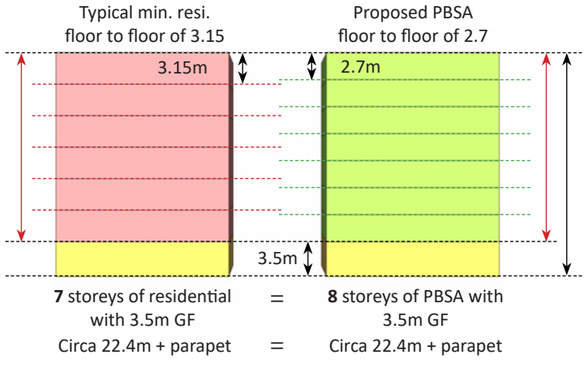
The proposed scheme steps up gradually forming a transition between the 8 storey buildings on the Carriglea site to the south and the 10 storey Concorde development to the west.

11 PBSA floor to floor of 2.7m generates a 11 storey building of circa 35m (including oversized ground floor and roof plant enclosure). Comparable to 10 storeys of apartment development.

10 Apartment floor to floor of 3.15m. Concorde scheme proposes circa 33m high apartment development.

Developments permitted planning or under construction

Typical residential vs PBSA height comparison diagram



Design Proposition & Principles

Height/Massing - View From North-West

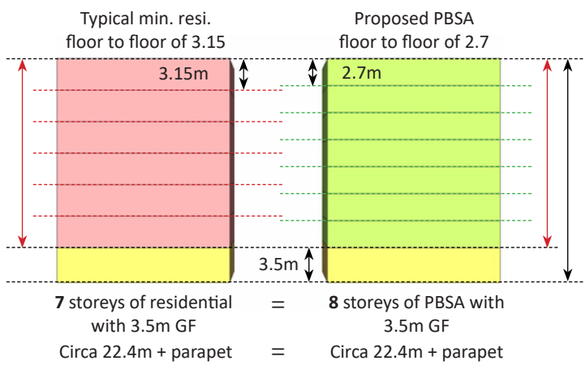
The Naas Road side of the proposal varies in massing, however, generally picks up on the lines of the Concorde development. The scheme sets back from the main road forming a generous public square. While the North Eastern block steps up from 10 storeys to 15, simultaneously adding interest and variety to the street elevation while providing enclosure and presence to the Public square.

11 PBSA floor to floor of 2.7m generates a 11 storey building of circa 35m (including oversized ground floor and roof plant enclosure). Comparable to 10 storeys of apartment development.

10 Apartment floor to floor of 3.15m. Concorde scheme proposes circa 33m high apartment development.

Developments permitted planning or under construction

Typical residential vs PBSA height comparison diagram



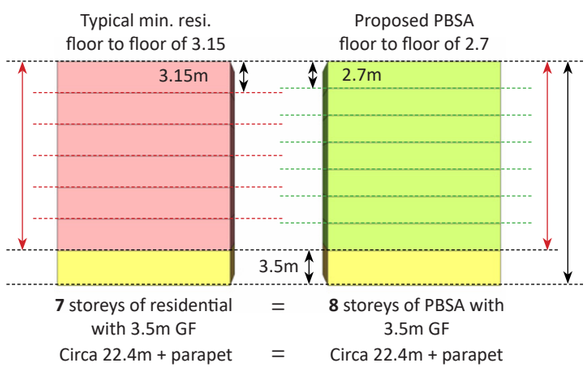
Design Proposition & Principles - Height

Floor to floor heights

The proposed scheme has a typical floor to floor height of 2.7m, allowing for a clear ceiling height of 2.4m. As a result of this, a PBSA scheme can contain more storeys than an office or apartment scheme of the same height, which typically have circa 4m and 3.15m FFL to FFL respectively.

The predominant shoulder height of the scheme is 10 PBSA storeys, at 30.5m high. Block 2 has a set back level at 11 storeys ad an overall height of 35.3m. Block 2 has a pop-up with a total of 15 storeys at a height of 46.1m. This is circa 31m lower than the 77.6m height of the Royal Liver block A building which has 18 storeys.

Typical residential vs PBSA height comparison diagram



Massing - Long View From North-West

A long view towards Naas Road and the general Naas Road redevelopment lands shows how a differing building heights contributes towards an interesting and varied townscape.

Modulation of Height

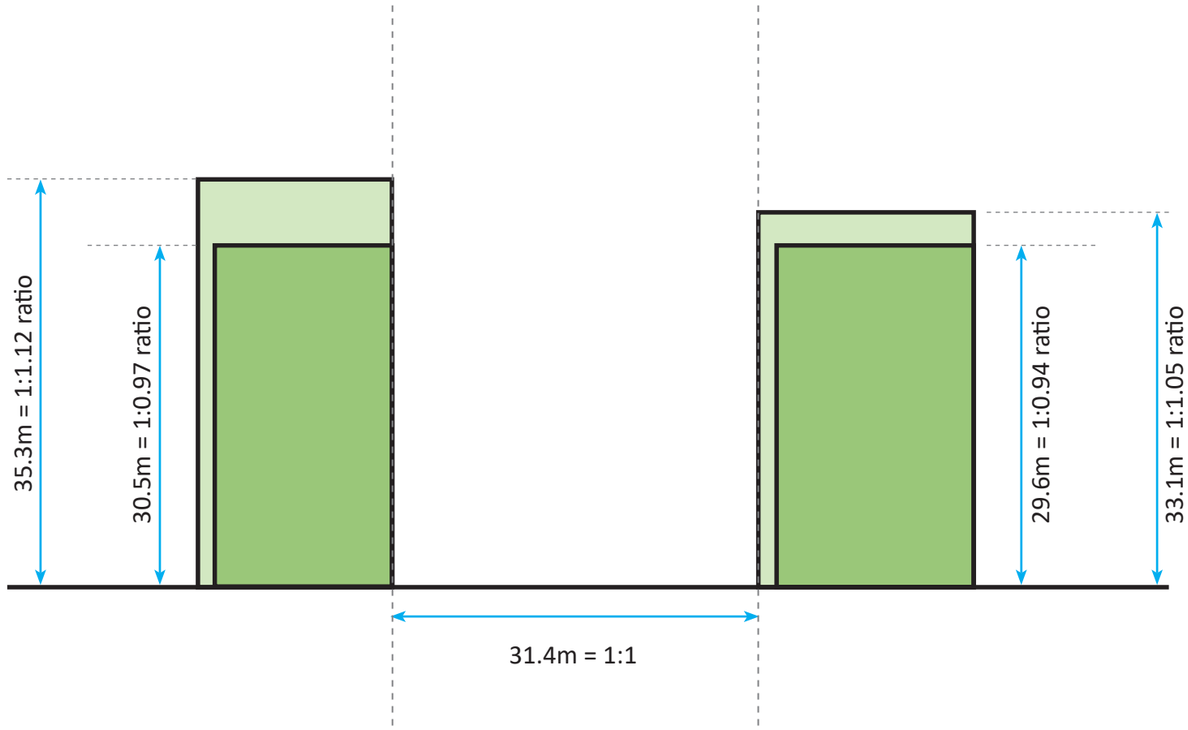
The proposed modulation in height contributes to a broken and dynamic skyline with ranges of height. This avoids blanket building extrusions which can result in a monotonous urban realm.

Design Proposition & Principles - Height

Comparison with the Concorde development

The predominant shoulder height of the scheme is 10 PBSA storeys, at 30.5m high. Block 2 has a set back level at 11 storeys ad an overall height of 35.3m.

Block 2 has a pop-up with a total of 15 storeys at a height of 46.1m.



Street Scale

Diagram showing the scale of enclosure of the road formed by the proposed scheme and the Concorde scheme.

Due to the considerable width of the Naas Road, there are no issues with street scale to the North of the scheme.

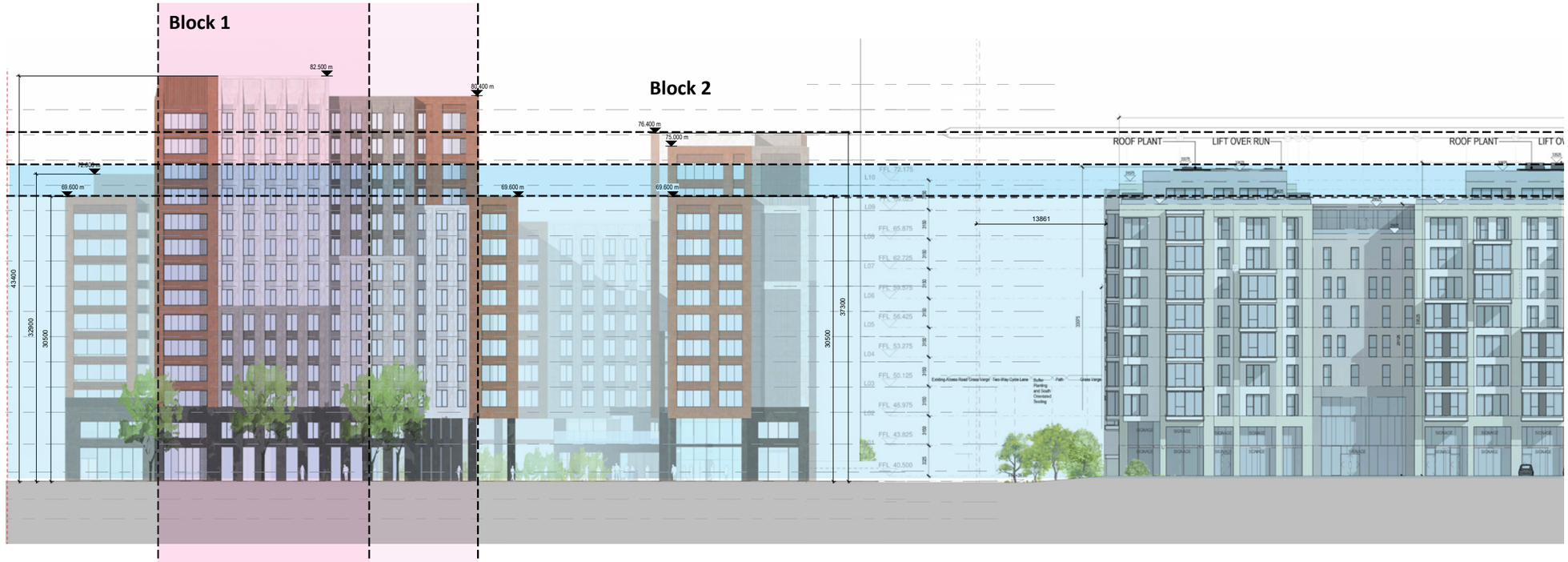
Design Proposition & Principles - Height- North Elevation

May Pre-App Scheme

The previous iteration of the scheme proposed a wider frontage of block 1 onto Naas Road.

The main shoulder height on this elevation corresponds to the same height as the 10 residential storeys of the adjacent Concorde site.

Previously the top floor of block 2 broadly corresponded to the top floor of Concorde, however, the roof plant enclosure took the overall height and massing of block 2 about one floor higher.

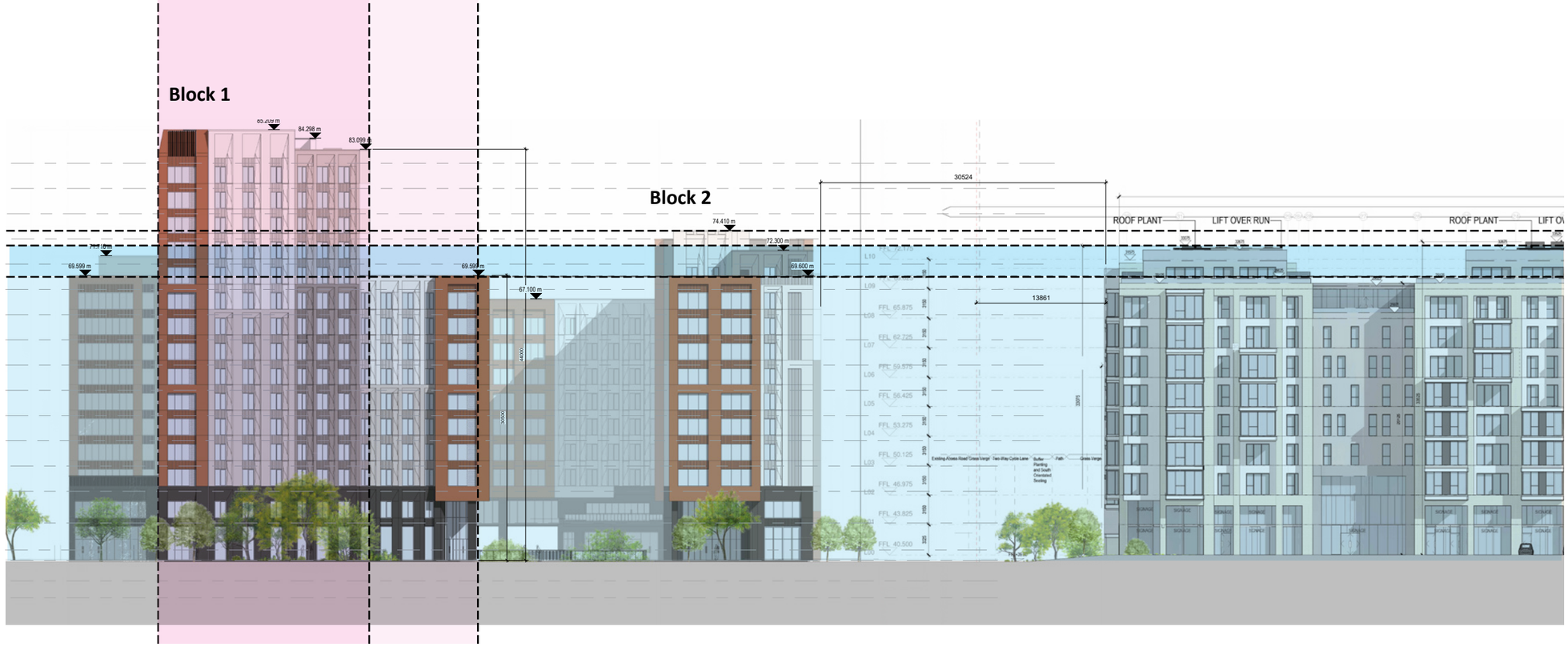


Current Planning Scheme

The current proposals present a much slimmer block 1 facade onto the Naas Road. In addition to having made the facade narrower, the design team conducted a series of massing studies to establish the optimum proportions and slenderness ratio, concluding that an additional floor would be beneficial from a design perspective in achieving an improved slenderness ratio.

The predominant shoulder height remains the same, corresponding to the same height as the 9 residential storeys of the adjacent Concorde site.

The height of block 2 has been reduced by one PBSA storey (2.7m) bringing the overall height much closer to that of Concorde.



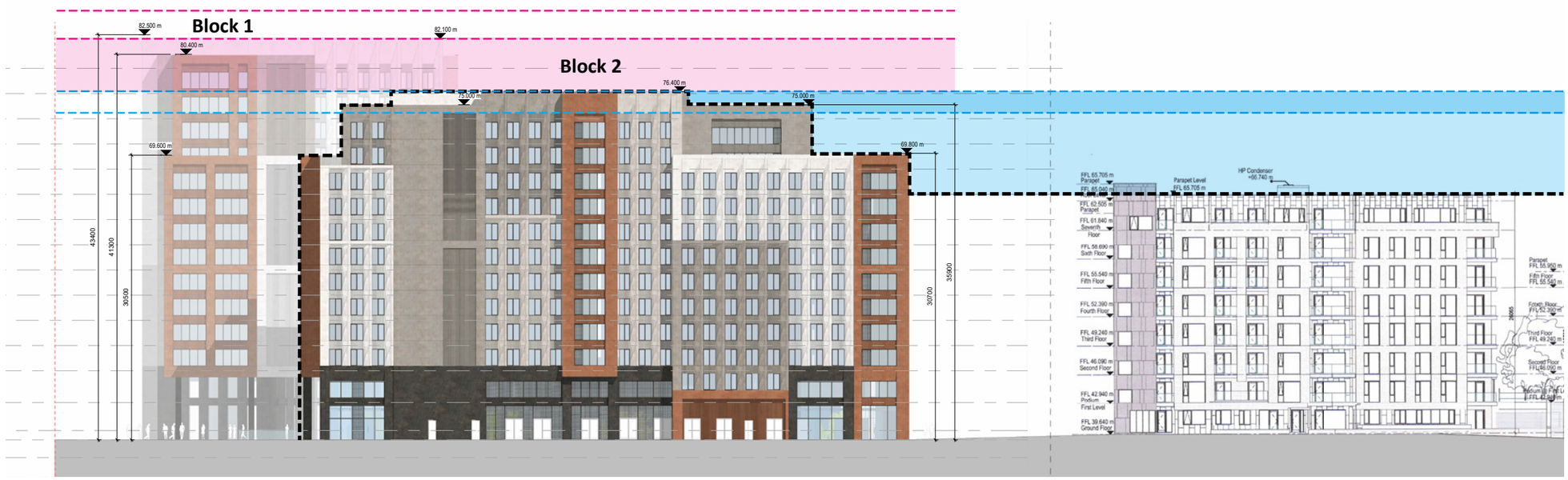
Design Proposition & Principles - Height- West Elevation

May Pre-App Scheme

The previous iteration of the scheme presented a 12 PBSA storey facade onto the west boundary of the site. Visually, this was aproximately a one storey higher than Concorde.

When viewed against the Carriglea scheme, the step change in height was more significant and was more noticeable.

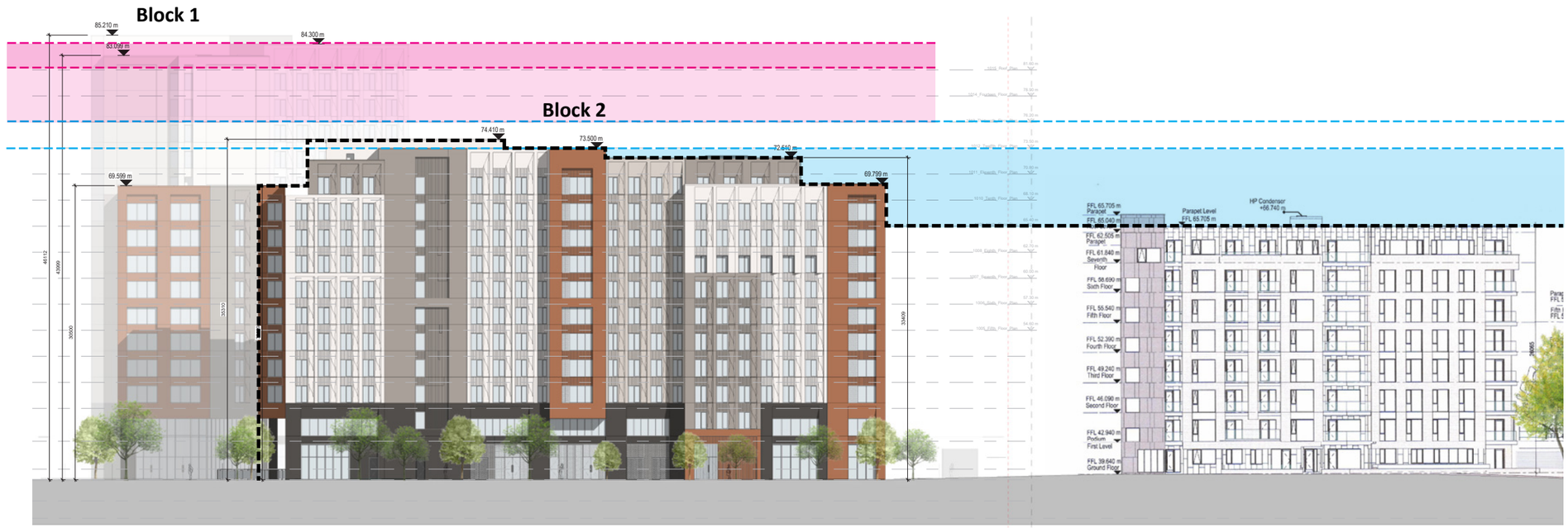
The height of block 1 was two storeys taller than block 2. This resulted in a clustred overall massing whereby the two blocks were more likely to be perceived as a single mass.



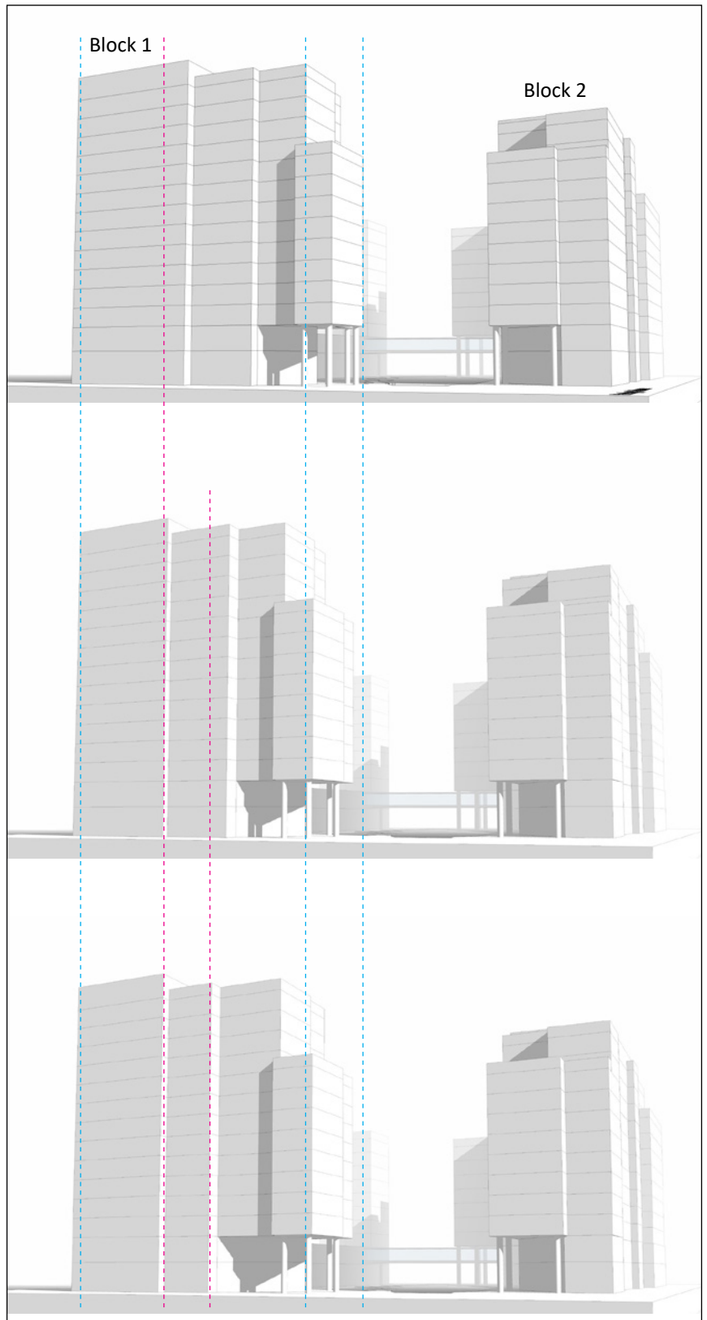
Current Planning Scheme

The current proposals reduce the height of block 2 by removing one storey, resulting in a more gradual height step from Carriglea. This reduction also brings the overall height and shoulder height in line with the Concorde proposals.

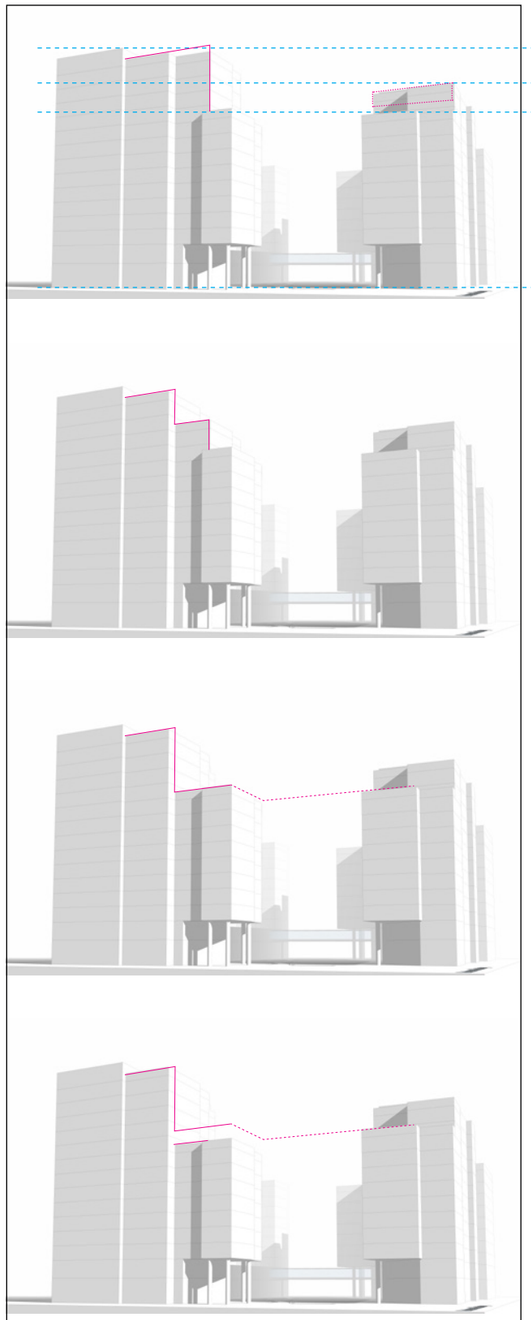
The height of block 1 is increased by one storey to form a more distinguishable massing between blocks, and to improve the proportions/slenderness ratio of block 1.



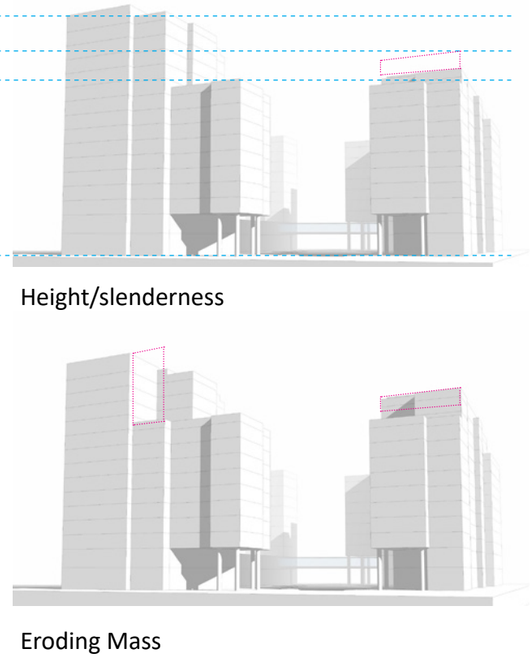
Design Proposition & Principles - Design Development



Slimming of block 1



Alternative Block A massing

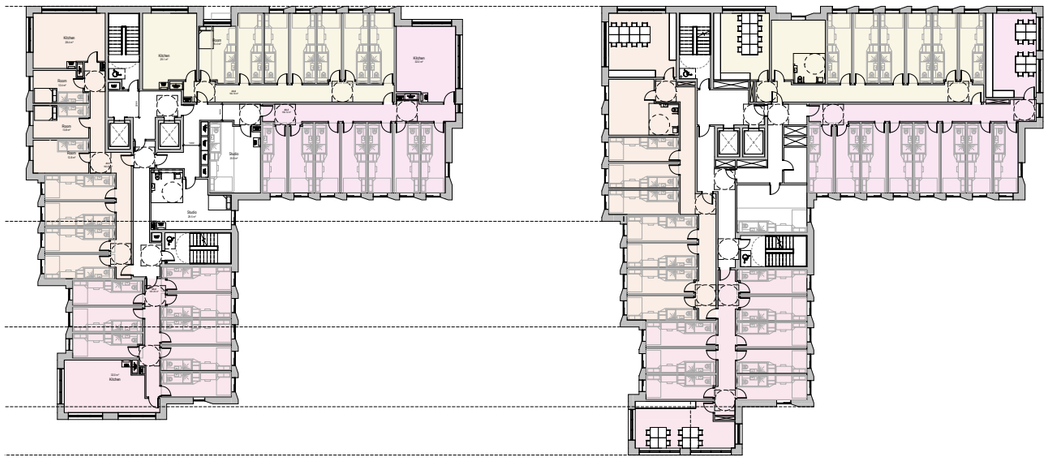


Design Development for Reduced Massing

Following the LRD Opinion meeting, the design team further reviewed the all aspects of the scheme, including the overall massing of the proposals. The three key aspects to be addressed were the mass/proportions of Block 1, and the relationship of block 2 with the Concorde development, and the relationship of block 2 with the Carriglea site to the South.

The studies carefully considered changes to the general arrangement of the layouts and the resulting massing. The key changes were:

- The overall reduction of the massing of block 1, particularly with the elevation facing onto the Naas Rd
- Reduction in height by one storey of block 2 to improve the scheme's relation to Concorde and Carriglea
- Addition of one floor to block 1 in order to improve the slenderness ratio and overall proportions of this block.



Sample Design Development Layouts

Public Realm

The landscape has been designed collaboratively from the offset as in integral element of the proposals. Our intention is to enhance the overall public realm along Naas Road and create a unique outdoor environment for the residents of the proposed student accommodation scheme and the wider public.

Landscape design proposals have been developed on a number of levels to address the integration of proposed architecture, vehicular access, pedestrian circulation, cycle parking, fire tender/service vehicle access, infrastructure, Local area planning, context, human scale and a unique sense of place.

The spatial arrangement of the landscape design proposals relates directly to and are informed by the architectural proposals and the presence of the River Camac to create a unified whole and settle the proposed development into the site context. Movement patterns, orientation, context, prospect and microclimate have been considered in the design and detail of the scheme.

Our intention is to enhance the overall public realm along Naas Road and create a unique outdoor environment for the residents of the proposed student accommodation blocks and the wider public. This will be achieved through the development of 3 open space plazas (‘Central Plaza’ fronting Naas Road, Cycle Entrance Plaza to the northeast, and Connection Plaza facing Carriglea Development to the south), a Green Route Boulevard (to the west of the site) and many attractive ‘Through Routes’ that take people on interesting journeys through the entire Gowan House site.

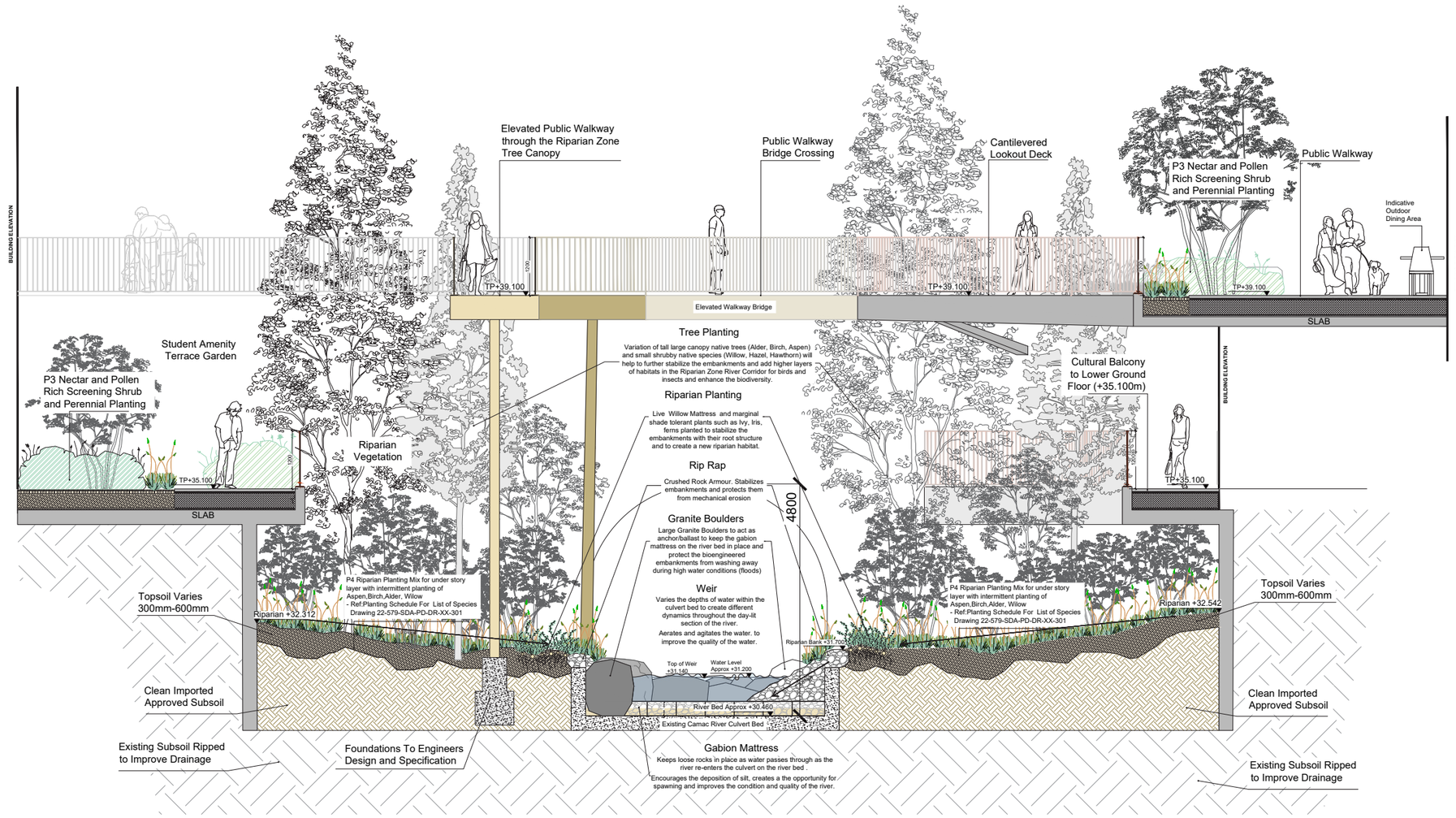
We propose the de-culverting/daylighting of approximately 76m of the river Camac which flows through the centre of the site, between the two new student accommodation buildings. The de-culverting of the river creates a continuation of the linear green space concept depicted in the recently expired Local Area Plan (LAP) along the Naas Road from the Carriglea Development site through to Naas Road. The daylighting of the river will reintroduce riparian vegetation along the River Camac and establish a new nature hub within this heavily urbanized area.

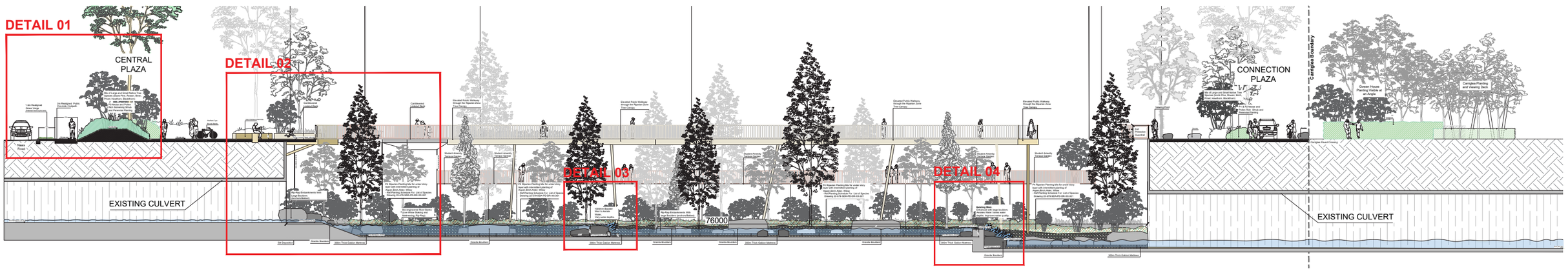
Concept Landscape Sketch - Refer to separate landscape report for further details.

Daylighting River

We propose the de-culverting or daylighting of approximately 76m of the river Camac which flows through the centre of the site, between the two new student accommodation buildings. The de-culverting of the river creates a continuation of the linear green space concept depicted in the recently expired Local Area Plan (LAP) along the Naas Road from the Carriglea Development site through to Naas Road. The daylighting of the river will reintroduce riparian vegetation along the River Camac and establish a nature hub within this heavily urbanized area.

Refer to separate Landscape report for further details.





River Camac Culvert and Wayleave

There is a wayleave strip running diagonally through the site, over which no building footprint can be constructed. This strip will be approximately 12m wide to account for the width of the culvert and allowance for the wayleave either side. This provides an opportunity to generate an exceptional public realm including daylighting the culverted river, the creation of a riparian zone, and a chance to connect to the public realm of the Carriglea site to the South.

Distance from River

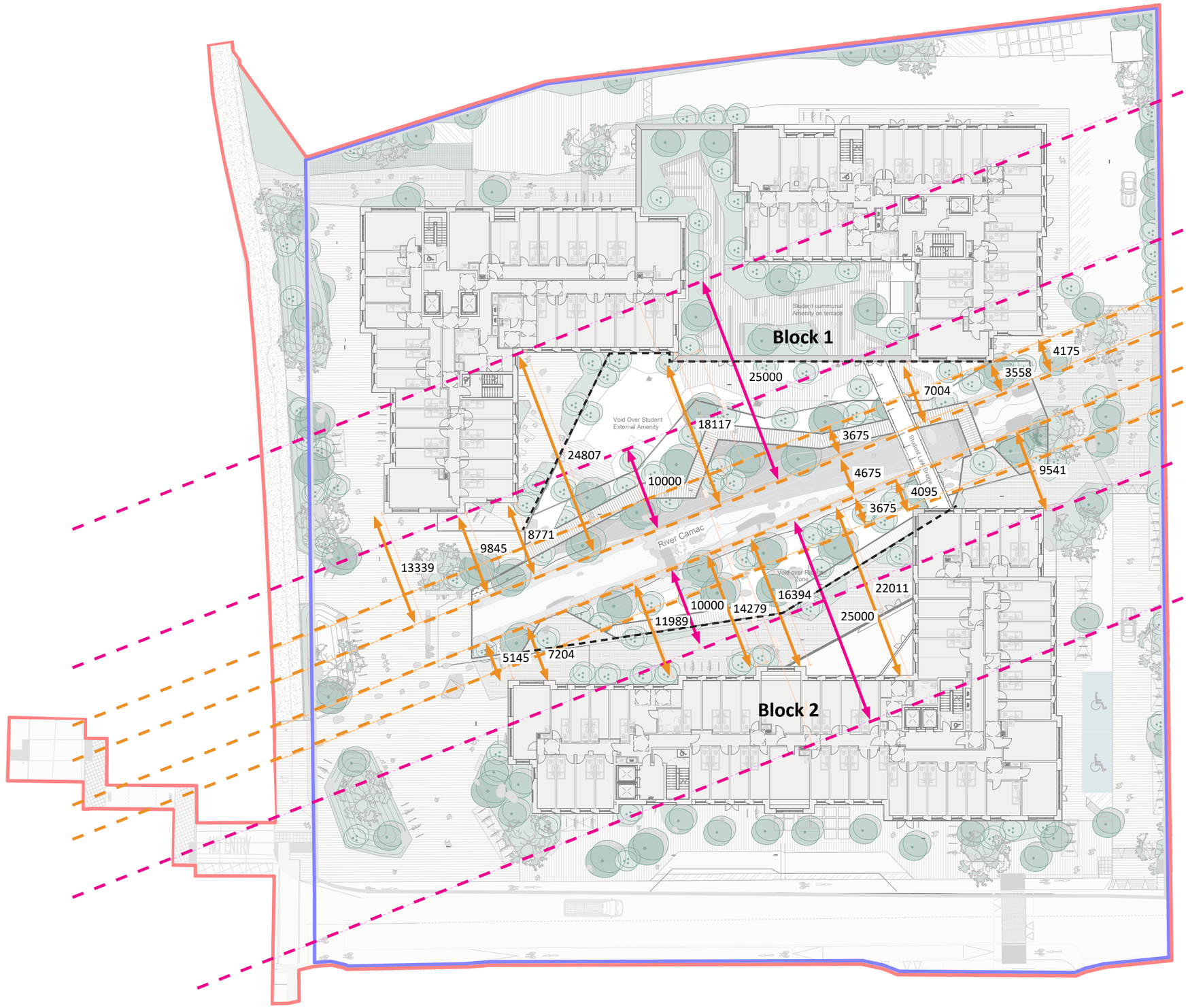
The proposal includes the de-culverting or daylighting of approximately 76m of the river Camac which flows through the centre of the site, between the two new student accommodation buildings. As can be seen here, the opening of the river happens in between block 1 and block 2.

The distance between blocks on the northern end is circa 20m, with building distance to the river at this point of circa 8.7m and 5.1m.

The distance between blocks on the southern end is circa 17m, with building distance to the river at this point of 3.5m and 4.1m.

The overall space in between the two blocks is circa 38m x 46m, with the distances to the river varying between 3.5m and 25m.

Refer to separate Landscape report for further details.



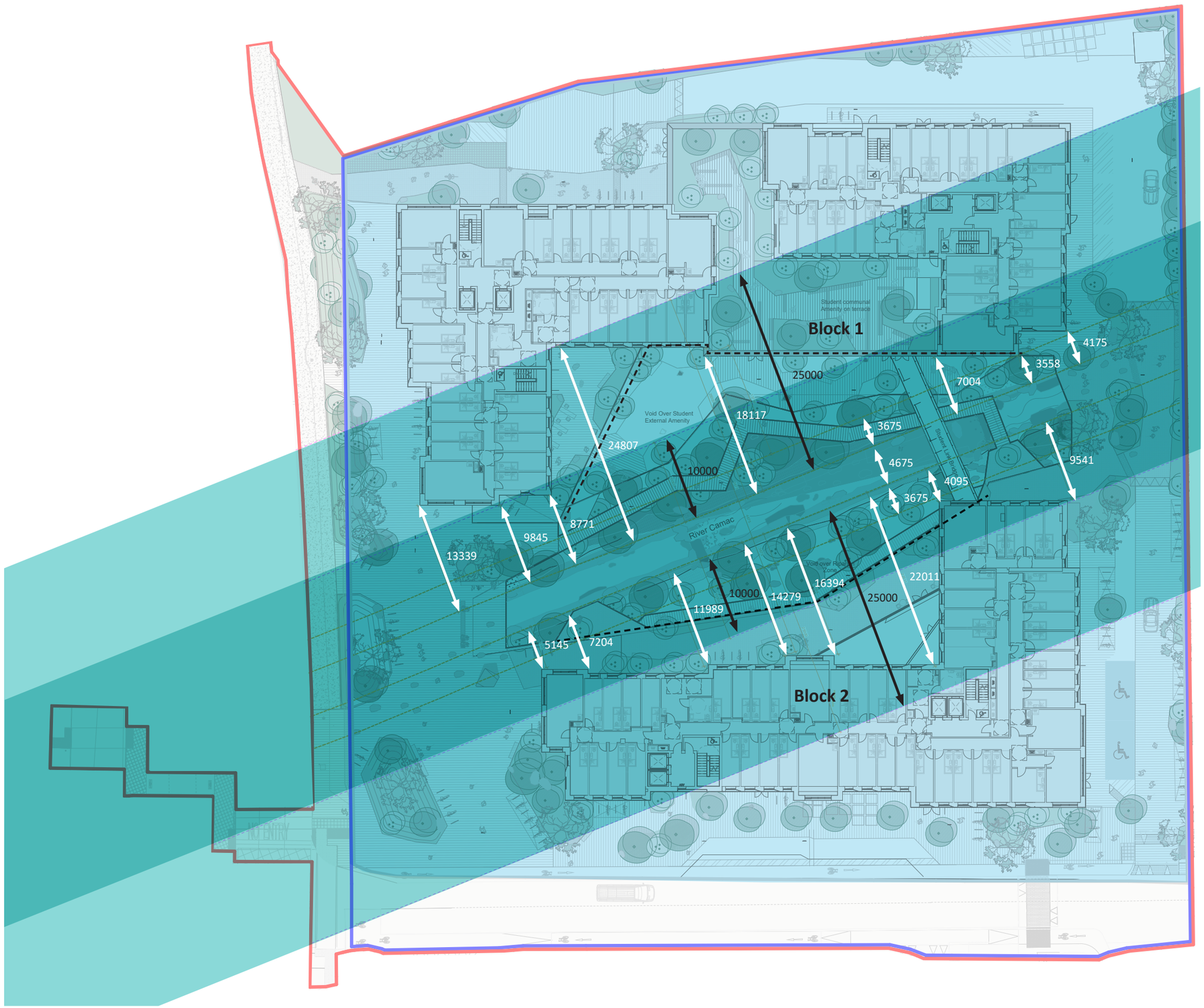
River Camac - Development Plan Set-Backs

The development plan set's out particular set-backs from the Camac River. Excerpt below:

"To manage all development within and adjacent to the Camac River Corridor in a way that enhances the ecological functioning and water quality of the river and aligns with the principles for river restoration. All development shall provide for a minimum set-back distance of 10-25m from the top of the river bank depending on site characteristics. Large development sites in excess of 0.5ha should provide a minimum set-back of 25m from the top of the river bank where informed by a hydromorphological study."

As can be seen from the illustration, a continuous 25m off-set would render the site mostly undevelopable, with 40% taken up by the river and off-set.

The current scheme goes to great lengths to maximise the both the length of river being de-culverted, and to maximise the area of riparian zone and ecological value. The proposals aim to strike a fine ballance between the viability of the scheme and acheiving the aspirations of the Development Plan.



10m offset zone

25m offset zone

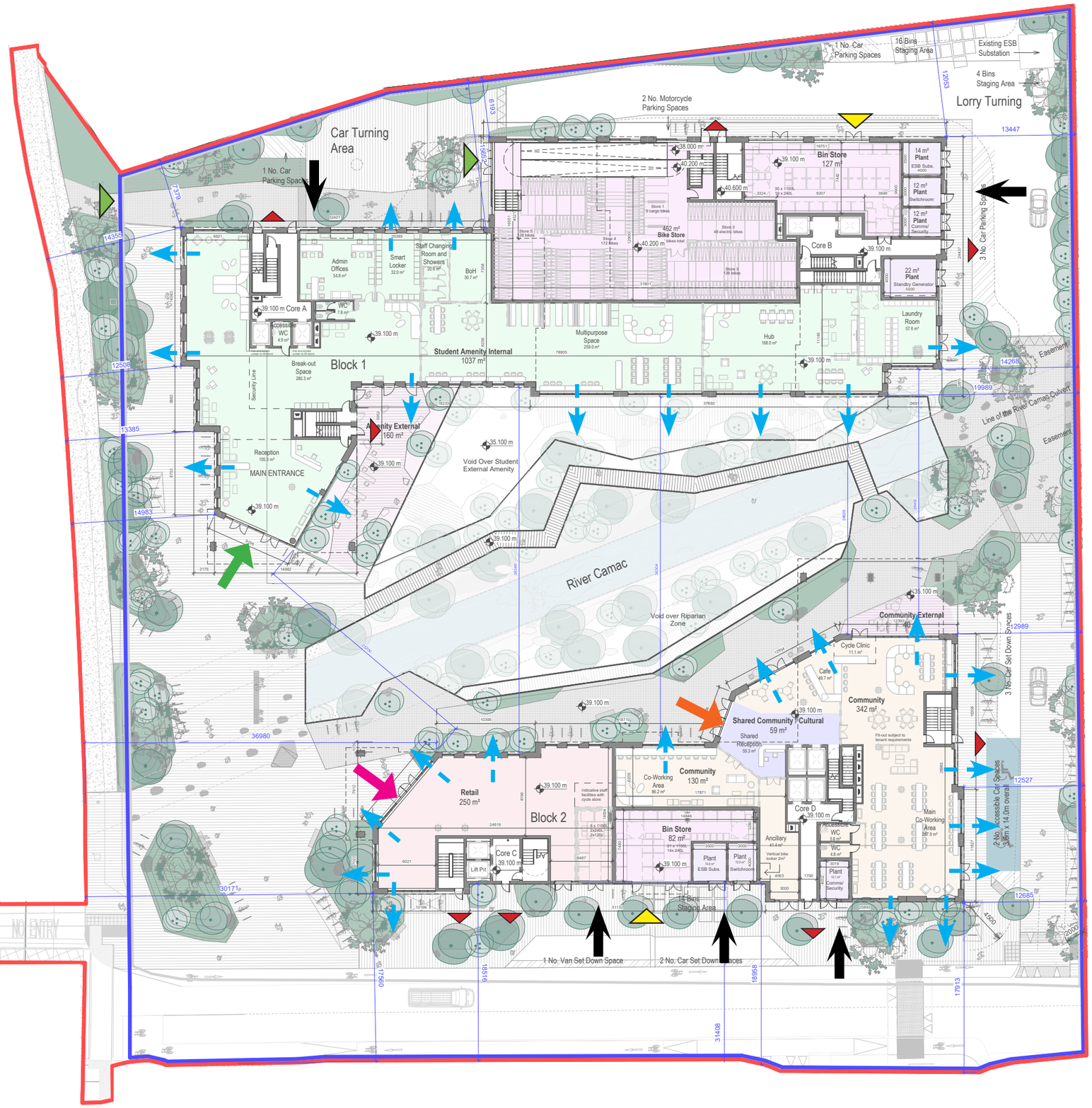
Design Proposition and Principles - Access

General Access Strategy

As a general principle, the Central part of the site is designed for daylighting the river, riparian zone and pedestrian access.

Vehicular access into the site is from the South West corner, with a service route being provided along Eastern and Southern Boundaries.

The public square has been design to allow fire tender access if required. A fire tender would reach the square from the perimeter of the site, entering at the SW corner, driving along the east and north boundaries.



- Cultural/Communal Access
- Commercial Access
- Students Access
- Servicing Access
- Cycle Store Access
- Refuse Collection
- Fire escape
- Active Frontage

External Communal Amenity

Communal Amenity - General Strategy

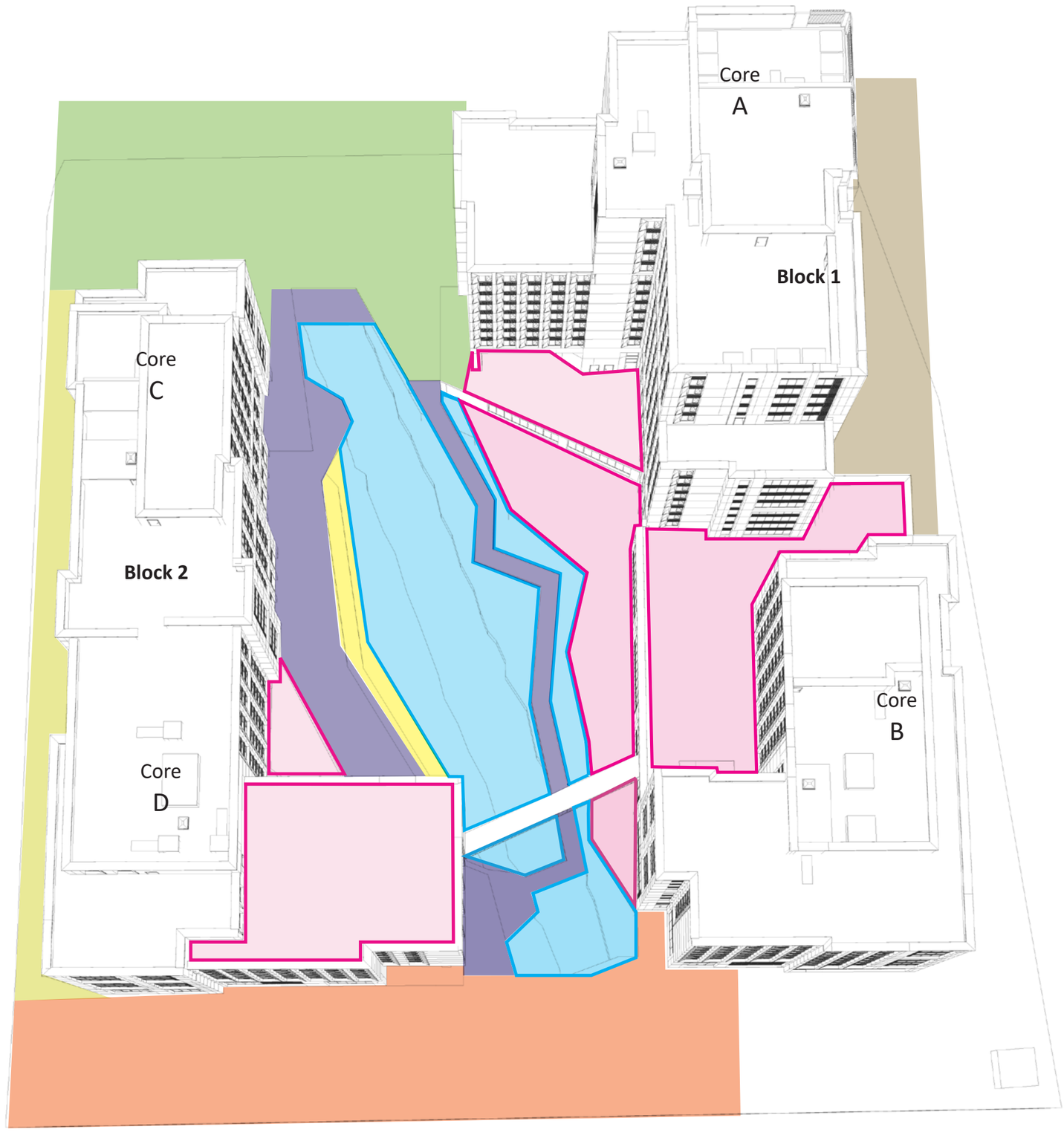
In order to maintain the integrity, generosity and accessibility of the public realm, the design team has opted to locate the external student communal amenity across two terraces, highlighted pink in this image.

The larger terrace on the second floor of block 2 is partly made up of an intensive green roof integrated into the landscape scheme.

In addition to the external amenity, the scheme proposes a variety of internal communal amenity, including a generous communal space at the first, ground and basement floors of block 1. Block 2 also boasts 70 square meters of external amenity space. However, due to the lack of daylight, this external space is not counted towards the total usable area. Nevertheless, students will still be able to use this space. The bridge seen allows the communal amenity to be connected and shared between all blocks. This also allows the student accommodation to have a single entrance point from which residents are distributed.

Please refer to next page and GA plans for further information of internal layouts.

- External student amenities
- Riparian Zone
- Central Plaza
- Green Route Boulevard
- Connection Plaza
- Publicly accessible area
- Cycle Entrance Plaza
- Cultural External Space



Internal Communal Amenity

Communal Amenity - General Strategy

The scheme offers a variety of different internal amenity spaces distributed across five different levels, with the majority being found at basement, ground floor and first floor.

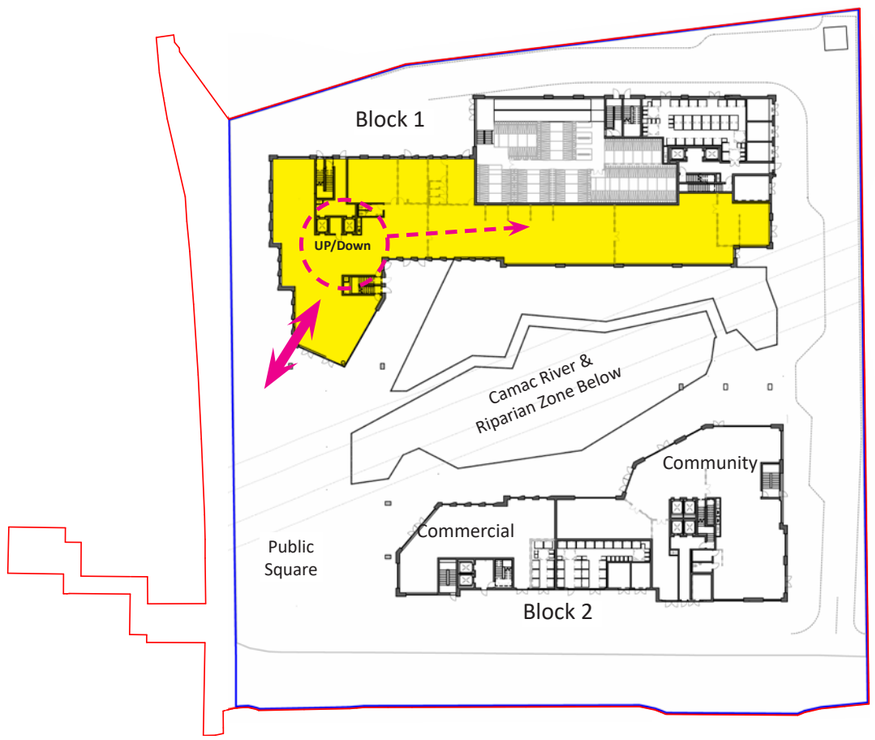
Second, tenth and basement floor amenities have direct access to external amenity spaces, while the ground floor amenity has direct access to/from the public square.

Student Circulation/Distribution

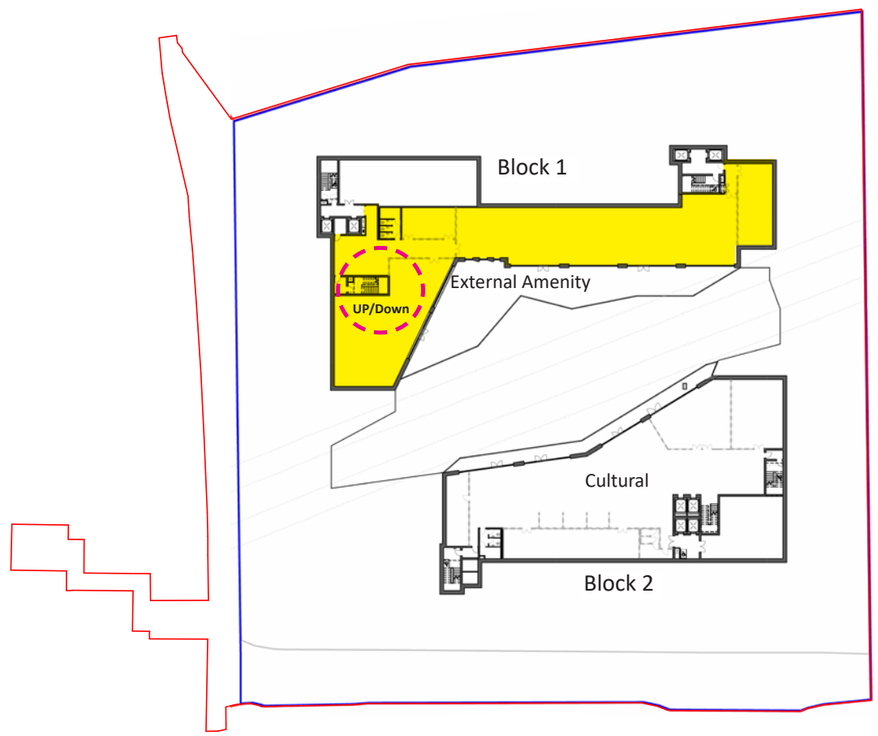
Students arrive at the main entrance of block 1. From this point residents have access to all other areas of the PBSA development. Down to access the basement level amenity, or up to all other areas, including access to block 2 via an access bridge/link

Amenities NIA		
Floor	**Internal**	**External**
Basement	897	338
Ground Floor	1037	160
1st Floor	2093	0
2nd Floor	0	387
9th Floor	0	289
Totals	4027	1174
Percentage	77%	23%
Total combined	5201	

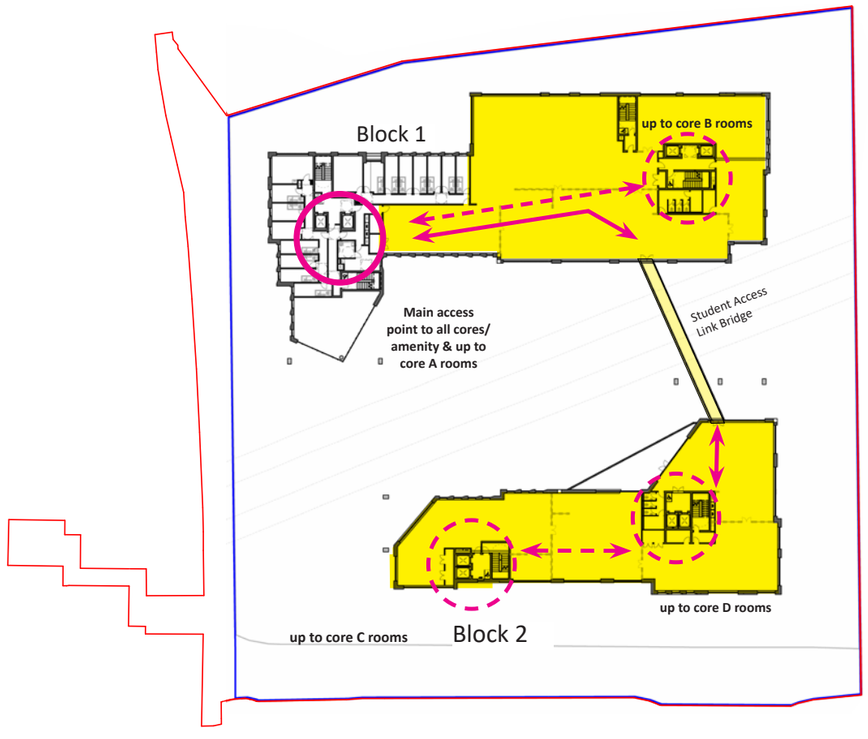
Ground floor



Basement floor



First floor



Internal Amenity

Student Link Bridge

It is a common operational requirement for PBSA schemes to have a single point of access from which students gain access through a secure access control reception area.

As described previously, students arrive at the main entrance of block 1. From this point residents have access to all other areas of the PBSA development.

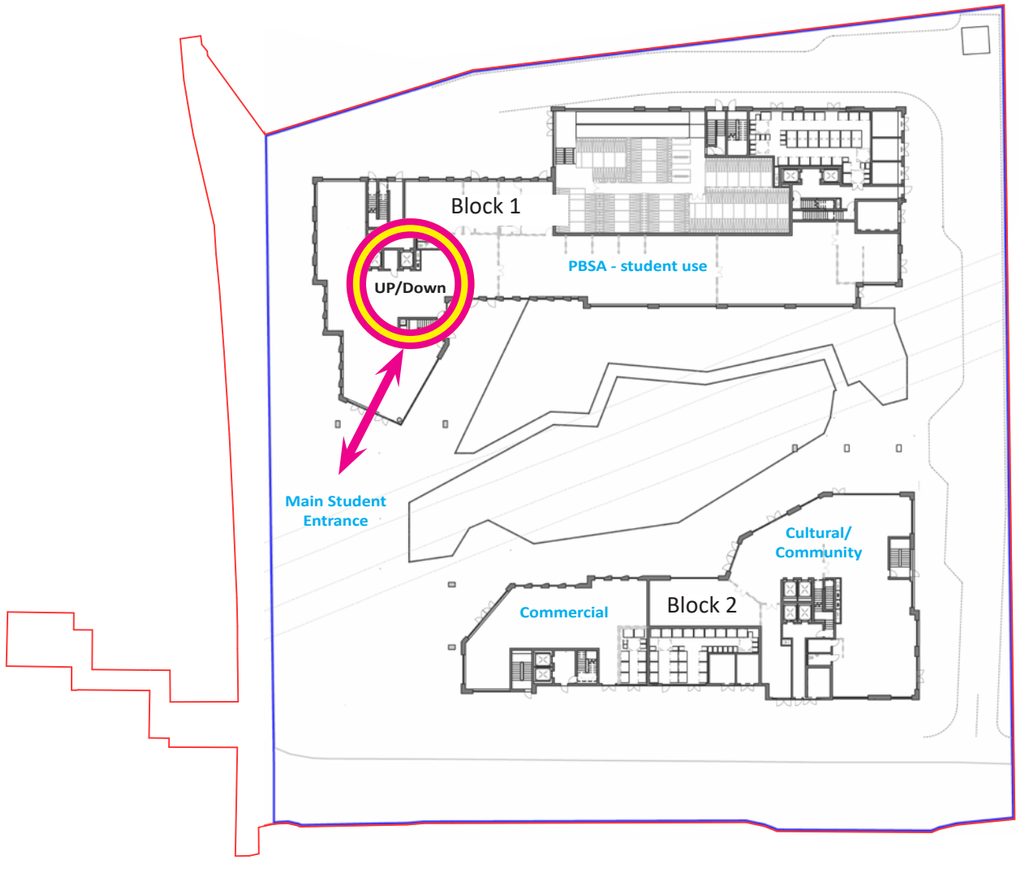
There are some amenity spaces on ground and basement which can be access directly from the reception area. However, the majority of student amenity areas and rooms are located above ground floor in both blocks.

Access to rooms and amenities within block 2 is via a bridge link, allowing students to access all areas while maintaining a safe and secure environment achieved by having a single point of access.

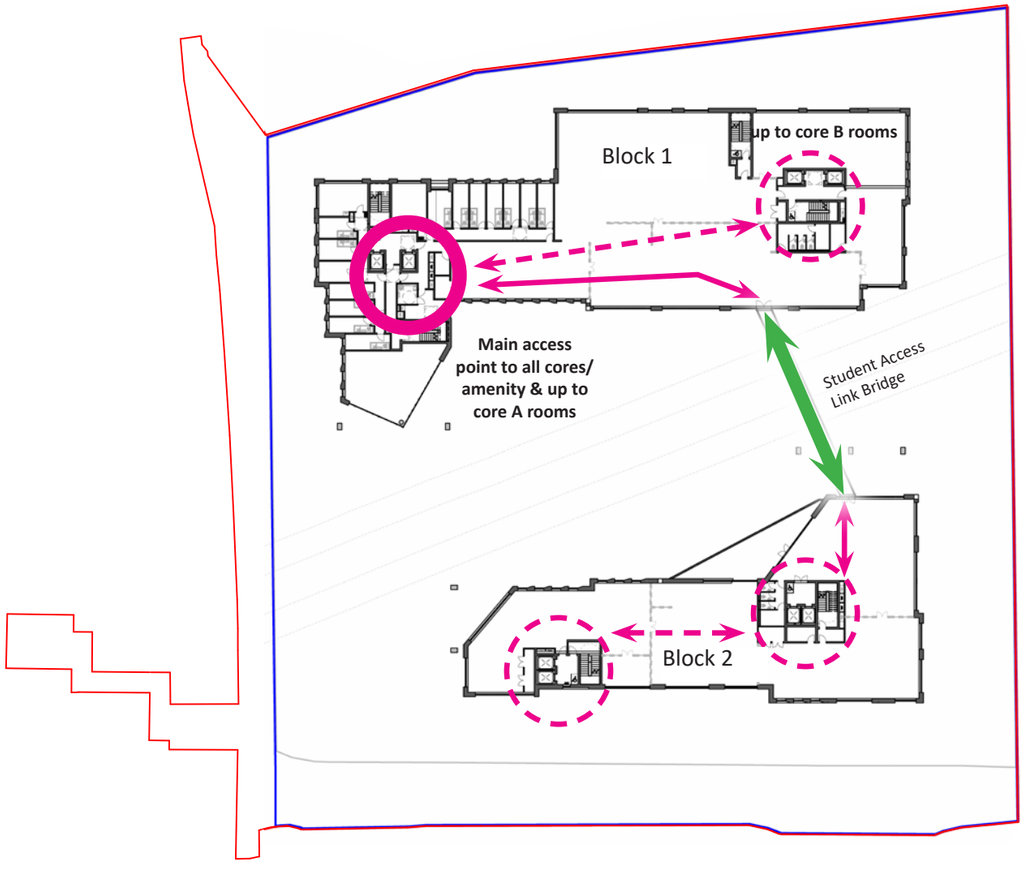
Note: Fire Life Safety egress is independent the link bridge.

View from South looking across the riparian zone towards the public square at the NW corner of the site

Ground floor



First floor Plan



Design Proposition & Principles - Uses

Use - View From North-West

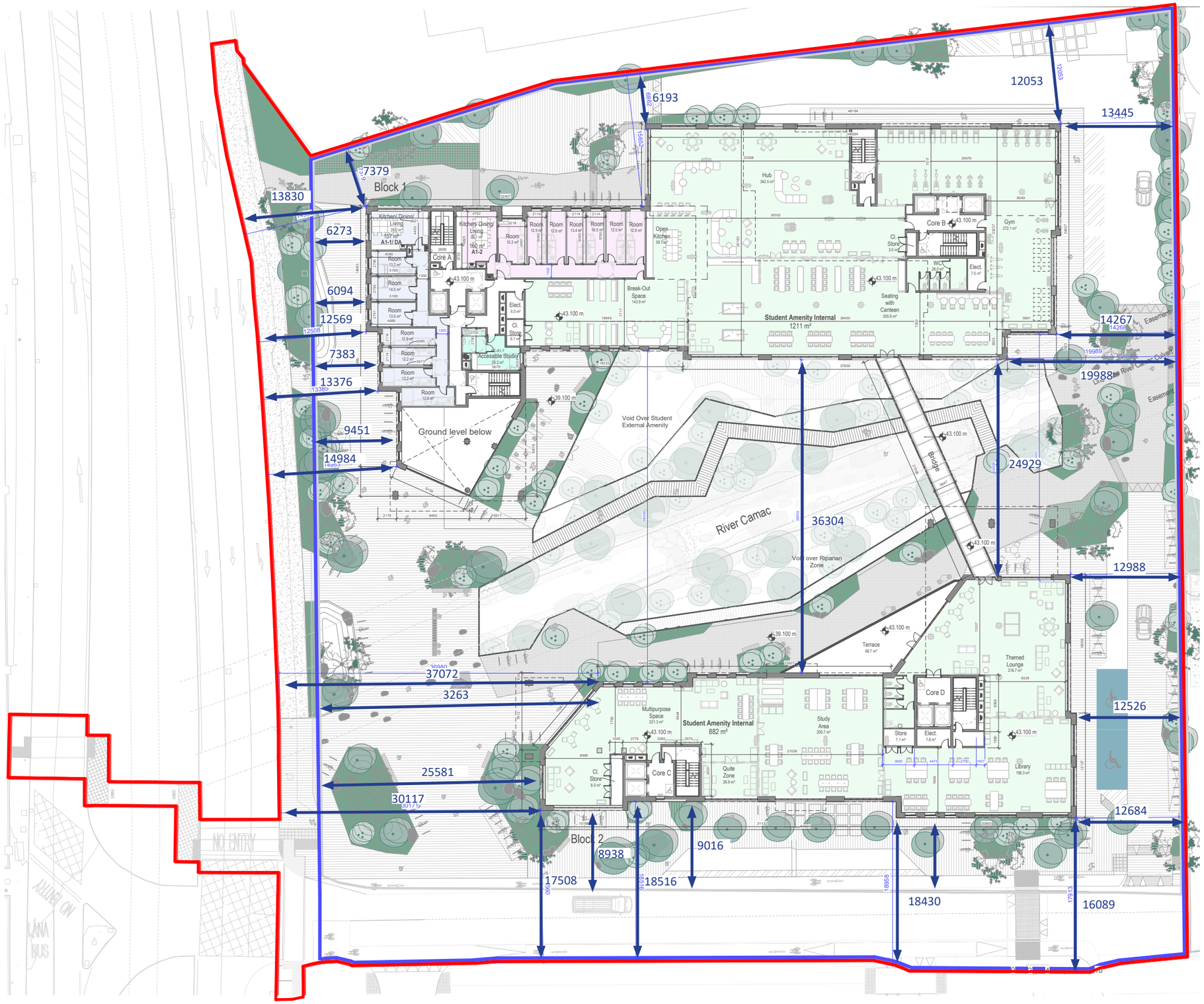
The proposed scheme is a purpose built student accommodation scheme, offering circa 33,140 sqm GFA including amenity, ancillary and plant areas, circa 250 sqm retail space, and circa 1,420 internal cultural/ community space. The retail space is located on the Western side of the site, off Naas Road, where it captures the most footfall as pedestrians traverse the new public realm. The cultural space provides an active frontage onto the public realm, as does the student amenity space and cultural/ community.

- Retail
- Cultural
- Community
- Student Internal Amenity Space

Design Proposition and Principles - Distance to boundaries

First Floor

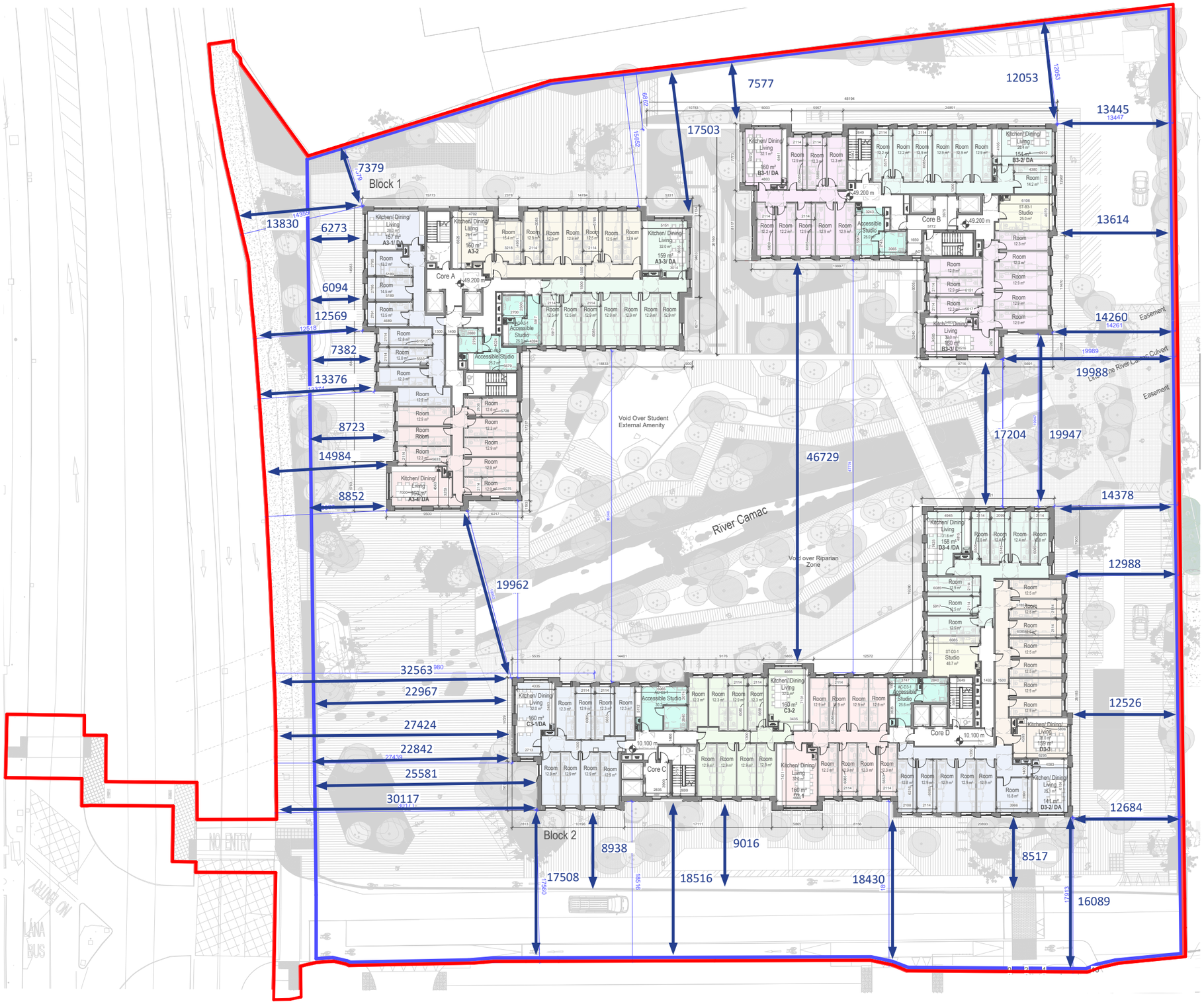
The distances to boundary shown here are for ground and first floor only. The building sets back from second floor upwards.



Design Proposition and Principles - Distance to boundaries

Typical Floor Plan L03 to L08

The distances to boundary shown here are for they typical floor. This applies to floors between the second floor and the 8th floor. The building sets back further for levels above.

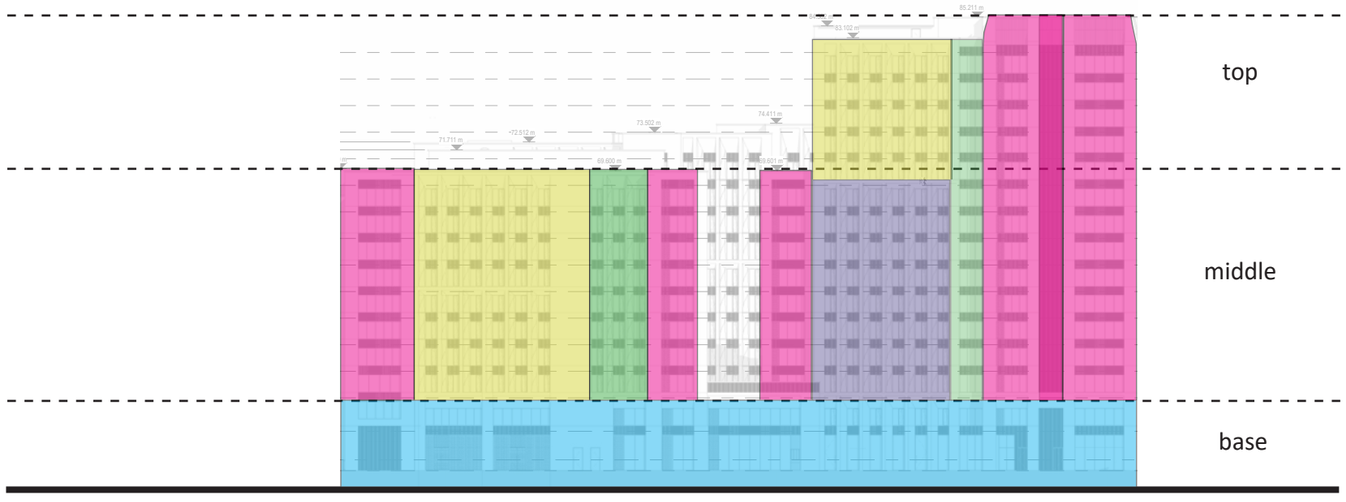


Facade Design Approach

Articulation

The scheme has been designed to intentionally have an element of articulation, particularity having regard to its location beside the permitted Concorde which has a more monotonous building height. This has the benefit of breaking up otherwise large planar façades.

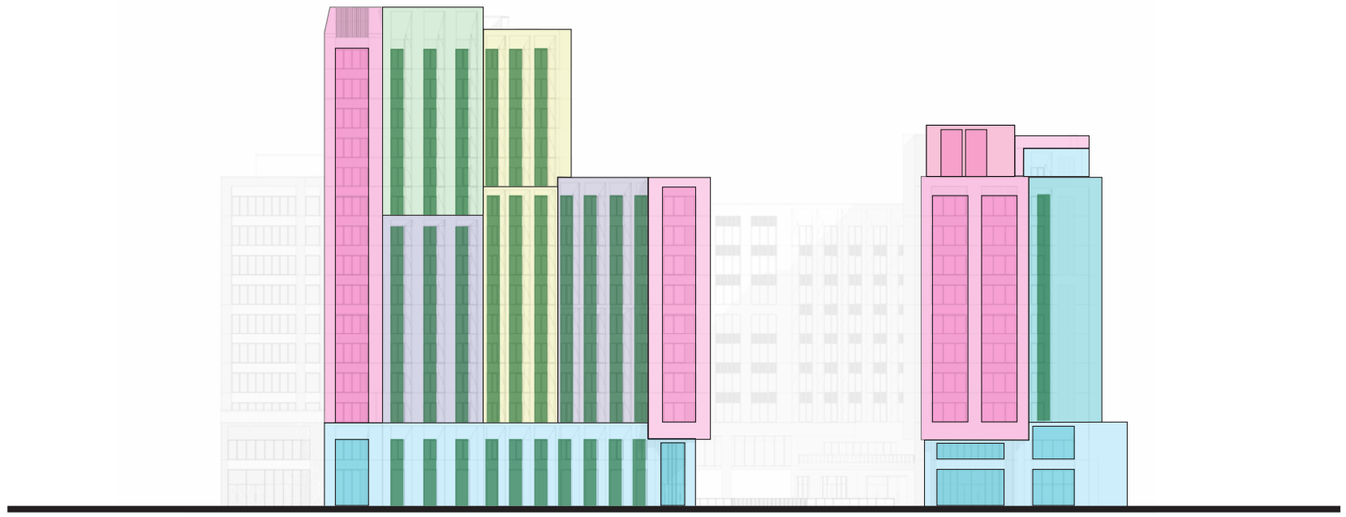
The different use at the lower floors automatically gives the design a ‘base’, whereas the predominant building heights of 10-15 storeys give the scheme a defined ‘middle’.



Detail

The façades are broken up further with the introduction of various detail feature.

- Horizontal banding (highlighted yellow) breaks the facade design vertically. These are either precast panels with vertical moulds
- Panels of alternative colour/textures (highlighted pink) are introduced to add variety and interest.
- Commercial/cultural facade (highlighted blue) have a different character to the residential design, but draw on similar materials and detailing to tie in with the overall design.



Facade Design Approach- Materials

Colour

Different concrete tones applied throughout act as another design tool to further break down the overall mass of the scheme. By applying complementary or contrasting colours, the façades are broken down in scale further, adding variety and interest to the overall composition.

Indicative Material Plate

The main material employed in the facade design is pre-cast concrete. This provides a high quality finish capable of taking a large variety of colours textures and patterns which will be applied to the facade panel mould. This is a robust low maintenance material that will ensure the continued appearance of the facade during the buildings' occupancy/lifecycle.

Facade Design Approach- The Gateway

The form, materiality and layout of the elevations have been meticulously planned to enhance the building's aesthetic appeal and foster a welcoming environment for the public. These goals have been realized through a series of creative approaches:

1. To distinguish the entrances to the courtyard, the façade has been thoughtfully recessed or stepped, effectively breaking up the elevation while emphasizing the corner elements as visual focal points.
2. The utilization of pigmented pre-cast concrete further reinforces this dialogue, emphasizing the corner buildings as the gateway to the courtyard.
3. The use of darker-toned pre-cast concrete on the ground floor serves as a clear visual indicator of the building's base.
4. The thoughtful stepping back of higher floors of the building creates a more human-scale environment within the courtyard whilst optimizing public rooftop spaces with apertures of the river and riparian zone.
5. Setting the façade back at ground floor level invites the public to flow into the courtyard; creating a public-friendly and welcoming environment.

Design Approach - Community Safety Strategy

Passive Surveillance

The design of the scheme allows for a high level of passivie surveliance of all open spaces sitewide. Large amount of glazing on lower floors and bedroom windows on upper floors provide many overlooking opportunities, including to the back-of-house entrances. Strategic placement of street furniture contributes to populating the public spaces and thus increased feeling of safety.

Avoiding the creation of blank facades, dark or secluded areas or enclosed public areas

Due to the high level of fenestration, there are no blank facades in this scheme. Where no openings to the facade are required, decorative facade elements are designed to discourage anti-social behavior. Facades to back-of-house spaces are treated with either extruded metal panels or vertical decorative elements.

The only enclosed public space in the scheme is the Block 2 Basement terrace, however it is accessible through highly glazed facade and overlooked from several points on the upper levels.

Eliminating leftover pockets of land with no clear purpose

Leftover pockets of land have been designed out of this scheme. Multiple entrance points to both blocks, location of planting and street furniture ensure each part of the site serves its purpuse. Situation of parking spaces and roads close to the back-of-house entrances establishes higher frequency of use of the adjacent external areas.

Providing adequate lighting

Adequate lighting is designed for all areas of the scheme, including the public realm and level 2 accessible terrace. A seperate submission on public lighting accompanies this planning application.

Providing a clear distinction between private and communal or public open space, including robust boundary treatment

Different use open spaces are distinguished by surface treatment and strategic planting location. This is easily noticible when looking at the intersection of the linear public open area to the East of Block 2 with the external community area, Connection Plaza and Central Plaza. All external student amenity space is completely seperate from the public open space and can only be accessed by students.

Providing clear and direct routes through the area for pedestrians and cyclists with safe edge treatment, maintaining clear sight lines at eye level and clear visibility of the route ahead

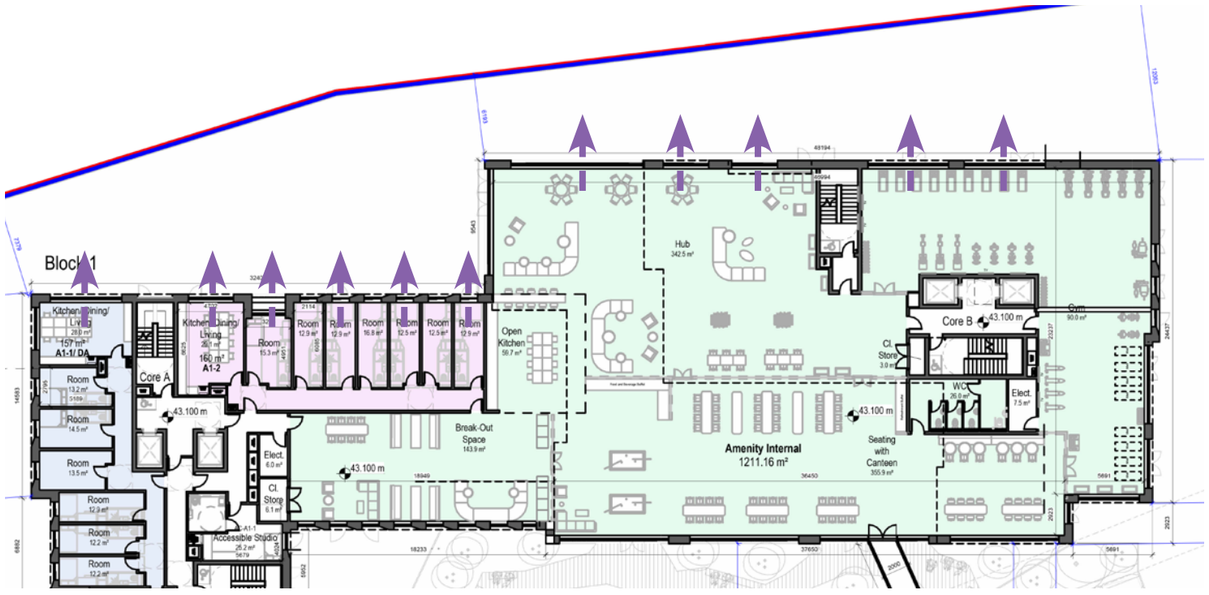
Majority of the site is intended for pedestrian use. Cycle route with Cycle Parking Entrance Plaza are clearly distinguished by surface treatment.

Using materials in public areas which are sufficiently robust to discourage vandalism

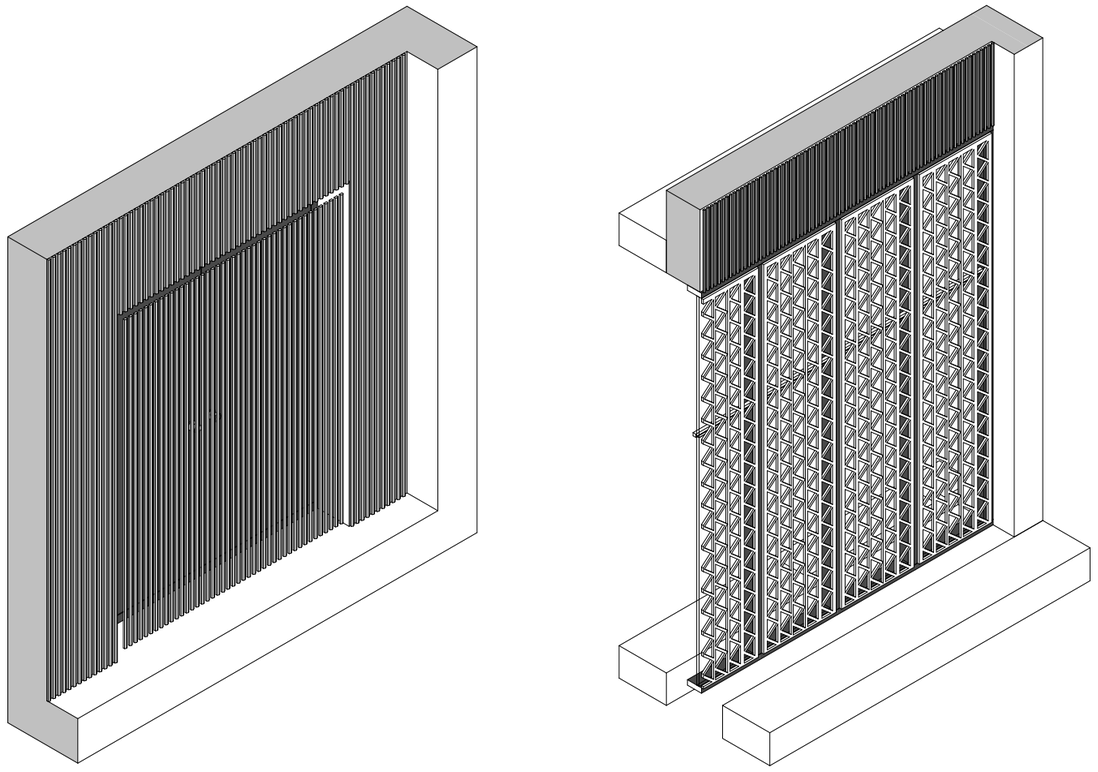
Facades will be clad primarily with pre-fabricated concrete panels**,** famously a sturdy material. Lower floors will be clad in a dark colour, making it easier to mask any signs of vandalism. Adequate specification for hard lanscaping, street furniture and planters is considered to fulfill this requirement.

Avoiding the planting of fast-growing shrubs and trees where they would obscure lighting or pedestrian routes; shrubs should be set back from the edge of paths

Native species are proposed to promote Irish native flora and fauna. Studies have been undertaken to ensure appropriate levels of daylight will be achieved. Further information on the proposed vegetation accompanies this planning application.



Overlooking of the East back-of-house areas on the ground level

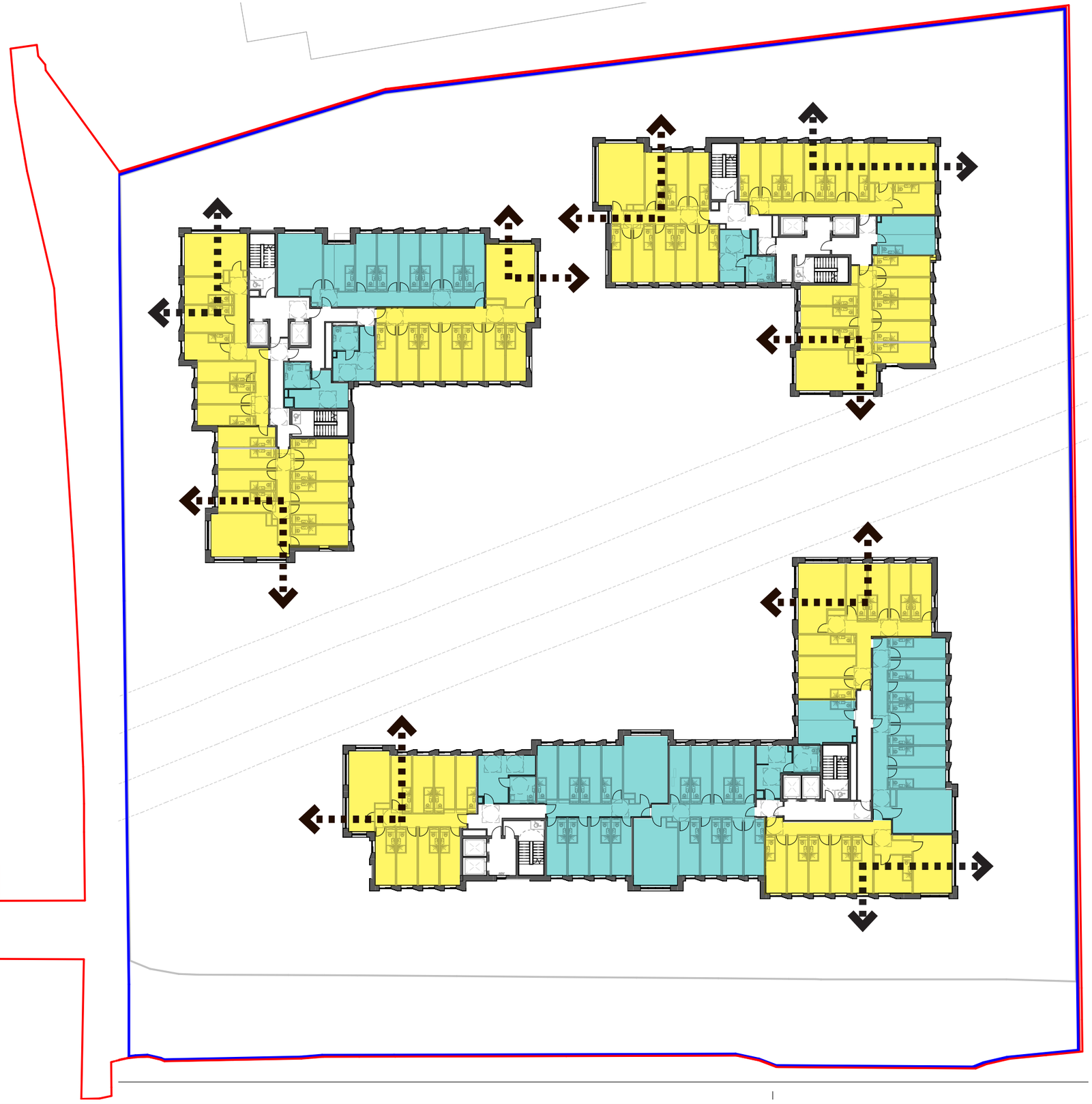


Treatment to the back-of-house facades

Design Approach - Aspect

Maximising Dual Aspect

The design team have strived to maximise the number of dual aspect clusters, currently at 67% dual aspect sitewide. Single aspect North facing clusters have been avoided completely.



Single Aspect

Dual Aspect

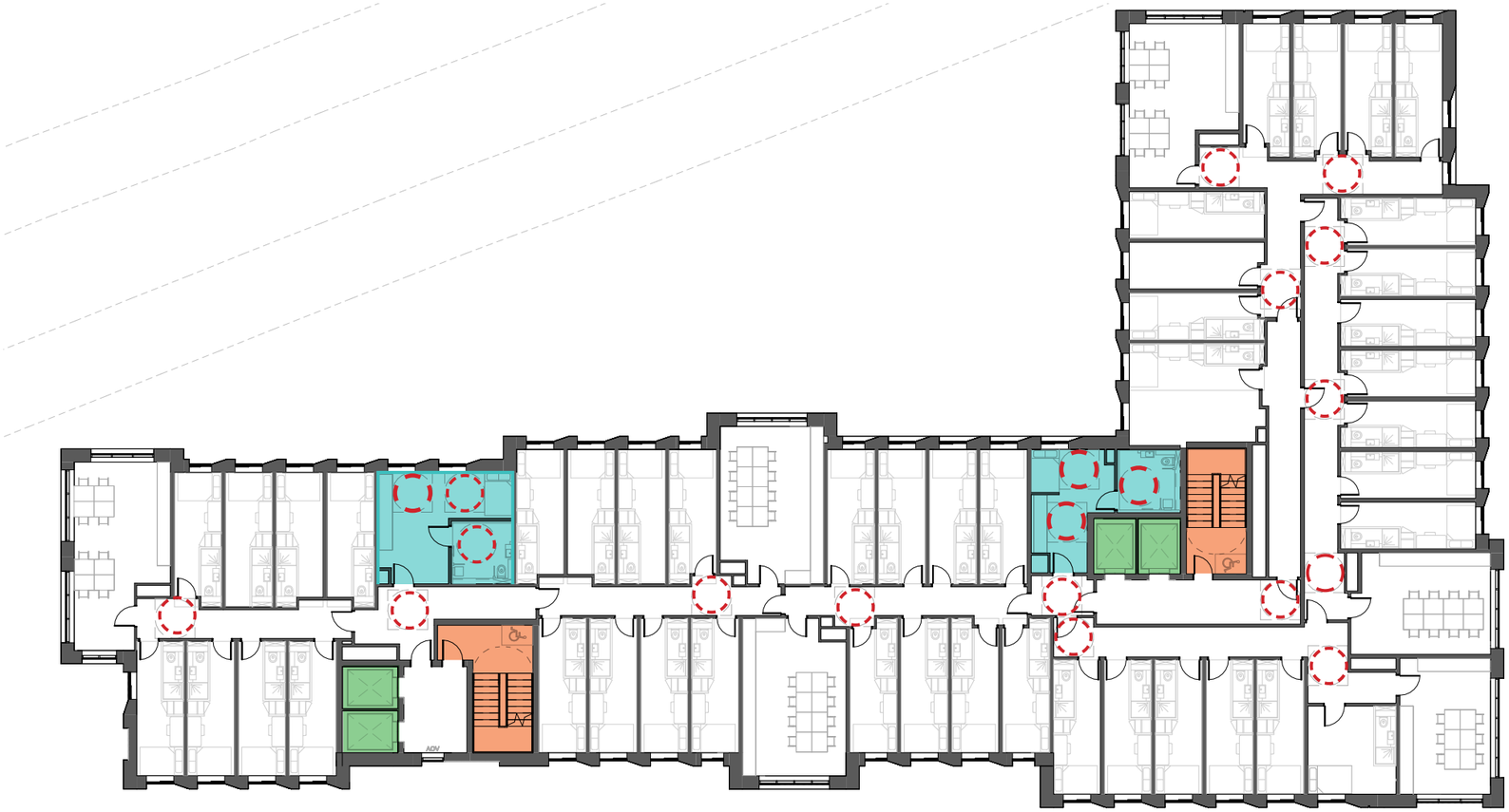
Design Approach - Accessibility

Inclusivity and Accessibility

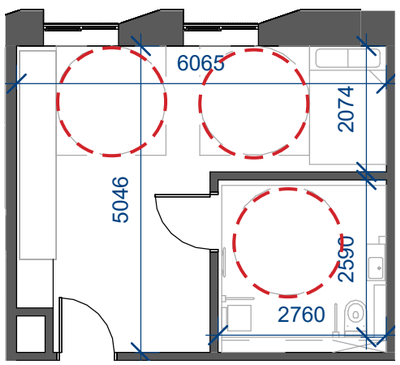
The scheme will provide 47 accessible studios, being 5% of all rooms. These are located near circulation cores for ease of access. Sufficient provision for disabled users is provided in all circulation spaces, communal areas and bin stores. Bike stores are equipped with accessible ramps and 5 cargo bike spaces, which can be used for oversized bikes used by people with mobility issues.

Accessible bathrooms are provided on each amenity level. Appropriate finishes will be provided to facilitate the movement through the building.

All landscape, public and private, has been designed to be fully accessible and inclusive.



- Accessible Studios
- Ambulant Stairs
- Accessible Lift
- 1800x1800mm clear manoeuvering zone



Accessible Studio Example

Facade Design & Public Realm Visualization

Example Scheme by Hollybrook Homes

Eagle Court - London

Hollybrook purchased, the Whitten Timber site for development to Student Accommodation and post graduate work space for the University of the Arts London. The development consists of 393 student rooms; 343 bedrooms and 50 studios, with associated communal space including a cinema room, games room, common room and outdoor space.

Completed Student Accommodation Projects

-698 Student Rooms at Our Lady's Grove Clonskeagh (Under Judicial Review)

-676 Student Rooms for the London School of Economics

-264 Student Rooms for the University of Arts

-393 Student Rooms for the University of Arts

-575 Rooms for the University of Essex

Example Scheme by Hollybrook Homes

University of Arts London

Hollybrook acquired and worked alongside the University of Arts to obtain planning permission for this development of student accommodation and an educational campus in Camberwell, South London.

The site is located in trendy and vibrant Camberwell, where there is an array of coffee shops, bars and restaurants and green spaces.

The development consists of 264 student bedrooms, a work zone and common room facilities for the students, basement energy centre, courtyard for outside art exhibitions space and a striking building with triple height basement lecture theatre and 68,000 sq. ft. of new academic space which connects to their existing 1960's building fronting onto Peckham Road.

The former self storage warehouse site, was logistically demanding with the university fully operational during the entire construction process. With the use of modular and precast building methods this assisted in Hollybrook's efforts to accelerate the programme, reduce disruption to UAL and our neighbours whilst maintaining our demanding high-quality standards.

3D Views

3D Views

3D Views

3D Views

Contextual 3D Views

Schedule of Accommodation

ROOM SCHEDULE												
Floor	Block 1						Block 2					
	Core A			Core B			Core C			Core D		
	Std Room	Accessible	Studio	Std Room	Accessible	Studio	Std Room	Accessible	Studio	Std Room	Accessible	Studio
Basement												
Lower Ground Floor												
Ground Floor												
1st Floor	14	1										
2nd Floor	29	2		23	1	1	16	1		28	1	1
3rd Floor	29	2		23	1	1	16	1		28	1	1
4th Floor	29	2		23	0	2	16	1		28	1	1
5th Floor	29	2		23	0	2	16	1		28	1	1
6th Floor	29	2		23	0	2	16	1		28	1	1
7th Floor	29	2		23	0	2	16	1		28	1	1
8th Floor	29	2		23	0	2	16	1		28	1	1
9th Floor	29	2		23	0	2	16	1		14	1	2
10th Floor	16	2					12	1		11	1	
11th Floor	16	2										
12th Floor	16	2										
13th Floor	16	2										
14th Floor	16	2										
TOTAL	**326**	**27**	**0**	**184**	**2**	**14**	**140**	**9**	**0**	**221**	**9**	**9**

AREA SCHEDULE				
Floor	Block 1		Block 2	
	Core A - GIA (m2)	Core B - GIA (m2)	Core C+D - GIA (m2)	Total - GIA (m2)
Basement	1198	0	1130	**2328**
Lower Ground Floor	426	0	0	**426**
Ground Floor	1903	0	1083	**2986**
1st Floor	1899	0	1018	**2917**
2nd Floor	822	647	1187	**2656**
3rd Floor	822	647	1187	**2656**
4th Floor	822	647	1187	**2656**
5th Floor	822	647	1187	**2656**
6th Floor	822	647	1187	**2656**
7th Floor	822	647	1187	**2656**
8th Floor	822	647	1187	**2656**
9th Floor	822	647	886	**2355**
10th Floor	572	0	675	**1247**
11th Floor	572	0	0	**572**
12th Floor	572	0	0	**572**
13th Floor	572	0	0	**572**
14th Floor	572	0	0	**572**
TOTAL	**14862**	**5176**	**13102**	**33140**
TOTAL excl. Basement & LGF	**13238**	**5176**	**11972**	**30386**

Housing Quality Assessment

Housing Quality Assessment																											
General												Area (sqm)		Kitchen/ Living/ Dining (sqm)				Bathrooms	Bedrooms (sqm)									
Block	Core	Floor	Number	Type	Orientation	Dual Aspect	No. of Bedrooms per Floor	No. of Bedspaces per Floor	Total No. of Bedspaces	Required Bedspaces min-max	GIA	Required GIA min-max	Kitchen/ Living/ Dining Area	Required Kitchen/ Living/ Dining Area	Area per Resident	Required Area per Resident	Bathrooms/ Bedroom (Required 1 Bath/ 3 Beds min.)	Required Single En-suite Bedroom Area	Single Ensuite Bedroom 1	Single Ensuite Bedroom 2	Single Ensuite Bedroom 3	Single Ensuite Bedroom 4	Single Ensuite Bedroom 5	Single Ensuite Bedroom 6	Single Ensuite Bedroom 7	Single Ensuite Bedroom 8	Aggregate Bedroom Area
Block 1	Core A	First Floor	A1-1/ DA	7 Bed Cluster	N/E	Yes	7	7	7	3 - 8	157.0	55 - 160	28.0	28.0	4.0	4.0	1/1	12.0	13.2	14.5	13.5	12.9	12.2	12.2	12.9	0.0	91.4
		First Floor	A1-2	7 Bed Cluster	E	No	7	7	7	3 - 8	160.0	55 - 160	29.1	28.0	4.2	4.0	1/1	12.0	15.4	12.9	12.9	12.9	12.5	12.5	12.9	0.0	92.0
		Second Floor to Eigth Floor	A2-1/ DA to A8-1/ DA	7 Bed Cluster	N/E	Yes	7	7	49	3 - 8	157.0	55 - 160	28.0	28.0	4.0	4.0	1/1	12.0	13.2	14.5	13.5	12.9	12.2	12.2	12.9	0.0	91.4
		Second Floor to Eigth Floor	A2-2 to A8-2	7 Bed Cluster	E	No	7	7	49	3 - 8	160.0	55 - 160	29.1	28.0	4.2	4.0	1/1	12.0	15.4	12.9	12.9	12.9	12.5	12.5	12.9	0.0	92.0
		Second Floor to Eigth Floor	A2-3/ DA to A8-3/ DA	7 Bed Cluster	E/W/S	Yes	7	7	49	3 - 8	159.0	55 - 160	32.0	28.0	4.6	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.9	12.5	12.5	0.0	89.5
		Second Floor to Eigth Floor	A2-4/ DA to A8-4/ DA	8 Bed Cluster	N/W/S	Yes	8	8	56	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.9	12.3	12.3	12.9	12.9	12.9	88.5
		Nineth Floor	A9-1/ DA	7 Bed Cluster	N/E	Yes	7	7	7	3 - 8	157.0	55 - 160	28.0	28.0	4.0	4.0	1/1	12.0	13.2	14.5	13.5	12.9	12.2	12.2	12.9	0.0	91.4
		Nineth Floor	A9-2	7 Bed Cluster	E	No	7	7	7	3 - 8	160.0	55 - 160	29.1	28.0	4.2	4.0	1/1	12.0	15.4	12.9	12.9	12.9	12.5	12.5	12.9	0.0	92.0
		Nineth Floor	A9-3/ DA	7 Bed Cluster	E/W/S	Yes	7	7	7	3 - 8	159.0	55 - 160	32.0	28.0	4.6	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.9	12.5	12.5	0.0	89.5
		Nineth Floor	A9-4/ DA	8 Bed Cluster	N/W/S	Yes	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.9	12.3	12.3	12.9	12.9	12.9	88.5
		Tenth Floor	A10-1/ DA	6 Bed Cluster	N/E	Yes	6	6	6	3 - 8	143.0	55 - 160	28.0	24.0	4.0	4.0	1/1	12.0	13.2	14.5	13.5	12.9	12.3	12.3	0.0	0.0	78.7
		Tenth Floor	A10-2	5 Bed Cluster	E	No	5	5	5	3 - 8	125.0	55 - 160	29.1	20.0	5.8	4.0	1/1	12.0	15.4	12.9	12.9	12.9	12.5	12.5	0.0	0.0	79.1
		Tenth Floor	A10-3/ DA	5 Bed Cluster	E/W/S	Yes	5	5	5	3 - 8	123.0	55 - 160	32.1	20.0	6.4	4.0	1/1	12.0	13.8	12.9	12.9	12.5	12.5	0.0	0.0	0.0	64.6
		Eleventh Floor to Fourteenth Floor	A11-1/ DA to A14-1/ DA	6 Bed Cluster	N/E	Yes	6	6	24	3 - 8	143.0	55 - 160	28.0	24.0	4.0	4.0	1/1	12.0	13.2	14.5	13.5	12.9	12.3	12.3	0.0	0.0	78.7
		Eleventh Floor to Fourteenth Floor	A11-2 to A14-2	5 Bed Cluster	E	No	5	5	20	3 - 8	125.0	55 - 160	29.1	20.0	5.8	4.0	1/1	12.0	15.4	12.9	12.9	12.9	12.5	12.5	0.0	0.0	79.1
		Eleventh Floor to Fourteenth Floor	A11-3/ DA to A14-3/ DA	5 Bed Cluster	E/W/S	Yes	5	5	20	3 - 8	123.0	55 - 160	32.1	20.0	6.4	4.0	1/1	12.0	13.8	12.9	12.9	12.5	12.5	0.0	0.0	0.0	64.6
		First Floor	AC-A1-1	Accessible Studio	S	No	1	1	1	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Second Floor to Eigth Floor	AC-A2-1 to AC-A8-1	Accessible Studio	W	No	1	1	7	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Second Floor to Eigth Floor	AC-A2-2 to AC-A8-2	Accessible Studio	S	No	1	1	7	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	AC-A9-1	Accessible Studio	W	No	1	1	1	-	25.1	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	AC-A9-2	Accessible Studio	S	No	1	1	1	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Tenth Floor	AC-A10-1	Accessible Studio	W	No	1	1	1	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Tenth Floor	AC-A10-2	Accessible Studio	S	No	1	1	1	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Eleventh Floor to Fourteenth Floor	AC-A11-1 to AC-A14-1	Accessible Studio	W	No	1	1	4	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Eleventh Floor to Fourteenth Floor	AC-A11-2 to AC-A14-2	Accessible Studio	S	No	1	1	4	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
	Core B	Second Floor to Eigth Floor	B2-1/ DA to B8-1/ DA	8 Bed Cluster	N/E/W	Yes	8	8	56	3 - 8	160.0	55 - 160	32.1	32.0	4.0	4.0	1/1	12.0	12.9	12.3	12.3	12.9	12.9	12.9	12.2	12.2	88.4
		Second Floor to Eigth Floor	B2-2/ DA to B8-2/ DA	7 Bed Cluster	E/S	Yes	7	7	49	3 - 8	154.0	55 - 160	28.4	28.0	4.1	4.0	1/1	12.0	14.2	12.2	12.2	12.9	12.9	12.9	12.9	0.0	90.2
		Second Floor to Eigth Floor	B2-3/ DA to B8-3/ DA	8 Bed Cluster	N/W/S	Yes	8	8	56	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.9	12.3	12.3	12.9	12.9	12.9	88.5
		Nineth Floor	B9-1/ DA	8 Bed Cluster	N/E/W	Yes	8	8	8	3 - 8	160.0	55 - 160	32.1	32.0	4.0	4.0	1/1	12.0	12.2	12.2	12.9	12.9	12.9	12.3	12.3	12.9	87.7
		Nineth Floor	B9-2/ DA	7 Bed Cluster	E/S	Yes	7	7	7	3 - 8	154.0	55 - 160	28.4	28.0	4.1	4.0	1/1	12.0	14.2	12.2	12.2	12.9	12.9	12.9	12.9	0.0	90.2
		Nineth Floor	B9-3/ DA	8 Bed Cluster	N/W/S	Yes	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.9	12.3	12.3	12.9	12.9	12.9	88.5
		Second Floor to Third Floor	AC-B2-1 to AC-B3-1	Accessible Studio	W	No	1	1	2	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Second Floor to Eigth Floor	ST-B2-1 to ST-B8-1	Studio	S	No	1	1	7	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Fourth Floor to Eight Floor	ST-B4-2 to ST-B8-2	Studio	W	No	1	1	5	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	ST-B9-1	Studio	S	No	1	1	1	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	ST-B9-2	Studio	W	No	1	1	1	-	25.0	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
Block 2	Core C	Second Floor to Eigth Floor	C2-1/ DA to C8-1/ DA	8 Bed Cluster	N/E/W	Yes	8	8	56	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.3	12.3	12.9	12.9	12.9	12.9	88.5
		Second Floor to Eigth Floor	C2-2 to C8-2	8 Bed Cluster	E/W	No	8	8	56	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Nineth Floor	C9-1/ DA	8 Bed Cluster	N/E/W	Yes	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.3	12.9	12.3	12.3	12.9	12.9	12.9	12.9	88.5
		Nineth Floor	C9-2	8 Bed Cluster	E/W	No	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Tenth Floor	C10-1/ DA	4 Bed Cluster	N/E/W	Yes	4	4	4	3 - 8	92.0	55 - 160	24.0	16.0	6.0	4.0	1/1	12.0	12.3	12.9	12.9	12.9	0.0	0.0	0.0	0.0	51.0
		Tenth Floor	C10-2	8 Bed Cluster	E/W	No	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Second Floor to Eigth Floor	AC-C2-1 to AC-C8-1	Accessible Studio	E	No	1	1	7	-	30.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	AC-C9-1	Accessible Studio	E	No	1	1	1	-	30.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Tenth Floor	AC-C10-1	Accessible Studio	E	No	1	1	1	-	30.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
	Core D	Second Floor to Eigth Floor	D2-1 to D8-1	8 Bed Cluster	E/W	No	8	8	56	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Second Floor to Eigth Floor	D2-2/ DA to D8-2/ DA	6 Bed Cluster	W/S	Yes	6	6	42	3 - 8	141.0	55 - 160	25.1	24.0	4.2	4.0	1/1	12.0	15.8	12.9	12.9	12.9	12.9	12.8	0.0	0.0	80.2
		Second Floor to Eigth Floor	D2-3 to D8-3	7 Bed Cluster	S	No	7	7	49	3 - 8	159.0	55 - 160	28.0	28.0	4.0	4.0	1/1	12.0	12.9	12.9	12.5	12.5	12.9	12.5	12.5	0.0	88.7
		Second Floor to Eigth Floor	D2-4/ DA to D8-4/ DA	7 Bed Cluster	N/E/S	Yes	7	7	49	3 - 8	158.0	55 - 160	31.6	28.0	4.5	4.0	1/1	12.0	12.9	12.5	12.5	12.8	12.4	12.4	12.0	0.0	87.5
		Nineth Floor	D9-1	8 Bed Cluster	E/W	No	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Nineth Floor	D9-2/ DA	6 Bed Cluster	W/S	Yes	6	6	6	3 - 8	140.0	55 - 160	25.1	24.0	4.2	4.0	1/1	12.0	15.8	12.9	12.9	12.9	12.9	12.8	0.0	0.0	80.2
		Tenth Floor	D10-1	8 Bed Cluster	E/W	No	8	8	8	3 - 8	160.0	55 - 160	32.0	32.0	4.0	4.0	1/1	12.0	12.9	12.9	12.9	12.9	12.3	12.3	12.9	12.3	89.1
		Tenth Floor	D10-2/ DA	3 Bed Cluster	S/W	Yes	3	3	3	3 - 8	66.0	55 - 160	16.3	12.0	5.4	4.0	1/1	12.0	12.0	12.0	12.2	0.0	0.0	0.0	0.0	0.0	36.2
		Second Floor to Eigth Floor	AC-D2-1 to AC-D8-1	Accessible Studio	E	No	1	1	7	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	AC-D9-1	Accessible Studio	E	No	1	1	1	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Tenth Floor	AC-D10-1	Accessible Studio	E	No	1	1	1	-	25.2	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Second Floor to Eigth Floor	ST-D2-1 to ST-D8-1	Studio	N	No	1	1	7	-	27.1	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	ST-D9-1	Studio	N	No	1	1	1	-	27.3	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-
		Nineth Floor	ST-D9-2	Studio	N	No	1	1	1	-	28.9	25 - 35	-	-	-	-	1/1	-	-	-	-	-	-	-	-	-	-

Schedule: Clusters

CLUSTER SCHEDULE						
Floor	**3 person**	**4 person**	**5 person**	**6 person**	**7 person**	**8 person**
Basement						
Lower Ground Floor						
Ground Floor						
1st Floor					2	
2nd Floor				1	6	6
3rd Floor				1	6	6
4th Floor				1	6	6
5th Floor				1	6	6
6th Floor				1	6	6
7th Floor				1	6	6
8th Floor				1	6	6
9th Floor				1	4	6
10th Floor	1	1	2	1		2
11th Floor			2	1		
12th Floor			2	1		
13th Floor			2	1		
14th Floor			2	1		
TOTAL	**1**	**1**	**10**	**13**	**48**	**50**
					TOTAL	**123**

Key Figures

TOTAL	**871**	**92.6%**	**Standard Room**	**Typical Room = 12.86 sqm**
	47	**5.0%**	**Accessible Studio**	**Typical Accessible= 25 sqm**
941	**23**	**2.4%**	**Studio**	**Typical Studio = 25 sqm**

Amenities NIA		
Floor	**Internal**	**External**
Basement	897	338
Ground Floor	1037	160
1st Floor	2093	0
2nd Floor	0	387
9th Floor	0	289
Totals	4027	1174
Percentage	77%	23%
Total combined	5201	

Internal Area (sqm)	
Cultural/ Community	**1422**
Student Amenity	**4027**
Plant	**369**
Bike Store	**876**
Retail	**250**
Electrical Room	**21**
Bin Store	**210**
Cores	**4797**

External Area (sqm)	
Cultural/ Community	**131**
Student Amenity	**783**
Roof Plant	**807**
Existing Electrical Substation	**13**

Planning requirement	required total area	provided internal area	provided external area	provided total area	
5% Cultural/ Community space *	1,343	1,422	131	1,553	5.78%
10% public open space	962	-	-	3,000	
5 sqm amenity / bed min.	4,705	4,027	1,174	5,201	5.53

*5% of GFA excluding plant, bin stores, cores & parking

Site Area (sqm)	11,298
Developable Site Area (sqm)	9,622
Plot ratio	3.2
Existing Site Coverage	29%
Proposed Site Coverage	36%
Cycle Parking Spaces - Student Internal	941 (including 5 cargo and 48 elctric bike stands)
Cycle Parking Spaces - Other Internal	3
Cycle Parking Spaces - Landscape	218
Car Parking	7
Accessible Car Parking	2

Demolition	GIA	GEA
GF	2634	2745
L1	2538	2630
Total	5172	5375

Cultural/ Community NIA					
Floor	**Use**	**Name**	**Internal Area (sqm)**	**Total Internal Area (sqm)**	**External Area (sqm)**
Basement	Cultural	Digital Hub	436	729	
		Office	41		
		Store/ BoH	193		
		Staff Changing Rooms and	18		
		WC	16		
	Shared Community / Cultural	Accessible Break-Out	162	221	91
		Shared Reception	59		
Ground Floor	Community	Café	50	472	40
		Cycle Clinic	11		
		Co-Working Area	86		
		Main Co-Working Area	268		
		Ancillary	41		
		WC	11		
Total				1422	131
Percentage				92%	8%
Total Combined				1553	