

Dundrum Central

Dundrum Central SHD
Proposed SHD on Lands at the Central Mental Hospital,
Dundrum Road, Dundrum, Dublin 14
Issued for SHD Planning Application

reddy architecture
+urbanism

Architectural Design Report

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Dundrum Central Development

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1.0 | Introduction



Figure 1 - Existing Aerial Image

1.2 | Project Description

Project Description

The development will consist of the demolition of existing structures associated with the existing use (3,736 sq m), including:

- Single storey former swimming pool / sports hall and admissions unit (2,750 sq m);
- Two storey redbrick building (305 sq m);
- Single storey ancillary and temporary structures including portacabins (677 sq m);
- Removal of existing internal sub-divisions/ fencing, including removal of security fence at Dundrum Road entrance;
- Demolition of section of porch and glazed screens at Gate Lodge building (4 sq m);
- Removal of walls adjacent to Main Hospital Building;
- Alterations and removal of section of wall to Walled Garden.

The development will also consist of alterations and partial demolition of the perimeter wall, including:

- Alterations and removal of section of perimeter wall adjacent to Rosemount Green (south);
- Formation of a new opening in perimeter wall at Annaville Grove to provide a pedestrian and cyclist access;
- Alterations and removal of sections of wall adjacent to Dundrum Road (including removal of existing gates and entrance canopy), including reduction in height of section, widening of existing vehicular access, provision of a new vehicular, cyclist and pedestrian access;
- Alterations and removal of section of perimeter wall adjacent to Mulvey Park to provide a pedestrian and cyclist access.

The development with a total gross floor area of c. 106,770 sq m (c. 106,692 sq m excluding retained existing buildings), will consist of 977 no. residential units comprising:

- 940 no. apartments (consisting of 53 no. studio units; 423 no. one bedroom units; 37 no. two bedroom (3 person) units; 317 no. two bedroom (4 person) units; and 110 no. 3 bedroom units) arranged in 9 blocks (Blocks 02-10) ranging between 2 and 6 storeys in height (with a lower ground floor to Block 03 and Block 10, resulting in part 7 storey), together with private (balconies and private terraces) and communal amenity open space provision (including courtyards and roof gardens) and ancillary residential facilities;
- 17 no. duplex apartments (consisting of 3 no. 2 bedroom units and 14 no. 3 bedrooms units located at Blocks 02, 08 and 09), together with private balconies and terraces.
- 20 no. two and three storey houses (consisting of 7 no. three bedroom units and 13 no. 4 bedrooms units) and private rear gardens located at Blocks 02, 08 and 09).



Figure 2 - Sketch of proposed public realm in front of Main Hospital Building

The development will also consist of 3,889 sq m of non-residential uses, comprising:

- Change of use and renovation of existing single storey Gate Lodge building (reception/staff area) to provide a café unit (78 sq m);
- 1 no restaurant unit (307 sq m) located at ground floor level at Block 03;
- 6 no. retail units (1,112 sq m) located at ground floor level at Blocks 03, 06 and 07;
- 1 no. medical unit (245 sq m) located at ground floor level at Block 02;
- A new childcare facility (463 sq m) and associated outdoor play area located at ground floor level at Block 10; and
- A new community centre facility, including a multi-purpose hall, changing rooms, meeting rooms, storage and associated facilities (1,684 sq m) located at ground and first floor level at Block 06.

Vehicular access to the site will be from the existing access off Dundrum Road, as revised, and from a new access also off Dundrum Road to the south of the existing access.

The development will also consist of the provision of public open space and related play areas; hard and soft landscaping including internal roads, cycle and pedestrian routes, pathways and boundary treatments, street furniture, wetland feature, part-basement, car parking (547 no. spaces in total, including car sharing and accessible spaces); motorcycle parking; electric vehicle charging points; bicycle parking (long and short stay spaces including stands); ESB substations, piped infrastructural services and connections (including connection into existing surface water sewer in St. Columbanus Road); ducting; plant (including external plant for district heating and pumping station); waste management provision; SuDS measures (including green roofs); attenuation tanks; sustainability measures (including solar panels); signage; public lighting; any making good works to perimeter wall and all site development and excavation works above and below ground.

1.3 | Introduction & Site Statistics

This report sets out how the proposed scheme has responded to a range of site constraints and opportunities, and how the design process has taken into account feedback at key stages from consultation and engagement to balance the issues and opportunities and achieve the design principles and optimise the potential for this landmark site.

The LDA's design approach aims to be inclusive and responsive to the local context and the unique opportunity that the site presents for a new distinct and integrated urban community in Dundrum.

The document sets out guidelines on key development standards and demonstrates a response to a range of site opportunities and constraints to inform the design. The lands provide a unique opportunity to transform this closed, inward-looking site into a new, welcoming, sustainable urban community with a distinctive identity that will be integrated into the wider community of Dundrum.



Figure 3 - View of the entrance at Dundrum Road

Site Statistics	
Total Site Area	9.6 ha
Net Site Area	6.54 ha
No. of Units	977
Total Gross Area - Proposed	106,770 m ²
Total Gross Area - 'Other Uses'	3,889 m ²
Site Coverage	32%
Plot Ratio	1.11
Gross Density	102 units/ha
Net Density	150 units/ha
Total Public Open Space	3.05 ha
Communal External Amenity Space	0.58 ha

The Team

Applicant
Architect
Masterplan
Project Manager
Planning Consultant
Engineer (Civil, Transport & Structure)
Engineer (Mechanical & Electrical)
Landscape Architect
Conservation Architects
Verified Views and CGI's
Daylight & Sunlight Analysis
Waste Consultant and Acoustic Consultant
Quantity Surveyor
Arborist
Fire Engineer
Ecologist
Acoustic Consultant
Traffic and Transport Engineer
Microclimate
Archaeologist
Accessibility

Land Development Agency
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Tyréns UK
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Tom Phillips + Associates
Barrett Mahony Consulting Engineers
EDC
AECOM
Alastair Coey Architects
Macroworks
GIA
AWN
AECOM
Arborist Associates
Jensen Hughes
Altemar Limited
AWN
ILTP
B-Fluid
IAC
OHAC

2.0 | Site Strategy

2.0 | Planning Strategy

The Masterplan will underpin a dual planning application strategy, comprising the lodgement of a Strategic Housing Development (SHD) for the main residential element of the scheme, which will be considered by An Bord Pleanála under the SHD provisions, and a further planning application to DLRCC under Section 34 of the Planning and Development Act 2000 (as amended) relating to the non-residential adaptive re-use of the existing buildings and some further residential development.

The planning strategy has been influenced by the SHD legislative provisions which limits the quantum of non-residential floorspace that can be applied for as part of a SHD. Further to this, there will also now be a quantum of residential development included within the S34 planning application on the basis that it shares an inseparable relationship with the main hospital building, with the demolition of ancillary built form to the rear of the main hospital building required to facilitate the delivery of the residential development to the rear.

In addition to considerations surrounding the risk of legal challenge and efforts to minimise this risk, the delayed vacating of the HSE and associated service users has resulted in constraints surrounding access to the main hospital building for the survey work required to support an application for the adaptive re-use of the building. The S34 planning application will therefore follow the SHD application in a consecutive fashion which will also respond to the Board's Opinion surrounding concerns of a concurrent approach. This strategy prioritises the SHD and delivery of a significant number of new homes in line with the LDA's remit.

We seek to fully realise the Masterplan through this proposed dual strategy. This Design Appraisal document refers to the proposed SHD planning application. Please see the Masterplan document submitted as part of the planning application for further information regarding the S34 planning application and the buildings included therein.



Figure 4 - Materplan CGI of Proposed Public Park adjacent to Rosemount Green



Figure 5 - Existing Aerial Image

2.1 | Site Location

The site is bound to the north by Mulvey Park, a low-rise residential development consisting of terraced two-storey houses. To the west lie Dundrum Road and the LUAS Green Line, each providing a strong north-south connection along the site's western edge. To the east lies more two-storey residential development in the form of detached, semi-detached and terraced houses at Friarsland Road, while to the south is Rosemount Green, a small open space, and the Rosemount Estate beyond that.

Please refer to Masterplan document for comprehensive background on development.

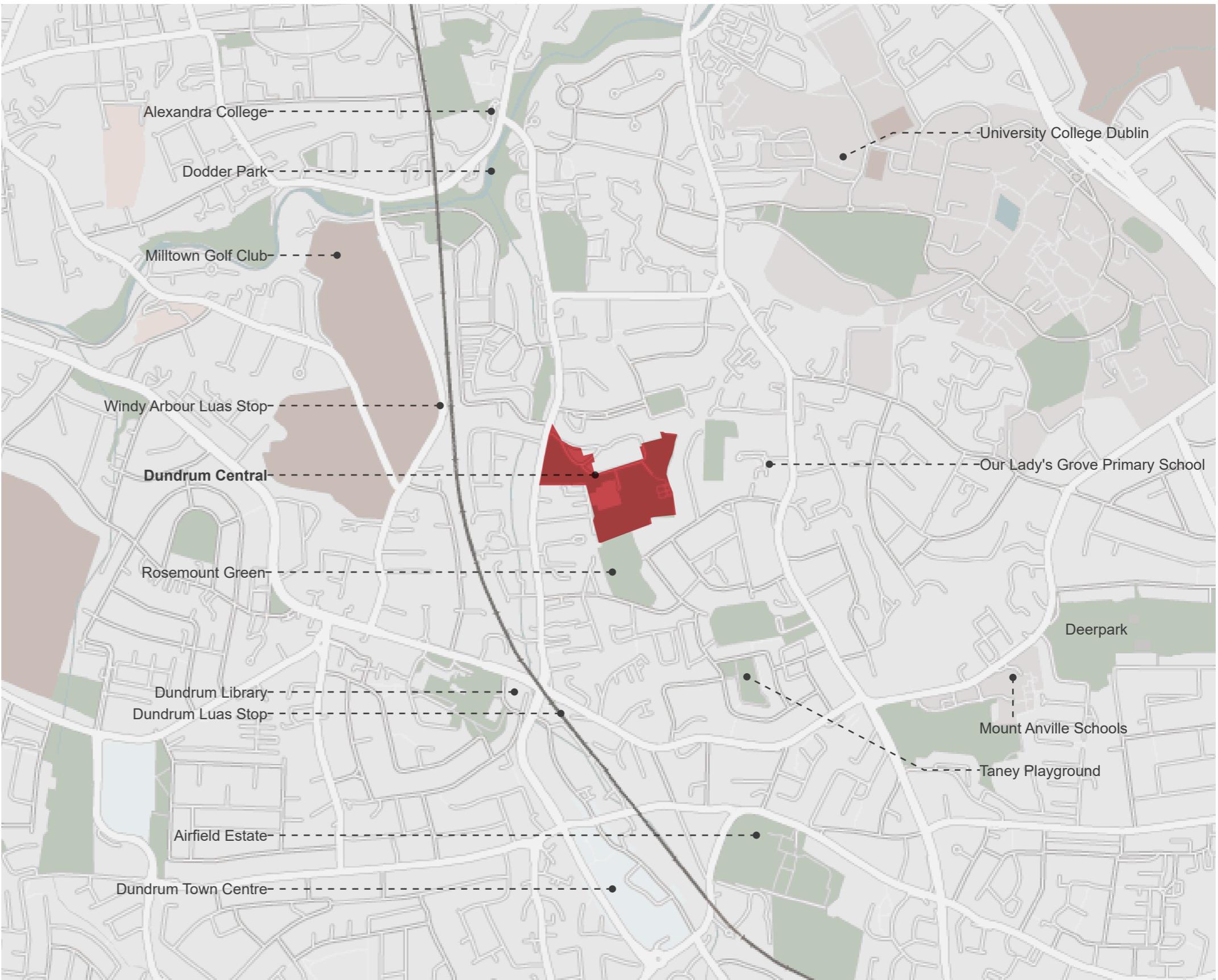


Figure 6 - Site Connectivity

2.2 | Existing Site Layout



Figure 7 - Existing Site Plan

2.3 | Site Layout Sketch



2.4| Heritage & Conservation Approach

The Central Mental Hospital Dundrum was opened in 1850. It is stated to be the first forensic mental hospital in Britain or Ireland. Its original title was the Central Criminal Lunatic Asylum. Prior to the existence of the Dundrum asylum, the mentally ill who had committed a crime were confined to prison and received no treatment for their illness.

In the early years of the 19th century, the authorities began to come to the opinion that those whose crimes arose solely from the fact that they were mentally ill, generally referred to at the time as 'Lunatics' or more politely 'Insane Persons', would be more appropriately confined to a secure hospital than to a prison. The 19th century was a time when it was believed that society would benefit and be improved by the construction of a large number and wide variety of institutions in which certain classes of people could be housed, cared for and supported, sometimes whether they liked it or not.

It is important to remember that the Central Mental Hospital Dundrum was built and run as a hospital not a prison, care not punishment. It is also important to remember that, particularly in the early days, most, nearly all, of the patients committed to the Central Criminal Lunatic Asylum were poor. It is likely that the facilities in the asylum were far more comfortable than where the patients came from – warm, dry, clean, decent food, outdoor space, clean air.

Please see Chapter 04 of the Masterplan Report for further information.



Figure 8 - View of the Main Hospital Building from the Central Parkland

2.4 | Heritage & Conservation Approach

Indicative Cross Section of Main Hospital Building
shown for information - No changes proposed as
part of SHD application.



2.5 | Masterplan Strategy

This Masterplan forms the basis of high-quality and sustainable development at the subject lands. The Masterplan conveys the development vision of the Land Development Agency, embedded within urban design principles for density and sustainable design.

Given the scale of the site, the Masterplan also ensures the comprehensive redevelopment of the site, giving consideration to both the spaces within and surrounding the site boundary. For example, the masterplanning exercise facilitates the identification and consideration of potential significant site constraints at an early stage. This ensures that certain baseline considerations are incorporated into the planning application design process from inception. This will minimise the requirement for post-design mitigation and address constraints at an early stage of the planning process, resulting in a high-quality proposal that contributes to the placemaking of the surrounding area.

With the dual planning application strategy in mind, the Masterplan will play a further important role in forming the basis for the holistic and cumulative assessment of both planning application schemes. For instance, the planning applications will be accompanied by an Environmental Impact Assessment Report (EIAR) that will assess the cumulative impact of the entire Masterplan area.

Please see the Masterplan Report for further information.

Legend

- Entrance to site
- Primary road
- Pedestrian/cycleway
- Public realm
- Views
- Frontage

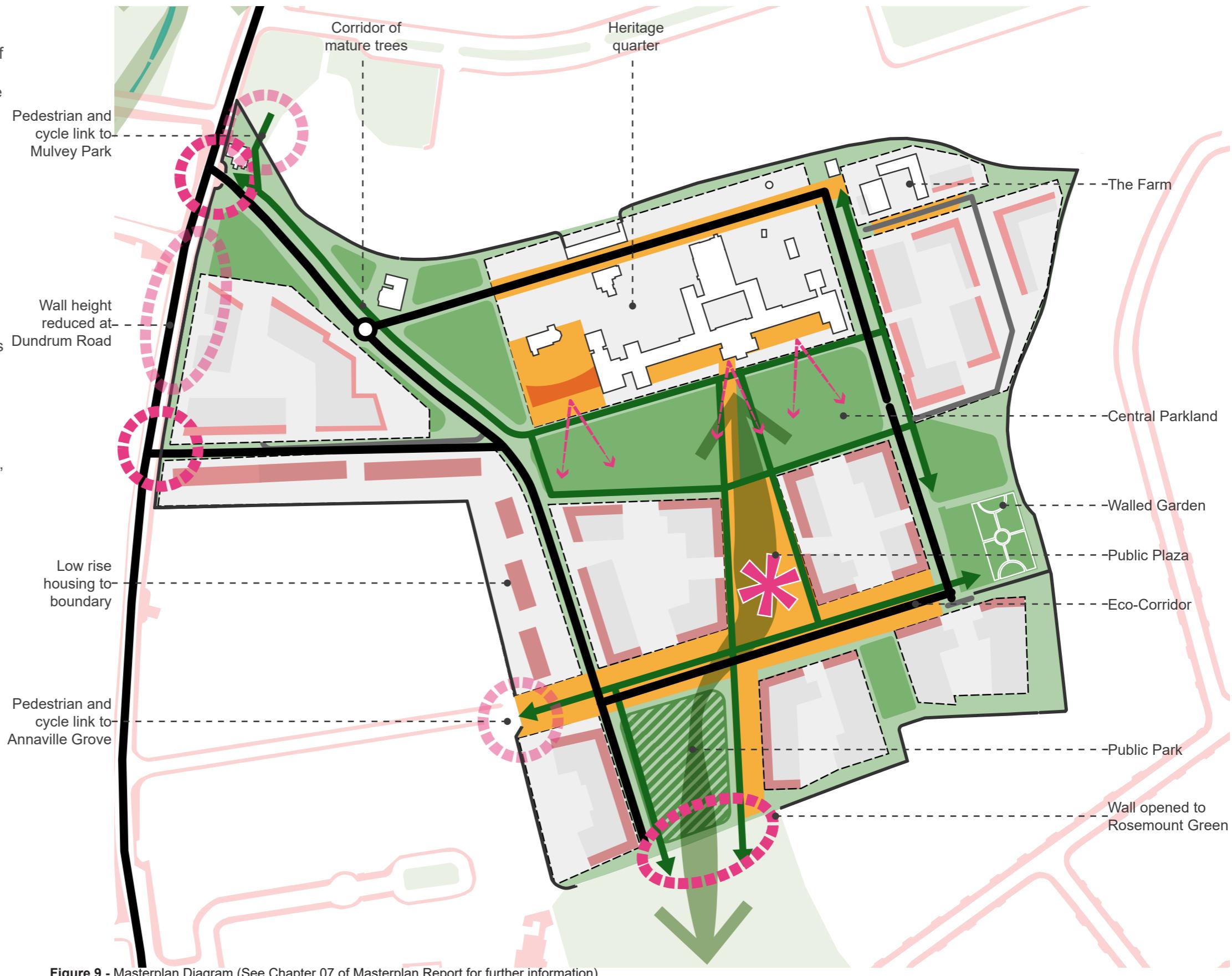


Figure 9 - Masterplan Diagram (See Chapter 07 of Masterplan Report for further information)

2.5 | Masterplan Strategy - Planning Approach



Existing Site

Masterplan

- Masterplan Prepared for entire site.
- Cumulative impact to be assessed in SHD application.



Masterplan

All Residential Buildings

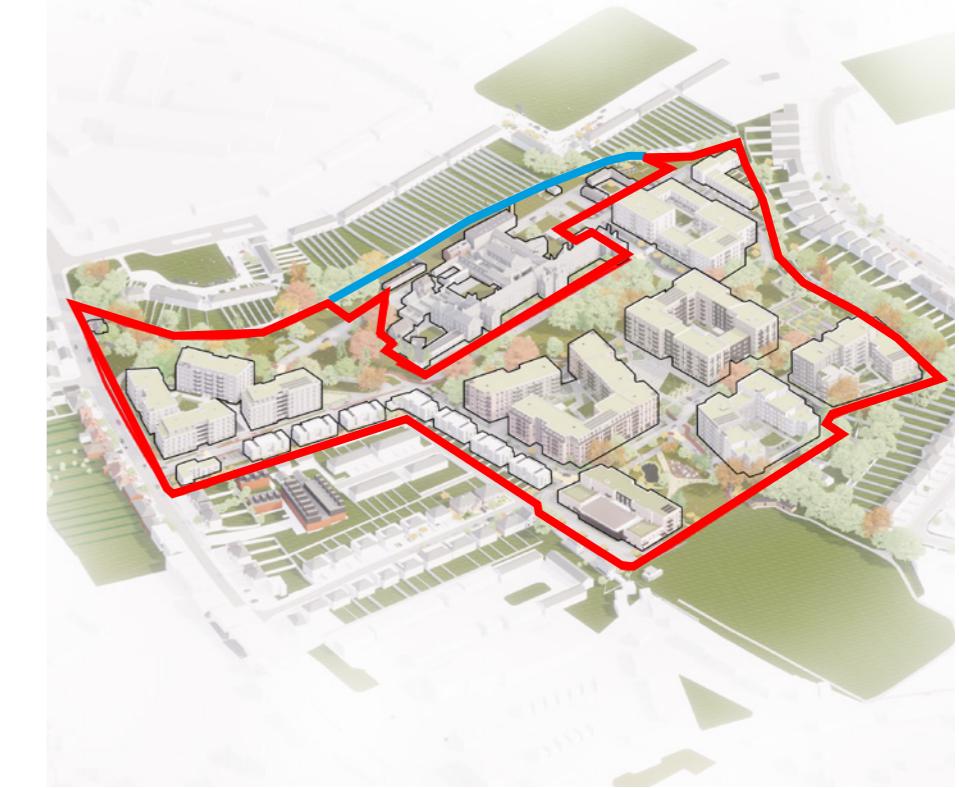
- Blocks 01 to 12
- 1,048 Dwellings (incl. 977 SHD)

Non-Residential Uses

- Main Hospital Building
- Chapel
- Infirmary
- Creche
- Retail
- Community
- Medical

Other

- Demolitions adjacent to Main Hospital Building



SHD Application

Residential Buildings

- Blocks 02 to 10 (excl. 01, 11, 12)
- 977 Dwellings

Non-Residential Uses

- Creche
- Retail
- Community
- Medical

Other

- Demolitions to buildings within SHD redline boundary

2.6 | Proposed SHD Site Layout

The proposed development is comprised of separate apartment blocks ranging from 2-6 storeys and a number of two / three storey duplex apartments and houses arranged around the site. The development has been organised to maintain and enhance the existing green spaces, maximising the publicly accessible open space, while providing communal amenity spaces at each block.

The surrounding area is predominantly comprised of 2-3 storey housing. Higher densities of living, along with an increased mixture of uses, will be essential in facilitating the development to grow as a 'distinctive urban centre' and to create a sense of place within Dundrum.

Block	No. Dwellings
Block 02	134
Block 03	161
Block 04	104
Block 05	118
Block 06	043
Block 07	211
Block 08	025
Block 09	023
Block 10	158
Total	977 Dwellings



Figure 10 - Proposed Site Plan

2.7 | Sustainable Travel

Sustainable Travel at Dundrum Central

The climate crisis has brought into sharp relief the need to make significant changes to the way we live, work and travel if we are to move towards an environmentally sustainable pathway. Decarbonising is among the biggest challenges of our time. Solely relying on technological advancements and stricter CO₂ standards are only part of the solution to the challenge.

It is the responsibility of all of us to create an environment where the most energy-efficient modes of transport and a progressive approach to modal shift can thrive. The LDA's policy to promote sustainable travel and promote modal alternatives is at the core of the design concept for Dundrum Central. From the outset of this project the goal of creating a community with high livability has been central to the design approach. This has resulted in the creation of a design proposal with high quality pedestrian and cycle links and infrastructure and reduced car parking numbers.

It is a fundamental aspect of the organizational strategy of the residential scheme that the effect of the car is reduced to foster better use of pedestrian, cycling and public transportation and enhance the liveability of the new community at Dundrum Central.

Moving from traditional transportation modes

Shift enablers are increasingly available to facilitate alternative modes of transport to the car in terms of public transport and cycling networks. Dundrum Central benefits from ready access to public transport in the Luas network and bus routes which connect it to the city.

Dublin is a city which is entirely commutable through its cycle network. In combination with safe and attractive infrastructure, such as cycle-paths and shared e-bicycles, large numbers of commuters and residents are committed to the bicycle. This modal shift is encouraged by the Dundrum Central transportation strategy. The electric bicycle is also a potential game-changer as it removes many barriers of conventional cycling.

To encourage a positive modal shift and reduce reliance on the private car, the scheme will allow for the provision of infrastructure to facilitate an e-bike scheme such as "Bleeper" on the site. Accessible, short-term e-bike rental schemes have been growing in popularity in recent years. Users of the e-bike scheme will have access to rental bikes stored on cycle parking stands and can return them to other approved public locations for a small fee. To encourage a positive modal shift and reduce reliance on the private car, the scheme will allow for the provision of infrastructure to facilitate bike-sharing schemes to operate from the site such as "Bleeper". Accessible, short-term rental schemes have been growing in popularity in recent years. Users of these publicly accessible schemes would have access to rental bikes stored on cycle parking stands and can return them to other approved public locations for a small fee.

Overall, Dundrum Central is well served by a variety of transport options which will facilitate the objective to encourage and promote more sustainable means of transport.

The LDA's project initiative for Dundrum Central sets out policies for a sustainable transport future.

The main objectives are:

- To improve accessibility to alternative modes of transport
- To encourage smarter travel, i.e. to reduce overall travel demand
- To maximise the permeability and efficiency of the Dundrum Central network
- To work closely with the Local Authority, the National Transport Authority, Irish Rail, Dublin Bus, Transport Infrastructure Ireland, Bus Éireann and all other relevant stakeholders in a partnership model to promote an increased

uptake in public transport.

- To reduce reliance on car parking and therefore to reduce transport emissions

The purpose of the Dundrum Central Mobility Management plan is to establish a formal mobility and traffic management plan dealing with transport modal shift and accessibility. A number of proposals are included in this Plan covering cycling, parking, traffic management and bus services.

In supporting the objectives of the Mobility Management Plan, the Dundrum Central masterplan aims to create a pleasant pedestrian environment through and around Dundrum Central. This brings enormous benefits, in terms of access to amenity, parkland space, enterprise and innovation space and facilities for different age groups. In line with Smarter Travel, the master plan for the lands facilitates cycling and walking by providing a network of safe, well-lit and convenient pedestrian routes and a north south cycle route within the site which will encourage such modes of transport. The routes are designed to be connected, convenient, comfortable, and conspicuous.

2.7 | Sustainable Travel



2.7 | Sustainable Travel

Key Connectivity and Movement Issues

Creating two main pedestrian and vehicular access routes from Dundrum Road, which are open and inviting in nature providing views and permeability through the site onto Rosemount Green.

- Additional access locations at Mulvey Park/Dundrum Road and from Annerville Road to the west create additional pedestrian and cyclist permeability. As with all successful living areas, streets are needed to provide permeability into areas of development and connectivity and ease of movement within the area and these interventions create the potential for access to the amenity spaces and onto the new streets created.
- In the case of Dundrum Central Site, additional access to the site is required to provide access for the people of Dundrum and Windy Arbour and residents alike to the parkland areas, walled gardens, the historic former hospital building which will house Enterprise and Innovation uses and the associated heritage buildings which will house amenity and community uses that exist on the site and to the future amenity, residential and commercial facilities that are to be developed on the site. The mobility management proposals will:
 - o Provide access for existing Windy Arbour and New residents
 - o Provide access for people working in the area
 - o Provide access for deliveries to residential, commercial and other properties in the area
 - o Provide access for Emergency Vehicles to the site

In considering access requirements, various modes of transport that have been considered as needed to be accommodated in order of importance:

1. Pedestrians incl. Wheelchair users, prams/buggies etc
2. Cyclists
3. Light Goods vehicles
4. Service Vehicles
5. Cars

The level of permeability that should be afforded to each of these users has been considered in the layout of the Masterplan Area.

Pedestrian & Cyclist Movement

- In the Dundrum Central Masterplan area, it is intended that movement will be dominated by pedestrians and cyclists, with limited vehicular access. This will help to create a vibrant and sustainable place, providing the area with an important sense of place.
- Any areas where vehicles are allowed within the Masterplan area will be designed as shared spaces. Such spaces are integrated spaces where pedestrians, cyclists and vehicles share the carriageway, and are considered to be highly desirable where pedestrian activities are high and vehicles movements are only required for lower level access or circulatory purposes. This is a home-zone style street design as outlined in DMURS.
- A key element of new linkages is the provision of pedestrian and cycle linkages on the west banks, north and south sides of the lands. These will serve as both amenity routes and access routes to the greater Dundrum and Windy Arbour area. As amenity routes, they will form part of long distance amenity routes which can connect cyclists from Bird Avenue, through to Mulvey Park and through Dundrum Central onto Rosemount Green and onto Dundrum south or east to Goatstown road.
- There is a significant population living within two kilometres of the Dundrum Central location. These characteristics contribute towards making this area an ideal location for commuting to work or school by foot or bicycle.
- Key to the delivery of a successful cycle network is the provision of a complete supporting infrastructure. Cycle parking facilities will be provided at suitable locations within the Masterplan site.

Vehicular Movement

- While it is intended that movement through the Masterplan area will be dominated by pedestrians and cyclists, provision is made for limited vehicular access to the site for deliveries, service vehicles and emergency vehicles. It is intended that access for deliveries and service vehicles to the site will be restricted to certain times of the day.
- Various options for movement into and out of the site were considered. Having considered the various options, it was decided that the best option was to foster permeability and reduce the effect of the car on the lands as much as possible.
- It is intended that vehicular access to certain areas will be limited and will be controlled by way of retractable bollards (automated or removable) to be located in the areas in front of the former hospital and to restrict access to local access or car parking.
- Furthermore, it is intended that the design of the street in the area located to the centre of the lands between buildings 03 and 07 are designed with a view to the creation of an open civic space. This civic space, whilst accommodating limited traffic access at certain times of the day, would be useable as a civic space for outdoor events. The detailed design of this civic space will be incorporated into the proposed urban park which permeates the scheme design.
- It is intended that the existing vehicular access along Dundrum Road will be maintained, continuing to provide access to properties to the north of the lands and facilitating a route towards the periphery of the lands.

2.7 | Sustainable Travel



2.7 | Sustainable Travel

Parking Provision

It is an objective of the Dundrum Central Mobility Management plan to prioritize active travel and travel via public transport. Parking provision is aligned with national policy by facilitating a reduced reliance on private vehicles while also taking into consideration the necessary demand so as to prevent overspill into nearby areas.

This will also continue to take into consideration the necessary demand so as to prevent overspill parking in nearby areas. It is noted that this is in line with the Department of Housing, Planning and Local Government's Guidelines for Planning Authorities, Design Standards for New Apartments Section 4.19 of this document states: "In larger scale and higher density developments, comprising wholly or in part of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such as rail and bus stations located in close proximity".

Given the location of Dundrum Central adjacent to multiple modes of public transport and its large scale and high density, it aligns with the above description as such it is appropriate to commit to a lower level of car parking provision.

It is an objective to ensure that sufficient cycle parking is provided to meet demand at the site to ensure cycling is considered a viable option where possible. It is also an objective of this plan to minimise the numbers using private cars and in cases where it does occur, to increase the number people travelling as passengers.

The proposed car club spaces will help facilitate a cultural shift away from car ownership and, by association, car travel, by maintaining access to a car for residents' occasional use while more sustainable modes are used for day to day travel needs. This facility will be monitored in terms of usage and demand and the number of vehicles available increased as appropriate.

Reducing car parking and promoting more sustainable forms of transportation within the development boundary will be carried out on a phased basis with approx. 5 development phases anticipated to complete the development of 1,048 units.

An initial development stage of 250-300 units is anticipated in the first construction phase commencing on site in 2023 to be complete in 2024 – this will also see the introduction of an internal road network for pedestrians and cyclists with limited access for cars and car parking - approx. 200 car parking spaces to include residents, visitor and service

car parking. In this initial stage of development, existing parking and an interim use of the existing hard surfaces will continue to cater for construction car parking and day to day servicing of the development and its use.

Therefore little or no effect on the on street car parking external environment outside of the development boundary is anticipated – and indeed this is likely for the second and third phases of development (occupation Q3 2028) which could see occupation numbers reach 600-700.

It is apparent that whilst this is a scheme ultimately for 1,048 residential units – it will not create anywhere like the traffic movements and potential demand on car parking anticipated by adjoining local residents and homeowners, as the phased implementation will develop in increments, from 2024 – 2030, each phase is essentially self-sufficient until final occupation.

Please refer to the Traffic & Transport Assessment and Mobility Management Plan prepared by ILTP as submitted with this planning application for further information.

Use of Technology

Recent advancements in technology present a number of additional opportunities in relation to encouraging positive modal shift. The availability of smartphone apps is beneficial to users of public transport as they can check timetables and real-time services remotely. Residents at Dundrum Central will benefit from using the options below which will reduce reliance on private cars. As part of the Mobility Management Plan, at Dundrum Central the completed development will be informed of a variety of potentially useful tools including the following:

The NTA Journey Planner

Available on the NTA website and as a downloadable app, the journey planner provides a comprehensive list of travel options available from any origin/destination point in the country. Most notably, this is not limited to a single mode of travel and includes routes which consider multiple modes and multiple public transport services while also providing details such as journey times and distances for each option.

Public Transport Providers

Each of the major public transport providers, including Dublin Bus, Bus Éireann and Irish Rail, now have their own dedicated app that can be downloaded to a smartphone and/or tablet. These contain detailed information on all services offered including timetables and also allow for real time up-dates on changes or disruptions to services.

RealTime Ireland

An application available for download to smartphones and tablets, this app provides real time arrival and departure listings for a range of public transport options from major rail stations to individual bus stops. This app also links with the aforementioned NTA Journey Planner to provide a comprehensive travel planning tool.

Taxi Apps

There are various apps available at present which simplify the process of booking taxis considerably to provide a much more accessible service. The above are just a few examples of the services available which would be of significant use in promoting more sustainable means of transport. The availability of such services will be promoted amongst residents on a regular basis and information on any new services that become available will also be provided.

Car Sharing Apps and Car Clubs

To allow occasional car use for residents who don't own their own car, car sharing and travel club services will be provided within the proposed development to be facilitated by the management company.

2.8 | Sustainability

Home Performance Index

An initial assessment has been carried out against the Indicators set out in the Irish Green Building Council's (IGBC) Home Performance Index (HPI) Technical Manual. The HPI assessment procedure analyses the buildings under the following categories:

Environment
Health and Wellbeing
Economic
Quality Assurance
Sustainable Location



2.8 | Sustainability



1.0 Environment

The development will encourage regeneration within an existing urban area, thereby discouraging sprawl. The development encourages more rational and efficient use of land. This will support resilient communities and minimise climate change vulnerability. The development is centred around landscape and supporting biodiversity.

2.0 Health & Wellbeing

Dwellings in the proposed development have been designed to balance good levels of fresh air with heat loss due to ventilation, to ensure the quality of life and mental wellbeing of residents by providing visual delight and daylighting, and to reduce noise transfer to effect change in the perception of urban dwelling.

3.0 Economic

The buildings on site will be designed to nZEB standards to reduce energy costs to affordable levels. Dwellings will be provided with energy monitoring systems to allow residents to understand their energy and water use. This will help to support the residents' financial welfare.

4.0 Quality Assurance

The buildings in the development are designed in compliance with the Building Regulations and will be fitted out with materials which comply with all necessary NSAI and ISO standards. This will guarantee the durability and long life of the dwellings. Materials will be subjected to on-site testing and necessary quality control procedures as outlined in HPI guidance documents.

5.0 Sustainable Location

The site is located close to existing transport and also encourages the inclusion of alternative transportation modes in the new development, e.g. bike-sharing. The dwellings will benefit from proximity to nearby employment, retail and community facilities.

2.9 | Masterplan Strategy - Movement

Legend:

-  Primary Cycle Route
-  Primary Vehicular Route
-  Local Access / Homezone
-  Pedestrian/Cycle access and Occasional / Emergency Access
-  Access Point - All Users
-  Access Point - Ped & Cyclist



Access points

- 1A. Dundrum Road - All Users
- 1B. Dundrum Road - All Users
2. Mulvey Park - Ped / Cycle
3. Annaville - Ped / Cycle
4. Rosemount Green - Ped / Cycle

3.0 | Proposed Layout

3.1 | Urban Design & Landscaping

Landscape Design

A 'Landscape Architecture & Public Realm Design Report' has been prepared by Aecom Landscape Architects which incorporates an overview of the existing site and features and details of the proposals across the site.

Retaining and enhancing the important existing site features was one of the primary objectives of the masterplan. The masterplan layout proposes a series of interlinked green spaces for public use including:

- Central Parkland
- Entrance Plaza
- Central Square
- Rosemount Park
- Walled Garden

For further details, please refer to the 'Landscape Architecture & Public Realm Design Report' prepared by Aecom Landscape Architects.



Figure 11 - Proposed open spaces

3.2 | Public Open Space

To enhance the natural amenity of the Dundrum Central site, public spaces and streets require an identifiable hierarchy and design strategy. They will be safe, pedestrian and cycle friendly and designed for a diverse population.

New, active and improved parkland, play spaces, and public realm will encourage interaction and provide a variety of meeting places. They will be integrated with key community facilities and associated services close to existing transport connections.

The site's extensive open spaces are detailed in the 'Landscape Architecture & Public Realm Design Report' prepared by Aecom Landscape Architects.

The quantity of Public Open Space is outlined on the Open Space Plan prepared by Reddy Architecture + Urbanism in conjunction with the Design Team and is summarised below:

Site Area (SHD):	9.59 ha
Public Open Space:	3.05 ha
Proposed Population*:	1,754 people
Public Open Space per Person:	17.39 sqm

In addition to the 3.05 ha of Public Open Space, the site's open character is maintained and enhanced with the provision of general landscaped areas (not contributing to Public Open Space) and with external communal amenity areas for residents.

Landscaped Areas:	0.36 ha
Communal Amenity:	0.58 ha
Open Space per Person: (Including Additional Areas)	23 sqm

*Population calculation refers to calculation at Section 8.2.8.2 of DLRCC County Development Plan 2016-2022.



Figure 12 - Open Space Diagram

3.3 | Key Open Spaces



01 | Central Parkland



02 | Entrance Plaza



03 | Central Square

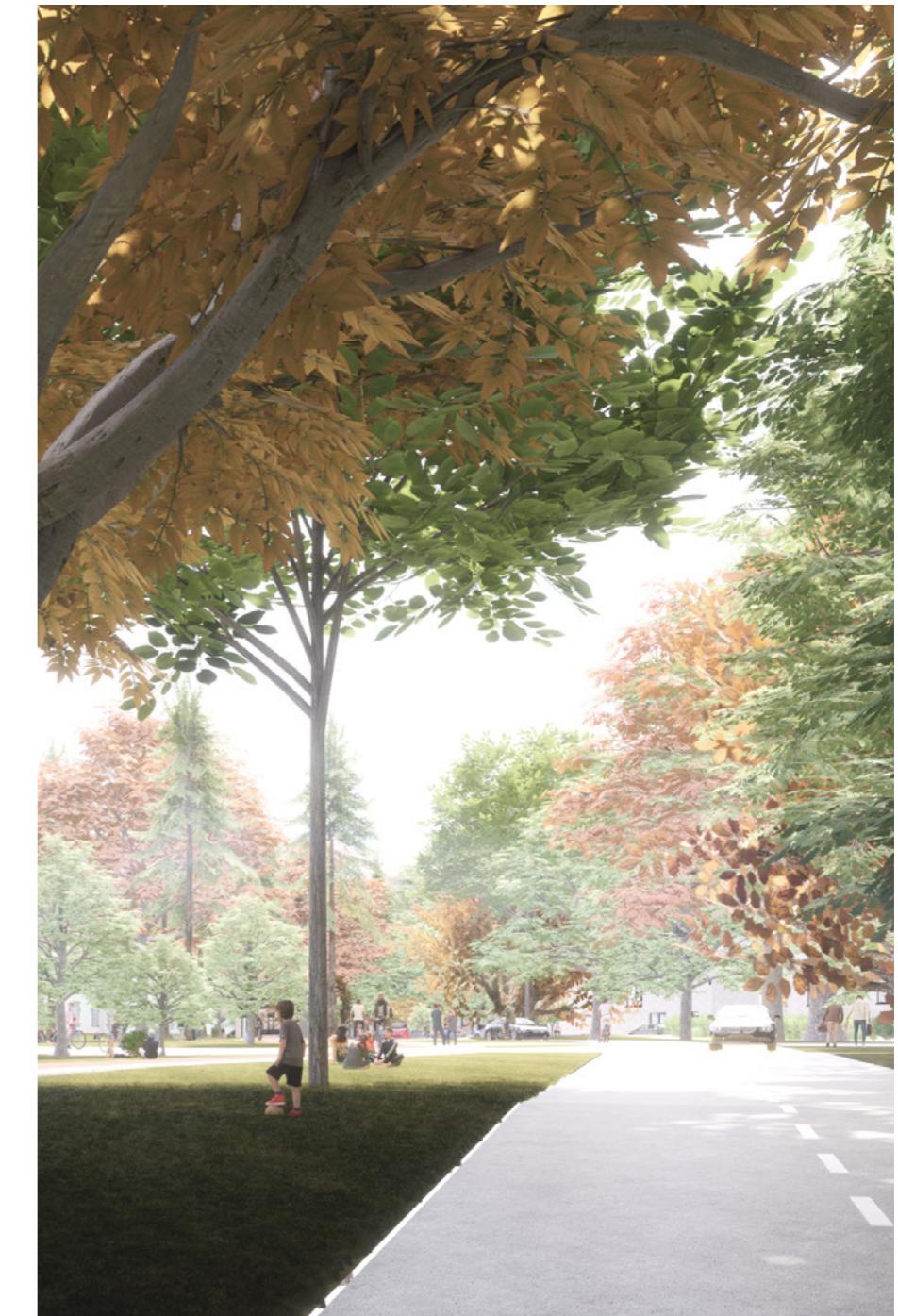
3.3 | Key Open Spaces



04 | Rosemount Park



05 | Walled Garden



06 | Central Avenue

3.3 | Key Open Spaces



3.3 | Key Open Spaces



3.4 | Permeability

Legend:

Primary Cycle Route

Pedestrian/Cycle access and Occasional / Emergency Access

Access Point - All Users

Access Point - Ped & Cyclist

Access points

- 1A. Dundrum Road - All Users
- 1B. Dundrum Road - All Users
2. Mulvey Park - Ped / Cycle
3. Annaville - Ped / Cycle
4. Rosemount Green - Ped / Cycle



Figure 13 - Permeability diagram highlighting pedestrian and cycle links across the site

3.4 | Permeability

01 Dundrum Road A

The new openings in the perimeter wall at the location of the existing entrance at Dundrum Road allow for increased permeability to the existing routes at Mulvey Park and towards the Windy Arbor LUAS stop. This opening also allows a route through the site for pedestrians and cyclists through the site to Rosemount Green.

02 Dundrum Road B

A new opening is proposed to the south of the existing entrance at Dundrum Road. This new entrance will open up new visual links towards the existing landscape and the Main Hospital Building while also providing access for all modes of travel at this location.

03 Annaville

A modest opening is proposed in the boundary wall to allow easy access to the site for pedestrians and cyclists at this location. This access point is in close proximity to the Community Facilities at Block 06 and also to the proposed Public Park north of Rosemount Green.

04 Rosemount Green

It is proposed to remove a section of the wall to join the new public park within the CMH site to the existing facilities at Rosemount Green. This new opening will also allow pedestrian and cyclist access to the existing routes from Rosemount Green towards Goatstown road to the east.



3.4 | Permeability

1A Dundrum Road - Existing Entrance

It is proposed to remove sections of the boundary wall at the existing entrance at Dundrum Road to provide increased permeability for all users at this entrance point.

This is enhanced with the proposal for new openings in the wall to enable access to Mulvey Park and with the provision of a dedicated pedestrian and cyclist route from this entrance point through the site to Rosemount Green.



3.4 | Permeability

1B Dundrum Road - New Entrance

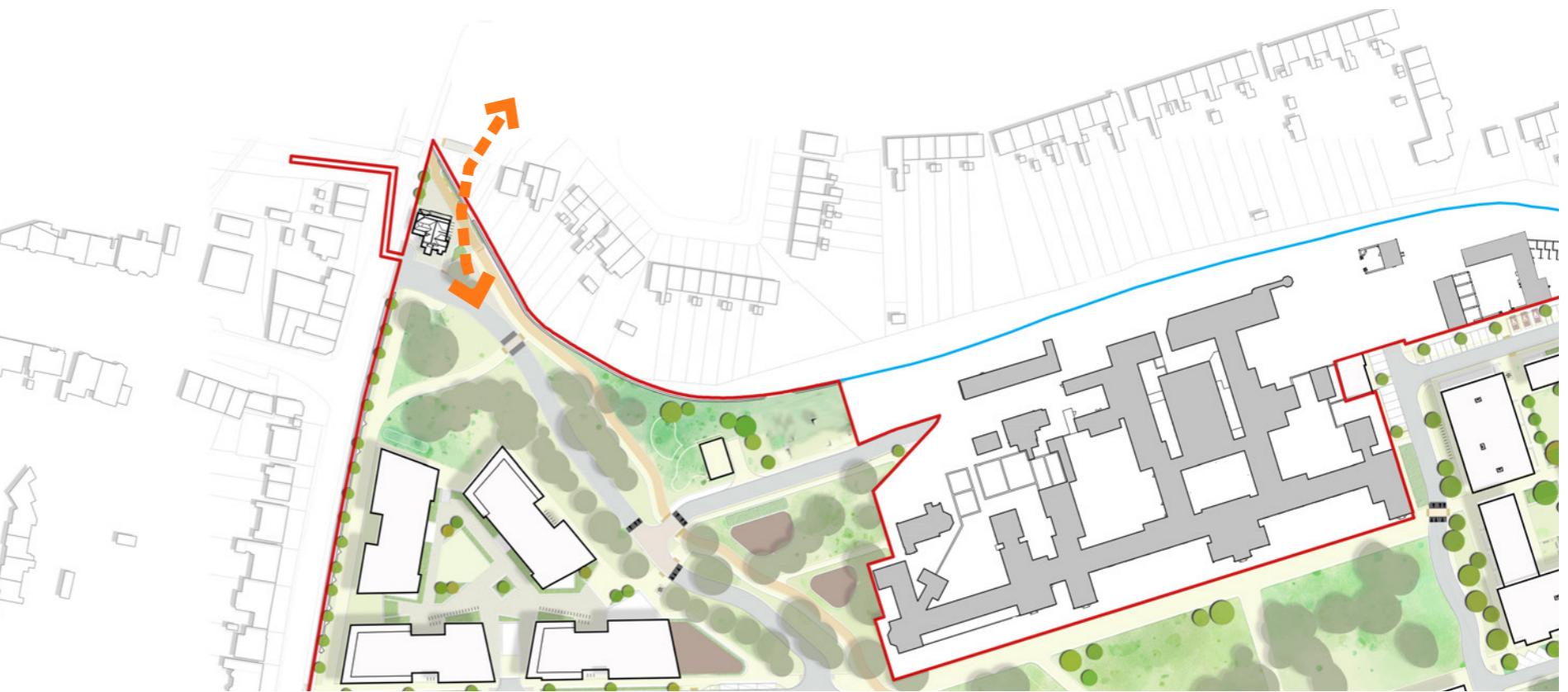
A new entrance route for all users is proposed at Dundrum Road to the south of the existing entrance. It is proposed to remove elements of the boundary wall at this location and for increased permeability with a new landscaped route proposed inside the boundary wall.



3.4 | Permeability

2 Mulvey Park

It is proposed to remove sections of the wall at the north west corner of the site to enable a pedestrian and cyclist connection to the existing open space at Mulvey Park.



3.4 | Permeability

3 Annaville

A new opening is proposed in the boundary wall at Annaville Grove. This will allow easy access to the site for the pedestrians and cyclists adjacent to the proposed Public Park and community facilities at Block 06.



3.4 | Permeability

4 Rosemount Green

It is proposed to remove a section of the wall to join the new public park within the CMH site to the existing facilities at Rosemount Green. This new opening will also allow pedestrian and cyclist access to the existing routes from Rosemount Green towards Goatstown road to the east.



Figure 14 - View of the connection between the new Public Park (left) and Rosemount Green (right)

3.4 | Permeability

Boundary Wall

The perimeter wall at Dundrum Central Mental Hospital was complete to its current extent by 1874. Built in granite and limestone rubble with concrete copings, and one short section in mass concrete.

It is proposed to remove sections of the perimeter wall at locations where it would significantly enhance both visual and physical permeability through the site. There are alterations to the wall proposed at Dundrum Road / Mulvey Park, Rosemount Green and a new pedestrian / cyclist opening in the wall at Annaville Grove.

The extent of proposed removal of the wall at Dundrum Road has been reduced since the ABP Pre-Application to retain the sense of enclosure provided by the wall, while balancing this with the visual amenity of the new residents and the wider community.

A wall survey report and drawings prepared by Alastair Coey Grade 1 Conservation Architects and Reddy Architecture + Urbanism are submitted with the application.

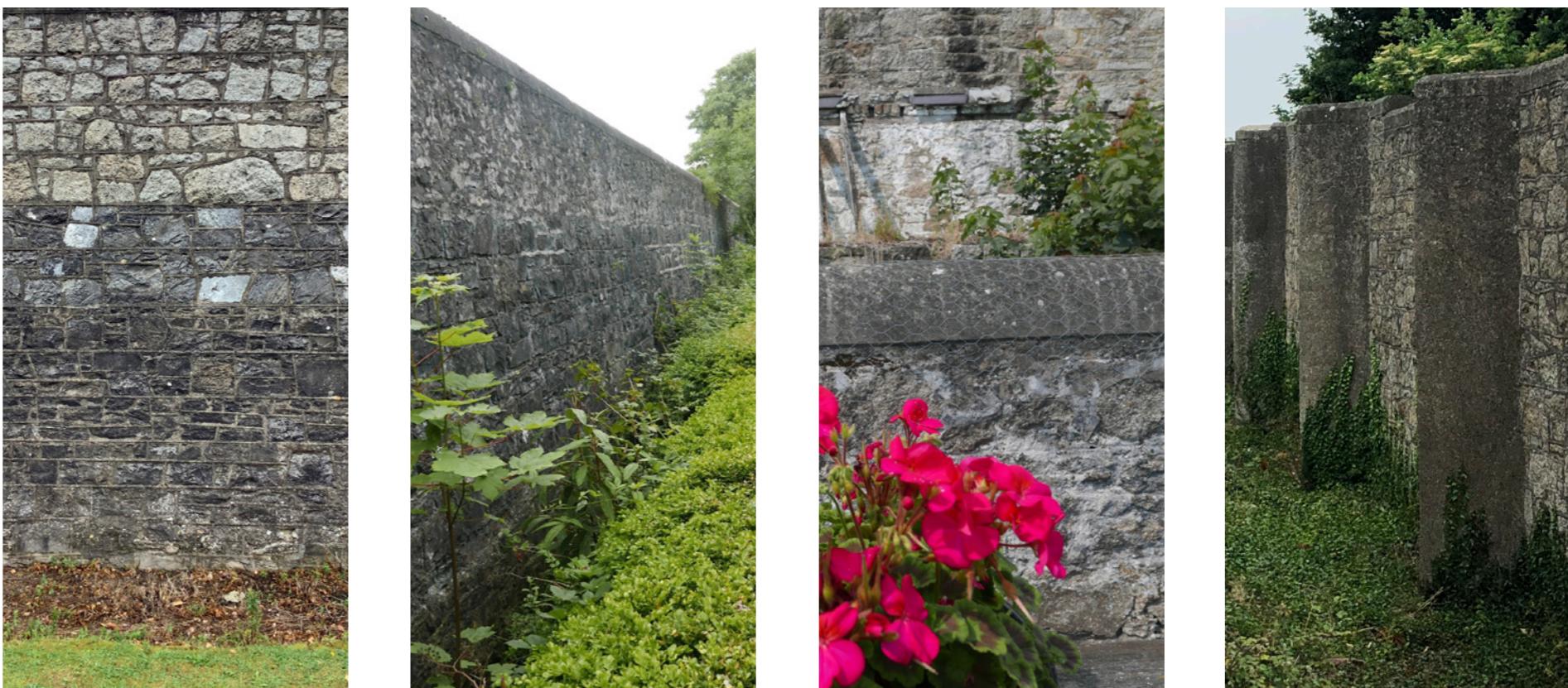


Figure 15 - Dundrum Road Wall illustrative diagram.

3.5 | Building Heights



3.6 | Overlooking

From the outset of the design process it has been important not to overlook or overshadow the existing adjacent context of predominantly low-rise housing. This is of particular concern at the north-eastern corner of the site where the rear of houses on Friarsland Road are close to the site boundary, and at the western edge of the site where housing at Annaville Grove, Annaville Park, Dundrum Road and Sommerville is close to the site.

In response to this context, the following design features have been included:

- Block 02 steps down to a height of 2 and 3 storeys adjacent to the boundary wall.
- Blocks 08 and 09 are at a height of 2 and 3 storeys adjacent to the boundary wall.
- No windows face the boundary wall above ground level in Blocks 08 and 09.
- Block 06 steps to a height of 2 storeys adjacent to the boundary wall.
- The south facade of Block 05 has no windows facing the boundary wall above ground level.
- Balconies close to the boundary wall at Block 05 have privacy screening.
- High-level clerestory windows are provided in living areas in Block 04 to allow daylight into the new dwellings while mitigating overlooking.

Legend

2 Storeys



3 Storeys



Figure 17 - Proposed Site Plan

3.7 | Fire Safety Strategy

All buildings on site have been designed in compliance with TGD Part B. Fire safety consultants Jensen Hughes have been appointed to advise regarding fire safety across the site.

The layout of the site has been considered with regards to fire tender access. The road layout onsite allows a fire tender quick access to each block. In certain instances surface treatments are proposed which will allow fire tenders to drive across areas which are not roads e.g. south of the Main Hospital Building, east of Block 06 and west of Block 04. These surface treatments allow access to fire fighting cores.

All dwellings on site are designed and will be constructed with appropriate provisions for early warning of fire and adequate means of escape. The internal linings of dwellings are designed to offer adequate resistance to the spread of flame over their surfaces. Party walls between dwellings will be constructed to offer adequate resistance to the spread of fire between dwellings. The external spread of fire has been mitigated by the design of external walls and roofs.

Sprinkler systems are provided in any proposed open plan dwellings. Travel distances within any dwellings to the final exit do not exceed 20 metres. All buildings are provided with fire detection and alarm systems consisting of interconnected, self-contained, mains powered / battery backed smoke / heat alarms in all circulation areas, high fire risk rooms, bedrooms and kitchens. Escape routes in open plan living kitchen areas allow occupants to escape past a 1.8 metre zone around the main cooking appliance.

Automatic opening vents (AOVs) of at least 1.5m² free area are provided in common circulation areas as a means of smoke control in escape areas. These AOVs are to be activated by means of an appropriate fire detection and alarm system.

Further detail will be included regarding fire safety measures as part of future Fire Safety Certificate applications for each block.



Figure 18 - Proposed fire tender access drawing (See drawing DCD-BMD-00-00-DR-C-1005 by BMCE submitted as part of this planning application for further detail)

3.8 | Outline Phasing

The phasing strategy has been considered at an early stage to inform the masterplan. The following criteria were used in evaluating the preferred approach:

Construction and Resident Safety

Safety is a primary consideration of the proposed phasing strategy. The phasing strategy intends to separate construction and residential traffic, avoiding crossover of vehicles wherever possible. Mitigation measures will be implemented to reduce any impact of noise and dust with clear separation provided between public areas and the locations within the builders' control.

Open Space & Landscape Design

The Masterplan proposes approximately 32% publicly accessible open space across the development. When establishing the preferred phasing approach, consideration was given to all options in maximising the quality and amount of public realm available to the new residents and the surrounding community. It is intended that high quality public spaces are delivered with each phase of development to compliment the communal and private spaces provided at the new residences.

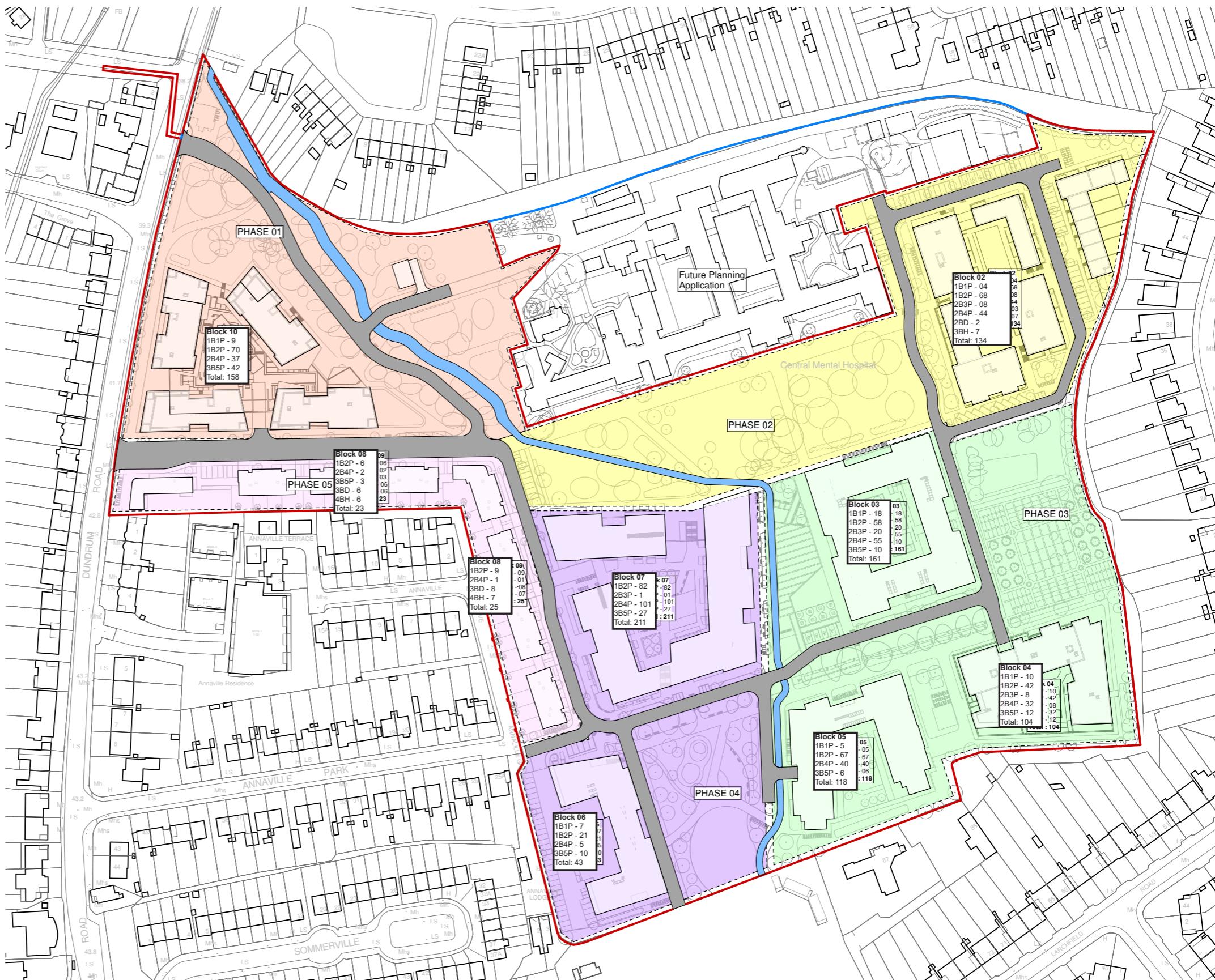
Utilities and Servicing

The provision of ESB, Water and Energy Utilities was an important consideration for the phasing plan. ESB substations are proposed per block with water and energy infrastructure coordinated across the masterplan for logical connections.

Visual Impact & Mitigation

The Masterplan has been developed with careful consideration of sunlight, daylight and visual impact to and from surrounding properties. This has been further developed when considering any potential phased impact both within the new neighbourhood and at surrounding properties. The boundaries between phases will be detailed to ensure a pleasant public realm throughout the construction period.

Please see Chapter 11 of Masterplan Report for further information.



3.9 | Sunlight & Daylight Analysis

A detailed Internal Daylight, Sunlight and Overshadowing Report has been prepared by GIA and is submitted as part of this application.

The results show that the proposed SHD scheme makes the most of the available daylight with 91% (2240 out of 2467) of the tested proposed habitable rooms meeting or exceeding the levels of Average Daylight Factor (ADF) recommended by the BRE which is considered excellent for a masterplan. The few shortfalls that occur are located in the more restricted façades and are mostly caused by the provision of projecting balconies, which inherently limit the daylight and sunlight ingress into the rooms below by obstructing their windows. The provision of private amenity space to all units is required and considered to outweigh the reduced daylight and sunlight amenity it causes. This is a common trade-off of different types of amenity (private amenity space v daylight and sunlight amenity) which occurs throughout urban locations and is generally deemed acceptable.

The communal amenity spaces at Blocks 03 and 07 performed relatively poorly for sunlight amenity at pre-application stage. Building heights were amended and the footprint of these blocks were adjusted to increase the size of the courtyards. GIA's current report indicates that the sunlight in these locations has improved. In any case, compensatory measures have been incorporated to mitigate impact to the residents. An internal amenity space is proposed at ground floor of Block 03 for the use of the residents. Block 10 has easy access to the surrounding open spaces at the existing entrance avenue and other green spaces in the vicinity.



4.0 | Proposal Summary

4.1 | Application Summary

Block No. Dwellings

Block 02	134
Block 03	161
Block 04	104
Block 05	118
Block 06	043
Block 07	211
Block 08	025
Block 09	023
Block 10	158

Total 977 Dwellings



4.1 | Application Summary

Block Naming

The proposed housing blocks onsite are numbered starting in a clockwise direction from the north-east. Due to the dual planning application strategy, the blocks closest to the existing buildings at the north of the site are not included in the SHD planning application. This is why the first Block numerically in this application is Block 02. Blocks 01, 11 and 12 will be included in the separate planning application to be submitted to DLRCC.



Blocks 08 and 09

Blocks 08 and 09 are named "blocks" however they do not resemble apartment blocks. The word "block" is used to refer to tranches of housing developed as a whole under the framework of the site-wide masterplan. Blocks 08 and 09 consist of low-rise houses, apartments and duplex apartments adjacent to the existing boundary wall. They share common unit layouts and are designed in harmony with each other however due to their contextual differences they are designated as two separate blocks. Block 08 is arranged on a north-south axis parallel with Annaville Grove. Block 09 is arranged on an east-west axis and is arranged parallel to the proposed access road and new entrance to Dundrum Road.

4.2 | Block 02

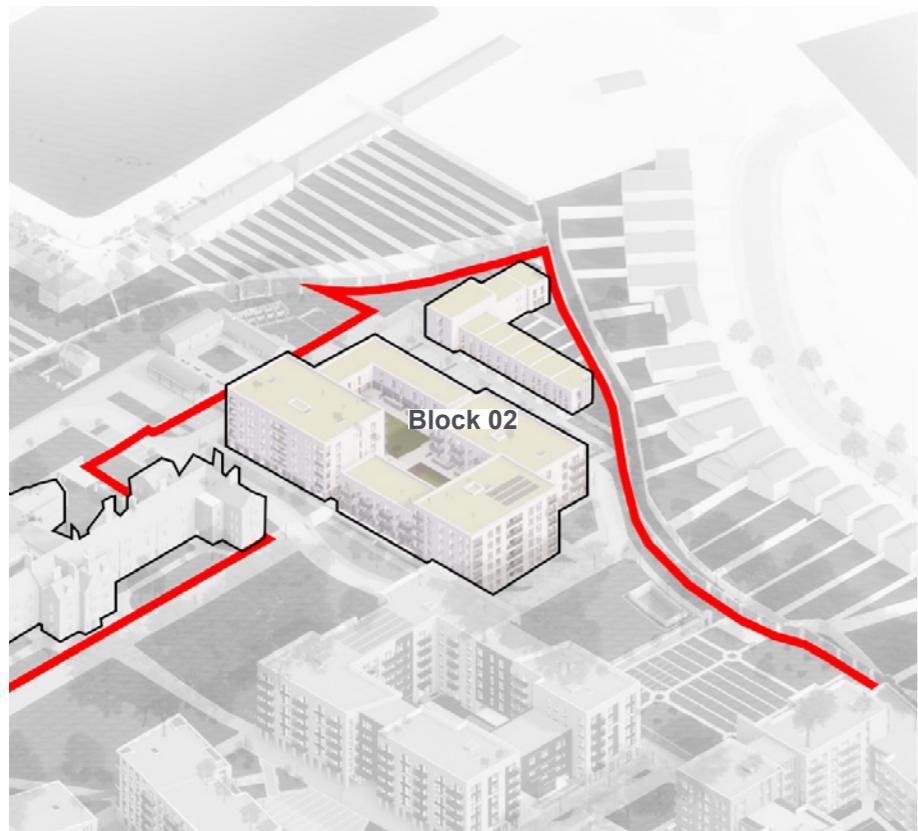


Figure 20 - Aerial view at Block 02

Description

Block 02 consists of new build houses and apartments adjacent to the Main Hospital Building and to the south of the farm buildings. The Design of Block 02 provides an opportunity for the adaption of the units for 'Age Appropriate' living and units incorporating Universal Design Principles. The proposed units comply with the 'DoHLG Design Standards for New Apartments' while enabling opportunity for future adaption allowing the residents to live in the community for longer. A medical centre is proposed at the north west of Block 02 accessible from ground level adjacent to the Main Hospital Building.

A homezone street is proposed between the houses at Block 02 and the apartments / duplexes with on-street parking provided close to front doors integrated with the landscape design.

Residential amenity is provided in a communal landscaped courtyard above parking. Block 02 is broken into a number of elements which reflect the geometry of the adjacent buildings stepping up from 2-storeys at the boundary to 6-storeys closer to the centre of the site.



Figure 21 - Homezone Street at Block 02



Figure 22 - Block 02 Courtyard

4.2 | Block 02

Key Statistics Block 02

Building Heights: 2-6 Storeys

Unit Breakdown:
7 Houses
3 Duplex Apartments
124 Apartments

Housing Typology: Houses, Duplex Apartments, Apartments

Other Uses: Medical (Ground Floor)

Comments: New build apartments overlooking The Walled Garden with Medical Centre at west adjacent to the Main Hospital Building.



Block 02
Typical Floor Plan

4.3 | Block 03



Figure 23 - View from The Walled Garden

Description

Block 03 consists of new build apartments adjacent to the walled garden and the new public plaza. Retail spaces and a restaurant are proposed at ground floor at the west side of Block 04 with a covered colonnade.

Residential amenity is provided partly in a communal landscaped courtyard with an internal amenity space at ground floor overlooking the central parkland.

The building heights at Block 03 is predominantly 6-storeys with a 4-storey element to the south to allow daylight into the courtyard. Plant areas are proposed at a lower ground level.



Figure 24 - View from the Public Plaza

4.3 | Block 03

Key Statistics Block 03

Building Heights: 4-6 Storeys (excl. Lower Ground Plant Areas)

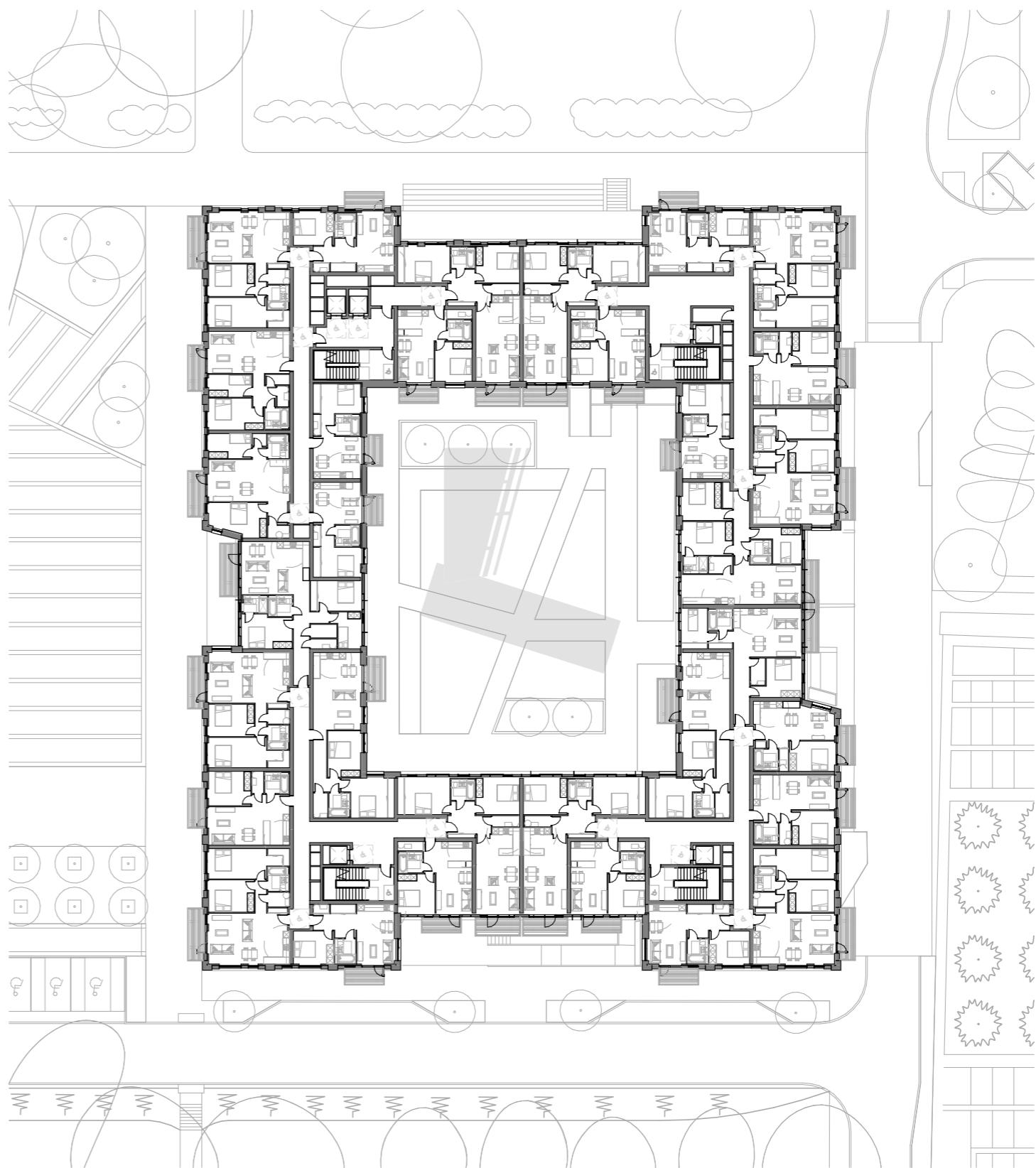
Unit Breakdown: 161 Apartments

Housing Typology: Apartments

Other Uses: Retail (Ground Floor)

Car Parking: 55 Spaces at Podium / Landscape

Comments: New build apartments overlooking The Walled Garden with non-residential uses adjacent to the proposed Plaza at west.



Block 03
Typical Floor Plan

4.4 | Block 04

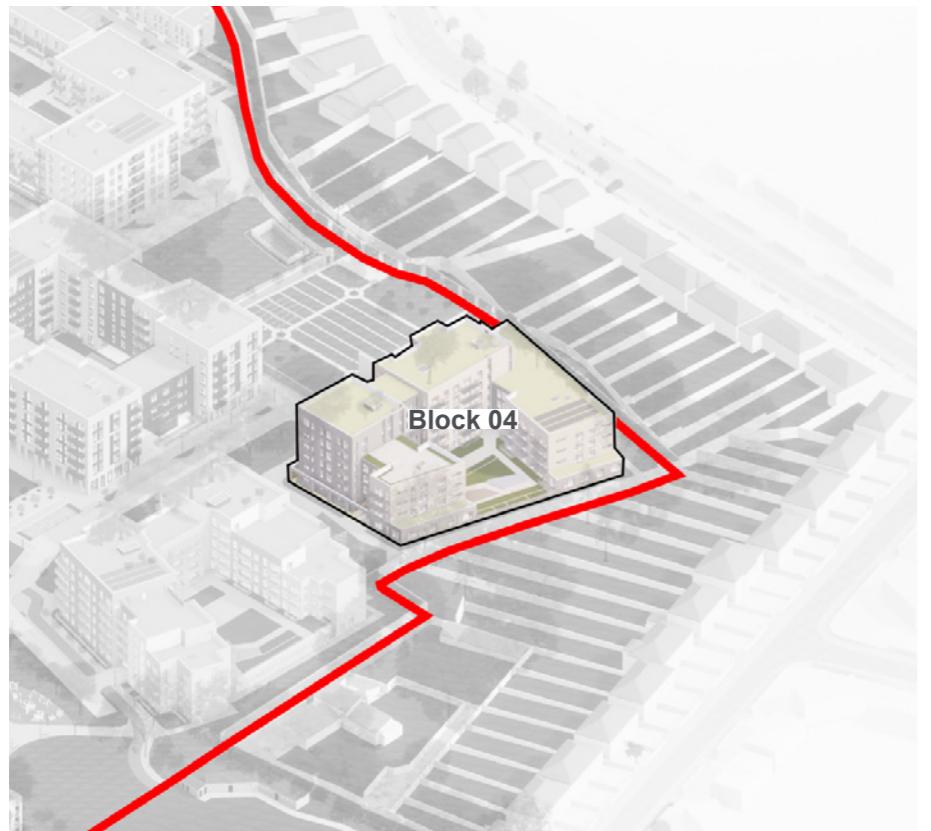


Figure 26 - View from The Walled Garden

Description

Block 04 consists of new build apartments located to the south of the Walled Garden.

Residential amenity is provided in a communal landscaped courtyard above parking and with a modest roof garden on the western element of the block overlooking the landscaped space between Block 04 and Block 05.

Block 04 steps from 4-storeys at the boundaries to existing neighbouring residences at Larchfield Road and Friarsland Road to a maximum height of 6-storeys at the north west corner, which relates to the massing at the adjacent section of Block 03. Clerestory windows are proposed to the south elevation of Block 04 to limit any overlooking from the proposed development.



Figure 25 - View from Eco-Corridor

4.4 | Block 04

Key Statistics Block 04

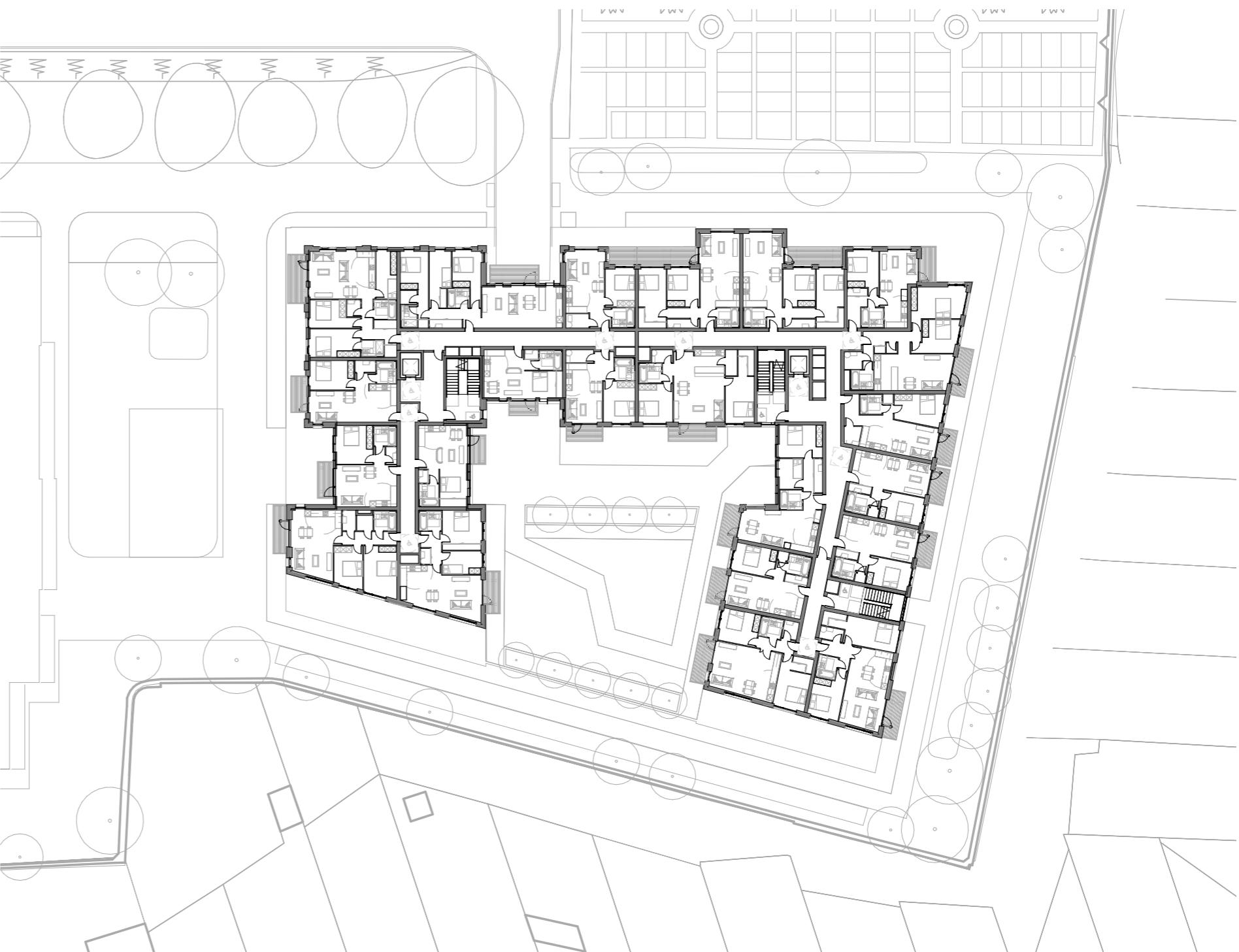
Building Heights: 4-6 Storeys

Unit Breakdown: 104 Apartments

Housing Typology: Apartments

Other Uses: N/A

Comments: New build apartments overlooking The Walled Garden, to the north / east of existing residences at Larchfield Rd. / Friarsland Rd.



Block 04
Typical Floor Plan

4.5 | Block 05

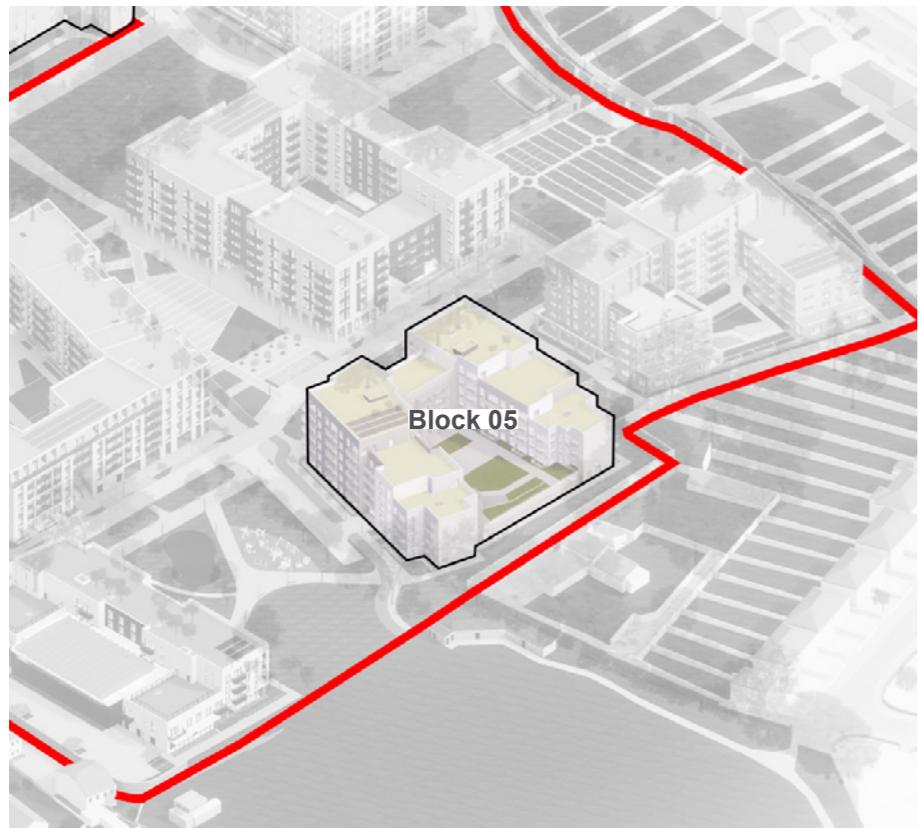


Figure 27 - View of Block 05 from Public Park

Description

Block 05 consists of new build apartments adjacent to the proposed Public Park to the south of the site adjacent to Rosemount Green.

Residential amenity is provided in a communal landscaped courtyard above parking.

Block 04 steps in height from 4-storeys at the south, adjacent to existing residences at Larchfield Road, to 5- and 6-storeys at the north elevation. Placement of windows has been carefully considered to mitigate any potential impact to the privacy of neighbours at Larchfield Road.



Figure 28 - View of Block 05 from the Public Plaza

4.5 | Block 05

Key Statistics Block 05

Building Heights: 4-6 Storeys

Unit Breakdown: 118 Apartments

Housing Typology: Apartments

Other Uses: N/A

Comments: New build apartments overlooking the proposed community park, to the north of existing residences at Larchfield Rd.



Block 05
Typical Floor Plan

4.6 | Block 06

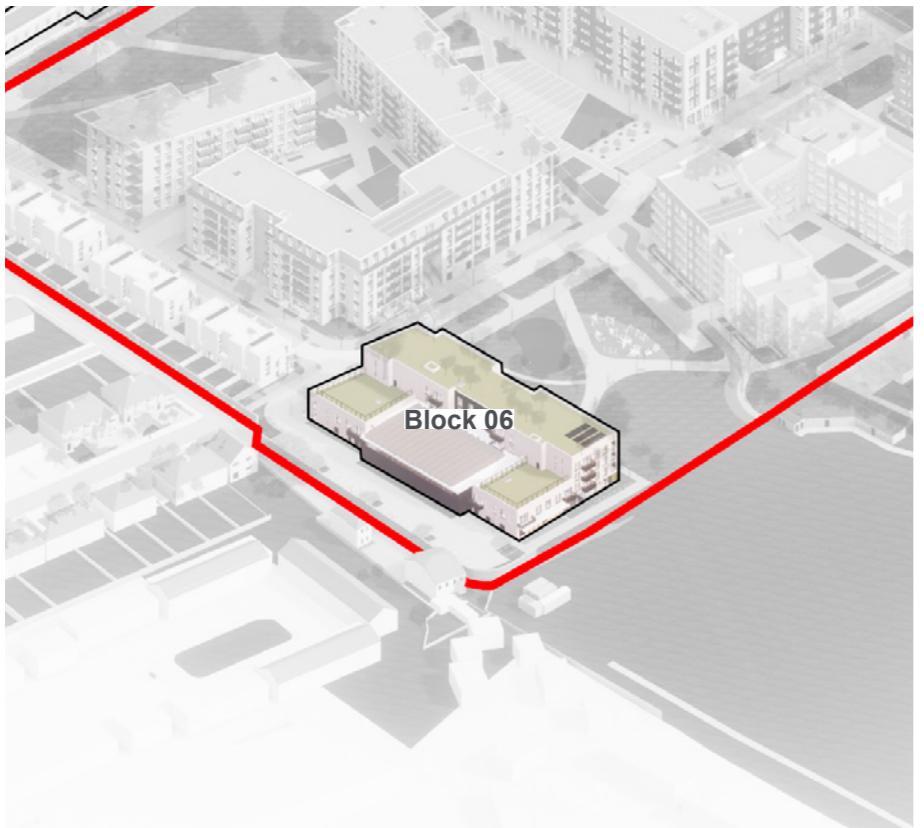


Figure 30 - View from the community park

Description

Block 06 consists of new build apartments to the west of the proposed community park. Extensive community facilities consisting of a multipurpose hall, community rooms and sports changing facilities are proposed at Ground and First Floor.

Residential amenity is provided at second floor level with the provision of two landscaped roof gardens accessed from the residential cores.

Block 06 steps from 2-storeys adjacent to the western site boundary to 4-storeys at the new communal park and is on-axis with the proposed street between Blocks 07 and 08. Balconies and window placement on the western facade have been designed to mitigate any potential impact to neighbouring properties at Annaville Grove.



Figure 29 - Internal view of Sports Hall

4.6 | Block 06

Key Statistics Block 07

Building Heights: 2-4 Storeys

Unit Breakdown: 43 Apartments

Housing Typology: Apartments

Other Uses: Community Uses
(Ground & First Floor)

Comments: New build apartments with community uses at Ground and First Floor overlooking the proposed community park, to the east of existing residences at Annaville Grove.



Block 06
Ground Floor Plan

4.7 | Block 07

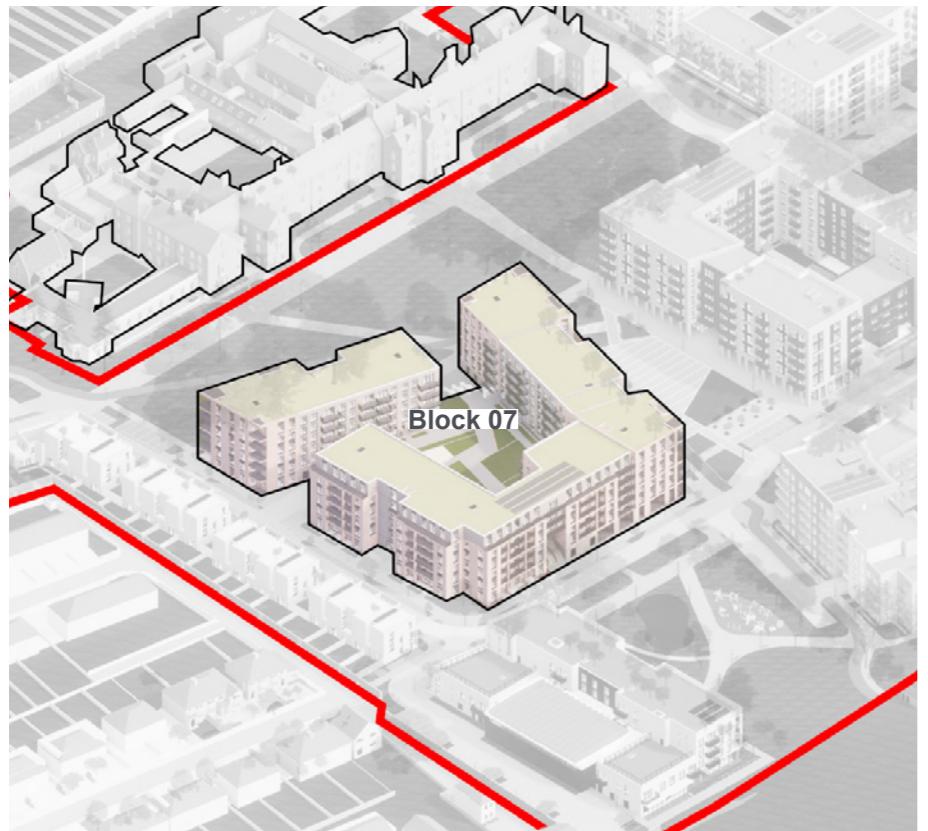


Figure 31 - Block 07 - South West Corner

Description

Block 07 consists of new build apartments adjacent to the proposed plaza with retail spaces at the east at Ground Floor.

Residential amenity is provided in a communal landscaped courtyard above parking.

Block 07 is primarily a 6-storey building with various set-backs and insets to break down the building's massing at primary locations.

The building's footprint was designed to take account of the existing mature trees at the Central Parkland while also addressing the Public Plaza and the streets to the west and south. A break has been provided in the north east corner of the block, providing views through to the facade of the main hospital building from the residential amenity areas.



Figure 32 - View from Block 07 Courtyard

4.7 | Block 07

Key Statistics Block 07

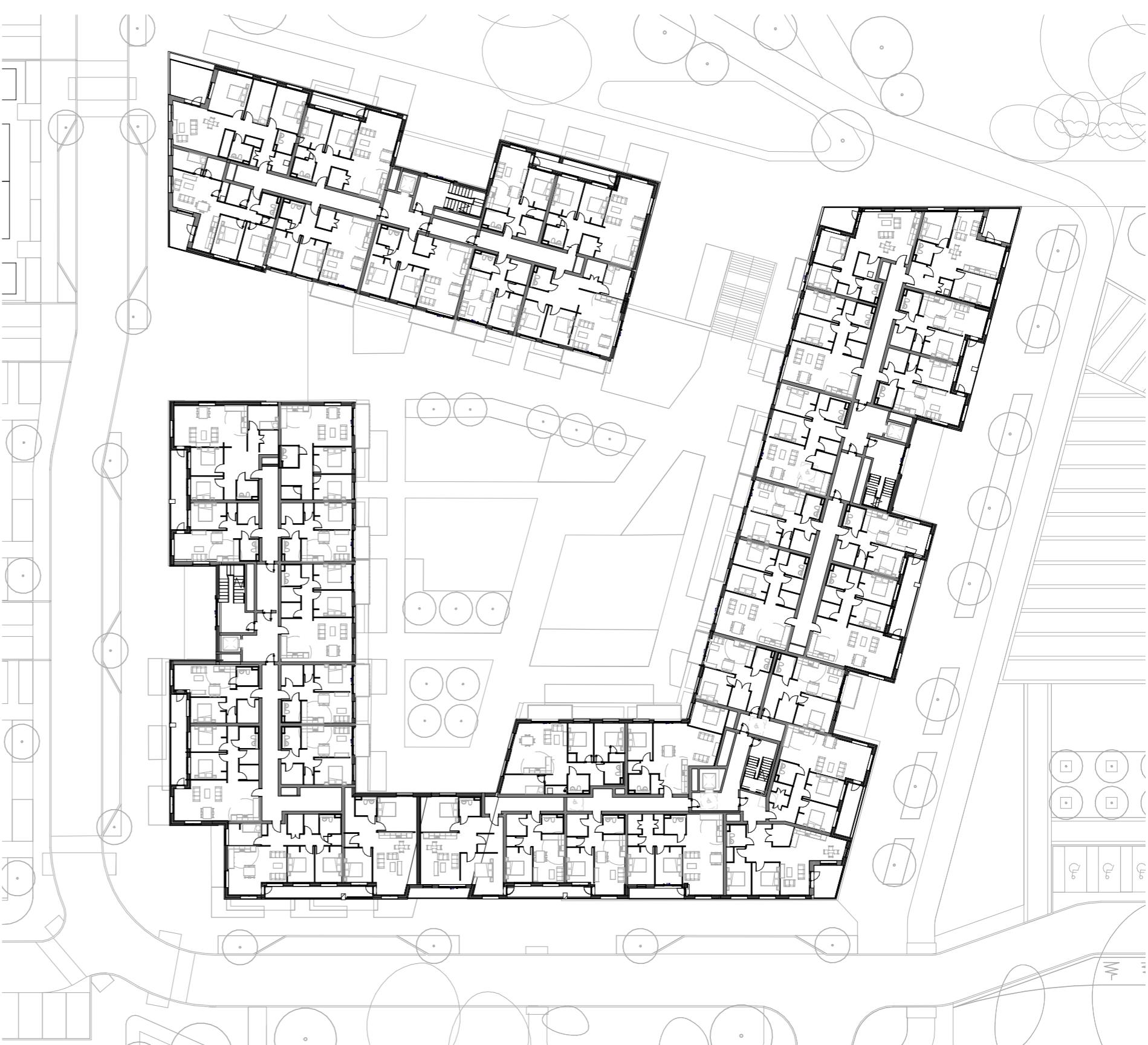
Building Heights: 4-6 Storeys

Unit Breakdown: 211 Apartments

Housing Typology: Apartments

Other Uses: Retail (Ground Floor)

Comments: New build apartments with non-residential uses adjacent to the proposed plaza at east.



Block 07
Ground Floor Plan

4.8 | Block 08

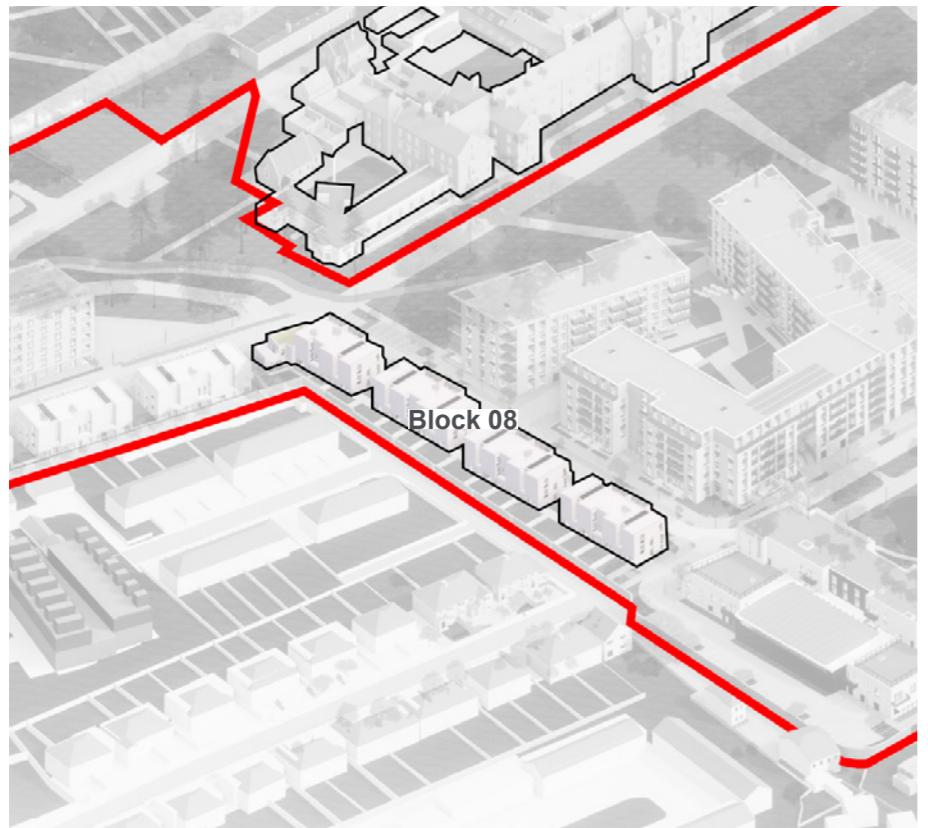


Figure 33 - View of Block 08 showing new pedestrian/cycle entrance in wall at Annaville Grove

Description

Block 08 consists of new build houses, apartments and duplex apartments along the western boundary of the site adjacent to Annaville Grove.

Residential amenity is provided at private rear gardens between Block 08 and the boundary wall at Annaville Grove in addition to balconies and terraces.

The scale of Block 08 allows the development to 'step down' in height from the centre of the site to the surrounding residences. The buildings step from 2- to 3-storeys along the length of the block, creating a sense of rhythm in the streetscape while also increasing light penetration and providing a pleasant private terraced area for the upper duplex apartments. The units are designed to avoid windows at the upper levels overlooking neighbouring properties and have visual screening to the terraces at upper levels to avoid overlooking at Block 07.



Figure 34 - View from street between Blocks 07 & 08

4.8 | Block 08

Key Statistics Block 08

Building Heights: 2-3 Storeys

Unit Breakdown:

8	Duplex Apartments
10	Apartments
7	Houses

Housing Typology: Duplex Apartments, Apartments, Houses

Other Uses: N/A

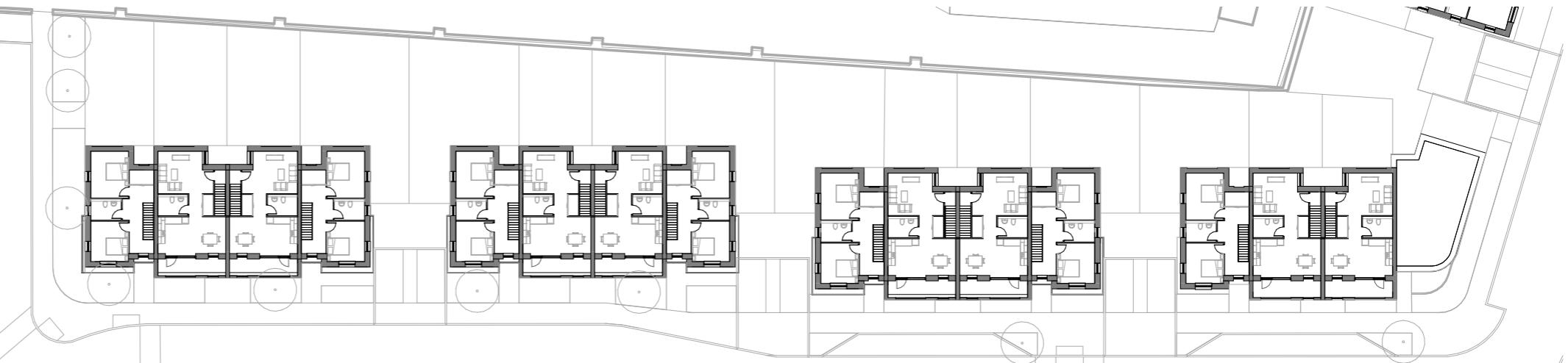
Comments: New build houses, apartments and duplex apartments to the east of existing residences at Annaville Grove.



Block 08
Ground Floor Plan



Block 08
First Floor Plan



Block 08
Second Floor Plan

4.9 | Block 09

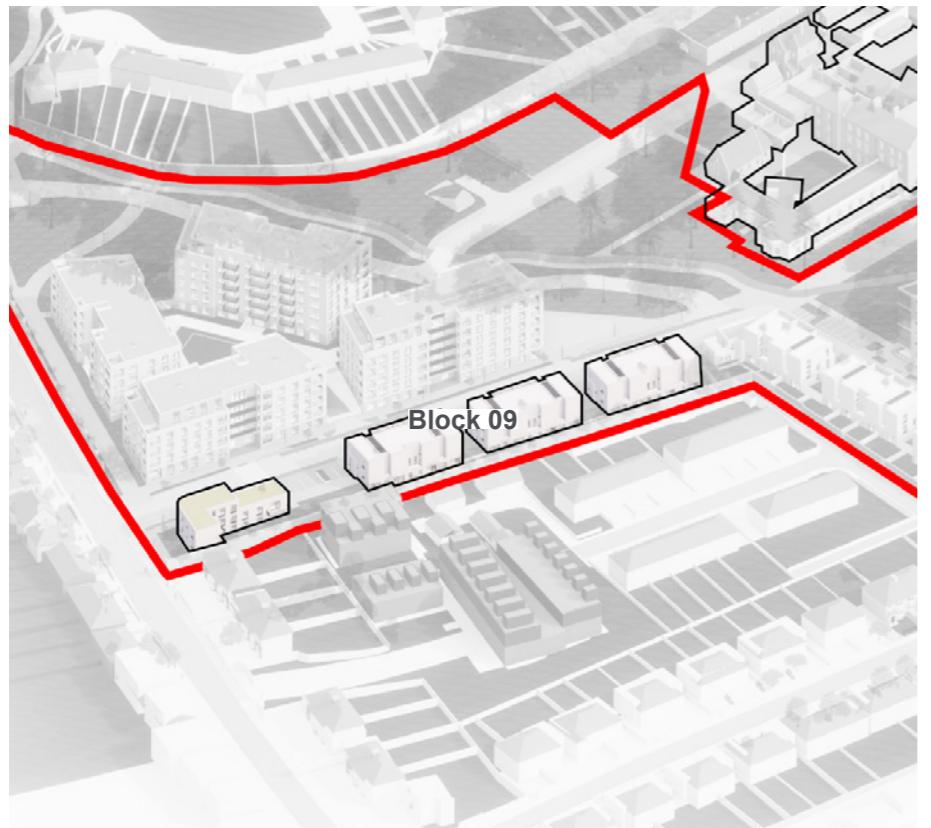


Figure 35 - Corner of Block 08 and Block 09

Description

Block 09 consists primarily of 3-storey housing with apartments and duplex apartments provided close to the proposed new entrance at Dundrum Road.

Residential amenity is provided at private rear gardens between Block 09 and the boundary wall at Annaville in addition to balconies and terraces.

The 2-3 storey massing of Block 09 allows light to penetrate from the south onto the proposed access route and also ensures no overshadowing occurs to Block 10. Located to the north of Annaville, the proposed massing ensures that the proposed development has a relationship with existing residences and ensures the visual amenity at Annaville is maintained. A landscaped pocket park has been provided north of an existing apartment building at Annaville .



Figure 36 - Streetscape between Block 09 and Block 10 to the north.

4.9 | Block 09

Key Statistics Block 09

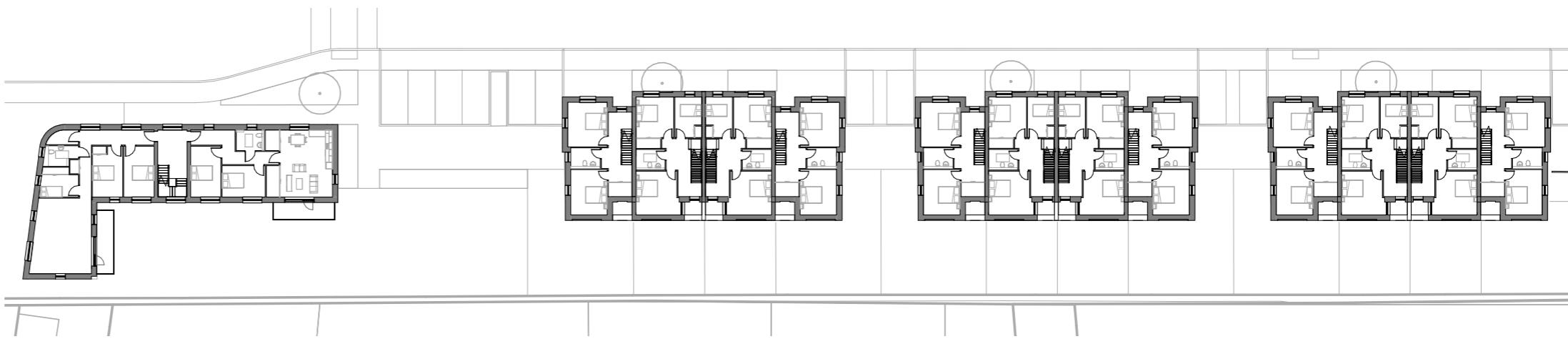
Building Heights: 2-3 Storeys

Unit Breakdown:
6 Houses
6 Duplex Apartments
11 Apartments

Housing Typology: Houses, Duplex Apartments, Apartments

Other Uses: N/A

Comments: New build houses, apartments and duplex apartments to the north of existing residences at Annsville Grove.



Block 09
Ground Floor Plan



Block 09
First Floor Plan



Block 09
Second Floor Plan

4.10 | Block 10

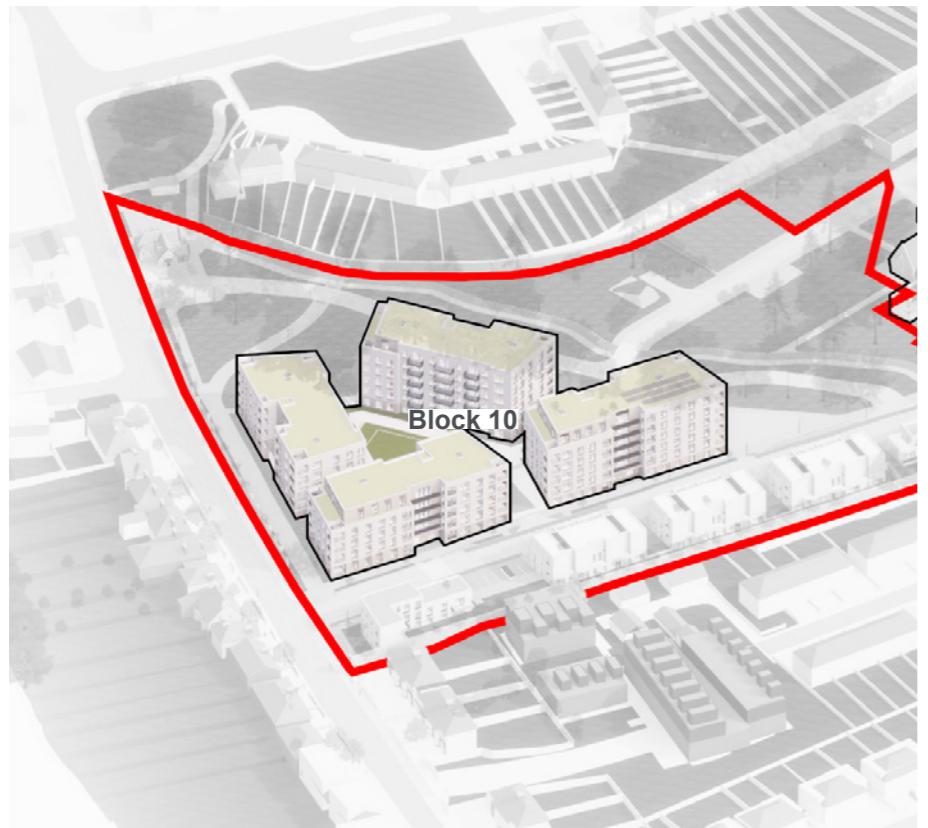


Figure 38 - Landscaped route between Block 10 and the boundary wall at Dundrum Road

Description

Block 10 consists of new build apartments adjacent to Dundrum Road, the existing tree-lined avenue and the proposed new access route into the site. A creche for the development is proposed at the eastern elevation with external play space proposed.

Residential amenity is provided in a communal landscaped courtyard with further external amenity provided at a landscaped roof garden.

Block 10 is formed as a number of brick elements stepping in height from 4-storeys to 6-storeys with contrasting tones of materials provided creating visual interest in the facade. The existing ground levels allow for three no. apartments to be proposed towards the existing entrance at Dundrum Road, creating a 7-storey element one location.



Figure 37 - Communal amenity at podium level, Block 10

4.10 | Block 10

Key Statistics Block 10

Building Heights: 4-6 Storeys (*Part 7-Storey)

Unit Breakdown: 158 Apartments

Housing Typology: Apartments

Other Uses: Creche (Ground Floor)

Comments: New build apartments with creche at ground floor, to the east of Dundrum Road.



Block 10
Typical Floor Plan

5.0 | Urban Design Manual Criteria

01 Context - How does the development respond to its surroundings?

"Any new development should improve on the existing situation, and at the same time be sensitive to its context." DEHLG - Urban Design Manual

Context - Positive Indicators noted by DEHLG:

- A development should seem to have evolved naturally as part of its surroundings
- Appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users
- Form, architecture and landscaping have been informed by the development's place and time
- The development positively contributes to the character and identity of the neighbourhood
- Appropriate responses are made to the nature of specific boundary conditions

The site is currently host to the Central Mental Hospital, a forensic mental health facility which developed from the mid-nineteenth century onwards, beginning with the construction of the extant asylum building which dates from the late 1840s. Plans are being advanced for the Central Mental Hospital to relocate from this site to a new facility at Portrane in north County Dublin in 2023.

The proposed development includes community spaces, retail facilities, a creche and significant publicly accessible open space across the site.

Placemaking is fundamental to the success of large scale developments and this is an important aspect of the creation of a new neighbourhood a Dundrum. A civic space is created within the centre of the development surrounded by retail units with new pedestrian connectivity proposed at the south, east and north.

The proposed neighbourhood centre is comprised of separate apartment blocks ranging from 2-6 storeys (excl. limited lower ground areas) and a number of two / three storey duplex apartments and houses arranged around the site. The development has been organised to maintain and enhance the existing green spaces, maximising the publicly accessible open space, while providing communal amenity spaces at each block.

The surrounding area is predominantly comprised of 2-3 storey housing. Higher densities of living, along with an increased mixture of uses, will be essential in facilitating the development to grow as a 'distinctive urban centre' and to create a sense of place within Dundrum.

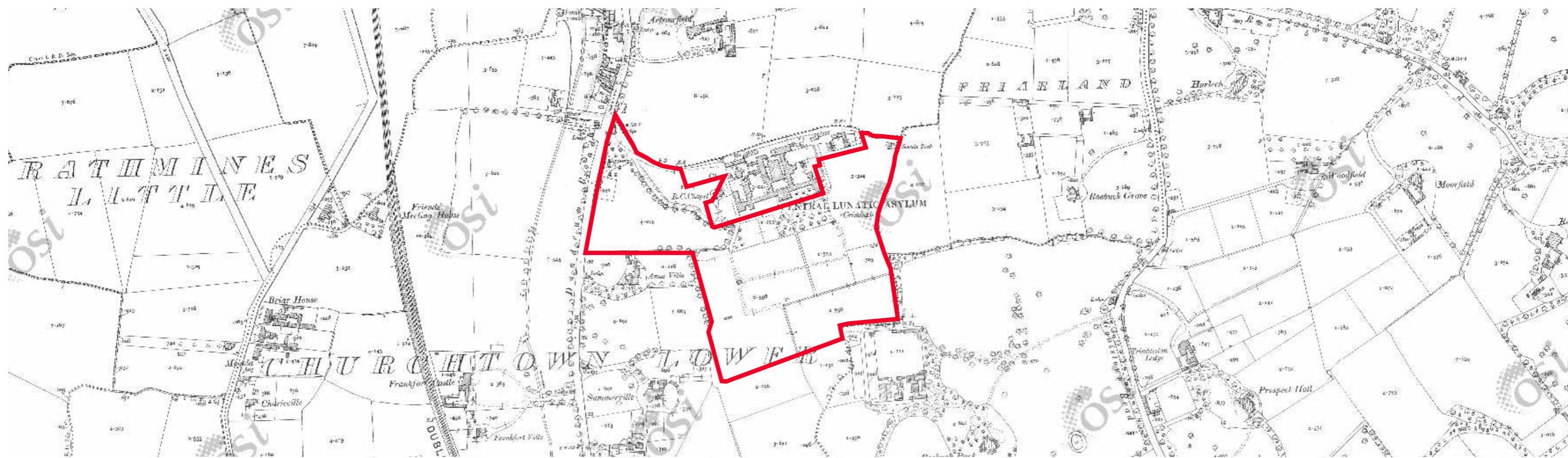


Figure 39 - 1888-1913 OSi

01 Context - How does the development respond to its surroundings?

A new pedestrian, cyclist and vehicular connection is proposed at Dundrum Road with sections of the wall to be removed to open the site for physical and visual connection back to the site. Openings or interventions are proposed only at those locations which will facilitate inclusive permeability and encourage access. The proposed design aims to acknowledge the scale and materiality of the wall at Dundrum Road while offering new visual and physical connections to the hospital and landscape.

New openings in the boundary wall are also proposed at Annaville Grove (West), Rosemount Green (South) and at Mulvey Park (North) which allow the local community to access the significant open space and amenity within the Central Mental Hospital (CMH) site. The new openings at Annaville Grove and Mulvey Park will be of a modest scale and are purely for pedestrian and cyclist access. At the site boundary to Rosemount Green, a more significant length of wall will be removed to enable pedestrian and cyclist permeability through the site.

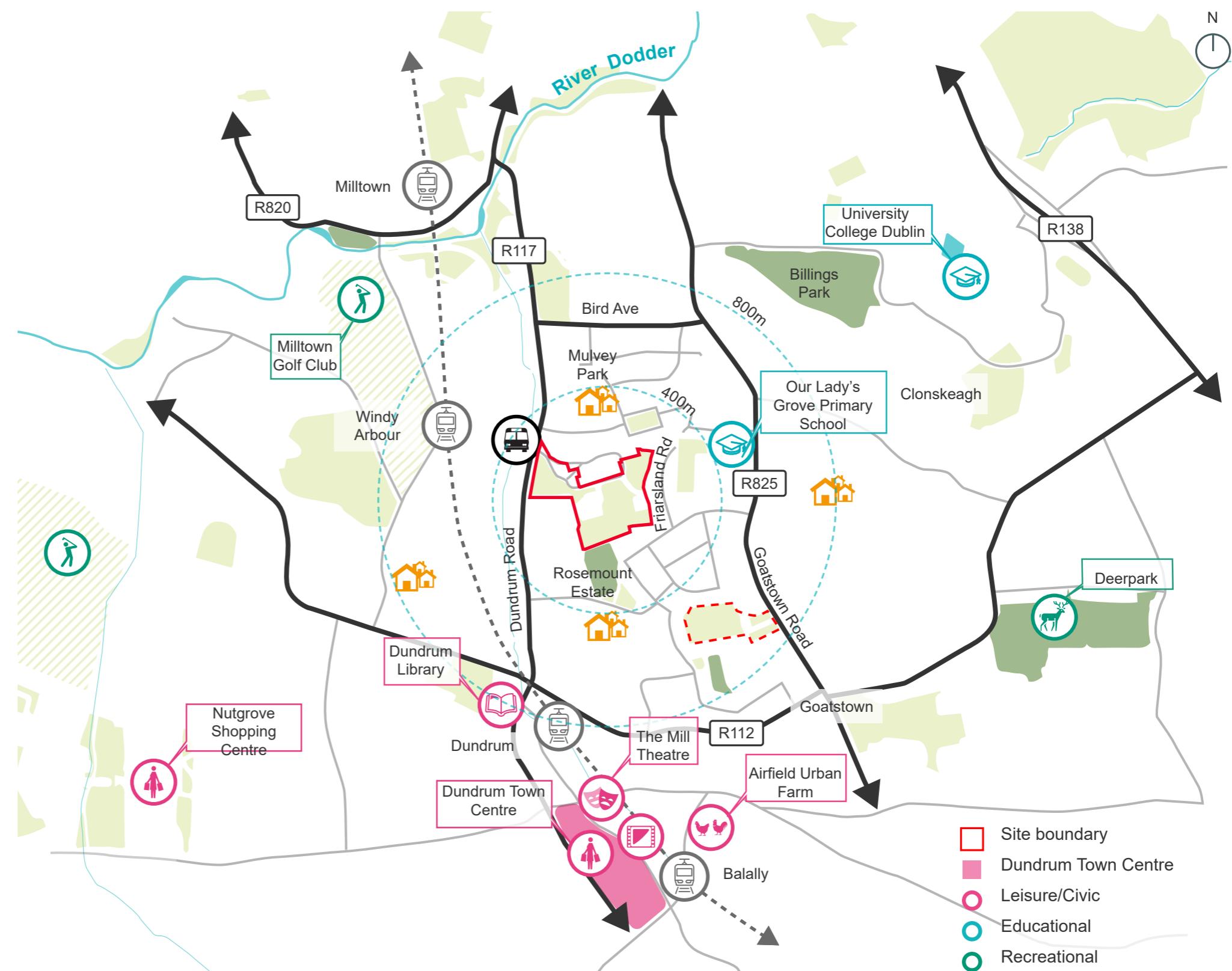


Figure 40 - Site Analysis

01 Context - How does the development respond to its surroundings?

Building heights have been designed to step down towards neighbouring properties with the tallest buildings located in the centre of the site >100m away from the nearest neighbouring residences. Balcony and window design have been considered to protect the amenity of existing residences while providing new residences with adequate sunlight and private amenity.

In addition to external factors, the masterplan has been designed to maintain and enhance the existing site conditions including:

- Maintaining sense of openness within the site with extensive open spaces.
- Building footprints designed to retain as many significant trees as possible.
- Pedestrian / cyclist route separated from existing tree-lined Avenue to mitigate impact to trees.
- Boundary walls opened at locations to enhance permeability between the site and its local context.



Figure 42 - Building footprints set out to maintain openness and existing landscape.

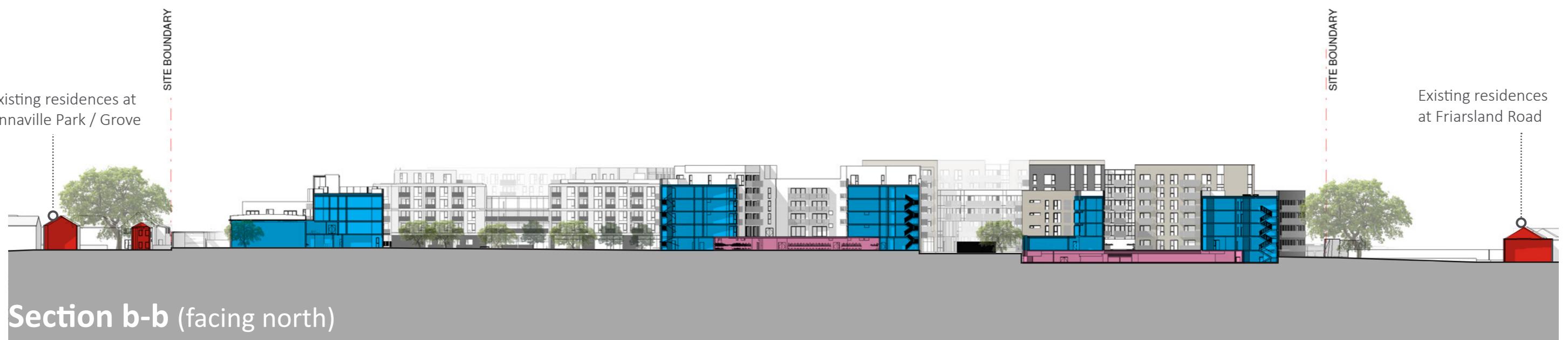


Figure 41 - View from the Walled Garden - Building height stepping down towards boundary.



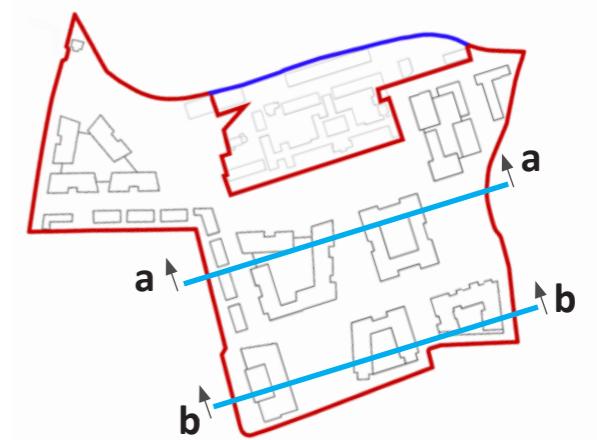
Figure 43 - Block 05 south facade designed to limit overlooking to the south.

01 Context - How does the development respond to its surroundings?



The taller proposed building elements are located away from the nearest neighbouring residences. The proposed heights are at their lowest adjacent to the site boundary, including 2/3 storey houses to the west and north of the site.

- Existing Buildings (Outside Site)
- Proposed Buildings
- Proposed Parking



02 Connections - How well connected is the new development?

"Successful neighbourhoods tend to be well connected to places, facilities and amenities that help to support a good quality of life. Such places include high quality open space and landscapes, leisure opportunities, shops – both for convenience and comparison goods, schools, places of worship, health centres and places of employment."

When choosing which area to live in, most people will choose a neighbourhood that permits easy or close access to the places that they need or like to visit on a regular basis. So the quality and sustainability of a neighbourhood can be measured by both how well it is connected to important amenities, and how pleasant, convenient and safe those links are to use."

DEHLG - Urban Design Manual

Connections - Positive Indicators:

- There are attractive routes in and out for pedestrians and cyclists
- The development is located in or close to a mixed-use centre
- The development's layout makes it easy for a bus to serve the scheme
- The layout links to existing movement routes and the places people will want to get to
- Appropriate density, dependent on location, helps support efficient public transport

The site is well served by existing public transport infrastructure, benefiting from its proximity to the LUAS Green line whose nearest station is located approximately 450m west of the site at Windy Arbour.

Dublin Bus network infrastructure includes stops at Dundrum Road, Goatstown Road (R825), Churchtown Road and Taney Road (both R112) and it is envisaged that local capacity and access will be further enhanced over the coming years under the BusConnects programme which is now being implemented.

An analysis of the public transport facilities has been included in the TTA submitted by ILTP as part of this application.

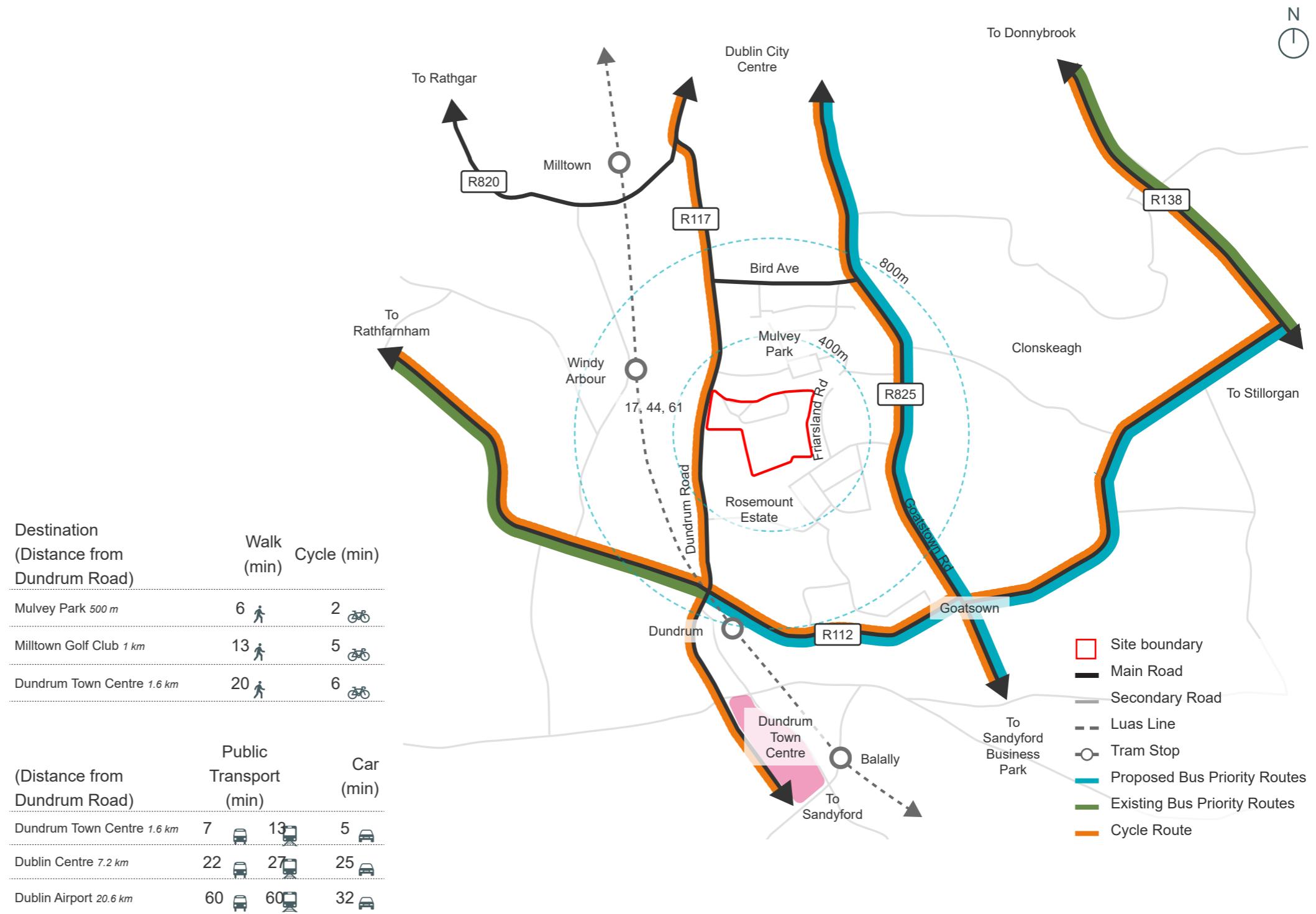


Figure 44 - Indicative Public Transport Connectivity

02 Connections - How well connected is the new development?

The site is also well placed with regard to amenities and facilities including shops, places of education, recreation and work.

The application proposes a number of direct cyclist and pedestrian openings leading from the surrounding residential areas straight to the site. This will allow the new centre to become a focal point within the community and this will be key to creating a successful new neighbourhood.

Vehicular routes within the site are kept to the periphery allowing the public plaza and the interlinked green spaces to prioritise pedestrians and cyclists. Vehicle access through the plaza space will be prohibited except for fire tender and service delivery vehicles at controlled times.

The public realm is designed to reduce the impact of vehicle traffic as far as is practical in order to prioritise pedestrian and bicycle use. The majority of car parking is located within covered landscaped 'podiums' with residential or commercial units placed around the perimeter to 'activate' the building edges.

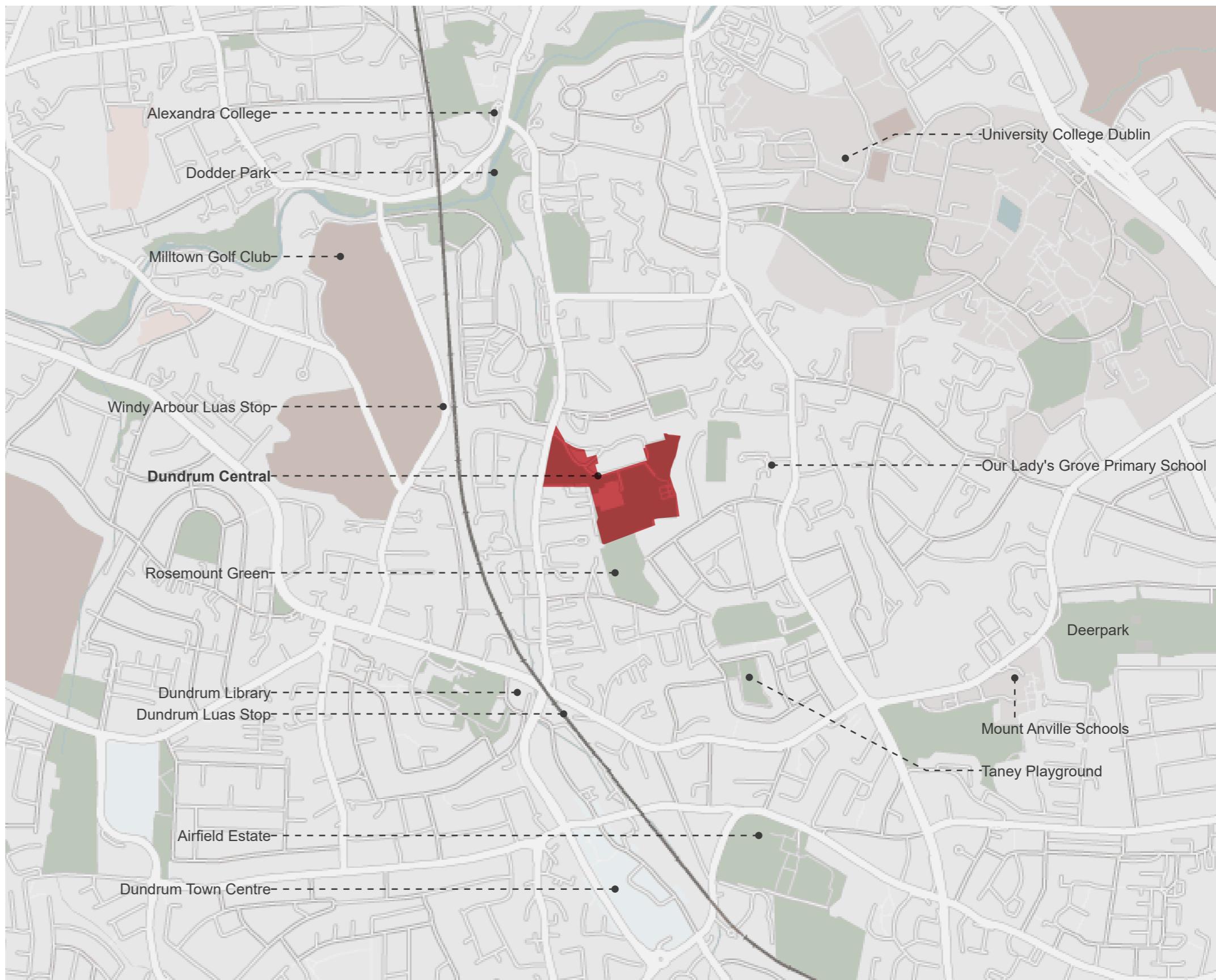


Figure 45 - Site Connectivity

02 Connections - How well connected is the new development?



Figure 46 - Site Plan highlighting boundary wall in white. To increase site permeability and reduce the imposing character of the wall sections will be removed or reduced.



Figure 47 - Viewpoint 1: Main entrance at Dundrum Road showing imposing nature of boundary wall as it exists. This access point will be kept with sections of the wall removed.



Figure 48 - Viewpoint 2: Rosemount Green. The boundary wall at this location is to be removed to allow local pedestrian and cycle access through the CMH site.



Figure 49 - Dundrum Road Wall illustrative diagram.

02 Connections - How well connected is the new development?



Figure 50 - Urban Ecology diagram - The site forms part of a network of connected green spaces in the local area.

03 Inclusivity - How easily can people use and access the development?

"Inclusive design is defined as that which meets the needs of all users, regardless of age, gender, race or sensory and mobility abilities. In its broadest sense, it also means creating places that can be enjoyed by people from all cultural and socio-economic backgrounds."

DEHLG - Urban Design Manual

Inclusivity - Positive Indicators:

- New homes meet the aspirations of a range of people and households
- Design and layout enable easy access by all
- There is a range of public, communal and/or private amenity spaces and facilities for children of different ages, parents and the elderly
- Areas defined as public open space that have either been taken in charge or privately managed will be clearly defined, accessible and open to all
- New buildings present a positive aspect to passers by, avoiding unnecessary physical and visual barriers

The proposed scheme creates a series of public open spaces and residents' communal amenity across the site.

The new public space provides a level surface linking the various commercial units with a variety of seating and landscaping provided creating an attractive streetscape. The surrounding residential buildings enclose the new public space whilst also allowing direct sunshine to cover portions of the square during varying parts of the day.

Routes are provided to all of the open spaces within the site with finishes, lighting and slopes appropriate for users of all abilities. Seating is provided throughout the landscape to allow users to rest as they make their way through the site.



Figure 51 - Seating integrated with the landscape design across accessible routes.



Figure 52 - A new safe pedestrian and cycle route separated from vehicles at the existing tree-lined Avenue

03 Inclusivity - How easily can people use and access the development?

Universal Design Homes

"A UD Home can adapt and change with us by factoring in at the outset key design features that benefit the quality of life of everyone in the home. The application of Universal Design thinking to our homes recognises our differences and accommodates them through the integration at the outset of the design and construction stages of:

- Flexibility and ease of adaptability to meet people's changing needs over time in a cost effective way;
- Sustainable design to improve comfort and energy efficiency; and
- Smart technologies to enable ease of living independently for longer."

- Universal Design Guidelines for Homes in Ireland (2015).

The Access Statement prepared by Reddy Architecture + Urbanism and OHAC submitted as part of this planning application demonstrates compliance with TGD Part M. However, the masterplan recognises the need to cater for flexibility based on the current and future needs of the community.

A number of dwellings are particularly suited to incorporate Universal Design features based on the following criteria:

- Apartment size and potential for adaptation.
- Location in respect of access to site or car parking in the immediate vicinity for users with reduced mobility.
- Ease of access to front door.
- Ease access to adjacent amenities.
- Areas free of structure allowing flexibility.

Block 02
Block 04
Block 06
Block 10

As the project develops through detailed design, the fit-out of the dwellings will be reviewed against the needs of the future residents with Universal Design features included as appropriate.



Figure 53 - Proposed Plaza Space



Figure 54 - Photomontage of Public Park at Block 06

03 Inclusivity - How easily can people use and access the development?

Block 02 - Age Friendly Living

During the masterplan process, Block 02 was identified as a location particularly suited to cater for Age Friendly Living. A mixture of own-door accessible one- and two-bedroom apartment units and three bedroom houses have been located on the street at the eastern side of Block 02.

Block 02 provides on-street parking in close proximity to the front doors of the proposed dwellings and is encircled by a homezone type street. The existing farm buildings at Block 01 are also in close proximity and it is envisaged that similar smaller-scale housing typologies are proposed at Block 01 in a future Planning Application.



Figure 55 - Homezone at Block 02



Figure 56 - Courtyard at Block 02

04 Variety - How does the development promote a good mix of activities?

"The most successful - and sustainable - communities are the ones that contain a good variety of things to do, see and enjoy. For larger scale developments, this means providing a good mix of uses, housing, facilities and amenities that help to engender a successful community. For smaller infill developments, it means ensuring that the proposed uses and housing types complement those that already exist so that a balance is struck."

DEHLG - Urban Design Manual

Variety - Positive Indicators:

- Activities generated by the development contribute to the quality of life in its locality
- Uses that attract the most people are in the most accessible places
- Neighbouring uses and activities are compatible with each other
- Housing types and tenure add to the choice available in the area
- Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood

The CMH site is currently inaccessible to the local community. The proposal to open up the site with a new entrance onto Dundrum Road and new pedestrian and cyclist connections at the north, south and west provides a significant variety of spaces and activities for both the new residents, and the residents of the surrounding neighbourhoods.

The proposed development will establish the site as a major part of a neighbourhood centre for Dundrum / Windy Arbour. A range of new retail and services will support the newly established community, which will in turn will contribute to the vitality of the area while complimenting the existing uses in the area.

In a successful neighbourhood, a mixture of uses are required to facilitate the evolution of a vibrant and attractive urban environment. The facades onto the streets and the public space will look to provide connectivity between the inside and outside and contain a range of functions that bring animation to the building frontages with passive surveillance of these spaces. This is achieved in the proposed scheme in a number of ways:

- The proposed retail areas facing onto the plaza will provide activation of the public space and street frontages from early morning through to the late evening at these locations
- The food and beverage facilities face onto the public square. This will allow these functions to make use of the square by providing outdoor seating areas that maximise the availability of direct sunlight during the day.
- The commercial spaces will be designed to be flexible in hosting a range of local retail or services such as shops, hairdressers, cafe's etc, that will support the local community and allow the development to become a destination.
- The community facilities proposed at Block 06 allow for a range of uses at various times of the day and are complimented by the residential units at ground and upper floors.
- Ground floor apartments will provide passive surveillance over both the residential amenity areas and public spaces through non working hours of the day.



Figure 59 - Retail Spaces at Block 07



Figure 57 - Restaurant at Block 03



Figure 58 - Community Spaces at Block 06

04 Variety - How does the development promote a good mix of activities?

The community spaces at Block 06 can be used to host a programme of community based events. It serves as a venue for meetings, conferences and events for local residents' associations, schools and sports clubs amongst others.

The activation of the public space and its pedestrianisation will assist in encouraging pedestrian movement through the development and connectivity with the surrounding areas. This in turn has a positive impact on the vitality of the space and the perceived security of the public realm.

Every opportunity has been taken to animate and open up the site to Dundrum Road. With the removal of sections of the wall, a greater sense of openness is provided with new views created from Dundrum Road into the landscape and back to the existing hospital. A small cafe is also proposed at the gate lodge.

The development will offer an alternative to suburban housing the locality that can appeal to variety of future residents including families, students, professionals and those looking to downsize. The new development offers the opportunity to live in well managed apartments that benefit from excellent landscaped amenities yet provide the convenience of a neighbourhood centre on their doorstep.

Legend

Creche	
Retail / Restaurant	
Medical	
Community	



Figure 60 - Non-residential uses at ground floor level

04 Variety - How does the development promote a good mix of activities?



Figure 61 - View of Public Plaza looking west.

05 Efficiency - How does the development make appropriate use of resources, including land?

"High-level Government policy in the shape of the NSS and the Climate Change Strategy establishes the importance of reducing the energy requirements and greenhouse gas emissions associated with residential development.

There are two main strands to designing places for climate change – mitigation and adaptation. This Criterion seeks to cover mitigation, which addresses how places can be designed to reduce the impact of development on climate change." DEHLG - Urban Design Manual

Efficiency - Positive Indicators noted by DEHLG:

- The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design
- Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems
- Buildings, gardens and public spaces are laid out to exploit the best solar orientation
- The scheme brings a redundant building or derelict site back into productive use
- Appropriate recycling facilities are provided

The CMH site currently consists of the Main Hospital Building and a number of associated buildings and small temporary structures, and the general pattern of other development in the area has been predominantly low density. A higher density development will provide increased support for the economic viability of the local retail facilities and services while establishing a new neighbourhood centre with a distinct identity. The proposals also create an efficient use of land while maintaining the landscape character of the site.

When planning the site a number of site layout options were explored for the orientation of buildings and the routing of the public space through the site. The site layout as developed provides a series of public and semi-private outdoor spaces with excellent solar access whilst still allowing buildings to step up in height from the site perimeter towards the centre.

The public and semi-private spaces are pedestrian dominated and this is achieved by placing most car parking under podiums.

When reviewing the efficiency of the development on the site and its density we have analysed the design against the Guidelines for 'Urban Development and Building Heights' the key criteria as set out below:

At the scale of the relevant city/town:

- *The site should be well served by public transport with high capacity, frequent service and good links to other modes of public transport:*

The subject site is located approx. 450 meters (less than 10 minute walk) from Luas Green Line Windy Arbour with services at 3 minute intervals during peak hours. As well as providing a direct route into Dublin city centre, the Luas provides a direct route into Dundrum Town Centre, albeit just one stop to the south.

It is also less than a 10-minute walk from Dublin Bus Routes on Dundrum Road with services into Dublin city centre at hourly intervals.

Further to this, the site is less than a 15 minute walk from Dublin Bus Routes on Goatstown Road which provides services into Sandyford Business District (a significant employment location) at 20 minute intervals.

Notably, the 142 Dublin Bus Route provides services into UCD from Bird Avenue which is within a 10 minute walk of the site.

We therefore conclude that the subject site is well connected by public transport that provides frequent services to key employment and educational destinations, as well as providing access to surrounding social infrastructure. The public transport options in close proximity connect the site to a wide range of key destinations.



Figure 62 - View of public plaza



Figure 63 - View from public plaza looking towards Central Parkland

05 Efficiency - How does the development make appropriate use of resources, including land?

- Development proposals incorporating increased building height, including proposals within architecturally sensitive areas, should successfully integrate into / enhance the character and public realm of the area, having regard to topography, its cultural context, setting of key landmarks, protection of key views. Such development proposals shall undertake a landscape and visual assessment, by a suitably qualified practitioner such as a chartered landscape architect:

The proposed development includes a series of new buildings planned in a Masterplan context across the 9.6 ha extent of the site ranging in height from 2-6 storeys. The prevailing height of the subject proposal is predominantly 4-6 storeys. The design strategy locates lower heights around the edge of the site (2 and 3 storeys) in closest proximity to existing residential properties in order to minimise potential impacts on the residential amenities of these properties in relation to overlooking,

daylight and sunlight impact, overshadowing and overbearing, with greater heights located towards the centre of the site. The topography of the site has also been used, where possible, to minimise visual impact yet deliver buildings to an appropriate height and scale. It is considered that this approach successfully integrates the new development into the area and whilst clearly comprising a new and higher density form of development than the prevailing two storey housing, it will not give rise to significant amenity or visual impacts as evidenced by the enclosed Townscape/ Landscape and Visual Impact Assessment (chapter 13 of the EIAR), prepared by Macroworks and Daylight, Sunlight and Overshadowing Assessments undertaken by GIA. This assessment considers the visual impact of the development proposed when viewed from 17 no. viewpoints from a range of locations external to the site.

- On larger urban redevelopment sites, proposed developments should make a positive contribution to place-making, incorporating new streets and public spaces, using massing and height to achieve the required densities but with sufficient variety in scale and form to respond to the scale of adjoining developments and create visual interest in the streetscape:

The proposed development will deliver a new mixed use urban quarter on a large former institutional infill site. The proposed development is designed around a series of new internal streets and spaces or character areas, which serve to create a diverse and animated development. The scheme will deliver a gross density of 102 units per ha (or c. 150 units per ha in net density terms) through the provision of a range of architectural styles and contrasting scales within the development. As noted within the TVIA contained at Chapter 13 of the EIAR, the townscape impact of the development is considered to be moderate/positive.

At the scale of district/ neighbourhood/ street:

- The proposal should respond to its overall natural and built environment and make a positive contribution to the urban neighbourhood and streetscape:

The proposal is designed to maintain the site's open character through the provision of significant public open space and to retain as much of the site's valuable natural environment as possible including important features such as the walled garden and the mature trees on the site. The landscape strategy for the lands will enhance and complement the adjoining existing public open space (Rosemount Green) and promote the provision of pedestrian and cycle routes through the site. In addition, the site's existing built environment is also incorporated into the proposed development through sensitive interventions and placement of buildings in the immediate setting of the Proposed Protected Structure complex, which will be adapted and re-used as an enterprise/



Figure 64 - Section through residential amenity space and public space

05 Efficiency - How does the development make appropriate use of resources, including land?

innovation centre as part of the wider Masterplan proposal. Intervention to the site's iconic boundary wall represents a balance between achieving increased permeability and connectivity into the surrounding area and a sensitive approach aimed at retaining the vast majority of an important heritage asset.

- The proposal should enhance the urban design context for public spaces and key thoroughfares, thereby enabling additional height in development form to be favourably considered in terms of enhancing a sense of scale and enclosure while being in line with the requirements of "The Planning System and Flood Risk Management – Guidelines for Planning Authorities" (2009).*

The proposed development will deliver a series of significant new public open spaces that can be accessed by a range of thoroughfares primarily by pedestrians and cyclists. The creation of these spaces enables buildings predominantly ranging in height from 2 – 6 storeys to be established on the site. The framing of these significant public spaces by buildings in this height range provides an appropriate sense of scale and enclosure in what is a very significant 11.39 ha (overall) landholding.

- The proposal should make a positive contribution to the improvement of legibility through the site or wider urban area within which the development is situated and integrates in a cohesive manner:*

The proposed development, which will introduce a new residential neighbourhood together with commercial uses will be a new destination for the future occupiers of the development and the existing community. To ensure connectivity and accessibility between the proposed development and existing surrounding streets, the proposal includes a number of new pedestrian and cyclist access points which enable connection into the existing network.

- The proposal positively contributes to the mix of uses and/ or building/ dwelling typologies available in the neighbourhood:*

The proposed development will deliver a good range of uses including residential, crèche, café, restaurant, retail, medical and community. These uses will all contribute to the range of services available to the existing area and future neighbourhood being created on site. In terms of dwelling typologies, the proposal will deliver a range of residential unit types that will serve a wide range of household types.

At the scale of the site/building:

- The form, massing and height of proposed developments should be carefully modulated so as to maximise access to natural daylight, ventilation and views and minimise overshadowing and loss of light (Refer to accompanying report):*

The development is designed to ensure that there will be no significant overshadowing or loss of daylight or sunlight to adjoining residential properties. Heights are modulated throughout the scheme to minimise impact on access to sunlight or daylight on adjoining dwellings. The enclosed Daylight and Sunlight – Impact on Neighbouring Properties Report and Transient Overshadowing Assessment, both prepared by GIA, provides further details in this regard.

- Appropriate and reasonable regard should be taken of quantitative performance approaches to daylight provision outlined in guides like the Building Research Establishment's 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2:2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting'.*

Assessment under the BRE Guidelines has been carried out to demonstrate that the acceptable levels of daylight and sunlight have been achieved for the dwellings and amenity spaces in the proposed development (Refer to GIA report for further details).



Figure 65 - Landscape to the south of public plaza, looking towards Block 03.

05 Efficiency - How does the development make appropriate use of resources, including land?



Figure 66 - View looking across the Public Space

05 Efficiency - How does the development make appropriate use of resources, including land?

In addition to reviewing the proposed scheme against the guidelines for Urban Development and Building Heights we have also considered the density and building height against the six principles set out in the DLRCC Building Height Strategy.

To protect the residential amenities of the County:

"Much of the County consists of fairly low density, low-rise suburban residential areas. Increased densities and heights should not detract from residents' living conditions, should avoid significant loss of privacy and light, and the scale and bulk of new development should have regard to its setting. The challenge for this strategy is to achieve sustainable densities without adverse impacts on residential amenities (caused by excessive building height)."

A full analysis of the proposed development on existing residents daylight and sunlight has been carried out by GIA who have confirmed that there are no unacceptable impacts projected by the development on neighbouring residents in daylight and sunlight terms. The buildings step in height and have been designed to ensure that the residential amenity of existing residents is maintained with window and balcony placement carefully considered to mitigate overlooking. The buildings are also appropriately set back from the adjacent residences. See Daylight and Sunlight Assessment Report prepared by GIA.



Figure 67 - Open Space Diagram

05 Efficiency - How does the development make appropriate use of resources, including land?

To protect the County's built heritage and natural areas of exceptional beauty:

"Dún Laoghaire-Rathdown comprises natural areas of exceptional beauty, including 17km of coastline as well as outstanding upland areas. The County also has an exceptional built heritage, both archaeological and architectural, with the highest concentration of Protected Structures outside of the Dublin City Area. In order to protect the County's built and natural heritage, building heights should have regard to the qualities of buildings and areas of architectural and historic interest and important views and prospects".

The existing landscape and heritage value of the CMH site is notable and care has been given to maintain the existing landscape character of the site. Important features such as the Avenue, The Central Parkland (the area to the front of the main hospital), and the Walled Garden are maintained with new visual connection back

to the site facilitated by new openings to the boundary wall.

To promote higher densities and allow for increased building heights around public transport nodes and centres of activity:

"With the need for sustainable growth, high density, mixed-use development should be promoted in centres of activity and around transport nodes. This may mean increased building heights in appropriate locations, although high density does not necessarily require the provision of tall buildings. High-density development can also be achieved through low to medium-rise compact development forms such as terraces, urban blocks and apartments built around garden squares. There is a case often made, in urban design terms, that as residential buildings rise higher than c.5 storeys, the loss of contact between residents and the public realm below prevents meaningful supervision and interaction".

The development proposes a range of housing forms and typologies across the site. The proposed building heights are a result of extensive Sunlight / Daylight Studies and the Townscape and Visual Impact Assessments, and have been informed by considerable public engagement at the site.

To encourage higher densities and also to allow for increased building heights at appropriate locations along public corridors:

"Higher densities and mixed-use development should be promoted along strategic public transport corridors in order to support sustainable development patterns. Increased building height at key locations, particularly junctions along major transport corridors, helps the legibility of the County. However, the hierarchy of a corridor may also be emphasised through other means than height, such as quality building, continuity and enclosure, or public space design".

The site is located close to the Luas Green line and is also serviced by several local bus routes connecting it to Dublin City Centre and other locations including UCD, Blackrock, Ranelagh, Nutgrove, Enniskerry, Stepaside and DCU. The quality of bus routes serving the locality is to improve in the coming years thanks to the Busconnects programme. The position of the site adjacent to these transport corridors will make it an attractive place to live. The site provides an opportunity to create a high quality community which can use this connectivity as an advantage and therefore rely less heavily on private cars for day to day transport.



Figure 68 - Section 01



Figure 69 - Section 02

05 Efficiency - How does the development make appropriate use of resources, including land?

To promote higher density through in-fill development:

"Higher densities should be promoted through the redevelopment of vacant or underused land and sites in sustainable locations throughout the County and through appropriate infilling. The aim should be to provide additional new housing near centres and existing public transport infrastructure, whilst preserving open space at the edge of the County. Building heights may be increased in suitable locations, depending on the context of the site, but such development needs to have regard to such factors as the character of the surrounding area and the living conditions of residents".

The existing site is currently inaccessible to the public and remains largely underutilised with much green space and surface car parking. The design proposes an appropriately dense development consisting primarily of new housing while maintaining approximately 32% Open Space.

DLRCC's Building height strategy provides Upward and Downward Modifiers for the height of buildings relative to the surrounding townscape.

The following Upward Modifiers are seen as applicable to the site:

A. The development creates urban design benefits:

- The development proposes a new public plaza for all users with a variety of retail, food and beverage and commercial offers.
- The proposed openings and massing onto Dundrum Road benefits the legibility of the area.
- A new public park is provided which will enhance and extend the existing green space at Rosemount.

B. The development will provide major planning gain:

- New pedestrian and cyclist connections are proposed within and through the site, creating a safe route between the site boundaries at Mulvey Park and Rosemount Green.

C. The development will have civic, social or cultural importance:

- The proposed design will provide and enhance public space where such facilities are currently deficient.
- The development proposes to open up the site of the Central Mental Hospital for public access and amenity for the first time in its history.

F. The size of a site (>0.5ha) sets its own context for development and therefore has potential for greater building height away from boundaries with existing surrounding residential developments:

- The site section demonstrates a reduction in height as the buildings get closer to adjacent properties.

To allow for landmark buildings in the right places:

"Landmark buildings attract people, help orientation and contribute to local identity. Generally, landmark buildings are higher than their surroundings but they may be created through other means than height, such as quality building or public space design. However, landmarks should relate to the scale of a given node. Landmark buildings normally need to be sparse in a given area in order to be able to perform their role as landmarks, although a close cluster of taller buildings can combine to form a single landmark in wider urban views. The appropriateness and location of landmark buildings will only be considered during the Local Area Plan/Urban Framework Plan or Strategic Development Zone processes".

The site of the Central Mental Hospital has significant cultural and landscape value and as such, warrants

a landmark design response appropriate in scale and quality. The considered plans for the site include the creation of a central public plaza between the community park to the south and the central parkland to the north, with two landmark buildings of appropriate scale to the west and east. The scale and visual amenity of the plaza is enhanced by its connection to the green spaces, in addition to being contained by the landmark buildings. These landmark buildings are activated at ground level by retail and food and beverage units, and amenity is further enhanced by high quality building materials.



Figure 70 - View looking towards Main Hospital

06 Distinctiveness - How do the proposals create a sense of place?

"Each successful community has a distinct and special character. That is not to say that each community should compete with or try to upstage the rest – some of the most successful areas have a quiet and easy charm. Nonetheless, each successful neighbourhood will have its own raison d'être that makes people choose to live there over other places. Much of an area's character will be derived from elements considered in the other 11 Criteria, including – but not limited to the variety of uses, layout and architecture. But these must come together in such a way as to make the neighbourhood memorable"

DEHLG - Urban Design Manual

Distinctiveness - Positive Indicators:

- The place has recognisable features so that people can describe where they live and form an emotional attachment to the place
- The scheme is a positive addition to the identity of the locality
- The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout
- The proposal successfully exploits views into and out of the site
- There is a discernible focal point to the scheme, or the proposals reinforce the role of an existing centre

The site, due to its historical development presents significant opportunity to provide unique and memorable public spaces. Interventions proposed at the boundary wall are at locations to 'invite' the public into the previously closed off spaces to experience the setting of the Main Hospital Building and the quality of the existing landscape.

The high-value landscape areas are maintained and buildings have been placed at areas designed to maintain and enhance the existing amenity. The plaza space at the centre of the site provides a contrast to the extensive green spaces as a space with hard landscaping complemented with planting and SuDS features.

The development has to create a strong sense of place and create a public space that works as a destination to attract pedestrians to the service, retail and commercial uses at the newly established neighbourhood centre. The public space also needs to be a place that provides opportunities for socialising and a place for people to meet, whilst respecting residential amenity and privacy.



07 Layout - How does the proposal create people friendly streets and spaces?

"How the site is laid out is one of the key determinants of successful places. The layout of a neighbourhood can help to determine an area's character and sense of place – the same buildings arranged differently will have a very different feel to each other - its safety and security and how well it works. Many of the mistakes that are attributed to bad planning are often errors of layout – for instance, a dead end that does not connect with the route to the school, or a lonely footpath that is a haven for crime and anti-social behaviour."

DEHLG - Urban Design Manual

Layout - Positive Indicators:

- Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.
- The layout focuses activity on the streets by creating active frontages with front doors directly serving the street
- The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers
- Traffic speeds are controlled by design and layout rather than by speed humps
- Block layout places some public spaces in front of building lines as squares or greens, and some semiprivate space to the back as communal courts

The design sets out to prioritise the pedestrian and cyclist above the private car as a primary concept. A bicycle route has been proposed from the boundary at Mulvey Park to the boundary at Rosemount Green with limited cross overs with vehicular traffic. Private vehicular traffic is kept to the edge of the development with appropriate traffic calming measures to reduce speeds.

Every opportunity has been taken to make all public street frontages active with 'own-door' residences or retail spaces provided at the majority building frontages. Access to podium car parks and ESB substations have been placed at locations chosen to mitigate impact to the streetscape.

The natural slope/topography of the site has been used to advantage in the design of the car parking facilities by placing them under a podium level. A DMURS statement has been prepared by ILTP.



08 Public Realm - How safe, secure and enjoyable are the public areas?

"The most successful neighbourhoods contain streets, squares, parks and public gardens that are as good quality – if not better, than the private buildings and spaces within the neighbourhood. A neighbourhood with poor quality public spaces will rarely be improved by even the highest quality architecture – whilst a neighbourhood of ordinary buildings can be transformed through improvements to the public realm."

DEHLG - Urban Design Manual

Public Realm - Positive Indicators:

- All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use
- The public realm is considered as a usable integrated element in the design of the development
- Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighborhood
- There is a clear definition between public, semi-private, and private space
- Roads and parking areas are considered as an integral landscaped element in the design of the public realm

The public space and the shared amenity spaces for the residents provide a variety of spaces that are planned and designed to host a diversity of activities. The public space is sized to serve an amount of services and retail uses suitable for a Neighbourhood Centre. The residential buildings will also bring additional life and animation to the site, increasing the footfall into and around the public space.

The views produced of the public spaces within the site demonstrate the scale and functionality of each space plus the linkages between spaces and the passive surveillance over each space from the residential apartments.

There is a clear definition between the public realm at ground level and the residents communal space at podium level. Access control will be used to control who can access the podium using the steps up from the public space. Podium level apartment terraces looking onto the residents communal

space will be provided with a planted buffer zone to distinguish the different ownership. The residents communal space benefits from excellent passive supervision from apartments at all locations and all children's play areas will benefit from this passive supervision at all times. The public space and the surrounding streets also benefit from excellent passive supervision.



Figure 71 - The proposed Public Plaza benefits from passive supervision from adjacent dwellings and commercial units



Figure 73 - Public Plaza connecting to Central Parkland



Figure 72 - View of proposed pedestrian and cyclist connection at Annaville.

09 Adaptability - How will the buildings cope with change?

"The success and sustainability of a housing development can be measured by its longevity. Much of the most successful housing of the past is still in use because it has been able to adapt to changing circumstances – for example by adapting to changing family sizes, different forms of space heating and increased car ownership."

DEHLG - Urban Design Manual

Adaptability - Positive Indicators

- Designs exploit good practice lessons, such as the knowledge that certain house types are proven to be ideal for adaptation
- The homes are energy-efficient and equipped for challenges anticipated from a changing climate
- Homes can be extended without ruining the character of the types, layout and outdoor space
- The structure of the home and its loose-fit design allows for adaptation and subdivision, such as the creation of an annex or small office
- Space in the roof or garage can be easily converted into living accommodation

Residential apartments offer less physical adaptability compared to individual houses. A house can facilitate future modifications including extensions and attic conversions.

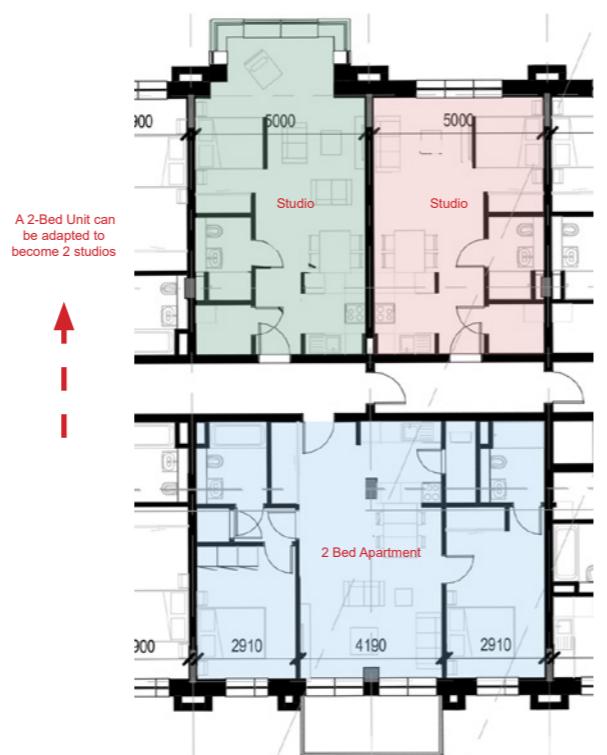
Dublin is experiencing population growth coupled with a change in the preferences and structure of households and their size. In 2016, the average household size in Dublin City was 2.48 persons per household, compared to 3.13 in 1986, which suggests a trend towards smaller household size. With this in mind, apartments should still offer some flexibility to adaptation to future trends.

The predominant housing stock in the local area consists of low-rise detached, semi-detached and terraced houses. The provision of affordable apartments in this development will provide a new option for people looking to live in the area including people unable to rent or buy a house in the area and people already living nearby who are seeking to downsize.

In terms of physical adaptability, apartment buildings are traditionally concrete column and slab construction, this allows all walls to be of lightweight construction and non load bearing. This offers the opportunity to be able to modify apartments layouts if required or merge/split apartments at a future point in time if circumstances dictate. For example, 2-Bed Units could be converted to two studio units.

Notwithstanding this, the current provision of 1, 2 & 3 bedroom apartments will cater for a range of users and over half of these apartments exceed the minimum standard areas by at least 10%.

In terms of dealing with climate change the residential buildings are designed to NZEB standards. Apartments will utilise air-source heat pump technology to ensure the apartments can be heated as efficiently as possible without producing unnecessary emissions which themselves would contribute to climate change.



10 Privacy & Amenity - How do the buildings provide a decent standard of amenity?

"Privacy and amenity are extremely basic human needs. Such matters are particularly important in higher density schemes where good space standards, sound insulation and access to private open space can make the difference between acceptable urban living and a poor living environment."

DEHLG - Urban Design Manual

Privacy & Amenity - Positive Indicators:

- Each home has access to an area of useable private outdoor space
- The design maximises the number of homes enjoying dual aspect
- Homes are designed to prevent sound transmission by appropriate acoustic insulation or layout
- Windows are sited to avoid views into the home from other houses or the street and adequate privacy is affordable to ground floor units.
- The homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables.

The quantity of residents communal amenity space exceeds the requirements of the standards as set out in Appendix 1 of the Sustainable Urban Housing Design Standards for New Apartments.

External communal amenity space has been provided at podium level and at some roof terraces, which are, naturally, raised above the public space, providing clear separation between public and semi private spaces. The orientation of the blocks allows for the majority of the external amenity area to receive a minimum of 2 hours of sunlight on March 21st, which is positive and exceeds the BRE's numerical criteria for sunlight to external spaces .

All apartments have access to their own private balconies or roof terraces exceeding the minimum requirements as per the Apartment Guidelines.



10 Privacy & Amenity - How do the buildings provide a decent standard of amenity?

Ratio of Dual Aspect Apartments

As the site is located at a well-connected accessible location, where good street frontages will be required in order to create a strong public realm, a balance between these design requirements and the need to provide dual aspect apartments must be met. The development exceeds the 50% requirement of SPPR4. On an individual block basis, all blocks exceed 50% dual aspect.

Where ground level apartments have terraces facing onto the shared residential amenity space then planting is provided to give a buffer zone between the private and semi-private amenity spaces.

All apartments will be designed to meet Part E of the Technical Guidance Documents for acoustic sound transmission. All apartments are also designed to meet the storage requirements as set in Appendix 1 of the Sustainable Urban Housing Design Standard for New Apartments. All storage is contained within each individual apartment.

The proposed buildings step down in height where directly adjacent to residential properties to respect the privacy of adjacent properties and transition in scale to the existing suburban housing.



11 Parking - How will parking be secure and attractive?

"How parking is dealt with on a development site can significantly affect the success of a development. The most successful developments tend to provide sufficient parking to cope with demand in a way that does not overwhelm the appearance and amenities of the public realm." DEHLG - Urban Design Manual

Parking - Positive Indicators:

- Appropriate car parking is on-street or within easy reach of the home's front door.
- Parked cars are overlooked by houses, pedestrians and traffic, or stored securely, with a choice of parking appropriate to the situation.
- Parking to be provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces
- Materials used for parking areas are of similar quality to the rest of the development
- Adequate secure facilities are provided for bicycle storage

The proposed development aims to reduce the number of cars on site, prioritising the pedestrian and cyclist over the private vehicle. This is in accordance with the LDA's dedication to providing sustainable development and building neighbourhoods that promote healthy, active and sustainable mobility. The development proposes 547 car parking spaces in total located primarily at podium car parking at the blocks, with a relatively small proportion located at ground level / within the landscape.

Given the proximity of the site to public transport, it is proposed to provide less than the Development Plan standards for the residential uses, in line with the Government's guidance for sustainable communities. A detailed breakdown and summary of the parking provision has been provided in the report prepared by ILTP.

It is submitted that this is an appropriate balance between the Development Plan and the Government guidance for sustainable housing developments.



Figure 74 - Parking adjacent to Block 07



11 Parking - How will parking be secure and attractive?

The proposed development includes dedicated cycling infrastructure and links for pedestrians and cyclists to adjacent roads in an effort to increase pedestrian and cyclist safety by reducing the need to use the primary vehicular entrances to the site at Dundrum Road.

New openings created in the wall at Mulvey Park, Annaville Grove and Rosemount Green are available to pedestrians and cyclists. Cyclists can then access the cycle infrastructure on site to arrive at secure long-stay residents' bicycle parking stores. Each block has dedicated long-stay parking for residents and short-stay parking for visitors, with some additional parking provided for non-residential uses such as the medical centre in Block 02 and community facilities in Block 06.

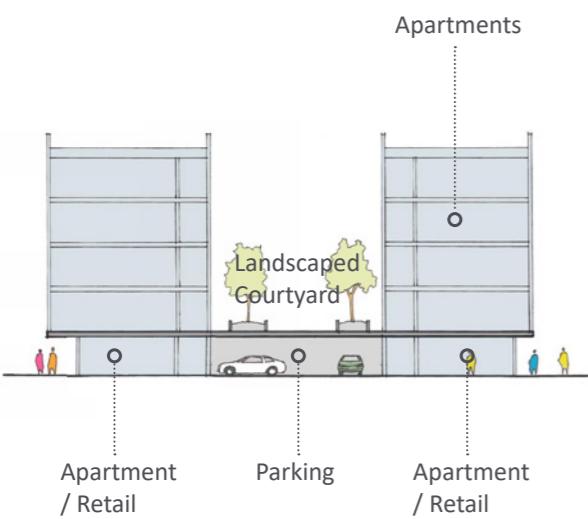


Figure 76 - Podium parking diagram section



Figure 75 - Diagram showing parking locations across the site

12 Detailed Design - How well thought through is the building and landscape design?

"While strategic considerations such as location, connections, and sustainability will determine much of the success of a scheme, the finished quality can have a significant effect on a development's character, sense of place and legibility."

DEHLG - Urban Design Manual

Detailed Design - Positive Indicators:

- The materials and external design make a positive contribution to the locality
- The landscape design facilitates the use of the public spaces from the outset
- Design of the buildings and public space will facilitate easy and regular maintenance
- Open car parking areas are considered as an integral element within the public realm design and are treated accordingly
- Care has been taken over the siting of flues, vents and bin stores

The Dundrum Central development will provide a new building line along Dundrum Road, creating a new edge condition to the development. Within the site, variations of brick type, detailing and proportions supplemented by complimentary materials allow the individual blocks to make reference to their character areas within the site, creating a distinct sense of identity at each building.

A detailed Finishes Report is provided as an Appendix to this report.



Appendix A | Materials and Finishes Report

12 Detailed Design - How well thought through is the building and landscape design?

The design of the public space has been central to the design for the new neighbourhood centre. A taking in charge drawing has been discussed with DLRCC suggesting which areas of the site be taken in charge by them on completion of the project. Landscape finishes in areas to be taken in charge by DLRCC will be approved by them. The public space will be managed by the developer allowing an enhanced quality of materials to be used at this location.

For further information on the landscape design, please refer to Aecom Landscape Architects drawings and reports.



Figure 77 - Proposed Site Plan

A.1 | Block 02

Block	No. Dwellings
Block 02	136

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



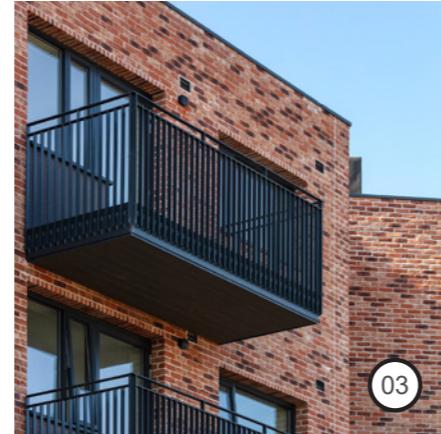
01

Brick framing to deck access



02

'Bolt-on' aluminum balcony



03



Figure 79 - Sample material palette

Figure 80 - Block 02 Courtyard



Figure 78 - Block 02, west elevation

A.1 | Block 02



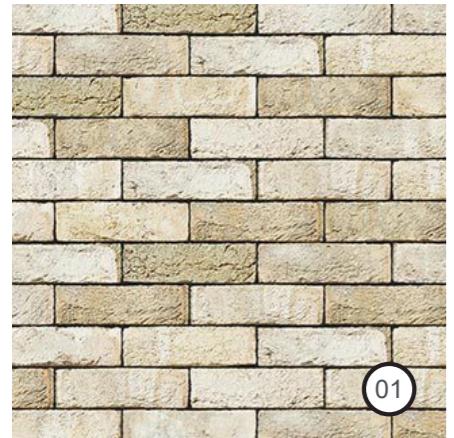
Figure 81 - Facade study, Block 02

A.2 | Block 03

Block	No. Dwellings
Block 03	161

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



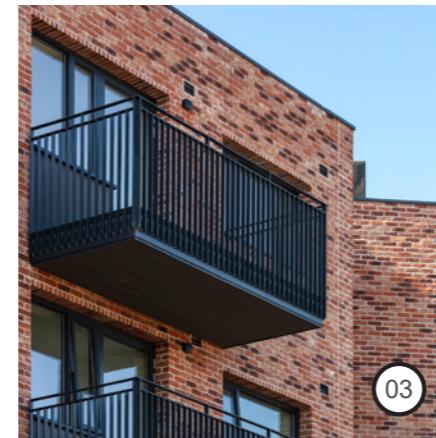
01

Selected aluminium cladding



02

'Bolt-on' aluminum balcony



03

Figure 83 - Sample material palette



Figure 84 - View of Block 03 from Public Plaza



Figure 82 - Block 03, west elevation

A.2 | Block 03



Figure 85 - Facade study, Block 03

A.3 | Block 04

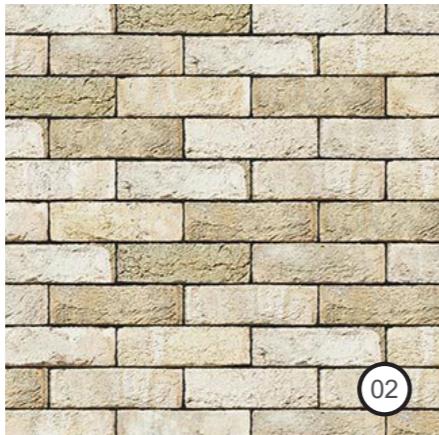
Block	No. Dwellings
Block 04	104

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



Brick framing to deck access



'Bolt-on' aluminum balcony

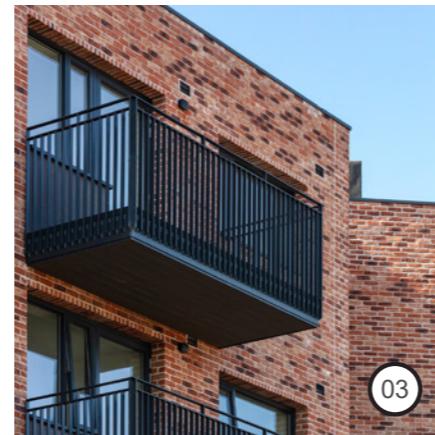


Figure 87 - Sample material palette



Figure 88 - View of Block 04 from Eco-Corridor

Note: some trees omitted
for clarity



Figure 86 - Block 04, north elevation

A.3 | Block 04



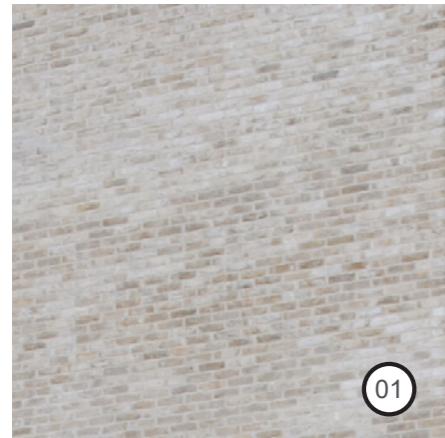
Figure 89 - Facade study, Block 04

A.4 | Block 05

Block	No. Dwellings
Block 05	122

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



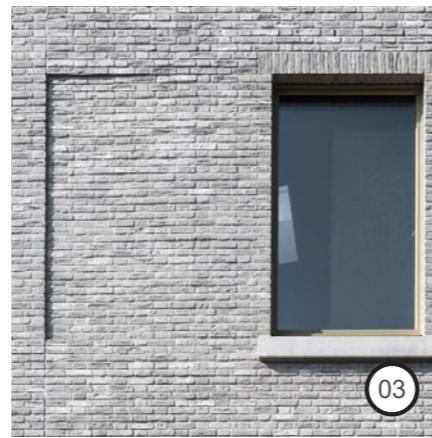
01

Selected dark brick



02

35mm brick recessed panels at selected locations at south facade.



03



Figure 91 - Sample material palette

Figure 92 - View of Block 05 from Public Park



Figure 90 - Block 05, north elevation

A.4 | Block 05



Figure 93 - Facade study, Block 05

A.5 | Block 06

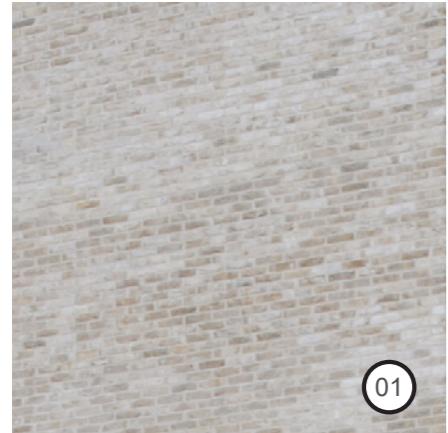
Block No. Dwellings

Block 06

43

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



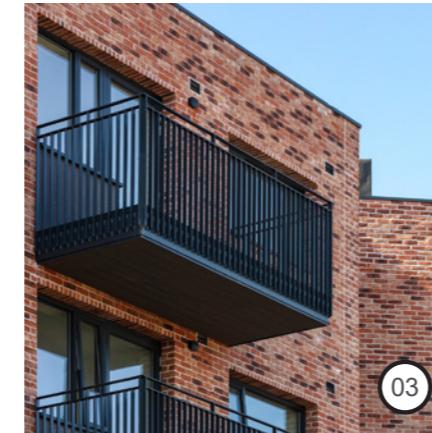
01

Selected bronze tone cladding panel



02

'Bolt-on' aluminum balcony



03

Figure 95 - Sample material palette



Figure 96 - View of Block 06 from Public Park

Note: some trees omitted
for clarity



Figure 94 - Block 06, east elevation

A.5 | Block 06



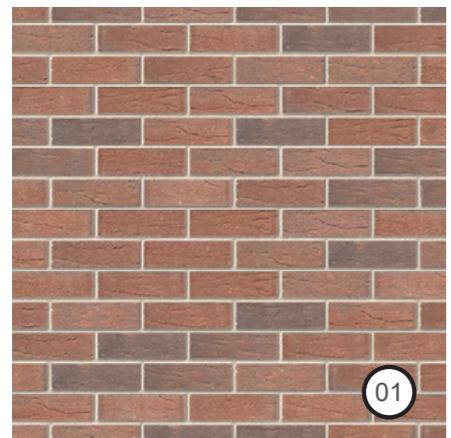
Figure 97 - Facade study, Block 06

A.6 | Block 07

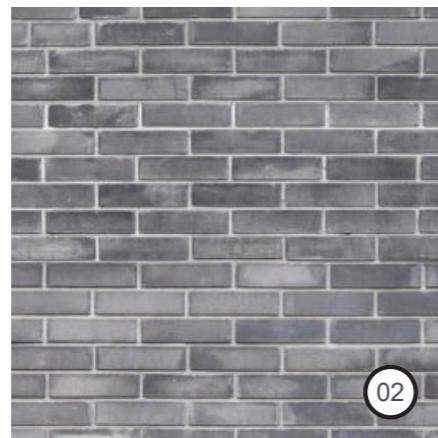
Block	No. Dwellings
Block 07	192

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected red brick



Selected dark brick



'Bolt-on' aluminum balcony

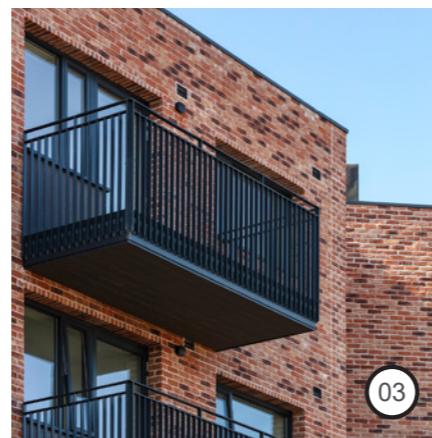


Figure 99 - Sample material palette

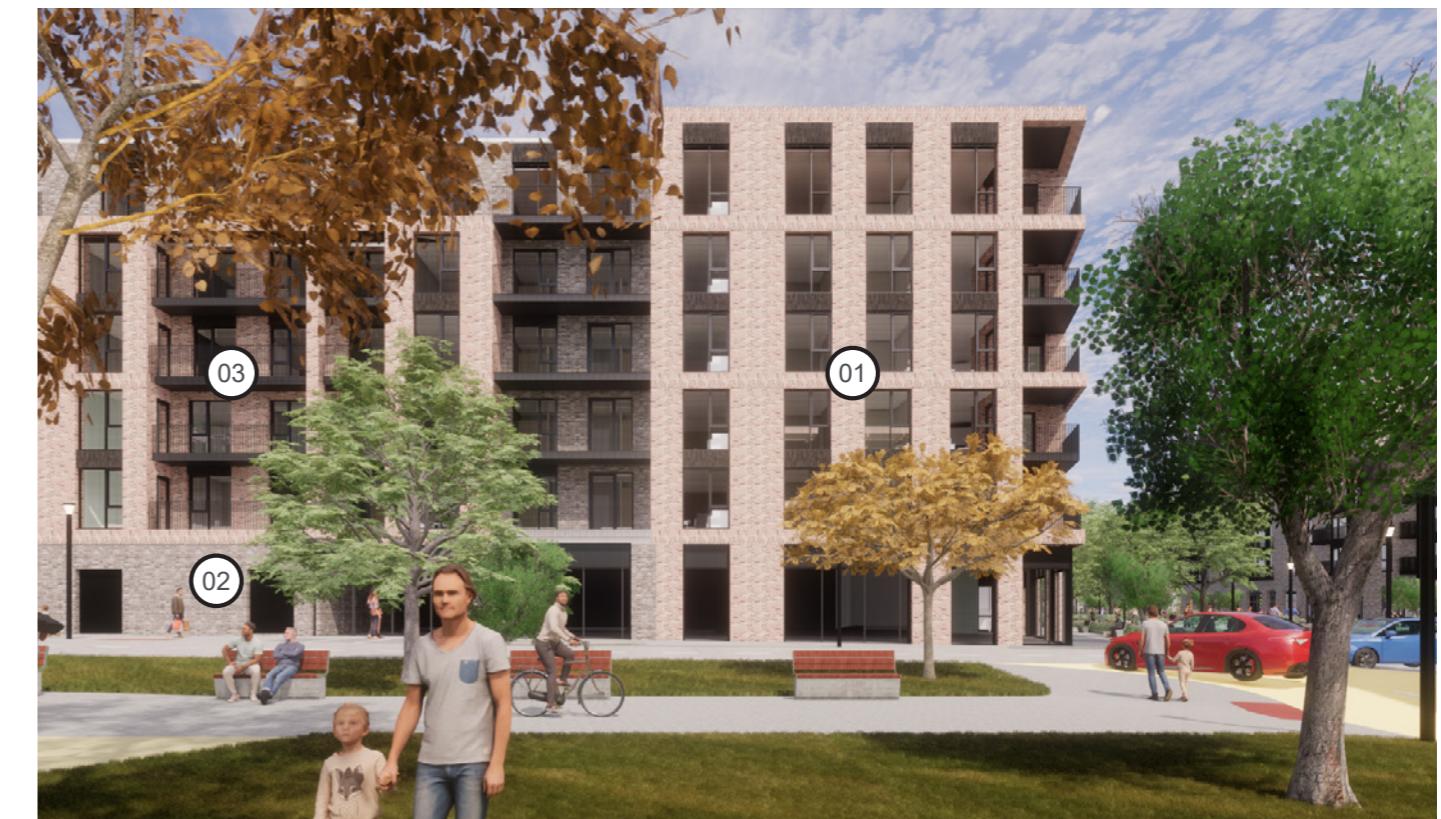


Figure 100 - View of Block 07



Figure 98 - Block 07, east elevation

A.6 | Block 07



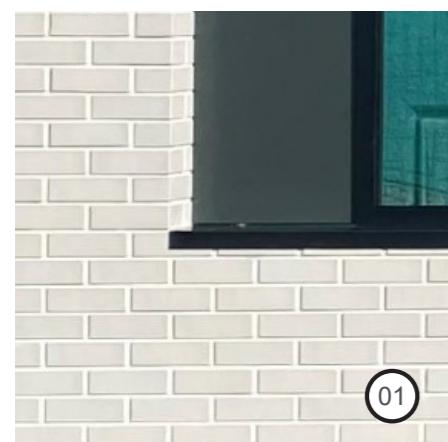
Figure 101 - Facade study, Block 07

A.7 | Block 08 and Block 09

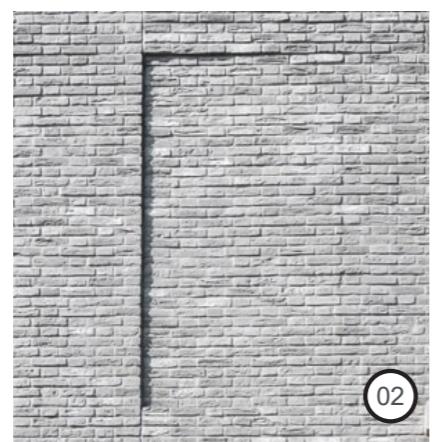
Block	No. Dwellings
Block 08	24
Block 09	24

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected buff brick



35mm brick recessed panels at rear elevation.



Aluminium railing to upper terrace

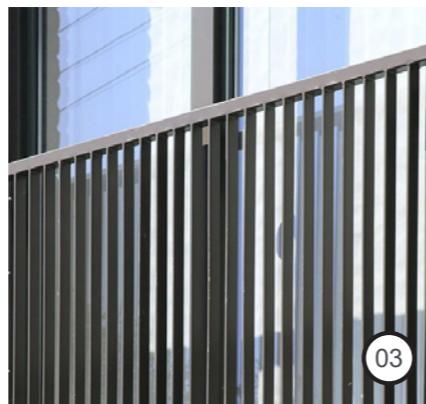


Figure 103 - Sample material palette



Figure 104 - View of Block 08



Figure 102 - Block 09, north elevation

A.7 | Block 08 and Block 09



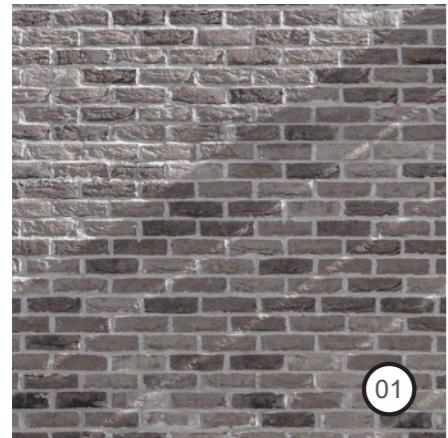
Figure 105 - Facade study, Block 08 and Block 09

A.8 | Block 10

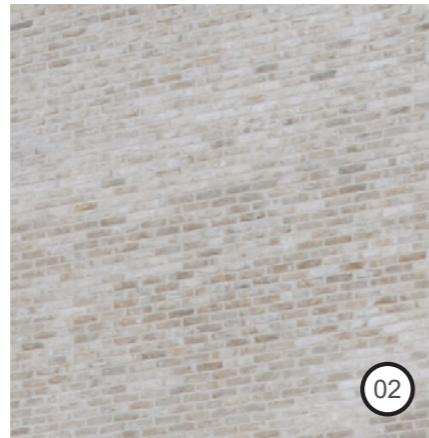
Block	No. Dwellings
Block 10	157

Please Note:
Reference images are indicative.
Please refer to planning application drawings
and proposed 3D imagery for further detail.

Selected dark brick



Selected buff brick



Inset balcony at selected locations



Figure 107 - Sample material palette

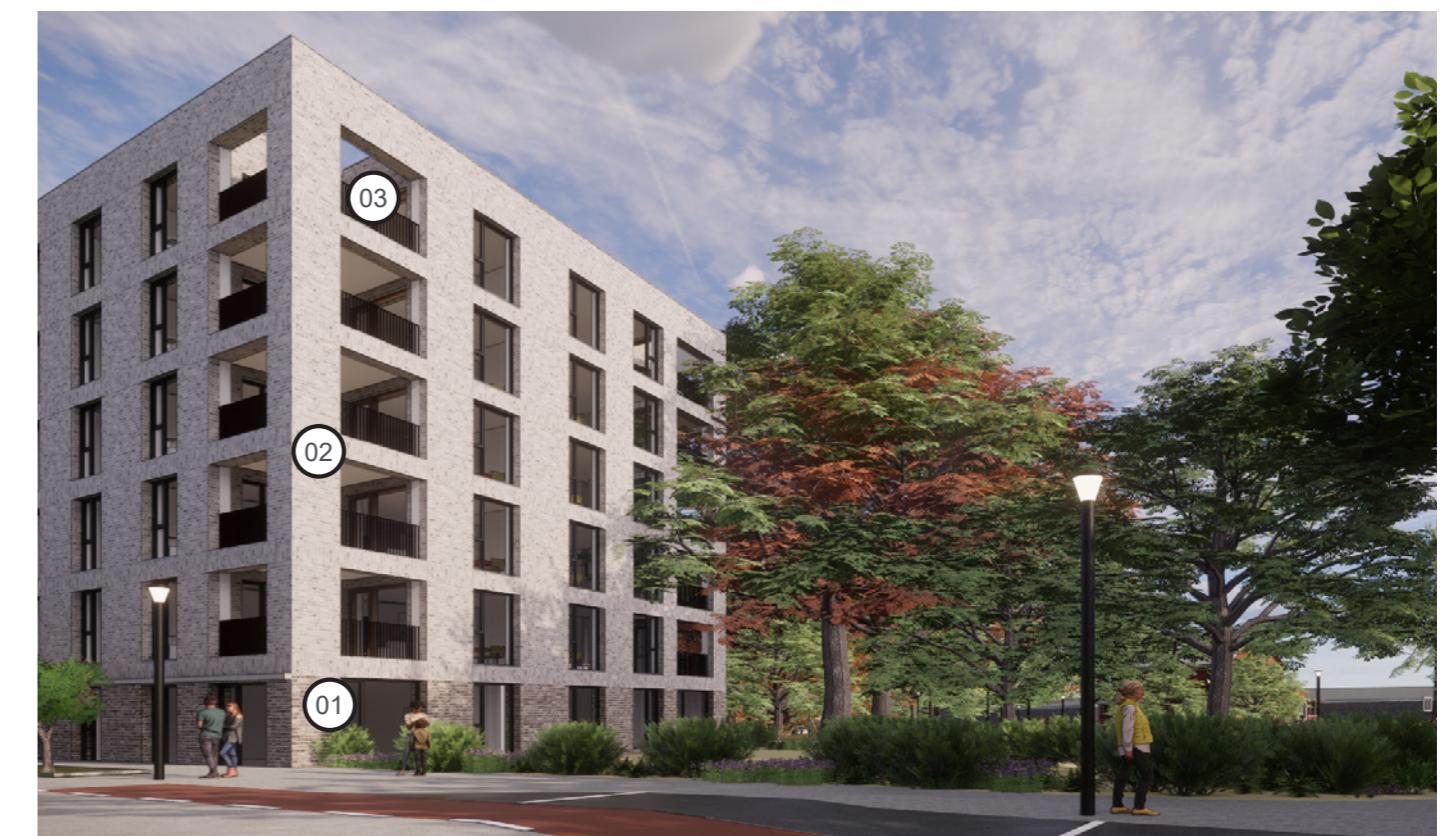


Figure 108 - View of Block 10



Figure 106 - Block 10, south elevation

A.8 | Block 10



Figure 109 - Facade study, Block 10

A.9 | Sitewide Materials Strategy

Legend

Colour Material

	Selected light brick
	Selected dark brick
	Selected buff brick
	Metal rainscreen cladding



Figure 110 - Proposed sitewide materials strategy

A.10 | Proposed Landscape Layout



Figure 111 - Proposed Landscape Layout (Please see Landscape Architecture and Public Realm Design Report prepared by AECOM submitted as part of this planning application)

A.11 | Soft Landscaping



Street trees within pavement



Shrub and underplanting



Meadow planting



Roadside swale and tree planting



Amenity lawn



Wetland meadow planting

Figure 112 - Proposed soft landscaping finishes (Please see Landscape Architecture and Public Realm Design Report)

A.12 | Hard Landscaping



Soft natural edges with buff gravel pathway



Self bound gravel



Greater variety of materials within public squares



Play surface to kids play areas



Accent granite sets to focal areas



Trees set within paved areas

Figure 113 - Proposed hard landscaping finishes (Please see Landscape Architecture and Public Realm Design Report)

A.13 | Site Furniture

Seating



Bicycle Parking



Bollard and Bins



Figure 114 - Proposed site furniture (Please see Landscape Architecture and Public Realm Design Report)

