



## Architectural Design Statement

Residential Development at Lehaunstown Land,  
Cherrywood SDZ, Dublin

February 2026

ABK Architects, 34 Lower Leeson Street Dublin 2



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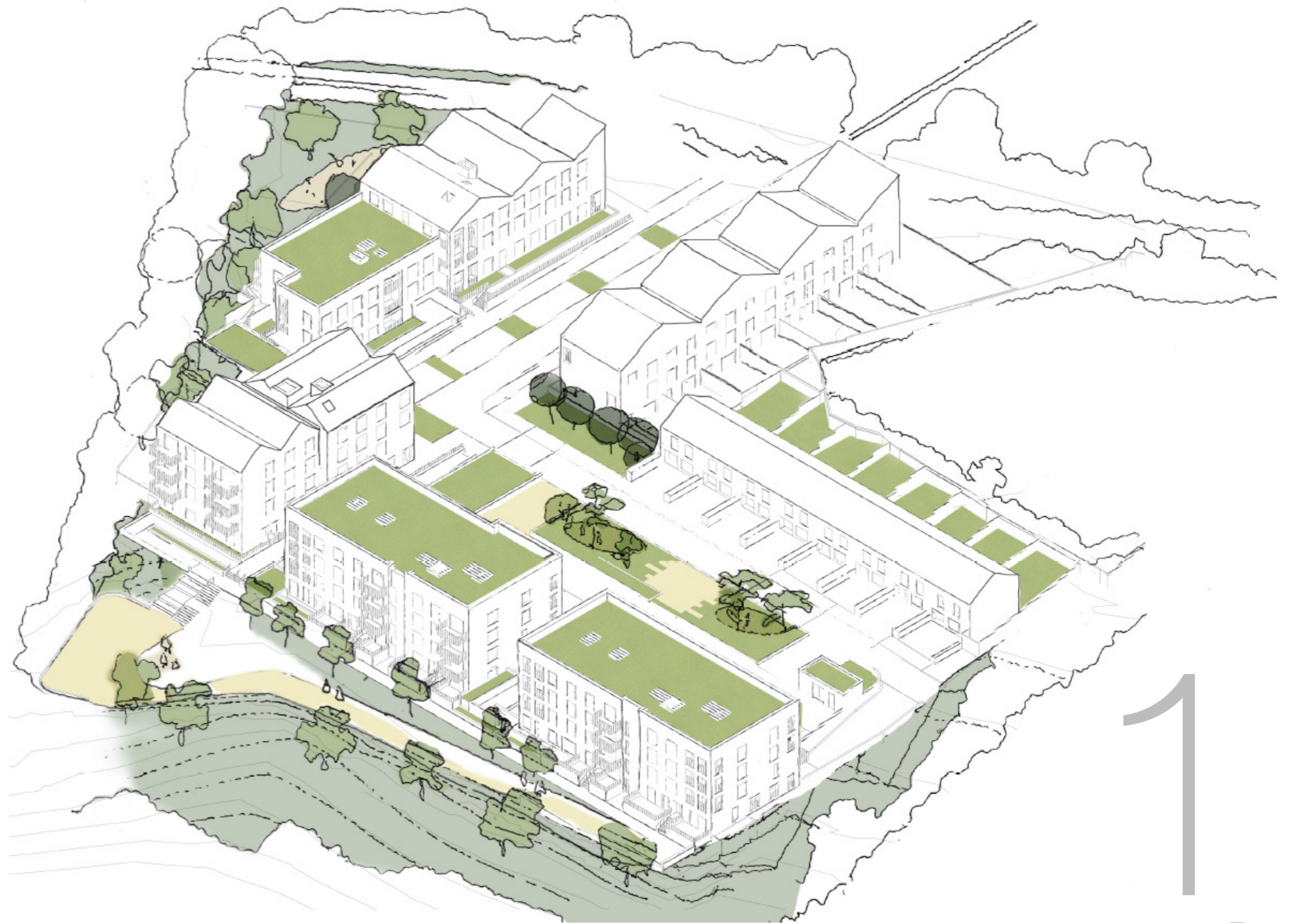
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# 1

INTRODUCTION

## 1.0 Introduction

### 1.1 Design Statement Overview

This Design Statement has been prepared by ABK Architects in support of a Part 8 planning application prepared by Dun Laoghaire Rathdown County Council. The application proposes the development of 109 no. residential units together with associated parking, cycle parking, communal space, and public open space.

The proposal is predicated on a strong, distinctive urban form and a pedestrian friendly public realm. The public open spaces are defined by terraces of residential units – houses and apartments with an emphasis on pedestrian connectivity within the context of the Cherrywood SDZ.

This document is a summary of the proposals and design strategies which are fully described in the drawings and reports accompanying the application.

The Architectural Design Statement has been informed by inputs from members of the design team. In addition to the general arrangement drawings required for submission under the planning regulations, this report should be read in conjunction with detailed reports as prepared by other members of the design team:

Client:	Dun Laoghaire Rathdown County Council
Architects:	ABK Architects
Civil and Structural Engineer:	PUNCH Consulting Engineers
M&E Engineer:	Homan O'Brien Services Engineers
Landscape Architect	Murphy Sheanon Landscape Architects
Quantity Surveyor	AECOM
Arborist	Arborist Associates Ltd
Ecologist	Fehily Timoney
Archaeology	Archaeology Plan

This Architectural Design Statement is informed by the guidance set out in the Cherrywood Planning Scheme, Dun Laoghaire Rathdown County Development Plan 2022-2028 and is structured around best practice guidance outlined the Design Manual for Quality Housing (DHLGH), Sustainable Urban Housing for New Apartments (DHLGH) 2022, 'Urban Design Manual: A Best Practice Guide' (2009) and Design Manual for Urban Streets (DMURS)



Proposed Elevation onto the Square - PA 061



SITE DESCRIPTION

## 2.0 Site Description

### 2.1 Summary Description

The site is located off Lehaunstown Lane, Laughanstown, Co Dublin. It consists of a rectangular plot of land in agricultural use with an area of approximately 3.58 hectares.

**Site Gradient:** The site slopes significantly from west to east descending towards the Cabinteely River which defines the eastern boundary of the site. The western (upper) portion of the site has a considerable gradient of approximately 1:15. The gradient increases quite significantly from the middle of the site to a gradient of 1:6 before levelling out at the valley floor adjacent to the river. (Refer to Appendix 1 for Site Constraints Drawing)

**Site Boundaries:** The southern and western boundaries consist of mature hedge rows. These are required to be retained as noted on Map 5.2 of the Cherrywood Planning scheme (CPS). Map 5.3 of the CPS notes the presence of a badger set and latrine along the southern boundary. This has been addressed under the Pond 2a planning grant.

The eastern boundary of the site is defined by the Cabinteely River and its associated riparian planting. Beyond the river to the east are a series of residential developments accessed from the N7.

The north-western corner of the site shares a boundary with a private residence -Grangeland. This boundary consists of hedging and planting reinforced with sections of block wall.

The Northern boundary consists of mature hedging and ditch. An existing combined foul drain runs along this northern boundary cutting across the site at the lowest level and following the valley floor.

An overhead ESB line runs across the NW corner of the site.

### 2.2 Existing Adjacent Development

Existing one-off houses, accessed from Lehaunstown Lane are located along the northwest boundary of the site. One of these properties, a single-storey bungalow, Grangeland, occupies the northwest corner of what would once have been part of the original field that makes up this site. The adjacent land to the south and west consists of fields.

### 2.3 Proposed Adjacent Developments

In line with the Cherrywood Planning Scheme, there are a number of proposed residential and infrastructural developments adjacent to and within the site that are defined by CPS or are currently being developed. These include the following:

**Mixed Use Development:** Planning Ref DZ19A/0863. A residential development consisting of 107 new dwellings to the south of the site and incorporating the adjacent greenway. Planning permission was granted in May 2022.

**Mixed Use Development:** Planning Ref DZ21A/0414. A residential development consisting of 342 new dwellings to the north of the site. Planning permission was granted in January 2020.

**Access Road to West of Site:** Planning Ref S179A/H/03/2024. In accordance with the CPS, DLR together with the adjacent land-owner have been granted permission for a new road connecting Grand Parade (at P2) to Lehaunstown Lane, As well as serving future adjacent development and a future school, this road will serve as the access road for the proposed development.

**Attenuation Pond 2a:** Planning ref: Part 8 application. This consists of the proposed development of an attenuation pond located in centre of the proposed site. As per Table 6.1.2: Infrastructure Requirements Development Area 1, this provides surface water attenuation as part of the infrastructural development of the CPS. This permission also includes a section of the Greenway infrastructure. This development is being carried out by DLR CoCo.

### 2.4 Site Access

The site is currently accessed from Lehaunstown Lane via a narrow, gated path that is understood to be the original field access. There is currently no access or road frontage that might serve the scale of the proposed development.

The Cherrywood Planning scheme illustrates an indicative access point to the proposed site from Lehaunstown Lane through private lands that are not in the ownership of the applicant (Map 2.5 and Map 6.1)

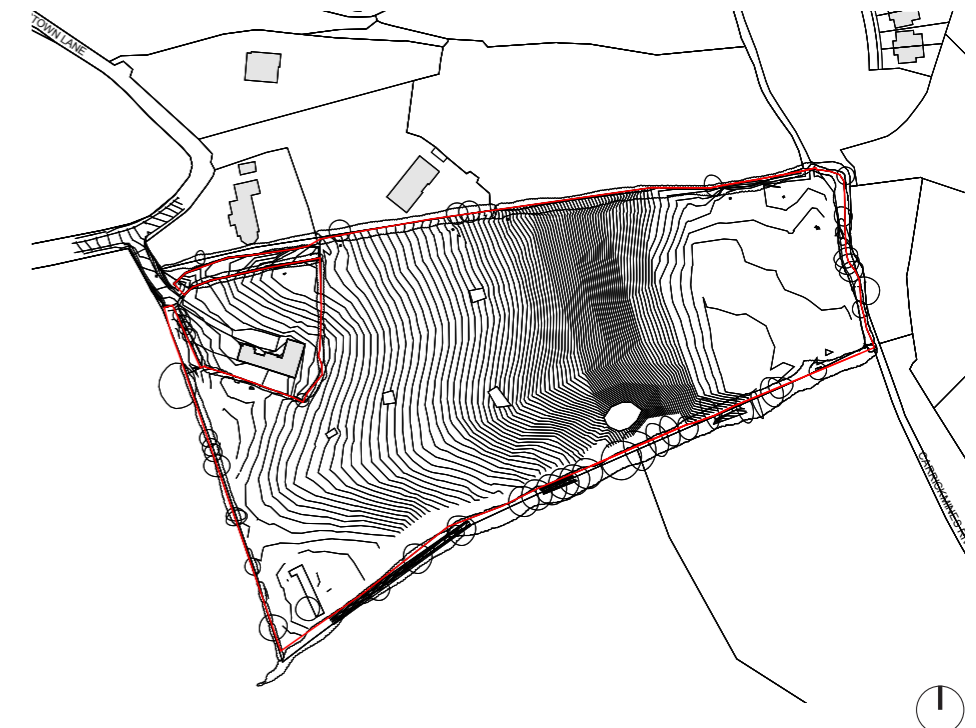
It is intended that the development be accessed via the proposed road development to the west of the site (Planning Ref S179A/H/03/2024) until such time as a connection to Lehaunstown Lane can be made as part of future development in line with the CPS.

DLR County Council together with the adjacent land-owner have been granted permission for a new access road connecting Grand Parade (at P2) to Lehaunstown Lane. The new road has been coordinated with this application including the formation of a new opening in the hedge boundary to the western boundary of the site. It is intended that the new road will provide utilities for this development.

### 2.5 Site Zoning

As defined by the Cherrywood Planning Scheme (CPS), the site falls under two Primary land Use categories (CPS Map 2.1). A portion of the site is allocated for use as Green Infrastructure and Greenway. The remaining site area is zoned 'Residential'. (Refer to Drawing 790\_PA900 for site diagram indicating extent of Zoning and ABK accommodation schedule for site areas)

The site falls within Development Area 1: Lehaunstown. Its character is informed by Lehaunstown lands, Druid's Glen and Loughlinstown Valley. This development area is focused on the village centre (CPS Map 6.1). The site falls within Growth Area 2.



Site Location Plan - PA 001

## 2.6 Permissible Residential Density

The site is zoned Res 2 within Development Area 1 (CPS Map 2.2). CPS Proposed Amendment No.8 permits a density range of between 45 and 75 Net Residential Units per Hectare (Table 2.9 as amended) with permitted unit types ranging from semi-detached housing to higher density terraced and duplex units with some apartment blocks in locations where principal frontages are required and the scale of proposed development is informed by the characteristics of the particular development plot and its proximity to services, amenities and the Village and Town Centres.

## 2.7 Site Constraints

The site has a significant number of constraints both natural, infrastructural and legislative that inform, define and restrict any proposed development. Specifically, the following are noted:

- Site Topography: Existing site gradients are significant with existing slopes varying from 1:15 to 1:6 restricting development to a quantum of the site.
- Protected hedgerows: These hedgerows together with associated exclusion zones form the southern and western boundary of the site. They restrict options for site access into the site as well restricting the extent of developable area.
- Tufa Springs: These are located to the southwest section of the site and restrict development to this quantum of the site.
- Utilities: A proposed storm water swale and existing foul trunk sewer with associated exclusion zones along the northern boundary of the site restrict development along this boundary
- Utilities: ESB overhead MV power lines run across the north-western corner of the site with associated exclusion zones.
- Utilities: Existing septic tank serving an adjacent residence extends into the northern area of the site.
- Natural Green Space: CPS Map 5.1 indicates the requirement for a 'Natural Green Space' running along the western boundary of the site that restricts development.
- Natural Green Space: CPS Map 5.1 indicates extensive 'Natural Green Space' encompassing approximately 1/3 of the site that is to form part of the Lehaunstown Valley Green Infrastructure.
- Green Infrastructure: CPS Map 2.1 defines the Primary Land Use of the eastern 1/3 of the site as Green Infrastructure
- Greenway: Map 2.5 requires the provision of a cycle greenway running north south along the western boundary of the site and connecting through the adjacent hedging to proposed road and cycle infrastructure outside of the site.

## 2.8 Cultural and Built Heritage: Archaeology

Map 3.1 of the Cherrywood Planning Scheme indicates that the entire site falls within the probable extent of a Military Camp while a section of the site falls within Ref RMP DU026-127 'Camp' on the Record of Monuments and Places.

DLR commissioned an archaeological assessment of the site carried out by Archaeology Plan, consultant archaeologists. Informed by the proposed development, Archaeology Plan carried out a desktop survey, site inspection and test trenching of the site which forms part of this application.

While the report found almost no evidence of the C18th Military camp RMP DU026-127, the report identified metalised surfaces, burnt spread and bronze age pottery in slit trenches to the west end of the site where development is focused. They are of the view that future development will impact the site negatively. They have identified areas with a high potential for remains and have recommended that an enabling works contract be carried out to include the following:

- 1) Hand excavation to area of high risk
- 2) Stripping of top-soil under archaeological supervision to areas of intermediate risk
- 3) Preconstruction ground works (to Pond 2a) and monitoring of topsoil reduction to low risk areas

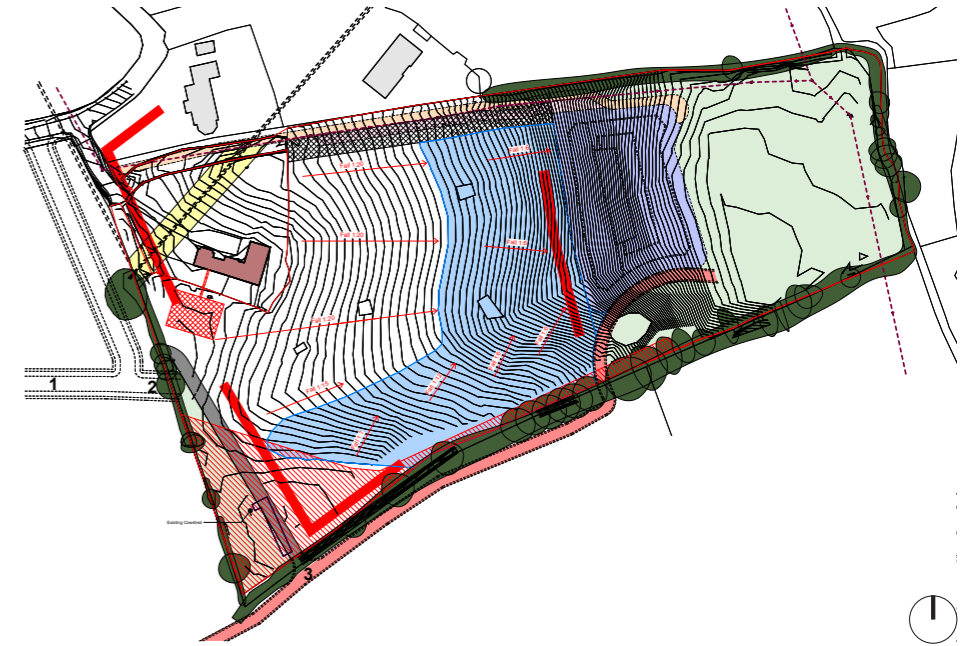
DLR Co.Co. are procuring a separate, advance enabling works contract to be completed in advance of any future development with a view to resolving the site from an archaeological perspective.

## 2.9 Consultation

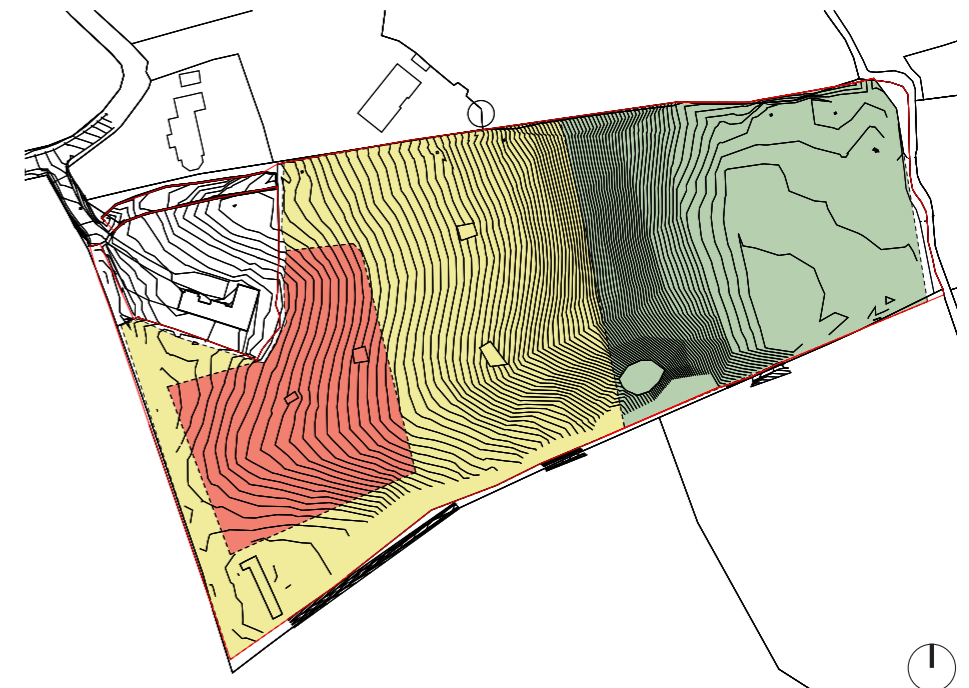
The Design Team have met with DAPT (Development Agency Project Team), Dun Laoghaire Rathdown Planning Department, Elected Representatives over the following dates:

- 7<sup>th</sup> February 2023 (Elected Representatives)
- 16<sup>th</sup> February 2024 (DAPT)
- 6<sup>th</sup> March 2024 (DAPT)
- 29<sup>th</sup> May 2024 (DAPT)
- 23<sup>rd</sup> October 2025 (DAPT)

All comments were taken onboard to ensure consistency with the Planning Scheme for DLR Housing Site Plot L8, Lehaunstown.



Site Constraints - PA 901



Archaeological Risk Plan - PA 910



### 3.0 Project Description

#### 3.1 Introduction

The development is conceived as one of a series of interconnected neighbourhoods and is underpinned by the 'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas', the 'Urban Design Manual –a best practice guide', DEHLG 2009 and the principles set out in the Cherrywood Planning Scheme.

#### 3.2 Project Summary

The project proposes a legible residential enclave defined by existing field boundaries and overlooking the Carrickmines River valley, with an individual character achieved through concept, design style and use of materials. (in line with Specific Objective PD7)

The project consists of 109 residential units made up of terraced houses, duplexes and apartment buildings ranging in height from 2 to 4 storeys organised around a hierarchy of pedestrian-oriented spaces that look to mitigate the impact of cars.

These spaces are referred to as 1.) 'The Mall', an approach road that connects with the proposed adjacent infrastructural road to the west, and a central public space 2.) 'The Square' which acts as the primary focus for the community. Car parking is provided as on-street parking, off-street parking, and underground parking for apartments.

#### 3.3 Site Context

The project looks to work with existing site characteristics and constraints so as to create a coherent development that responds to context. In particular, the project looks to 1) engage with the existing and proposed Green Infrastructure in particular the riparian landscape of the Carrickmines River Valley; 2) Avail of views eastwards over the valley towards the sea; 3) Incorporate existing protected hedgerows that bound the site into an overall landscape concept; 4) Work with the existing topography which varies significantly in gradient from 1:16 to 1:6.

#### 3.4 Site Strategy

The project is organised around two spaces: a tree-lined east-west road - 'The Mall' and a north-south public space – 'The Square'.

The Mall which runs from west to east following the contours of the site is defined by three-storey buildings on either side – an apartment block (Block C) to the south side of the road and a terrace of duplex units consisting of a 1-bed unit above a two-storey 3-bed unit to the north.

The Mall is terminated by a four-storey apartment building (Block B) which closes view to the east and redirects movement northwards towards The Square. Ground floor units along the Mall are own-door access so as to provide animation and active frontage to this new street.

The Square which consists of an open terrace for use by the general public negotiates the change of level across the site and is defined along its western edge by two-storey 3-bed houses (Block D). The lower, eastern edge of The Square is defined by 4-storey apartment buildings (Blocks A1- A2) that in turn overlook public amenity space and the valley to the east.

The same building that closes the end of The Mall provides closure to the southern end of The Square.

#### 3.5 Access and Approach

The road layout works with existing topography to provide compliant infrastructure that creates meaningful, pedestrian-oriented spaces.

The project will be accessed via the proposed access road to the west of the site (Planning Ref S179A/H/03/2024 that will connect Grand Parade to Lehaunstown Lane as indicated on CPS Map 2.5.

The design proposes the extension of the access road eastwards to create a new residential street 'The Mall'. which will turn northwards to form the western side of a new Public Square.



South Elevation of Block D and Block A - PA 060

Traffic looking to exit the development can drive around this central Public Square and exit via the same approach road.

The layout facilitates the future introduction of a through-road to connect the development with Lehaunstown Lane in line with the access point indicated on CPS Map 2.5 and Map 6.1. (refer Drawing PA903)

In order to provide compliant road gradients that deliver appropriate access to dwellings in accordance with TGD M 'Access and Use, it is proposed to adjust existing site levels along the section of road running east-west (The Mall) so as to achieve a road and pavement gradient that is less than 1:20.

The proposed levels for the road running north-south are set at existing site levels and follow existing site contours so as to minimise site works and associated cut-and-fill.

The section of road running along the eastern side of The Square to the front of Blocks A1 and A2 is set at a lower level again in order to work with existing site contours.

Road widths are in line with CPS para. 4.2.7 and DMURS with the access road width set at 5.5M. Pavement widths are 2M and incorporate trees and planted areas.

It is proposed that the eastern section of the central public space including connecting roads is designed as a shared space or 'Home-Zone' so as to reduce car speed and create a more pedestrian-friendly environment.

### 3.6 Cycle Way and Walkways

The development looks to maximise pedestrian permeability with clear, legible and direct routes for pedestrians

and cyclists along anticipated desire lines, with safe edge treatment, clear sight lines at eye level and an appropriate level of passive supervision. In line with CPS PD10

Cycleways and walking routes will be provided in line with Map 2.5 and Map 5.1 of the CPS. In particular, a branch cycle 'greenway' is proposed that runs from the new access road southwards where it terminates at the site boundary ready for future connection with the Cycle Greenway linking Grand Parade to the Natural Green Space of the River Valley.

### 3.7 Connection and Permeability

The proposal looks to facilitate movement of pedestrians and cyclists by creating a series of legible paths, routes and spaces that respond to desire-lines, positively contribute to the character of the area, and connect with the greater Cherrywood Way. (CPS Project Objective PD24 -26)

The design is organised around an east-west pedestrian through-route that looks to connect Grand Parade to the Natural Green Space that runs along the valley floor to the east of the site. Refer to drawing 790\_PA903 and 790\_PA911 for diagram of Pedestrian Routes.

The pedestrian route descends along a tree-lined road - 'The Mall' - negotiating a landscaped terrace between Blocks A and B before continuing by path through a landscaped parkland. The route connects with the new Greenway to be provided by others. Through the careful manipulation of levels, the route is designed to provide Access for All.

Views from The Mall between buildings A2 and B towards the Carrickmines River valley and the coast beyond reinforce this route by drawing the pedestrian through the landscape.

A secondary pedestrian route is proposed that connects the new Public Square to the Green Infrastructure by means of a landscaped flight of steps that cuts between Blocks A1 and A2.

A pedestrian route follows the proposed Natural Green Space running along the northwestern boundary of the site and links with Lehaunstown Lane via the existing field entrance and gate.

### 3.8 Project Mix and Typology

In accordance with the Cherrywood Planning Scheme, the project proposes a wide range of unit types ranging from terraced and duplex units to apartment blocks where principal frontages are required in particular overlooking the open space of Carrickmines River Valley and associated Natural Green Space.

Own-door units are provided at ground floor to provide active frontage in line with Specific Objective PD3 of the CPS. Refer drawing 790\_PA904 for Diagram illustrating Active Frontage.

The unit mix provided by the design is as follows: 26% one-bed, 54% two-bed and 20% three-bed. This is in accordance with the parameters set out by the CPS. This mix has been agreed with DLR Housing DLRCC/HNDA.

### 3.9 Project Net Density

Table 2 of the Cherrywood Planning Scheme 9 as amended sets the permissible Net Density (No. of Units / Net Site Area in Hectares) for a development within Res 2 to between 45 Units and 75 Units/Hectare.

The development area of the site is calculated as being the overall site area of less the area allocated for use as Green Infrastructure and Greenway which totals a Net Development Area of 2.039 hectares zoned 'Residential'.

Based on the above area, the minimum permissible number of units is 92 and the maximum is 153.

The number of units proposed in the scheme is 109 units.

The Net Density achieved by the proposed scheme is 109 Units / 2.0173 Hectares = 54 Units/Hectare which is within the permissible range.



Active Frontage - PA 904



Pedestrian Access and Permeability - PA 903

### 3.10 Urban Form: Building and Massing

The development provides a range of building types which together provide the required residential mix while responding to context. Buildings vary in height from two to four stories in accordance with CPS Map 2.3. Principle Frontages are designed to define a series of streetscapes and enclose and overlook amenity areas (in line with CPS Specific Objective PD9). Refer Drawing 790\_PA902

#### 3.10.1 Blocks A1 and A2

Blocks A1 and A2 consist of four storey residential apartment buildings over underground parking that together form the eastern side of the new Public Square. A stepped pedestrian route that leads from the Public Square to the parkland below runs between the two buildings. A further pedestrian connection runs between Block B and the southern end of block A2.

The building takes advantage of existing topography to provide underground parking beneath blocks A1 and A2. Through a strategy of cut-and-fill, this lower level of parking efficiently resolves the significant change in level across this section of the site. Natural cross-ventilation to the car park is provided by means of vent grilles located along the building perimeter accommodated within planters. The car park is accessed via a ramped vehicular access to the northern boundary of the site.

Upper floor apartments are accessed via common entrance lobbies entered from the street. The entrance to Block A2 is located on the northern corner of the block so as to animate the pedestrian route between the two buildings and provide active frontage while the entrance to Block A1 is located centrally within the block.

West-facing ground floor units have own-door access from the Public Square so as to provide animation to the street and passive surveillance. These units are buffered by planting zones / gated front gardens so as to provide an element of protection and privacy.

A Duplex arrangement enables the private open space for these own-door accessed units to be located at first floor level so as to provide an appropriate level of privacy while ground-floor own-door corner units have their private open space screened from the street by deep planters.

East-facing ground floor units also have own-door access and are approached via a pedestrian path that runs along the eastern side of the buildings.

In order to follow the existing topography of the site and provide disabled access across the site, this path is set at a lower level to the entrance level of the units it serves (approx. 1M below). External stepped approaches are provided from the pedestrian route to front doors. This change in level is exploited to provide privacy to the private open space / terraces of the ground floor units.

The private open space to upper floor apartments is provided by projecting or recessed balconies.

Communal outdoor space for Blocks A1 and A2 is provided in the form of a shared communal garden to the rear of apartment Block C as part of a common communal space strategy for the project.

#### 3.10.2 Block B

Block B consists of a four-storey high building that plays a pivotal position in the overall project. It acts as a termination to 'The Mall' by closing the vista for those approaching from the west. It incorporates a pedestrian connection in the form of a landscaped terrace that leads to a pedestrian route that descends through the site connecting to the Green Infrastructure beyond. Its northern elevation closes the southern end of the new Public Square.

All ground floor units to Block B have own-door access so as to provide animation and passive surveillance to the street. These units are buffered by planting zones / gated front gardens so as to provide an element of protection and privacy. Each unit has its private open space in the form of a series of south-facing 'back gardens'.

Upper-floor apartments are accessed via a recessed entrance that provides animation and active frontage to this key corner.

Private open space allocation for the upper floor apartments is provided in the form of balconies on east, west and south facades.

An ESB substation and switch room together with secure covered cycle parking for the development and the Block B bin store is located to the southwest corner of block B

Communal outdoor space for Block B is provided in the form of a shared communal garden to the rear of apartment Block C as part of a common communal space strategy for the project. Access to this Communal Space is via a gated pedestrian route between Block B and C and via the Greenway at the eastern end of block C



North Elevation of Block B and Block C - PA 060

### 3.10.3 Block C

Block C forms the southern side of The Mall and consists of an apartment block varying in height between two and three storeys. Through the careful manipulation of levels, the building negotiates the significant site gradient that occurs in this corner of the site.

The ground floor units are own-door access so as to provide active street frontage with level access being provided by a combination of cutting into the site and the formation of level terraces defined by local planters that act as buffers to the street. Active frontage and passive surveillance is provided to the west along the new cycle greenway by locating an entrance door on the corner.

Upper floor apartments are accessed by means of a central stair and lift entered from a central lobby.

Private Open Space is provided by means of a combination of balconies to the south and recessed terraces to the north.

A new, secure, south-facing communal garden is created to the rear of Block C to serve as Communal Open Space for the development serving Block A1, A2, B, C and D. This can be accessed via level access from the Greenway and via access stairs between blocks Band C.

### 3.10.4 Block D

Block D defines the northern side of The Mall and consists of a three-storey terrace of Duplex units that step to follow the slope of the street. The terrace provides a new urban edge and public frontage to the boundary with the adjacent single-storey residence to the north.

Three-bed duplex units occupy ground and first floor with direct access to private back gardens. One-bed units, accessed directly from the street by means of a private stair, occupy the third floor.

All units are own-door access entered directly from The Mall so as to provide animation and active frontage to the street. A planted garden to the street provides a buffer and incorporates bin stores. Private open space is provided by means of back gardens for duplex units and recessed terraces for one-bed units.

### 3.10.5 Block E

Block E consists of a two-storey terrace of three-bed houses with private rear gardens that back on to the adjacent single-storey residence. The terrace screens the existing boundary and provides a new urban edge to the Public Square. Front gardens accommodate off-street parking in accordance with CPS guidance. Bins stores and cycle storage are incorporated into planters and define the street edge and property lines.

### 3.11 Building Heights

Building heights vary from 2-4 floors in accordance with CPS Map 2.3. Building heights are distributed in response to the site topography and adjacent land-use. Taller, four storey buildings are located at the lowest level of the site overlooking public amenity areas and playground. Two and three storey buildings located towards the upper levels of the site.

Floor-to-floor heights are typically 3.1M for upper floors with ground level floor-to-floor heights of 3.45 meters. Building heights, measured from the higher street side as per CPS paragraph 2.9 where relevant, are less than the maximum of 16.5 meters set in CPS Table 2.11 being approximately 14.4 metres above ground.

### 3.12 Shadow Analysis

We refer you to ABK Architects' Shadow Analysis Report that forms part of this application. This report compares the existing site condition with that generated by the proposed development by means of a shadow analysis model study. This provides a visual representation of any changes to the availability of sunlight that may arise due to the proposed development.

The study uses the Equinox 21st March, Mid-Winter (21st December) and Mid-summer (21st June) between the hours of 10am and 6pm to demonstrate average sun angles at mid-season and high summer and winter

As part of the design development, analysis was undertaken to assess the sunlight and overshadowing impact of the proposed development on external spaces throughout the development and adjacent to the site.

The analysis illustrates that the shadows cast by the proposed development are largely limited to the confines of the site itself. The surrounding properties are sufficiently far away that they will be typically unaffected by shadows cast by the proposed development.

The shadow analysis carried out at equinox (March 20th) and Mid-summer (21st June) shows that the proposed development has minimal impact on neighbouring properties at these times of the year. Shadow casting is also minimal in early morning 10am in for 21st December.

The analysis shows that for proposed external areas, communal areas and gardens within the site, 50% of open space will receive at least 2 hours of sunlight on 21st March as required by BRE. This study confirms that the development will be adequately sunlit throughout the year.

### 3.13 Separation Distances

Consideration has been given in the design to the relationship between existing and proposed structures with a view to providing acceptable separation distances in compliance with para 12.3.5.2 of the DLR Development Plan notes 'a clearance distance of circa 22 Meters in general is required between opposing windows'

Block E: The separation distance between the rear elevation of Block E consisting of 2-storey houses and the adjacent residence Grangeland to the west is approximately 22 meters which is in accordance with para 12.3.5.2 of the DLR Development Plan

Block D: The proposed duplex building has been designed so as to minimize impact and overlooking on neighbours. The units have been designed such that bedroom windows and a small kitchen window are located in the elevation facing the existing residence, with living room spaces located to the front of the block.

Separation distances between Block D and the single storey residence, Grangeland vary due to the angle between the two buildings. The back-to-back distance between



Proposed Block B and A West Elevation - PA 061

the nearest point of the bungalow and Block D is 16.5 meters (to the eastern corner of the bungalow) while the back-to-back distance between Block D and the western end of Grangeland is circa 25 meters). The average separation distance between Block D to the adjacent residence of approximately 21 Meters is in line with the parameters set out in para 12.3.5.2 of the DLR Development Plan. Guidance from The Design Manual for Quality Housing- 3.6.8.2 ' Privacy' notes a minimum of 22M between upper floor windows at the rear. We note that as the existing building is single storey, there are no upper floor windows.

While para 12.3.5.2 of the DLR Development Plan notes 'a clearance distance of circa 22 Meters in general is required between opposing windows' it states that where separation distances are not met, a Daylight Analysis may be submitted. In line with this guidance, a Daylight Impact Assessment Report was carried out by Homan O'Brien Associates in accordance with The Building Research Establishment's (BRE) Site Layout Planning for Daylight and Sunlight: A guide to good practice (BRE 209) 3rd edition/ 2022 edition, (the "BRE Guide").

The results determined that the proposed development would not adversely affect the neighbouring building in terms of receipt of natural light, when assessed against the baseline scheme.

### 3.14 Principal Frontages

CPS Map 2.4 illustrates the indicative location and length of principal frontages where there is a desire to define strong streetscape elements, turn corners on public roads and enclose and overlook amenity open space areas and green routes.

The 4-storey high blocks A1, A2 and B that run north-south along the eastern boundary of the site provide principal frontage to the Lehaunstown Valley Green Infrastructure in line with the intent of the CPS.

Whereas site constraints - specifically the building on top of existing Tufa Springs - restrict the provision of Principal Frontages to the south-western corner of the site in line with Map 2.4, the eastern end of Block C is designed to address this corner of the site with its taller gable end providing frontage to the Greenway and adjacent Green Infrastructure.

Site constraints to the north-western corner of the site – specifically existing overhead power-lines, protected hedgerows and limited site-ownership (the majority of this corner of the site being outside the ownership of DLR Co Co) - restrict the provision of Principal Frontages to this area in line with Map 2.4

Within the limitations of the site constraints noted above, the combined end-elevations of Blocks C and D which overlook the adjacent Greenway and amenity space, provide an appropriate level of scale, enclosure and articulation of 'corner' to meet the intent of Specific Objective PD9 of the CPS and Map 2.4 through their increased height and careful articulation. Please refer to ABK drawing 790 PA902 for the associated diagram.

### 3.15 Active Frontage and Passive Surveillance

The development has been designed to incorporate principles of active frontage and passive surveillance throughout so as to provide a safe and secure residential environment for the community. Please refer to ABK drawing 790 PA904 for associated diagram.

Own-door ground-floor units accessed directly from the street provide animation to the public realm while giving residents a sense of ownership of the adjacent pavement. Where possible, living rooms and kitchens are located onto the street so as to provide an element of overlooking.

Apartment block entrances and foyers are located at key nodal points in the scheme so as to animate the pavement and maximise pedestrian traffic.

The public realm is designed to create a safe environment where informal overlooking and ownership provides an appropriate sense of security to communal spaces.

The development clearly defines boundaries between public and private and between 'front' and 'back'. Ambiguous spaces where ownership is not clear have been eliminated. Corners have been designed to be inhabited or active so as to eliminate anti-social behaviour. Taking-in charge has been agreed with DLR Co.Co. with the local authority taking in charge all elements of the public realm.

In respect of the various elements that make up the project, we note the following:

Blocks A1-A2: The entrance to Block A2 is located on the northern corner of the block so as to animate the pedestrian route between the two buildings and provide active frontage while the entrance to Block A1 is located centrally within the block to maximise circulation across the central square. West-facing, ground-floor units have own-door access from the Public Square so as



South Elevation of Block D and Block A - PA 060

to provide animation and passive surveillance to the street. East-facing, ground-floor units also have own-door access and are approached from a pedestrian path that runs along the eastern side of the buildings.

**Underground Car Park:** The underground car park is for use by residents of the apartment blocks A1, A2 and B. (Disabled parking for blocks A1, A2 and B are provided as on-street parking adjacent to the respective entrances) Vehicular access is via an access ramp at the north end of Block A1. For security, vehicular access will be limited to tenants by means of a fob-activated barrier located at the top of the access ramp.

Pedestrian access to the car park is provided via lift and stair from apartment circulation cores of blocks A1 and A2. Residents of Block B access the basement parking via an external stair located at the end of block A2.

The underground car park has been designed as open, uninterrupted space so as to provide a safe environment with good sightlines for ease of surveillance. Corners have been eliminated where possible so as to mitigate against anti-social behaviour.

The car park lay-out has been reviewed by DLR's Maintenance and Management Team in terms of safety and security as part of the design process.

**Block B:** The common apartment entrance is located at the end of The Mall at a critical corner in the development so as to provide animation and active frontage to adjacent street and square. All ground floor units to this block have own-door access so as to provide animation and passive surveillance to the street.

**Block C:** The ground floor units are own-door access so as to provide active street frontage with level access being provided by a combination of cutting into the site and the formation of level terraces defined by local planters that act as buffers to the street. Active frontage and passive surveillance is provided to the west along the new cycle greenway by locating an entrance door on this key corner.

**Block D:** All units are own-door access entered directly from The Mall so as to provide animation and active frontage to the street. Front doors are provided to the gable end of the terrace facing west so as to animate the adjacent public pavement.

**Block E:** This block consists of a terrace of houses with own-door access and living spaces overlooking the street and square beyond.

**Public Realm:** The communal open space to the rear of Block C has been designed as a garden with secure boundaries to all sides (incorporating the protected hedgerow to the southern boundary of the site). This garden is overlooked by the adjacent apartments of Block C including private terraces and balconies which together provide passive surveillance to this space.

**Public Square:** The Public Square, located at the centre of the project, is overlooked by the adjacent accommodation of Blocks A1, A2, B and the terraced houses of Block E) including balconies and terraces. The Public Square incorporates shared play space so as to create an animated, social hub for the community.

**The Park:** The sloping parkland to the east of Blocks A1-A2 incorporates a public path which provides front door access to adjacent ground-floor units which in turn animate this public route to the Green Infrastructure beyond. The space is overlooked by adjacent upper floor apartments with their balconies and terraces while programmed play-space is incorporated into the landscape to provide social activity.

### 3.16 Skyline

In accordance with paragraph 2.8.2 of the CPS, the roof profile and skyline of the project is designed to take into consideration the sloping topography of the site while taking into consideration the green-roof requirements set out in DLR Development Plan.

Roofs viewed from the higher levels of the site and on approach along The Mall incorporate pitched roofs to provide variety and to mitigate the impact of unsightly views of flat roofs.

Roofs at the lower level of the site which are less likely to be viewed from above (Block A1-A2) provide extensive green roofs as part of an integrated approach to the provision of green infrastructure and to meet SuDS requirements as set out in DLR Development Plan Paragraph 12.8.6.3., Appendix 7 and Dún Laoghaire- Rathdown County Council's Green Roof Policy' (2020) as noted below

### 3.17 Green Roof

As per CPS Specific Objective PI 8 which states that '...Green Roofs shall be used in accordance with Dún Laoghaire-Rathdown County Council's Green Roofs Guidance Document.', we note that Green Roof provision is in line with the requirements as set out in the following:

DLR Development Plan Paragraph 12.8.6.3,  
Appendix 7 – Sustainable Drainage System Measures  
Dún Laoghaire- Rathdown County Council's Green Roof Policy' (2020)

#### Roof Area Calculations

Standard GR1 of Dún Laoghaire- Rathdown County Council's Green Roof Policy notes site specific exemptions to Green roofs where '...terraced, semi-detached, detached housing, mews developments and duplexes where there isn't a continuous roof that is centrally managed'. On this basis, Duplex Block D and Terraced House Block E have been excluded from calculations below

**Green Roof Compliance:** The total roof area that pertains to Green Roof Policy is as calculated in ABK Accommodation Schedule that forms part of this application.

Whereas Standard GR2 notes a Minimum Coverage of 70% Intensive Green Roof provision, the proposed Intensive green roof will be 63%. In accordance with DLR Development Plan Appendix 7 -Exemptions and Amplifications and as agreed in consultation with DLR CoCo, in order to mitigate the 7% short-fall in Green Roof, it is proposed that SuDS measures that provide the equivalent enhancement of amenity and habitat and equivalent interception/treatment that the short fall in green roof will be provided on the site in agreement with the Local Authority

Please refer to Punch Consulting Engineers Report that forms part of this application for details of the site-wide SuDS strategy



### 3.18 Material Palette and Façade Composition

The development proposes the use of brick as the principle facing material throughout the development.

Brick colour and texture will vary in tone from block to block and within blocks so as to provide variation and a modulation of scale across the development while also contrasting with planting.

A selected brick is proposed for all buildings. The use of stone precast concrete and are proposed to provide variation to this palate. Garden walls and planter are to be faced with brick with selected brick / stone copings.

Windows and balustrading will have a selected coloured Polyester powder-coated finish.

### 3.19 Landscape Design

An integrated approach to landscape has been developed by the design team that looks to create a coherent strategy that resolves existing topography, works with existing landscape features in particular existing protected hedgerows, reinforces existing biodiversity, and connects with existing and proposed strategic landscape infrastructure.

Please refer to Murphy Sheanon Landscape Architects drawings and report submitted as part of this application.

NOTE: The exact details and extents of the landscape design will follow the latest advice and guidance from the Dun Laoghaire-Rathdown County Council. Landscape elements, play spaces, and finishes will be agreed upon in consultation with the DLRCC Parks and Housing Departments to ensure compliance with their necessities and standards at the time of construction.



Illustration of Central Landscape Area to 'The Park'



APARTMENT DESIGN

## 4.0 Apartment Design

### 4.1.0 Unit Design

Units are designed in accordance with guidelines set out in Dun Laoghaire Rathdown County Development Plan 2022-2028 and Sustainable Urban Housing for New Apartments (DHLGH) 2022.

In respect of compliance with recent guidance - 'Planning Design Standards for Apartments 2025', we note that the guidelines are currently under Judicial Review and as such, have not been applied to this design.

#### 4.1.1 Floor to Ceiling Heights

Floor-to-ceiling heights in Apartments are in accordance with or in excess of the guidelines.

#### 4.1.2 Internal Space Provision

Apartment net internal floor areas are in accordance with the space requirements set out by in the "Sustainable Urban Housing: Design Standards for New Apartments" with room sizes according with the minimum sizes defined in this document. A Housing Quality Schedule has been prepared for each unit to demonstrate compliance and forms part of this submission.

The provision of adequate and compliant storage is made within units. (Whereas 'Planning Design Standards for Apartments 2025', Item 3.7 notes that Bulky Storage should be provided, the guidance does not stipulate the quantum of storage/unit. As noted in 4.1 above, these guidelines are currently under Judicial Review and as such have not been applied to the design.)

#### 4.1.3 Universal Access Provision

The proposed development is designed in accordance with TGD M of the Building Regulations. Apartment blocks, communal facilities and external communal space has been designed so that they are easy for people to use regardless of age or abilities.

The development is in compliance with Part M of the Building Regulations. Entrance thresholds to apartment foyers, common areas and ground floor units and communal facilities are flush throughout. Access to upper floors is via lift together with the provision of TGD M compliant stairs.

6no 1B2P Accessible Apartments to Universal Design Standards will be provided with 3no located in block A1 and 3no located in block A2.

#### 4.1.4 Dual Aspect

The proposed development is in an 'Intermediate Urban Location' as defined in Chapter 2.0 of Sustainable Urban Housing: Design Standards for New Apartments. Dual aspect ratios are in accordance with SPPR 4 of these standards with which stipulates that 50% of apartments are Dual Aspect. The design achieves 70% of units being dual aspect.

### 4.2 Daylight Study

A Daylight Analysis Report was carried out by B+W Consulting Engineers in support of this submission. The calculation methodology for daylight is based on the British Research Establishments "Site Layout Planning for Daylight and Sunlight: A Good Practice Guide" by PJ Littlefair, 2022 Third Edition.

In respect of Daylight Factor, the analysis confirms that across the entire development recommended levels of internal daylight are achieved. A 100% compliance rate was achieved across the selected apartments throughout the entire development.

In respect of Daylight Illuminance, the analysis confirms that across the entire development recommended levels of Daylight illuminance are achieved. A 100% compliance rate was achieved across the selected apartments throughout the entire development.

### 4.3 Private Open Space Provision

Private open space for apartments is in accordance with Table 12.11 of the DLR Development Plan.

Private Open Space typically takes the form of projecting and recessed balconies for apartments on upper floors and terraces at ground floor.

Private open space for houses and duplex units is provided in the form of gardens in accordance with CPS Table 2.10 – 'Private Open Space Requirements'.

Please refer to ABK Housing Quality Index Schedule for area calculations in respect of the provision of Private Open Space for individual units.



Block D Bay Elevation - PA 501

#### 4.4 Public Open Space Provision and the Public Realm

In accordance with DLR Development Plan Table 12.8, a minimum of 15% of the overall site area is required to be provided as Public Open Space. Based on the site area, this requires a minimum of 3,059 M2 of public space. The proposed design will provide a total of 4,200M2 of Public Open Space allocated as follows:

**Public Square:** A new public square is proposed as the focus of the community and is designed as part of traffic-calmed 'Home-Zone'. The space consists of a level terrace running north-south formed by low retaining walls and a flight of steps along the eastern edge for people to sit and children to play. It incorporates a children's play space and a seating area within a grove of trees for relaxation and leisure.

**Park:** A Sloping landscaped parkland that extends along the eastern site boundary crossed by paths that follow that gradient of the site and connect to the Greenway which in turn leads to the Green Infrastructure beyond.

Please Refer to ABK drawing 790 PA905 for Diagram illustrating extent and location of Public Open Space

#### 4.5 Communal Open Space Provision

In accordance with Item 5.7 of the CPS, DLR Development Plan Table 12.9 and "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities", 673M2 of Communal Open Space is required to be provided.

A secure, south-facing communal garden with an area of 995M2 is provided for residents of apartment blocks A1, A2, B, C and D in compliance with Communal Open Space requirements.

The space is designed as an inviting place for people to use for safe informal recreation. The space is secure with level access from the new Greenway running along the western boundary of the site and from the east via external stairs adjacent block B. There is direct access from the first floor of Block C. The communal space is overlooked by terraces and balconies of Block C providing passive surveillance.

Spaces are designed to have adequate levels of sunlight throughout the year in accordance with BRE 209 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' (2011). The area of Communal Open Space is 1500M2 which is in excess of the 674M2 required.

Please Refer to ABK drawing 790 PA905 for Diagram illustrating extent and location of Communal Space.

#### 4.6 Play Facilities

Children's play needs will be provided in accordance paragraph 5.6 of the CPS and with current Dún Laoghaire-Rathdown County Development Plan policy paragraph 12.8.9. Specifically, the following will be provided:

- Age 0-6yrs: A play space (approx. 85-100m2) with suitable play equipment will be incorporated into the design of the Public Square to meet the specific needs of toddlers and children to the age of six.
- 7-13 yrs: A play area for older children and young teenagers of approximately 200-400 sq. metres will be incorporated into the lower-level landscaped Park accessed via the pedestrian route that runs through the site

Play spaces are overlooked by adjacent apartments providing passive surveillance and security. Children's play spaces are within 150M of the residential accommodation which they serve. Refer to ABK Drawing PA-909 for Diagram indicating location of Play Spaces and distances.

#### 4.7 Waste Management

The development will comply with the DLR Development plan and CPS Specific Objective PI 32 in respect of the provision of waste/recycling and bin storage provision. Waste generated by residents in apartments will be stored in dedicated communal waste storage areas (WSAs), strategically located adjacent to the entrance to each block.

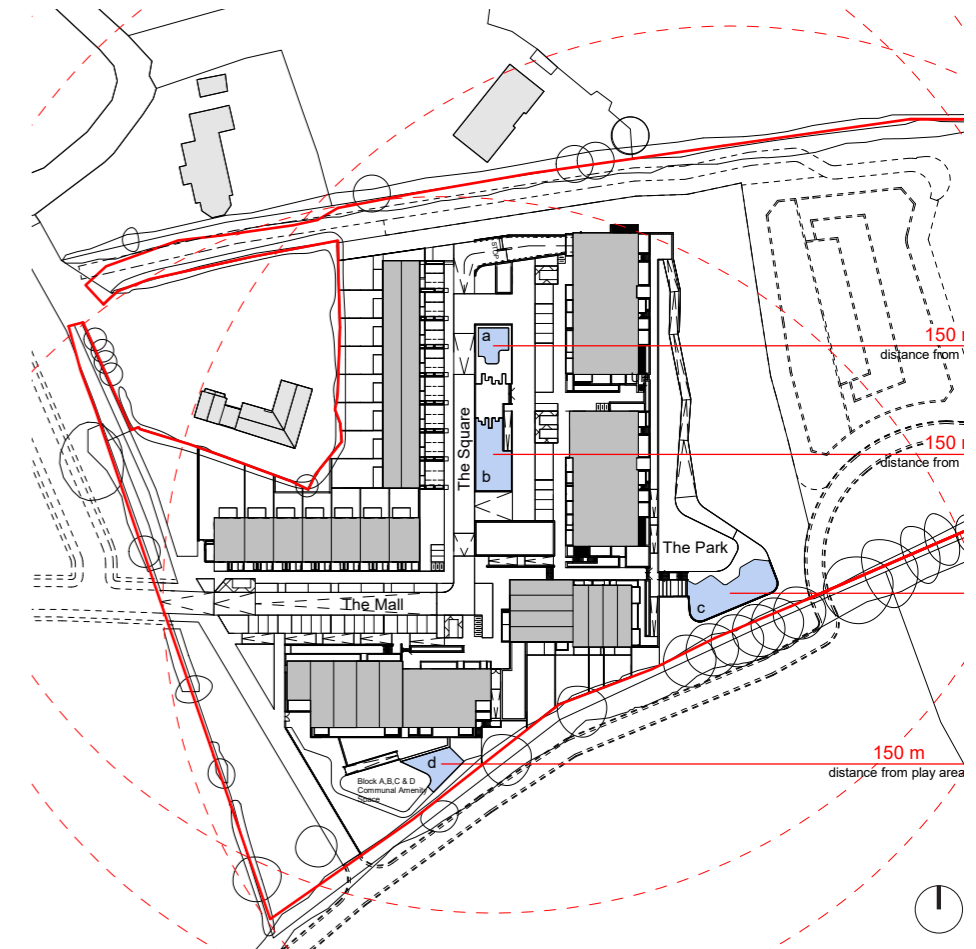
WSAs have been incorporated into each apartment block with external access to facilitate collection and agreed bin collection points. WSAs will be brightly lit, well-signed, spacious for easy manoeuvrability, with good ventilation. Adequate space is provided for separate storage of general mixed waste, general recyclable waste, and organic waste.

Waste bins from each residential block will be collected from designated waste collection points by the nominated waste contractor. Roads have been designed to provide access for waste collection trucks, including design of turning circles and headroom requirements.

Separate, secure bin stores for individual units have been incorporated into the streetscape for duplex (Block D) and Terraced houses (Block E). These define boundaries and mark the edge of pavements. Refer to ABK Drawing PA-908 for Diagram indicating location of bin storage.



Public and communal amenity plan - PA 905



Play Facilities - PA 909



PHYSICAL INFRASTRUCTURE

## 5.0 Physical Infrastructure

### 5.1 Water Supply

A connection strategy has been agreed in principle with UE to connect to the trunk water main located in Grand Parade. The proposed water main connection is to be incorporated into the utilities provision for the new access road connecting Grand Parade with Lehaunstown Lane to be provided by others. Please refer to Punch Consulting Engineer Documentation for details

### 5.2 Foul Drainage.

A connection to the existing combined trunk sewer running along the northern boundary of the site has been agreed in principle with UE. Please refer to Punch Consulting Engineer Preliminary Documentation.

It is noted that an existing foul drainage system, specifically septic tank and soak-away serving the adjacent property, 'Grangeland' is located within the site along the boundary to that property. Subject to a separate agreement between the parties, it is proposed that the property be connected directly to the adjacent foul line and the existing septic tank and associated soak-away be extinguished and removed. An agreement in principle has been received from UE for the proposed connection to the main foul line.

### 5.3 Storm Water Drainage

Storm water management will be designed in accordance with paragraph 4.1.2 of the CPS and in accordance with the Stormwater Management Guidelines for the Cherrywood Rathmichael Development Area 2009. SuDS strategies include the provision of green roofs to attenuate rainwater run-off; the incorporation of swales / Bio-retention areas along roads to be integrated with the overall landscape design, the provision of attenuation tank to east of site.

Please refer to Punch Consulting Engineer Documentation for details of proposed SuDS and Storm Water design proposals

### 5.4 Flood Risk Assessment

The site is a Zone C (not subject to flooding under CFRAMS mapping). A Flood Risk Assessment has been completed by DLR Co.Co. on the basis of OPW and other local government guidelines for SSRFA's. Please refer to separate FRA that forms part of this submission.

### 5.5 Hydrology

The southwestern corner of the site falls within A Precautionary Catchment Area as per Map 5.1 of Amendment 8 of the CPS. Specific Objective GI 61 requires the protection of calcareous (tufa) springs and the surrounding area with any development

to have no net effect on the hydrogeological and other physical conditions on which these springs rely.

JBA Consulting Ltd ("JBA") were commissioned to provide a hydrogeological assessment of the proposed Lehaunstown Residential Development at Cherrywood Planning Scheme area. This assessment follows the Appendix E: Tufa Spring Mitigation Requirements of the Cherrywood Planning Scheme 2014 (updated July 2023).

The assessment concluded that the proposed development will not significantly impact the groundwater flow or groundwater recharge at the site or affect the Tufa Springs Catchment area. Based on the staged outline in Table 4-1 of Appendix E of the Planning Scheme, the assessment recommends that no further stages of investigation are required. Please refer to the JBA Consulting Ltd Tufa Assessment that forms part of this submission for details.

### 5.6 Traffic and Transportation

Please refer to Punch Consulting Engineer's reports addressing matters relating to transport



Proposed Block B and A East Elevation - PA 061

## 5.7 Car Parking

Car parking provision will be in accordance with The Cherrywood Planning Scheme Section 4.2.10 as amended, specifically, Table 4.4 of Section 4.2.10 which defines the maximum quantum of parking that may be permitted for any residential development. The proposed design will provide 88 car parking spaces with an additional 2no spaces provided for Car-Share totalling 90 spaces. All parking designed to be EV ready. Please refer to Accommodation Schedule for the quantum of parking to be provided.

Distribution is as follows:

Basement Parking:	43no spaces for use by Blocks A1, A2 and Block B.
On-street Parking:	28no on-street spaces for use by Blocks B, C and D
Disabled Parking:	5no on-street spaces provided for use by Blocks A1, A2, B, and C
On-curtilage Parking:	12no spaces provided for Block E with 4no units getting 2no spaces each and 4 units get 1no space each.
Visitors Parking:	2no on-street spaces provided centrally adjacent Block A2

Underground car parking is located below apartment Blocks A1, A2. Vehicular access is provided via a car park ramp to the north which is secured by means of an access-controlled vehicular barrier.

The provision of underground car parking is made possible due to the existing significant site gradient. The design avails of a cut-and-fill strategy combined with a retaining wall condition to resolve the significant 1:6 slope that occurs at this section of the site to provide a level, accessible site. The underground car park is for use by residents of the apartment blocks A1 and A2 and Block B. Secure access is provided from the lift and stair cores of blocks A1 and A2. Residents of Block B with allocated spaces in the basement have access via a secure external stair located at the end of Block A2.

The underground car park has been designed so as to provide a clear, open and uninterrupted parking space so as to provide clear light lines, and easy surveillance. Corners have been eliminated where possible so as mitigate against loitering. Refer to ABK Drawing PA\_906 for Diagram illustrating Car Park Distribution.

## 5.8 Cycle / Motorcycle Parking

Cycle parking consisting of long term and short stay parking provision is in accordance with The Cherrywood Planning Scheme paragraph 4.2.11 and DLR Development Plan. The design allows for a 20% future increase in bike parking capacity in accordance with guidance.

Secure, enclosed resident bike parking is provided adjacent to the entrances to Block A1 and A2 to serve these blocks. A secure, covered cycle parking area is provided between Apartment blocks B and C to serve residents of Blocks B, C and D. Bike parking will be provided using a balanced, two-tier stacking system to maximise space use.

Secure bike lock-ups are integrated into the front of terrace houses of Block E. Short-stay cycle parking is distributed appropriately throughout the development.

Dedicated Motorcycle parking will be provided at a minimum of four or more spaces per 100 car parking spaces. Spaces are located in the Basement and at the end of Block D.

Refer to Accommodation Schedule for quantum to be provided. Refer to ABK Drawing PA\_906 for Diagram illustrating locations of cycle parking.

## 5.9 Utilities and Telecoms

Existing utility and Telecom network locations have been established and connections have agreed with the relevant utility provider in line with Special Objective PI26.

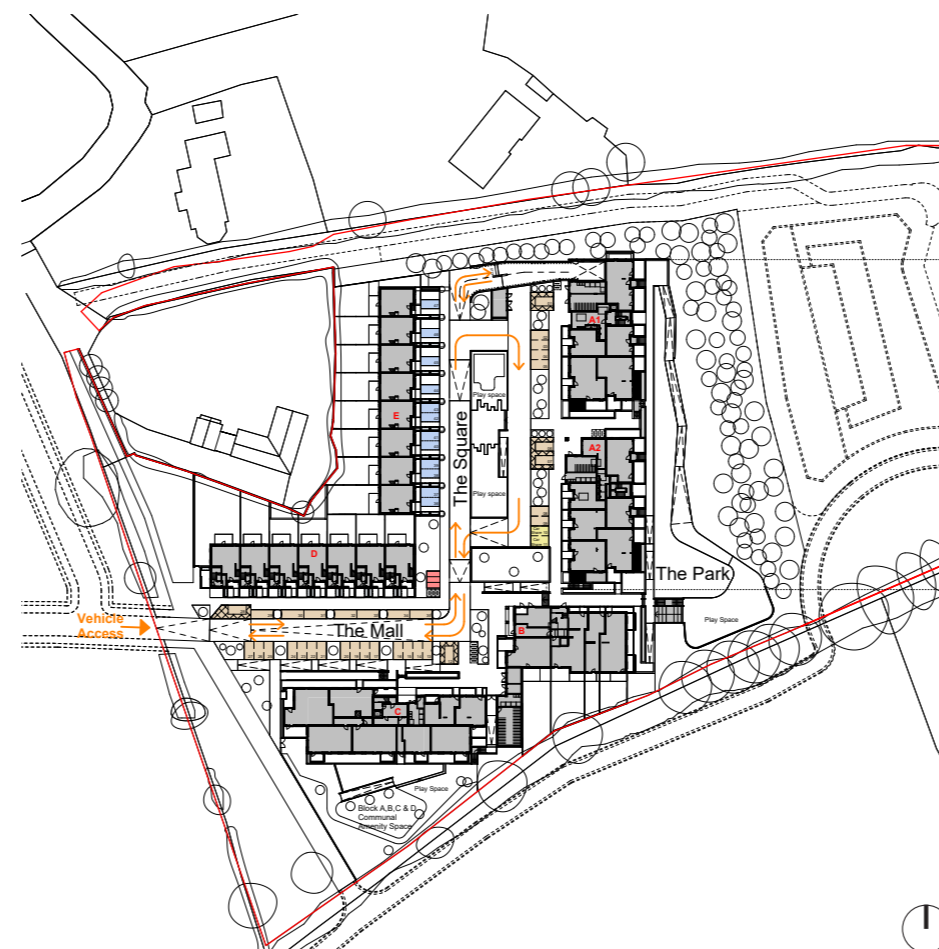
Please refer to Homan O'Brien's M+E Engineer's compliance report and associated documentation for information on utilities connections.

## 5.10 Energy

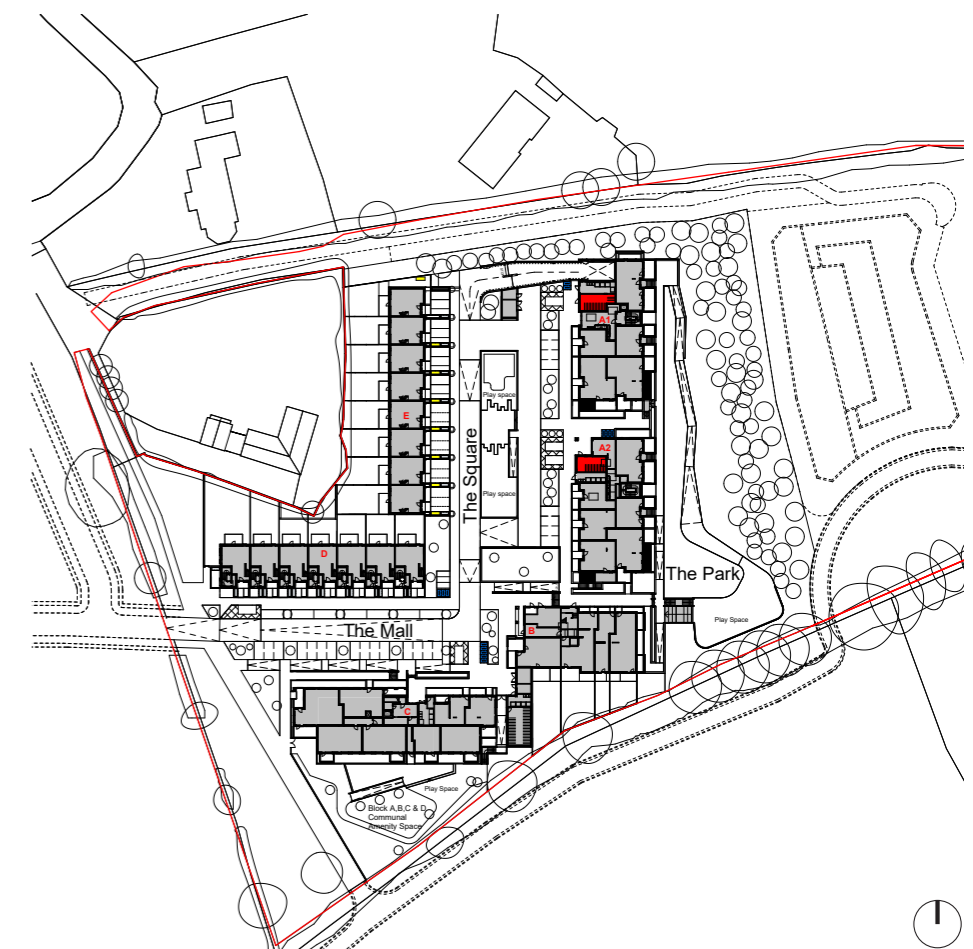
The Apartment and House types have been modelled to ensure compliance with Building Regulations Part L (NZEB) 2022 and as updated 14<sup>th</sup> February 2023.

The development has been designed to achieve Part L NZEB compliance with a minimum BER of A3. The design proposes a significant reduction in Primary Energy and CO2 emissions compared to a Building Regulation Compliant Residential Building to Part L 2018. Air Tightness to achieve 3m<sup>3</sup>/m<sup>2</sup>/hr which is a 60% improvement on the Building Regulations advised upper limit figure.

Please refer to Homan O'Brien's M+E Engineer's Compliance Report that addresses matters pertaining to energy.



Car Parking Plan - PA 906



Cycle Strategy Plan - PA 907



## 6.0 Green Infrastructure

### 6.1 General

The proposed development looks to reinforce the aims of the CPS by extending green infrastructure, ecological connectivity and the network of open spaces to create a high-quality environment for residents. The design integrates clear, legible links and greenways while simultaneously providing wildlife corridors.

The proposal looks to facilitate movement of pedestrians and cyclists by creating a series of legible paths, routes and spaces that respond to desire-lines, positively contribute to the character of the area, and connect with the greater Cherrywood Way. (CPS Project Objective PD24-26)

### 6.2 Greenways and Natural Green Space

CPS Map 5.1 indicates the following Natural Green Space within the boundary of the site.

- An extensive Natural Green Space encompassing approximately 1/3 of the site to form part of the Lehaunstown Valley Green Infrastructure.
- Natural Green Space along the western boundary of the site to include a Cycle Greenway

These green amenity spaces have been incorporated into the overall design. We note that the detailed design of the Natural Green Space to the eastern portion of the site has been covered by the planning grant received for Pond 2A and as such is not covered by this application.

### 6.3 Protected hedgerows

CPS Map 5.2 note Habitats to be retained in particular hedgerows to the south and west boundaries of the site.

#### 6.3.1 Western Hedgerow

The planning grant for a new Access Road to the west of site (Planning Ref S179A/H/03/2024) encompasses a grant for the making of a new opening in the existing hedge. No works to the western hedgerow are proposed under this application.

#### 6.3.2 Southern Hedgerow

CPS Map 2.5 indicates a greenway / cycle path running north-south along the western boundary of the site passing through an existing gap in the protected hedgerow. This application proposes the construction of this section of greenway to extent as far as the site boundary terminating before the existing hedge.

As the section of East-West greenway on the far side of the hedge has not yet been constructed, it is proposed that any future connection and associated works to the hedge be carried out as part of the construction of this east-west greenway. In summary, no works are proposed to the southern protected hedge as part of this application

### 6.4 Tree Exclusion Zone

The development maintains an exclusion zone of approximately 10M from the centre-line of the hedge-rows to ensure that there is no adverse impact on existing trees and tree routes Please refer to Arborists Associates Report that is part of this application.

### 6.5 Site Lighting

Site lighting is designed to coordinate with the site lighting design for the proposed adjacent main road. It has been designed in accordance with Dún Laoghaire-Rathdown County Council Public Lighting guidance, S5489-1:2013, EN13201-2015, I.S. 10101. The lighting design complies with the Part M DAC requirements for the Pedestrian route and stairs/ramps. The lighting fixture will have Dali controlling, IP65, and Electronic driver with LED white light not greater than 4,000k or less than 3,000k. The systems will be designed to minimise effects of the lighting on bat population. Please refer to Homan O'Brien's External Lighting Report that forms part of this submission.

### 6.6 Wind Analysis

A Microclimatic Wind Analysis and Pedestrian Analysis Report has been carried out by IN2 Engineers where Wind Analysis was assessed utilising Airflow Simulation techniques through Computational Fluid Dynamics (CFD) Simscale software. Wind simulations were compiled and assessed against Lawson Criteria Methodology- an assessment method for Pedestrian Comfort.

The balconies on all blocks in the proposed development were assessed. With minor adjustments to two balconies which have been incorporated into the design, balconies are predicted to be suitable for "Outdoor Dining/Pedestrian Sitting".

The analysis found that conditions for pedestrians at ground level were predicted to be suitable for "Pedestrian Sitting/ Standing" across the majority of the proposed development which presents excellent sheltered conditions for its intended use as outdoor garden and amenity spaces.

Overall, the proposed development was determined to not negatively impact on its receiving environment in terms of wind microclimate, allowing for the mitigation measures that were identified through the process of analysing microclimatic effects and determining design solutions.

Please refer to IN2 Consulting Engineer's Microclimatic Wind Analysis and Pedestrian Analysis Report that forms part of this submission.

### 6.7 Environmental Impact Assessment

In accordance with European Union Directive 2014/52/EU, Ecologists Fehily Timoney have completed an Environmental Impact Assessment Screening Report for the site based on the proposed development.

Based on all available information, and taking account of the scale, nature and location of the proposed project, Fehily Timoney confirmed that the preparation of an EIAR is not a mandatory requirement (under Part 1 or Part 2 of Schedule 5). The project is deemed a sub-threshold development; hence the potential for significant environmental effects arising as a result of the proposed project has been evaluated, in accordance with the requirements of Schedule 7A and Schedule 7. Please refer to Fehily Timoney's report that form part of this submission

### 6.8 Appropriate Assessment Screening

Fehily Timoney completed a stage one screening for AA of the proposed project which demonstrates that the proposed project is not likely to have significant effects on any European site. Please refer to Fehily Timoney's report that form part of this submission



Axonometric view from southwest looking northeast





