



# CORNELSCOURT RESIDENTIAL DEVELOPMENT LANDSCAPE DESIGN STATEMENT

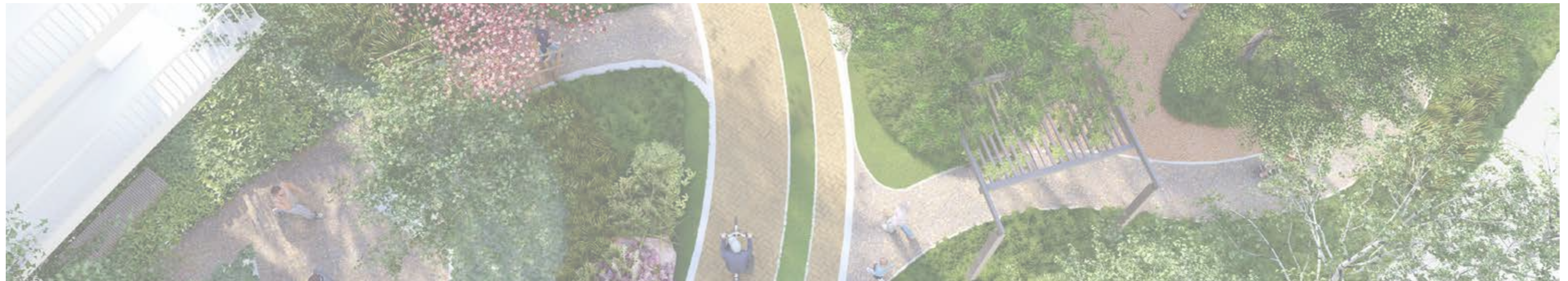


LANDS AT CORNELSCOURT VILLAGE, OLD BRAY ROAD, CORNELSCOURT, DUBLIN 18

# TABLE OF CONTENT

REV		DATE	ISSUED BY
D0	Submission for pre-planning	11.03.2021	GB
P1	Submission for Planning Application	25.11.2021	GB

SECTION TITLE	PAGE NO.
Introduction	3.
Site Analysis	8.
Landscape Vision	11.
Landscape Strategies	14.
Boundary treatment	41
Landscape proposal- character areas	52
Softscape Strategy	95.
Hardscape Strategy	113.
Play Strategy	121.
Combined Roof plan	131.
Ecological Enhancement	134.
Appendix	137.



## PLANNING POLICY

The quality of our built environment is dependent not only on building design and street layout but also on smaller elements that can make an important contribution. Development proposals will be assessed both in terms of how they contribute to the achievement of the core strategy and related objectives, and also having regard to both qualitative and quantitative standards as set out in this section.

The **Section 8.2.8 Open Space and Recreation of the Dun Laoghaire-Rathdown County Development Plan 2016-2022** highlights that landscaping in the urban environment can have multiple advantages for citizens and can enhance quality of life, as well as providing an attractive visual context and contributing to a sense of place on the proposed development.

The tables on the following pages will explain how the requirements have been achieved and show within the proposed scheme.

### RESPONSE

<p><b>8.2.8.2 Public/Communal Open Space- Quantity</b></p> <p>The Planning Authority will require public and/or communal open space to be provided within new residential and large scale commercial developments.</p> <p><b>(i) Residential / Housing Developments.</b> The Planning Authority shall require an absolute default minimum of 10% of the overall site area for all residential developments to be reserved for use as Public Open and/or Communal Space irrespective of the occupancy parameters set out in the previous paragraph (..)</p>	<p><b>Quantity</b> The scheme will provide a large portion of Communal Open Space. The quantity of COS has been based on the Schedule of Accommodation and <i>Appendix 1 of Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities</i>, which clearly states the quantum of Communal Open Space that needs to be provided for each unit typology. The scheme requires 2,372sqm. of COS. The scheme provides 5,165 sqm of COS. When the communal open space which exceeds the BRE Guidance 2 hours of sunlight access is only taken into account, the resulting area of communal open space (4,703sqm) still exceeds the minimum quantitative standard provided within the <i>2020 Apartment Guidelines</i>. Refer to page 17 of this report.</p>
<p><b>8.2.8.3 Public/Communal Open Space-</b></p> <p><b>Quality</b> Open space is fundamental in contributing to a high quality of life for those living, working and visiting the County... Public and/or communal open spaces should be overlooked and designed to ensure that potential for anti-social behaviour is minimised through passive surveillance.</p> <p><b>(i) Design</b> -Public and/or communal open spaces within new development should be capable of providing opportunities for play space (..).</p> <p><b>(ii) Accessibility and Permeability</b> -Permeability and accessibility will be encouraged as part of an integrated approach to the provision of linked open spaces (..).</p> <p><b>(iii) Biodiversity</b>-Public and/or communal open spaces, especially large ones, can provide for a range of natural habitats and can facilitate the preservation and enhancement of flora and fauna (..).</p> <p><b>(iv) SuDS</b>- SuDS shall not normally be included in the calculation of open space provision. However, where a SuDS scheme is visually attractive and readily accessible for public use in most weather conditions, a proportion of the SuDS area could be incorporated as a component part of the open space provision (..)</p> <p><b>(v) Green Roofs</b>-The use of green roofs will be encouraged as part of an integrated approach to the provision of green infrastructure. Information in relation to green roofs is set out in Dún Laoghaire-Rathdown County Council's 'Green Roofs Guidance Document' (2014).</p>	<p><b>Quality</b> Refer to page 17 of this report. The scheme has been designed to ensure passive surveillance, discouraging antisocial behaviour, littering or vandalism. This will encourage the utilisation of the spaces by the community.</p> <p><b>(i) Design</b> Refer to page 17 and of this report. The proposed communal open space has been broken down into variety of functional areas, each with a distinct character, which is intended to create varied use and interest, capable of providing different opportunities for play.</p> <p><b>(ii) Accessibility and Permeability</b> Refer to page 31 of this report. The development will facilitate connections by pedestrians and cyclists from the North, given a route from N11 toward Old Bray Road which will positively contribute to, and create linkages with, the surrounding context. The proposed development is well located with proposed pedestrian and cycle facilities and has good public transport options available to commuters from the N11 and Old Bray Road. In addition a potential access from Willow Grove has been provided for.</p> <p><b>(iii) Biodiversity</b> Refer to page 131 of this report. Careful planting and a new generation of trees have been selected in order to provide the most suitable softscape and enhance the biodiversity.</p> <p><b>(iv) SuDS</b> SUDS measures are incorporated into the development such as green roofs, permeable paving and rain gardens.</p> <p><b>(v) Green Roofs</b> Refer to page 128 of this report. The green roofs proposed will enhance the biodiversity enhancements. The green coverage of at least 60% of the total roof area (as required by the DLRCC Development Plan) requirement has been established with engineers.</p>

# INTRODUCTION

## PLANNING POLICY

<p><b>8.2.8.4 Private Open Space- Quantity</b></p> <p><b>(i) Private Open Space for Houses-</b> All houses (terraced, semi-detached, detached) shall provide an area of private open space behind the front building as follows:</p> <p>-3 bedroom houses to have a minimum of 60 sq.m</p> <p>..Any provision of open space to the side of dwellings will only be considered as part of the overall private open space calculation where it is useable, good quality space. Narrow strips of open space to side of dwellings shall not be included within any of the above calculations.(..) Provision of ‘defensible’ space, e.g. a planting strip, to the front of dwellings should be provided in order to contribute towards a sense of security within the home.</p> <p><b>(iii) Boundaries-</b> Boundaries located to the front of dwellings should generally consist of softer, more open boundary treatments, such as low-level walls/railings and/or hedging/planted treatments.</p>	<p><b>(i) Private Open Space for Houses</b></p> <p>Refer to page 22 of this report. Private amenity space has been provided for ground floor apartments, with balconies at upper levels. Refer to HJL Architectural Design Report. Where provided at ground level, private amenity space will be have an appropriate boundary treatment to ensure privacy and security. (See 8.2.8.4(iii) Boundaries response.) In addition to this, each of the House Units located along the eastern boundary of the site will be provided with private gardens which exceed the minimum standards for houses.</p> <p><b>(iii) Boundaries-</b> Refer to page 41 of this report. Private amenity space is supplemented by a continuous planted defensible space to the courtyard perimeter that ensures privacy to all groundfloor apartments. Generally this takes the form of an evergreen hedge to provide a clear boundary definition between private and communal spaces. Private Rear Gardens will be also be separated by a timber fence wich will ensure the privacy in between the houses.</p>
<p><b>8.2.8.5 Apartments – Play Facilities</b></p> <p>In terms of play facilities for children regard shall be had to the ‘Sustainable Urban Housing: Design Standards for New Apartments’ (2007).</p>	<p><b>Play facilities</b></p> <p>Refer to page 120 of this report. and response to Point 4.13 Children's Play</p>

The tables below will explain how the requirements have been achieved and evidence how the scheme adheres to the Apartment Guidelines 2020, **Sustainable Urban Housing: Design Standards for New Apartments**

<p><b>4.13 Children’s Play</b></p> <p>Children’s play needs around the apartment building should be catered for:</p> <p>-within small play spaces (about 85 – 100 sq. metres) for the specific needs of toddlers and children up to the age of six, with suitable play equipment, seating for parents/guardians, and within sight of the apartment building, in a scheme that includes 25 or more units with two or more bedrooms; and</p> <p>-within play areas (200–400 sq. metres) for older children and young teenagers, in a scheme that includes 100 or more apartments with two or more bedrooms.</p>	<p>Refer to page 120 of this report. The scheme will provide a large portion of Play Space. The quantity of play areas has been based on the Schedule of Accomodation</p> <p><b>Play spaces needs of toddlers and children up to the age of six</b> 85-100sqm required Apartment Guidelines states: <i>&lt; 25 or more apartments with two or more bedrooms.</i></p> <p><b>Play spaces needs of toddlers and children up to the age of six</b> <b>100sqm provided.</b></p> <p><b>Play area for older children and young teenagers-</b> 200-400 sqm required Apartment Guidelines states: <i>&lt; 100 or more apartments with two or more bedrooms.</i></p> <p><b>Play area for older children and young teenagers-</b> <b>400 sqm provided.</b></p>
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### Communal Amenity Space

4.10 The provision and proper future maintenance of well-designed communal amenity space will contribute to meeting the amenity needs of residents. In particular, accessible, secure and usable outdoor space is a high priority for families with young children and for less mobile older people.

The minimum required areas for public communal amenity space are set out in Appendix 1.

While private and communal amenity space may adjoin each other, there should generally be a clear distinction with an appropriate boundary treatment and/or a 'privacy strip' between the two.

4.11 Communal amenity space may be provided as a garden within the courtyard of a perimeter block or adjoining a linear apartment block. Designers must ensure that the heights and orientation of adjoining blocks permit adequate levels of sunlight to reach communal amenity space throughout the year. Roof gardens may also be provided but must be accessible to residents, subject to requirements such as safe access by children. These facilities offer a satisfactory alternative where climatic and safety factors are fully considered, but children's play is not passively supervised as with courtyards. Regard must also be had to the future maintenance of communal amenity areas in order to ensure that this is commensurate with the scale of the development and does not become a burden on residents.

4.10 The proposed communal open space setting offers a broad range of character areas to choose from and explore, in terms of both size and configuration. This variety will attract a wide range of users, and the entire range of areas will be accessible by all. Steps have only been used where necessary to address the level changes of the site to achieve the required FFL. Where steps have been used we have provided and alternate ramped/sloped access aligned with the section 1.1.3.3 of Technical Guidance Document M 2010.

The development exceeds the Communal Open Space requirement, and provides limited public open space given its infill, higher density nature.

Generally, the private amenity space is not interfacing with Public Open Space but only with Communal Open Space. The distinction of the two spaces will be provided through a defensible buffer that consists of an evergreen hedge with a railing (around the private terraces located at ground floor). Where the semi-public open space meets the communal open space clear distinction through predominantly, hardscape surface treatment has been proposed. Ref to page 21 of this report.

4.11- Communal open space for residents will predominantly be provided within the residential courtyards of each block, and along the residential path within the southern area of the scheme. The communal open space areas include a broad range of open spaces which are characterised by planting, shared surface dedicated for pedestrian and cyclist flow movement.

The open space will support the connectivity of each communal area into a unique landscape setting providing high quality amenity space across the development.

All the open space areas and communal areas are located within close proximity of the proposed homes and are designed to provide opportunities for passive and active recreation, play and relaxation.

Walking routes, play areas, outdoor exercise equipment and variety of seating are provided. All open spaces actively enhance the green infrastructure and biodiversity of the area by providing a highly planted landscape.

The residential path within the southern area has own-door access residential units facing on to the space with small private threshold areas at the entrances. This will create a character of a pedestrian-only residential street that has passive surveillance.

Overall, the landscape masterplan provides attractive green infrastructure, range of easily accessible amenities within open spaces which contribute to healthy, secure and sustainable living environment.

Refer to pag 16. The scheme doesn't include amenity roof terraces.

# RESPONSE TO ABP OPINION

## RESPONSE TO ABP OPINION- CASE REFERENCE: ABP-310042-21

An Bord Pleanála has considered the issues raised in the pre-application consultation process and giving regard to the consultation meeting and the submission of the planning authority, is of the opinion that the documents submitted with the request to enter into consultations constitute a reasonable basis for an application for strategic housing development.

The following information has been considered as a key point for the landscape strategy design and consideration and/or justification are largely explained in this report and drawings.

### ITEMS RAISED BY ABP

### RESPONSE

<p>Item 3.</p> <p>» A Materials Strategy that specifically addresses the proposed materials and finishes for buildings, open spaces, <b>paved areas</b> and <b>boundaries</b>, having regard to the requirement to provide high quality and sustainable finishes and details.</p>	<p><b>Paved area:</b></p> <p>» The proposed Hardscape palette indicated in this report and with the standalone report C0126 REPO2 - Landscape Design: Hardscape Strategy produce by Cameo and Partners, will contribute to defining the character of the spaces between buildings, public open space (included into the Taking in Charge area), communal open spaces and private spaces. The changes in hard surface material will help to demarcate the use of the areas i.e sitting and relaxing space, play areas and shared surface. The distinction of different tones and finishes of paving which includes natural stone paving, clay brick paving and concrete block paving have been strongly related to future uses of the proposed shared surface, cycle lane and pathways. The proposed materials will be appropriate and sympathetic to the local character of the area and are an integral part of the design. Careful consideration has been given to the design, texture and colour of the materials to ensure they will integrate with the design, in particular with a strong tonality cohesion with the proposed buildings facade finishes, which will assist in providing a high-quality living environment. All the landscaping materials will have a good resistance to accidental damage and low maintenance characteristics. (Please Refer to HJL report for further information regarding the building facade finishes).</p> <p><b>Boundaries:</b></p> <p>» The site will have high permeability and accessibility for all through the introduction of pedestrian and cycle links into the site and through careful consideration of the openings along the site boundary, which will enhance legibility in the area and will emphasise the visual character of the development. Where possible, the boundary treatment will replicate the existing pattern and material (i.e boundary along the N11) which is characteristic of the immediate locality. Refer to pg.41 of this report and drawings C0126 L400, C0126 L401, C0126 L402.</p>
<p>Item 4.</p> <p>» A report which address existing and future residential amenity and which includes matters such as daylight/sunlight analysis, micro-climate/wind impacts and noise impacts, together with proposals to address any such impacts, if necessary... A month-by-month assessment of average daylight hours within the public open space should be provided within the Daylight and Sunlight Analysis document to allow for a <b>full understanding of the year round level of overshadowing of the primary outdoor recreation areas for the development should be submitted...</b></p>	<p>» Please Refer to 3D Design Bureau report, which assesses daylight/sunlight analysis, micro-climate/wind impacts produced by IES Consulting, and noise impacts produce by AWN.</p> <p>For the purposes of the final application, in order to ensure that an exceptionally high standard of outdoor recreation areas is provided within the communal open spaces, an exercise has been undertaken to calculate the quantum of communal space which fully meets the BRE recommended 2-hour sunlight access on the 21st of March. When only the communal open space which exceeds the BRE Guidance, the resulting area of communal open space (4,703sqm) still exceeds the minimum quantitative standard required by the 2020 Apartment Guidelines. Please Refer to page 17 of this report for further detail.</p>

## ITEMS RAISED BY ABP

## RESPONSE

Item 6.

- » A detailed landscaping plan for the site which clearly differentiates between areas of public, communal and private open space and which details exact figures for same.
  
- » Details should also include proposals for hard and soft landscaping including street furniture, where proposed, which ensures that areas of open space are accessible, usable and available for all.
  
- » Pedestrian permeability through the site should be outlined.
  
- » Details of the interface between private, public and communal areas should also be detailed. Additional cross sections, CGIs and visualisations should be included in this regard.

- » Communal and Open Space Strategy, Refer to page 17 of this report. Illustrative plan, diagrams, sections supporting the landscape setting strategy being proposed. Refer to drawings C0126 L1000, C0126 L500, C0126 L501, C0126 L502 . The scheme provides for some areas to be "taken in charge", this is limited to the improved public footpaths at the perimeter of the scheme. The large quantum of Communal Open space provided is accessible by all residents , with permitted access by the wider general public. including the future potential link to 'Willow Grove'
  
- » Refer to page 93 and page 114 of this report. Please Refer to drawings C0126 L200, C0126 L300. In addition, stondalone report C0126 REP02 - *Landscape Design: Hardscape Strategy* produced by Cameo and Partners illustrates in detail the hardscape strategy. Please Refer to page 40 for the barrier free design concept. All the proposed street furniture within the development has been strategically located to create gathering and relaxing areas accessible for all.
  
- » As part of the landscape proposals, our vision is to maximize permeability through the site. The site will benefit from improved pedestrians and cyclist access and permeability in line with the aspiration of DMURS. There are four principle pedestrian connections into the site. The first two are from Old Bray Road to the south and south west of the site, the third from the new northern gateway along the N11 Corridor, and the fourth is a potential pedestrian access to Willow Grove.
  
- » for detailed information on the interface in between Communal Open Space, Private space and Public Spacerefer to pages 16, 20, & 21 of this report. Sections and CGI support and illustrate the strategy. See page n°50 of this report.



# SITE ANALYSIS

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## LOCATION

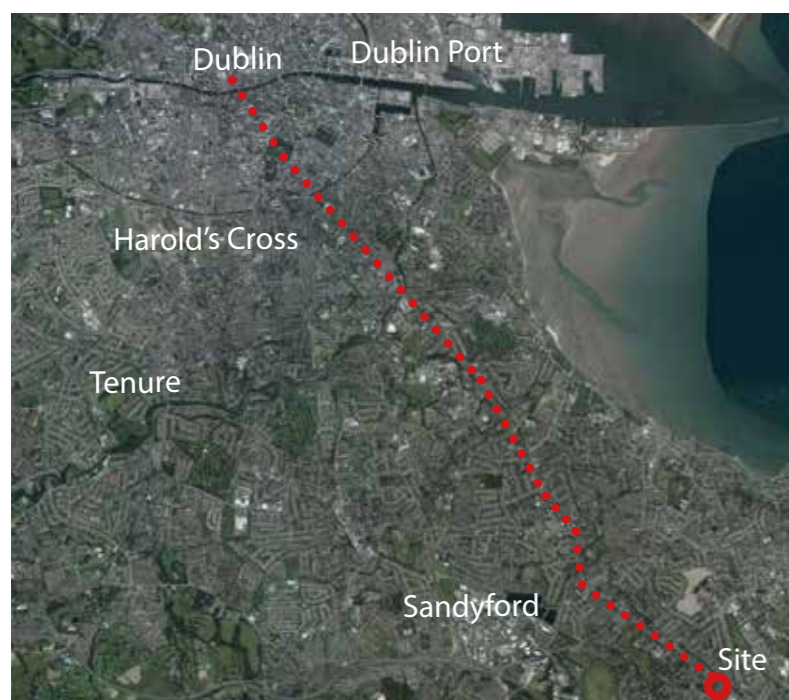
The adjacent diagram visually depicts important character zones and districts surrounding the site. Through the existing road, paths and bridge network physical connections are achieved with these surrounding areas.

The site for the proposed development is located within a disused 2.15ha site between the Old Bray Road and the N11 (Stillorgan Road). Cornelscourt village is located along the Old Bray Road to the west of the site. This area is a vibrant mix of small shops, cafes, restaurants and offices. The area is characteristically populated by two story detached and semi-detached houses with a very variable appearance.

On the North and East side of the site lies the Beech Park and South Park housing areas. The AIB bank, a contemporary 3-story office block with its surface car park to the rear (towards the N11), sits on the west side of the site.

South of the site is a petrol station, followed by a 2-story food outlet and then a row of 13 single-story cottages.

This row of cottages is a characteristic feature of the village extending along the Old Bray Road to just short of Willow Grove at its southern end.



Site location within the wider context of Dublin.



1. Dunnes Shopping Centre
2. St Brigid's Boy's School
3. Loreto College

 Nearby bus stop

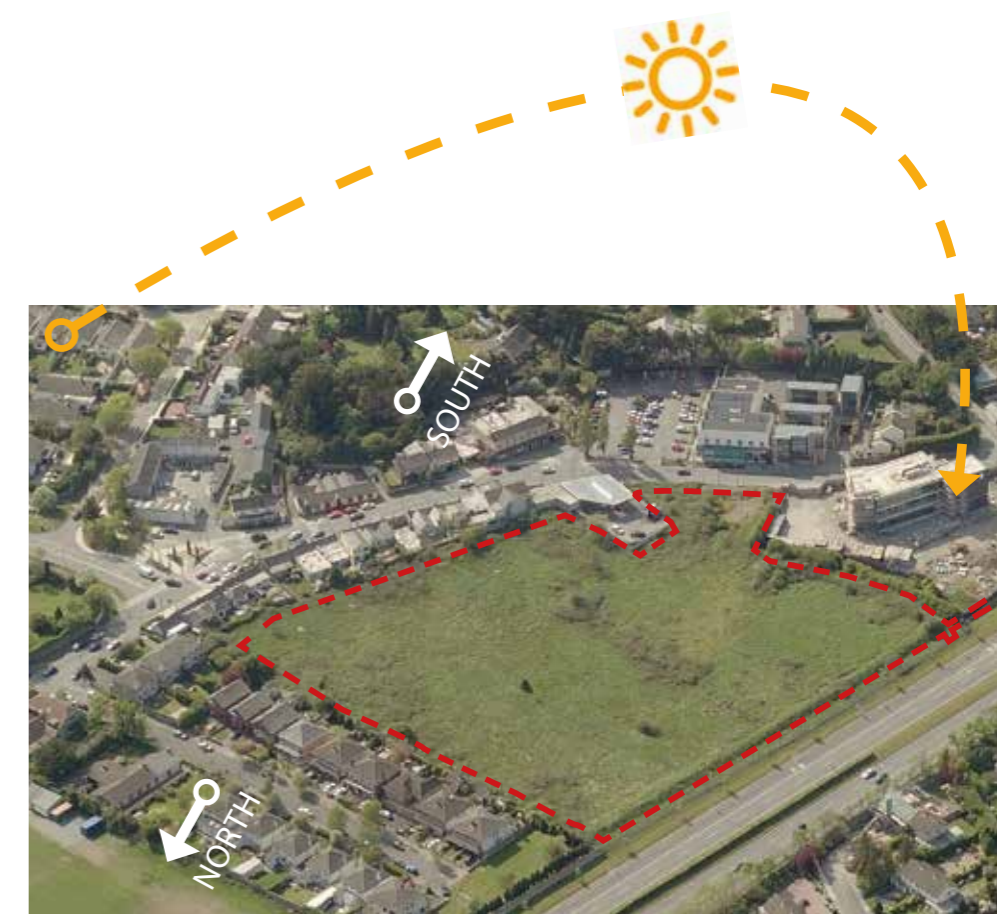
### SITE DRIVERS & KEY INFLUENCES:

In order to develop a suitable and appropriate landscape scheme it is imperative an understanding of the site and those forces which influence the site are identified and understood.

The above diagram sets out the key factors / drivers which influence the site and the user experience.

# SITE ANALYSIS

## ADJACENT CONTEXT AND SUN PATH ANALYSIS



The adjacent diagram and the views on the left visually depict how the daily sun path travels influencing shade and aspect. These constraints have a strong impact on the landscape design.

An aerial photograph of a city neighborhood, overlaid with a semi-transparent orange filter. The image shows a mix of residential and commercial buildings, streets, and green spaces. The text 'LANDSCAPE VISION' is positioned in the lower right quadrant of the image.

# LANDSCAPE VISION

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## LANDSCAPE INTRODUCTION



Quality landscape and public realm spaces are a defining part of the development; This section of the Design & Access Statement outlines the landscape proposal for the scheme.

The site covers an area of 2.15ha, which will comprise of high quality architecture, communal and private gardens, areas of new public realm, and extensive roof gardens and terraces. The sheer extent of landscaped spaces is a real positive and distinctive feature of the proposed development.

### OVERARCHING AIMS, OBJECTIVES AND DESIGN PRINCIPLES

- » Foster a sense of community, increase social activity, and reduce social isolation
- » Promote greater use and diversity of activity within open space, with particular benefits to encourage children to play outside and support the elderly and disabled to feel less inhibited and constrained by their environment
- » Promote personal safety through greater levels of community supervision and self policing
- » Make the amenity open space visually more attractive
- » Encourage people to walk or cycle within their local area
- » Encourage residents to look after their open spaces
- » Improve the quality of the urban environment, increase the attractiveness of urban living and encourage a more sustainable lifestyle
- » Improve quality of life, health and well being
- » Improve safety from traffic, by reducing traffic speeds to walking pace.

## DESIGN OVERVIEW

### GROUND FLOOR PLAN



The proposed concept is based on the relationships between architecture and landscape and the transition between internal and external spaces.

Planting and open lawn areas have been distributed in a way that provides essential screening to the apartments which are more exposed to the key communal areas and also providing opportunities for socialising and play.

### BASEMENT/ LOWER AREA PLAN



The open space will encourage people to socialise and interact.

Residents will have the flexibility to use the space how they wish, which will establish a sense of pride and ownership. The semi natural style of the planting will create a unique identity for the scheme and contribute to a sense of place for the residents and wider community. Play spaces and family gathering areas ensure new residents of all ages can enjoy the space. Ongoing maintenance and management will ensure the garden is safe and welcoming at all times.

Native planting and careful habitat creation aim to establish an ecologically rich environment which will benefit the local people and the environment.

It is important that people feel welcome and are encouraged to use the space. The idea that 'people attract people' is true in spaces such as this, so to encourage this behaviour measures such as BBQ areas, activity zones and play areas have been included.

An aerial photograph of a city, showing a mix of residential houses, larger commercial buildings, and green spaces. The image is overlaid with a semi-transparent orange color. The text 'LANDSCAPE STRATEGIES' is centered in white, bold, uppercase letters. A thin white horizontal line is positioned below the text.

# LANDSCAPE STRATEGIES

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## OPEN SPACE STRATEGY

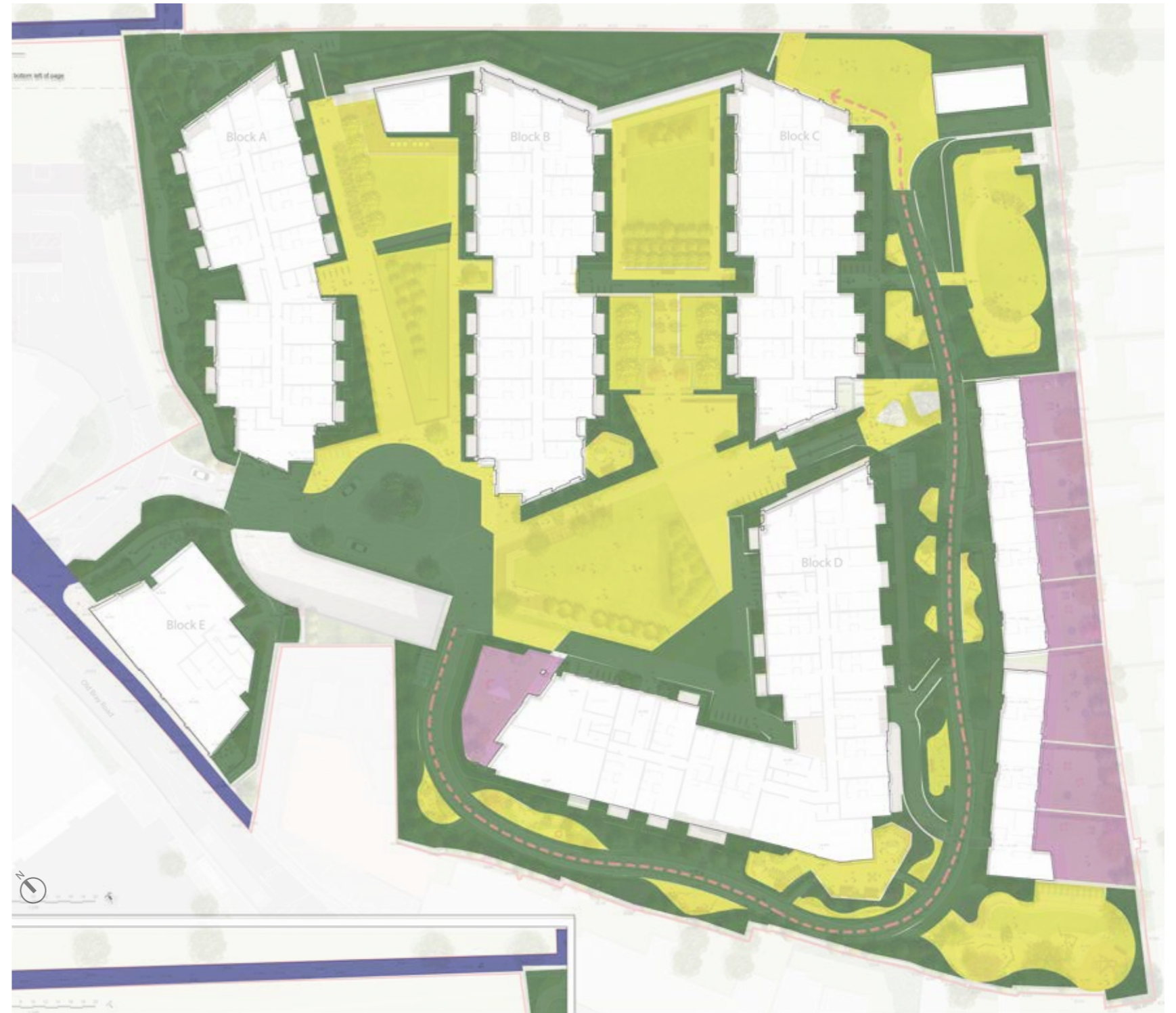
Open space provision has been a key aspect considered during the design process. The amenity spaces are an essential component of sustainable development. The landscape setting has achieved a high-quality environment including recreational and amenity space provided throughout the development to meet the existing and future needs of the community. The amenity spaces provided across the scheme are safe and are easily accessible from the existing network that surrounds the site and ensures that the recreational needs of residents are met, enhancing their health and well-being, by providing opportunities for exercise and social interaction, thereby creating inclusive liveable neighborhoods.

The scheme provides for some areas to be "taken in charge", this is limited to the improved public footpaths at the perimeter of the scheme. The large quantum of Communal Open space provided is accessible by all residents, with permitted access by the wider general public. including the future potential link to 'Willow Grove'

The adjacent diagram illustrates how the scheme offers generous open space that provides a landscape setting embracing the quantified communal, private and public open spaces throughout. Private Amenity Space has been provided to the childcare facility, private gardens to houses, terraces, and balconies at ground and upper floors.

In response to ABP Opinion **ITEM 6**, which states: "  
..A detailed landscaping plan for the site which clearly differentiates between areas of public, communal and private open space and which details exact figures for same..."

The diagram shown on this page clearly illustrates the areas indicated as Public Open Space, Communal Open Space, and Private Amenity. The following pages will show the quantum breakdown exercise taken into account during the definition of each amenity space.



- Communal Open Space
- Public Open Space
- Semi Public Open Space
- Private Amenity Space (Private gardens, crèche outdoor amenity and ground floor terraces)

# INTRODUCTION - COMMUNAL OPEN SPACE

## COMMUNAL OPEN SPACE PRINCIPLES

The proposed landscape setting offers a broad range of character areas to choose from and explore, in terms of both size and configuration. This variety will attract a wider range of users.

The character areas will be linked with a pathway that highlights and combines the communal open spaces incorporated within each character area.

The Provision of the communal open space between podium level and lower ground floor level have been carefully dispersed to provide the most beneficial distribution of space throughout the development.

A detailed explanation of the differences uses of Communal Open Space will be demonstrated in the following pages.

## ACTIVE/USABLE OPEN SPACE

Areas recognised as Communal Open Space within the wider character areas.



Communal Open Space

The COS quantum has been conservatively calculated, considering only the space that could be in daily use. The following areas have been omitted from the calculation:

- Design elements that could be considered unusable incidental space on 21 March;
- Shaded area (Areas that presented less than two hours of sunlight) ;
- Private spaces;
- Vehicular ramp;
- Planting buffer strip along the boundary;
- Dedicated residents pathway;

## CHARACTER AREAS

These character areas make up the key user experiences available on the site:



Character areas

1. Entrance Plaza and Drop Off Zone
2. Tenant Amenity / Community Hub
3. Sculptured residential courtyard/ The scented garden
- 3A. Sculptured residential courtyard/ The mounded garden
4. Residential amenity gardens
5. Recreation active green
6. Terraced landscape with native planting
7. Crèche playground
8. Private rear garden



## COMMUNAL OPEN SPACE STRATEGY-COS

Communal open space for residents will predominantly be provided within the residential courtyards of each block, and along the residential path within the southern area of the scheme.

In response to ABP Opinion **ITEM 6**, which states: "  
..A detailed landscaping plan for the site which clearly differentiates between areas of public, communal and private open space and which details exact figures for same..."

The proposed landscape design of the communal courtyard spaces follows a number of consistent principles that are designed to create a high quality living environment for residents of all ages as well as ensuring the adherence to the requirements in regards to the quantity and quality of communal amenity space.

The quantity of COS has been based on the Schedule of Accommodation and *Appendix 1 of Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities*, which clearly state the quantum of Communal Open Space that needs to be provide for each unit typology.

Following this, the scheme requires 2,372sqm. The areas of Communal Open Space have only been considered when exceeding the BRE Guidance 2 hours of sunlight (on 21 March)access is taken into account. The following pages will explain in detail the process applied.

The Communal Open space provided is accessible by all residents of the development , with access to the wider general public also allowed.

The space recognised as Communal Open space will be set within a greater area of open space which incorporates the shared surface routes and the planted borders.

## COMMUNAL OPEN SPACE REQUIREMENTS

CORNELSCOURT RESIDENTIAL DEVELOPMENT,Communal Amenity Space			
Unit Type	No.of Units	Sqm Per Unit	sqm Communal Space Required
Studio	0	4	0
One bedroom	294	5	1470
Two bedrooms (3pers)	1	6	6
Two bedrooms (4pers)	110	7	770
Three bedrooms (4pers)	14	9	126
<b>Total</b>	<b>419</b>		<b>2372</b>

Source: Schedule of Accomodation produced by HJL Architects

## COMMUNAL OPEN SPACE PROVISION



Communal open space required: 2,372sqm

- Communal Open space Provided: **4,703sqm**
- +
- Communal Open space Provided (achieving less than 2hr sunlight): **462sqm**

## OPEN SPACE STRATEGY



Semi Public Open space

# DESIGN CONCEPT -COMMUNAL OPEN SPACE

## COMMUNAL OPEN SPACE STRATEGY-COS

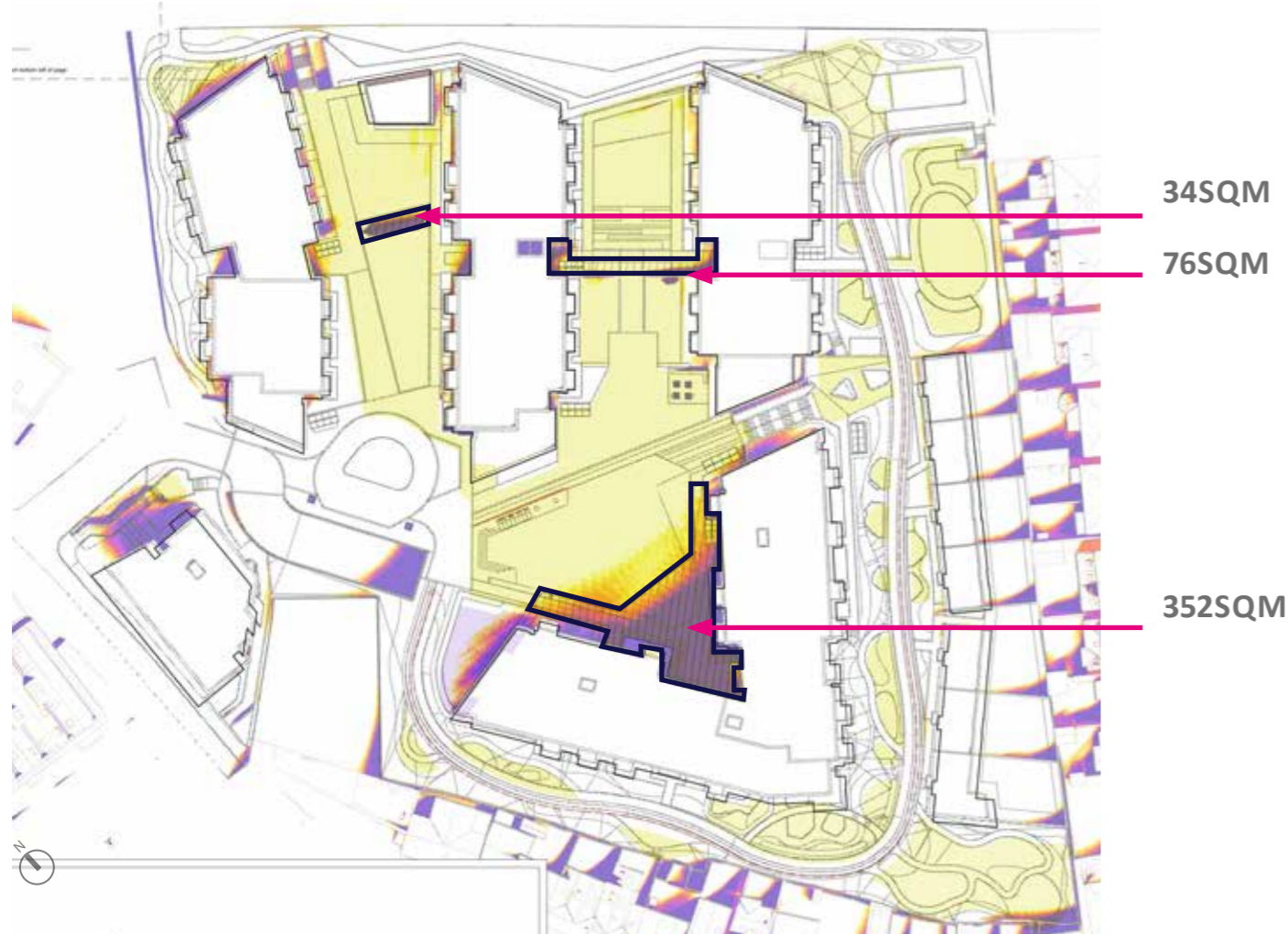
For the purposes of the final application, in response to ABP Opinion **ITEM 3** which states: "A report which address existing and future residential amenity and which includes matters such as **daylight/sunlight analysis, micro-climate/wind impacts and noise impacts, together with proposals to address any such impacts, if necessary.... A month-by-month assessment of average daylight hours within the public open space should be provided within the Daylight and Sunlight Analysis document to allow for a full understanding of the year round level of overshadowing of the primary outdoor recreation areas for the development should be submitted..**" and in order to ensure that an exceptionally high standard of amenity is provided via the proposed communal open spaces within the scheme, an exercise has been undertaken to calculate the

quantum of communal space which fully meets the BRE recommended 2 hour sunlight access on the 21st of March for its entire area.

This exercise confirms that, even in the event that only open space which 100% meets the 2 hour sunlight criteria is taken into account, the scheme still exceeds the minimum requirements of the 2020 Apartment Guidelines at **4,703sqm.**

When the additional open space (which does not fully achieve 2 hours sunlight) is included, the level of overall provision is well in excess of the minimum level of provision, with 5,165sqm provided.

## SUNLIGHT ASSESSMENT PLAN IN RELATION WITH COMMUNAL OPEN SPACE



\*Sunlight hours for courtyard- Ref to 3DDB Sunlight, daylight and shadow assessment report

## COMMUNAL OPEN SPACE PROVISION



Communal Open space Provided (achieving less than 2hr sunlight): **462sqm**

Communal Open Space achieving > 2hr sunlight requirement **4,703sqm**

+ Communal Open Space including areas not achieving required sunlight **Approx.5,165sqm**

## COMMUNAL OPEN SPACE STRATEGY

In response to ABP Opinion **ITEM 3** which states: *"A report which address existing and future residential amenity and which includes matters such as daylight/sunlight analysis, micro-climate/wind impacts and noise impacts, together with proposals to address any such impacts, if necessary.... A month-by-month assessment of average daylight hours within the public open space should be provided within the Daylight and Sunlight Analysis document to allow for a full understanding of the year round level of overshadowing of the primary outdoor recreation areas for the development should be submitted..."*.

Based on the wind simulation results produced by IES Consulting, it should be noted that the landscape design is compliant with the Lawson's comfort criterion, with no further mitigation measures required.

An extract from Chapter 11. Wind Microclimate – Non Technical Summary

...Dublin exhibits predominantly south-westerly and westerly winds. The median wind speed for Dublin is around 5m/s, i.e. for 50% of the year wind speed exceeds 5m/s. Therefore, from outset the challenge, from wind comfort point of view, is to reduce wind speeds in amenity spaces to one tenth of their frequency of the occurrence of over 5m/s.

In general the locations with most likely exceedance of sitting comfort criteria included:

- West, and northern edge of the central sun decking and sitting space
- West corner of the deck around the multifunction pavilion
- Northern amenity space between buildings B and C.
- Some balconies on buildings A, B and C

However, in all cases, whenever the wind speed at the above location exceeded 4m/s for more than 5% of the year i.e. exceeded the threshold for the Lawson's Sitting Comfort Criterion, it is also less than 6m/s for more than 95% of the year i.e. fully compliant with threshold for the Lawson's Standing Comfort Criterion.

Hence, any exceedance noted for the Lawson's Sitting Comfort

Criterion can be considered very marginal and, it will not lead to an environment which is unpleasant to use. The local air speed is only going to be greater than a gentle breeze, but most frequently less than a moderate breeze. Such conditions are unlikely to have any impact on usability of this locations as amenity spaces. The environment on these locations will be typical of, and consistent with, any other location on and around buildings of a similar scale and design, in the Dublin area.

The site showed excellent compliance with the Lawson's Safety Criteria for the normal and sensitive pedestrians.

For further information refer to the Appendix on this report and/or IES Consulting CFD Wind Assesment Report.

## COMMUNAL OPEN SPACE PROVISION



## BUSINESS WALKING COMFORT CRITERIA



## LEISURE WALKING COMFORT CRITERIA



## SITTING COMFORT CRITERIA

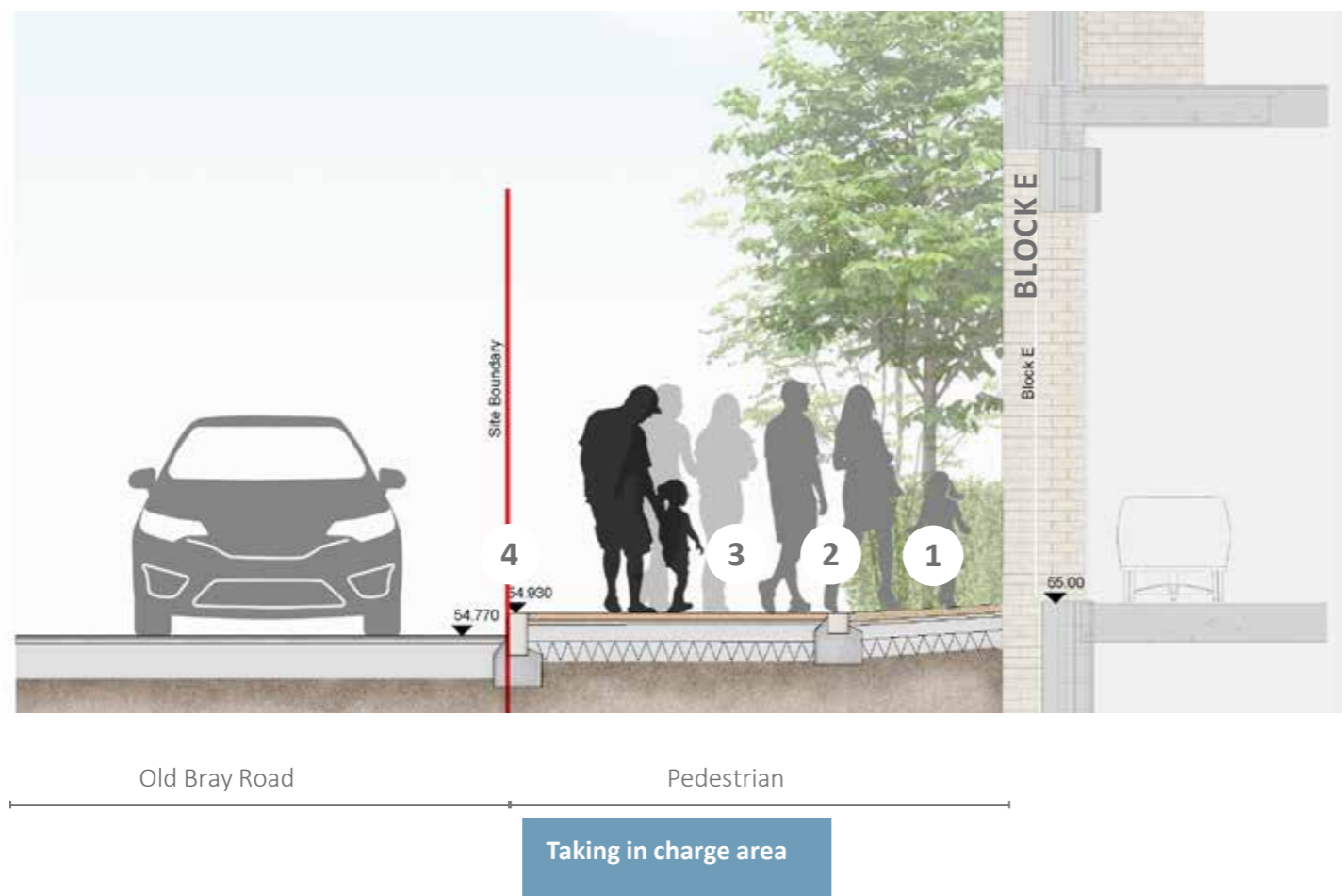


# DESIGN CONCEPT - PUBLIC OPEN SPACE

## TAKING IN CHARGE AREA

All the public areas of the scheme will be designed and built to Dun Laoghaire-Rathdown "taking in charge standards". The only areas recognised as public open space will be the pedestrian 2m wide footpath along the Old Bray Road, pedestrian crossing and the vehicular access with the set back proposed for refuse truck cycle lane proposed along the N11, within the applicants boundary site. All the communal area proposed and shown on the previous pages will remain publicly accessible at all times and will be management and maintained by a private management company.

## LANDSCAPE SECTION THROUGH OLD BRAY ROAD AND BLOCK E



## TAKING IN CHARGE AREAS



- Shared access roadway
- Drainage wayleave
- Taking in charge area

The DLRCOCO Parks and Landscape Services, Guidance for developers in Taking and Charge areas fall back on the DMURS document.

On this basis, the paving proposed within the TIC will need to be approved by DLR.

Analysis of the surrounding paving material is In situ Concrete pedestrian and Bituminus footways.

Generally, the existing surface levels along Old Bray Road will remain unaltered. The public footpath proposed along the road will be protected by an upstand kerb (4) that will follow the current surface road levels. The footpath (3) within the TIC area must be "made good" matching the material approved by DLR. A flush pin kerb (2) will demarcate the boundary between the Taking in charge area with the privately managed zone (1).

Please refer to DBFL Report for further information.

In response to ABP Opinion **ITEM 6**, which states: "  
..A detailed landscaping plan for the site which **clearly differentiates between areas** of public, **communal** and private open space and which details exact figures for same..."

## DESIGN AIM IN SEMI-PUBLIC SHARED SURFACE

- » Create an environment in which pedestrians can walk, or stop and enjoy the space without feeling intimidated by noise pollution from passing traffic;
- » Simple and legible, comfortable and fully accessible design for visually and physically impaired people.
- » The changing in the hard surface materials will minimize the visual appearance of the carriageway. This approach deems to encourage any drop off traffic to a minimum speed and indicate that this is a pedestrian priority zone.

## DESIGN AIM IN COMMUNAL OPEN SPACE

- » The changing in the hard surface materials will divide the required fire tender route to narrower paths.
- » The different tones and finishes of the paving materials give the feeling of small scale landscape spaces.
- » Demarcation of different tones and sizes of material layouts provide the feeling of a comfortable landscape setting.
- » Softscape plays a role in providing an environment transition in the communal courtyard, compared to the shared surface that will primarily have a formal character.

## SEMI PUBLIC (SHARED VEHICULAR SURFACE) AND COMMUNAL SPACE CONCEPT



SHARED VEHICULAR SURFACE | COMMUNAL OPEN SPACE

GRANITE SLAB PAVING-MID GREY COLOR/LARGE SLAB SIZE

DEMARICATION KERB

GRANITE SLAB PAVING-BUFF COLOR/ SMALL SLAB SIZE



- Semi-public Open space\*
- Communal Open Space

\*This is a transitional area that extends within the zones of open space. The semi-public zone includes the vehicular shared space on the plaza, which serve predominantly vehicular flow related to the building users and the pedestrian and cyclist flow movement bridging the N11 and Old Bray Road.

# DESIGN CONCEPT - PRIVATE AMENITY SPACE

## PRIVATE AMENITY SPACES AND PRIVATE CRÈCHE PLAYGROUND

Aligned with the **Section 8.2.8 Open Space and Recreation of the Dun Laoghaire-Rathdown County Development Plan 2016-2022** the scheme includes Private Open Space; the private rear gardens to the houses, private terraces and balconies to the apartments, and the crèche playground.

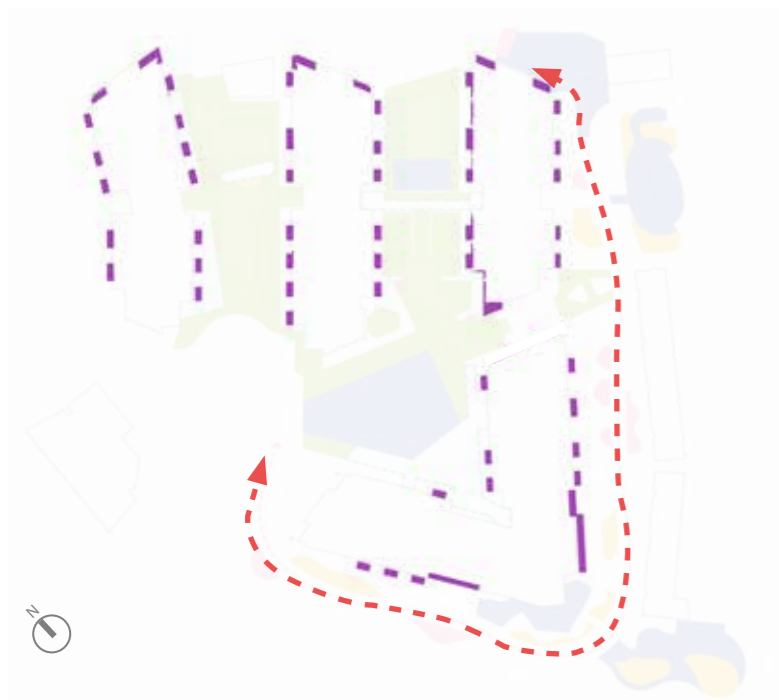
7 No. houses have been proposed along the Eastern boundary of the site. All houses will have a private garden.

The dimension of the rear garden has followed the requirement indicated in the Section 8.2.8.4, which for 3 bedroom houses to have a minimum of 60 sq.m has been exceeded for each property.

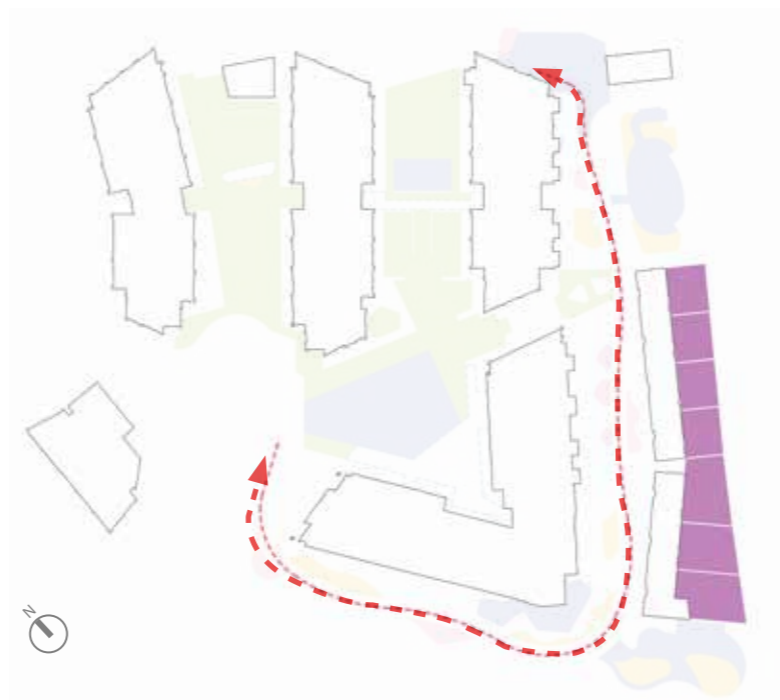
The provision of rear gardens at the back of the houses has been considered as part of the overall private open space calculation as it is useable, good quality space. Based on the wind simulation and Sunlight Assessment the results, the private amenity are compliant with the requirements. Each private amenity will have a 1.8m timber fence that will provide security and privacy within the home.

In addition to this, the scheme will have an outdoor crèche amenity that will be privately maintained. Please Refer to HJL Architectural Report for further information.

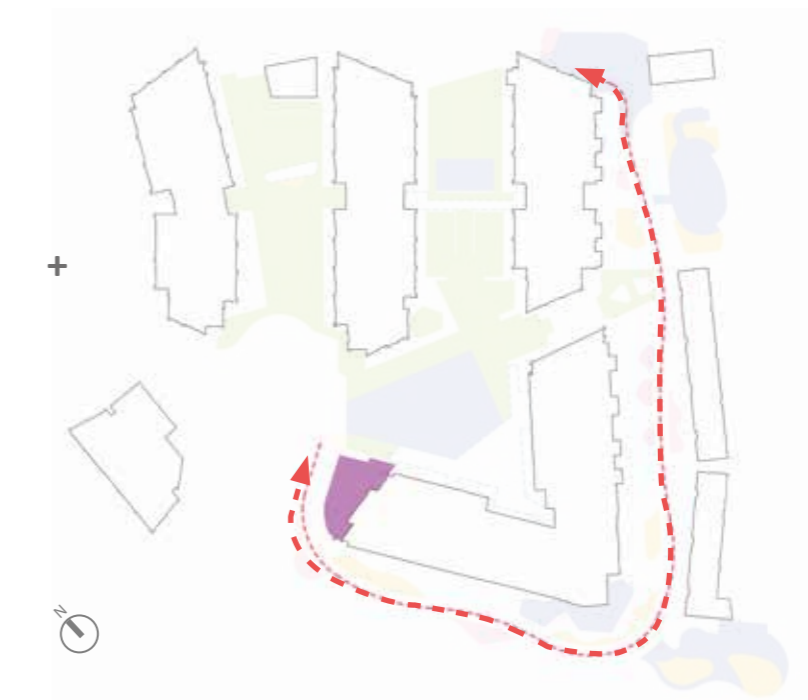
### Private terraces at the ground level



### Private amenity rear garden: Approx. 831sqm



### Private crèche playground: Approx. 163sqm



Every apartment located at the ground level will have a private terrace. Above ground level the private open space will be in the form of a balcony. The minimum depth of balconies should be 1.5m and be accessed from living rooms. Boundaries to private terraces generally consist of an evergreen hedge in combination with 1.1 railings.

Please Refer to HJL Architectural Report for further information.







## COMMUNAL OPEN SPACE REQUIREMENT

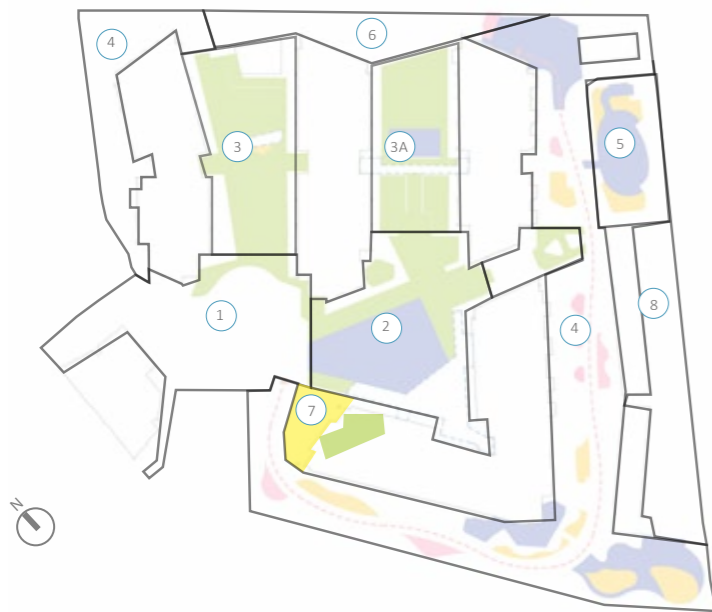
The diagram shows the variety of functions of the areas proposed. Each has a distinct character, which is intended to create a multi use and interesting space.

Variations in hard and soft landscape materials, combined with specific features are just some of the methods used to create a sense of place for each functional area.

The available communal open space has been broken down into the following function categories:

-  **Equipped Play area:** Approx. **458sqm**
-  **Active Recreational Area:** Approx. **1669sqm**
-  **Passive Recreational Area:** Approx. **2401sqm**
-  **Multi-generation Fitness Area:** Approx. **175sqm**

## CHARACTER AREAS



- |                                                          |                                            |
|----------------------------------------------------------|--------------------------------------------|
| 1. Entrance Plaza and Drop Off Zone                      | 5. Recreation active green                 |
| 2. Tenant Amenity / Community Hub                        | 6. Terraced landscape with native planting |
| 3. Sculptured residential courtyard/ The scented garden  | 7. Crèche playground                       |
| 3A. Sculptured residential courtyard/ The mounded garden | 8. Private rear garden                     |
| 4. Residential amenity gardens                           |                                            |



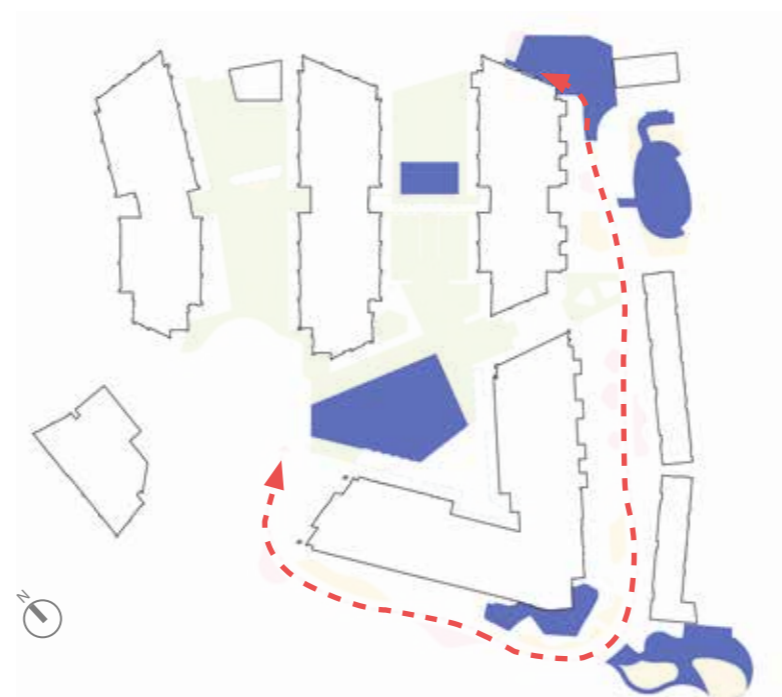
Path providing access for all, as well as to help children develop way finding skills. Linking a series of recognisable features and character areas such as play and fitness trail which reinforce a sense of place and attachment for future residents.

# DESIGN CONCEPT- COMMUNAL OPEN SPACE

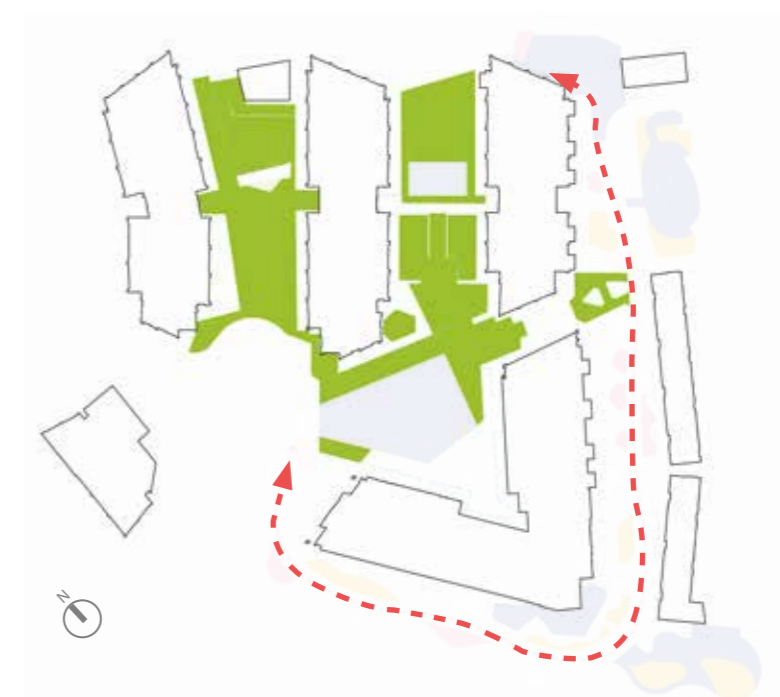
## COMMUNAL OPEN SPACE FUNCTIONS



**Active Recreational Area:** Approx. 1669sqm



**Passive Recreational Area:** Approx. 2401sqm



The integration of landscape features that mark important points help to structure the experience for pedestrians between the main plaza, the Willow Grove potential future access and across all the podium area.

Large landscape elements such as open lawn areas, tree planting, and low-level planting provide setting to the active ground floor uses and passive recreation areas. Small landscape elements help to animate the area without requiring significant space.

As part of the overall communal open space the landscape for Cornelscourt provides, several play stations, multi-generation fitness areas all located along the path network. Under the overall conceptual approach of educational play, these elements allow incidental play for children and adults alike.

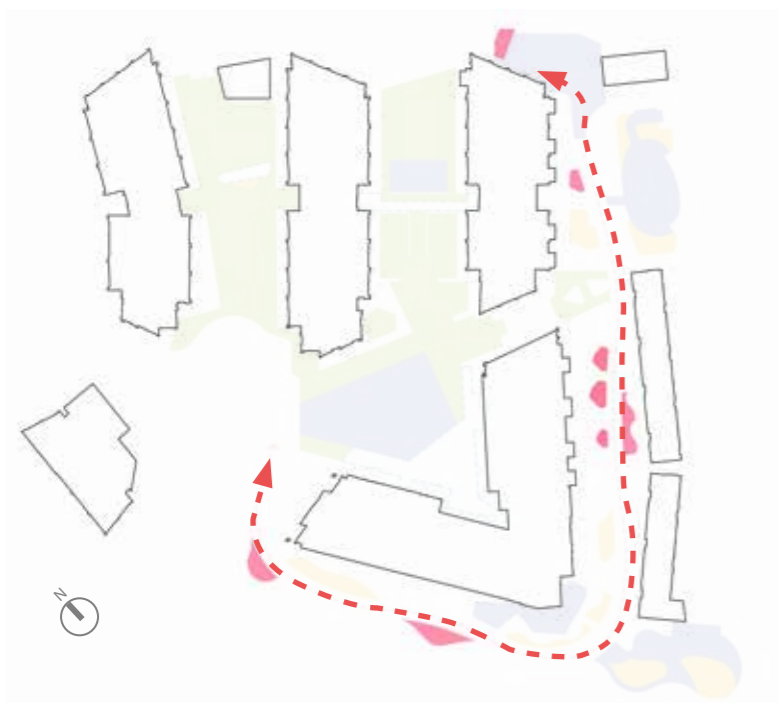
The proposed elements have a sculptural quality, are vandalism-resistant and low maintenance.



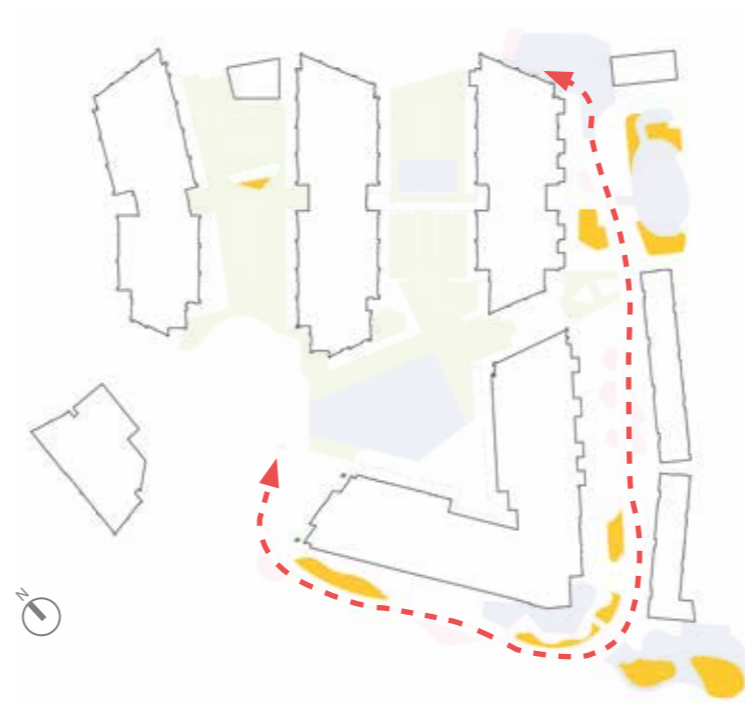


## COMMUNAL OPEN SPACE FUNCTIONS

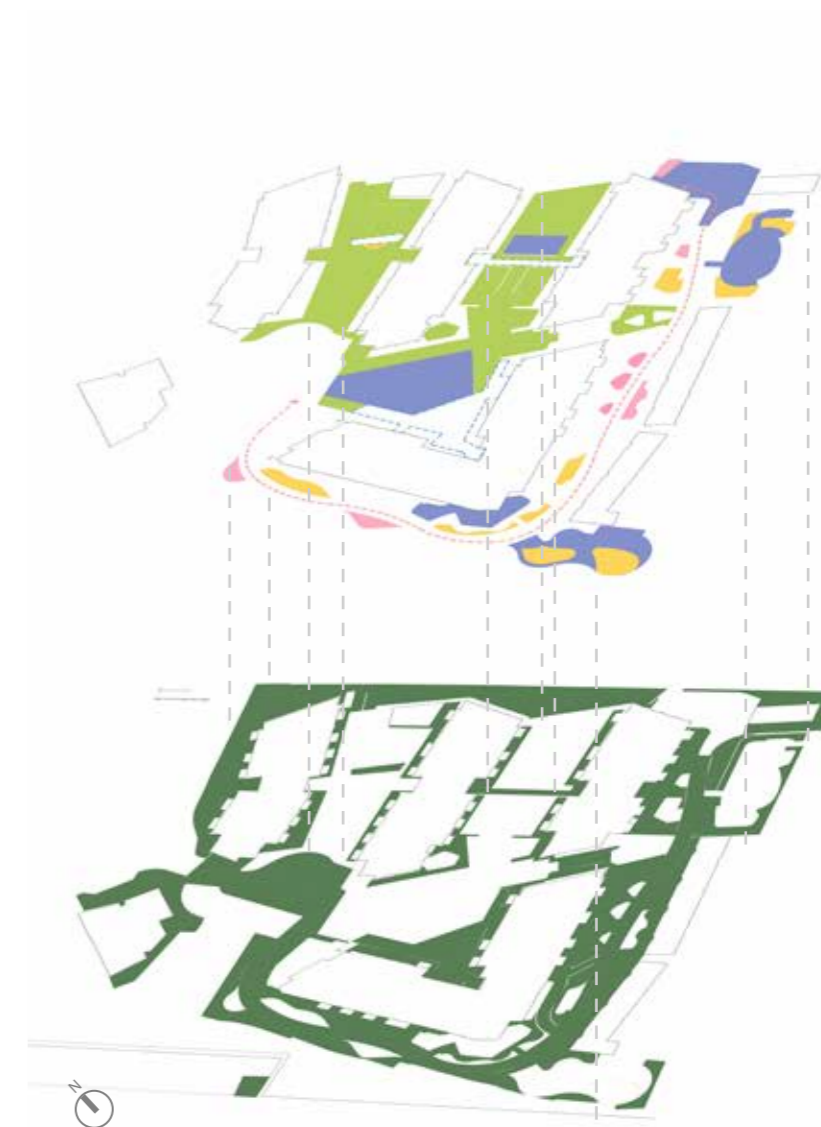
**Multi-generation Fitness Area:** Approx. 175sqm



**Equipped Play area:** Approx. 458sqm



**OPEN SPACE STRATEGY**



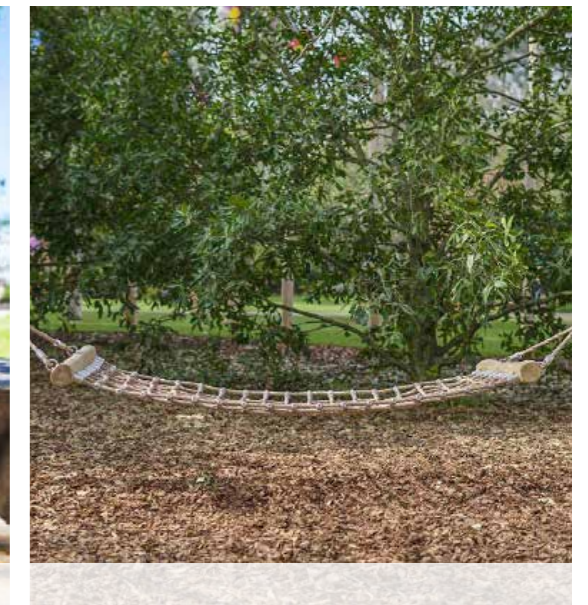
The hierarchy of space radiates out from the central formal open lawn, the primary amenity space. The sculptured courtyards with active and passive areas, provide secondary amenity spaces, and a series of smaller tertiary spaces arranged throughout the masterplan, as connective tissue, tie the entire development together as one cohesive masterplan.

# DESIGN CONCEPT - COMMUNAL OPEN SPACE

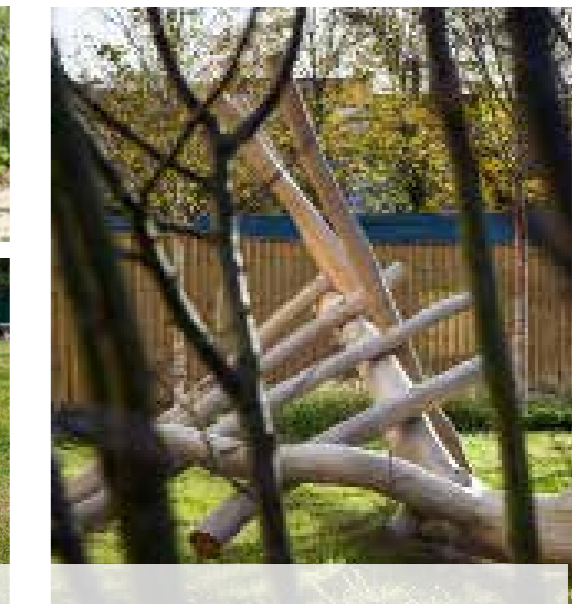
## COMMUNAL OPEN SPACE



FITNESS AREA

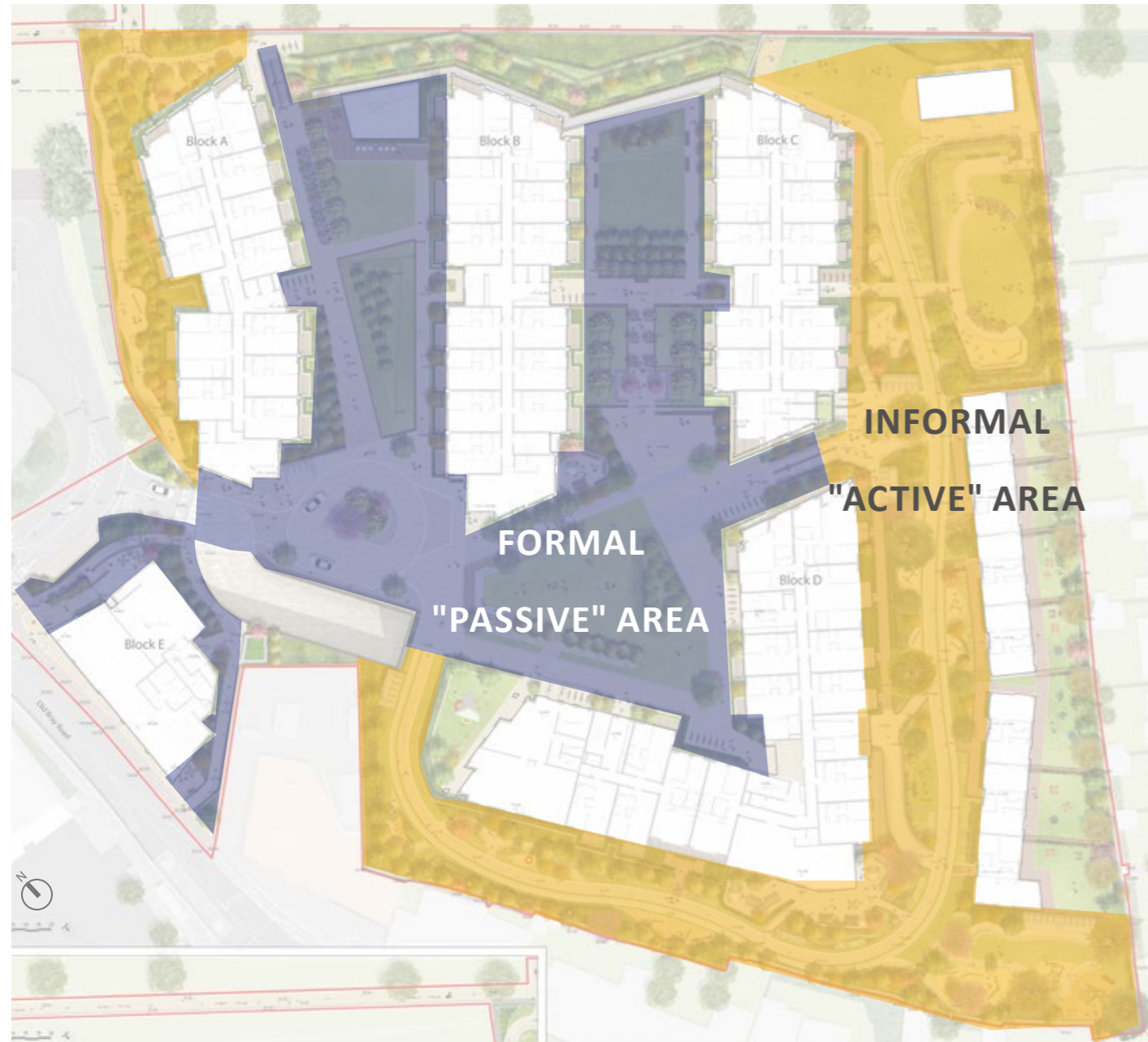


PLAY ON-THE-WAY



DEDICATED PLAY AREA

## KEY PRINCIPLES



The design has been split into two categories to help inform the possible use of the space and to improve site legibility and functionality.

### Formal/ Passive area

- Attractive & charming
- The landscape reflects architectural geometry
- Calming and comforting space
- Undulating edges give the space a softer feel

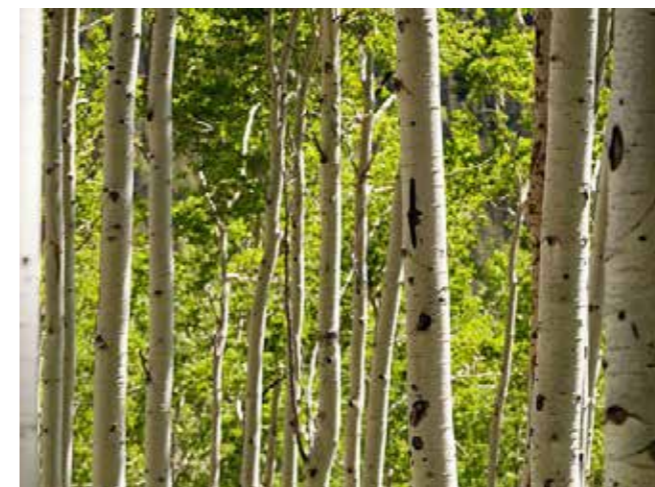
### Informal/ Active area

- A pedestrian/ cycle friendly environment
- Connected, legible and walkable
- Sinuous and organic design encourages exploration
- Active zones (play, BBQ, exercise) to encourage fitness and community involvement

Formal/ Passive area



Informal/ Active area









# DESIGN CONCEPT

## KEY PRINCIPLES



The open space has been broken down into a number of key usages. These areas developed to form the main character areas which make up the overall design.

-  Arrival Space: attractive, welcoming
-  Courtyard Gardens: relaxing, calming
-  Lounge and Hub: meeting, dining
-  Central Space: meeting, play, relaxation
-  Active Zones: play, BBQ, sport, fitness area
-  "Flexible" communal Open space

## USERS IN-BETWEEN SPACES

This is the possible programming of the visitors across the period of a day. The ability to enter and move around in-between spaces has a large effect on the type and number of users. Connectivity, accessibility and permeability are the key elements considered in the scheme.



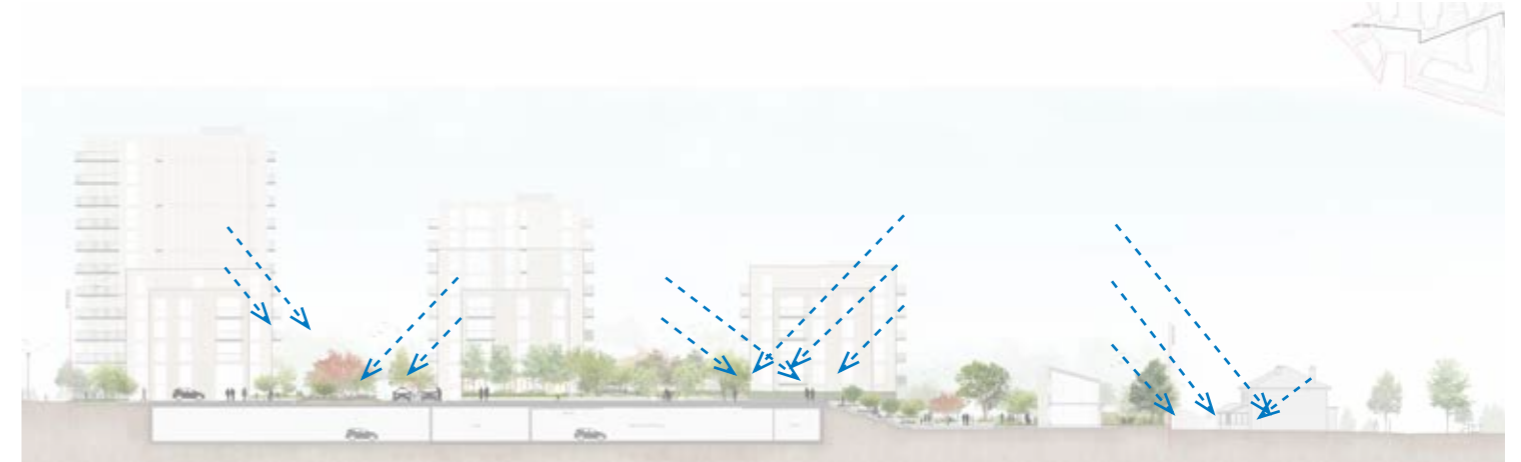
## PASSIVE SURVEILLANCE STRATEGY



The scheme has been designed to ensure passive surveillance, discouraging antisocial behavior, littering or vandalism. This will encourage the utilisation of the space by the community.

- Own door access units
- Private terrace along the facade of the building
- ↗ Access

## CONCEPT SECTION OF THE PASSIVE SURVEILLANCE STRATEGY



- - - - -> Potential passive surveillance

# DESIGN CONCEPT- CIRCULATION

## CIRCULATION WITHIN THE SCHEME

The circulation movement through the site is essential for the usability and success of the open spaces. The development strategy is focused on the walkability and permeability of the site through the podium level and the lower ground level. The development, while allowing for essential vehicular circulation, in the plaza, prioritises pedestrian and cyclist connections, with dedicated high-quality "corridors" with non-slip paving and delineated by planting.

Vehicular prevention elements, such as bollards, raised edges, and planting, are used to restrict unwanted vehicular circulation in pedestrian areas, with removeable bollards at locations where emergency access is required. The scheme incorporates the expansion of potential circulation toward Willow Grove and on the N11..



- Vehicular movement dedicated area
- Pedestrian and Cyclist Areas (with the exception of the emergency vehicle)

## VEHICULAR CIRCULATION



## PEDESTRIAN AND CYCLIST CIRCULATION

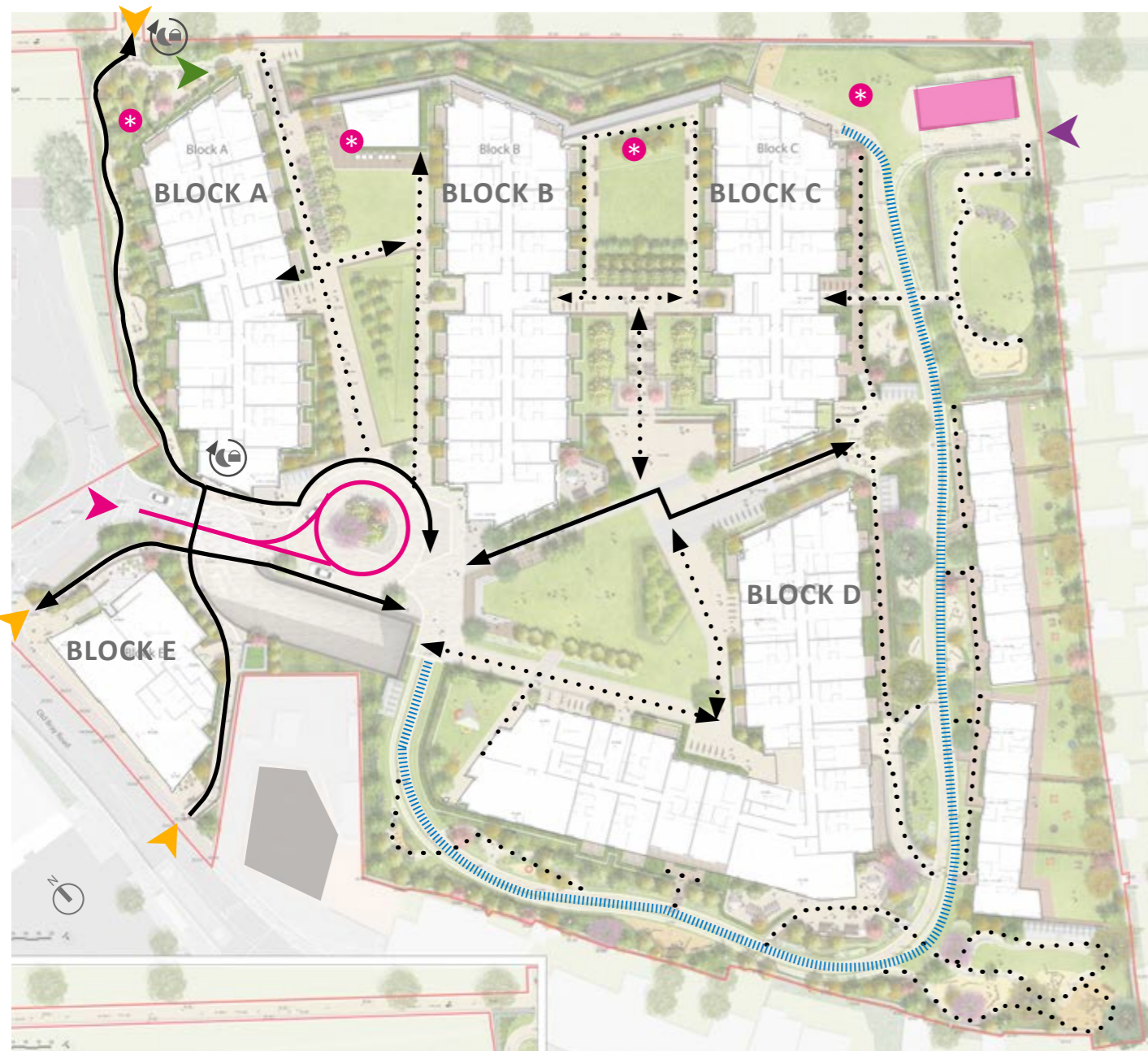


## PEDESTRIAN AND CYCLIST PASSAGE



Pedestrian and cycle crossings will be prioritised in this area. The hardscape material, changing finishes, and tonality will enhance the priority of no vehicular movement, this zone will be a raised table to reduce the speed of the vehicles from the basement.

## CIRCULATION WITHIN THE SCHEME



- Primary pedestrian circulation
- Secondary pedestrian circulation
- Shared residential cycle and pedestrian route
- Vehicular circulation
- Proposed pedestrian & cycle route entrance point
- Residents only- fob access
- Main vehicular access
- Potential Future connection to Willow Grove development
- Controlled Gate (Access for residents only)
- Existing Petrol Station
- ESB

In response to ABP Opinion **ITEM 6**, which states:  
 "...Pedestrian permeability through the site should be outlined.."

Pedestrian permeability, public or resident, is critical to the success of a vibrant 'place' and thus finds itself as a key driver at the heart of the masterplan strategy. These routes not only help residents navigate the site, they also play a key role in linking together the various open spaces and neighbourhoods.

The proposed internal network of pathways promotes easy access between the open spaces and the residential zones. As explained on pg. 40 of this report, all routes will be fully accessible.

A control point located on Building A will ensure that the shared surface will be residents use only and will enhance the feeling of the security on the site.

### CONTROLLED GATE

Due to the different positions of the recreational areas and the conformity of the western perimeter pathway, a number of gates have been proposed with different approaches:

Controlled access zones limit access through the perimeter area immediately surrounding the building to daylight hours.

Safety usability of the space due to the imminent proximity with the N11.

\*The proposed pedestrian gates will have a self-closing gate option, which is an in-ground operator with an adjustable closing rate and the soft close feature ensures that the gate returns to the closed position. In addition, a magnetic lock will be introduced to ensure only adult pressure will be applied in order to open the gate.



# DESIGN CONCEPT-CIRCULATION

## CIRCULATION FROM N11 TOWARD OLD BRAY RD AND VICE VERSA



In response to ABP Opinion **ITEM 6**, which states: "...Pedestrian permeability through the site should be outlined.."

The site will be accessed by pedestrian and cyclists from the North, from N11 toward Old Bray Rd providing permeability within the wider context.

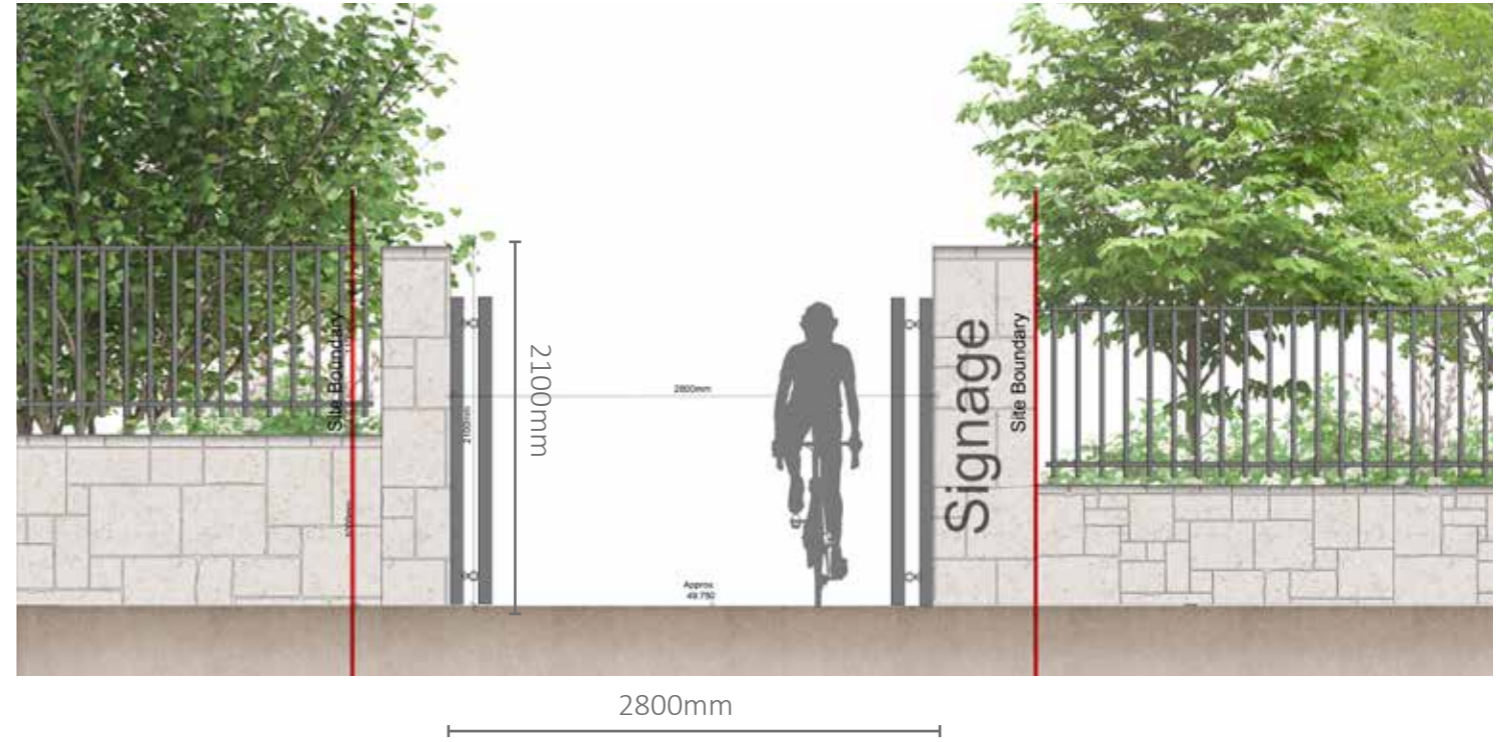
The proposed development is well located with proposed pedestrian and cycle facilities and has good public transport options available to commuters from the N11 and Old Bray Rd.

Walking and cycling are prioritised as a mode of sustainable transport has been the key aim applied to the circulation concept.

A comprehensive network of linked footpaths, walking trails, and cycleways are provided across the site.

These are complimented by the landscape framework setting which will enhance the physical environment for both pedestrians and cyclists which will increase permeability across the site.

## PROPOSED ACCESS FROM N11 (A)

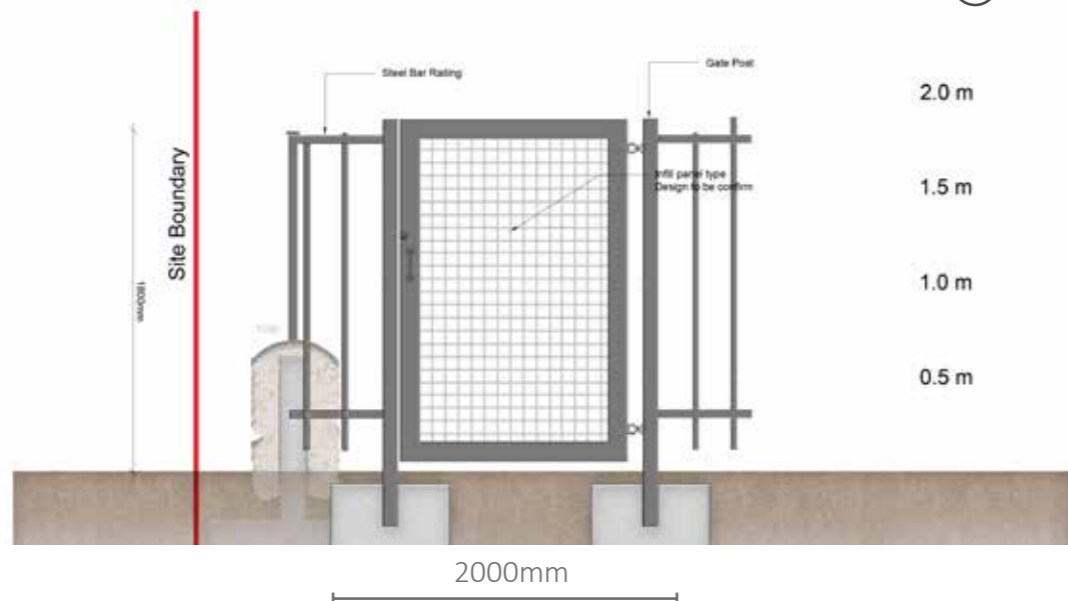


## PROPOSED ACCESS FROM N11 (A)

### SHOWING THE CLOSED CONTROLLED GATE DURING THE NIGHTTIME

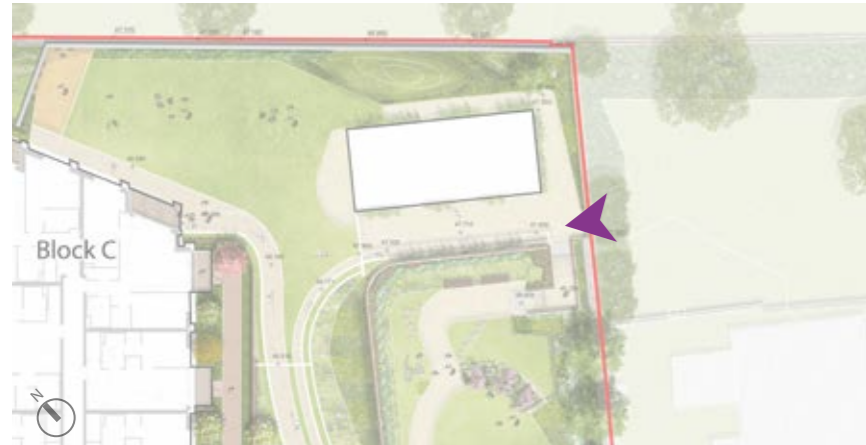


## PROPOSED CONTROLLED GATE DURING THE NIGHTTIME (B)





## POTENTIAL FUTURE CONNECTION TO WILLOW GROVE



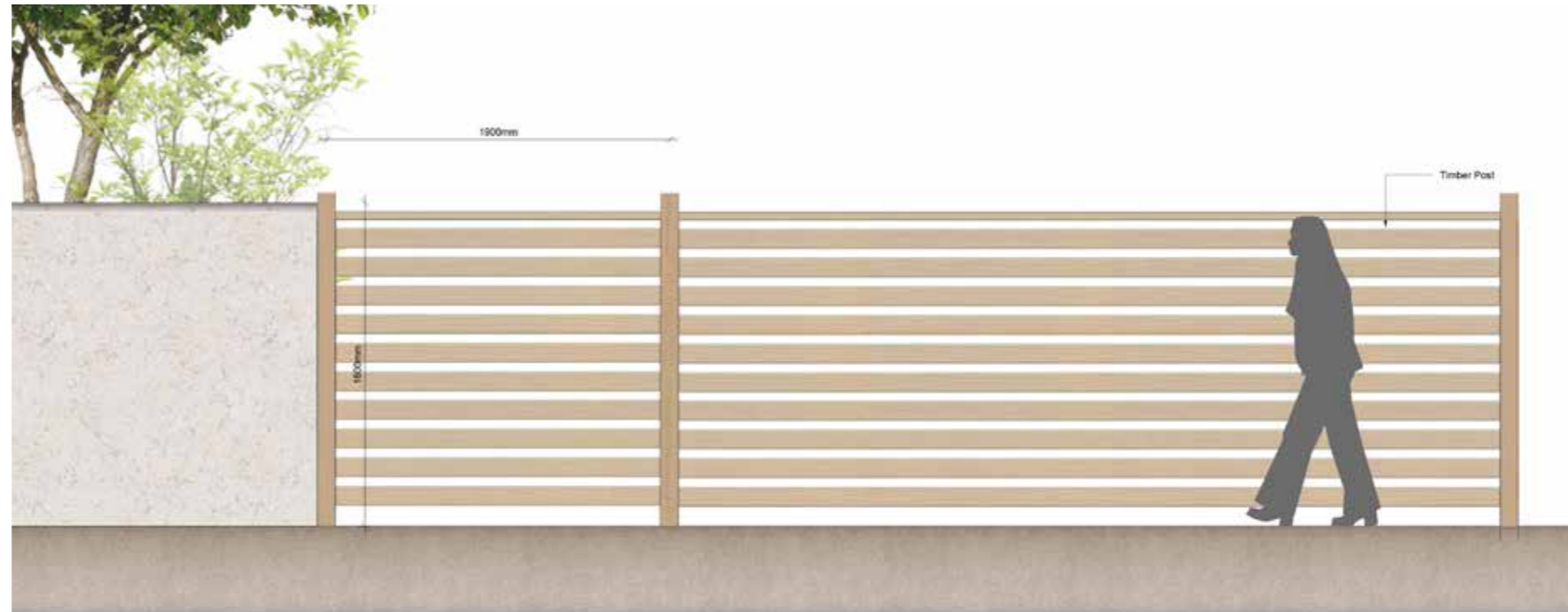
In response to ABP Opinion **ITEM 6**, which states: *"...Pedestrian permeability through the site should be outlined.."*

The scheme incorporates the expansion of potential continuous movement toward Willow Grove and on the N11..

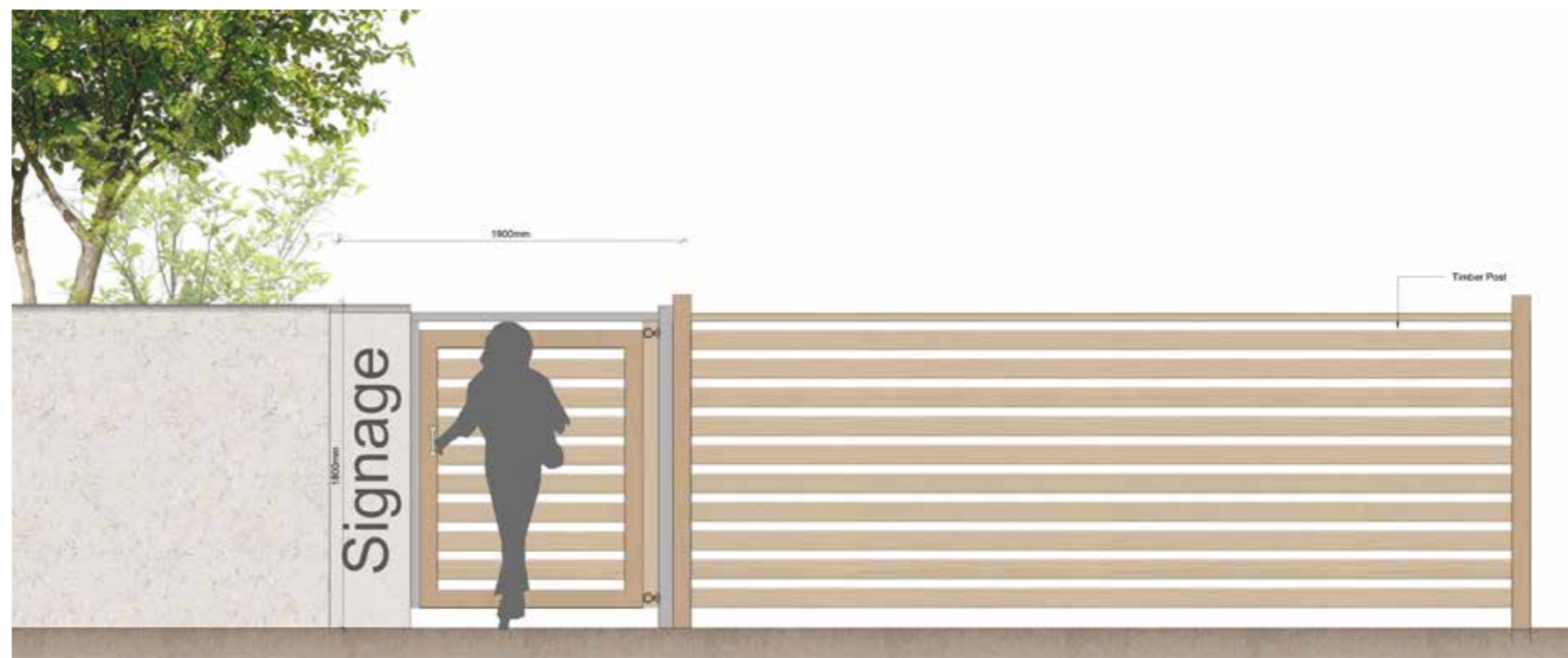
The apartments and duplexes located along the South and South East of the site would be served by the path that could potentially link to the village of Willow Grove.

### INTERIM ARRANGEMENT

### PROPOSED RENDERED WALL INFILL WITH TIMBER FENCE ALLOWING FOR FUTURE CONNECTIVITY AT WILLOW GROVE












### POTENTIAL FUTURE CONNECTIVITY THROUGH WILLOW GROW, PEDESTRIAN GATE



# DESIGN CONCEPT


## ACCESS



-  Residential lobbies access
  -  Basement vehicular access
  -  Crèche access
  -  Basement pedestrian/cycle access
  -  Basement refuse store
  -  Residential own access
  -  Amenity tenants access (Gym)
  -  Commercial access
-  Cyclist acces to Cycle Storage to the basement

## VISUAL CONNECTION



-  Main Visual axes
-  Focal Points

## RESIDENTIAL WALKING TRAILS AND CYCLEWAY

The site requires a trafficable clear area for fire tender route. As a principle of the design in order to emphasize the residential environment, along the South and South-East area the path network has been carefully studied.

Walking trails and cycleway will run in between the townhouses and the blocks. The fire tender route is hidden within the finishes that make up the pedestrian and cycle route with the additional width being provided by reinforced grass allowing a natural feeling but still accommodating the technical and functional demands. The adjacent section shows how the trails will be accommodated within the residential amenity garden character area.



Residential walking trails and cycleway

## TYPICAL SECTION OF THE RESIDENTIAL WALKING TRAILS AND CYCLEWAY



Reinforced grass 500mm | Cycle lane 1000mm | Reinforced grass 500mm | Footpath 1500mm | Reinforced grass 500mm

Fire tender access  
4000mm

# DESIGN CONCEPT

## EXERCISE LOOP AND FITNESS STATION

The proposed landscape design encourages active engagement with nature. Residents can utilise the space for running, walking, dog walking. Ultimately this will encourage greater use of the outdoor environment, greater opportunities for interactions and places for health and wellbeing.



These safe, active routes will be appropriately lit and overlooked to ensure passive surveillance. Dotted along the route will be exercise stations in the form of single or clusters of equipment. It is proposed to include pullup bars, rope climbs, monkey bars and elements to compliment the calisthenic workout. Nature becomes the gym!

There will be opportunities for multifunctional active areas to kick a ball, shoot some hoops.

The landscape design also considers the link of the internal and external activity that will enhance the user experience.

The need to mitigate the Noise became an opportunity to enclose and guarantee more privacy to the gym users and at same time became the feature opportunity for an equipped climbing wall. The space will surrounded by planting creating the perfect space for an "under sky" gym. The open lawn will be a gathering area also serves the need for the turning point of the emergency vehicle movement. For further detail of the gym facility please. Refer to the HJL Architectural Report.



-  Residential walking trail and cycleway
-  Exercise station

## EXISTING CYCLE ROUTE IN THE SURROUNDING AREA

In promoting a cycle friendly scheme, three indispensable components have been considered: storing at home, riding on a cycling network and parking and storing at destinations. These principles will encourage bicycle ownership and bicycle use.

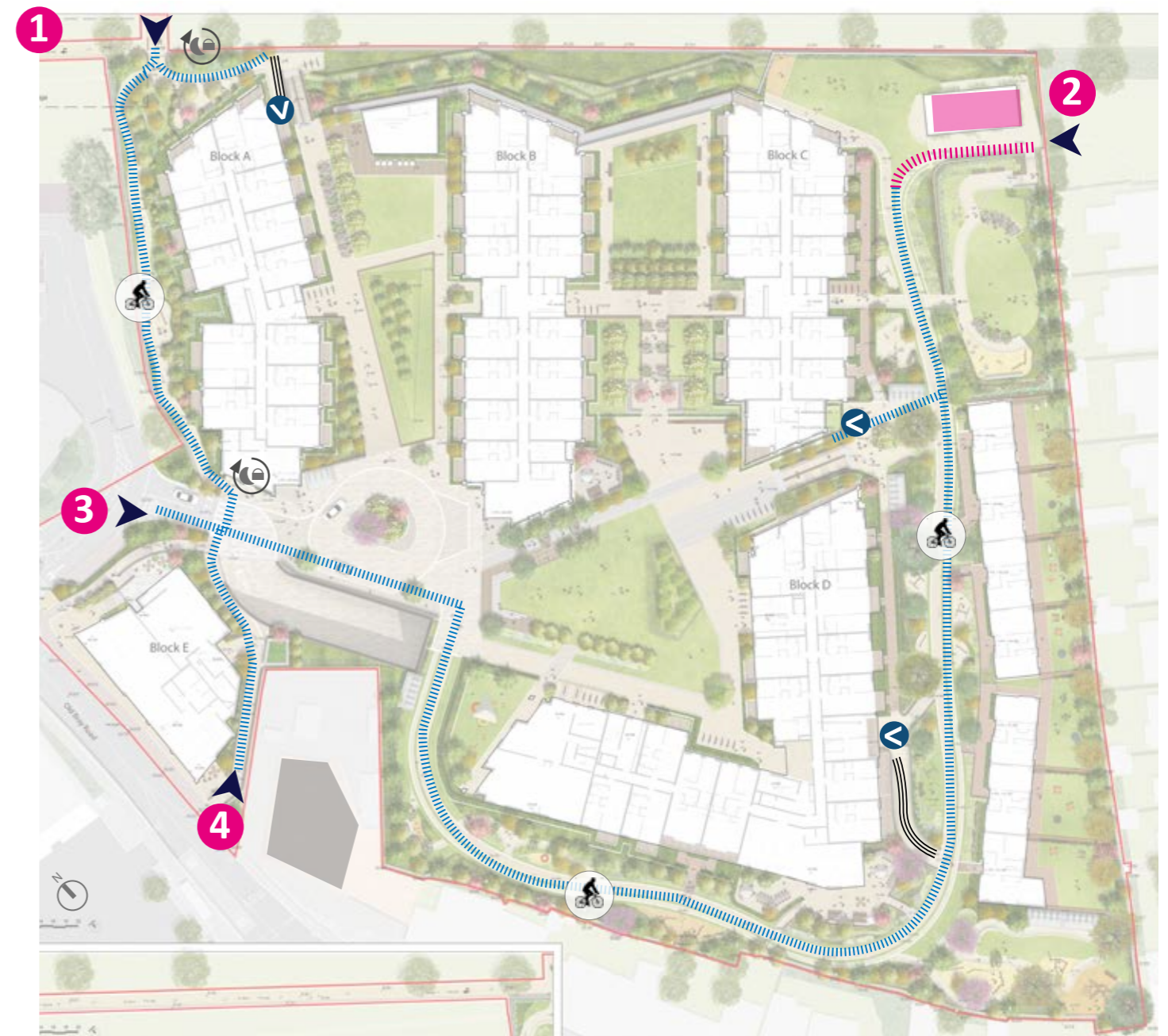
The map below shows the existing cycling network local to the site, and the adjacent diagram shows the cycle circulation within the scheme.

There are cycle facilities along the N11 corridor and there are a range of services and facilities in the local area.



- Site boundary
- ⋯ Existing cycle route in the surrounding area
- 1 Proposed cycle access at N11 road to the scheme
- 2 Potential cycle access at Willow Grove development to the scheme

## CYCLE NETWORKING CIRCULATION



- ⋯ Cycle circulation
- ⋯ Potential Cycle circulation
- = Cycle ramp to basement
- ▶ Basement pedestrian/cycle access
- ▶ Cycle access
- ▶ Controlled Gate (Access for residents only)
- 1 Proposed cycle access from N11 road - (junction with the existing cycle lane along N11)
- 2 Potential cycle access from Willow Grove
- 3 Proposed cycle access from Bray Road
- 4 Proposed cycle access from Bray Road
- Existing Petrol Station
- ESB

# DESIGN CONCEPT

## CYCLE ACCESS TO BASEMENT

Large and secure cycle storage has been provided in three different locations within the basement. All the cycle storage will be accessed from the ground level by the cyclist. The cycle ramps provided in the landscape setting have followed the requirements in the *Dun Laoghaire Rathdown Cycle Design Guidelines*. The secure cycle store locations are situated in strategic locations, to provide for both visitor and resident parking in close proximity to each building entrance.

The scheme provides a network of paths that can be traveled by cyclists with different destinations. An alternative and more direct route from basement to the lower ground is provided by cycle channel stair providing connection from the podium to the area below. Refert to HJL Architectural Report for further details.

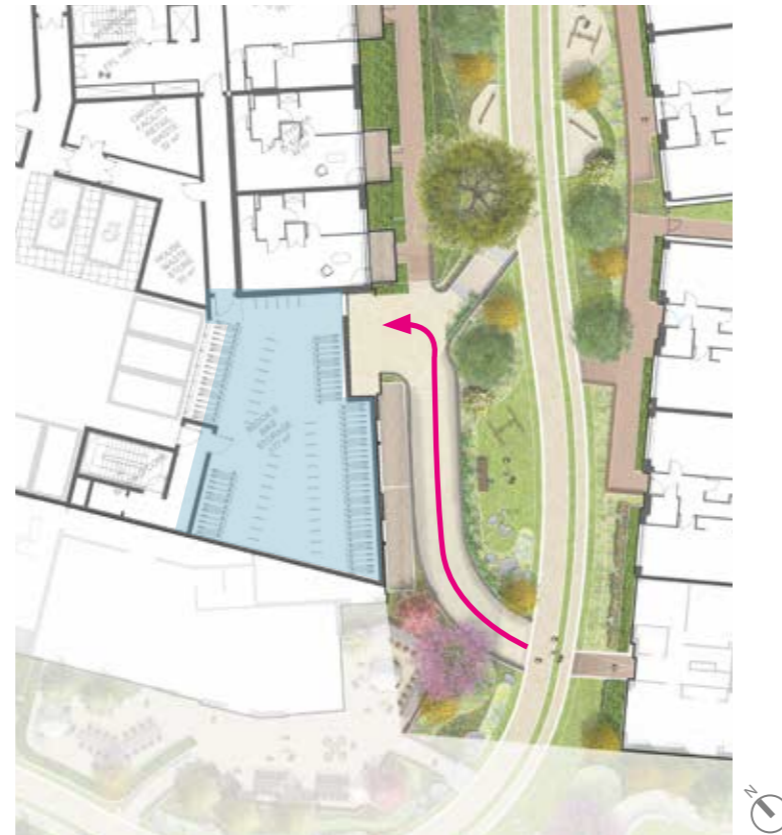


For illustrative purpose only.

### CYCLE STORE ACCESS FROM THE GROUND TO BASEMENT AT BLOCK A



### CYCLE STORE ACCESS FROM THE GROUND TO BASEMENT AT BLOCK D



### CYCLE STORE ACCESS FROM THE GROUND TO BASEMENT AT BLOCK C



## CYCLE PARKING REQUIREMENTS AND PROVISION

The accessibility to, and secure storage of, bicycles is a key concern for apartment residents and apartment proposals must respond accordingly to the requirements below in their design and provision of cycle storage facilities.

### Provision, based on Apartment Guidelines :

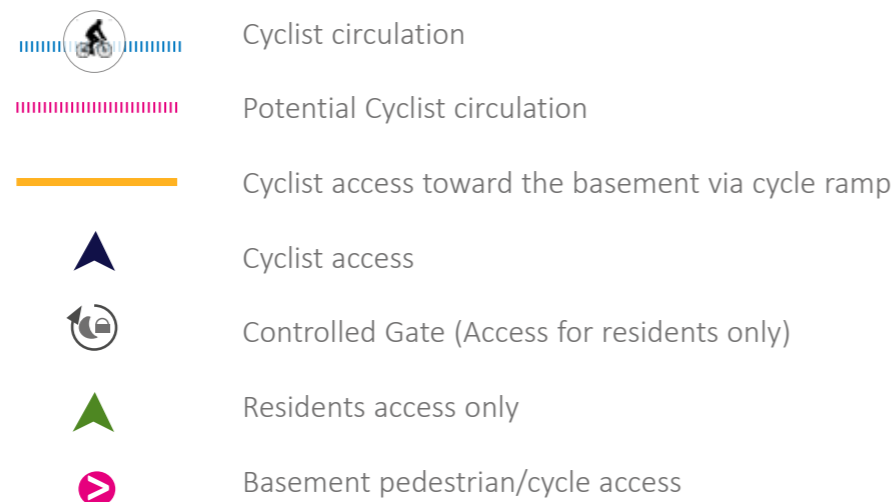
A standard of 1 cycle storage space per bedroom has been applied.  
 Visitor cycle parking has a provision of 1 visitor space per 4 dwellings.

### PRINCIPLES APPLIED:

- » Residents' cycle parking should be in a secure and sheltered location.
- » Lockable cage or gated area.
- » Sheltered
- » Near the building (25m from building access)

### CYCLE PARKING PROVISION 819No. Bike spaces provided

<p><b>148No.</b> <b>AT GROUND LEVEL</b>                  Sheffield Spaces (74 Stands)                  of which No.66 sheltered by structure</p>	+	<p><b>3No.</b> <b>AT GROUND LEVEL</b>                  Cargo Bike Sheffield Spaces                  (2No. for Crèche+ 1No. Amenity area)                  along Bray Rd)</p>
<p><b>664No.</b> <b>BASEMENT</b>                  No.160 Sheffield Spaces (80Stands)                  No. 504 Two Tier Racks</p>		



Bicycle stands (Sheffield stands)



Sheltered bicycle stands (Sheffield stands)



Cargo Bike bicycle stands (Sheffield stands)

# DESIGN CONCEPT

## BARRIER-FREE DESIGN



In response to ABP Opinion **ITEM 6**, which states: "Details should also include proposals for hard and soft landscaping including street furniture, where proposed, which ensures that areas of open space are accessible, usable and available for all".

This diagram illustrates the available routes for disabled access. All access routes have been designed in accordance with Section 1.1.3.3 of TGD M 2010 to provide compliant gentle slopes across the site with level landings where required.

Due to a significant height difference of Approx. 3 metres between the podium level and the lower ground (basement level) two stairs are proposed within the landscape that connect the areas, contributing to the linkage between the overall recreational and functional areas.

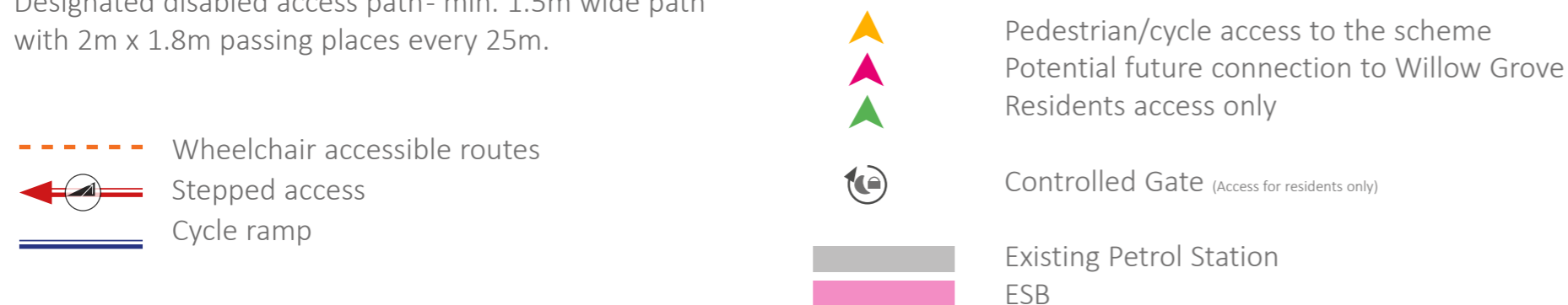
Alternative universal access has been provided for via compliant routes providing access to all at convenient gradients.

Steps have only been used where necessary to address the level changes on the site to achieve the required FFL. Where steps have been used we have provided alternate ramped/sloped access where possible.

### DESIGN PRINCIPLES APPLIED:

- » Equitable Use
- » Flexibility in Use
- » Simple and Intuitive use
- » Perceptible Information
- » Low physical effort

Designated disabled access path- min. 1.5m wide path with 2m x 1.8m passing places every 25m.



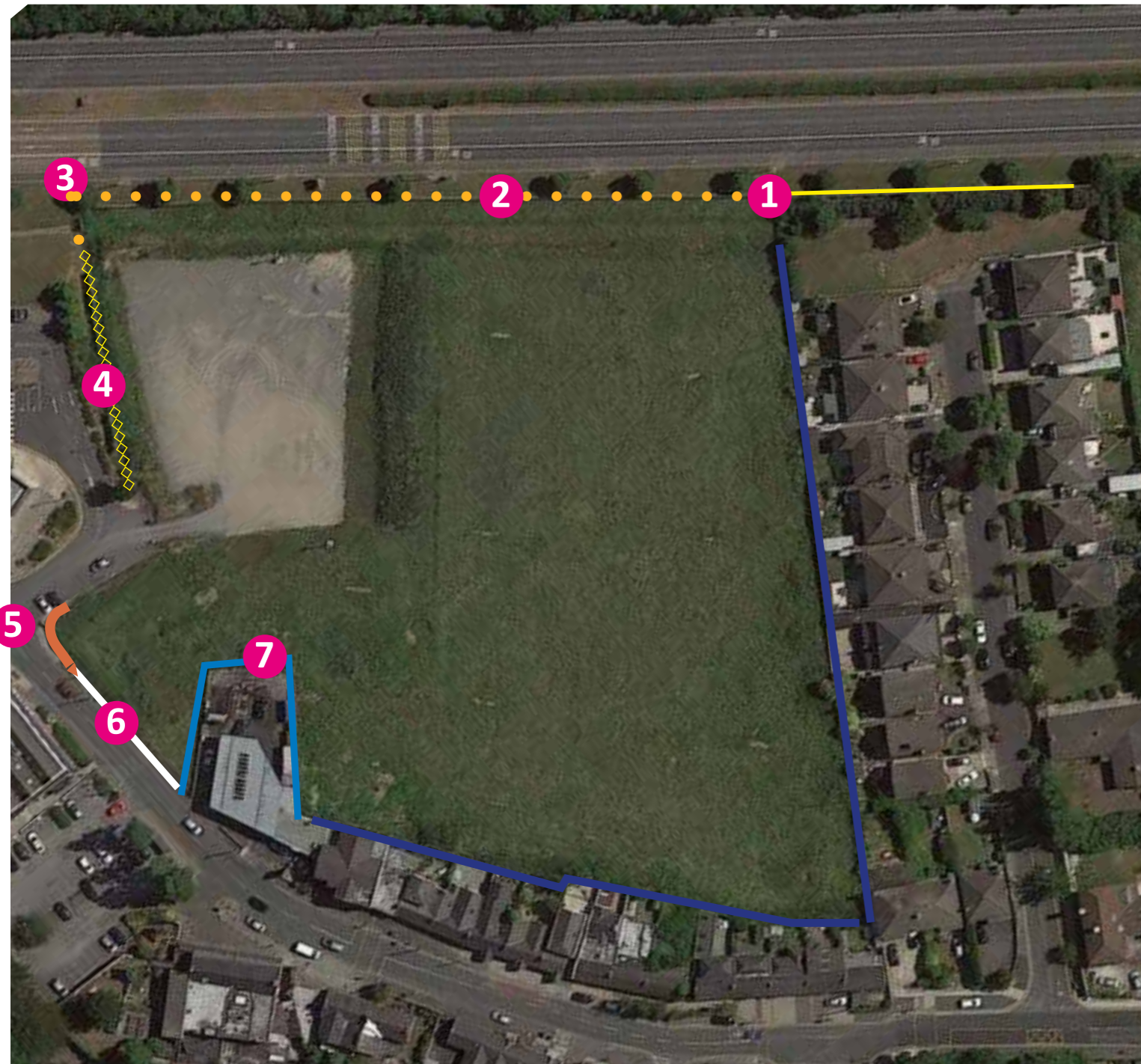


An aerial photograph of a city, showing a mix of residential houses, larger commercial buildings, and green spaces. The entire image is covered with a semi-transparent orange filter. In the lower right quadrant, the text "BOUNDARY TREATMENTS" is written in a bold, white, sans-serif font. A thin white horizontal line is positioned directly below the text.

# BOUNDARY TREATMENTS

# BOUNDARY TREATMENT

## EXISTING BOUNDARY ALONG THE PERIMETER



### EXISTING BOUNDARY CONDITION

- Existing High Dry Stone Wall
- Existing wire mesh fence
- Existing palisade fence
- Existing low dry stone wall
- Existing concrete post and rail
- Existing hit and miss panel fence
- Existing Concrete wall

## EXISTING CONDITION



## BOUNDARY TREATMENTS ALONG THE SITE PERIMETER

In Response to ABP Opinion **Item 3** which states "...A Materials Strategy that specifically addresses the proposed materials and finishes for buildings, open spaces, paved areas and **boundaries**, having regard to the requirement to provide high quality and sustainable finishes and details..", the adjacent diagram shows the fully adherence with the requirement.

A balance needs to be struck between security and privacy requirements for the scheme. The landscape proposals have adopted a variety of boundary treatments which aim to keep residents safe, maintain levels of privacy, and, discourage anti-social behaviour.

A simple cohesive palette across the scheme is proposed which will reinforce the character of the development and help instil a sense of place. The adjacent diagram illustrates where proposed.

- BT1-Low rubble stone wall and railings to 1.8m combined height
- BT1a-Rubble stone wall and railings to 2.1m combined height
- BT1b-Low rubble stone wall and railings to 1.4m combined height
- BT2-1.8m high rendered block wall
- BT3-Rubble stone wall- 3m high
- BT4-1.1m high close board timber fence with hedge and planting on the residential side
- BT4a-Uncoursed random rubble stone faced RC retaining wall with timber fence (1.8m height)
- BT4b 1.8m high close board timber fence (potential for gate)



# BOUNDARY TREATMENT

## INTERNAL BOUNDARY TREATMENTS

The main internal boundary treatment types used within the scheme are:

- Rendered Block work wall
- Low brick wall with metal railing
- Timber close board fencing
- Boundary to private terraces: balustrade and hedges

Some examples of the type of finishes and materials proposed are shown on the following pages.

- BT5-1.5m Perimeter railing
- BT6-1.8m Timber Close board fence
- BT7- 1.5m Glass balustrade
- BT8-Variou height- Low brick wall to match architectural brick work
- BT9-Low rendered block wall with railing (1.1m)



## PAVING PALETTE

### Boundary Type 1

Low rubble stone wall and railings  
Height: 1.8m combined

### Boundary Type 1a

Rubble stone wall and railings  
Height: 2.1m combined

### Boundary Type 1b

Low rubble stone wall and railings  
Height: 1.4m combined



### Boundary Type 2

Rendered block wall  
Height: 1.8m  
Supplier: TBC



### Boundary Type 4-

close board timber fence  
Height: 1.1m  
Supplier: Jacksons fencing or Similar Approved



### Boundary Type 4a/b

Close board timber fence with hedge and planting on the residential side\*  
Height: 1.8m  
Supplier: Jacksons fencing or Similar Approved



### Boundary Type 5

Perimeter railing, galvanise and PPC  
Height: 1.5m  
Supplier: Lang+Fulton or Similar Approved



### Boundary Type 6

Timber close board fence  
Height: 1.8m to 1.5m  
Supplier: Jacksons fencing or Similar Approved



### Boundary Type 7

Glass Balustrade  
Height: 1.5m  
Supplier: Lang+Fulton or Similar Approved



### Boundary Type 8

Low brick wall to match architectural brick work  
Height: various  
Supplier: TBC



### Boundary Type 9

Low rendered block wall with railing  
Supplier: TBC



# BOUNDARY TREATMENT



- BT1-Low rubble stone wall and railings to 1.8m combined height
- BT1a-Rubble stone wall and railings to 2.1m combined height
- BT1b-Low rubble stone wall and railings to 1.4m combined height

Note:  
 The position of the stone wall takes into consideration the RPA of the existing trees that will be retained along the N11, in proximity to the site boundary. Further inspection of the roots to be undertaken at pre-construction stage.  
 For further information refer to Item 5 Comments/Mitigation included into the Arboricultural Assessment produced by Arborist Associates Ltd.

## LOW RUBBLE STONE WALL AND RAILING TO 1.8M COMBINED HEIGHT



## RETAINING RUBBLE STONE WALL AND RAILING TO 2.1M COMBINED HEIGHT



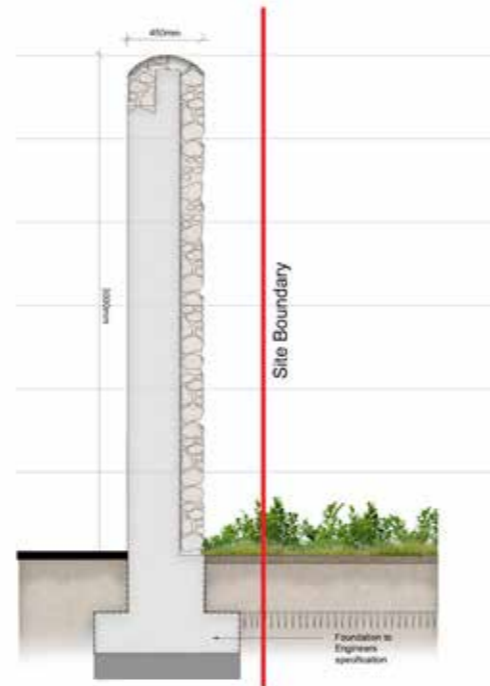
## LOW RUBBLE STONE WALL AND RAILING TO 1.4M COMBINED HEIGHT





BT3-Rubble stone wall 3m height

## RUBBLE STONE WALL/ 3M HEIGHT



## EXISTING WALL ALONG N11 (OUT OF SITE BOUNDARY)

In order to have a consistent boundary treatment across the proposal, the design proposes to extend the adjacent boundary wall, approx. 3metres in Height (see figure below) located in the proximity of the site, along the site application boundary by approx. 40m length. The wall will return to the façade of Building C. For further information see Appendix includes on this report.



**Note:**

The position of the stone wall takes into consideration the RPA of the existing trees that will be retained along the N11, in proximity to the site boundary. Further inspection of the roots to be undertaken at pre-construction stage.

For further information refer to Item 5 Comments/Mitigation included into the Arboricultural Assessment produced by Arborist Associates Ltd.

# BOUNDARY TREATMENT

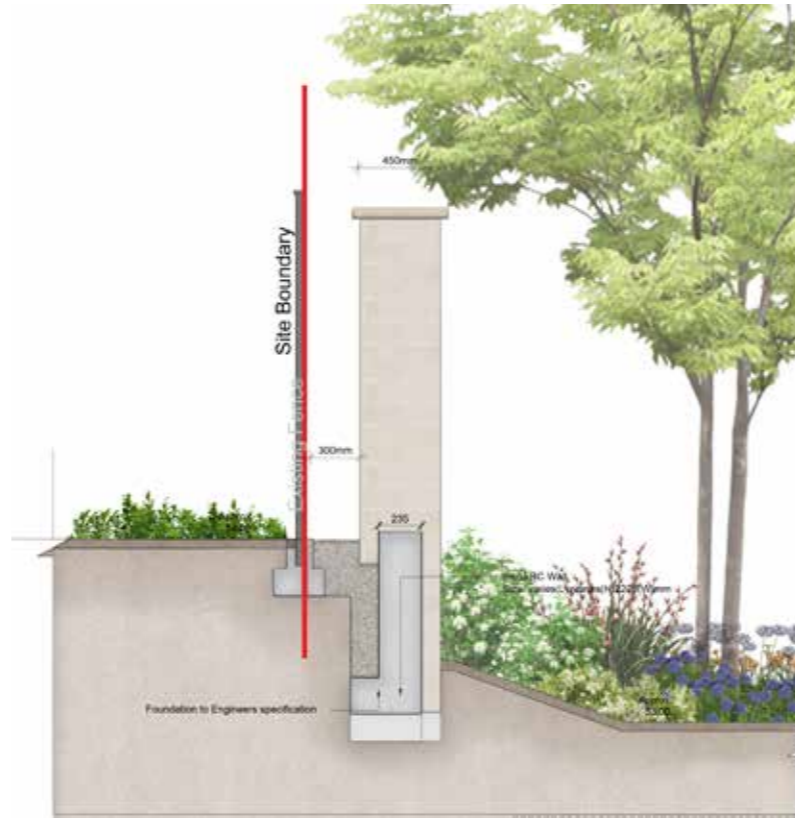


--- BT2-1.8m high rendered block wall\*

\*The existing neighboring boundary will not be impacted in anyway.

## RENDERED BLOCK WORK WALL

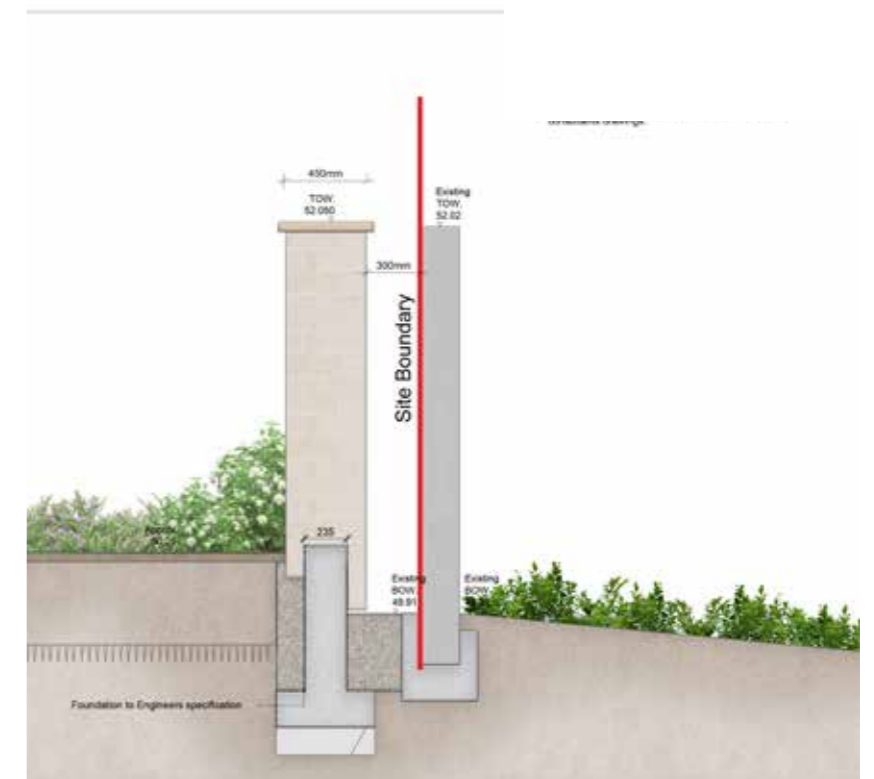
SECTION THROUGH PROPOSED HOUSE



## LANDSCAPE SECTION 1

## RENDERED BLOCK WORK WALL

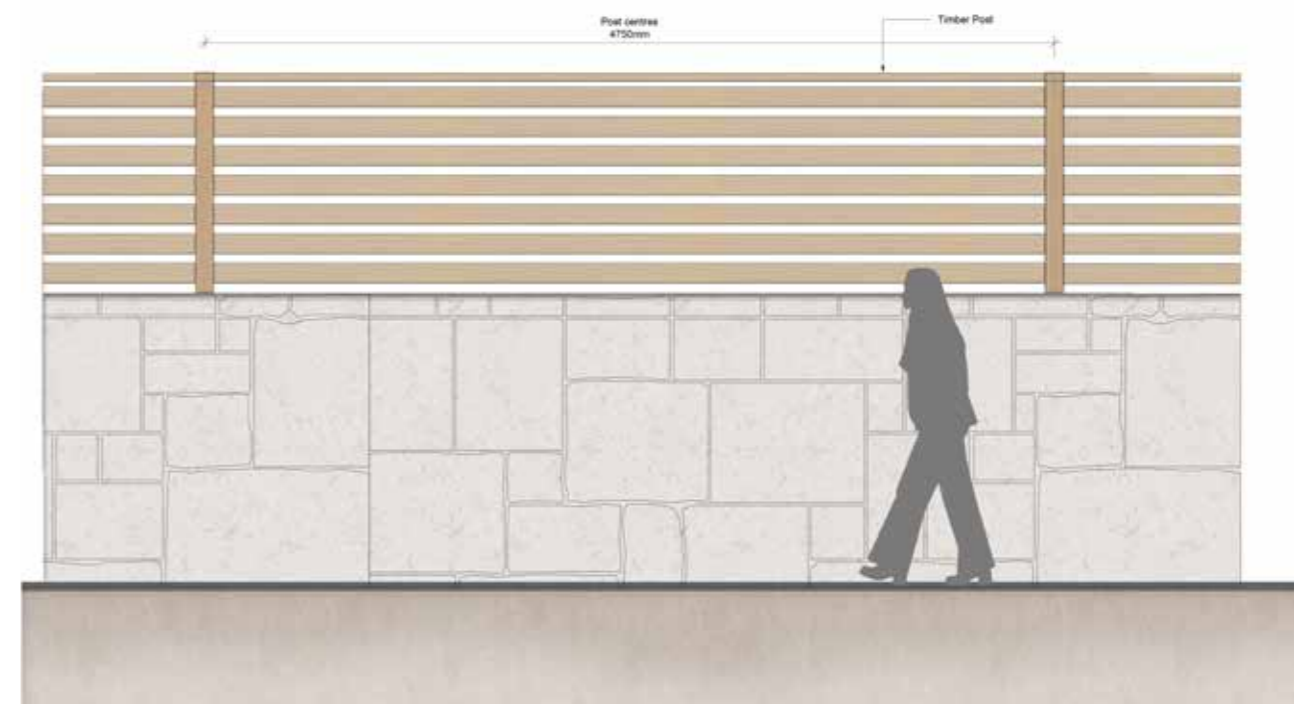
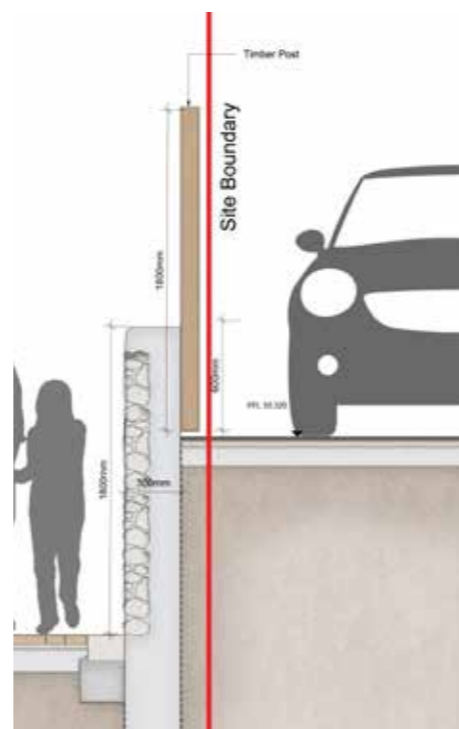
SECTION THROUGH WILLOW GROVE PROPERTY







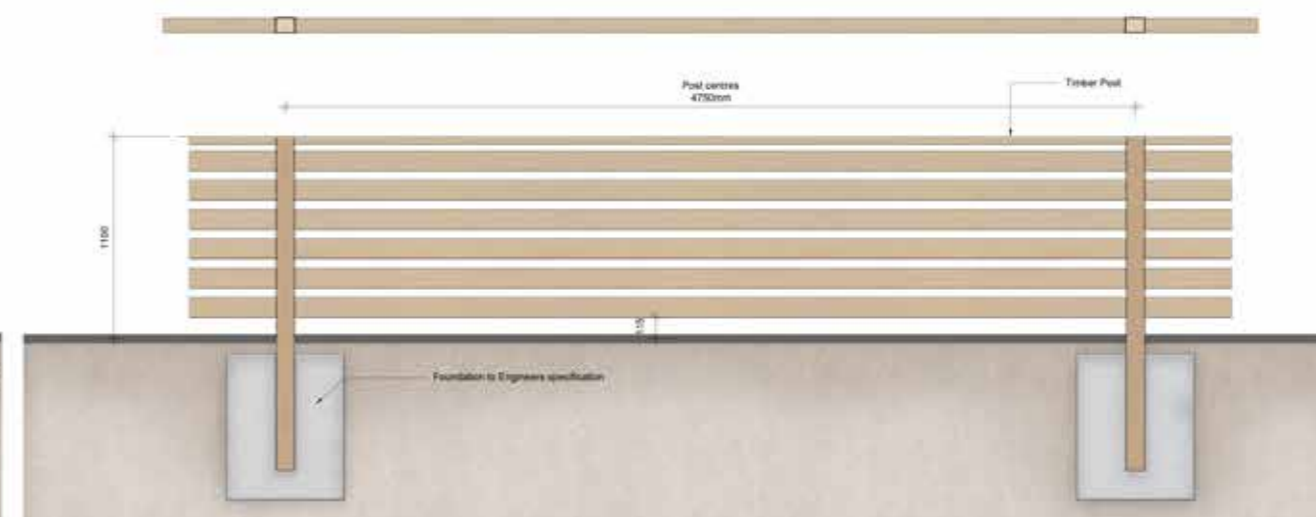
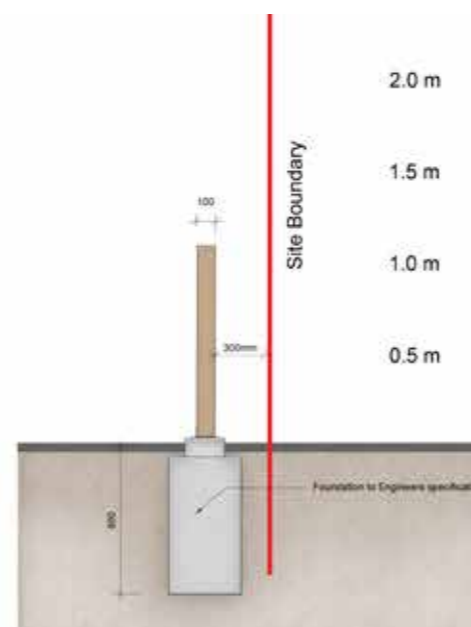
## UNCOURSED RANDOM RUBBLE STONE FACED RC RETAINING WALL WITH TIMBER FENCE



- BT4-1.1m high close board timber fence with hedge and planting on the residential side
- - - BT4a-Uncoursed random rubble stone faced RC retaining wall with timber fence (1.8m igh)

Note:  
The timber close board fence has been proposed at two different heights in order to respond to the adjacent existing condition along the petrol station boundary. The boundary will have a 1.8m height which will provide acoustic and visibility screening; the exception is the first part in the immediate access to the site that will be 1.1m height. This will guarantee the visibility of the petrol station signage present on site.

## CLOSE BOARD TIMBER FENCE



# BOUNDARY TREATMENT

## PRIVATE DEFENSIBLE SPACE

In Response to ABP Opinion **Item 6** which states *"..Details of the interface between private, public and communal areas should also be detailed. Additional cross sections, CGIs and visualisations should be included in this regard.."*, the adjacent diagram shows full adherence with the requirement.

This section of the report explains how these thresholds will be tackled as part of the landscape scheme.

Private amenity space of ground floor units are located along the perimeter of the buildings. The minimum width provided is 1.5 metres. Private amenity space is supplemented by a continuous planted defensible space to the courtyard perimeter that ensures privacy to all ground floor apartments.

Generally this takes the form of an evergreen hedge to provide a clear boundary definition between private and communal spaces.

### KEY PRINCIPLES:

- » Avoid direct views into private areas or dwellings.
- » Discourage people from congregating in front of private dwellings.
- » Create an attractive view from the internal space.
- » Increase the quality of the scheme with a strong relationship between internal and external environments.

 1.2m high Evergreen hedge



## THRESHOLD TREATMENTS

The typical sections illustrate the various treatments of the defensible space applied. The intention is to create a safe yet aesthetically pleasing solution, which ensures residents maintain their privacy without compromising the view.

Screening views into properties while providing attractive views out of a dwelling has been a key factor and the threshold between public and private space is treated as an important consideration for security, visual privacy and visual amenity.

### APARTMENT UNITS ADJACENT TO COMMUNAL SPACE

#### SECTION B-B'



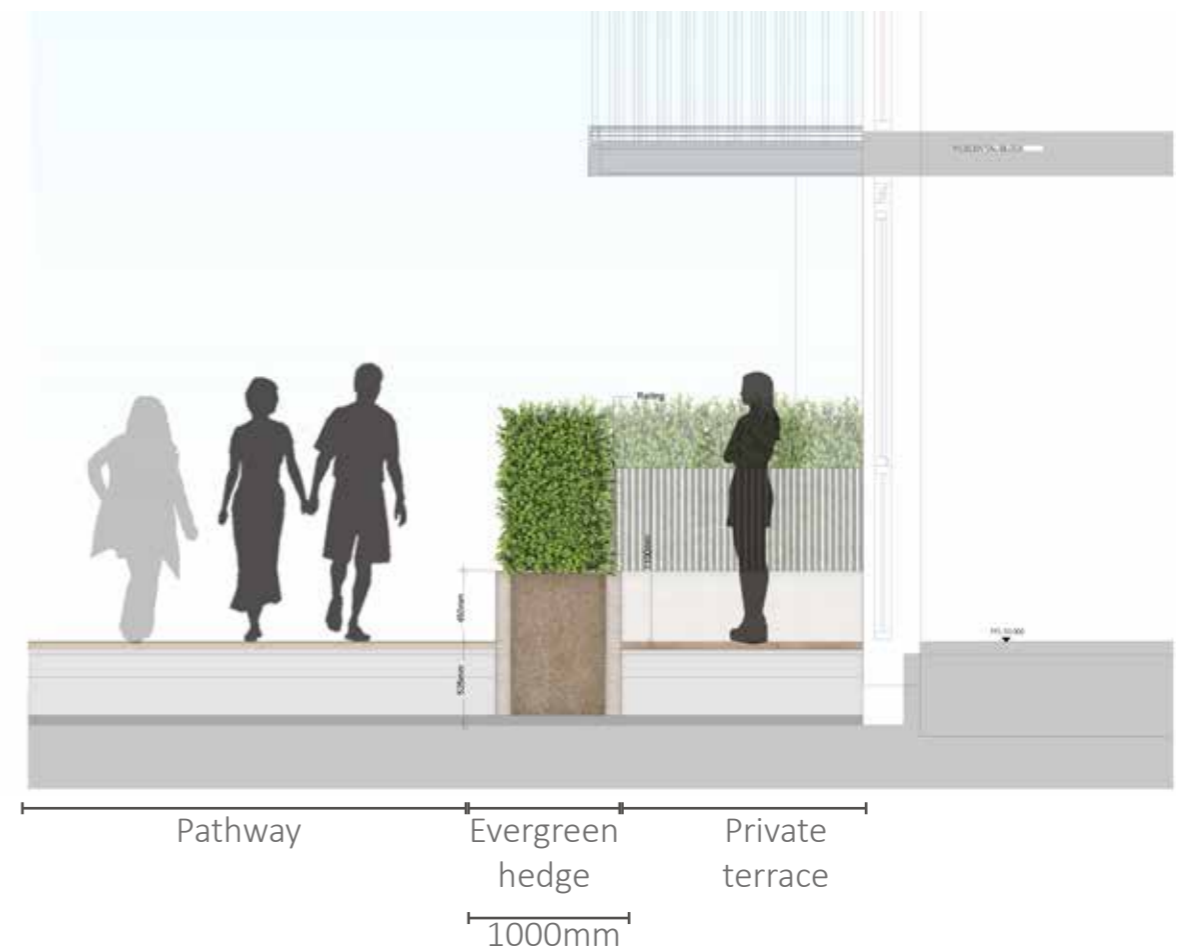
The proposed multi-stem trees provide privacy for the homeowners by restricting the direct view from the courtyard. However, the light leaf nature of the trees will allow adequate daylight to permeate the internal spaces.

### APARTMENTS UNIT WITH OWN DOOR ACCESS

#### SECTION A-A'



#### SECTION C-C'



An aerial photograph of a city neighborhood, overlaid with a semi-transparent orange filter. The image shows a mix of residential and commercial buildings, streets, and green spaces. The text is positioned in the lower right quadrant of the image.

**LANDSCAPE PROPOSAL-  
CHARACTER AREAS**

## ILLUSTRATIVE MASTERPLAN / GROUND FLOOR

The space performs a variety of roles; welcoming to families, promoting the ecological aspirations of the development, establishing a sense of community, and creating a high quality external space.

To achieve these roles the space includes a series of key features and designated areas as listed below:

1. Cornelscourt plaza
2. The CUT, Sculptured mounded lawn/ Activity area for informal play and socialising.
3. Great Lawn/ Flexible play, activity area
4. The Heart Square/ gathering area for visitors and residents
5. Sensory boulevard/ scented planting
6. Residential open lawn
7. Public Open lawn
8. The pavilion café
9. Stepped connection
10. Sculptural seating and social space with mounding and shaded seating.
11. Residential square
12. Cycle and pedestrian access to basement
13. Pocket square
14. Rainwater gardens for enhanced bio-diversity and informal play.
15. Pedestrian and cycle access from Bray Road.
16. Wind mitigation 'birch' screening
17. New pedestrian link through the site towards N11
18. The TRIANGLE
19. Recreational Open Green



NEW PEDESTRIAN LINK THROUGH THE SITE TOWARDS N11



# LANDSCAPE PROPOSAL

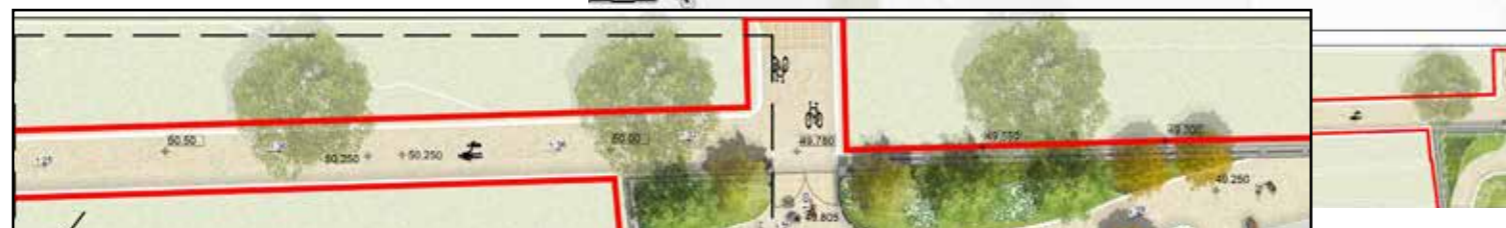
## ILLUSTRATIVE MASTERPLAN OF THE BASEMENT (LOWER) AREA

The basement / lower area space includes a series of key features and designated areas, as set out below:

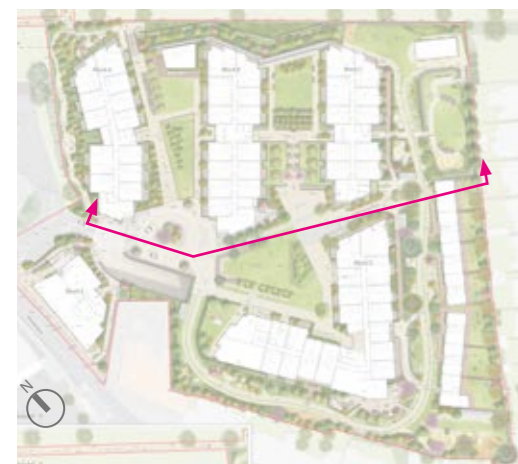
1. Pedestrian & cycle access to the basement cycle storage area.
2. Buffer planting with native trees and shrubs. Boulders and logs provide informal play
3. Terraced landscape
4. Private rear garden
5. Densely planted retaining wall structure to provide a visually appealing garden view to the basement flats.
6. Stepped access to the podium level.
7. Recreation area
8. Potential access to Willow Grove
9. New pedestrian link through the site towards N11
10. Substation
11. Recreational Open Green
12. Cycle ramp



NEW PEDESTRIAN LINK THROUGH THE SITE TOWARDS N11



## EAST- WEST ILLUSTRATIVE LANDSCAPE CROSS SECTION



# CHARACTER AREAS

## LOCATION MAP

Our landscaping vision for the development will create several distinct areas. The adjacent schematic identifies the key character areas within the scheme. Each area is explored in more detail in the coming pages.

It is important to note that, whilst each area has its own unique character, there are a series of unifying design principles, materials and styles applied to each space to create an overall cohesive landscape.

These character areas make up the key user experiences on the site:

1. Entrance Plaza and Drop Off Zone
2. Tenant Amenity / Community Hub
3. Sculptured residential courtyard/ The scented garden
- 3A. Sculptured residential courtyard/ The mounded garden
4. Residential amenity gardens
5. Recreation active green
6. Terraced landscape with native planting
7. Crèche playground
8. Private rear garden





## CHARACTER AREA 1. - ENTRANCE PLAZA AND DROP OFF



A simple, understated, hardscaped plaza. The plaza surface is open and expansive to allow vehicles to manoeuvre but is enclosed with a canopy of branches above to establish a sense of human scale for residential users within the space.

Layout allows space for vehicular movement, drop-off, disabled parking and pedestrian access via a shared-surface approach.

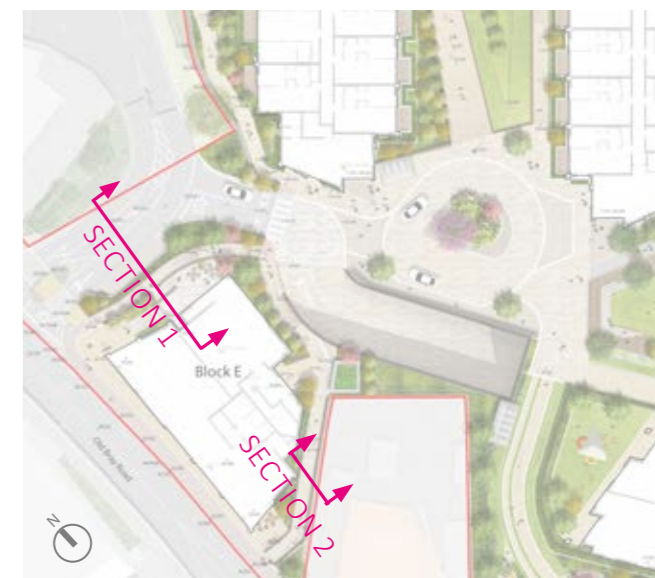
### KEY ELEMENTS / CHARACTERISTICS:

1. Pedestrian access from Old Bray Rd
2. Part M compliant access into the site and new buildings
3. Active ground floor frontage at entrance of scheme
4. A central grove of semi-mature, high stem Tulip trees as a focal feature.
5. Set down area /Shared pedestrian priority plaza



# CHARACTER AREAS

## CHARACTER AREA 1. - ENTRANCE PLAZA AND DROP OFF, SECTIONS AND VISUALS



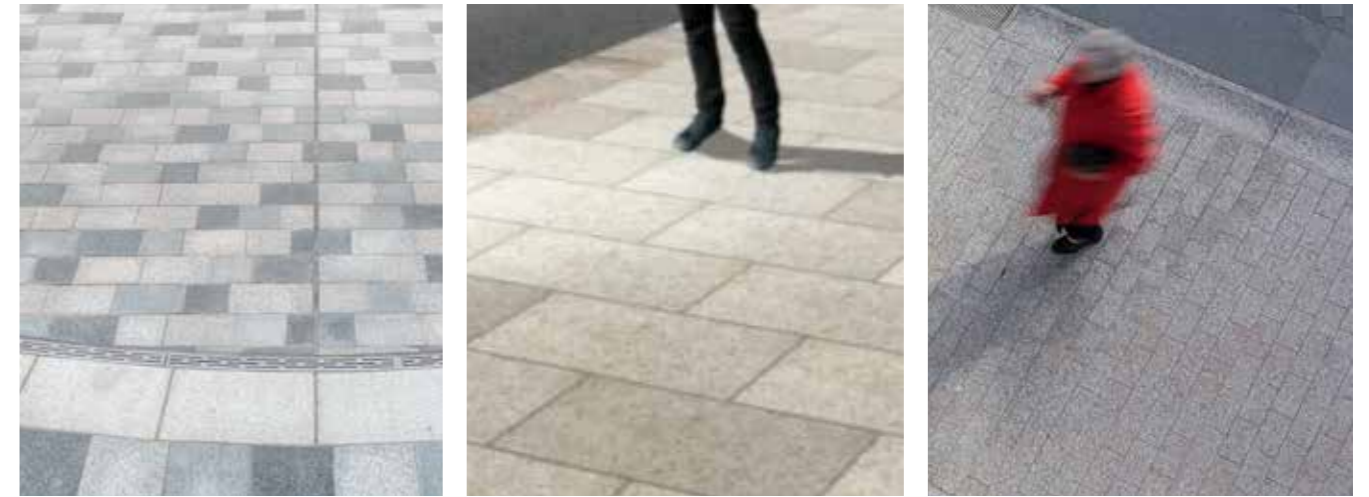
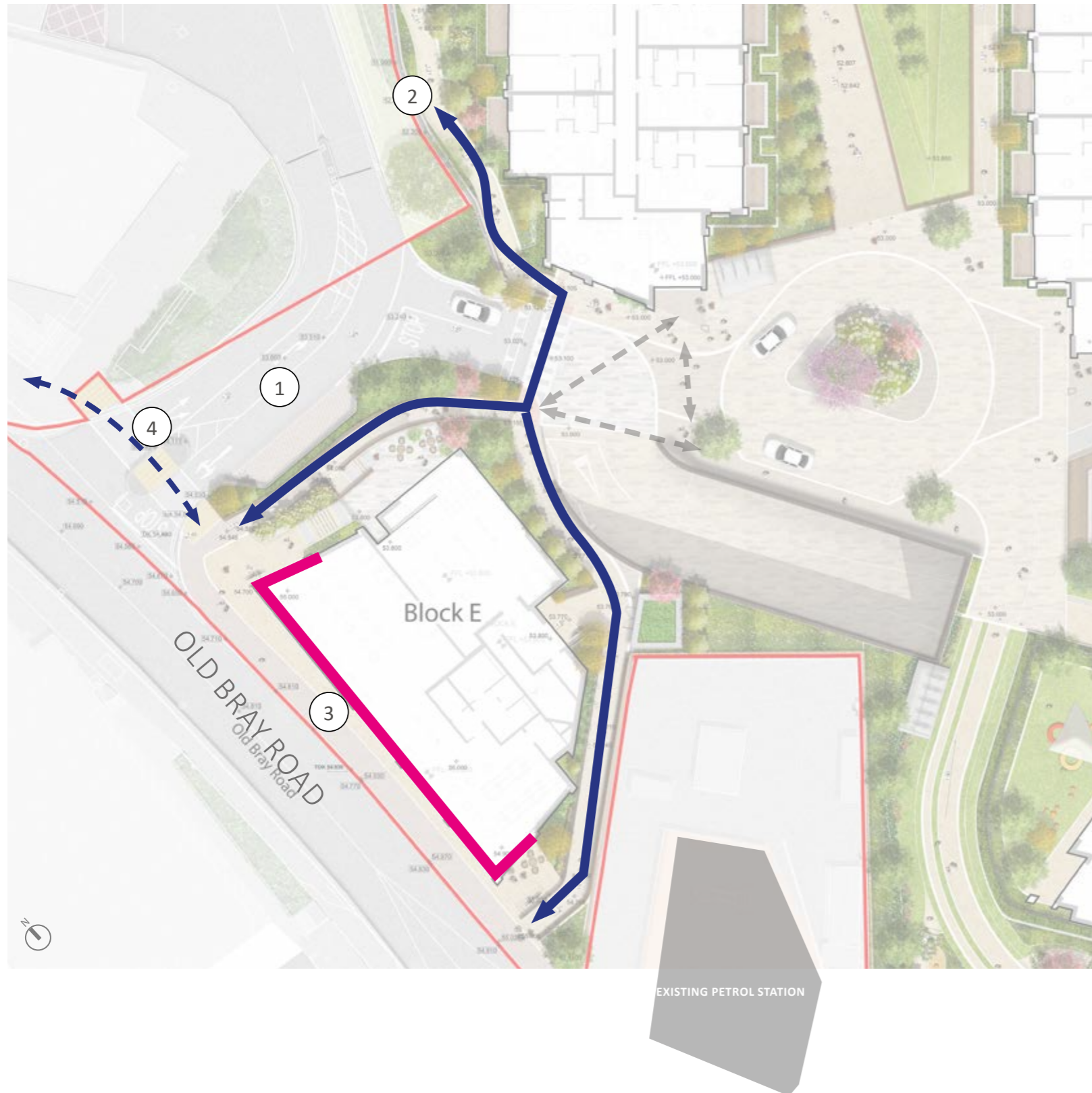
For illustrative purpose only.

LANDSCAPE SECTION 1

LANDSCAPE SECTION 2



## CHARACTER AREA 1. - ENTRANCE PLAZA AND DROP OFF

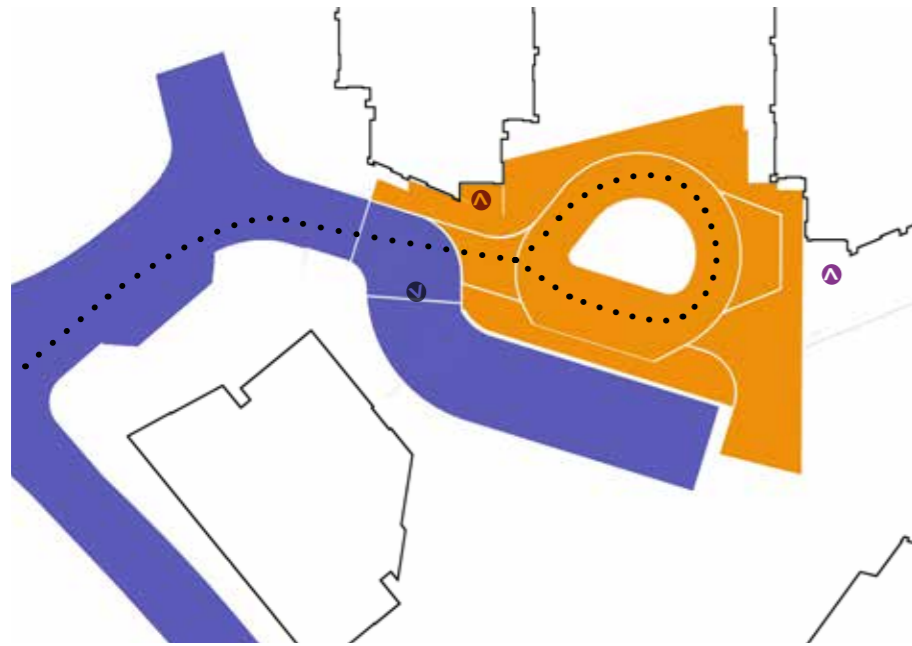


- Desire route
- Active architectural frontage
- Focal Point
- Pedestrian/cycle route

1. Main vehicular access
2. Residential gardens- pedestrian/cycle connectivity from N11
3. Pedestrian route along Old Bray Road
4. Pedestrian island allowing safe crossing for pedestrians.

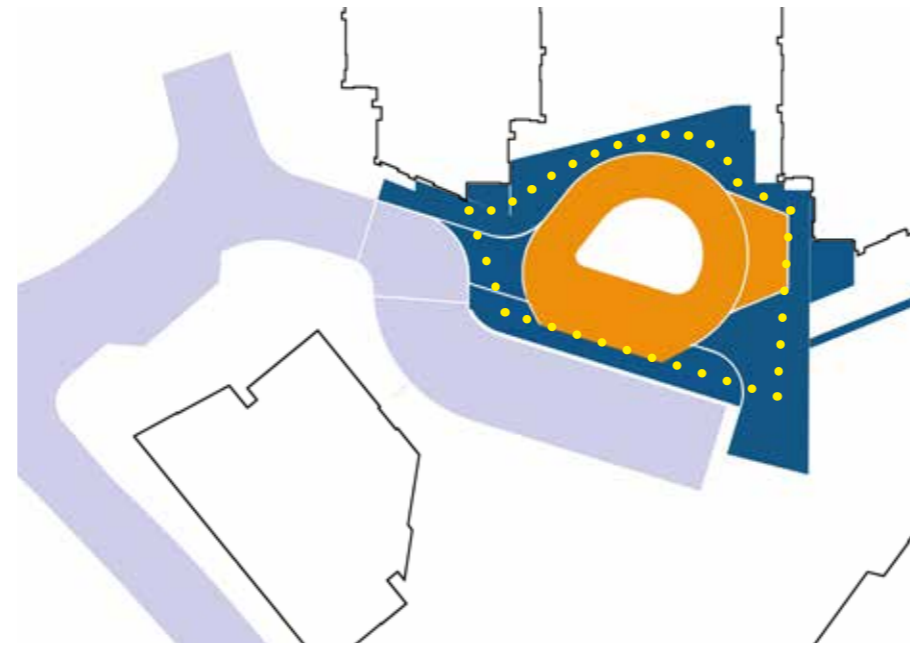
# CHARACTER AREAS

## ENTRANCE PLAZA AND DROP OFF/CONCEPT DIAGRAMS

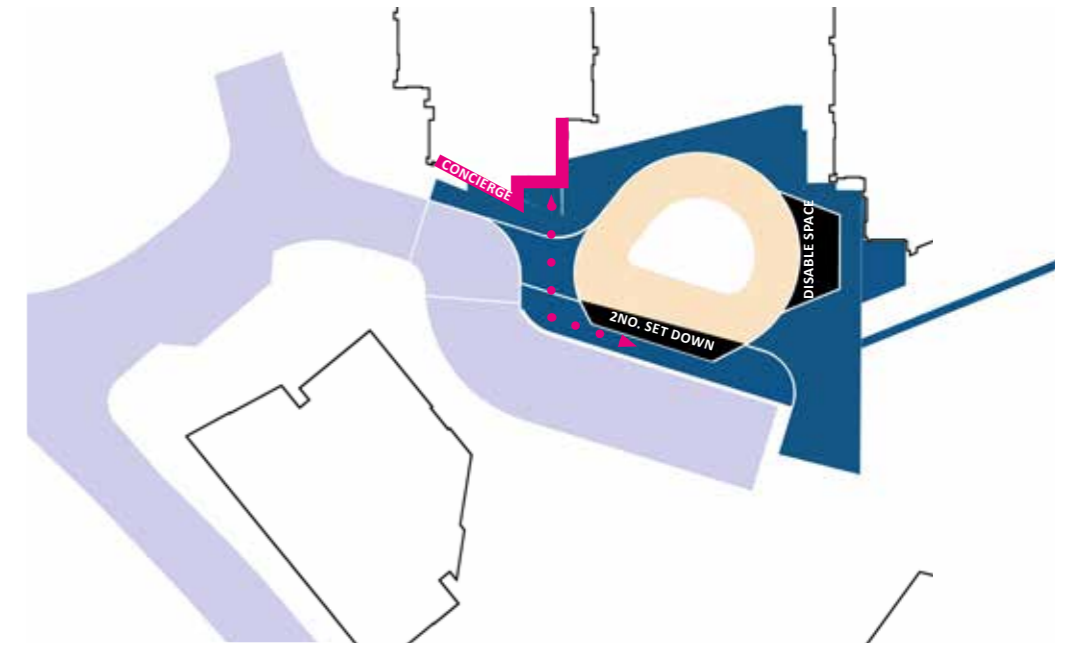


"Vehicular carriageway"  
for:  
*All*

"Shared surface" for:  
*Taxi*  
*Visitors*  
*Emergency vehicles*  
*ESB service movement*  
*Cyclist*



A shared route provides the main access for all users, with separate footpaths offering optional routes away from vehicle movements. (Vehicle numbers will be low and infrequent.)



2No. Set-down  
1No. Visitors Disable Parking

Vehicular traffic from Old Bray Rd site access uses the basement car park (rather than proceeding further into the shared surface)



Demarcation of shared plaza & carriageway through paving materials and changing tones of materials.



The shared plaza accommodates 2No.set down spaces for deliveries and taxi that will serve the scheme. The proximity of the proposed concierge will control the use of these bays. The shared plaza also accommodate 1No. Disable parking space adjacent to block B.



# CHARACTER AREAS

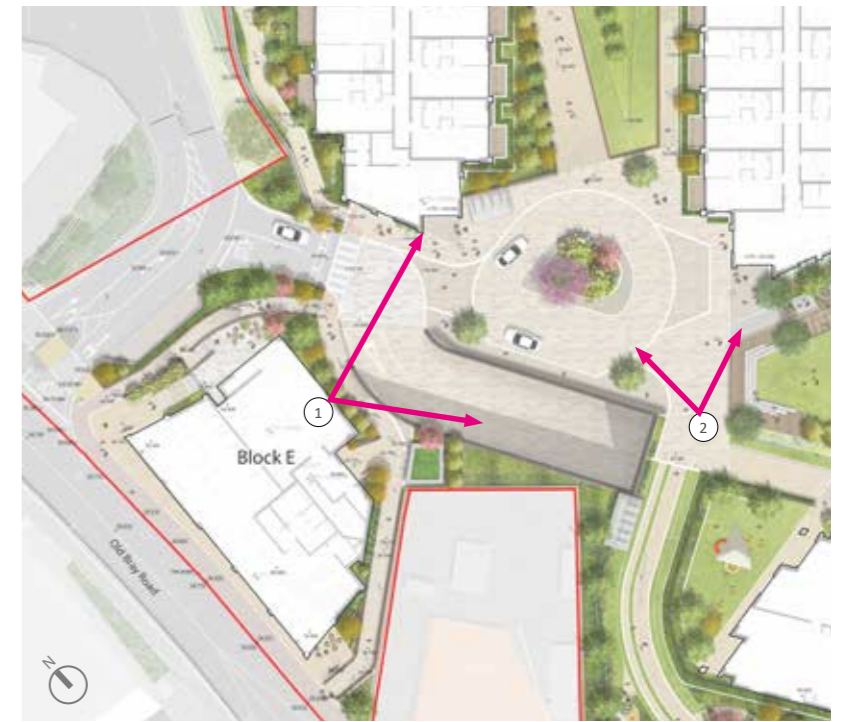
## CHARACTER AREA 1. - ENTRANCE PLAZA AND DROP OFF, VISUALS



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 1. - ENTRANCE PLAZA AND DROP OFF, VISUALS



For illustrative purpose only.

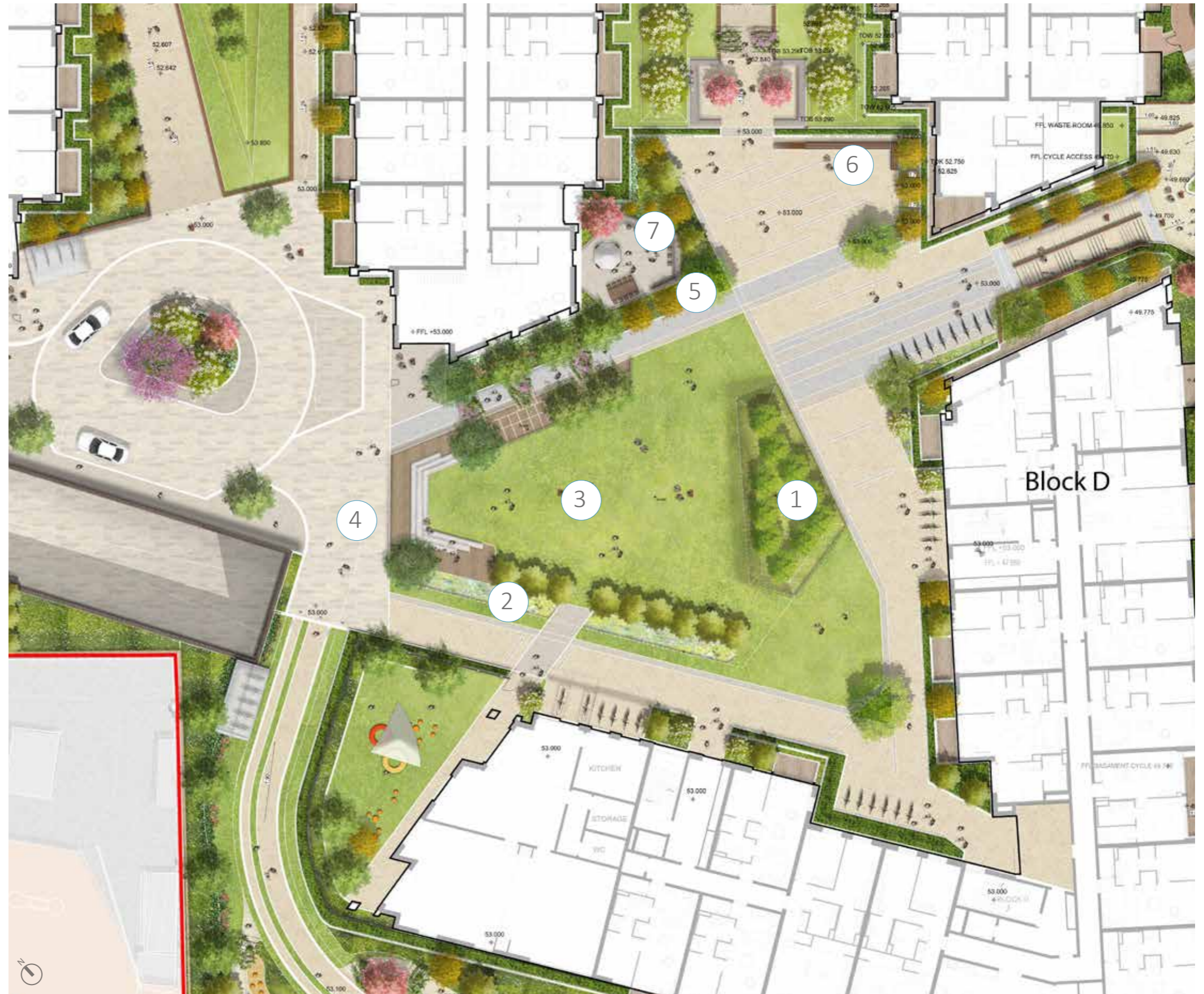
## CHARACTER AREA 2. - TENANT AMENITY / COMMUNITY HUB



The community hub will be a public space which sits at the heart of the development, providing a green oasis which aims to serve the new residents. This open space will encourage people to socialise and interact, helping cement existing and forge new community relationships. Residents will have the flexibility to use the space how they wish which will establish a sense of pride and ownership over the space.

### KEY ELEMENTS / CHARACTERISTICS:

1. Mounded informal landscape with geometric tree arrangement.
2. Rainwater garden to enhance ecology and provide natural play feature for kids.
3. Amenity lawn areas for active and passive recreation. All ages can enjoy the space.
4. High quality paving materials and elements.
5. Planting with a year around interest.
6. Sheltered seating area
7. Outdoor communal amenity space



# CHARACTER AREAS

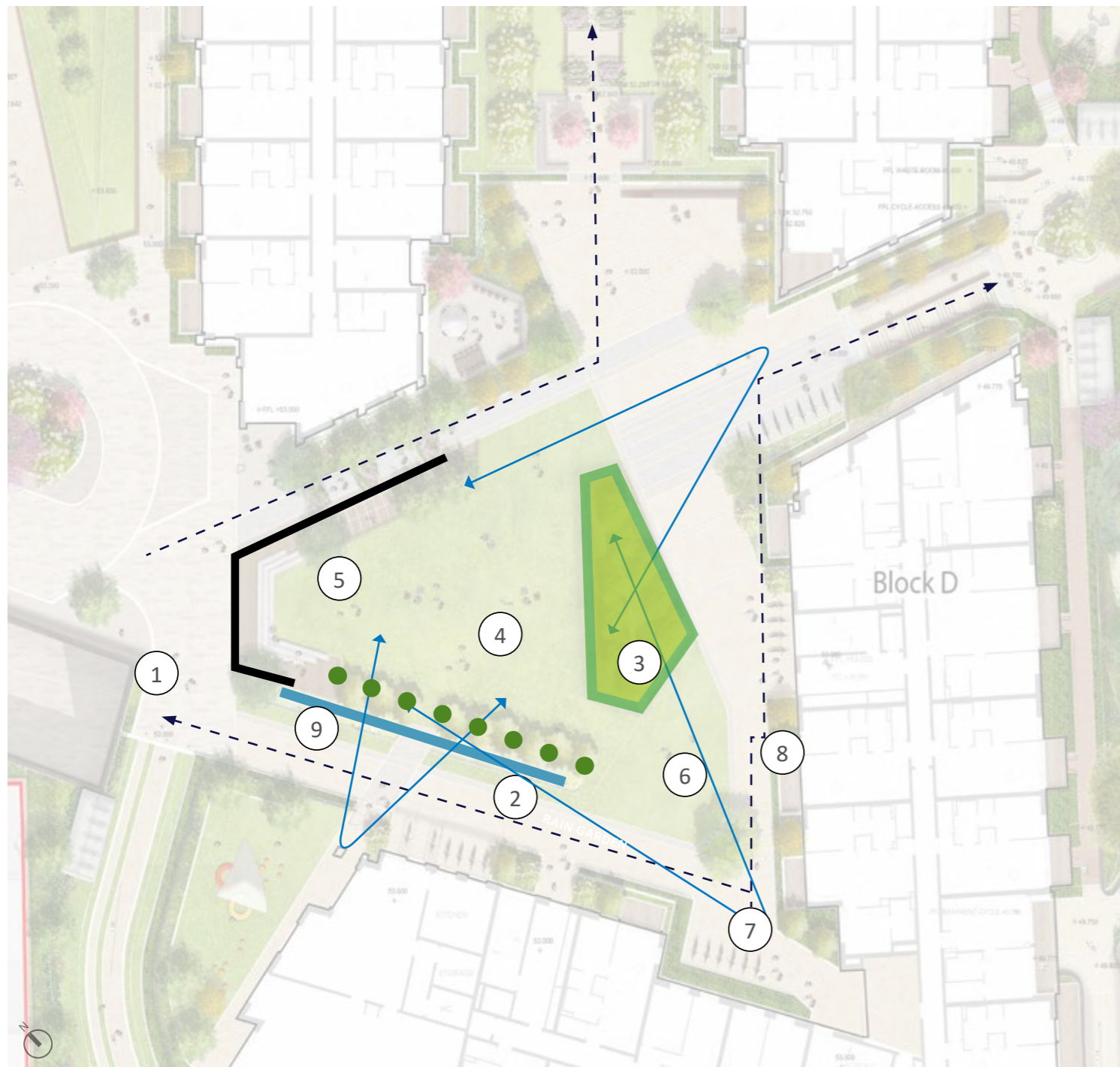
## CHARACTER AREA 2. - TENANT AMENITY / COMMUNITY HUB, VISUAL








For illustrative purpose only.



## CHARACTER AREA 2. - TENANT AMENITY / COMMUNITY HUB, CONCEPT DIAGRAM



-  Seating furniture enclosure
-  Pedestrian & cycle movement/ barrier free design
-  Sculptured mound with birch trees
-  Tree avenue
-  Rain garden



1. Seating structure enclosure- provide definition to the space- engage the topography of the space
2. Tree Avenue- provide shade and definition of the area
3. Sculptured mound- provide playful attraction to the area
4. Central lawn- serving as the central communal gathering space
5. Outer seating- Providing opportunities for respite and interaction
6. Free reinforced grass area, to accommodate emergency vehicle movement
7. Residential welcoming square
8. Private defensible space
9. Rain garden

# CHARACTER AREAS

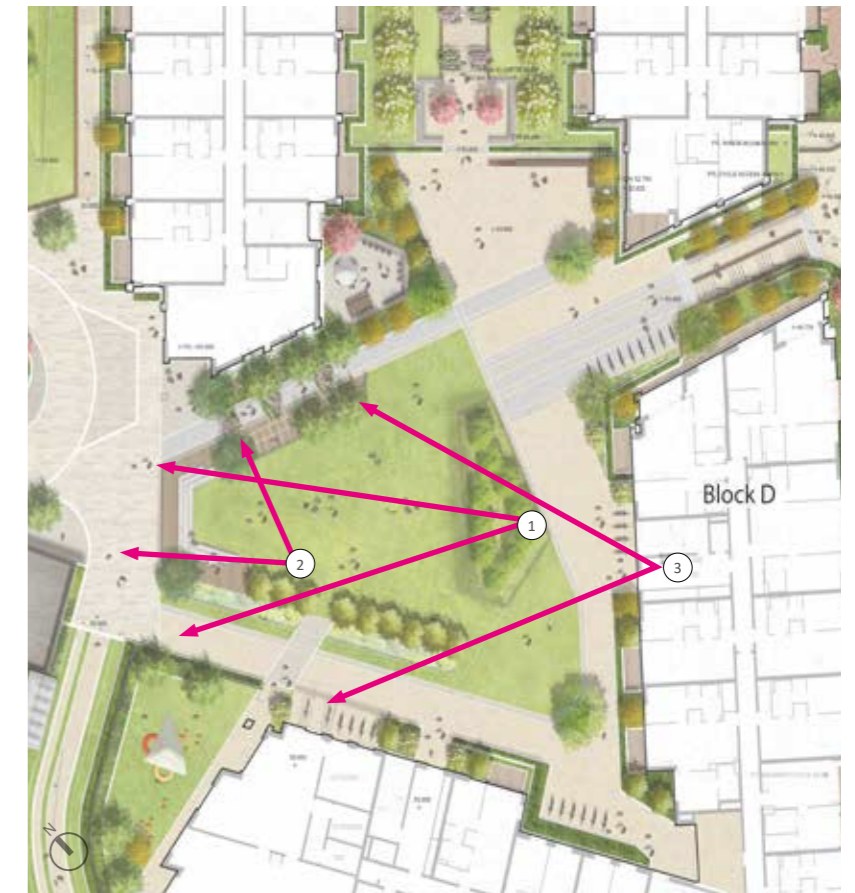
## CHARACTER AREA 2. - TENANT AMENITY / COMMUNITY HUB, VISUALS



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 2. - TENANT AMENITY / COMMUNITY HUB, VISUALS



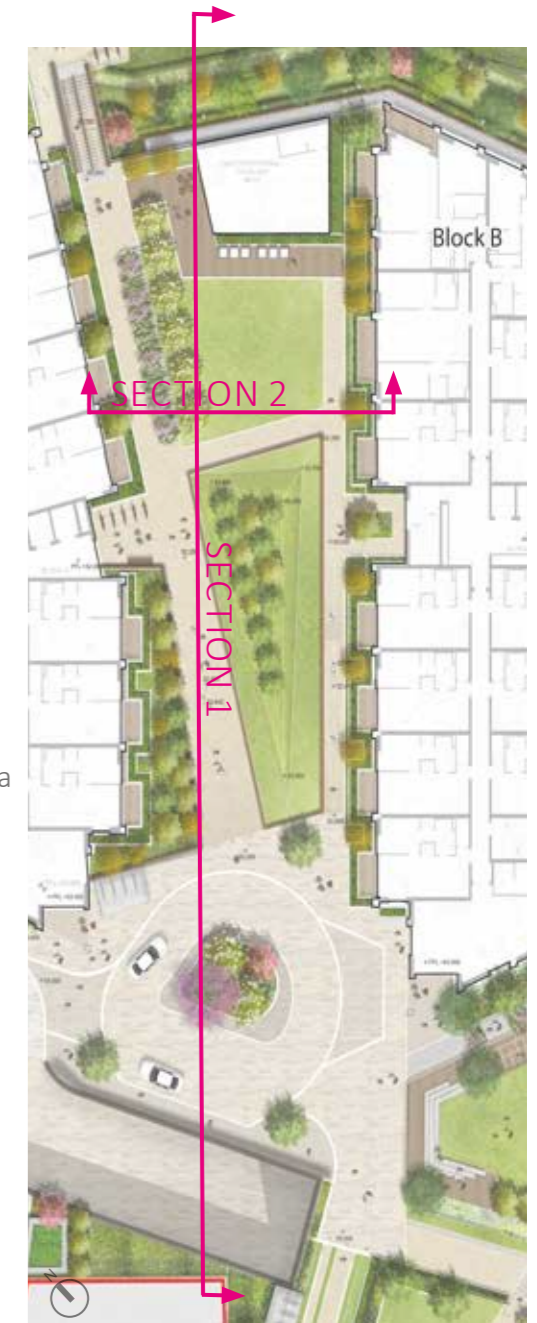
For illustrative purpose only.



# CHARACTER AREAS

## CHARACTER AREA 3. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN, SECTIONS

LANDSCAPE SECTION 1

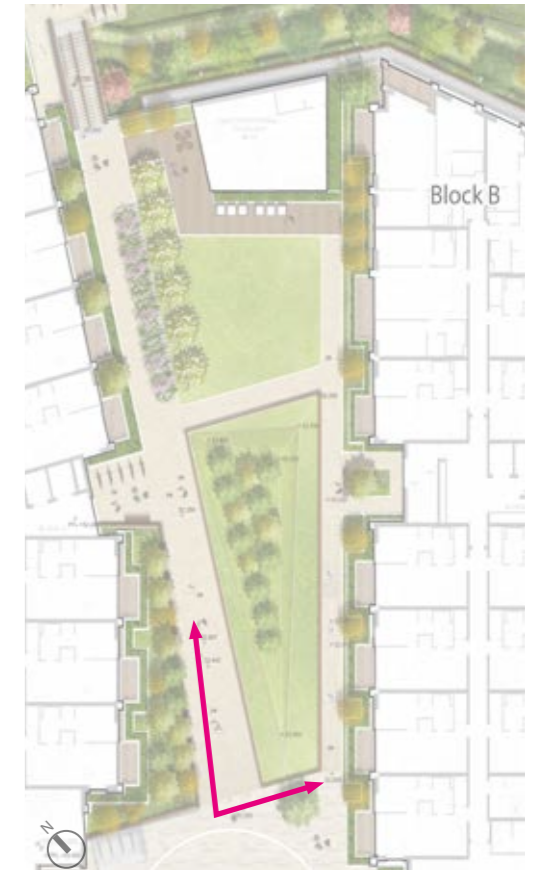


LANDSCAPE SECTION 2



# CHARACTER AREAS

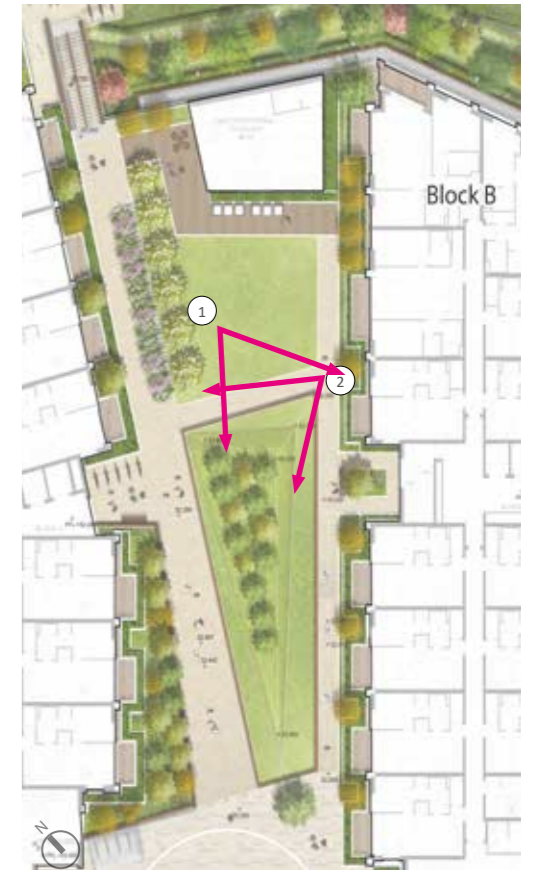
## CHARACTER AREA 3. - SCULPTURED RESIDENTIAL COURTYARD -THE SCENTED GARDEN, VISUAL



For illustrative purpose only.

# CHARACTER AREAS

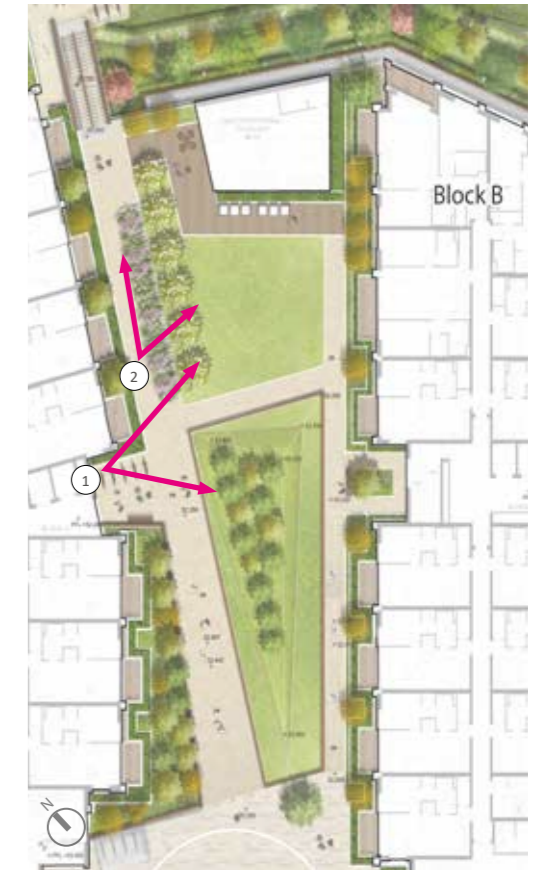
## CHARACTER AREA 3. - SCULPTURED RESIDENTIAL COURTYARD -THE SCENTED GARDEN, VISUALS



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 3. - SCULPTURED RESIDENTIAL COURTYARD -THE SCENTED GARDEN, VISUALS



For illustrative purpose only.



# CHARACTER AREAS

## CHARACTER AREA 3. - SCULPTURED RESIDENTIAL COURTYARD -THE SCENTED GARDEN, VISUALS



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 3A. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN



The Mounded Garden will perform a variety of roles, it will be welcoming to the residents, promote the ecological aspirations of the development, establish a sense of community, provide a space for relaxation.

### KEY ELEMENTS / CHARACTERISTICS:

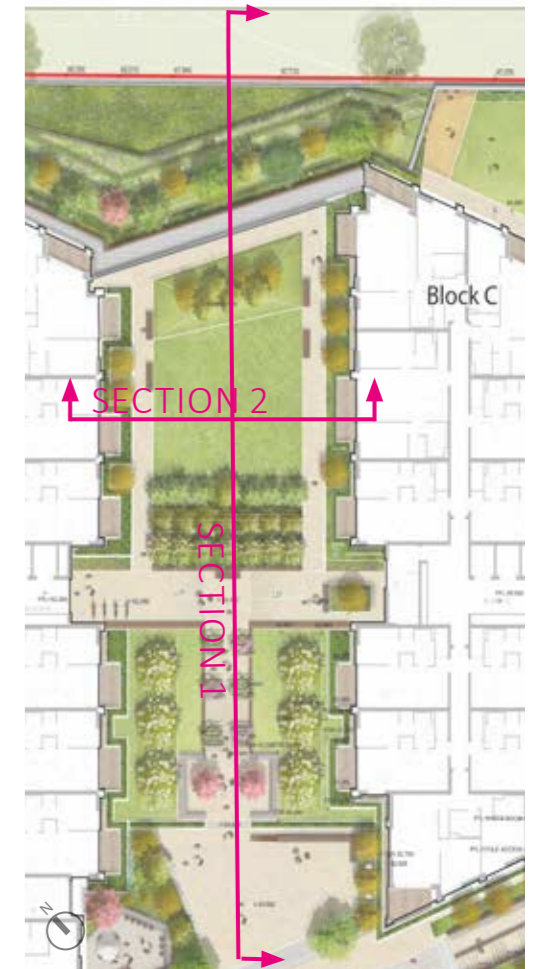
1. Mounded landscape with ornamental grass planting surrounding the central garden space.
2. Natural, high quality materials as paving and seating elements.
3. Formal/geometric tree planting provide visual connection with the community hub area.
4. Open lawn
5. Enclosed seating area



# CHARACTER AREAS

## CHARACTER AREA 3A. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN, SECTIONS

LANDSCAPE SECTION 1

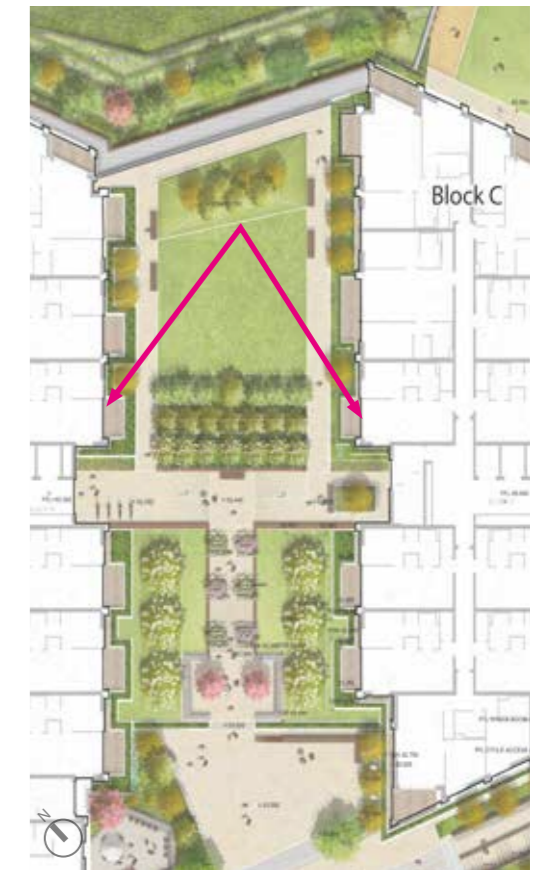


LANDSCAPE SECTION 2



# CHARACTER AREAS

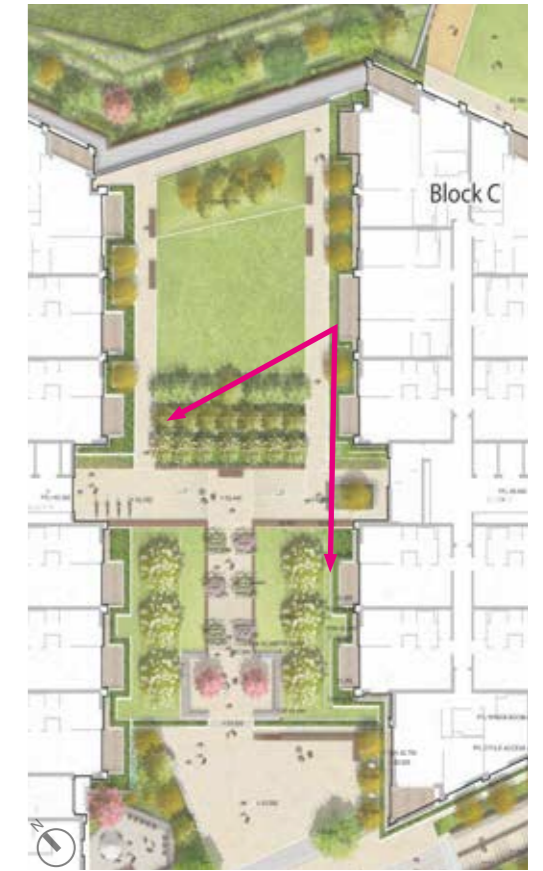
## CHARACTER AREA 3A. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN, VISUAL



For illustrative purpose only.

# CHARACTER AREAS

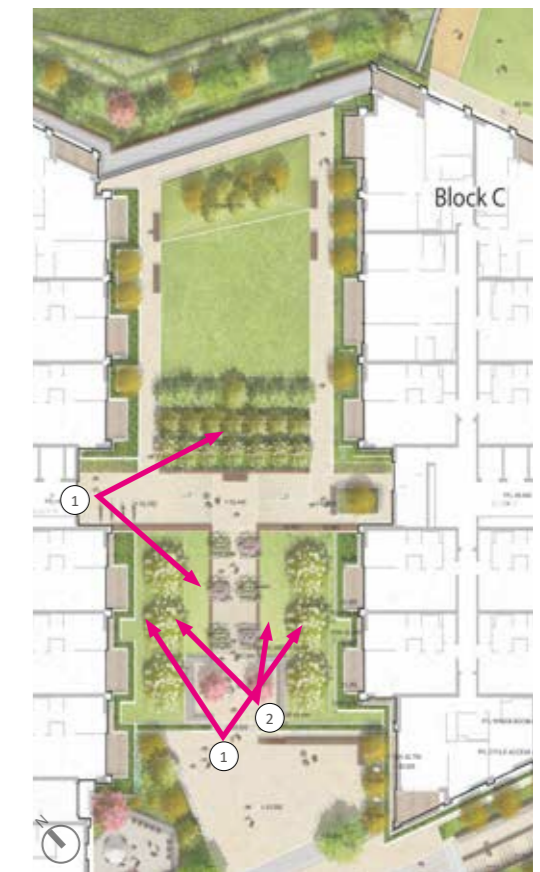
## CHARACTER AREA 3A. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN, VISUAL



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 3A. - SCULPTURED RESIDENTIAL COURTYARD- THE MOUNDED GARDEN, VISUALS



For illustrative purpose only.

## CHARACTER AREA 4. - RESIDENTIAL AMENITY GARDENS



The Residential Amenity Garden is the setting for Play spaces and family gathering areas ensuring new residents of all ages can enjoy the space.

The area has a family friendly approach to the landscape design. The space features an undulating play and activity surface which spans through the garden and connects together the activity nodes.

Variety of planting types offer variations in colour, texture and aroma. These design techniques are intended to stimulate the senses and encourage nearby residents to use the outdoor spaces more frequently. Own-door access units have been introduced along most frontages, providing passive surveillance. Native planting and careful habitat creation will establish an ecologically rich environment which will benefit the local people and the environment.

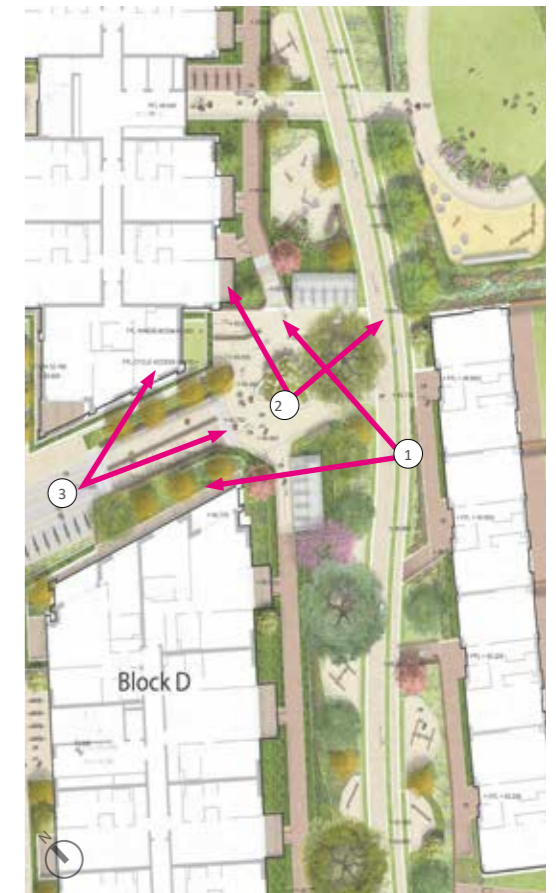
### KEY ELEMENTS / CHARACTERISTICS:

1. Cycle access into basement
2. Wide main stairs
3. Multi-age play areas and natural play elements
4. BBQ areas and gathering spaces
5. Fitness station surrounded by lush planting



# CHARACTER AREAS

## CHARACTER AREA 4. - RESIDENTIAL AMENITY GARDENS, VISUALS



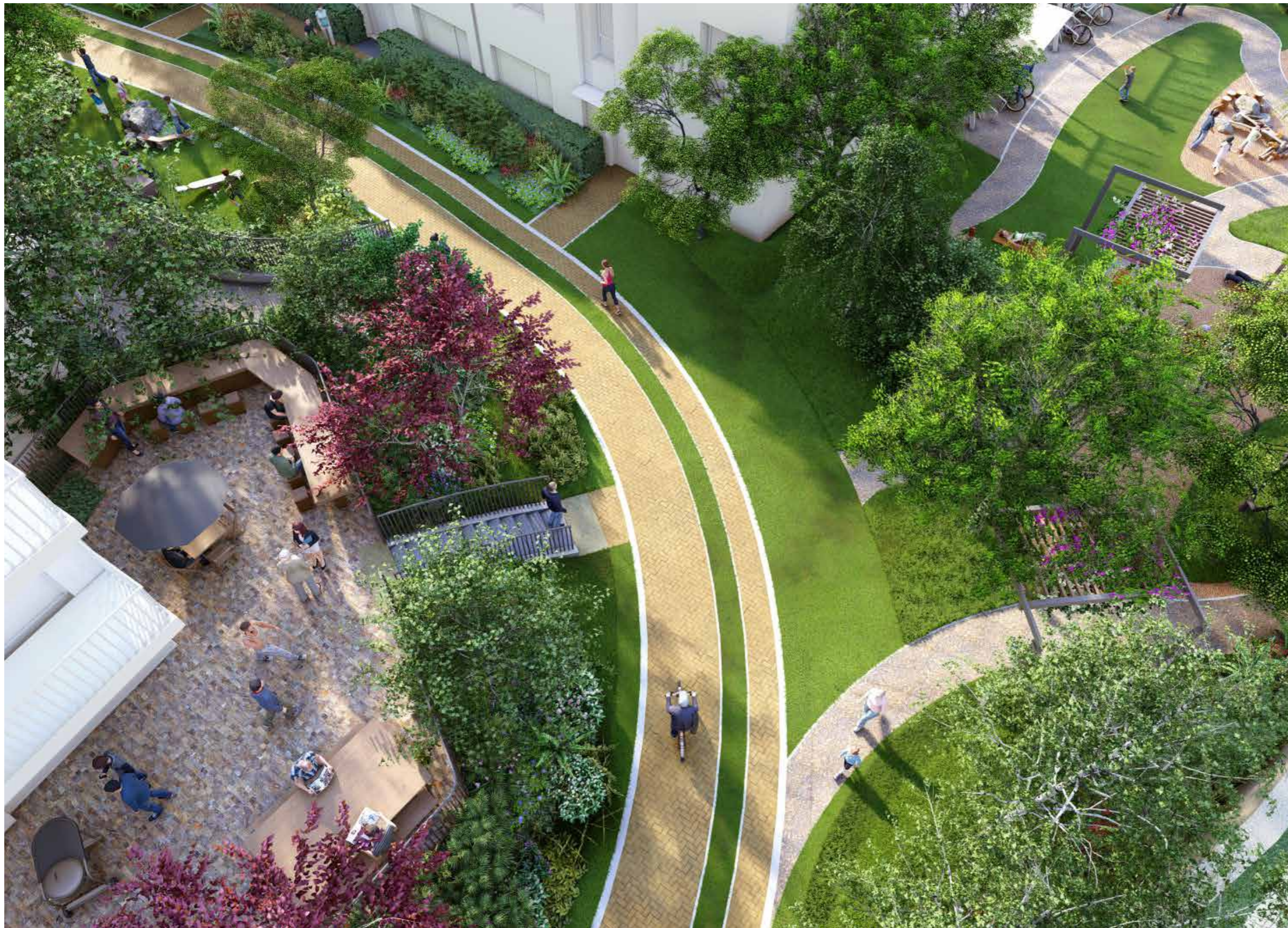
For illustrative purpose only.



# CHARACTER AREAS



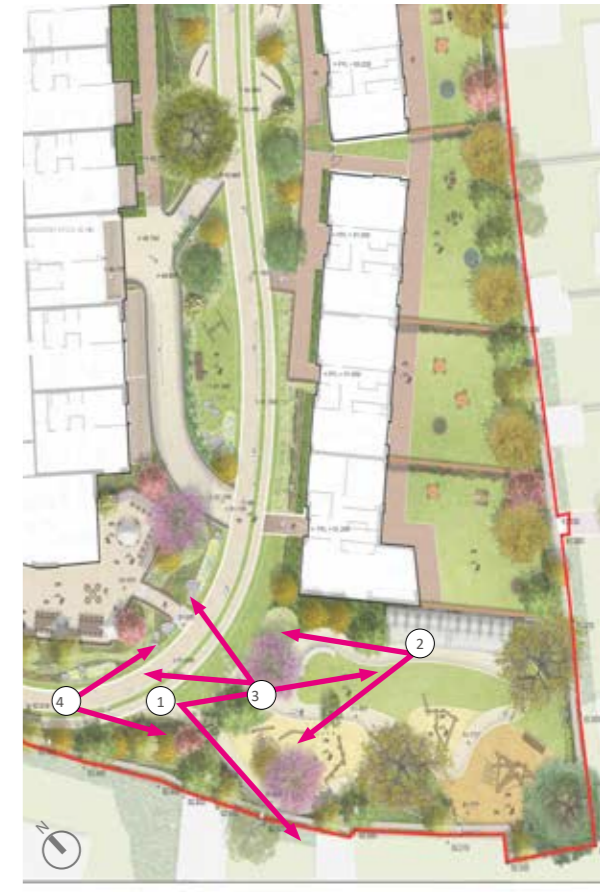
## CHARACTER AREA 4. - RESIDENTENTIAL AMENITY GARDENS, VISUAL



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 4. - RESIDENTIAL AMENITY GARDENS, VISUALS



For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 4. - RESIDENTIAL AMENITY GARDENS, SECTIONS

LANDSCAPE SECTION 1



LANDSCAPE SECTION 2



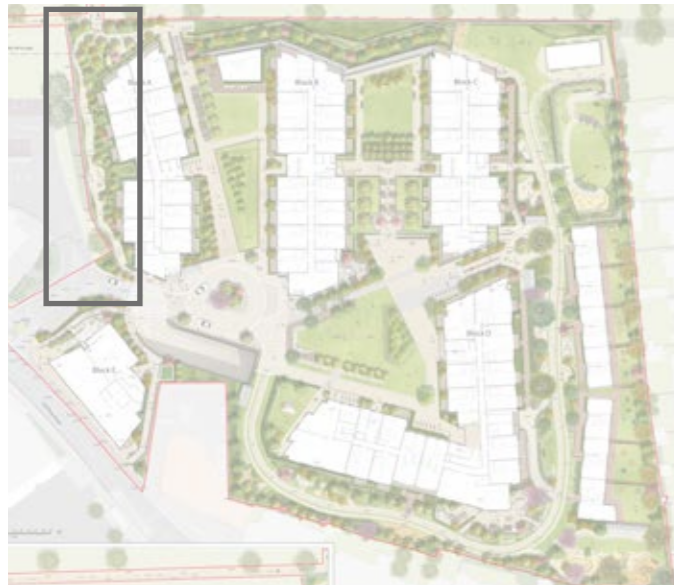
# CHARACTER AREAS

## CHARACTER AREA 4. - RESIDENTIAL AMENITY GARDENS, VISUALS



For illustrative purpose only.

## CHARACTER AREA 4. AMENITY GARDEN, CIRCULATION FROM THE N11



Located on the West of the site, the area would be accessed by pedestrian and cyclists from the North, giving a route from N11 toward Old Bray Rd providing permeability within the wider context.

The Shared pedestrian and cycleway will run along the lush green garden area. The link is complimented by the landscape framework setting which will enhance the physical environment for both pedestrians and cyclists which will increase permeability across the site. Along the sinuous link, seats and play on the way will be provided.

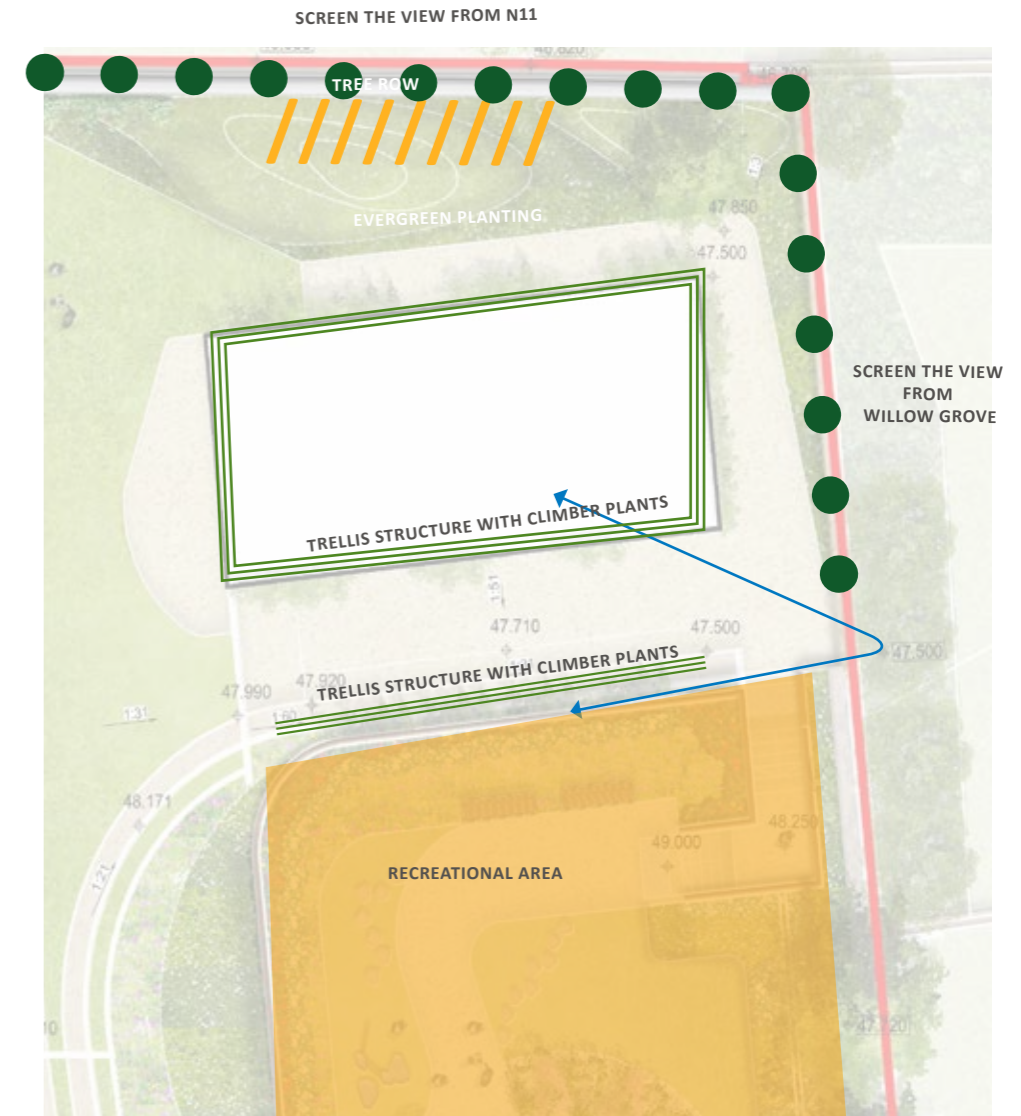
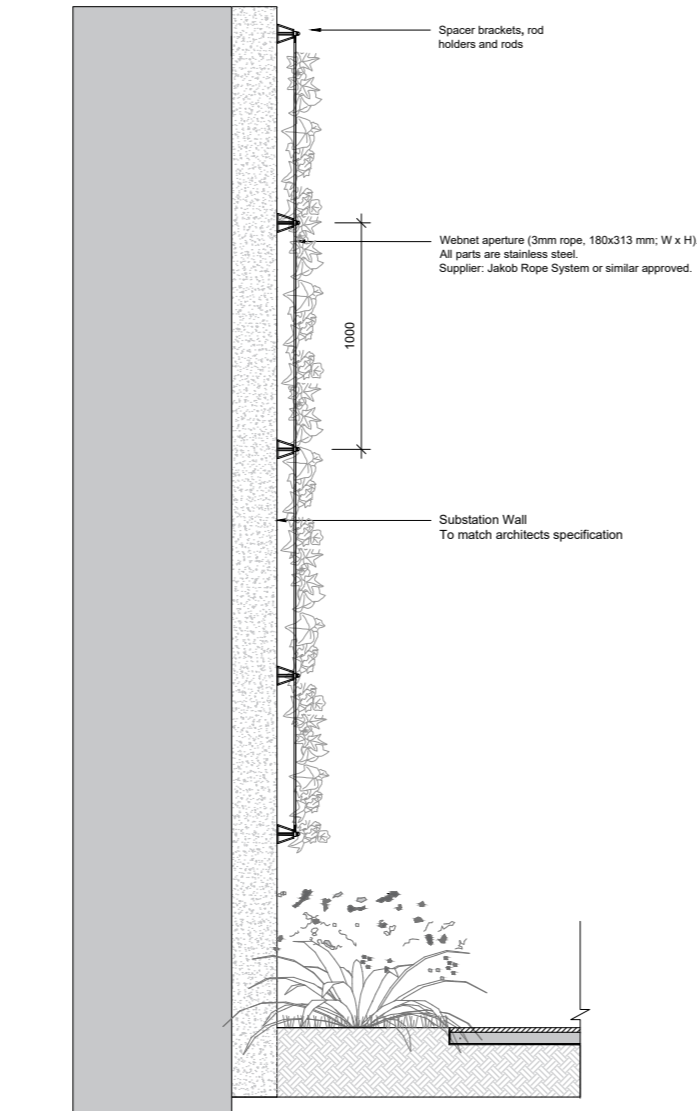
### KEY ELEMENTS / CHARACTERISTICS:

- » Privacy provided by defensible space that runs along the facade of the building.
- » Passive surveillance from the proximity of the Building A.



# CHARACTER AREAS

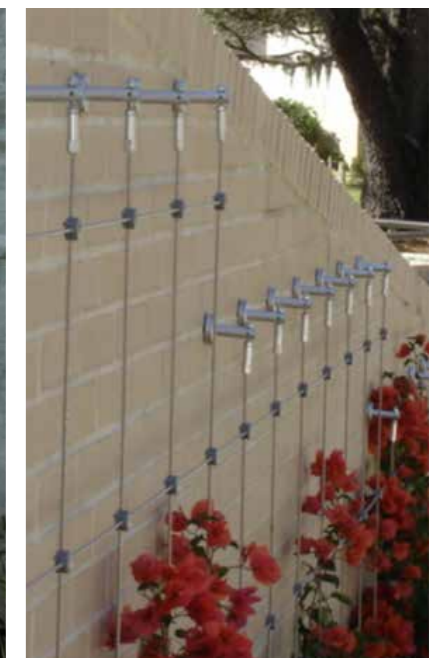
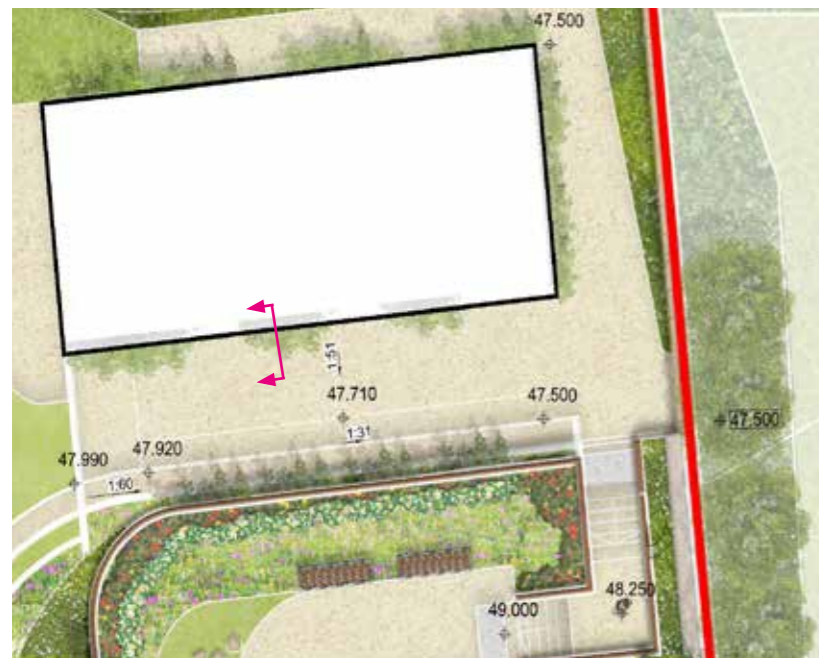
## CHARACTER AREA 4. SUBSTATION SCREEN VISUAL



### PROPOSED STEEL CABLE TRELLIS SYSTEM

#### KEY ELEMENTS / CHARACTERISTICS:

- » Provides an effective deterrent to graffiti
- » Aesthetically upgrade the substation facade
- » Facade protection and ventilation
- » Contribute to ecology condition



## CHARACTER AREA 5. - RECREATION ACTIVE GREEN

Located to the North- East of the site.

We are presented with an open area identified as a recreational area.

This zone has been the result of the Irish Water Foul storage chamber located on the site.

The design consists of a legible central open lawn that caters for both adult and children with play and seating facilities that enclose the space.

Due to the existing vertical position of the water storage, the northern part of the space would be enveloped by a gentle embankment covered by planting.

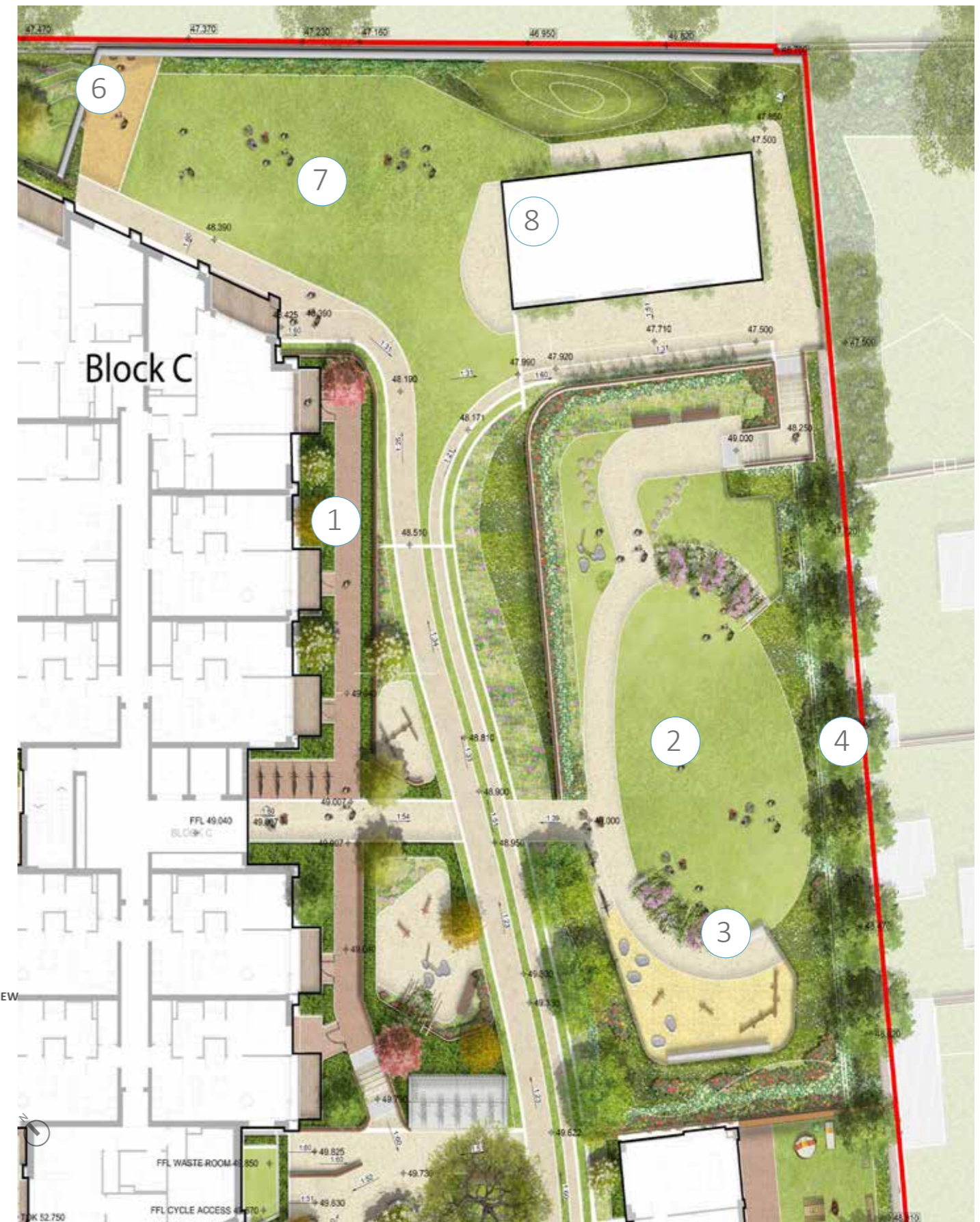
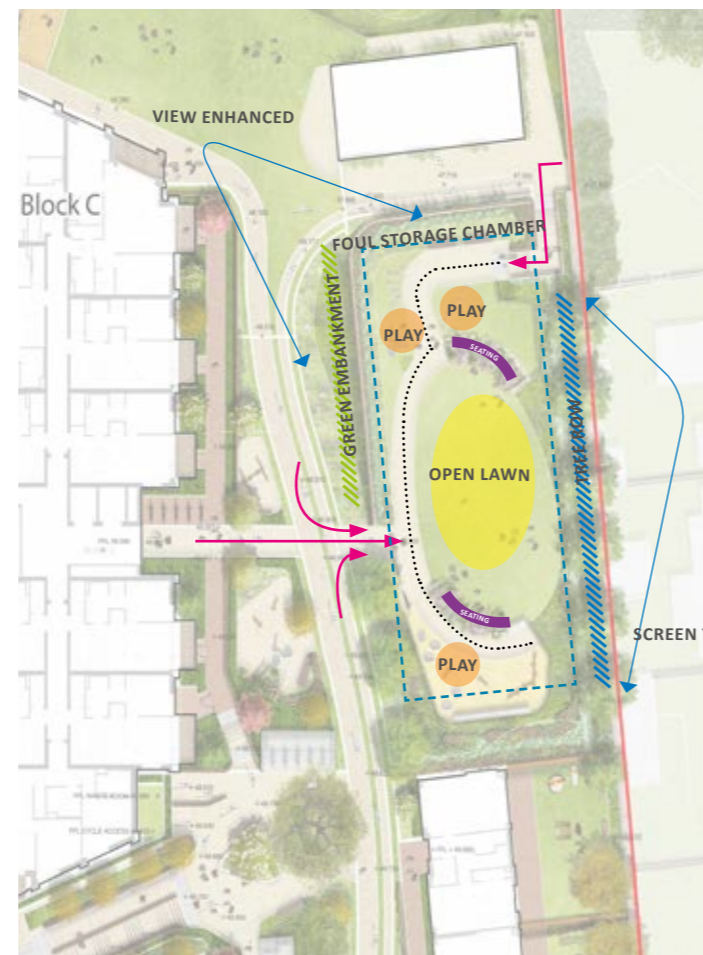
The central space set within a lush green planting would be surrounded by seating area sheltered by pergolas.

### KEY ELEMENTS / CHARACTERISTICS:

1. Create an interesting scene for occupants within the homes.
2. Open Lawn allowing flexibility of use of the space
3. Facility will be provided for both adult and child
4. Tree avenue planted at the lower level providing privacy to residents of Willow Grove.
5. Area well overlooked by the homeowners of Block C and proposed Townhouses
6. Climbing wall
7. Open lawn
8. ESB



CONCEPT DIAGRAM



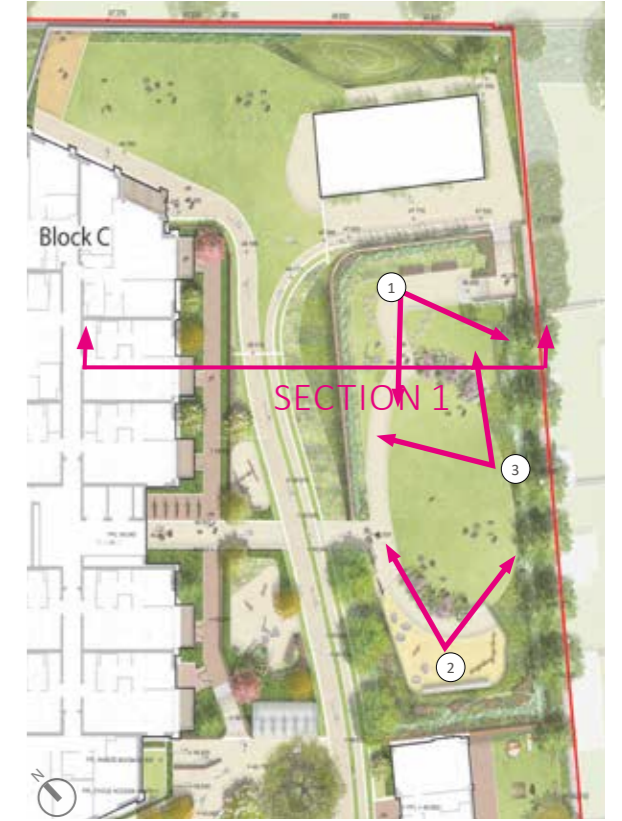
# CHARACTER AREAS

## CHARACTER AREA 5. - RECREATION ACTIVE GREEN, SECTION AND VISUALS

LANDSCAPE SECTION 1



Private terrace | Pathway with defensible space | Cycle and pedestrian pathway | Planting | Open lawn surrounded by seating | Tree rows



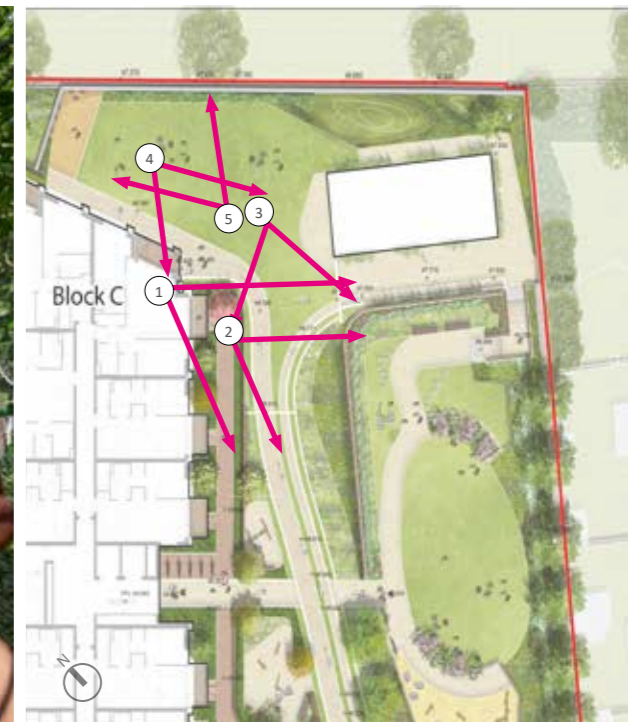
For illustrative purpose only.



# CHARACTER AREAS



## CHARACTER AREA 5. - RECREATION ACTIVE GREEN, VISUALS



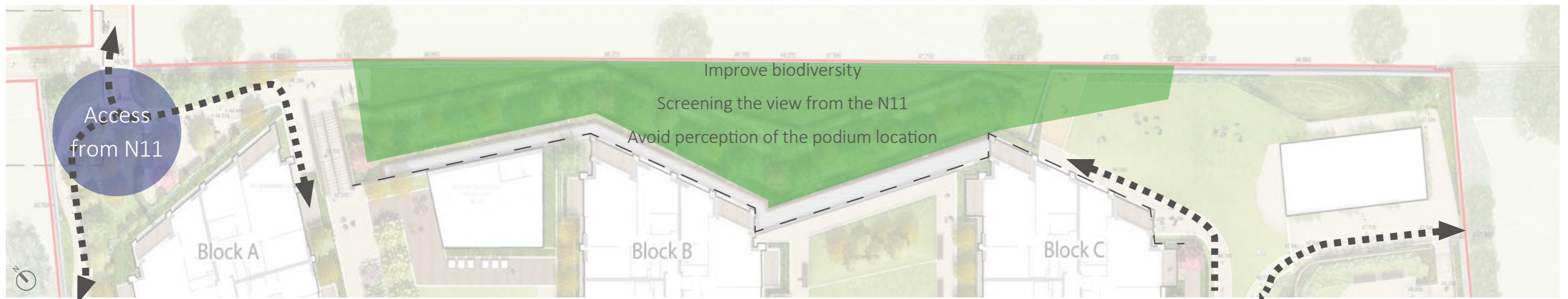
For illustrative purpose only.

# CHARACTER AREAS

## CHARACTER AREA 6. - TERRACED LANDSCAPE WITH NATIVE PLANTING

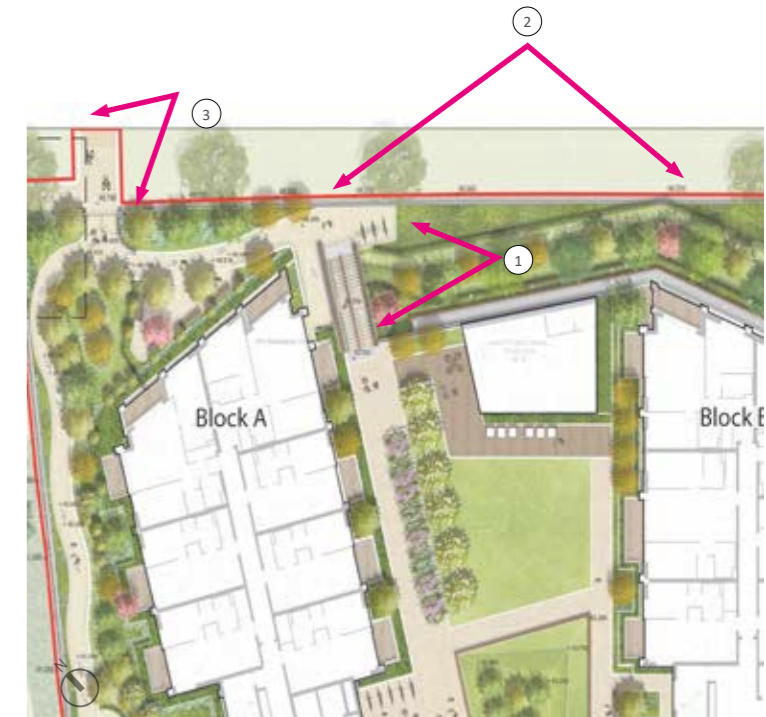


Due to the changing level between the N11 road and the proposed podium, the transition has been formed by the gentle terracing of the landscape. The natural ventilation needed to the parking, and the changing levels became a great opportunity for sculptural landform, with semi-mature planting and dense ground cover. The terraced landscape area will avoid the perception of the elevated podium and will provide a visually pleasant space for the amenity user. The dense planting will improve the biodiversity of the site and reduce the impact of the traffic on the adjacent N11 road.



# CHARACTER AREAS

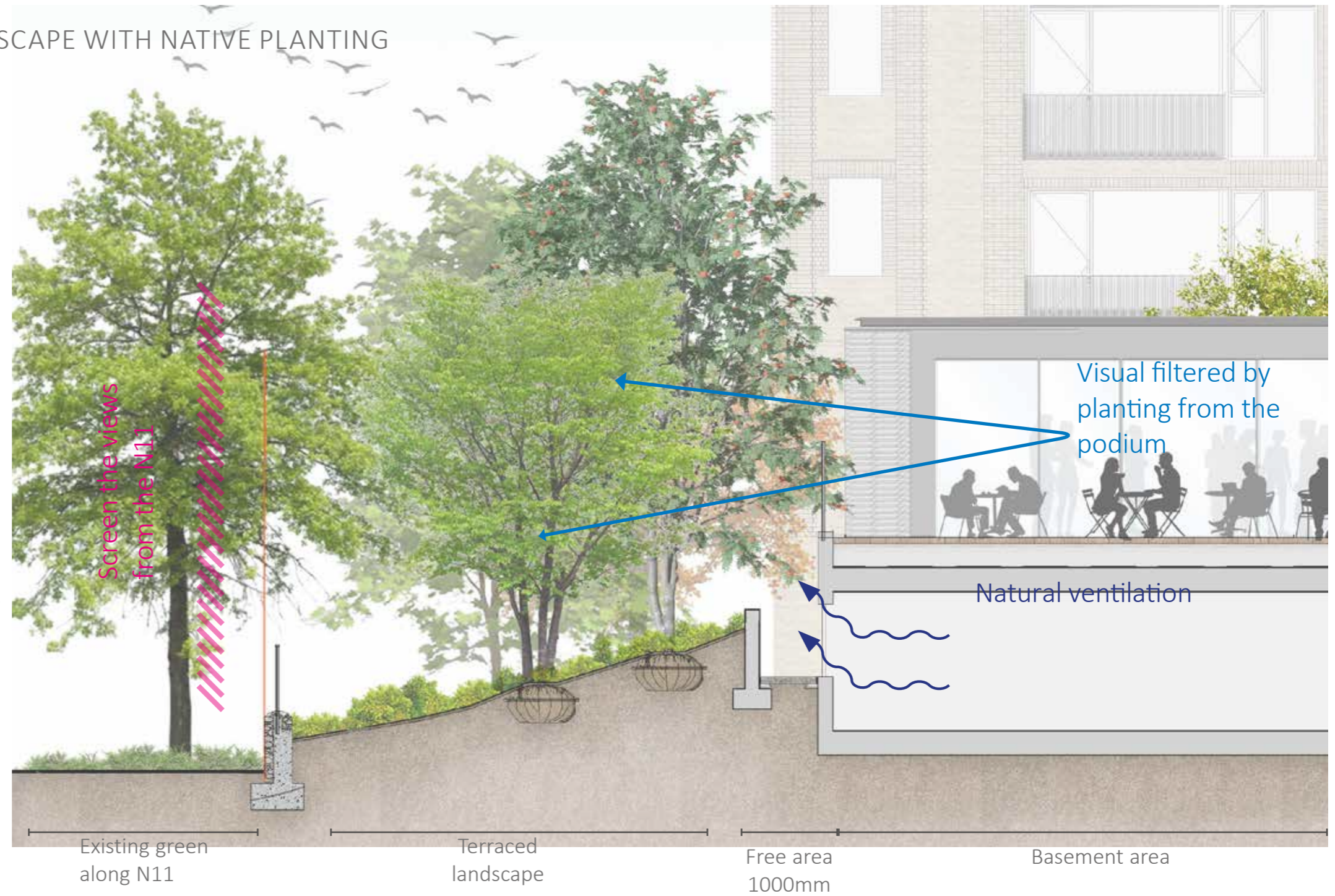
## CHARACTER AREA 6. - TERRACED LANDSCAPE WITH NATIVE PLANTING, VISUALS



For illustrative purpose only.

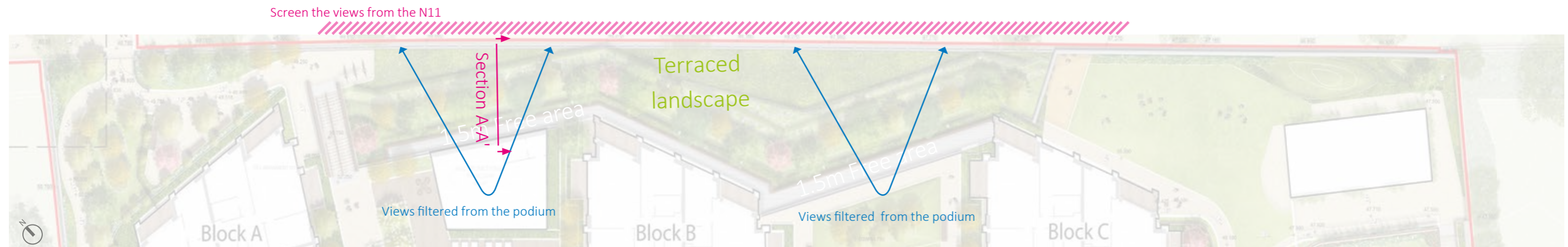
# CHARACTER AREAS

## CHARACTER AREA 6. - TERRACED LANDSCAPE WITH NATIVE PLANTING



### KEY ELEMENTS / CHARACTERISTICS:

- » Screen direct views from N11 toward the carpark ventilation
- » Planting to improved the ecology along the boundary
- » Enhance the perception from the podium areas

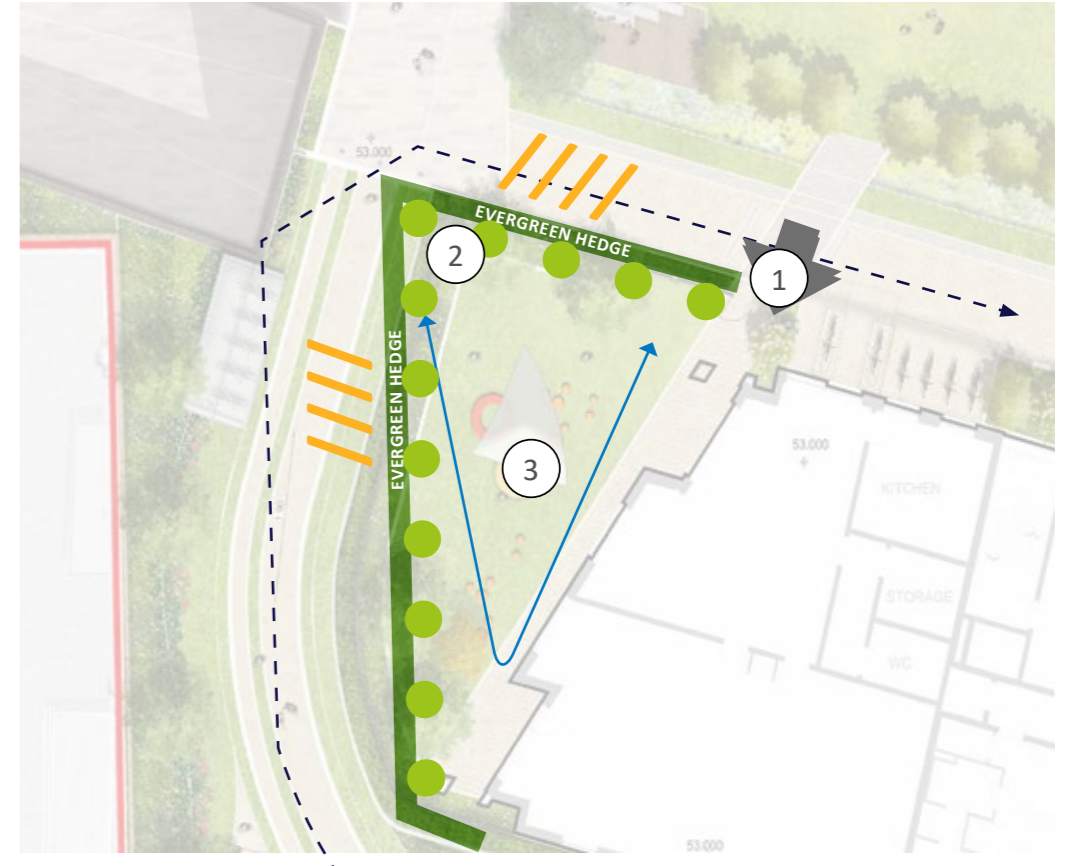
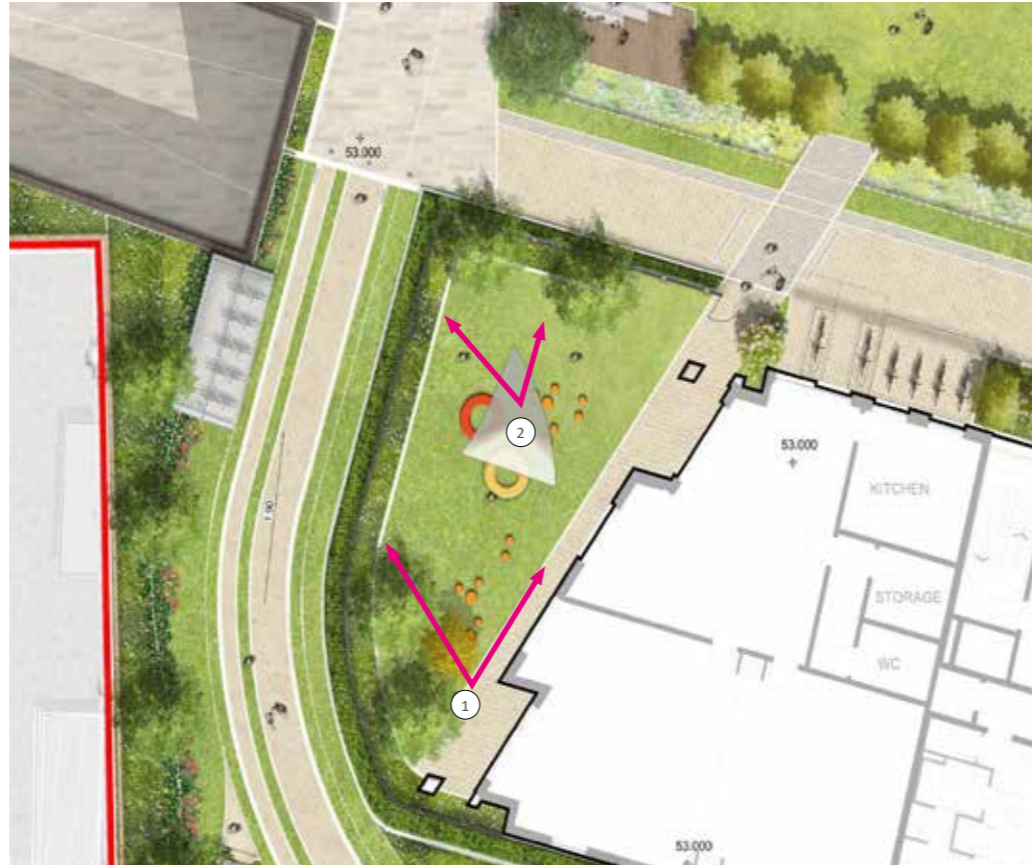


# CHARACTER AREAS

## CHARACTER AREA 7 - CRÈCHE AREA



Private crèche playground: Approx. 163sqm



For illustrative purpose only.

An aerial photograph of a city street grid, overlaid with a semi-transparent orange filter. The image shows a dense network of streets and buildings, with a prominent road running horizontally across the bottom. The text 'SOFTSCAPE STRATEGY' is positioned in the lower right quadrant of the image.

# SOFTSCAPE STRATEGY

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## EXISTING TREES

The Tree Survey produced by Arborist Associates Ltd. explains in detail the current condition of the trees itself.

The report states the following:

The site area is located off the 'Old Bray Road', Cornelscourt, Dublin 18 and it is broadly rectangular in shape. The site is bounded by the 'N11 Dual Carriageway' to the east, by the 'Old Bray Road' and associated commercial / residential developments to the west and to the north by the 'AIB Bank' grounds and to the south by existing residential development area known as 'Willow Grove'.

The site is mostly in unmaintained grass / exposed soil and slopes from the 'Old Bray Road' down towards the N11 Dual Carriageway. There is just one tree (No.0441) an early-mature Holly on the site area located on the western boundary. There are isolated clumps of scrub around the site area consisting of Elder, Buddleia and Bramble developing due to the lapsed management.



# SOFT LANDSCAPE STRATEGY

## EXISTING TREES

The line of Limes (tree Nos. 4-9) on the N11 grass verge are located outside the application boundary.

The team have, since early design stages carefully considered the proximity of the existing trees and have ensured their retention is secure through to the developed boundary treatment proposal which consists of a rubble stone wall with railing on top.

In collaboration with the Arboriculturalist, a mitigation measure has been agreed, with a proposed lintel foundation bridge over the root area that will allow sufficient clearance for existing and future growth of the trees.

For further detail refer to the Arboriculturalist report.

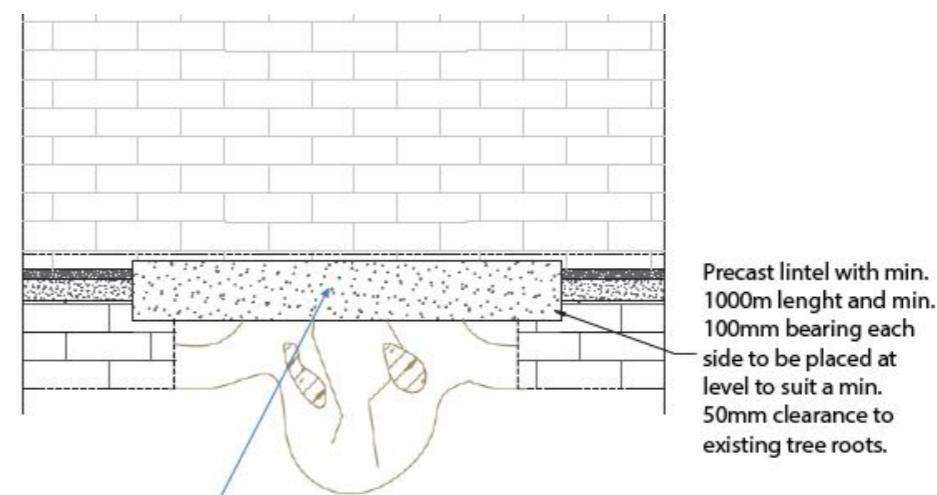


Indicative RPA

## WALL CONSTRUCTION: IDENTIFY EXISTING ROOT LOCATIONS AND BRIDGE OVER THEM

Existing trees: trees no. 1&7-13 are adjacent to the Boundary.

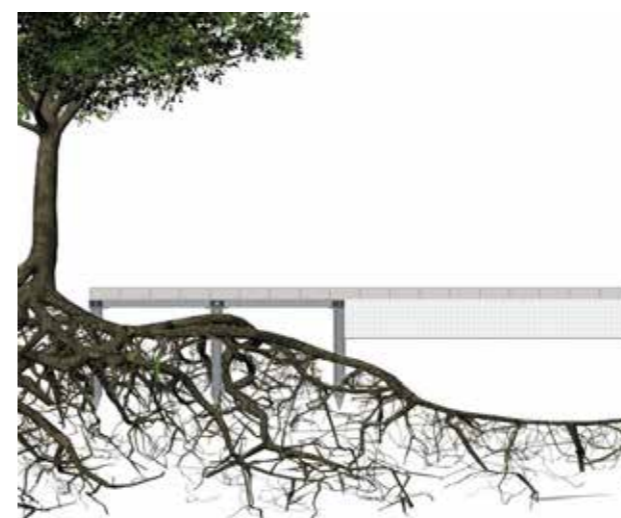
The proposed boundary treatment will be bridged to minimise root disturbance allowing sufficient clearance for future growth.



Concrete lintel over tree roots allows them to grow underneath it reducing damage to wall and roots system

- The position of the stone wall considers the RPA of the existing trees that will be retained along the site boundary. Further inspection of the roots to be undertaken at pre-construction stage to avoid root damage, a bridge beam system will be installed within the boundary foundation.

## TYPICAL EXAMPLE OF ROOT BRIDGE





## TREE PLANTING

The strategy for the tree planting is to create a visual interest and important screening. The species have been chosen to create year round interest, with some evergreen trees located throughout the space.

The adjacent diagram illustrates the tree positions and identifies the different species proposed. The chosen species consist of a mix of small multi-stem trees and clear stem specimens.

All trees chosen are suitable for podium level tree installation where above the basement car parking

The tree planting strategy aims to position the right tree in the right place, with an emphasis on stock quality over quantity.

- Amelanchier lamarckii* - June berry (No.49)
- Amelanchier alnifolia*- Alder-leaf shadbush (No.7)
- Cornus florida* Flowering dogwood (No.19)
- Betula pubescens* - Downy birch (No.37)
- Acer griseum* - Paperbark maple (No.19)
- Corylus avellana* - Hazel (No.28)
- Cornus mas* - Dogwood (No.36)
- Acer campestre*- (No.33)
- Liriodendron tulipifera* 'Aureomarginatum' -Tulip tree (No.11)
- Acer rubrum* - Red maple (No.4)
- Carpinus betulus* -Hornbeam 'Columnaris' (No.20)
- Fagus sylvatica*- Common beech (No.4)
- Tilia cordata*, 'Roelvo' (No.15)
- Chionanthus virginicus* - Fringe tree (No.12)
- Malus toringo var. sargentii*- Sargent's apple (No.19)

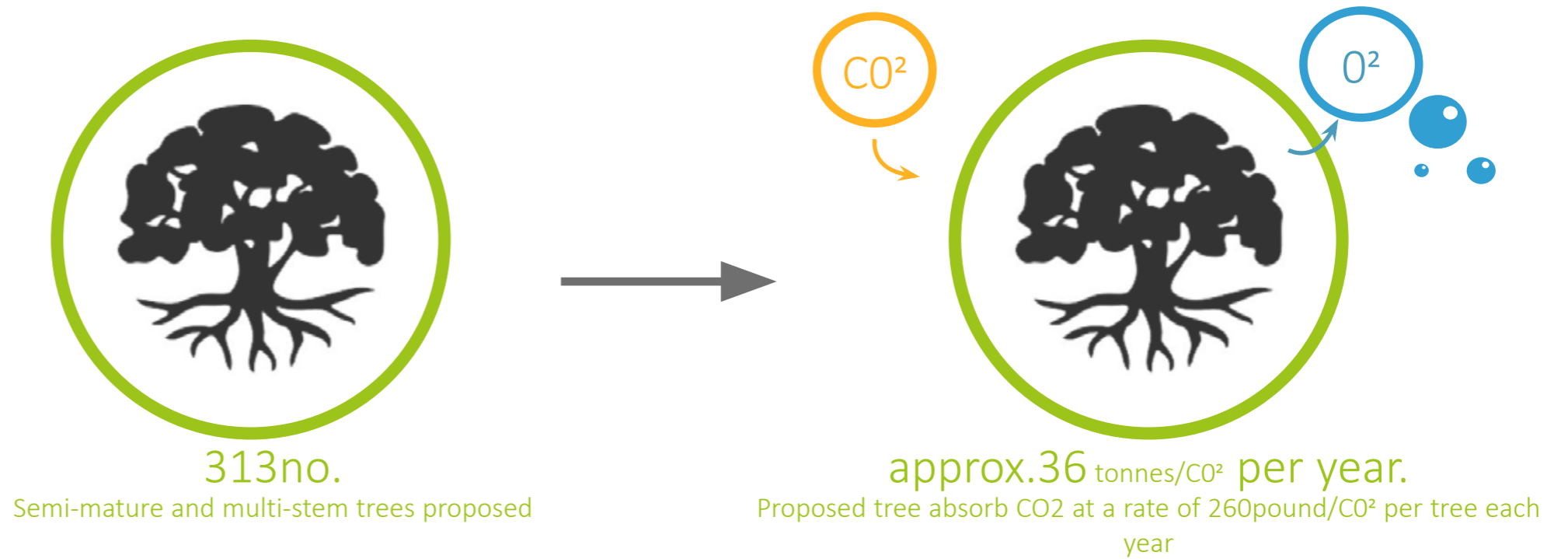


# SOFT LANDSCAPE STRATEGY

## PROPOSED SPECIFICATION TREES

The planting of trees can provide a number of social, environmental and economic benefits. A summary of the key benefits achieved by tree planting are given below:

- » Physiological and psychological health improvements.
- » Urban cooling – reduction of the urban heat island effect
- » Maintenance and enhancement of biodiversity
- » Influential in developing a sense of place and unique site character



SPECIES NAME	Size/Specification			
	Condition Multi steam (ms)- Singular steam (st)	Height, meter	Girth Diameter, cm	n° species
<b>Semi-mature trees</b>				
Lioriodendron tulipifera	st	6.0/7.0	35/40	11
Acer rubrum	st	6.0/7.0	35/40	4
Carpinus betulus	ms	8.0/9.0	35/40	20
Fagus sylvatica	st	8.0/9.0	35/40	4
Tilia cordata	st	8.0/9.0		15
<b>Small multi-steam trees</b>				
Acer griseum	1.5/2m ms	5.5/6.5		19
Acer campestre	1.5/2m ms	5.5/6.5		33
Amalanchier alnifolia	1.5/2m ms	5.5/6.0		7
Amalanchier lamarkii	1.5/2m ms	5.5/6.0		49
Betula pubescent	1 ms	5.5/6.5		37
Corylus avellana	1.5/2m ms	5.0/6.0		28
Cornus mas	1.5/2m ms	5.0/6.0		36
Cornus florida	1.5/2m ms	5.5/6.0		19
Chionanthus virginicus	1.5/2m ms	4.5/5		12
Malus toringo var. sargentii	1.5/2m ms	4.5/5		19

## TREE PLANTING

Small multi-stem trees, with 2-2.5m clear stem



**○** *Amelanchier lamarckii* - June berry

June berry is a large erect deciduous shrub or small tree of open habit, with bronze-tinged young leaves turning orange and red in autumn. White flowers in short lax racemes as the leaves unfurl. Fruit a red to dark purple-black berry, soon eaten by birds.

Ultimate height: 5-6 metres  
 Ultimate spread: 4-5 metres  
 Time to ultimate height: 10-20 years

**○** *Betula pubescens* - Downy birch

Downy birch is an elegant medium-sized deciduous tree with slender drooping twigs. Bark white, becoming black and rugged at base. Leaves ovate, yellow in autumn. Flowers in catkins.

Ultimate height: 8 metres  
 Ultimate spread: 5 metres  
 Time to ultimate height: 10-20 years

**○** *Acer griseum* - Paperbark maple

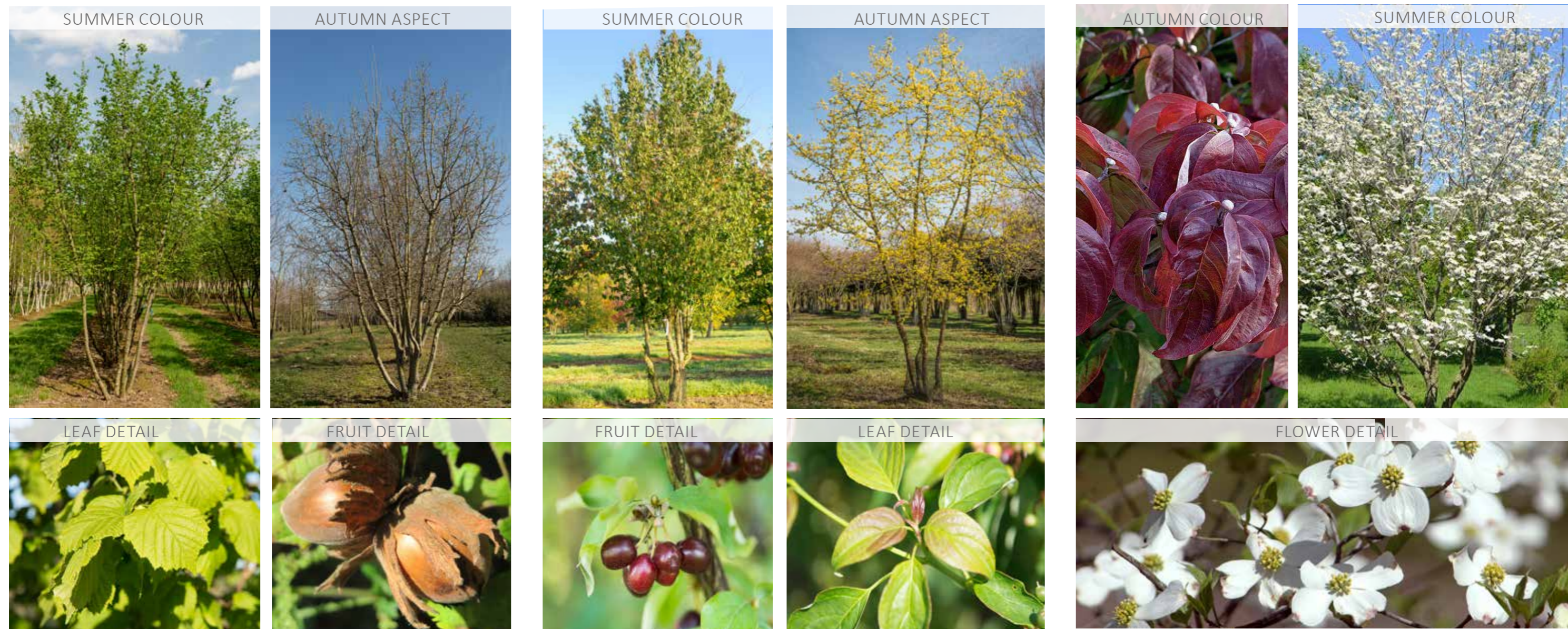
Paperbark maple is a small spreading deciduous tree with attractive peeling, papery chestnut-brown bark. Leaves with 3 leaflets, downy and whitish beneath, turning brilliant red and orange in autumn. Flowers are small.

Ultimate height: 7-8 metres  
 Ultimate spread: 4-5 metres  
 Time to ultimate height: 20-50 years

# SOFT LANDSCAPE STRATEGY

## TREE PLANTING

Small multi-stem trees, with 2-2.5m clear stem



 *Corylus avellana* - Hazel

Hazel is a large, spreading deciduous shrub or small tree, with rounded leaves turning yellow in autumn, and yellow male catkins in early spring, followed by edible nuts in autumn.

Ultimate height: 4-6 metres  
 Ultimate spread: 4-5 metres  
 Time to ultimate height: 10-15 years

 *Cornus mas* - Dogwood

Dogwood is a large deciduous shrub that produces lots of shiny red berries, this fruit has long been used as a food crop as well as been loved by birds. *Cornus mas* has soft foliage with small, bright yellow flowers in early Spring that are followed by fleshy, bright red, cherry-like fruits in late Summer. Attractive bark on older plants.

Ultimate height: 4-5 metres  
 Ultimate spread: 3-4 metres  
 Time to ultimate height: 10-15 years

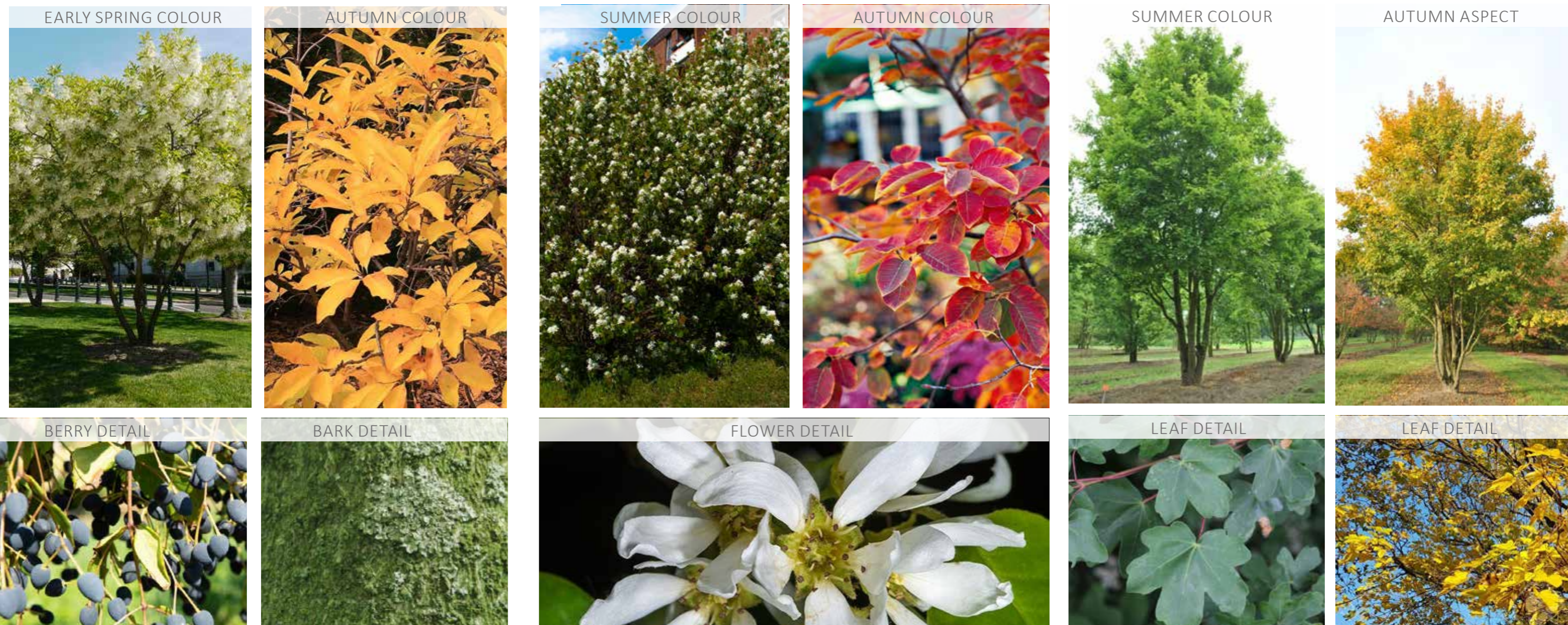
 *Cornus florida* - Flowering dogwood

*Cornus* can be deciduous shrubs or trees, or creeping, woody-based perennials, some with brightly coloured young stems. Tiny flowers are borne in dense clusters, sometimes with showy bracts. Many have fine autumn colour.

Ultimate height: 3-5 metres  
 Ultimate spread: 3.5 metres  
 Time to ultimate height: 10-20 years

## TREE PLANTING

Small multi-stem trees, with 2-2.5m clear stem



○ *Chionanthus virginicus*- Fringe tree

*C. virginicus* is a deciduous shrub with an abundance of slightly fragrant, airy, creamy- white flowers in June and July; dark blue-black berries may follow in autumn.

Ultimate height: 3-5 metres  
 Ultimate spread: 2.5-4 metres  
 Time to ultimate height: 10-20 years

● *Amalanchier alnifolia*- Alder-leaf Shadbush

*A. alnifolia* is a small, very slender tree or large shrub with upswept branches and bronze young leaves, maturing to green then orange-yellow in autumn. Dense, terminal racemes of pure-white flowers, with green centres, are produced in abundance in mid-spring and followed by edible scarlet fruits, maturing to black.

Ultimate height: 3-5 metres  
 Ultimate spread: 1-1.5 metres  
 Time to ultimate height: 10-20 years

○ *Acer campestre*- Field maple (multi-stem)

Field Maple is a medium-sized deciduous tree with a compact bushy crown. Leaves with 5 blunt lobes, turning yellow or red in the autumn. Flowers small, green, forming typical winged maple fruits.

Ultimate height: 8-10  
 Ultimate spread: 4-8 metres  
 Time to ultimate height: 10-20 years

# SOFT LANDSCAPE STRATEGY

## TREE PLANTING

Semi-mature clear stem trees, with 2.5m clear stem



 *Liriodendron tulipifera 'Aureomarginatum'* - Tulip tree (columnar)

This is an elegant medium-sized deciduous tree with slender drooping twigs. Bark white, becoming black and rugged at base. Leaves ovate, yellow in autumn. Flowers in catkins.

Ultimate height: 12 metres  
 Ultimate spread: 8 metres  
 Time to ultimate height: 20-50 years

 *Acer rubrum*- Red Maple

Red maple is a round-headed tree growing up to 30m tall. In spring, tiny red flowers are borne in erect clusters before the appearance of dark green leaves with whitish undersides. The leaves turn bright red in autumn.

Ultimate height: more than 12 metres  
 Ultimate spread: 8 metres  
 Time to ultimate height: 20-50 years

 *Carpinus betulus "columnaris"* - Hornbeam 'Columnaris'

Slow-growing tree that remains narrow when young but later grows asymmetrical and broad. The crown is semi-closed and more irregular than the species, and the lower branches, which are often shorter, hang down slightly. The trunk is purplish grey and smooth, but darker and peeling later.

Ultimate height: 4-8 metres  
 Ultimate spread: 2.5-4 metres  
 Time to ultimate height: 20-50 years

## TREE PLANTING

Semi-mature trees



*Fagus sylvatica*- Common Beech

*F. sylvatica* is a large, vigorous deciduous tree with a broad, spreading crown. Leaves broadly elliptic, yellow-green in spring, rich russet-brown in autumn. Flowers small, green, followed by bristly fruits.

Ultimate height: more than 12 metres  
 Ultimate spread: 8 metres  
 Time to ultimate height: 20-50 years

*Tilia cordata "greenspine"* - Small leafed Lime

*Tilia* are deciduous trees with broadly ovate or heart-shaped leaves, 'Greenspire' is a vigorous and narrowly conical medium-sized deciduous tree with glossy, dark green, heart-shaped leaves and plentiful, fragrant pale yellow flowers.

Ultimate height: more than 12 metres  
 Ultimate spread: 4-8 metres  
 Time to ultimate height: 20-50 years

*Carpinus betulus* - Common Hornbeam

*Carpinus* are deciduous shrubs and trees with attractive foliage and hop-like fruit clusters in late summer and autumn.

Ultimate height: more than 12 metres  
 Ultimate spread: 4-8 metres  
 Time to ultimate height: 20-50 years







# SOFT LANDSCAPE STRATEGY

## ORNAMENTAL PLANTING

This diagram has been developed to outline the types of planting proposed for the scheme, where it is positioned and approximate height.

Planting is an important consideration as it softens built form, humanises space, mitigates the micro-climate and provides a seasonal sense of place. The planting scheme has been developed based on the following considerations:

- Suitability of form and the eventual scale of planting in relation to the space and elevation.
- The use of tree, shrub and perennial planting to enhance the design by responding to the articulation of space in opening vistas, defining and filtering views.
- Planting to be appropriate to setting, not posing threat or nuisance, for example; through the specification of clear stem trees adjacent to public routes.
- Species selection to elevate local biodiversity levels.

	Rainwater garden planting
	Herbaceous planting
	Perennial planting
	Evergreen hedge, 120 cm
	Shrubs
	Lawn





## HERBACEOUS PLANTING

### PERENNIAL MIX A



1. *Anemone h. var. japonica* 'Splendens'
2. *Perovskia atriplicifolia*
3. *Penstemon* 'Rich Ruby'
4. *Echinacea purpurea*
5. *Sanguisorba Tanna*
6. *Salvia* 'Caradonna'

### PERENNIAL MIX B



1. *Alchemilla mollis*
2. *Geum* 'Totally Tangerine'
3. *Astrantia major* 'White Giant'
4. *Carex testacea*
5. *Rudbeckia fulgida*, *Crocsmia crocosmifolia* 'George Davison'
6. *Kniphofia* 'Sunningdale Yellow'

### PERENNIAL MIX C



1. *Anemanthele lessoniana*
2. *Dierama pulcherrimum* 'Blackbird'
3. *Lisimachia* 'Atropurpurea'
4. *Aquilegia* 'Black Barlow'
5. *Anthriscus sylvestris* Ravenswing
6. *Verbascum* 'Petra'

# SOFT LANDSCAPE STRATEGY

## HERBACEOUS PLANTING

### PERENNIAL MIX D



1. *Erythronium 'Pagoda'*
2. *Euphorbia am. var. robbiae*
3. *Dryopteris erythraea*
4. *Helleborus x hybridus 'Harvington Apricot'*
5. *Liriope muscari 'Monroe White'*
6. *Polystichum aculeatum*

### PERENNIAL MIX E



1. *Hyacinthoides non-cryspa*
2. *Carex 'Ice Dance'*
3. *Aстранtia major 'Claret'*
4. *Luzula nivea*
5. *Liriope muscari*
6. *Pachisandra terminalis*

### PERENNIAL MIX F



1. *Alchemilla mollis & Polystichum polyblepharum*
2. *Carex 'Ice Dance'*
3. *Epimedium x warleyense 'Orangekonigin'*
4. *Geranium macrorrhizum 'White Ness'*
5. *Liriope muscari 'Monroe White'*

## SHRUB AND HEDGE PLANTING

### SHRUB PLANTING



1. *Aucuba japonica* 'Rozannie'
2. *Chaenomeles japonica* sp.
3. *Cornus stolonifera*

4. *Cornus sericea* 'Kelsey'
5. *Prunus laurocerasus* sp.
6. *Perovskia atriplicifolia*
7. *Cornus* 'Winter Flame'

### HEDGE PLANTING



1. *Crataegus monogyna* - Hawthorn
2. *Carpinus betulus* - Hornbeam
3. *Griselinia littoralis* - Broadleaf

# SOFT LANDSCAPE STRATEGY

## HERBACEOUS PLANTING MOOD IMAGES

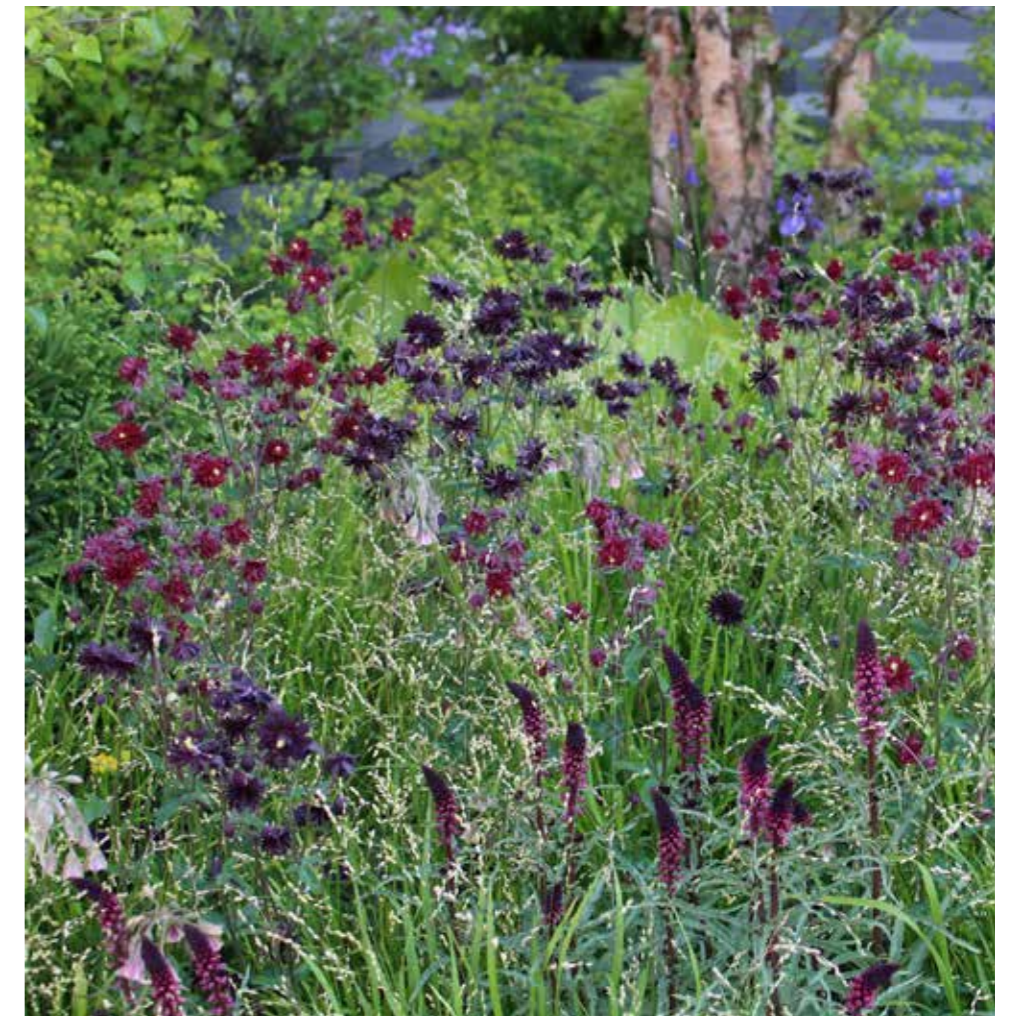
PERENNIAL MIX A



PERENNIAL MIX B

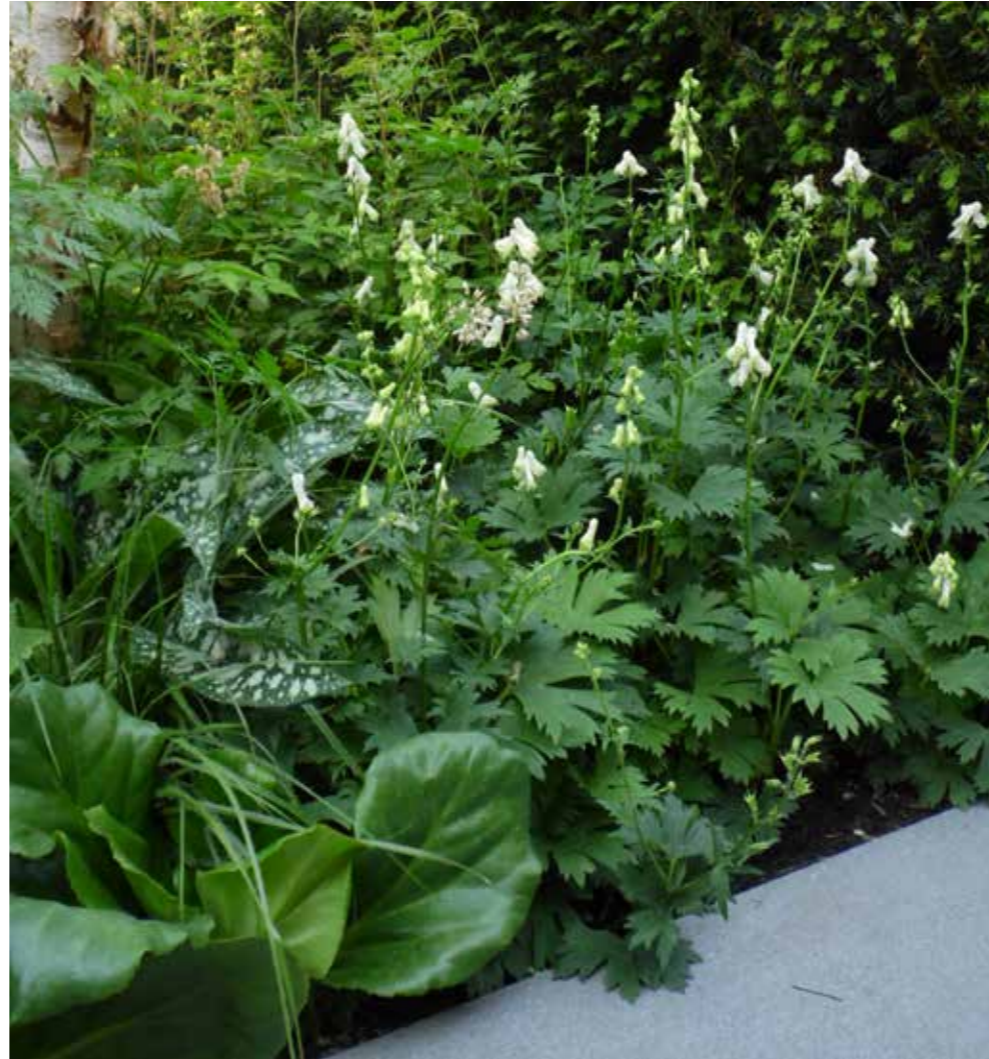


PERENNIAL MIX C



## HERBACEOUS AND SHRUB PLANTING MOOD IMAGES

PERENNIAL MIX D, E & F WITH BIRCH TREES



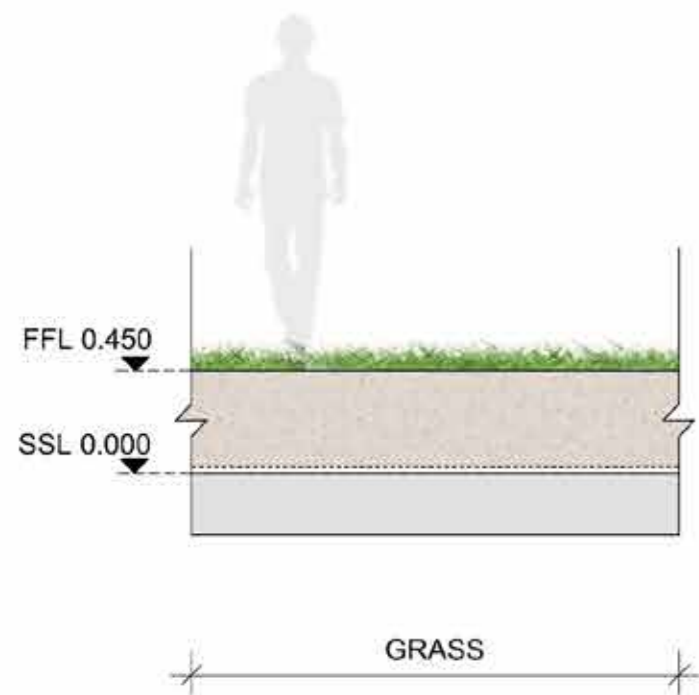
# SOFT LANDSCAPE STRATEGY

## TYPICAL SOFT LANDSCAPE SECTIONS

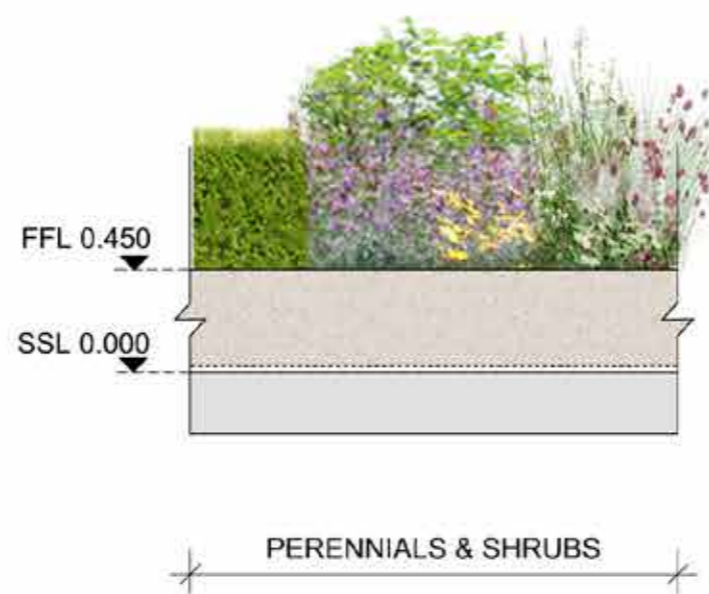
More than 50% of the garden will be built over basement. Whilst this may seem challenging to maintain a healthy and working landscape, it is perfectly possible as long as the minimum required soil depth is provided for the plants.

A wide range of plants are will do very well in this area. The key for podium planting, as in any traditional border design, is to choose the right plant for the

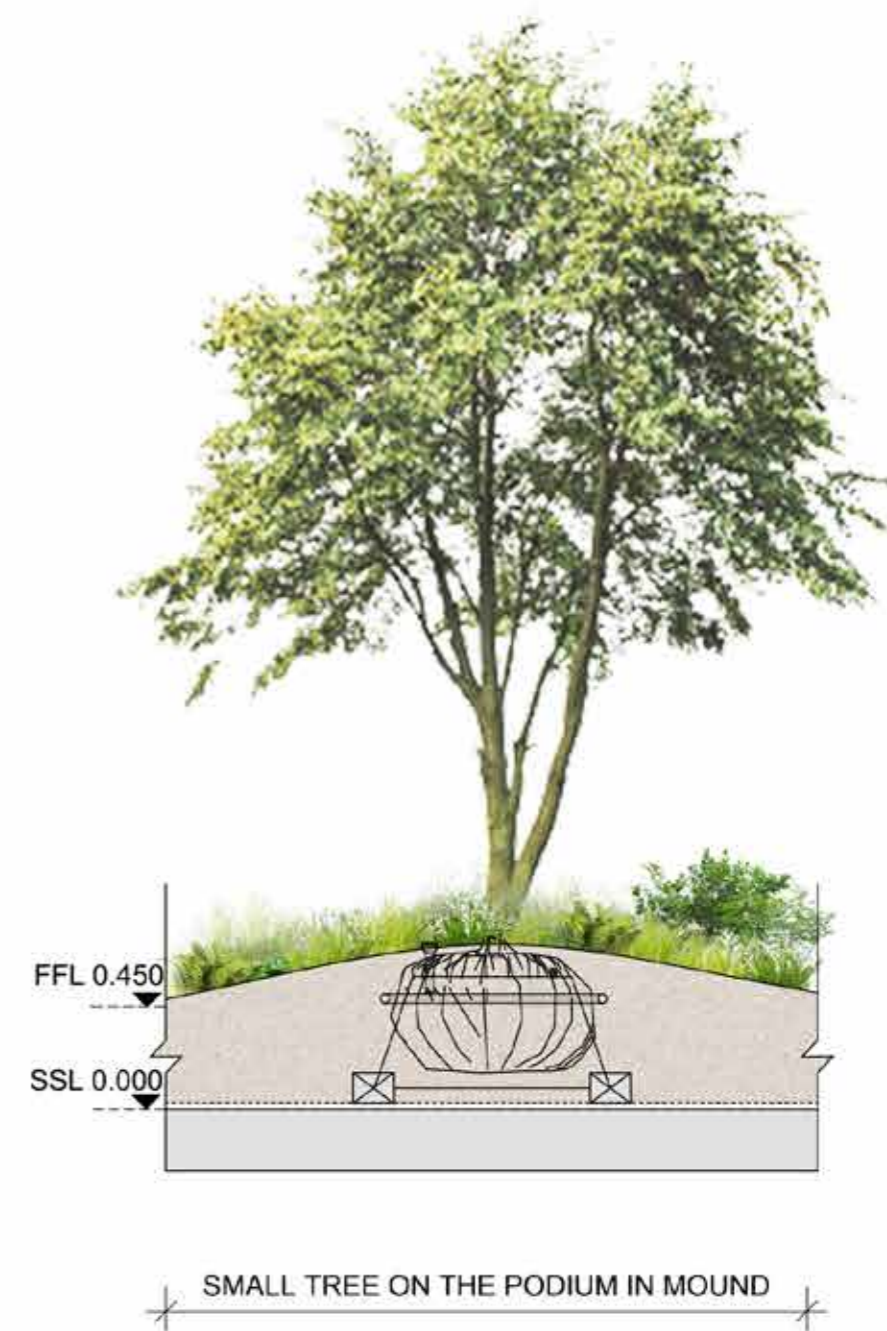
situation. As a general rule, as little as 60mm will support a sedum mat. With 150mm, it is possible to grow amenity turf, given appropriate irrigation and regular feeding. With 450mm of growing medium, a good range of shrubs and herbaceous perennials will be perfectly happy, and there is always the option of localised mounding over areas with extra structural support for smaller trees .



Preferred soil depth for amenity lawn: 450mm.



Preferred soil depth for small shrubs and herbaceous planting: 450mm.  
For larger shrubs: 600mm.



Preferred soil depth for small multi stem trees which do not grow higher than 3-4 metres: min. 750-800mm.  
For larger trees: minimum 1000mm.

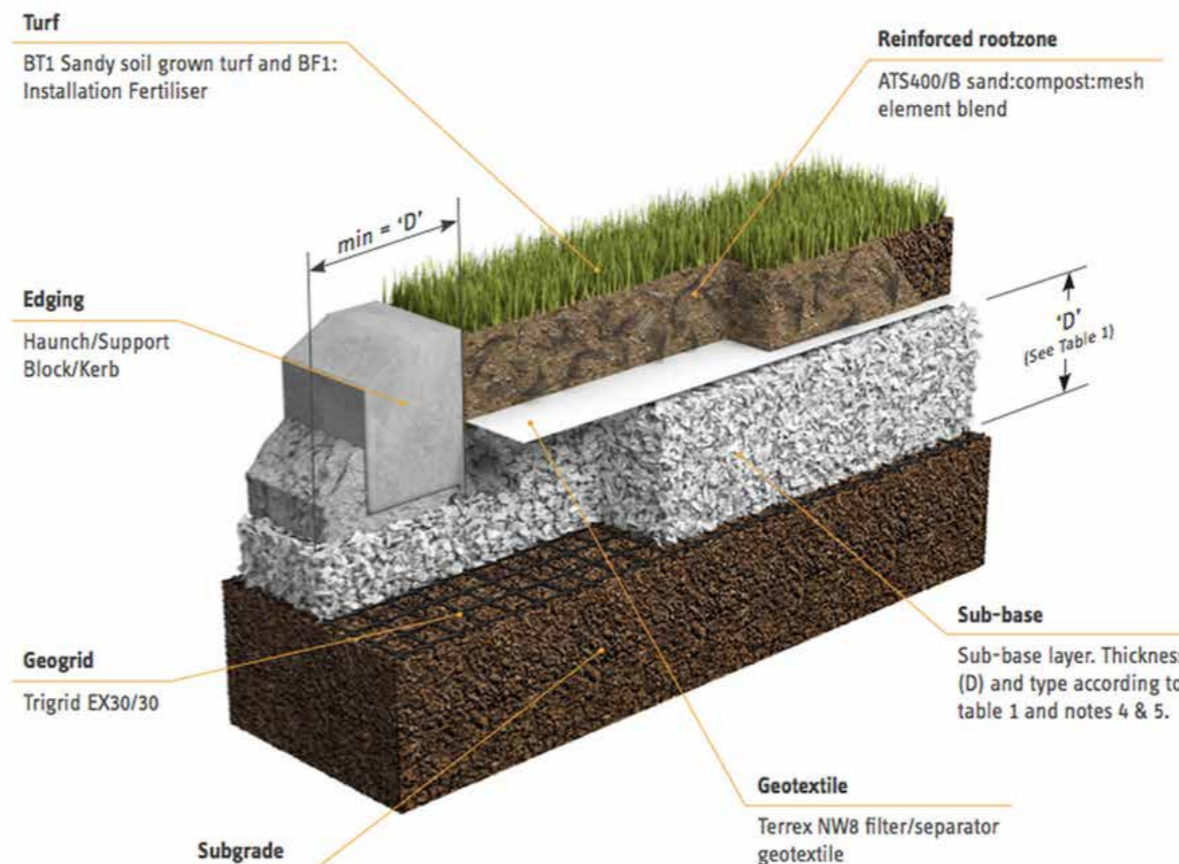
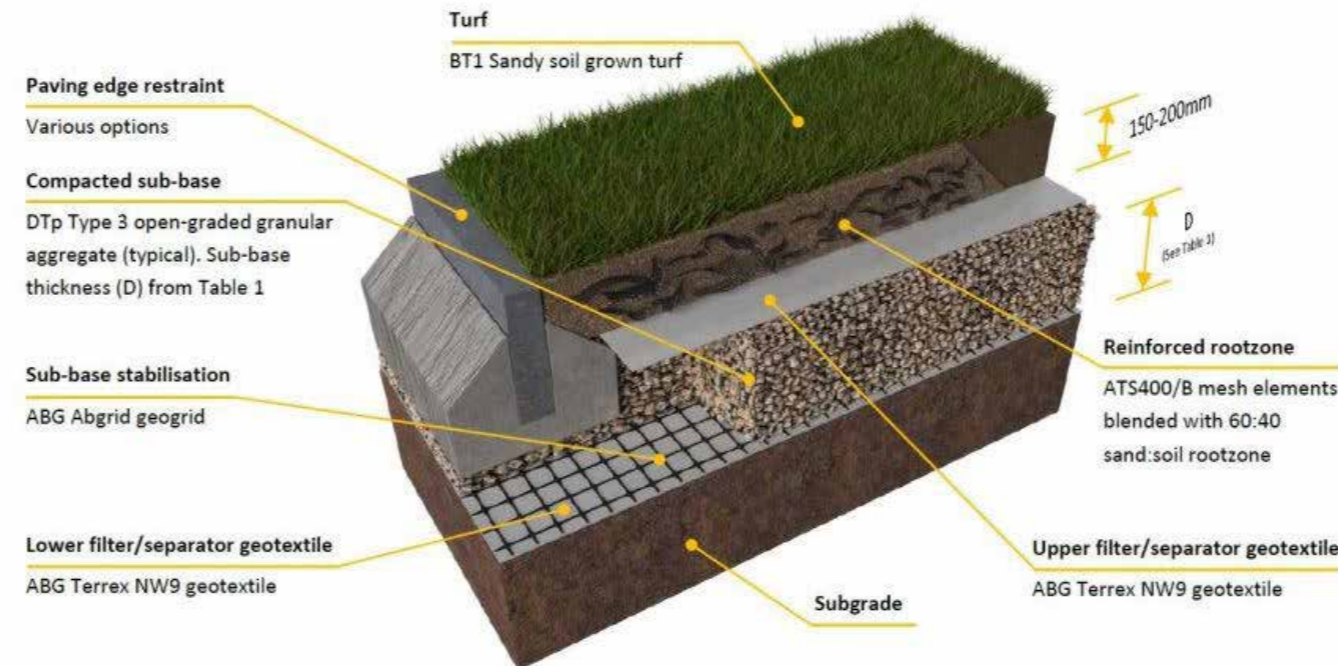
## THE TECHNOLOGY OF REINFORCED GRASS

The Netlon Advanced Turf System (ATS400/B) is a load-bearing natural grass reinforced surface with no visible surface structures or trip hazards. It provides a safe, free-draining, wear tolerant reinforced grassed surface which resists compaction and surface rutting, whilst sustaining increased pedestrian and vehicle traffic up to HGV loadings when provided with an appropriately designed sub-base.

Advanced Turf consists of a high quality sandy soil root zone into which thousands of playing card sized polypropylene Netlon plastic mesh elements are pre-blended, the composite mesh reinforced root zone, selected turf and installation fertiliser are delivered to site as a system. Once the Advanced Turf grass reinforcement root zone system is installed and as the roots develop, they entwine with the interlocking Advanced Turf's plastic mesh elements and form a strong, extremely stable and deep anchored root system. Maintained as a standard quality grassed surface,

Advanced Turf can be specified as a component of SuDS Source Control and in many trafficked applications such as: Grassed Fire/Emergency Access routes, Cherry Picker/Service access,

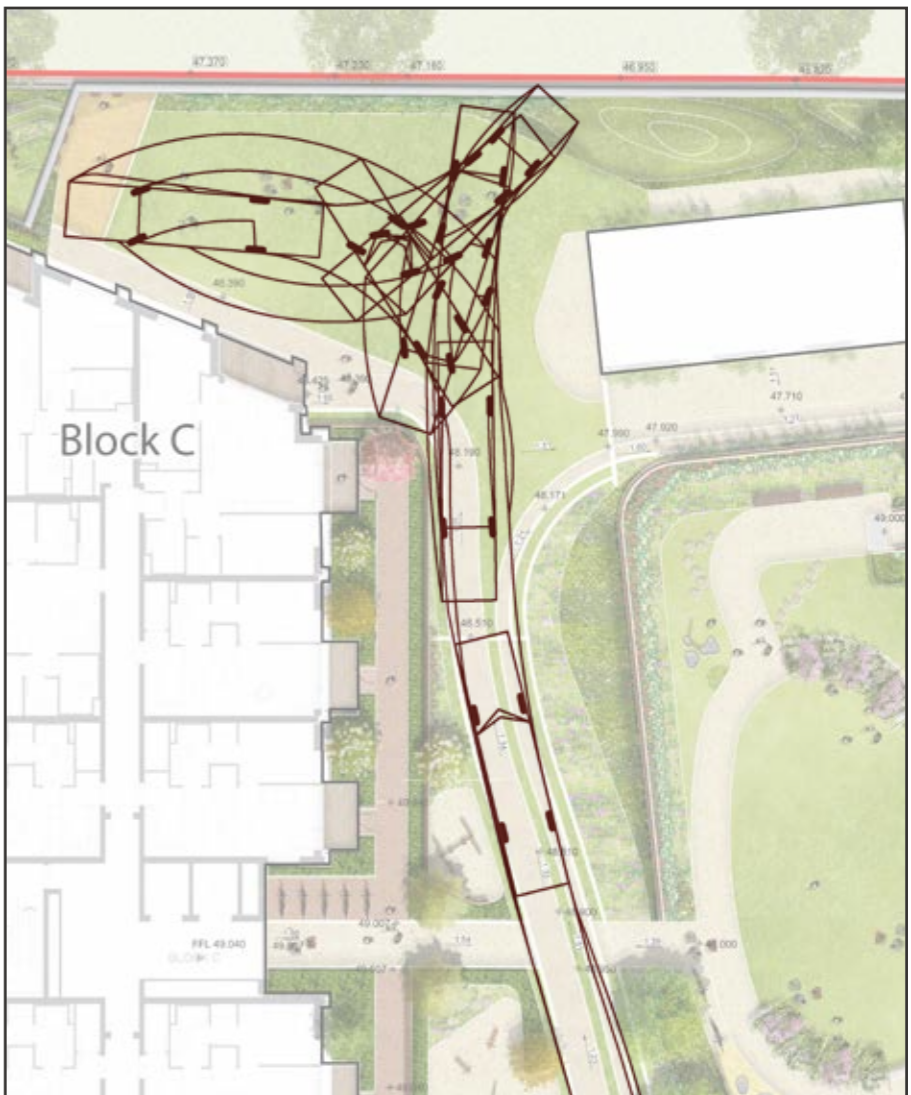
### DETAILS OF THE REINFORCED GRASS SYSTEM



Without Netlon ATS (left) rutting occurs as the applied vehicle wheel loads are not distributed efficiently through the soils. However, with Advanced Turf grass reinforcement system, the load is transferred efficiently meaning that higher vehicle loads can be applied without the risk of rutting occurring,

# SOFT LANDSCAPE STRATEGY- FIRE TENDER CIRCULATION

THE TECHNOLOGY OF REINFORCED GRASS    AREAS SUPPORTED WITH GRASS REINFORCEMENT SYSTEM



**Paving Type 8. Product: Netlon advanced turf, reinforced grass**  
Supplier: ABG or Similar Approved





An aerial photograph of a city street grid, overlaid with a semi-transparent orange filter. The image shows a dense network of streets and buildings, with a prominent road running horizontally across the bottom. The text 'HARDSCAPE STRATEGY' is positioned in the lower right quadrant of the image.

# HARDSCAPE STRATEGY

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# HARD LANDSCAPE STRATEGY

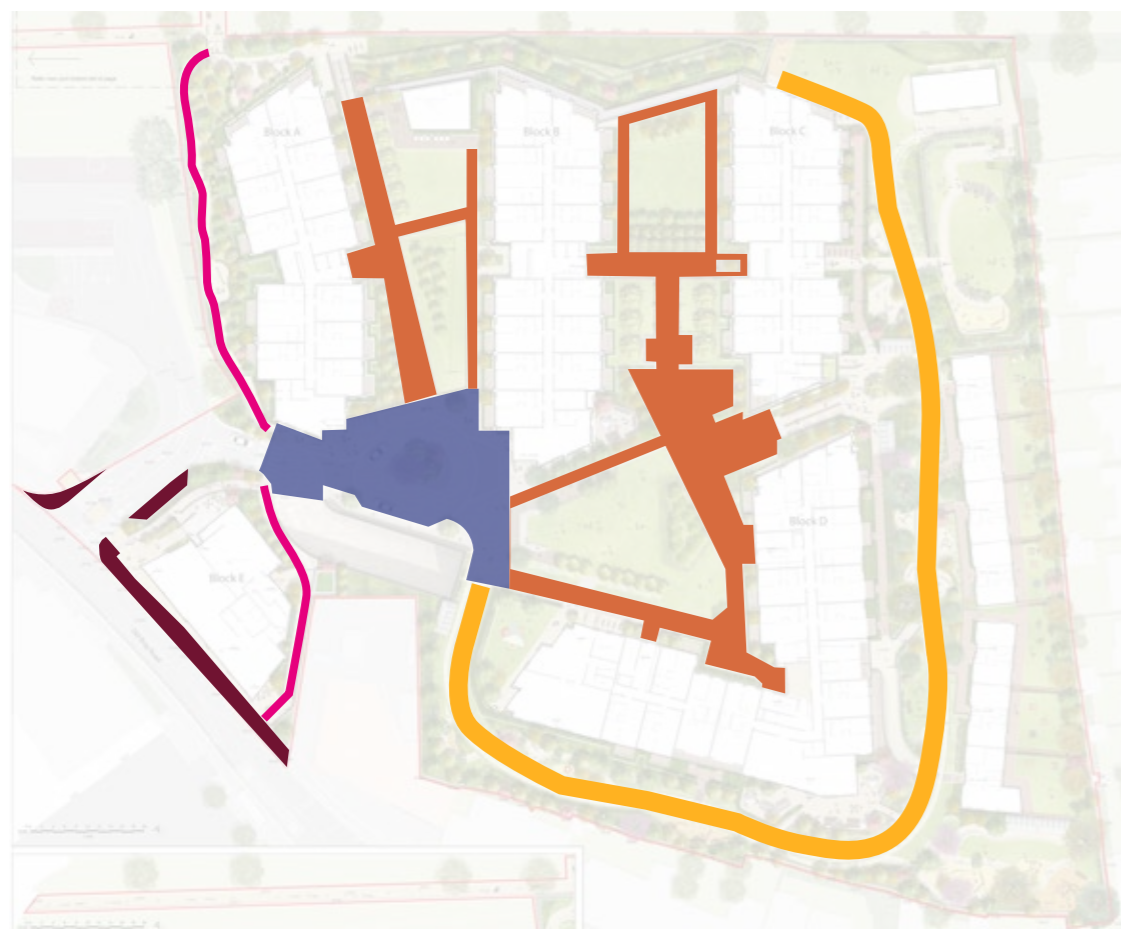
In Response to ABP Opinion **Item 3** which states  
 "...A Materials Strategy that specifically addresses the **proposed materials and finishes for buildings, open spaces, paved areas and boundaries, having regard to the requirement to provide high quality and sustainable finishes and details..**",  
 the following pages provide the required information.

The hardscape strategy will contribute to defining the character of the spaces between buildings, communal open spaces and private spaces.  
 The changes in hard surface material will help to demarcate the use of the areas i.e sitting and relaxing space, play areas and shared surface.

The chapter is also responding, to ABP Opinion **Item 6** which states "...**Details should also include proposals for hard and soft landscaping including street furniture, where proposed, which ensures that areas of open space are accessible, usable and available for all...**"

The distinction of different tones and finishes of paving which includes natural stone paving, clay brick paving and concrete block paving have been strongly related to future uses of the proposed shared surface, cycle lane and pathways.

## HARDSCAPE CONCEPT



The proposed materials will be appropriate and sympathetic to the local character of the area and be an integral part of the design. Careful consideration has been given to the design, texture and colour of the materials to ensure they will integrate with the design, in particular with a strong tonal cohesion with the proposed buildings facade finishes, which will assist in providing a high-quality living environment.

All the landscaping materials will have a good resistance to accidental damage and low maintenance characteristics.  
 (Please Refert to HJL report for further information regarding the building facade finishes).

Within the Site Boundary there is a small area proposed to be "Taken in Charge" by DLR. The paving proposed in this area will fully meet the standard requirements of DLRCOCO Parks and Landscape Services, Guidance for developers in Taking in Charge areas which falls back on the DMURS document.

## PAVING PALETTE

The hard landscape palette will be carefully selected to enhance the space.

High quality materials will help to create a positive, inclusive and inspiring environment, where people feel comfortable to walk through, sit, contemplate and enjoy the landscape setting.

-  PT0 Paving To DLR specification
-  PT1 Natural Stone Granite slabs,
-  PT2 Natural Stone Granite slabs,
-  PT3 Natural Stone Granite slabs,
-  PT4 Natural Stone Granite slabs,
-  PT5 Aluminium decking
-  PT6 Self binding gravel
-  PT7 Wet Pour Safety Surface
-  PT8 Netlon advanced turf,
-  PT9 Corduroy Tactile Flag Paving
-  PT10 Brick clay paving
-  PT11 Block Paving, Tegula



# HARD LANDSCAPE STRATEGY

## PAVING PALETTE

### Paving Type 0. Paving To DLR specification

Product: Granite Flagstones  
 Size/ Colour: Max 600 x 600mm Min 60mm deep /  
 Beige or grey  
 Finish: Bush-hammered finish recommended

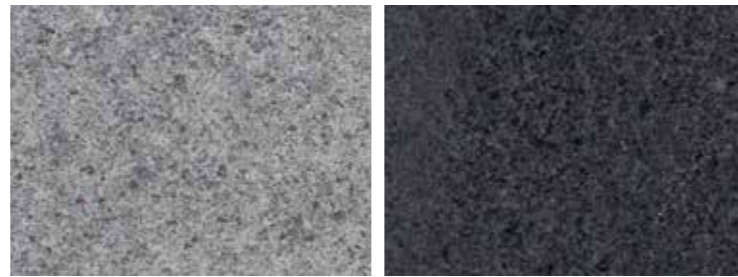


Paving Type 01. Product: Asphalt Paving  
 Supplier: TBC or Similar Approved



### Paving Type 1. Natural Stone Granite slabs,

Product: Praga granite  
 Size/Colour: 300x150x80/Praga granite  
 Finish: Flamed- Finish insert of Honed finish



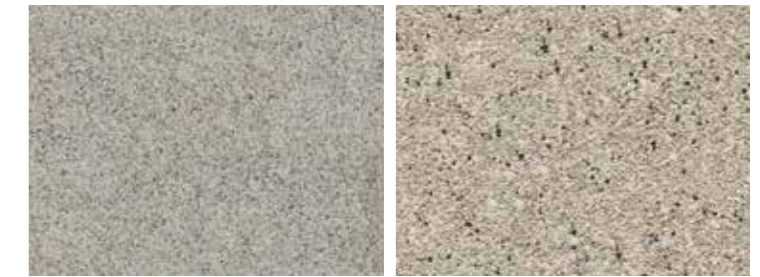
### Paving Type 1a. Natural Stone Granite slabs,

Product: Elara granite  
 Size: 30x150,x80mm  
 Finish/Colour: Flamed/ Varying tones of buff,orange and grey



### Paving Type 2. Natural Stone Granite slabs,

Product: Modal paving  
 Size/Colour: 300x100,200x100 Random pattern/ Mid grey&Light cream  
 Finish: Textured



### Paving Type 2a. Natural Stone Granite slabs,

Product: Praga granite  
 Size/Colour: 200x100x80/Praga granite  
 Finish: Flamed- Finish insert of Honed finish



### Paving Type 3. Product: Natural Stone Granite slabs

Product: Modal paving  
 Size/Colour: 300x200x 70mm/Oatmeal granite&Light cream  
 Finish: Textured/Smooth



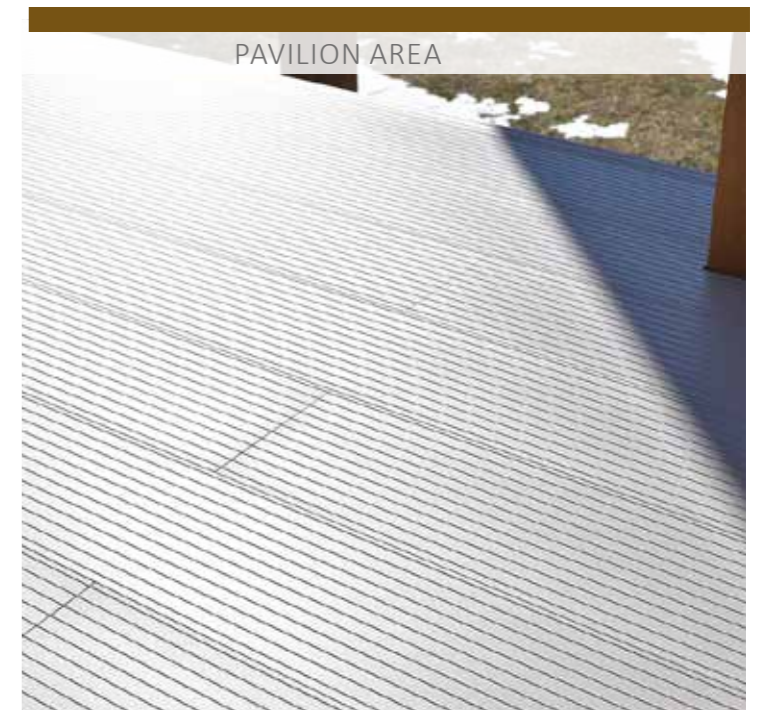
### Paving Type 4. Product: Natural Stone Granite slabs

Product: Modal paving  
 Size/Colour: 200x100x 70mm/Oatmeal granite&Light cream  
 Finish: Textured/Smooth



### Paving Type 5. Product: Aluminium decking

Size/Colour: 1200x600mm or s.a



**Paving Type 6. Product: Self binding gravel**  
Size/Colour: 0-4mm/ Golden Amber

**Paving Type 7. Product: Wet Pour Safety Surface**  
Colour: Varies

**Paving Type 8. Product: Netlon advanced turf, reinforced grass**  
Supplier: ABG or Similar Approved

**Paving Type 9. Product: Corduroy Tactile Flag Paving**  
Size/Colour: 400x400x65mm

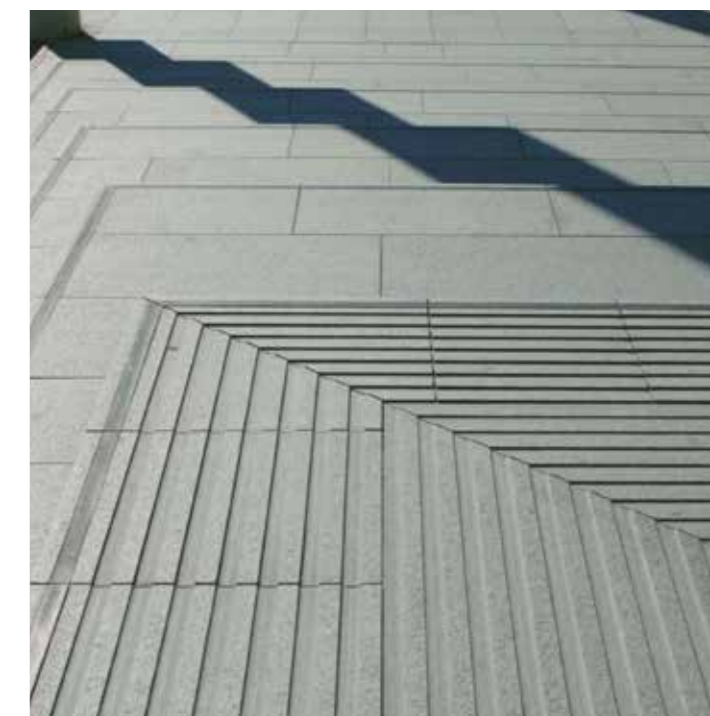
SEATING AND FITNESS AREA AROUND THE CURCULAR PATH



PLAY AREAS



CIRCULAR PATHWAY STRIPS



**Paving Type 10. Product: Brick clay paving**  
Size/Colour: TBC

**Paving Type 11. Product: Block Paving, Tegula**  
Size/Colour: Tegula trio 197x173,173x173x130x173mm/  
Golden  
pattern  
Finish/Colour: Flamed/ Buff

PRIVATE PATIO



CIRCULAR PATHWAY



















# FURNITURE STRATEGY

## FURNITURE STRATEGY

In response to ABP Opinion **ITEM 6** which states "...**Details should also include proposals for hard and soft landscaping including street furniture, where proposed, which ensures that areas of open space are accessible, usable and available for all...**"

Furniture and features are carefully selected to enhance the space without cluttering the garden. Through careful spacial planning, the selected furniture and features will enrich the space and provide opportunities for residents to enjoy the space and feel connected with the surroundings.

The design and placement of elements will respond to the architecture through sympathetic, appropriate and consistent materials, textures and scales. High quality elements will help to create a positive, inclusive and inspiring environment, where people feel comfortable to walk through, sit, contemplate and enjoy the landscape setting.

-  FT1.: Natural Play Equipment
-  FT2.: Bench: Prima Marina
-  FT 2a. Cube seat
-  FT3. Bollards
-  FT4.: Recessed Tree Grille: Castle
-  FT5. Sheffield Cycle Stand
-  FT6. Product: Picknick Tables- Prima Marina
-  FT7 . Product: Reinforced concrete bench
-  FT8.: Temporary Canopy
-  FT9.: Fitness Trail
-  FT10.: Handrail
-  FT12. Vertical structure
-  FT13. Table and Chairs
-  FT14. Metal bicycle access channel.
-  FT15. Cable trellis system
-  FT17. Loungers integrated in the solid podium isles



## FURNITURE PALETTE

### Furniture Type 1.: Natural Play Equipment

Supplier: TBC  
Smooth and rounded boulders with no sharp edges and under 0.6m height.



### Furniture Type 2.: Bench: Prima Marina

Supplier: TBC  
Size: 2125x600x450mm  
Material: White acid etched reconstituted stone with wooden seat.



### Furniture Type 2a. Cube seat

Product: TBC  
Supplier:TBC



### Furniture Type 3. Bollards

Product: GEO  
Supplier: TBC  
Size/Material: 102x1100 mm.316 stainless steel body and cap.



### Furniture Type 4.: Recessed Tree Grille: Castle

Supplier: GreenBlue Urban or Similar Approved  
Size: 1200x1200mm. Material: Galvanised Steel



### Furniture Type 5. Sheffield Cycle Stand

Product: Ollerton  
Supplier: TBC  
Size/Material: 750x750x48.3mm (HxLxW)/Polish Stainless steel.



### Furniture Type 6. Product: Picnck Tables - Prima Marina

Supplier: TBC  
Size/Material: TBC/ White acid etched reconstituted stone with wooden seat, top.



### Furniture Type 7 . Product: Reinforced concrete bench

Size: varies x 500mm Height  
Colour: Light Grey  
Supplier: TBC



# FURNITURE STRATEGY

## FURNITURE PALETTE

### Furniture Type 8.: Temporary Canopy

Supplier: TBC

Description: Canopy above BBQ and play areas to provide shelter from sun and light rain.



### Furniture Type 9.: Fitness Trail

Supplier: TBC

Description: Fitness trail elements made of timber.



### Furniture Type 10.: Handrail

Supplier: LiniLED

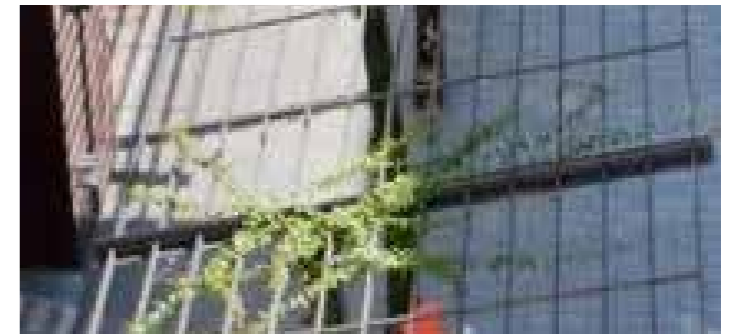
Description: Stainless steel handrail with LED lighting compliant with building regulations.



### Furniture Type 12. Vertical structure

Pergola structure and cantilver pergola

Supplier: TBC



### Furniture Type 13. Table and Chairs

Supplier: TBC



### Furniture Type 14.

Cycle channel

Supplier: TBC



### Furniture Type 15. Cable trellis system

Supplier: TBC



### Furniture Type 17. Loungers integrated in the solid podium isles

Supplier: TBC







# PLAY STRATEGY

## WHY PLAY MATTERS

### POLICY BACKGROUND

The integration of play provision throughout the open space is an important element to ensure access and usability of the open spaces for children and young people.

These form the overall policy background to the play strategy for Cornelscourt scheme.

The following documents have been taken into consideration:

- National Children's Play Policy 'Ready Steady Play' (2004)
- Teenspece', National Recreation Policy for Young People (2007)
- Sustainable Urban Housing: Design Standards for New Apartments 2018.

To promote a child-centred approach, based where appropriate, on 'home-zone' principles, that enables children to:

- Move freely and safely around their neighbourhood;
- Play within sight of their home;
- Play in the natural environment;
- Play at purposefully designed play facilities.
- Carefully sited, in easily accessible locations and well overlooked by adjacent housing, while not causing a nuisance to nearby residences.

### POLICY FOR PLAY

The importance of play is reflected in a growing body of policy documents that support children's right to play. In order to provide adequate recreation and play facilities that satisfy local needs, the following objectives shall apply:

Specific Objectives:

### Based on Apartment Guidelines:

'The recreational needs of children must be considered as part of communal amenity space within apartment schemes. Experience in Ireland and elsewhere has shown that children will play everywhere. Therefore, as far as possible, their safety needs to be taken into consideration and protected throughout the entire site, particularly in terms of safe access to larger communal play spaces. Children's play needs around the apartment building should be catered for:

- Within the private open space associated with individual apartments;
- Within small play spaces (about **85 – 100 sq. metres**) for the specific needs of toddlers and children up to the age of six, with suitable play equipment, seating for parents/guardians, and within sight of the apartment building, in a scheme that includes **25 or more units with two or more bedrooms**; and
- Within play areas (**200–400 sq. metres**) for older children and young teenagers, in a scheme that includes **100 or more apartments** with two or more bedrooms.'

The Apartment Guidelines also note the following:

'The perimeter block with a central communal open space is particularly appropriate for children's play, especially if access from the street is controlled. The landscape design and orientation of play areas can contribute significantly to their amenity value. However, the noise from courtyard play areas can diminish residential amenity, particularly in smaller schemes, and designers must find solutions which balance all the factors involved.'

Source:  
Sustainable Urban Housing: Design Standards for New Apartments 2018.,

### PRINCIPLES APPLIED

- Provide 'bespoke' areas
- Play area located in close proximity to each building (see Approach by age group)
- Promote natural elements (Complies with the relevant British (BS) or European (EN) Standards)
- Provide a wide range of play experiences
- Create accessible area to both disabled and non-disabled children
- Provide low cost maintenance area

### APPROACH & QUANTUM BY AGE GROUP

The provision of play opportunities follows a two-tiered approach of providing dedicated play spaces as well playable spaces throughout the application site and reinforces the family friendly living environment proposed for Cornelscourt .

Play opportunities are targeted towards and provided for the following age groups. The following categories and age groups are only indicators and should be considered fluid as to which age they encompass.

**Infants & Toddlers** (0-5y / 100m movement radius): Play spaces for this age group will be provided as part of doorstep-play, where the play spaces are provided as part of each development block.

**Provided area: 121sqm**

**Young children** (6-11 / 400m movement radius): The play of young children is characterized by first unsupervised forays into the public realm. While communal amenity spaces allow for an easily accessible play environment, equipped play areas in the public space.

**Provided area: 337qm**

## PLAY APPROACH

The play strategy for the scheme adopts a flexible, multi-use approach to the amenity and play space.

This section of the report outlines the play space quantum, the style of play space and proposed equipment / features.

### NATURAL / INCIDENTAL PLAY:

Providing for areas within safe, inspiring environments in which children can play and adults can socialise and observe their children.

This multi-functional approach is intended to maximise the usable exterior space, and help create a sense of community within the development.

### PLAY SPACE AIMS AND OBJECTIVES:

Several principles have driven the design all of which underpin creating a well-integrated community:

- » A safe, inspiring play scape for young children.
- » To create an environment which also appeals to adults.
- » Encourage children to be active which in turn can improve health and well-being.
- » Where possible reconnect children with nature, educating them about the environment and helping to establish a sense of ownership and pride over the space.
- » Equipment that is accessible to all, with the width for wheelchair access and part M compliant.
- » Play for all has been provided for with play equipment that has similar tasks but different levels of challenge for age groups and ability, such as the climbing frame, providing children with choice.

### Active Recreational Area as Incidental play space

1669sqm



### Equipped Play area

Approx. 458sqm



The overall design aspiration for the scheme is to make the communal areas child friendly by providing well located, well designed spaces that are accessible. The diagrams above show the dedicated equipped play areas, predominantly located along the informal residential garden and the active recreation active zones.

The Residential communal courtyards offer the opportunities to play within a safe and formal designed landscape. Incidental play opportunities will be provided in a number of locations. These include landscaped areas, level changes such as steps and seating edges. The play space provision is an important part of the landscape design. The space must be both safe and stimulating for younger children without detracting from the aesthetic appeal of the space for adults. The strategy is to immerse this play space within the landscape, so it feels part of the overall composition, rather than a designated play area within the residential garden.

Pedestrian priority along the circular southern and eastern part is a key driver in the design and there are informal opportunities for 'playable' and 'social' spaces throughout the landscape. Creative play is encouraged by incorporating a number of different elements within these spaces.

The palette is specifically chosen to match the overall design language of the proposals and may include small swings, balancing poles and slides, that are integrated into the overall courtyard landscaping.

# PLAY STRATEGY

## PLAY APPROACH

The requirements have been achieved within the scheme following the Sustainable Urban Housing: Design Standards for New Apartments 2018

Children's play needs around the apartment building should be catered for:

The quantity of play areas has been based on the Schedule of Accommodation

 Play spaces needs of toddlers and children up to the age of six 85-100sqm required  
Provided: **121**sqm

 Play area for older children and young teenagers- 200-400 sqm required  
Provided: **337**sqm

**Equipped Play area** Approx. **458**sqm



## PLAYABLE SPACES-CONCEPT

NON-PRESCRIPTIVE PLAYABLE SPACES

\*



Sensory play-  
Nature + Touch + Scent



Stepping stones offer informal seating opportunities  
As Physical play-balancing



Landform offer a variety of landscape  
Free play- rolling + climbing



Free play- Improve way finding skills

PUBLIC OPEN SPACE  
NATURAL FORM PLAYSPACE WITH  
INTEGRATED PLAY FEATURE

\*



Physical play-  
Balancing+Jumping



Educational play-  
Exploring the nature



Social play-  
Interaction together



Potential of re-use trunk  
Step in log- balancing

INCIDENTAL PLAY  
OPPORTUNITY WITHIN THE  
OVERALL SCHEME

§



Interactive play-  
Water play



Free Play-  
Running



Changing levels  
Accidental play



Textural changes to the paving offer opportunities  
for creative play

# PLAY STRATEGY

## PLAY PROVISION



Hard landscape areas could be used for scooting and running.

Formal and informal gathering opportunities along textural planting

Grass spaces to encourage physical play e.g running, playground games

Landscape mounds, level changes to create informal open performance spaces

Rain garden provide sensory interest

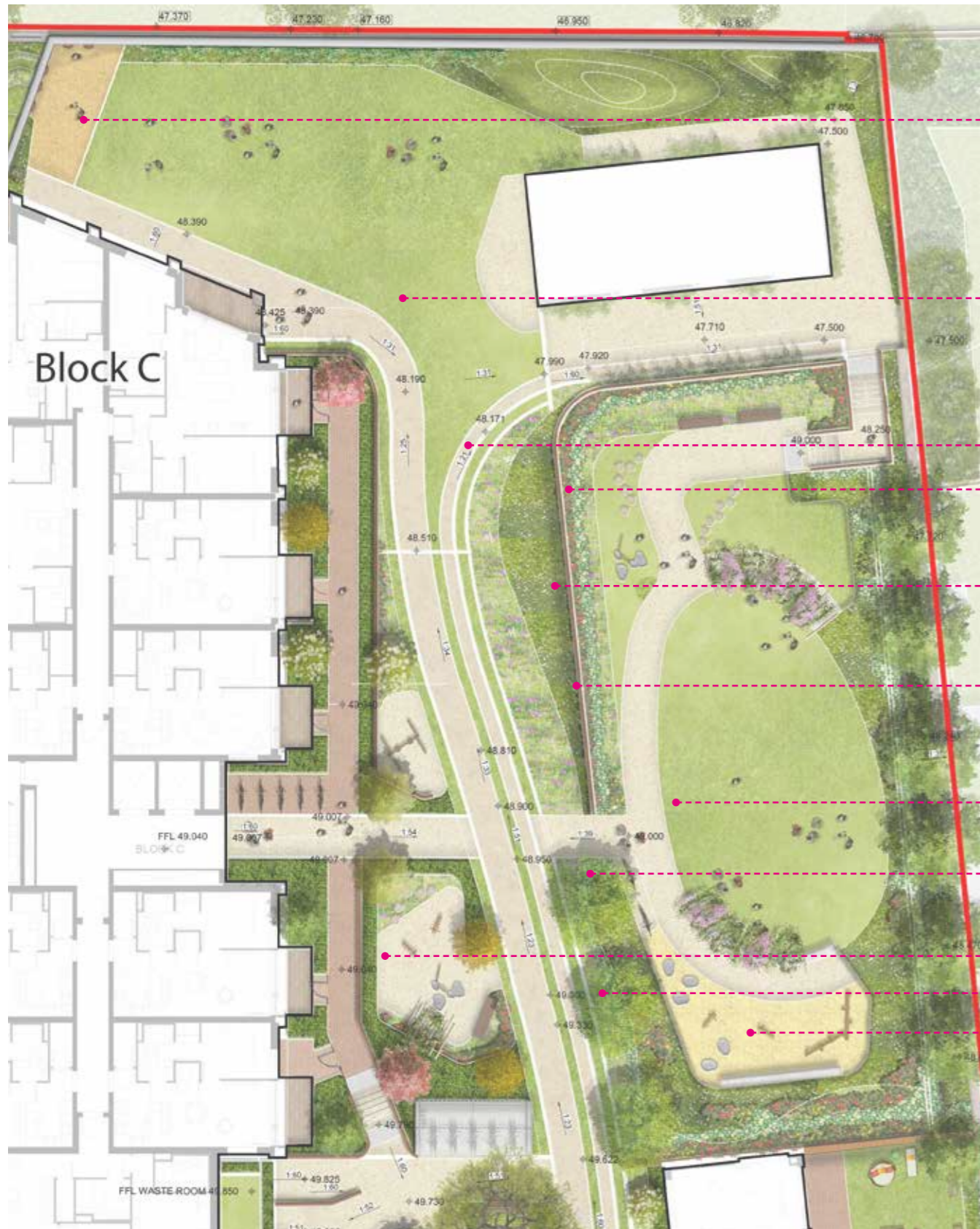


Stepping stones & logs promoting creative physical play such as balancing jumping and co-ordination skills

Grass spaces to encourage physical play e.g running, playground games

Large sculptural wood element for balancing, jumping + informal congregation

## PLAY PROVISION



Climbing wall to encourage social interaction as well as physical play

Lawns to encourage physical play e.g running, playground games

Formal and informal gathering opportunities along textural planting

Steps for jumping and informal seating

Planting beds provide sensory interest

Hard landscape areas could be used for scooting and running.

Lawn to encourage physical play e.g running, playground games

Path networks provide access for all as well as help children develop way finding skills and could be used for scooting and running.

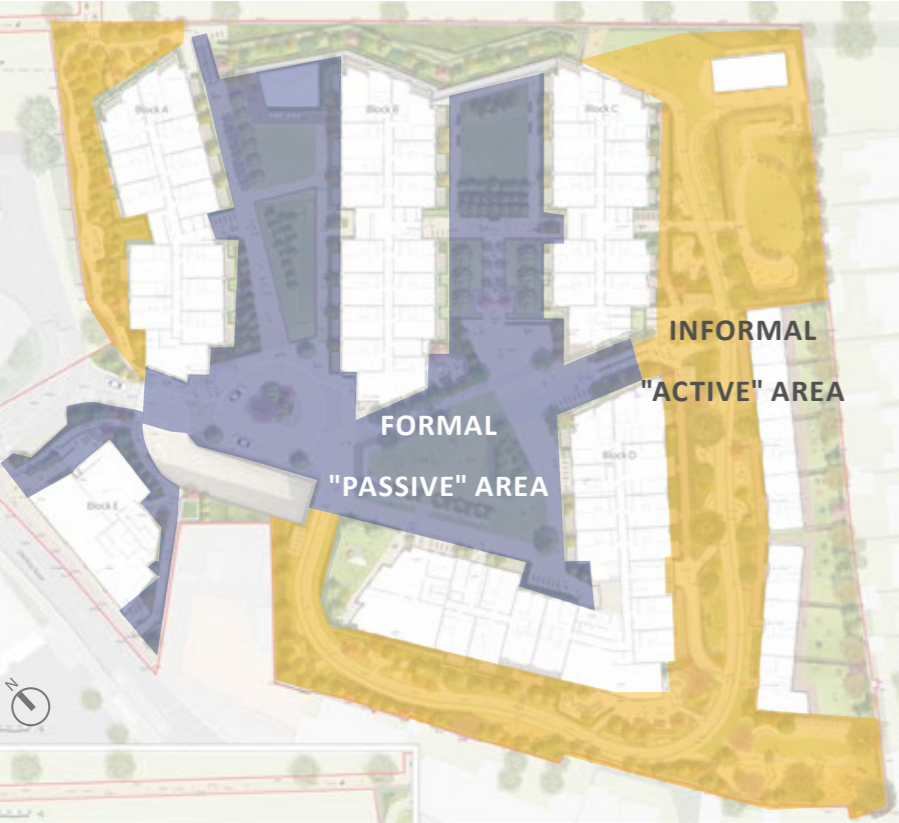
Boulders to encourage social interaction as well as physical play

Steps for jumping and informal seating

Logs promoting creative physical play such as balancing jumping and co-ordination skills

# PLAY STRATEGY

## PLAY APPROACH



## PLAY EQUIPMENT

- 1. Natural Boulders
- 2. Mounds and Land Forms
- 3. Plants and rainwater gardens
- 4. Stepping stone
- 5. Balance Beam
- 6. Wren’s Nest
- 7. Twisted Climber- Intertwine
- 8. Scramble Climber
- 9. Trapezee Equipment
- 10. Monkey Bars
- 11. Wobble Board
- 12. Play sculpture





## PLAY EQUIPMENT

### 1.) NATURAL BOULDERS



A natural element to any play area, strong and maintenance free these are great looking as well as bring elements of natural play and informal meeting and seating points. Boulders are proposed which are smooth and rounded with no sharp edges. They are proposed in different sizes, all options are low level (under 1m in height) and are suitable for seating and clambering in any area.

### 2.) MOUNDS AND LAND FORMS



Natural mounds are great to add element of height to any play area, breaking up a flat landscape and helping shelter a play area from surroundings, they can be used to help aid with play equipment such as slides and tunnels for be used to place items such as trees, boulders and tree trucks on.

### 3.) PLANTS AND RAINWATER GARDENS



Can be used as borders to create different zones throughout areas but as well as being functional they also add play value. Plants encourage sensory play which includes scent and texture and particular plants can be chosen to attract wildlife to an area and compliment any natural play equipment.

### 4.) STEPPING STONE



### 5.) BALANCE BEAM



### 6.) WREN'S NEST



# PLAY STRATEGY

## PLAY EQUIPMENT

7.) TWISTED CLIMBER - INTERTWINE



Two joined balance beams create a tough balancing activity that will help to test children's skills.  
Age: 3-14 years.

8.) SCRAMBLE CLIMBER



A timber A-frame climbing unit that is great to get children active.  
Age: 3-14 years.

9.) TRAPEZEE EQUIPMENT



Great for testing strength, agility and coordination as children can swing across the trapeze. Age: 8-14 years.

10.) MONKEY BARS



A timeless classic that remains a playground favourite! The Monkey Bars help to develop a number of skills and are great for juniors. Age: 6-14 years.

11.) WOBBLE BOARD



The Wobble Board's wobbling walkway is designed to push children's balancing skills to the max as they work their way to the end. Age: 18 months- 6 years.

12.) PLAY SCULPTURE GRASSHOPPER





# COMBINED ROOF PLAN

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# COMBINED ROOF PLAN

## EXTENSIVE GREEN ROOFS

The rooftops will be designated to biodiversity enhancements and as part of the SUD's strategy. The green roofs coverage of at least 60% of the total roof area (as required by the DLRCC Development Plan) requirements to be established with engineers as part of the detail design process.

Green Roofs Provided: 5400sqm



\* Refer to DBFL drawing for further information

## EXTENSIVE GREEN ROOFS

There are many opportunities for green roofs which can improve local biodiversity and support the wider green infrastructure network by re-introducing green spaces and surfaces into the urban environment. The build-up principle of the green roof is shown on the adjacent diagram. This a typical proprietary system, which will be developed further based upon specific requirements to be established with engineers as part of the detail design process.

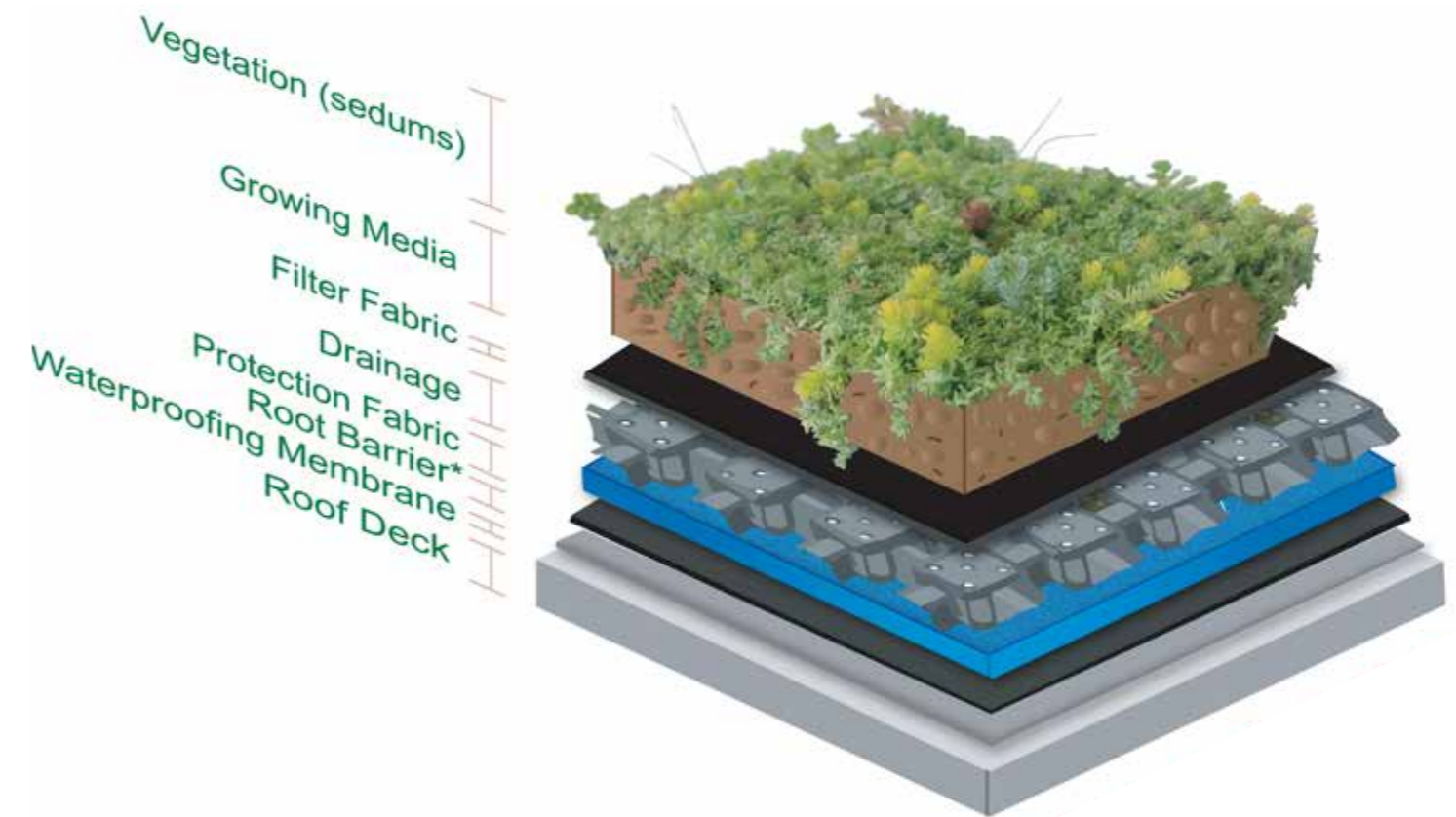
Biodiverse roofs are an excellent way to encourage new wildlife into the development. . These roofs can also help improve air quality, reduce the heat island effect, and attenuate roof surface run-off, supporting Water Sensitive Urban Design (WSUD) approaches to development. The selection of and specification of planting species will be established at the detailed design stage with the aim of providing a range of planting types which aim to align with local biodiversity targets.

A series of sedum roof precedent images are included below, and demonstrate the variety of planting and styles which can be achieved.

### PRECEDENTS

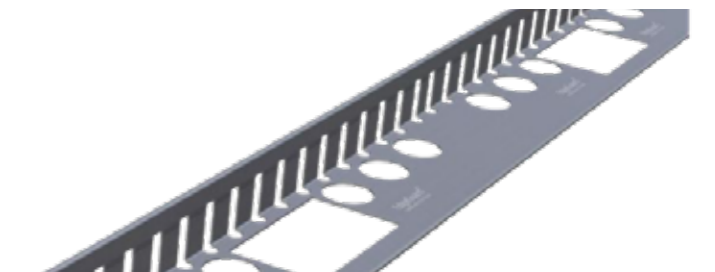


### TYPICAL BUILD-UP FOR GREEN ROOFS



**Paving Type 12. Product: Gravel strip**  
Supplier: CED or Similar Approved  
Size/Colour: TBC

**Edge Type 4. Product: Aluminium Edging**  
Supplier: Kinley or Similar Approved  
ExcelEdge AluExcel 75mm Edging, flexible.





# ECOLOGICAL ENHANCEMENT

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## ECOLOGICAL STRATEGY

The scheme presents numerous opportunities to deliver ecological enhancements for the benefit of local people and biodiversity.

Some of these opportunities are:

- Wild flower meadows
- Biodiversity roofs
- Native planting
- Shelter for birds, bats
- Insect hotels

Other enhancements will also be adopted to maximise the opportunities the scheme brings, and to set a high benchmark for other developments within the wider masterplan to follow. The following pages set out some of the interventions we are incorporating to meet local biodiversity targets. The final specifications and details of these elements will need to be developed with a suitably qualified ecologist to ensure the equipment and habitat creation is correctly installed.



### BAT BOXES

The inclusion of bat boxes can help provide roosts for a variety of species. These boxes can be fabricated from a range of materials and positioned against building façades, fences and amongst tree planting. The final design and style of the bat boxes is yet to be agreed and will form part of the detail design process.

Coordination with the architects and the ecologist will be required if facade mounted boxes or rooftop roosts are to be adopted.

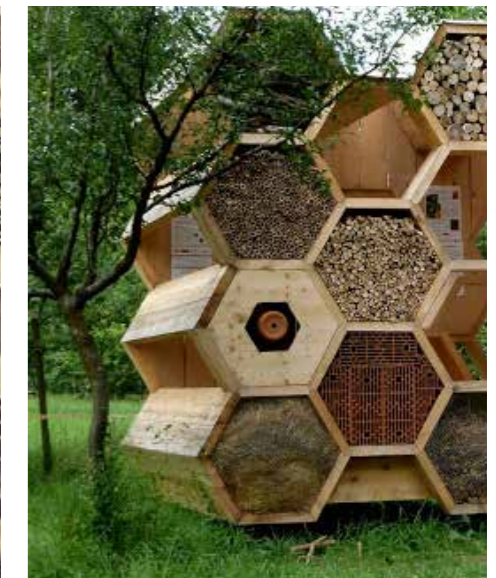


### INSECT HOTELS

Insect hotels have been positioned in strategic locations across the scheme providing the perfect habitat for invertebrates such as bees and butterflies. The inclusion of these types of habitat will help cross pollination of the planting, help sustain other wildlife and provide an interesting educational tool for children living in the new development.

The design, scale and location to be confirmed and developed post planning in collaboration with an ecologist to maximise the benefits associated with this habitat type.

These can be creatively designed as focal points, or sculptural elements which may also provide connections for engagement with local school programmes or nature groups.



# ECOLOGICAL ENHANCEMENT

## ECOLOGICAL STRATEGY

### BIRD BOXES

Bird boxes provide a low-tech and effective way to encourage wildlife into the scheme. Positioned on buildings, within trees and on specially designed poles, these simple habitats provide visual interest and can echo the architectural styles seen throughout the development.

The use of birds and other wildlife to manage pests is a more environmentally friendly approach than the use of pesticides. By encouraging a healthy bird population residents can also benefit from the improved sense of well-being bird song can bring. As with the other ecological enhancements it is hoped the bird population on site can provide an educational resource for residents, and help achieve an appreciation for nature and the environment.

The ultimate number of bird boxes and their positioning will need to be confirmed with an ecologist. The adjacent images demonstrate the range of bird boxes available and how they are integrated with the style of the development.



For illustrative purpose only.





# APPENDIX

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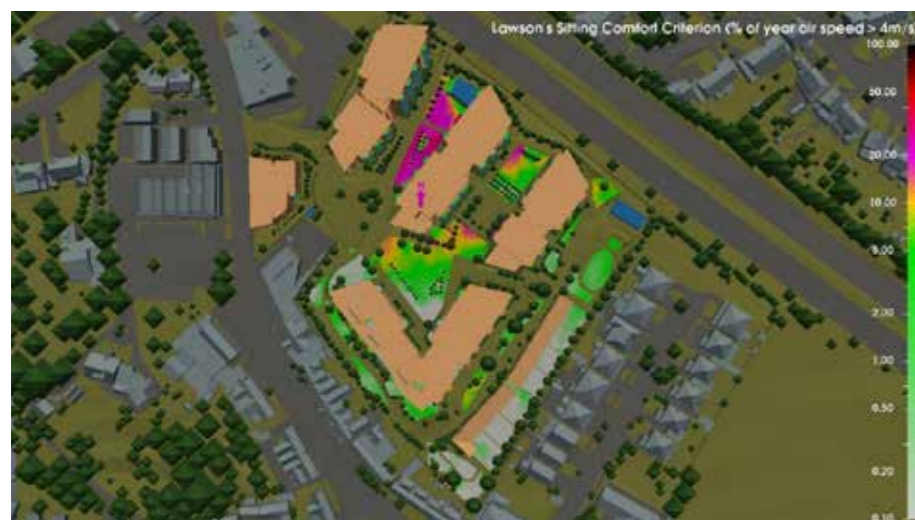
IES Consulting Engineers have been commissioned to investigate the potential impact of wind movement on pedestrian comfort around the proposed residential scheme.

## IDENTIFICATION OF LIKELY SIGNIFICANT IMPACTS

The Lawson's sitting comfort criteria states that the local air speed at designated locations should not exceed 4m/s for more than 5% of the duration analysed. The Lawson's standing comfort criteria states that the local air speed at designated locations should not exceed 6m/s for more than 5% of the duration analysed.

## GROUND AMENITY SPACES

The ground amenity spaces show good compliance for sitting criteria. Pictures below show the results of sitting and standing comfort on the ground amenity spaces.



Source: Figure 11.17, IES Report, Lawson's Sitting Comfort Criteria: View of the entire site

The amenity spaces to the east of Buildings C and D, show excellent compliance with the requirements of the Lawson's Sitting Comfort Criterion i.e. the local air speed does not exceed 4m/s for more than 5% of the year. There are unlikely to be any effects on sitting areas here, with no further mitigation measures required. These locations are shown in blue boundary in Figure 11.17. As the locations are on the eastern side of the development, they are shielded from the frequent westerly, and south-westerly winds.

There are two locations of interest where the amenity spaces will exceed the requirements of the Lawson's Sitting Comfort Criterion, under its strictest interpretation, i.e. the local air speed will exceed 4m/s for more than 5% of the year.

- A. West, and northern edge of the central sun decking and sitting space. (Marked by yellow arrow in Figure 11.19.)
- B. West corner of the deck around the multifunction pavilion (Marked by blue arrow in Figure 11.19.)
- C. Northern amenity space between buildings B and C. (Marked by black arrow in Figure 11.19.)

All of the above locations are in the path of the prevailing westerly, and south-westerly winds. These constitute more than 75% of the winds experienced in Dublin.



Source: Figure 11.19, IES Report, Lawson's Sitting Comfort Criteria: View of the site from southwest



Source: Figure 11.20, IES Report, Lawson's Sitting Comfort Criteria: View of the site from southwest

**Location A** adjacent to the sun-decking area, is only at the edge of the area. The rest of that entire area has fully met the Lawson's Sitting Comfort Criterion i.e. the local air speed does not exceed 4m/s for more than 5% of the year. For the part where the Lawson's Sitting Comfort Criterion is not met, the 4m/s threshold is exceeded 20% of the year. However, on comparing the results for these locations to Lawson's Standing Comfort Criterion results, they show excellent compliance, i.e. the local air speed does not exceed 6m/s for more than 5% of the year. See Figure 11.20. So of the 20% of year when the local air speed exceeds 4m/s, 15% of the year, it also does not definitely exceed 6m/s. The local air speed at the location will be less than 4m/s for 80% of the year, and between 4-6m/s for 15% of the year. Any exceedance noted for the Lawson's Sitting Comfort Criterion can be considered very marginal and, it will not lead to an environment which is unpleasant to use.

**Location B** is at the entrance for the multifunction pavilion space. As such this location will be required for access to the pavilion, and placing seats would not be feasible here. The rest of the space noted around the multifunction pavilion fully met the Lawson's Sitting Comfort Criterion i.e. the local air speed does not exceed 4m/s for more than 5% of the year. For the part where the Lawson's Sitting Comfort Criterion is not met, the 4m/s threshold is exceeded 20% of the year. However, on comparing the results for these locations to Lawson's Standing Comfort Criterion results, they show excellent compliance, i.e. the local air speed does not exceed 6m/s for more than 5% of the year.

**Location C** is at the edge of the amenity space between Buildings B and C. The rest of the space in that amenity space fully met the Lawson's Sitting Comfort Criterion i.e. the local air speed does not exceed 4m/s for more than 5% of the year. For the part where the Lawson's Sitting Comfort Criterion is not met, the 4m/s threshold is exceeded 20% of the year. However, on comparing the results for these locations to Lawson's Standing Comfort Criterion results, they show excellent compliance, i.e. the local air speed does not exceed 6m/s for more than 5% of the year.

Any exceedance noted for the Lawson's Sitting Comfort Criterion can be considered very marginal and, it will not lead to an environment which is unpleasant to use. The local air speed is only going to be greater than a gentle breeze, but most frequently less than a moderate breeze. Such conditions are unlikely to have any impact on usability of the public open spaces for personal recreation.

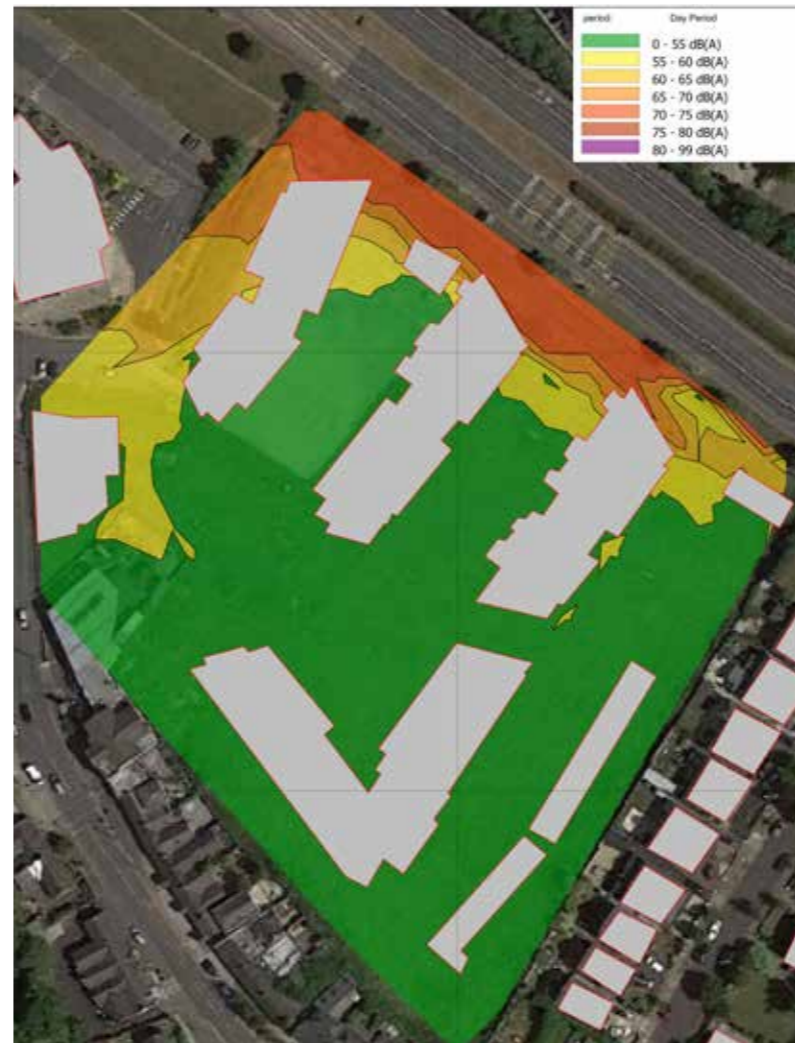
AWN Consulting have been commissioned to investigate the potential Noise Impact Assessment (see Chapter 9 of the EIAR) considers both outward impact of the proposed development on the surrounding environment and inward impacts of proposed development on the proposed residential dwellings.

With respect to external noise levels for amenity areas in the development, ProPG provides that *‘the acoustic environment of external amenity areas that are an intrinsic part of the overall design should always be assessed and noise levels should ideally not be above the range 50 – 55 dB LAeq,16hr’*. The PProPG go on to state that *‘these guideline values may not be achievable in all circumstances where development might be desirable. In such a situation, development should be designed to achieve the lowest practicable noise levels in these external amenity spaces’*.

The design of the external spaces has taken cognisance of potential of noise from the N11 impacting on the development. In this respect, the proposed communal areas located at podium level are positioned higher than the N11 which eliminates line of site to the road and therefore reduces noise impacts on external areas. In addition, a range of design features have been introduced to reduce potential impacts including the provision of glazed balustrades at podium level (also functioning as a safety feature) and the continuation of the existing random rubble wall at Meadow Grove (boundary with N11) before returning to meet the façade of Building C.

Accordingly, the assessment finds that external noise levels within the vast majority of the communal open space is within the recommended range of noise levels from ProPG of between 50 – 55 dB LAeq,16hr. Typically, at areas closer to the N11 noise levels will be higher, however the extent of communal open space exceeding 55 dB LAeq,16hr has been minimised where possible (less than 15.6% of total communal open space provided) to achieve the lowest practicable noise levels at these locations and ensure the creation of comfortable, quiet amenity spaces. In this respect, and given the quantum of communal open space proposed well in excess of the minimum quantitative standard provided within the 2020 Apartment Guidelines, the noise assessment considered that no further mitigation is required to control external noise levels across amenity areas.

Please refer to the Chapter 9 of the EIAR for further details



Source: AWN Consulting, Noise Assessment Impact



----- Communal open space exceeding 55 dB LAeq



----- Communal open space exceeding 55 dB LAeq  
 ■ Communal open space provided

# APPENDIX- NOISE IMPACT ASSESTMENT

## INCORPORATION OF PROPOSALS TO ADDRESS RESIDENTIAL AMENITY IMPACTS

The design of the external spaces has taken cognisance of potential of noise from the N11 impacting on the development. In this respect, the proposed communal areas located at podium level are positioned higher than the N11 which eliminates line of site to the road and therefore reduces noise impacts on external areas. In addition, a range of design features have been introduced to reduce potential impacts including the provision of glazed balustrades at podium level (also functioning as a safety feature) and the continuation of the existing random rubble wall at Meadow Grove (boundary with N11) before returning to meet the façade of Building C.

Noise Assessment has been carefully considered during the design process of the landscape.

Due to the proximity of the N11 Road, a zone of the outdoor space has been affected by the Noise that slightly exceeds the ideal requirement classified between the range of 50-55db as ProPG Planning and Noise: Professional Practice Guidance on Planning and Noise states.

In collaboration with the design team, further landscape design elements were proposed to mitigate the noise impact on the site.

Generally the landscape podium area will be enclosed by a 1.5m High Glazed Balustrade that will run along the basement outline, in addition, a 3 metre high Random Rubble wall in the proximity of the Eastern part of Building C adjacent to the gym, has been introduced.

In order to have a consistent boundary treatment across the proposal, the design team proposes to extend the adjacent boundary wall, approx. 3metres in Height (see figure below) located in the proximity of the site, along the site application boundary by approx. 40m length. The wall will return to the façade of Building C.

The need to mitigate the Noise became an opportunity to enclose and guarantee more privacy to the gym users and at same time became the feature opportunity for a climbing wall.

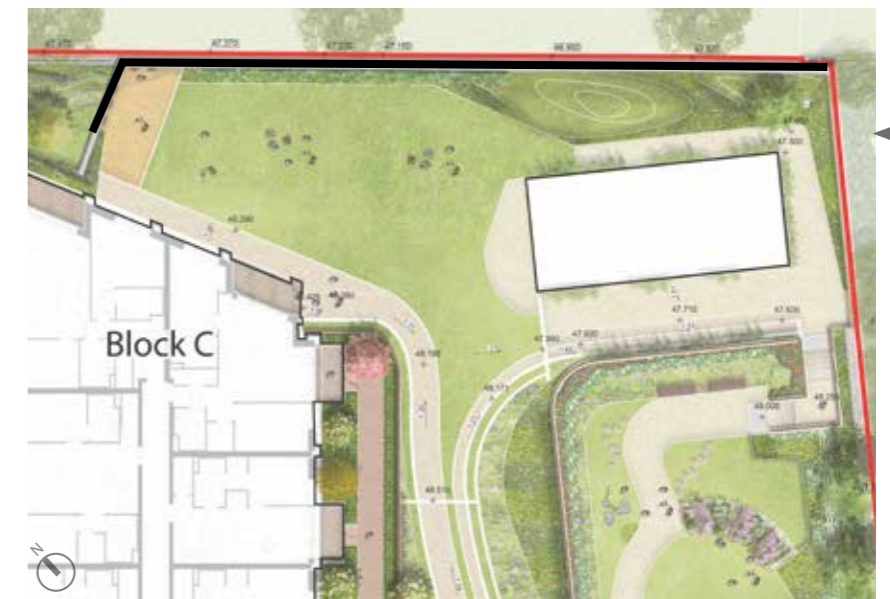
The proposed boundary wall will provide a transition between the proposal boundary treatment of random rubble wall and railing to the boundary of the adjacent site within the existing area.

The proposed migration measures reduce significantly potential noise impacts on communal open space, notwithstanding some of the outdoor gym zone will slightly exceeds the 50-55db requirement. However, considering the outdoor space will be considered as an "active recreation area" the users of this area should not be adversely affected by the noise levels predicted.

GLAZED BOUNDARY LOCATION



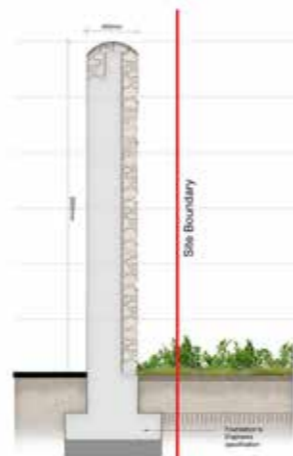
PROPOSED 3M HEIGHT WALL



EXISTING RUBBLE WALL ALONG N11



SECTION



ELEVATION





No-dig paving

Due to the proximity of existing trees along the proposed pathway a cellular confinement system specifically designed for tree root protection such as CellWeb (product) is recommended. The system creates a permeable and stable, load-bearing surface for traffic or footfall whilst eliminating damage to roots through compaction and desiccation of the soil.

KEY PLAN



Item	Works	Comments/Mitigation
6	Landscaping	<p>An internal path within this site area will run within the calculated root zone of Tree No. 1 &amp; along by Tree Nos. 4 – 7 and it is proposed to route new shared surface paths leading from the pedestrian entrance northwards to the junction with 'Old Bray Road' and this will be routed on the grass verge between these trees and the boundary wall with the 'AIB Bank'.</p> <p>These paths will be located within the root zone of Tree Nos. 1, 6 &amp; 7 and these sections of path are to be installed using a No-Dig method incorporating a 'CellWeb' product to provide support and to carry the path surface over the existing ground levels containing the roots of these trees.</p> <p>The root zones of these trees are to remain closed off from the surrounding works by the tree protection fencing until such time as the ground protection has been put in place in accordance with Arboricultural Guidance Note 12 – 'The Use of Cellular Confinement Systems Near Trees', A guide to good practice. See general installation arrangements under 6.8.0 of this report.</p> <p>Around the site area, the existing ground levels within the RPA (<i>Root Protection Area</i>) of the trees are to be retained and incorporated into the finished landscaped development. Where changes in levels occur, these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.</p> <p>All soft and hard landscaping within the RPA of the trees to be retained are to be carried out manually and the soil levels are not to be lowered or raised resulting in root damage to the trees. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of 'Sections 8 of BS5837 2012' are to be adhered to during the landscaping within the RPA's of these trees.</p>

Source: Extract of Comments/Mitigation from Arboricultural Assessment produce by Arborist Associates Ltd.



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