



SHELDON HOUSE

Landscape Report
15.02.2023
Rev 4

Design Approach

Creating a new sustainable landscape based on the integration of social interaction and biodiversity

The long lasting quality of the landscape design will ensure the creation of successful streets and spaces within this neighbourhood.

Meeting the aspirations of the architectural solution, the landscape scheme will contribute significantly to the quality of life, for both the existing local community, and future residents. In this regard we have paid great attention to both the physical appearance and human scale issues. It has been our overall objective to create a solution that achieves a sense of belonging to its time, its place and its community as follows:

1. Belonging to the time: promoting a contemporary solution fit for the twenty first century;
2. Belonging to the place: understanding and responding to both the wider context and local townscape, promoting an accessible, legible, active and sustainable design; and
3. Belonging to the community: appreciating the human scale requirements of the community, from social interaction, safety and security, activity and amenity; with the intention of creating spaces for all age groups and all seasons.



Design Principles

The design principles of the Landscape Masterplan respond to the site analysis and look to solve the issues raised. The overriding objective for the landscape is to create a safe, meaningful amenity whilst improving the ecological aspects of the site.

This will be achieved with a landscape design that adopts the following principles:

- Create a landscape setting that contributes to a healthy living environment, focussed on the users well being
- Promote sustainability and ecological value within the design of all the spaces and areas, exploring ways of incorporating native planting wherever possible
- Provide a stimulating and safe playspace where children can interact with nature
- Identify an appropriate character for the landscape that incorporates contemporary design

The three adjacent images summarise this approach, creating a new safe homezone, active playspace zone and a biodiverse habitat.






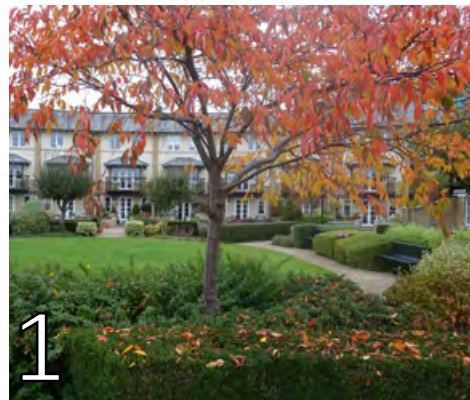
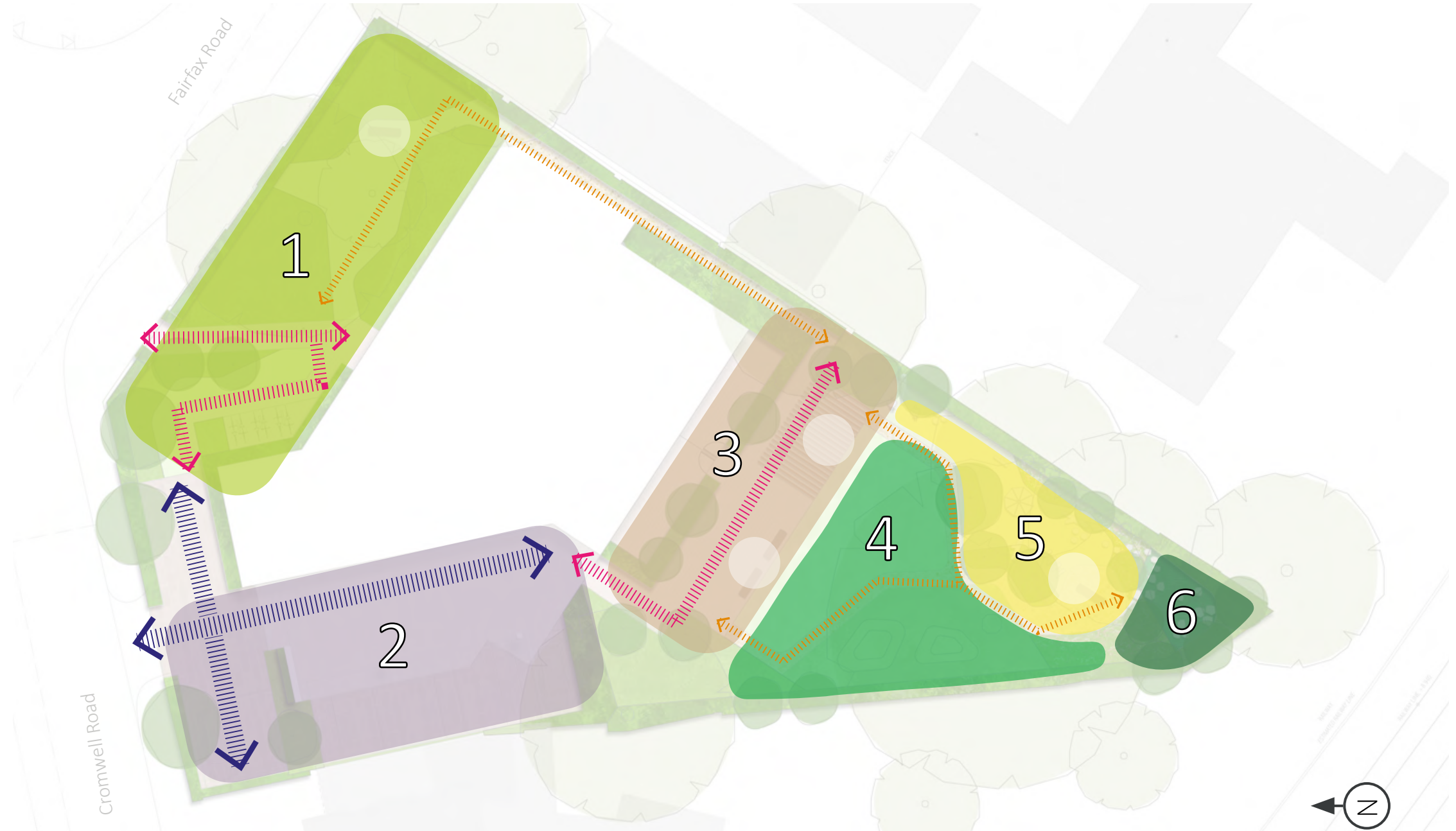
Design Concept

The concept of the landscape masterplan formulates an appropriate response to the setting whilst creating a cohesive approach.

There are 6 distinct areas:

-  1. Front Garden
-  2. Courtyard and Parking
-  3. Terrace
-  4. Lawns
-  5. Play
-  6. Wildlife

-  Roads
-  Footpaths
-  Informal Footpaths



Landscape Masterplan

The core aim of this strategy is to create a new safe and inviting landscape that serves its future residents.

A legible and clear streetscape provides safe access into the site, whilst lush and diverse planting promotes biodiversity and ecological enhancements.

Our Masterplan celebrates the creation of the following spaces that will in turn be described in detail within this chapter.

Key:

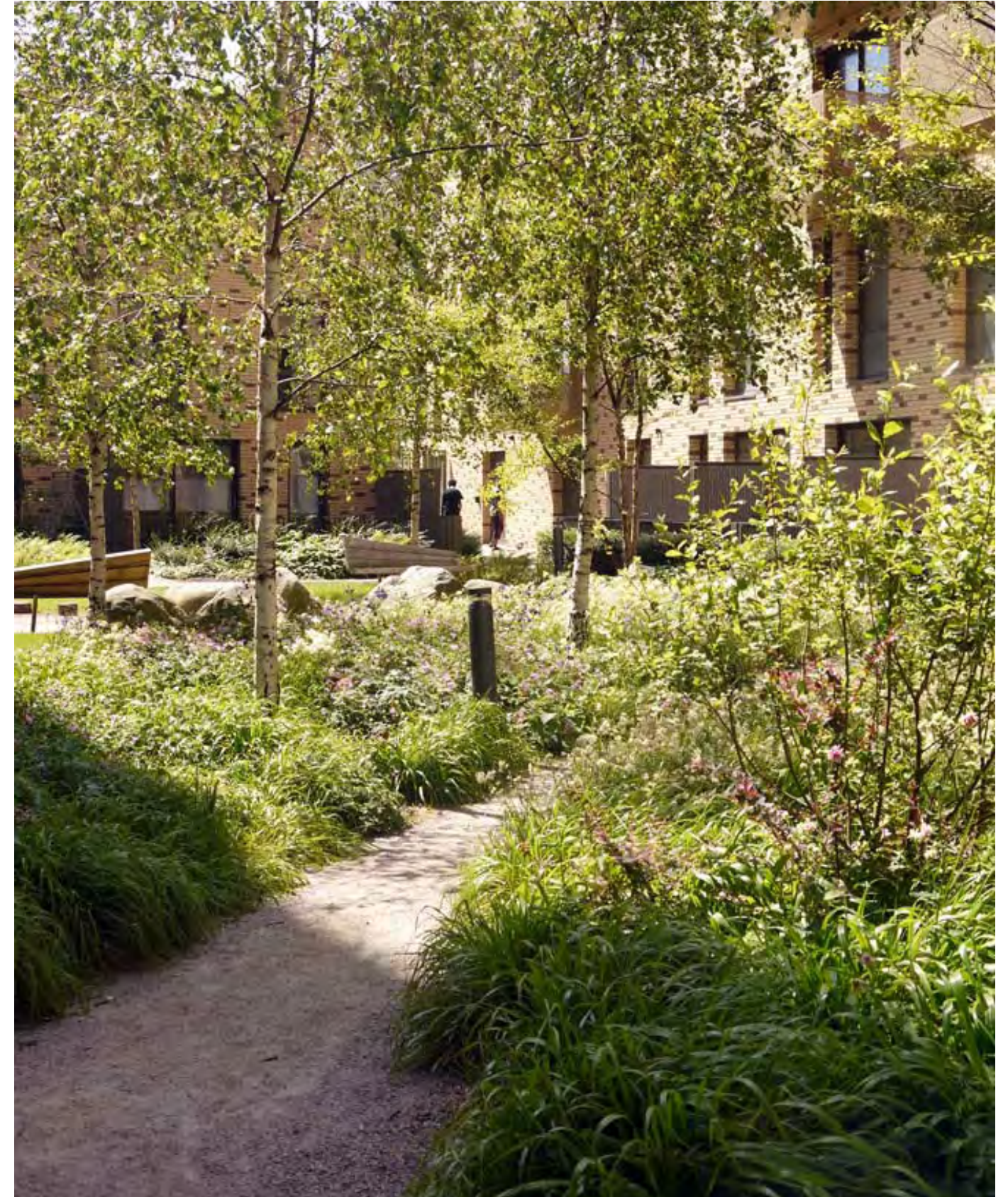
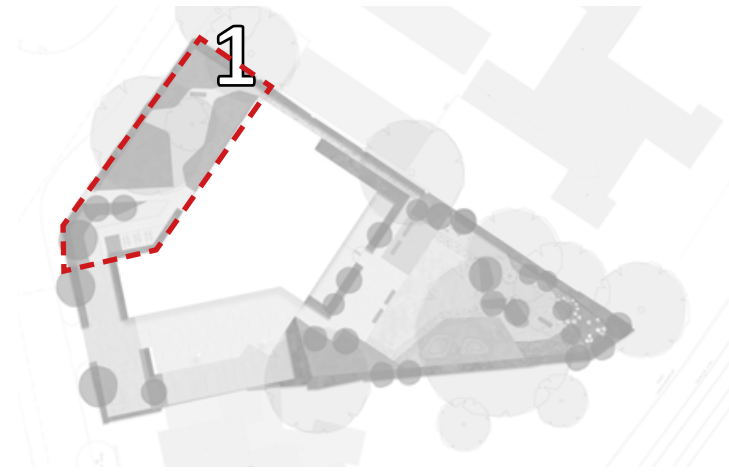
- 1. Front Garden
- 2. Courtyard and Parking
- 3. Terrace
- 4. Lawns
- 5. Play
- 6. Wildlife



1. Front Garden

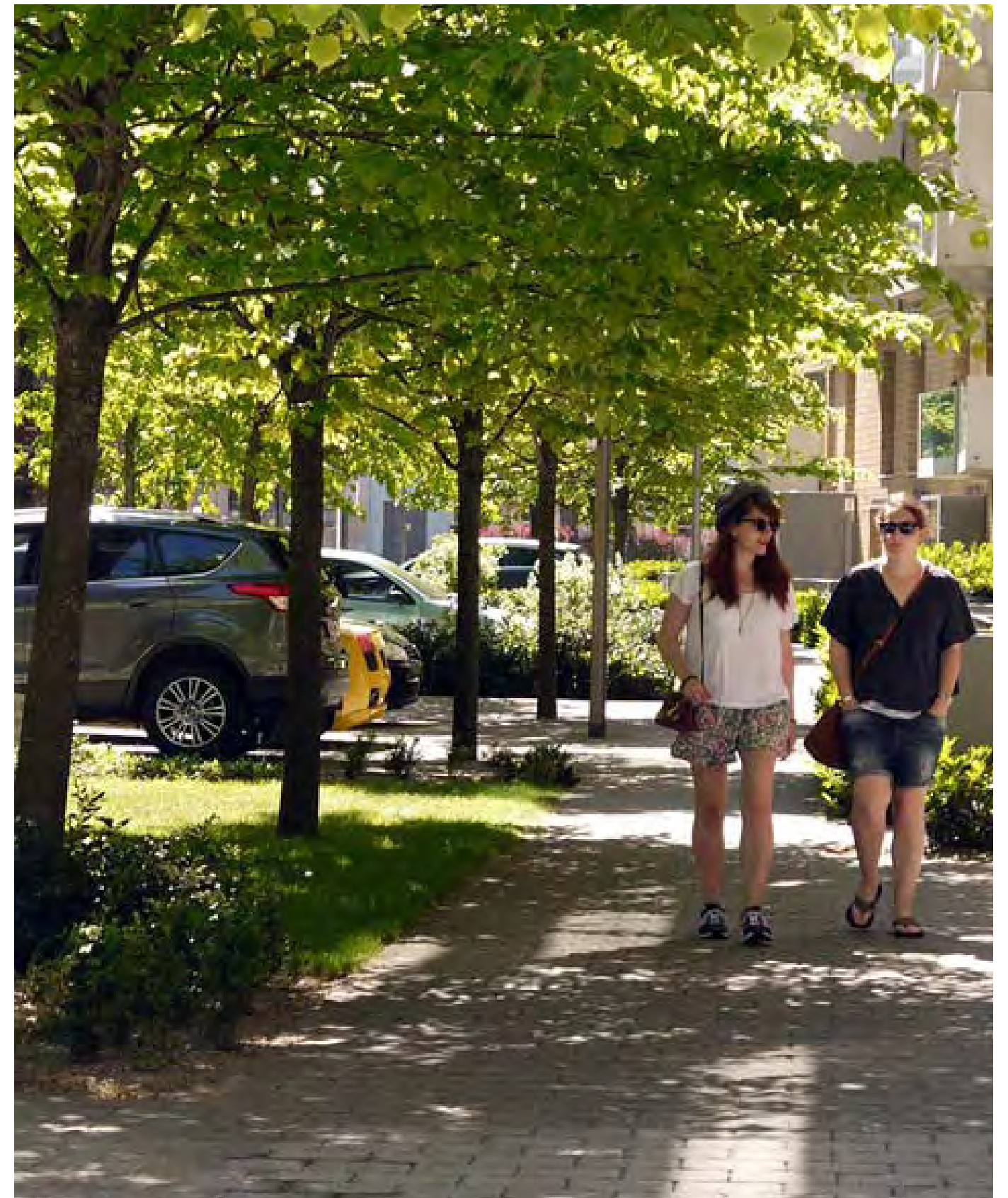
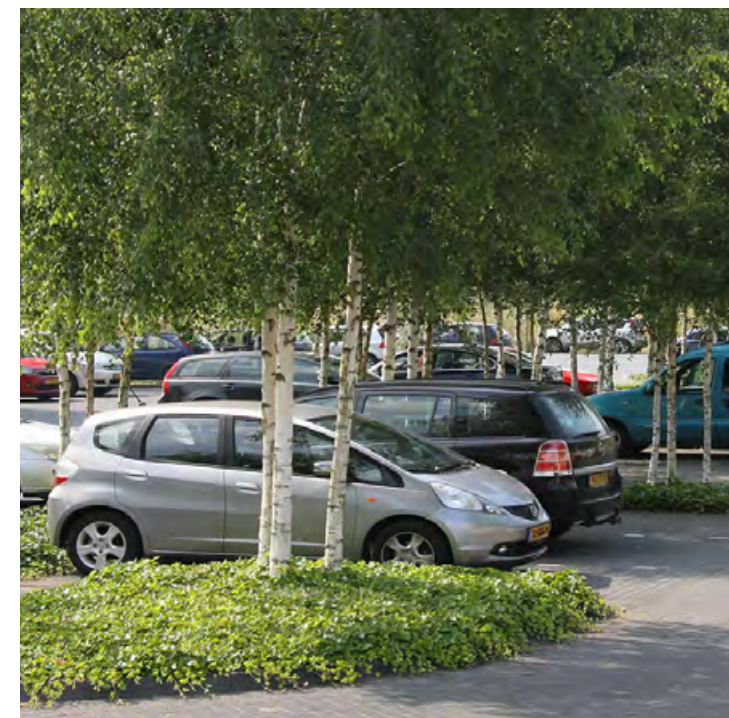
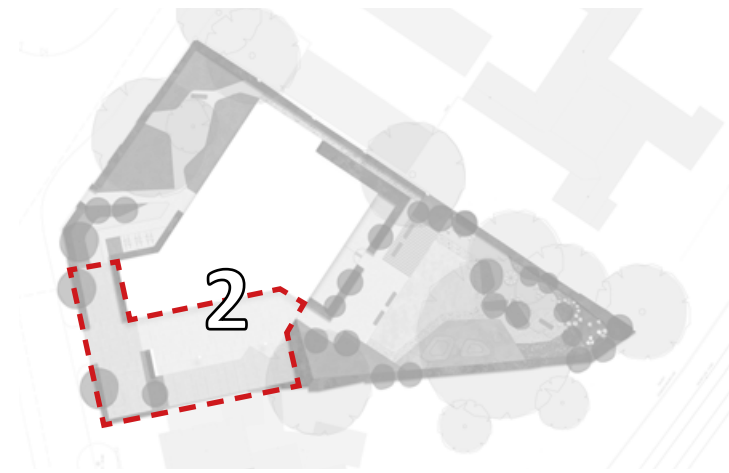
The Front Garden space will be characterised by a small lawn with a dedicated seating area underneath the existing mature trees. It will be an informal space blooming with flowering bulbs in spring that is enclosed with wide planting beds and a native hedge border where one can relax or wait in front of the building. The entrance benefits from the visitors' cycle stand area and a clear footpath to the main door.

A generous green buffer to the building elevation will provide a sense of privacy and the new trees will emphasise the main pedestrian route.



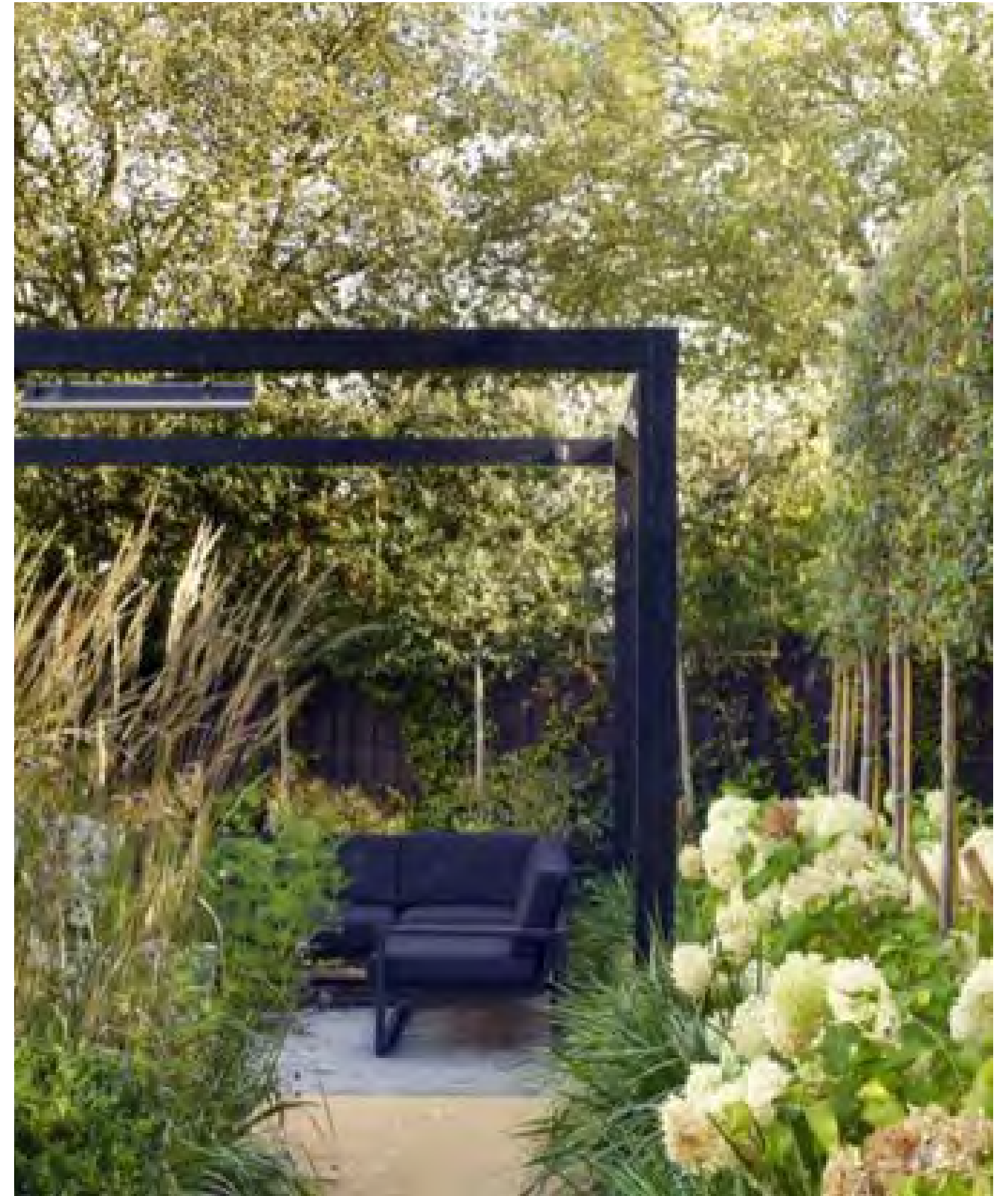
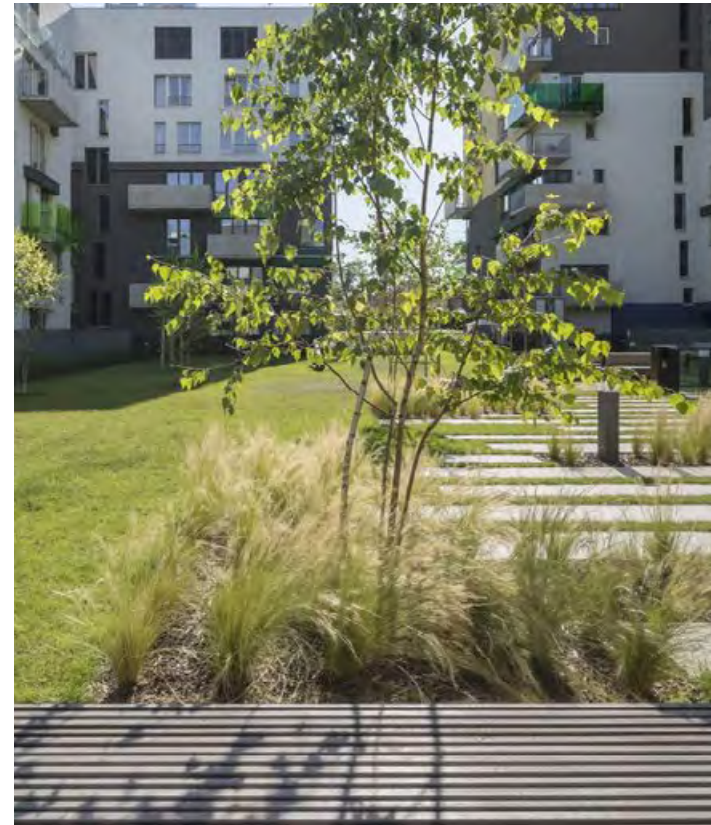
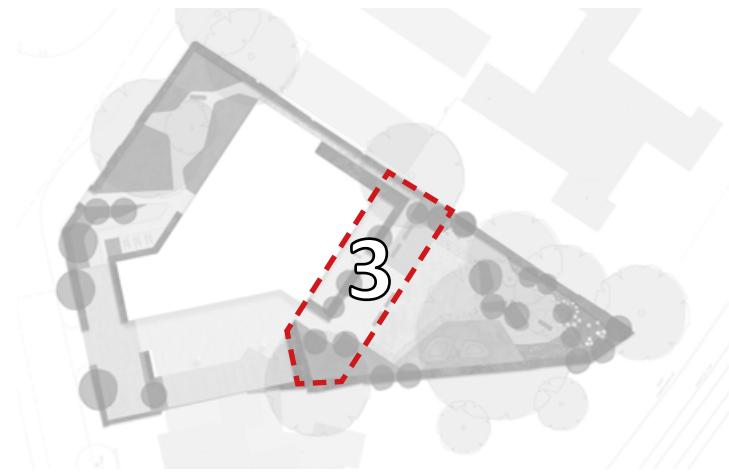
2. Courtyard and Parking

The parking provides residents and visitors with a substantial number of spaces and a delivery bay placed at the front of the building. A change of paving and a linear planting strip are there to create another threshold to the garden area, emphasizing the shared character of that space, where pedestrians are prioritised. New tree planting frames the entrance to the parking and lush planting provides a safe buffer to the garden. Simple, permeable paving materials create an elegant transitional space that helps in wayfinding.



3. Terrace

The Terrace is located at the back of the residential building, facing and overlooking the garden. A pergola will provide residents with a new seating space underneath its canopy that is complemented with another bench directly facing the formal lawn. The terrace is enclosed with planting on both sides and ornamental shrub planting at the back, which serves the purpose of a green buffer to the private gardens. A change in paving and a fence clearly delineates private from public space. Flowering magnolia trees will create a magical atmosphere at the terrace area in early spring, encouraging residents to use the space as soon as the weather starts to get warm and they can sit in the sun overlooking the garden that slowly wakes up to life.



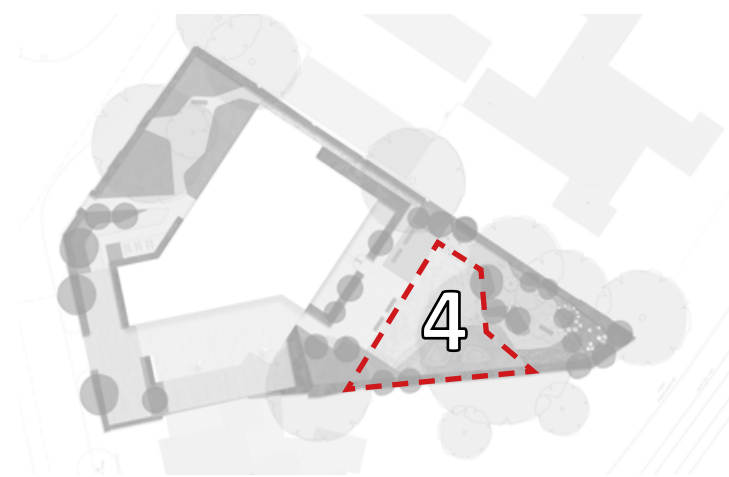
4. Lawns

The lawn space consists of two areas.

One is the formal lawn with maintained grass providing open space in the sun that can be used and interpreted in any way that the residents wish to.

The other one is the informal lawn full of wildflowers popular with pollinators. Two mounds will make the terrain more interesting and encourage children to climb on and use this space as an informal play area. It is an open and sunny spot that can be used either for sports or for a relaxing picnic.

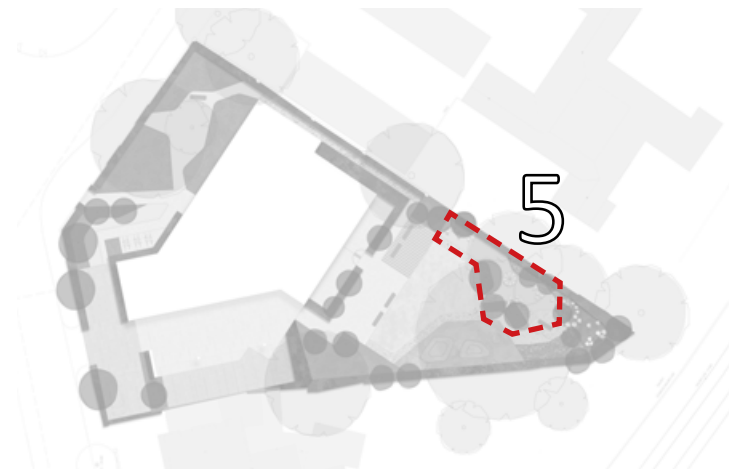
Both spaces are connected with an informal resin-bound gravel path.



5. Play

The play area will consist of exciting natural play elements that will stimulate the imagination of children of all ages. It incorporates plenty of sensory planting that will encourage them to interact with nature and the planting itself creates a variety of open and slightly enclosed spaces for the kids to enjoy. They will be able to challenge themselves as well as take a moment to rest.

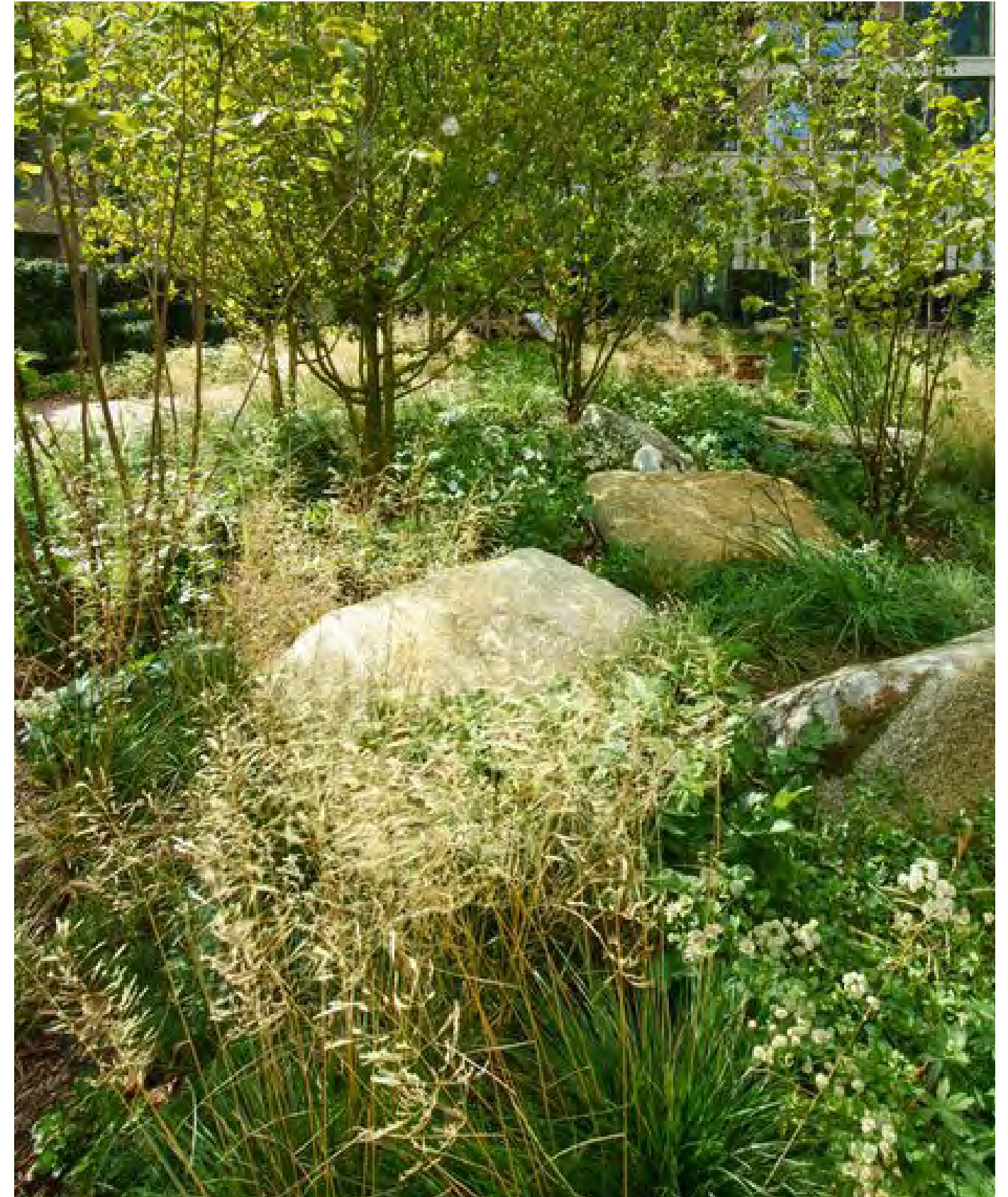
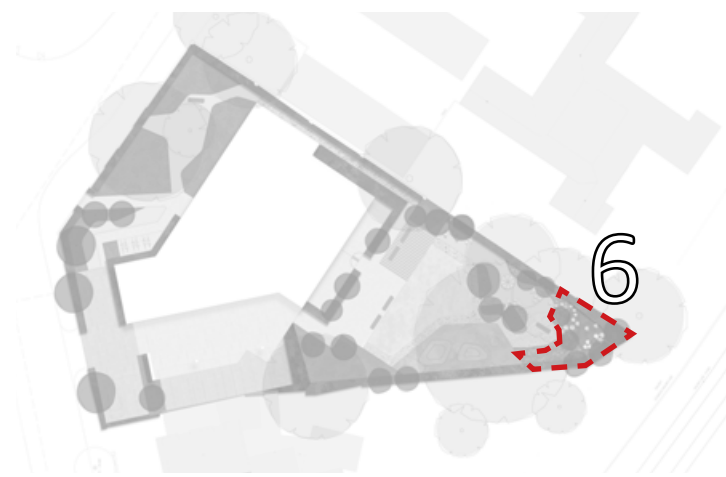
The space can be overlooked from the terrace as well as the small seating area right next to the play that allows a comfortable supervision of the children in a green setting.



6. Wildlife

The Wildlife area consists of a generous buffer from the railway tracks. Native shrubs and planting will attract wildlife, enhance the biodiversity of the site while also providing a rainwater run-off basin in a potential event of a heavy rain.

It will benefit insects and small mammals by providing them with food and shelter, a safe space among tall grasses and bushy planting where they can establish their habitat. It will also support birds by providing them with area for nesting.



Tree Planting Strategy

The tree planting strategy will help to reinforce the spatial hierarchy and highlight different characters throughout the site.

The mix of native species will help the local wildlife and boost biodiversity of the site, while more ornamental, flowering trees will create a magical atmosphere to the more formal areas adjacent to the building.

We are proposing to plant a variety of species in different sizes, multi-stems as well as a single stem, which each will contribute to create different settings and habitats.

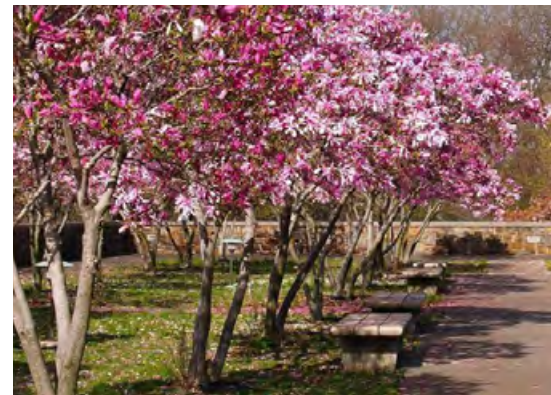
-  Existing trees
-  Acer platanoides
-  Amelanchier Lamarckii
-  Magnolia 'Jane'
-  Prunus avium 'Lapins'
-  Betula pendula
-  Corylus avellana
-  Sorbus aucuparia
-  Salix purpurea



Sorbus aucuparia (Rowan)



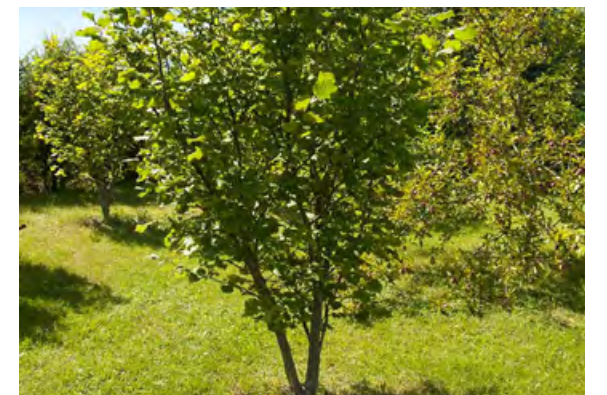
Acer platanoides (Maple)



Magnolia 'Jane'



Betula pendula (Birch)



Corylus avellana (Hazel)

Planting Strategy

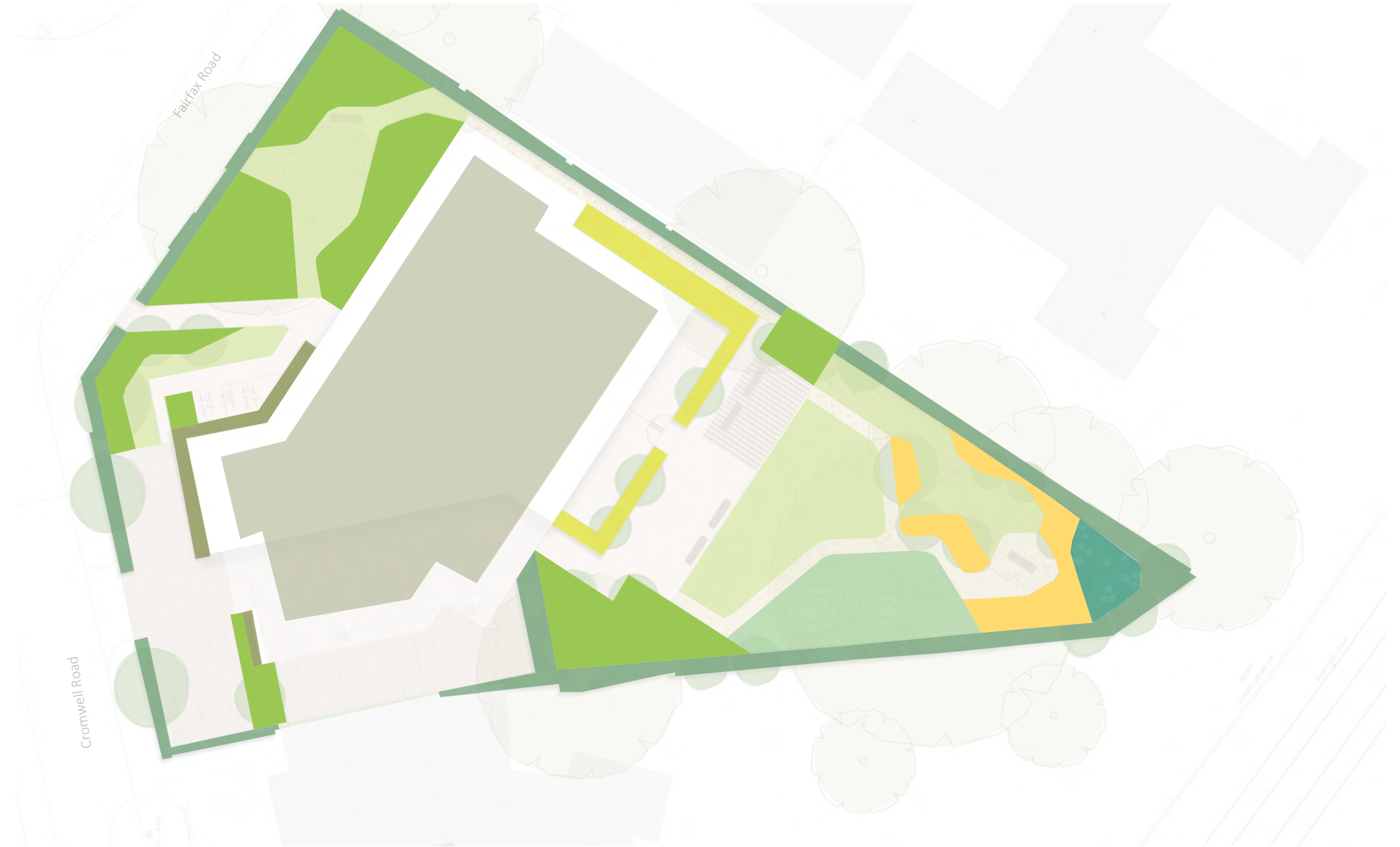
Hedge and shrub planting is a crucial element to the success of the new scheme. Well arranged, maintained and cared for plants give a good impression and increase the value for biodiversity. Each space is defined by planting most appropriate for it.

The building surrounds and arrival will be defined by a more formal and maintained planting style, while the edges of the site will be planted with mainly native shrubs and trees.

We are proposing to use a variety of trees, shrubs and perennials across the entire masterplan to create different atmospheres and enhance the experience throughout the seasons whilst boosting biodiversity and a variety of habitats for wildlife.

The plants we choose are easy to maintain, offering all-year interest through colour and texture.

-  Shade tolerant lawn with bulbs
-  Groundcover mix
-  Native hedge
-  Informal lawn with wildflowers
-  Ornamental shrubs
-  Wildlife garden
-  Climbers
-  Herbaceous perennial planting (sensory planting)
-  Green roof



Planting Strategy

The planting strategy includes species valuable to wildlife that have been highlighted in the Preliminary Ecological Appraisal (March 2021) and include:

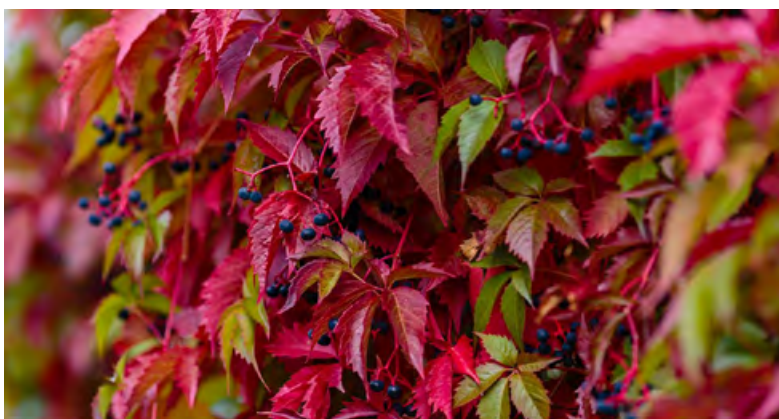
- native seed/fruit bearing species to provide foraging habitat for mammals and birds (*Crataegus monogyna*, *Rosa canina*, *Ligustrum vulgare* etc.)
- nectar-rich species to attract bees, butterflies and moths (*Lavandula*, *Viburnum davidii*, *Mahonia*, *Hydrangea* etc.)
- wildflower grassland margins to provide larval food for caterpillars and to attract butterfly and moth species such as wall and small heath (*Festuca glauca*, *Deschampsia flexuosa*, *Dactylis glomerata*)
- species which attract night flying insects which will be of value to foraging bats (*Oenothera biennis*, *Lonicera periclymenum* and *Pulicaria dysenterica*)

Informal lawn with wildflower mix



Rhinanthus minor, *Achillea millefolium*, *Carex divulsa*, *Malva moschata*, *Plantago lanceolata*, *Dipsacus fullonum*, *Centaurea nigra*, *Oenothera Biennis*

Climbers



Hedera helix 'Green riple', *Parthenocissus quinquefolia*, *Clematis* 'Beauty of Worcester', *Lonicera periclymenum*

Groundcover mix



Persicaria affinis 'Darjeeling Red', *Pachysandra terminalis*, *Bergenia* 'Morgenröte', *Hebe pinguifolia* 'Pagei', *Euphorbia amygdaloides*

Ornamental shrubs



Lavandula angustifolia, *Hebe* 'Champagne', *Viburnum davidii*, *Mahonia eurybracteata* 'Soft Caress', *Hydrangea serrata* 'Bluebird'

Sensory planting



Stachys byzantina 'Silver Carpet', *Rosmarinus officinalis*, *Helianthus*, *Cosmos atrosanguineus*, *Pennisetum alopecuroides*, *Pelargonium crispum*

Native hedge



Crataegus monogyna, *Ilex aquifolium*, *Rosa canina*, *Fagus sylvatica*, *Carpinus betulus*, *Euonymus europaeus*, *Ligustrum vulgare*

Wildlife garden



Briza media, *Luzula sylvatica*, *Dryopteris filix-mas*, *Galium odoratum*, *Ajuga reptans*, *Rosa rugosa*, *Pulicaria dysenterica*, *Festuca glauca*, *Deschampsia flexuosa*, *Dactylis glomerata*

Shade tolerant grass with bulbs



Galanthus nivalis, *Crocus tommasinianum*, *Narcissus pseudonarcissus*

Urban Greening Factor

The result of The Urban Greening Factor calculations conducted by Clive Chapman Architects for Sheldon House is **0.68**, which exceeds the residential minimal target factor of 0.4.

RESIDENTIAL SITE			
Surface cover type	Factor x	Area	Total
Semi-natural vegetation (e.g. trees, woodland, species-rich, grassland, maintained or established on site).	1.0 x	60m ²	= 60.0
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1.0 x	0m ²	= 0.0
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8 x	0m ²	= 0.0
Standard trees planted in connected tree pits with minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8 x	441m ²	= 352.8
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7 x	361m ²	= 252.7
Flower-rich perennial planting.	0.7 x	20m ²	= 14.0
Rain gardens and other vegetated sustainable drainage elements.	0.7 x	16m ²	= 11.2
Hedges (line of mature shrubs one or two shrubs wide).	0.6 x	194m ²	= 116.4
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6 x	147m ²	= 88.2
Green wall – modular system or climbers rooted in soil.	0.6 x	0m ²	= 0.0
Groundcover planting.	0.5 x	220m ²	= 110.0
Amenity grassland (species-poor, regularly mown lawn).	0.4 x	196m ²	= 78.4
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3 x	0m ²	= 0.0
Water features (chlorinated) or unplanted detention basins.	0.2 x	0m ²	= 0.0
Permeable paving.	0.1 x	367m ²	= 36.7
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone) & buildings / outbuildings.	0.0 x	176m ²	= 0.0
Total			= 1120.4
Site Area		/ 1649m²	
Urban Greening Factor			= 0.68

RESULTS

Residential Urban Greening Factor = 0.68

LONDON PLAN 2021

Residential Target Factor = 0.4















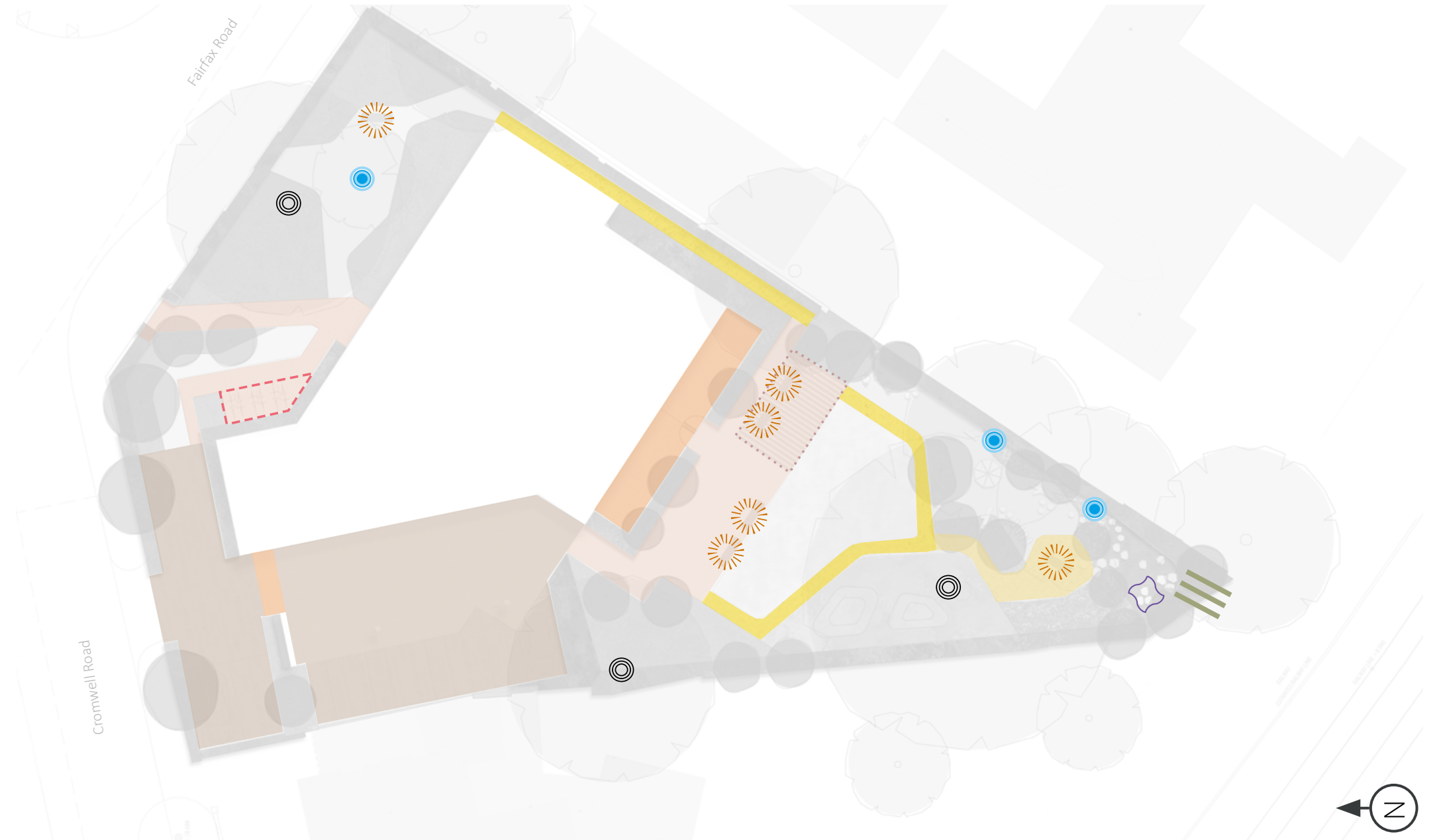
Hardscape Strategy Including Biodiversity Measures

The colours, sizes and materials have been selected to create a cohesive masterplan whilst providing a clear and legible hierarchy of spaces. Materials will be used in such a way to help reinforce the design concept, create distinct spaces and support the interdependence of the character areas.

Block paving will lead to the main entrance and it will also be used for the terrace area at the back of the building. Smaller sized units are used to differentiate private from public space and will be used as private garden paving and as a means to create a new threshold to the site, changing the character from public to semi-public. Resin-bound paths will lead through the garden in an informal and naturalistic way.

Biodiversity measures have been planned in line with the Preliminary Ecological Appraisal (March 2021) for Sheldon House and include creation of: hedgehog pass, bat boxes, nest boxes and deadwood habitat.

-  Permeable block paving
-  Block paving type 1
-  Block paving type 2
-  Resin-bound gravel
-  Self-binding gravel
-  Bench
-  Cycle stands
-  Pergola
-  Bat box (installed at least 4m above ground)
-  Nest box
-  Hedgehog pass under fence
-  Deadwood habitat



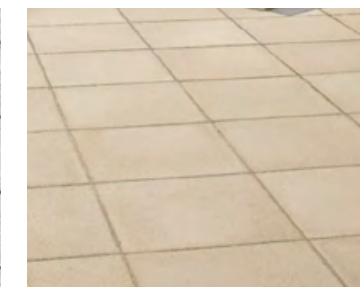
Pergola



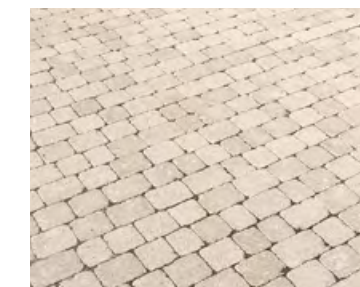
Bench



Permeable block paving



Block paving type 1



Block paving type 2



Resin-bound gravel



Self-binding gravel

Playspace Strategy

PLAY AND CHILD OCCUPANCY ASSESSMENT

Following the Council's child yield calculator as set out in the Planning Obligations SPD the following results were obtained:

GLA Population Yield Calculator

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	0	0	0	0
Social Units	16	8	3	0

Total Units: 27

Geographic Aggregation: Outer London

PTAL: PTAL 0-2

Notes

Sample size of 24 sites
 Shaded cells require user input
 Select both geography and PTAL
 For developments in Outer London with PTAL 5-6 use [London/PTAL 5-6] or [Outer London/3-4] to calculate yield

Yield from Development (persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	0.0	8.0	8.0
Ages 5, 6, 7, 8, 9, 10 & 11	0.0	5.8	5.8
Ages 12, 13, 14 & 15	0.0	2.2	2.2
Ages 16 & 17	0.0	1.1	1.1
18-64	0.0	38.1	38.1
65+	0.0	0.9	0.9
Total Yield	0.0	56.1	56.1

Play Space Calculator

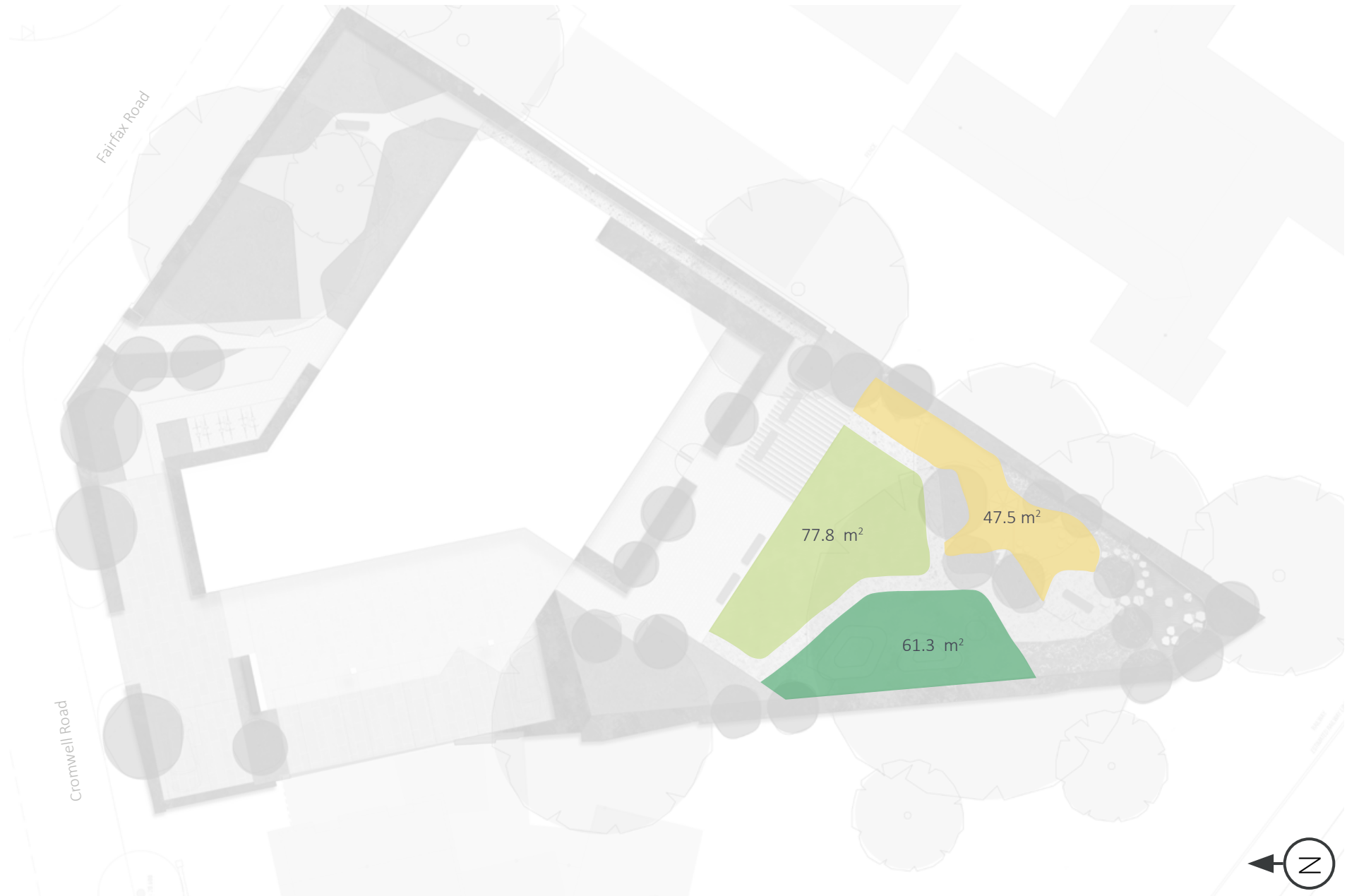
Total Children: 17.1

	Benchmark (m ²)	Total play space (m ²)
Play space requirement	10	170.9

The yield calculator estimates 17.1 total children that will occupy this development. As this figure is higher than 10, a dedicated on-site play space is required and will be provided, with a minimum amenity area of 170.9m².

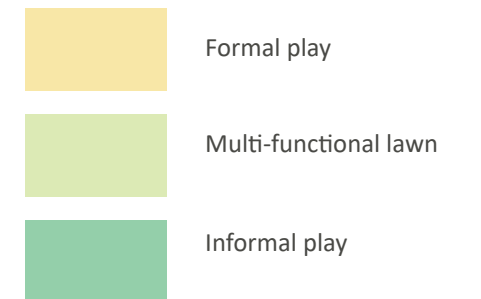
Beyond this, local facilities have been assessed to understand the availability of playspace, and whether they are within reasonable walking distance for children. The guide travel distance is 100m for under 5's, 400m for 5-11 year olds and 800m for 12+.

Extract from the 'Sheldon House Redevelopment, Public open space assessment' (January 2023).



The space for play that we are providing consists of 3 areas of different character and possibilities of varied form of play.
 Formal play- 47.5 m²
 Lawn- 77.8 m²
 Informal play- 61.3 m²

The joined playspace provision is 186.6 m², which exceeds the minimum area of 170.9m².





Outerspace

Landscape Architects
Urban Designers
Community Enablers

T 020 8973 0070
E info@outerspaceuk.com

outerspaceuk.com

The Boathouse Design Studio

27 Ferry Road
Teddington

TW11 9NN

