

5.1 Landscape Objectives

The overall landscape proposals for the Wensley Road Regeneration are intended to significantly improve the quality of the open space, legibility of pedestrian and cycle routes to create a safe and accessible spaces for all users, in addition to creating improved connections to green spaces in the wider area.

Phase 1

The approved phase 1 landscape scheme (ref:200122) proposes a wide range of landscaping works. The existing play provision has been expanded and redesigned to provide play equipment for all ages. The existing mature trees in centre of the site will be retained and accompanied by new extensive succession planting that will continue to enhance the natural character of the space over time.

Phase 2

The second phase of development at Wensley Road addresses the conditions around the existing three existing buildings. A sensitive and considered design approach has been taken to create safer, more approachable spaces, that provide sufficient definition to give existing residents ownership, balanced with opportunities for imaginative play and flexible usage.

Phase 1 - Landscaping Key Features

- ① Activity Trail
- ② 5 -11 year old's play area
- ③ Under 5's play area
- ④ Outdoor gym
- ⑤ Retained Mature Trees

Phase 2 - Landscaping Key Features

- ① Defined, user friendly routes
- ② Multi-use space & seating area
- ③ Buffer Woodland Planting
- ④ Cycle Storage

Wensley Road Regeneration - Landscape Masterplan



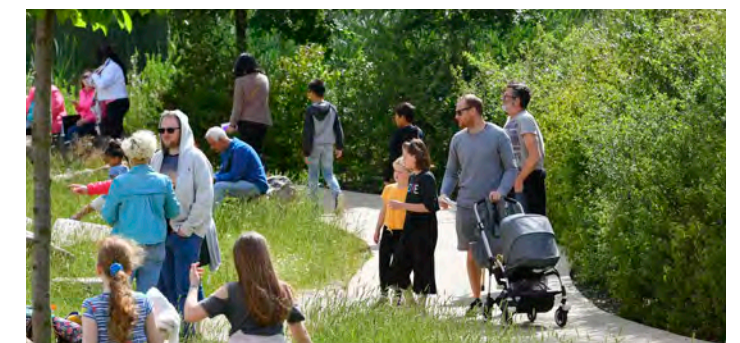
Key Landscape Principles



1. Promoting good access from Wensley Road to existing green and active travel networks



2. Enhancing nature at Wensley Road through a nature recovery network and green corridors



3. Make Wensley Road a great place to live for families with safe connections to greenspace



4. Create a fun and stimulating natural play space with activities for all ages

5.2 Landscape Design Phase 1

The phase 1 approved design intends to knit together the existing spaces which lack coherence to create a vibrant central green space featuring exciting natural play and biodiverse planting. Streets have been designed to accommodate pedestrian crossings and enable access into the site.

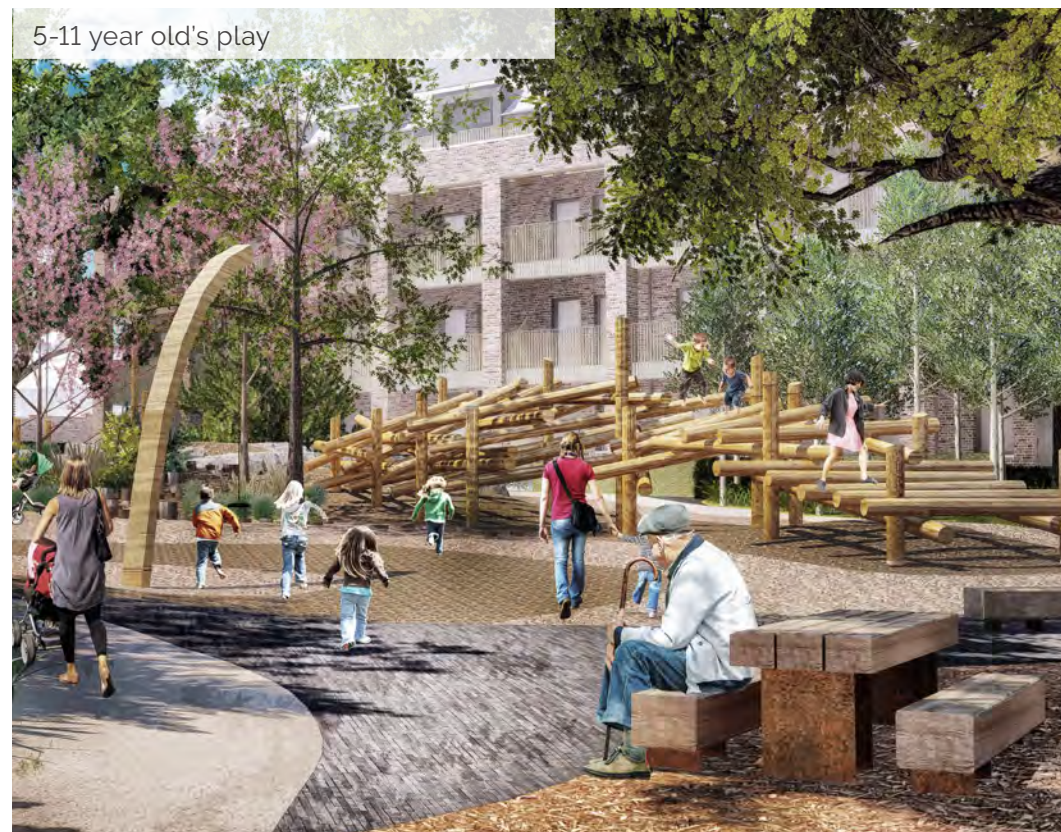
Central Garden Space

A key component of the phase 1 scheme is the new, improved central garden space, which provides a range of multi- generational facilities and spaces. In addition to integrating the existing category A mature trees, new planting is also incorporated within this area.

In order to retain the central garden as the focal point of the site, a complimentary but more slightly more modest approach to the landscape design is intended for the garden areas adjacent to the existing towers.

Tree Planting Strategy

An extensive tree planting strategy is proposed as part of the phase 1 proposal, which includes the implementation of street trees, and new 'groups' of a variety of species which are disease resistant and drought tolerant. Proposed specimen trees retain the character and habitat of the current landscape.



5.3 Existing Landscape

Site Context

Wensley Road sits between two landscape typologies; the site is peri urban and borders on a rural landscape.

Sitting just outside of the city centre the site has the potential to be incredibly well connected to both the urban centre and the wider natural landscape surrounding Reading.

The site benefits from its close proximity to Cycle Route R6: Meadway, Southcote & Coley Park to Reading Town Centre. Each of the Reading cycle routes terminates in central Reading, linking through a network of central cycle links to form a network encompassing the Reading Borough Council area and beyond.

Through both the phase 1 and phase 2 proposals, the intention is to strengthen these connections through an improved path network within the site, and signage and wayfinding at key node / orientation points.

Enhancing Nature

The site is adjacent to some significant areas of green infrastructure within Reading, not least of which is the Fobney Island Nature Reserve. This is an area of significant ecological and habitat value.

The site will look to be a continuation of this biodiversity rich landscape and become a vital link in an expanded green network.

This will be achieved through creating a range of habitat types within the site. A more varied mix of native tree species will be introduced with both fruiting and flowering species. A more varied mix of grassland including wildflower meadow and species rich grassland will also be introduced.



5.3 Existing Landscape

Currently the landscape at Wensley Road provides a disjointed and under utilised series of public spaces with little clarity on wayfinding and connections to adjacent green spaces.

However there are positive features to the site, namely that the green space features several existing mature Turkey Oaks which provide shade and habitat for many species, in addition to a well used play facility in the centre of the site.

Within the three sites in phase 2 the majority of the existing space is poor quality lawn with no defined usage. It does not include any pathways, street furniture or street lighting. It is understood from feedback received during the phase 1 consultation events that these spaces are very rarely used.

To the front elevation of each of the buildings there is a coloured tarmac strip approximately 1m wide and knee rail to provide a buffer between the ground floor accommodation and the footway that runs alongside the existing parking court.



5.4 Design Guidance and Parameters

Through a series of design development workshops with the RBC Client Team and RBC Housing Management Team, as well as presentations to Local Ward councillors a number key issues and constraints were identified in relation to design of the amenity space around the perimeter of the existing buildings

Key Issues:

- Antisocial behaviour
- Contraband items such as drugs and weaponry concealed in planting
- Rodent infestation
- Dangerous usage of premises i.e. Items being thrown from tower windows towards perimeter of tower blocks requiring 2m exclusion zone
- It may be challenging to manage controlled access to the gardens

Design Considerations:

- Low level planting and planting in close proximity to the existing buildings should be avoided to reduce rat burrowing opportunities.
- The overall design of the spaces should be kept relatively simple and flexible, to keep the primary focus on the central greenspace but also create a calmer environment by contrast.
- A balance between hard and soft landscape treatments, using high quality, long last materials to minimise the long term maintenance requirements.
- Combine appropriately located street lighting and clear stem planting to ensure spaces feel safe and well overlooked.

Tree Removal & Replacement

As result of the reconfiguration of the open space as part of the approved phase 1 masterplan proposal there is a requirement to remove a total of 66 individual trees and 209 trees within groups. Therefore it is proposed that across both phases of the development in excess of 279 trees will be reprovided on the site. This is shown in the table below.

Separate to Wensley Road phase 1 and 2 proposals, three Turkey Oak trees are proposed for removal by Reading Borough Council due to health and safety reasons, not associated with the proposed development. However the existing category A mature trees in the central green space will be retained.

The approved phase 1 tree retention and removal plan is included within the appendices.

Climate Emergency Policy

The landscape design proposals for both phases 1 and 2 of the Wensley Road regeneration have been developed in accordance with the RBC emerging Climate Emergency Policy to ensure the scheme will align with current policy and targets to tackle the climate crisis. Key sections of the policy have been extracted below:

"Nature: our aim is that by 2025 the people of Reading will see changes to the management of open spaces and the green links between them that store more carbon as well as giving shade for hot summers, corridors for wildlife and some flood control. New developments will include biodiversity net gain and water management, and there will be exemplar sites showing how to change planting and soil management around buildings to mitigate the impacts of climate change" - Page 5

"Ensuring that new development delivers a 'net gain' for the environment: as Reading grows we need to ensure that national and local planning policies requiring a 'net gain' for biodiversity are observed, so that new and restored habitats can help us mitigate the causes and adapt to the impacts of climate change" Page 49

"Creating and enhancing wildlife corridors through Reading: by joining up natural and seminatural habitats we can increase the value of Reading's greenspaces as carbon stores and sinks,as well as making it easier for people and wildlife to adapt to climate impacts" Page 50.

Number of tree to be removed - Phase 1 & 2	
	66 individuals (34 C Cat, 22 B Cat, 10 U Cat)
	209 trees from within 13 groups (169 C Cat, 40 B Cat)
Total	275
Note:	It was agreed following a site meeting between ACD Environmental (Appointed Phase 1 Arboriculturalist) and the RBC Natural Environment Officer that Turkey oaks T87, 90 & 93 would be shown to be removed on the approved phase 1 application drawings as they are due to be felled for H & S reasons unrelated to development. However these three trees are not included within the total number of trees to be removed.
Number of Proposed Trees - Phase 1 & 2	
Phase 1	209
Phase 2	70 (minimum)
Total Proposed Trees	279

Phase 1 and Phase 2 Tree Planting Summary

5.5 Open Space Strategy

In order to facilitate the proposed improvements to the existing buildings including the extended ground floor entrance and refuse store; increased external wall insulation and increased number of external cycle stores, there is a slight reduction in terms of the overall open space area. This is summarised in the table below and shown on drawings 0610,0611,0612 in the appendices.

The majority of the open space that is built on is the land which is currently occupied by the external bins and has low amenity value. It will now be included within the curtilage of the building thus facilitating the provision of a new entrance and enlarged refuse store which will provide a significant improvement in terms of refuse facilities. While increasing the number of safe cycle storage will be a huge benefit to existing residents and encourage sustainable travel.

The overall landscape proposals will significantly improve the quality of open space from the existing, with more clearly defined areas and wayfinding which encourage increased usage of these areas.

When the phase 1 planning application was submitted, it was indicated that the landscaped areas around the base of the existing buildings could become private, communal gardens for the existing residents.

However following further discussions with the RBC housing management team several concerns were identified regarding a completely private approach. In particular it was agreed that a secure perimeter would be hard to manage, and control, as well as potentially create a refuge for tenants engaging in anti-social and illegal activity.

It is therefore proposed to retain these spaces within the public realm and accessible to the whole community. However the design of the layout and the perimeter treatments have been carefully considered to ensure that the existing residents of each of the three buildings feel a sense of ownership over these spaces.

	193 Wensley Court	203 Irving Court	193 Riversley Court
Site Area	1578.5m2	1121.0m2	1924.5m2
Existing			
Existing building GEA	473.0m2	471.7m2	500.1m2
Existing Open Space	1105.5	649.3m2	1424.4m2
Proposed			
Proposed Additional Building GEA	74.1m2	73.8m2	45.4m2
Proposed Additional GEA (Cycle Stores)	37m2	29m2	37m2
Total building / storage footprint	585.1m2	574.5	545.5
Proposed Open Space	993.4m2	546.5m2	1342.0m2
Reduction in Open Space	111.1m2	102.8m2	82.4m2
Total Reduction in Open Space	280.3m2		

Summary of Open Space areas



Proposed Open Space Diagram
Wensley Road Phase 1 & 2

- Legend
- Proposed public open space
 - Proposed private gardens
 - Proposed entrance Extension
 - Cycle Stores

5.6 Public Garden Typology

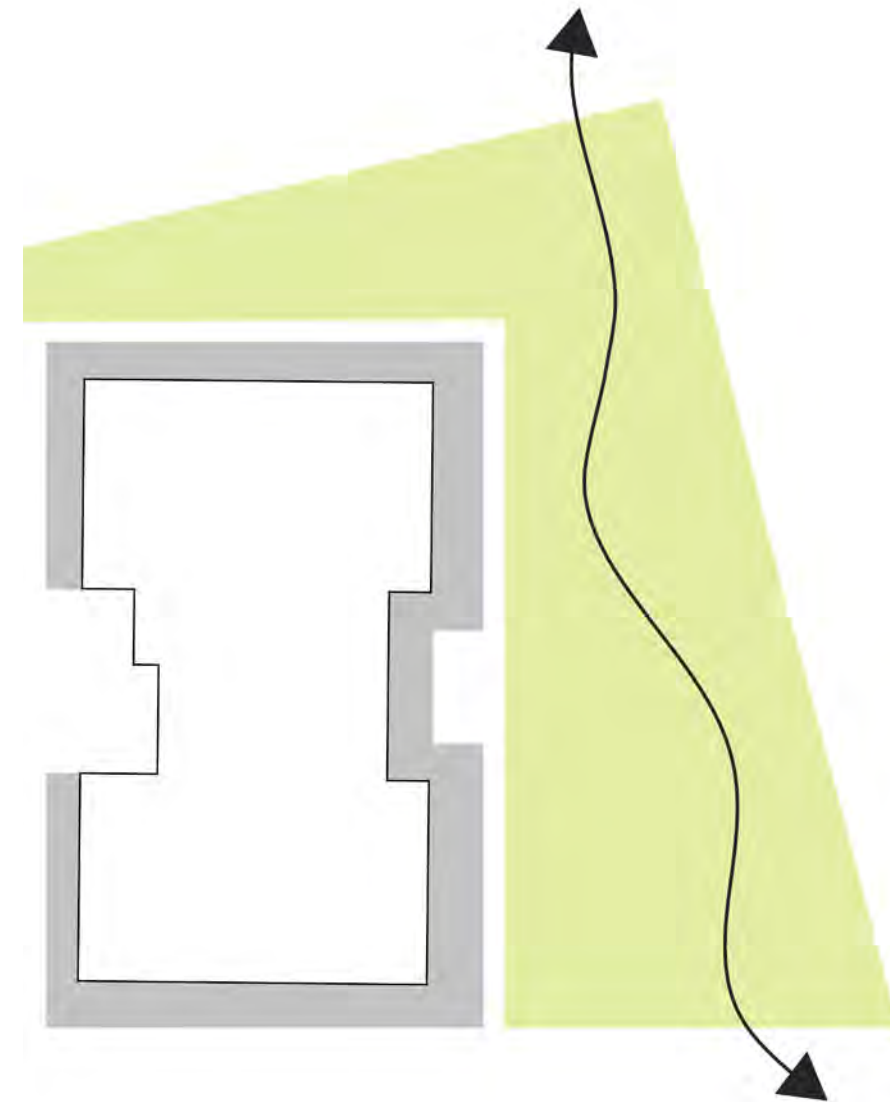
It is proposed that the spaces at the base of the towers are fully public spaces within the public realm. An intentionally simple design approach has been taken for these spaces, in order that they are accessible to all, easily maintained and provide an opportunity for more flexible usage, as well as ensuring that the central garden becomes the main focus for the community.

The perimeter of the gardens includes a railing with gates yet remains open and can be used by both residents and members of the wider community. A perimeter of Silver Birch with a planting understorey provides a sense of enclosure and garden feel to the spaces. However the low height understorey and a minimum clear stem of 2m to the trees would allow for visibility at eye level throughout.

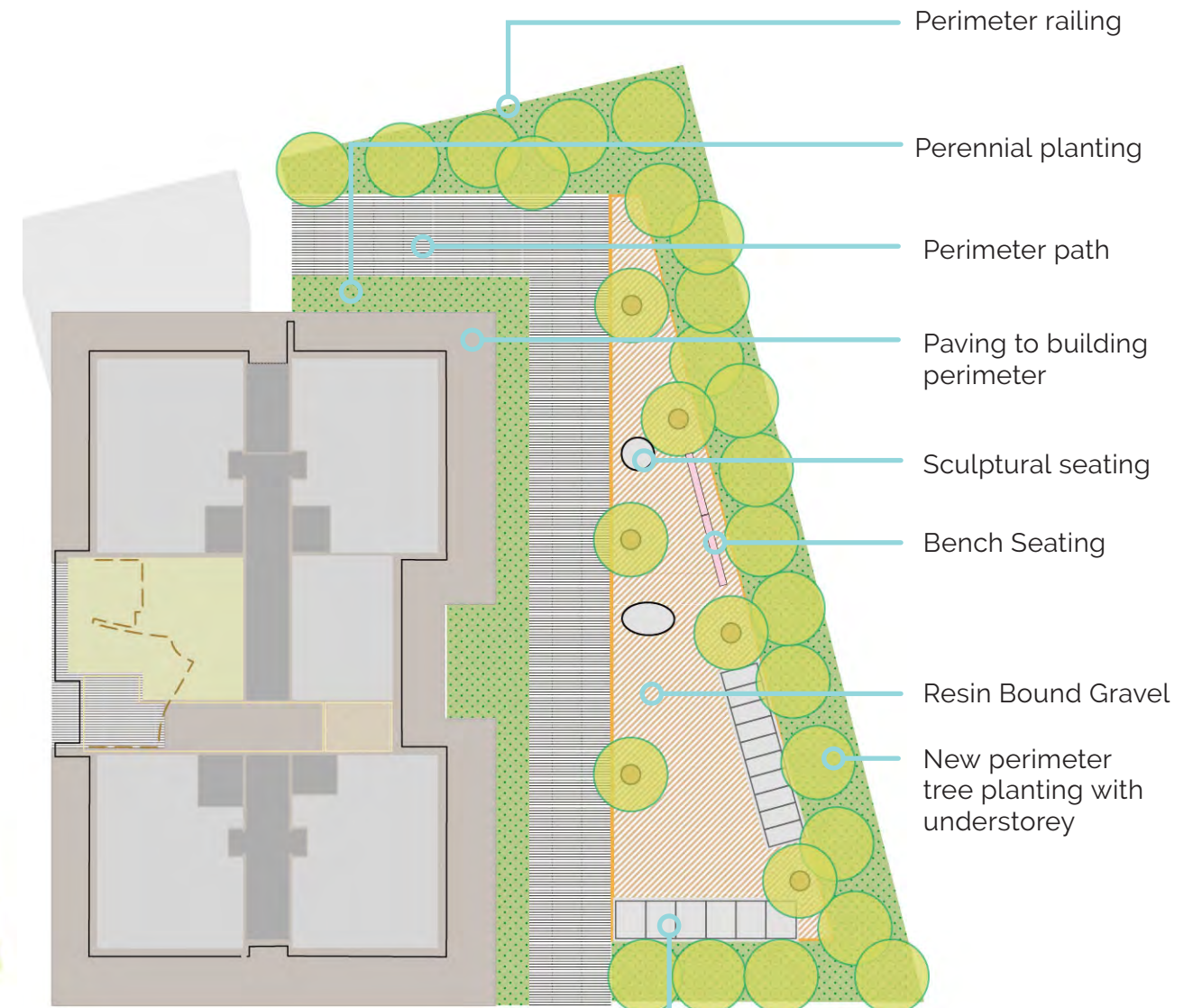
Robust benches and sculptural elements set within a hard landscaped area provide seating and opportunities for incidental play - a place to get to know your neighbours.

A wider perimeter buffer zone around the existing buildings, a minimum of 1.8m wide, surfaced with uneven cobbles is proposed around the buildings. To the street elevations, the perimeter will be defined by an raised brick kerb detail and to amenity spaces by an additional planting buffer section.

The same design approach and features have been applied to all three of the proposed phase 2 sites.



Typical Garden Layout & Key Features
(Wensley Court)



Typical Garden Layout & Key Features
(Wensley Court)

Bicycle storage

10 x Individual –
900x1900x1325
(1 Bicycle)

5 x Family – 1280x1900x2115
(2 Bicycles)

Total – 20 New cycle spaces
(+ 4 Existing)

5.7 Phase 2 Landscape Masterplan



5.8 Landscape Precedents

The approach taken to the public realm on the South Bank of the Thames could be applicable to the spaces at Coley Rise; particularly the public realm at the Tate Modern.

Although a very different kind of space, the approach taken to the public realm is simple and robust: groves of Birch trees are surrounded by either resin bound aggregate hard standing or lawn. These spaces are simple, uncluttered and easy to maintain.

The trees create human scale spaces next to tall buildings.



Tate Modern landscape



Tate Modern landscape



NEO Bankside courtyard



Kurt Hackenberg Platz, Koln



Tate Modern landscape



NEO Bankside courtyard



'The Matrix' courtyard, Glasgow

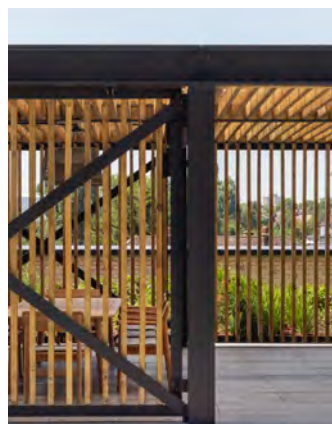
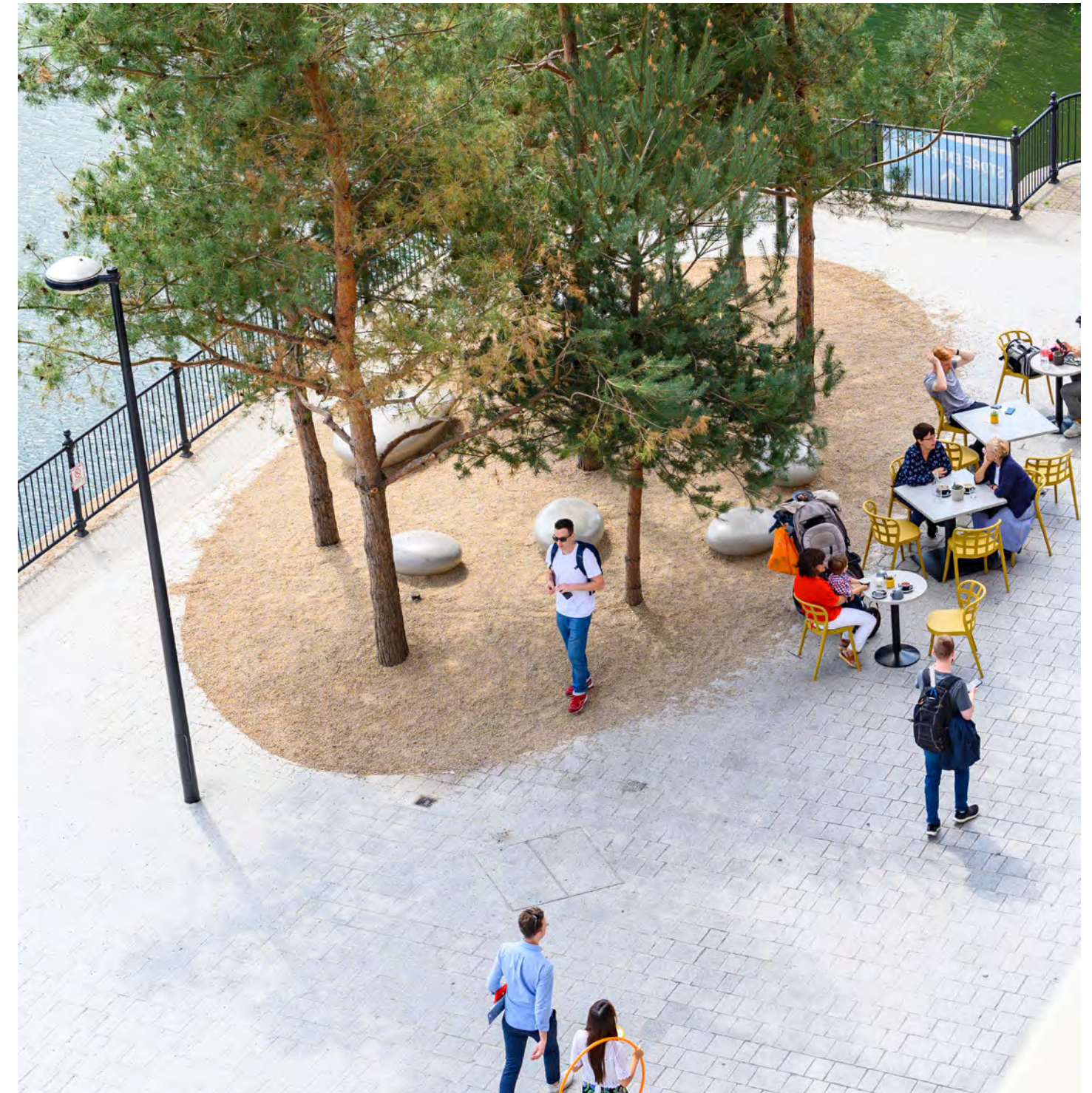
5.8 Landscape Precedents

Creating predominantly hard landscaping to the gardens for flexible use, with robust furniture and planting.

Using sculptural elements for seating and incidental play - a place to get to know your neighbours.

A woodland grid with perennial understorey that spills into resin bound paving will frame the space. The low height understorey and clear stems to trees allows for visibility throughout.

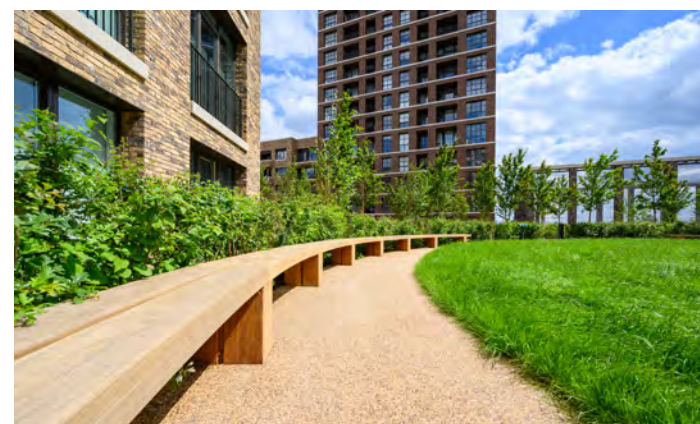
The perimeter areas to the towers are shown as hard landscaping for ease of maintenance.



Greenford Quay

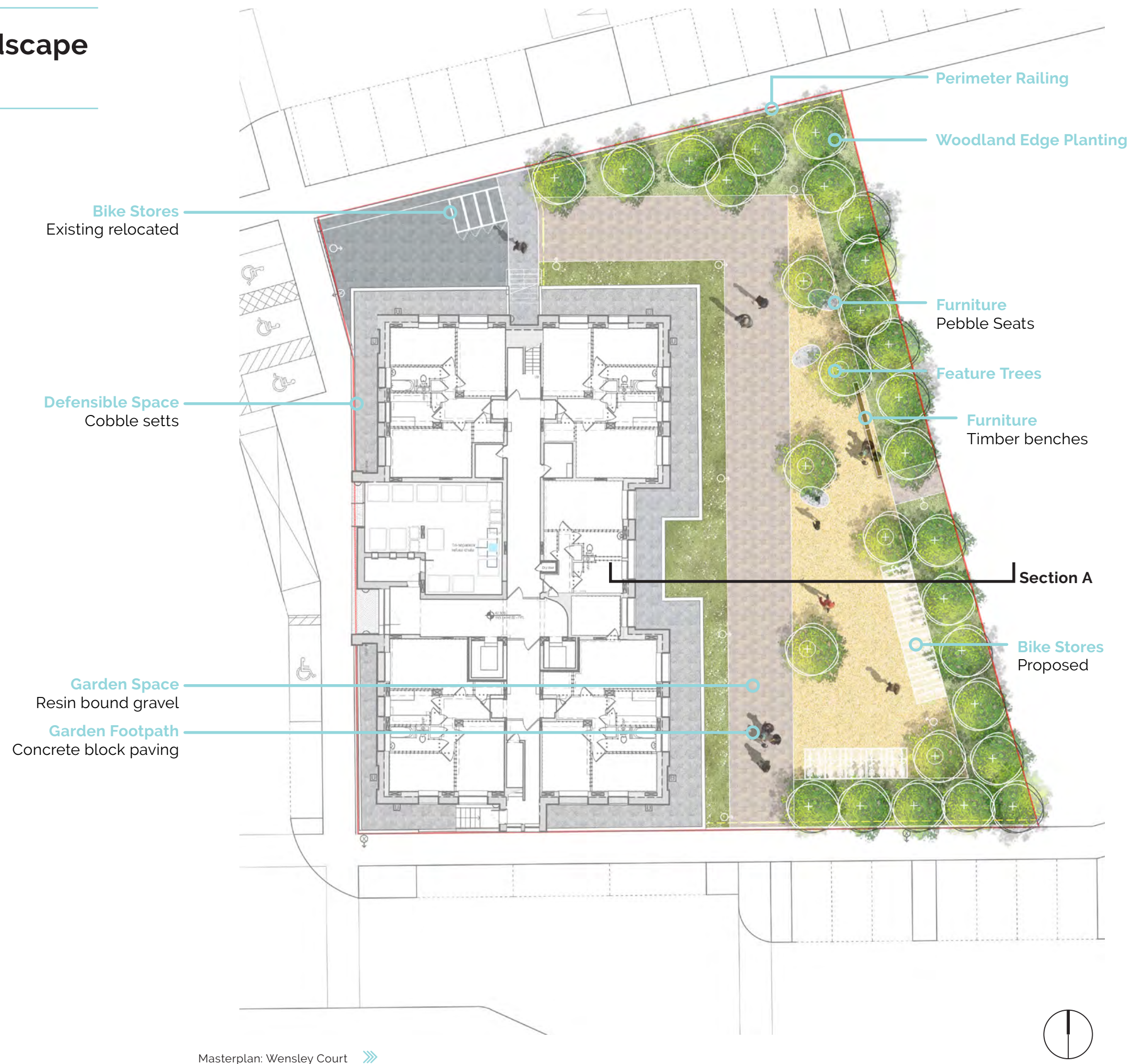


Canada Water



5.9 Detailed Landscape Proposals

193 Wensley Court - Site Plan



Masterplan: Wensley Court >>

5.9 Detailed Landscape Proposals

193 Wensley Court - Site Section



Section A: Wensley Court

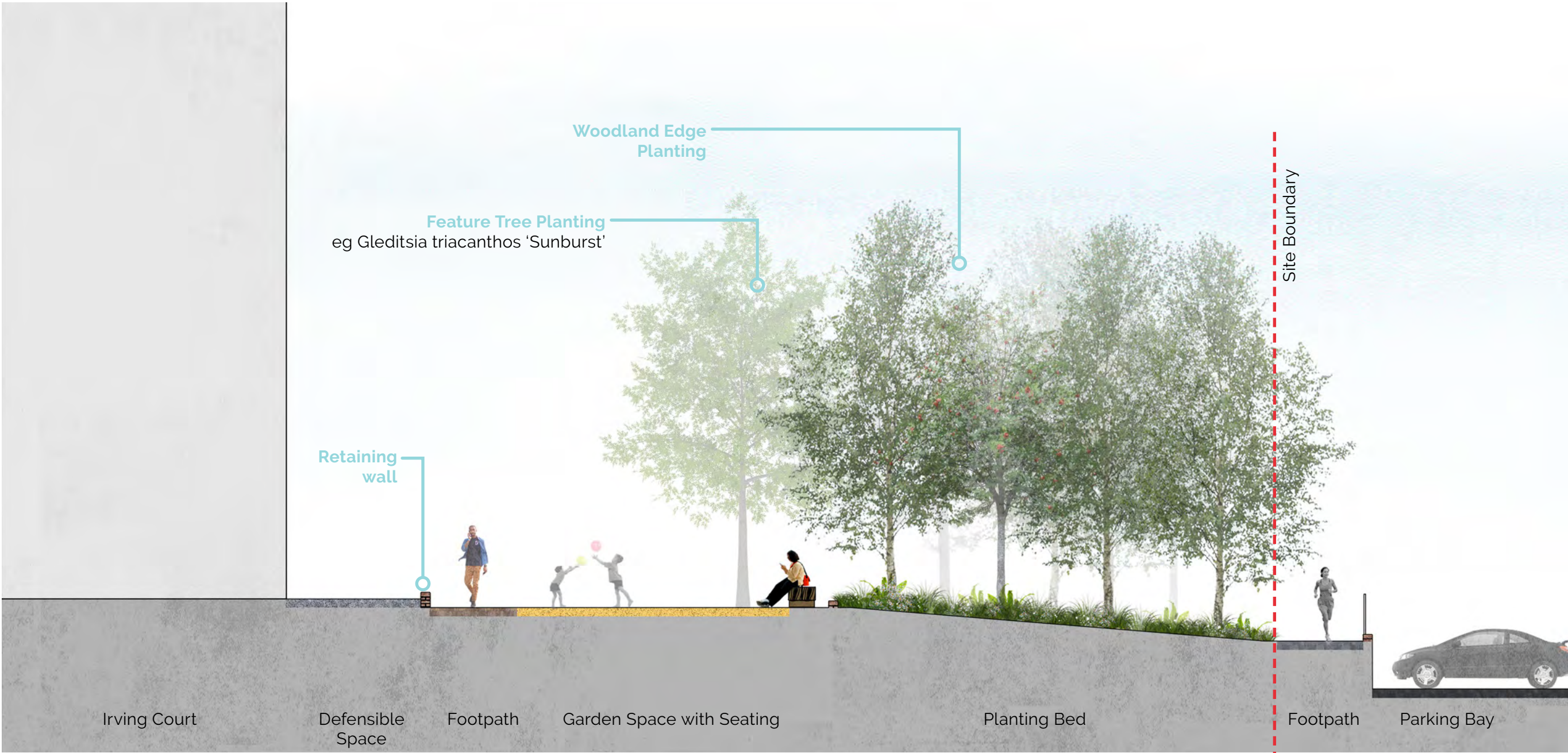
5.9 Detailed Landscape Proposals

203 Wensley Court - Site Plan



5.9 Detailed Landscape Proposals

203 Irving Court - Site Section



Section B: Irving Court

5.9 Detailed Landscape Proposals

205 Riversley Court - Site Plan

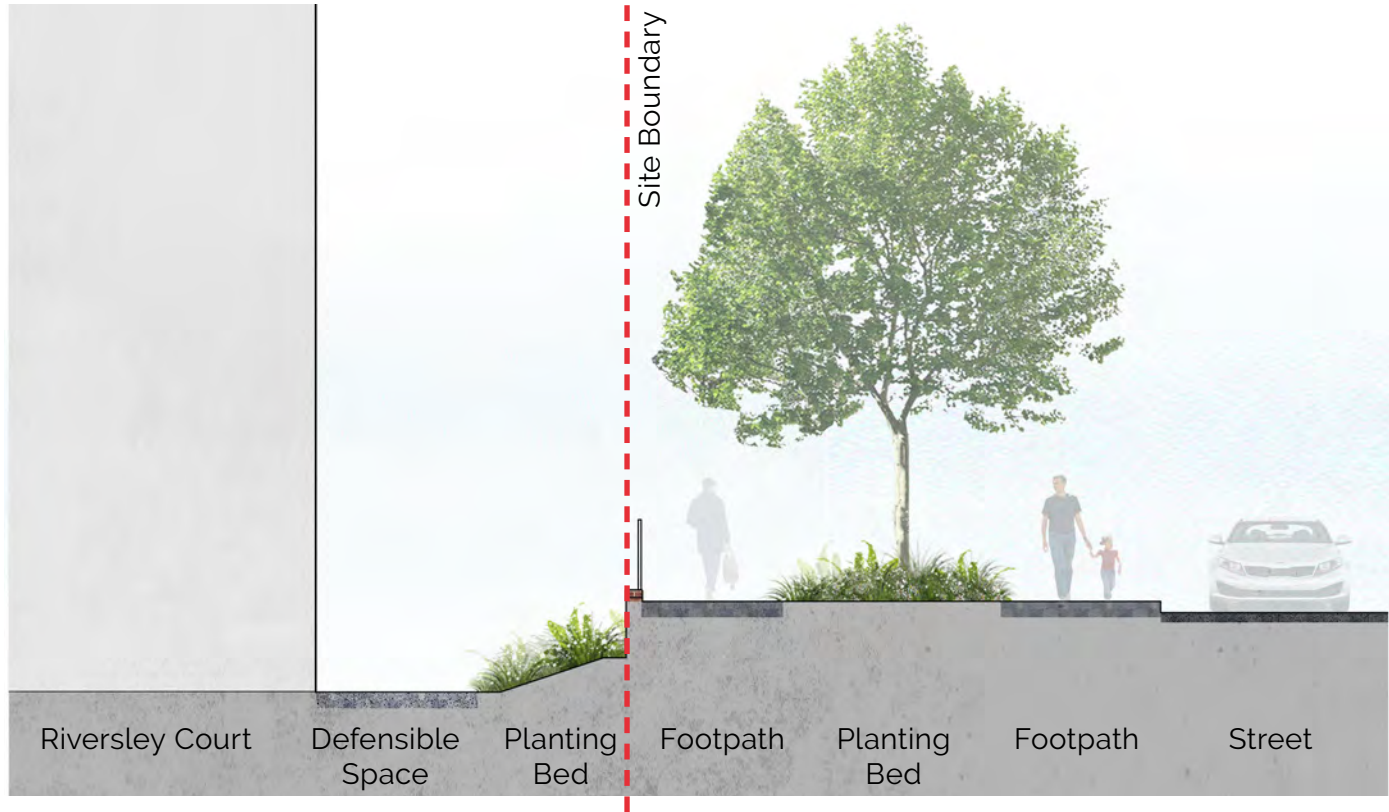


5.9 Detailed Landscape Proposals

205 Riversley Court - Site Section



Section B: Riversley Court



Section D: Riversley Court

5.9 Detailed Landscape Proposals



5.10 Garden Access Strategy

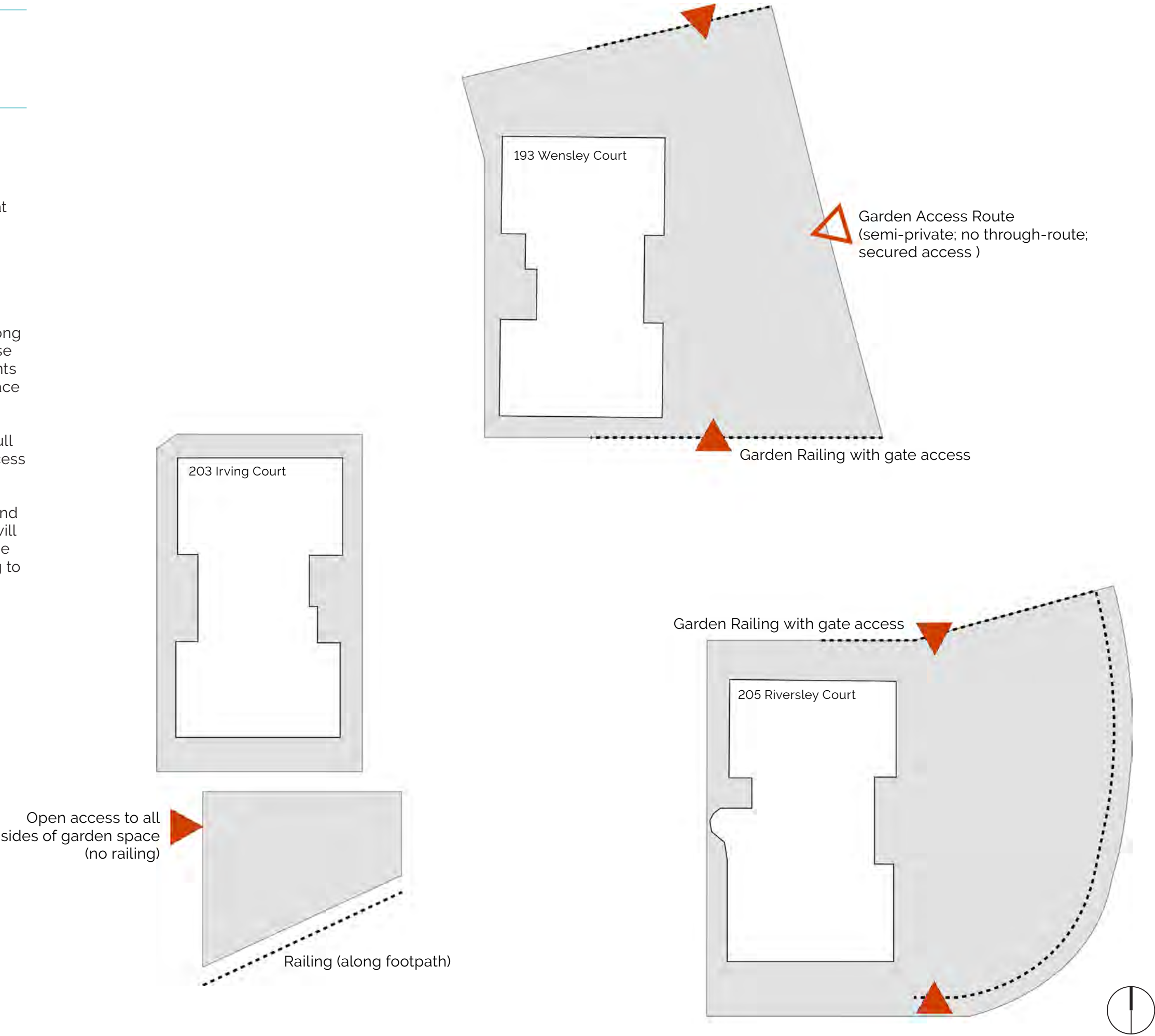
Access

The garden spaces will be publicly accessible to the wider community. As it is anticipated that children may still use these spaces for playing in, a perimeter railing with gates is proposed to prevent running out into the surrounding streetscapes.

Wensley Court will have a railing to north and south ends of the garden with gate access. Along the east, the garden boundary walls from Phase 1 development form a boundary edge. Residents from the new block can access the garden space at Wensley Court via a secured gate access.

Riversley Court will have a railing around the full perimeter of the a garden space, with gate access north and south.

Irving Court is a much smaller garden space, and does not include a perimeter railing. A railing will be implemented under Phase 1 works along the footpath to the south of the woodland planting to prevent direct access out into a busy street.



5.11 Tree Planting Strategy

The planting strategy reflects the aims to create a biodiverse landscape with a self regulating system of low maintenance plants that blend well into the woodland aesthetic that is being aimed for across the wider development.

Tree Planting

A mix of native and non-native species has been selected within Coley Rise to help future proof against large tree losses through pests and disease. New tree planting includes native flowering and fruiting species to help enhance the site's biodiversity and habitat value.

The woodland edge is formed using a dense grid of Silver Birch, Rowan and Scots Pines.

Feature trees spill out into the hardstanding areas of the gardens, and these will be of one species for each Court thus providing an identity to each garden space.

A minimum of 70no trees will be planted in Phase 2 to achieve the overall minimum 279no trees to be planted across both Phases 1 + 2 as per the approved Planning Application for Phase 1.

Feature Tree Planting



Pinus sylvestris



Betula albosinensis 'Red Panda'



Gleditsia triacanthos 'Sunburst'

Woodland Edge Planting



Betula pendula



Sorbus aucuparia 'Joseph Rock'



Pinus sylvestris

5.11 Tree Planting Strategy



5.12 Planting Strategy

Planting below the trees and within planting beds in the gardens consists of extremely robust and self-seeding perennials to create a simple palette of plants that are easy to maintain.

A native groundcover species with accents of ferns, Wood Aster and Aquilegia sp will provide suitable dense coverage to the planting beds, whilst providing seasonal interest and textural qualities



Luzula sylvatica



Polystichum setiferum



Asplenium scolopendrium



Aster divaricatus

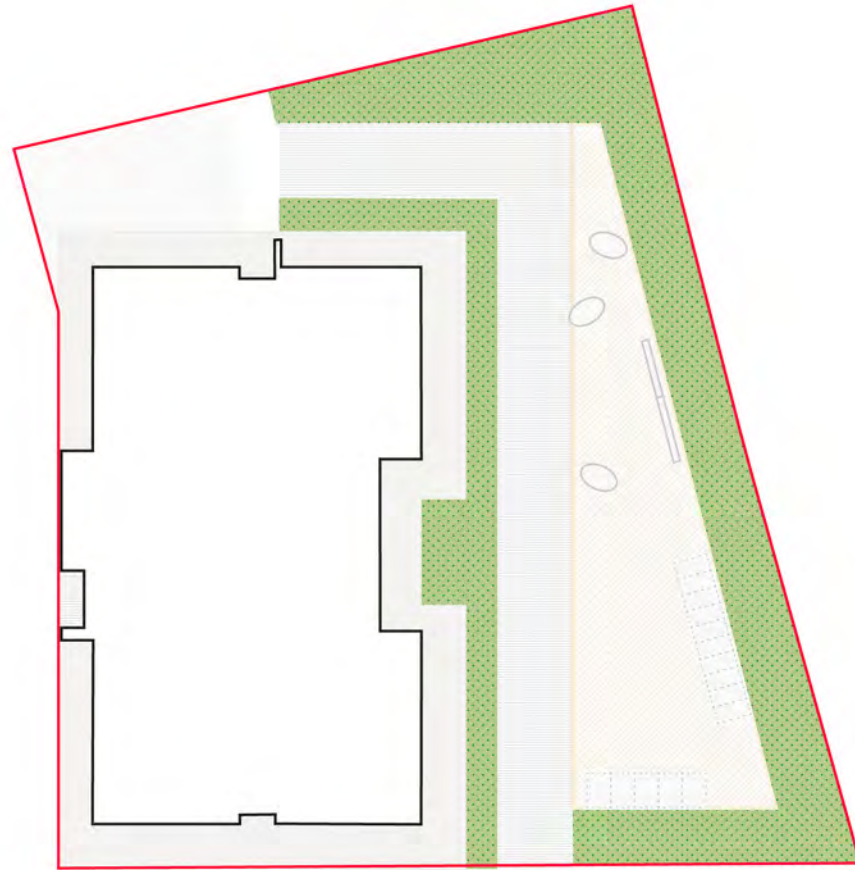


Aquilegia vulgaris 'William Guinness'

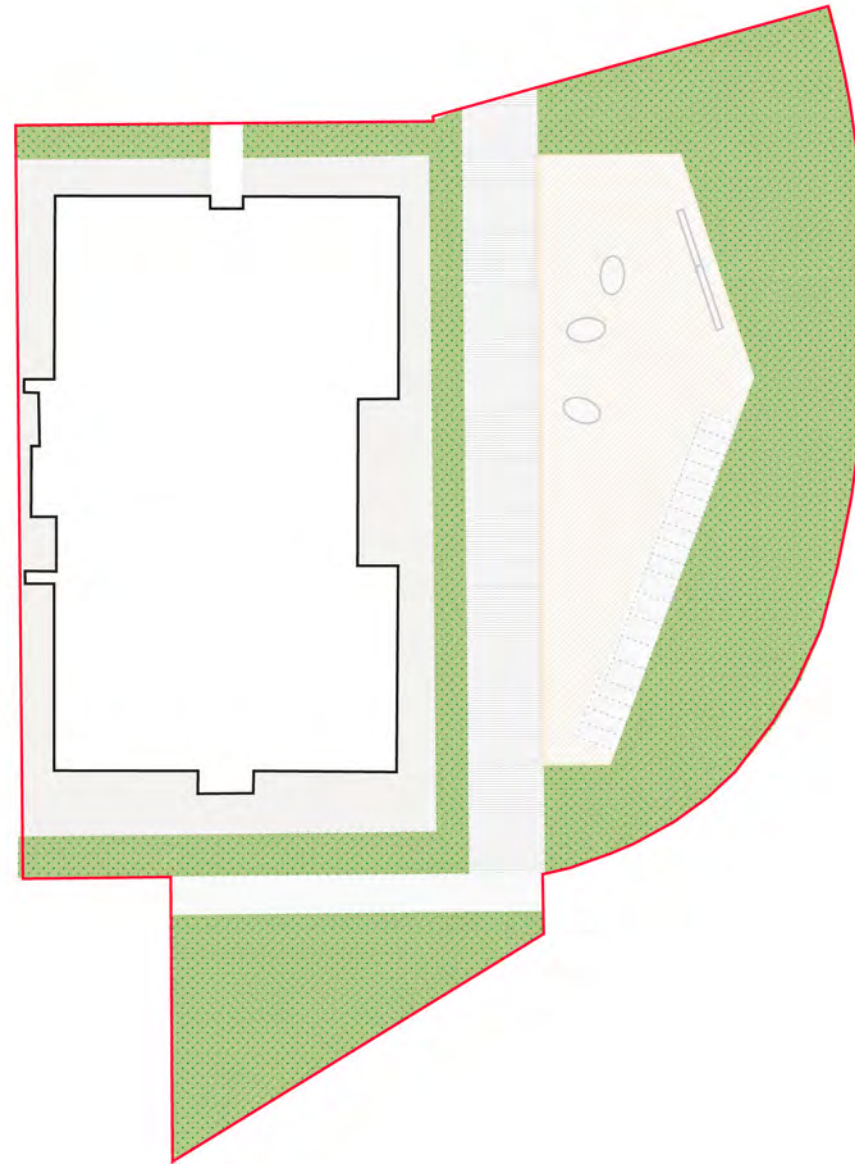


Galanthus nivalis

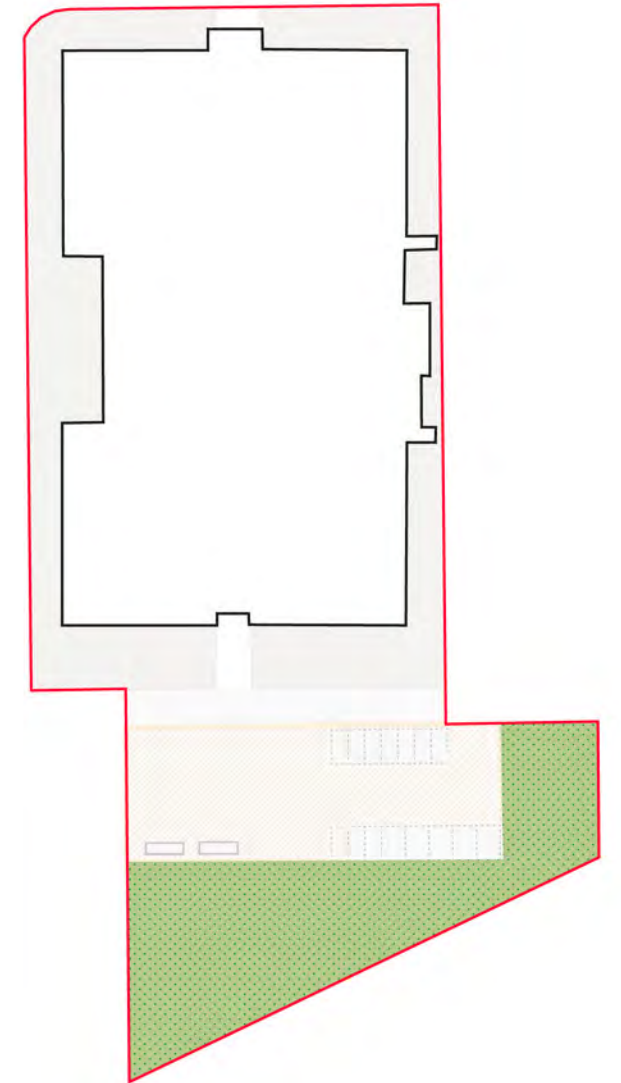
5.12 Planting Strategy



193 Wensley Court



205 Riversley Court



203 Irving Court

5.13 Materiality

The materials have been selected for their durability and muted tones to blend in with and complement the woodland aesthetic of the central space and the materials used in Phase 1.

Materials

The materials will also set the tone of the gardens, making them stand out as a different space from the wider development.

The defensible zone to the immediate perimeter of each building will be a cropped cobble sett to discourage access, yet remain easy to maintain.

The garden spaces will consist of concrete block paving and a resin bound gravel to break down the scale of the spaces.

The block paving will be similar to the footpaths in the wider masterplan, but of a warmer tone and the resin bound gravel will be a similar colour to that used in the Central Space in Phase 1.



Defensible Perimeter
Cropped cobble setts



Garden Footpath
Concrete block paving



Garden Space
Resin bound gravel



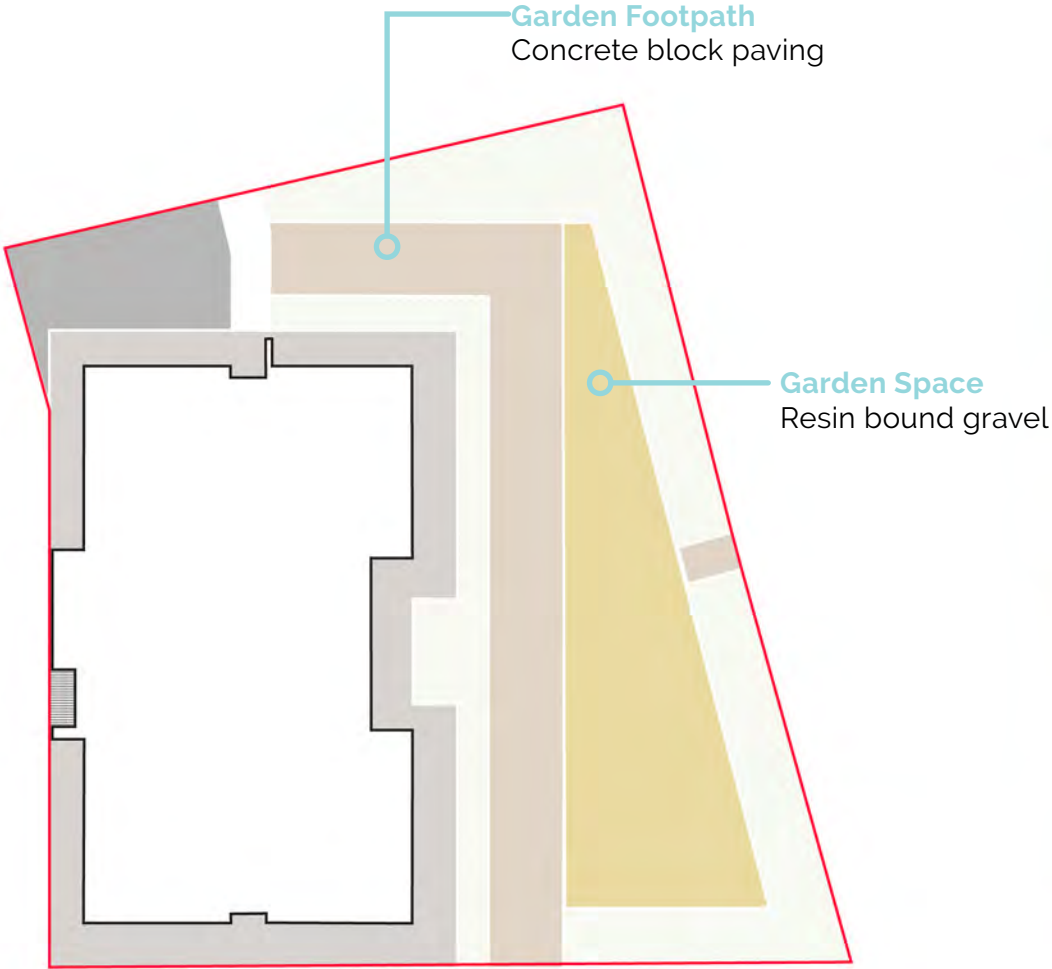
Edges
Concrete edging



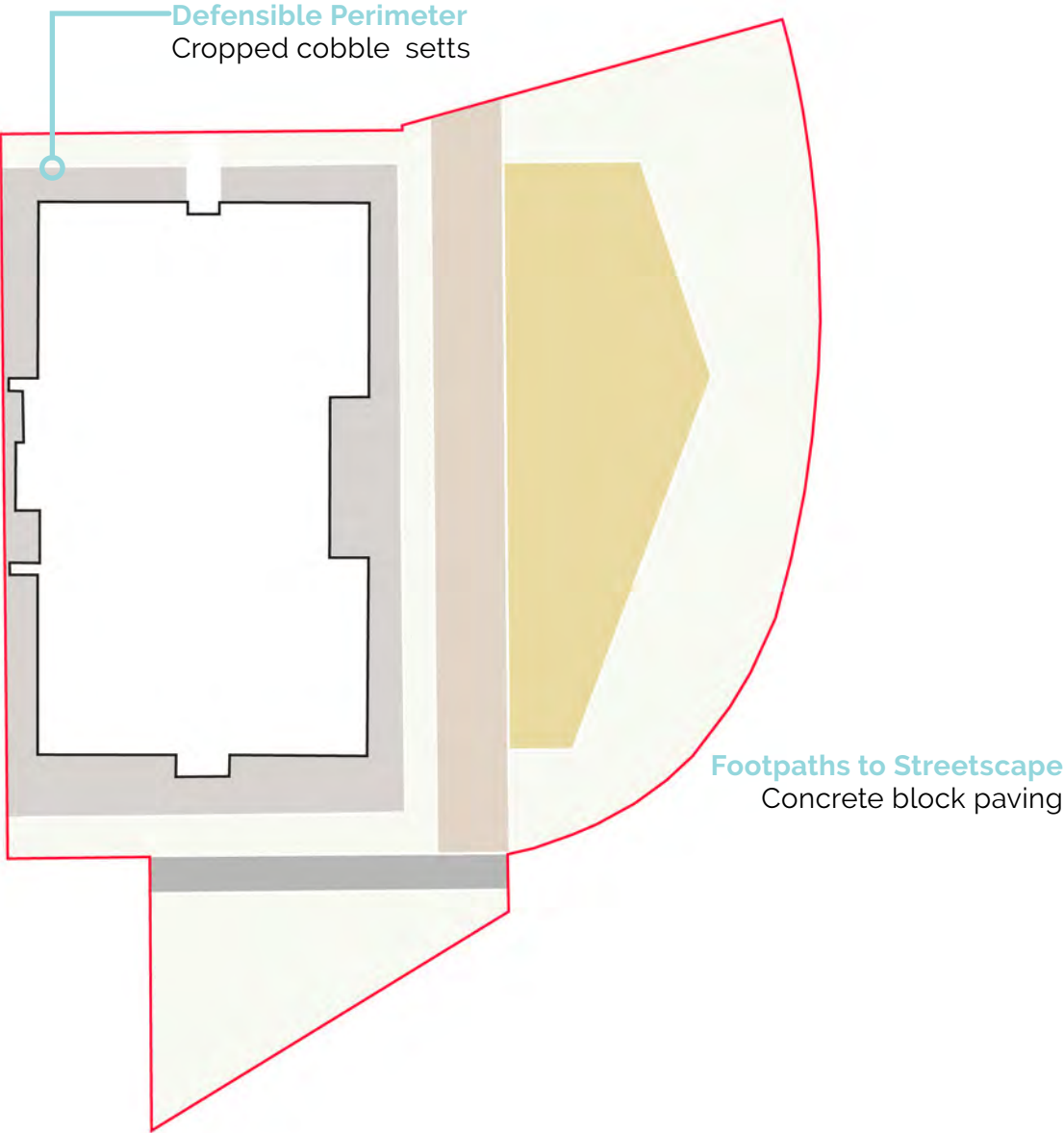
Footpaths (Phase 1)
Concrete block paving



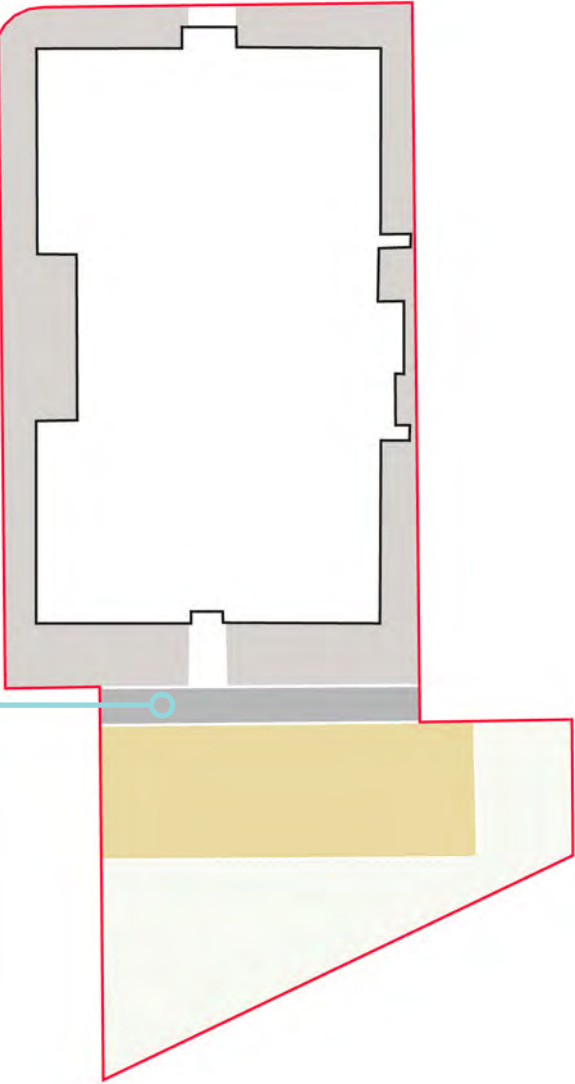
5.13 Materiality



193 Wensley Court



205 Riversley Court



203 Irving Court

5.14 Site Furniture, Walls and Boundaries

Site furniture has been selected for its robustness and to tie in with the woodland aesthetic and furniture provided in Phase 1. The retaining walls and boundaries similarly follow the same design aesthetic as those elements in Phase 1 for a cohesive family of details across the development.

Site Furniture

Timber beam benches made from recycled timbers with a powder-coated finish to steelwork. Fire retardancy levels ensure that damage from vandalism is minimised.

Pebble Seats provide a sculptural seating and play element in the gardens

Steel bins are robust and secure from vermin

Tree grilles will provide protection to those trees in hard landscaping

Retaining walls

Retaining walls will be necessary on site to accommodate for changes in topography. The details will tie in with architectural features by using a facing brick and deep precast concrete coping. In areas where the change in level exceeds 600m, a railing will be added to the top of wall for fall protection.

Boundaries

Small upstand walls are used to demarcate between footpaths and the defensible space to perimeter of buildings.

Steel flatbar railings are used to form a perimeter boundary to the garden sites at Wensley Court and Riversley Court, aiding in the prevention of young children running into the streetscape. Gates provide access in the garden from the surrounding streetscape.



Robust timber beam benches



Feature Pebble Seats



Steel bins



Tree Grilles

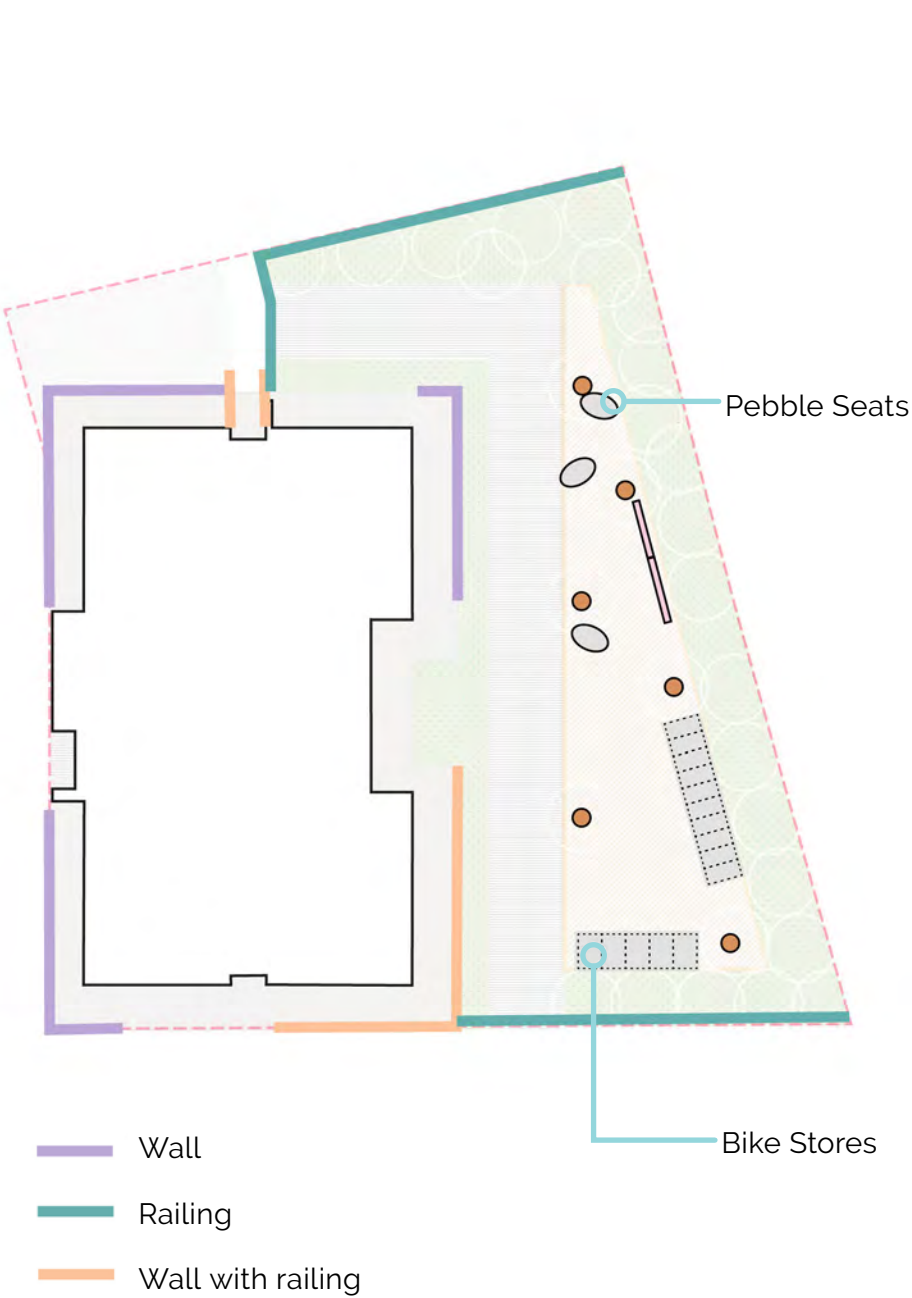


Walls to be facing brick with precast concrete coping

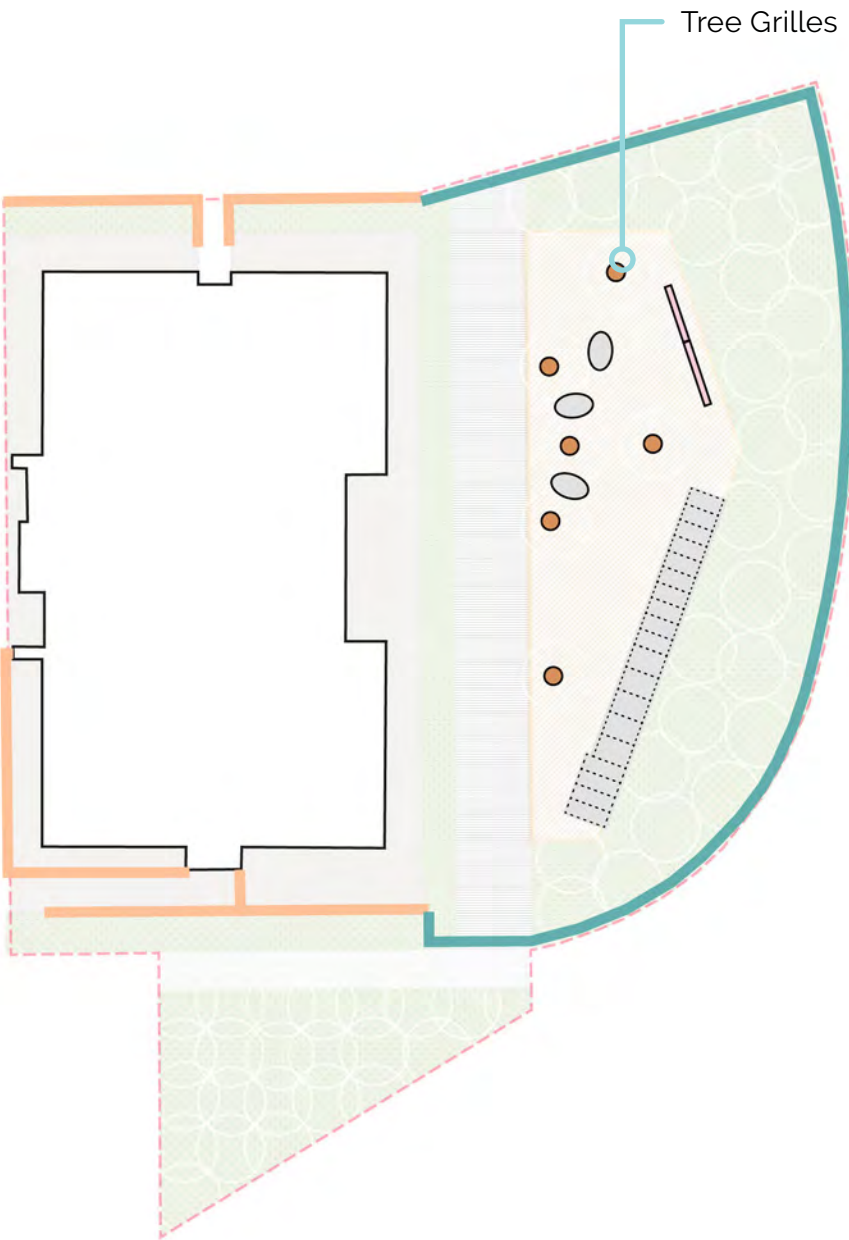


Steel flatbar railings and gates

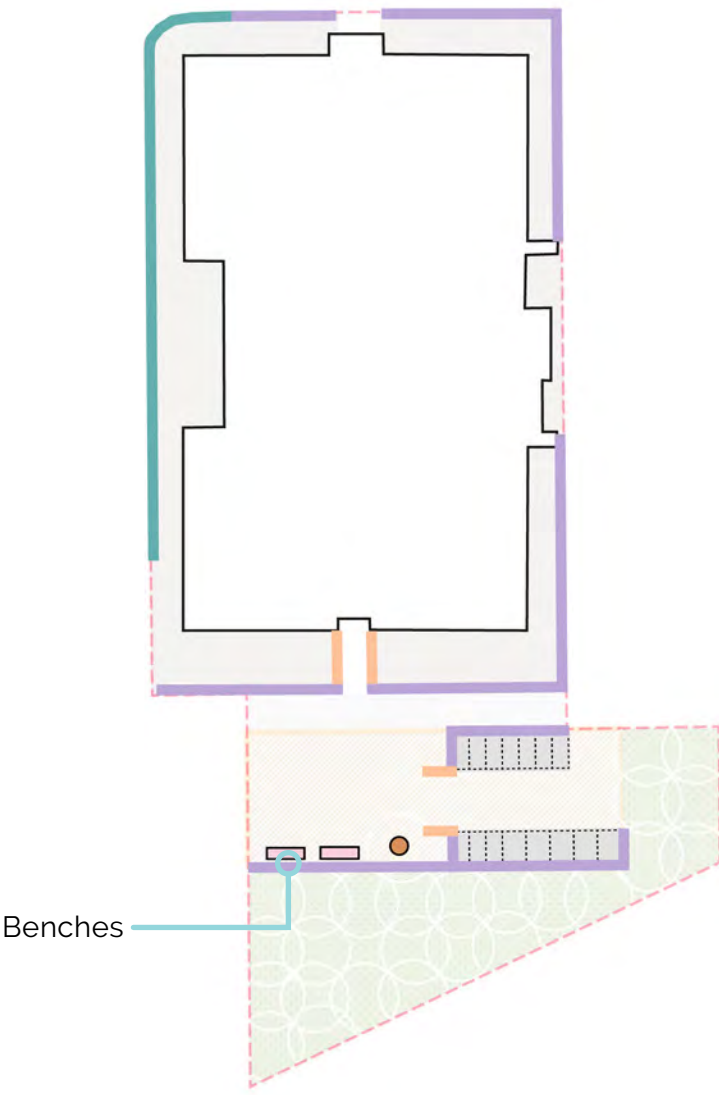
5.14 Site Furniture, Walls and Boundaries



Wensley Court



Riversley Court



Irving Court

5.15 External Lighting Strategy

All lighting is required to be robust and vandal-proof, whilst providing an adequate level of safety lighting across the external spaces.

Wall Mounted

Wall mounted lighting is proposed to either side of the main entrance, ensuring that entrance area is well lit and clearly visible at all times.

Down lights are proposed above the means of escape doors, to provide illumination to the escape routes and external escape stairs but minimize light into the neighbouring residential windows.

Uplighters

To replace the wall mounted external lighting at the corners of the building, uplighters integrated in the paving are proposed to define the edges and perimeter of the building at night, and directional lighting columns away from the building will provide illumination to pedestrian routes. Again this intended to minimize disruption to ground floor residents.

Lighting Columns

Directional lighting column are proposed along the new footways through the landscaped areas. These have been intentional located so that the light is directed away from the ground floor windows but also provides a good level of lighting for wayfinding. Additional lighting columns are also proposed adjacent to cycle storage areas. A downward facing luminaire will be selected to minimise disruption to foraging bats at night.



Wall Mounted



Lighting Column



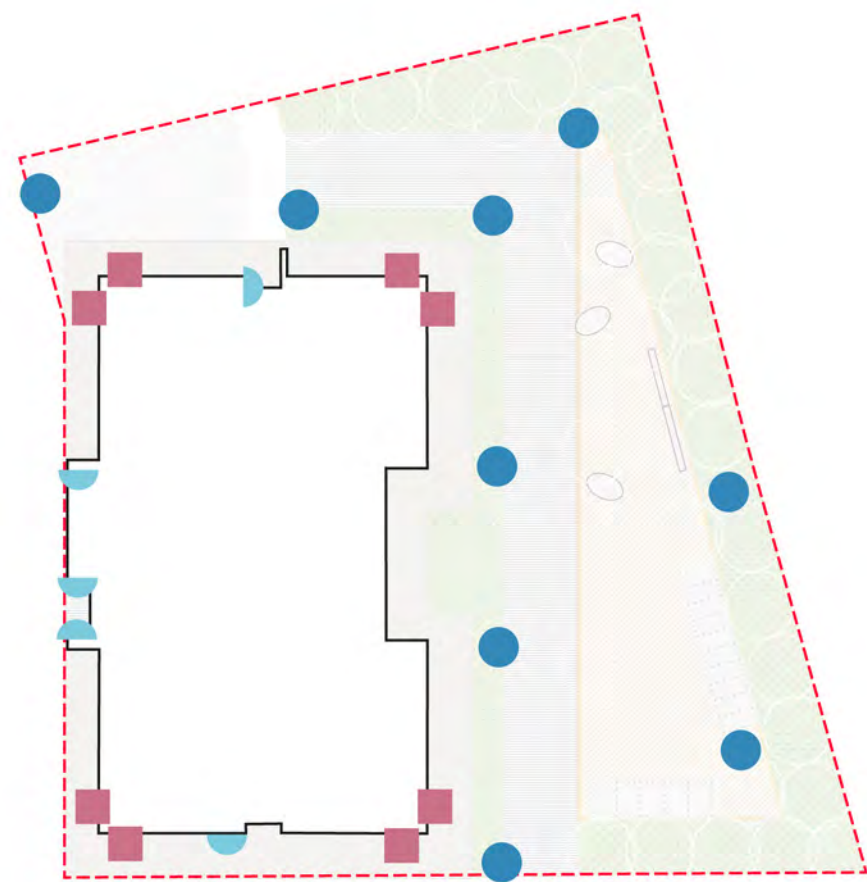
Uplighters

Downward facing
asymmetrical flat beam light
distribution, directed away
from ground floor windows

Wooden luminaire pole
with aluminium base ties
into woodland aesthetic of
garden spaces

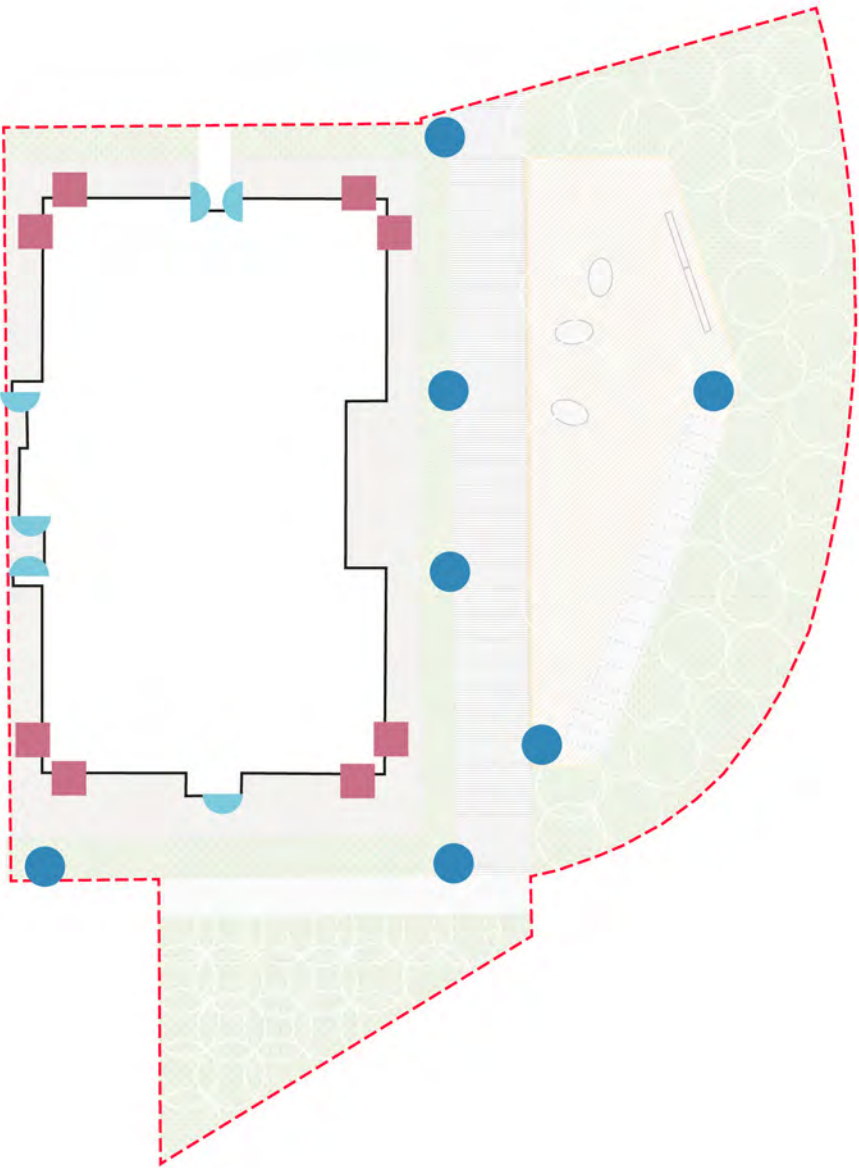


5.15 External Lighting Strategy

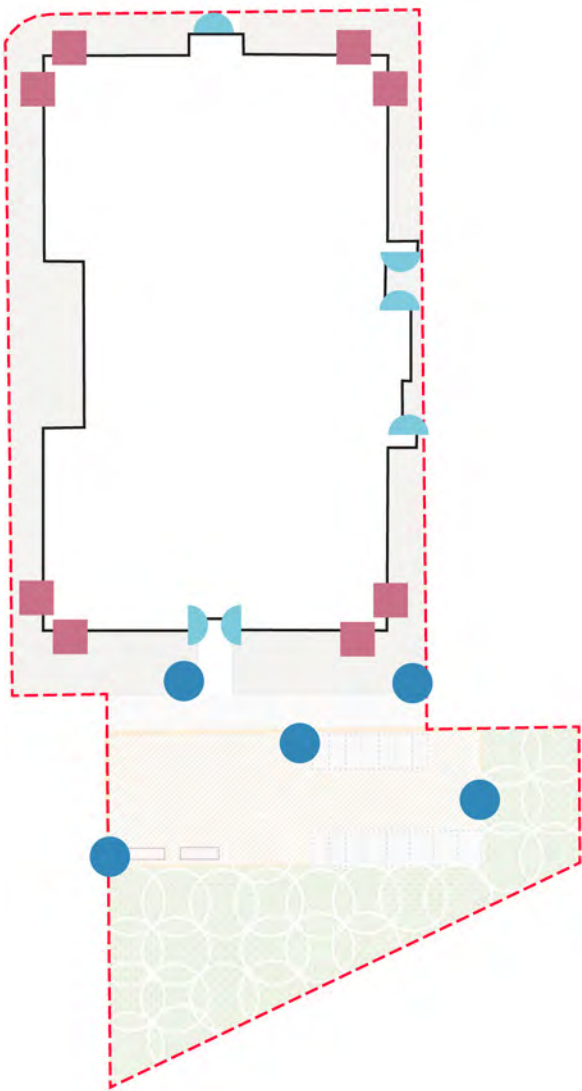


- Lighting column
- Uplighter
- ◐ Wall-mounted

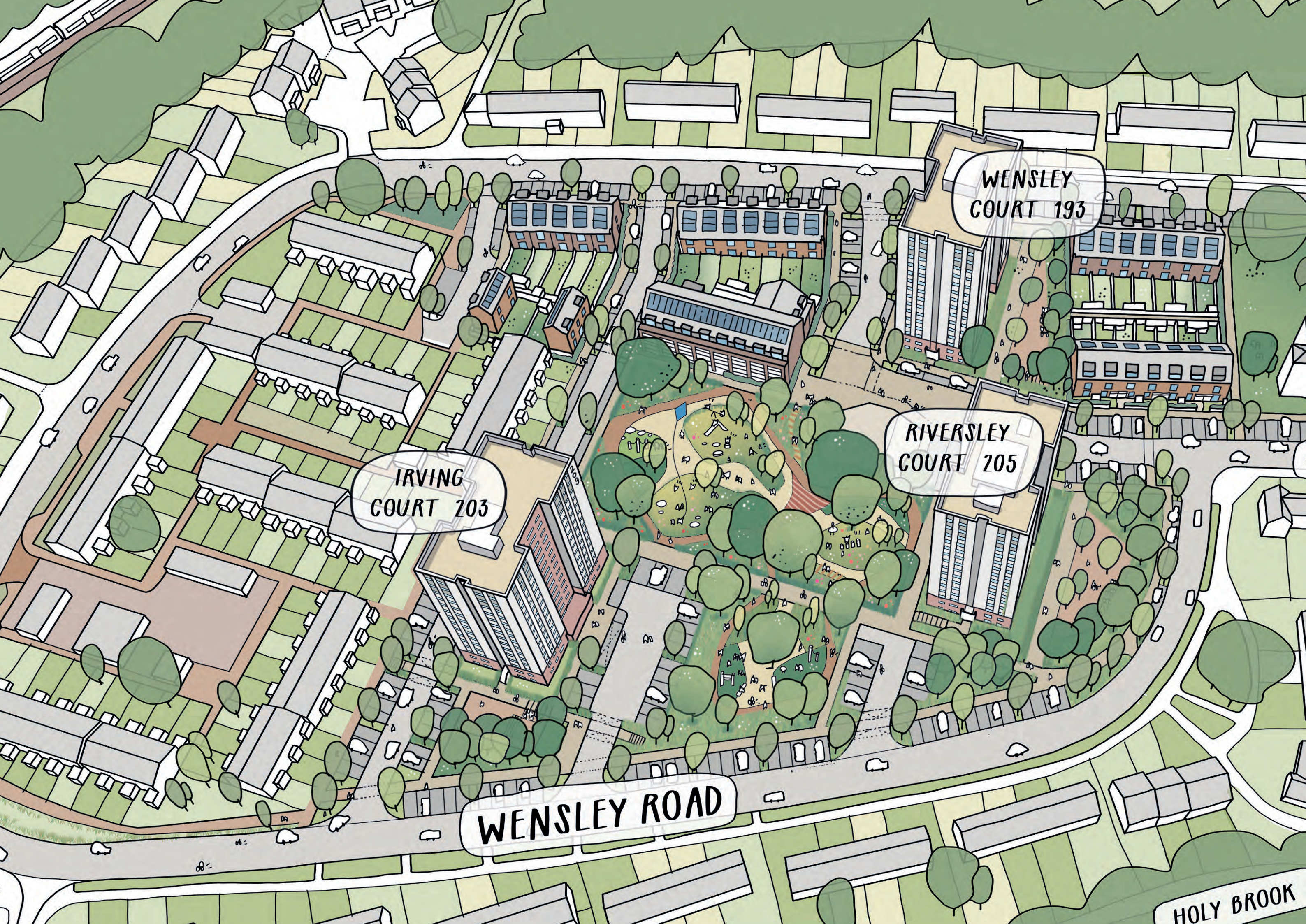
Wensley Court



Riversley Court



Irving Court



WENSLEY
COURT 193

RIVERSLEY
COURT 205

IRVING
COURT 203

WENSLEY ROAD

HOLY BROOK

6.1 Accessibility Statement

The submitted proposal for the refurbishment of the Coley Park flats has been designed to improve the functionality of the existing buildings, improving both safety and accessibility for existing residents.

The design of the reconfigured communal areas, as well as the replacement external wall materials and windows, have been carefully considered to ensure that they meet or exceed buildings regulations, as well as reflect current and future needs of the existing residents.

The new street network, public realm and site access points, approved as part of the Wensley Road phase 1 application (ref: 20001) were designed to ensure that the routes to the existing entrances of the Coley Park flats are legible, accessible, welcoming and safe.

Key Access Elements of the Design

1. Approach to the Site

All three of the existing buildings are accessed via Wensley Road, which is the only vehicular access route into the Coley Park Estate. The site can also be accessed via pedestrian and cycle routes from Southcote to the west, Courage park to the north-west and via walking routes from Fobney meadow to the south.

2. Service/Emergency Vehicle Access

Service and emergency vehicles access approach the site as existing, via the Wensley Road loop. Currently access the front façade and main entrance of the each of the existing buildings is via a parking court with a single access point.

The approved Wensley Road phase 1 development will provide two new vehicle routes through the site, new parking courts adjacent to Irving and Riversley Court and additional emergency and service vehicle access routes with controlled drop bollards through the central green space.

Tracking of both refuse and fire tenders was undertaken as part of the phase 1 design development and were included within the Transport statements submitted as part of the approved application (ref:20012). This new site configuration, which has been reviewed by RBC Building control and the Royal Berkshire fire service, provides improved emergency vehicle access to an increased number of existing building facades and dry riser inlets and was therefore considered by RBC Building control as a significant improvement to the existing emergency vehicle access arrangement.

3. Access to and from the Street

The main entrance of each of the three blocks will be reached via a minimum 2m wide resurfaced footpath, which will be delivered as part of the approved phase 1 works. The design of the new entrances incorporates a recessed area to provide shelter on arrival, a new door entry system, lighting and wider automatic entrance doors, improving access to the buildings for residents' visitors and maintenance staff.

The glazed entrances door and sky lights will increase the amount of natural daylight in the internal entrance lobby, which will also be redecorated throughout as part of these works. Both the communal entrance area and the adjacent refuse lobby have been sufficiently sized for wheelchair users. All other communal areas will remain as existing.

In addition to the main entrance, each of the existing buildings has a means of escape on the north and south elevations. At Wensley and Riversley Court, the northern escape route is from the stair half landing between the ground and the first floor, leading to the external metal escape stairs. To the south, a fire escape door is located at the bottom of the ground to first floor flight of stairs, and an unconnected lobby at ground floor leads to an adjacent external fire escape door. As a result, the ground floor communal areas cannot be accessed via this flight of stairs. This arrangement is mirrored at Irving Court.

As part of the proposed phase 2 refurbishment works, all of the fire doors are to be replaced to meet current building regulations. Where there are currently two adjacent means of escape, a new lobby is proposed, providing access to the ground from both existing flights of stairs and also removing the need for two fire escape doors.

The external stairs serving the means of escape at the opposite end of the building are to be replaced with wider, more durable concrete steps with Building Regulations Compliant railings.

The design of the approved phase 1 site plan ensures that clear access is maintained to and from the existing means of escape. Footways from the means of escape will also be improved by levelling and resurfacing as part of the phase 1 works.

4. Inside the Homes

There are minimal internal alterations proposed to the existing homes as part of the proposed phase 2 works however the replacement of the external wall insulation, windows and the installation of MVHR units will have a positive impact on the living environment of the existing residents.

Although the overall size of the windows will remain as existing, the configuration of the fixed and openable glazing has been reconfigured to allow windows to be cleaned internally.

6.2 Sustainability Strategy

Refurbishment rather replacement of existing, good quality homes provides an opportunity to make vast savings in terms of embodied carbon of new construction materials. This is particularly true for a large, well constructed residential development such as the Coley Park Flats where it is viable to improve the buildings fabric to meet and exceed modern standards.

The proposed refurbishment of the existing Coley Park Flats is intended to address resource efficiency, environmental protection and to facilitate and encourage sustainable behaviours for residents.

The key elements can be summarised as follows:

- Fabric first approach to the building envelope, aspiring to achieve Enerphit standards for thermal performance, combined with the installation of MVHR systems to improve internal air quality and ventilation.
- Supporting active travel through increased provision of safe, secure and easily accessible cycle storage, combined with improved connections to the green travel network provided as part of Phase 1 works.
- Encouraging and supporting residents to improve recycling habits by providing new user-friendly refuse, recycling and food waste facilities.
- Providing enhanced external landscape with increased biodiversity value, creating a key link with existing rich natural habitats in the surrounding area.
- Make effective use of resources by re-using materials on-site where possible, reducing waste and specifying materials with low embodied carbon, minimising waste and reducing material transportation.
- Holistic approach to improving the environment for existing residents leading to a positive impact on mental health and personal wellbeing.

Thermal Performance

Reading Borough Council is committed to significantly improving the energy efficiency of all the existing housing stock throughout the borough, by considering the most appropriate solutions for each of the sites.

As the replacement of the external insulation and windows is required on the existing blocks, this provides an ideal opportunity for adopting a fabric first approach to improving the thermal performance of the buildings and as result reducing energy demand.

A series of comparison studies were prepared by HTA Sustainability to consider the combined effect of different improvements in terms of the external wall insulation and window specification.

These ranged from the minimum requirement under approved document L1B (2018) of the building regulations to U-values equivalent to Enerphit standard (Retrofit equivalent for Passivhaus), with variations to demonstrate the impact of improved air tightness.

In line with the Passivhaus principles adopted for new build homes within Phase 1 and to maximise potential energy saving for residents, the intention is to target the more ambitious Enerphit U-values for both the external walls and windows in addition to establishing a low air permeability rate of 3m³/hm² @ 50 Pa and new mechanical ventilation system.

Further details are included with the Energy Statement (RBC-CRR_HTA-S_RP_0502), which has been submitted as part of this application.

Refuse & Recycling

The intention is to replace the existing refuse chute with a new smart tri-separator system that allows residents to use the refuse chutes for general waste, mixed recycling and food waste.

In comparison to the existing situation where residents are required to take recycling to external bins within the car park, the upgrade of refuse chutes will include a recycling option separator and will make it far easier for residents to recycle and separate food waste from general waste with the intention of reducing the amount of general waste.

To further encourage and facilitate recycling via the refuse chutes, RBC are proposing providing each resident with appropriately sized domestic bins for within their homes. The aspiration is also to introduce a new communication and management strategy around refuse and recycling, to be provided alongside the physical improvements.

Landscape

Improvements to the green spaces are around the base of the existing buildings will be designed to provide attractive, safe and comfortable microclimate conditions as part of the improved public realm that will be delivered as part of the phase 1 works.

Increased tree planting of suitable species will provide shade, air movement and cooling to the urban environment, as well as positively contribute to biodiversity and the health and wellbeing of residents.

Sustainable Transport

The existing homes are well connected to public transport links, with a regular bus service, bronze 11, running to Reading town centre directly from the site. It is hoped that the provision of new bus stops as part of the phase 1 works will encourage increased usage of this service by local residents.

Reading cycle route 6 runs through the site and this link will be improved as part of the phase 1 works. To support the use of this route and the wider cycling network and promote cycling as a mode of transport, leisure and exercise to residents, the quantity of cycle storage for existing residents will be increased, with a number of additional individual and family sized lockers (2 cycles) available.

Materials

All the materials specified for the proposed development will be durable and of high quality to minimise the need for maintenance or replacement.

The use of materials and construction techniques that have smaller ecological and carbon footprints will be prioritised, as well as materials which ensure a good air quality. Where possible, materials will be sourced for local suppliers and manufacturers.

Where possible any existing material will be retained and reused before specifying any raw materials.

6.3 Designing Out Crime

There are a number of ongoing issues with anti-social behaviour both in and around the existing buildings, therefore improving the safety and security for the existing residents is a key priority of the proposed refurbishment works.

The design proposals have been developed with the on-site housing management team and presented to local ward councillors in order to gain and in depth understanding of the existing challenges.

In advance of the planning submission, as part of the pre-application planning consultation, the proposals were reviewed by the Crime Prevention Advisor for Berkshire. All comments received following this review have been considered and where possible, incorporated into proposals. Recommendations regarding specifications will be integrated into detailed design development.

The followings measures have been incorporated into the design to help ensure the safety and security of all residents:

- The proposed refuse and recycling strategy has been specifically developed to mitigate current issues with fly tipping, misuse of existing facilities and rat infestations around the external refuse and recycling provision. All refuse, recycling and food waste bins are to be located within an internal store, with maintenance access only. The ground floor refuse lobbies and upper floor refuse chute access points will be fitted with CCTV to deter misuse of these facilities.
- The existing under-croft entrances are to be replaced with well-lit entrance areas which have been designed to be safe and welcoming, whilst providing ample shelter for residents, visitors, and staff on arrival.

- 24-hour lighting and CCTV is proposed to all of the new entrances and reconfigured communal areas both internally and externally, including the means of escape on all three buildings. Secondary access controlled doors within the entrance lobbies have been considered however it was decided that the enhanced lighting and new CCTV surveillance system would constitute a significant upgrade to the current level of safety and security for residents in these areas, without impede the current building use for existing residents.
- The proposed landscaping has been carefully considered with a combination of low-level planting to be maintained at 1m or less and tree canopies to be at least 2.4m from the ground, in order to maintain clear sight lines and natural surveillance. Drop kerbs and bollards have been used strategically to inhibit any unauthorised vehicle usage of perimeter footpaths.
- The existing knee-high railing and coloured tar-mac perimeter to the base of the three buildings will be replaced by a perimeter buffer zone to a minimum depth of 1.8m, with an uneven cobbled surface and clearly defined threshold to discourage loitering adjacent to the building and ensure privacy for residents. Additional buffer planting has been proposed between the perimeter zone and the new landscaped areas to improve the privacy for ground floor residents.
- External individual cycle lockers are proposed, rather than communal storage areas to reduce the risk of theft or damage to personal property of residents.
- The undercroft of the escape stairs will be enclosed within a brick base up to tread height to ensure eliminate the opportunity for littering or dumping of waste beneath the stair which could provide a fire hazard. An open railing to the stair, lighting and CCTV in these areas will improve visibility in these areas and deter anti-social behaviour.

The principles of the security features are listed below:

- New communal doors will meet SBD standards, and will be fitted with a certified locking system to meet the requirements of LPS1175 SR2.
- External lighting will meet BS5489
- PAS24 doors to all accessible doors. Laminated glazing BSEN356 level P1A.
- All bin and bike stores to be secure and follow SBD guidance.
- Lighting column mounted site-wide lighting will be complaint with BS54489

6.4 Building Services & Maintenance

The proposed refurbishment works to existing Coley Park flats are intended to deliver long lasting improvements, alleviate existing maintenance challenges and deliver a sustained enhancements to living environment for existing residents.

To ensure that this is achieved, the scope, design and specification of the proposed improvement works have been and will continue to be developed in close coordination with the RBC Property Services and Housing Management, alongside extensive technical research.

The following design features have been incorporated:

External Envelope

- Robust brick base to all three buildings, up to second floor window height, to prevent the ingress of rats through to the insulation at ground floor level and prevent against increased wear and damage at ground floor.
- Selection of a durable, long lasting, and high-quality render finish with minimal routine maintenance, along with easy repair systems.
- Reconfigured opening arrangement to residential windows to allow internal cleaning, designed to meet Part K Building regulation requirements.

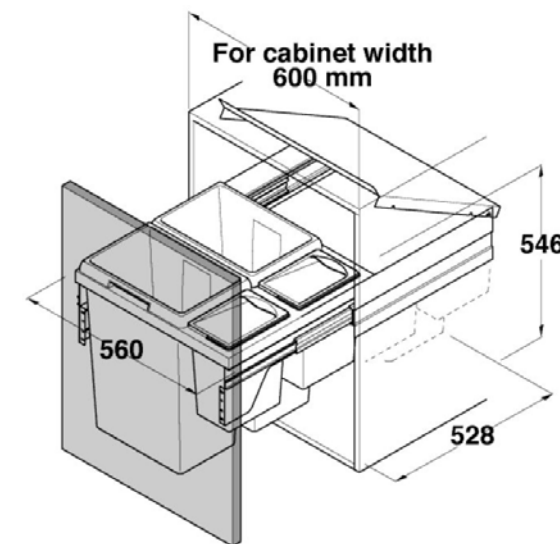
Mechanical & Electrical Systems

- Mechanical ventilation to the new refuse store and communal entrances, to eliminate odours and improve the internal air quality.
- MVHR system to be installed within each of the flats to eliminate condensation and improve internal air quality.
- Lighting to the entrances and rear gardens will be low energy with carefully selected luminaires.

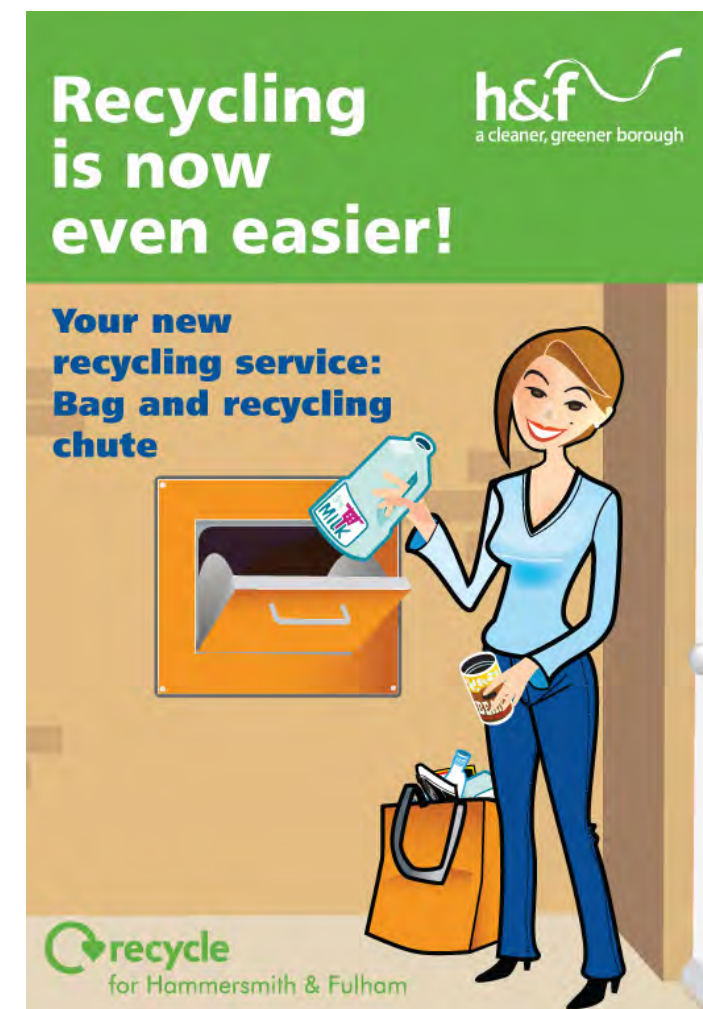
- New intercom and door fob access systems will be integrated throughout the communal circulation of the buildings.
- Extension of the recently installed sprinkler system to cover all of the flats, communal areas and the reconfigured entrance lobby and refuse store
- A new CCTV system is to be installed with both internal and externally located cameras

Tri-separator Refuse & Recycling Chutes

- Tri- separator chute and ground floor lobby to allow residents to dispose of general waste, mixed recycling, and food waste without having to enter the bin store, minimising issues with fly tipping.
- Waste selection system means that the hopper to chute will not open unless a waste option is chosen, reducing accidental contamination of waste bins.
- Fill sensors connected to a remote monitoring system to alert management staff when bins require rotating. Once full chute hoppers will lock preventing overflow in the bin store.
- Larger diameter chutes will reduce the occurrence of blockages in the chutes. Maintenance access panels at east floors allow for easy removal of blockages.
- Refuse, recycling and food waste caddies and bags which correspond to the size of the refuse chute will be provided to all residents.
- Electronic internal cleaning system will allow chutes to be routinely cleaned. Whilst integrated vents will eliminate odours.
- On collection days the refuse, recycling and food waste bins will be rotated by the management staff to ensure that the waste being collected is located closest to the refuse store doors.



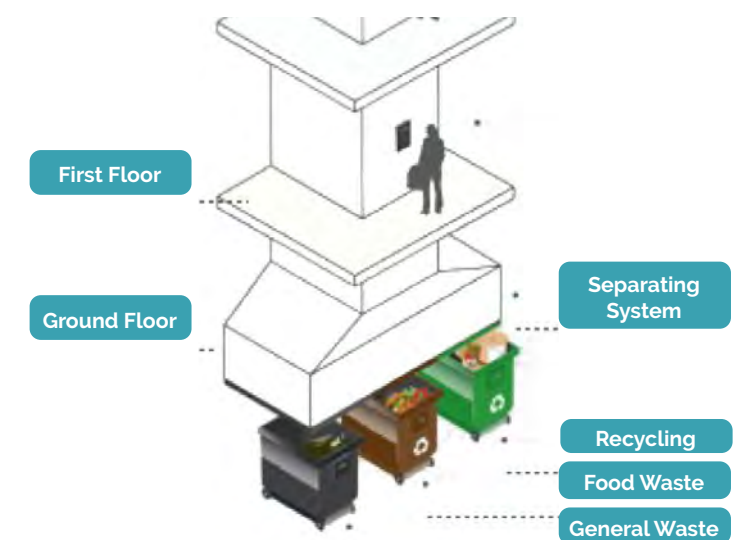
Refuse, Recycling & Food Waste Caddies - Chute Compatible



Example 'Recycle now' Signage



Smart Hopper with waste selection controls



Tri-separator refuse chute

6.5 Refuse Strategy

The approved Wensley Road phase 1 site plan was designed to ensure that refuse could be collected from the current refuse locations in all three of the existing blocks. Tracking of the refuse vehicle model used by Reading Borough Council, was carried out for the whole site and included within the transport statement.

On the approved phase 1 masterplan, for all three of the existing buildings, the two 1100 litre general waste bins remained in the existing locations. However owing to the reconfigured street and parking layout, revised locations for the four 1100 litre existing external recycle bins were proposed.

The new internal refuse and recycling facilities will be in the same location as the existing internal store and external general waste bins, therefore the proposed refuse collection arrangement will remain unaltered from the approved phase 1 planning application. The refuse vehicle tracking from approve phase 1 application (ref:20012) is included in the appendices.

Owing to the increased internal refuse and recycling capacity as part of the proposed refurbishment works, the relocated external refuse stores shown in the phase 1 planning submission will no longer be required.

Diagram Legend Site Plan

- Refuse Vehicle Collection Points
- General Waste Bins
- Recycling Bins
- Communal Recycling Bins
- Refuse Vehicle Routes



Existing Site - Refuse Strategy Diagram (NTS)



Phase 1 (ref:20012) - Site Refuse Strategy Diagram (NTS)

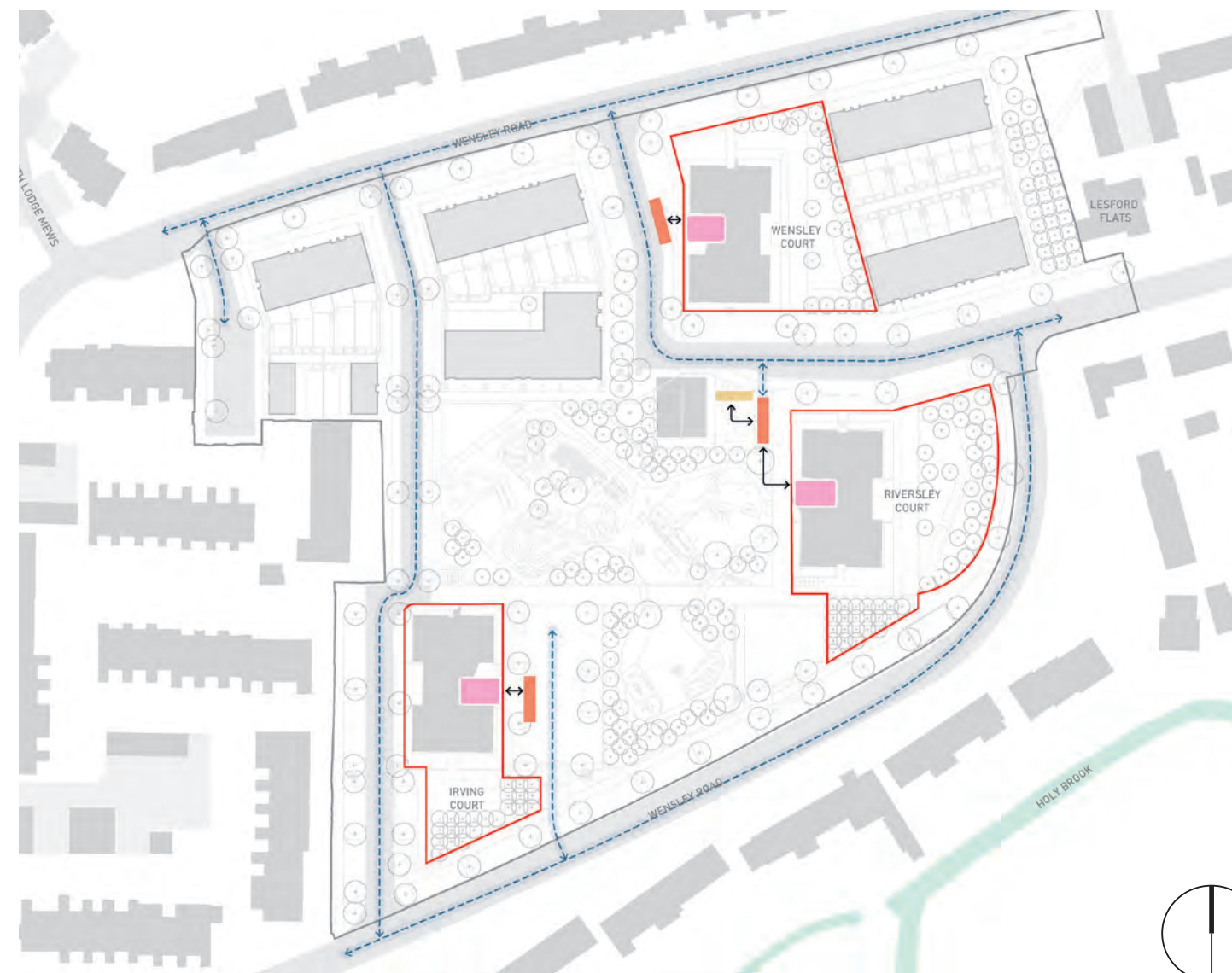
6.5 Refuse Strategy

The internal refuse store is to be extended and reconfigured to accommodate the tri-separator refuse system and all refuse, recycling, and food waste bins internally. The following capacity is proposed: -

- 5 x 1100litre General Waste
- 7 x 1100litre Recycling
- 5 x 240litre

RBC Housing Management and Waste Management teams intend to review the proposed mixed of refuse bin provision at regular intervals to response to requirements of the residents.

The proposed improvements to the refuse and recycling facilities are an essential element of the improvements works. It will be combined with wider communication and engagement strategy that is being developed by the housing management team to ensure that the new facilities are used correctly by residents.

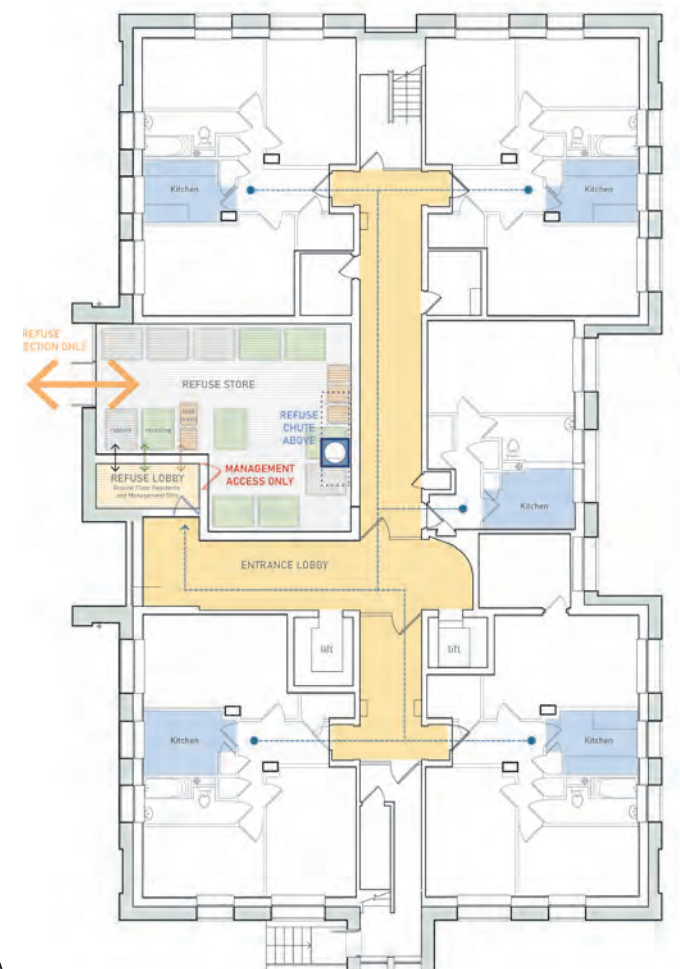


Phase 2 - Site Refuse Strategy Diagram - NTS

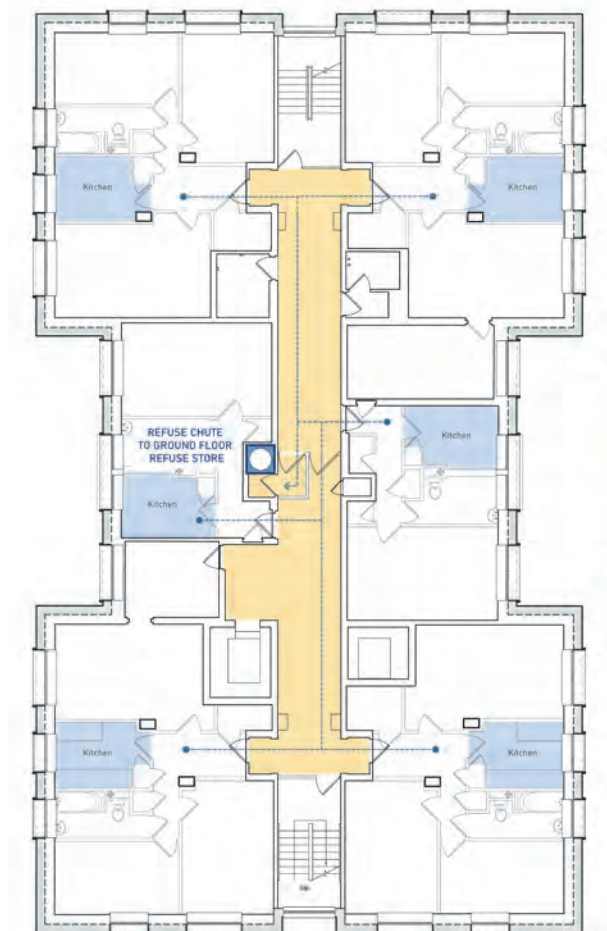
Diagram Legend
Site Plan



Diagram Legend
Building Plan



Ground Floor Refuse Strategy Diagram - NTS



Upper Floor Refuse Strategy Diagram - NTS

6.5 Fire Strategy

Fire Tender Access - Site Plan

As part of the phase 1 planning submission (ref:20012), vehicle tracking of the fire tender model used by Royal Berkshire fire was submitted to demonstrate that fire tender access to both the proposed new homes and the existing buildings. Vehicle tracking is included in the appendices.

Subsequently, the proposed phase 1 site plan has been reviewed by RBC Building Control and Royal Berkshire fire service. In addition to providing adequate access to the entrances, the proposed layout also provides improved access to additional building facades, therefore providing an improvement on the current arrangement.

Existing Building

The existing buildings are served by two means of escape with a fire escape stair at either end of the building. The communal corridors are separated into two compartment and there is a lobby at every floor to the refuse chute at all floors. The existing stairs are ventilated by open vents on every floor.

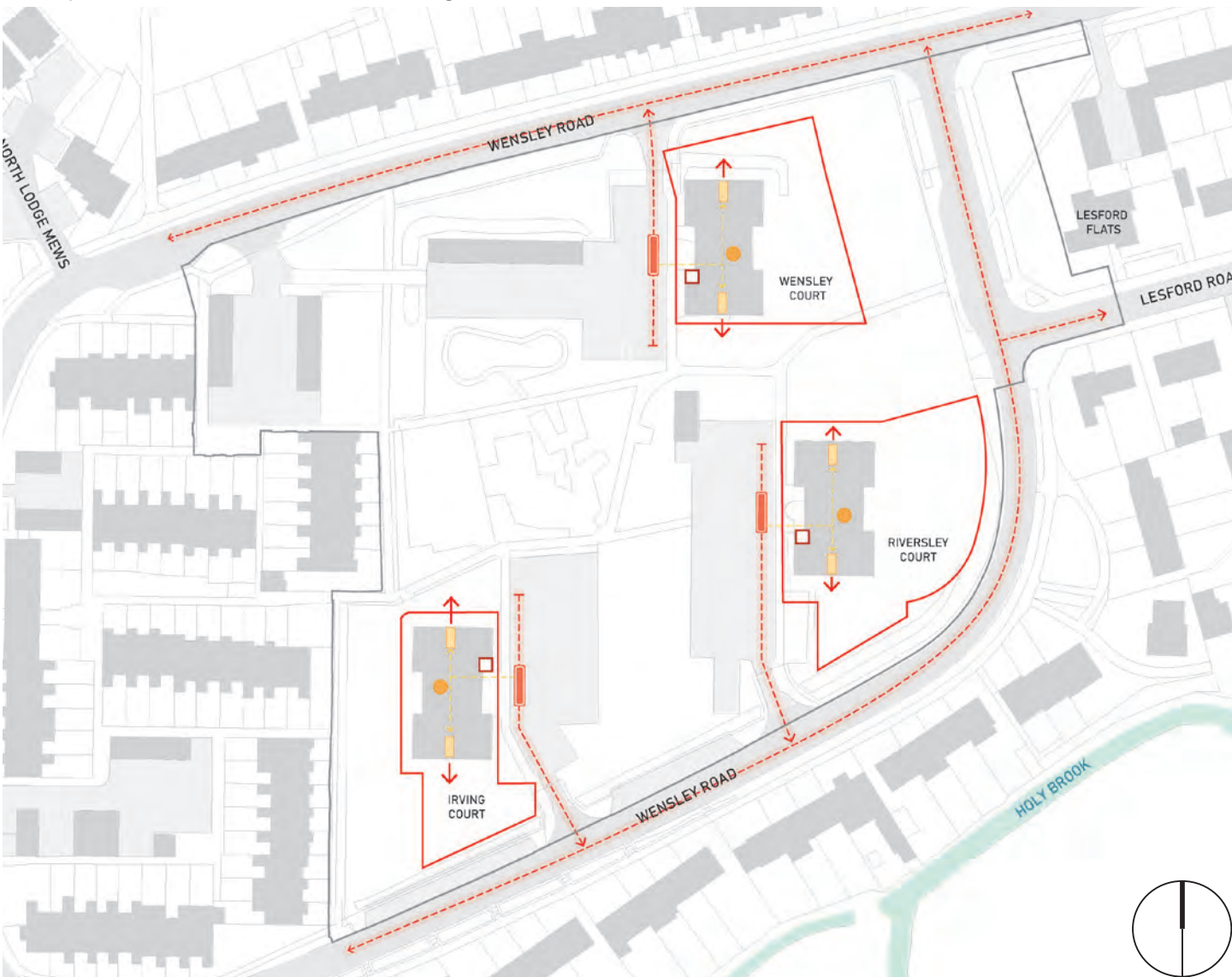
Currently sprinklers are being installed to all 267 flats and communal areas, along with a new fire alarm system to the communal areas. These works commenced in October 2019 and are due to be completed in June 2021.

Diagram Legend Site Plan

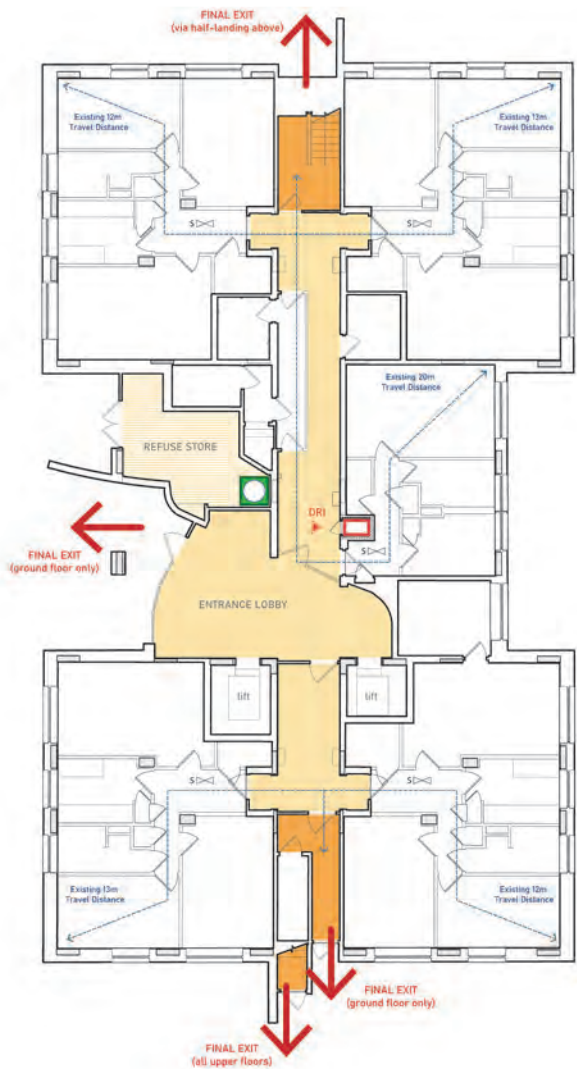
- Fire Tender
- Vehicle Movement
- Escape Stair & MOE
- Dry Riser Inlet
- Dry Riser Outlet

Diagram Legend Building Plan

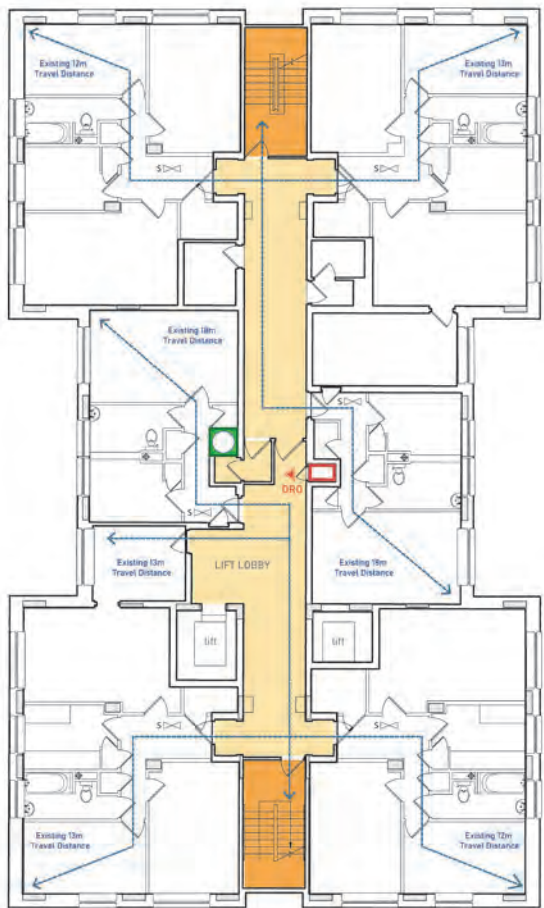
- Protected Common Stair
- Protected Common Corridor
- New Sprinkler System (To be completed June 2021)
- Refuse Store
- Existing Refuse Chute



Existing Site Fire Strategy Diagram - NTS



Existing Ground Floor Fire Strategy Diagram - NTS

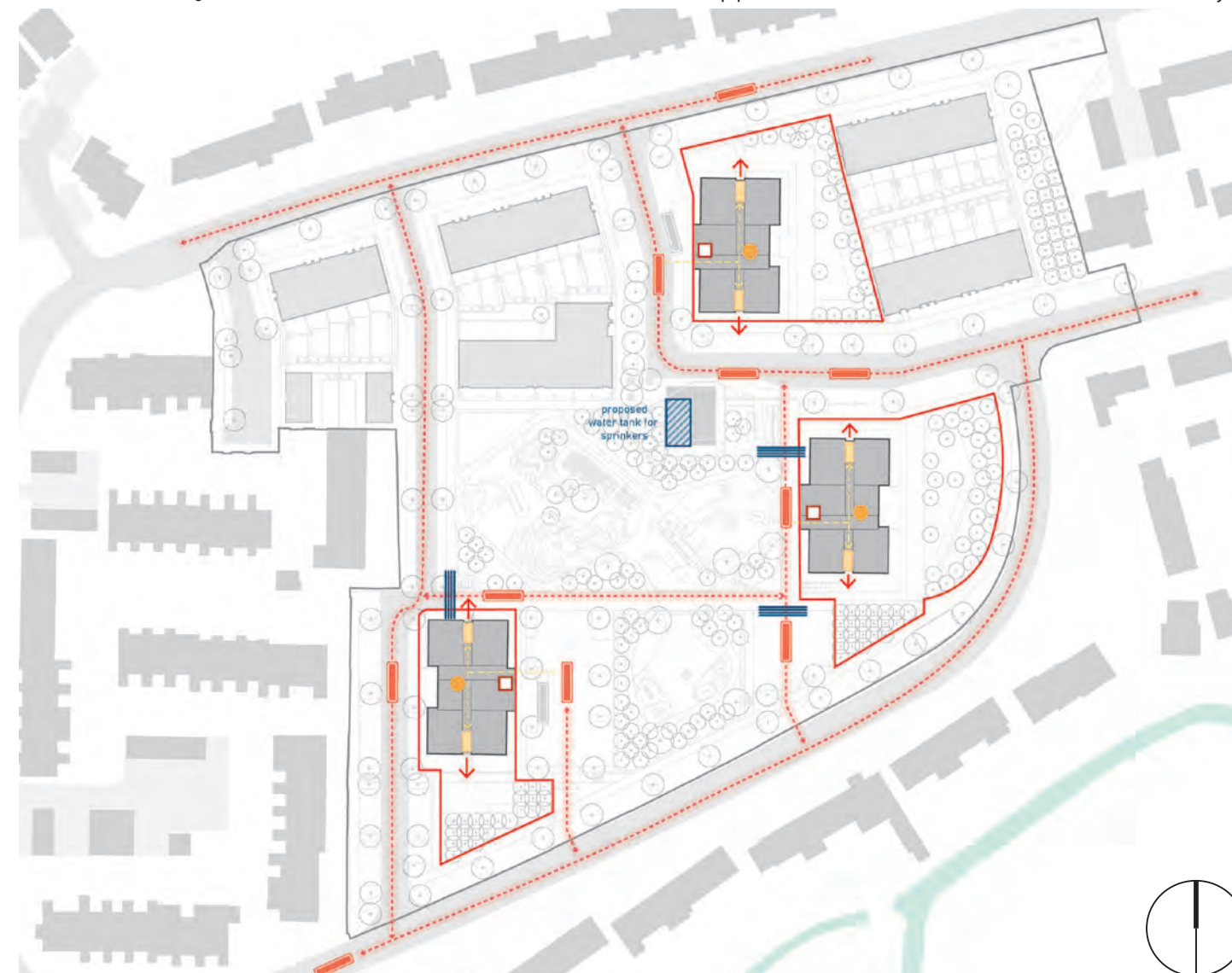


Existing Upper Floor Fire Strategy Diagram - NTS

6.5 Fire Strategy

It is imperative that any proposed improve works enhance the safety of existing residents, therefore the following measures are included within the proposal: -

- Existing external fabric to be replaced with a non-combustible, mineral wool insulated render system that is compliant with regulation 7 of the approved document B (2018), A2-S1-d0 or higher.
- Maintained and improved access routes to and from existing means of escape.
- Relocation of the dry riser inlet to an external location, adjacent to the new entrances.
- Extension of the new sprinkler system, to all of the existing flats and communal areas, to the reconfigured entrance lobby, refuse lobby and store.
- Replacement windows to the stair cores to incorporate an automatic opening vents (aov)
- Replacement of existing fire escape doors and external fire escape steps in accordance with approved document B of the building regulations.
- A minimum of 60 minute fire rated walls to new internal refuse store, with fire rated hoppers to the refuse chute and refuse lobby.



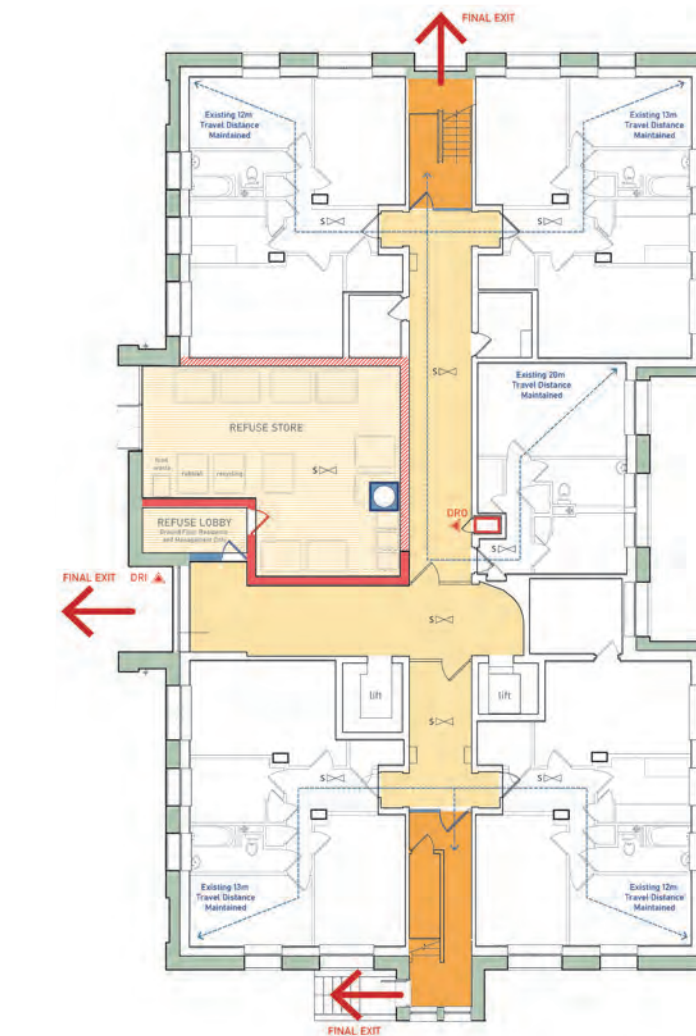
Phase 2 - Proposed Site Fire Strategy Diagram - NTS

Diagram Legend
Site Plan

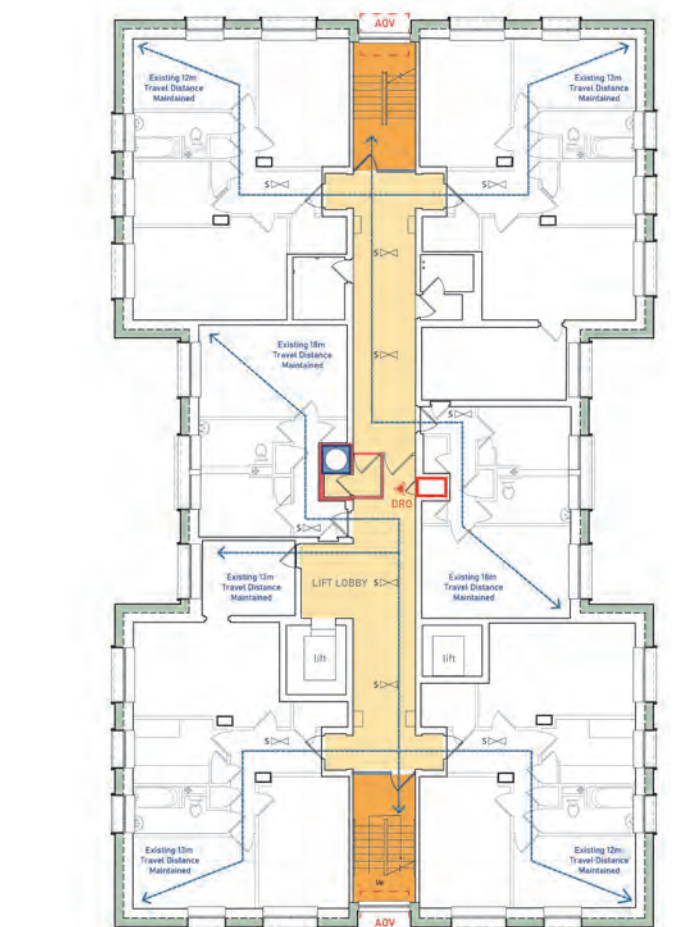
- Fire Tender
- Vehicle Movement
- Escape Stair & MOE
- Dry Riser Inlet
- Dry Riser Outlet
- Drop Bollards

Diagram Legend
Building Plan

- Non-combustible EWI (A2-S1-d0 or higher)
- Minimum of 60min Fire Rated Wall
- Minimum of 60min Upgraded Fire Rated Wall
- 60min Fire Rated
- New Sprinklers (To be completed June 2021)
- Protected Common Stair
- Protected Common Corridor
- Replacement Refuse Chute



Proposed Ground Floor Fire Strategy Diagram - NTS



Proposed Upper Floor Fire Strategy Diagram - NTS