



2.0 Masterplan Framework

The Masterplan Framework creates codes that seek to secure the key placemaking characteristics of the innovation neighbourhood. This wide ranging collection

of codes covers diverse topics including sustainability, landscape, urban design, accessibility, movement and safety.

- 2.1 Sustainability and Mitigating Urban Heat
- 2.2 Spatial Hierarchy and Public Realm Framework
- 2.3 Legibility Framework
- 2.4 Inclusive Design Principles
- 2.5 Active Travel Framework
- 2.6 Framework Towards a More Inclusive Environment
- 2.7 Uses and Mix
- 2.8 Servicing, Access and Car Parking Strategy
- 2.9 Character Areas
- 2.10 Street Typologies
- 2.11 Urban Greening Framework
- 2.12 Landscape Vision
- 2.13 Tree Strategy
- 2.14 Ecology and Biodiversity Enhancement
- 2.15 Water Responsive Framework
- 2.16 Play and Leisure Strategy
- 2.17 Lighting, Wayfinding and Security

2.0 Masterplan Framework

2.1 Sustainability and Mitigating Urban Heat

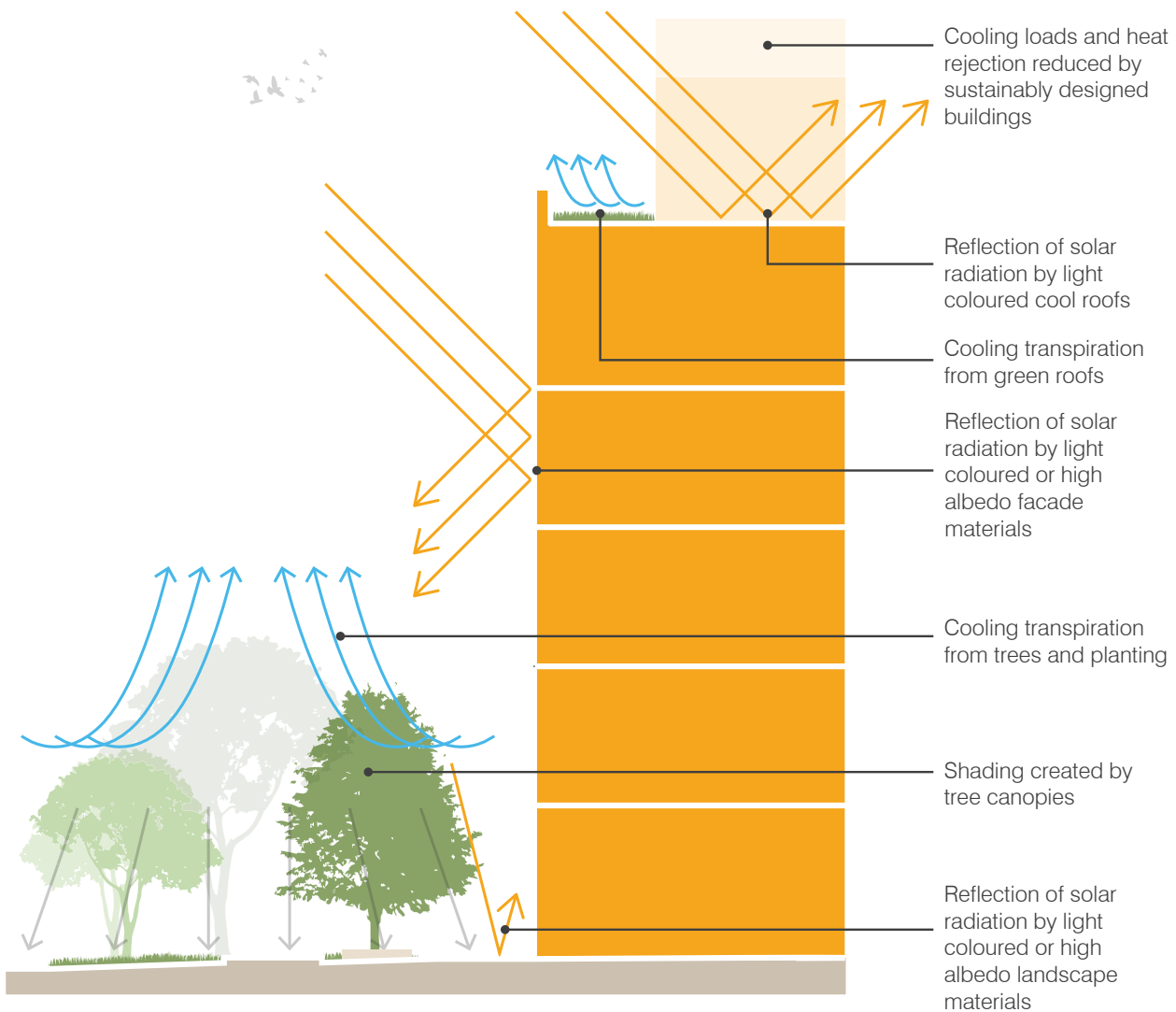
The below codes aim to provide suitable controls to limit the influence that the Urban Heat Island will have on the buildings and spaces as well as the surrounding area.

Sustainability

- 2.1.0 All reserved matters applications *must* demonstrate compliance with the principles and strategies set out within the Sustainability Strategy and Energy Strategy.

Urban Heat

- 2.1.1 The detailed design of both buildings and landscape *must* be informed by their cumulative impacts on the Urban Heat Island Effect.
- 2.1.2 Design strategies to mitigate urban heat *should* form part of a holistic design strategy that gives suitable weight to other factors such as townscape appearance.
- 2.1.3 Reserved Matters applications *should* demonstrate the individual plot contribution to the site-wide Urban Greening Factor calculation.
- 2.1.4 The strategies to mitigate urban heat *should* include, but need not be limited to, strategies such as those listed below:
- Maximising soft landscape area
 - Maximising tree canopy cover to create shade
 - Maximising green roof area
 - The use of light-toned or high-albedo roofing materials to create cool roofs
 - The minimising of area of hard landscape materials for vehicle movement
 - Water sensitive design that allows for open water
 - Self-shading façades
 - Shading devices incorporated into buildings designs to shade the landscape
 - The use of light-toned or high-albedo facade materials
 - The use of light-toned or high-albedo landscape materials
 - Maximising vertical greening by using climbing plants on facades



Use of rain gardens in an open green space as landscape features.
Deer Creek Watershed Alliance, US



Light coloured materiality and green roofs for urban heat mitigation.
Belle Vue, London, Morris + Co



Use of rain gardens as a buffer between vehicle and pedestrian routes.
Camley Street, London, LDA Design

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2.2 Spatial Hierarchy and Public Space Framework

The proposal will be a public realm led development and will create a clear network and hierarchy of streets and spaces. The following design codes apply across the whole site to form a clear network and hierarchy of streets and new public open spaces that are well framed and overlooked by active frontages.

- 2.2.0 These Design Codes *must* be read in conjunction with the Landscape & Public Realm Parameter Plan.
- 2.2.1 Spaces within the masterplan *must* be defined as primary, secondary or tertiary and are allocated per the site plan on the opposite page to support the movement hierarchy.
- 2.2.2 The definitions of a Primary, Secondary and Tertiary spaces are given below and *must* be used to define the characteristics of the spaces and the buildings that form them:
- Primary: A highly active street or space forming a focal point of activity or acting as part of the main circulation around the site. It is expected that these streets will be bounded by the primary active spaces within buildings.
 - Secondary: A connective street or space creating routes across the site between primary streets or spaces. It is expected that these streets will host some activity but be less active than the primary streets.
 - Tertiary: A functional street or space that is intended to feature little or no public facing activity. Typically found at 'back-of-house' areas.
 - Access: A zone for reconfigurations and improved access to the site. There are no codes for access areas.

- 2.2.3 The Primary, Secondary and Tertiary classifications are designated to offer controls over design criteria which relate to character and *must* not result in undue downgrade in the quality of space or materiality where it would negatively impact the public experience of the masterplan.
- 2.2.4 Transitions between different street classifications *must* be designed so that the public realm reads as a singular cohesive design.
- 2.2.5 Active frontages *must* be included in all primary areas.
- 2.2.6 The Beehive Redevelopment *must* include a large open green space at the southern entrance to the site.
- 2.2.7 The Park *must* be designed to reflect its significance within the Proposed Development and the local area and be welcoming and accessible for all.
- 2.2.8 The Beehive Redevelopment *must* include a variety of open spaces that are accessible for all.
- 2.2.9 The open spaces *must* be varied in scale, character and identity.
- 2.2.10 The Beehive Redevelopment *must* include a square with a mix of hard and soft landscaping.
- 2.2.11 The square *must* be designed to be capable of supporting outdoor events.
- 2.2.12 Active frontages *should* be included in all secondary areas.
- 2.2.13 Spaces between buildings on secondary streets *should* be adequately activated by either active frontage or building entrances.
- 2.2.14 Active frontages *should* be continuous along the Beehive Greenway, as shown in the illustrative material.

Note:

An active frontage is a frontage created by populated internal space that has a direct visual relationship with the external environment.

Active frontages provide activation and amenity to the streetscape and improve public security by enabling passive surveillance of spaces.



Primary street example
Assembly Row, Boston, Copley Wolff
Design Group



Secondary street example
Southbank Place Masterplan, London,
Squire and Partners

Spatial Hierarchy and Active Frontage



Space for cultural events and interactive
art.
Times Square Design Pavilion Event, NY



Urban green space with layers of
smaller spaces.
Veolia HQ, Aubervilliers, Vogt

2.0 Masterplan Framework

2.3 Legibility Framework

The Legibility Framework should act as an overlay to the spatial hierarchy that defines the components that will come to create a legible, memorable and easily navigable place. All buildings regardless of hierarchy must exhibit design excellence.

- 2.3.0 Nodal Zones, Markers, Thresholds and Wayfinding Corners *must* collectively enhance sitewide legibility and in turn the legibility of onward journeys through the site

Nodal Zones

Zones of distinct character and activity within the masterplan that enable easy determination of location within the wider masterplan

- 2.3.1 Nodal Zones *must* be designed with to be clearly distinct from other areas of the masterplan.
- 2.3.2 Nodal Zones *must* be designed to enable easy wayfinding around the site.
- 2.3.3 Nodal Zones *must* be engaging spaces enhanced by high quality landscape design.
- 2.3.4 Nodal Zones *must* be designed to be safe, accessible, sustainable and allow for future flexibility.
- 2.3.5 Nodal Zones *should* include spaces designed to enable people to meet or gather.
- 2.3.6 Nodal Zones *should* deliver a focussed vision centred around a primary use or spatial typology.
- 2.3.7 Public art *should* be integrated into Nodal Zones as part of the wider strategy.

Marker Buildings

Key buildings which signify important moments within the masterplan

- 2.3.8 The Marker typology *must* only be applied to Plots 2 or 5 or both
- 2.3.9 Markers *must signify* key points with the site; for example the center of the site or the primary entrance
- 2.3.10 The architecture of Markers *must* respond the significance of these buildings, whether locally, city-wide or both.

- 2.3.11 The architecture of Markers *should* clearly communicate the nature of the new innovation neighbourhood being created.

Thresholds

Key transition points between entry spaces and the central spaces of the masterplan

- 2.3.12 Thresholds *must* be designed to soften the transition between the existing context and the central spaces of the masterplan.
- 2.3.13 Thresholds *must* clearly communicate the transition between the spaces that they bridge between.
- 2.3.14 Thresholds *must* clearly communicate the transition between spaces when viewed from site entry points.
- 2.3.15 Thresholds *must* be created by coordinated architectural and landscape design.
- 2.3.16 Thresholds *must* be designed to create welcoming and inclusive entrances into the central masterplan spaces.
- 2.3.17 Thresholds *must not* create an exclusive place or experience which would dissuade use of the site by local people.

Wayfinding Corner

Building corners that terminate local views and may be used as part of the wayfinding strategy for the site.

- 2.3.18 Wayfinding Corners *must* be an integrated part of the architectural solution for the buildings that they form part of
- 2.3.19 Wayfinding Corners *must* be easily identifiable to enable clear wayfinding through the site.
- 2.3.20 The coordination of built form and landscape *must* be informed by sightlines to Wayfinding Corners.
- 2.3.21 Wayfinding Corners *should* be considered as potential sites for public art as part of the wider strategy

- Primary
- Secondary
- Tertiary
- Access
- Key Arrival Spaces
- Active Frontage
- Nodal Zone
- Marker Buildings
- Threshold
- Wayfinding Corner



Legibility Framework



Using existing and new trees to frame a focal point in a public space.
Henning G. Kruss, Bjarke Ingels Group, Denmark



Articulation change at a marker point.
R7 Kings Cross, Morris+Co, London



Focal point urban spaces that allow for
sufficient space for activity.
Coal Drops Yard, Townshend, London

2.0 Masterplan Framework

2.4 Inclusive Design Principles

The Proposed Development will be accessible and welcoming to all: people from the local community, occupiers of the new buildings and visitors. The Development will accommodate for all abilities and backgrounds, physically and socially.

The design will reflect all national and local design requirements, guidance and Building Regulations.

The access and circulation around the site will accommodate for all abilities and modes of transport for a fully accessible development.

Spaces

- 2.4.0 The overall character of the site *must* be welcoming and inclusive to local residents and the wider public.
- 2.4.1 At Reserved Matters, inclusive design *must* be evidenced at all stages of design, from concept to completion.
- 2.4.2 When pedestrian, cyclist and vehicular circulation meets at a crossing junction, priority *must* be given first to pedestrians and then, to cyclists and finally, vehicles.
- 2.4.3 Levels *must* work with and tie in to existing site levels and steps *should* be avoided. Where steps are required, an alternative minimum 1:21 graded route *must* be provided.
- 2.4.4 Landscape *must* be predominantly flush with gradients of 1:40 and prioritise gradients of 1:60 or shallower, where practical for maximum accessibility, movement, circulation and flexibility of use.
- 2.4.5 All hard landscaping, kerbs and edges *must* be compliant with policy.
- 2.4.6 Accessible parking *must* have flush access to adjacent pavement surface, as well as road surface, with contrast low kerb outlining each bay.
- 2.4.7 Play areas *must* include inclusive play elements that are appropriately integrated.
- 2.4.8 Street furniture *must* be placed at regular intervals across the site to allow for places of rest and this furniture *must* be inclusive by design.

- 2.4.9 All public spaces *must* be appropriately lit for use during day and night.
- 2.4.10 An Accessibility Consultant *should* be appointed for Reserved Matters applications.
- 2.4.11 Level access *should* be available to all public open space.
- 2.4.12 Signage design *should* be inclusive by design to ensure way-finding is possible for all.

Built Form

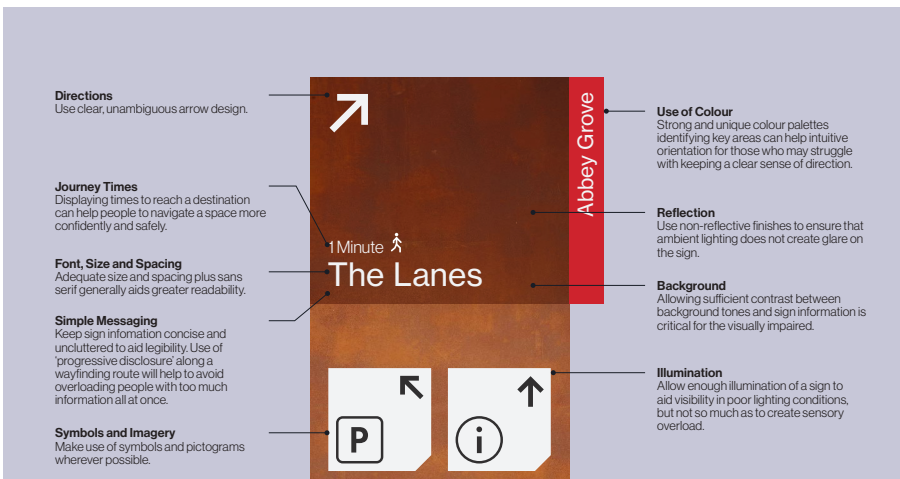
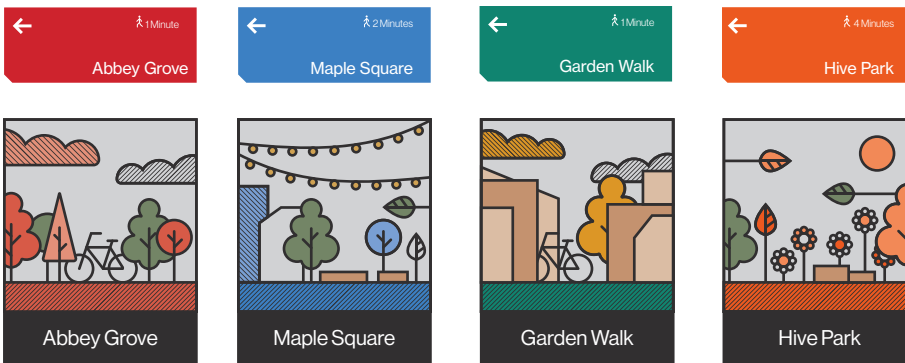
- 2.4.13 At Reserved Matters, all buildings *must* meet Building Regulations and the Equality Act 2010.
- 2.4.14 Reserved Matters internal layouts *should* meet design guidance for accessibility.



Inclusive play equipment using colour and texture.



A variety of inclusive seating options for all.



Inclusive wayfinding signage.

Proposed Wayfinding Strategy for the Beehive Redevelopment, Leonard Design Architects



Use of colour, texture and sensory qualities to create a varied environment. Battersea Power Station, London, LDA Design

2.0 Masterplan Framework

2.5 Active Travel Framework

These Codes aim to create a place that will deliver an exemplary active travel movement network for all users and prioritise sustainable travel.

All Active Travel Routes and Modes

- 2.5.0 The central spine comprising of Abbey Grove, the Garden Walk, Maple Square and Hive Park, known as Beehive Greenway, *must* act as a single continuous landscape accommodating a direct active travel route.
- 2.5.1 Where active travel routes cross the central public realm spaces, they *must* be designed in a way that minimises the interruption to the continuous flow of the public realm.
- 2.5.2 All cycle routes *must* be designed to comply with LTN 1/20 spatial standards.
- 2.5.3 Where active routes meet vehicle access, they *must* be prioritise active travel modes and promote legibility, using methods such as:
 - Extension of surface treatment of the pedestrian lane across over the trafficked area.
 - Detailing of surface treatment such as dropped kerbs or raised tables at level pedestrian crossing points.
 - Suitable traffic calming measures to reduce vehicle speeds.
 - Highly visible and legible signage to indicate priority movements to all users

Pedestrians

- 2.5.4 Pedestrian movement and safety *must* be prioritised at all times.
- 2.5.5 The movement network *must* be designed to minimise the requirement for pedestrians to cross other transport modes.

Cycles

- 2.5.6 Where cycle parking is to be provided in a structure separate to the building that it is serving, the route from the exit of the cycle parking to the entrance of the end of trip facilities within the building *must* be less than 50m.
- 2.5.7 The number of cycle parking spaces to be provided *must* be in accordance with

current adopted cycle parking standards requirements unless an evidenced proposal for the use of an alternative standard can be provided and agreed.

- 2.5.8 A minimum of 20% of the total cycle parking spaces in each location *must* be Sheffield stands.
- 2.5.9 A minimum of 5% of the total cycle parking in each location *must* be able to accommodate large format cycles (e.g cargo bikes, tricycles and recumbent cycles)
- 2.5.10 Spaces for large format cycles *must* be appropriately safeguarded from misuse; for example, through the implementation of clear wayfinding, signage, demarcation and format of stand.
- 2.5.11 High quality end of trip facilities such as changing rooms, showers and lockers *must* be provided within each plot, as appropriate to the uses of each plot.
- 2.5.12 Bike maintenance stations *must* be provided within on-plot cycle parking.
- 2.5.13 Provision *must* be made for the charging of e-bikes within on-plot cycle parking
- 2.5.14 The internal layout of cycle parking facilities *must* be in accordance with current adopted cycle parking design guidance unless a suitable proposal for the use of an alternative standard can be provided and agreed.
- 2.5.15 Designated cycle parking facilities and entrances *must* be overlooked to enable passive surveillance and discourage anti-social behaviour.
- 2.5.16 Entrances to on-plot cycle parking *should* be expressed positively through the architecture of the building
- 2.5.17 Entrances to on-plot cycle parking *should* be clearly legible as high quality entrances; for example, through the use of transparent façades and suitable wayfinding techniques

Other Active Travel

- 2.5.18 Provision should be made for the parking of other active travel modes such as scooters, and hire schemes for e-scooter and ebike.

- Entry Point
- On-Plot Cycle Parking
- Cycle Parking Entrance
- Primary Shared Cycle and Pedestrian Route
- Cycle Route
- Pedestrian Route



Cycle Framework Strategy



Entrances for cyclists that are positively integrated within the architecture of the building
101 Collins Street, Melbourne, Gray Puksand



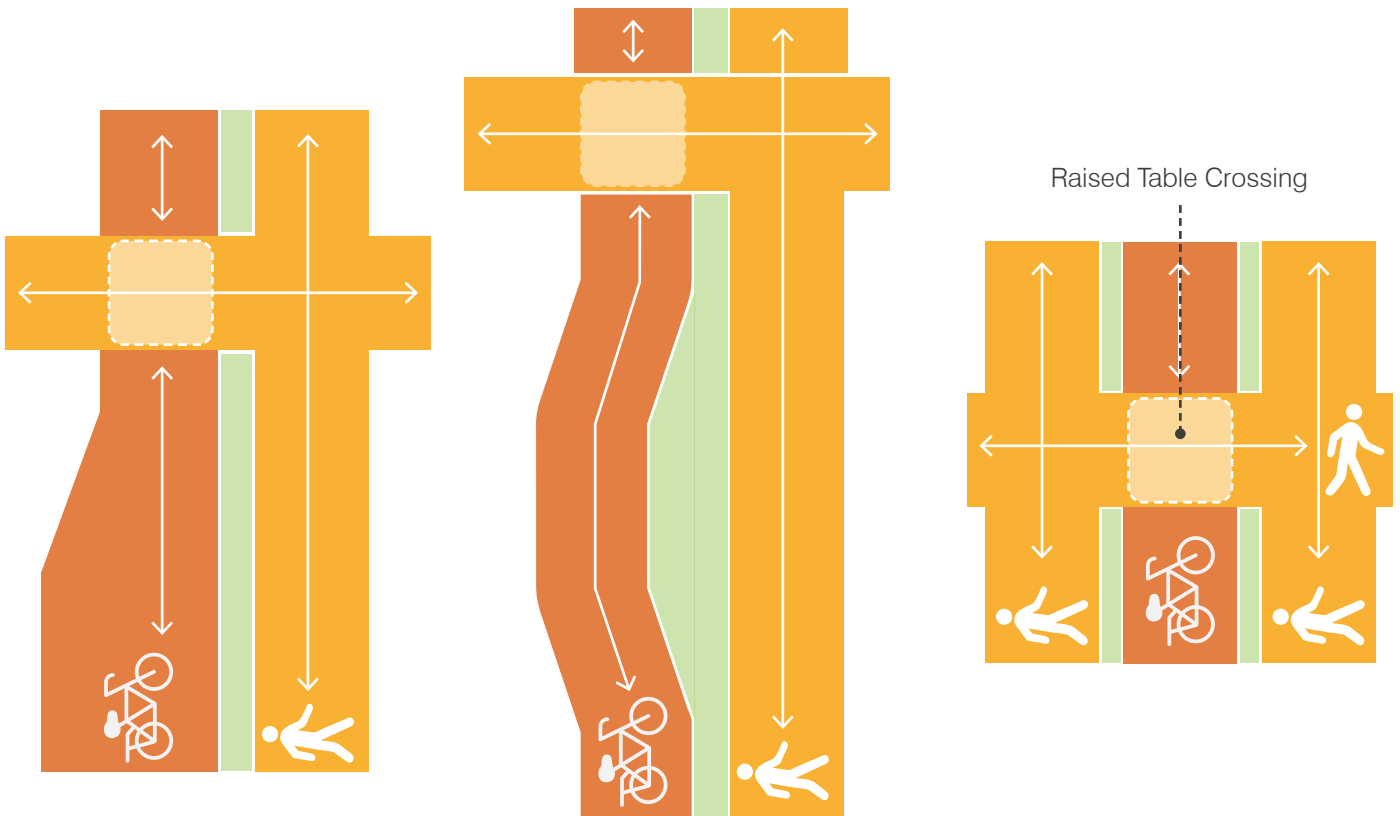
High quality end of trip facilities
Riverscape, London, Five at Heart

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2.6 Framework Towards a More Inclusive Environment

The Framework Towards a More Inclusive Environment sets out the principles that will ensure that pedestrians and cyclists are prioritised and can confidently move around the site with risks for conflict minimised. Particular focus is given to the street spaces which will contain the segregated pedestrian cycle routes of the Beehive Greenway.

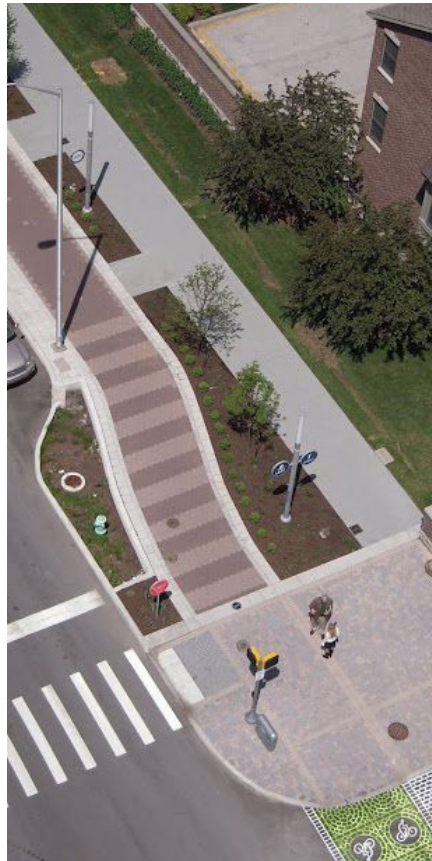
- 2.6.0 The detailed design of both buildings and landscape *must* be informed by their cumulative impacts on delivering outdoor spaces in which pedestrians and cyclists can safely move with the risk of conflict suitably reduced.
- 2.6.1 All public realm *must* be designed so that pedestrians are given priority over other site users.
- 2.6.2 Pedestrians and cyclists *must* be given clearly communicated priority at any crossings with vehicular routes.
- 2.6.3 Cycle and pedestrian movements *must* be segregated as soon as is technically achievable upon entering the site.
- 2.6.4 The pedestrian environment *must* be designed such that pedestrian movement zones are always the preferential choice for pedestrian journeys so as to minimise the potential for mis-use of cycleways by pedestrians.
- 2.6.5 Cycleways *must* be of the highest quality such that the designated routes become the preferential routes through for the majority of users
- 2.6.6 The scenario of cyclists using non-designated routes and highways as means of transit through the site *must* be considered within landscape and highways design of all areas.
- 2.6.7 Within Maple Square and Garden Walk it is required that design strategies with the objective of moderating cyclist speed *must* be employed. These strategies may included, but need not be limited to:
 - Narrowing of cycleways
 - Deviation of routes
 - Raised pedestrian crossing tables
 - Material demarcation
 - Clear signage and wayfinding
- 2.6.8 Any cycleway that crosses pedestrian desire lines *must* feature frequent crossing points with clearly communicated pedestrian priority.
- 2.6.9 Cyclists *should* be given reasonable space to dismount adjacent to cycleways with this space being separate to primary pedestrian footways.
- 2.6.10 Spaces for dismount *should* be clearly communicated with suitable signage and wayfinding.
- 2.6.11 Cycleways at entry points *should* be 4.5m wide, with this width being achieved as soon as is technically achievable upon entering the site. Narrower cycleways may be provided if expected cycle movements fall within reasonable bounds to allow this.
- 2.6.12 Proposals *should* be influenced by the Department for Transport guide: "Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure".



2.6.7 Strategies for safely moderating cyclist speed. From left to right, narrowing of cycleways, deviation of routes and raised pedestrian crossing tables. [Illustrative Diagrams].



Clear signage for pedestrians and cyclists.
Trapeze, France, AAUPC



Material demarcation at crossing points and along routes that prioritised pedestrians and cyclists over vehicles.
Indianapolis Cultural Trail, US



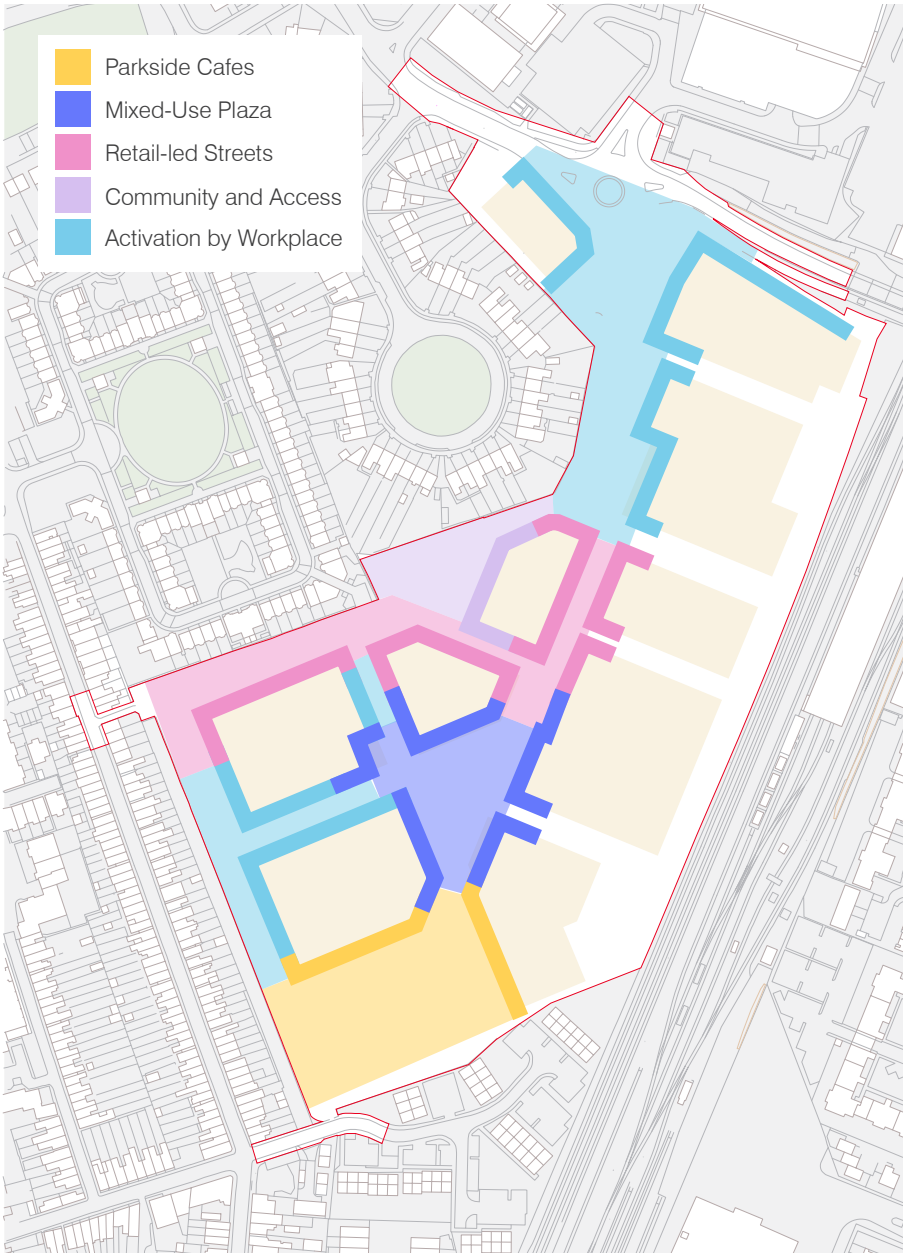
Cycle routes bordered with planting.
Avenues Mermoz et Pinel,
Gautier+Conquet Architects, France

2.0 Masterplan Framework

2.7 Uses and Mix

Whilst the exact nature and layout of the mixed-use ground floors will be determined at Reserved Matters applications, this Code is to form organisational principles to shape the ground plane environment to ensure a synergy between ground floor uses and the public realm to create a vibrant and coherent layout

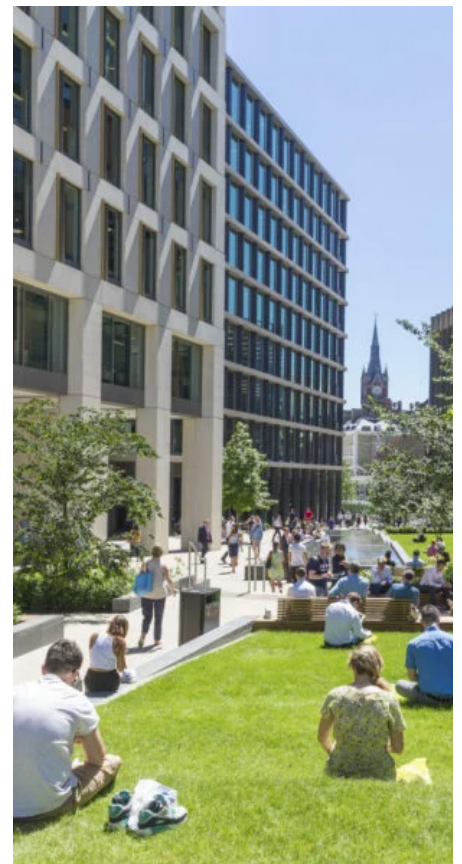
- 2.7.0 The ground floors of the proposed buildings *must* be designed to collectively deliver a mix of ground floor uses.
- 2.7.1 The ground floor uses *should* include more than two uses other than workplace or lobby in order to create a multi-faceted new place. This code is to be applied site-wide not per building.
- 2.7.2 The organisation of the mix of uses *should* be in accordance with the principles of the zoning plan, opposite.
- 2.7.3 Workplace is an acceptable ground floor use anywhere on site but *must* adhere to the principles for active frontage outlined elsewhere in this document.
- 2.7.4 A strategy for meanwhile uses *must* be included within the first Reserved Matters Application
- 2.7.5 Public facilities including toilets, drinking water fountains and seating *must* be included on site.
- 2.7.6 Ground floor uses *should* be organised such that they can support and extend on-site activation outside of the core Monday to Friday working day hours of 9am until 5pm.
- 2.7.7 The ground floors of the buildings *should* be designed to be flexible, allowing for future change in use of the proposed mixed-use spaces.
- 2.7.8 Spaces for community use *should* be included within the ground floor of at least one building.
- 2.7.9 The opportunity for public WiFi *should* be explored as part of the delivery of the main public realm areas.



Illustrative Ground Floor Organisation and Mix



Illustrative ground floor plan showing the mix of uses.



An active space bounded by commercial addresses and mixed use floorspace per the proposed Mixed-use Plaza.



Illustrative view showing the activation of Hive Park by the parkside cafes.

2.0 Masterplan Framework

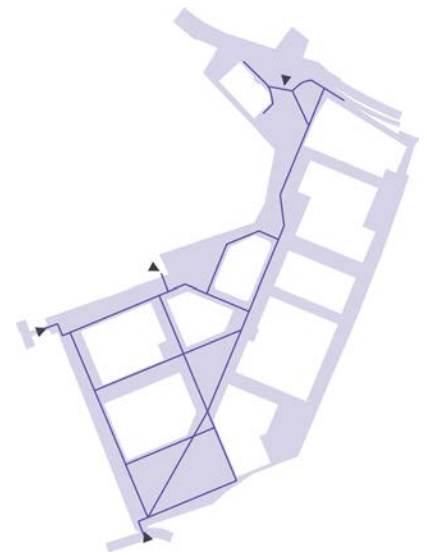
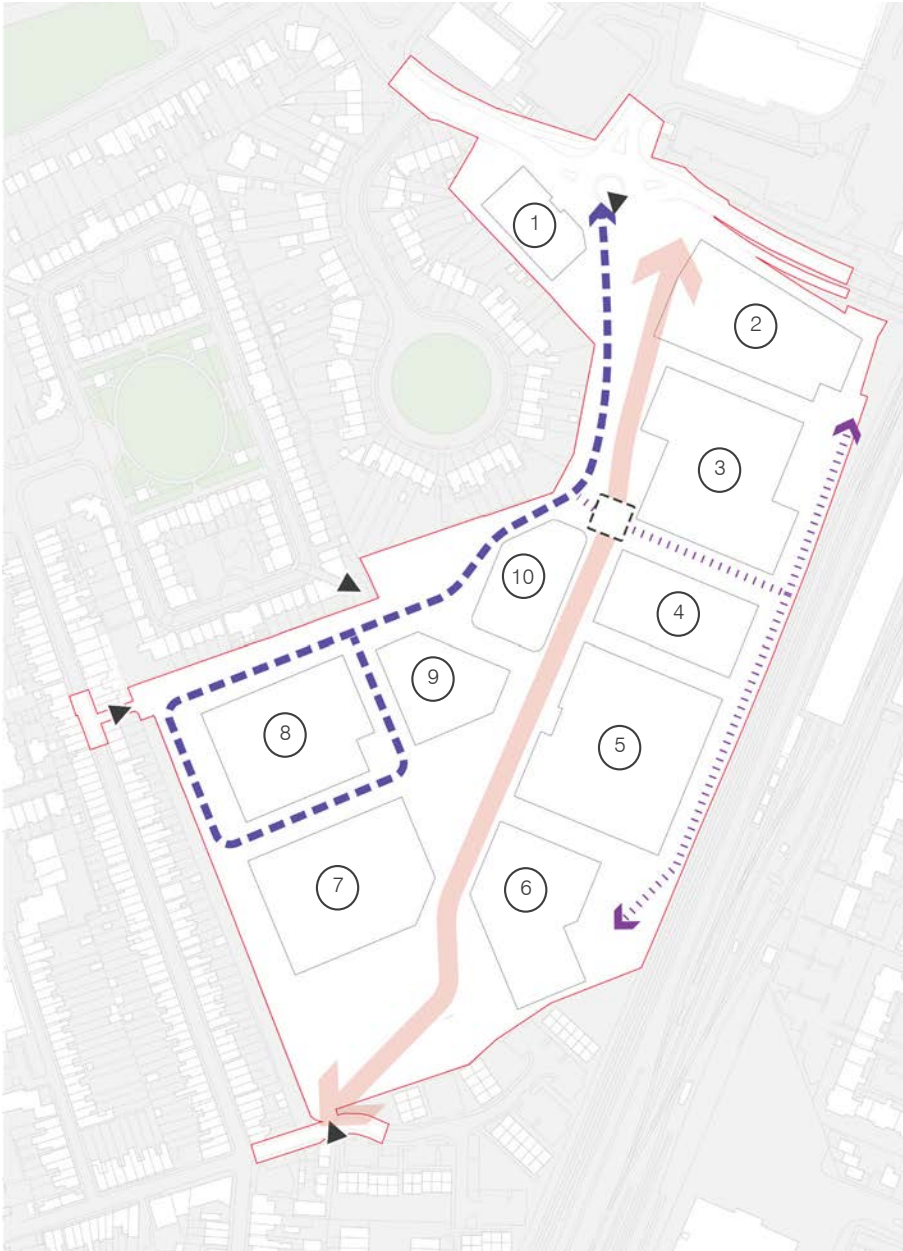
2.8 Servicing, Access and Car Parking Strategy

This code controls and manages vehicle movements to minimise their impact on the masterplan and so optimise the quality of place for people to enjoy.

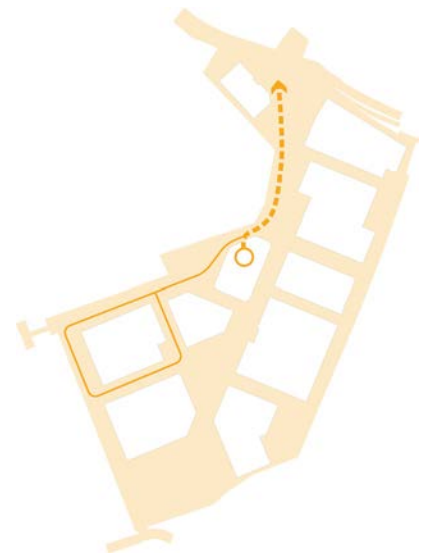
- 2.8.0 These Design Codes *must* be read in conjunction with the Access and Circulation Parameter Plan.
- 2.8.1 Movement across the site *must* prioritise pedestrians first, then cyclists, followed by vehicles to encourage a sustainable travel mode shift.
- 2.8.2 Vehicle access *must* be restricted to the Coldham's Lane entrance only.
- 2.8.3 All vehicles *must* adhere to a 15mph design speed limit.
- 2.8.4 There *must* be a bus stop for the Beehive Centre on the site.
- 2.8.5 Private car access *must* be limited to the route between the Coldham's Lane entrance and the proposed multi-storey car park at Plot 10. Exceptions to this include access for accessible parking, car club and taxi spaces and any traffic required to service events within the central spaces of the landscape.
- 2.8.6 Where service vehicle routes cross the central public realm spaces, they *must* be designed in a way that minimises the interruption to the continuous flow of the public realm.
- 2.8.7 The vehicle access to the loop road around Plot 8 *must* be limited to buses, service vehicles and access for private cars to accessible parking and car club spaces only.
- 2.8.8 The loop road *must* be designed to prioritise placemaking, with the impact of vehicle movements and parking to be minimised.
- 2.8.9 The majority of heavy goods servicing including the delivery and removal of bulk lab gasses *should* be limited to the service yards behind Plots 2 to 6.
- 2.8.10 The bus route *should* follow the loop road around Plot 8.
- 2.8.11 Vehicle movement around the loop road around Plot 8 *should* be limited to one-way clockwise movements.

-  Entry Point
-  Primary Route
-  Secondary Route

 Tertiary Route



Pedestrian Movement



Vehicle Movement



Parking bays softened by tree planting.
Nightingale Estate, London, Townshend

2.0 Masterplan Framework

2.9 Character Areas

The Proposed Development will be a public realm led scheme of mixed use. The masterplan defines a series of character areas that form a key part of the placemaking strategy.

2.9.0 The proposal *must* be a public realm led mixed-use scheme that incorporates and harmonises workplace uses with a high quality mixed-use ground floor.

2.9.1 The masterplan *must* comprise a number of primary character areas to create a varied and interesting sense of place. For the purposes of this application, these are illustratively named and located as below:

- **Hive Park:** a new green park activated by parkside cafes and restaurants
- **Maple Square:** a new flexible civic plaza designed to host events throughout the year
- **Garden Walk:** a highly activated green street that forms the northern part of the local centre
- **Abbey Grove:** the primary site entrance, softened by dense tree planting
- **The Lanes:** connective streets that connect into the surrounding streets
- **Railway Corridor:** the functional spine that houses the more demanding service areas

2.9.2 The character areas *must* vary in identity but maintain a cohesive feel throughout the site.

2.9.3 The landscape and buildings *must* be coordinated to create a cohesive design that reinforces the identity of the character areas that they sit within.

2.9.4 Abbey Grove, Garden Walk, Maple Square and Hive Park *must* collectively deliver the Beehive Greenway active travel corridor.

2.9.5 All character areas *must* support the retention of existing trees wherever possible.

2.9.6 The proposed removal of any existing trees *must* be justified and compensated for on site.

2.9.7 All character areas *must* include a tree planting strategy with a focus on mature size, biodiversity and climate resilience informing the selection.

2.9.8 Where relevant, the character areas *should* facilitate and enhance connections to the surrounding context.

2.9.9 Existing trees and vegetation *should* be retained and enhanced for amenity value from within and outside the site, and to support for habitat creation.

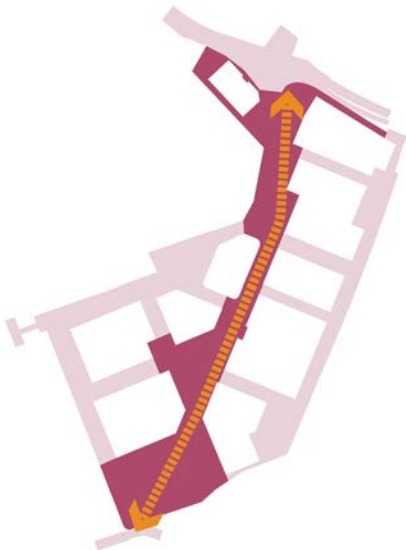
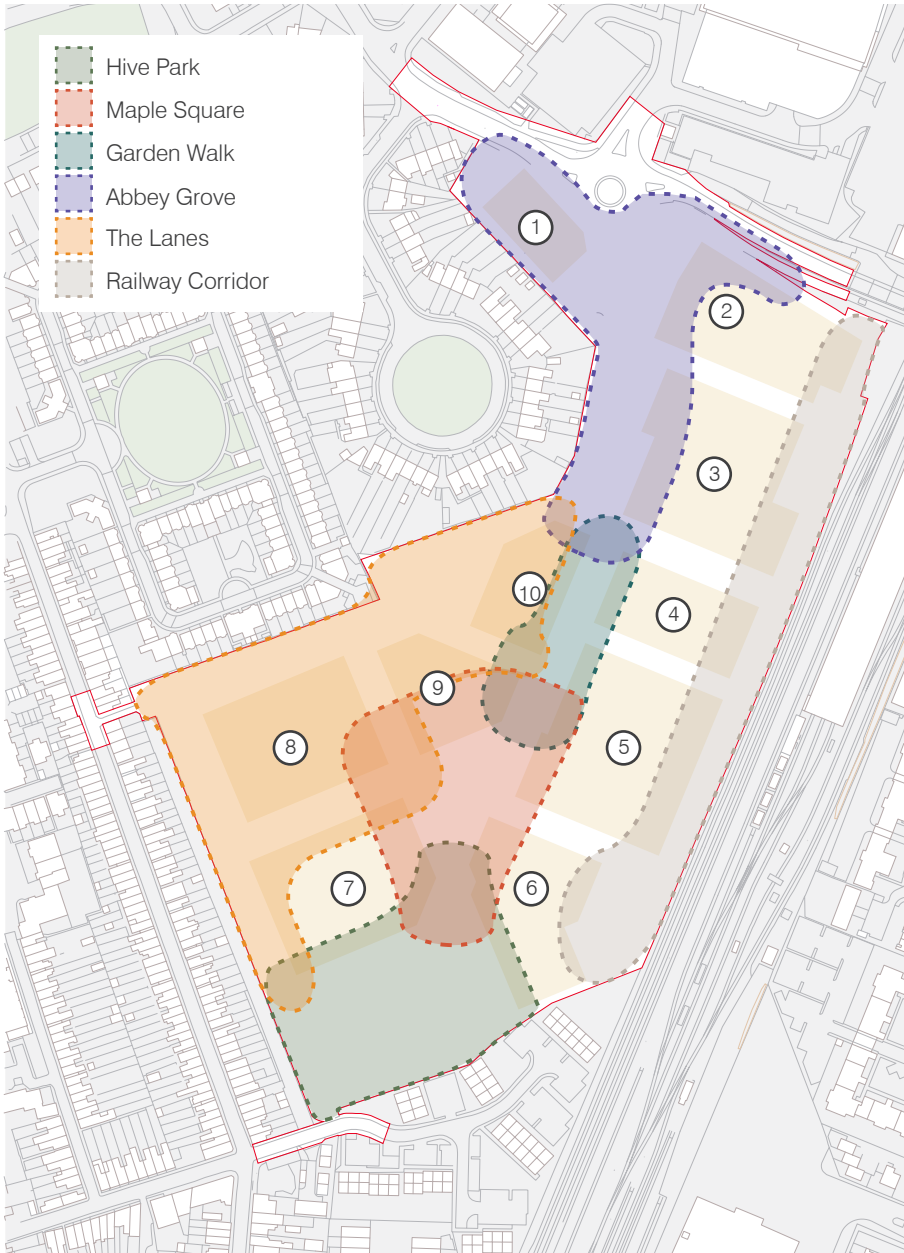
2.9.10 All character areas *should* enable habitat creation.

2.9.11 The landscape design *should* incorporate spaces for community use informed by ongoing community engagement.

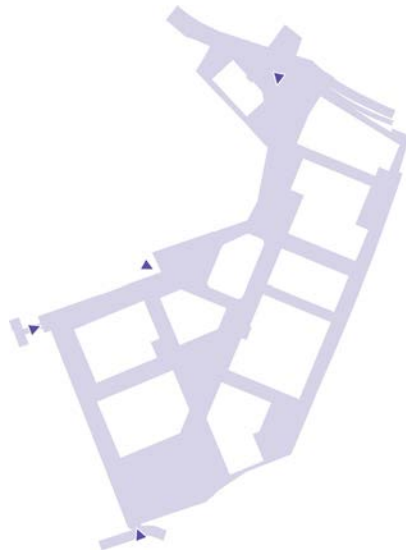
2.9.12 The public art strategy *should* be respond to the character area that each installation or initiative is situated within.

Character Areas Strategy

Character areas defined in detail further in the document.



Beehive Greenway



Entry Points

2.0 Masterplan Framework

2.10 Street Typologies

The streets will respond to the character areas to create functional spaces but seamlessly designed to create a coherent, attractive, usable and legible new place.

- 2.10.0 Excluding areas that need to be separated for safety and security reasons, movement into and around the site *must* not be impeded by gates or barriers.
- 2.10.1 Where vehicle and cycle routes cross Primary spaces, the design of these routes *must* not unduly impact the character of the continuous Primary spaces that they interact with.
- 2.10.2 Street widths *must* be in accordance with the minimum separation width between buildings as set out in the Parameters Plans.
- 2.10.3 The diagram opposite defines each of the key street spaces within the proposals, the below codes group these streets into typologies which *must* be used to define the characteristics of these streets.

● **Abbey Grove**

- 2.10.4 Street A *must* follow the design codes set out in the Abbey Grove typology section following.

● **Beehive Greenway**

- 2.10.5 Streets B, C & D *must* follow the design codes set out in the Beehive Greenway typology section following.

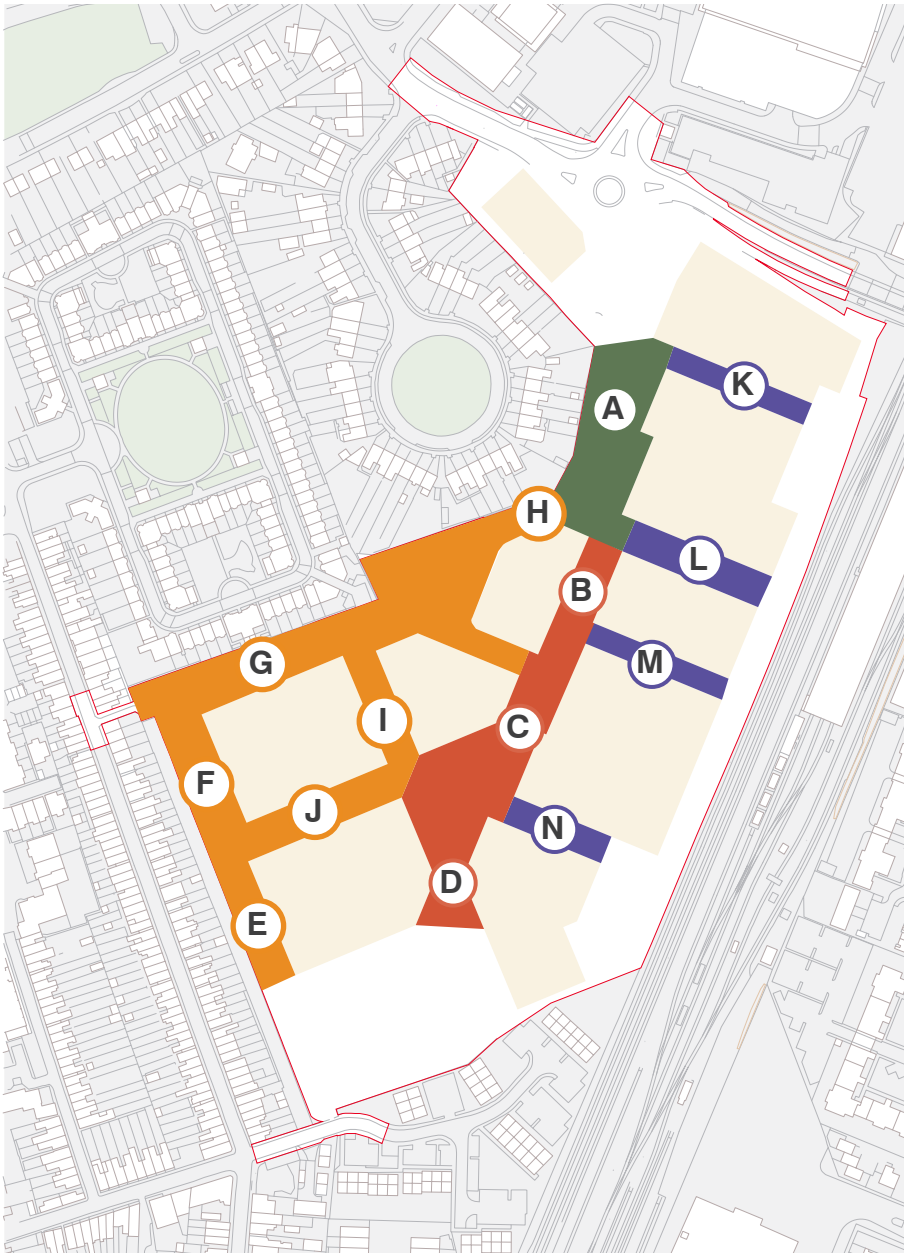
● **The Lanes**

- 2.10.6 Streets E, F, G, H, I, & J *must* follow the design codes set out in the The Lanes typology section following.

● **Railway Streets**

- 2.10.7 Streets K, L, M & N *must* follow the design codes set out in the Railway Corridor typology section following.

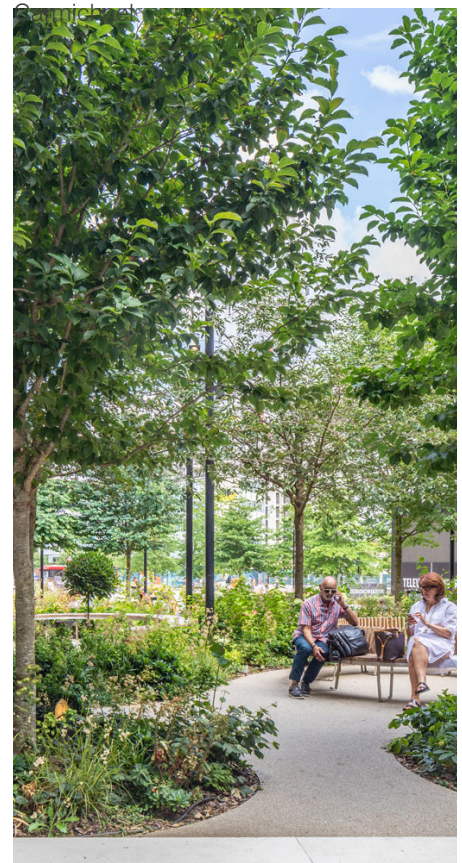
The streets defined within the above codes are shown illustratively on the following pages to demonstrate their expected scale and nature. Detailed codes are used on the pages to define characteristics unique to each of these streets.



Street Typologies



Active frontages respond to landscape.
Great George Street, Liverpool, Brock
Gerrard Architects



Urban greening project with extensive
sustainable drainage systems.
Ruskin Square, London, J&L Gibbons

2.0 Masterplan Framework

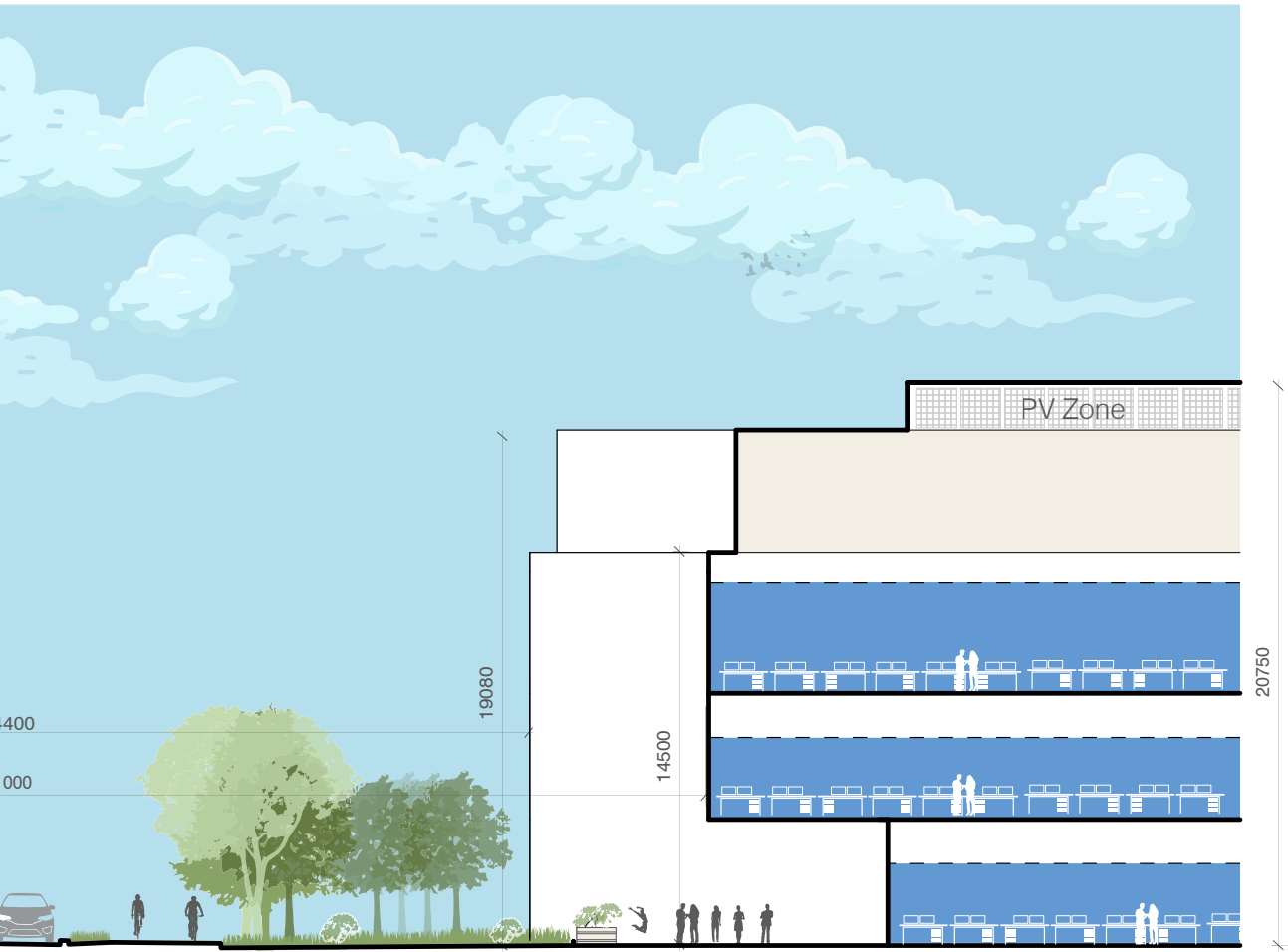
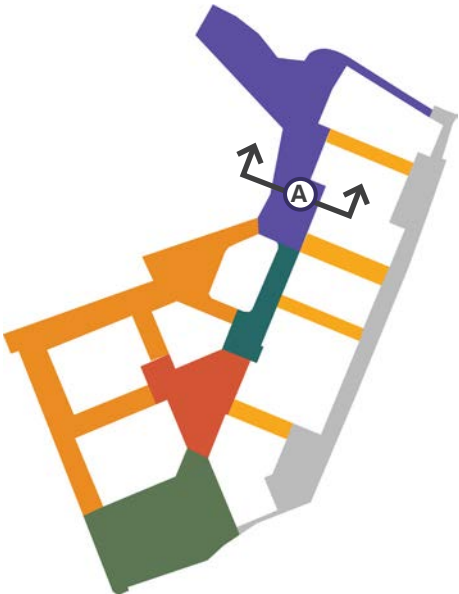
2.10 Street Typologies

Abbey Grove (Street A)

- 2.10.8 Abbey Grove *must* accommodate a continuous cycle route.
- 2.10.9 Abbey Grove *must* have a substantial green buffers with tree planting between the boundary to Silverwood Close and the main access road and between the main access road and the proposed buildings.
- 2.10.10 Abbey Grove *should* be designed to include areas of soft landscaping whilst maintaining site functionality and connectivity.



Section through Street A within Abbey
Grove character area



Plot 3

2.0 Masterplan Framework

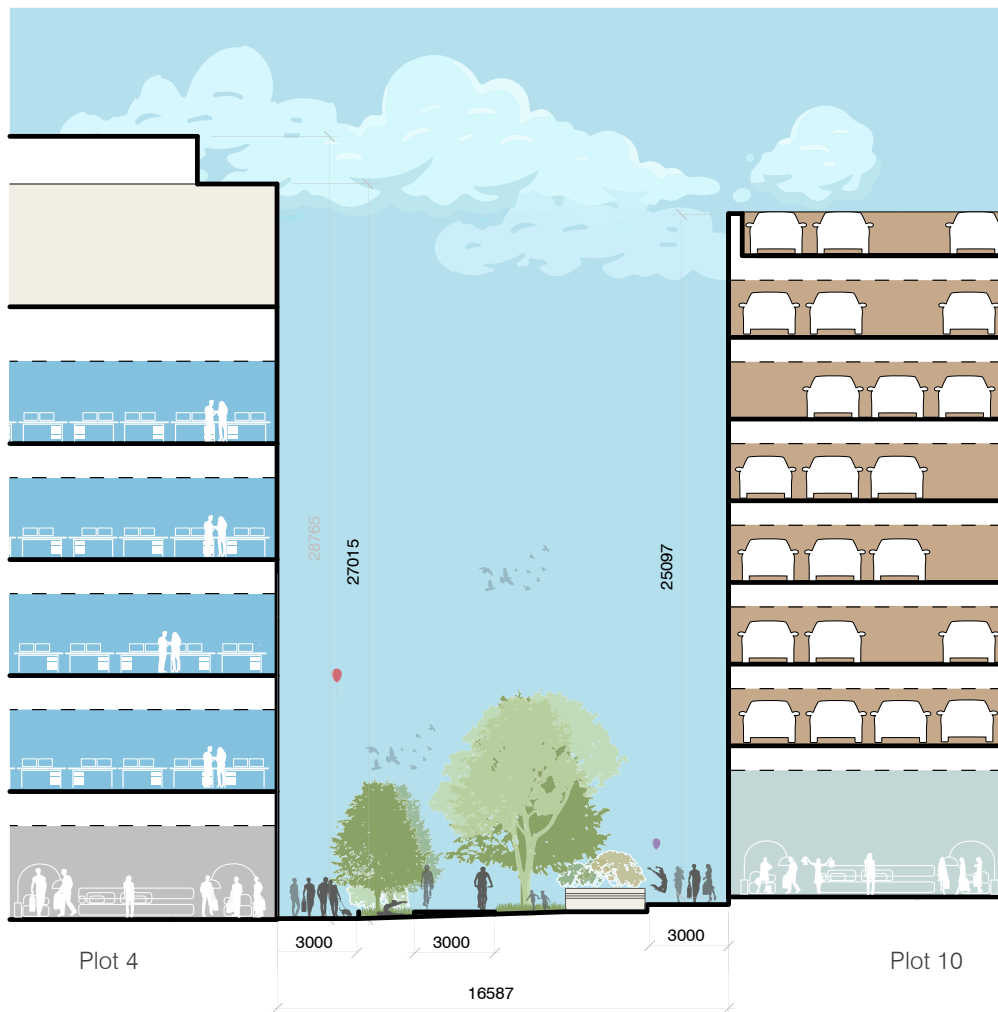
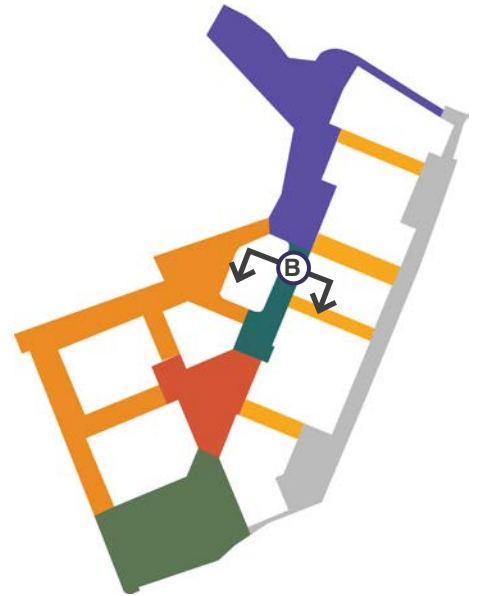
2.10 Street Typologies

Beehive Greenway (Streets B, C & D)

- 2.10.11 The Beehive Greenway streets *must* deliver and active travel corridor that creates a safe shared environment for all.
- 2.10.12 All streets *must* have a minimum of 3m pedestrian movement zone adjacent to building façades

Street B

- 2.10.13 Street B *must* be a minimum of 16.5m in width between Plots 10 and 4.
- 2.10.14 Street B *must* create a safe and legible threshold into and from Abbey Grove.
- 2.10.15 The width and alignment Street B *must* enable the safe and legible crossing of the Beehive Greenway over the proposed service route.



Section through Street B

2.0 Masterplan Framework

2.10 Street Typologies

Beehive Greenway (Streets B, C & D)

Street C

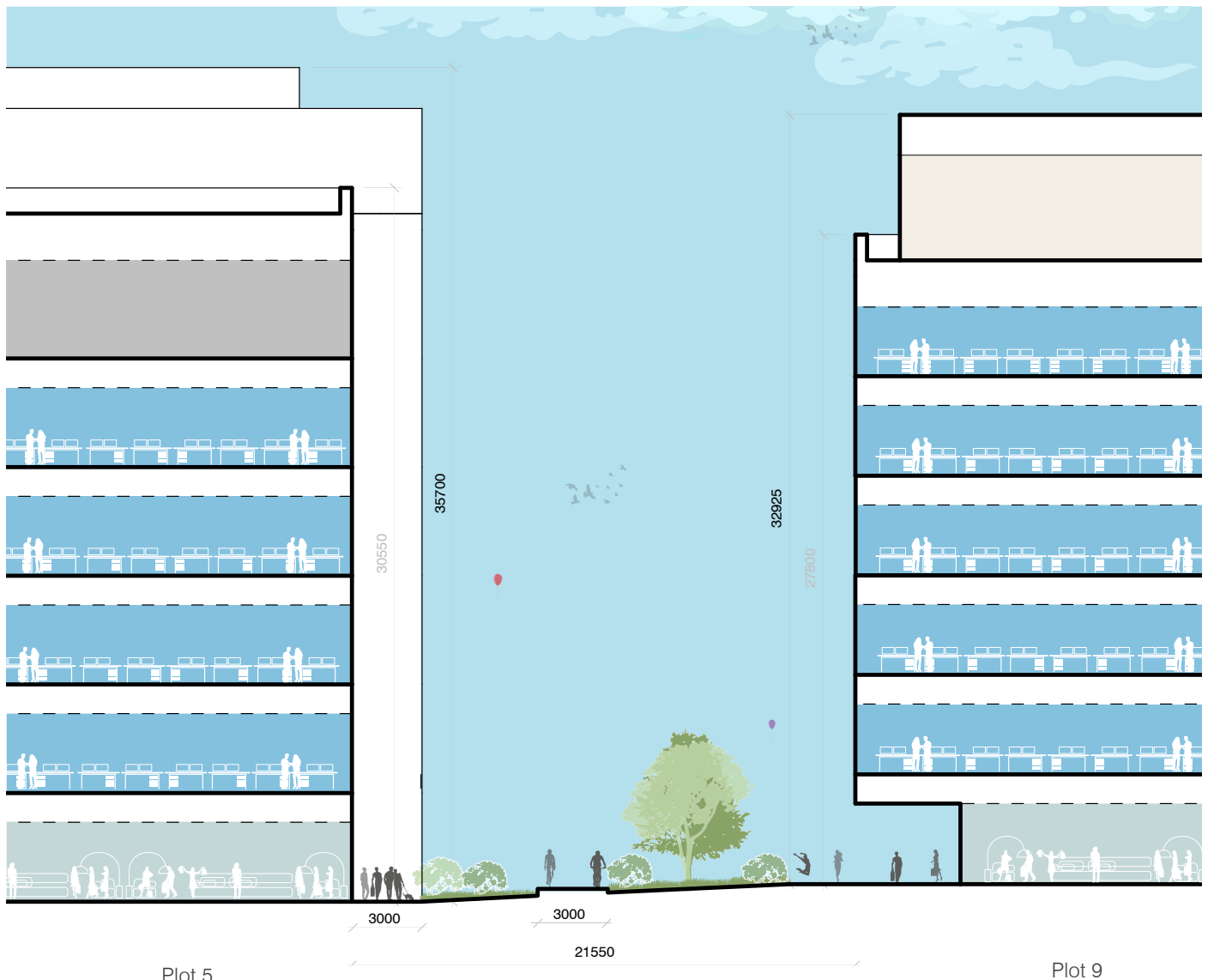
2.10.16 Street C *must* be a minimum of 21.5m in width between Plots 5 and 9.

2.10.17 Street C *must* create a safe and legible threshold into and from Maple Square.

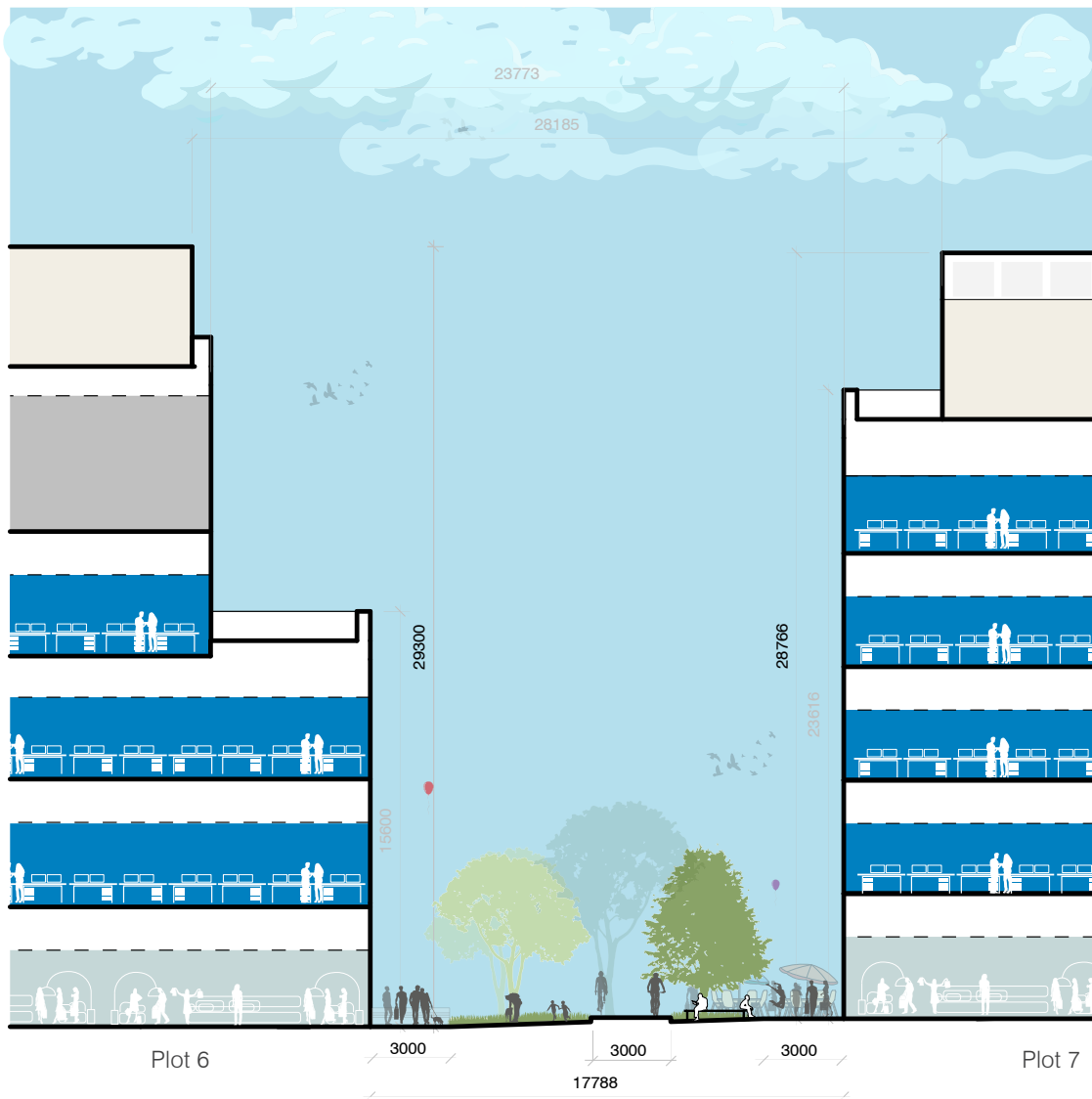
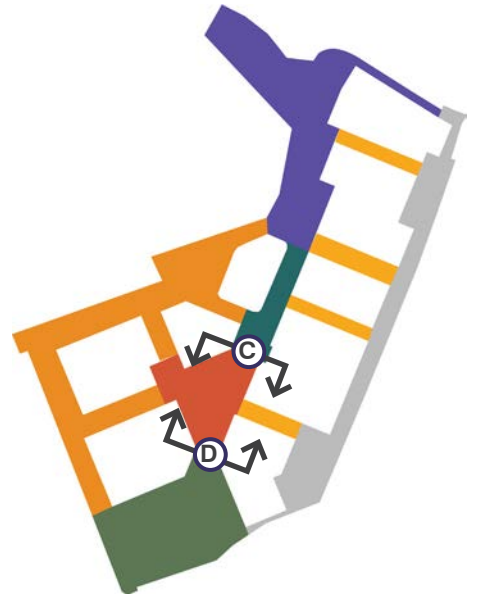
Street D

2.10.18 Street D *must* be a minimum of 17m in width at the closest point between the parameters of Plots 6 and 7.

2.10.19 Street D *must* create a safe and legible threshold into and from Maple Square and Hive Park



Section through Street C



Section through Street D

2.0 Masterplan Framework

2.10 Street Typologies

The Lanes (Streets E, F, G, H, I & J)

- 2.10.20 The Lanes *must* create an environment that mediates the relationship between the neighbouring residential properties and the new boundary streets
- 2.10.21 The Lanes *must* deliver a low-traffic transport loop that enables bus, service and accessible parking access to the south of the site.
- 2.10.22 The Lanes *must* enable connective routes between the York Street entrance and Hive Park and Maple Square

Street E

- 2.10.23 Street E *must* have a substantial green buffer with tree planting between the boundary to Rope Walk and Plot 7.
- 2.10.24 Street E *must* have additional tree planting to screen views out of Plot 7 towards the neighbouring properties.

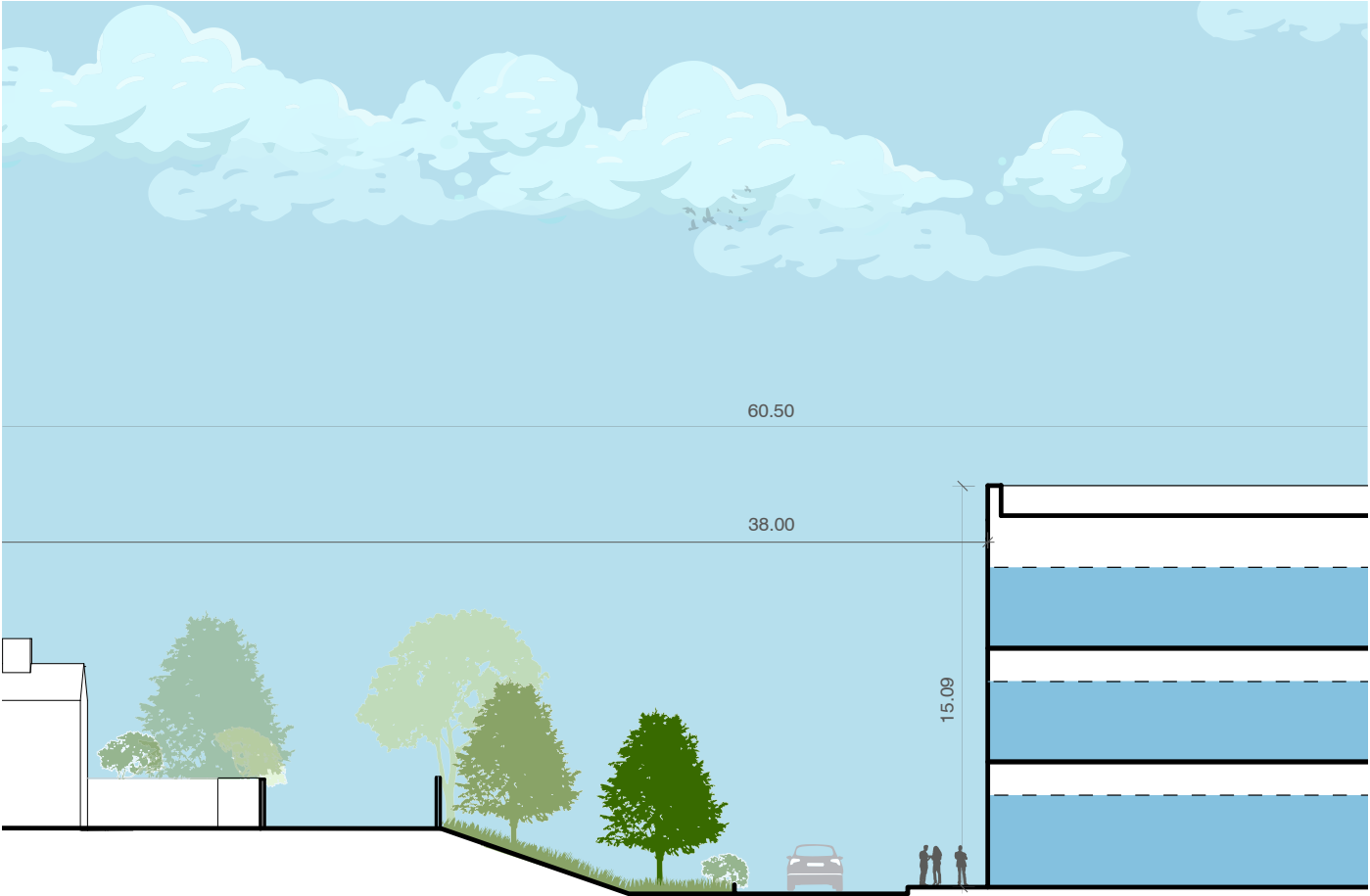
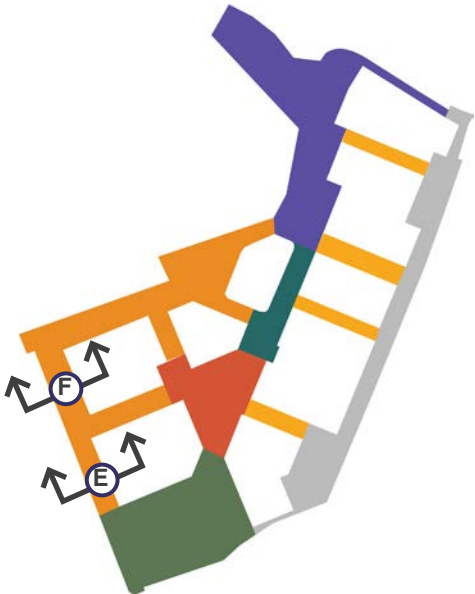
- 2.10.25 Street E *must* be overlooked and activated by active ground floor uses and upper floors of Plot 7.

Street F

- 2.10.26 Street F *must* have a substantial green buffer with tree planting between the boundary to Rope Walk and Plot 8.
- 2.10.27 Street F *must* incorporate new tree planting to screen views out of Plot 8 towards the neighbouring properties.
- 2.10.28 Street F *must* create a circulation route to support bus, service and accessible parking access.
- 2.10.29 Street F *must* be overlooked and activated by active ground floor uses and upper floors of Plot 8.



Section through Street E



Section through Street F

2.0 Masterplan Framework

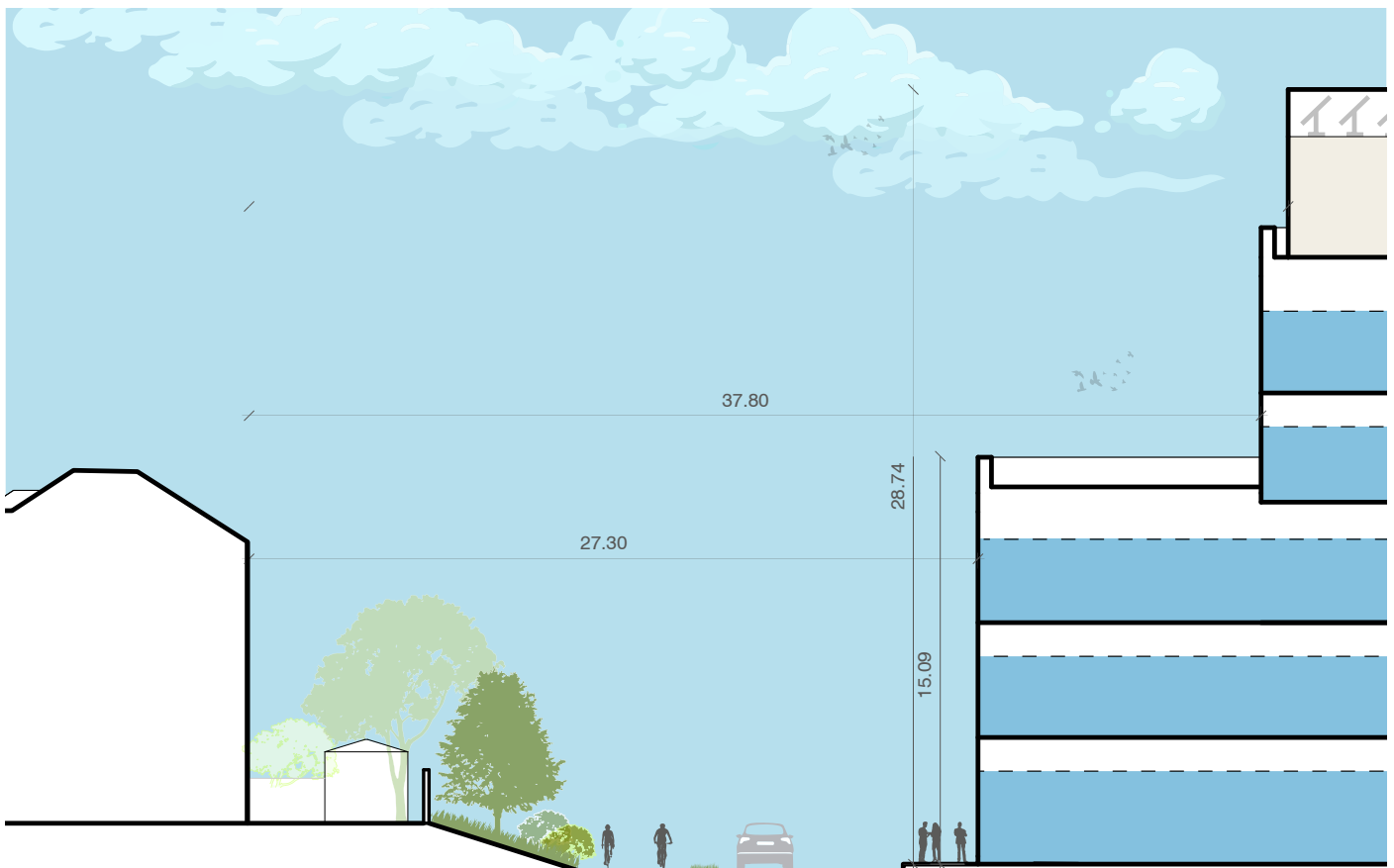
2.10 Street Typologies

Street G

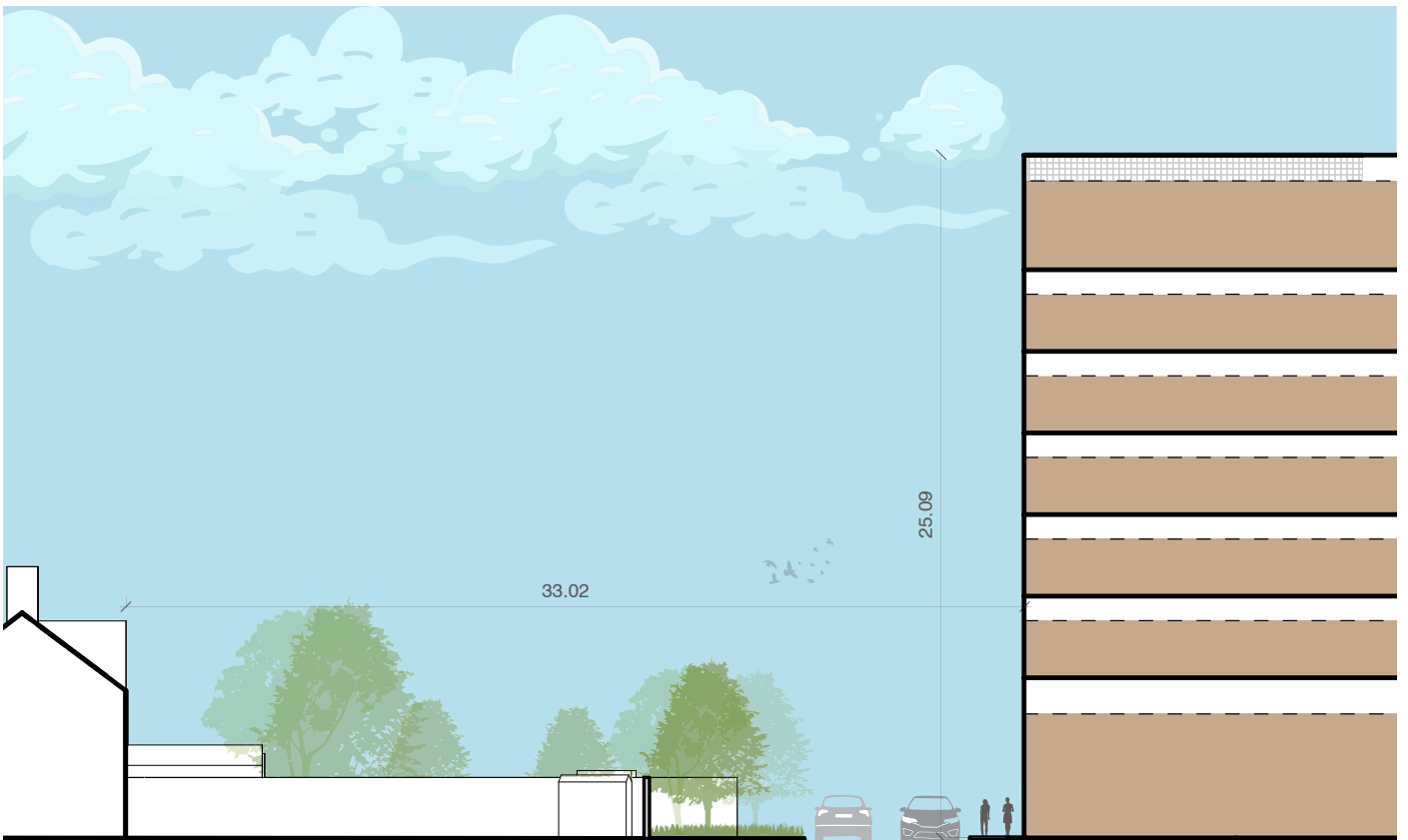
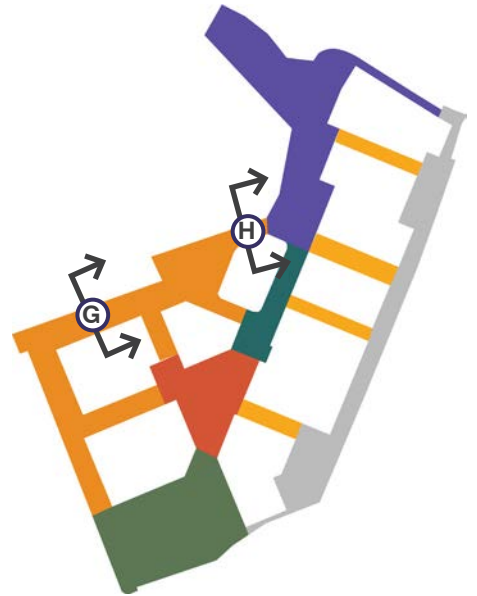
- 2.10.30 Street G *must* incorporate a substantial planting buffer to the St Matthew's Gardens boundary edge.
- 2.10.31 Street G *must* create a segregated two-way cycle route that connects to York Street via Rope Walk.
- 2.10.32 Street G *must* intersperse street side parking and service bays with tree planting to soften the influence of vehicles on this space

Street H

- 2.10.33 Street H *must* create a new tree planting buffer zone to the Silverwood close boundary edge.
- 2.10.34 Street H *must* be designed to create an environment that mediates the influence of vehicle movements over houses and gardens of Silverwood Close
- 2.10.35 Street H *must* incorporate a pedestrian route that connects York Street and St Matthew's Gardens to Abbey Grove.



Section through Street G



Plot 10

Section through Street H

2.0 Masterplan Framework

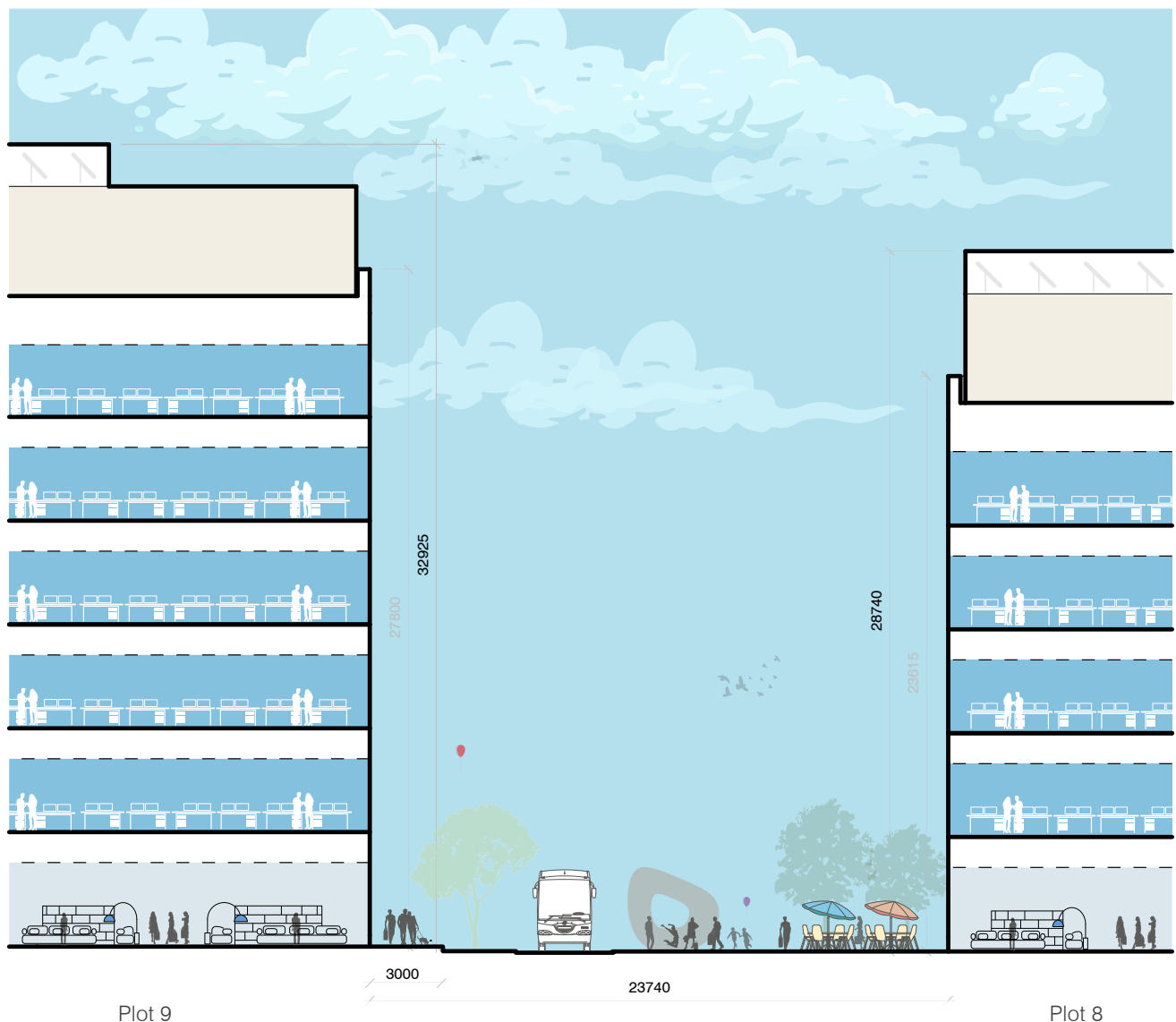
2.10 Street Typologies

Street I

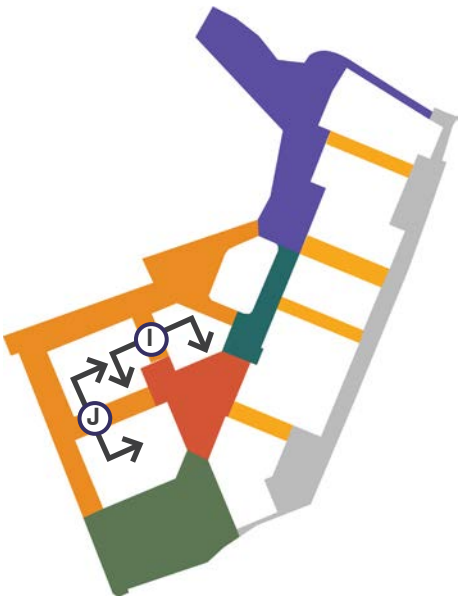
- 2.10.36 Street I *must* be a minimum of 14.5m in width between Plots 8 and 9.
- 2.10.37 Street I *must* be the location for the proposed bus stop.
- 2.10.38 Visibility of the bus stop from Maple Square *must* be a key consideration for its design and location within Street I.
- 2.10.39 Street I *must* intersperse street side parking and service bays with tree planting and soft landscape to soften the influence of vehicles on this space.

Street J

- 2.10.40 Street J *must* be a minimum of 16.5m in width between Plots 7 and 8.
- 2.10.41 Street J *must* intersperse street side parking and service bays with tree planting and soft landscape to soften the influence of vehicles on this space.
- 2.10.42 Street J *must* be overlooked and activated by active ground floor uses and upper floors of Plots 7 and 8.



Section through Street I

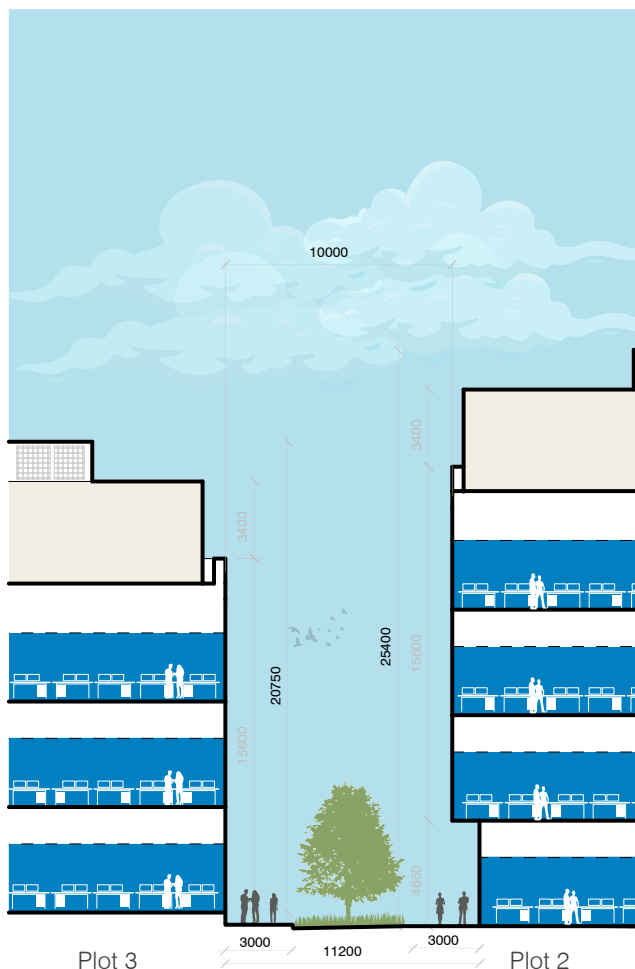


2.0 Masterplan Framework

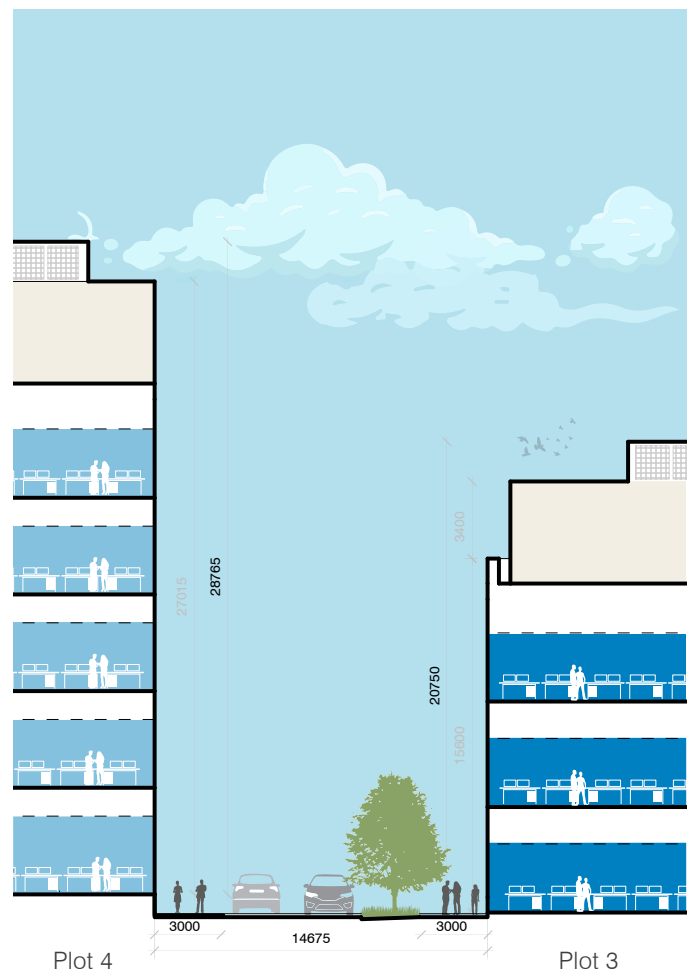
2.10 Street Typologies

Railway Streets (Streets K, L, M & N)

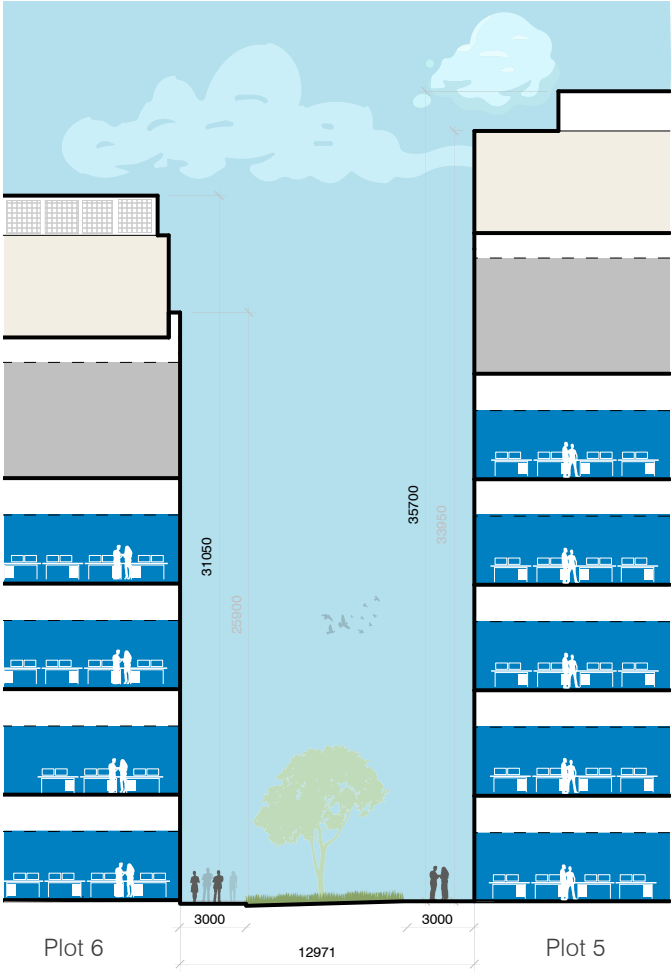
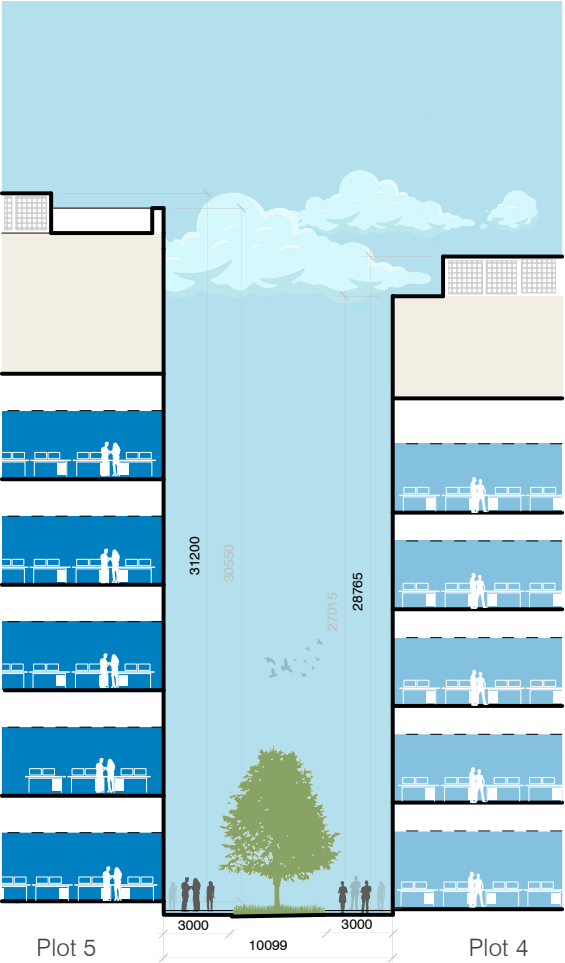
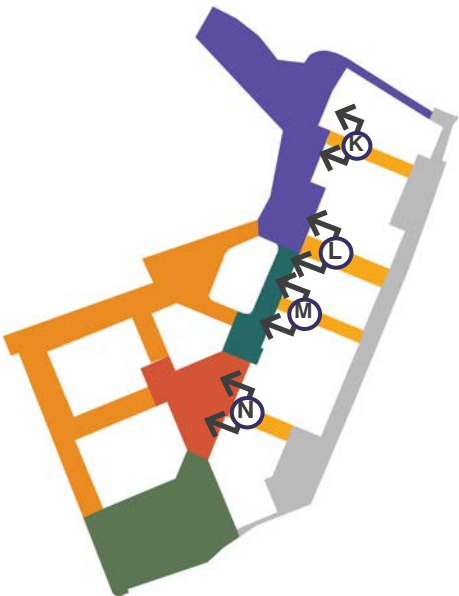
- 2.10.43 Street K *must* be a minimum of 10m in width between the facing elevations of Plots 2 and 3.
- 2.10.44 Street L *must* be a minimum of 14m in width between the parameters of Plots 3 and 4 and accommodate for vehicle access to the Service Road.
- 2.10.45 Street M *must* be a minimum of 10m in width between the parameters of Plots 4 and 5.
- 2.10.46 Street N *must* be a minimum of 12m in width between the parameters of Plots 5 and 6.
- 2.10.47 Street K *should* provide a welcoming arrival for cyclists entering into Plots 2 and 3.
- 2.10.48 Street L *should* aid legibility for service vehicles entering the Service Road and not appear as a public through route.
- 2.10.49 Street L *should* include soft landscape and tree planting.
- 2.10.50 Street M *should* provide a welcoming arrival for cyclists entering into Plots 4 and 5.
- 2.10.51 Street N *should* provide a suitable space for the Skate The Streets initiative.
- 2.10.52 All streets *should* incorporate street greening through landscape design and tree planting.



Section through Street K



Section through Street L



2.0 Masterplan Framework

2.11 Urban Greening Framework

There is a public realm led vision for the whole site. This is supported by a ‘People First’ approach where a cultural strategy has been set up through community and youth engagement to design and enjoy a better place for all. The vision is supported by six core principles which will be delivered by the cumulative design of the individual Reserved Matters applications.

Landscape

- 2.11.0 Green infrastructure *must* form a part of the strategy for all landscape areas.
- 2.11.1 The site *must* feel well integrated into the local area.
- 2.11.2 The site *must* be accessible to everyone.
- 2.11.3 Pedestrians *must* have priority, from the entrances and primary circulation routes, through the varied internal spaces, active frontages and facilities, and diverse range of activities provided for, across the course of a day and week.

Tree Strategy

- 2.11.4 The detailed design *must* optimise the retention of existing good quality existing trees.
- 2.11.5 Proposed tree planting *must* support and enhance the street typologies, character areas, biodiversity and green infrastructure.

Ecology and Biodiversity Enhancement

- 2.11.6 The site *must* exceed Biodiversity Net Gain policy targets.
- 2.11.7 The site *must* allow people to come in to contact with nature for health and well-being benefits.

Water Responsive Framework

- 2.11.8 The site *must* maintain a positive relationship with water throughout, at all levels (roofs, above and below ground).

Play and Leisure Strategy

- 2.11.9 The site *must* provide dedicated play equipment and incidental play opportunities, such as stepping logs, balance beams, adventure trails, sensory and quiet spaces.
- 2.11.10 The site *must* promote health and well-being.
- 2.11.11 The site *must* provide formal and informal activities, such as green gym equipment, running track, group exercise class spaces, open space and access to nature.
- 2.11.12 The site *must* be cycle friendly.

Lighting, Wayfinding and Security

- 2.11.13 The site *must* be safe, welcoming, enjoyable and inclusive to all local residents and the wider public.



Urban Greening Framework



Landscape



Trees



Ecology



Wayfinding



Play and Leisure



Water

2.0 Masterplan Framework

2.12 Landscape Vision

The landscape will create an enjoyable, safe and inclusive place to visit, pass through and dwell. This will include for informal and formal public open space, such as a square, a park, amenity spill-out areas, play on-the-way, buffer planting to neighbouring buildings, and structural landscape.

Public Realm

- 2.12.0 Landscape *must* contribute to reducing the heat island effect and mitigate against climate change.
- 2.12.1 All of the open space *must* be publicly accessible, with the exception of a dedicated wildlife area and the service yards running parallel to the railway line.
- 2.12.2 Public open streets *must* be in line with the minimum separation width between buildings as set-out in the Parameters Plans.
- 2.12.3 The proposal *must* allow a minimum 3m wide pedestrian footpath to the perimeter of all building façades connected to the primary public realm.
- 2.12.4 The proposal *must* contribute to ecology, health, and well-being by prioritising sustainable modes of transport, and sustainable drainage solutions.
- 2.12.5 The Beehive Greenway *must* be the main north-south green corridor across the site.
- 2.12.6 The Beehive Greenway *must* be connected east-west via active streets with a series of localised open green areas and day/night activities.
- 2.12.7 Spill-out areas *should* be a minimum of 1.5m wide, with their final dimensions being determined by the expected requirements of the adjoining ground floor unit.

Materiality

- 2.12.8 Paving materials *must* be selected that are durable and contribute to the drainage strategy by creating permeable surfaces.
- 2.12.9 The furniture palette *must* ensure durability and functionality through the use of robust, damage resistant materials.
- 2.12.10 The furniture palette *must* include a variety of seating that demonstrates consideration

for inclusive design and social opportunities, including seats with backrests and arm rests and spaces for wheelchair users.

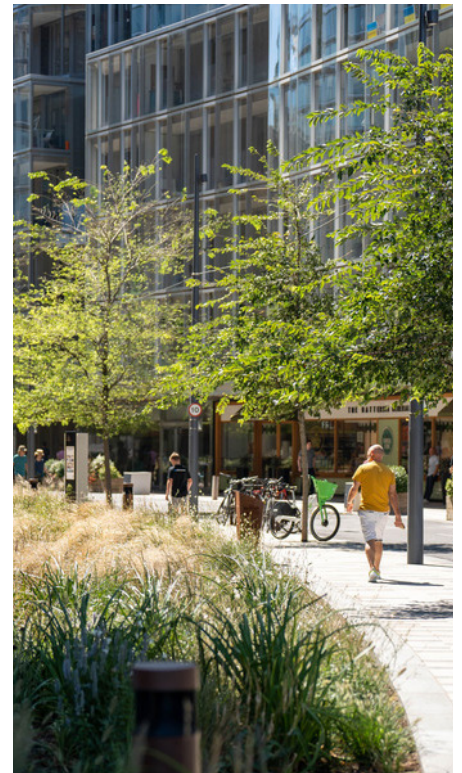
- 2.12.11 The furniture palette *must* include a variety of play-on-the-way and furniture elements to maximise the potential uses within each open space.

Planting (for Tree Planting refer to 2.8)

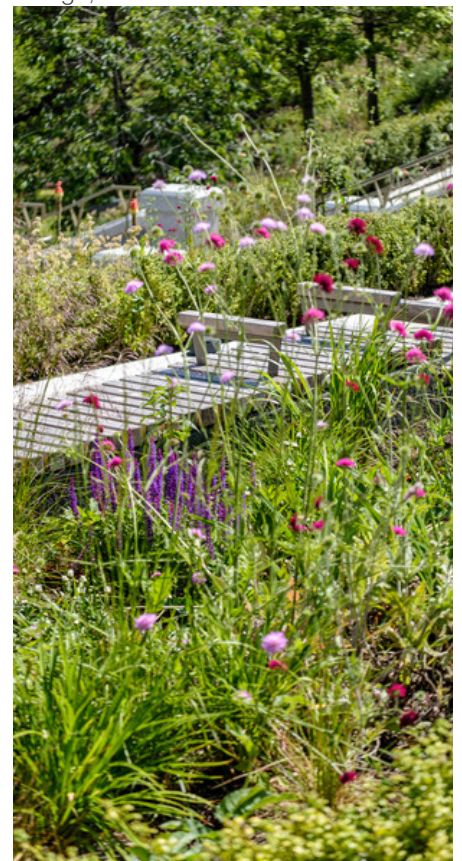
- 2.12.12 Planting *must* contribute integrally to the character of spaces by providing elements such as shade, privacy, separation, continuity.
- 2.12.13 The selection of planting mixes *must* maximise species diversity and resilience in order to be tolerant of future local climatic conditions.
- 2.12.14 The planting palette *must* be selected to minimise the need for irrigation (after an initial period of planting establishment and to prevent plant failure).
- 2.12.15 A thorough maintenance and management plan *must* be included as part of the landscape proposals.
- 2.12.16 Where vertical greening is proposed by way of supported climbing plants adequate soil capacity *must* be provided to ensure vigorous and sustained growth.
- 2.12.17 Where vertical greening is proposed by way of supported climbing plants adequate soil capacity *must* be provided to ensure vigorous and sustained growth
- 2.12.18 The soft landscape within the public realm *should* support the Beehive's identity.
- 2.12.19 Planting *should* be utilised to define space and create a comfortable, human scale within the public realm.
- 2.12.20 The planting palette *should* incorporate features to support all life stages of pollinators.
- 2.12.21 The planting palette *should* include plants which have seasonal variation, year round interest aesthetically, or provide other sensory features.
- 2.12.22 Proposed planting beds *should* be at least 2m wide and avoid narrow pinch points in order to ensure plants have the best opportunity to thrive.



Landscape Vision



Landscape must mitigate against climate change Battersea Power Station, LDA Design, London



Defining character through planting Union Terrace Gardens, LDA Design, Aberdeen



A variety of seating with different seat heights, arm rests and backrests Alfred Place, LDA Design, London

2.0 Masterplan Framework

2.13 Tree Strategy

The re-imagined Beehive Centre will become a greener place with trees, soft landscape and open spaces combining to define the character of this new innovation neighbourhood. A combination of boundary trees and other individual mature tree specimens will contribute to the vision for the site as a place for nature. This strategy has the potential to implement landmark trees that contribute to the layering of trees along Cambridge's skyline.

Existing Trees

- 2.13.0 Individual and groups of trees to the boundaries *must* be retained and enhanced where appropriate.
- 2.13.1 Where any removal of existing trees is justified to support the delivery of the design principles and character areas, then compensation on site *must* be provided.
- 2.13.2 It *should* be considered how to re-use any removed trees in the proposed landscape, for example in the form of bark mulch, fallen playable logs.
- 2.13.3 Small trees in the existing car park areas that are relatively small but in good health *should* be considered for transplantation to the park in the south of the site.
- 2.13.8 The character areas of Abbey Grove and Hive Park present the greatest opportunities for the planting of individual 'landmark' trees that will reach a sizeable form in future decades, such as *Platanus × hispanica* (London Plane), and *should* be considered.
- 2.13.9 Medium to small tree species *should* be carefully selected for their features such as bark character, leaf shape, autumn colours, etc. to enhance street-scapes and to respond to street requirements.
- 2.13.10 Fastigate trees *should* be avoided as they do not mature well and are not sustainable, biodiverse solutions.
- 2.13.11 The future of the site *should* be considered in the case of trees with large, long-lived species in key locations at they will out survive the development in most cases.
- 2.13.12 Trees *should* be planted as minimum Extra Heavy or Semi Mature across the site, unless there is good reason to source smaller specimens.
- 2.13.13 Any orchard tree planting *should* be designed to minimise the risk of slip hazards and pest issues as a result of fruit drop. The design solution should be supported by a suitable maintenance strategy.
- 2.13.14 Tree pits *should* be large enough to accommodate the size of tree being planted and the soil volume available must be sufficient to support the mature tree.

Proposed Trees

- 2.13.4 The selection of proposed trees *must* maximise species diversity and resilience in order to be tolerant of future local climatic conditions.
- 2.13.5 A thorough maintenance and management plan *must* be included as part of the landscape proposals.
- 2.13.6 The mature size of trees *must* be considered at all levels, with the largest trees achievable for each area based on space both below and above ground.
- 2.13.7 Large species with broader canopies *should* be considered, where appropriate in the public realm, as they preferable for carbon storage, providing shelter and amenity value.

- Existing individual tree
- Existing group of trees to be retained
- Area to be considered for proposed tree planting
- Area for tree planting of all scales with preferences for largest trees achievable within given constraints
- Area to be considered for proposed orchard tree planting
- Railway boundary not suitable for tree planting



Tree Strategy



Variety of tree planting, including orchard trees



Trees as features of open space
Duke University, US



Soft green edges, blend vegetation with activity spaces
Kingdom Street, Townshend LA, London

2.0 Masterplan Framework

2.14 Ecology and Biodiversity Enhancement

The proposals have the ability to greatly enhance the number and quality of habitats on site to create a place where nature can sustainability coexist with the new innovation neighbourhood, creating a better place for nature and people. The 100% BNG aspirational target will transform the site, offering a diverse and resilient place for nature that will contribute to the social and environmental value of the development.

Policy

- 2.14.0 The target BNG for the whole site proposals is 20% which *must* be met in order to achieve both adopted and emerging policy.
- 2.14.1 Given the limited value of the site at present the aspiration is to go further still, and proposals *should* work together to deliver a gain of 100% (i.e. double the baseline value).

Approach

- 2.14.2 Existing features of ecological value *must* be retained and enhanced, unless a strong justification for removal can be made to fulfil the vision.
- 2.14.3 Where losses to habitats are required, the landscape proposal *must* demonstrate that these will be more than off-set for through the design.
- 2.14.4 The landscape proposal *must* include the provision of new ecologically rich areas such as species-rich grassland, tree and scrub planting, green and blue roof space.
- 2.14.5 A green buffer of 5m minimum width *should* be allowed for wherever possible to the site and residential boundaries and be optimised for ecology and to provide green corridors.
- 2.14.6 In particular locations where various constraints don't allow for 5m, a minimum width of at least 3m *should* still be achieved.
- 2.14.7 Non-native amenity species *should* be kept to a minimum, with native species – particularly those of local provenance – favoured. In particular, species which would

provide opportunities for faunal groups (e.g. berry or nut-bearing shrubs) *should* be including within the planting mix.

Wildlife Area

- 2.14.8 A dedicated Wildlife Area *must* be included in the landscape proposal that has restricted access by maintenance personnel and ecological professionals only.
- 2.14.9 The Wildlife Area *must* include a bioretention area to promote ecological diversity and contribute to SuDS.
- 2.14.10 Visibility of the area and interpretation boards *should* be considered and installed for the benefit of the public.

Faunal Enhancements

- 2.14.11 Faunal enhancements *must* be delivered across the site.
- 2.14.12 Long-term management objectives, such as areas where management is primarily focused on maximising ecological value, *must* be in place to ensure that the proposals will deliver dynamic environments which will be of benefit to a range of faunal groups.
- 2.14.13 Faunal enhancements *should* include new opportunities for nesting birds (including local priority species) and roosting bats, which should be integrated into the new buildings.
- 2.14.14 The proposal *should* install bat and bird boxes on the retained, mature trees along the site boundaries where there is minimal exposure to artificial lighting and adequate shelter.
- 2.14.15 The proposal *should* install invertebrate features (such as invertebrate hotels and bee posts) across the site.
- 2.14.16 Where suitable connected habitat is created, basking areas and hibernacula for reptiles and amphibians *should* be created to cater for local priority species such as common lizard and common toad.

- | | | |
|--|---|--|
|  Enhanced boundary planting |  Open lawn with meadow planting |  Linear hedgerow planting |
|  Woodland planting |  Wildlife area with natural pond |  Bio diverse roofs |
|  Flower-rich herbaceous planting |  Orchard tree planting | |



Ecology Strategy



Invertebrate features across the site



Sunny area for wild planting
Marmalade Lane, Mole Architects,
Cambridge



Faunal enhancements across the site

2.0 Masterplan Framework

2.15 Water Responsive Framework

In line with local and national policies and guidance, the SuDS hierarchy has been followed in the evolution of a conceptual surface water management scheme for the proposed development. The proposal creates the opportunity to transform a largely impermeable surface into an exemplar in sustainable urban drainage.

- 2.15.0 The Water Responsive Framework *must* follow Cambridge SuDS design guide.

Surface Water Management

- 2.15.1 Arrangements *must* be provided beneath active spaces to control design storm events considering future climate change allowances.
- 2.15.2 BREEAM sustainability aspirations, provision of attenuation storage, and integration of a suite of on-site SuDS measures within the landscape *must* seek to control flows much closer to pre-development 'greenfield' runoff rates.
- 2.15.3 Lined and under-drained permeable surfaces *should* be provided across active spaces and public realm, integrated within hard and soft landscape areas where practical, accessible, and inclusive considerations allow.
- 2.15.4 Water quality benefits *should* be gained via integration of multiple treatment trains, including filter media, grassed filter strips and proprietary pollution control units.

Roofs

- 2.15.5 Blue and green roofs *should* contribute to the on-site re-use of water for building occupants and within the landscape.
- 2.15.6 Green and blue roof coverage across the site *should* be maximised whilst taking into account the competing demands for roof space from solar photovoltaics and critical roof top Mechanical & Electrical plant that form key components to the energy strategy.
- 2.15.7 Blue roof geo-cellular storage crates *should* be used under roofs with paving and plant

rooms to allow runoff and pollutants to be controlled and captured at source.

- 2.15.8 Blue roof geo-cellular storage crates *should* be used in conjunction with green roofs where possible.

Water Storage

- 2.15.9 Rain gardens *should* be provided along the length of The Beehive Greenway to support surface water capture.
- 2.15.10 Other 'soft' SuDS *should* be provided in the form of a bioretention feature in the Wildlife Area, filter drains and natural swales.
- 2.15.11 Below ground attenuation storage *should* be proposed beneath external hardstanding areas and service yards to control and utilise runoff which can not be captured through roofs or above ground storage.

Levels

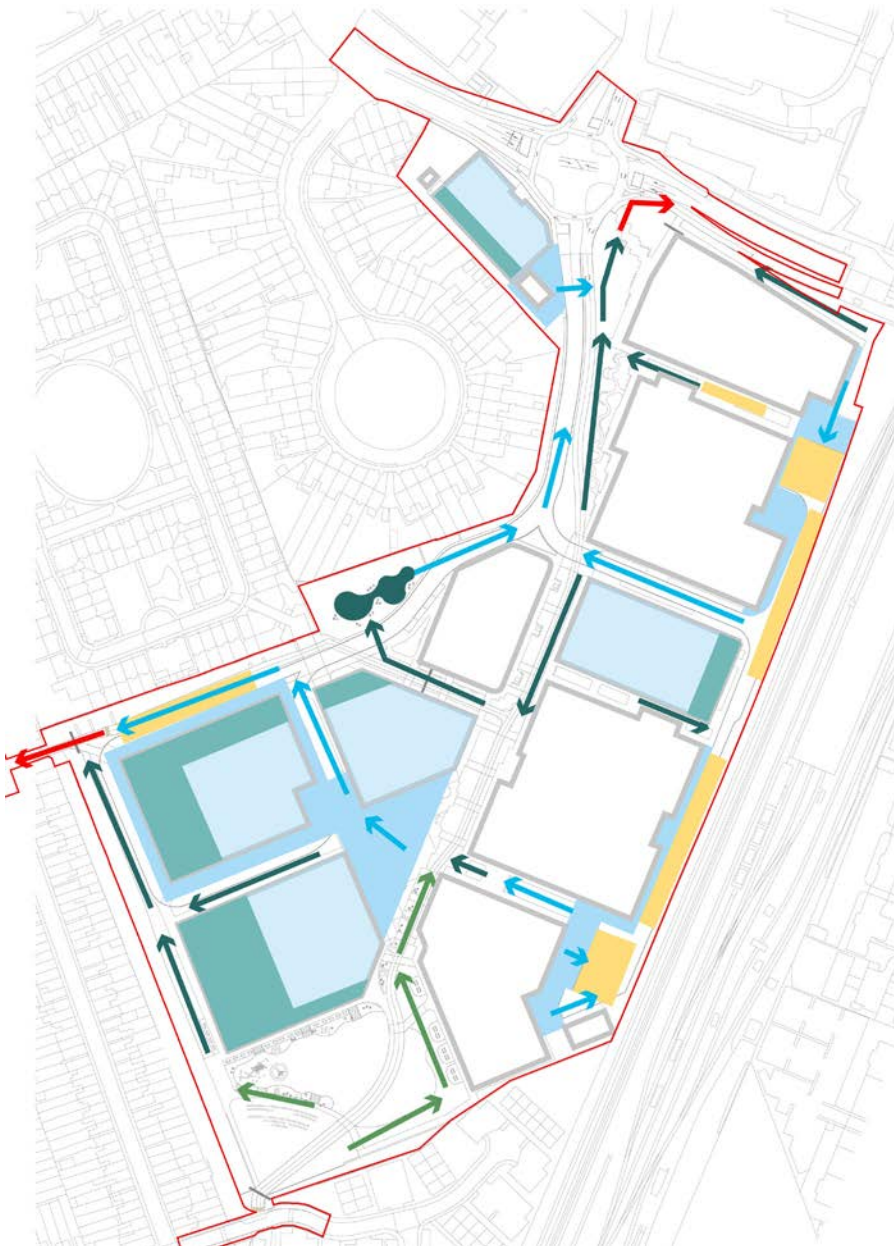
- 2.15.12 The landscape *must* tie into existing levels around the site boundary and work with the gentle slope of the existing site, which falls down towards the north-east entrance.
- 2.15.13 The landscape *must* maintain a flush surface with gradients of 1:60 or greater to support surface water runoff.
- 2.15.14 Direction of falls *should* be in line with the existing site to contribute to sustainable drainage.

Irrigation

- 2.15.15 Regularly spaced water points *must* be installed in favour of automated irrigation for planting.
- 2.15.16 Rainwater *should* be re-used for irrigation of soft landscaping within the public realm during particular dry summers after the planting establishment time, and service yard vehicle washdown, when not limited by internal building re-use.
- 2.15.17 Plants *should* be watered during the initial planting establishment period with an expectation of no further need of irrigation after that period.

- Blue roof to plant area
- 50/50 blue/green accessible roof
- Natural pond
- Permeable paving
- Below ground attenuation
- Outfall location to public sewers

- Bioretention routes
- Rain garden routes
- Principle drainage routes



SuDS Strategy



Dry Swale, SuDS
Millharbour, SpaceHub, London



Wide cycle lanes along SuDS planting
Avenues Mermoz et Pinel,
Gautier+Conquet Architects, France



Rain gardens
Castlegate Grey to Green Park, Sheffield

2.0 Masterplan Framework

2.16 Play & Leisure Strategy

The Beehive Redevelopment integrates play and leisure opportunities throughout the public realm. It is a child-friendly proposal where young people feel welcome and included and so to create a place that all ages of the community will enjoy spending time outside. Health and well-being form one of the 7 core principles of the landscape design.

Play

- 2.16.0 Public spaces, streets and formal and informal play spaces *must* be considered together to create safe, clear and navigable networks of well-connected spaces, so children can roam and play freely.
- 2.16.1 Segregated play areas for designated age groups *must* be avoided.
- 2.16.2 Formal and incidental play spaces *must* be multifunctional and inclusive, incorporating playable elements and equipment which cater for a range of ages and abilities.
- 2.16.3 Playable elements and equipment *must* incorporate good levels of challenge and risk and include for physical, adventurous and imaginative play.
- 2.16.4 Designs *must* consider the movement and occupation of parents and carers with young children. For example, level surfaces and seating next to play areas and cycle stands.
- 2.16.5 Biodiversity and greenery for holistic sensory engagement *should* be included.

Leisure

- 2.16.6 Opportunities for improving health and well-being *must* be considered and integrated throughout the site.
- 2.16.7 Leisure opportunities *must* appeal to a variety of use types and abilities, for example low impact versus challenging, family-friendly versus individual, group activities versus quieter moments, etc.
- 2.16.8 The design of cycle infrastructure *must* support a range of ages and abilities and consider how cycling can be safe for younger and less confident cyclists.
- 2.16.9 The cycle lane *must* establish and connect to the wider emerging Beehive Greenway network and wider Cambridge cycle network.
- 2.16.10 Open spaces with leisure facilities *must* be located, orientated and designed to maximise natural overlooking from passers-by and users of adjacent buildings, so children, young people and adults are visible and there is opportunity for informal community supervision.
- 2.16.11 It *must* be apparent to all children, young people and adults that they are welcome in public space and permitted to occupy it, during the day and after dark.
- 2.16.12 The site *should* ensure that other infrastructure, for example seating, bins, lighting, Wi-Fi, cycle stands, etc. is located in proximity to the leisure facilities provided.
- 2.16.13 Location and design of leisure features *should* consider indoor to outdoor spill out and connectivity with buildings.
- 2.16.14 The site *should* incorporate leisure activities across both hard and soft landscape spaces to maximise the appeal and variety of use types.
- 2.16.15 The site *should* provide activities that can be used across the year and seasons, at different times of the day and into the evenings, as well as different weather events.

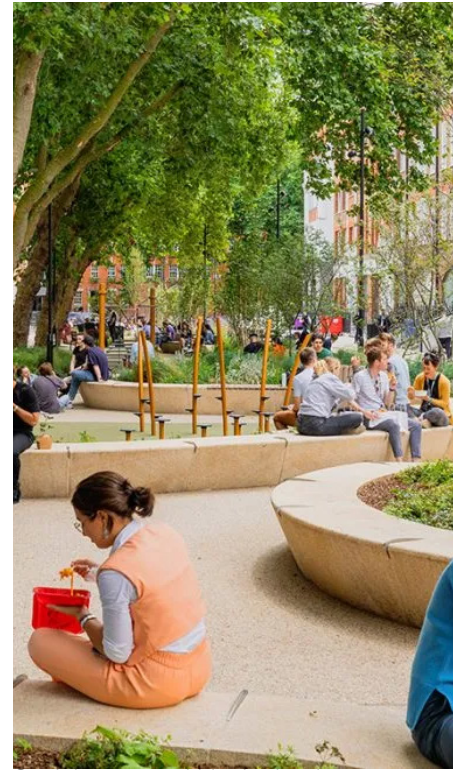
-  Beehive Greenway
-  Public realm
-  Park

-  Illustrative dedicated play area
-  Illustrative incidental play opportunity

-  Illustrative dedicated leisure area
-  Illustrative leisure opportunity



Play & Leisure Strategy



Social spaces within the landscape
Alfred Place Gardens, LDA Design,
London



Play and leisure for all ages
Alfred Place, LDA Design, London



Informal play opportunities integrated in to the soft landscape
Cator Park, HTA Design, Bromley

2.0 Masterplan Framework

2.17 Lighting, Wayfinding and Security

The below codes seek to secure the high level principles that support the combined role that Lighting, Wayfinding and Security have in the creation, and operation of, a safe, welcoming and enjoyable place.

Lighting

- 2.17.0 Physical wayfinding *must* form part of the strategy for creating a safe, legible and easily navigable part of the city
- 2.17.1 Lighting *must* provide visual interest after dark, adding to the character, amenity and usability of the public realm throughout the whole day.
- 2.17.2 Artificial lighting *must* help create a sense of welcoming, safety and security but *must* not have a negative impact on adjacent properties and habitats.
- 2.17.3 Lighting *must* minimise artificial lighting of existing vegetated boundaries.
- 2.17.4 All lighting apparatus *must* be considered as part of a palette of street furniture.
- 2.17.5 Lighting equipment *must* be coordinated with landscape layouts to mitigate against interference from and with tree canopies and pedestrian movement.
- 2.17.6 Public realm lighting equipment *must* be robust, low energy and with a long maintenance cycle.
- 2.17.7 Lighting *must* ensure a high quality night-time street scene and to help reduce the risk and perception of crime.

Wayfinding

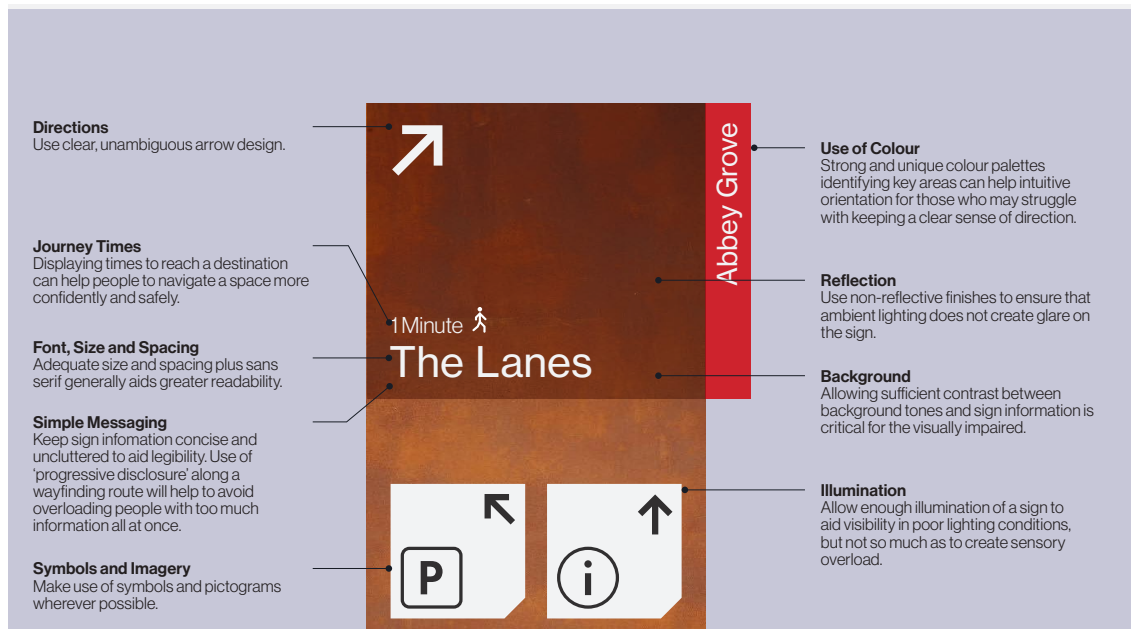
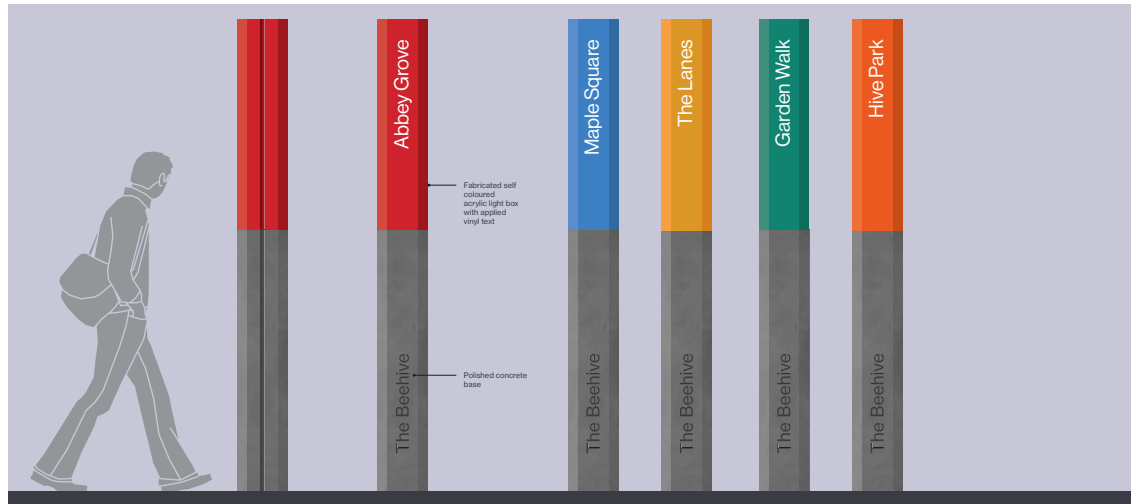
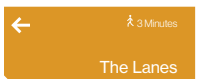
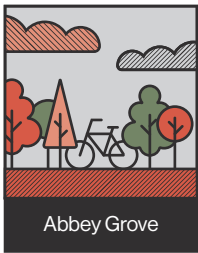
- 2.17.8 Physical wayfinding *must* form part of the strategy for creating a safe, legible and easily navigable part of the city
- 2.17.9 Any physical wayfinding *must* be designed to adopt inclusive design practices which can communicate widely with meaning and consideration for all site users.
- 2.17.10 Wayfinding *must* enable confident and safe navigation of the site by all users
- 2.17.11 The Wayfinding Strategy *must* reinforce connections to the wider city.

- 2.17.12 The placement and design of physical wayfinding *must* promote the strategy for soft thresholds between the proposed masterplan and the surrounding residential streets.

- 2.17.13 The Wayfinding Strategy *should* support the proposed initiatives for the modal shift towards sustainable transport modes.

Security

- 2.17.14 All entrances and landscape character areas *must* be well overlooked to promote passive surveillance of public spaces.
- 2.17.15 All entrances *must* be designed to allow clear lines of sight between entrances and routes through the masterplan
- 2.17.16 Dead-end conditions are to be discouraged and, where unavoidable, suitable design mitigations *must* be provided to ensure the creation of safe and comfortable spaces



Illustrative wayfinding design and signage typologies from the Wayfinding Strategy.