The Beehive Redevelopment

APP/Q0505/V/25/336061

Masterplanning

Proof of Evidence:

David Leonard BA BArch RIBA

Contents

1. Scope of evidence

1.0.1 My evidence is structured as follows:

(1) Section 1: Scope of evidence.

(2) Section 2: Sets out my experience, qualifications and the experience of Leonard Design as a masterplanning and design practice.

(3) Section 3: Describes the site and its relationship to its immediate setting and the city of Cambridge.

(4) Section 4: Sets out the Brief and Vision for the proposals. It outlines the principles that have informed the development of the masterplan and the vision that it seeks to achieve.

(5) Section 5: Sets out the opportunities and constraints created by the site and how they informed the development of the masterplan.

(6) Section 6: Sets out the core design principles formed as result of consideration of the matters set out in Sections 3-5.

(7) Section 7: Sets out the principles of the Illustrative Scheme, Maximum Heights and Plots Parameter Plan, and Design Code and the controls over Reserved Matters Application that they would provide.

(8) Section 8: Documents the design evolution of the scheme throughout pre-application consultation and during the period following the 2023 Outline Planning Application.

(9) Section 9: Sets out the illustrative masterplan design for the Application Site as a whole.

(10) Section 10: Sets out how the proposals will achieve the objectives of Chapter 12 of the NPPF using the Ten Characteristics of Well-Designed Places.

(11) Summary and Conclusion.

2. Qualifications and Experience

2.0.1 My name is David John Leonard, and I am a Chartered Architect, having qualified in 1989. I have been a member of the RIBA since 1989.

2.0.2 I hold a BA(Hons) (First Class) degree and a BArch(Hons) (First Class) degree from the Nottingham University School of Architecture and the Built Environment.

2.0.3 I have 38 years of professional experience designing and delivering masterplans and buildings across a wide range of developments in the UK and overseas.

2.0.4 I have occasionally given industry lectures and talks; I have been an occasional visiting tutor at the University of Nottingham and have been an occasional member of Nottingham City Council's Design Review Panel.

2.0.5 I founded Leonard Design in 2006, and the practice has since grown to approximately 80 members of staff across offices in Nottingham, London, and Seoul.

2.0.6 Leonard Design has worked in over 35 countries in the UK and Europe, the Middle East and Africa, Asia, and Australasia.

2.0.7 I have a particular interest in the way our towns and cities evolve, and how we can create successful developments and vibrant, inclusive places – ones which respect and enhance their locations and make positive contributions to communities and climate.

2.0.8 Our projects include a wide range of workplace, commercial, residential, retail, leisure, entertainment, culture, movie studios, sports and community uses, public spaces, green infrastructure, and transportation. Many are designed to demanding environmental standards. Many are designed in sensitive locations, conservation areas and working with heritage buildings.

2.0.9 Our clients include funds and developers, local authorities, institutions, individuals, occupiers, and communities.

2.0.10 I am experienced in giving evidence to other inquiries, including:

(1) The Broadmarsh Nottingham;

(2) The Friary expansion in Guildford;

(3) Westfield Derby;

(4) Reading Oracle;

(5) Brent Cross.

2.0.11 My experience in designing and working on developments which have similar ambition, scale or context include:

(1) Heart of the City, Sheffield (Completed 2024) A*s masterplanner and plot architect for Devonshire House, Isaacs House, and Burgess House.*

A 7-hectare mixed-use masterplan that redevelops individual city plots to create a

diverse mixed-use district in Sheffield City centre. The masterplan rehabilitates existing city plots with new architecture that sensitively stitches into the historic city centre.

(2) Bispevika, Oslo (Completed 2019) A*s masterplan design lead for the ground floor plane*
A 250-acre development on the Oslo waterfront comprising new housing above an active mixed-use ground floor plane of retail and dining.

(3) The Island Quarter, Nottingham (2017-current) A*s masterplanner in collaboration with Studio Egret West.*
A masterplan to transform 36 acres of long-dormant brownfield land into a mixed-use district for housing, office, laboratory, and culture supported by a comprehensive network of open and green spaces.

(4) Ironbridge (2019-2021): *As masterplanner.*
Transformation of the 350-acre site of the former Ironbridge Power Station and surrounding land into a new community of 1,000 homes, retirement living and commercial space around a new village centre including a primary school and nursery.

(5) Shaping Guildford, Guildford (2020-2023): *As masterplanner*
A 100-acre masterplan comprising up to 2,600 new homes, 140,000ft^2 of retail and dining floorspace and 250,000ft^2 office space for start-ups and established businesses. The masterplan creates a more attractive place to live and work, reduces congestion, protects the town from flood, and improves sustainable and affordable transportation

(6) Westfield London (Completed 2018): *As masterplanner and as Design Director at Westfield.*
Complex urban regeneration of 12 hectares of redundant inner-city industrial land into a vibrant mixed-use area. Once Europe's largest city centre shopping development; retail, dining, leisure, workplace, and transport infrastructure are carefully integrated into a densely populated urban setting.

(7) Westgate Oxford (Completed 2017): *As masterplanner in collaboration with BDP*
The redevelopment and extension of Westgate Shopping centre which incorporated full range of shopping, foodhall, boutique cinema and residential. The scheme was based around new covered streets and public space, including series of rooftop restaurants with views of the Oxford skyline.

2.0.12 Declaration of Truth

The evidence which I have prepared and provide for this called-in planning application reference APP/Q0505/V/25/3360616 in this proof of evidence is true and has been prepared and is given in accordance with the guidance of my professional institution and I confirm that the opinions expressed are my true and professional opinions

David J Leonard

Signature

27th May 2025

Date

3. Site & Context

3.0.1 In this section, I will establish the location and nature of the application site and its history. I will describe the relationships between the site and city of Cambridge and between the site and its local context.

3.1 Description of Application Site

3.1.1 As set out in 6.2 of the Statement of Common Ground (CD 6.01), the Site is not allocated or designated within the adopted Development Plan. It lies adjacent to the Mill Road Conservation Area.

3.1.2 The Site is currently a retail park, known as The Beehive Centre, situated approximately 1.7km to the east of Cambridge City Centre and lying adjacent to the western edge of the Cambridge-to-Ely railway line. The Site is 1km from Cambridge Station.

3.1.3 The Site is positioned to the southwest of Coldhams Lane, which connects to Newmarket Road (A1134) and is a main vehicular route into the city. To the east, over the railway bridge, Coldhams Lane leads to Coldham's Common and beyond this to Brooks Road/Barnwell Road (A1134).

3.1.4 The Site is irregular in shape, broadly forming a J-shape. Coldhams Lane forms the northeastern boundary, with Silverwood Close and St Matthews Gardens to the northwest. The railway line forms the southeastern boundary, with Sleaford Street to the south. The western boundary is formed by the rear of properties on York Street. The surrounding residential properties present a mix of two-storey Victorian properties, semi-detached post-war houses, three storey town houses and apartment blocks.

3.1.5 There is one point of vehicular access to the Site, which is via a roundabout on Coldhams Lane. This is included within the Application Site boundary. In addition, there are existing pedestrian and cycle access points into the Site via St Matthews Gardens to the north, York Street to the west and Sleaford Street to the south. Existing site entrances are generally of a poor quality with the entrances from York Street and Sleaford Street being of a notably poor quality of environment resulting from their relationship with existing buildings and service areas.

3.1.6 Approximately half of the land area of the site is used for vehicle circulation and surface car parking, providing 885 car parking spaces.

3.1.7 There is limited soft landscape with greening predominantly being found at the site boundaries and trees planted between car parking spaces.

3.1.8 The built structures on the include a variety of large-format retail units, the majority are two storeys and of little architectural merit. The buildings comprise 17 units, amounting to 22,637m^2 (GIA).

Existing Site Layout

The Site within the Wider City

3.2 Site History

3.2.1 The site was open fields on the edge of the city until development of the surrounding area commenced following the construction of the railway in 1845.

3.2.2 Between the early 1900s and the late 1990s the site was subject to somewhat piecemeal development which included railway sidings at the northern boundary with Coldhams Lane and a collection of light industrial buildings at the southern corner bounded by Sleaford Street.

3.2.3 By the 1970s the light industry in the southern corner of the site had expanded and the Co-op supermarket chain had been given permission to build a discount warehouse on the site to enable its customers to shop somewhere that was easy to park. This new building was known as Beehive 1.

3.2.4 During the 1980s and 1990s, further retail units were added to the Beehive Centre and the site gradually became an out-of-town retail park. The site has been in its current form since at least the late 1990s.

3.2.5 As set out above, the site has been subject to somewhat piecemeal development over its history with only the final phases of redevelopment of the site considering it a single planned entity which would build upon elements already existing on the site at that time.

3.2.6 The site has always been a place which is immediately and markedly different from its surroundings in terms of the architecture, scale and use of any buildings on site

3.3 The Relationship of the Site to the City and Local Context

3.3.1 The site occupies a location within the city that is well connected to existing walking and cycling routes, public transport, rail stations and vehicle routes:

(1) The site is c.1.7km from the city centre which is approximately a 10-minute cycle or 20-minute walk.

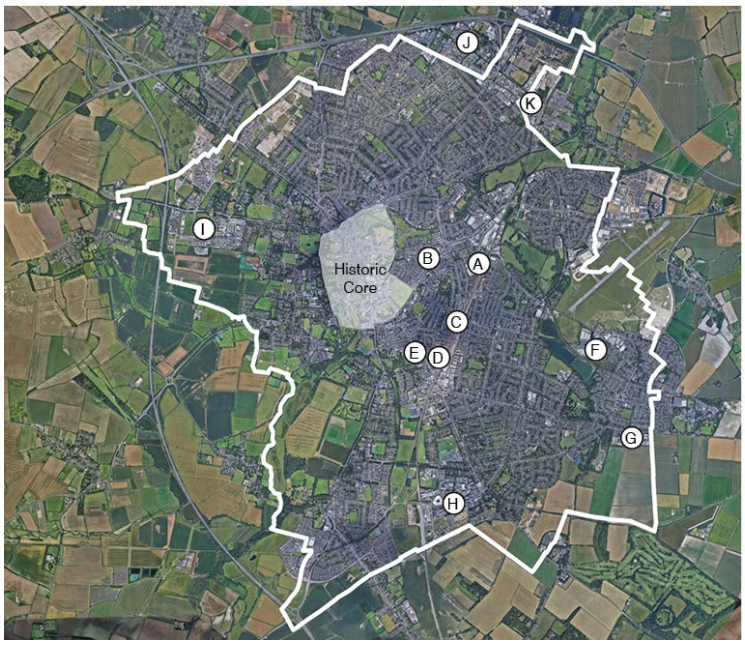
(2) The site is c.2.0km from Cambridge North Station and 1.1km from Cambridge station which is approximately a 5-minute cycle or 10-minute walk.

(3) There is a bus stop on site with additional bus connections, including park and ride, on Newmarket Road c.300m from site.

(4) The site is well connected by road to the east, north and west with access via Newmarket Road and Coldhams Lane.

3.3.2 The site is part of the Railway Corridor, an area with a number of delivered or consented schemes that have successfully increased scale and density including the former Ridgeons site (The Ironworks), the Mill Road Depot (Mill Yard), and the CB1 development at Cambridge station.

3.3.3 The site would form part of an emerging landscape of urban and suburban innovation and workplace clusters locally, including the proposed schemes at the Grafton Centre and Project Newton in Cherry Hinton. The plan below maps out notable established and pipeline sites within the urban area of Cambridge. The site would also become part of the wider collection of innovation parks further afield including those outside of the city boundary.



A. The Beehive Centre
B. The Grafton Centre
C. Mill Yard
D. CB1
E. Botanic Place
F. Project Newton
G. CITP
H. Cambridge Biomedical Campus
I. West Cambridge
J. Cambridge Science Park
K. Cambridge North

3.3.4 The site sits within Abbey Ward and is directly adjacent to Petersfield Ward. Petersfield Ward is an area of Cambridge which was been identified to have a particularly low provision of open space in the Council's Open Space and Recreation Strategy (2011)(CD 4.03).

3.3.5 Mr Handforth's evidence identifies the heritage assets, including conservation areas which have the potential to be impacted by the proposals.

(1) The eastern corner of Parker's Piece forms the boundary of the Historic Core which is nearest to the site at c.800m away,

(2) The site is immediately adjacent to the Mill Road Conservation Area, the boundary for which aligns with the rear boundary between the gardens of 2-92a York Street and Rope Walk.

(3) The developed form of the site would be visible from a number of distant viewpoints (as set out within the LVIA and Mr Macquire's evidence) which include:

(a) Castle Hill Mound 2.2km to the west;

(b) Red Meadow Hill 5.8km to the west;

(c) Mill Road Bridge 0.8km to the south;

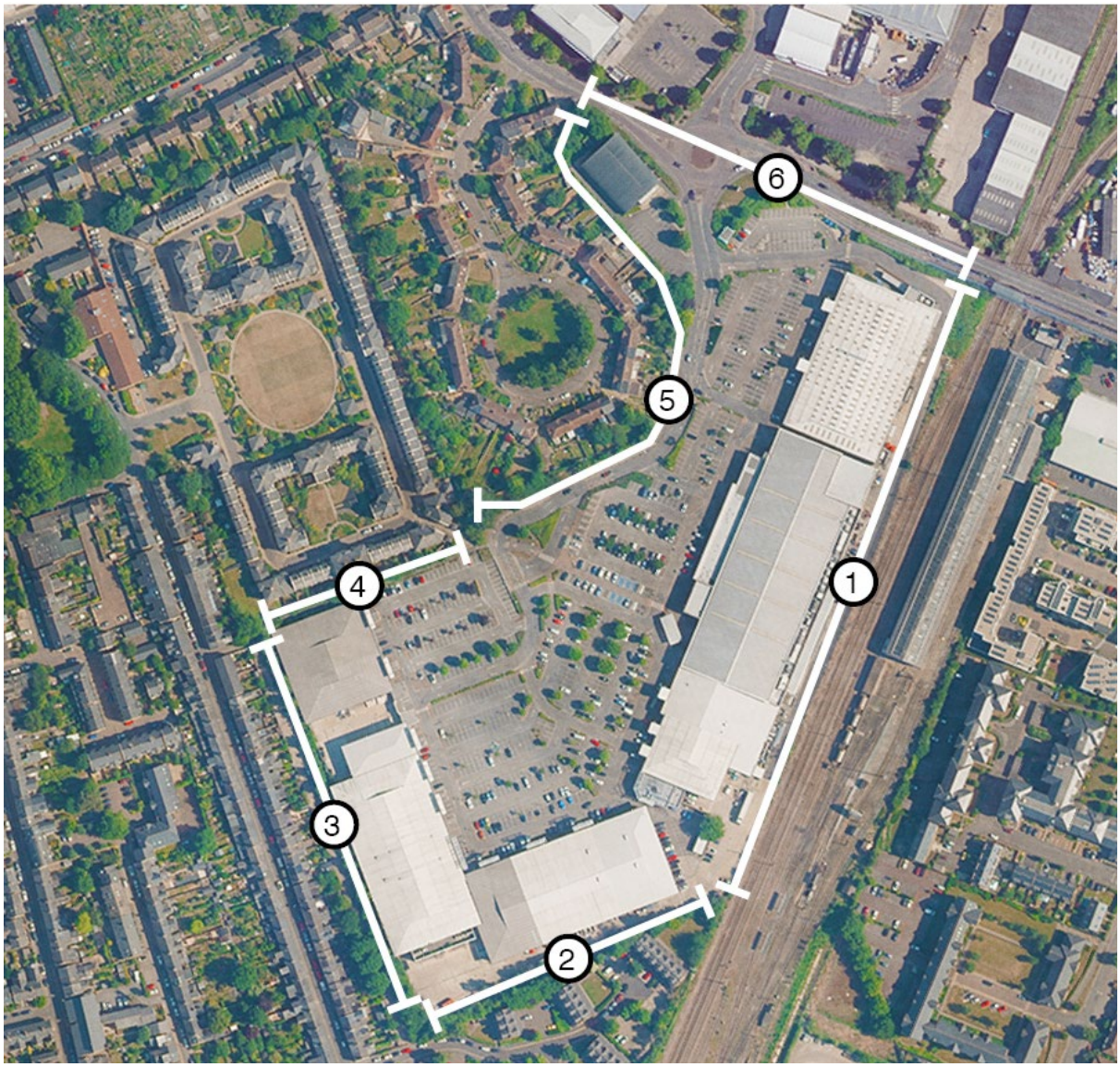
(d) Coldham's common 0.5km to the east and north-east.

(4) Locally, there would be views to the site from limited locations within the neighbouring streets of the Conservation Area with the most notable being the view from the Geldart Pub on York Street towards the Sleaford Street entrance.

3.3.6 The site is bounded by residential areas on all boundaries except for the boundary with Coldhams Lane and the Railway.

3.3.7 The plan below illustrates that the current retail centre is embedded within an established, predominantly mixed-use part of the city. The area to the north, including Cambridge Retail Park and Coral Park is predominantly commercial in nature

3.3.8 The conditions at each of the site boundaries is outlined below, running clockwise from the railway boundary per the below plan:



1. The Railway Boundary
2. Sleaford Street Boundary
3. York Street (Rope Walk) Boundary
4. St Matthew's Gardens Boundary
5. Silverwood Close Boundary
6. Coldhams Lane Boundary

(1) Railway Boundary:

(a) This boundary is currently the location for the primary service vehicle route for the retail park with the existing retail sheds forming a near continuous wall of back-of-house, service and plant areas.

(b) The site is separated by the rail line from the residential developments of Pym Court, Hampden Gardens, Winstanley Gardens and the Timberworks.

Within the rail line sits an engine cleaning shed, which obscures views towards the site from Pym Court.

(2) Sleaford Street Boundary:

(a) There is an immediate change in level between Sleaford Street and the Site, with the site sitting c. 2.2m lower than Sleaford Street.

(b) A retaining wall that projects c2.2m above the Sleaford Street ground level forms the immediate transition between Sleaford Street and the site, which in this location is currently used for servicing and the turning of service vehicles.

(c) There is dense tree planting both within and without the site boundary with this rising to a maximum height of c.8m above the ground level at Sleaford Street.

(d) The houses of Sleaford Street are arranged approximately perpendicular to the site boundary.

(e) The Site is accessible from Sleaford Street via Vera's Way.

(3) York Street (Rope Walk) Boundary:

(a) The boundary is approximately parallel with the houses of 2-92a York Street with these houses all having direct facing conditions towards the Site.

(b) The Site is lined with retail sheds or service yards along the length of this boundary

(c) The boundary is separated from the rear gardens of the York Street properties by Rope Walk, a street accessed from York Street that is used for parking and access to the rear of the York Street properties as shown in the above image.

(d) The site sits c. 2.0m lower than Rope Walk and the change in level is resolved by a landscape bank with tree planting along the full length of the boundary.

(e) Tree cover is supplemented by trees within gardens although the amount and scale of any trees within gardens varies along the length of the boundary. There are large trees behind 16-28 York Street.

(f) The Site is accessible from York Street via the entry to Rope Walk between 90A and 92 York Street.

(4) St Matthew's Gardens Boundary

(a) The boundary is approximately parallel with the properties of 163-211 St Matthews Gardens with these properties all having direct facing conditions towards the Site.

(b) 163-201 St Matthew's Gardens have an outlook over the car park and 203-211 have an outlook towards the existing retail shed.

(c) The boundary is formed directly with the rear gardens of the St Matthews Gardens terrace with the majority of these gardens (171-207) sitting below the ground level of the Site.

(d) There is dense tree planting along the site boundary. Whilst this varies in height and density it rises to an approximate maximum height of 13m above the ground level within the site. As a result, a limited number of windows to St Matthew's Gardens have a direct unobstructed view to the site with the ground and lower ground floor spaces being particularly limited.

(e) The Site is accessible via a pedestrian route in the south-eastern corner between 161 and 163 St Matthew's Gardens.

(5) Silverwood Close Boundary

(a) The Site shares a direct boundary with 32-65a Silverwood Close, with 34-61 and 64-65a Silverwood Close having a direct facing condition with the Site.

(b) 32-33 Silverwood Close have an outlook towards a narrow landscape area with tree planting.

(c) 34-45 Silverwood Close have an outlook over the car park.

(d) 47-65a Silverwood Close have an outlook towards the existing Porcelanosa unit and its parking and tree planting.

(e) The boundary is intermittently planted with trees within and without the site boundary. The scale and amount of tree planting varies with some properties having a near open and unobstructed outlook towards the site and some properties having no direct unobstructed view towards the site, being screened by sometimes significant trees up to c.13m in height such as at 38 Silverwood Close.

(6) Coldhams Lane Boundary

(a) The Coldhams Lane boundary extends from the Silverwood Close boundary up to the bridge over the rail line. The road, footpath and cycle path collectively rise up towards the bridge over the rail line creating a marked level change of c.4.0m.

(b) Along much of its length there is little to no soft landscape, creating a poor quality of environment that is dominated by vehicle movement. There is some tree planting around the roundabout junction with a cluster of TPO trees positioned around the Porcelanosa unit.

(c) The roundabout is well used for access to both the Site and Cambridge Retail Park and Coral Park. The current layout of this junction creates challenging conditions for pedestrian and cyclist movement.

4. The Brief & Vision

4.0.1 In this chapter I will describe the vision for the Beehive Redevelopment and the key elements of the brief for the masterplan, sustainability, landscape, and community.

4.1 The Initial Brief

4.1.1 Leonard Design were first engaged by Railpen to conduct early feasibility studies for the redevelopment of the Beehive Centre in late 2019, with a high-level brief to optimise the site to create a commercially deliverable laboratory and workplace cluster within the city which would be responsive to its context and capable of being granted planning permission.

4.1.2 The initial brief included additional directives to create:

(1) A sustainable place with high-performing buildings

(2) A strategy for open space that would contribute to the character and identity of the site

(3) A strategy to create a mixed-use ground floor that would create a vibrant place attractive to prospective tenants and local residents

4.1.3 In mid-2020 a more detailed feasibility study was undertaken to determine the outline brief for the development before developing the scheme for the first pre-application consultation with the LPA resulting in the vision set out in 4.2-4.6.

4.2 Masterplan Vision

4.2.1 The masterplan will optimise the use of the site such that the opportunities and constraints of the site are duly addressed by a holistically balanced design resulting in the creation of a new cluster of buildings for innovation and life-science focussed businesses.

4.2.2 The masterplan will create a place with character and identity that acts as a high-quality 21st century addition to Cambridge, forming a legible part of the wider R&D landscape of the city.

4.2.3 A new local centre at ground floor, comprising mixed-use units and workplace lobbies alongside new streets and open spaces will contribute to the vibrancy and identity of this new place.

4.2.4 A new street layout will enhance connectivity within the site and enable better local connectivity for routes passing through site.

4.2.5 A mix of office and wet and dry-laboratory buildings, with a variety of floorplate and tenancy sizes, will create a diverse place that can cater to needs of occupiers ranging from start-ups and SMEs to large international tenants.

4.3 Landscape and Public Realm Vision

4.3.1 The public realm will create open spaces that are accessible for all, with no barriers to entry.

4.3.2 Open spaces will be designed to create a range of experiences contributing to the character of this new place including a new city park, a civic square, a wildlife area, green streets with tree planting and a linear wooded plaza.

4.3.3 The greening of open spaces and streets will be maximised such that a significant uplift to on-site biodiversity can be achieved.

4.3.4 Open spaces will be designed to support a range of programmed and un-programmed activities and events that contributes to the vibrancy and activity of the local centre.

4.3.5 Open green spaces that contribute to the outdoor amenity space for local residents will be created.

4.4 Transport Vision

4.4.1 A modal shift away from private car use will be supported by strategies that promote active and sustainable travel.

4.4.2 High quality active travel routes between York Street and Coldhams Lane will be created.

4.4.3 Private car parking will be consolidated to a new multi-storey car park close to the site entrance to allow much of the site to be largely car free.

4.4.4 The new movement framework will create routes which minimise the points at which pedestrians and cyclists would have to interact with vehicles.

4.4.5 The junction at Coldhams Lane will be redesigned to improve connectivity across Coldhams Lane and promote pedestrian and cyclist priority and safety.

4.5 Sustainability Vision

4.5.1 A new highly sustainable place will be created with high-performing buildings and sustainable landscape.

4.5.2 All buildings will be designed using fabric-first principles and will use electricity for heating, cooling and hot water, supported by on-site power generation.

4.5.3 All buildings, excluding the multi-storey car park in Plot 10 (which is not suitable for assessment due to its proposed uses), will achieve a minimum BREEAM certification of Excellent. Any office floorspace shall be capable of achieving BREEAM Outstanding.

4.5.4 Buildings will be designed to minimise carbon emissions resulting from their construction and whilst in operation.

4.5.5 Water use will be minimised and supported by strategies to harvest and reuse rainwater or grey water, or both.

4.6 Community Vision

4.6.1 Space for community will be integrated within the buildings and open spaces and will make a notable contribution to the local centre offer. Concepts for these spaces and initiatives have been developed though consultation with local groups and will continue to be developed at the reserved matters applications stage.

4.6.2 A flexible community space will be created, offering space for use by local groups. This concept has been developed in consultation with Abbey People, Cambs Youth Panel and Romsey Mill.

4.6.3 A space for STEM education will be created, offering space to engage local schoolchildren in STEM learning activities. This concept has been developed in consultation with Cambridge Science Centre.

4.6.4 A strategy for safe skateboarding within the site has been developed and a skateable area of public realm will be created. This concept has been developed in consultation with Cam Skate.

4.6.5 There will remain scope for community involvement in operation through the ongoing management plan for the open space which will include a year-round programme of events to be held primarily within the central civic square.

5. Opportunities and Constraints

5.0.1 In this section I will set out the opportunities offered by the site and the redevelopment of the site as well as describing the key constraints that informed the design development process.

5.1 Opportunities

5.1.1 Optimise the potential of brownfield land.

(1) More efficient land use, including the potential to release land currently used as car parking and single-storey retail to create new public realm and high-quality buildings.

(2) Enable net environmental gain with new habitat creation.

5.1.2 Create a new piece of the city with streets, spaces and buildings contributing to a strong sense of place.

(1) Building upon established street networks to create a new place.

(2) Create new open spaces with high amenity value for local residents.

(3) Create new high-quality buildings which contribute to the character of this new place and embody the identity of 21st Century Cambridge.

5.1.3 Achieve sustainable development.

(1) Enable a transition in use to one with a more secure and longer-term economic sustainability than the current site.

(2) Create a new local centre with green and open spaces that support health, social and cultural well-being.

(3) Create new, more sustainable buildings with long design life and high performance to respond to climate challenges.

5.1.4 Meet the need for high quality workplace and research floorspace.

(1) Create a new centre for knowledge and innovation in a well-connected and accessible location within the city.

5.1.5 Create a new, strong neighbourhood centre.

(1) Create a mixed-use ground-floor plane of local shops, services, dining, leisure, and community space alongside new open spaces.

(2) Promote social interaction between people who might not otherwise come into contact with each other i.e. residents of the neighbouring areas and the laboratory and office workers.

5.1.6 Dramatically increase the local provision of accessible and high-quality open space.

(1) Some 34% of the site is currently used for surface car parking, much of which can be released to reconfigure the site to create new high-quality buildings and spaces.

(2) The surrounding area to the south of the site has a shortfall of open space relative to its population. Creating new open space, accessible to all, would help to address this.

5.1.7 Reduce car parking numbers and maximise the benefits this would bring in terms of reduced vehicle movements, use and efficiency of land use and demoting the car through design.

(1) By nature of the change in use of the scheme there is an opportunity to reduce the number of car parking spaces on site.

(2) A reduction in vehicle movements within the site resulting from the reduced quantum of parking and a change in use from retail to workplace would improve the quality of environment on the site and for neighbouring properties, for example by improvements to air quality and a reduction in noise associated with vehicle movements.

5.1.8 Improve existing pedestrian and cyclist infrastructure and connectivity.

(1) Improve the quality of environment at site entrances and enhance pedestrian and cyclist connectivity at all entrances.

(2) Create better connectivity between entrances, enabling better options for transit through the site.

(3) Create a safer and more legible pedestrian and cyclist network with minimised interactions with vehicles.

5.2 Constraints

5.2.1 Restrictions to access.

(1) There are only 4 entry points to the site, with only one of these being for vehicles, the remainder being for pedestrians and cyclists only.

5.2.2 Interface with Coldhams Lane.

(1) Coldhams Lane is a busy local route with high levels of vehicular traffic.

(2) Proposals should seek to enhance the quality of environment of this key route and enhance pedestrian and cyclist connectivity and safety.

(3) A suitable design solution for the 4-way junction should be delivered to improve local connectivity.

5.2.3 Relationship with Residential Boundaries.

(1) The optimisation of the site, being previously developed land, will result in a higher proportion of the site being built out, with buildings being taller than those of the existing one to storey retail park.

(2) The site is directly bounded on three sides by residential properties which are predominantly two storeys tall with some elements of 3 and 4 storeys.

(3) The new relationship with residential properties resulting from the change in the nature of the built form on site must be considered within a contextual, informed, responsive and iterative design process that seeks to balance a number of design considerations.

5.2.4 Relationship with the Railway.

(1) Exclusion zones for cranage and laboratory gas storage will influence how new buildings may be brought forward along the railway line.

5.2.5 Views Towards the Site

(1) The proposed buildings, being of greater height than the existing retail park, would be more visible in views from around the city and therefore consideration must be given to how they might best form a new high-quality addition to the skyline.

(2) Local views towards the site must address the change in scale that would result from the proposals such that the new buildings become a high-quality addition to the local street scene.

(3) High quality design secured by the Design Code must ensure that, where visible, the proposals appear as a legible 21st Century addition within the skyline of Cambridge that would be read as an identifiable element distinct from the Historic Core.

5.2.6 Spatial Requirements of Sustainable Buildings Used for Scientific Research, including:

(1) Servicing, whereby larger service vehicles may be required more frequently than for a typical workplace building resulting in the need for larger dedicated areas for vehicle movement.

(2) Bulk and bottled gas storage is a requirement for many laboratory tenants and so space must be allocated for the safe location of these items.

(3) Extract flues are required to safely discharge and disperse any exhaust air from fume cupboards. The height of flues will be equivalent to more than 25 percent height of the building on which they sit and would form the tallest and most visible part of any building that would require them.

(4) A greater extent of rooftop plant areas is required for air handling units to deliver the necessary rates of air change within the building and air source heat pumps to sustainably provide heating, cooling and hot water alongside the necessary space for any fan units associated with the fume cupboard exhaust flues.

5.2.7 Working with Existing Landscape

(1) The existing topographic levels of the site should be considered when siting building entrances and setting out ground floor levels such that a place can be created that is easy to access for all with no steep level changes.

(2) A strategy that promotes retention of existing trees should be developed such that the need to optimise the use of the site with new building footprints may be balanced against retaining existing trees and the biodiversity that they support.

5.2.8 Transport Corridors.

(1) Some approach routes, particularly those from the south, are dimensionally constrained and therefore the use of these routes to access the proposals must be considered, with

suitable management and design strategies in place to manage any potential increase in pedestrian and cyclist movement.

6. Design and Place Principles

6.0.1 In this section I will outline the key design principles that underpinned the design rationale for the proposals, as set out in the 2023 and 2024 Design and Access Statements (CD 1.02 and CD 2.01 respectively). I will also outline the Place Principles as set out in the 2024 Design Code (CD 2.64).

6.1 Design Principles

6.1.1 The Design Principles that informed the development of the masterplan throughout design development are set out below. These principles are based on an analysis of context, opportunities and constraints and seek to inform a balanced response to the key influencing factors derived from this analysis.

6.1.2 Connectivity with the City:

(1) Connecting the four entry points with new or improved routes.

(2) Enabling onward connection through the site.

(3) Enabling access to the site from across the city.

6.1.3 Streets and Spaces:

(1) Connecting entrances with a street layout and hierarchy that responds to the surrounding streets.

(2) Creating open spaces at strategic locations such as site entrances or the intersection of key routes.

(3) A variety in the scale and nature of streets and spaces to create spaces of distinct character within a cohesive whole.

6.1.4 Open Space and Greening:

(1) Create new streets and spaces that have the capacity to support new planting of all kinds.

(2) Create new tree-lined streets.

(3) Create significant new green open spaces with local amenity value.

6.1.5 Movement within the Site

(1) Limit the extent to which private cars can move around the site.

(2) Minimise the need for pedestrian and cycle routes to cross vehicle routes.

(3) Provide high quality cycle parking around the site and within buildings.

6.1.6 Sculpted and Responsive Massing

(1) Develop building forms that are conceived or developed bearing all contextual elements in mind' and that balance the optimisation of the use of the site, the creation of character and identity, and the impacts to local and city-wide townscape and heritage such that a positive, high-quality addition to city skyline can be created.

(2) Concentrate taller massing towards the centre of the site and along the railway, such that taller elements within the silhouette created by the proposals may be read as a localised point of interest within the wider skyline.

(3) Position and shape buildings to enable a well-handled transition in scale from the Conservation Area such that building mass reduces towards residential boundaries to create edge conditions that relate well to the scale of neighbouring residential properties.

(4) Create a massing and material strategy that promotes a variety of form and materiality such that buildings may be read individually within the collective silhouette of the development and create a positive contribution to the skyline of Cambridge in the 21st Century.

6.1.7 Active Spaces

(1) Create streets and spaces that are activated and overlooked by active frontage, including that which contains workspace.

(2) Ensure that all primary and secondary streets are predominantly bounded by active frontage.

(3) Encourage the activation of open space by uses within buildings determined by a curated ground-floor plane strategy.

6.1.8 A Welcoming and Inclusive Place

(1) Create a place with no barriers to entry.

(2) Ensure that the site may be enjoyed by all, including those who may not be using the buildings.

(3) Ensure that the ground-floor plane is designed in a such a way that it encourages natural movement and discovery through the site.

6.2 Place Principles

6.2.1 The following 'Place Principles' were included in the introductory chapter of the Design Code and capture the key objectives of the proposals and informed the creation of the Design Code.

6.2.2 A Place that Creates Space for Innovation Within the City:

(1) The proposed re-imagining of the Beehive Centre as a new innovation neighbourhood responds to the ongoing demand for high quality innovation space within the urban area of Cambridge.

(2) Providing this space on brownfield sites within the city reduces further greenbelt development, creates a better experience for workers, provides local amenity and increases economic activity within the city; all in a location that is more accessible for sustainable transport modes.

6.2.3 A Place that Brings Different Communities Together

(1) The combination of innovation space, mixed-use ground floor and extensive public realm that the Beehive Redevelopment creates will enable the coming together of different groups in a vibrant and diverse new place.

(2) A new population of workers will help to support and drive activity within the diverse mix of uses within the ground floor, which alongside the new high quality open space will create a new local destination.

6.2.4 A Place Without Barriers to Entry

(1) Creating a place that is free to use and without physical barriers to entry is key to ensuring that this new place can become a fully integrated part of the city.

(2) Allowing access for all promotes the intermingling of diverse communities that will drive the ongoing development of the character and identity of this new place.

6.2.5 A Place for All

(1) The combination of open space, ground floor, community and workplace strategies will create a place for all people at all ages. The variety of new workplaces creates opportunity for jobs at all career stages.

(2) Open spaces will be designed to include space for play, space for activity and space for rest.

(3) The mixed-use ground floor will create a diverse mix that will appeal to a wide range of people and the community spaces within this mix will create space for local groups to use.

6.2.6 A Place that Promotes Urban Greening

(1) There will be a significant transformation of the site from a place of hard landscape and trees planted between car parking to one of green streets and a new city park.

(2) A diverse tree retention and planting strategy will retain 58 trees and add approximately 290 new trees that will contribute to urban greening alongside new planting, lawns, green roofs, and potential for green façades on key buildings.

(3) The greening of this site will play a role in the ongoing response to the urban heat island effect by creating shade, reducing hard heat retentive surfaces and through the cooling benefits of the transpiration of trees and plants.

6.2.7 A Place that Enables Active Travel Connections

(1) The proposals have the capacity to unlock a key direct active travel connection between the dense streets of the Mill Road Conservation Area and the north of Cambridge.

(2) The connective route through the site from Sleaford Street to Coldhams Lane, here named the Beehive Greenway, enables a direct pedestrian and cyclist route through the site with very little interaction with vehicles.

(3) Onward connectivity beyond the Beehive site is promoted by a commitment to a redesigned Coldhams Lane junction that will prioritise pedestrian and cyclist movement and safety.

7. Role of Parameters & Design Code

7.0.1 In this section I will set out the form of the submitted parameter plans and the controls over future Reserved Matters Applications that they secure. I will describe and illustrate the relationship between the Illustrative Scheme and Maximum Parameter Envelope. I will describe the nature and content of the Design Code (CD 2.64) and set out the extent to which they offer additional control over the nature of future Reserved Matters Applications.

7.1 Description of the Illustrative Scheme and its Role

7.1.1 The final form of the Illustrative Scheme was arrived at as the result of the significant iterative multi-disciplinary design development and consultation process that is set out in Chapter 8. The Illustrative Scheme seeks to deliver a balanced approach to the optimisation of the use of the site, and the benefits that this would bring.

7.1.2 The Illustrative Scheme, and its various iterations throughout the design process, formed the basis of most pre-application consultations, including those focussed on residential amenity, townscape, and heritage.

7.1.3 The Illustrative Scheme represents the consistent likely scenario for the development of the site pursuant to the Parameter Plans (CD 2.16-20) and Design Code (CD2.12). The Illustrative Scheme represents the likely maximum scale of the proposals, being the embodiment of the maximum floorspace (166,685m^2 gross external area) of the overall development that could be delivered within the controls of the Parameter Plans and Design Code as a mixed-use laboratory and office led-scheme, with Plots 2, 3, 5 and 6 designed as wet-lab buildings. Plots 2, 3, 5 and 6 are allocated as laboratory buildings within the Illustrative Scheme as this is the likely scenario under which they will be brought forward and also represents the largest scale of these buildings as a result of the increased storey heights, plant allocation and extract flues.

7.1.4 The Illustrative Scheme was designed to capture the key spatial relationships between buildings, spaces and neighbouring context and directly informed maximum parameter volume and controls.

7.2 Description of Items Secured by the Parameter Plans

7.2.1 The parameter plans collectively secure a number of the fundamental elements of the design, ensuring that a well-considered high-quality place will be delivered. Elements secured by parameter plans are outlined below.

7.2.2 Land Use, Ground Floor Parameter Plan (CD 2.19)

This plan captures the intent to deliver a mixed-use local centre focussed on Plots 4-10, these being the plots having a direct relationship with the key open spaces that would form the local centre alongside the mixed-use ground floor floorspace.

7.2.3 Land Use, Upper Floors Parameter Plan (CD 2.20)

This plan captures the intent to create an office and workplace cluster with car parking consolidated into a single location at Plot 10.

7.2.4 Access and Circulation Parameter Plan (CD 2.17)

This plan captures the intent to create:

(1) A central movement corridor for cyclists and pedestrians that would be largely segregated from vehicle movements with only one crossing point along its length where it would cross the service route between plots 3 and 4.

(2) A road that would run along the north-western perimeter of the site from Coldhams Lane before looping around plot 8 and returning to Coldhams Lane, this route enabling access to Plot 10 for private cars, service access to Plots 7, 8, 9 and 10, and access to the re-provided bus stop.

(3) A dedicated service route along the railway for plots 2, 3, 5 and 6, these being the buildings likely to be delivered for laboratory use and therefore having more demanding servicing requirements.

7.2.5 Landscape and Open Space Parameter Plan (CD 2.16)

This plan captures the intent for:

(1) A large publicly accessible green area (shown as Hive Park within the Illustrative Scheme) at the south of the site

(2) A linear publicly accessible green area (Abbey Grove) at the north of the site.

(3) Publicly accessible hard landscape areas at the heart of the site that would deliver Maple Square per the Illustrative Scheme.

7.2.6 Maximum Building Heights and Plots (CD 2.18)

This plan captures the following massing strategies derived from the development of the Illustrative Scheme. A detailed description of the controls within this plan are set out within 7.3.

(1) Centring of Mass: Taller building elements are set away from residential boundaries in a response to retaining adequate residential amenity and daylighting. The tallest buildings on site, Plots 5, 6 and 9, are situated around Maple Square and the railway.

(2) Massing Reduction towards Residential Boundaries: Achieved either by a reduction in height to two or three commercial storeys (Plots 1, 6, 7, 8 and 9) or by limiting the footprint area (Plot 10).

(3) Distinct Taller Areas: Tall building elements are clustered around the centre of the site to form a single point of height in long distance viewpoints such as Castle Hill Mound. Buildings heights reduce towards site boundaries to resolve the change in scale with the surrounding area and to limit the perception of the horizontal form of the development.

(4) A Varied Skyline: the form and height of buildings have been designed to create variety and to reduce the potential for the proposals to create a singular linear silhouette. This strategy defines the height of buildings, their form in plan, massing setbacks at upper levels and the location of flues, the detail of which is secured by Design Code.

7.3 Controls within the Maximum Building Heights and Plots Parameter Plan

7.3.1 The maximum Building Heights and Plots Parameter Plan (CD 2.18) sets out the volumes (Parameter Envelope) within which the proposed buildings may be brought forward. To allow a limited degree of design flexibility these volumes are larger than the illustrative scheme, this being an embodiment of the maximum floorspace which could be developed. The relationship between the Illustrative Scheme and Parameter Envelope, and the nature of controls which would limit the extent to which each parameter volume may be occupied are set out below.

7.3.2 There are several elements that build up the parameter volume and additional controls which are set into in the Maximum Building Heights and Plots Parameter plan (CD 2.18) The below sets out each of the elements of the parameter plan, how each was derived, and the result of their application:

7.3.3 Illustrative Scheme Line

(1) The outline of the land area covered by the Illustrative Scheme, this being either the outline of the building's footprint at ground floor or, in cases where there is an inset at ground floor, the outline of the building at first floor.

(2) The Illustrative Scheme Line has been included in Maximum Building Heights and Plots Parameter plan (CD 2.18) to allow the reader to draw a clear relationship between the IS and the Plot Outline.

(3) The Illustrative Scheme Line has been simplified in places where small deviations in building line would have resulted in the creation of overly complex parameters.

7.3.4 Plot Outline

(1) The Plot Outlines define the areas in which new buildings may be created.

(2) Each plot is defined by a zone, with its boundary set no more than 3 meters out from the footprint of the Illustrative Scheme Line. Offsets from the Illustrative Scheme Line of up to +3.0m create a zone which allows some minor flexibility in form such that the design of each plot may respond appropriately to changes in circumstance as the masterplan is brought forward and to allow for creative architectural responses which accord with the Design Code.

(3) Plot outlines are created for both building footprints at ground floor and any set back upper levels, these having their own outline derived as an offset from the Illustrative Scheme.

(4) Areas of the scheme that required a greater degree of certainty at the Outline Application stage are subject to more limited offsets, below the typical +3.0m. For example, the elevation of Plot 10 that would directly face Silverwood Close has a 0.0m offset from the IS, as does the rear elevation of Plot 1 which also faces Silverwood Close, meaning there is certainty to the minimum gap that will be created in these situations.

7.3.5 Maximum Plot Coverage

(1) The Maximum Plot Coverage denotes the maximum percentage of the total area of each Plot that may be covered by the footprint of any new building, the area of which is measured as the area bounded by the building's outer perimeter wall.

(2) The coverage percentage is typically derived from the Percentage Plot Coverage of the Illustrative Scheme Line with up to 2.7% additional coverage being allowed such that limited flexibility of footprint area is included to allow minor design variation, an increase in outer wall thickness or the creation of articulation and design features. The exception to this being at Plot 1 where the variance is set to 0%, this footprint already being maximised within the Illustrative Scheme.

(3) The Maximum Plot Coverage has been provided to prevent RMAs from proposing buildings that would fully occupy the maximum parameter volume thereby significantly limiting the potential of the delivered scheme to replicate the full effects of the maximum parameter envelope.

7.3.6 Maximum Height Parameter

(1) The Maximum Height Parameter denotes the maximum height for any built element including rooftop plant and screening, and photovoltaic arrays. Flues that would extend beyond the maximum height parameter are subject to their own control as detailed in 7.3.10.

(2) There is a specific exception at Plot 10, noted on the parameter plan, which allows a lift and stair overrun to project beyond the Maximum Parameter Height by 1.25m.

(3) The maximum parameter height is derived directly from the height of the Illustrative Scheme, with no difference in height between Maximum Parameter Height of an area bounded by a Plot Outline and the tallest elements of the IS that it contains, with the following exceptions:

(a) Plot 1, whereby the setback facing Silverwood Close may be reduced in height to that shown in the Illustrative Scheme. In the usual way, the design at reserved matters would be required to comply with Design Code chapters 4.1 and 5.1.

(b) Plot 4, whereby 1.3m has been included above the final floor of the Illustrative Scheme such that additional flexibility of articulation of the roofscape is available at reserved matters to provide further opportunity to address the appearance from Coldham's Common.

7.3.7 Minimum Separation between Buildings

(1) Dimensions that define the Minimum Separation between Buildings are provided between each of the Plots 2 to 10.

(2) These dimensions are derived from the separation between the buildings of the IS, in some instances exactly and in others rounded down by no more than 1.0m such as between Plots 5 and 6.

(3) The control for Minimum Separation between Buildings seeks to secure the key spatial relationships between the new buildings that were designed into the IS, and therefore the streets and spaces that are created by them.

7.3.8 Minimum Separation between Building Elements

(1) Dimensions that define the Minimum Separation between Building Elements are provided at Plots 3 and 5.

(2) These dimensions separate building elements at roof level within the same building plot.

(3) The Minimum Separation between Building Elements control seeks to secure the split form and variation of roof line at Plots 3 and 5 that were designed into the IS to break down the bulk and mass of these buildings.

7.3.9 Massing Breaks

(1) Notation to secure Massing Breaks is shown at Plots 3 and 5. The nature of these massing breaks are detailed within the individual Design Codes for these buildings.

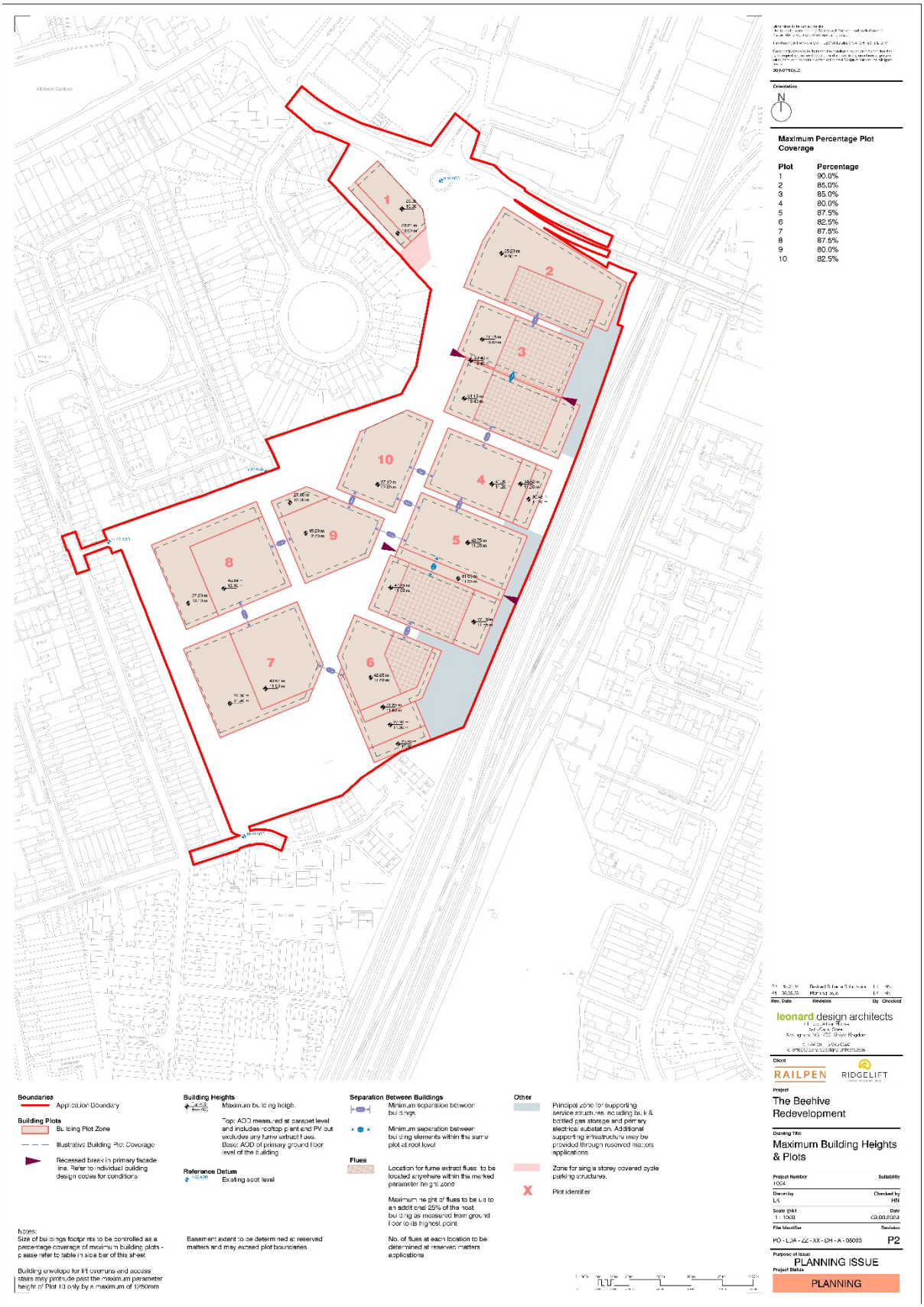
(2) The noted Massing Breaks seek to secure the split form of Plots 3 and 5 that was designed into the Illustrative Scheme to break down the bulk and mass of these buildings.

7.3.10 Flues

(1) Hatched zones showing locations where flues would be permitted to exceed the Maximum Height Parameter related to the main building and its plant. These zones are shown on Plots 2, 3, 5 and 6.

(2) The height of flues within this zone may be up to an additional 25% of the height of the host building as measured from ground floor to its highest point per guidance in BS14175.

(3) Design Code chapter 3.7 sets out the detailed strategy for the design, position and grouping of flues and promotes strategies that would reduce their height (Design Code 3.7.9).



Maximum Plots and Building Heights Parameter Plan (CD 2.18)

7.4 Description of Design Code

7.4.1 The Design Code (CD 2.64) was developed in collaboration with Urban Design and Landscape Officers and with further input from Planning, Heritage, Sustainability, Transport and Ecology Officers.

7.4.2 It sets out rules and requirements for the design of subsequent applications to ensure that the design of each phase of the redeveloped Beehive Centre will be undertaken in a purposeful, coherent and coordinated way.

7.4.3 The DCs make use of the established methodology of creating Codes using “must” or “should” notation which set out how Codes should be applied at RMAs:

(1) Must: A mandatory design requirement that needs to be followed.

(2) Should: A design principle which *should* be followed unless it can be demonstrated that an alternative proposal can achieve an equally positive design outcome.

7.4.4 The Code must be referred to for all design decisions. It is there to inspire good practice, sustainable design, and maintain project quality.

7.4.5 The Code is made up of the following chapters

(2) Masterplan Framework

The Masterplan Framework seeks 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.

(3) Site Wide Built-Form Design Principles

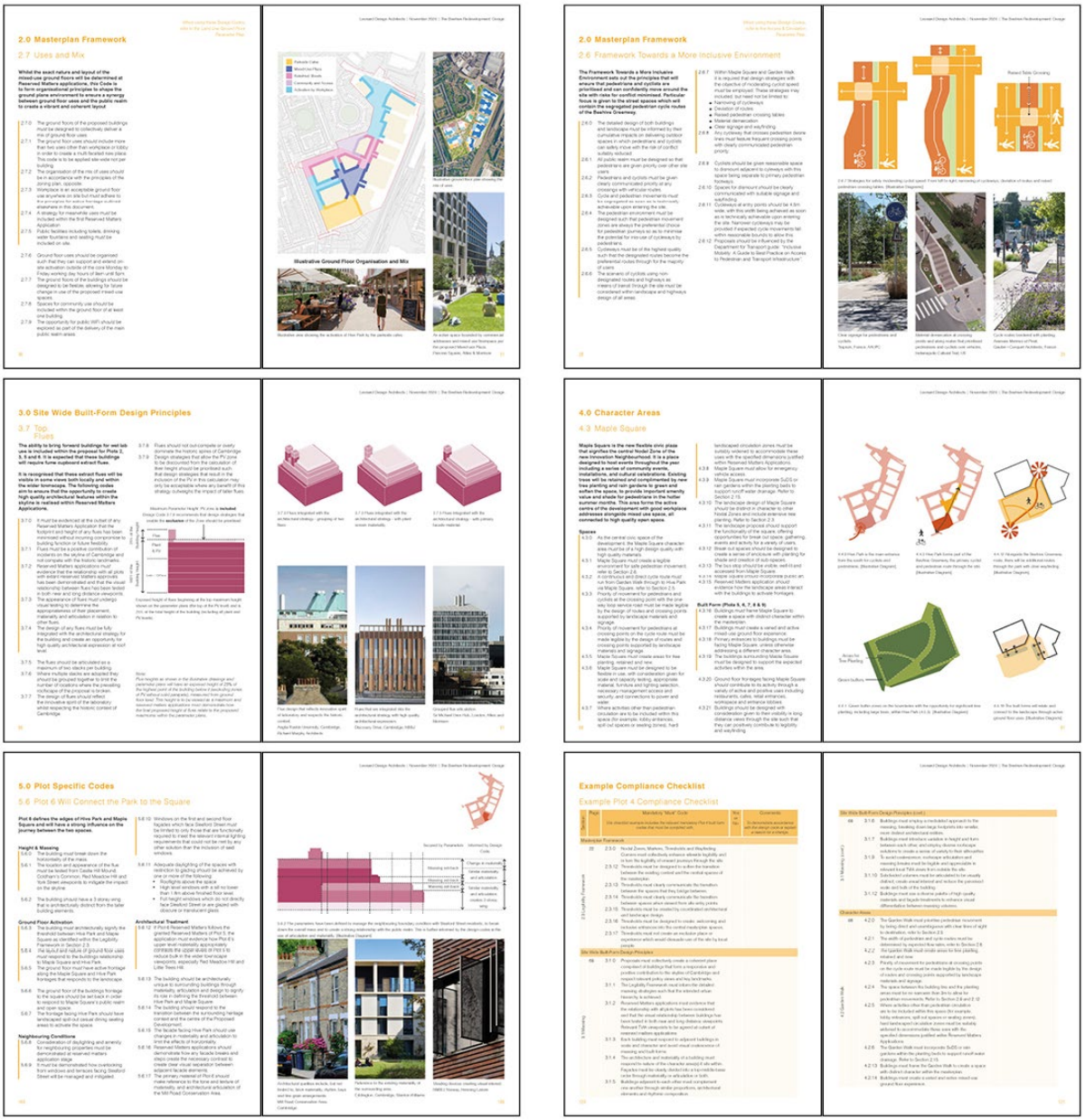
The Site Wide Built-Form Design Principles provide detail on how the volumes secured by parameter plan will resolve into interesting, diverse, and attractive buildings that contribute positively to the rhythms and richness of Cambridge.

(4) Character Areas

The Character Areas will be informed by the codes of the Masterplan Framework which are supplemented by codes which add detail to the requirements for each of the key spaces.

(5) Plot Specific Codes

Building on the site wide built-form principles, the Plot Specific Codes provide the detail required to resolve the opportunities and constraints of each of the proposed building plots. These codes address a range of subjects including neighbouring conditions, skyline, architectural articulation, and the relationship with Character Areas.



Extracts from the Design Code showing chapters 2.6, 2.7, 3.7, 4.3 and the Compliance Checklist

7.4.6 As outlined above, the Design Code seeks to provide a wide-ranging suite of controls that promote a considered and coordinated response to a wide range of issues, some examples of codes addressing quality of place, residential amenity and scale are given below. Unless otherwise stated the codes apply to the full site.

(1) Urban Design Principles

(a) 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.*

(b) 2.9.1: *The masterplan must comprise a number of primary character areas to create a varied and interesting sense of place.*

(2) Movement Principles

(a) 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.*

(b) 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.*

(3) Urban Greening Principles

(a) 2.11.0: *Green infrastructure must form a part of the strategy for all landscape areas.*

(b) 2.12.12: *Planting must contribute integrally to the character of spaces by providing elements such as shade, privacy, separation, continuity.*

(4) Neighbouring Conditions. A summary table of codes which relate to neighbouring residential conditions is given in Appendix B: Principal Design Code Controls Relating to Neighbouring Residential Conditions.

(a) 5.1.3: *Any windows within the facade facing Silverwood Close must be designed to eliminate overlooking conditions. [Plot 1]*

(b) 5.1.4: *In order to eliminate overlooking conditions towards Silverwood Close, the first floor (second storey) of Plot 1 must not feature any windows where a direct facing view to the properties at Silverwood Close is possible. [Plot 1]*

(c) 5.6.8: *Consideration of daylighting and amenity for neighbouring properties must be demonstrated at reserved matters application stage. [Plot 6]*

(d) 5.6.9: *It must be demonstrated how overlooking from windows and terraces facing Sleaford Street will be managed and mitigated. [Plot 6]*

(5) Design Quality

(a) 3.1.0: *Proposals must collectively create a coherent place comprised of buildings that form a responsive and positive contribution to the skyline of Cambridge and respect relevant policy views and key landmarks.*

(b) 3.1.12: *Buildings must use a diverse palette of high-quality materials and façade treatments to enhance visual differentiation between massing volumes.*

(c) 3.2.6: *The material choices must reflect the National Design Guide principles, be appropriate for construction, practical, durable, affordable and attractive.*

(6) Ground Floor Plane Principles

(a) 2.7.0: *The ground floors of the proposed buildings must be designed to collectively deliver a mix of ground floor uses.*

(7) Massing Strategy

(a) 3.1.6: *Buildings must employ a modulated approach to the massing, breaking down large footprints into smaller, more distinct architectural entities*.

(b) 3.1.9: *Buildings must introduce variation in height and form between each other and employ diverse roofscape solutions to create a sense of variety to their silhouettes.*

(8) Plot Specific Considerations

(a) 5.8.0: *The building [Plot 8] must have a 3-storey edge on façades on the boundary, as stated in the Maximum Building Heights and Plots Parameter Plan.*

(b) 5.10.3 The layout and nature of ground floor uses [of plot 10] must respond to the building's relationship to the Garden Walk and Silverwood Close by minimising the influence of vehicle movement and parking over these.

(c) 5.10.8: It must be demonstrated how overlooking from the upper levels [of Plot 10] facing St Matthews Gardens and Silverwood Close will be managed and mitigated.

7.4.7 A planning condition is proposed to ensure that each Reserved Matters Application will require evidence of compliance with the Design Code, we suggest through the submission of a compliance checklist in a format matching the abridged example on p120-121 of the 2024 Design Code (CD 2.64d).

8. Design Evolution

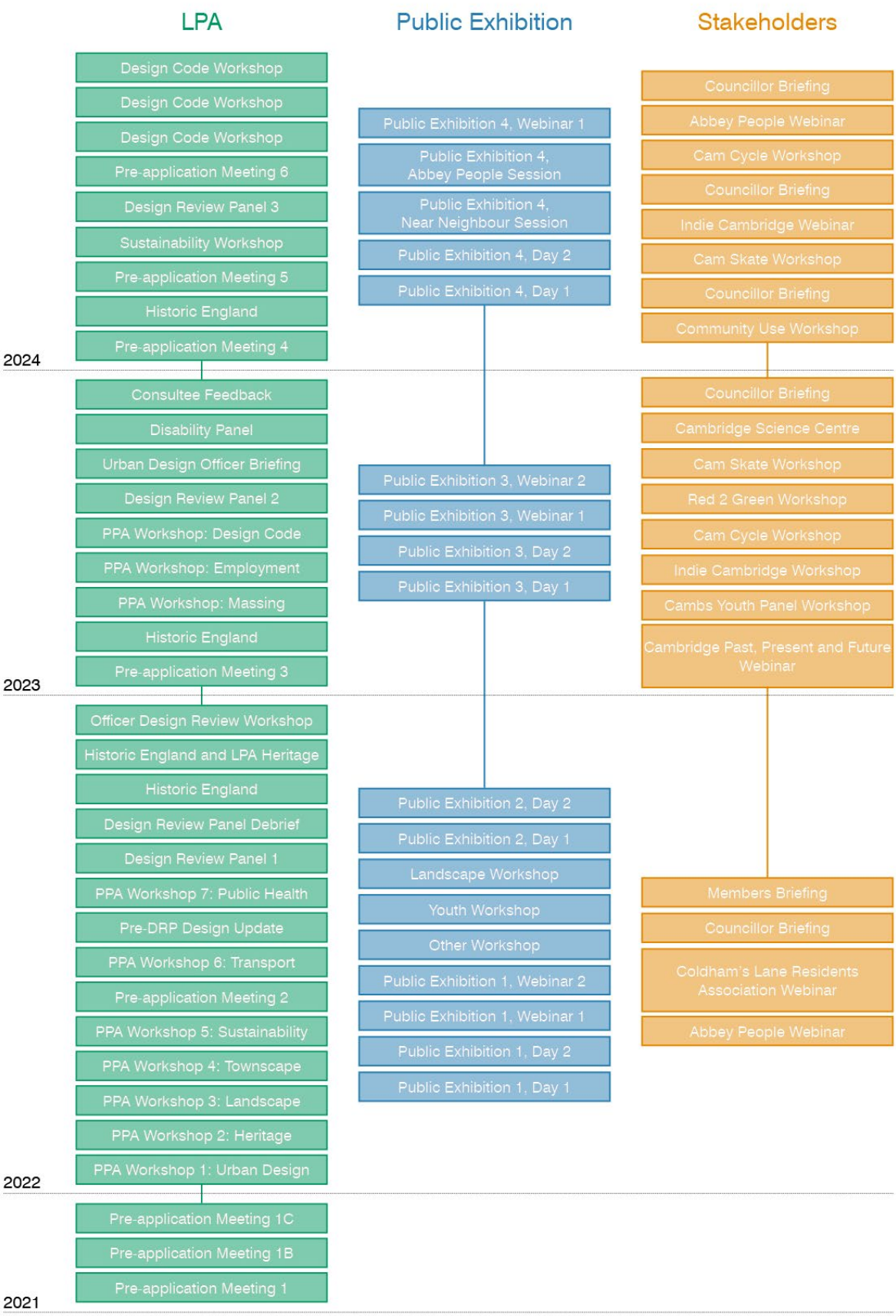
8.0.1 In this section I will describe the evolution of the proposals during the pre-application period that ran from early 2021 until August 2023 and the subsequent design evolution that occurred in response to the consultee comments received to the planning application submission between November 2023 and August 2024.

8.0.2 The final form of the Illustrative Scheme was arrived at as the result of the significant iterative multi-disciplinary design development and consultation process. This process was wide ranging and sought to create a contextual response that would balance site optimisation, placemaking, heritage, landscape, open space, amenity, sustainability and access amongst others.

8.0.3 As noted in the Committee Report (CD 3.01) and Statement of Common Ground (CD 6.01), the scheme that resulted from this design process was able to demonstrate that "the proposed development can be accommodated on the site with a strategic control framework and design approach that responds well to the site's context. It also realises the opportunity to reimagine the existing retail park, transforming an inefficient use of land into a vibrant, employment-led urban quarter in a sustainable location that has capacity for a change in scale and density. There is certainty that the outline proposals will enable a high standard of detailed design in respect of placemaking and character at the reserved matters stage."

8.1 Summary of Consultation

8.1.1 The timeline on the following page sets out the key consultation events between April 2021 and August 2024. There were 73 consultation sessions held during this period, of which 38 were for local residents, stakeholder groups and council members. The remaining 35 sessions were held with the LPA team.



Consultation timeline

8.2 Pre-Application Design Evolution: April 2021- August 2023

8.2.1 Between April 2021 and August 2023, the scheme evolved significantly to address the feedback from the LPA, Design Review Panel, statutory consultees and community consultation. During this period changes were made to every plot within the masterplan, including two plots being removed from the masterplan in their entirety.

8.2.2 Following the initial forming of the scheme concept, topics addressed during this period included:

(1) Residential amenity: whereby initial principles for massing that reduced towards residential boundaries were enhanced and supported by refinement of building massing, reduction in building heights and more detailed considerations, including those secured by Design Code.

(2) Local townscape and heritage: whereby the scheme was shaped to reduce the impact it would have on the neighbouring street scene of the Mill Road Conservation Area. A further local consideration was how the buildings would appear from Coldham's Common and the effect this would have on the sense of openness to be enjoyed from the area of Green Belt Land. Both issues were addressed by a series of building height reductions and refinements to the massing strategy at the upper levels of key building plots.

(3) Wider city townscape and heritage: whereby significant adjustments were made to building heights and form, fundamentally changing the strategy for how the proposed buildings would integrate with the wider Cambridge skyline and minimise competition with the Historic Core.

8.2.3 There was significant and wide-ranging consultation undertaken during the period leading up to submission of the Outline Planning Application, all of which contributed to the evolution of the proposals.

(1) Local Planning Authority: detailed consultation on all areas of scheme design with particular emphasis on the form and scale of the development and the resultant effects of this on residential amenity, landscape, townscape, and heritage.

(2) Design Review Panel: The design review panel commented on the scheme twice during this period and guided the form of development and the design codes, with emphasis on how to create a cohesive new place.

(3) Historic England: A number of consultation sessions were held with Historic England with feedback given regarding massing, materiality and form. A particular focus was how buildings were seen together in some views and, additionally, the height, layout, number, and design of flues which led to specific design codes being created.

(4) Community: Feedback from public exhibitions, webinars, and community workshops, shaped the scheme to respond to local input including massing and scale, residential

amenity and the nature and use of the mixed-use ground floor and public realm. Design Codes that seek to limit or eliminate overlooking conditions at Plots A(1)[1], I(7) and J(8)[2] were created as a direct result of discussions at public exhibition.

(5) Stakeholder Groups: Individual workshops held with local stakeholder groups directly influenced the design evolution of the scheme with notable examples being the spaces created for initiatives with Cam Skate, Cambridge Science Centre, and Cambridge Youth Panel and the ongoing consultation with Make Space for Girls.

8.3 Post-Application Design Evolution: November 2023 – August 2024

8.3.1 Consultee feedback from the Outline Planning application was received in November 2023 and was discussed in detail at two principal sessions with the LPA team.

8.3.2 Included in the November 2023 discussions with the LPA was a presentation by officers of an alternative masterplan layout, being the version included within the Urban Design Officer consultee comments (CD 1.20). This proposal set out several strategies that sought to reshape the scheme in response to a rebalancing of design considerations resulting from the key themes of consultee feedback relating to:

(1) Coldhams Lane: including the nature of the junction in terms of land use and pedestrian and cyclist priority.

(2) Movement Framework: including the potential for the creation of a more direct active travel corridor.

(3) Public Space: including the creation of open space closer to site entrances and creating better connections between them using the proposed active travel corridor.

(4) Skyline and Townscape: including proposals that would see greater modulation of building heights with marker buildings. Adjustments to building footprints that would improve retained residential amenity at Silverwood Close and Rope Walk were also proposed.

(5) Uses and Mix: A refocusing of the local centre offer to create a greater density of mixed-use space towards the south of the Site.

8.3.3 Following a comprehensive period of review of the scheme amendments proposed by the Urban Design officer, and a subsequent substantive redesign process, an amended masterplan was presented to the LPA in March 2024. The redesigned scheme sought to balance the strategic goals of the LPA proposals against the functional and commercial constraints of the site and project brief, achieving the following benefits over the scheme as submitted in 2023:

[1] The naming convention for plots was changed between the 2023 application scheme and the 2024 revised scheme to reflect the changes to site layout. Where reference is made to the 2023 scheme alphabetical naming will be followed by the relevant 2024 plot number in brackets, e.g. Plot A(1).
[2] Plots H and I of the 2023 application were superseded by 2024 revised scheme Plot 7. Plots J and K were superseded by 2024 revised scheme Plot 8.

(1) Commitment to a Coldhams Lane junction that prioritises placemaking, pedestrian and cyclist movement.

(2) A centralised active travel route that more directly connects York Street (via Sleaford Street) to Coldhams Lane.

(3) Relocation of car parking to Plot M(10) to reduce vehicle movements that would cross the active travel corridor.

(4) A strategy for consolidated open space leading to larger open spaces, including Hive Park and Maple Square, connected by the central active travel route.

(5) A reduction in building height of 1 storey at each of the tallest buildings of the original submission scheme: plots F(5), G(6) and L(9).

(6) Increased separation at the York Street boundary, enabled by an adjustment to the location and parameters of Plot I(7) and the reformatting of Plots J(8) and K(8) into a single building.

(7) The reduction in footprint area and height of Plot M(10) to retain a more open aspect for 34-39 Silverwood Close.

8.3.4 The new proposals met many of the objectives set out by the LPA team in November 2023 with some items agreed to be refined through further development. Over the period of pre-application and public consultation that ran between March and July 2024 the following areas of the scheme were further developed:

(1) The Coldhams Lane junction was further developed with an illustrative layout for a Cycle-Optimised Protected Signal (CYCLOPS) junction developed to demonstrate how a high-quality junction may be delivered within the constraints of the site.

(2) The siting and parameters of Plot 1 were further developed such that an upper floor setback created promoted a sense of openness to be perceived from properties at Silverwood Close.

(3) Plot 2 was significantly reshaped such that its height was able to be reduced by 1 storey, creating a silhouette for the scheme that had a single high point at the centre rather than the design response that included for a ‘scooped’ roofline within the original outline application.

(4) The massing of Plots 4 and 5 was developed with the objective of minimising visual coalescence and horizontality leading to design strategies secured by both parameter and Design Code.

(5) The strategy for combining plots that was deployed at Plot 8 was ultimately also implemented at Plot 7, increasing separation from Rope Walk and reducing the building heights near to the boundary.

The Evlolution of the Illustrative Scheme over the Design Development Process

8.4 Design Development for Residential Daylight, Sunlight and Amenity

8.4.1 Consideration of residential amenity, including daylight, sunlight and outlook directly influenced the development of the scheme from an early stage, setting design principles that remained relevant to the scheme from inception through to the revised November 2024 scheme.

8.4.2 Assessment of existing boundary conditions and outlook informed the early design iterations and was supported with qualitative testing for overshadowing by the design team. These findings and resulting design principles were presented at the first LPA pre-application meeting in March 2021. Design principles included:

(1) The reduction of building heights towards residential boundaries,

(2) Siting open spaces and green planting at residential boundaries

(3) Siting the tallest buildings away from boundaries directly shared with residential properties.

8.4.3 The illustrative scheme presented at the March 2021 pre-application was subject to quantitative technical daylight and sunlight testing by eb7, testing both Vertical Sky Component (VSC) and Annual Probably Sunlight Hours (APS). The resultant report found that that the proposals were capable of achieving retained VSC levels in the high-teens to mid-twenties.

8.4.4 As outlined in 8.2, the scheme underwent significant design development during 2022 and 2023. During this time, the scheme was subject to further qualitative overshadowing testing by the design team and boundary sections were frequently discussed at pre-application meetings. Further technical assessments were conducted by Eb7 in May 2022 and August 2023, which confirmed that adequate daylight and sunlight results were achieved by the IS at these stages. Amenity for neighbouring residential properties was improved as a result of the height reductions made across the scheme. Specific, smaller scale design changes that were made to improve neighbour amenity were:

(1) The reshaping of the plant level at the final floor of Plot A(1).

(2) Realignment of Plots I(7) and J(8) and reshaping of their upper floors, supported by massing parameters that offered no variance between the maximum massing parameter and the illustrative scheme at the southern elevation facing Rope Walk.

(3) Adjustments to the footprint of Plot L(9) such that greater separation would be achieved between the lower levels and St Matthew's Gardens.

(4) A reshaping of Plot M(10) to offset the upper levels further away from the boundary with Silverwood Close.

8.4.5 The Design Code that supported the 2023 Outline Planning Application included specific codes that sought to limit overlooking from key plots towards residential boundaries, with

specific codes created that would limit the potential for overlooking from Plots A(1), I(7) and J(8).

8.4.6 As outlined in 8.3 a series of significant design changes were brought forward between November 2023 and March 2024, with the following being informed by residential amenity:

(1) A reduction in height of one storey at Plot 1.

(2) The creation of Hive Park at the south of the site, increasing separation between new buildings and residential properties of York Street and Sleaford Street.

(3) The reformatting of the previous Plots H(7) and I(7), to create Plot 7, with increased separation to York Street properties and reduced height towards this boundary.

(4) A reduction in height of one storey at Plot 9.

(5) The relocation of car parking to Plot 10, enabling a smaller footprint and lower building height in this location.

8.4.7 Further design development following the March 2024 LPA pre-application meeting sought to further improve residential amenity including:

(1) Creating an upper floor setback at Plot 1, creating a more open outlook for properties at Silverwood Close.

(2) The amalgamation of two plots to create Plot 7 with increased separation to York Street properties and reduced height towards this boundary.

8.4.8 Design Code codes were further enhanced to promote designs at Reserved Matters applications that would further address residential amenity and daylighting including codes that would secure:

(1) At reserved matters, demonstration of the consideration for residential amenity and daylight.

(2) Green buffers at key boundaries that would have a screening effect.

(3) A modulated approach to massing, including building setbacks to reduce the visual impact of mass.

(4) Finer grain or more domestic scale architectural articulation.

(5) At reserved matters, demonstration of the design response to facing conditions with neighbouring residential properties.

(6) Height reductions towards residential boundaries.

(7) Design strategies that would limit the potential for overlooking of amenity areas.

(8) Design strategies to mediate the effects of vehicular movements to Plot 10.

(9) Design strategies that would positively address and manage the change in scale between the new buildings and the Mill Road Conservation Area.

8.4.9 The extensive design development was informed by quantitative and qualitative analysis and, as set out in Mr Lonergan's evidence, achieved a high overall compliance rate given the

number of windows analysed and the shift in scale required to optimise the site for development with retained values for the Maximum Parameter scheme supported by appeal precedent and comparison to levels achieved in the local area.

8.4.10 Design changes made between November 2023 and August 2024 have been shown to have reduced the change in retained daylight effects of the maximum parameter scheme at the following 47 properties such they now demonstrate BRE compliance:

(a) 150 Sleaford Street

(b) 26, 32-46, 50, 54-58, 62-72 and 78-92 York Street

(c) 205, 207, 209, 211 and 213-221 St Matthew's Gardens

(d) 30 Silverwood Close

(e) 55-68, 69-83 and 84-97 Hampden Gardens

(f) 11-17 The Terrace

9. Illustrative Masterplan

9.0.1 In this section I will set out a full and thorough description of the illustrative proposals for the Beehive Redevelopment. These embody the likely scenario for the development of the site pursuant to the Parameter Plans and Design Code and represent the theoretical maximum scale, being the embodiment of the maximum floorspace. The close nature of the relationship between the Parameter Plans, Design Code and Illustrative Scheme allows for a degree of flexibility but would result in the scheme to be delivered being closely related to the Illustrative Scheme.

9.1 Site Layout

9.1.1 The proposals seek to create a new, high-quality addition to the city comprising new streets and open spaces bounded by buildings that would create a vibrant mixed-use local centre at ground floor in support of the office and laboratory floorspace amounting to a maximum of 166,685m^2 GEA.

9.1.2 The new streets have been laid out to respond to the established north-south street pattern of the neighbouring streets of the Mill Road Conservation Area, resolving these with a new street layout for the northern portion of the site that is informed by the alignment of the rail line.

9.1.3 Site entrances are to be significantly enhanced in quality, promoting better movement for all with enhanced priority and safety for pedestrians and cyclists. Each entrance will directly connect to a new street or open space, creating a positive relationship with neighbouring streets and thereby allowing the proposal to become firmly embedded in its context. The improvement in connection to neighbouring streets will be most marked at the southern entrance, for example the Sleaford Street entrance, which currently connects to a back of house servicing area, will connect directly to Hive Park, the primary new green open space.

9.1.4 The new street pattern will enable safe and efficient movement around the site and includes :

(1) The Beehive Greenway active travel corridor which connects York Street to Coldhams Lane, enabling safer and more direct north-south connectivity in the area.

(2) New, well-connected pedestrian and cyclist routes which minimise interaction with vehicles,

(3) A re-provided bus stop served by enhanced bus services,

(4) Consolidated private car parking at Plot 10,

(5) A servicing strategy that focuses the most intense servicing along the rail line.

9.1.5 The street network defines ten building plots which range in footprint size between 1,193m^2 & 5,247m^2 (GEA) and are between 15.9m and 35.7m tall. The height and form of plots are determined by a massing strategy that was developed to address local conditions and city-wide townscape.

Illustrative Ground Floor Plan (NTS)

Table of primary building use, number of stories including plant and total GEA of each Plot

Plot 1: Office, 3 Storeys and 2,299m² GEA

Plot 2: Wet Lab, 5 Storeys and 18,685m² GEA

Plot 3: Wet Lab, 4 Storeys and 17,926m² GEA

Plot 4: Office, 6 Storeys and 13,155m² GEA

Plot 5: Wet Lab, 7 Storeys and 31,122m² GEA

Plot 6: Wet Lab, 6 Storeys and 15,683m² GEA

Plot 7: Office, 6 Storeys and 19,872m² GEA

Plot 8: Office, 6 Storeys and 17,171m² GEA

Plot 9: Office, 7 Storeys and 13,701m² GEA

Plot 10: Car Parking, 8 Storeys and 16,948m² GEA

Illustrative Upper Floor Plan (NTS)

9.2 An Innovation Centre within the City

9.2.1 The proposals will create a high-quality centre for innovation within the urban area of Cambridge that would be exemplary in its design quality, accessibility, amenity and sustainability. Mr O'Byrne's evidence demonstrates how the proposals would directly meet unmet need for office and R&D in an excellent, accessible location.

9.2.2 The proposals will deliver nine state-of-the-art, highly sustainable buildings for office and R&D use set within a public realm-led masterplan which will create much amenity value for employers, employees and the local community alike.

9.2.3 Delivering well considered space for innovation alongside a mixed-use ground floor set within high quality realm presents the opportunity to create a vibrant place promoting the meetings and chance encounters between people who might not otherwise come into contact with each other, fostering collaboration and creativity.

9.2.4 Buildings have been designed to deliver a range of floorplates sizes, ranging between 1,193m^2 & 5,247m^2 (GEA). Each building is designed to be subdivided at each floor into a number of tenancies, offering a high degree of flexibility to accommodate tenants of all sizes, from start-up and scale-up to large global firms. The ability to host this range of tenants within a development that has the critical mass to sustain its own onsite ecosystem would be an attractive and sustainable proposition.

9.2.5 The close-to-centre location of the site comes without many of the constraints of the city core, with high quality links to the rest of the city on foot, by bike, by public transport and by car. This accessibility coupled with the capacity of the site to deliver an innovation centre of self-sustaining scale leads to this being an excellent location in which to support many jobs.

9.2.6 The proposals represent an opportunity to create a vibrant mixed-use innovation centre within a single cohesive estate close to the centre. The mixed-use ground floor plane with its shops, cafés, restaurants, leisure and community space alongside workplace address will become the space in which the working community within the new office and R&D buildings will interact, creating a new place which will be firmly embedded within the city. The nature of the mixed-use ground floor plane that will from a new local centre is set out in section 9.3.

9.3 The Ground Floor Plane and the Local Centre

9.3.1 The layout of buildings, streets and open spaces was devised to enable an active mixed-use local centre to be delivered that would create amenity value for the occupiers of the new buildings and local residents alike. Some 5,178m^2 of mixed-use space for approximately 21 new shops, cafes, restaurants, leisure and community is to be created at ground floor with the streets south of Plot 3 being the primary focus for this floorspace creating a density of activity that will drive the vibrancy of this new place throughout the week. The diversity and intensity of activity is further enhanced by the considered locations for the 10 workplace lobbies and cycle parking entrances leading to high-quality end-of-trip facilities for cyclists, generally at basement level.

9.3.2 Community space within buildings and the landscape, informed by consultation with local stakeholder groups, form a key part of the strategy for the activation of the ground floor plane and includes:

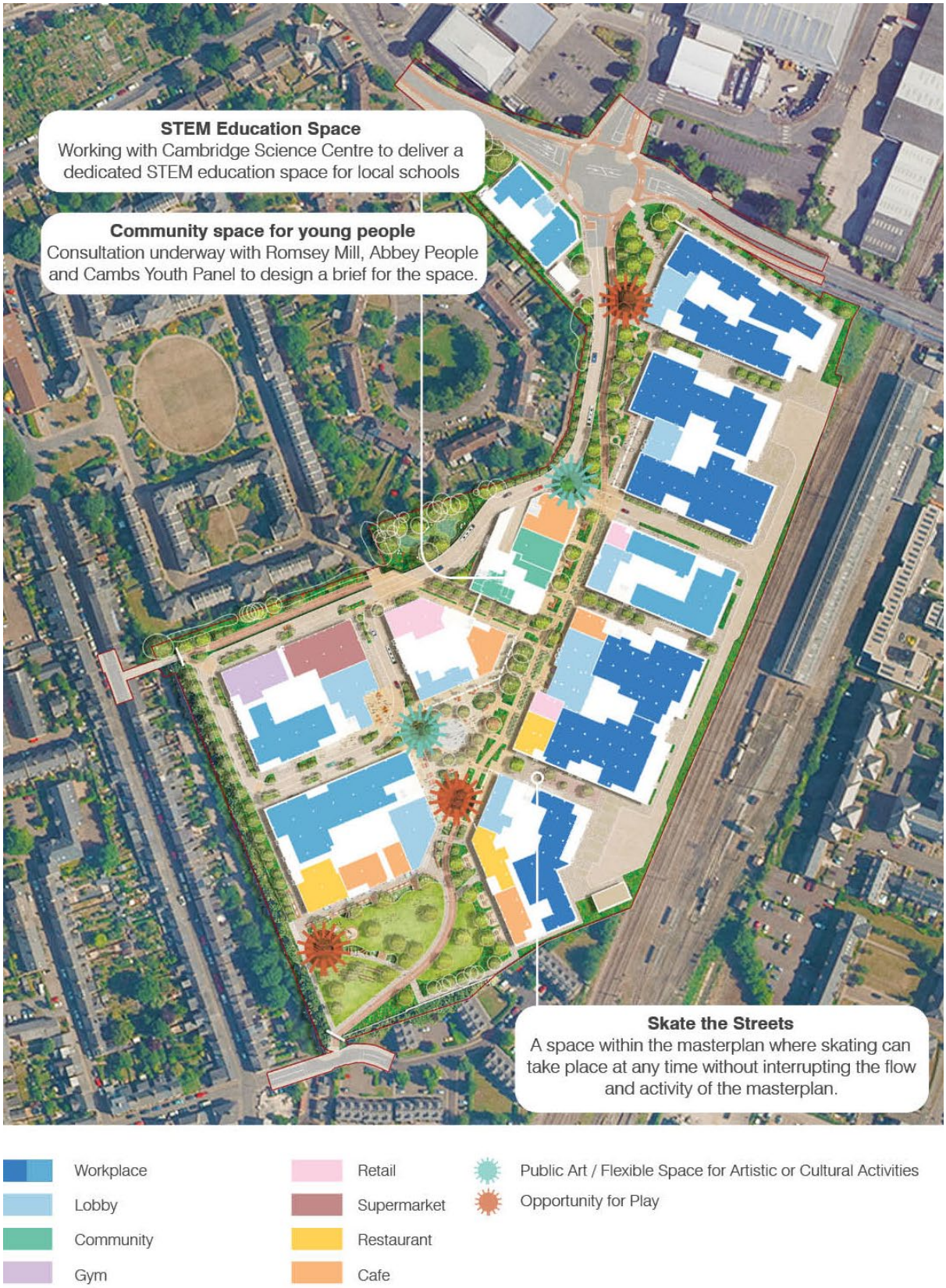
(1) A flexible community space designed for local groups. Developed in collaboration with local organisations Abbey People, Cambridge Youth Panel and Romsey Mill, a dedicated space would be created within the ground floor of Plot 10.

(2) A STEM (science, technology, engineering and mathematics) education centre, also within the ground floor of Plot 10, will be developed with Cambridge Science Centre and will create a new destination for local education groups and families to engage with STEM learning at the heart of this new innovation neighbourhood.

(3) A strategy for safe skating as part of the Skate the Streets initiative, developed with Cam Skate, will include a dedicated space for skating supported by a management strategy that would enable skaters to safely use the site between Plots 5 and 6.

9.3.3 The spatial strategy for the proposals seeks to create a range of open spaces and streets that vary in scale, appearance and function such that areas of distinct character may be created as part of an overall cohesive design, contributing to a rich mix of experiences that would enhance the site and its surroundings.

9.3.4 Key to the spatial strategy is the creation of high-quality open spaces of scale that would provide a meaningful contribution to publicly accessible amenity for those living in the area around the site, and for visitors from around the city. A range of new open spaces includes a linear wooded plaza, a wildlife area, a civic square and a city park will create accessible outdoor amenity space for the enjoyment of all. These spaces are outlined in more detail in section 9.5.



Illustrative Ground Floor Plan with Local Centre Uses (NTS)

9.4 Architecture, Massing and Scale

9.4.1 The built form of the Illustrative Scheme, as defined by the architecture, massing and scale strategies developed through the comprehensive design development process set out within Chapter 8 of this document, represents the likely maximum scale of the proposals.

9.4.2 A commitment to delivering a well-considered place with high quality architecture is captured within the Design Code (CD, notably within Chapter 3: Site Wide Build-Form Design Principles which sets out Design Codes which *"provide detail on how the volumes secured by parameter plan will resolve into interesting, diverse and attractive buildings that contribute positively to the rhythms and richness of Cambridge."* These codes define strategies for massing, materiality and the detail of the ground floors, primary facades, roofscape and any extract flues that would cumulatively ensure a high standard of design quality and, as described in Chapter 10, align with the objectives of the 10 Characteristics of Well Designed Places.

9.4.3 The siting, height and orientation of buildings was a key consideration through the full duration of design development as outlined in Chapter 8. The plans on pages 59 and 60 set out the massing strategy and resulting height and layout of the buildings of the Illustrative Scheme arising from this process which, in turn, sets out the Maximum Parameter volume as described in Chapter 7.

9.4.4 Secured by the Maximum Building Heights and Plots Parameter Plan (CD 2.18), the following strategies informed how buildings would be shaped and how building mass would be distributed across the site:

(1) Concentrating taller buildings towards the centre of the site and the railway.

(2) Reducing building heights or footprints towards residential boundaries.

(3) Creating a single point of height within the skyline, created by Plots 5, 6 and 9.

(4) Varying building heights and footprints.

9.4.5 Appendix A illustrates the relationships that would be created between existing buildings and the buildings of the Illustrative Scheme and Maximum Parameter envelope, with plans, sections and views provided for each.

(1) This is supported by a study of conditions of enclosure in the local area that help give an appreciation of the conditions to neighbouring properties to be formed by the proposals. The study considers pre-existing conditions alongside newly completed or consented schemes, the majority of which are found within a 750m radius of the site and within the Mill Road Conservation Area.

(2) An assessment of vertical enclosure ratio (a ratio of the height and width between buildings used to assess enclosure within Chapter P1 of the National Model Design Code, Part 2 Guidance Notes) and horizontal enclosure (measured in degrees) created by the buildings of study sample and those of the proposals is included. Whilst the

subjects of the study do not present replicas of the proposals in a 3D environment, they allow for a comparison between the nature of conditions of enclosure within the local area and those created by the proposals that would lead to a good appreciation of the dimensions and impacts that the proposal could form with the neighbours to the Site.

9.4.6 Pages 88-97 of the Design and Access Statement (CD 2.01) include views of the illustrative scheme in context and demonstrate how the application of the strategies of 9.4.4 and the refinements secured by Design Code would allow the scheme to become a positive new addition within the skyline of Cambridge with a high standard of design secured by and advocated for by Design Code.

Illustrative Massing Strategy

Illustrative Massing Heights

9.5 Landscape

9.5.1 The masterplan is underpinned by a comprehensive landscape and public realm strategy developed by LDA Design, a distinguished consultancy with a 45-year track record in landscape architecture. Operating from eight UK studios and comprising over 200 professionals, LDA Design has delivered nationally significant projects including the Queen Elizabeth Olympic Park and the phased redevelopment of Battersea Power Station. Its Cambridge Studio has been active in the city for more than two decades, providing strategic guidance on initiatives such as the review and reshaping of the Cambridge green belt, Cambridge East, North-West Cambridge, and the new settlement at Waterbeach. The practice has also contributed to the delivery of key sites for the University of Cambridge, including the New Museums site, the Wellcome Genome Campus, and Cambridge Science Park.

9.5.2 From the entrances and circulation routes, through the varied open spaces, facilities, and diverse range of activities provided for across the course of a day and week, the proposal is pedestrian- and cycle-friendly at its heart. The landscape strategy was developed as an integral part of the masterplan and informed the overall spatial strategy for the site. The proposals capitalise on the variety and richness of spaces created by the masterplan, creating unique and engaging experiences across the site. The vision to create meaningful public realm and open space that would support outdoor leisure, socialising and play and that would positively engage with the built form of the new buildings is captured within the Design Codes and is supported by the following strategies:

(1) Public Realm: 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.

(a) Tree retention and planting: Trees will contribute to the character and amenity of the site by providing shade, shelter, form, and interest as well as habitat and food for wildlife. The scheme will retain 58 existing trees and plant approximately 290 new trees. Strategies to promote larger tree species are secured by design code.

(b) Ecology and Biodiversity: The scheme will achieve the local target for 20% Biodiversity Net-Gain (BNG), targeting a projected 100% BNG at completion. A wide range of new habitats are to be created including herbaceous planting, woodland planting, biodiverse roofs, open lawns with meadow planting, swales and a dedicated natural pond and wildlife area.

(c) Urban Greening: An Urban Green Factor (UGF) assessment, a tool which evaluates the quality and quantity of urban greening, has been undertaken with the proposals achieving a UGF of 0.32, which exceeds the 0.3 score recommended by the

London Plan for commercial Development. UGF is not currently a policy requirement for Cambridge or the Beehive Redevelopment however the team have chosen to adopt it, and a minimum target score of 0.3 to assist with future-proofing the site and to demonstrate sustainability.

(d) Water: A positive relationship with water throughout the site, at all levels (roofs, above and below ground) is a crucial layer of blue infrastructure, which would be revealed to visitors to the site by the rain gardens and swales that are threaded throughout the site. Strategies to minimise water use, and promote water capture and re-use, for irrigation will form part of detailed proposals at Reserved Matters.

(e) Play: Dedicated play equipment, incidental play areas, formal and informal activities, open space, and access to nature will be integrated across the site to create a place that is welcoming to young people and families.

(f) Lighting and Wayfinding: Will maximise usage and engagement within the public realm through the creation and operation of a safe, welcoming, and enjoyable place.

9.6 Character Areas

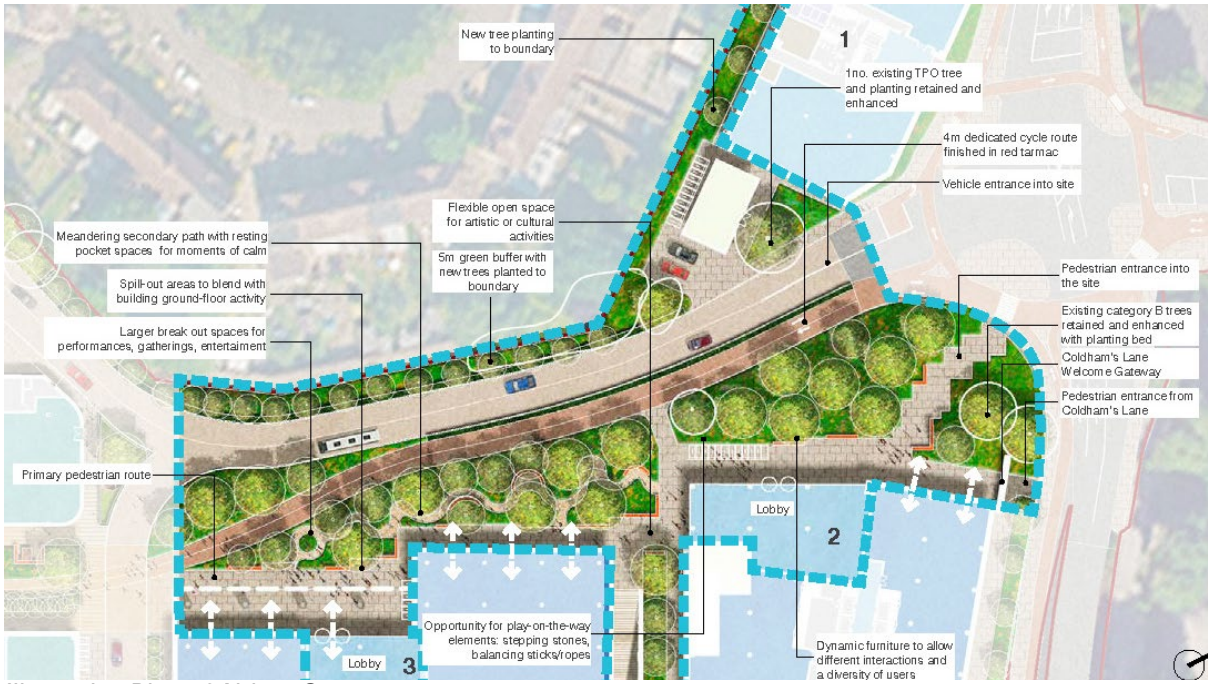
9.6.1 The nature of the innovation neighbourhood that would be created by the proposals is best summarised using the character areas defined in the Design Code and Design and Access Statement: Abbey Grove, Garden Walk, Maple Square, Hive Park, the Lanes and the Linear Walks.

9.6.2 The Character Areas will create a variety of spaces of differing identity, activity and experience which collectively create a cohesive and coherent sense of place for the whole development.

9.6.3 Abbey Grove is the primary entrance space for those arriving at the site from Coldhams Lane and includes routes for vehicle, cycle, and pedestrian movement. Large retained existing London Plane trees can be found to the very north and will be supplemented with substantial new resilient tree planting of a range of species, sizes, and form. All trees will be planted in soft landscape and used to create spaces of different sizes for group gatherings or quieter moments. The proposed tree planting seeks to soften the influence of Coldhams Lane over the internal space of the masterplan. The area will feel calm and tranquil and will create dedicated workplace addresses for Plots 2 and 3. Abbey Grove can facilitate public art trails or installations and feature lighting.

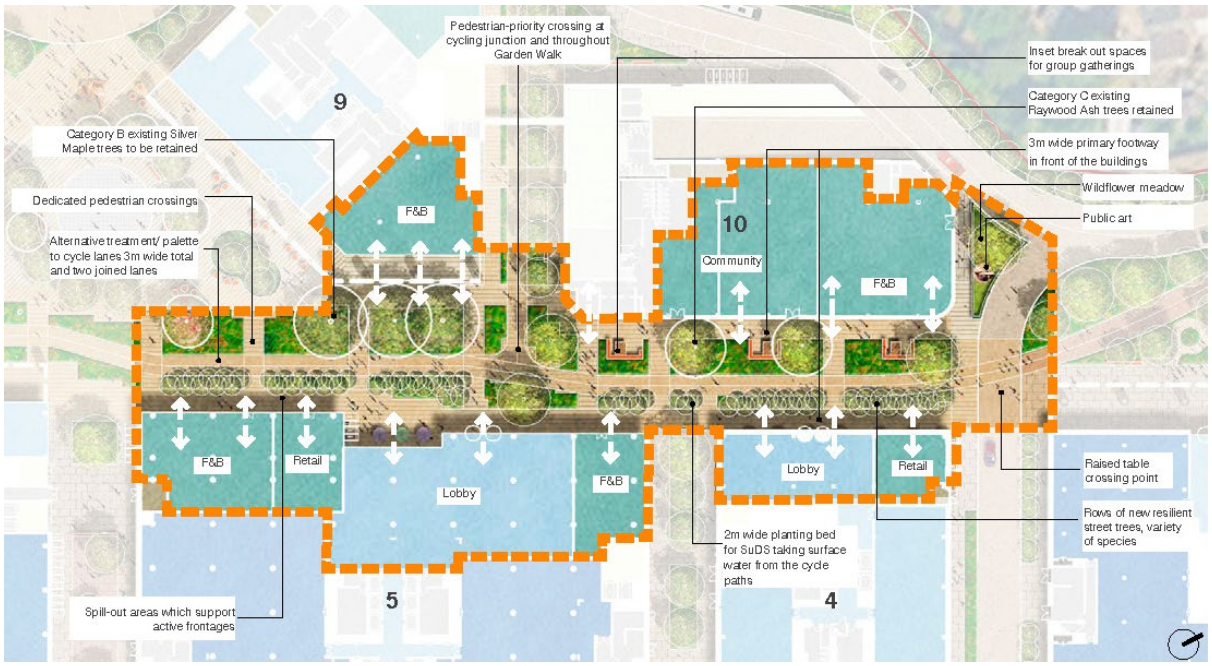
9.6.4 Garden Walk is an important green link between the north of the site and the south of the site. It forms part of The Beehive Greenway active travel corridor which connects to Cambridge Retail Park to the north and out through Sleaford Street to the south. Pedestrians and cyclists will share this busy space and accessibility, legibility and safety are of the utmost importance. Community and mixed-use floorspace in the ground floors of Plots 4, 5, 9 and 10, and the workplace lobbies of Plots 4 and 5, signal the threshold into the mixed-use local centre that is key to the creation of a successful and vibrant place.

Illustrative View of Abbey Grove



Illustrative Plan of Abbey Grove

Illustrative View of Garden Walk

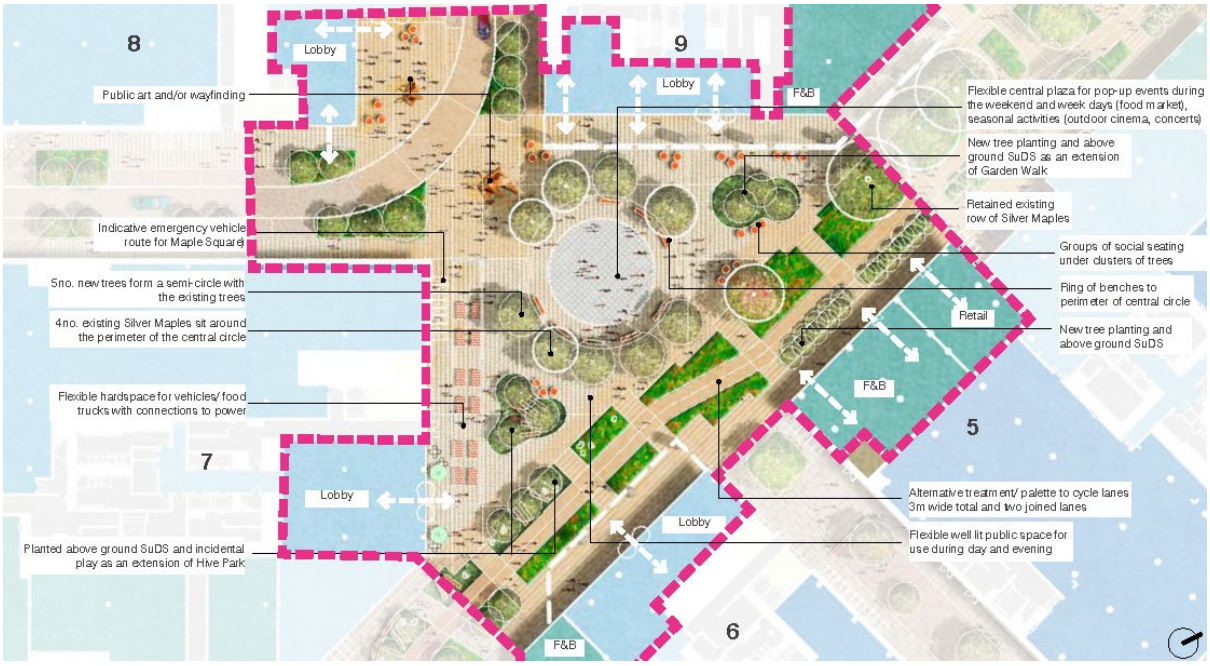


Illustrative Plan of Garden Walk

9.6.6 At the heart of the site is Maple Square which, being the space with the highest proportion of hard landscape, will become a civic outdoor space capable of hosting a year-round programme of outdoor events weekly lunchtime food trucks, or a weekend farmer's market, driving week-long activation at the heart of the site. Four existing Silver Maple trees inspire and inform the setting of the central circular flexible space, which has been capacity tested for various larger seasonal events, such as an ice-skating rink, outdoor cinema screen or public art exhibition and performances. The trees will be supported with new tree planting to form a circle, with benches located beneath each canopy providing shade and shelter. A mix of workplace, lobbies and mixed-use floorspace will bound the space, generating activity throughout the day and week.

9.6.7 Hive Park, a proposed new public park is an exciting addition to the proposals that was a core part of the design strategy of the amended 2024 scheme. Located at the south of the site, it is directly accessible from the widened Sleaford Street entrance and will feature a gently graded route for both pedestrians and cyclists. A large open lawn is south facing and perfect for summer picnics, reading and relaxing, and sun-bathing. Tree planting of large and medium sized species, including feature 'landmark' trees, will provide character, form and shade for the hotter months. The lawn will be framed with playable swale edges, whilst the park also features a dedicated play area. The ground floors of the buildings which frame the park (Plots 6 and 10) will create café and restaurant spaces that, alongside outdoor seating terraces, will create an active edge to the park to the northwest and northeast.

Illustrative View of Maple Square



Illustrative Plan of Maple Square

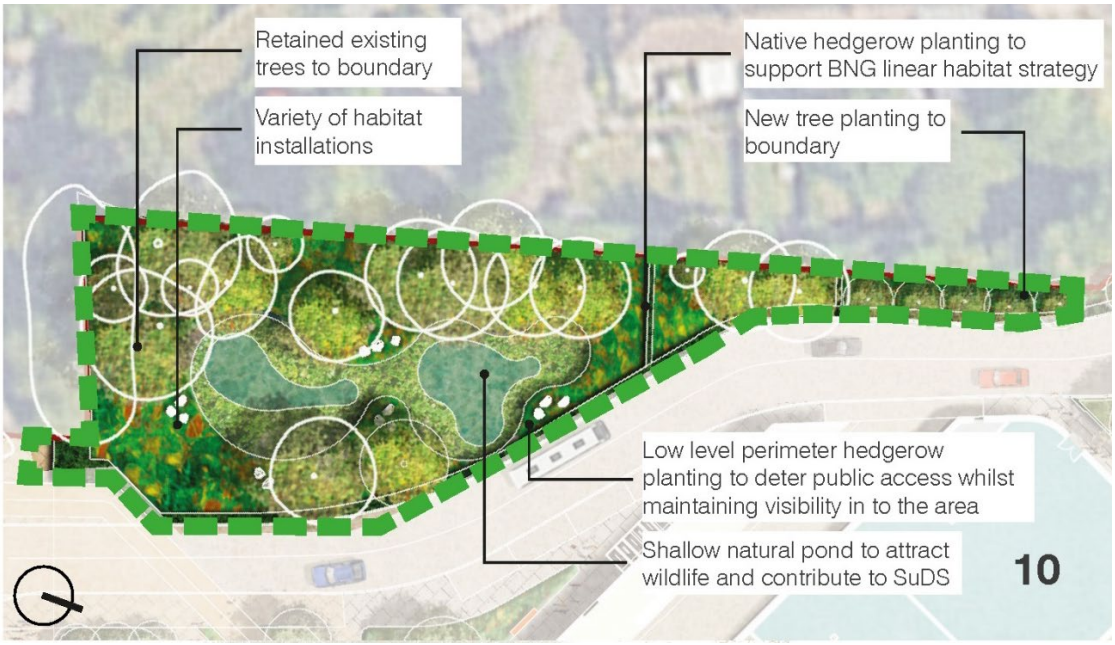
Illustrative View of Hive Park

Illustrative Plan of Hive Park

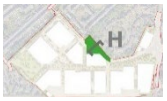
9.6.8 The Lanes include a distinctive lane along the western boundary including the retention and enhancement of the boundary trees and planting found adjacent to St. Matthew's Gardens residences, to ensure an important visual, acoustic and ecological buffer and green corridor is provided. A new secondary route is also proposed to be introduced to the southern boundary and thus creating the character of The Lanes. New tree planting will include a variety of resilient species, including fruit trees to create a local 'orchard walk' with interpretation boards and educational signage, and opportunities for play between York Street and Sleaford Street entrances. The route which leads from York Street through to the street between Plots 9 and 10 will be lined on one side with active mixed-use floorspace, including community space, in order to ensure that this street remains active and subject to passive surveillance throughout the day.

9.6.9 The Linear Walks are east-west semi-active streets linking off the character areas found in the public realm. They provide important connectivity to cycle store access (located in building basements) and some secondary facade entrances. These walks provide a space to the west to dwell off the main route and have lunch or coffee with colleagues, with the space between Plots 5 and 6 being designated for the primary space for the Skate the Streets initiative.

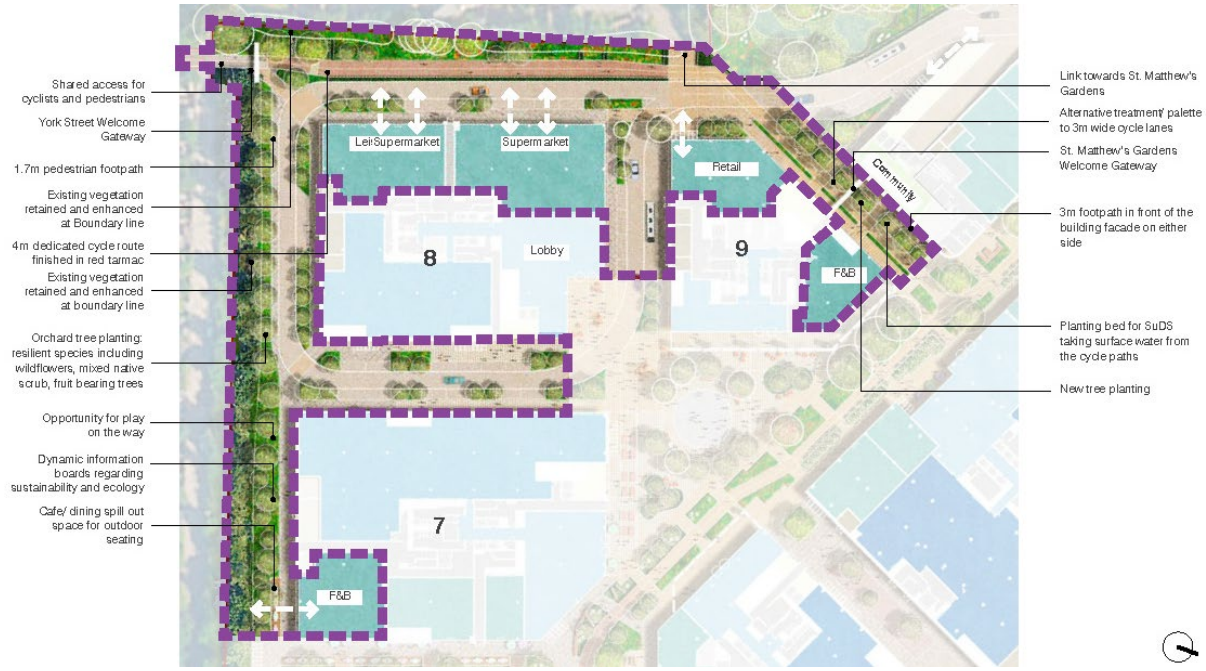
9.6.10 A Wildlife Area is to be located in the triangle of land tucked in to the rear of some neighbouring properties of St. Matthew's Gardens and Silverwood Close. This area, which is c.1,000m², is already protected by a brick wall boundary and features several existing trees, which are all to be retained and enhanced. This will ensure a buffer is retained between neighbours and support the creation of green corridors within the site.



Illustrative Plan of The Lanes



Illustrative view of The Lanes



Illustrative Plan of The Lanes

10. Achieving a Well-Designed Place (NPPF Chapter 12)

10.0.1 In this chapter I will demonstrate how the proposals align with the 10 Characteristics of Well-Designed Places upon which the National Design Guide (NDG) (CDX.X) and National Model Design Code (NMDC) (CDX.X), and subsequently NPPF Chapter 12, are founded. In this chapter all references to the Design Code are for Core Document 2.64.

10.1 Context

10.1.1 Understanding and responding to local and wider context

(1) The proposals are founded upon an understanding of the site gained from analysis of the features set out in Paragraph 42 of the NDG.

(2) Masterplan principles informed by this analysis include:

(a) The layout of new streets which are informed by the existing organisation and pattern of established neighbouring streets.

(b) The scale, location, and nature of open spaces, particularly at site entrances where they would offer a significant improvement upon the existing on-site conditions.

(c) Building mass and form which is informed by the relationships created with neighbouring residential properties, and the wider city.

(d) Movement principles including the improved Coldhams Lane junction, site entrances and the proposed Beehive Greenway active travel route.

10.1.2 Heritage, local history, and culture

(1) An assessment of nature the character of the Mill Road Conservation Area was undertaken at an early stage of the design process and informed design responses that sought to build upon the rich character of the neighbouring streets through landscape, massing and layout strategies as demonstrated in p154-161 of the 2023 Design and Access Statement (CD 1.02), with many of these strategies carrying through to the 2024 revised scheme.

(2) The relationship of the scheme with heritage assets and their setting was a key consideration for the shaping of the scheme, particularly in views from the Mill Road Conservation Area, including from York Street and Mill Road Bridge, and wider townscape views where the scheme would be visible alongside the Historic Core, including Castle Hill Mound and Red Meadow Hill.

10.2 Identity

10.2.1 Response to Local Character and Identity

(1) Local character and identity informed detailed design considerations captured within the Design Code such as those that seek to promote architecture that suitably responds to the character of the Conservation Area and the wider city, for example:

(a) Design Code 3.4.0 *"All building façades must be thoughtfully designed, exhibiting design excellence regardless of hierarchy, and should create elevations that provide a 21st Century response to the rhythms and richness found in the character of Cambridge."*

(b) Design Code 5.6.17 *"The primary material of Plot 6 should make reference to the tone and texture of materiality, and architectural articulation of the Mill Road Conservation Area,"* identical codes also being in place for Plots 7 and 8 which, along with Plot 6, would have the most direct visual interaction with the conservation area.

(2) Open spaces have been designed to build upon the existing pattern and scale of open spaces in the local area including those at St Matthew's Piece, St Matthew's Gardens and Silverwood Close. The new civic space at Maple Square introduces a new typology of open space that would enhance the diversity of open space in the local area.

(3) Supported by the landscape, lighting and wayfinding strategies, the new street layout will create a legible place that would enhance connectivity between the site and surrounding streets such that its positive contribution to the character and identity of the local area would be greatly enhanced beyond that of the existing centre.

10.2.2 Well-designed, high quality and attractive places and buildings

(1) The Design Code seeks to secure a standard of design that would achieve well designed, high-quality and attractive buildings at Reserved Matters Applications. The Code sets out design strategies and objectives in Chapter 3.0 *Sitewide Built-Form* Principles that would require the designs to resolve the volumes secured by parameter plan into interesting, diverse and attractive buildings that would contribute positively to the rhythms and richness of Cambridge.

10.2.3 Create Character and identity.

(1) In addition to building upon the established character of the local area, the proposals will create a place with its own distinct identity defined by the new architecture, open spaces, and the active local centre that they would form. The Design Code seeks to ensure that this new place would be brought forward as a place formed by a diversity of new open space, buildings and activity that collectively define a place with a singular cohesive identity, this being controlled by Design Codes 2.9.2 to 2.9.4.

10.3 Built Form

10.3.1 Compact form of development

(1) The proposals capitalise on a sustainable location in which to locate a new local centre and employment cluster. This central location comes without many of the constraints of the city core, with high quality links to the rest of the city on foot, by bike, by public transport and by car.

(2) The proposals optimise density by creating an efficient new layout of streets, open spaces, and new buildings. The footprint area of the new buildings is 32% greater than the existing centre and is supported by the masterplan strategy to create a new part of the city fabric will deliver a more diverse mix of uses, increased employment and significant new public realm.

(3) The design strategies that were developed through extensive consultation, outlined in Chapter 9 and the 2024 Design and Access Statement (CD 2.01) and further controlled by the Design Code, would achieve an optimised density whilst creating an appropriate response to context.

10.3.2 Appropriate building types and forms

(1) The site layout has been developed to create an experience that would be an evolution of principles consistent with the character of neighbouring streets, which typically feature long facades characterised by fine grain variation of architecture and materiality. There are extensive Design Codes within Chapters 3 and 5 that promote architectural designs that would respond to the scale and grain of the local area.

(2) The new streets which, unlike the surrounding Victorian Terraces, are designed to accommodate movement for vehicles including buses, dedicated cycle routes and landscape are also designed to create space for tree planting and soft landscape in accordance with NPPF Paragraph 136.

10.3.3 A new local destination

(1) The mix of uses for the ground floors of the buildings, including shops, restaurants, cafes, services, community spaces and workplaces and their lobbies, alongside the open spaces the activities that would take place within them will create a local destination. This destination would provide the opportunity for people, including those who may not otherwise come into contact with each other, to meet, share experiences and come together.

(2) The proposals include open spaces, particularly Hive Park, which would be bounded by active mixed-use floor space forming a core part of the destinational offer. This condition is one which is rare not only within the immediate locality, but also within the wider Cambridge.

(3) The identity that would be established, being one that would respond and add to, the character of the immediate local area but also bring its own defined identity, would create a locally distinct centre which would contribute to the character and legibility of this part of the city.

10.4 Movement

10.4.1 Connected network of routes for all modes of transport

(1) The movement principles secured by the parameter plans would contribute to a spatial hierarchy for the site, the detail of which is secured by Design Code Chapters 2.2 *Spatial Hierarchy and Public Space Framework* and 2.8 *Servicing Access and Car Parking Strategy* and is further enhanced by Design Code Chapter 2.3 *Legibility Framework.*

(2) The layout and nature of routes for all transport modes have been devised to achieve the following objectives:

(a) Create a new high-quality junction at Coldhams Lane that gives priority to pedestrian and cyclist movement and safety.

(b) Minimise the extent of the site that would be accessible to private car users.

(c) Create a bus stop with enhanced services.

(d) Minimise the potential for conflict between different transport nodes with priority given to the most vulnerable site users.

(e) Minimise the number of number of crossings that pedestrians and cyclists would have to make over vehicle routes to access, or transit through, the site.

(f) Create servicing routes that would divert larger service vehicles away from residential boundaries.

10.4.2 Active travel

(1) A shift in transport mode share away from private car towards more sustainable travel modes, including active travel forms a key part of the transport strategy. The proposed Beehive Greenway active travel route will create a high-quality transit route for pedestrians and cyclists, supporting the ambition to achieve the necessary modal shift.

(2) The ambition to create a place that promotes the use of active travel routes as an integral part of the masterplan is supported by the following Design Code Chapters:

(a) Chapter 2.5 *Active Travel Framework* which sets out codes that would deliver an exemplary active travel movement network for all users and prioritise sustainable travel.

(b) Chapter 2.6 *Towards a More Inclusive Environment* which sets out codes 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.

10.4.3 Well-considered parking, servicing, and utilities infrastructure for all users

(1) Strategies for servicing and car parking are defined in Design Code Chapter 2.8 *Servicing, Access and Car Parking Strategy* which sets out codes that will control and manage vehicle movements to minimise their impact on the masterplan and so optimise the quality of place for people to enjoy.

(2) Well-coordinated servicing, including refuse storage and collection is secured by Design Code 3.3.10 "*Entrances and routes for building services (e.g. refuse storage and collection) must be well coordinated with the proposed ground floor frontages, public realm and highways."* with the illustrative scheme designed such that bin stores are generally sited within buildings at ground floor or basement.

10.5 Nature

10.5.1 A network of high quality, green open spaces

(1) The principles for a variety of high-quality, green open spaces as part of the public realm strategy are outlined in a wide-ranging Urban Greening Framework which is set out in the following Design Code Chapters:

(a) 2.11 *Urban Greening Framework*

(b) 2.12 *Landscape Vision*

(c) 2.13 *Tree Strategy*

(d) 2.14 *Ecology and Biodiversity Enhancement*

(e) 2.15 *Water Responsive Framework*

(f) 2.16 *Play and Leisure Strategy*

(g) 2.17 *Lighting, Wayfinding and Security*

(2) The Urban Greening Framework is further supported by the individual Design Codes set out for each Character Area in Design Code Chapter 4.0 *Character Areas*.

10.5.2 Improve and Enhance Water Management

(1) Strategies and objectives for water management are set out within Design Code Chapter 2.15 *Water Responsive Framework* which sets out codes that would secure a public landscape design that, through adherence to local and national policy and the application of the SuDS hierarchy would transform a largely impermeable surface into an exemplar in sustainable urban drainage.

(2) The Water Responsive Framework addresses the following topics: Surface Water Management, Roofs, Water Storage, Levels, and Irrigation.

10.5.3 Support rich and varied biodiversity.

(1) Design Code Chapter 2.14 *Ecology and Biodiversity Enhancement* seeks to secure design strategies that would 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. A minimum 20% Biodiversity Net Gain will be achieved by the proposals, offering a diverse and resilient place for nature that will contribute to the social and environmental value of the development. The landscape and building design of the Illustrative Scheme has the capacity to achieve the 100% BNG aspirational target set for the project.

10.6 Public Spaces

10.6.1 Well-located, high quality and attractive public spaces

(1) The landscape and plots and heights Parameter Plans secure a site layout that would deliver accessible and well-connected public spaces that would be accessible for all.

(2) Supported by the Local Centre and Public Realm Management Strategy (LCPRMS) and Design Code Chapter 2.16 *Play and Leisure Strategy*, each of the open spaces is designed to support distinctive uses including leisure and play within Hive Park and a programme of outdoor events at Maple Square.

(3) The new open spaces and streets will include a mix of new and retained trees and soft landscape with strategies for these set out in Design Code Chapter 2.13 *Tree Strategy and* expanded upon in Chapter 4.0 *Character Areas*.

10.6.2 Safe and well-designed spaces

(1) All open spaces would be bounded by new buildings on at least one side, and resulting from their classification within Design Code Chapter 2.2 *Spatial Hierarchy and Public Space Framework* and Design Code 2.2.5 the ground floors of these buildings must include active frontage that would contribute to the natural surveillance of public space

(2) Spaces would be kept active by the curation of uses within the ground floor of the buildings and public realm such that they can support and extend on-site activation

outside of the core Monday to Friday working day hours of 9am until 5pm, per Design Code 2.7.6.

(3) Design Code Chapter 2.17 Lighting, Wayfinding and Security sets out codes that would 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.

10.6.3 Social interaction

(1) The masterplan, and its strategy for enhancing the quality and connectivity of entrances support the Design Code Place Principle to create a '*place without barriers for entry'* this place principle being supported by the following Design Code Chapters:

(a) 2.3 *Legibility Framework*

(b) 2.10 *Street Typologies*

(c) 2.17 *Lighting Wayfinding and Security*

(d) 4.0 *Character Areas*

(e) 5.0 *Plot Specific Codes*

(2) The combined effect of the ground plane strategy as set out in Design Code Chapter 2.7 *Uses and* Mix and 2.*16 Play and Leisure Strategy* will create a place where people can meet and socialise in a variety of ways in a variety of spaces.

(3) The mixing of the local centre offer with the office and laboratory uses would create a place that would promote meetings between people who might not otherwise come into contact with each other.

10.7 Uses

10.7.1 A mix of uses.

(1) The proposals would create a new active and vibrant mixed-use place that would become a local destination.

(2) The strategy for ground floor uses that would drive the activity and vibrancy of the new local centre, alongside the public realm, is set out with Design Code Chapter 2.7 *Uses and Mix* which seeks 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.

(3) The principles of Design Code Chapter 2.7 are further supported by the detailed design considerations set out in Design Code Chapter 3.3 *Base: Ground Floor Activation, Transparency and Entrances* which will ensure that the ground floor achieves People friendly places that have a scale, which people can relate to. The ground floor plane of the development including the spaces and the buildings, is a key element of the proposal to create a place that is inclusive, vibrant, attractive and a coherent relationship between ground floor uses and the public realm.

(4) The location and nature of the lobby entrances to the new office and laboratory addresses will be a key contributor the activity and vibrancy of the new local centre and will be an important consideration at Reserved Matters Applications.

10.7.2 Social Inclusion

(1) The principles set out in 10.6.3 are supported by the strategies outlined in the LCPRMS to create a welcoming place for all without barriers to entry.

(2) The inclusion of community facilities within the ground floor and the landscape will promote social interaction and integration.

10.8 Buildings

10.8.1 Healthy, comfortable, and safe

(1) A commitment is made to delivering high quality sustainable buildings. All buildings, excluding the multi-storey car park in Plot 10 (which is not suitable for assessment due to its proposed uses), will achieve a minimum BREEAM certification of Excellent. Any office floorspace shall be capable of achieving BREEAM Outstanding.

10.8.2 Relationship to external amenity and public spaces

(1) The proposed open spaces and the mixed-use ground floor would carry great amenity value for the office and laboratory occupiers and local residents. The public external amenity spaces may be supplemented by private amenity spaces in the form of external terraces for the office and laboratory occupiers provided that they conform with the relevant Design Codes that would manage and mitigate any resulting overlooking conditions.

10.8.3 Storage, waste, servicing, and utilities

(1) 10.4.3 outlines the relevant considerations for Storage, waste, servicing and utilities.

10.9 Resources

10.9.1 Energy Hierarchy

(1) All buildings will be designed to a fabric-first sustainability strategy including high-performing facades alongside passive measures set out in in the Design Code that include limiting glazed area and solar shading strategies as set out in Design Code Chapter 3.4 *Middle: Facade Hierarchy.*

(2) All heating, cooling and hot-water will be delivered by air-source heat pumps powered by electricity. This all-electric strategy is supported by significant on-site power generation in the form of photovoltaic arrays at roof level which are subject to specific Design Codes that would inform their placement and design.

10.9.2 Selection of materials and Construction Techniques

(1) The scheme has set an ambitious embodied carbon target of $\leq$600 kgCO_2/m^2 with a $\leq$500 kgCO_2/m^2 push target for the office buildings, which are anticipated to be steel

framed. Laboratory buildings are subject to a 750 kgCO_2/m^2 target and are anticipated to be concrete framed due to the performance requirements of this building typology.

(2) The Maximum Parameters and Illustrative Scheme have been designed with a small degree of tolerance to allow for modern construction techniques to be employed should they be of benefit.

10.9.3 Maximise Resilience

(1) Ambitious targets for the reduction of water consumption in use have been set such that the full 5 BREEAM Wat01 plus an additional credit for innovation would be attainable.

(2) Design Code Chapter 2.1 sets out design strategies that would limit the influence that the Urban Heat Island will have on the buildings and spaces as well as the surrounding area. This includes strategies that would influence façade materiality, landscape materiality, tree planting, soft landscaping and building greening.

10.10 Lifespan

10.10.1 The LCPRMS sets out the principles for a management strategy for the estate, including the mixed-use ground floor and the public realm. The LCPRMS will be reviewed and become the basis for a Local Centre and Public Realm Management Plan (LCPRMP) that would accompany the Reserved Matters Applications.

10.10.2 The Illustrative Scheme and Maximum Parameters have been designed such that the design of the scheme may evolve to respond to technological or regulatory changes during the construction period. Furthermore, spatial characteristics for the buildings including ground floor levels, storey heights and tenancy divisions at upper levels have been developed to allow a degree of adaptability over time.

10.10.3 The design of open spaces and the curation of activities that they would play host to have been, and would continue to be, informed by participation by members of the local community. The open spaces themselves will be design for access by all, without barrier to entry, and so will be capable of becoming an evolving part of the local social infrastructure.

10.11 Summary

10.11.1 As set out above, the proposals have been developed in accordance with the 10 Characteristics of Well-Designed Places, and therefore Chapter 12 of the NPPF, and so would be capable of delivering a transformational change that would lead to the reimagining and optimisation of a significant site within Cambridge such that it can become a new part of the city that engages positively with its surroundings.

11. Summary and Conclusion

11.0.1 My name is David John Leonard, and I am a Chartered Architect and founder of Leonard Design, a practice with offices in Nottingham, London and Seoul.

11.0.2 I have 38 years of professional experience designing and delivering masterplans and buildings across a wide range of developments in the UK and overseas.

11.0.3 I have worked on the Beehive Redevelopment as masterplanner on behalf of Railpen since 2019.

11.1 Site and Context

11.1.1 The application site is Previously Developed Land, currently a retail park. It makes inefficient use of land and contributes little to the local urban fabric.

11.1.2 The redevelopment marks the first time the entire site is being planned as a single entity, enabling a purposeful, optimised design that can contribute meaningfully at both local and city-wide levels.

11.1.3 Existing development around and within the site results in a sharp change in character at the site boundary, producing a poor environment. The proposals aim to improve this, introducing more typical urban streets and spaces.

11.2 Brief and Vision

11.2.1 The initial brief sought to create a commercially viable, sustainable, high-quality lab and workplace cluster, capable of gaining planning permission. A mixed-use ground floor would create a vibrant place for tenants and residents.

11.2.2 The masterplan envisions an innovation neighbourhood with a strong identity, high-performing buildings, mixed-use ground floors, and appealing public realm.

11.2.3 The masterplan will create a place with character and identity that acts as a high-quality 21st century addition to Cambridge, forming a legible part of the wider R&D landscape of the city.

11.2.4 Public spaces will be accessible to all and contribute to the new place's character, including a city park, civic square, landscaped streets and a linear wooded plaza.

11.2.5 Active travel will be promoted by improving connectivity and consolidating parking in a multi-storey car park, enabling a largely car-free site.

11.2.6 All buildings will follow fabric-first sustainable design and use electric systems, supplemented by on-site power generation.

11.2.7 Community facilities will be embedded throughout, shaped through consultation with local groups, and further developed at the reserved matters stage.

11.3 Opportunities and Constraints

11.3.1 The purposeful reimagining of this significant site as a single entity presents many opportunities to improve upon the existing nature of the site, a place which contributes poorly to the local urban area, comprising inefficient and poor-quality buildings, has little ecological value or open space, and makes inefficient use of the site.

11.3.2 The immediate and wider city context presents a range of constraints that should be duly considered as part of the balanced approach to the design of the masterplan. Constraints include the relationship with neighbouring properties, access and movement, technical delivery of lab buildings, and visual impact on the skyline and townscape.

11.4 Design and Place

11.4.1 Design Principles set out the design objectives for the proposals and were used to inform development of the masterplan throughout design development. The Principles are based on an analysis of context, opportunities and constraints and seek to inform a balanced response to the key influencing factors deriving from this analysis.

11.4.2 Place Principles, presented in the Design Code, outline the ambition for the new place and are supported by the Code's design controls.

11.5 Illustrative Scheme, Parameters and Design Code

11.5.1 The Illustrative Scheme results from significant, iterative multi-disciplinary design and consultation, optimising site use and benefits.

11.5.2 The Illustrative Scheme represents the consistent likely scenario for the development of the site pursuant to the Parameter Plans and Design Code. The Illustrative Scheme represents the likely maximum scale of the overall development that could be delivered within the controls of the Parameter Plans and Design Codes as a mixed-use laboratory and office led-scheme, with Plots 2, 3, 5 and 6 designed as wet-lab buildings.

11.5.3 The Illustrative Scheme was designed to capture the key spatial relationships between buildings, spaces and neighbouring context and directly informed maximum parameter volume and controls.

11.5.4 Maximum Height and Plot Parameter Plan sets out the maximum heights and footprints of each building using a variety of mechanisms to ensure that any flexibility created between the maximum parameter envelope and the Illustrative Scheme is strictly limited to that required for minor design development at Reserved Matters applications.

11.5.5 Surety of design quality and other key design characteristics is secured or advocated for by the Design Code which sets out rules and requirements for the design of subsequent applications to ensure that the design of each phase of the redeveloped Beehive Centre will be undertaken in a purposeful, coherent and coordinated way.

11.6 Design Evolution

11.6.1 The Illustrative Scheme design resulted from the significant iterative multi-disciplinary design development and consultation process. This process was wide ranging and sought to balance site optimisation, placemaking, heritage, landscape, open space, amenity, sustainability and access amongst others.

11.6.2 There were 72 consultation sessions held during between 2021 and 2024, of which 38 were for local residents, stakeholder groups and council members. The remaining 34 sessions were held with the LPA team and the Design Review Panel.

11.6.3 The scheme that resulted from this design process was able to demonstrate that the proposed development can be accommodated on the site with a strategic control framework and design approach that responds well to the site's context resulting in certainty that the outline proposals will enable a high standard of detailed design in respect of placemaking and character at the reserved matters stage.

11.6.4 Residential amenity, including sunlight, daylight, and outlook, was considered from the start and shaped design principles throughout. Quantitative and qualitative testing was conducted throughout the process to ensure that retained daylight and sunlight would be adequate.

11.7 Illustrative Masterplan

11.7.1 The proposals will create a high-quality centre for innovation within the urban area of Cambridge that would be exemplary in its design quality, accessibility, amenity and sustainability. This high-quality addition to the city comprising new streets and open spaces bounded by buildings would create a vibrant mixed-use local centre at ground floor in support of the office and laboratory floorspace amounting to a maximum of 166,685m^2 GEA.

11.7.2 A new street network will enhance connectivity between improved site entrances resulting in safe and efficient movement around the site and enhanced connectivity with the city.

11.7.3 The spatial strategy for the proposals will create open spaces and streets that vary in scale, appearance and function generating areas of distinct character as part of a cohesive design, contributing to a rich mix of experiences that would enhance the site and its surroundings.

11.7.4 The massing of the Illustrative Scheme, which was conceived or developed bearing all contextual elements in mind, has been devised to enable a well-handled transition in scale from the Character Area with the tallest elements, Plots 5, 6 and 9, being clustered around the centre of the site such that the silhouette of the scheme creates a single point of height that will become a positive new addition to the Cambridge skyline.

11.8 A Well Designed Place

11.8.1 The demonstrated adherence to the 10 Characteristics of Well-Design Places ensures that the proposals would be capable of delivering a transformational change leading to the reimagining and optimisation of a significant site within Cambridge such that it can become a characterful new part of the city that engages positively with its surroundings.

11.9 Conclusion

11.9.1 My evidence presents a scheme which has taken full consideration of the opportunities and constraints created by the site and its context such that it realises the opportunity to reimagine the existing retail park, transforming an inefficient retail park into a vibrant, employment-led urban quarter with an activated ground floor and range of public spaces in a sustainable location that has capacity for a change in scale and density.

11.9.2 Extensive multi-disciplinary consultation with the LPA, Design Review Panel, and local community has shaped the proposals over the course of four years to create a scheme which balances a wide range of competing factors to optimise the use of the site.

11.9.3 The proposal will be a legible new part of the city comprising new streets, buildings and open spaces. It will form a high-quality 21st century addition to the skyline of Cambridge with a massing that has been shaped with regard to the effects on townscape and heritage effects that it would carry.

11.9.4 The design quality and placemaking secured and advocated for by the Parameter Plans and Design Code, and as a result of accordance with the 10 Characteristics of Well Designed Places of the National Design Guide, would create a place that would form a characterful new addition to Cambridge that would contribute positively to the local urban area.

11.9.5 The proposed strategic control framework, including Parameter Plans and Design Code, and design approach respond well to the site's context such that it is demonstrated that the site has the capacity to accommodate the proposals.

11.9.6 The proposal represents a thoroughly considered and well-balanced response to optimising the use of the site of the Beehive Centre and will create a high-quality centre for innovation within the urban area of Cambridge that would be exemplary in its design quality, accessibility, amenity and sustainability.

11.9.7 Consideration of residential amenity, including daylight, sunlight and outlook directly influenced the development of the scheme from an early stage, setting design principles that remained relevant to the scheme from inception through to the current proposal. Quantitative and qualitative testing of shading, daylight and sunlight informed the design development throughout the full design period.

11.9.8 The new buildings will be of a greater scale than that of the existing retail sheds and will create new conditions with neighbouring residential properties. The conditions created by the new buildings, which are the result of a well-considered design development process, would not be overly dominant nor result in an oppressively enclosed outlook, counter to the putative reason for refusal. Both the maximum parameter envelope and illustrative scheme create conditions of enclosure that are consistent with a range of conditions found within the surrounding area. The Design Code supports high-quality design responses that take into account amenity, daylight and outlook and would result in attractive buildings and landscape that would be visible from neighbouring residential properties.