The Beehive Redevelopment

Design & Access

Leonard Design Architects on behalf of Railway Pension Nominees Limited July 2023



The Beehive Redevelopment Outline Planning Application Design Access Statement

Purpose and Description of the Document

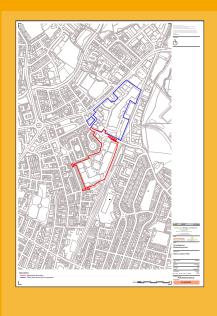
This document forms part of the Outline Planning application for the demolition and redevelopment of the Beehive Centre, including a new local centre (E (a-f), F1(b-f), F2(b,d)), open space and employment (office and laboratory) floorspace (E(g)(i)(ii) to the ground floor and employment floorspace (office and laboratory) (E(g)(i)(ii) to the upper floors; along with supporting infrastructure, including pedestrian and cycle routes, vehicular access, car and cycle parking, servicing areas, landscaping and utilities.

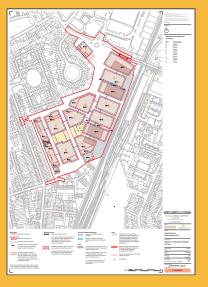
The document provides a detailed explanation and justification for the design principles and concepts and how the proposed development will integrate into its surrounding context. The document provides information to illustrate how the redevelopment of the Beehive centre will address the 10 characteristics set out within the National Design Guide to achieve a well-designed place.

The proposals shown within this document are the 'Illustrative Scheme' which informs the Parameter Plans (opposite) that make up this Outline Planning application. The principles that are explored in and defined by the Illustrative Scheme are key to the make up of the Parameter Plans; which are designed to capture the design intent of the Illustrative Scheme in a flexible format to allow for future design development. The restrictions created by the Parameter Plans must be observed within Reserved Matters applications. A description of the Parameter Plans is available in Section 7

As required by Regulation 9 of the Town and Country Planning Order 2015, the following document demonstrates the following:

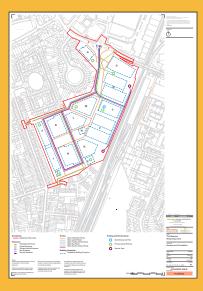
- Design principles and concepts Section 3.0
- Design response to context Section 2.0
- Access, policies and consultation Section 4.5
- Heritage and Conservation Areas Section 2.0





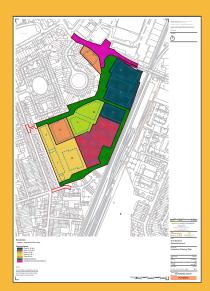














Contents

5.6

5.7

5.8

Drainage

Existing Trees on Site

Tree Removal and Retention

1.0	Introduction	5.9	Ecology
	Executive Summary	5.10	Sustainability
		5.11	Character Areas - Overview
2.0	Context	5.12	Abbey Grove
2.1	Site Location	5.13	Creative Exchange
2.2	Planning & Policy Context	5.14	Garden Square
2.3	Historical Context	5.15	Vera's Garden
2.4	Immediate Heritage Assets	5.16	Hive Lane
2.5	Wider Heritage Assets	5.17	Linear Walks
2.6	Local and Urban Context	5.18	Boundary
2.7	Existing Condition	5.19	Existing Hard Landscaping Overview
2.8	Opportunities and Constraints	5.20	Hard Landscaping Strategy
		5.21	Furniture Strategy
3.0	Vision	5.22	Planting Strategy
3.1	Objectives	5.23	Tree Planting Strategy
3.2	A Better Place For All	5.24	Maintenance Strategy
3.3	A Sustainable Place		
3.4	Welcoming Place for Nature	7.0	Design Evolution
3.5	A Welcoming Place For All	6.1	Masterplan Evolution
3.6	A Well Connected Place	6.2	Townscape Evolution
3.7	A Place of Opportunity	6.3	Consultation
		6.4	
4.0	The Beehive Redevelopment	0.4	Cambridge 4 C's
4.1	Creating a Masterplan		A 11 11 MI
4.2	A New Local Centre	7.0	Application Plans
4.3	The Illustrative Scheme	7.1	Red Line Boundary
4.4	Sustainability	7.2	Parameter: Maximum Building Heights &
4.5	Connectivity and Transport		Plots
4.6	Townscape	7.3	Parameter: Land Use - Ground Floor
4.7	Heritage	7.4	Parameter: Land Use - Upper Floors
4.8	Character	7.5	Parameter: Access and Circulation
4.9	Open Space	7.6	Parameter: Landscape and Open Space
		7.7	Illustrative Masterplan
5.0	Landscape	7.8	Illustrative Phasing
5.1	Vision	7.0	mastrative i riasing
5.2	Design Principles	8.0	Security
5.3	Local & Neighbourhood Open Space	0.0	- Security
5.4	Access		
5.5	Site Topography		

1.0 Introduction

Executive Summary

The Beehive Redevelopment will create a high-quality new local centre, workplace and innovation cluster. Eleven new buildings for life-science, innovation and office use come together to create a masterplan carefully organised around a series of connected open spaces, providing a vibrant mixed-use environment.

Unrecognisable from its current incarnation as a retail park with large areas of surface parking, the proposal will strike a balance between built footprint and open space, creating ample opportunities for outdoor activities and amenities for local residents and the on-site workforce. This emphasis on open space will also support a significant increase in biodiversity, with a target of achieving a 100% improvement on-site.

The upper floors of the buildings create a new cluster of life-science and office workplace to meet the demand for such spaces within the city. The ground floors of the buildings work together to create a new local centre that can provide an exciting and useful new mix of shops, services, leisure spaces and spaces to socialise. A community pavilion sits at the heart of the scheme and will create space to be used by local groups.

The open spaces on site combine to create the Beehive Greenway, stretching approximately 350m. This interconnected series of open spaces will include dense tree planting, urban-scale streets, and a civic-scale square featuring a new wetland environment. Complementing this, a new local high street will connect to York Street, while a public garden and pavilion will provide opportunities for community led activity.



Existing Beehive Centre



Illustrative Beehive Masterplan



A better place for all.

The scheme will benefit from

- 7.000 sam of active mixed-use ground floor spaces
- 22 new shops, cafés, services and mixed-use spaces
- 1 community pavilion for local groups, events and classes



A welcoming place for nature.

A key principle of the masterplan is to achieve an ambitious target of **100% Biodiversity Net Gain**; retaining 45 trees and planting a further 212 new ones. New climate resilient habitat types will be introduced to the site and existing ones will be strengthened.



A sustainable place.

We have set ambitious, achievable, targets - contributing to the City's response to the climate emergency. This will be an **all-electric scheme** with low embodied and operational carbon emissions.



A welcoming place for all.

The proposal will include:

- 2.1 hectares of open space created within 3.1 hectares of wider landscape
- A community garden
- 4.3 sam of open space per employee on site



A well connected place.

- 30% increase in cycle mode share
- 80% reduction in car mode share
- Reduced weekday peak flow for car trips on local highways network



A diverse range of employment.

6,710 jobs including:

- 986 low-skilled.
- 1.275 mid-skilled.
- 4.448 high-skilled
- In life sciences, research and development, administration, leisure, retail and more

1.0 Introduction

Executive Summary

The ground floors of the majority of buildings on-site will offer a blend of uses that will define the character and quality of this local centre. A mix of shops, cafes, restaurants, services, leisure facilities, health and wellbeing establishments, and co-working spaces will enhance the existing network of local centres in the area.

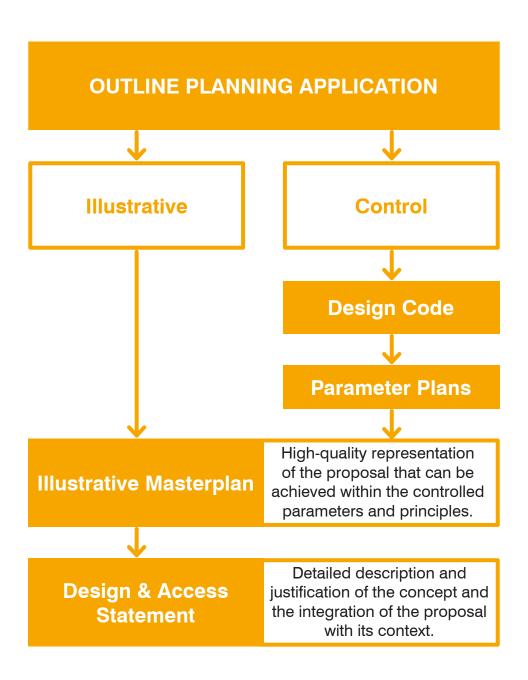
The design of the masterplan and supporting transport initiatives combine to support a shift in the way that people will access the site. Private-car use will be de-prioritised with many more trips being made by sustainable transport including walking, cycling and bus travel.

Sustainability is a core focus of the proposed buildings, which are designed to high performance standards. They will feature all-electric power, hot water, and heating and cooling systems, with no mains gas used anywhere on site. We have set stringent sustainability targets, and will achieve BREEAM Outstanding on at least 7 of the workplace buildings. This will require a range of sustainable initiatives, including thermal efficiency, carbon reduction, and water conservation.



This document forms part of the suite of information that will support an outline application that sets the scope for the transformation of this key area of Cambridge. Alongside the Design Codes and Parameter Plans, which set-out how the proposals must take shape, this Design and Access Statement will describe and illustrate the

content of the application to allow stakeholders to consider the proposals in detail. The illustrative masterplan that forms the basis of this application follows the principles rigorously set out within the Parameter Plans and Codes and is the result of a considered and holistic masterplanning process.





2.1	Site Location
2.2	Planning & Policy Context
2.3	Historical Context
2.4	Local and Urban Context
2.5	Existing Condition
2.6	Opportunities and Constraints

2.1 Site Location

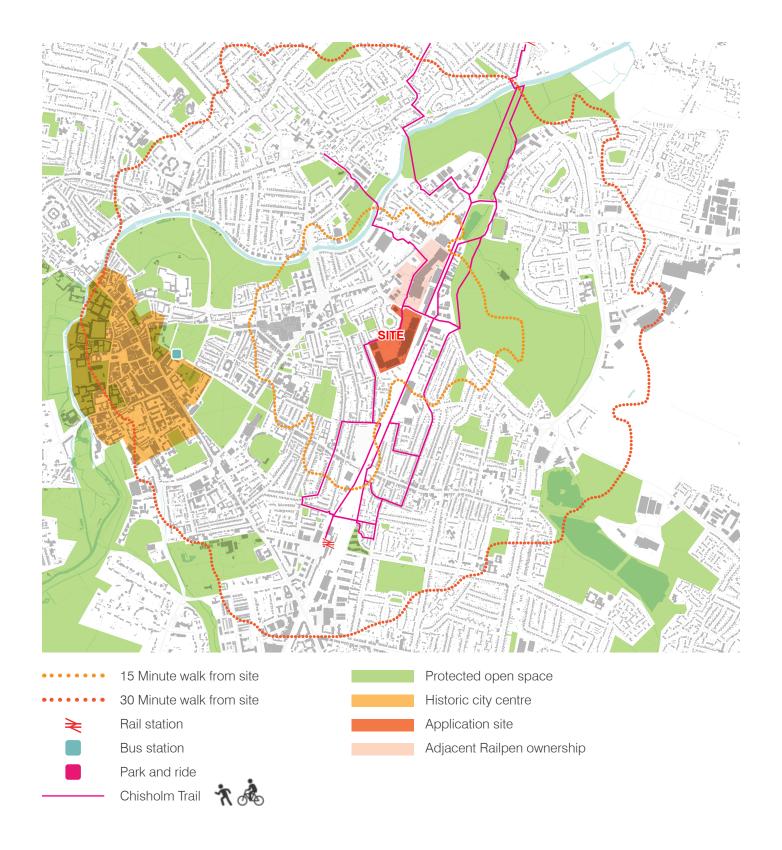
The Beehive Redevelopment sits within Cambridge at an edge-of-centre location that offers an enormous opportunity to create a truly special new part of the city.

The site's proximity to central Cambridge and separation from the heavily constrained historic core means that it is a highly accessible and sustainable location to create a new local centre with places to work, shop, and socialise.

The site lies between the two rail stations: approximately 2km from Cambridge North and 1km from Cambridge Station. It is connected to both stations by existing on and off-road cycle routes with the network due to be expanded through city-wide initiatives.

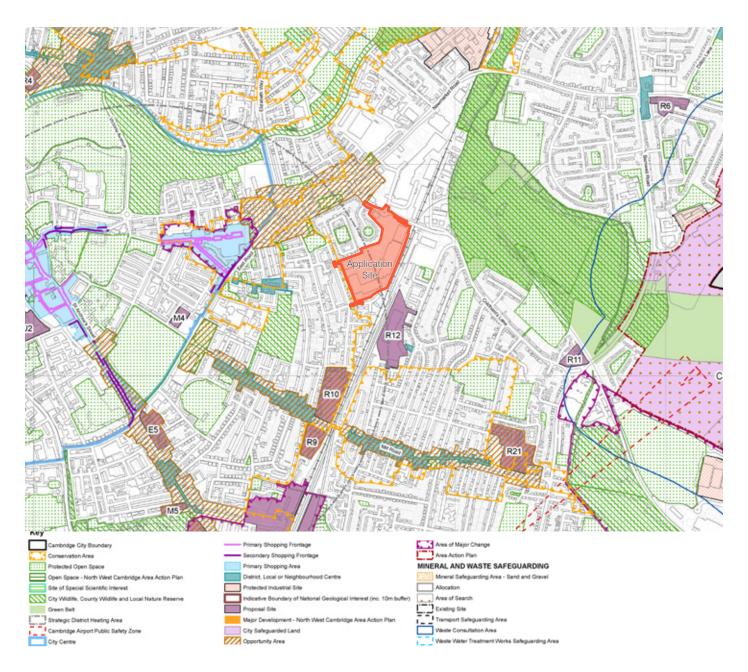
Adjacent to the site is the Cambridge Retail Park which is also in the ownership of the applicant. It is expected that the proposals for the redevelopment of the Beehive Centre will create great opportunity to bolster Cambridge Retail Park's position as one of the leading retail parks in Cambridge.

As is typical for much of the city around the railway line, the site and surroundings have limited access to open space for public use. Larger pieces of open space such as St Matthew's Piece and Mill Road Cemetery are supported by some greening within residential areas such as St Matthews Gardens. This gives rise to an opportunity to further expand this network of green spaces and reintroduce green and open space to site.



2.2 Planning & Policy Context

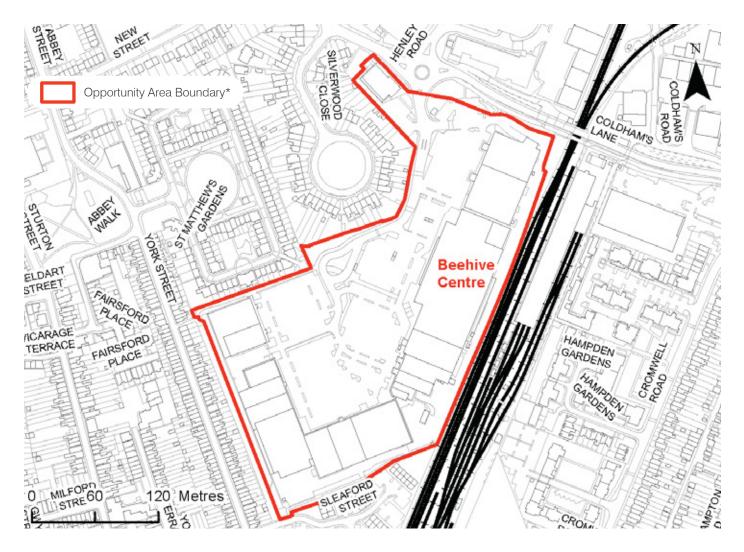
The Cambridge Policies Map 2018 extract below illustrates that there are no allocations or designations in the adopted local plan that directly apply to the site. It is noted, however that the site does have a direct relationship with the adjacent Mill Road Conservation Area. The map also reveals the local shortfall of open space that exists in the area between Coldham's Common and Mill Road Cemetery that the redevelopment of the Beehive Centre will seek to alleviate.



Within the emerging Greater Cambridge Local Plan (First Proposals, 2021) the Application Site is identified as an Opportunity Area: S/OA/BC Beehive Centre. The Plan identifies the site as being capable of delivering a far more aspirational and sustainable vision than the current retail park:

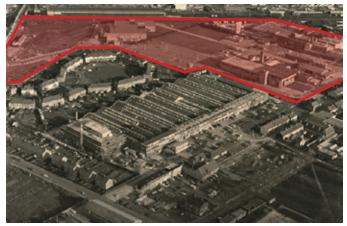
"The Opportunity Area proposed is an area of low density, large-scale retail uses with extensive surface car parking. This does not make very good use of an expansive area of land in the heart of Cambridge. With changes in retailing and the increase in online shopping, when taken together with the Local Plan themes of addressing climate change and creating Great Places, these sites have the potential to provide a significant opportunity for re-imagining this area close to the heart of Cambridge."

Text from: First Proposals, Greater Cambridge Local Plan



^{*}Boundary as drawn in Greater Cambridge Local Plan (First Proposals, 2021), this does not represent the application boundary.

2.3 Historical Context



Approximate site boundary

Image Source: pye-story.org

Cambridge City-wide History

Cambridge City has a rich history dating back over a thousand years. The city was first settled by the Romans, who established a bridge over the River Cam, from which the city gets its name.

Over time, the city grew into an important centre of learning, with the founding of the University of Cambridge in the 13th century. During the English Civil War in the 17th century, the city was a stronghold of the parliamentarians.

In the 19th century, the city saw significant growth and industrialisation, particularly in the areas of printing and engineering. Today, Cambridge is known as a hub of innovation and technology, with many cutting-edge companies and research institutions calling the city home.

Beehive Centre Site History

While the site is surrounded by a tight urban grain that continues to the city centre, it is itself a large area dedicated to a single use with large buildings surrounded by car parking. The abrupt change from residential streets to large format stores is quite unusual and requires analysis of site history to understand how it came to be so and how a new streetscape can be informed by the historic patterns.

1920's

The site is used for allotment gardens and is bounded by York Street to the west, Coldhams Lane and Newmarket Road to the north and the railway to the east.

1930's

Silverwood Close is constructed and the infill of residential to the east of the railway begins.

1950's

Infill of adjoining residential sites continues. The first industrial buildings appear on site, starting at the southern end of the site.

1970's

By the 1970's the site has been completely filled with industrial buildings including the Pye Radio factory and the first element of the Cambridge & District Co-operative Society development "Beehive 1". The Beehive was the emblem of the Cooperative Society and lends the site its modern day name.

1990's

Having first opened in 1969 the Co-op development adjacent to Coldhams Lane is added to over the following years until it occupies a large portion of the site. The brick and tile works to the north of the site is redeveloped, creating 'Coral Park'.

2000's

The original Co-op buildings are demolished to create a new supermarket and additional retail with subsequent waves of development creating the site as it is today. The Pye Radio factory is demolished and replaced with St Matthew's Gardens.



OS Map Reproduced with the permission of the National Library of Scotland

2.4 Immediate Heritage Assets

A Heritage Appraisal and Impact Assessment accompanies this application. This Appraisal identifies the heritage assets which have the potential to be impacted by the proposed development of the site. The range of contribution which the site makes to the setting of heritage assets will vary.

The document identifies Heritage Receptors which form part of the Baseline both in the immediate and wider context. These have the potential to be affected by the proposed development. The most immediate identified assets are:

- 1. Mill Road Conservation Area
- 2. St Matthew's Church (Grade II Listed)
- 3. 247 Newmarket Road (Grade II Listed)
- 4. Positive Unlisted Terraces on York Street (non-designated asset)

Heritage Asset Influence

The Heritage Statement has influenced design development, including the appearance of buildings when viewed from the Mill Road Conservation Area and townscape impact. This has ranged from the materiality, tone and texture choices and the domestic character and architectural treatment of buildings to break down the mass of the development in the townscape views.

These findings and influences are reflected in the Design Codes and Illustrative Masterplan.



Other Buildings

Public Green Space

— Site Boundary

— Mill Road Conservation Area

Other Conservation Areas



Church of St Matthew's (Grade II Listed)



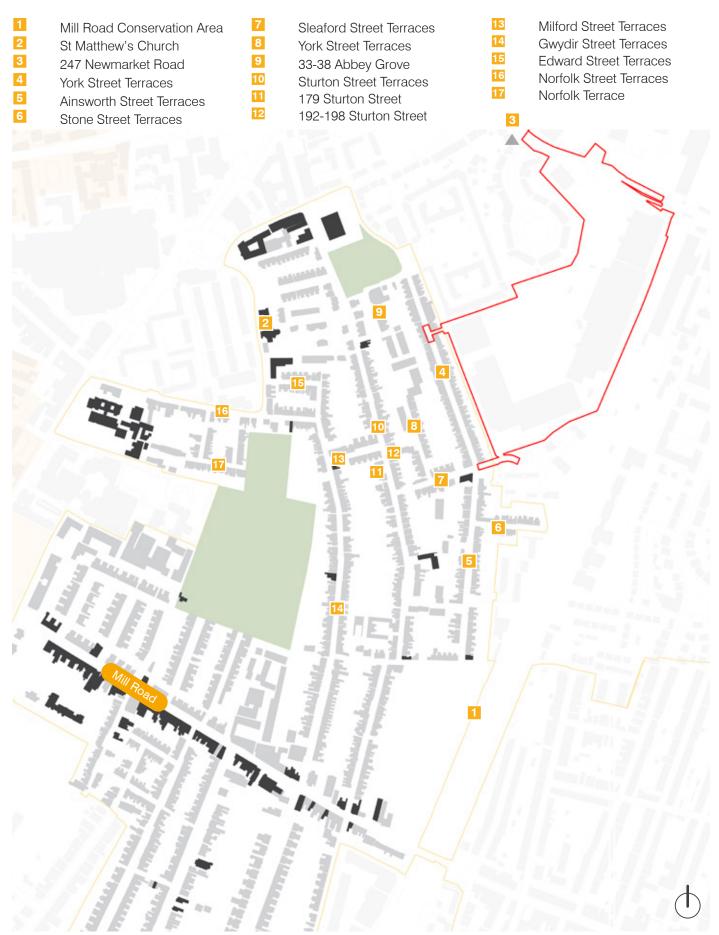
247 Newmarket Road (Grade II Listed)



Gwydir Street within Mill Road Conservation Area looking South towards CB1 and train station



Positive Unlisted Buildings in York Street



Local Urban Grain of the Mill Road Conservation Area | Identified Immediate Heritage Receptors from the Heritage Statement

2.5 Wider Heritage Assets

A Heritage Statement identifies the wider heritage assets around the site, these include Conservation Areas, Grade I and II Listed Buildings and a Scheduled Monument. The Statement assesses the significance of these assets and the impact of the proposed development on their significance. As a result of the long-range views into the site. In particular, the townscape views include Policy viewpoints which have been looked at from a built heritage point of view and are positioned in relation to specific listed building locations.

The proposal seeks to contribute to the wider heritage assets, for which more details can be found in the following pages and the accompanying Heritage Statement prepared by Bidwells.



Jesus College (Grade I Listed)



Kings College Chapel (Grade I Listed)



Cambridge University Library (Grade II)



All Saints Church (Grade I Listed)



Old Cheddar's Lane Pumping Station (Scheduled Monument)



Church of Christ Church (Grade II Listed)

1 Central
2 Riverside

Kite

New Town & Glisson Road Castle & Victoria

West Cambridge

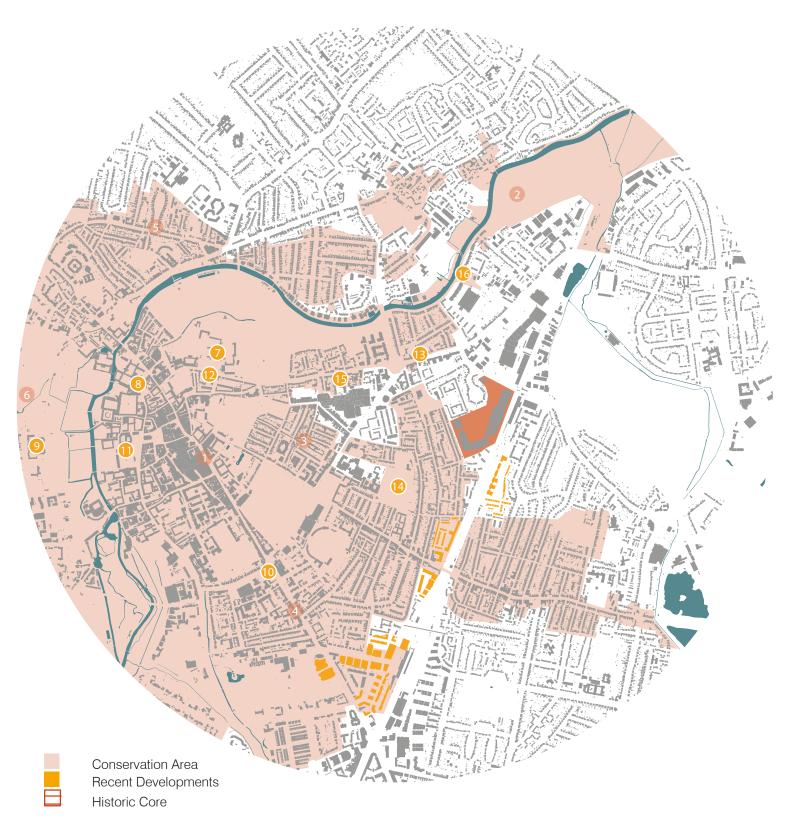
Jesus College
St John's College
University Library
Church of Our Lady
Kings College Chapel

All Saints Church

St Andrews the Less
Mill Road Cemetery

Church of Christ Church

Old Cheddar's Lane pumping station



2.6 Local and Urban Context

Conservation and Heritage

The Mill Road Conservation Area has a more inward facing nature due to the typology of the properties within it. As such, views of the site are limited to breaks in the built form and from areas of open space.

Boundary Conditions

There are a variety of boundary conditions, from residential gardens to railway line. Each boundary will be carefully considered and the condition improved from existing where possible.

Entrances

Site entrances are a key area for improvement as the majority of these are very narrow with poor visibility and presence. The improvement of these entrances will directly enhance wider site connectivity.

Connectivity

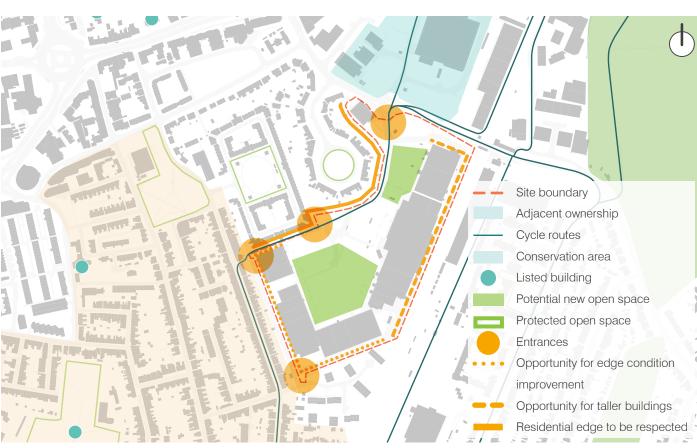
The site lies on a key location adjacent to the crossing of the railway line within the network of cycle routes. Improvements to site entrances and cycle infrastructure will strengthen the position of this portion of the Trail.

Open Space

Sitting in the corridor of limited open space adjacent to the railway line, the site provides an opportunity to contribute to the local network of open spaces by providing multiple meaningful pieces of open space.

Adjacent Ownership

Ownership of the adjacent Cambridge Retail Park opens the opportunity for the consolidation of existing retail in the area onto a single site, improving both the Cambridge Retail Park and the opportunity for development on the application site.



Immediate Context Map

Site Potential

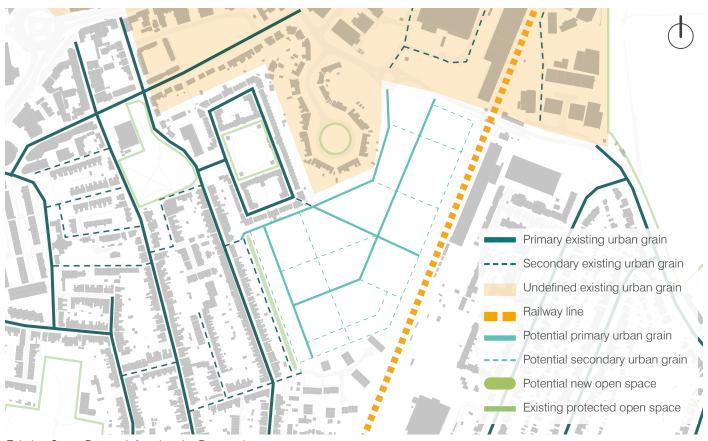
The proposed development takes a 'blank canvas' approach to the masterplan which is afforded to it by its lack of green space and vast hard standing. This creates the opportunity to reimagine the site as a piece of urban fabric which will integrate with the city. In order to do this the masterplan should acknowledge and respond to the existing pattern of streets and open spaces.

To the west of the site there is a strong existing urban grid whose main routes lie approximately north-south with its secondary routes running east-west. This grid was reinforced with the introduction of St Matthews Gardens in the early 2000's but immediately breaks down at Silverwood Close which was constructed while the adjacent area was still open space. The grid is also broken at Sleaford Street.

Where the site is enveloped by strong urban grids at the south-west corner of the site the masterplan should adopt a similar street pattern. At the northern end of the site the grid would be better suited to following the railway line per the streets to the east of the line.

The alignment of the connection point at St Matthews Gardens creates an opportunity to resolve the two new urban grid patterns around a pre-existing site condition.

Open spaces may be introduced to the centre of the site to create generous outdoor amenity while open spaces at the perimeter will help establish green buffers between the proposed commercial buildings and existing residential properties.



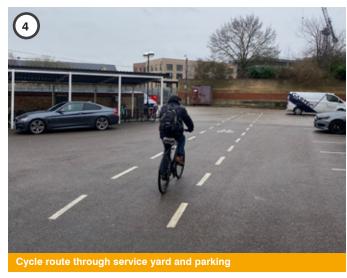
Existing Street Pattern Informing the Proposals

2.7 Existing Condition













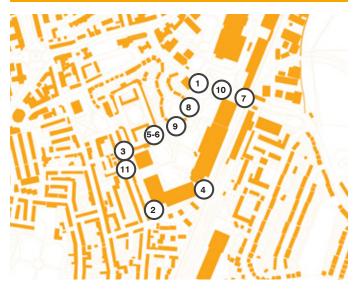












2.8 Opportunities and Constraints

Opportunities

Urban Design

The site currently makes little positive contribution to the urban character of the surrounding area. The principle of development will be based around good urban design and open space that will improve the urban character of the area.

Place Making & Activity

The current site layout and use, whilst remaining generally busy, does little in the way of place making and creating an even spread of activity over the site. A more even distribution of building footprints and active frontage around the site would contribute greatly to the identity of the site.

Biodiversity

Some greening is currently provided by planting beds and individual tree planting dispersed throughout the car park. The size of the site enables the opportunity for a significant open and green space led proposal which would be able to offer a significant uplift in biodiversity and connect to the wider network of open space.

Connectivity

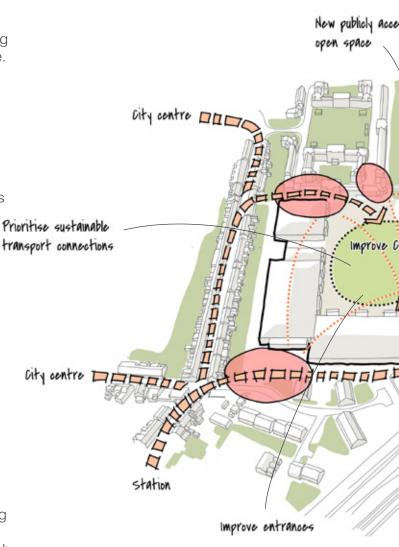
The current site layout is primarily designed around access and circulation by private vehicles with pedestrians and cyclists being lower down in the movement hierarchy. The proposal will prioritise sustainable and active transport and offer improvements to cross-site transit routes and local connectivity.

Sustainable Location

Being close to the city centre but separate from the constrained historic core means that this site has a high catchment of people within walking and cycling distance whilst also having access to good vehicle connections. It is a very sustainable location in which to create a workplace cluster.

Site Entrances

The quality of the existing non-vehicle entrances is generally poor being narrow and lacking local surveillance, creating opportunities for anti-social behaviour and safety issues. There is an enormous opportunity to increase the quality of these entrances.



Reduce car parking capacity East Cambridge Create a new local centre

Constraints

Number of Entrances

The site is relatively constrained in terms of access points with only four access points in total. Whilst all of these entrances are currently multi-modal, only one these can be used by vehicles.

Transition in Scale

Increasing building density will result in taller structures compared to the existing centre. Consideration of the relationship between these buildings, site boundaries, heritage assets and nearby residential areas is crucial. Building heights in these areas should be limited for proper scaling, especially those bordering the Conservation Area.

Interface with Coldhams Lane

Coldham's Lane is currently a very busy highway with the character only softened by intermittent areas of green space. Whilst the application looks to reduce traffic movements on Coldham's lane, it will remain important to preserve and enhance any green areas along this corridor.

Relationship with Rail Line

Design considerations are necessary when working alongside a live rail line, including exclusion zones for cranes and hazardous materials such as lab gas storage. These factors will shape the space along the railway line.

Skyline Context

Cambridge is a city with great character and several significant heritage assets within its skyline. With the majority of the city being relatively low rise, any taller buildings will become visible in long distance viewpoints and must be rigorously tested for visual and townscape impacts.

Transport Corridors

It is expected that a modal shift towards sustainable and active transport will take place. This is likely to locally increased cyclist and pedestrian movements in local streets. These impacts must be carefully managed and tested.