



The Grafton Centre Members Briefing

22388 - 8037 - 00 | May 2023

Pioneer

Macgregor Smith

AG ANGELO
GORDON

Corstorphine & Wright

Pioneer

Specialist Life Sciences Infrastructure & Venture Building Company

Focused on creating ecosystems that help companies accelerate cures for Human & Planetary Health

1.1 Our Company

Venture Building

Helping to turn an idea into a business and assisting that business grow

- Accelerators
- Incubators
- Scale-Up
- Supported by our Internal VC

Infrastructure

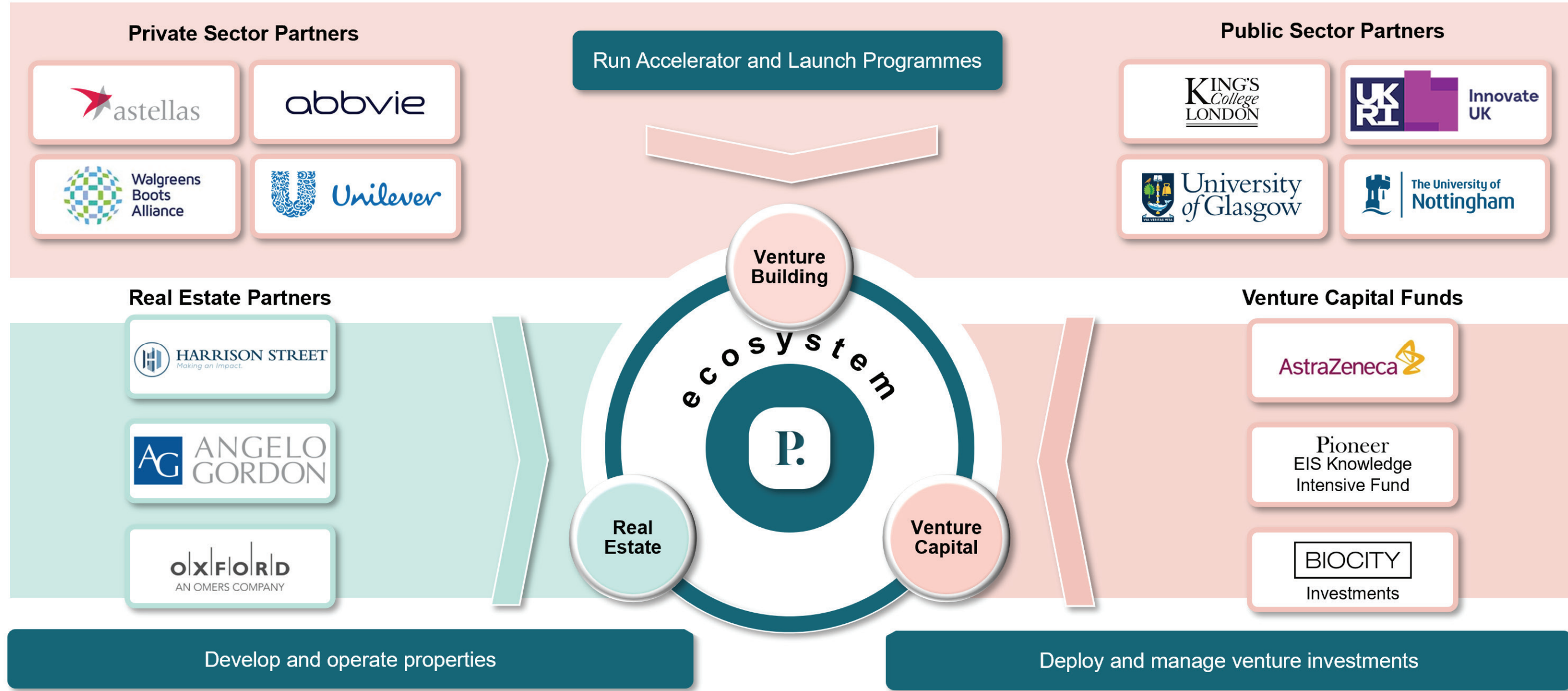
We create the environments in which business are more likely to succeed

- £1bn real estate portfolio over 12 sites totalling 4m sq ft
- Specialist scientific equipment

‘Europe’s only vertically integrated science and tech specialist’

Pioneer

1.2 Pioneer Group's Unique Approach



Pioneer

1.3 UK National Coverage

Pioneer Group is one of the UK’s largest innovation ecosystem for the science and technology industries and now also operates in Ireland.

- c. £1bn portfolio
- 12 integrated locations totalling 4m sq ft
- Further 4m sq ft of expansion



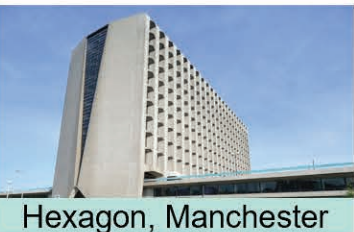
Kent Science Park



Colworth Park



Nottingham x2



Hexagon, Manchester



Wilton Centre



Edinburgh



Glasgow



Cardiff



Victoria House



Grafton, Cambridge*



Dublin**

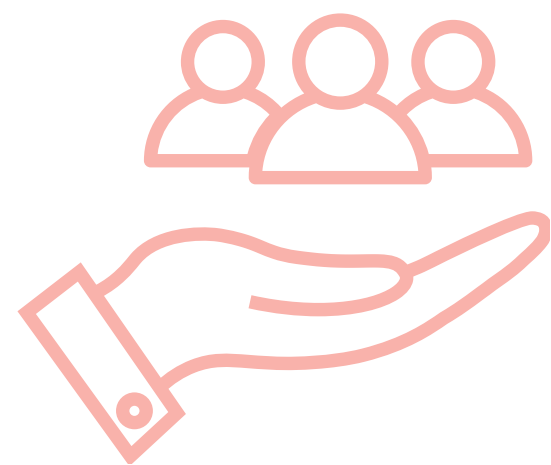
* Subject to conversion

** Incubator only



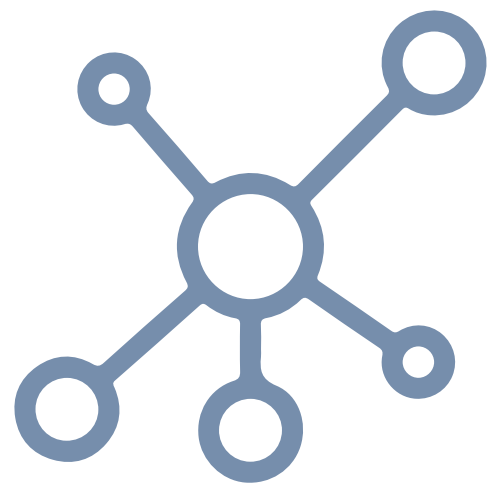
Pioneer

1.4 Shared Objectives



COMMUNITY

The development will foster a sense of **community**; delivering wellbeing for existing and future members of the community through positive interaction



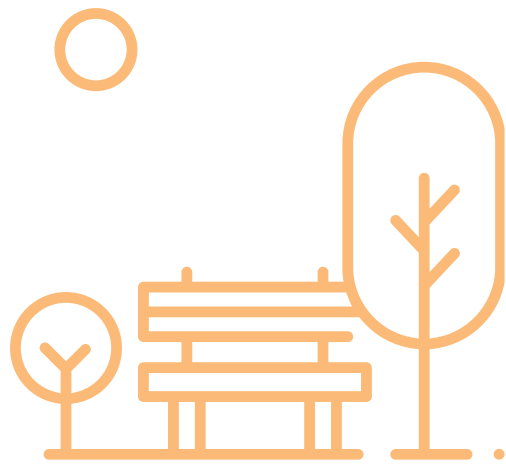
CONNECTIVITY

Located in a highly sustainable location where people can benefit from high **connectivity** to jobs and services - where infrastructure is upgraded to match the pace of development



CLIMATE

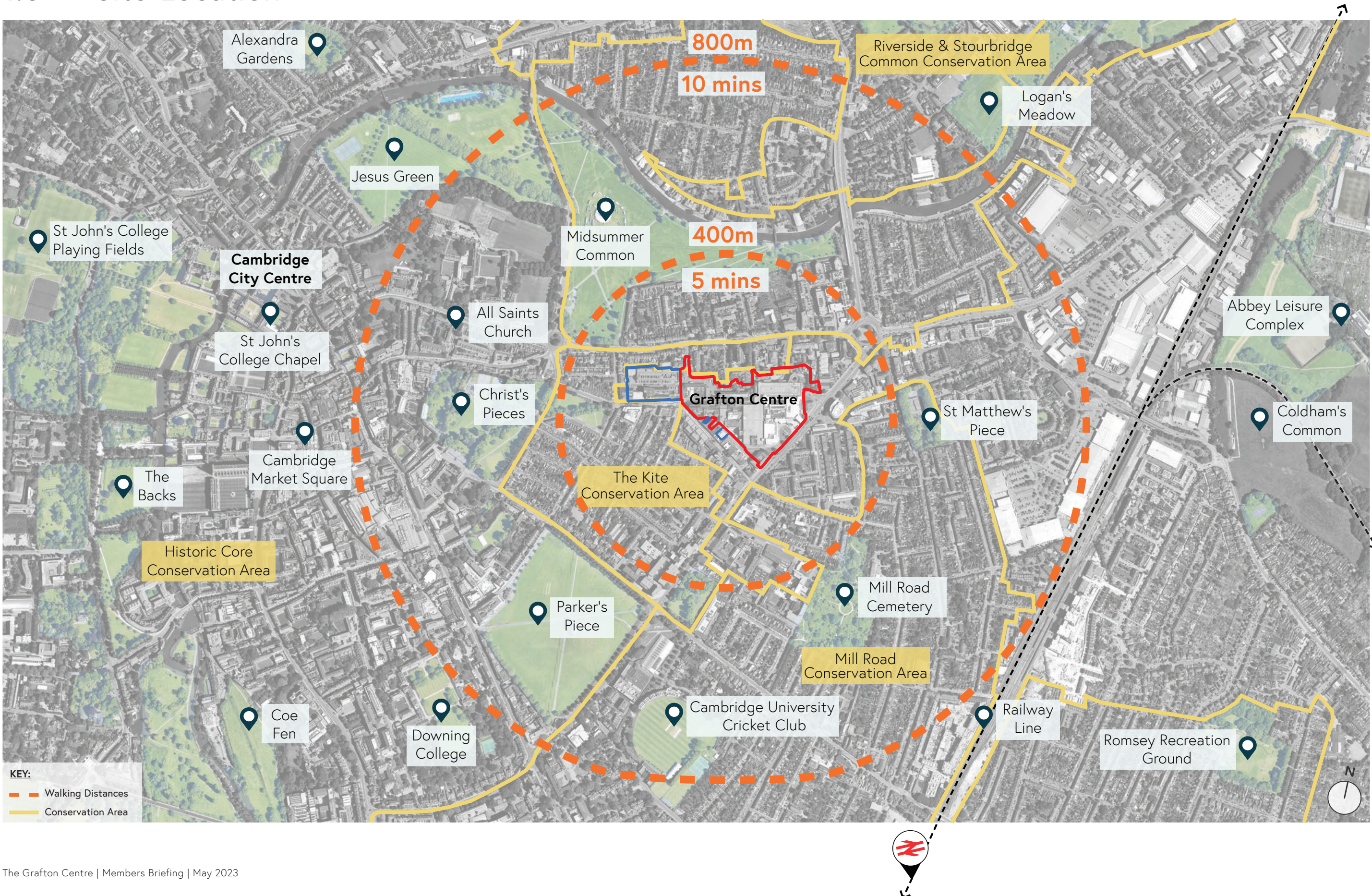
Retaining **embodied carbon** and delivering a high-quality **sustainable development** with imaginative landscaping and innovative approaches to transport, energy and waste



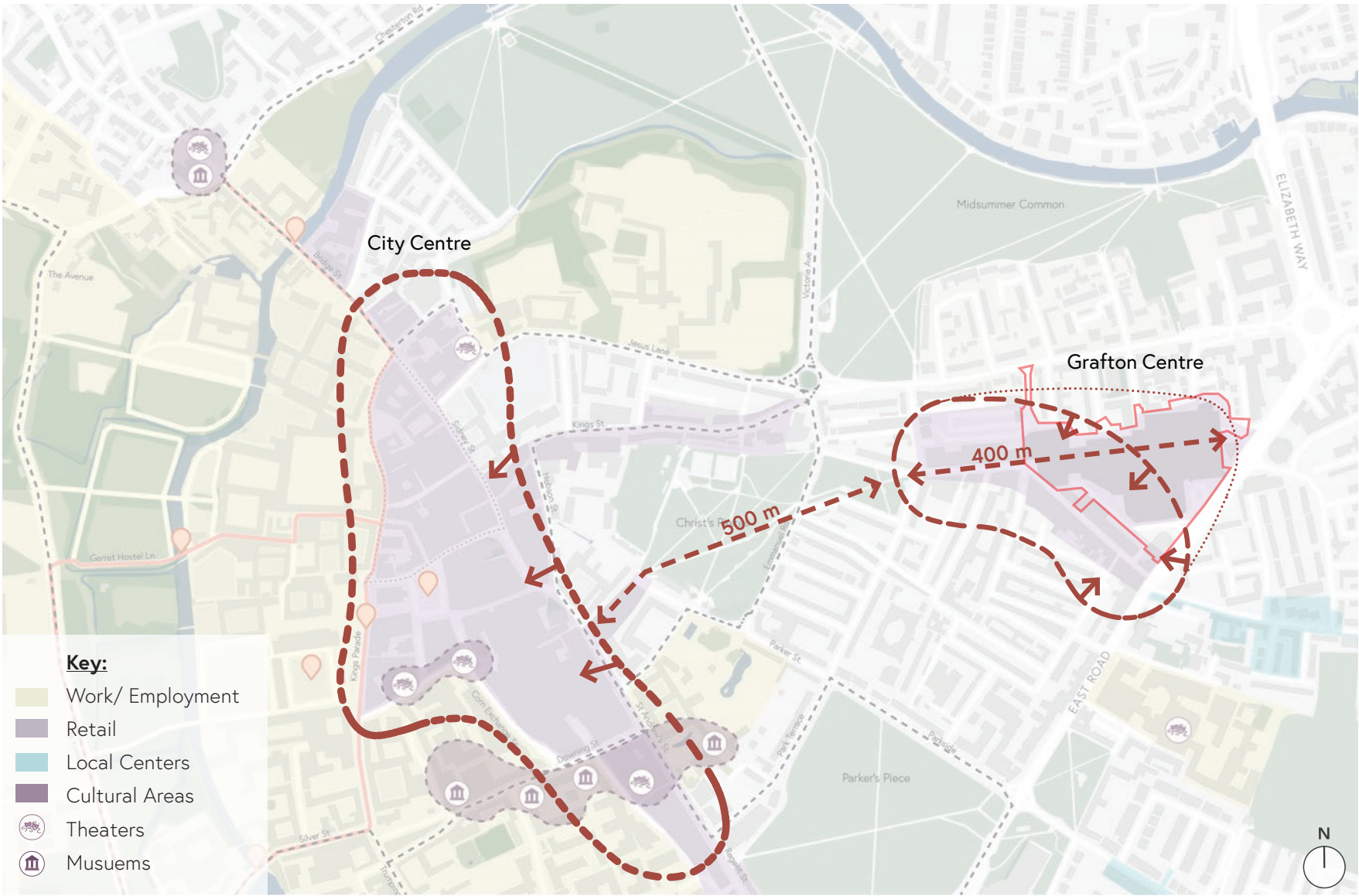
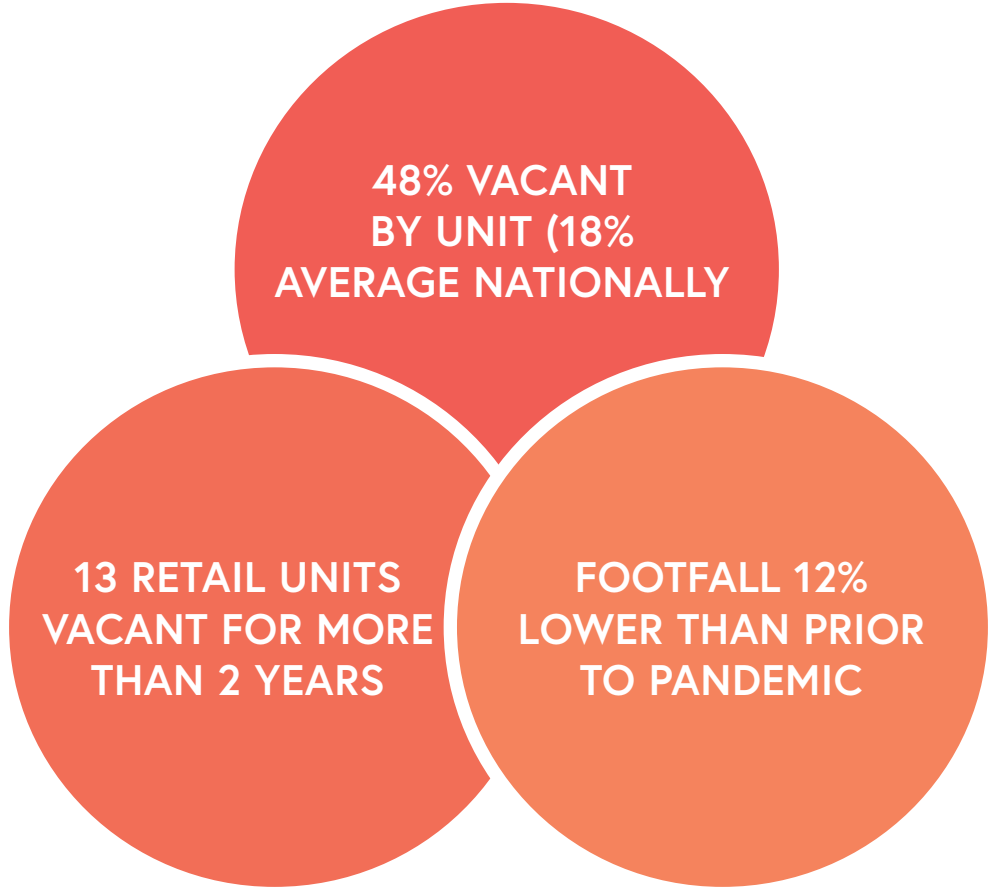
CHARACTER

Responding to **local character** and facilitating greater architectural quality which allows the public to see into the building whilsy recognising and prioritising the public realm.

1.5 Site Location



1.6 Retail Impact Assessment

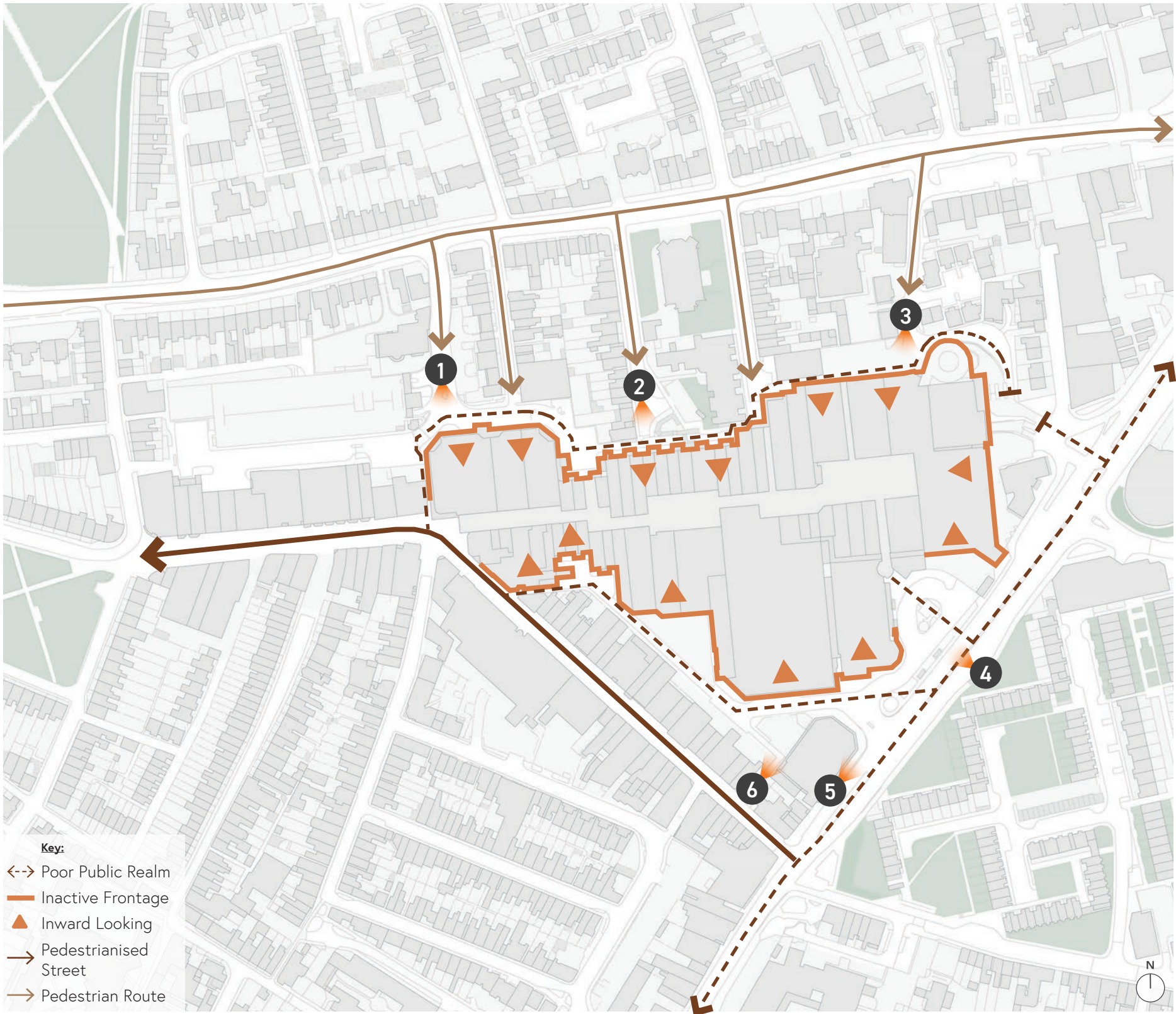


Grafton Centre Break Dates GOAD - Ground Floor

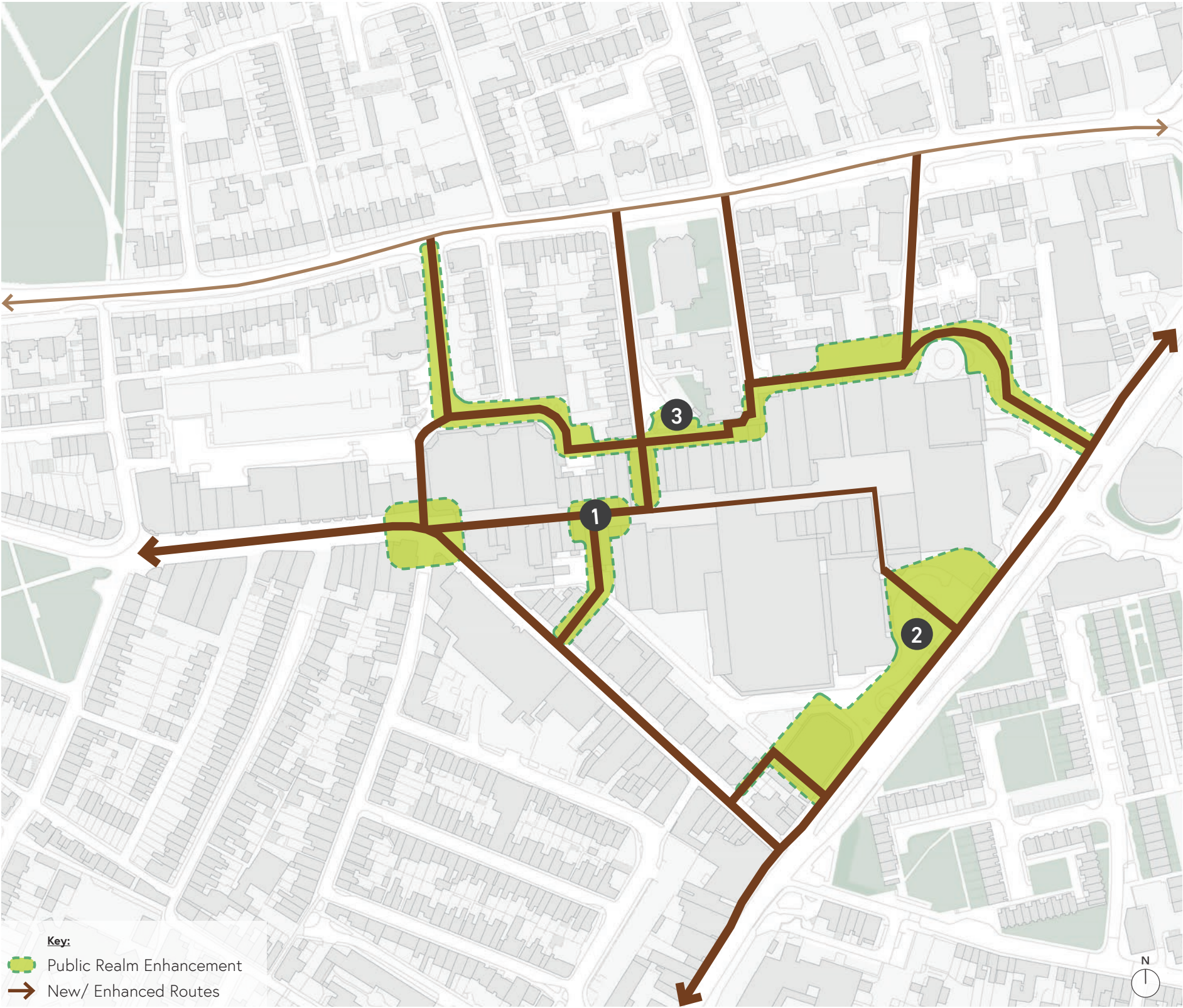


Grafton Centre Existing Condition

1.7 The Existing Grafton Centre



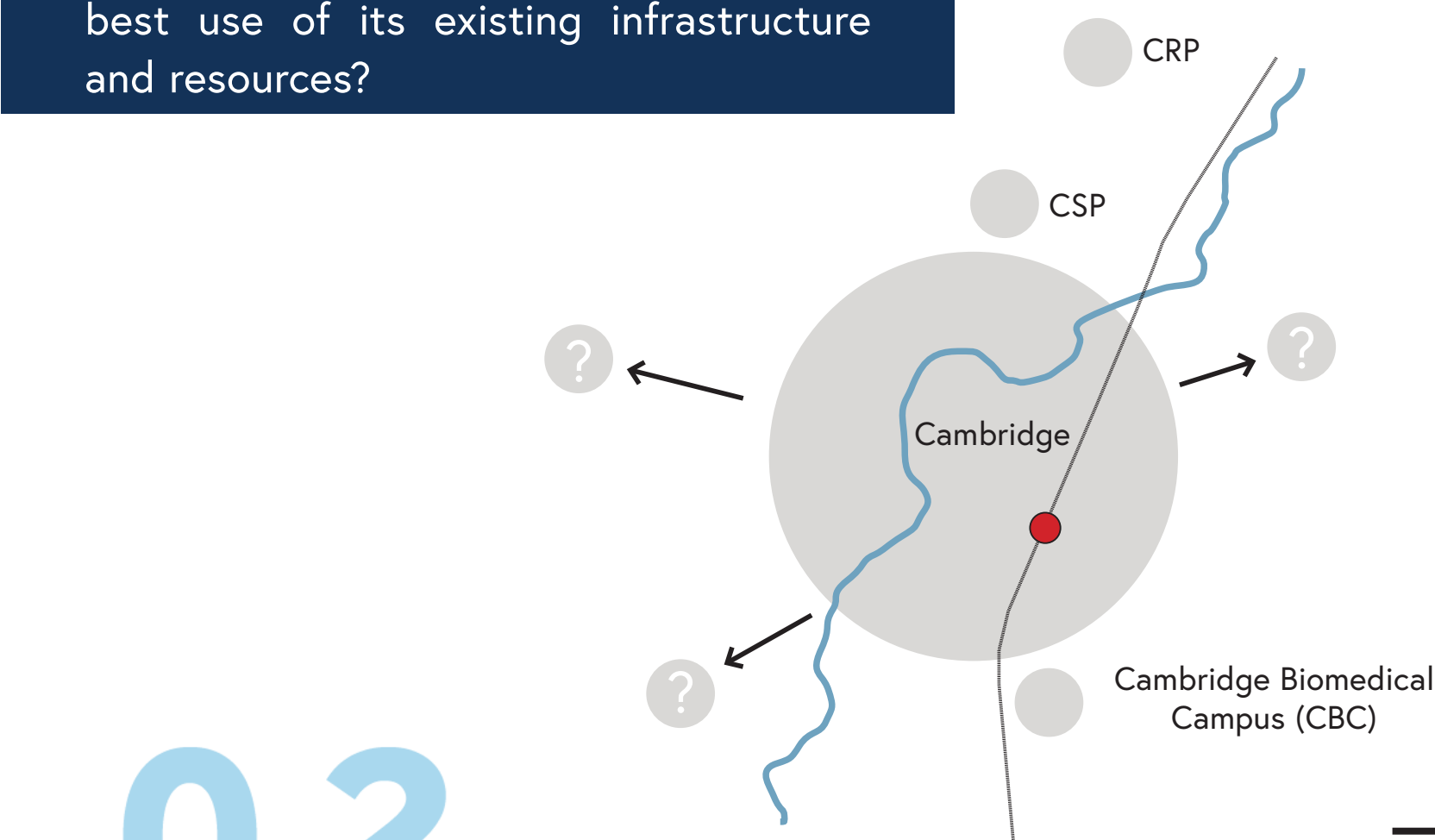
1.8 Enhancing Permeability and Public Realm



1.9 Why Life Sciences Use?

Benefits of a Town Centre Location

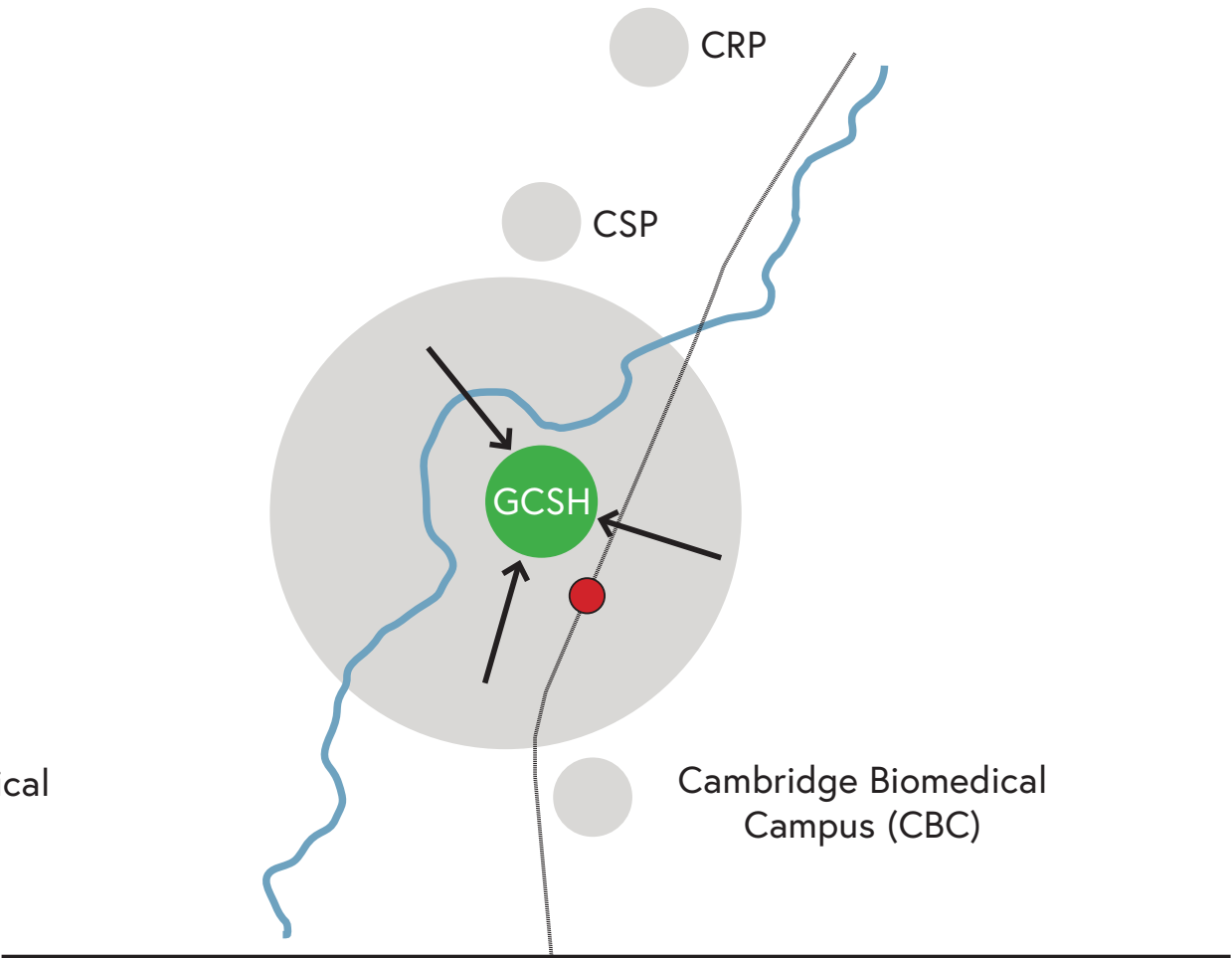
How can Cambridge continue to grow its life sciences sector, while making best use of its existing infrastructure and resources?



0.2%
Supply shortages keep the Cambridge laboratory availability rate at sub 1%

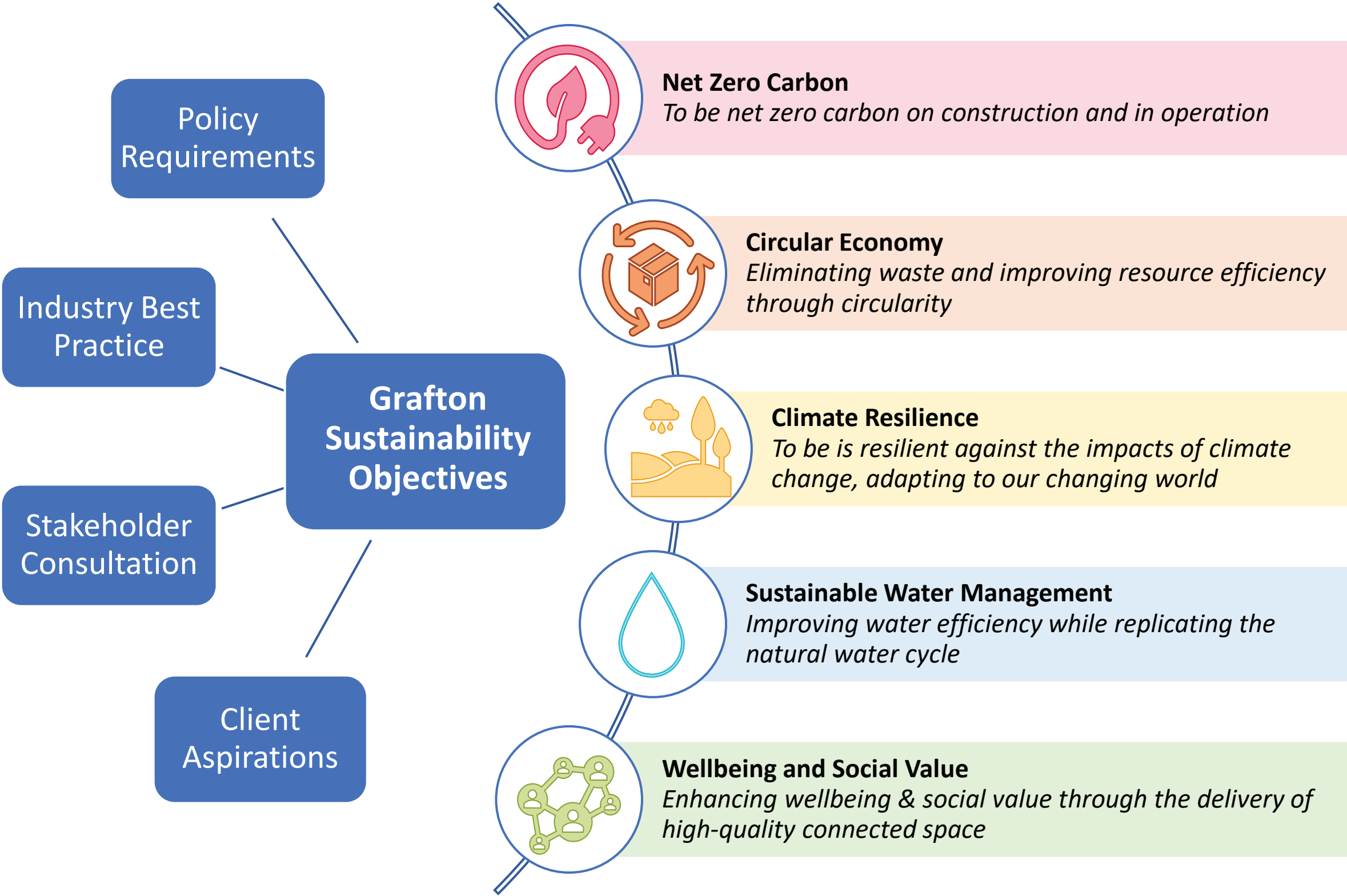
(Reference : Bidwells Arc Market Data Book Jan 2023)

Cambridge's USP is its reputation for academic excellence and its quality as place to live.



Repurposing the Grafton Centre as an innovation hub for life sciences offers the sustainable reuse of an existing building in a sustainable location, bringing new employment and footfall to the high street.

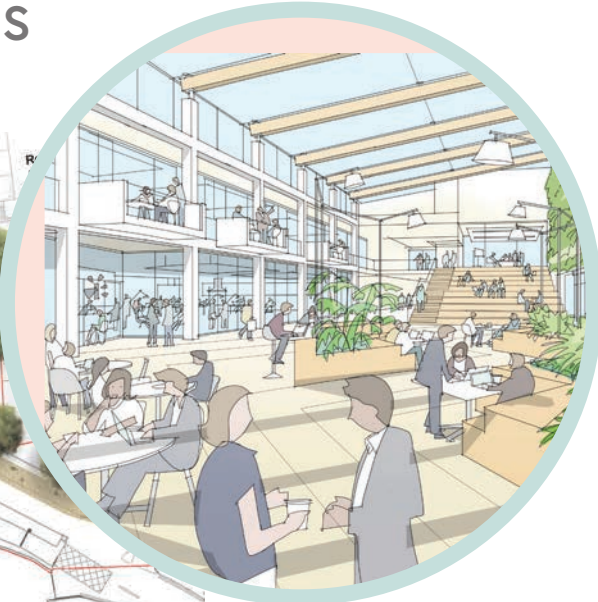
1.10 Sustainability Framework



1.11 The Masterplan

- Key:
- Retail/ F&B
 - Cycle Store
 - Lab/ Write-up
 - Community Space
 - Back of House
 - Circulation
 - Cinema
 - Gym Entrance
 - Hotel

LIFE SCIENCES



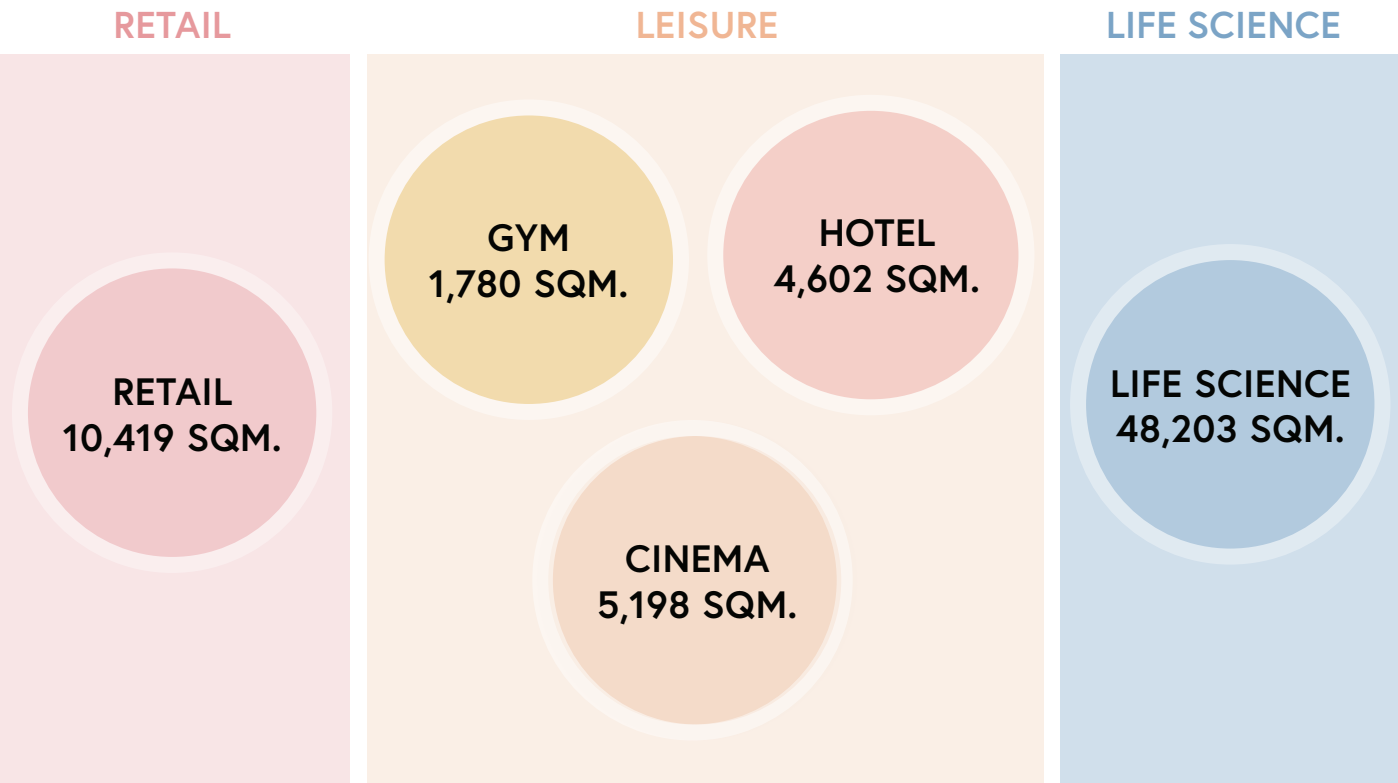
RETAIL



LEISURE, HOTEL
and F&B

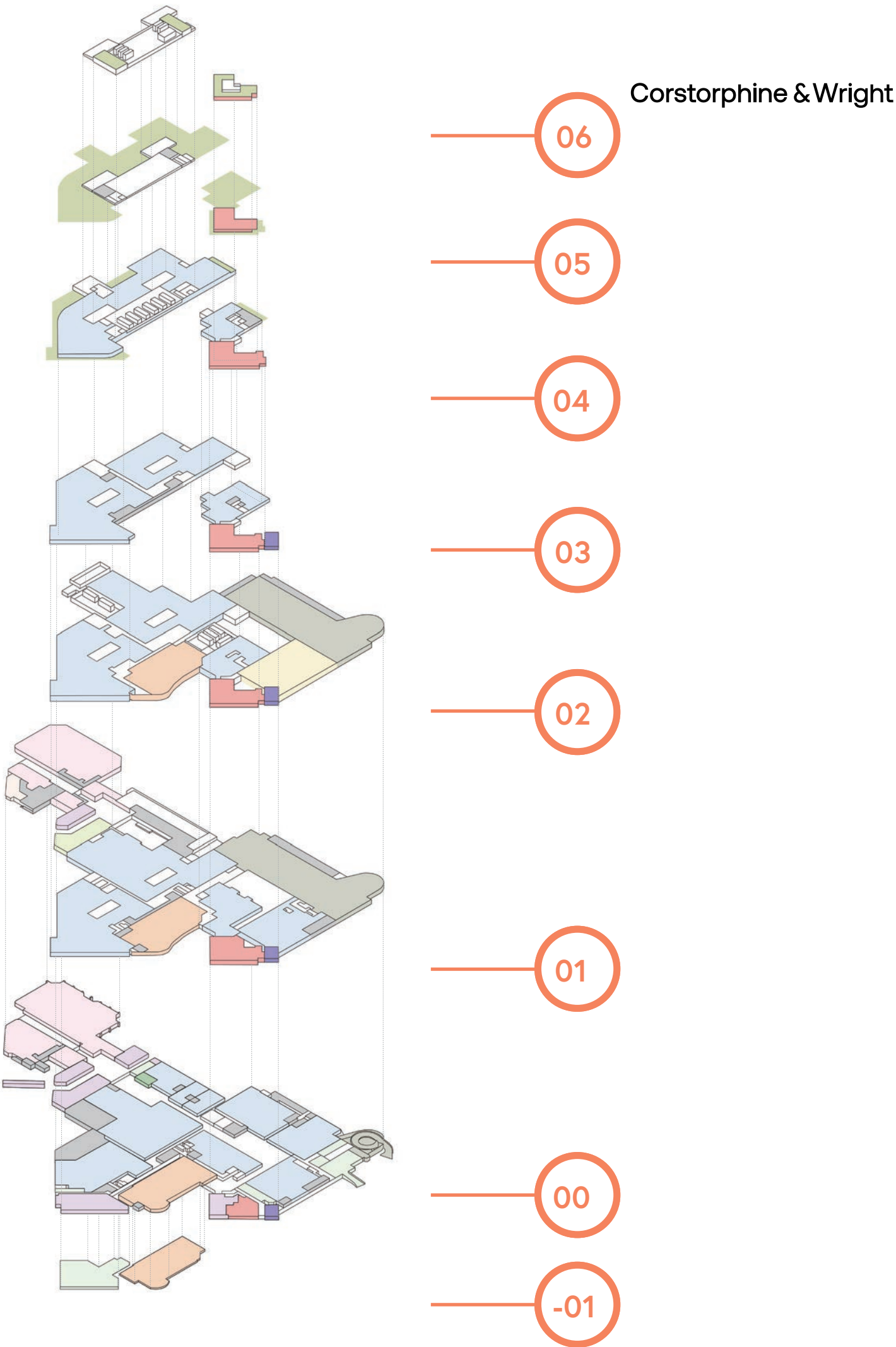


1.12 Use and Amount Overview

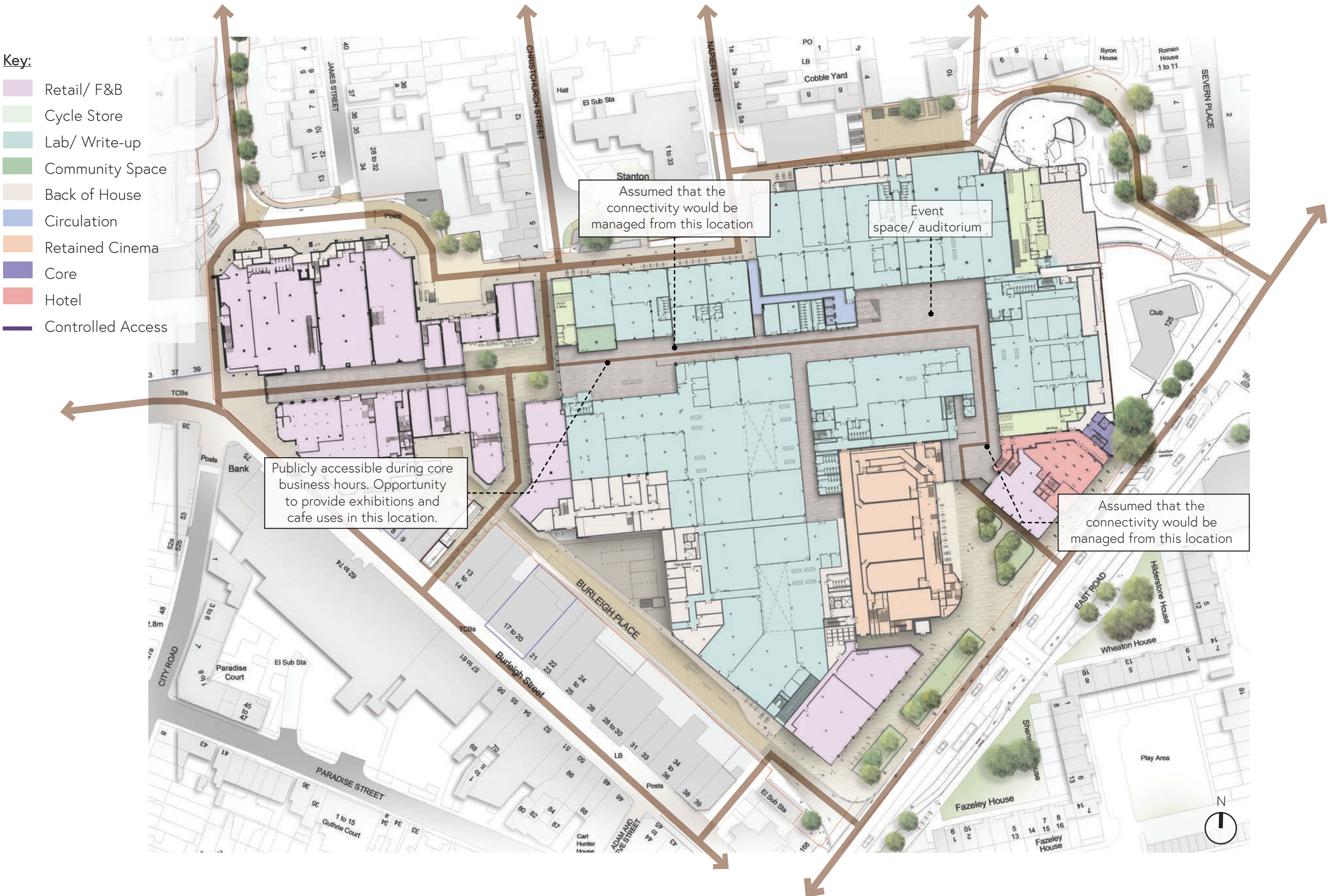


*New floor space over and above existing and consented is 10,000 sqm.
 Consented Hotel
 Abbeygate House

- Key:
- Retail
 - Cycle Store
 - Lab/ Write-up
 - Community Space
 - Back of House
 - Circulation
 - Cinema
 - Gym Entrance
 - Hotel



1.13 Proposed Permeability

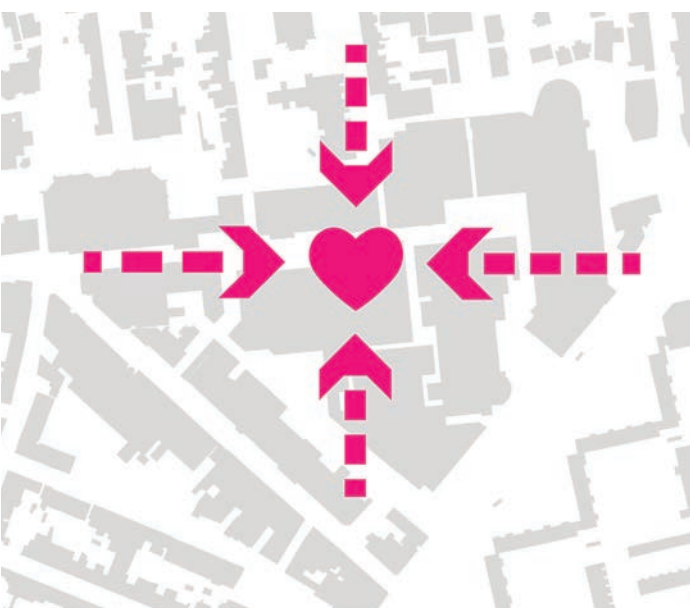


1.14 Landscape Design Principles

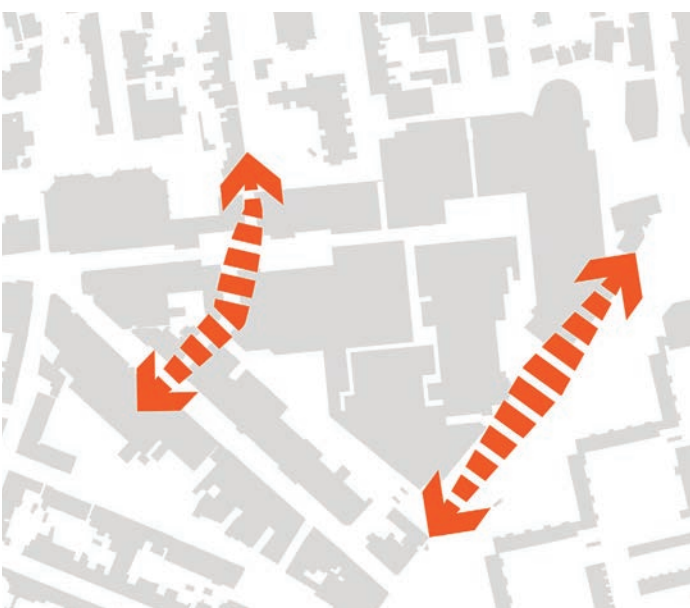
In collaboration with Corstorphine and Wright architects, Macgregor Smith developed the initial project brief to encompass a series of fundamental design aims with the overall objective of delivering a high-quality and multi-functional landscape strategy. By developing a concept which considers the combined internal and external user experience, the landscape proposals seek to compliment the architecture to provide an exciting, re-imagined Grafton Centre. The following 6 design principles have been used to shape the emerging landscape proposals:

- 1. Make a PLACE, a destination to attract people into the Kite area;
- 2. Enhance the PUBLIC REALM around the Grafton Centre and reinforce a spatial hierarchy to improve the pedestrian environment;
- 3. Support SUSTAINABLE forms of transport by promoting walking and cycling and creating enhanced routes around and through the Grafton Centre;
- 4. Address the closed nature of the Site by providing new spaces that are OPEN & CONNECTED to the adjacent public realm;
- 5. Develop a multi-functional landscape strategy which includes meaningful GREENING and appropriate plant selection to support local biodiversity and provide biophilic external and internal amenity spaces which promote WELL-BEING through access to nature;
- 6. Create RESILIENT landscapes in the face of the Climate Emergency through integrated sustainable drainage systems, efficient water usage and urban heat resilience.

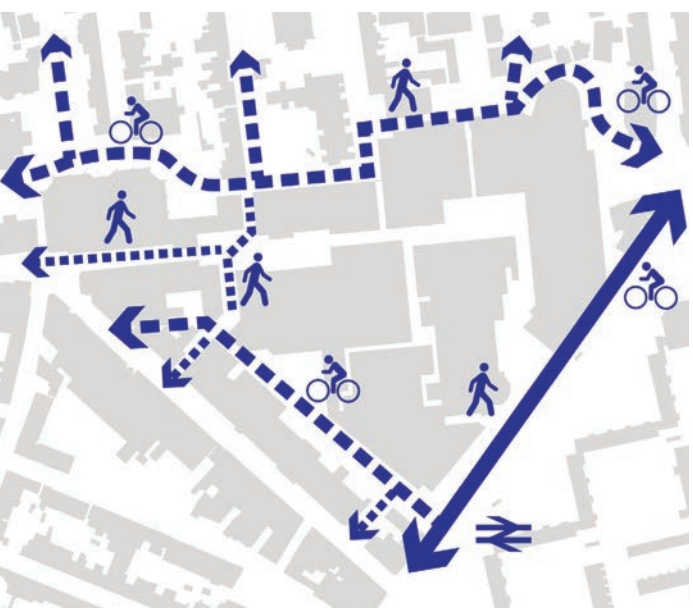
01 Make a PLACE



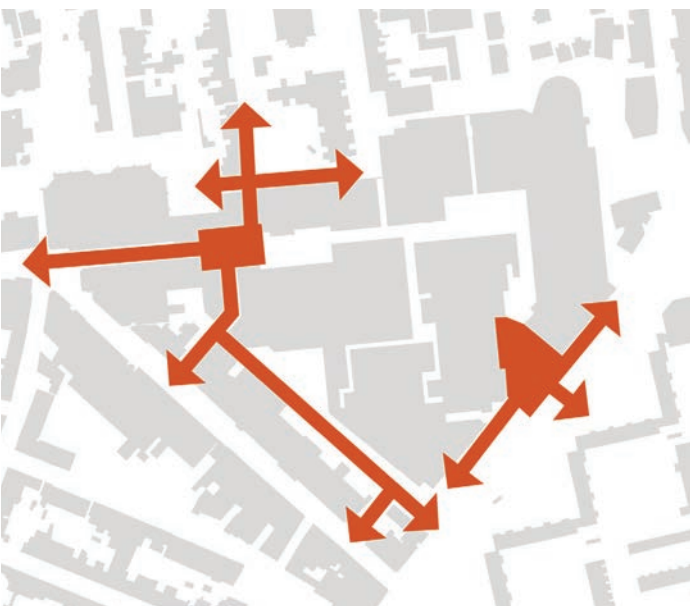
02 Enhance the PUBLIC REALM



03 Encourage SUSTAINABLE transport



04 Provide OPEN & CONNECTED public spaces



05 Multi-functional and meaningful GREENING



06 Create RESILIENT landscapes



1.15 Cycle Strategy

The diagram adjacent sets out the cycle provision and location in and around the scheme. In summary the proposed scheme looks to provide:

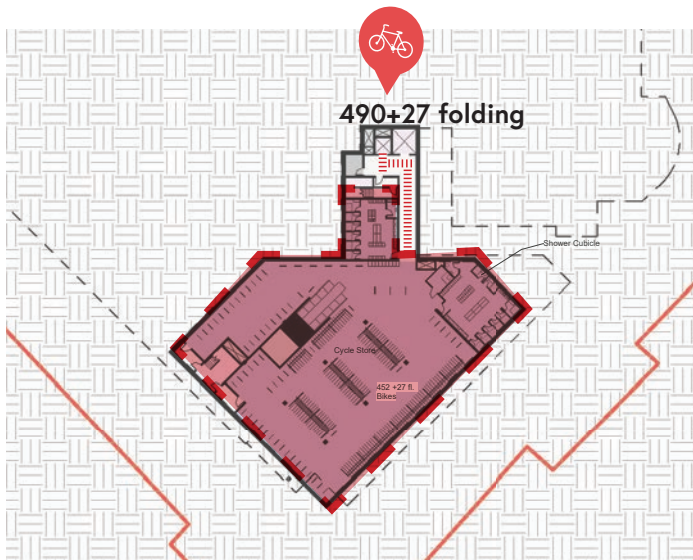
External cycle storage is of high importance locally, with existing stands and stands on surrounding streets like Burleigh Street well used. The proposed scheme looks to provide 352 external cycle spaces, with 60 of these spaces within the S278 works. These spaces will be provided in the form of stainless steel Sheffield cycle stands and half stands, which are the preferred means of external cycle storage of Cambridge City Council. A tapping rail will be fitted to the first and last stand for rows of cycle parking to minimise potential hazards for partially sighted pedestrians.

Over 5% of the spaces are allocated as non-standard cycle provision, a total of 20 non-standard external cycle spaces. Here 2m spacing and 3m bay length (length of cycle) is accommodated, with opportunity for a half size cycle stand.

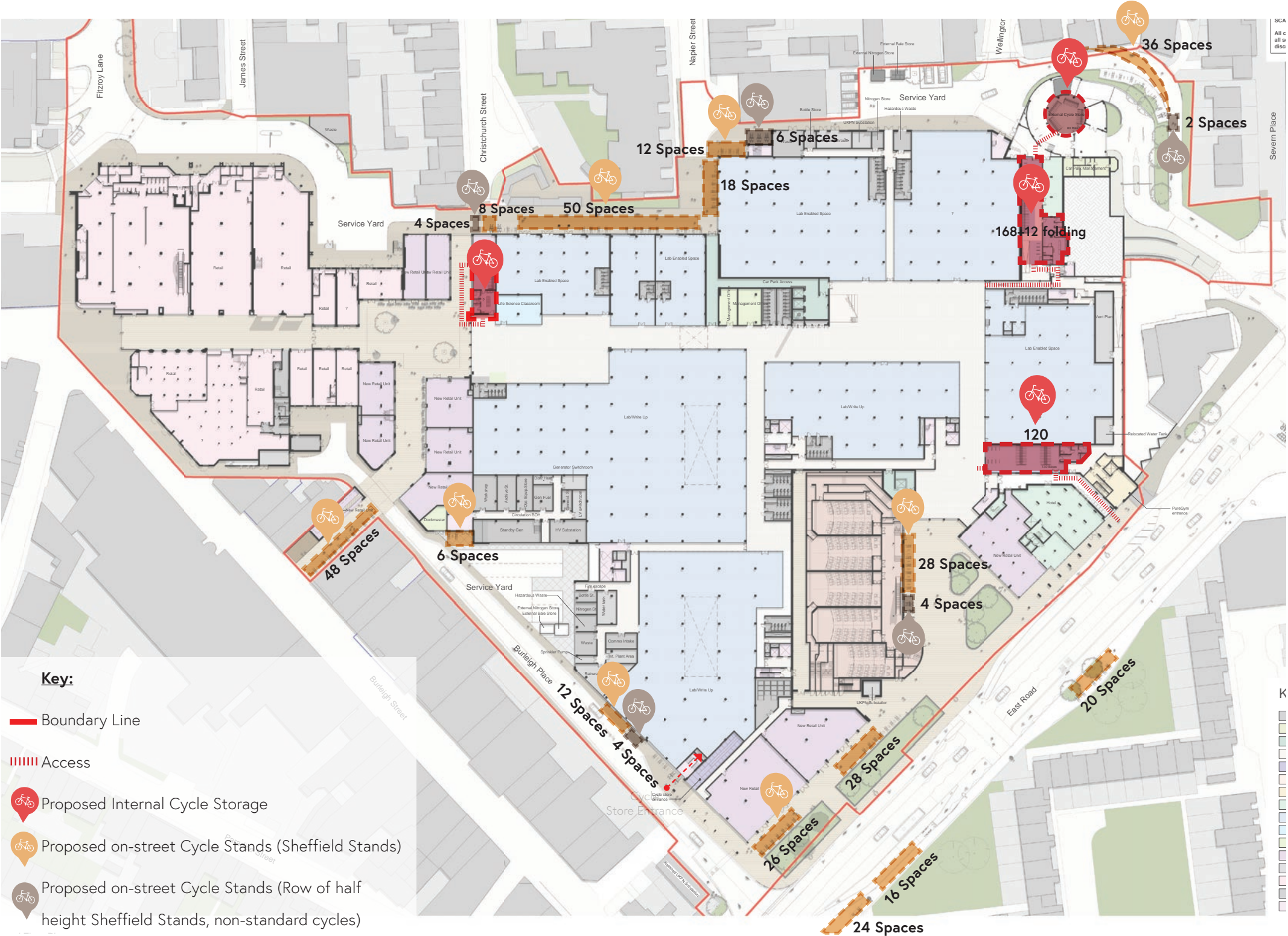
Internal Life Sciences provision = 820* plus 60 folding bike lockers

* Based on a life science occupancy of 2161 people, please refer to accompanying note that sets out the occupancy rationale.

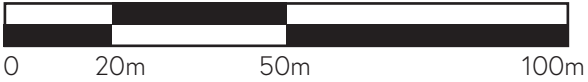
** Stainless Steel Sheffield Cycle Stand (as per LA preference)



Basement



Ground Floor

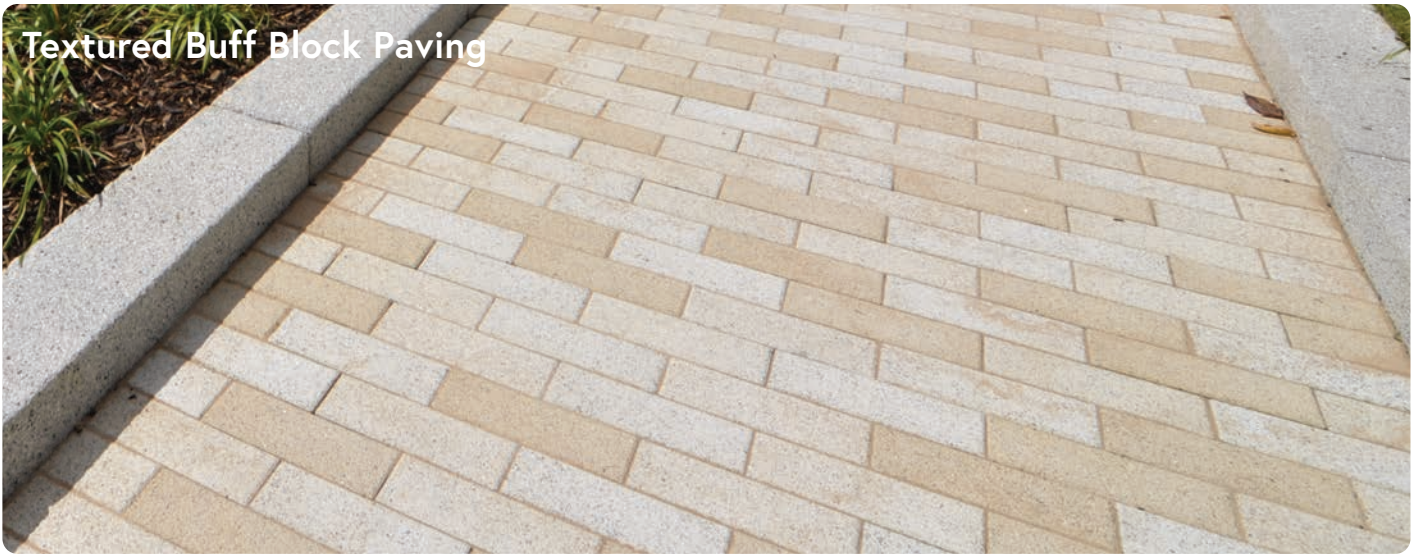


1.16 Landscape Ground and Roof Level Overview

- ① New pedestrian footway and street tree planting along Fitzroy Lane
- ② Improved northern connection, with enhanced surfaces and general decluttering and rationalisation of route
- ③ Linear garden created alongside historic wall
- ④ Rationalised parking court with tree planting and enhanced surface finish
- ⑤ Improved connection from Wellington Street, creating a planted, tree lined cycle and pedestrian route
- ⑥ S278 improvements along East Road
- ⑦ Generous public space created adjacent to the hotel, cinema and entrance to the life sciences with rain gardens and proposed trees that provide seasonal interest
- ⑧ Linear rain gardens created along East Road to provide green buffer and attenuate rainwater run off. Tree lined route created with retained and proposed tree planting
- ⑨ Enhanced surface to Burleigh Place with improved pedestrian crossings
- ⑩ New N/S connection through the Grafton Centre, connecting Christchurch Street to Burleigh Street and providing a new flexible public space
- ⑪ Extensive biodiversity roof with blue roof system and solar panels
- ⑫ Northern roof terrace providing a verdant, enclosed 'secret garden'
- ⑬ Western roof terrace with a green edge, flexible seating provision and canopy structure
- ⑭ Southern events terrace provides a large flexible space creating opportunities for larger events
- ⑮ Linear terrace providing planted edge offering users a green outlook from the adjacent work spaces
- ⑯ Eastern roof terrace providing a flexible hard space with seating provision and generous planted area



1.17 Landscape Strategies - Materials

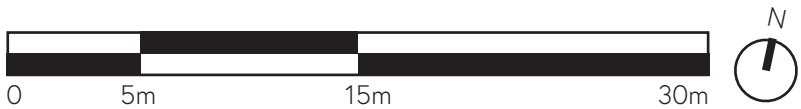


1.18 Fitzroy Lane Existing



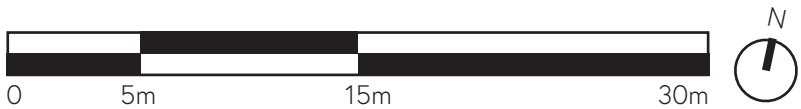
1.19 Fitzroy Lane Proposed

- ① Route opened up to create clear visual and physical connection down Christchurch Street and through to new N/S connection and public space
- ② Bin store and bridge retained
- ③ Linear garden planted with shade tolerant species alongside historic wall
- ④ New N/S pedestrian connection through Grafton Centre (C&W)
- ⑤ Building pulled back to provide improved arrival space and enhanced E/W connection
- ⑥ Turning head reduced in size to minimise pinch point. Area resurfaced and made flush with adjacent surface



1.20 Christchurch Lane Overview

- ① Route opened up to create clear visual and physical connection down Christchurch Street and through to new N/S connection and public space
- ② Bin store and bridge retained
- ③ Linear garden planted with shade tolerant species alongside historic wall
- ④ New N/S pedestrian connection through Grafton Centre (C&W)
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- ⑥ Turning head reduced in size to minimise pinch point. Area resurfaced and made flush with adjacent surface



1.21 Christchurch Lane Existing





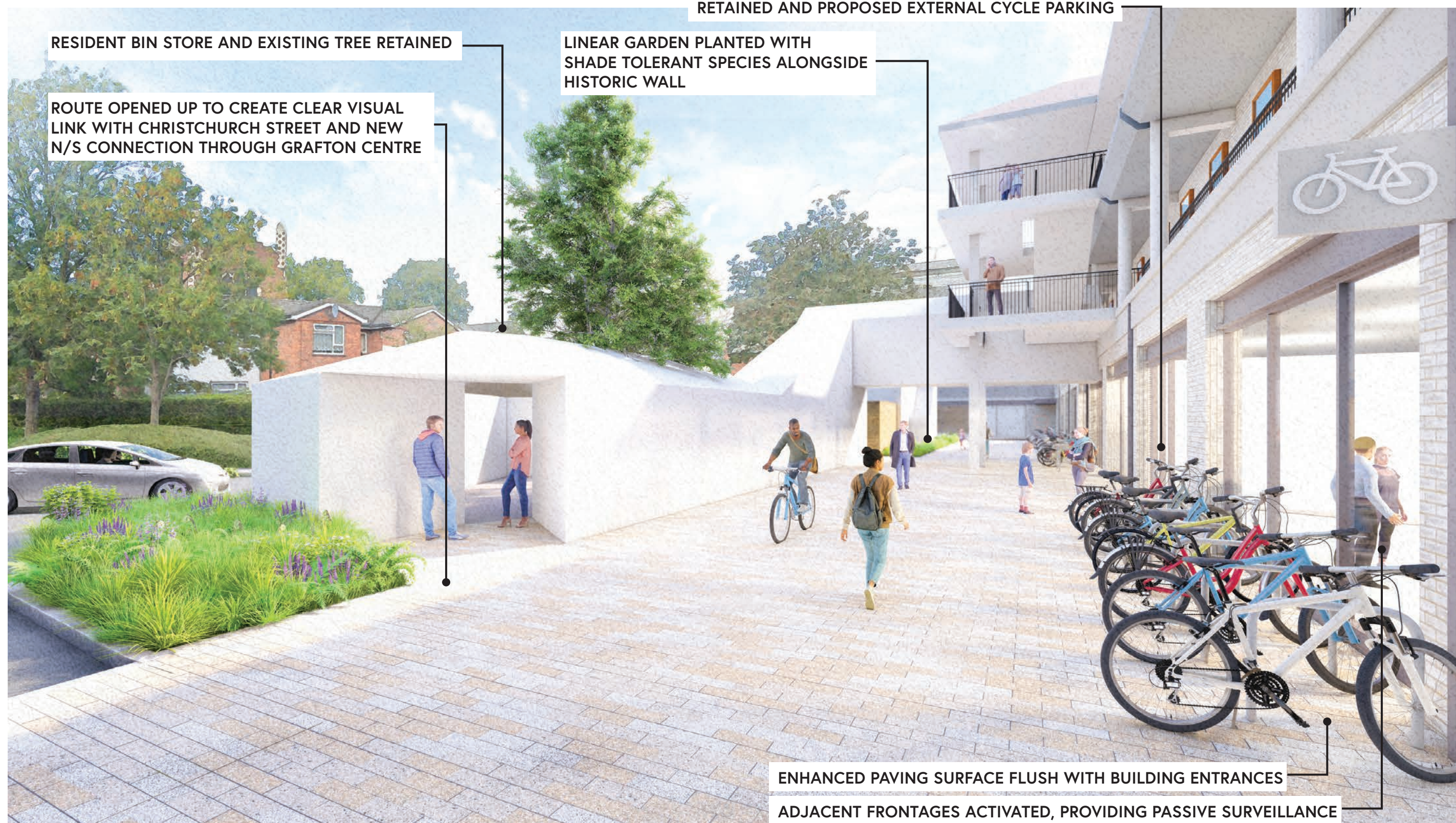
1.22 Christchurch Lane Proposed

RETAINED AND PROPOSED EXTERNAL CYCLE PARKING

RESIDENT BIN STORE AND EXISTING TREE RETAINED

ROUTE OPENED UP TO CREATE CLEAR VISUAL LINK WITH CHRISTCHURCH STREET AND NEW N/S CONNECTION THROUGH GRAFTON CENTRE

LINEAR GARDEN PLANTED WITH SHADE TOLERANT SPECIES ALONGSIDE HISTORIC WALL

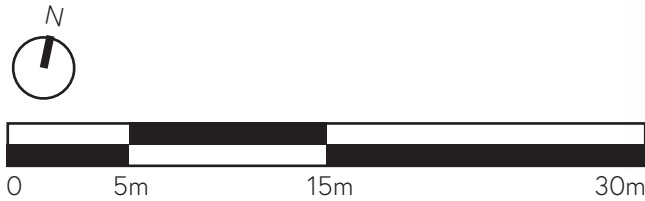


ENHANCED PAVING SURFACE FLUSH WITH BUILDING ENTRANCES

ADJACENT FRONTAGES ACTIVATED, PROVIDING PASSIVE SURVEILLANCE

1.23 Wellington Street Overview

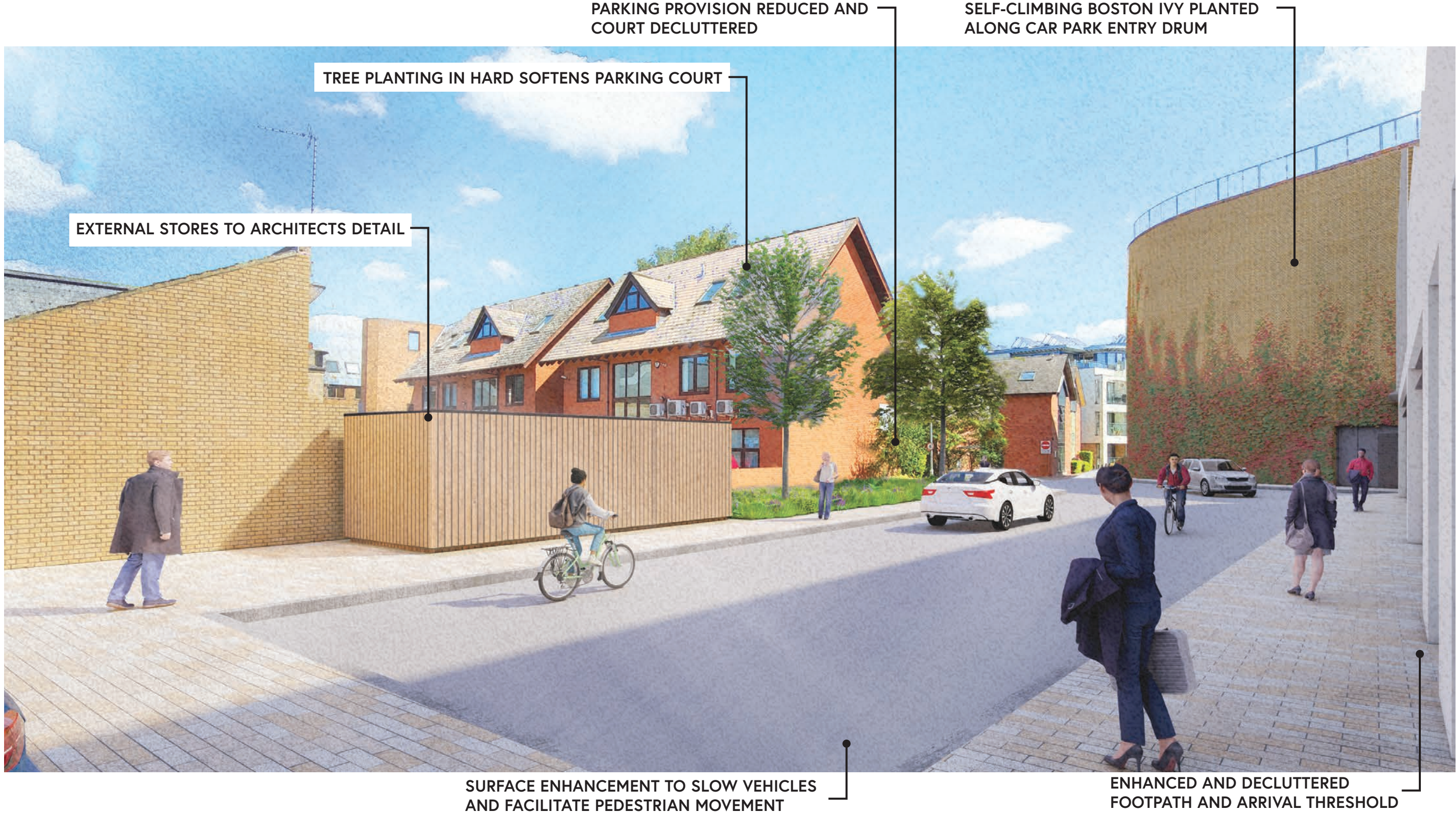
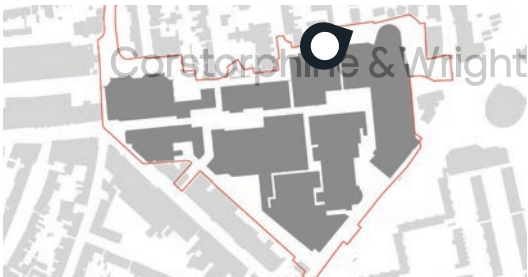
- ① Tree and ground cover planting replacing car parking bays
- ② Enhanced paving surface for footpaths connecting to Wellington Street and Cobble Yard
- ③ Self-clinging Boston ivy provides green facade to the multi-storey car park ramp
- ④ Buff surface overlay and bollards provide safer, pedestrian orientated cycle and walking route
- ⑤ Existing car parking replaced with tree and ground cover planting and cycle parking



1.24 Wellington Street Existing



1.25 Wellington Street Proposed



1.26 East Road Overview

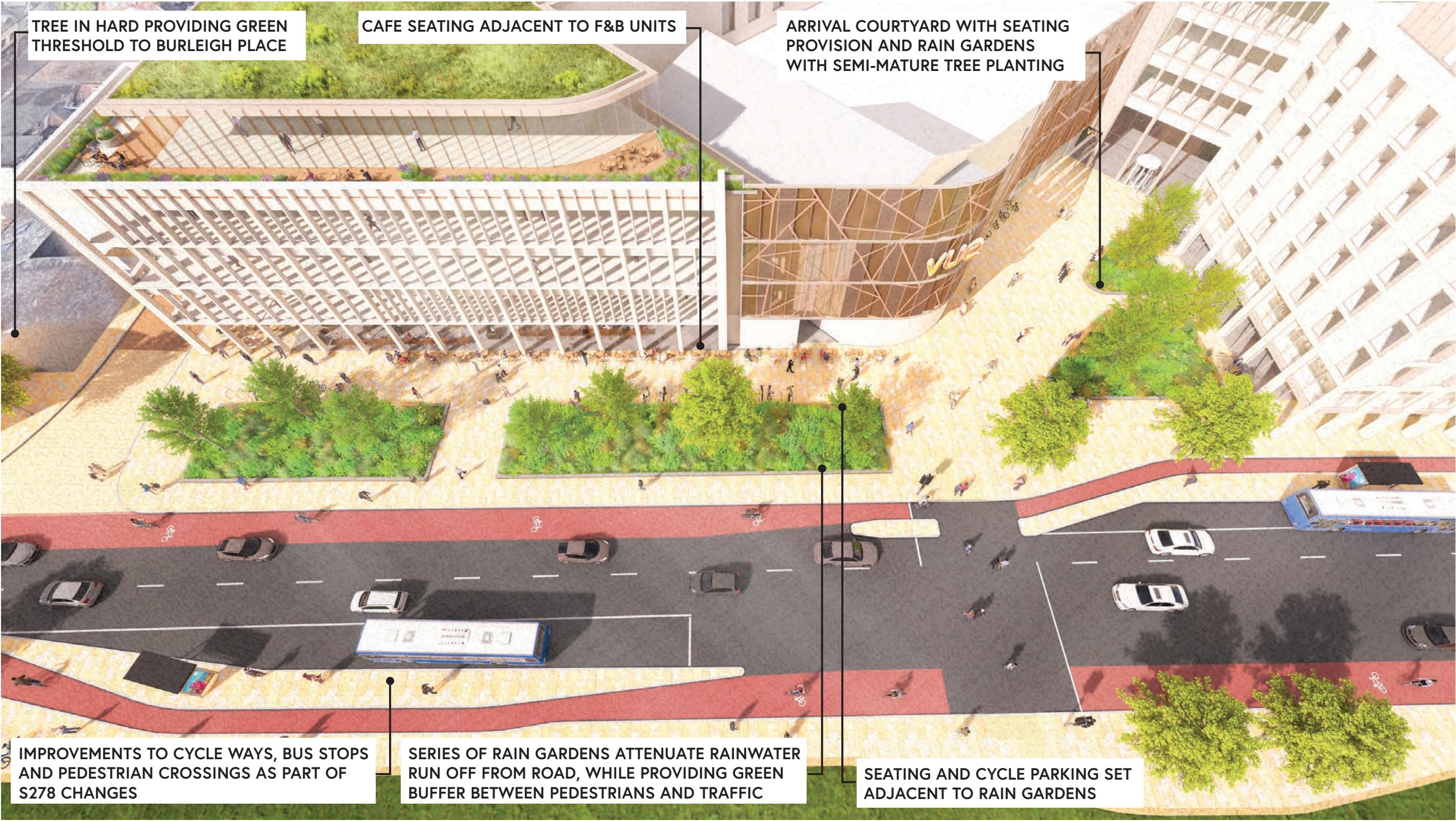
- ① Arrival courtyard with seating provision adjacent to rain gardens and tree planting
- ② Series of rain gardens attenuate rainwater run off from road, while providing green buffer between pedestrians and traffic
- ③ Areas of seating and cycle parking set adjacent to rain garden planters
- ④ Improvements to cycle ways, bus stops and pedestrian crossings as part of S278 changes
- ⑤ Trees in hard constructed tree pit provide green threshold to Burleigh Place
- ⑥ Cafe seating adjacent to F&B units



1.27 East Road Existing



1.28 East Road Overview



1.29 East Road View 01



1.30 East Road View 03

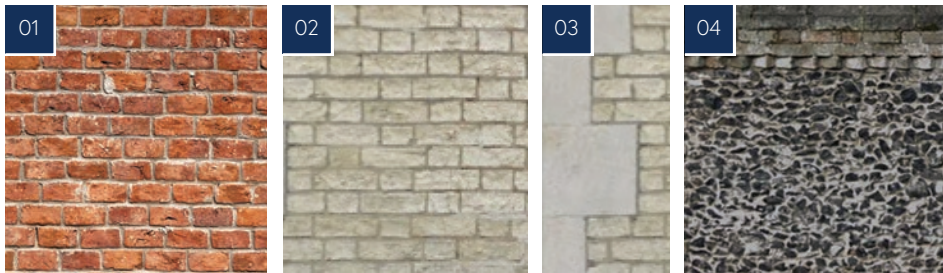


1.31 East Road View 04



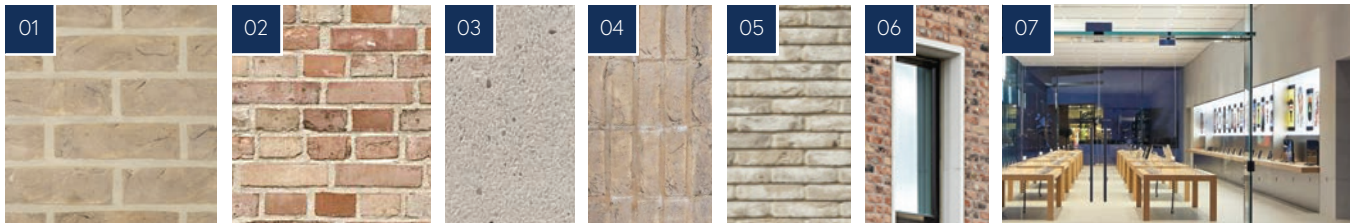
1.32 Material Palette Overview

CONTEXTUAL MATERIALITY



- 1. Red Brick - Christchurch St
- 2. Buff Brick - Eden Chapel, Fitzroy St
- 3. Stone Quoins - Eden Chapel, Fitzroy St
- 4. Knapped Flint Wall - Christchurch St

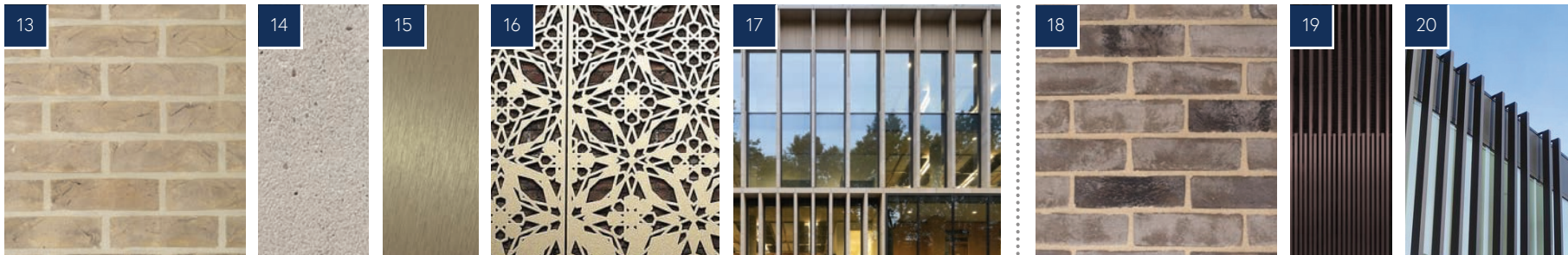
RETAIL QUARTER



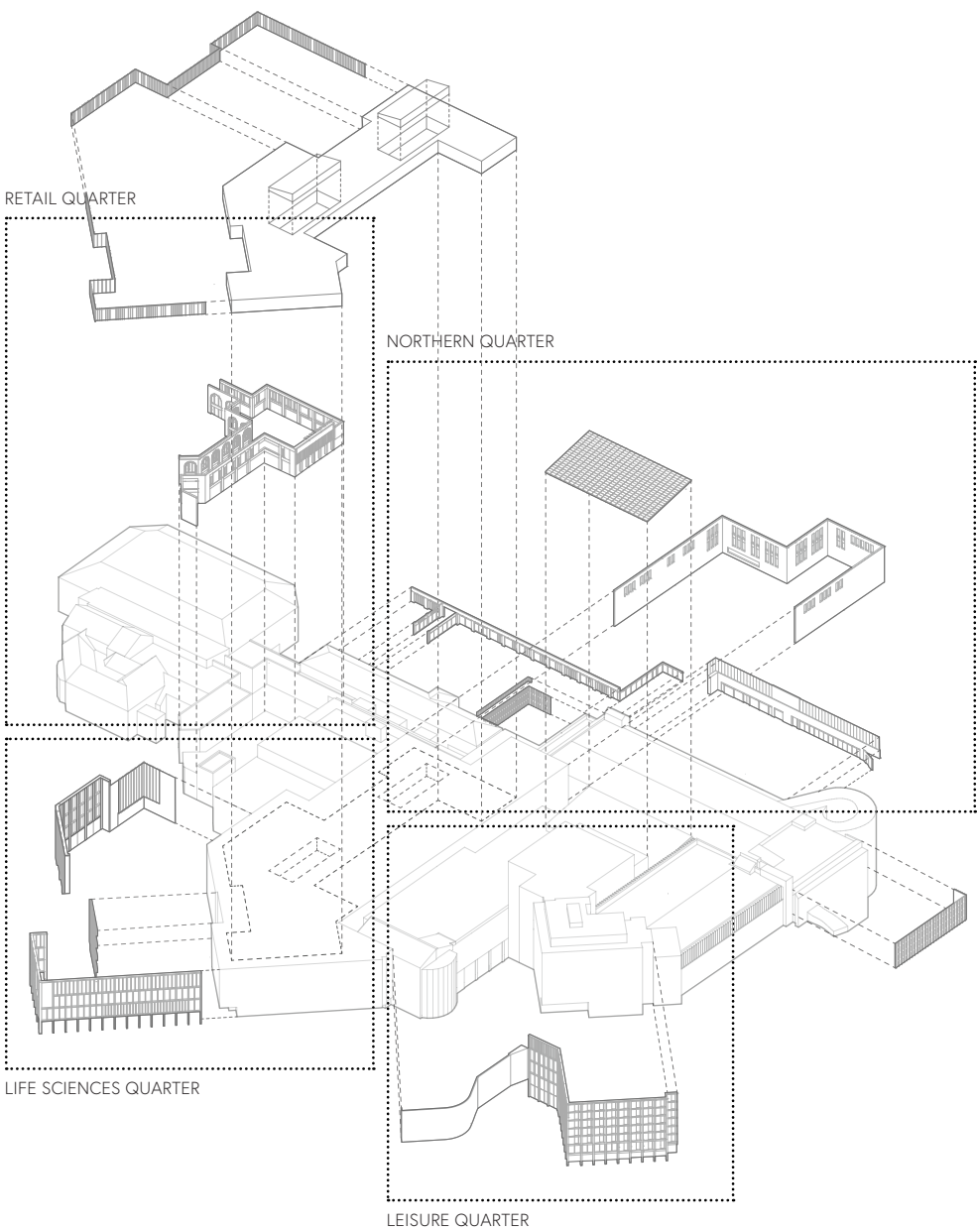
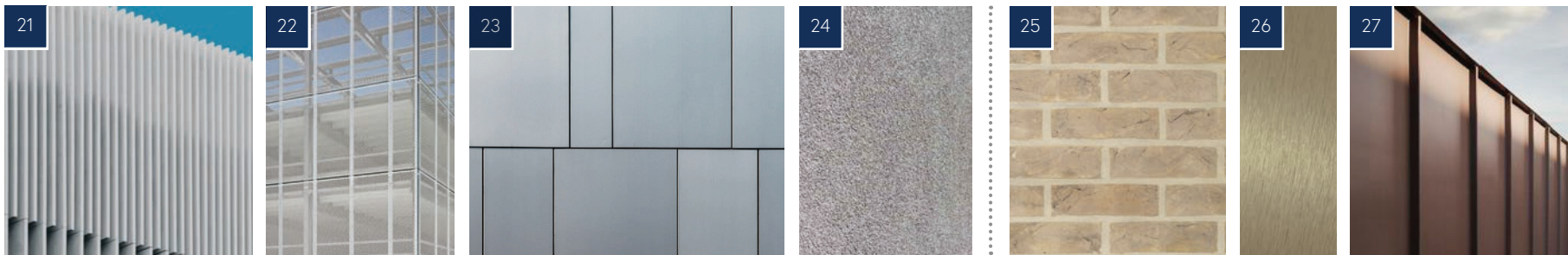
LIFE SCIENCE



LIFE SCIENCE QUARTER



LEISURE QUARTER



- | | | |
|------------------------------------|------------------------------------|-------------------------------------|
| 1. Buff Brick | 10. Perforated Aluminium Panels | 19. Dark Bronze Pant Screen |
| 2. Buff/Red Multi Brick | 11. Buff Brick | 20. Bronze Colour Shading Fins |
| 3. Cast Stone | 12. Glazed Business Unit Frontages | 21. Silver colour Aluminium Fins |
| 4. Soldier Course Detailing | 13. Buff Brick | 22. Aluminium Mesh |
| 5. Raked Mortar Joint Detail | 14. Cast Stone | 23. Silver Aluminium Cladding Panel |
| 6. Cast Stone Window Surround | 15. Bronze Colour Metalwork | 24. Grey Silicone Render |
| 7. Structurally Glazed Shopfronts | 16. Perforated Aluminium Panels | 25. Buff Brick |
| 8. Bronze Aluminium Screening Fins | 17. Cast Stone Fins | 26. Bronze Colour Metalwork |
| 9. Dark Bronze Pant Screen | 18. Grey/Brown Brick | 27. Bronze Colour Standing Seam |

1.33 Retail Quarter - Fitzroy Square



134 Retail Quarter - Gold Lane



1.35 Leisure Quarter - East Road Existing



1.36 Leisure Quarter - East Road Proposed



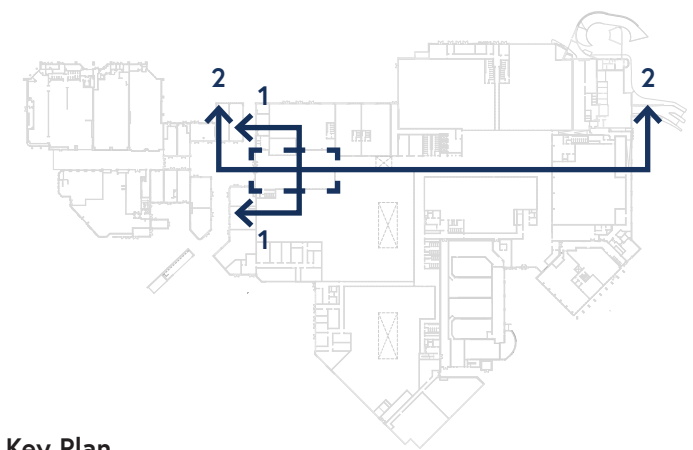
1.37 Life Science Quarter - East Road Proposed



1.38 Life Science - Community Space



Classroom



Key Plan



Section 1



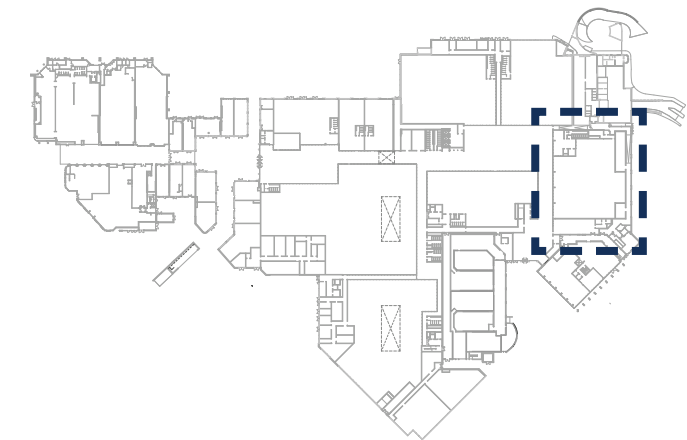
Section 2

1.39 Life Science - Incubator and Starter Laboratory Space

A fully fitted out Cat B laboratory incubator and starter laboratory space will be provided at Ground Floor Level to the east with a functional, fully fitted out Cat B "Grow-on" Unit provided at First Floor Level. This will include individual starter laboratory enabled space and associated but separate write up space assuming an average 60/40 split.

Ground Floor Area of Incubator is circa 1,215 sqm.

First Floor Area of Grow-On scape is circa 1,592 sqm.



Ground Floor



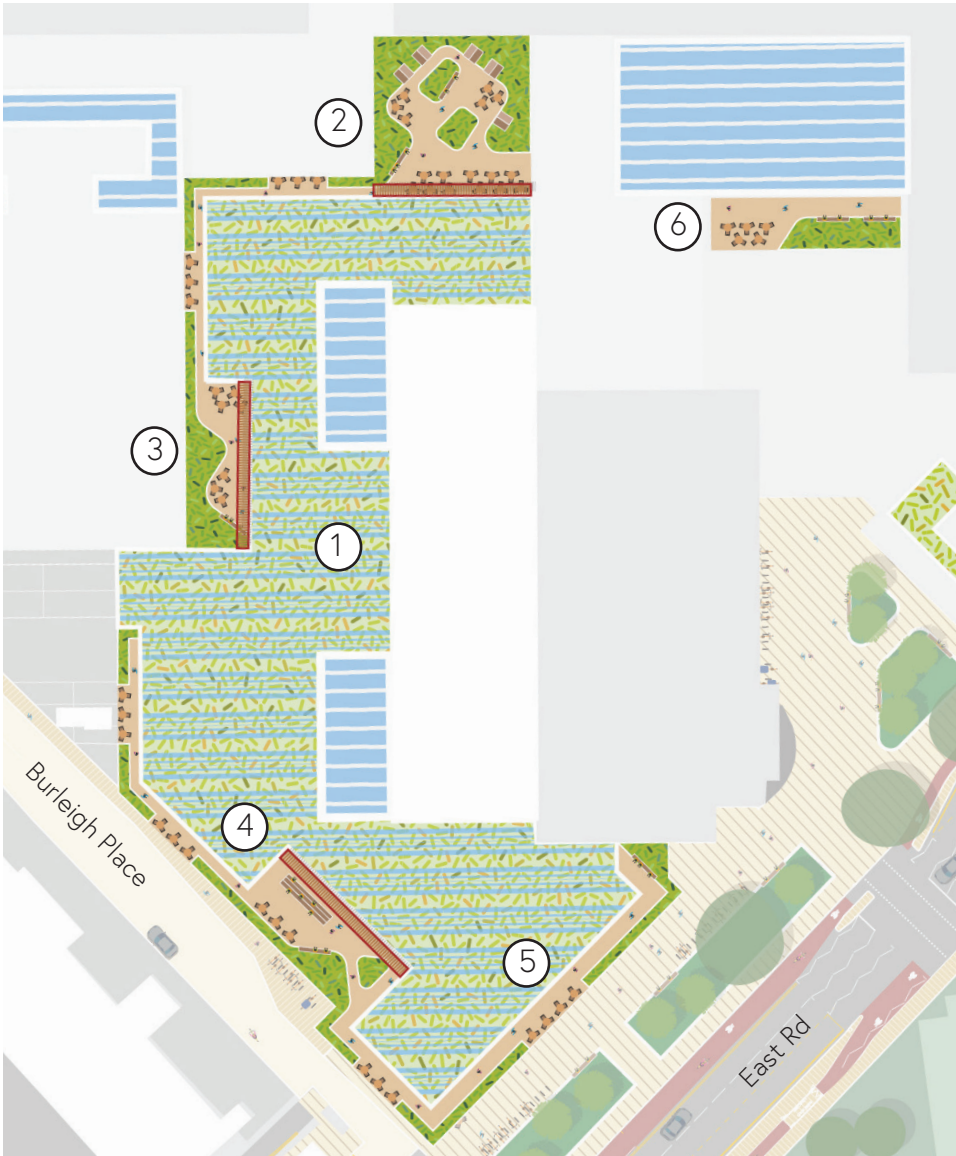
First Floor



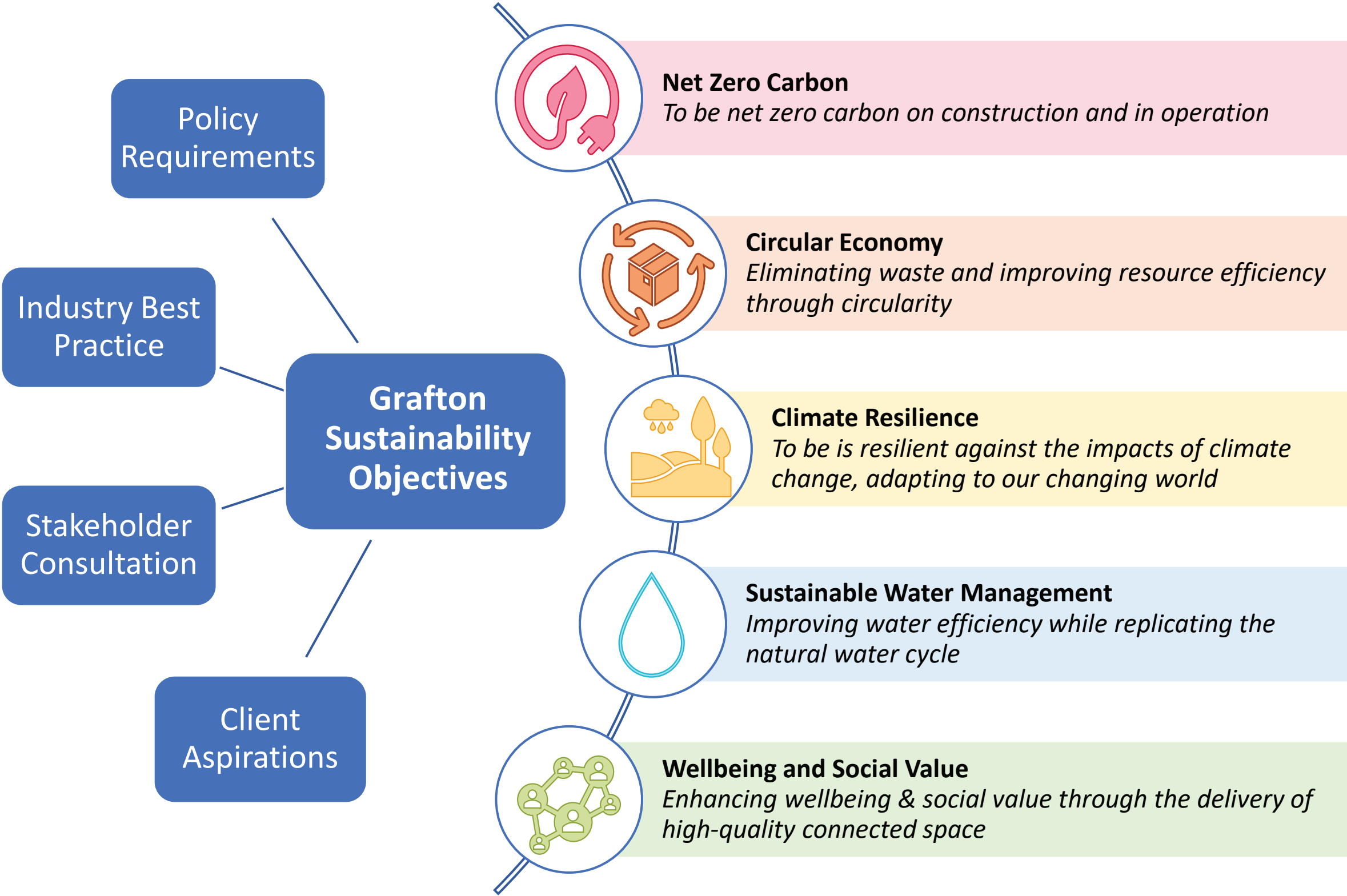
0 10m 25m 50m

1.40 Life Science - Rooftop Amenity Spaces

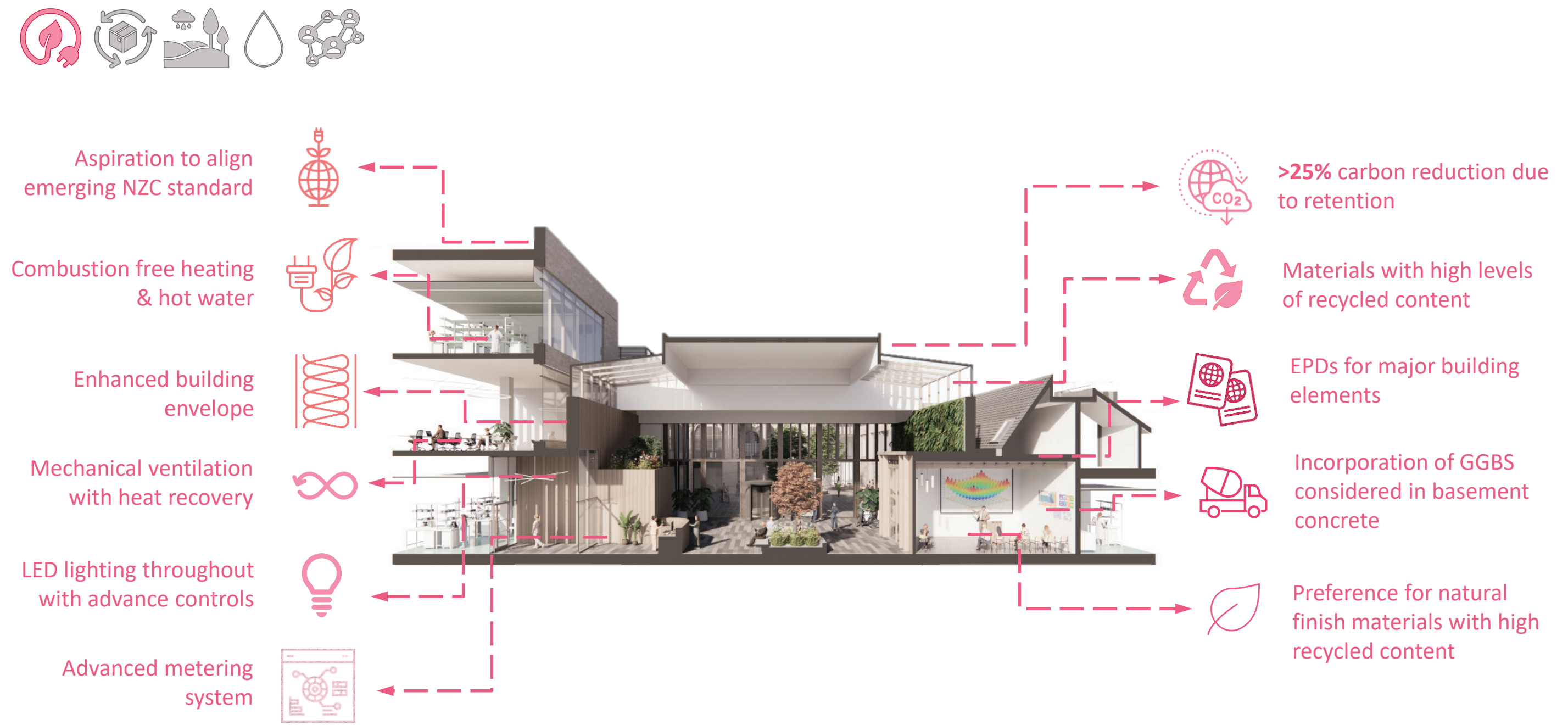
- ① Extensive biodiversity roof with blue roof system and solar panels.
- ② Northern roof terrace providing a verdant, enclosed 'secret garden'.
- ③ Western roof terrace with a green edge, flexible seating provision and canopy structure.
- ④ Southern events terrace provides a large flexible space creating opportunities for larger events.
- ⑤ Linear terrace providing planted edge offering users a green outlook from the adjacent work spaces.
- ⑥ Eastern roof terrace providing a flexible hard space with seating provision, as well as a generous planted area adjacent to the mechanical plant.



1.41 Sustainability Framework



1.42 Net Zero Carbon



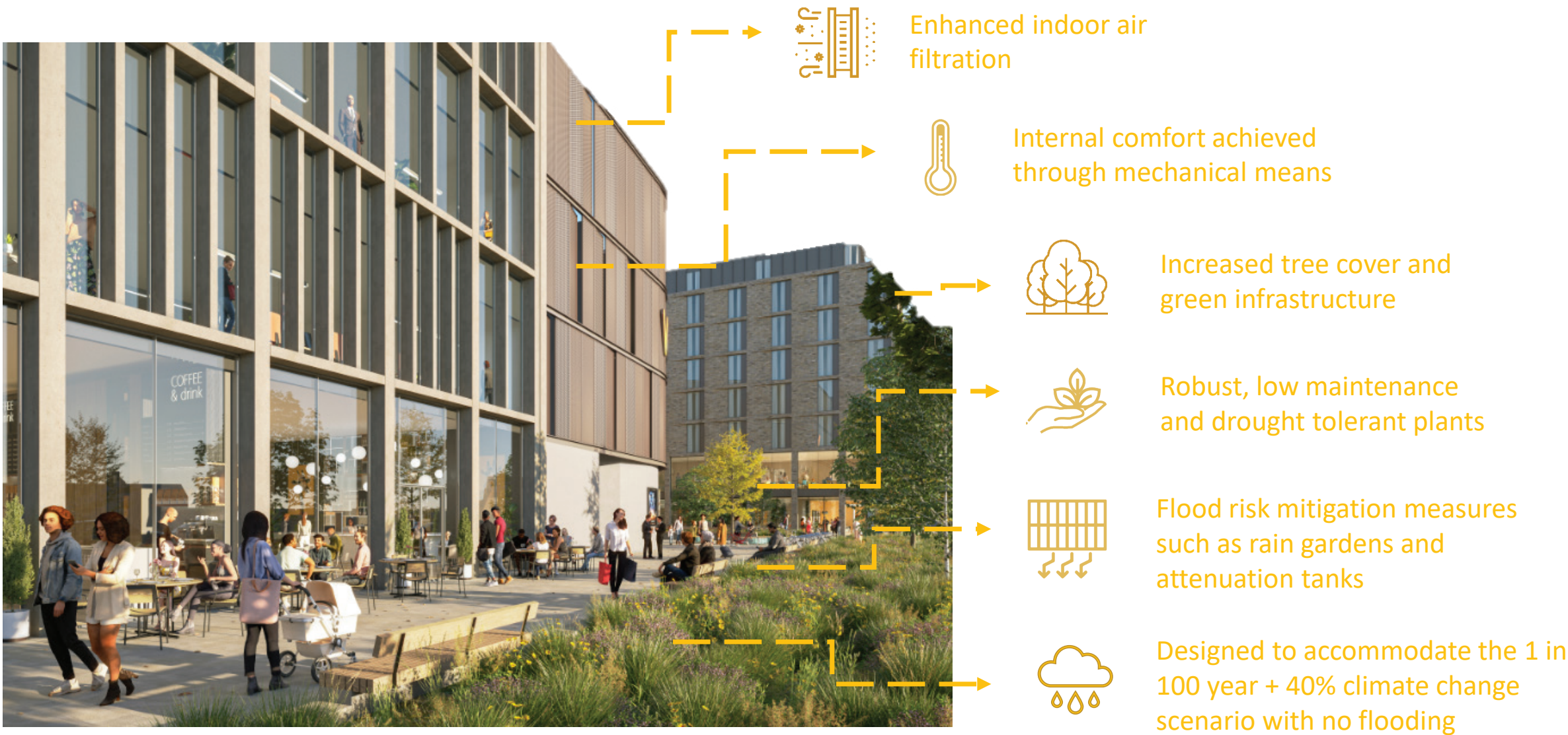
KPIs	Unit	Policy requirements	Aspiration
Upfront embodied carbon (A1-A5)	kgCO ₂ /m ² [GIA]	Report	650
Whole Building Energy Use Intensity	kWh/m ² [GIA]	150 - Life sciences 55 - Hotel	150-250 – Life sciences* 55- Hotel*
Combustion free heating and hot water	Zero	No mains gas	No mains gas
Space heating demand	kWh/m ² [GIA]	15-20	20
Renewable energy provision	Solar PV Panel Area	Encouraged	Maximise

1.43 Circular Economy



KPIs	Unit	Policy requirements	Aspiration
% materials from re-used sources	%	Circular Economy Statement	10%
% of new materials can be re-used at end of life	%	Circular Economy Statement	30%






1.44 Climate Resilience



KPIs	Unit	Policy requirements	Aspiration
% of climate risks reduced to low or moderate risk	%	Reduce climate risks	90%
Thermal comfort - summertime	% Time Out Range	Follow cooling hierarchy, with modelling using future climate scenarios	3%

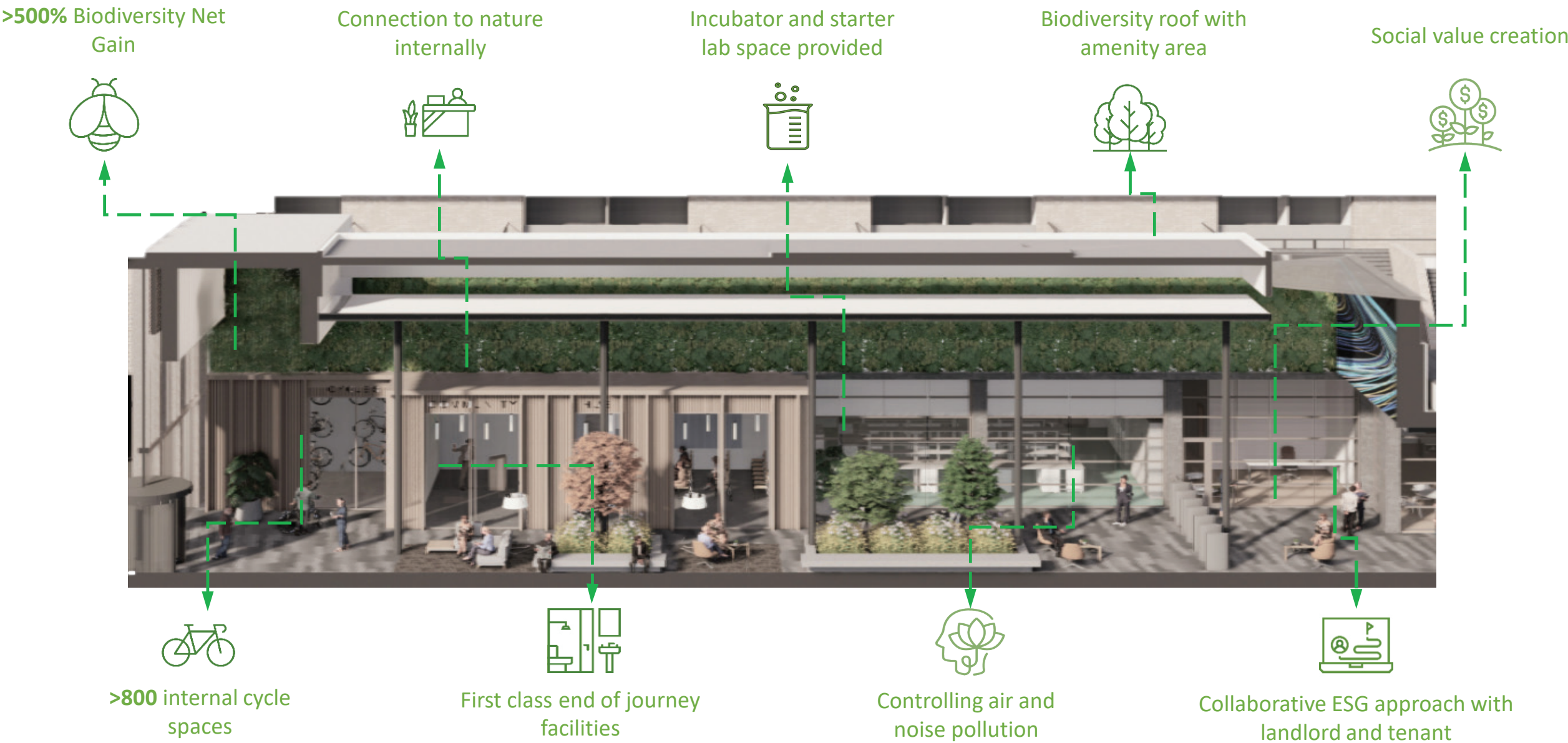
1.45 Sustainable Water Management



-  Achieving all 5 BREEAM Wat01 credits
-  Rainwater recycling providing at least 50% of WC flushing,
-  Rainwater used for irrigation
-  Blue roof
-  Sustainable Urban Drainage Systems

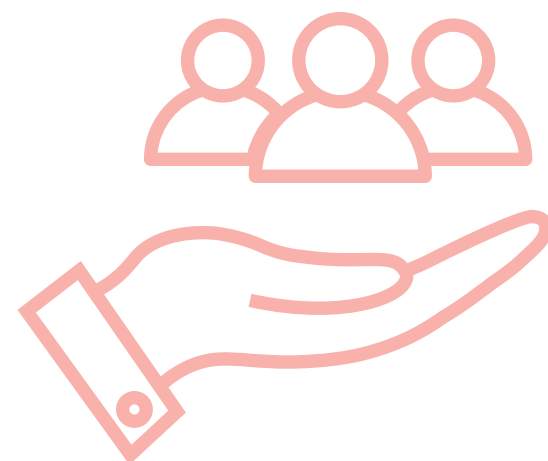
KPIs	Unit	Policy requirements	Aspiration
Water efficiency	BREEAM Wat 01 credits	5	5
Peak runoff rate	l/s/ha	No worse than existing	No worse than existing

1.46 Wellbeing and Social Value



KPIs	Unit	Policy requirements	Aspiration
Cycle parking	tbc	tbc	tbc
Biodiversity Net Gain (BNG)	%	20%	>20%
Social Value	No. of contractor initiatives	Provide narrative	>10 (tbc)

1.47 Outcomes

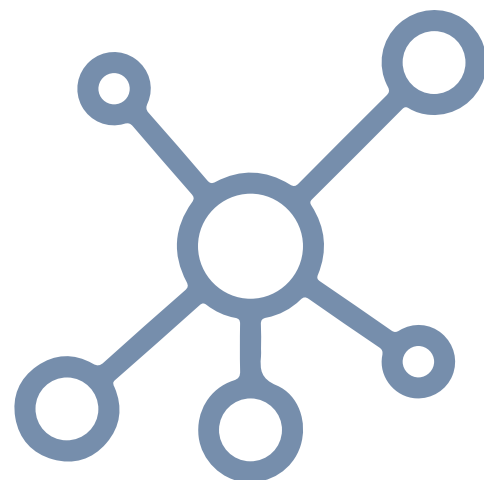


COMMUNITY

The development will foster a sense of **community**; delivering wellbeing for existing and future members of the community through positive interaction

BENEFITS

- A long-term local economic offer**
Jobs for all levels from school leavers to PHD's
- 2,161 future members** expected to be working there - feeding the local economy too
- Strengthened and flexible** local retail
- Increased footfall** and spend
- Community space** focussing on STEM and local young people

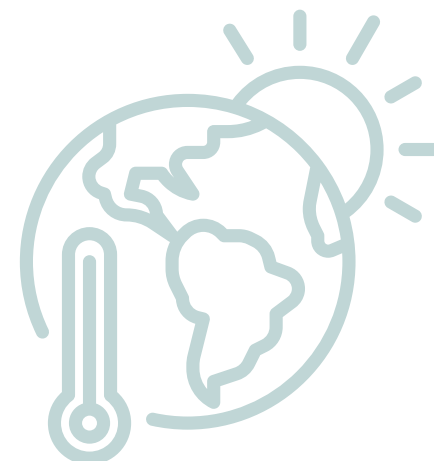


CONNECTIVITY

Located in a highly sustainable location where people can benefit from high **connectivity** to jobs and services - where infrastructure is upgraded to match the pace of development

BENEFITS

- Reconnecting** a historic north-south route
- Investment in **inclusive** public realm
- Promotion of **non-car transport**
- East Road **enhancement**

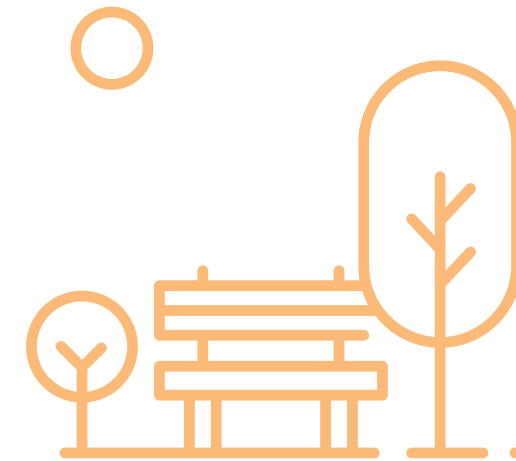


CLIMATE

Retaining **embodied carbon** and delivering a high-quality **sustainable development** with imaginative landscaping and innovative approaches to transport, energy and waste

BENEFITS

- Previously developed city centre location
- Exceeding policy in **addressing climate emergency**
- All electric new build, reduced water consumption
- Dramatic **improvement in biodiversity and greening**



CHARACTER

Responding to **local character** and facilitating greater architectural quality which allows the public to see into the building whilsy recognising and prioritising the public realm.

BENEFITS

- Activation** of building frontages
- Family of architecture bringing walls, roofs, and streets to life
- Safety and security** of surrounding streets
- Tree planting **increasing canopy cover**

Corstorphine & Wright

Contact us to discuss your project

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