

The Grafton Centre Members Briefing

Pioneer

Macgregor Smith



Corstorphine & Wright

Pioneer

Specialist Life Sciences Infrastructure & Venture Building Company

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

7age z

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

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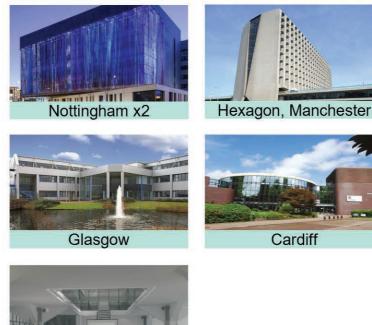
1.3 **UK National Coverage**

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







Cardiff

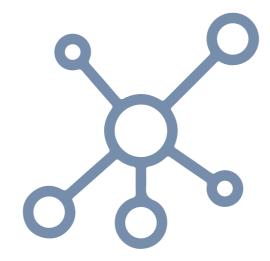


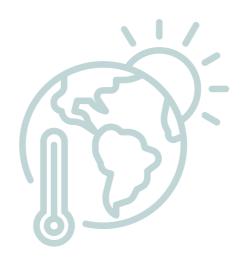
^{*} Subject to conversion ** Incubator only



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Victoria House







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

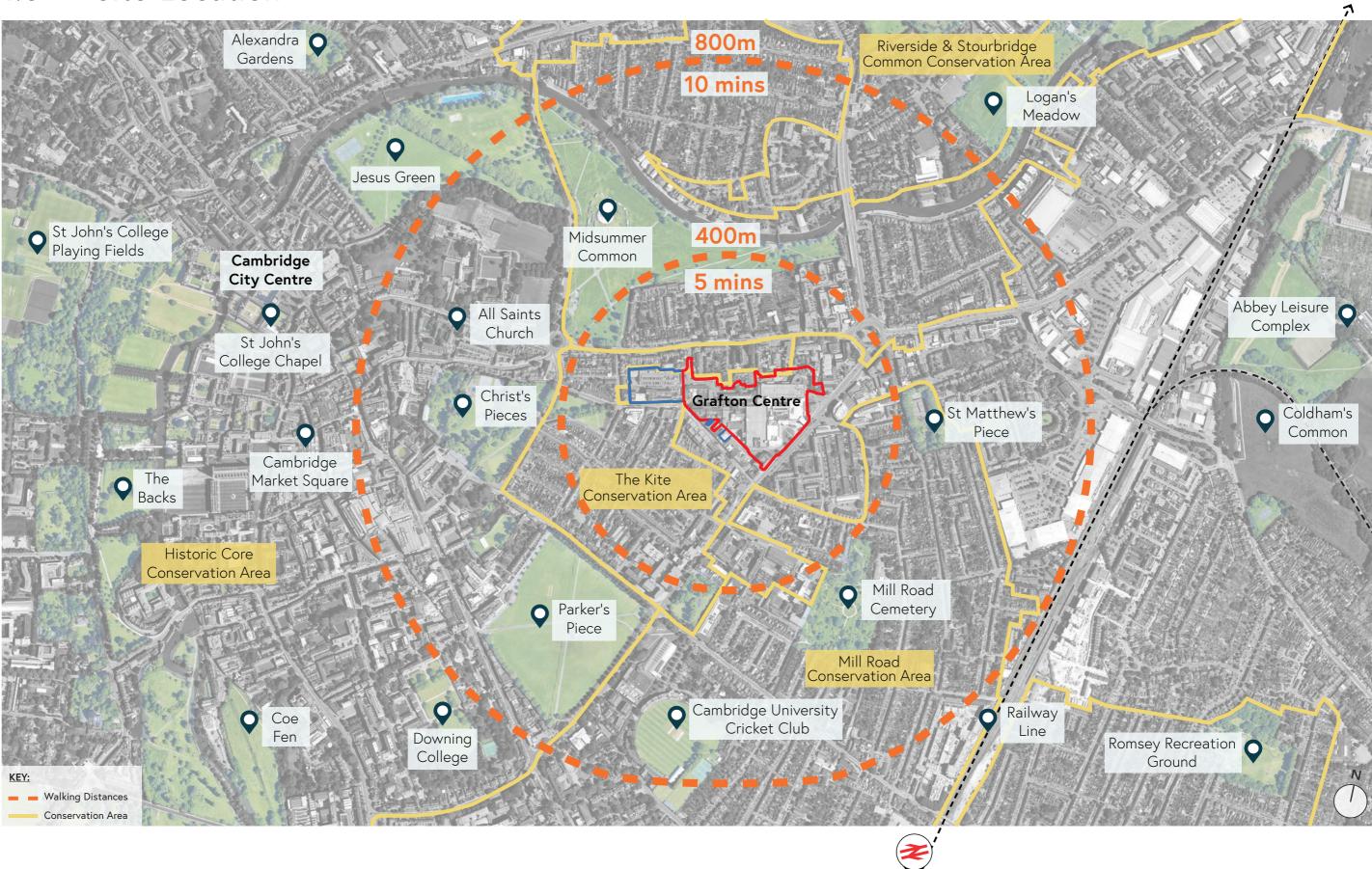
Retaining embodied carbon and delivering a high-quality sustainable development with imaginative landscaping and innovative approaches to transport, energy and waste

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.

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1.5 Site Location



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1.6 Retail Impact Assessment



1.7 The Existing Grafton Centre



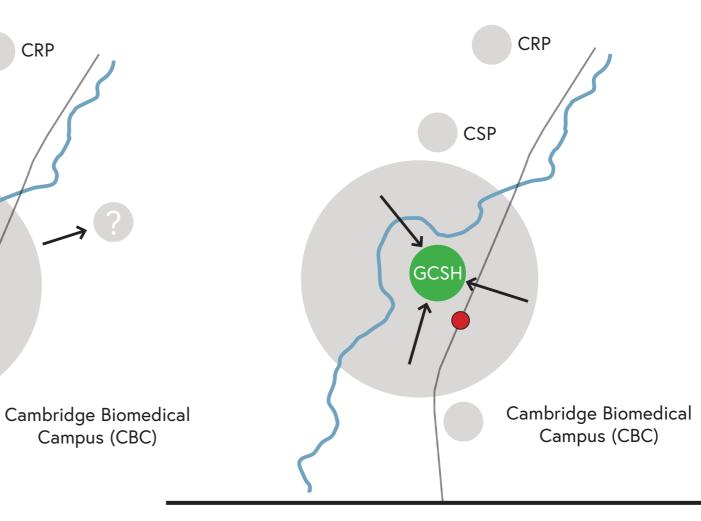
1.8 Enhancing Permeability and Public Realm



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?

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





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

(Reference : Bidwells Arc Market Data Book Jan 2023)

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.

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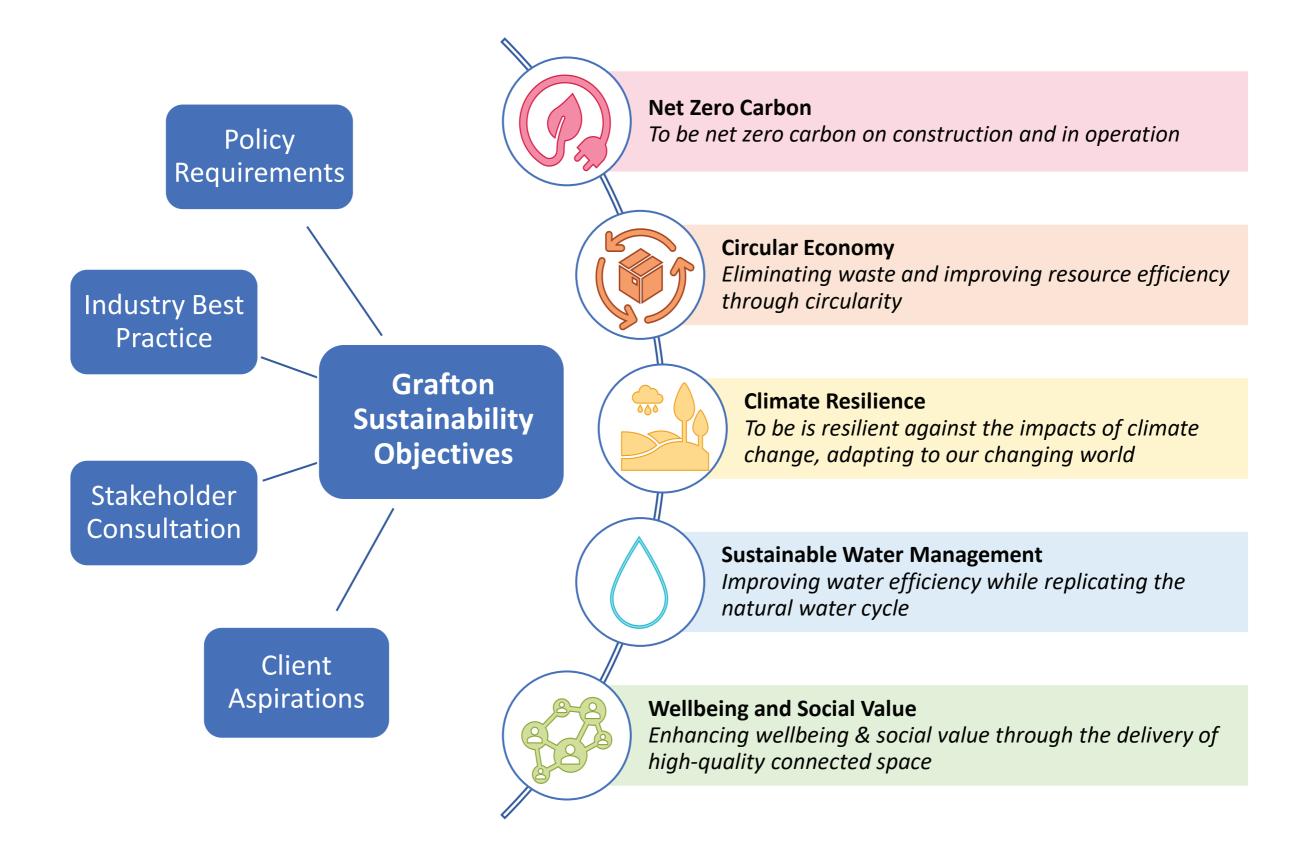
Campus (CBC)

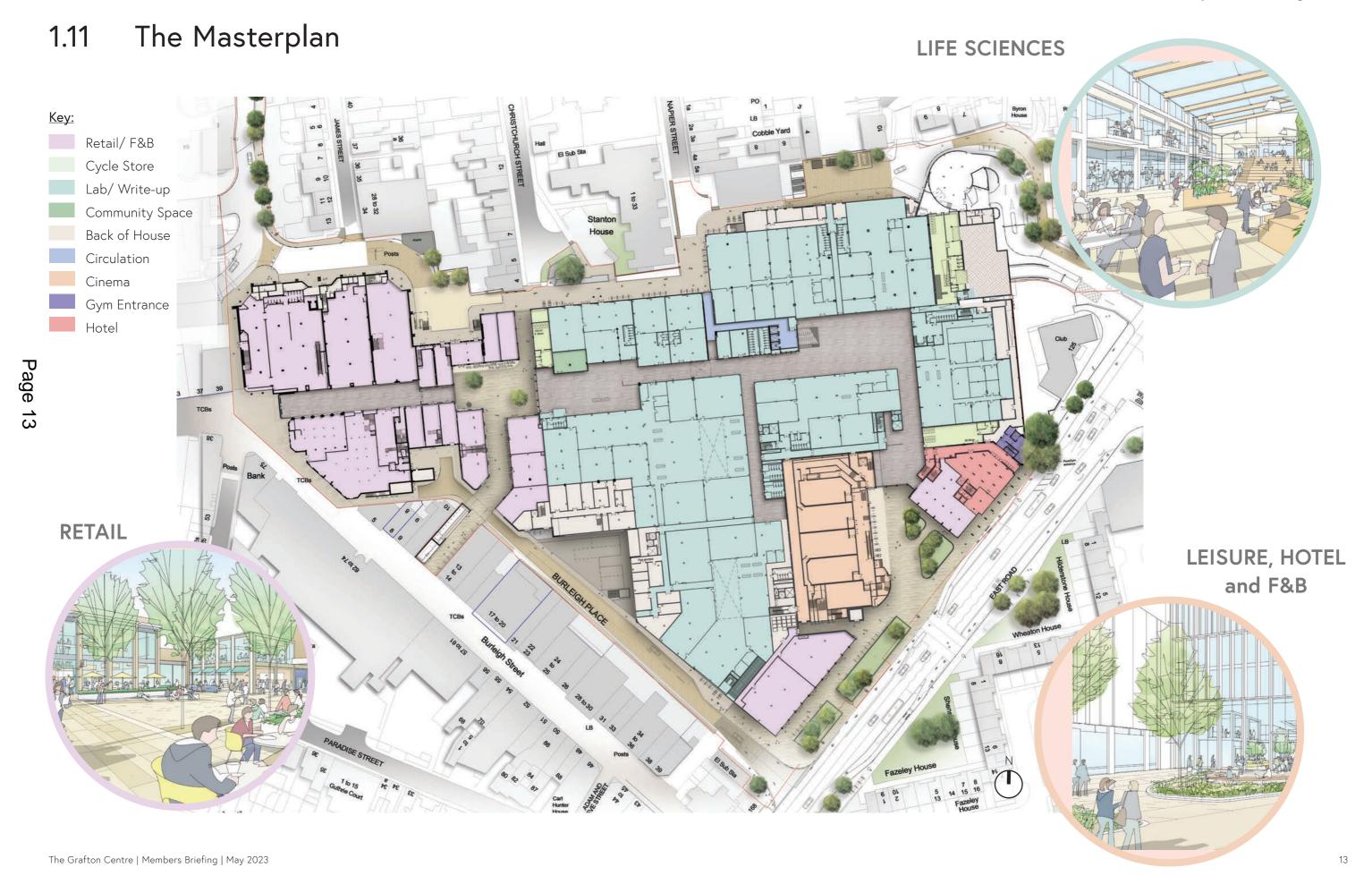
CRP

CSP

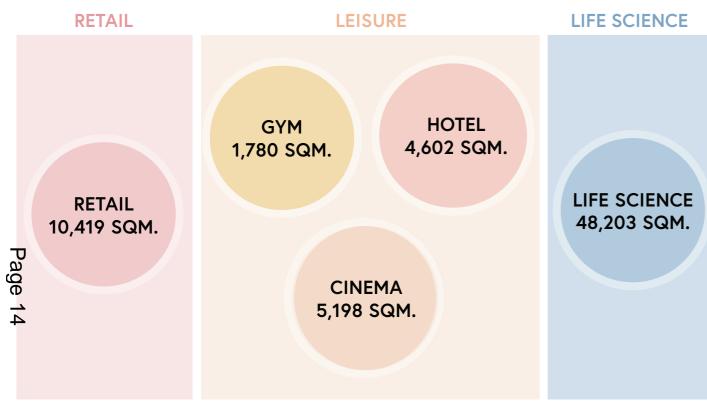
Cambridge

1.10 Sustainability Framework



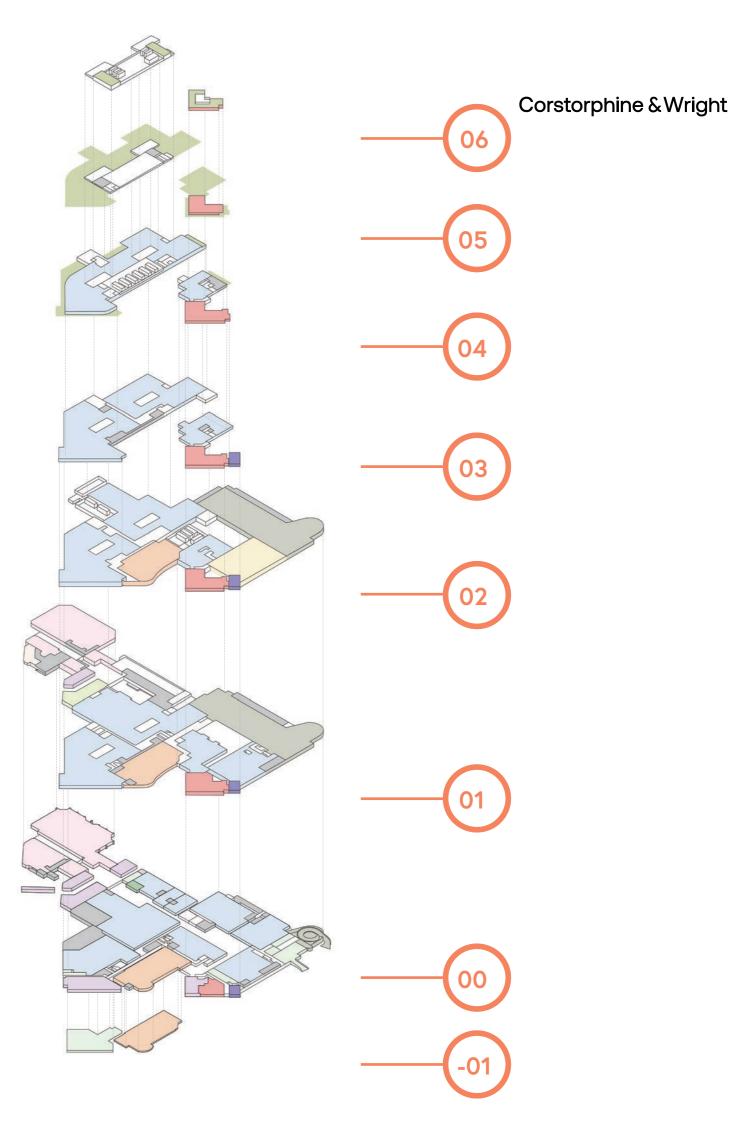


1.12 Use and Amount Overview

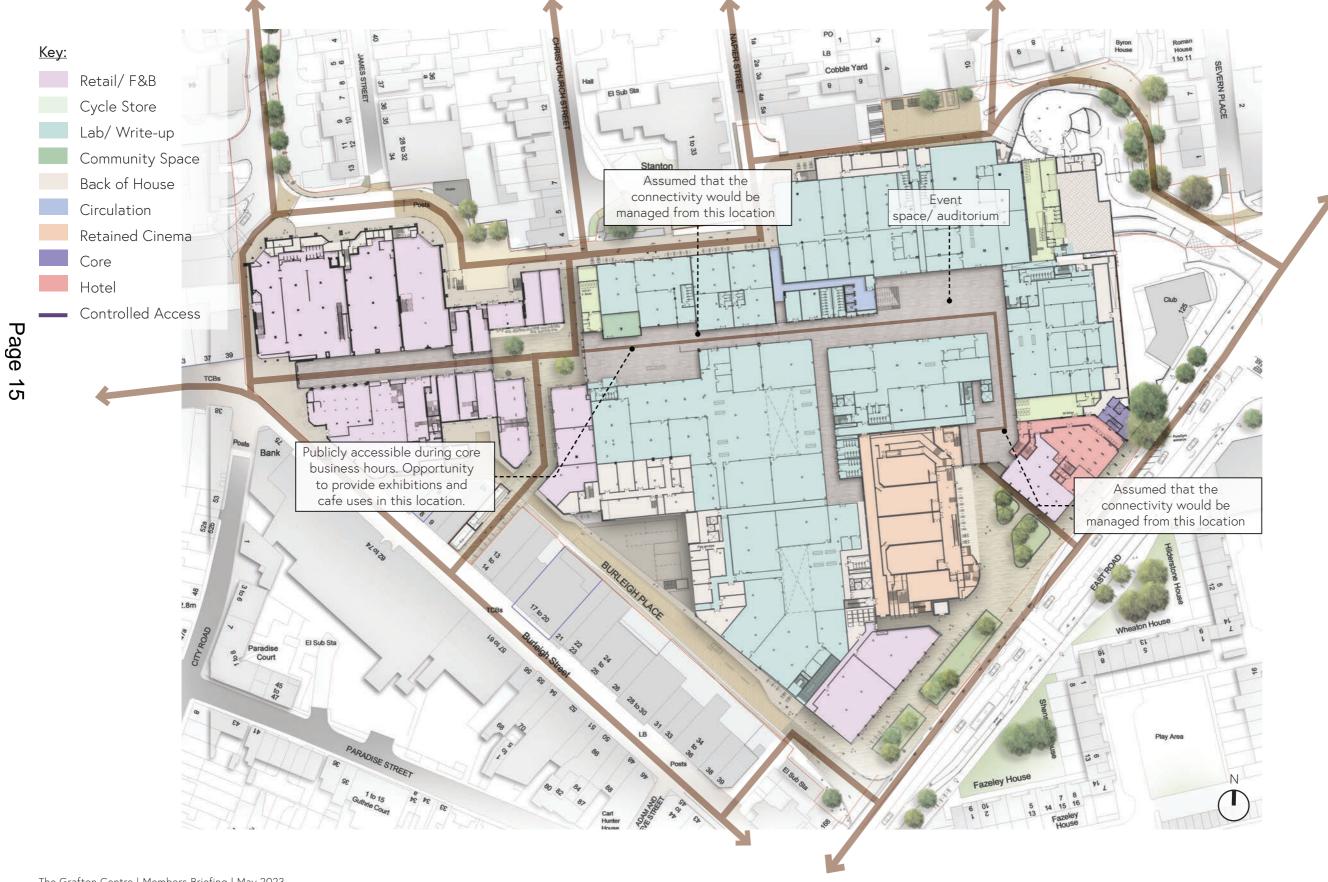


*New floor space over and above existing and consented is 10,000 sqm. Consented Hotel Abbeygate House





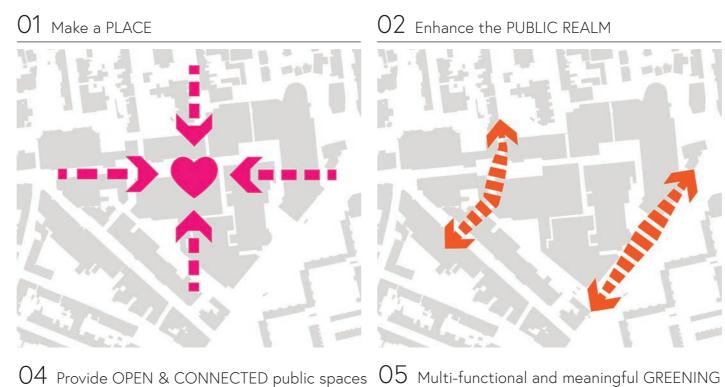
1.13 Proposed Permeability

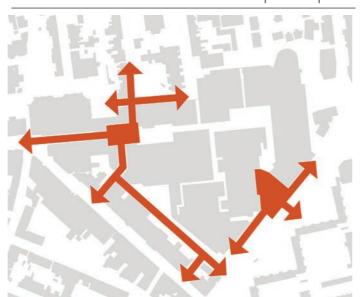


1.14 Landscape Design Principles

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 multifunctional 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.















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.

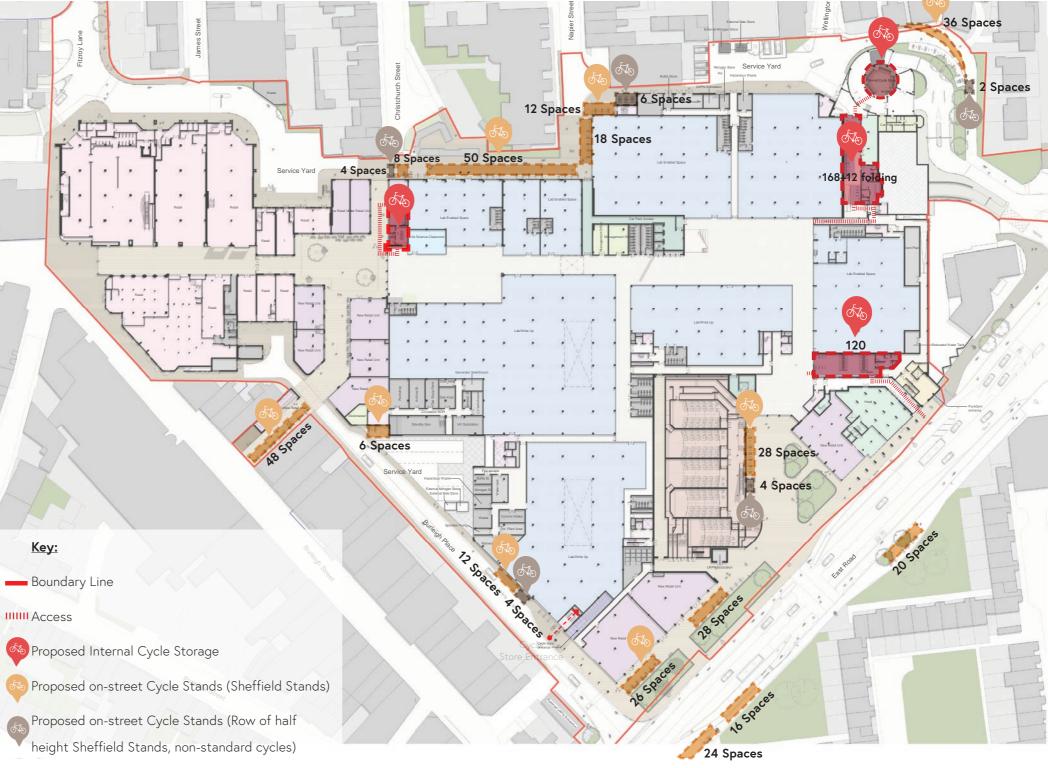
A tapping rail will be fitted to the first and last stand for rows of cycle parking to minimise potential hazards for partially sighted pedestrians.

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)





Ground Floor

Corstorphine & Wright

1.16 Landscape Ground and Roof Level Overview

- 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
- 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

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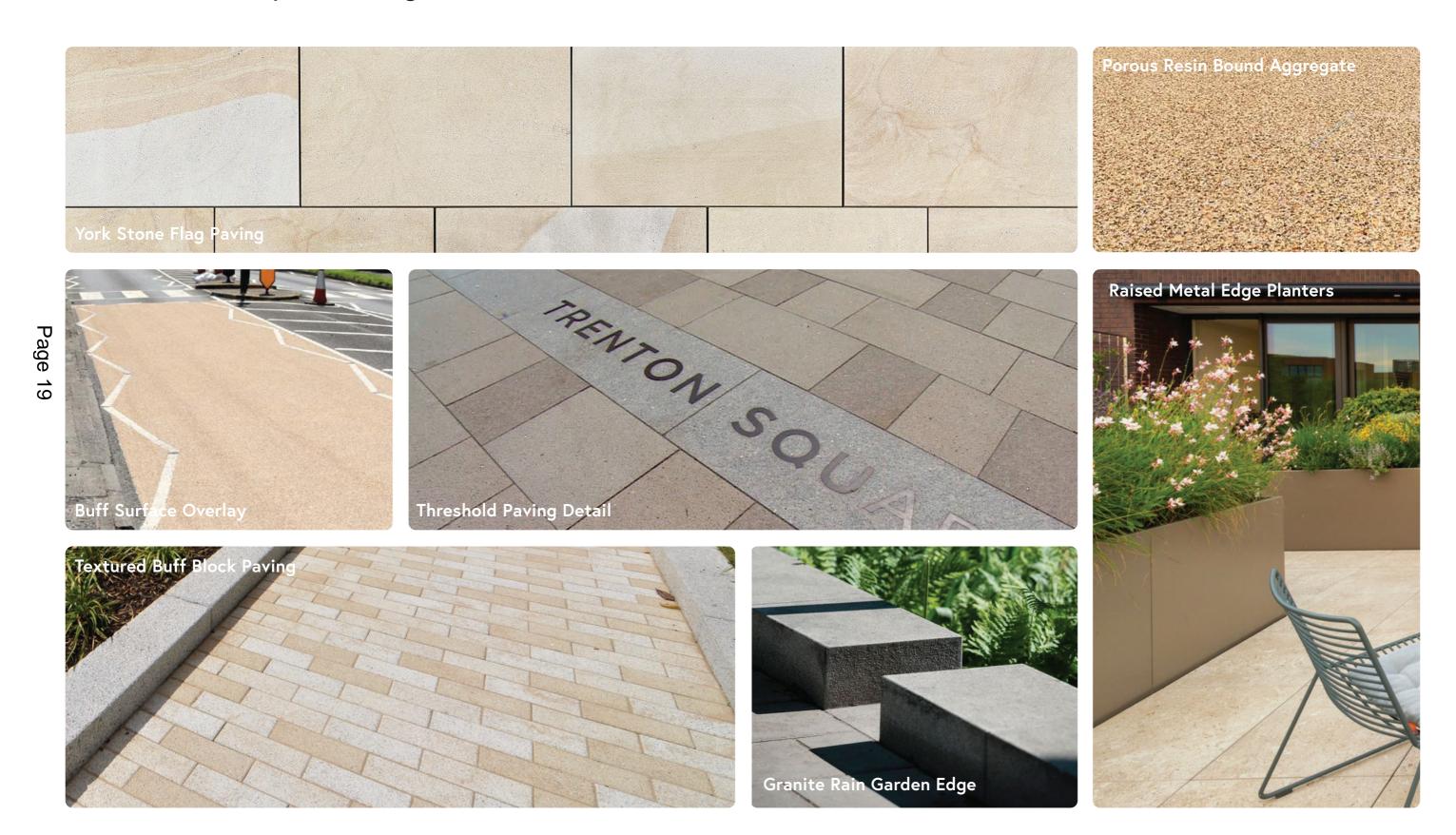
- Generous public space created adjacent to the hotel, cinema and entrance to the life sciences with rain gardens and proposed trees that provide seasonal interest
- 8 Linear rain gardens created along East Road to provide green buffer and attenuate rainwater run off. Tree lined route created with retained and proposed tree planting
- Enhanced surface to Burleigh Place with improved pedestrian crossings
- New N/S connection through the Grafton Centre, connecting Christchurch Street to Burleigh Street and providing a new flexible public space
- Extensive biodiversity roof with blue roof system and solar panels
- Northern roof terrace providing a verdant, enclosed 'secret garden'
- Western roof terrace with a green edge, flexible seating provision and canopy structure
- Southern events terrace provides a large flexible space creating opportunities for larger events
- Linear terrace providing planted edge offering users a green outlook from the adjacent work spaces
- Eastern roof terrace providing a flexible hard space with seating provision and generous planted area



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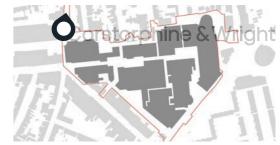
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1.17 Landscape Strategies - Materials



1.18 Fitzroy Lane Existing

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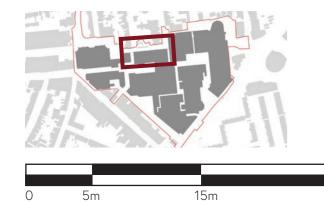




1.19 Fitzroy Lane Proposed

- 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
- New N/S pedestrian connection through Grafton Centre (C&W)
- Building pulled back to provide improved arrival space and enhanced E/W connection
- Turning head reduced in size to minimise pinch point. Area resurfaced and made flush with adjacent surface

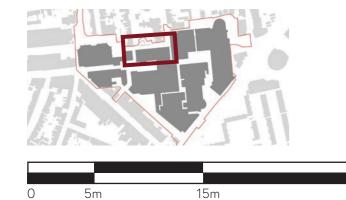




1.20 Christchurch Lane Overview

- 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
- New N/S pedestrian connection through Grafton Centre (C&W)
- Building pulled back to provide improved arrival space and enhanced E/W connection
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1.21 Christchurch Lane Existing

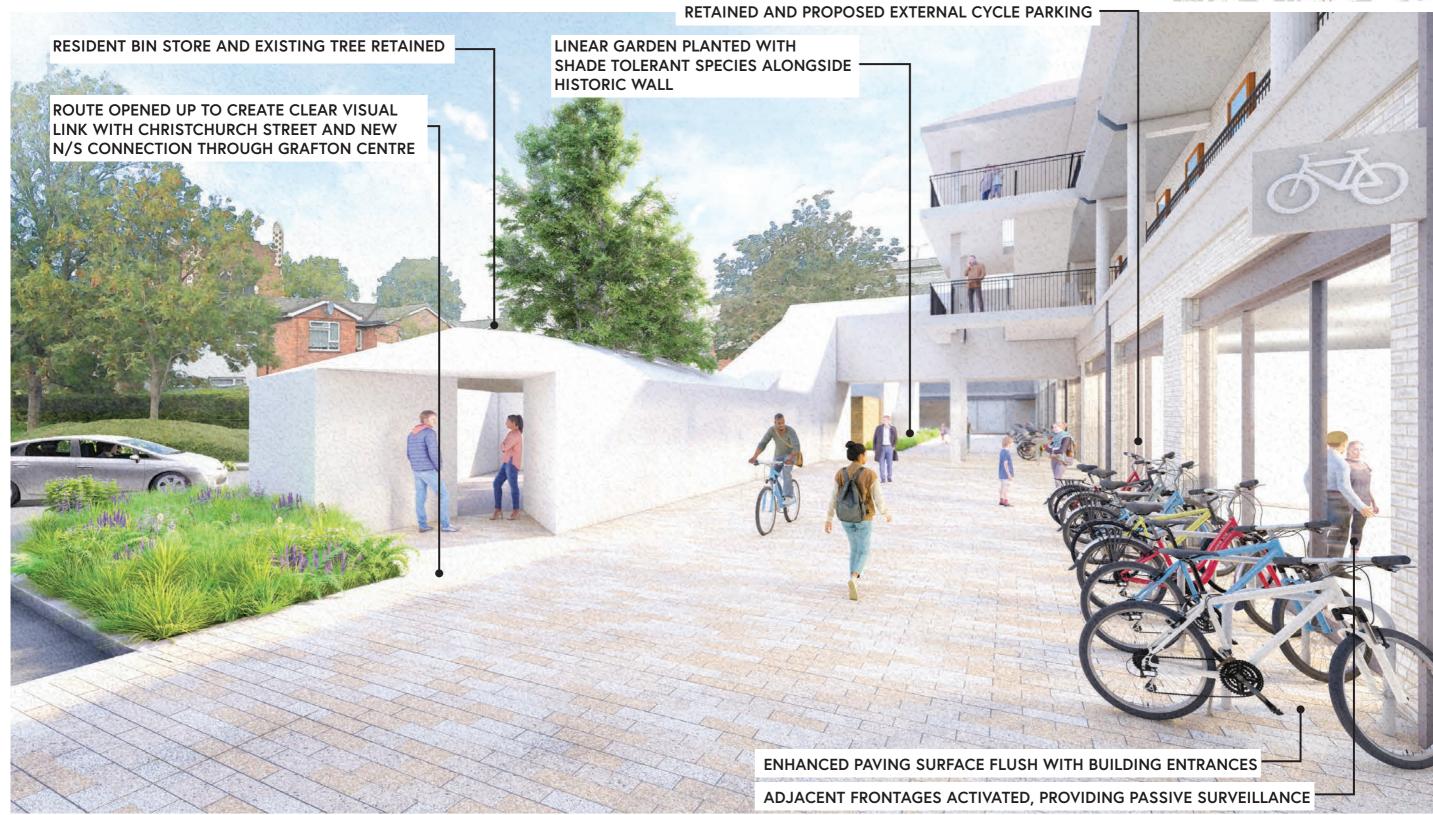


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1.22 Christchurch Lane Proposed

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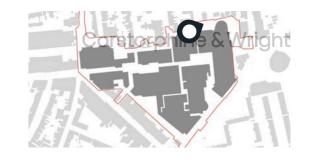
1.23 Wellington Street Overview

- 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
- 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



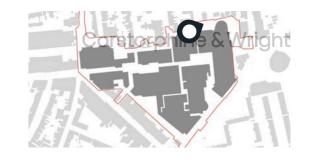
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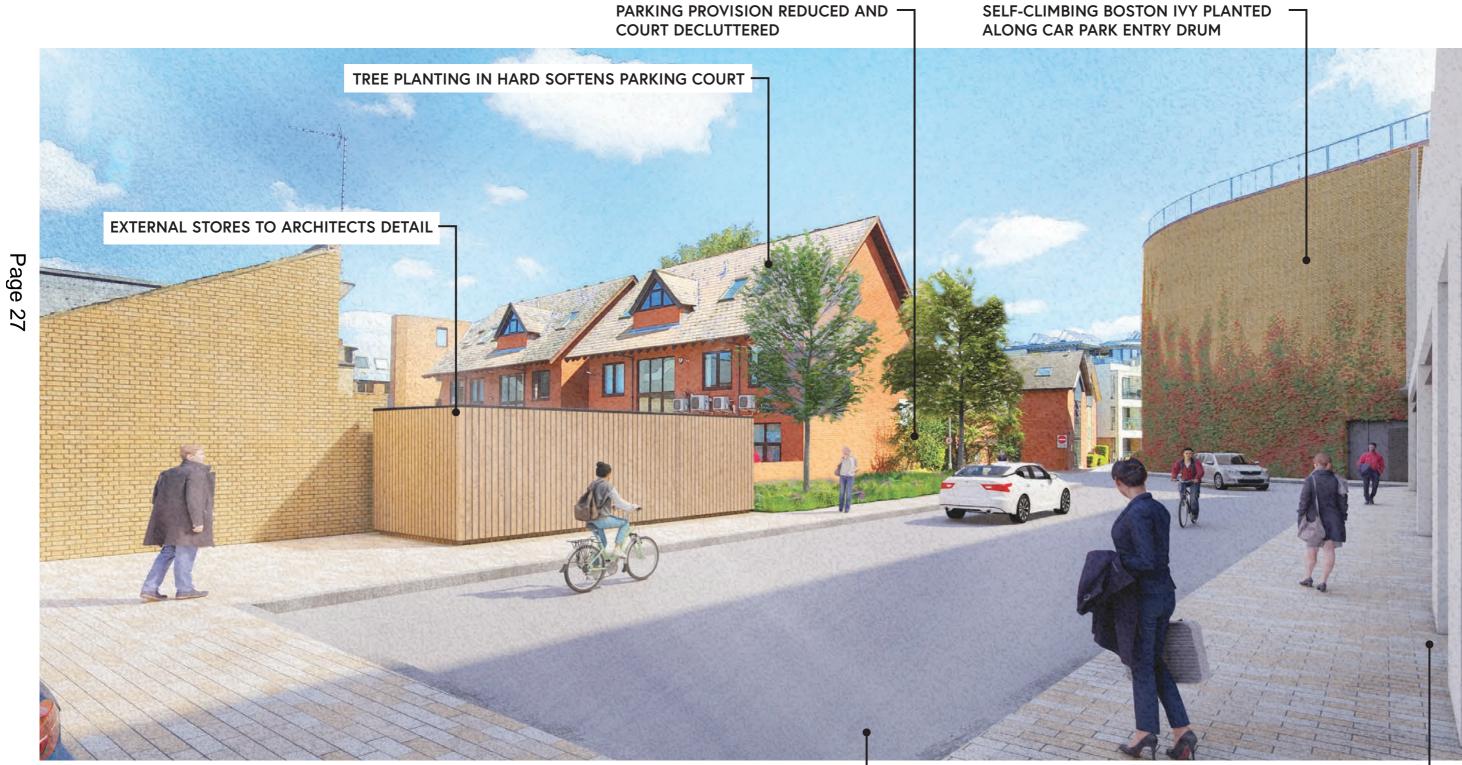
1.24 Wellington Street Existing





1.25 Wellington Street Proposed





SURFACE ENHANCEMENT TO SLOW VEHICLES AND FACILITATE PEDESTRIAN MOVEMENT

ENHANCED AND DECLUTTERED FOOTPATH AND ARRIVAL THRESHOLD

1.26 East Road Overview

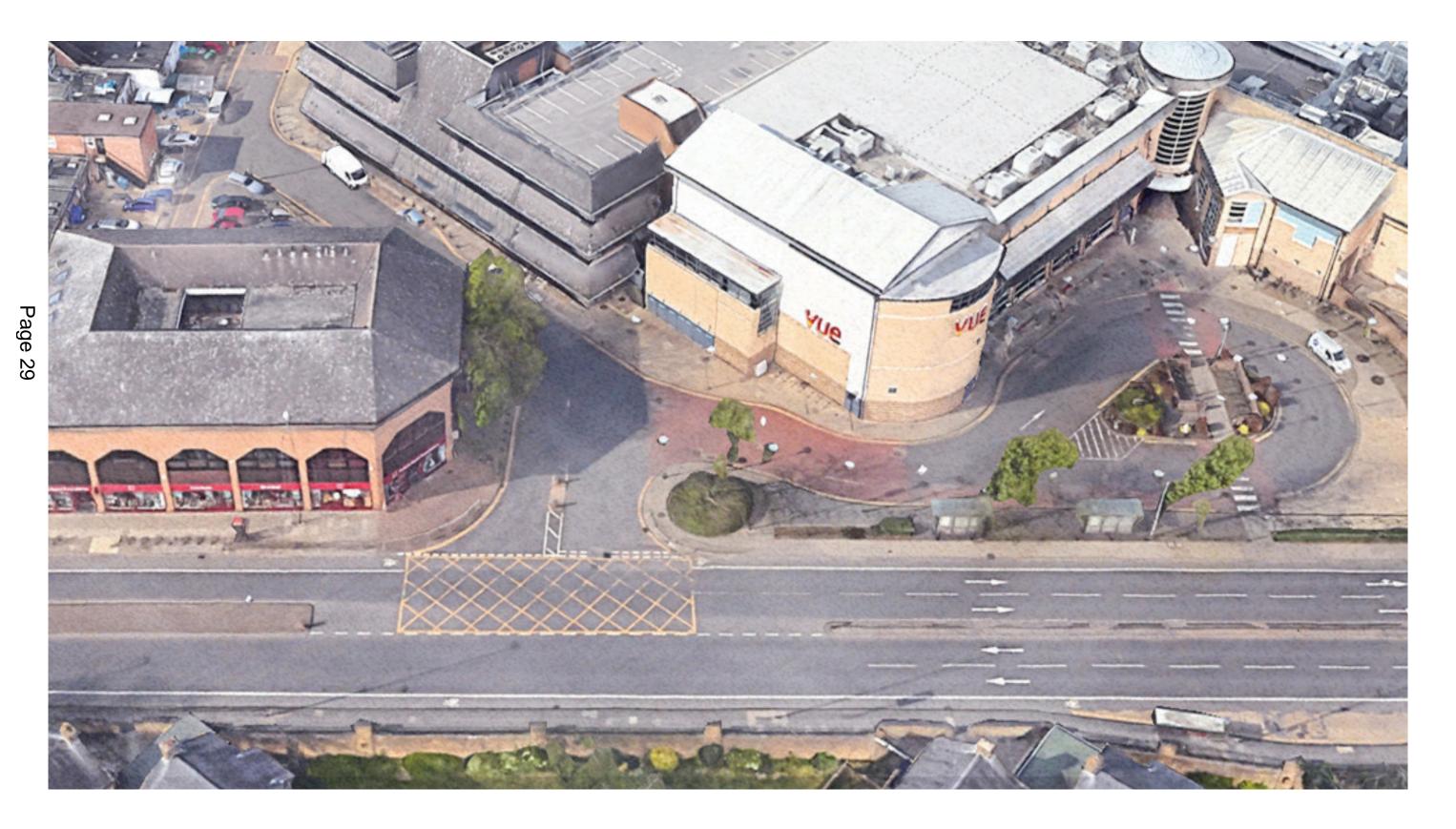
- 1 Arrival courtyard with seating provision adjacent to rain gardens and tree planting
- Series of rain gardens attenuate rainwater run off from road, while providing green buffer between pedestrians and traffic
- (3) Areas of seating and cycle parking set adjacent to rain garden planters
- 4) Improvements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





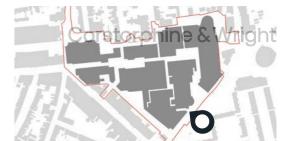


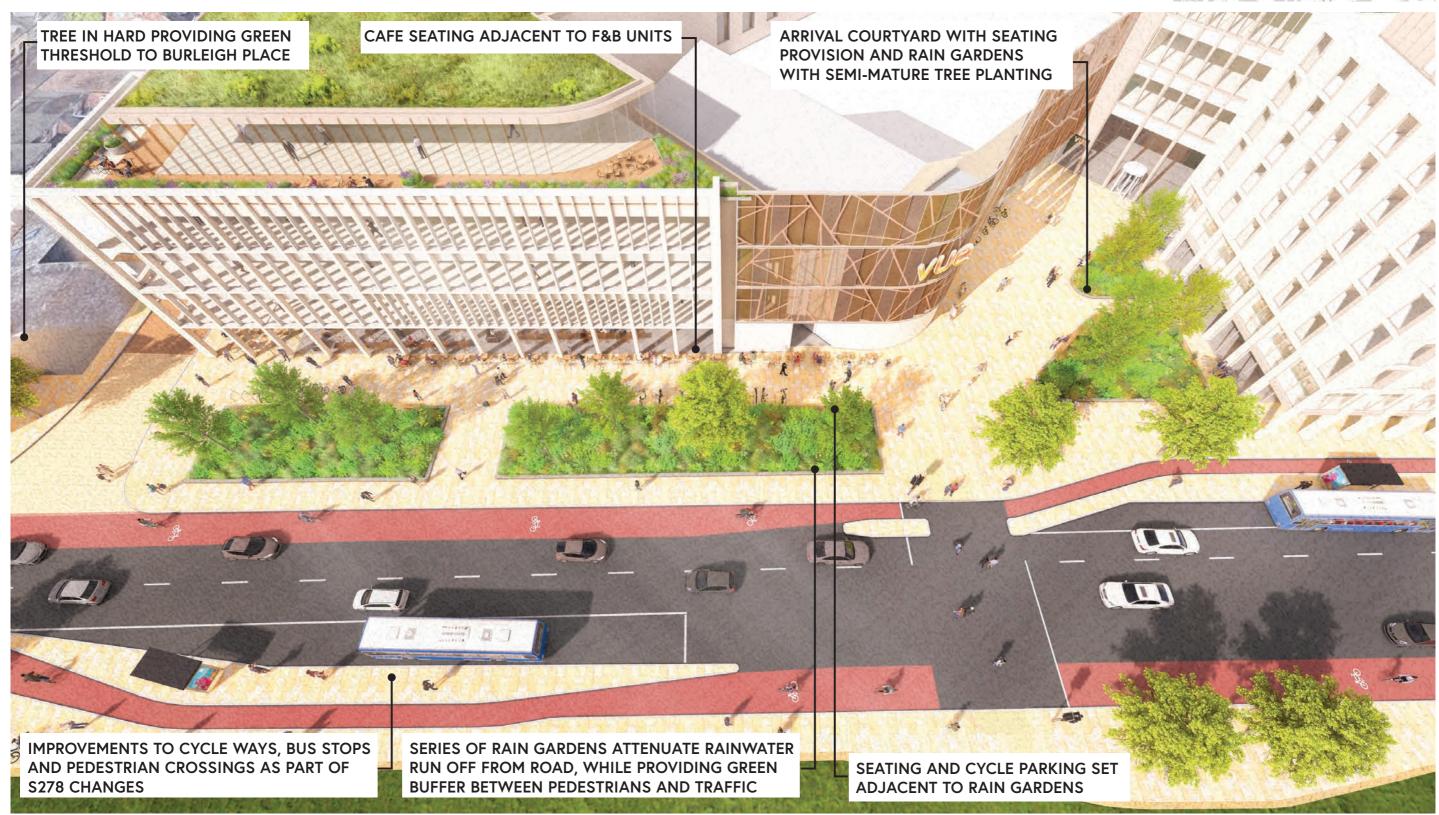
1.27 East Road Existing



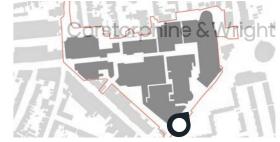
1.28 East Road Overview

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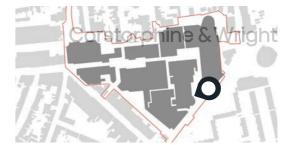
1.29 East Road View 01





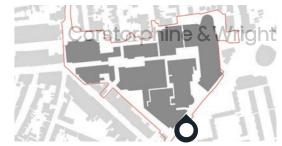
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1.30 East Road View 03





1.31 East Road View 04



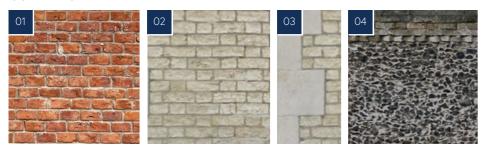


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Material Palette Overview 1.32

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

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LIFE SCIENCE QUARTER























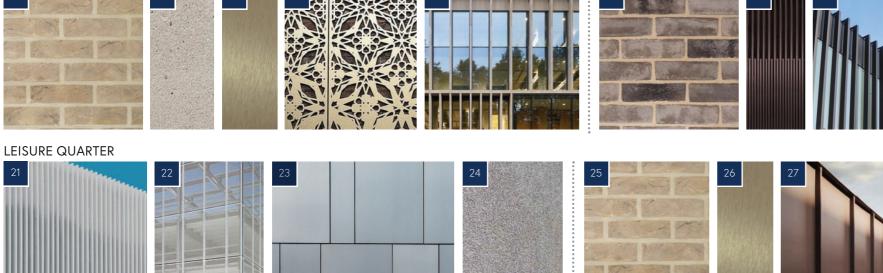


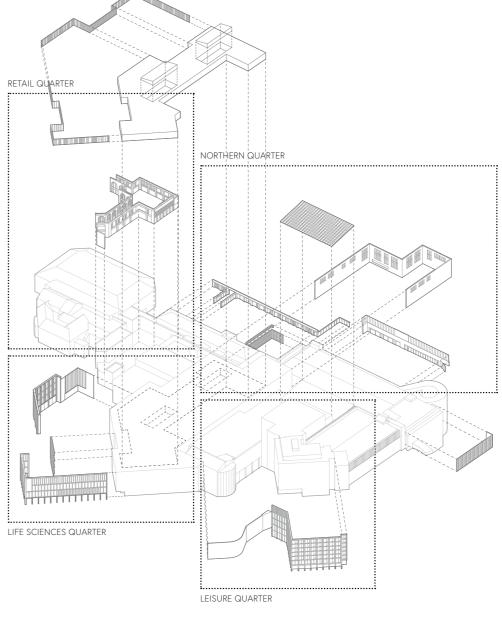


- 2. Buff/Red Multi Brick
- 3. Cast Stone
- 4. Soldier Course Detailing
- 5. Raked Mortar Joint Detail
- 6. Cast Stone Window Surround
- 7. Structurally Glazed Shopfronts
- 8. Bronze Aluminium Screening Fins 17. Cast Stone Fins
- 9. Dark Bronze Pant Screen

- 10. Perforated Aluminium Panels
- 11. Buff Brick
- 12. Glazed Business Unit Frontages
- 13. Buff Brick
- 14. Cast Stone
- 15 Bronze Colour Metalwork
- 16. Perforated Aluminium Panels
- 18. Grey/Brown Brick

- 19. Dark Bronze Pant Screen
- 20. Bronze Colour Shading Fins
- 21. Silver colour Aluminium Fins
- 22. Aluminium Mesh
- 23. Silver Aluminium Cladding Panel
- 24. Grey Silicone Render
- 25. Buff Brick
- 26. Bronze Colour Metalwork
- 27. Bronze Colour Standing Seam













1.37 Life Science Quarter - East Road Proposed



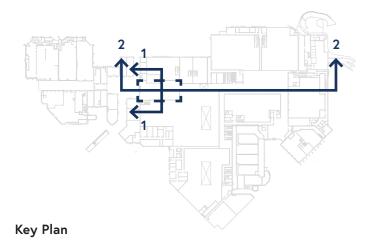
1.38 Life Science - Community Space





Classroom

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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 "Growon" 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.

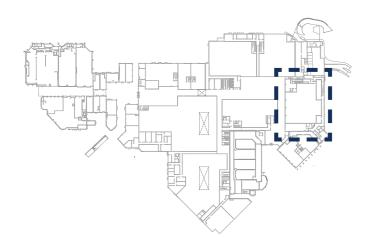
Ground Floor Area of Incubator is circa 1,215 sqm.

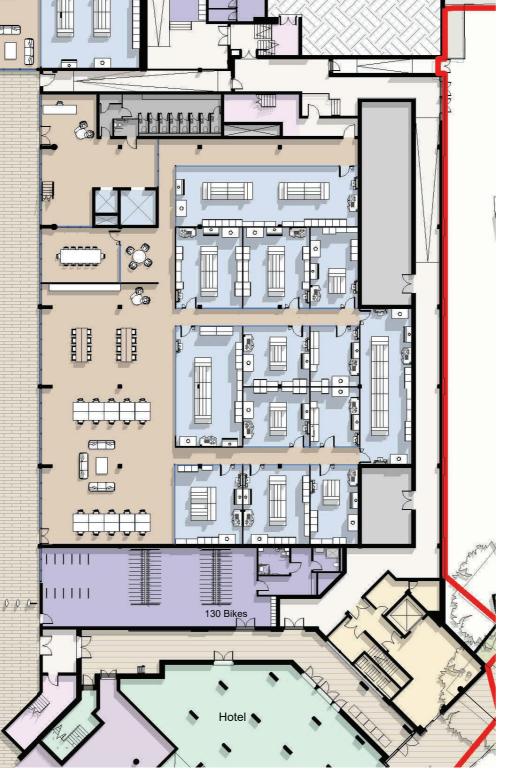
First Floor Area of Grow-On scape is circa 1,592 sqm.

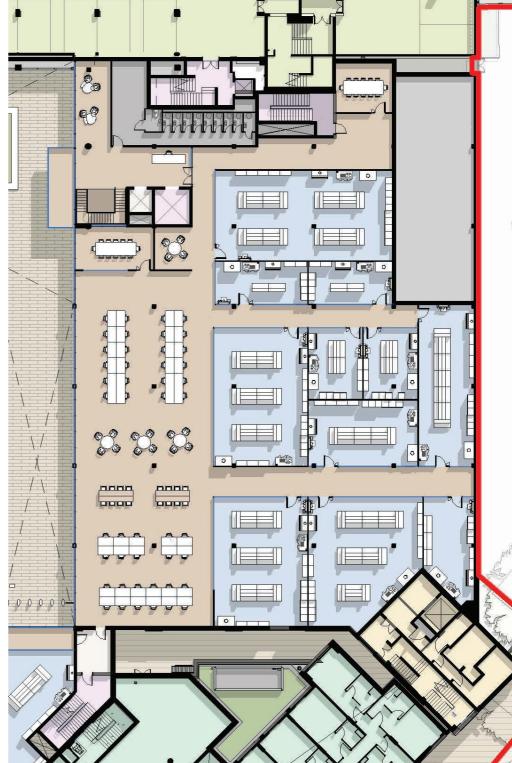


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Ground Floor

First Floor

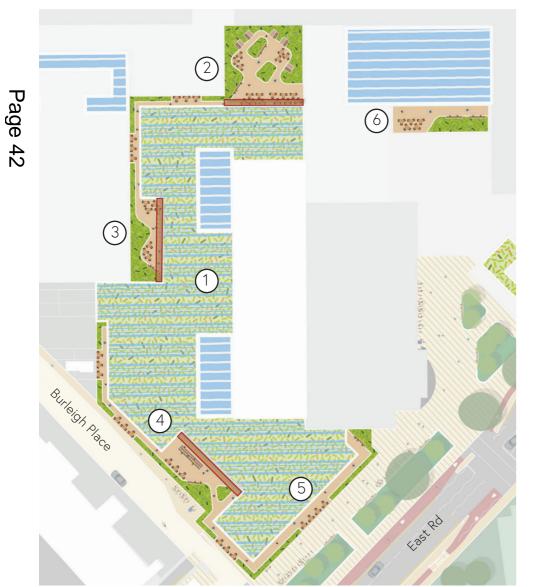
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Corstorphine & Wright

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'.
- Western roof terrace with a green edge, flexible seating provision and canopy structure
- 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.
- 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



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1.42 Net Zero Carbon









Aspiration to align emerging NZC standard

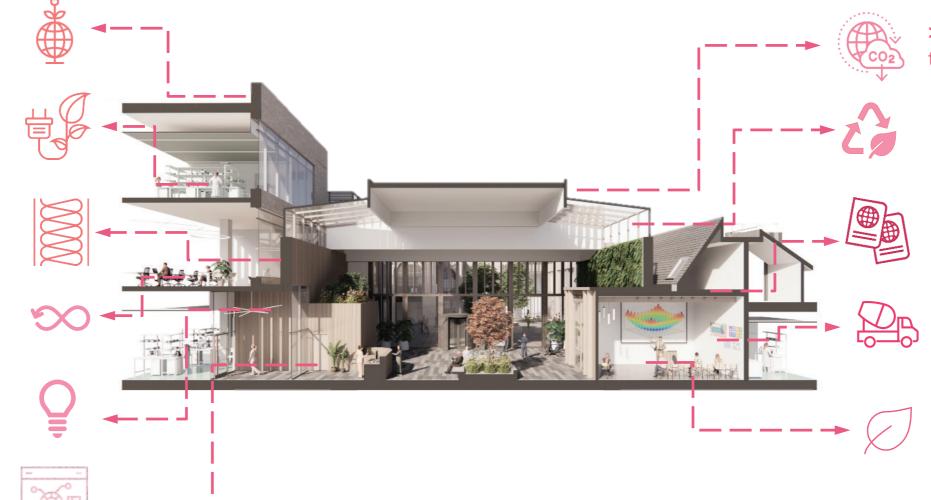
Combustion free heating & hot water

> **Enhanced building** envelope

Mechanical ventilation with heat recovery

LED lighting throughout with advance controls

> Advanced metering system



>25% carbon reduction due to retention

Materials with high levels of recycled content

EPDs for major building elements

Incorporation of GGBS considered in basement concrete

Preference for natural finish materials with high recycled content

KPIs	Unit	Policy requirements	Aspiration	
Upfront embodied carbon (A1-A5)	kgCO ₂ /m ² [GIA]	Report	650	
Whole Building Energy Use Intensity	kWh/m² [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/m² [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%

Climate Resilience 1.44



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Enhanced indoor air

Internal comfort achieved through mechanical means



Increased tree cover and green infrastructure



Robust, low maintenance and drought tolerant plants



Flood risk mitigation measures such as rain gardens and attenuation tanks



Designed to accommodate the 1 in 100 year + 40% climate change scenario with no flooding

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%

Sustainable Water Management



KPIs

Water efficiency

Peak runoff rate





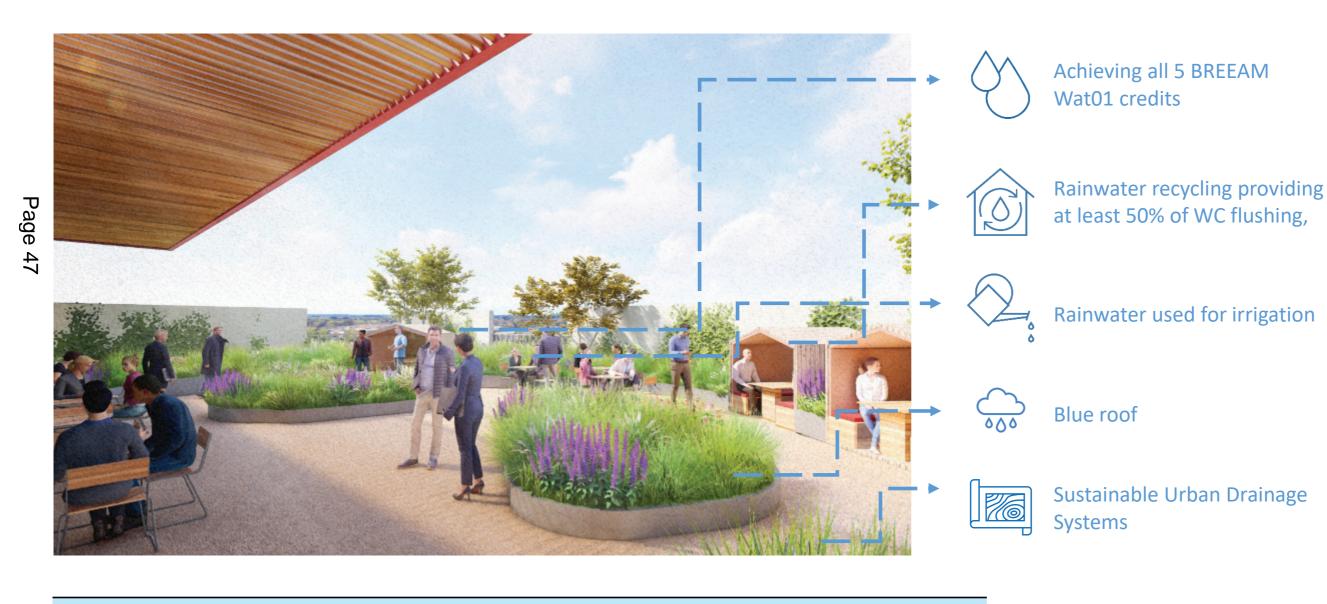




Unit

BREEAM Wat 01 credits

l/s/ha



Policy requirements

5

No worse than existing

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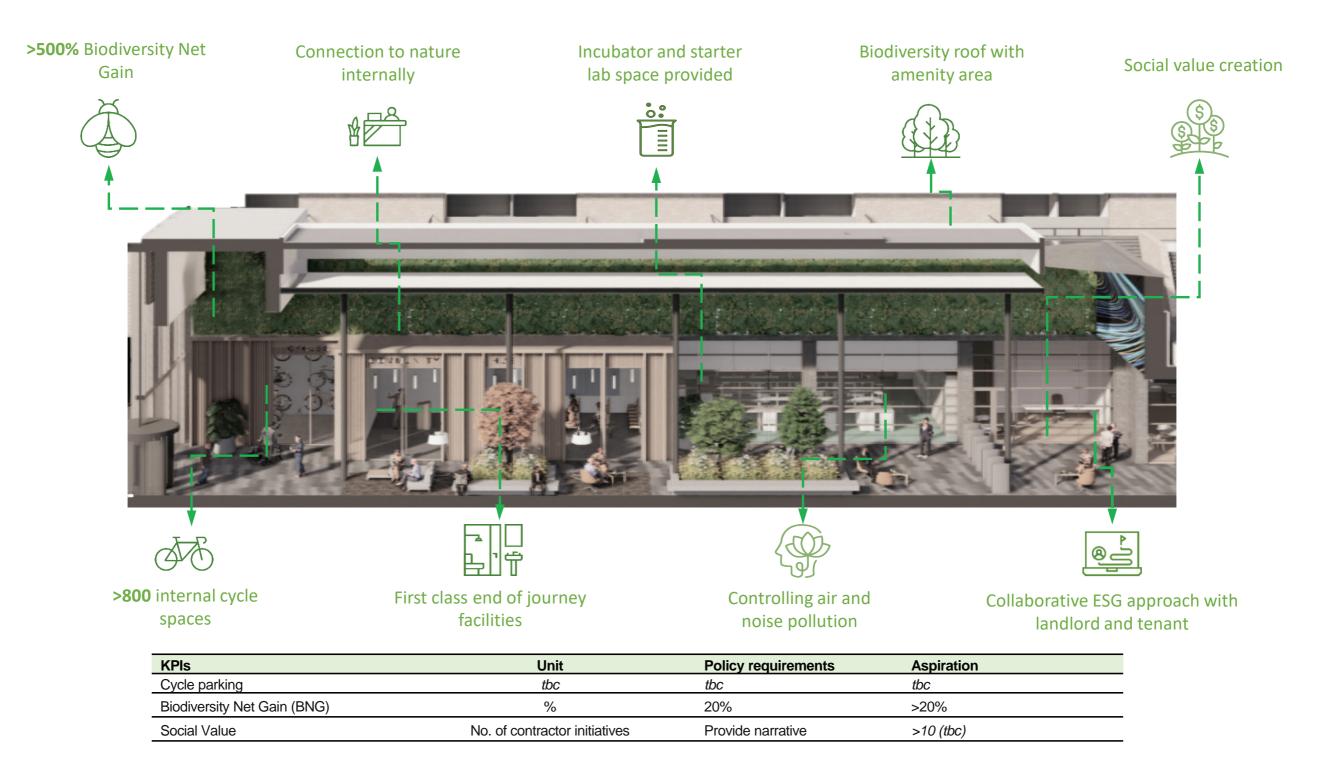
Aspiration

5

No worse than existing

1.46 Wellbeing and Social Value





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

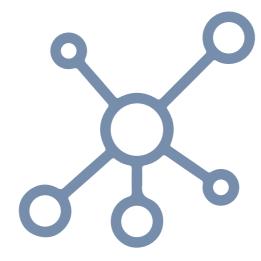
BENEFITS

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



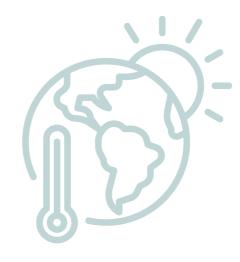
CONNECTIVITY

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

Safety and security of surrounding streets

Tree planting increasing canopy cover

Contact us to discuss your project

Corstorphine & Wright

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