



Oxford University Development

Begbroke Innovation District

Design and Access Statement

July 2023

Hawkins\Brown
With
OKRA
RCKa
OOZE

Document history

Version	Date	Description
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Cultivating a place ...In which a community can change the world



Our vision is for a successful innovation district, taking advantage of the site's peri-urban qualities and delivering homes for Oxfordshire.

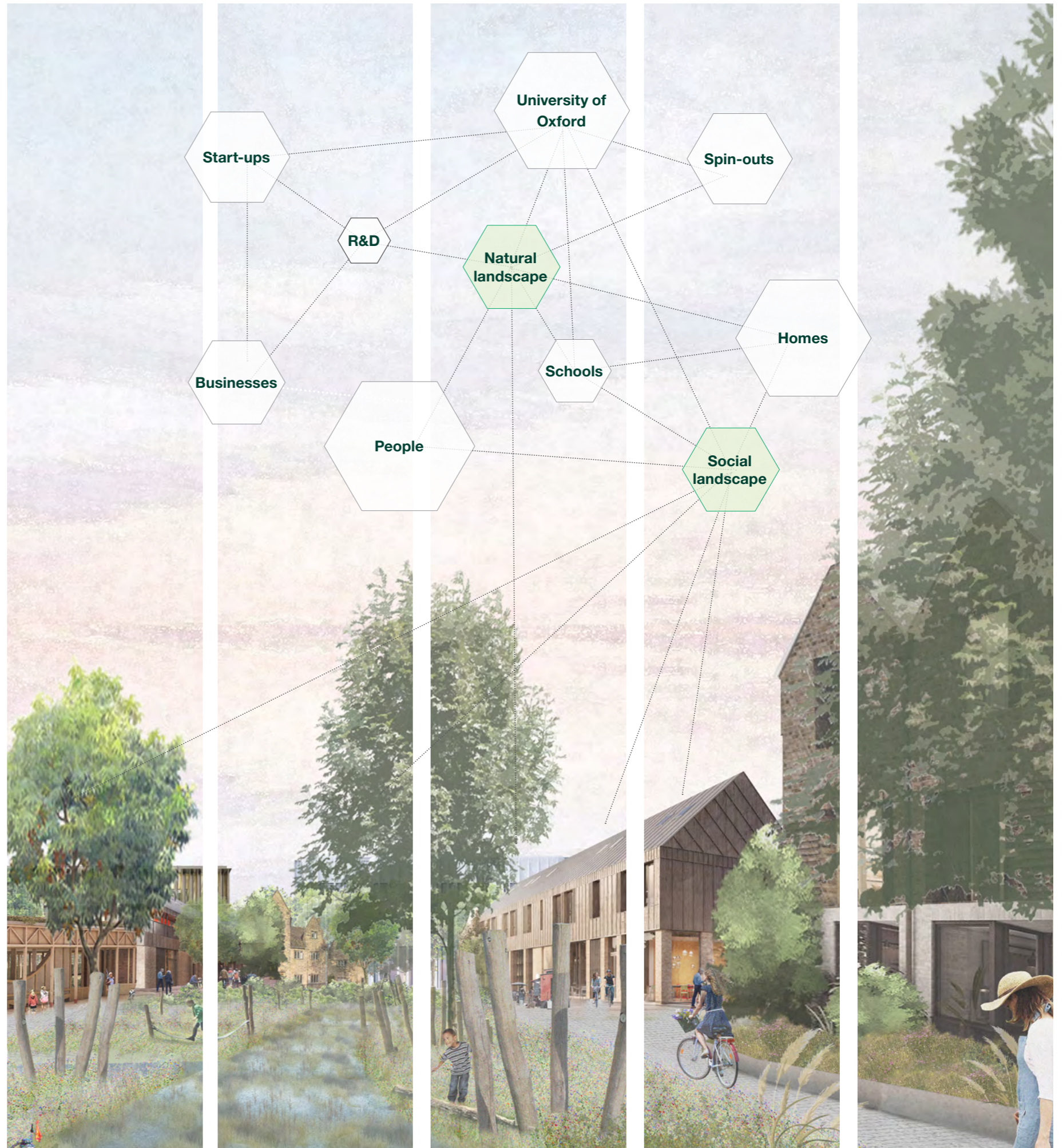
An innovation district is a mixed-use environment where the combination of academic researchers, start-ups, established companies, residents and visitors provides the critical mass and ecosystem services to support the growth of knowledge-based enterprises and the provision of social amenities that is attractive to a wide audience.

An innovation district enables enterprises to grow from inception through incubation to maturity, as well as provide an environment attractive to established commercial organisations.

The site, client and brief provide the opportunity to pursue a development that moves the dial on development norms in their pursuit of the exemplary. Innovation refers to both the activity of the commercial/R&D space, as well as the way in which the development is designed and delivered.

The proposal establishes

- A framework for social restorative landscapes across more than half the site area;
- A fundamental rebalancing of streets for active travel and landscape through 'living streets'; and
- Accommodation of cultural and social amenity delivered from the outset to 'engineer serendipity'.



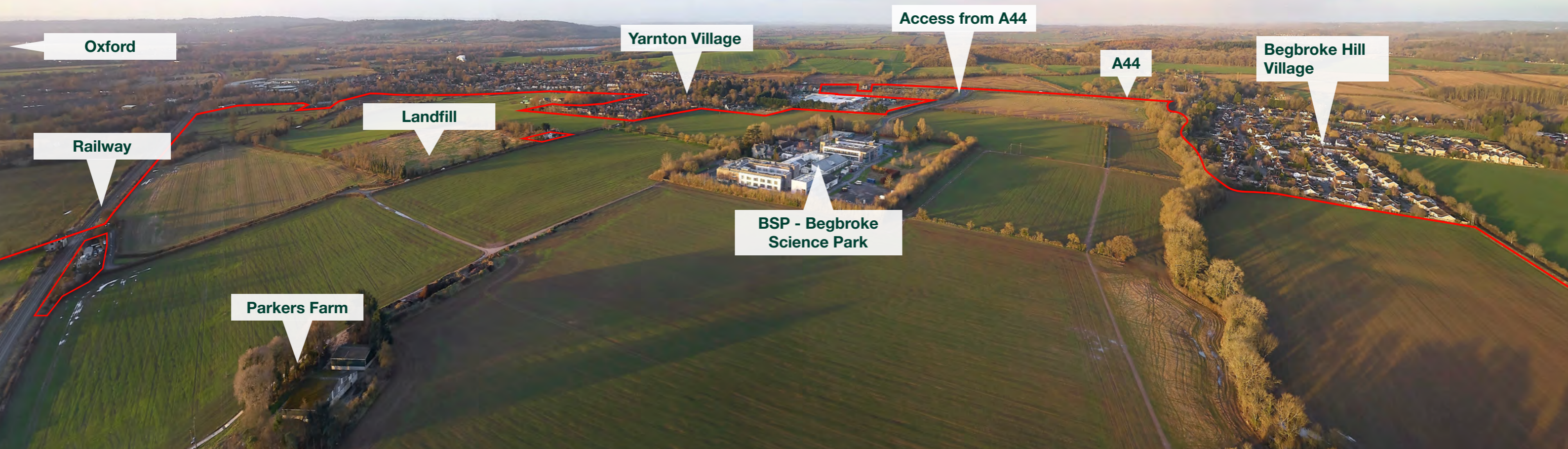
And outstanding site including...

An outstanding site for a perhaps once in a lifetime opportunity including,

- Connection to Oxford via car, cycling or public transport
- A successful existing science park,
- Three neighbouring villages with thousands of years of history and consolidated communities,
- Unique environmental and heritage assets including a Jacobean farmhouse,
- Trees and planting of different ages and qualities,
- The Oxford canal and the opportunity to contribute to wider ecological networks,
- Access to Oxford
- Challenges such as a landfill site in need of re mediation
- Or mono-cultural agriculture tenants.



Application site boundary



Contents

1. Introduction	10	5. Neighbourhoods and places	90	8. A Coordinated Approach	176
1.1. Team	12	5.1. Begbroke Hill	92	8.1. Neighbours	178
1.2. Executive summary	14	5.2. The Arrival	94	8.2. Railway Bridge	180
1.3. Purpose and structure of this document	15	5.3. Begbroke Hill Artery	96	9. Transport	182
2. Understanding the site	16	5.4. Living Streets	98	9.1. Car is a guest	184
2.1. Part of a wider network	18	5.5. Begbroke Science Park	100	9.2. Connecting to wider networks	186
2.2. Local needs	22	5.6. The Farmstead	102	10. Infrastructure	188
2.3. Our Neighbours	24	5.7. Farm Link & Innovation Avenue	104	10.1. Flooding and surface water drainage	190
2.4. Site Edges	26	5.8. Interface streets	106	10.2. Utilities	192
2.5. The Site	28	5.9. Parkers Farm	108	11. Access	194
2.6. Summary of considerations	44	5.10. Parkers Farm Artery	110	11.1. Introduction and design guidelines	196
3. Consultation and design evolution	52	5.11. Research & Development	112	11.2. The district	198
3.1. Timeline	54	5.12. Foxes Cover	114	11.3. Residential accommodation	202
3.2. Sketches	62	5.13. Central Park	116	12. Conclusion	204
4. Place Principles and masterplan framework	68	5.14. Foxes Cover Artery	118	12.1. Emerging from multiple needs	206
4.1. Cultivating a place	70	5.15. Rowel Brook Park	120	12.2. Resulting in tangible benefits	208
4.2. A restorative landscape	72	5.16. Rowel Brook Park North	122	12.3. Shifting development models	210
4.3. Engineering serendipity	74	5.17. Railway Marshes	124	12.4. Cultivating a place... ..	212
4.4. Car is a guest	76	5.18. Canalside Park	126	13. Appendix	220
4.5. Opening to Oxfordshire	78	6. Sustainability	128	13.1. Glossary	222
4.6. Active stewardship	80	6.1. A regenerative design	130		
4.7. Place Principles and masterplan framework	82	7. Landscape	132		
4.8. Masterplan framework	84	7.1. A Performative Landscape	134		
4.9. Illustrative masterplan	86	7.2. Landscape Strategies	140		
4.10. Illustrative sections	88	7.3. Green	142		
		7.4. Blue	152		
		7.5. You	156		

1. Introduction

**An innovation district
taking advantage of unique
environmental qualities.**

1.1. Team

The Begbroke Innovation District team is led by Oxford University Development and brings together expertise from UK and Europe.

Masterplan Design team



Hawkins\Brown
Architects and urban designers, design lead



OKRA
Landscape, design strategy, and placemaking



RCKa
Neighbourhood design and character



OOZE
Urban design, placemaking and landscape strategy



Murray Twohig
Vision



KMC Transport Planning
Transport consultants and placemaking

Other members of the masterplan team



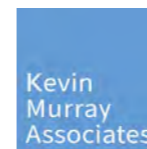
Turner & Townsend
Project management



Quod
Planning, Housing, Environmental Planning and Socio-economic



Buro Happold
Engineering



Kevin Murray Associates
Community engagement



King Technical Consultant
Site surveys



AECOM
Cost control

1.2. Executive summary

The Begbroke Innovation District is an ambitious project stemming from different needs. Its proposal sits at the intersection of Oxford's unmet housing needs and the desire to expand Oxford's university research and development facilities at Begbroke Science Park. In doing so, it opens the site to offer its great environmental assets to Oxfordshire, it fosters crossovers between existing communities and the university's research activities, it brings nature to people's doorstep, and it shifts development models to more sustainable, climate-change conscious, health and well-being focused models, through place making.

This Design and Access Statement has been led by Hawkins Brown and prepared by the design team on behalf of Oxford University Development. The area of the site covered by this application is 170.4 hectares. The document has been prepared in support of an Outline Planning Application for the Begbroke Innovation District, seeking Outline permission with all matters reserved.

Outline application, with all matters reserved, for a phased (severable), comprehensive residential-led mixed use development comprising:

Up to 215,000 square metres gross external area of residential floorspace within Use Class C3/C4 and large houses of multiple occupation (Sui Generis); Supporting social infrastructure including secondary school/primary school(s) (Use Class F1); health, indoor sport and recreation, emergency and nursery facilities (Class E(d)-(f)) Supporting retail, leisure and community uses, including retail (Class E(a)), cafes and restaurants (Class E(b)), commercial and professional services (Class E(c)), local community uses (Class F2), and other local centre uses within a Sui Generis use including public houses, bars and drinking establishments (including with expanded food provision), hot food takeaways, venues for live music performance, theatre, and cinema. Up to 155,000 net additional square metres (gross external area) of flexible employment uses including research and development, office and workspace and associated uses (Use E(g)), industrial (Use Class B2) and storage (Use Class B8) in connection with the expansion of Begbroke Science Park; Highway works, including new vehicular, cyclist and pedestrian roads and paths, improvements to the existing Sandy Lane and Begbroke Hill road, a bridge over the Oxford Canal, safeguarded land for a rail halt, and car and cycle parking with associated electric vehicle charging infrastructure; Landscape and public realm, including areas for sustainable urban drainage systems, allotments, biodiversity areas, outdoor play and sports facilities (Use Class F2(c)); Utility, energy, water, and waste water facilities and infrastructure; together with enabling, site clearance, demolition and associated works, including temporary meanwhile uses.

1.3. Purpose and structure of this document

This Design and Access Statement has been prepared to support the Outline Planning Application for the Begbroke Innovation District.

This document also describes the approach to realising the vision for and the character of the Begbroke Innovation District. These 'Place Principles' are captured in the Development Specification, Parameter Plans and the Strategic Design Guide - all of which are Control Documents

A masterplan has been prepared to test the parameters and guidance submitted for approval. This Design and Access Statement describes the Illustrative Masterplan, as well as the context analysis and resulting Place Principles leading to it. This Design and Access Statement has been organised as follows:

- The masterplan proposal has emerged from an understanding of the site context described in the Chapter 2 of this document.

- Throughout the pre-application process, comments and feedback have been taken into account through the design of the masterplan. This process, and the evolution of the masterplan are described in the Chapter 3 of this document.
- The Place Principles guiding all stages of design are described in the Chapter 4 of this document.
- The Illustrative masterplan is described in Chapters 4 to 12.

The format and content of the Design And Access Statement

- Explains the evolutionary process of the development and the thinking behind the final design
- Shows how the design of the proposal has taken into account the nature of the surrounding area and how it helps improve the environment
- Shows that the Applicant has considered how everyone, including disabled people with pushchairs and older people can use the buildings

The Design and Access Statement sets out an explanation of the Proposed Development and how design has influenced the Outline Planning Application. The diagrams, images and text contained within this document are intended to illustrate the design intent. The commitments in respect of the design are set out within the Strategic Design Guide. Any details within the Design and Access Statement should therefore be treated as illustrative and are not for approval.

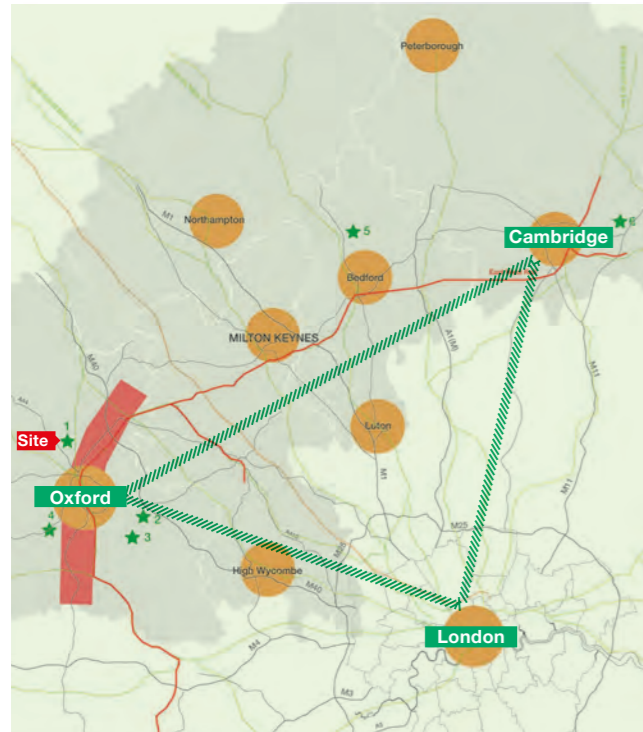
2. Understanding the site

**A proposal emerging from the
environmental, landscape,
character, history, connectivity and
planning context**

2.1. Part of a wider network

The Oxfordshire knowledge clusters

Oxford-Cambridge Arch

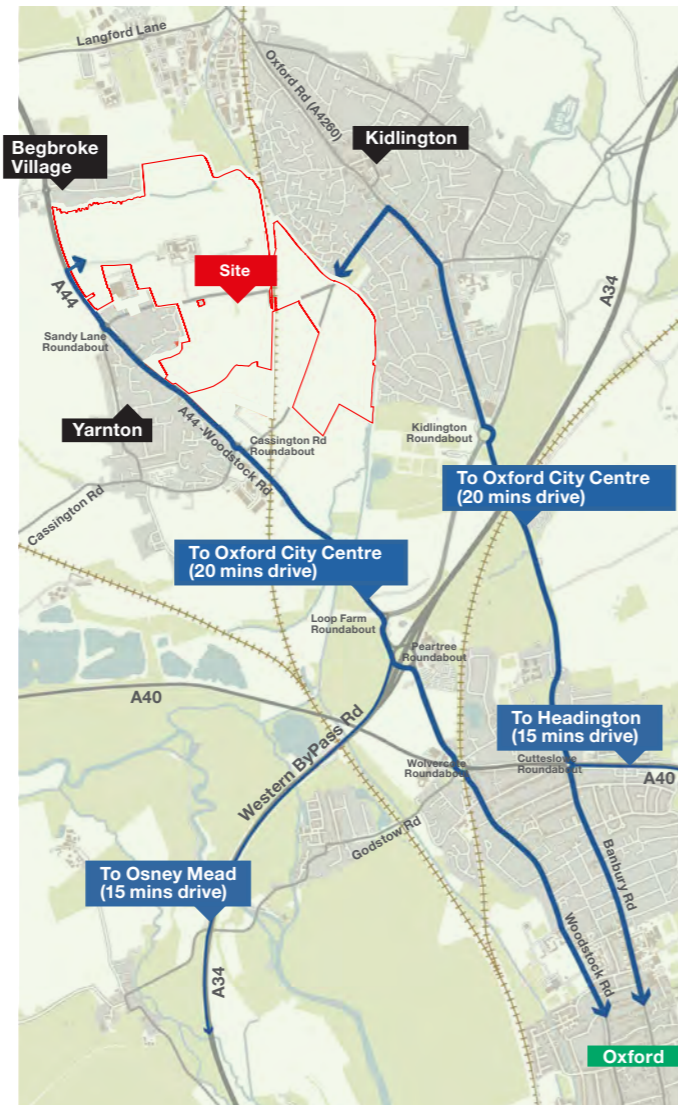


Situated within the Oxford-Cambridge Arc, the site is connected to world-leading science and innovation hubs.

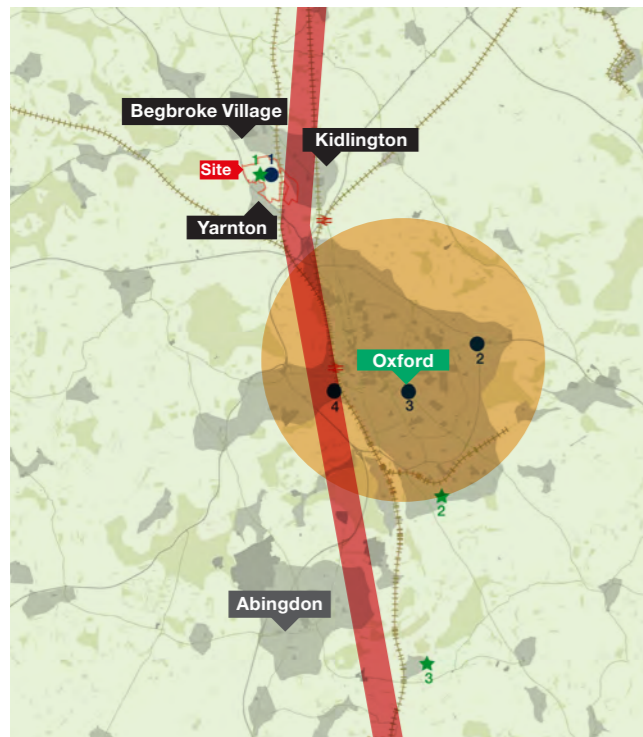
Begbroke benefits from direct connections to a number of science parks and innovation centres.

Transport infrastructure of different types provide links to key areas clustering other centres of knowledge economy including London and Cambridge and the multiple centres between them.

Proximity to Oxford



Oxfordshire Knowledge Spine

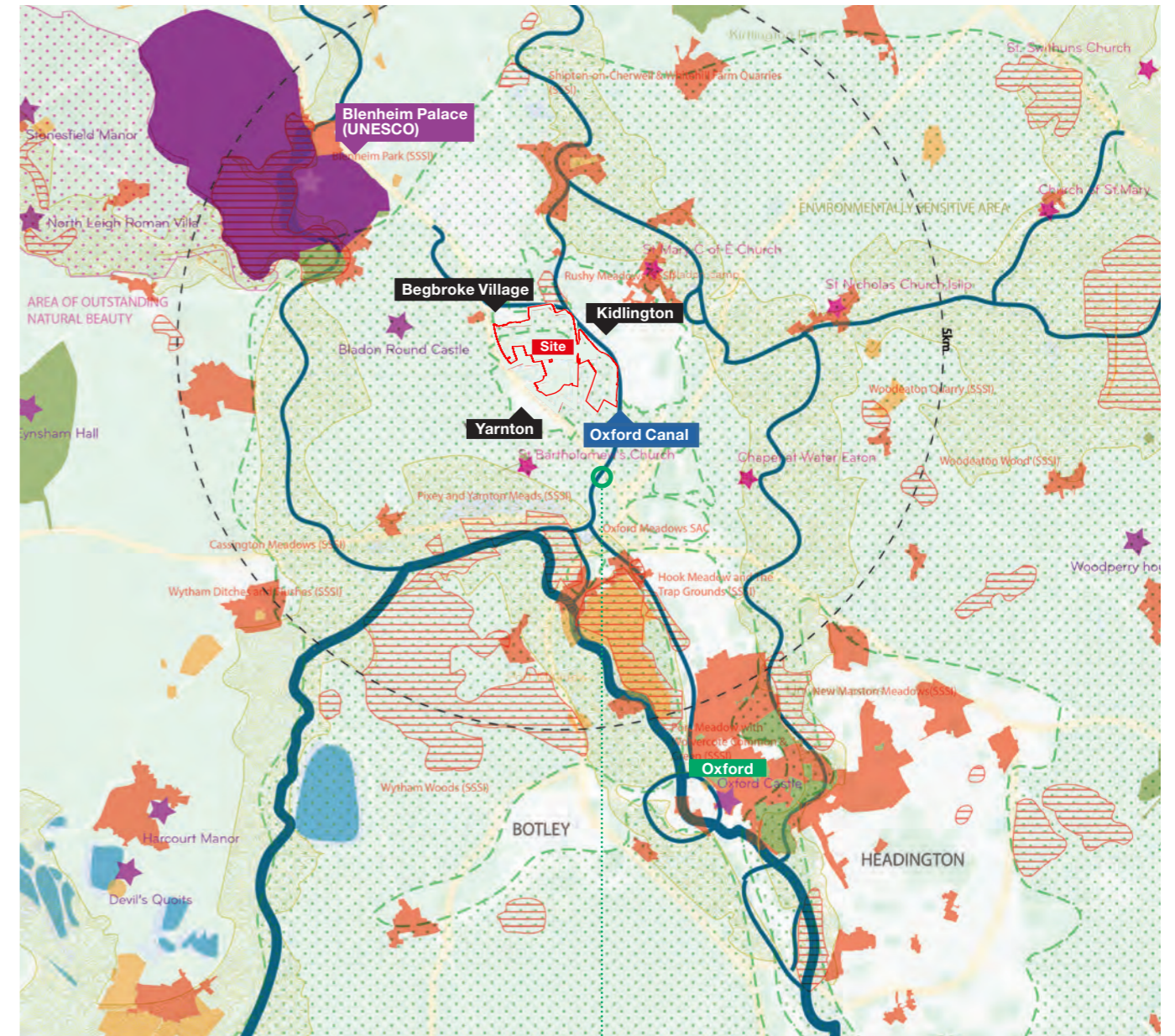


- ★ **Science Parks**
 1. Begbroke Science Park
 2. Oxford Business Park
 3. Culham Science Centre
 4. Oxford Science Park
 5. Colworth Science Park
 6. Cambridge Science Park

- **University of Oxford Innovation Hubs**
 1. Begbroke Science Park
 2. Oxford University Headington
 3. Oxford University Science Area
 4. Osney Mead Industrial Estate

Regional heritage setting & environmental networks

The revised Green Belt & regional context



- ★ Local Heritage
- ★ Grade I Listed buildings: buildings of exceptional interest.
- Conservation Areas
- Scheduled Monuments
- Parks and Gardens
- Oxford Green Belt
- Sites of Special Scientific Interest SSSI
- Area of outstanding natural beauty
- Environmentally sensitive area
- 5km radius

Oxford canal conservation area

The Oxford Canal running to the east of the site is part of the Lower Cherwell Valley Conservation Target Area (CTA).

- The Oxford Canal Conservation Target Area (CTA) is part of the Nature Recovery Network (NRN).
- Its objectives include the creation and restoration of the water vole habitat.

Transport network

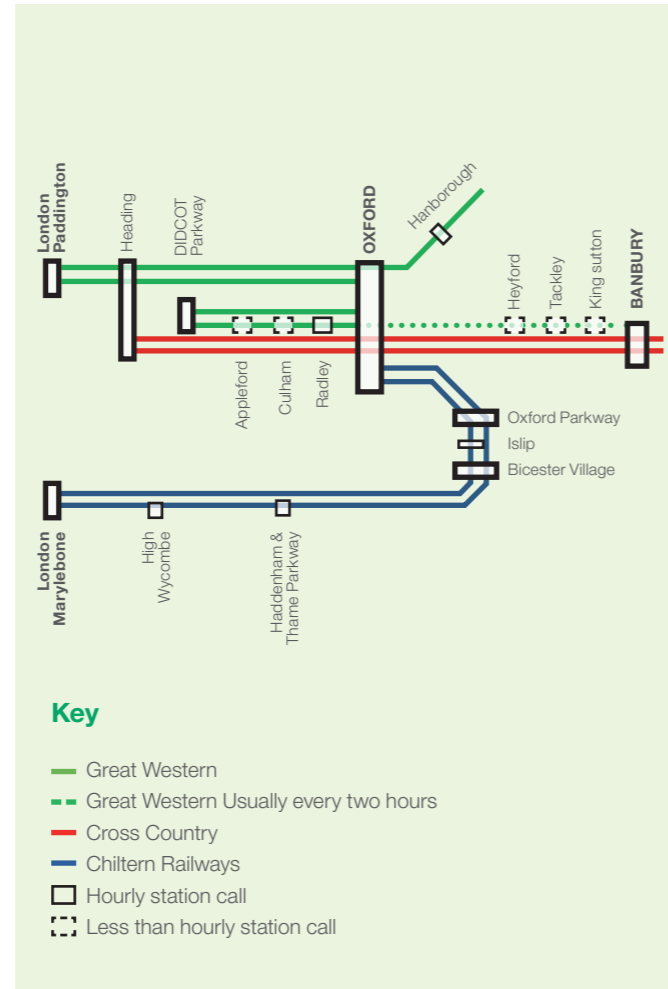
Roads



The site is accessed via a signal controlled junction on the A44.

- The A44 in the vicinity of the site access junction is a street lit dual carriageway which is subject to a speed limit of 50mph.
- To the south-east of the Sandy Lane roundabout, the A44 Woodstock Road connects to Cassington Road at a three-arm roundabout.
- The A44 southbound dual carriageway approach to the roundabout maintains two-lanes all the way to the give-way to the roundabout.
- To the south of the Cassington Road roundabout the A44 Woodstock Road becomes a single carriageway, crossing both the railway line and Oxford Canal, and joins the A4260 Frieze Way at the Loop Farm roundabout.

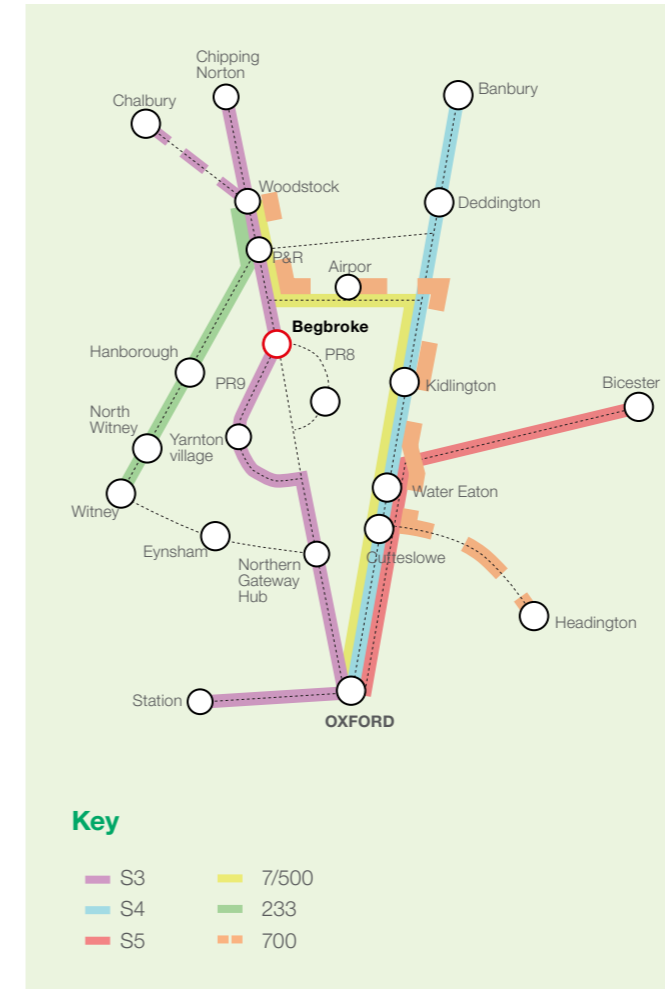
Railway



The railway line running north to south through the site.

- Local Plan policy PR8 requires land to be reserved for a potential railway station at Begbroke.
- Oxford Parkway is the closest station to the site.

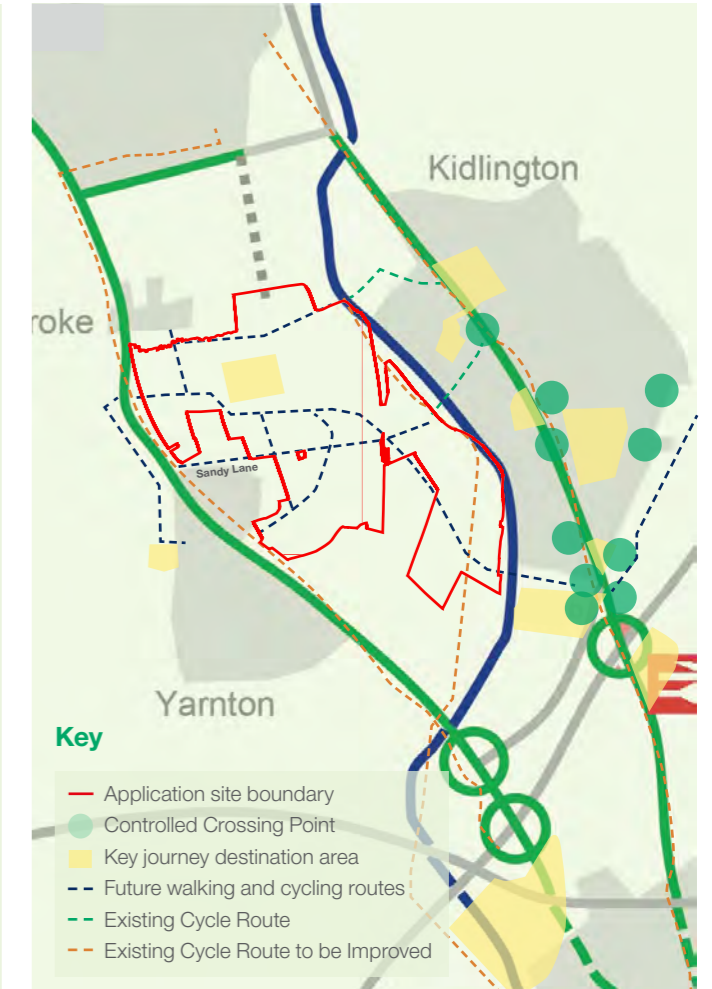
Buses



The site is currently served by Route S3, a half-hourly bus service operating between Oxford and Chipping Norton.

- Several bus routes, including S4, 700, and 7, serve the A4260 Kidlington corridor, but they are outside the 400m walking distance catchment area for the site.

Walking & cycling



The Oxford County Council transport strategy is to upgrade the A4260 through Kidlington as a 'cycle superhighway' and provide pedestrian/cycle routes along both sides of the A44.

- A network of walk/cycle routes will be provided through development sites to connect into the wider network, and
- Sandy Lane is planned to be closed to general traffic and provided as an active travel corridor to support walking and cycling in the area.

2.2. Local needs

The Site comprises part of the land allocated by Policy PR8 of the Cherwell District Council Local Plan Part 1 Partial Review. The allocation's objective is to deliver housing to address Oxford's unmet housing need.

Policy and guidance



A The Cherwell Local Plan 2011-2031 (Part 1) Cherwell District Council North Oxfordshire

B The Cherwell Local Plan 2011-2031 (Part 1) Partial Review: Oxford Unmet Housing Need- Adapted 7 Sept 2020- Cherwell District Council North Oxfordshire

C Oxford Canal Conservation Area Appraisal- October 2012 (Part 1 & Part 3): South Northamptonshire Council & Cherwell District Council North Oxfordshire

D Local Nature Reserves in England: A guide to their selection and declaration, Natural England

Strategic housing sites

The Local Plan identifies a series of sites in order to address current housing needs.

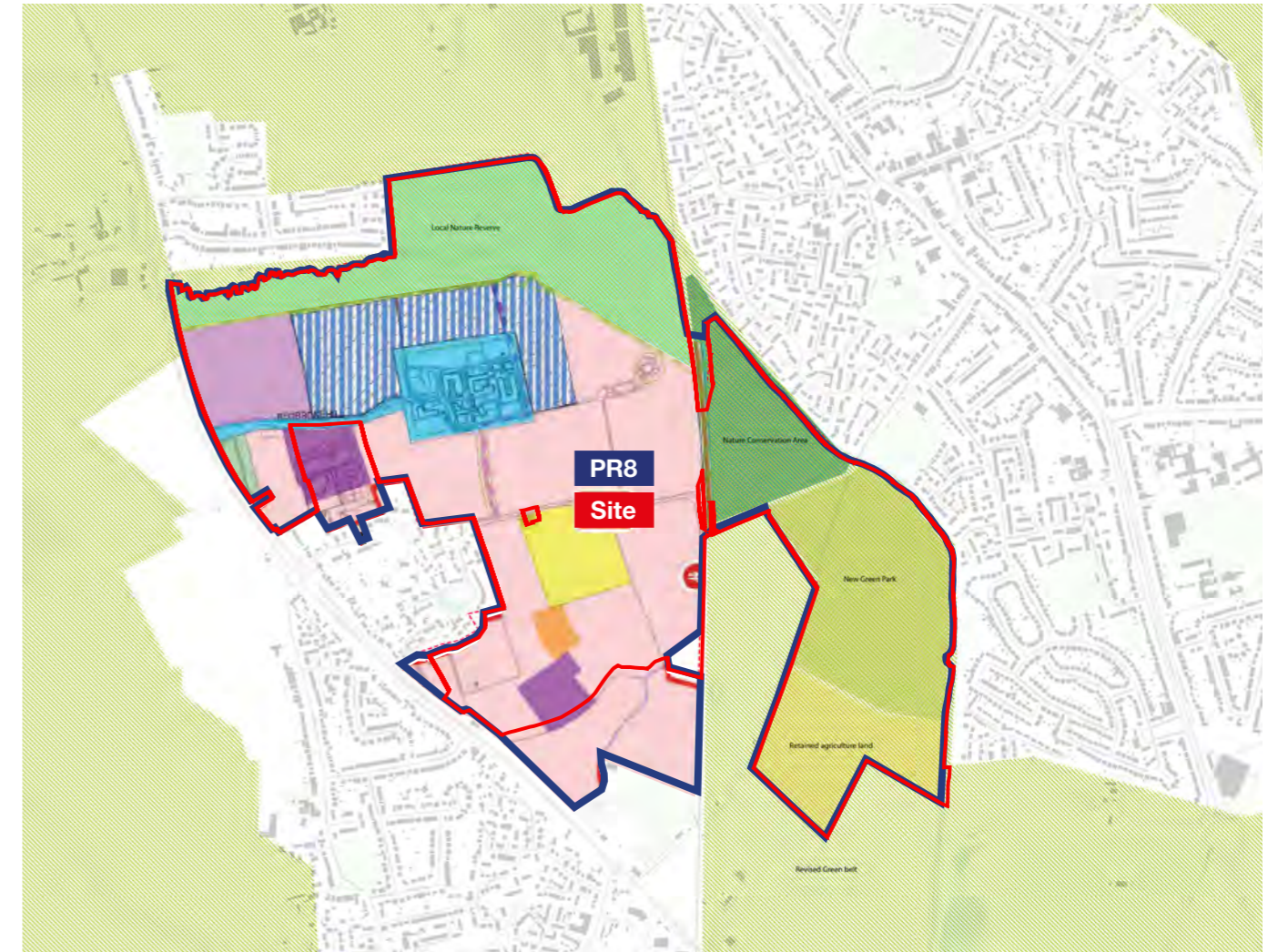
PR8 accounts for almost half of the 4,400 homes marked for delivery across six of the seven strategic sites in Cherwell.

PR9	Land West of Yarnton
PR8	Land East of the A44
PR7a	Land South East of Kidlington
PR7b	Land at Stratfield Farm
PR6a	Land East of Oxford Road
PR6b	Land West of Oxford Road
PR6c	Land at Frieze Farm



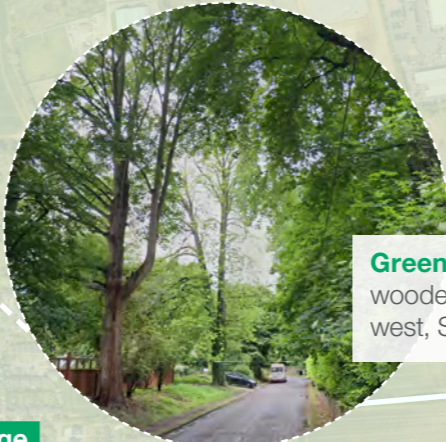
4,400 homes in total

Site allocation



[Red outline]	Application site boundary
[Blue outline]	PR8 Boundary
[Blue area]	Existing Begbroke Science Park
[Orange area]	Local Centre
[Pink area]	Residential (66ha, 50% affordable)
[Blue grid area]	Land Reserved for Employment
[Purple area]	Primary School Use (3.2ha and 2.2ha)
[Light purple area]	Secondary School Use (8.2ha)
[Yellow area]	Former Landfill Site
[Hatched area]	Existing Allotments
[Red circle with cross]	Reserved Land for Railway Halt
[Green area]	Local Nature Reserve (29.2ha)
[Light green area]	Nature Conservation Area
[Light green area]	Nature Conservation Area: Oxford Canal
[Yellow-green area]	Canal side park
[Light yellow area]	Retained agricultural land
[Hatched area]	Greenbelt

2.3. Our Neighbours



Green roads: Historic fabric and wooded setting of Begbroke village west, Spring Hill Road



Accessible heritage: St Mary's Church featuring Our Lady's Needle, 13th-15thC



Community: Market stalls & Community life on Gala Day



Nature in your front door: Village facing fields and Worton Heath beyond

Site

Kidlington



Landscape: View from Begbroke Lane towards Begbroke village east



Landmarks as 'way finding': The clock tower on the High Street and Oxford Road



Destination: Yarnton Home and Garden, pan-parish catchment

Yarnton



Promenade: Picturesque culs-de-sac on Yarnton east



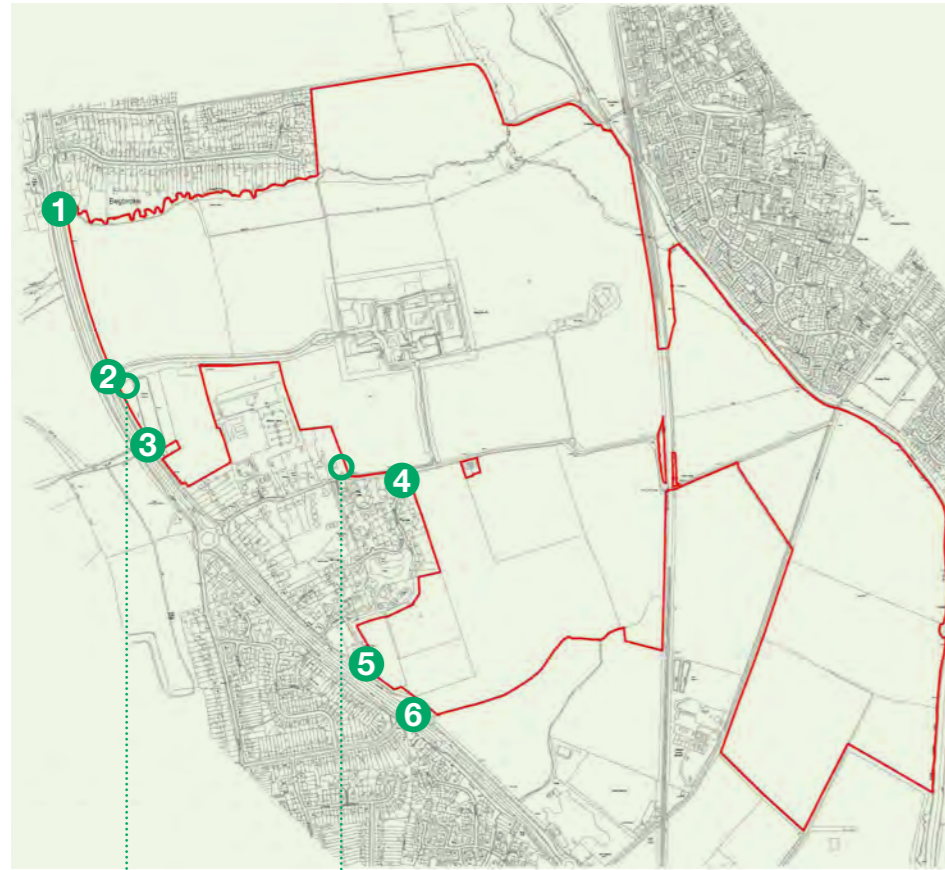
Natural Playgrounds: A secluded pond and playground, Yarnton east



Scale: Heritage character along Church Street with tighter spacing of houses

2.4. Site Edges

East Side Edges



- A number of conditions can be found on the western edge including, the main entrance to the site, access to existing allotments, Sandy Lane and Yarnton access and a series of vehicular entrances towards the southernmost section.
- The main entrance to the site is visible and vehicular-traffic dominated.

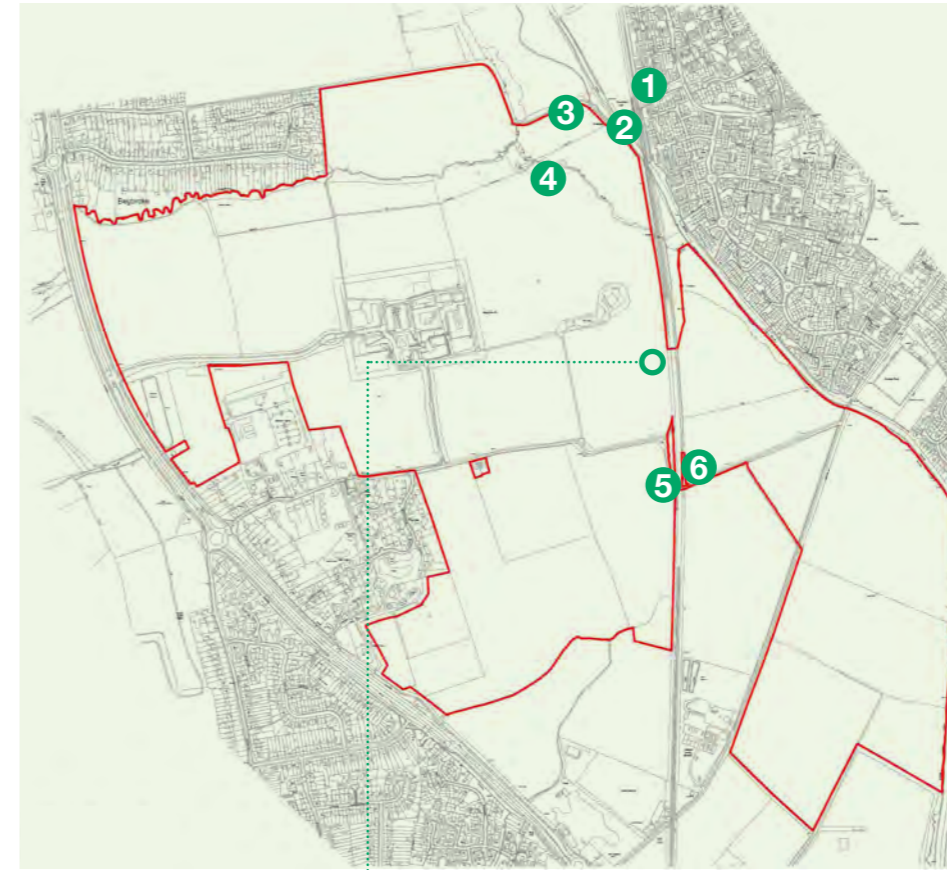
- 1 Woodstock Road
- 2 Begbroke Hill junction
- 3 Allotments (Begbroke and Yarnton Allotment Association)
- 4 Boundary with Yarnton east
- 5 Entrance to Oxford Poultry
- 6 Boundary with Hallam land ownership

Main entrance to the site

Access to Sandy Lane



West Side Edges

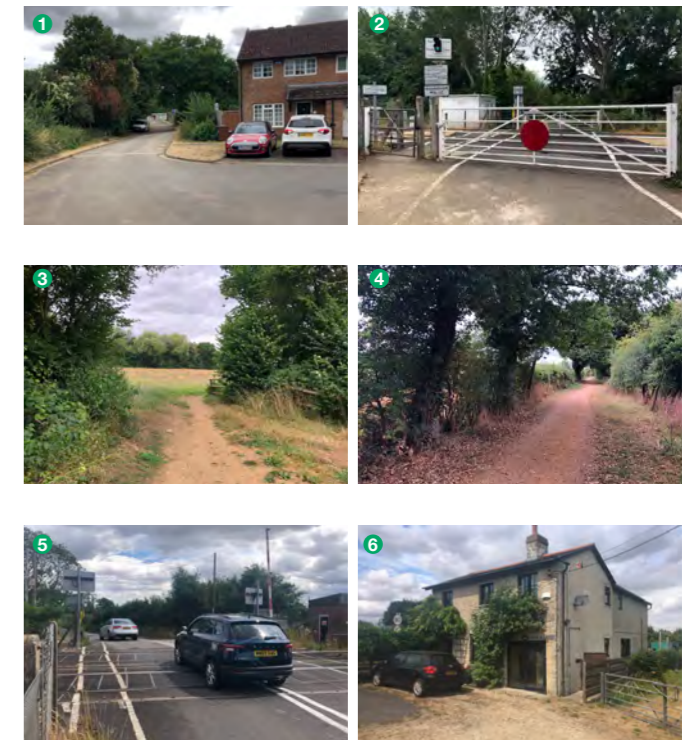


The railway running through the site constitutes a physical barrier.

- Two railway crossings currently make access from Kidlington possible, one at the north and one at the centre of the site along Sandy Lane.
- There is a proposal to close the at-grade crossing and replace it with a new bridge currently designed by Network Rail. A series of meetings have been held for the design team to influence or lead the design of the new bridge.

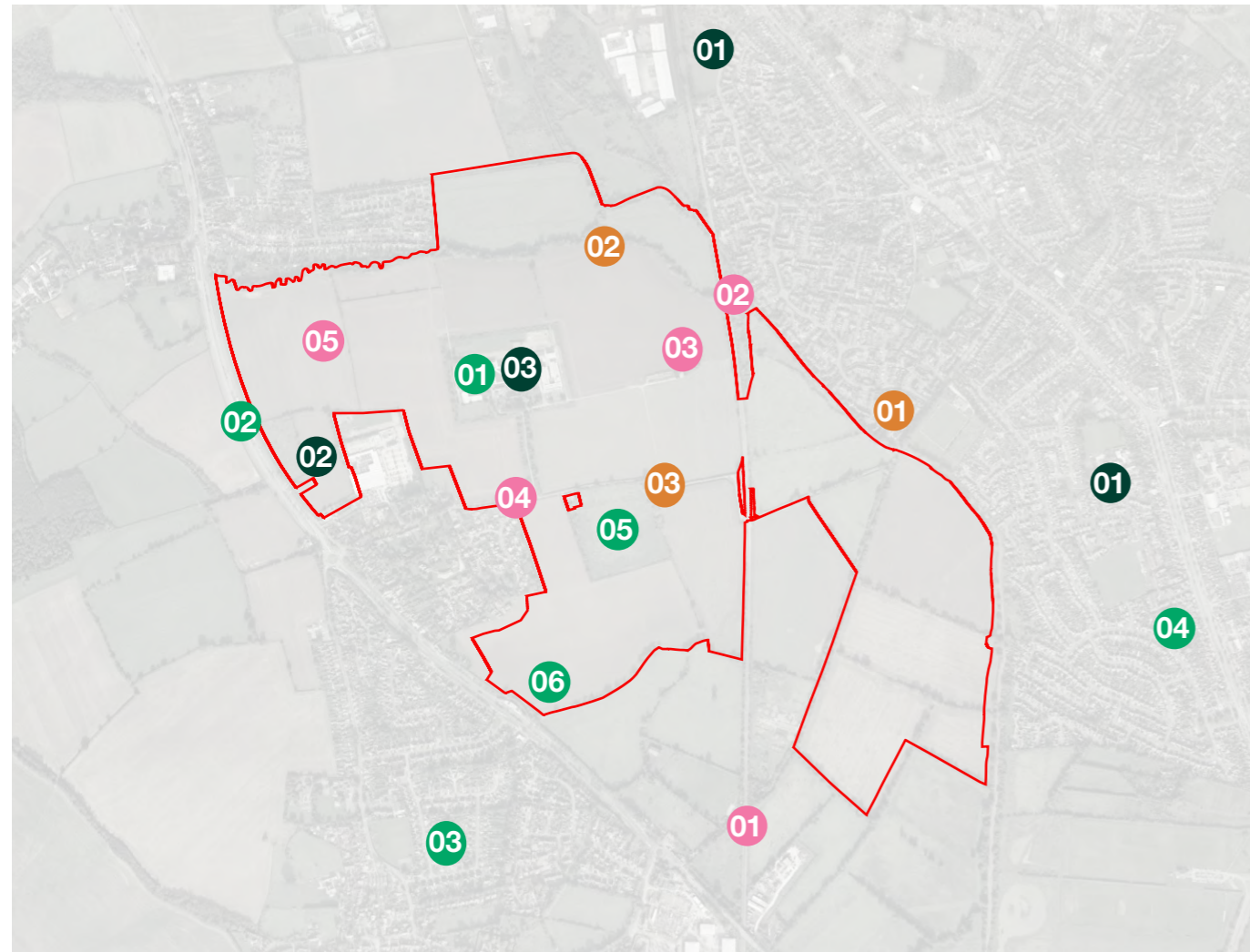
- 1 Approach from Partridge Place Kidlington
- 2 Crossing at Roundham Lock
- 3 Bridge over Rowel Brook
- 4 Begbroke Lane
- 5 Sandy Lane crossing
- 6 House at Sandy Lane crossing

New bridge proposal



2.5. The Site

History

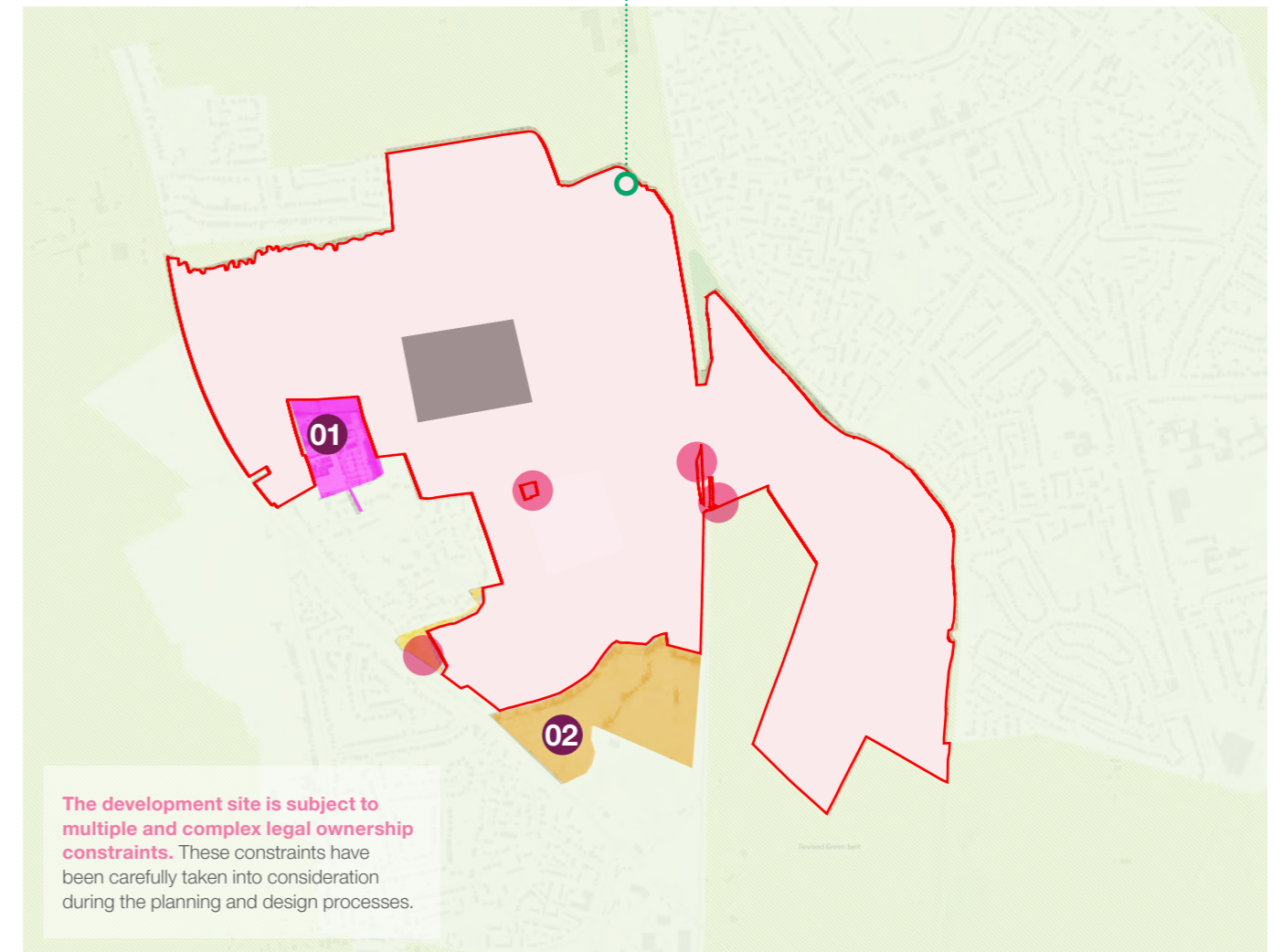


- | | | | |
|--|--|-------------------------------------|---|
| 1833 | 1896 | 1949-1970 | 2004 |
| 01 Canal already existing (constructed 1769-1790) | 01 Birmingham and Oxford Junction Railway constructed (1850) | 01 Suburban expansion of Kidlington | 01 Begbroke Science Park established (2000) |
| 02 Rowel Brook runs along perimeter of Begbroke Hill | 02 Rowel Brook cut off by railway | 02 Allotment gardens from the 1970s | 02 Begbroke Hill entrance road |
| 03 Kidlington Lane to Yarnton and Sandy Lane existed close to current form | 03 Parkers Farm | 03 Begbroke Farm | 03 Residential expansion of Yarnton |
| | 04 Sandy Lane normalised | | 04 Residential expansion of Kidlington |
| | 05 Approximate current parcel sizes | | 05 Landfill site within red line closed and backfilled by 1980s |
| | | | 06 Filling station since early 1980s |

Ownership

The PR8 site.

- The emerging proposal will be informed and have to work and address and where possible integrate proposals with its neighbours.

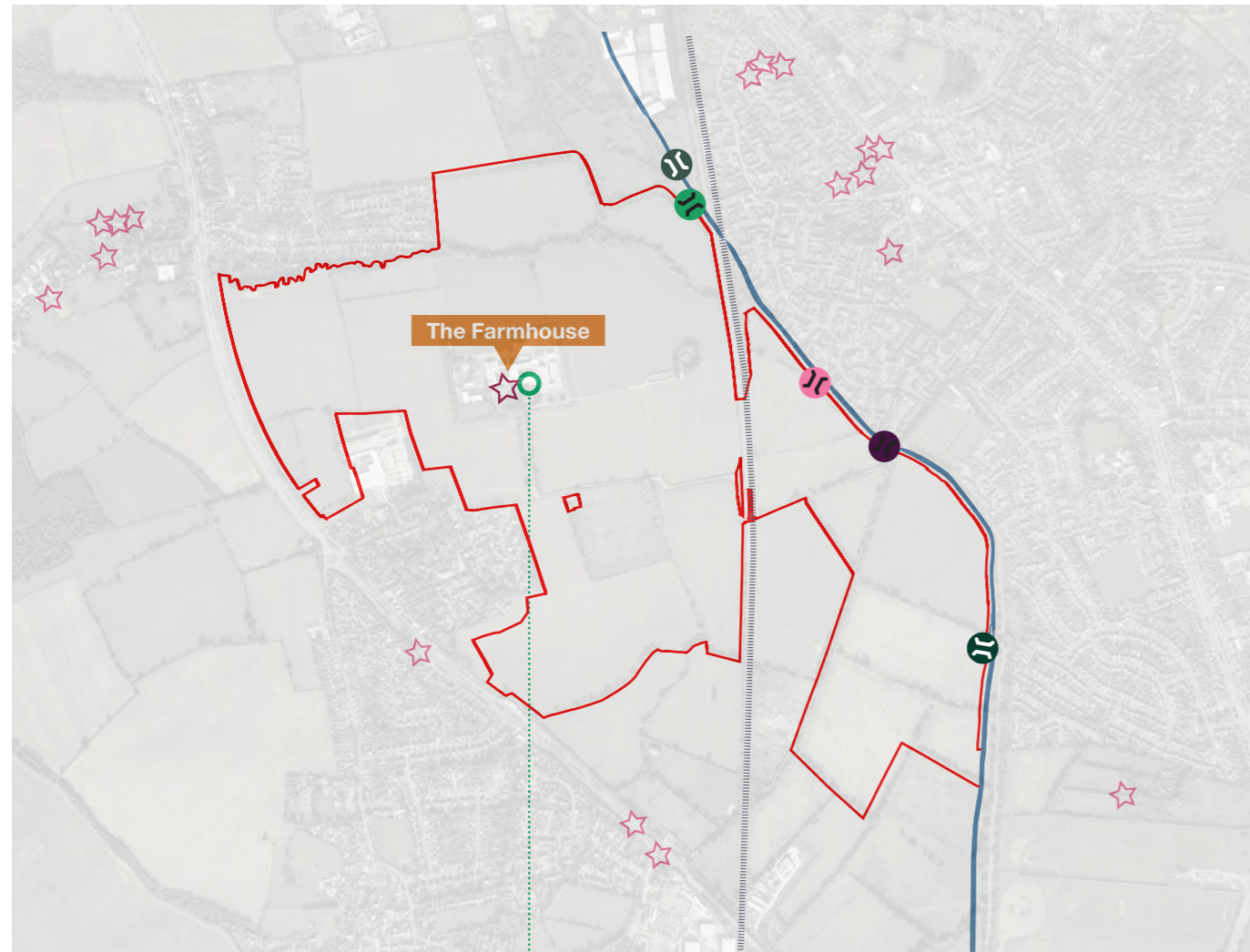


- 01 **The Newcore**
- 02 **Mr Smith and Mr Smith Land**
- Other third party land owners



- Application site boundary
- Begbroke Science Park, owned by the University
- Former landfill, owned by the University
- Third Party land
- Third Party land
- University of Oxford Land

Heritage



Begbroke Hill Farmhouse

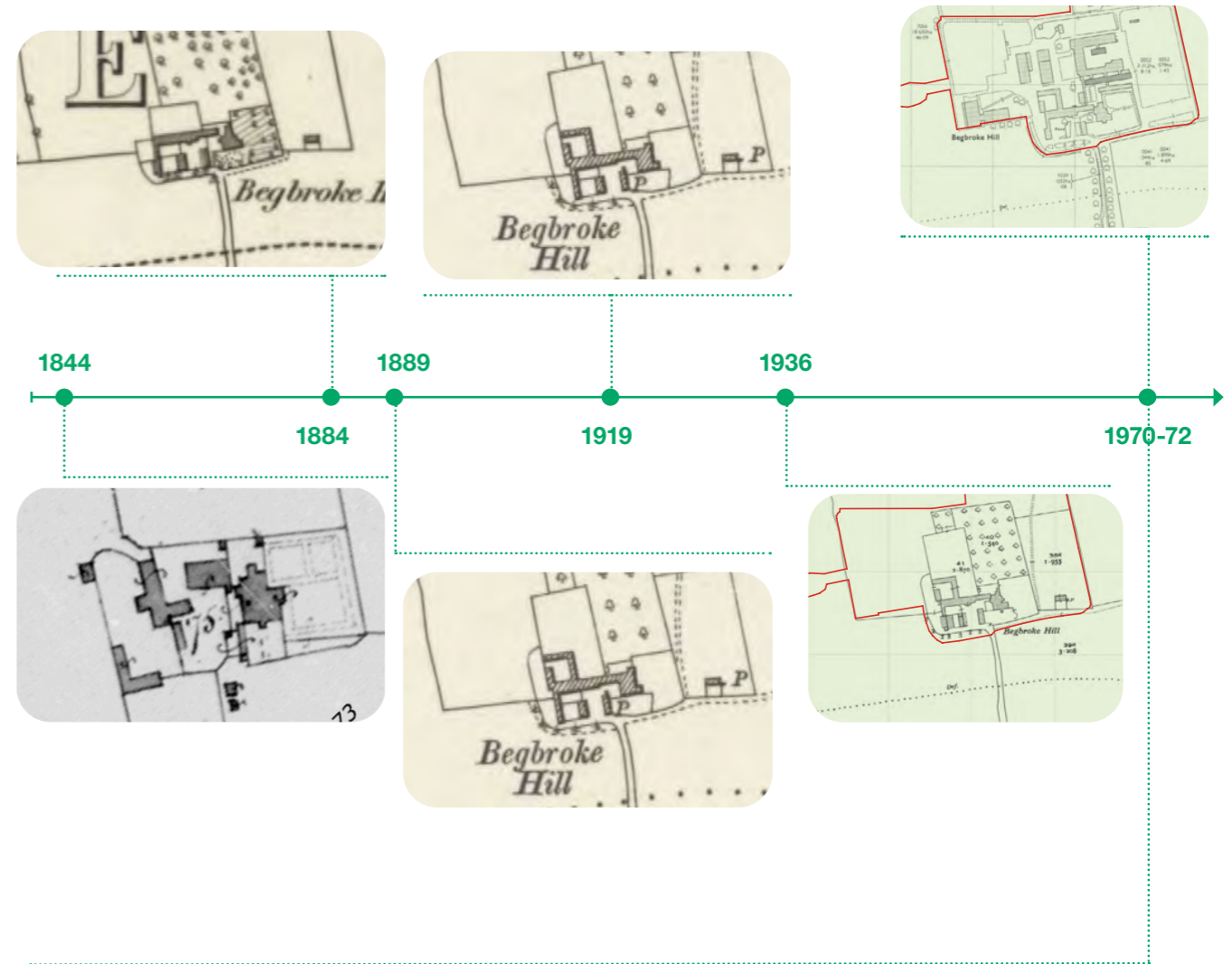


Yarnton Bridge

Key assets

- The Jacobean Farmhouse is a grade II listed building on site.
- Bridges over the Oxford Canal are also historical features.
- Beyond the site, the surrounding villages include a series of historical buildings such as St Mary's church in Kidlington.

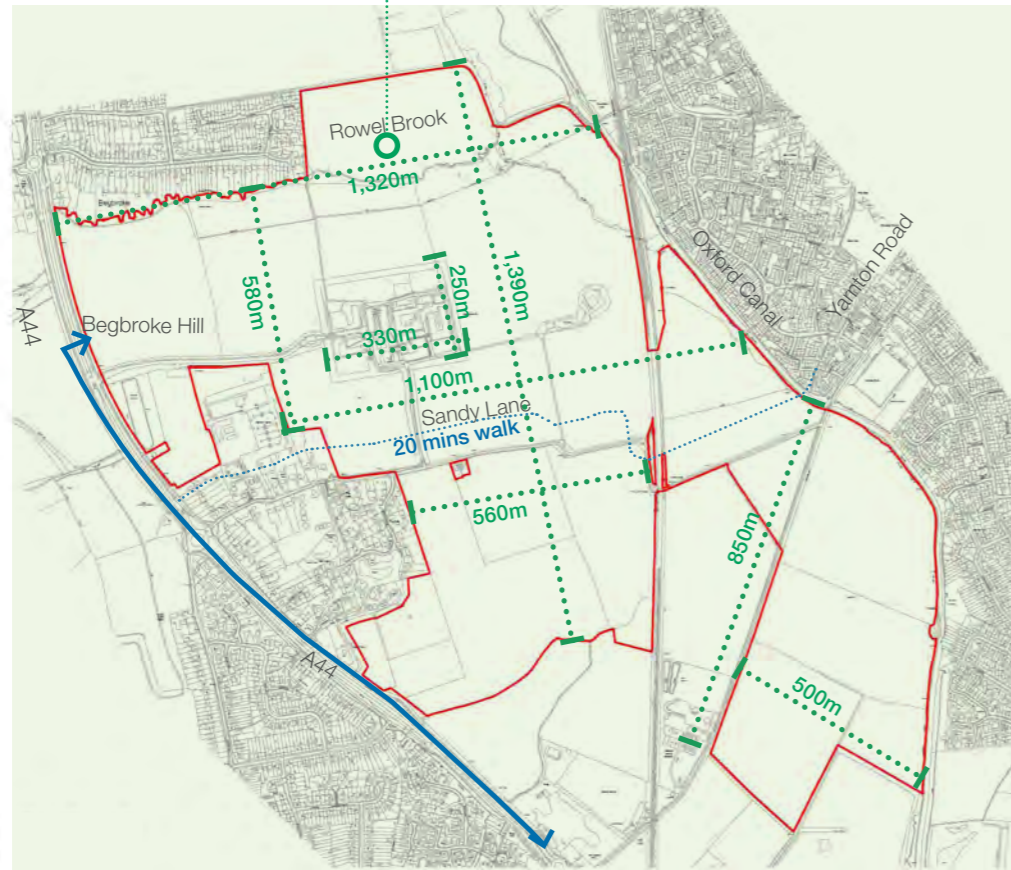
- ▭ Application site boundary
- ★ The Farmstead Grade I Listed Features
- ☆ Landmarks
- Ⓜ Roundham Lock
- Ⓜ Roundham Bridge
- Ⓜ Kidlington Lock
- Ⓜ Bullers Bridge
- Ⓜ Yarnton Bridge
- Oxford canal



Scale and dimensions

The site area is approximately 170 ha

- It takes approximately 20 minutes to walk and 6 minutes to cycle through the site east to west.



Scale comparison

Innovation Districts



170 ha



Giant, Grenoble
136 ha



Eddington, Cambridge
162 ha



Eindhoven University of
Technology
75 ha

Innovation Districts R&D only



22.8 ha
(Including existing BSP 8.2 ha)



North Oxford
27 ha



CB1, Cambridge
12 ha



Kendall Square, MIT Cambridge
14 ha



Innovation Quarter, Kings
Cross, London
28 ha

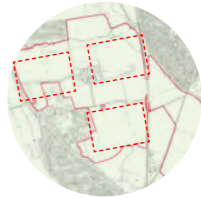


Granta Park
58 ha



Babraham Park
61 ha

Residential-led Developments



55 ha
1800 homes



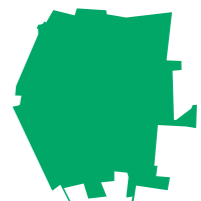
Barton Park, Oxford
39 ha
8885 homes



Bicester Village, Kingsmere
133 ha
1585 homes

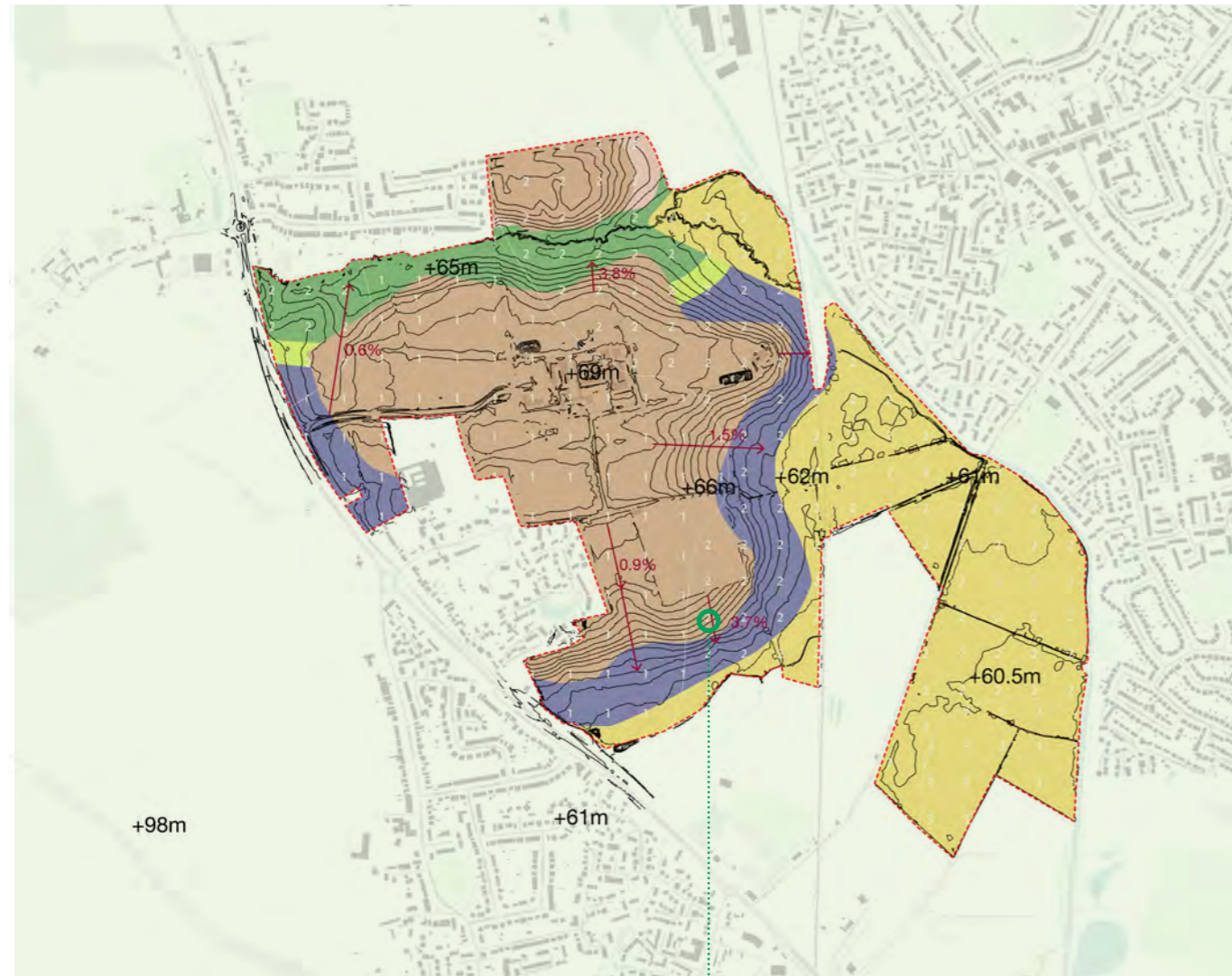


North East Didcot
146 ha
1880 homes



Waterbeach, Cambridge
298 ha
6500 homes

Geology



Soil type (British Geological Survey)

■	Sand & Gravel
■	Alluvium
■	Oxford Clay Fm
■	Kellaways Clay
■	Cornbrash Formation
■	Kellaways Sand

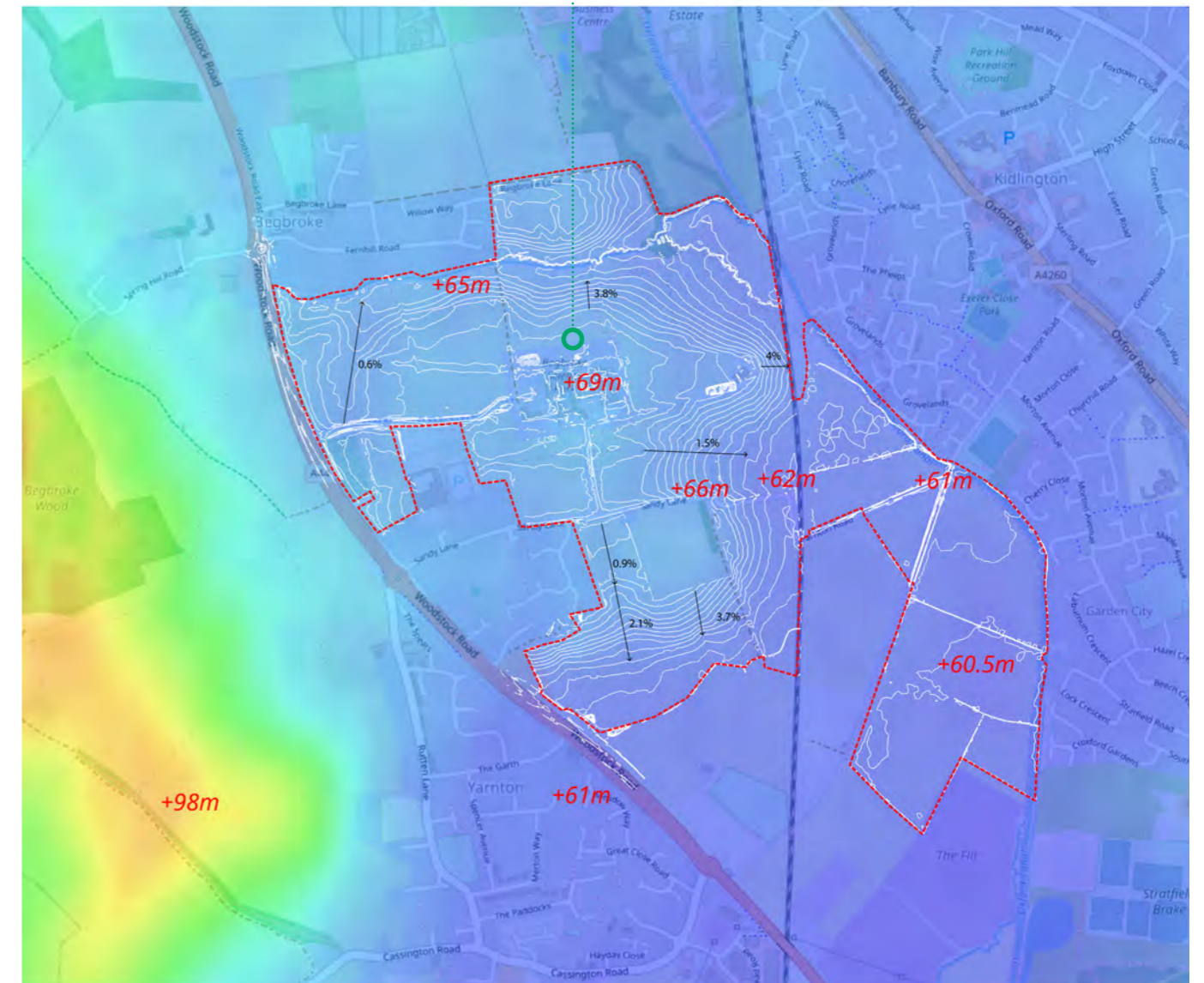
The site's geology reveals the history of the region shaped by the river and floodplains.

- Agricultural topsoil comprising of gravelly sand and clay soils. Alluvial deposits in low-lying areas close to the streams in the north and south of the site as well as the area between the railway line and the Oxford Canal and river terrace deposits in the higher areas of the site. Underlying solid geology and sub-croppings of Oxford Clay Formation, Kellaways Sand, Kellways Clay and Corbush limestone formation. Made ground in the former Sandy Lane landfill, consisting of ash with a variety of man-made waste.

Topography

The site is situated to the east of the hilly **Blenheim Park**, and it contains a natural plateau at approximately **+69m** at its centre.

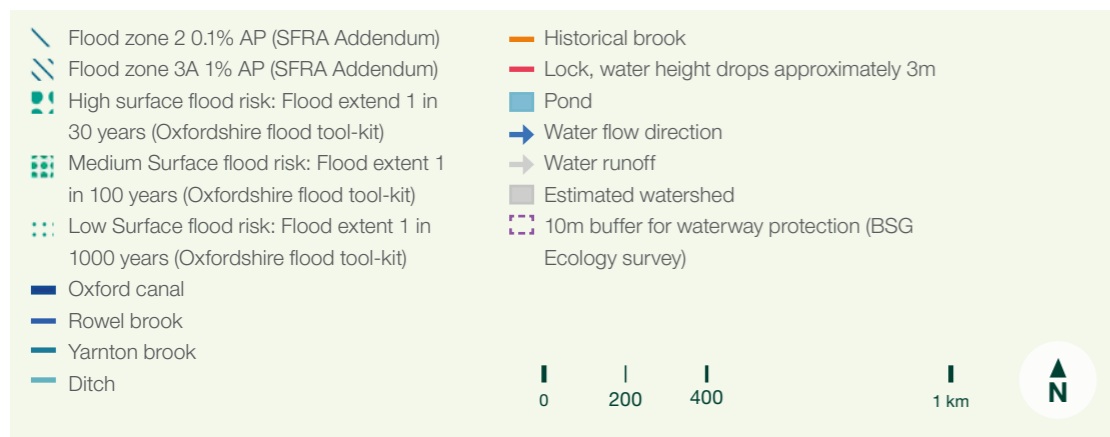
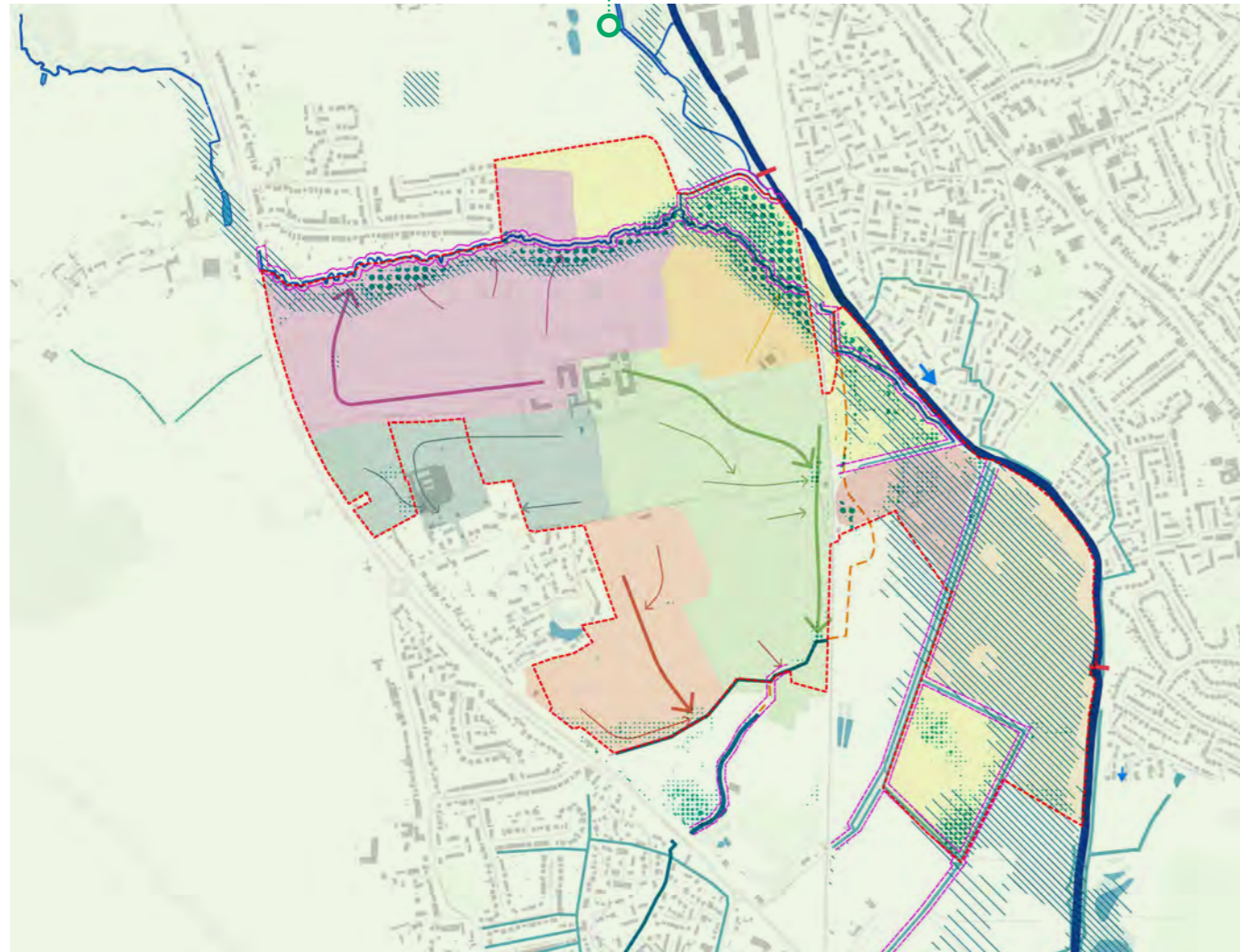
- This plateau is where the existing cluster of Science Park buildings is located. The slopes around the plateau gradually slope downwards towards the Oxford Canal, which has an elevation of +61m.



Hydrology

Existing watercourses and flooding

- The majority of the Site is located within Flood Zone 1 and at low risk of flooding. Areas located in Flood Zone 2 and 3, which are at medium to high flood risk are located along the length of Rowel Brook, the parcel of land to the west of the Oxford Canal, in the North-West of the Site and around the Southern drainage ditch.
- Oxford Canal serves mainly as a waterway but historically has over-topped causing flooding.



Ecology



The Oxford Canal and Rowel Brook form a green-blue network on a larger scale, while hedgerows provide ecological connectivity on a smaller scale.

- The site has valuable ecological features and six main habitats: arable land, grassland, woodland, hedgerow, streams, and ditches. Only specific areas are considered HPI (Habitat of Principal Importance), including hedgerows, the Science Park pond, and semi-natural woodland along Rowel Brook. The former landfill site contains semi-improved grassland, scrub, and ruderal vegetation.

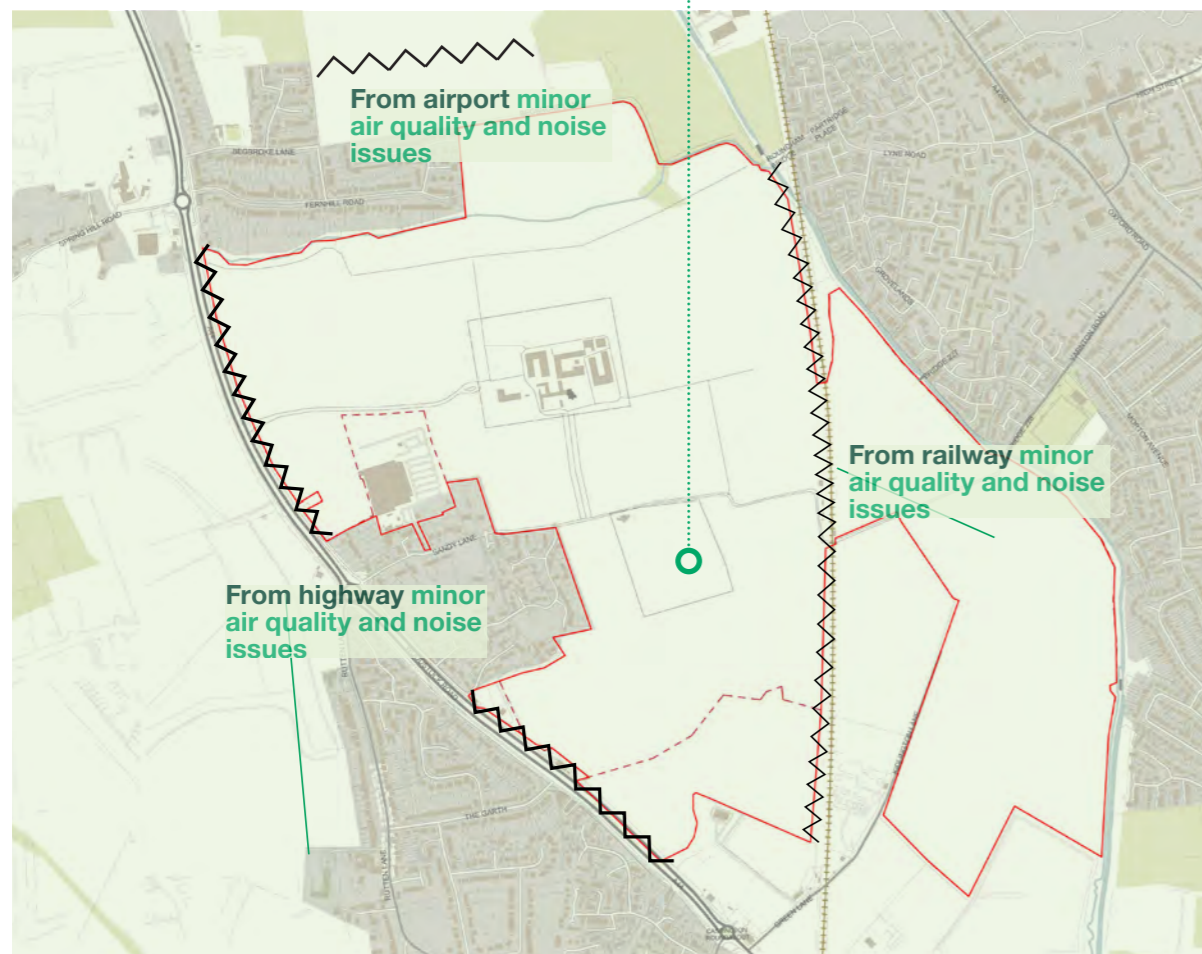
Noise and air quality

Air quality and noise issues from A44

- The A44 is an air pollution source on-site adding a constrain to the development and the distribution of uses.

Noise sources impacting Begbroke

- The Railway running through the site and the airport located to the north are other sources of noise and air quality potentially impacting on to areas of development and future buildings and public realm.



Utilities

There are a number of utilities currently running across the site.



Environmental assets

Biodiversity

The brook supports a variety of plant and invertebrate species.

Water quality

The brook has good water quality, with low levels of pollutants and high levels of dissolved oxygen.

The Oxford Canal

The site includes a series of areas of environmental quality including a Canal, trees of different ages and quality, and other green areas. A significant proportion of the site is currently used for farming, a series of natural resources form a biodiversity ecosystem the design and landscape can stem from.



The Oxford Canal

Railway

BSP - Begbroke Science Park

Former landfill site

Rowel Brook



Recreational opportunities

The brook provides opportunities for outdoor recreation, such as fishing and wildlife watching.

Ecological connectivity

The brook forms part of a green-blue network at a larger scale, providing connectivity between different habitats and ecological corridors.



The Environmental assets serve as an important green-blue network at a larger scale and provides connectivity between different habitats and ecological corridors. These assets should be preserved and protected for the benefit of both the local ecosystem and the surrounding community.

Begbroke Science Park

Begbroke Science Park is a research and development park located in Begbroke, North of Oxford, UK.

The park provides office and laboratory space for companies and research groups working in science and technology fields.

The site is situated adjacent to Blenheim Park and contains several landscape features with ecological value, including Rowel Brook.

Oxford Analytics

Training centre

Oxford Advanced Services

Chemical manufacturer

Iota Sciences

Scientific equipment supplier

Jasteq limited

IT support and services

Safe Shield Services

Security services

Impact Engineering Laboratory

Research institute

OGT

Biotechnology company

Oxford Molecular Biosensors Ltd

Research engineer

Cortex Organics Ltd

Chemistry lab

Oxford Ionics

Research and product development

Adaptix Ltd

Research and product development

WheelRight

Design engineer

Oxford Mestar Ltd

Biotechnology company

Chiralabs

Laboratory

Cyan UV Ltd

Industrial equipment supplier

Home to a science park

- **Begbroke Science Park is a successful mix of businesses sitting on the site today.**
- **The proposal can build from it rather than creating an innovation district from scratch.**

A number of businesses are located on the site today. These include laboratories, design, engineering and other types of research. The first step has already been made. The creating of an innovation district at Begbroke can build from these businesses expanding and already successful enterprise.

Access
by A44



2.6. Summary of considerations

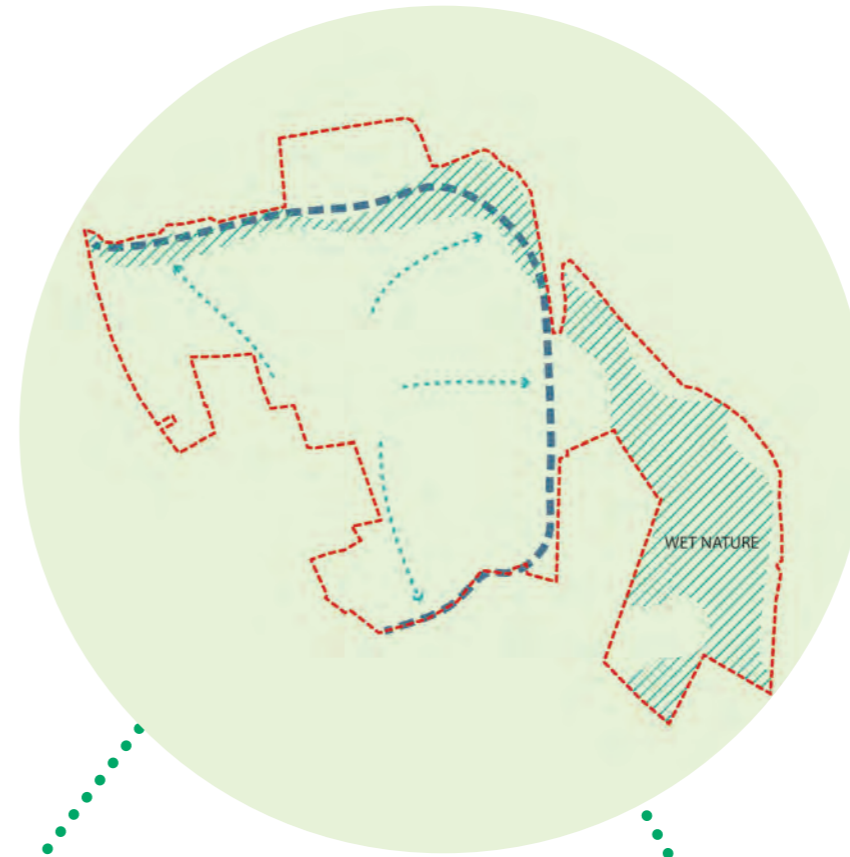
Site environmental conditions



Ecology

The east and north of the site connect to wider Oxfordshire's ecological networks.

- Additionally trees of varied quality and hedgerows provide the ecological base to work from.



Hydrology

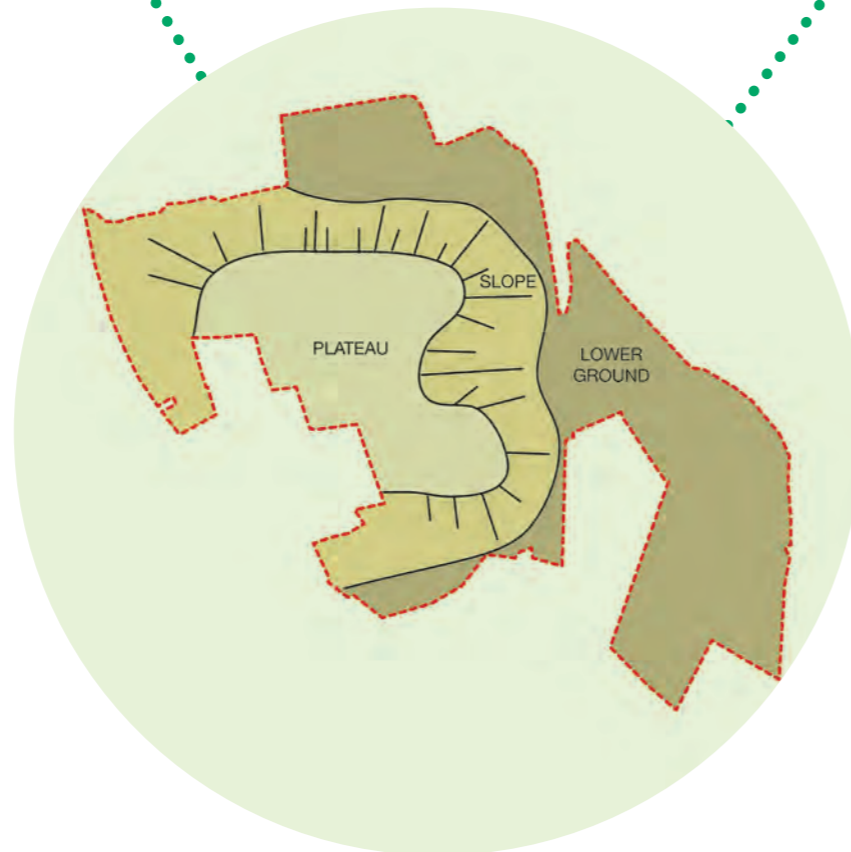
Following the topography of the site, the water runs down from higher to lower floodable areas.

- Existing drainage patterns have informed the flood risk and drainage strategies.

Topography

The site is defined by the Original Begbroke Hill -a plateau at the centre of the site.

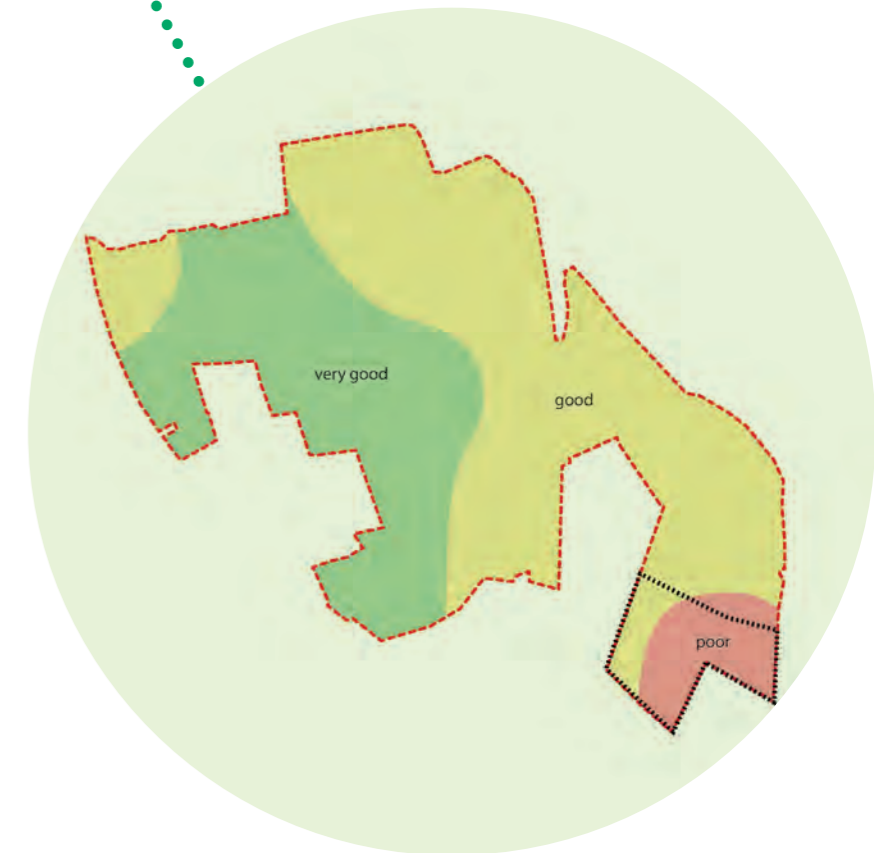
- Beyond it, the site drops to its lower level towards the east.



Geology

The site's geology reveals the history of the region shaped by the river and floodplains.

- Agricultural topsoil comprising of gravelly sand and clay soils.



Landscape character and networks



Hedge

A series of hedgerows including the perimeter of the existing science park.



Oxford Canal

The Oxford Canal runs to the east of the site providing ecological and character value



Forest

The northwestern area of the site present a series of close trees that speak to Worton Heath beyond the site.

Landfill

The former landfill site provides opportunities for a new open civic park.



History, character and local communities



Character

The architecture of the surrounding villages offer the opportunity to create character links and a wider identity stemming from Oxfordshire

History

The surrounding villages provide a sense of history, for instance through their settlement patterns and built form



Social Network

Well-established retail and community facilities

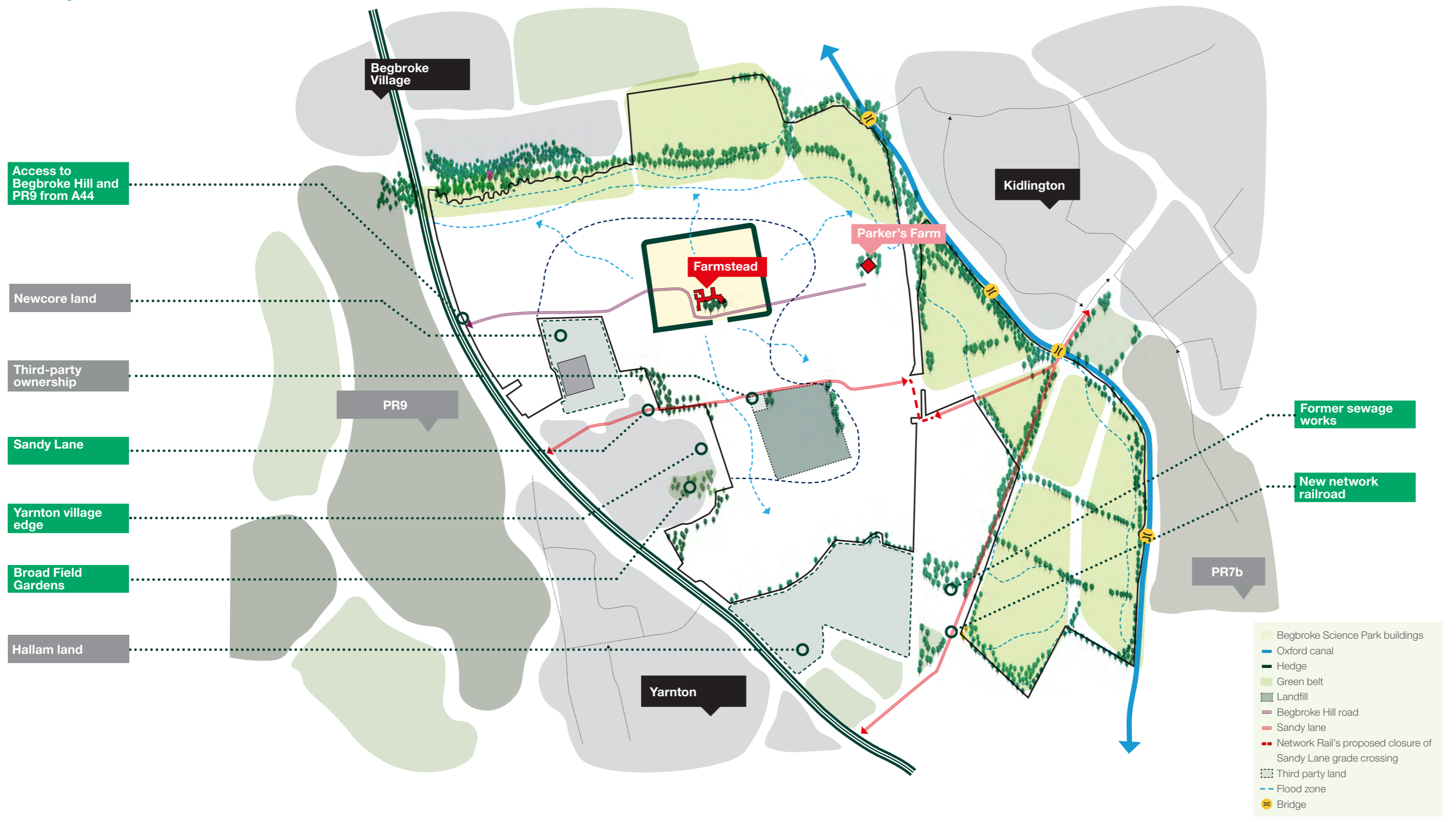


Common assets

The canal offers opportunities to bind places and people.

Base Plan

Environmental conditions, landscape character and the site context and surrounding communities are the foundation from which the proposal will emerge.



3. Consultation and design evolution

The design process has been underpinned by a thorough process of engagement and consultation with the local authorities, members of the public, design review panels, and local stakeholder groups.

3.1. Timeline

(More information on the Statement of Community Involvement)

Competition scheme



Watersheds, Topography & Flood



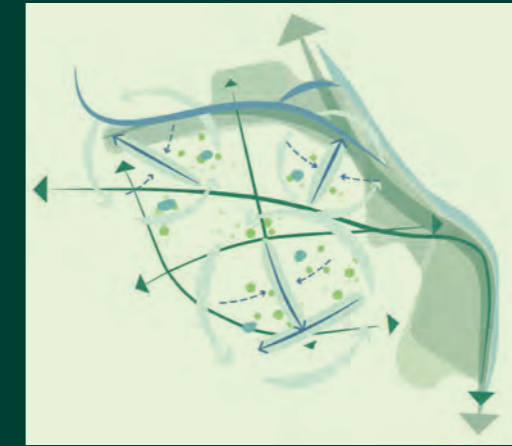
- River/Canal
- Flood zone
- Watersheds
- Topography/slope

Vision



PPA1

Emerging Proposal Sustainability strategy summary



PPA2

Emerging Proposal Civic space for civic pride



PPA3

2022

May

Masterplan kick off OU, L&G, OUD & Design Team

- The team held a series of workshops to define the vision for the site.
- A dual focus was discussed where the innovation district would form a community enabling research that could change the works whilst well-embedded in Oxfordshire and with tangible local benefits.



June/ July

OU Topic-based workshops

- A series of specialist workshops were held with experts of the University of Oxford to gather input on: Energy and carbon, Sustainability, Mobility and Transport, Community and Inclusivity, Biodiversity, and Innovation.
- The workshops provided valuable information in relation to the geology of the site, required infrastructure for the future autonomous vehicles, social infrastructure, required amenity and energy models.



July

Meet the Design Team Workshop and drop-in

- A stakeholder workshop on site and three community drop-in sessions were held for the assembled design team to take contact with the local community before starting the design work.
- Questions of transparency, trust, alongside more technical aspects were raised.



July

CDC/OCC PPA#1 - Vision

- The purpose of the meeting was to introduce the team and discuss OUD's vision for developing their land within the PR8 allocation, as well as to discuss consultation, Sandy Lane, infrastructure delivery and coordination, working with adjacent landowners, the principles of joint working at the future PPA programme.
- The strategic location and existing assets of the Site makes it one of a kind and an unrivalled opportunity to delivery high quality mixed use development.
- Begbroke Science Park ('BSP') sits in the middle and is in clear need of expansion to support its burgeoning research and innovation.
- Various infrastructure improvements were discussed, including road access, public transportation, and utility connections.
- The need for sustainable development practices, including energy efficiency and green spaces, was highlighted.

September

CDC/OCC PPA#2 - Sustainability and GI

- Feedback was provided on various aspects of the masterplan, including green spaces, sustainable stewardship, connections to open spaces, play areas, food growing opportunities, and biodiversity net gain.
- Connections to green spaces is supported and thought should be given to how Yarnton can be provided good access to open spaces
- Further discussions were planned regarding the Health Impact Assessment Toolkit and the location of retained agricultural land.
- Drainage and Sustainable Drainage Systems (SuDS) proposals were discussed, with the offer of additional advice when more detailed proposals are available.
- The potential provision of play spaces and sports pitches within the green belt land and the need for a maintenance and management strategy were highlighted.
- Ownership and remediation considerations for landfill land, connectivity of schools to green infrastructure, and a movement network were discussed.
- Repurposing strategies for certain areas, design review panels, and the coordination of development briefs and consultations were addressed.
- Hyper local wild spaces should be included

October

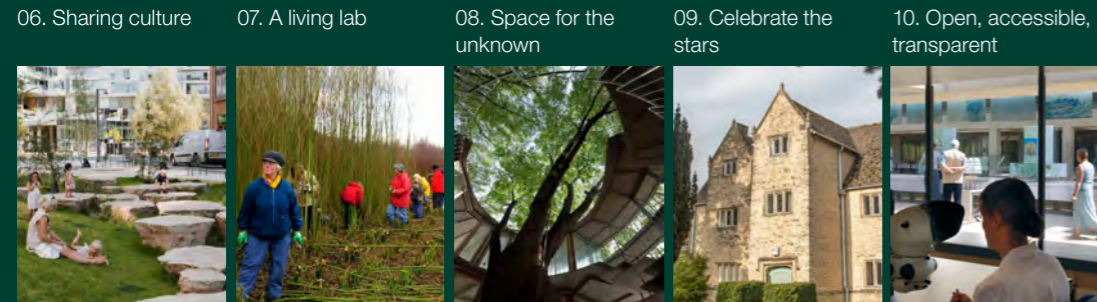
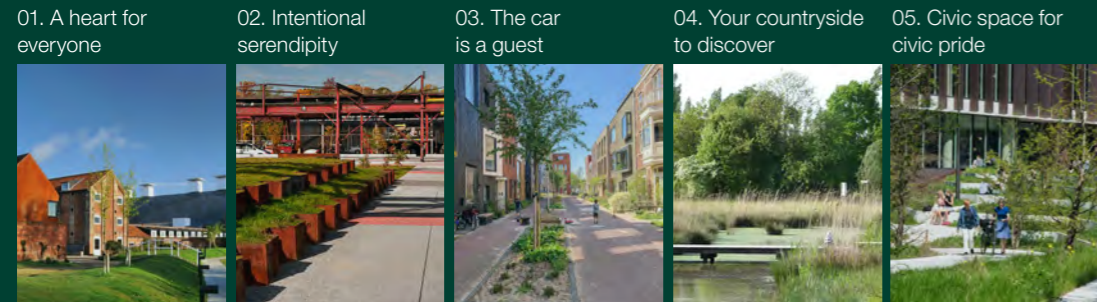
CDC/OCC PPA#3 - Key moves

- BSP at centre creating mixed use heart
- Distinctive but complementary neighbourhoods
- Using GI and the movement strategy as the framework for the layout
- Location of the schools
- Retained agricultural land (social farm)
- Landfill as a positively used open space

Colour key

- Internal
- Community engagement
- Local Planning Authority

Evolving 10 Principles



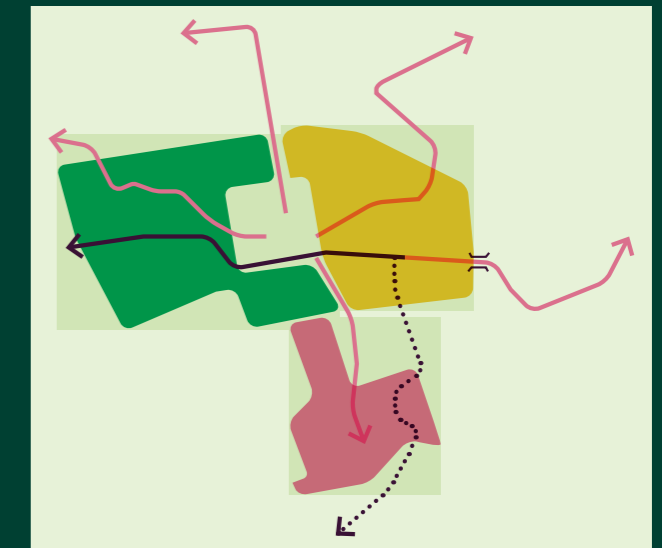
PPA4

Emerging Master Plan



PPA4

Three neighbourhoods with nature at their heart



PPA5

- Main cycling/pedestrian link
- Main access route
- Public transport



October

CDC/OCC PPA#4 - Master Plan layout

- The team presented the current illustrative masterplan, discussing scale and massing.
- The public art strategy can be intertwined with the archaeology and play strategies in order to develop a more characterful masterplan that has a greater sense of 'ownership'.
- Use of the Farmstead to anchor the local centre.
- Massing and scale will also be important considerations at the borders between existing and proposed development and between land uses (commercial and residential areas).
- the car is a guest principle raised a discussion about the adoptability of the roads. OCC to put OUD in contact with the County's Road Agreements Team to allow discussion of the emerging transport strategy.
- intention to create low-car neighbourhoods.
- OUD's desire to deliver an east-west bus, cycle and pedestrian route through the site that would make use of the enhanced Sandy Lane crossing. Utilising bus-only routes through development.

November

OU online workshop

- Workshop sharing the masterplan work to date.
- Feedback revolved on questions of transport and energy models amongst other topics.
- The team explained the transport modelling process, stages and timescales. And a workshop on energy models testing the Begbroke proposals was agreed.



November

Site visit, stakeholder workshop and community drop-in sessions

- Feedback from the community centred on flooding and the frustration with the closure of Sandy Lane were the main topics raised.



November

Design Review Panel #1

Concept and Design Vision:

- Interrogation regarding how the concepts of 'innovation' and 'countryside' will manifest in the design.
- The team should clarify how the development will be set within countryside when it is bordering the settlements of Kidlington and Yarnton

Sustainable Development:

- An ambitious circular water strategy should be developed and set out how water will be reused, surface water managed, and water cleaned on site.

Landscape, masterplan and layout

- Illustrative masterplan should accurately describe how green and blue networks structure the masterplan, and how the countryside will infiltrate the plan.
- Delivering more homes, or to deliver the same number of homes within a much smaller area of the site.
- The secondary school location should be reconsidered.

Movement and connectivity

- The scheme's design must also anticipate and integrate the train station.
- We welcome the design team's intentions for the car to be a guest and to pursue 'decide and provide', alongside limited car parking.

December

CDC/OCC PPA#5 - Master Plan Review

- OUD are seeking to submit the outline application in July 2023.
- OUD confirmed that their outline planning application would only cover the land owned by the University; it would not include the land promoted by Hallam Land Management nor by Newcore.
- Allotments could be provided within the green belt.
- Seeking an 'enhanced' bridge over the railway. The proposed location of the enhanced bridge is further north than shown on the PR8 policy map due to land ownership constraints.
- The masterplan to allow for the full policy requirement with regards to education provision, but for there to be sufficient flexibility in the plan for this land to be 'flipped' to other uses if the need for new schools is not forthcoming.
- The locations of the schools would be influenced by the phasing strategy.

Colour key

- Internal
- Community engagement
- Local Planning Authority

School options



PPA6

- Opt 01
- Opt 2a
- Opt 2b
- Opt 03
- Opt 04
- Opt 05

Masterplan evolution



PPA7

The Bridge

- Railway
- Bridge over railway
- Railway station
- Railway platform
- Parkers Farm
- Secondary School

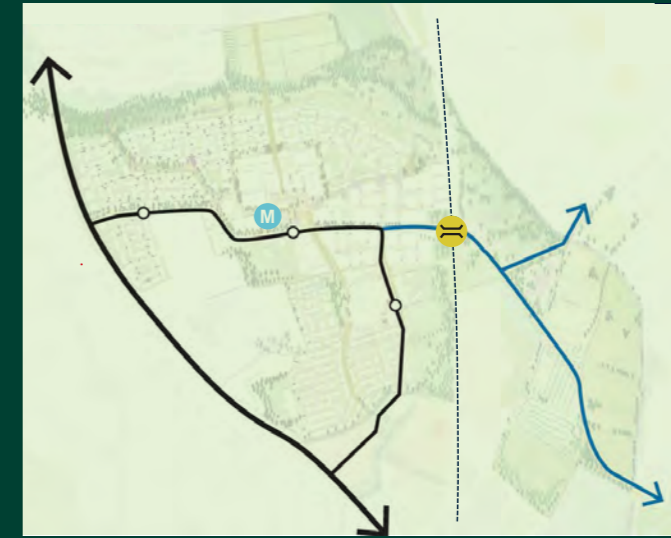


Natural drainage and water management



The drainage scheme should be designed to control surface water in close proximity to where it falls and replicate natural drainage as closely as possible. Infiltration, attenuation and conveyance to Rowel Brook via swales, retention basins, storage cells and permeable paving

Integrated public transport



PPA8

- Current route along A44
- Public transport looping though the site off the A44
- Indicative location of a bus stop
- Potential public transport route
- Bridge

Regenerating the landscape for people and planet

Rethinking movement so the car takes a back seat

Reframing innovation through integration of living and research

PPA9

2023

February

CDC/OCC PPA#6 - Flexible framework

- Coordinating design with neighbouring sites (Hallam + Newcore).
- Relocation of existing allotments.
- Relocation of second primary school following discussions with OCC (still in process).
- Refinement of a parking strategy (mobility hubs, living streets, etc.).
- Elaboration of Living streets concept and practicalities.

March

CDC/OCC PPA#7 - GI and Landscape

- Refinement of landscape design from vision to illustrative scheme, defining its varied character.
- Adjustment of Green arteries and neighbourhoods layout following topography and ecology input (following from DRP#1 feedback)
- Coordinating and incorporating Network Rail bridge responding to community consultation feedback.
- Provision of outdoor gyms, and aromatic/sensory gardens that could benefit neurodivergent residents.

March

Stakeholder Masterplan Review Workshop Community Drop-in Session #3



April

CDC/OCC PPA#8 - Transport

- Create a radical shift away from cars through walking and cycling neighbourhood design principles, active travel routes and shared mobility.
- KMC presented the OCC's current and emerging strategies for bus provision, which will see an additional route added that will loop through PR8 and connect to Oxford Parkway and beyond via Frieze Way.
- On living streets illustrative proposals have been tracked to ensure they can be accessed by refuse and emergency vehicles.
- Providing walking and cycling routes to connect Begbroke, Kidlington and Yarnton through the development.
- Bridge: There are land ownership constraints on either side of the railway north of Sandy Lane which make it impossible to deliver the bridge in this location as it requires embankments that would infringe on that 3rd party land. A more northerly location is being taken as this is less constrained and complements the emerging masterplan, including the location that is safeguarded for the potential rail station.

May

CDC/OCC PPA#9 - Sustainability

- The approach to sustainability will follow the energy hierarchy, taking a fabric first approach and supplying power through on-site renewables.
- To ensure that landscaped and play areas can be enjoyed at all times of the year (e.g. covered spaces or winter gardens for adverse weather) and by people of all ages and abilities.
- Confirmed that the high-level approach to flooding and SuDS provision is appropriate.
- The masterplans have been designed to respond to a number of standards including Building with Nature, CEEQUAL and WELL Community.
- CDC will expect all buildings to meet BREEAM Very Good.

Colour key

Internal

Community engagement

Local Planning Authority

Illustrative Master Plan



Summer Application submission

Outline planning application

2023

May

Design Review Panel #2

We welcome the progress made by the team and support the logical three-tiered planning approach.

Concept and Design Vision:

- Clarify how the outline planning submission, described as 'tier 1', will safeguard commitments made at this stage and prevent design ambition from becoming diluted as the proposal progresses.
- Provide further detail on the aspects of the design that will be covered by the parameter plans that will be submitted at tier 1 stage – such as the green arteries.

Design Principles:

- Within each of the five place principles, set out key specific targets and aims that will guide design decisions from the strategic to the detailed to deliver tangible benefits to the future Begbroke community.

School:

- The school is described as being in a 'suitable location'
- Continue to work with Oxfordshire County Council to explore how the school can be spatially connected with the innovation district.

Landscape:

- Describe how a regenerative landscape will be manifested within the masterplan and deliver positive outcomes for people and nature.

Oxfordshire villages:

- Study the morphology and density of Oxfordshire villages. Explore delivering a denser scheme for distinctiveness within the Oxfordshire context, and for meeting the masterplan's built development needs within a smaller area of the site.

July

Application preview exhibition

- The team took the public through the content of the application.



Colour key

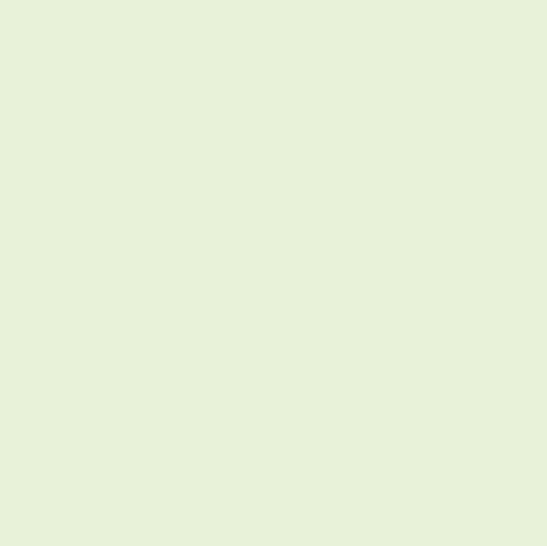
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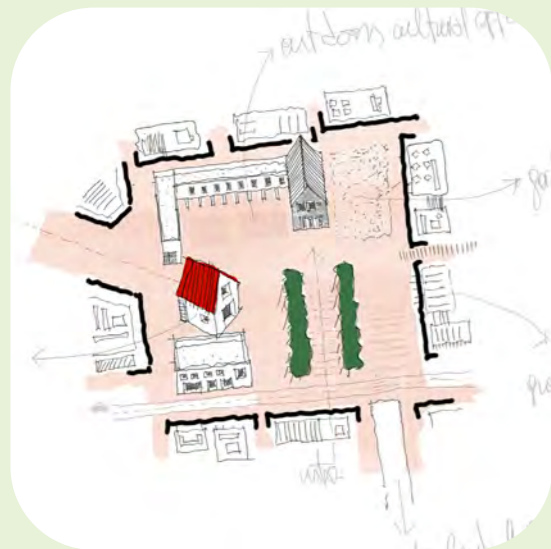
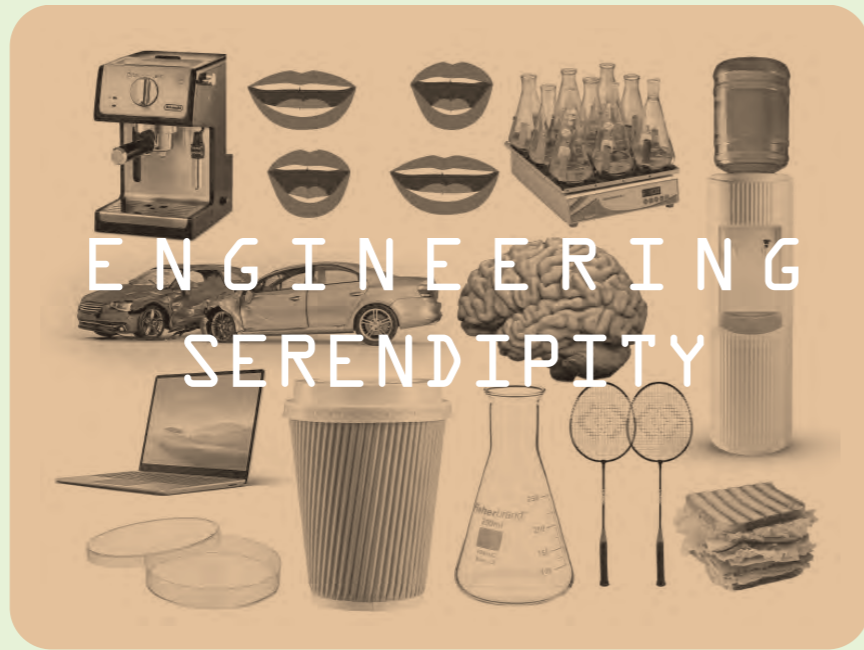
Community engagement

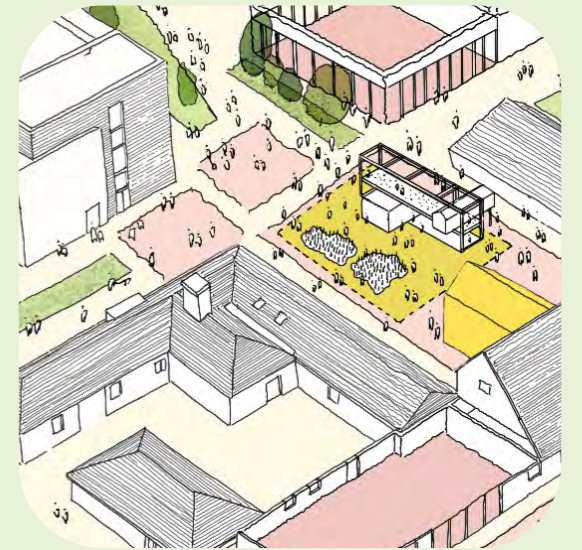
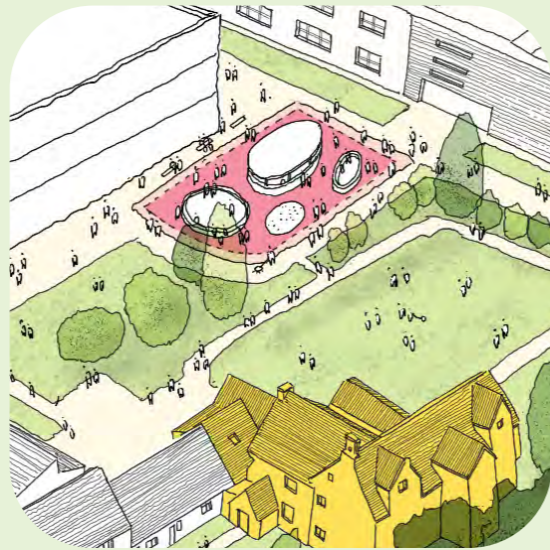
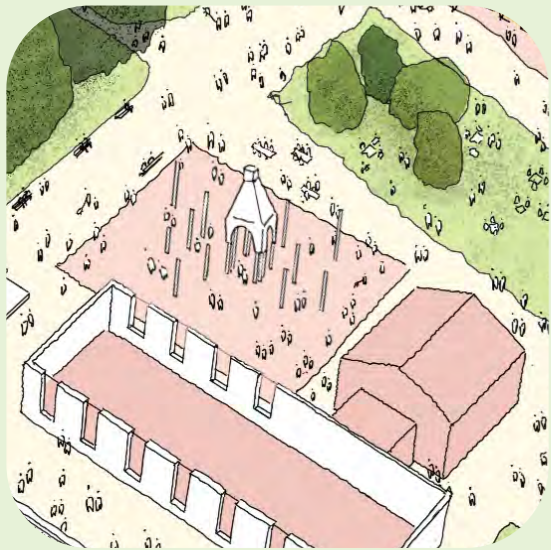
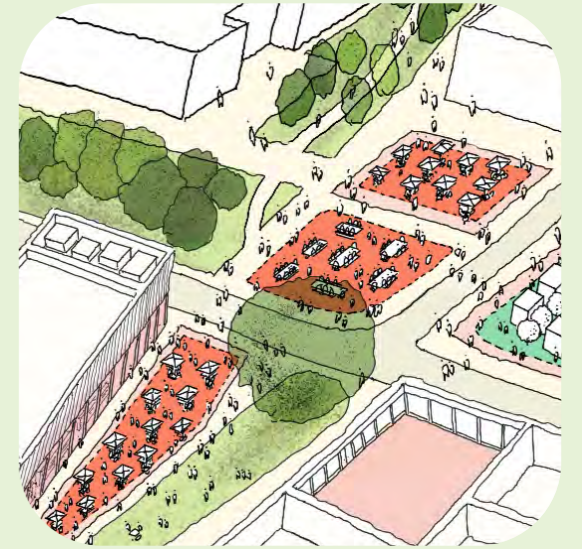
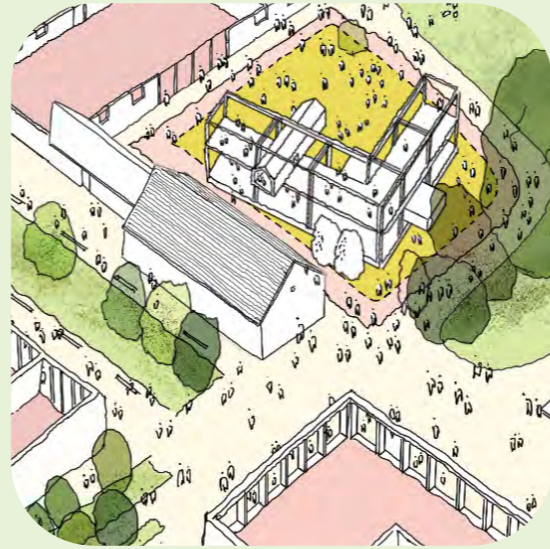
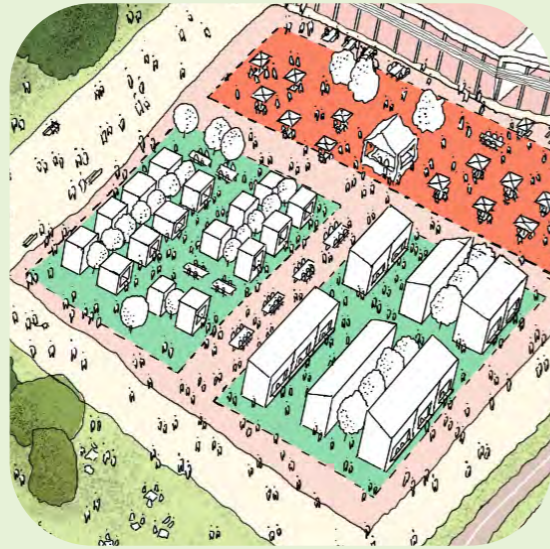
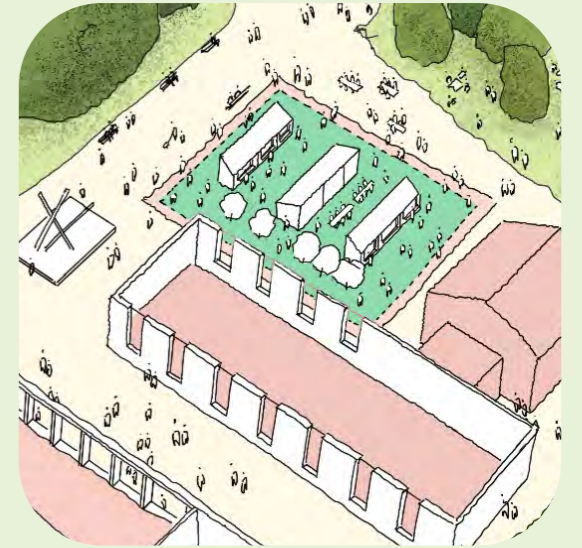
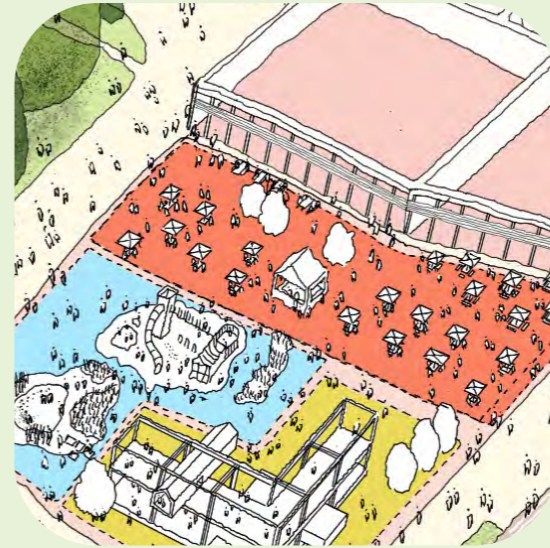
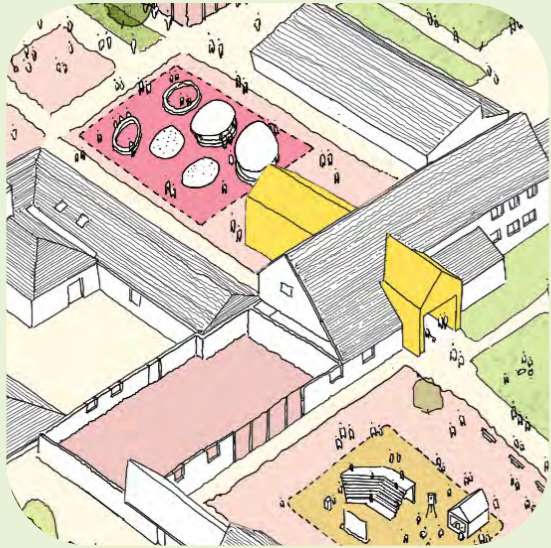
Local Planning Authority

3.2. Sketches

A series of sketches have been developed and used to test the spatial qualities of the illustrative masterplan. These are working drawings rather than illustrations; they describe the process rather than the final proposal, thus their inclusion in this chapter.







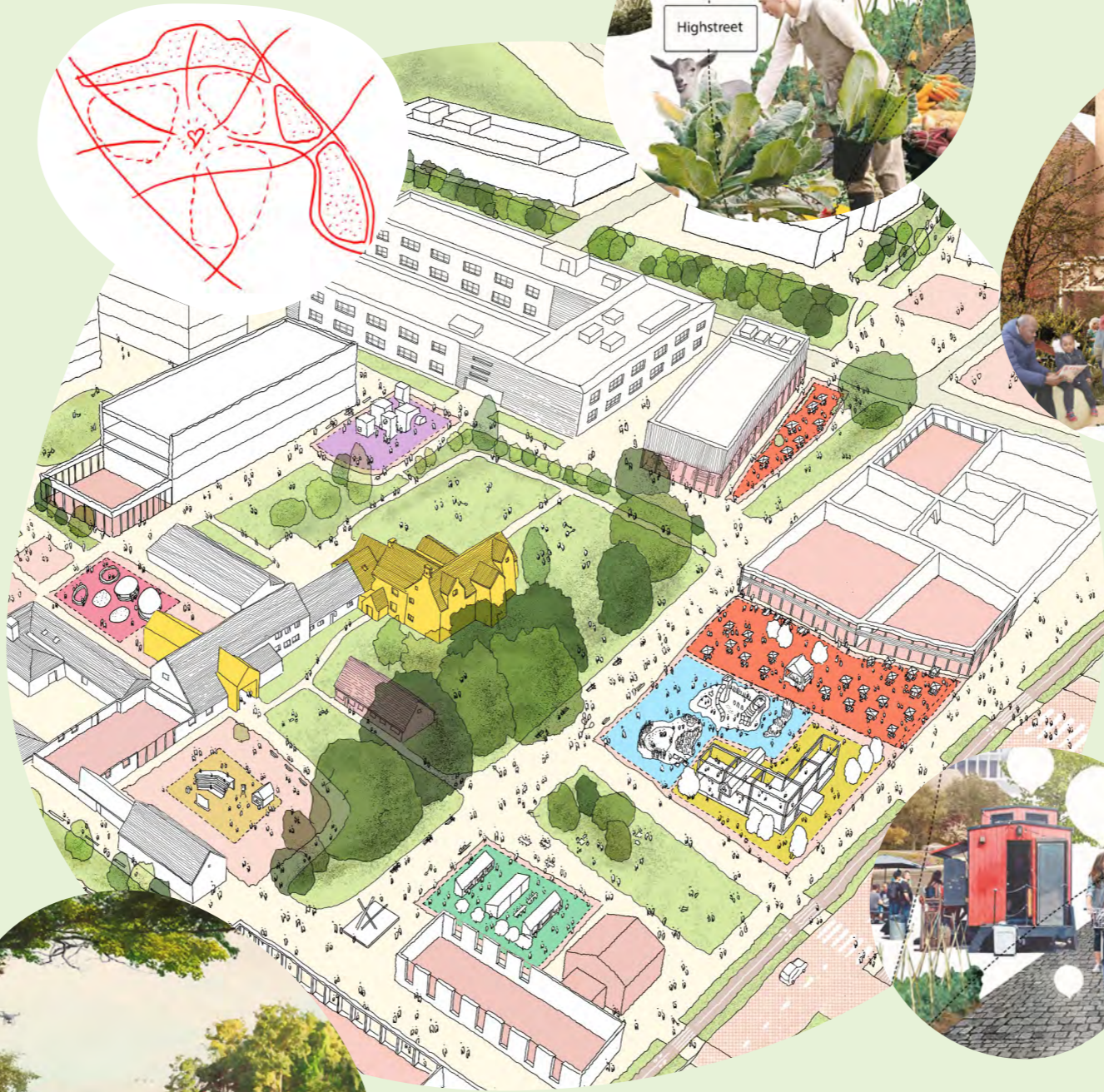
4. Place Principles, masterplan framework and illustrative masterplan

The design process has distilled the vision into a set of guiding principles that will form the foundations on which Begbroke Innovation District is built. These Place Principles, tested through the Illustrative Masterplan, have been captured in the Development Specification, Parameter Plans and Strategic Design Guide.

4.1. Cultivating a place

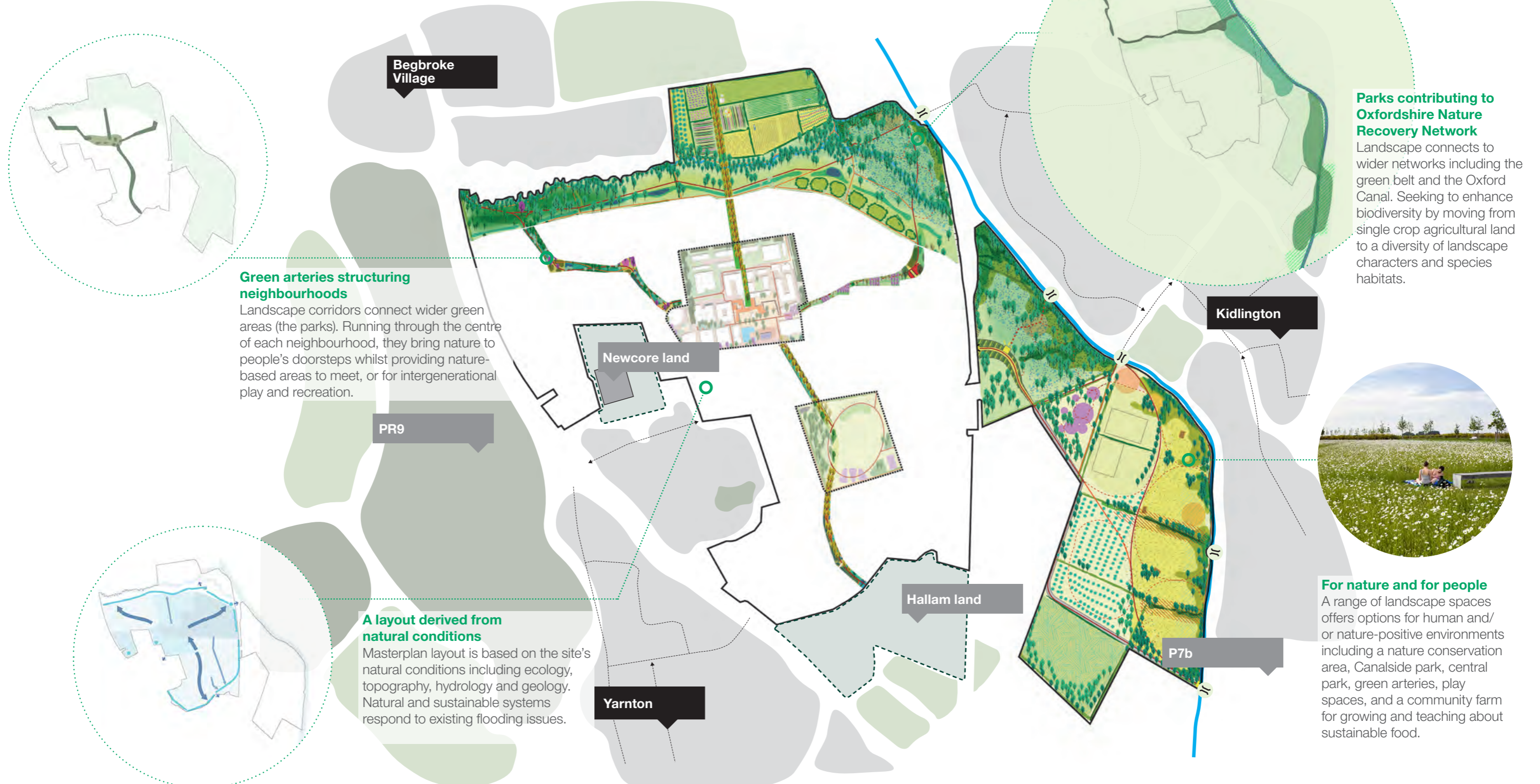
... In which a community can change the world

A world-leading university with research credentials, shareholders guided by long term values, and a site with impressive natural resources surrounded by well-established communities represents a once in a lifetime opportunity to create a global innovation district with tangible local benefits.



4.2. A restorative landscape

Work with natural systems to improve the health and well-being of people and nature



Green arteries structuring neighbourhoods

Landscape corridors connect wider green areas (the parks). Running through the centre of each neighbourhood, they bring nature to people's doorsteps whilst providing nature-based areas to meet, or for intergenerational play and recreation.

PR9

A layout derived from natural conditions

Masterplan layout is based on the site's natural conditions including ecology, topography, hydrology and geology. Natural and sustainable systems respond to existing flooding issues.

Yarnton

Newcore land

Hallam land

Kidlington

P7b

Parks contributing to Oxfordshire Nature Recovery Network

Landscape connects to wider networks including the green belt and the Oxford Canal. Seeking to enhance biodiversity by moving from single crop agricultural land to a diversity of landscape characters and species habitats.

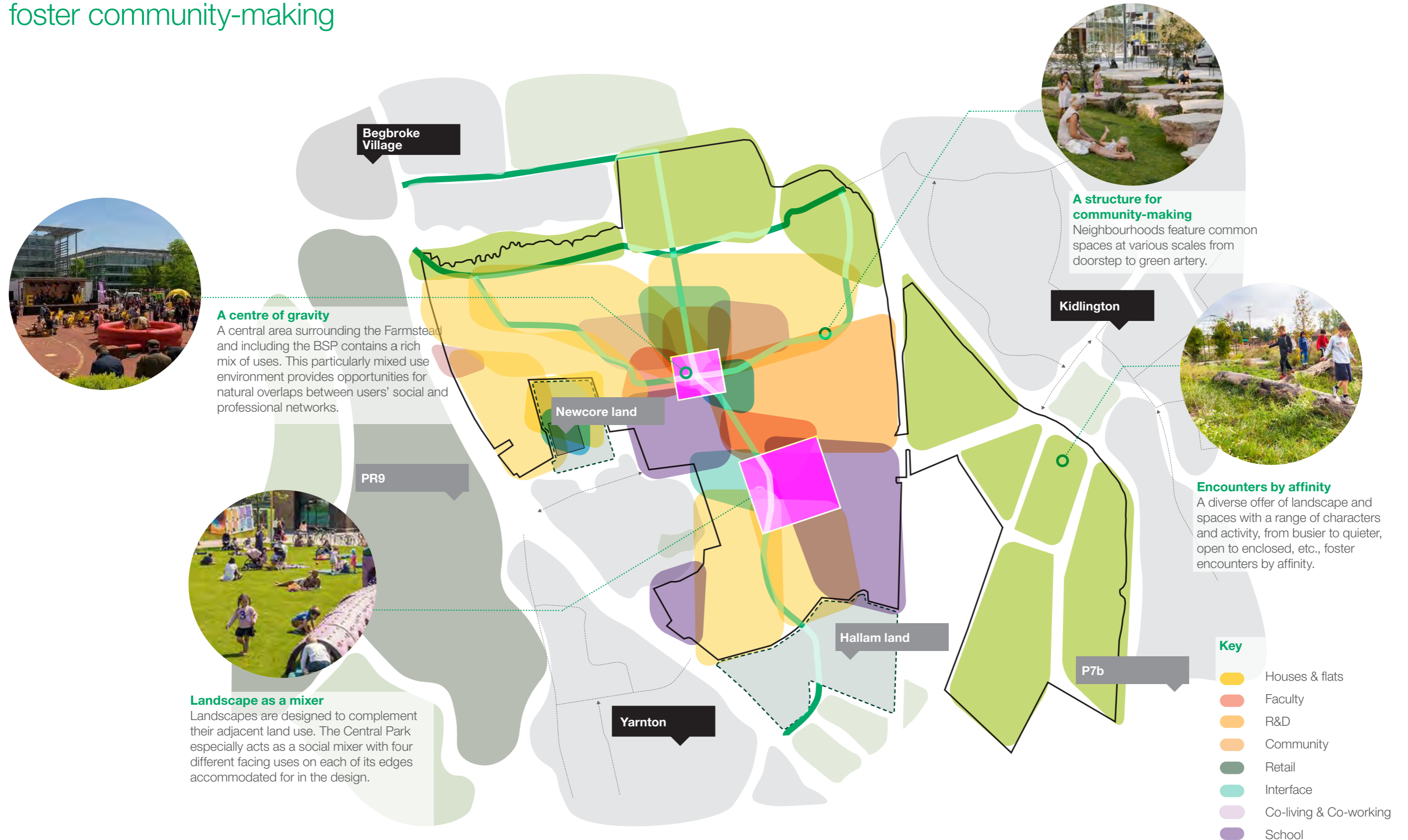


For nature and for people

A range of landscape spaces offers options for human and/or nature-positive environments including a nature conservation area, Canalside park, central park, green arteries, play spaces, and a community farm for growing and teaching about sustainable food.

4.3. Engineering serendipity

Landscape and amenities that intentionally foster community-making



A centre of gravity
A central area surrounding the Farmstead and including the BSP contains a rich mix of uses. This particularly mixed use environment provides opportunities for natural overlaps between users' social and professional networks.

A structure for community-making
Neighbourhoods feature common spaces at various scales from doorstep to green artery.

Encounters by affinity
A diverse offer of landscape and spaces with a range of characters and activity, from busier to quieter, open to enclosed, etc., foster encounters by affinity.

Landscape as a mixer
Landscapes are designed to complement their adjacent land use. The Central Park especially acts as a social mixer with four different facing uses on each of its edges accommodated for in the design.

- Key**
- Houses & flats
 - Faculty
 - R&D
 - Community
 - Retail
 - Interface
 - Co-living & Co-working
 - School

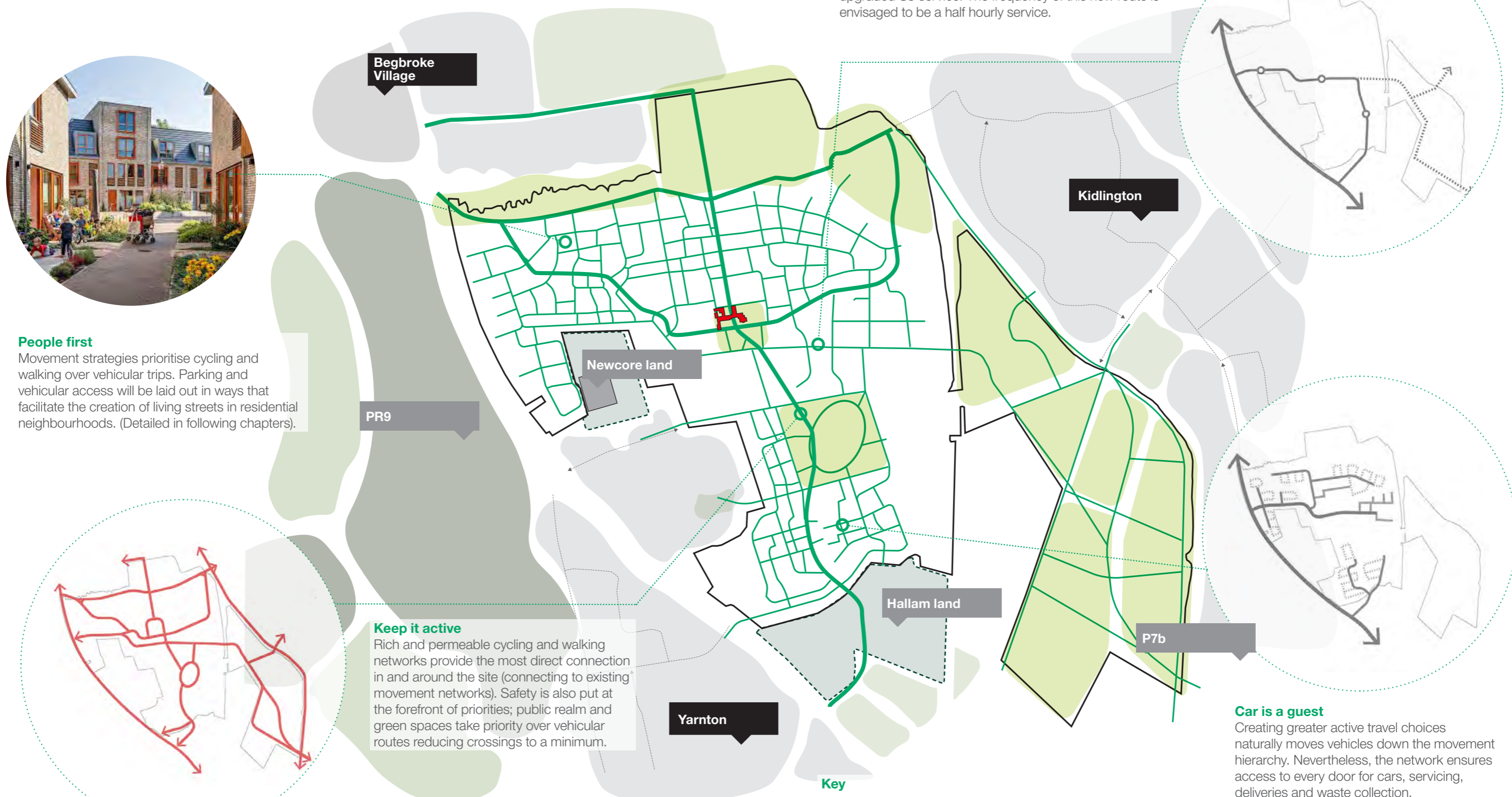
4.4. Car is a guest

Prioritise active travel and limit car movement to create better streets



People first
 Movement strategies prioritise cycling and walking over vehicular trips. Parking and vehicular access will be laid out in ways that facilitate the creation of living streets in residential neighbourhoods. (Detailed in following chapters).

Public transport, today and tomorrow
 A new bus route is anticipated to serve the site, subject to agreement with OCC of the precise route, and is illustrated in the diagram below along with the proposed upgraded S3 service. The frequency of this new route is envisaged to be a half hourly service.



Keep it active
 Rich and permeable cycling and walking networks provide the most direct connection in and around the site (connecting to existing movement networks). Safety is also put at the forefront of priorities; public realm and green spaces take priority over vehicular routes reducing crossings to a minimum.

Car is a guest
 Creating greater active travel choices naturally moves vehicles down the movement hierarchy. Nevertheless, the network ensures access to every door for cars, servicing, deliveries and waste collection.

- Key**
- Pedestrian & cycling network
 - Green arteries

4.5. Opening to Oxfordshire



Respect boundaries, connect to neighbours, and provide amenity for all



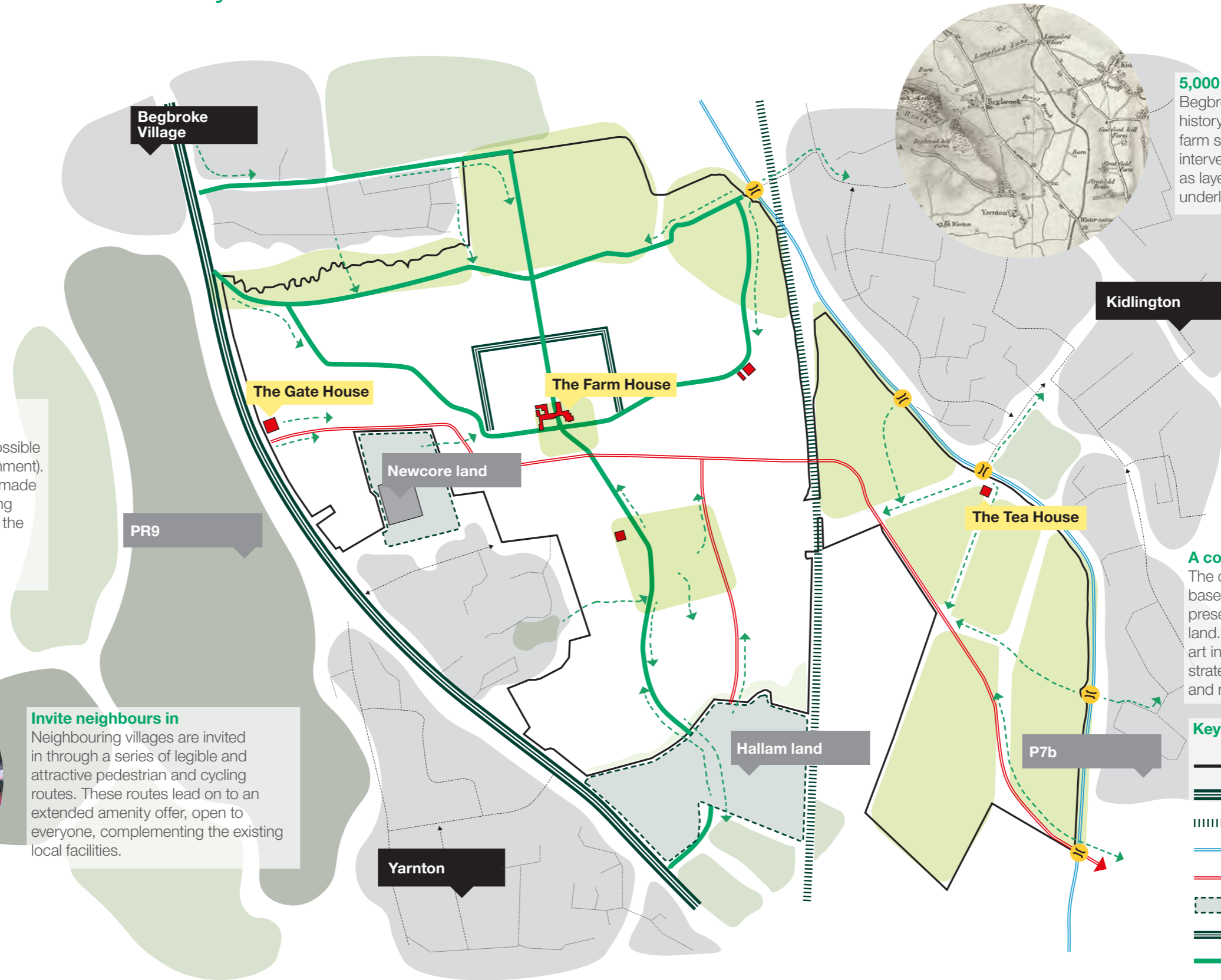
Open up the gates

All landscape will be open and accessible to everyone (where possible and not detrimental to the environment). The existing science park will be made more accessible with a broadening of uses and with modifications to the hedge (the Membrane).



Invite neighbours in

Neighbouring villages are invited in through a series of legible and attractive pedestrian and cycling routes. These routes lead on to an extended amenity offer, open to everyone, complementing the existing local facilities.



5,000 years of history

Begbroke ID emerges from the history of the area, in particular the farm settlement and land-based interventions like the Oxford Canal as layers built upon the site's underlying geology.



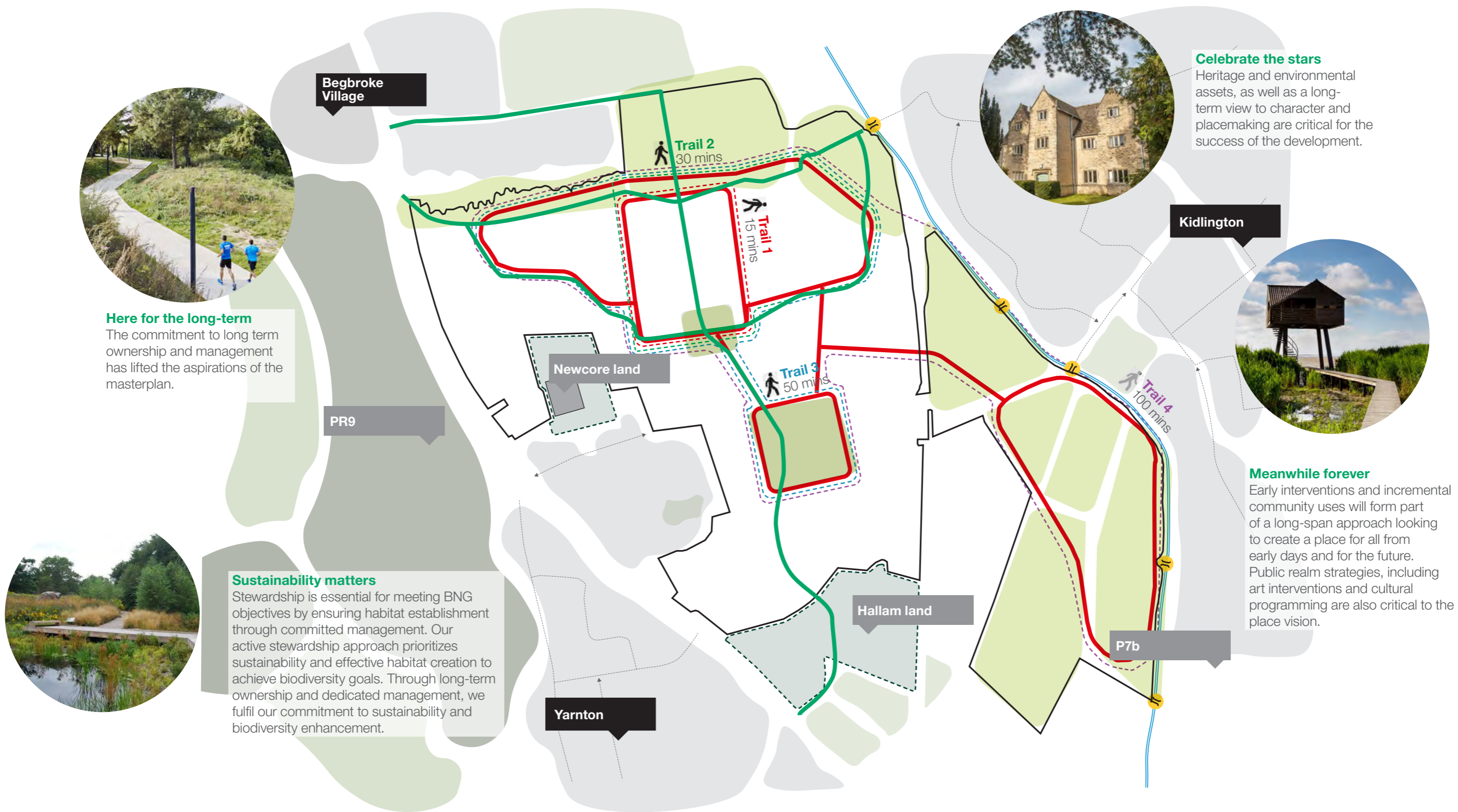
A community of communities

The cultural identity of the place will be based both on the lives and stories of people present and past, and their relationship to the land. Meanwhile uses, community events, art interventions, amenities, trails, and other strategies will expose these layers of culture and make them present in the place.

- Key**
- Site boundary
 - ≡≡≡ A44
 - ||||| Railway
 - Oxford canal
 - Existing roads
 - - - New developments
 - ≡≡≡ The hedge
 - Green Arteries

4.6. Active stewardship

Plan, manage, curate and monitor for long-term value creation



Here for the long-term
The commitment to long term ownership and management has lifted the aspirations of the masterplan.



Celebrate the stars
Heritage and environmental assets, as well as a long-term view to character and placemaking are critical for the success of the development.



Meanwhile forever
Early interventions and incremental community uses will form part of a long-span approach looking to create a place for all from early days and for the future. Public realm strategies, including art interventions and cultural programming are also critical to the place vision.

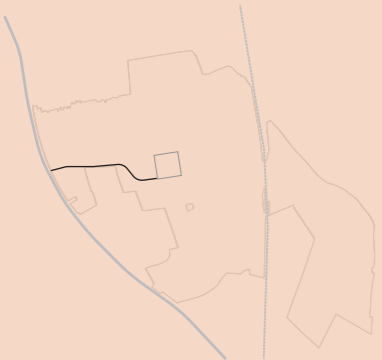


Sustainability matters
Stewardship is essential for meeting BNG objectives by ensuring habitat establishment through committed management. Our active stewardship approach prioritizes sustainability and effective habitat creation to achieve biodiversity goals. Through long-term ownership and dedicated management, we fulfil our commitment to sustainability and biodiversity enhancement.

4.7. Place Principles and masterplan framework

L - A restorative landscape
 E - Engineering serendipity
 C - Car is a guest
 O - Opening to Oxfordshire
 S - Active stewardship

The masterplan includes 15 components (diagrams below) bringing the Place Principles to life. The following chapters of this document provide guidance on key design aspects ensuring the fulfilment of their role(s).



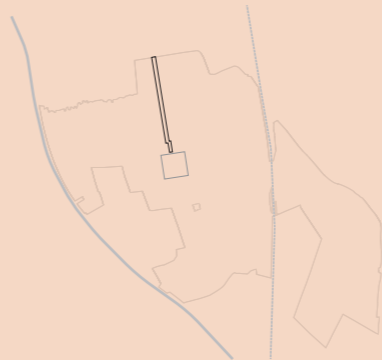
The Arrival
O|C



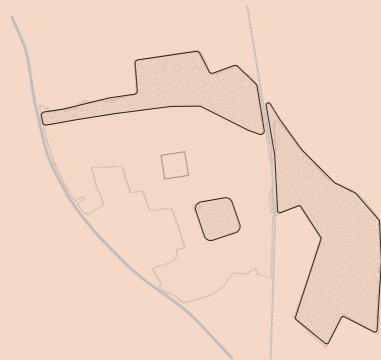
The Farmstead
E|O|S



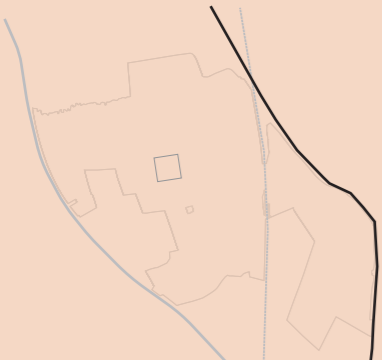
Green Arteries
L|E|C



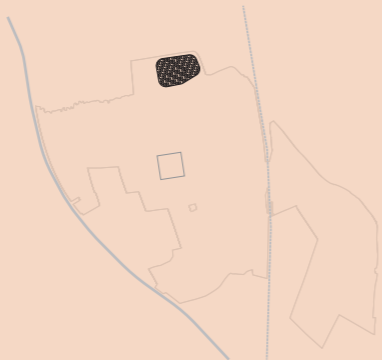
Farm Link & Innovation Avenue
L|E|C



Parks
L|O|S



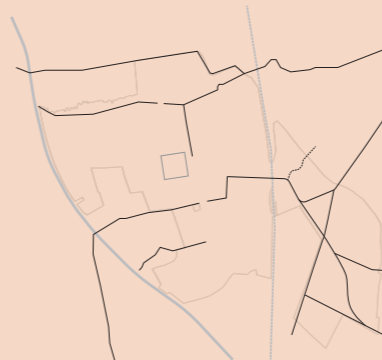
Oxford Canal
L|O



The Community farm
O|S



The Interface
O|E



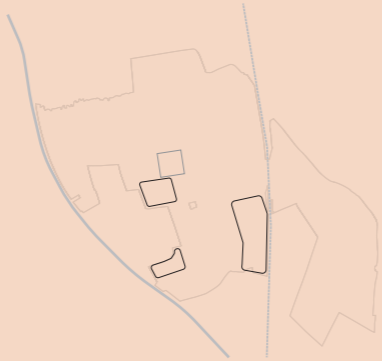
Lanes
O|S



Bridges
O|S



Landmarks
E|C



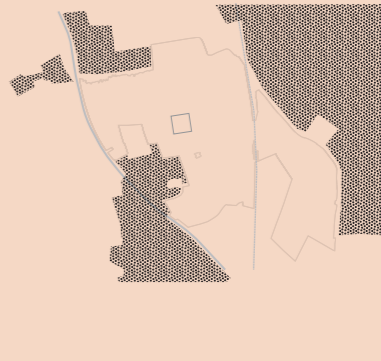
Schools
E|O|S



Living Streets
C|L|E

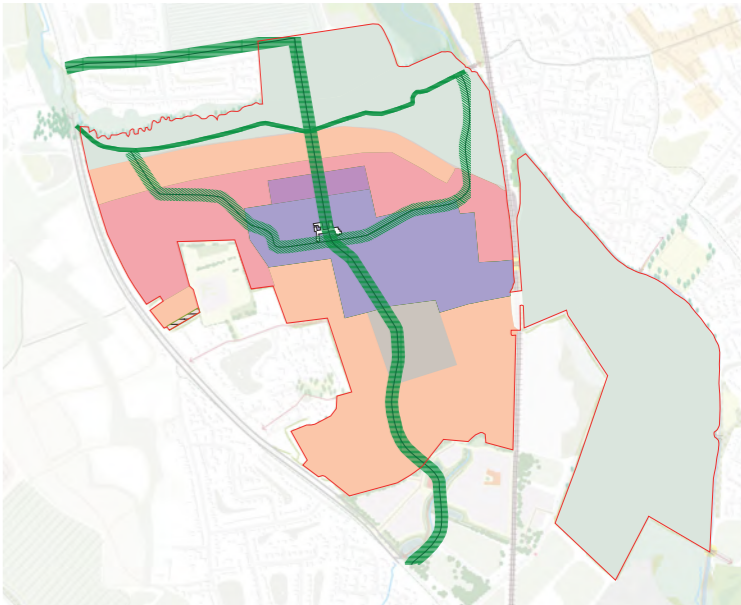
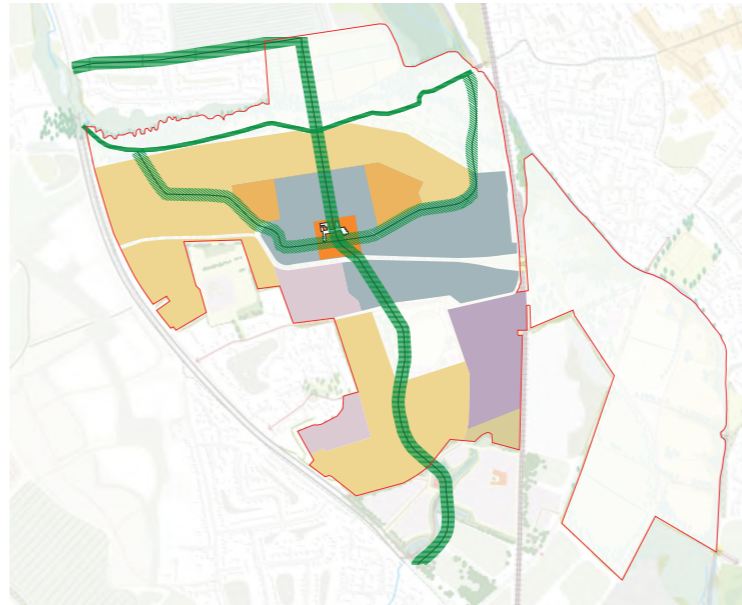
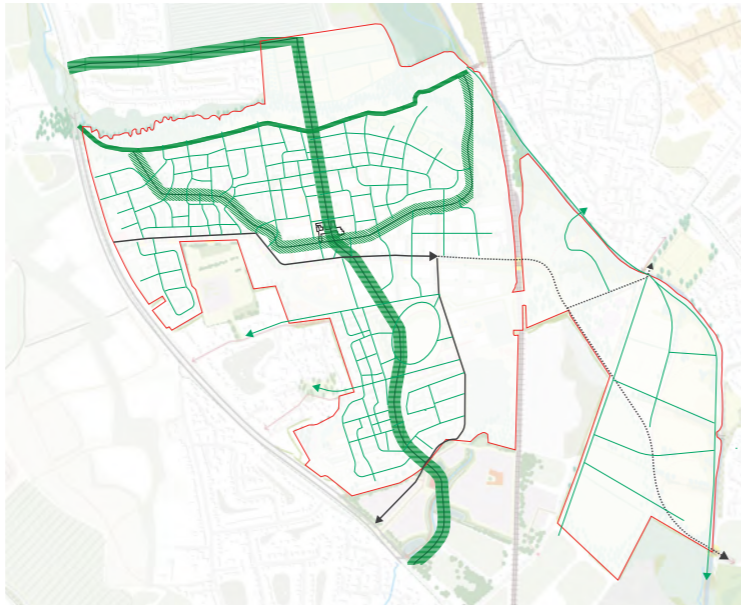
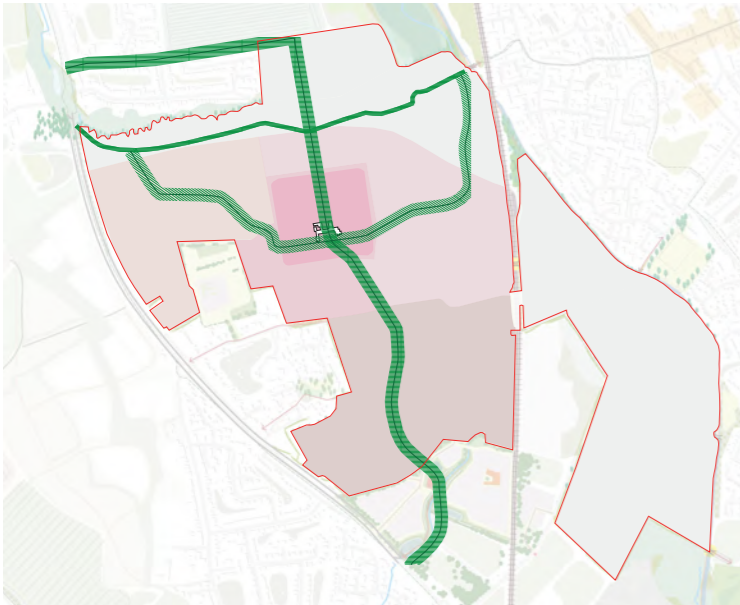


Research & development
E|O



Neighbouring Villages
O|C

4.8. Masterplan framework



Layout

- 3 Neighbourhoods
- Local Centre

Movement

- Main pedestrian and cycling routes
- Main vehicular routes

Land Use

- Mainly Residential
- Mainly R&D
- Mixed Use
- Primary School
- Secondary School
- Local Centre

Scale

- Maximum building heights**
- Up to 10 m from ground level
 - Up to 13.5 m from ground level
 - Up to 15 m from ground level
 - Up to 18 m from ground level
 - Up to 22 m from ground level

4.9. Illustrative masterplan

- Neighbourhoods**
 - BH Begbroke Hill
 - BSP Begbroke Science Park
 - PF Parkers Farm
 - FC Foxes Cover
- Places**
 - BHA Begbroke Hill Artery
 - CSP Canalside Park
 - CP Central Park
 - F&I Farm Link & Innovation Avenue
 - FCA Foxes Cover Artery
 - TM The Interface
 - LS Living Streets
 - PFA Parkers Farm Artery
 - R&D Research & Development
 - RBP Rowel Brook Park
 - TA The Arrival
 - TF The Farmstead
 - RM Railway Marshes
- Landmarks**
 - 1 The Gatehouse
 - 2 The Welcome
 - 3 The Farmhouse
 - 4 Farmstead Plaza
 - 5 Wellness Centre
 - 6 R&D Landmark
 - 7 Parkers Farm
 - 8 The Tea House

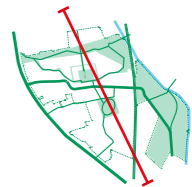
- Mobility**
 - Primary cycle and pedestrian routes
 - Secondary pedestrian routes
 - Begbroke Hill
 - Bridges
 - Potential new train station
- Water**
 - Swale
 - Retention Ponds
 - Oxford Canal
 - Rowel Brook

- Productive Land**
 - Allotment Gardens
 - Agriculture Lands
- Farmstead**
 - (Local centre including amenity, retail, cafés, etc.)
 - Existing Farmhouse
 - Indicative Canopy
 - Indicative Amenity Building
- Landscape Typologies**
 - Woodlands
 - Marshlands
 - Grasslands
 - Osier

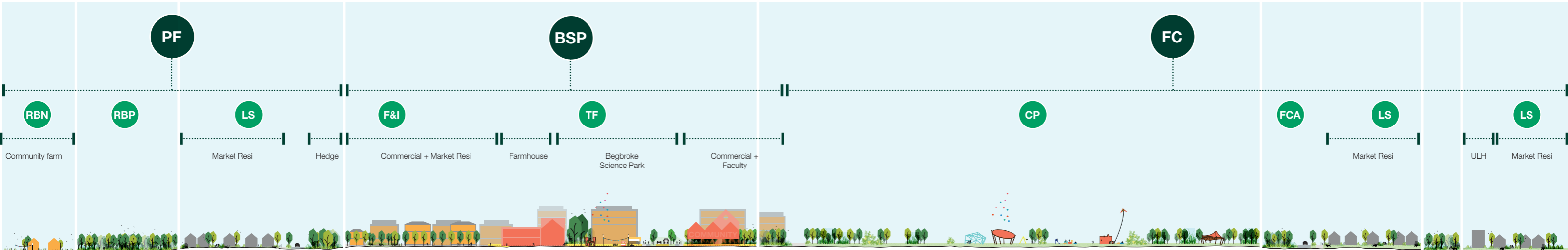


4.10. Illustrative sections

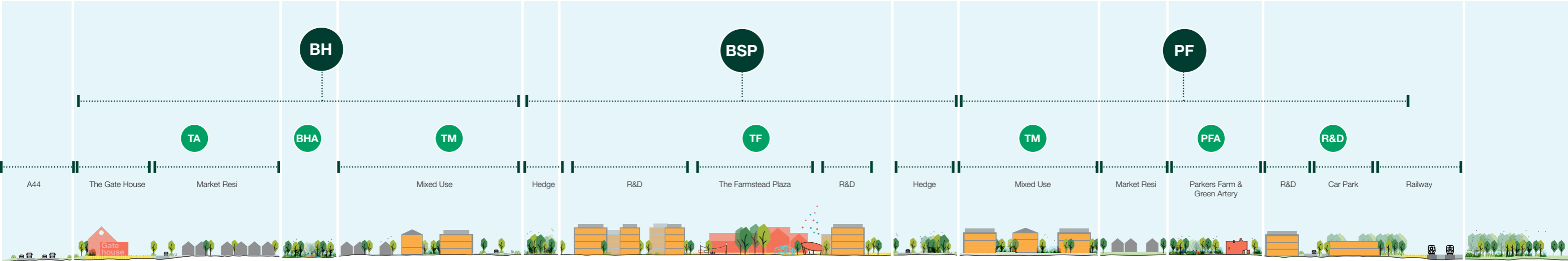
Seamless transitions between different areas, uses, building types, scales and characters foster cross-overs between different communities.



From north to south



From east to west



5. Neighbourhoods and places

Four neighbourhoods and key places at Begbroke epitomise our sustainable vision. With a focus on landscape and nature, these areas embody integrated principles of well-being, community support and biodiversity.

5.1. Begbroke Hill

The Neighbourhood

A predominantly residential neighbourhood that includes the entrance avenue and sets the character and tone for the entire development

BH



LS . Living Streets

Streets designed with green space, trees and swales to encourage meeting and playing and discourage all but essential vehicular use.

Label for Places

Neighbour Village

Roads

Landmark

Other land owners

BHA . Begbroke Hill Artery

Main neighbourhood community spaces with a more wooded character. Connects to urban amenities in the Farmstead and countryside living in Rowel Brook Park.

Begbroke Village



RBP . Rowel Brook Park

Natural and semi-natural environments celebrate countryside living: from woodland in the west transitioning through wildflower-rich meadows and then wetland and marsh habitats in the east.

2 The Welcome

A key landmark terminating Begbroke Hill Road that marks the entrance to BSP and the R&D area.

Begbroke Hill Avenue

A44

Yarnton Home & Garden

Existing district-wide retail facility

Yarnton

Woodstock Road frontage

A combination of landscape (including existing hedgerows) and buildings



1 The Gatehouse

A special building signalling the entrance to the site

TA . Begbroke Hill Avenue

The entrance avenue establishing the character of Begbroke ID and bookended by the Gatehouse and the Welcome. Fronted by attractive residential frontages and integrating safe spaces for cyclists, pedestrians, public buses and cars.



5.2. The Arrival

TA

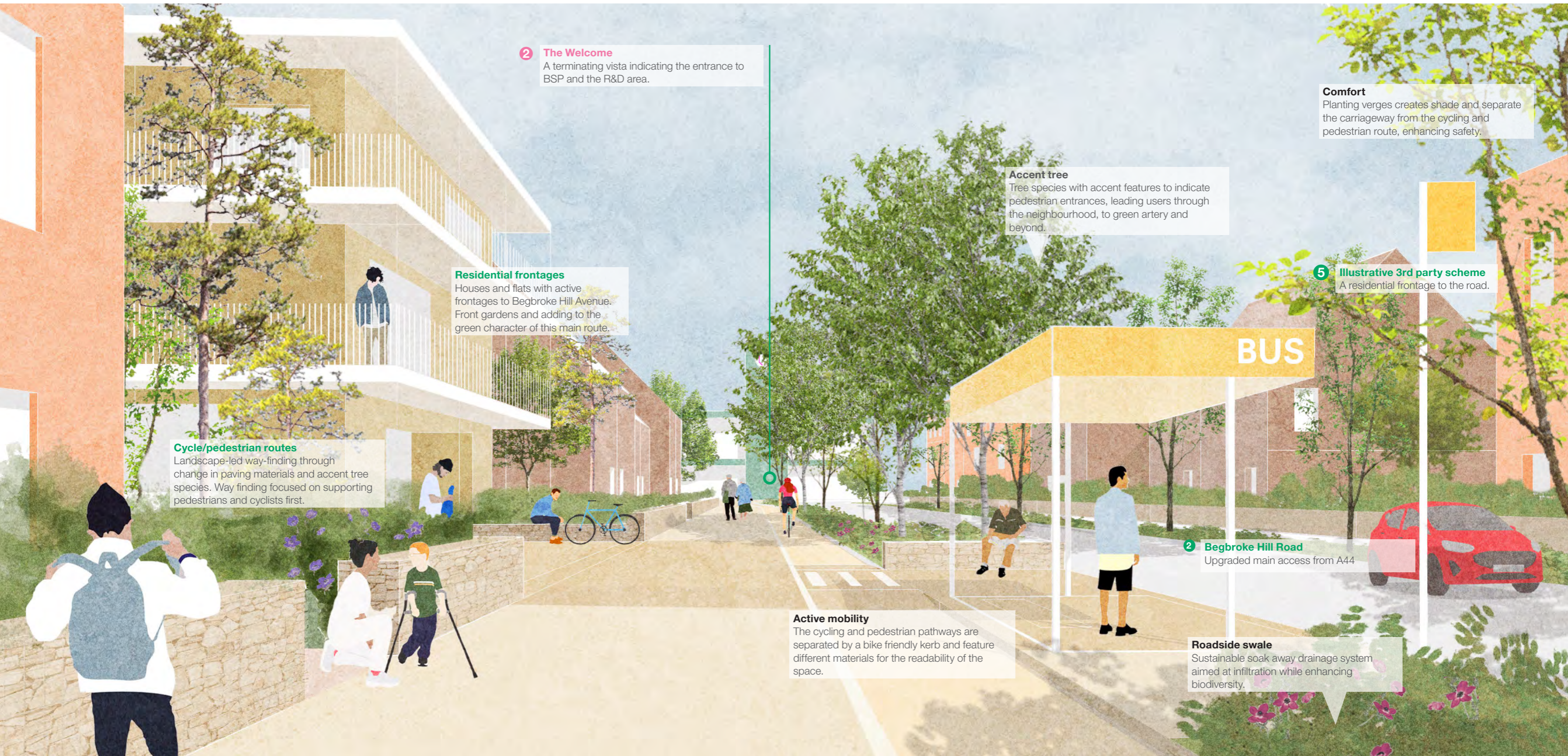
The entrance avenue establishing the character of Begbroke ID and bookended by the Gatehouse and the Welcome. Fronted by attractive residential frontages and integrating safe spaces for cyclists, pedestrians, public buses and cars.



- 1 A44/Woodstock Road
 - 2 Begbroke Hill road
 - 3 Woodstock road frontage
 - 4 Yarnton Home & Garden
 - 5 Emerging third party scheme
- 1 The Gate House
 - 2 The Welcome



- Key**
- - - Site Boundary
 - Key feature
 - Landmark
 - Frontage
 - Existing / Consented
 - Key open space
 - - - Shared path
 - - - Pedestrian
 - Bus stop
 - ◀ Point of view



2 The Welcome
A terminating vista indicating the entrance to BSP and the R&D area.

Residential frontages
Houses and flats with active frontages to Begbroke Hill Avenue. Front gardens and adding to the green character of this main route.

Cycle/pedestrian routes
Landscape-led way-finding through change in paving materials and accent tree species. Way finding focused on supporting pedestrians and cyclists first.

Accent tree
Tree species with accent features to indicate pedestrian entrances, leading users through the neighbourhood, to green artery and beyond.

Comfort
Planting verges creates shade and separate the carriageway from the cycling and pedestrian route, enhancing safety.

5 Illustrative 3rd party scheme
A residential frontage to the road.

2 Begbroke Hill Road
Upgraded main access from A44

Active mobility
The cycling and pedestrian pathways are separated by a bike friendly kerb and feature different materials for the readability of the space.

Roadside swale
Sustainable soak away drainage system aimed at infiltration while enhancing biodiversity.

5.3. Begbroke Hill Artery

Main neighbourhood community spaces with a more wooded character. Connects to urban amenities in the Farmstead and countryside living in Rowel Brook Park.

BHA



- 1 Rowel Brook Park
 - 2 Shared primary path
 - 3 Secondary path
 - 4 Node
 - 5 Openings
-
- 2 The Welcome



- Colour Key**
- Key feature
 - Landmark
 - Frontage
 - Existing / Consented
 - ≡ Existing hedge strategically thinned down
 - Key open space
 - Shared path
 - - - Pedestrian
 - Living Street
 - Bus stop
 - ◀ Point of view



Forested character
Woodlands atmosphere through curated density of planting and native species. The under-story is composed of clumps of forest-inspired shrubs, whips, and wild flowers.

4 Node
Family-oriented activity fostering a sense of community. It includes a thematic sensory garden, play equipment, and exercise corner.

3 Secondary path
Winding path providing direct access to front doors.

5 Openings
Breaks between houses marking direct connection to adjacent living streets and wider green infrastructure.

2 Shared primary path
Highly accessible path for both cyclists and pedestrians.

Edges
Garden terraces spill out through permeable edges into the artery. This encourages people to use the artery helping to foster a sense of community at the heart of the neighbourhood.

Informal play
Scattered loose logs and stepping stones to encourage interpretative play and use along the way.

Bioretention swale
Storm-water detention and infiltration basins which doubles up as spaces for active play and social uses.

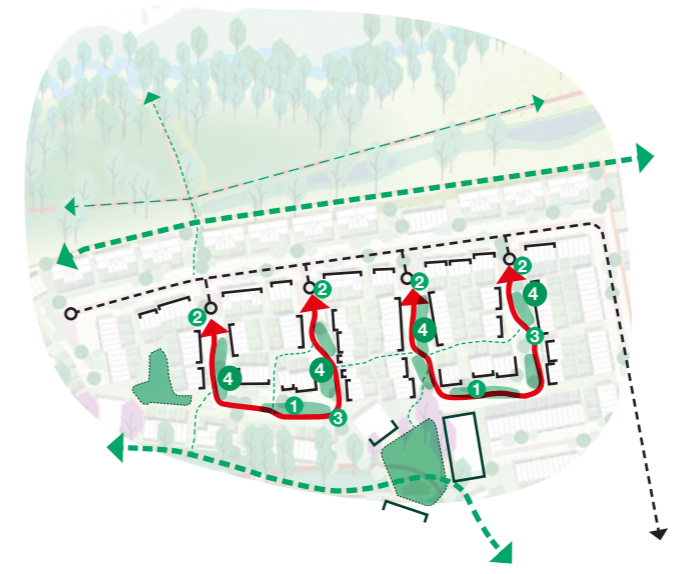
5.4. Living Streets

Streets designed with green space, trees and swales to encourage meeting and playing and discourage all but essential vehicular use.

LS



- 1 Green islands
- 2 Consolidated parking
- 3 Shared paths with vehicles
- 4 Landscape island



Colour Key

■ Key feature	--- Shared path
■ Frontage	- - - Pedestrian
■ Key open space	— Living Street
● Landscape Island	◀ Point of view



2 Consolidated parking
 Parking spaces are clustered at the end of the road. Kids, elders or shopping bags can be dropped off at the door, before parking a few metres away.

Vistas
 Openings and vistas leading onto green open areas such as green arteries or parks

Nature guiding traffic
 Locally harvested logs can act as natural 'bollards' guiding traffic.

Breaks and setbacks
 Gaps between buildings as well as setbacks create opportunities to access internal courtyards as well as a sense of spatiality to the living street.

Defensible space
 Private defensible space integrated with the living street

4 Landscape island
 Areas for pic-nics, lush trees and planting and for the use of residents.

Sweeping road layout
 Road design for speed reduction

Water
 Ambition for water runoff as part of the wider drainage strategy

5.5. Begbroke Science Park

BSP

The Neighbourhood

The legacy estate with the Farmhouse at the centre, which provides the cornerstone for Begbroke Innovation District. Intensified and integrated into the wider masterplan.



F&I . Farm link & Innovation Ave

Part of the north-south link running across the site it connects the community farm with the Farmstead fostering synergies between food production, well-being shops and the community.



IP . Interface Streets

A street at the edge of the BSP blending the new neighbourhoods



2 The Welcome

A landmark signalling the entrance to the R&D cluster.



3 The Farmhouse

A characterful listed grade II building which forms the focus of the Farmstead



Existing farmhouse trees

A series of mature characterful trees in front of the Farmhouse incorporated as part of the Farmstead

Yarnton



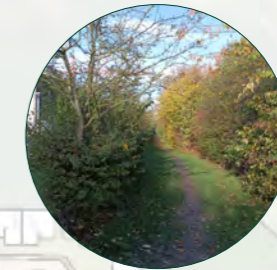
The Weed Garden

An emerging art/landscape project that provides recreational space



Existing farmhouse garden

A landmark signalling the entrance to the R&D cluster



Existing hedge

The existing hedge will be selectively trimmed and replanted to balance existing landscape character with opening up to the wider masterplan.

PI (Place Initial) . Place

Neighbour Village

Roads

Landmark

Existing

Proposal

Education

Farmhouse

6 R&D Landmark

Begbroke Hill road

Primary School
3FE

Sandy Lane

Central Park



Edge of the Farmhouse

The buildings framing the Farmstead activate and define the architectural character of the local centre.

TF . The Farmstead

The heart of the Begbroke ID, it clusters amenity and community uses and it's directly connected to the rest of the site and surrounding villages.



5.6. The Farmstead

The heart of the Begbroke ID, it clusters amenity and community uses and it's directly connected to the rest of the site and surrounding villages.

TF



- 1 Hotel
- 2 Mobility hub
- 3 Begbroke Hill road
- 4 Primary School 3FFE
- 5 The Weed Garden
- 6 Canopy
- 7 Farmhouse gardens
- 8 Retained existing trees
- 9 Retained existing Hedge
- 10 Farm link & Innovation Ave
- 2 The Welcoming Building
- 5 Wellness barn
- 6 R&D Landmark
- 3 The Farmhouse
- 4 Farmstead Plaza



Colour Key

- Key landmark
- Key feature
- Landmark
- Frontage
- Existing / Consented
- Existing hedge strategically thinned down
- School
- Key open space
- Shared path
- Pedestrian
- Living Street
- Bus stop
- ◀ Point of view



8 Retained existing trees
Characterful and tall trees, enhanced with ground cover biodiverse planting.

7 Farmhouse gardens
A quiet space for respite or events that can be used as an extension to the Farmhouse.

3 The Farmhouse
Jacobean grade II listed building facing the plaza, contributing to a sense of history and character to the place. Buildings and landscape around it contribute to the setting of this heritage asset, by setting back or contributing to the overall character of the place.

Re-purposed ancillary building
Retaining the character of the non-listed building contributing to activating the Farmstead

Integrated signage
For way-finding and information about the campus.

Public art
Part of a wider strategy marking key areas of the site, such as the entrance to the R&D area

4 Farmstead Plaza
A district-wide multifunctional space for every one to meet. Its every-day use will be complemented with seasonal events, arts or performances.

6 R&D landmark
A key facade defining the edge of the Farmstead and marking the access to the R&D area to the east.

6 The Canopy
A permeable structure marking the district meeting point.

5 Wellness barn
A multi-purpose building that provides space to come together indoors, supporting a range of different activities.

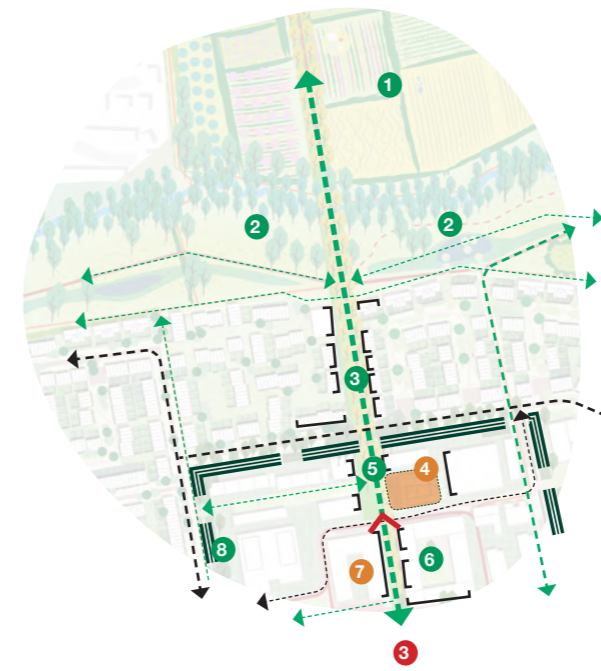
5.7. Farm Link & Innovation Avenue

Part of the north-south link running across the site it connects the community farm with the Farmstead fostering synergies between food production, well-being shops and the community.

F&I



- 1 Community farm
- 2 Rowel Brook
- 3 Farm link
- 4 Weed garden
- 5 Innovation Avenue
- 6 Building with active groundfloor
- 7 Existing CIE Building
- 8 Retained existing Hedge
- 3 The Farmhouse



Active ground floor
A new building with and engaging ground floor, contributing with complementary uses (e.g. residential or hotel) to the activation of the space at different times of the day or week.

Landscaped 'junctions'
A characterful existing tree and a landscaped area around it, mark the junction between the north-south axis and the access to the central area from Begbroke Hill.

3 The Farmhouse
The existing ancillary non-listed buildings are made permeable to reinforce the sense of centrality of the Farmstead and the north-south axis.

Landscape character
Tree lane with regular spacing to frame the sightlines between the Farmstead and Rowel Brook Park.

Urban furniture
Meeting pods and other devices fostering social interaction

CIE building
Existing buildings incorporated as part of the mix

Connectivity
The innovation and farm link form part of a continuous route running through the site connecting Begbroke village to Hallam land and Yarnton beyond.

5.8. Interface streets

As Begbroke Hill does to the west, the eastern edge of the BSP integrates with Parkers Farm and residential uses through a street providing a gradual transition between uses.

IS



6 Openings
Breaks in the massing facilitating visibility and movement and transitions between residential and R&D areas.

2 The membrane
Retained mature existing trees, placed within an open programmable landscape.

1 R&D
Existing and new buildings extending to the edge of the existing science park.

5 Active ground floors
Communal areas activate the interface streets and create a transition of uses and activity between the existing science park and the new neighbourhoods

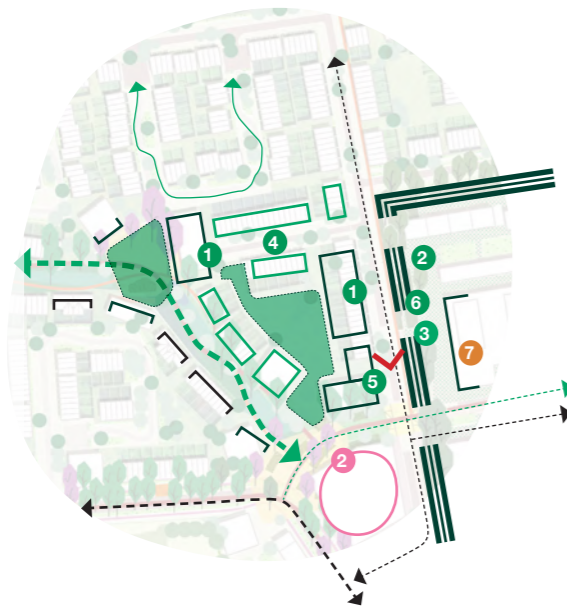
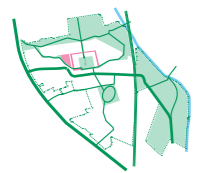
3 Pocket square
Strategic openings through the existing hedge with informal activities -picnic tables, ping pong -allowing for interaction between different groups.

4 Secondary road
Access to neighbourhoods through interface streets reinforcing the mix of uses whilst safeguarding a landscaped environment accessing every home.

Woodland gates
Existing dense vegetation is kept in three points to frame entrances.

Roadside swale
Sustainable drainage system targeted at enhancing biodiversity.

Winding path
Informal permeable path weaving through the existing hedge



Colour Key

- Key feature
- Landmark
- Frontage
- Existing / Consented
- Existing hedge strategically thinned down
- Key open space

- Shared path
- Pedestrian
- Living Street
- Bus stop
- < Point of view



Colour Key

- Key feature
- Landmark
- Frontage
- Existing / Consented
- Existing hedge strategically thinned down
- Key open space

- Shared path
- Pedestrian
- Living Street
- Bus stop
- < Point of view

- 1 R&D
- 2 The membrane
- 3 Pocket Square
- 4 Secondary road
- 5 Active ground floors
- 6 Opening
- 7 Existing / Consented

- 1 R&D
- 2 The membrane
- 3 Pocket Square
- 4 Secondary road
- 5 Active ground floors
- 6 Opening
- 7 Existing / Consented

2 The Welcoming Building

5.9. Parkers Farm

PF

The Neighbourhood

A mixed use neighbourhood combining residential uses in proximity to R&D buildings and mediated by programmed social landscape spaces.



LS . Living Streets

Streets designed with green space, trees and swales to encourage meeting and playing and discourage all but essential vehicular use.



7 Parkers Farm

A grouping of mature trees encloses a space currently occupied with agricultural sheds with the potential to be re-purposed for sports/leisure.

Rail Halt

Land safeguarded for the delivery of a rail halt with associated drop-off and facilities.

PI (Place Initial) . Place

Neighbour Village

Roads

Landmark

Existing

Proposal

Education



IP . Interface Streets

As Begbroke Hill does to the west, the eastern edge of the BSP integrates with Parkers Farm and residential uses through a street providing a gradual transition between uses.



PFA . Parkers Farm Artery

Provides a neighbourhood focus, while connecting the Farmstead with Rowel Brook and allotment land. Planted with edibles and sensorial specimens.

Pedestrian landscaped links

Landsaped through routes structuring the R&D plots and buildings and providing a direct link between Parkers Farm Artery with the Central Park

Railway



Railway bridge

(Outside of application scope) Bridge provides a vital east/west connection for cyclists, pedestrians and a future community bus service. High point provide vantage places, and embankments contribute to landscape character.

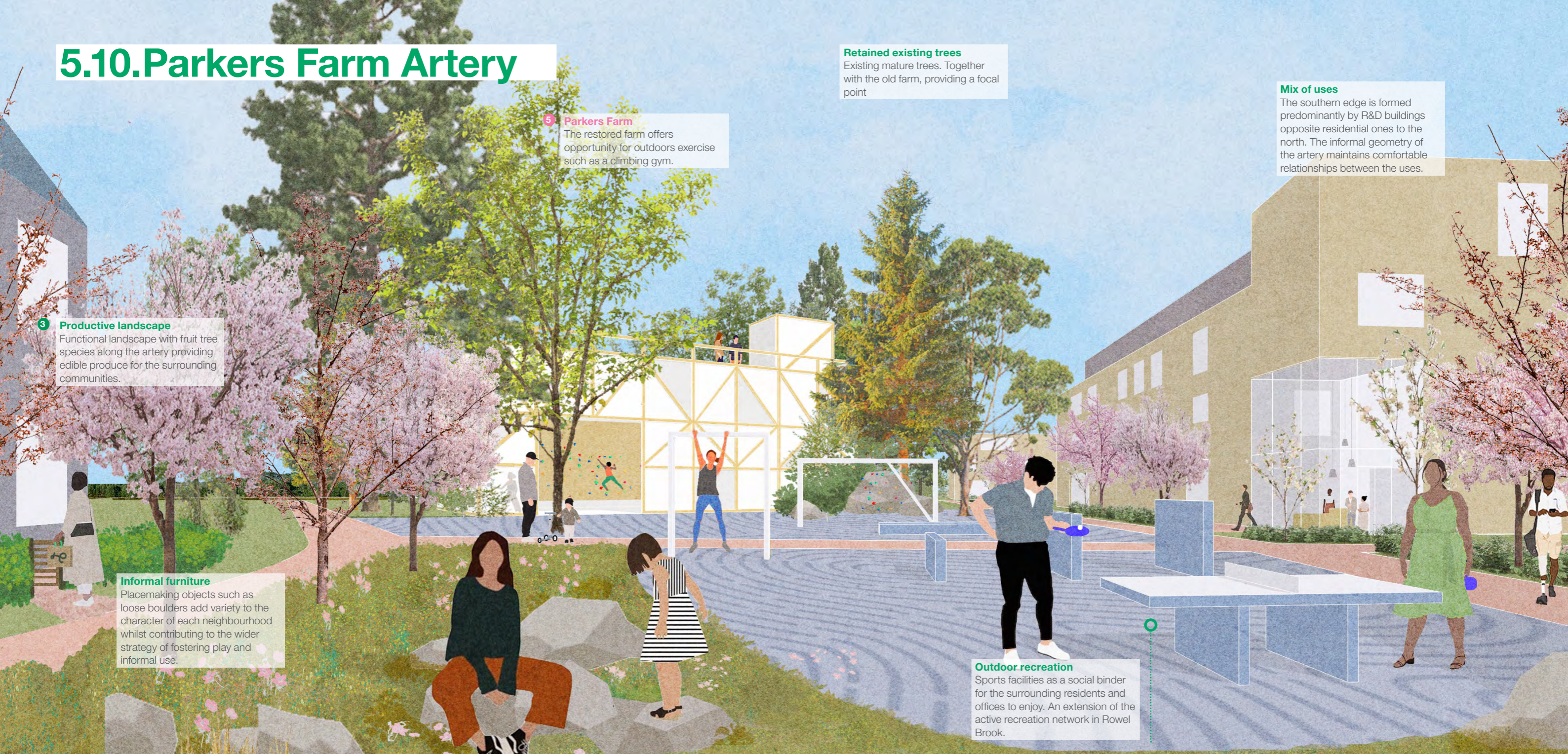
RD . Research & Development

Growing out from the BSP, plots flexibly accommodate a range of building types to feed an innovation ecosystem, all set within inspiring landscapes.



Yarnton

5.10. Parkers Farm Artery



3 Productive landscape
Functional landscape with fruit tree species along the artery providing edible produce for the surrounding communities.

Informal furniture
Placemaking objects such as loose boulders add variety to the character of each neighbourhood whilst contributing to the wider strategy of fostering play and informal use.

5 Parkers Farm
The restored farm offers opportunity for outdoors exercise such as a climbing gym.

Retained existing trees
Existing mature trees. Together with the old farm, providing a focal point

Mix of uses
The southern edge is formed predominantly by R&D buildings opposite residential ones to the north. The informal geometry of the artery maintains comfortable relationships between the uses.

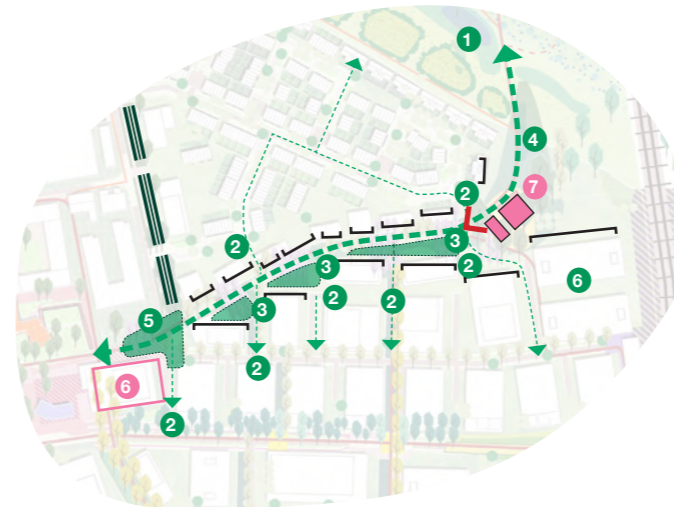
Outdoor recreation
Sports facilities as a social binder for the surrounding residents and offices to enjoy. An extension of the active recreation network in Rowel Brook.

PFA
Provides a neighbourhood focus, while connecting the Farmstead with Rowel Brook and allotment land. Planted with edibles and sensorial specimens.



- 1 Rowel Brook
- 2 Openings
- 3 Productive landscapes
- 4 Shared primary path
- 5 Node
- 6 Car Park

- 6 R&D landmark
- 7 Parkers Farm



Colour Key

■ Key feature	--- Shared path
■ Landmark	- - - Pedestrian
■ Frontage	— Living Street
■ Existing hedge strategically thinned down	○ Bus stop
■ Key open space	◀ Point of view

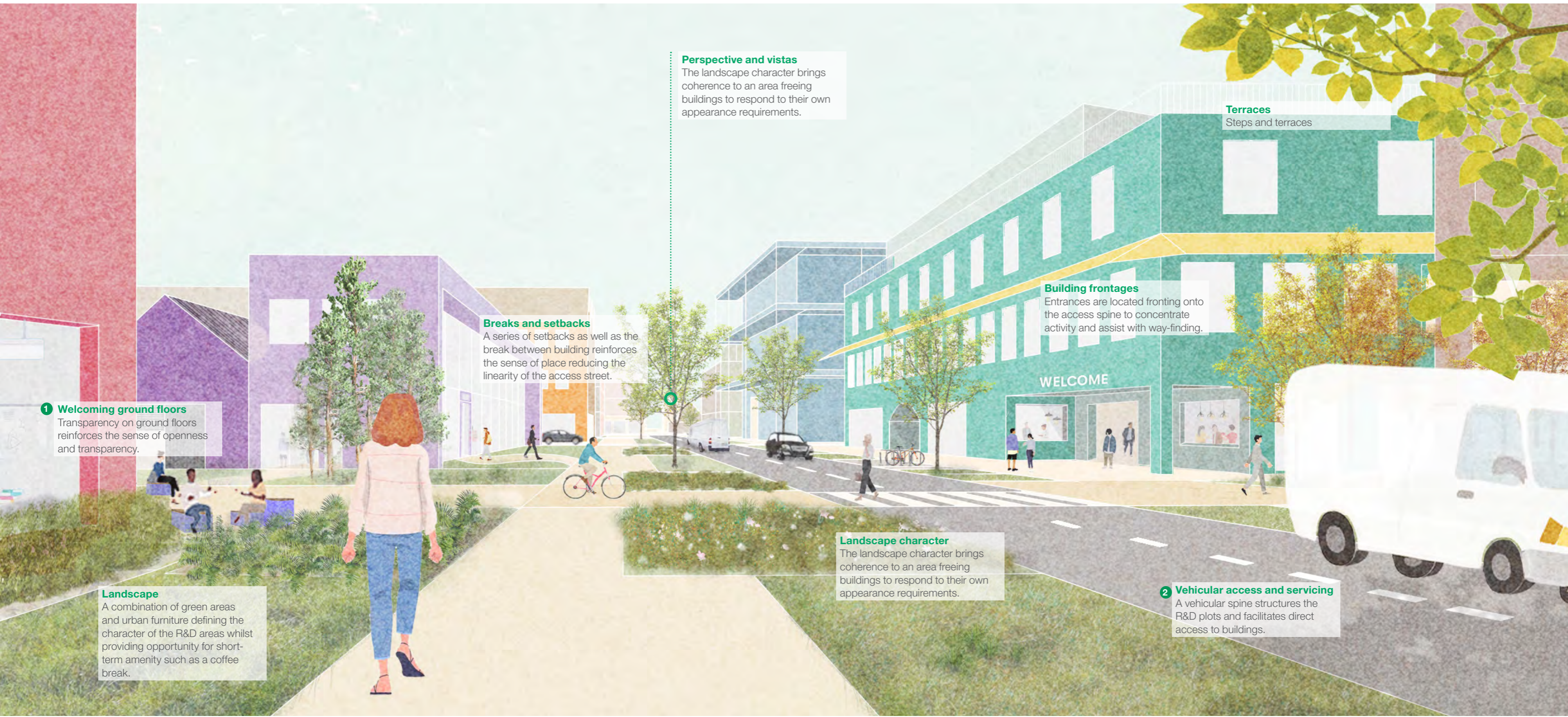
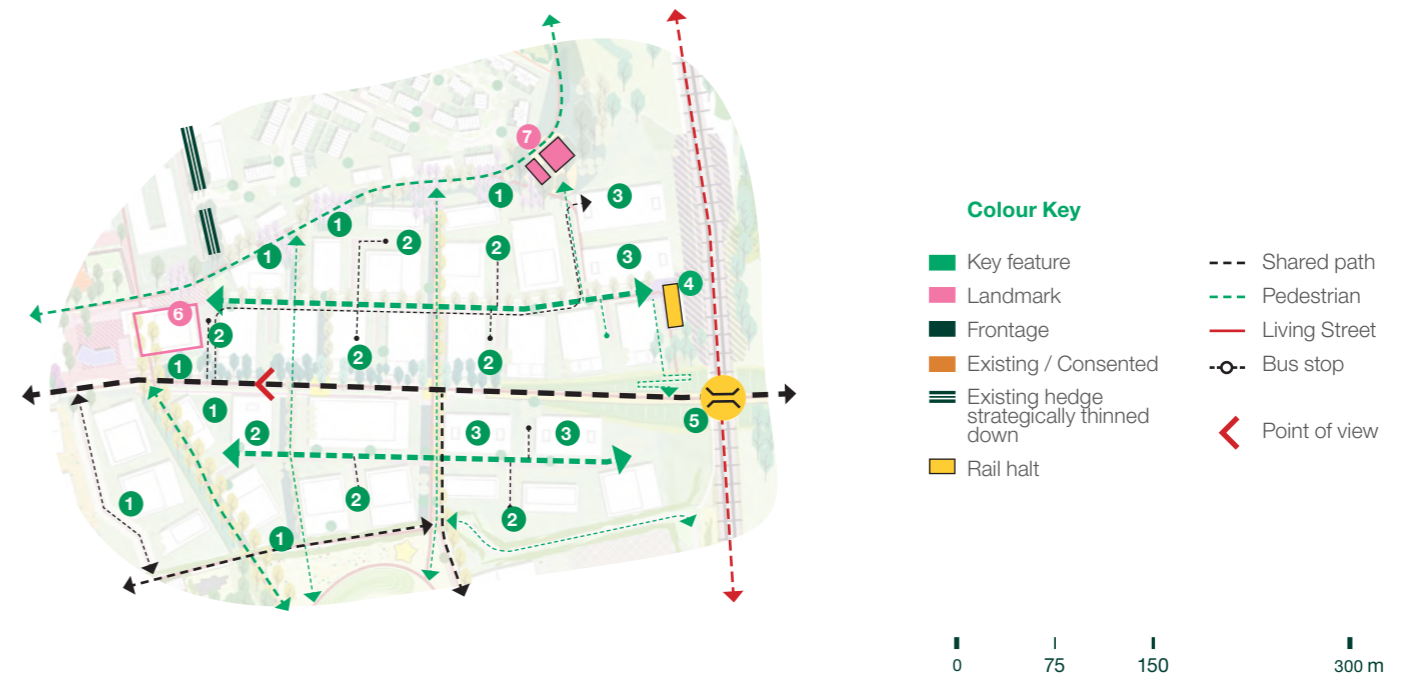


5.11. Research & Development

Growing out from the BSP, plots flexibly accommodate a range of building types to feed an innovation ecosystem, all set within inspiring landscapes. **R&D**



- 1 Welcoming ground floors
 - 2 Vehicular access and servicing
 - 3 Car Park
 - 4 Rail halt
 - 5 Bridge
-
- 6 R&D Landmark
 - 7 Parkers Farm



1 Welcoming ground floors
Transparency on ground floors reinforces the sense of openness and transparency.

Landscape
A combination of green areas and urban furniture defining the character of the R&D areas whilst providing opportunity for short-term amenity such as a coffee break.

Breaks and setbacks
A series of setbacks as well as the break between building reinforces the sense of place reducing the linearity of the access street.

Perspective and vistas
The landscape character brings coherence to an area freeing buildings to respond to their own appearance requirements.

Landscape character
The landscape character brings coherence to an area freeing buildings to respond to their own appearance requirements.

Building frontages
Entrances are located fronting onto the access spine to concentrate activity and assist with way-finding.

Terraces
Steps and terraces

2 Vehicular access and servicing
A vehicular spine structures the R&D plots and facilitates direct access to buildings.

5.12. Foxes Cover

FC

The Neighbourhood

A predominantly residential neighbourhood with schools and organised around the Central Park. It neighbours Yarnton to the west and the emerging Begbroke South (Hallam Land) including connections to the open spaces of each of these and set backs to create an appropriate response to the edges.



Sandy Lane

An existing route with ecological value on its edges, it remains an important element of the masterplan with a modal shift from vehicular to active travel once the new Railway bridge is in place.

Railway

Secondary School

A large site, its location ensures the environmental qualities for learning, and connection to other uses facilitating synergies (amenity, r&d, etc.). It also privileges direct connection to public transport while also providing essential vehicular drop-off. Its location does not interrupt the permeability of the site, which enables active travel movement and natural water drainage.

PI (Place Initial) . Place

Neighbour Village

Roads

Landmark

Existing

Proposal

Education

Sandy Lane



CP . Central Park

Organised around a central multifunctional lawn, the edges of the park offer a diversity of themed landscapes reflecting the different land uses fronting each side. Co-location of programmes contributes to engineering serendipity.

Yarnton

Broad Field Park

Primary School 2FE



FCA . Foxes Cover Artery

Part of a north-south route linking Begbroke Village and the Community Farm in the north with Begbroke South (Hallam Land), it creates a formal landscape in the character of a country lane.

The Old Brook

A44 / Woodstock Road

Edge to Yarnton

Sensitive massing provides the built edge interfacing with Yarnton: lower building heights, setback frontages, and more spaced-apart houses.

Link to Broad Field Park

The masterplan enables a future connection between the existing Broad Field Park and the Central Park strengthening the green grid across the site and surrounds.

Woodstock Road frontage

A combination of landscape (including existing hedgerows) and buildings will form the frontage to the road.



LS . Living Street

Streets designed with green space, trees and swales to encourage meeting and playing and discourage all but essential vehicular use.

5.13. Central Park



3 Entrance plaza
Small plazas at the intersections between the routes leading into the park and the loop.

9 The Wild Garden
A planted refuge area for biodiversity, One small informal discovery and educational trail, telling the story of the Landfill.

2 The Loop
550m track with distance markers to encourage running, jogging and skating. It connects surrounding destinations and frames the central lawn.

Hilly islands
Raised mound to create soil depth for tree planting while providing shade for comfort

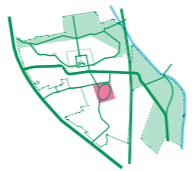
The Steps
South-facing amphitheatre embedded in sculpted landform overlooking the lawn. Spectator of the lawn

8 Tip Tower
A landmark tower, potentially doubling as play structure.

1 Central lawn
Large space for daily activities, such as picnic and relaxation. Also suitable for large events and organized sport.

Organised around a central multifunctional lawn, the edges of the park offer a diversity of themed landscapes reflecting the different land uses fronting each side. Co-location of programmes contributes to engineering serendipity.

CP



- 1 Central lawn
- 2 The loop
- 3 Entrance plaza
- 4 The steps
- 5 The hills
- 6 The fields
- 7 Sandy Lane Gardens
- 8 Tip Tower
- 9 The wild garden
- 10 Secondary School
- 11 Link to Broad Field Park
- 12 Edge to Yarnton
- 13 Foxes Cover artery
- 14 Sandy Lane
- 15 Existing housing

Colour Key

- Key feature
- Landmark
- Frontage
- Existing / Consented
- School
- Shared path
- - - Pedestrian
- Living Street
- Bus stop
- ◀ Point of view

0 50 100 200 m

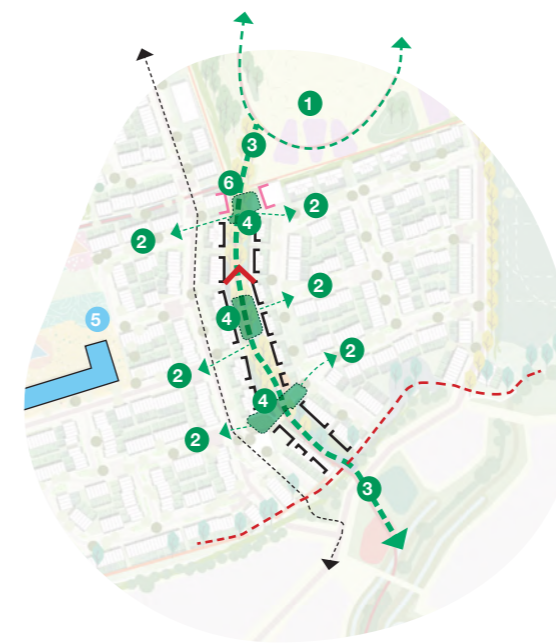
5.14. Foxes Cover Artery

Part of a north-south route linking Begbroke Village and the Community Farm in the north with Begbroke South (Hallam Land), it creates a formal landscape in the character of a country lane.

FCA



- 1 Central Park
- 2 Openings
- 3 Meandering path
- 4 Nodes
- 5 Primary School 2FE
- 6 Way-finding



- Colour Key**
- - - Site Boundary
 - Key feature
 - Landmark
 - Frontage
 - School
 - Key open space
 - - - Shared path
 - - - Pedestrian
 - Living Street
 - Bus stop
 - ◀ Point of view



Rural character
Rustic atmosphere created through a winding lane accentuated by edge trees and a ground-cover of golden rustic crops and wild flowers.

Sitting
Strategically situated elements adding dwelling to movement functions.

Way-finding
Routes and junctions with special paving to indicate connection to living streets.

Meandering path
Main path for cyclists and pedestrians to travel up to the Central Park and connecting down to the Begbroke South development

Bioretention swale
Storm-water detention and infiltration basins with a double function, also as spaces for active play and social uses.

Housing interface
Small front gardens with stone walls forming part of the artery.

5.15. Rowel Brook Park

Natural and semi-natural environments celebrate countryside living: from woodland in the west transitioning through wildflower-rich meadows and then wetland and marsh habitats in the east.

RBP



Nature at your doorstep
A continuous shared cycling path connects Begbroke Hill neighbourhood to the Rowel Brook Park uninterrupted by vehicular traffic.

Access to Begbroke Hill Neighbourhood
Different levels of accessibility ensure a good balance between human activities and undisturbed spaces for flora and fauna.

Wooded character
The atmosphere of the first stretch of the Rowel Brook Park is inspired by the surrounding landscape. Surrounding woodland characteristics are extended into the development area.

Active mobility
A continuous shared cycling path connects BSP to the existing Begbroke village. Fitness equipments and play features are strategically located within the Rowel Brook Park which promotes an active lifestyle.

Informal play
Scattered loose logs and stepping stones to encourage interpretative play and use along the way.

5.16.Rowel Brook Park North

RBN

Building on agricultural heritage

Within Rowel Brook Park, the local farm combines local food production with social and educational spaces. By relocating and introducing new allotment gardens in close proximity to the local farm, the rural and agricultural ambiance of the area is enhanced. This arrangement allows for the sharing of physical resources between the allotments and the farm, while also fostering a direct exchange of knowledge among farmers, allotment users, and potentially visitors.



- 1 Farm core
- 2 Community farm
- 3 Relocated allotments
- 4 New allotments
- 5 Community orchard buffer
- 6 Rowel Brook trail



Rowel Brook
The Rowel Brook woodland is retained and improved, a public park strip provides access along the local farm and serves as filter strips to improve water quality of the brook.

New hedgerows
New hedgerows with fruit and berries can be used to border different areas to build on the rural and agricultural atmosphere.

Allotment gardens
Re-located and new allotment gardens. By positioning them in proximity to the farm, resources can be optimised and the character of the area is strengthened.

Small scale vegetable farm
The small scale farm would provide a local source vegetables and could potentially offer spaces for educational purposes.

Farm Link
The local farm is directly connected with the farmstead and it's farm shop, through the Farm Link. This provides a physical connection between local food production and consumption.

Community orchard
A community orchard provides a meaningful spatial buffer between the local farm and the existing houses.

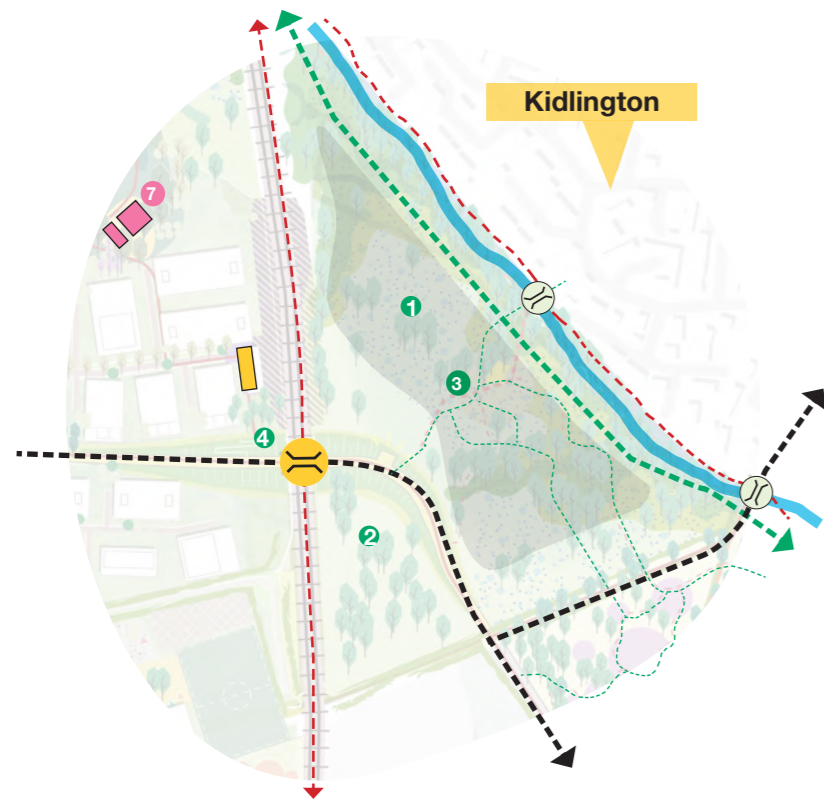
5.17. Railway Marshes

Nature Conservation area providing a gradient of wet habitats and strengthening the Oxford Canal Corridor

RM



- 1 Marshland within flood zone 2
- 2 Wet grassland
- 3 Lookout tower
- 4 Sandy lane bridge
- 7 Parkers Farm



- - Site Boundary
- Key feature
- Landmark
- Rail halt
- - Shared path
- - Pedestrian
- ◀ Point of view



Ecological considerations
Micro-relief and rewilding interventions turning the marshland into a riparian willow woodland (wet woodland).

3 Lookout tower
High point offering an opportunity to appreciate the marshland birds and landscape.

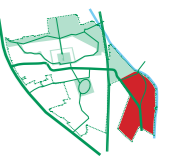
Board-walk
Restricted human access for minimal disturbance for nature.

Educative signage
Information about the flora and fauna in the marshland.

5.18. Canalside Park

CSP

The most active part of the green belt with spaces for sports, recreation and temporal interventions.



- 1 Canal crossing grounds
- 2 The triangle adventure play
- 3 Sports field
- 4 Meadows
- 5 Skylark paradise
- 6 The Tea House

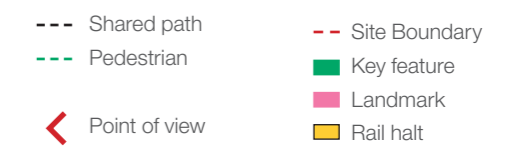
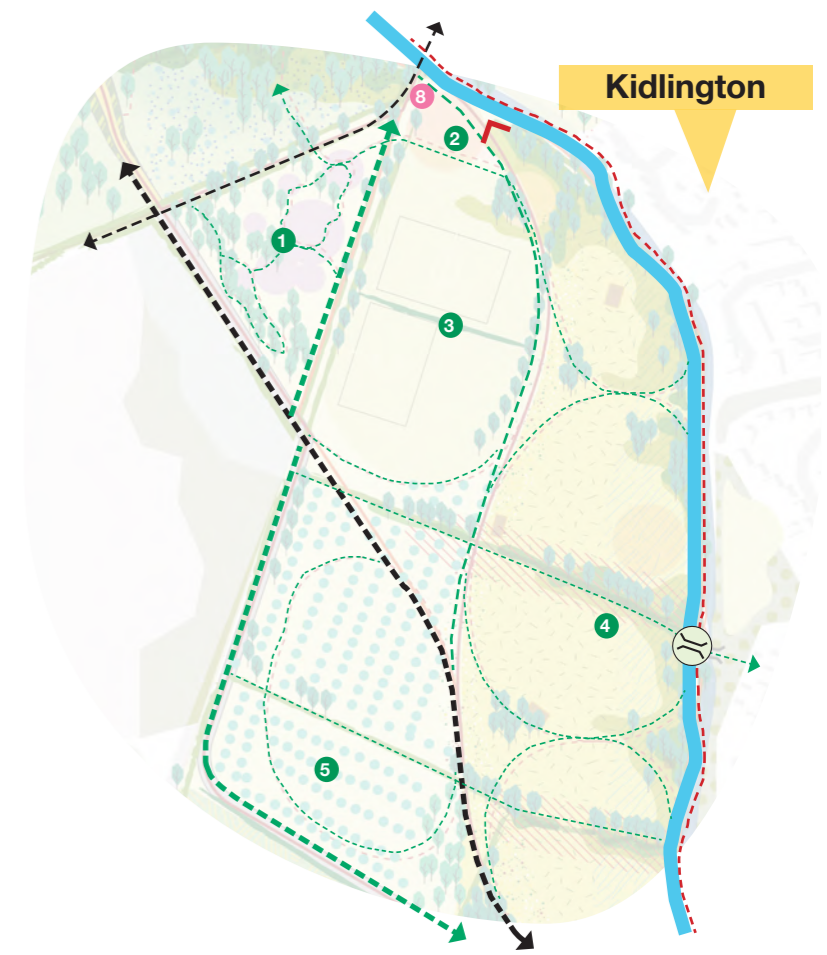
Biodiversity corridor
Existing hedges along the Oxford Canal is expanded and enhanced to strengthen the biodiversity.

Oxford Canal
Offers opportunities for recreational activities. Retained surrounding woodlands ensure the original character of the site is.

Upgraded tow-path
Existing tow-path is enhanced and widened when possible (stabilised compacted gravel).

Tree residence
Wooded area with potential for temporal Scouts Eco Restoration camp or light weight hut structures for a tree resort.

Sports field
Football pitch/ tennis courts, an extension of sports programming to link to the current soccer field in Kidlington.



Yarnton bridge
Connecting to Kidlington.

Canal Crossing Grounds
Fixed or temporary amenities of recreational nature relating to Oxford Canal.

6. Sustainability

Biodiversity, active travel, water management, inclusivity, well-being and Net Zero are an integral part of the masterplan. A series of sustainability objectives, emerging from wider targets look further to future stages of the Begbroke Innovation District. Relevant sustainability guidance has been included in the Strategic Design Guide.

6.1. A regenerative design

OUR Targets

Delivering Net Zero buildings in operation and create developments that are resilient to future climate events.

Reducing reliance on finite resources (e.g. water, materials) and support the circular economy, ensuring that we retain the highest value of resources.

Radically increasing biodiversity, enhancing and creating ecological networks that allow flora and fauna to flourish.

Creating a radical shift away from cars through walking and cycling neighbourhood design principles, active travel routes and shared mobility.

Fostering well-being and inclusion through **high quality green spaces**, community stewardship opportunities and engagement programmes.

Supporting local communities, providing diversity of housing, education and employment opportunities.

Committing to performance verification and sharing lessons learned.

Begbroke Innovation Districts Sustainability objectives



Targets and accreditation (Tier 2&3)

Place principles

01 A restorative landscape

Work with natural systems to improve the health and well-being and increase biodiversity

02 Engineering serendipity

Landscape and amenities that intentionally foster community-making

03 Car is a guest

Prioritise active travel and limiting car movement to create better streets and cut down emissions

04 Opening to Oxfordshire

An inclusive approach that respects boundaries, connects to neighbours, and provides amenity for beyond our borders

05 Active stewardship

Plan, manage, curate and monitor for long-term value creation

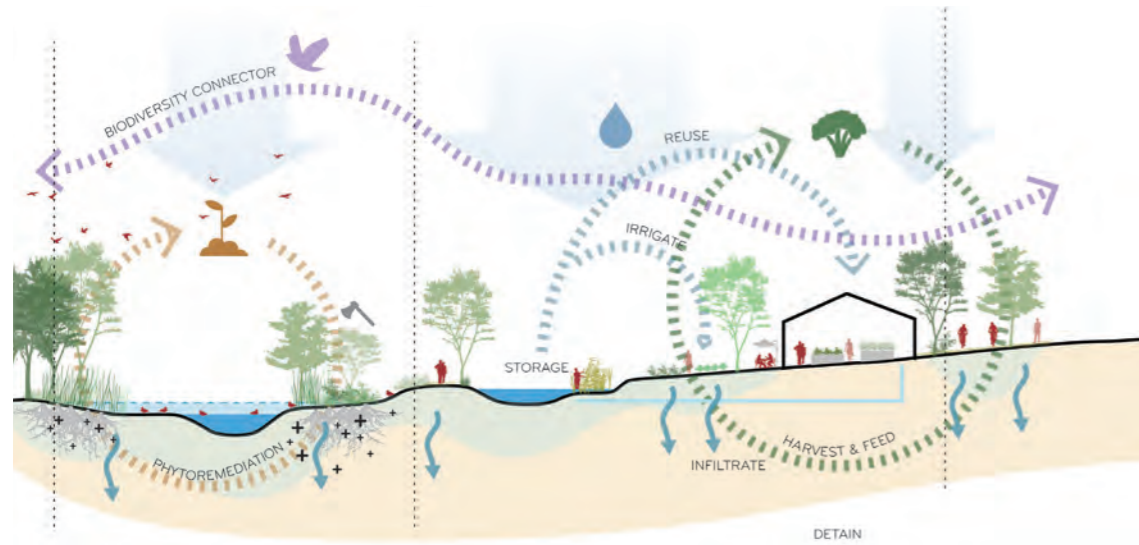
7. Landscape

The landscape design creates the bridge between a natural environment, including the memory and physical conditions of the site, and its use as a social binder.

7.1. A Performative Landscape

A common regenerative landscape for all.

Begbroke Innovation District is embedded into the rural landscape and the rural landscape is embedded into the development, offering nature based solutions for drainage, climate adaptation, health and wellbeing in a way that is unique to the site and its characteristics.

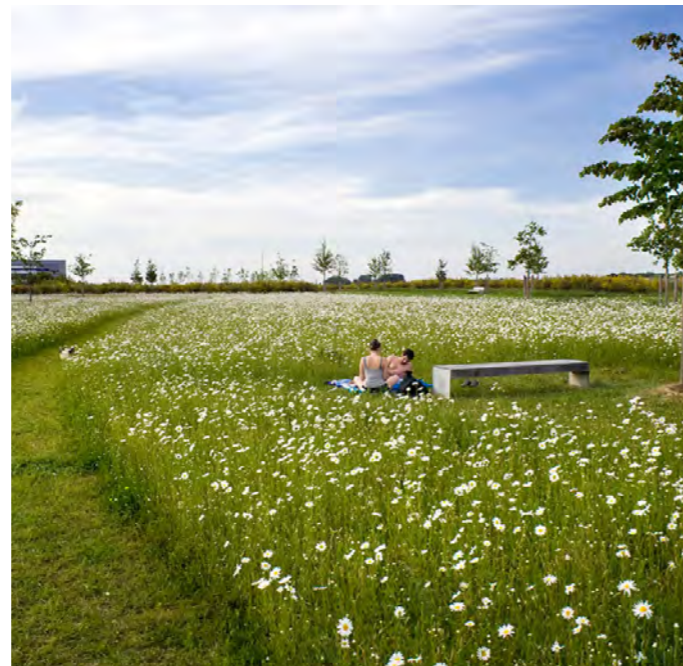


A mosaic of rural landscapes

A diverse palette of natural and cultural landscapes offer a variety of activities typically associated with rural living

Restoring natural balances

A landscape that restores the environment and encourages long-term sustainability, increased biodiversity and enhanced resilience.



A landscape for all to discover

Accessible and meaningful for existing and new communities

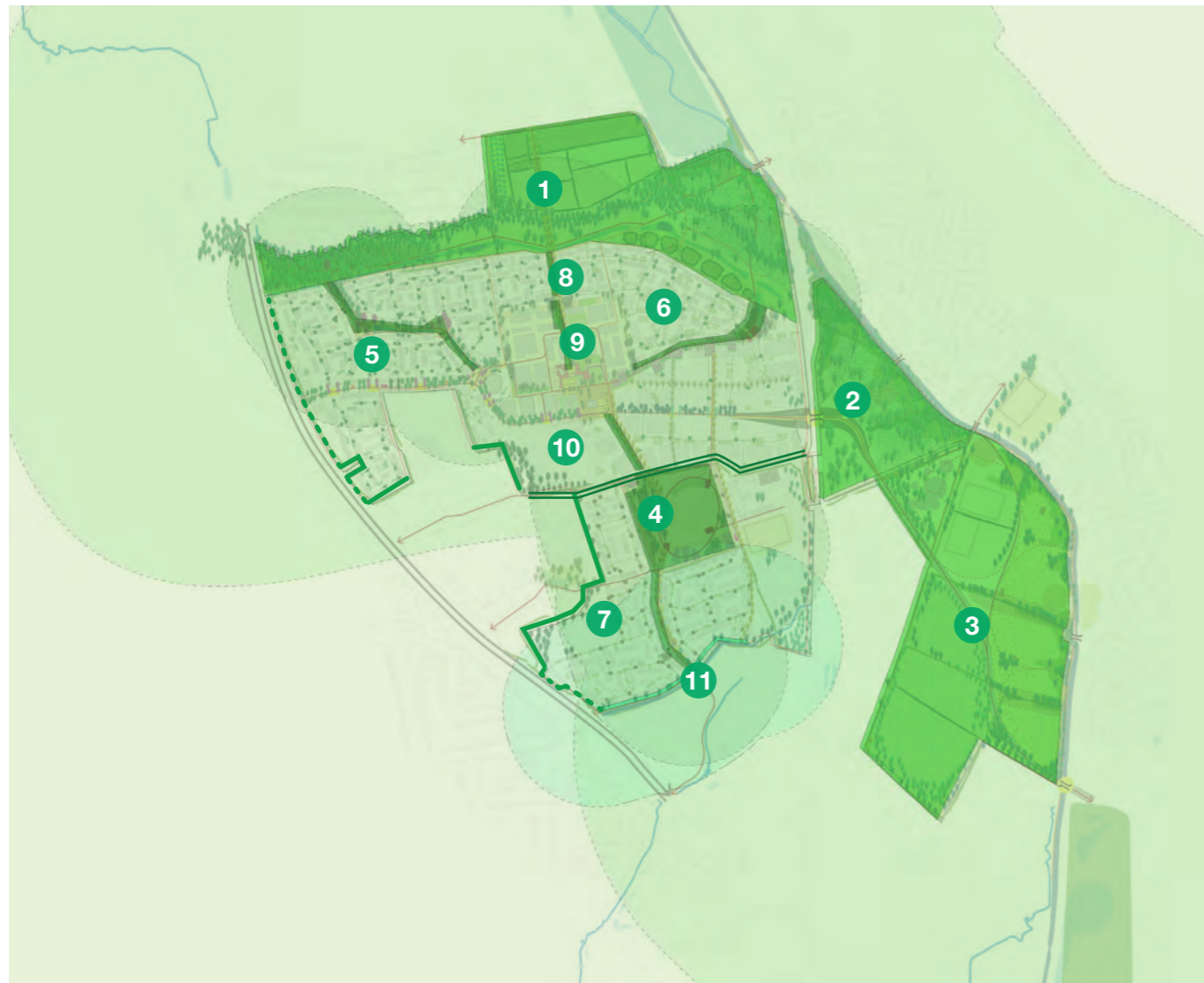


A joint endeavour

Development and stewardship through participatory design and construction

Interconnected green spaces accessible for all.

The development offers a variety of interconnected green spaces that combine attractive active mobility routes with drainage, biodiversity movement and spaces for play, sports and social interaction.



- 1. Rowel Brook Park (29.2ha)
- 2. Railway Marsh (10.9ha)
- 3. Canalside Park (35 ha)
- 4. Central Park (5.2 ha)
- 5. Forest Artery (1ha)
- 6. Food Artery (0.86ha)
- 7. Country Side Artery (0.55ha)
- 8. Farm link (0.16ha)
- 9. Innovation Avenue (0.31ha)
- 10. Boulevard (0.33ha)
- 11. Yarnton Ditches (0.44ha)

TOTAL AREA OF GREEN SPACE: 84.2HA
REQUIRED: 13.3HA*

* Assuming provision based on QUOD Social Infrastructure Requirements- August2022 Q210859.

- Existing green buffer
- New green buffer
- == Sandy Lane

The ‘Green Arteries’ are the prime green spaces within each neighbourhood but have a much larger role than a typical neighbourhood park. They offer direct access into the retained green belt from Begbroke Hill and Parker’s Farm neighbourhood, and into the Central Park from Foxes Cover neighbourhood, uninterrupted by vehicular traffic to truly bring nature to the doorstep.

Ecosystem services

The green arteries bring many benefits into the core of the development, such as climate adaptation, biodiversity connectivity, mental and physical health, connected communities and recreational opportunities.

Embracing rural living qualities

The retained green belt offers a variety of more active and more passive green spaces for recreation, nature and agriculture. By not stopping those qualities at the boundaries of the developed area but bringing them into the core of the development, the development provides a unique environment to live, work, learn and play.



Linked to living streets

Green arteries are linked to living streets while more car-focussed streets are situated away from the arteries in order to extend safe pedestrian priority connections as far into the neighbourhoods as possible.

Uninterrupted access to green open space

The green arteries provide direct access to larger green space uninterrupted by vehicular routes in order to provide a larger and safer area for outdoor activities such as sports, play and exploration for all ages.

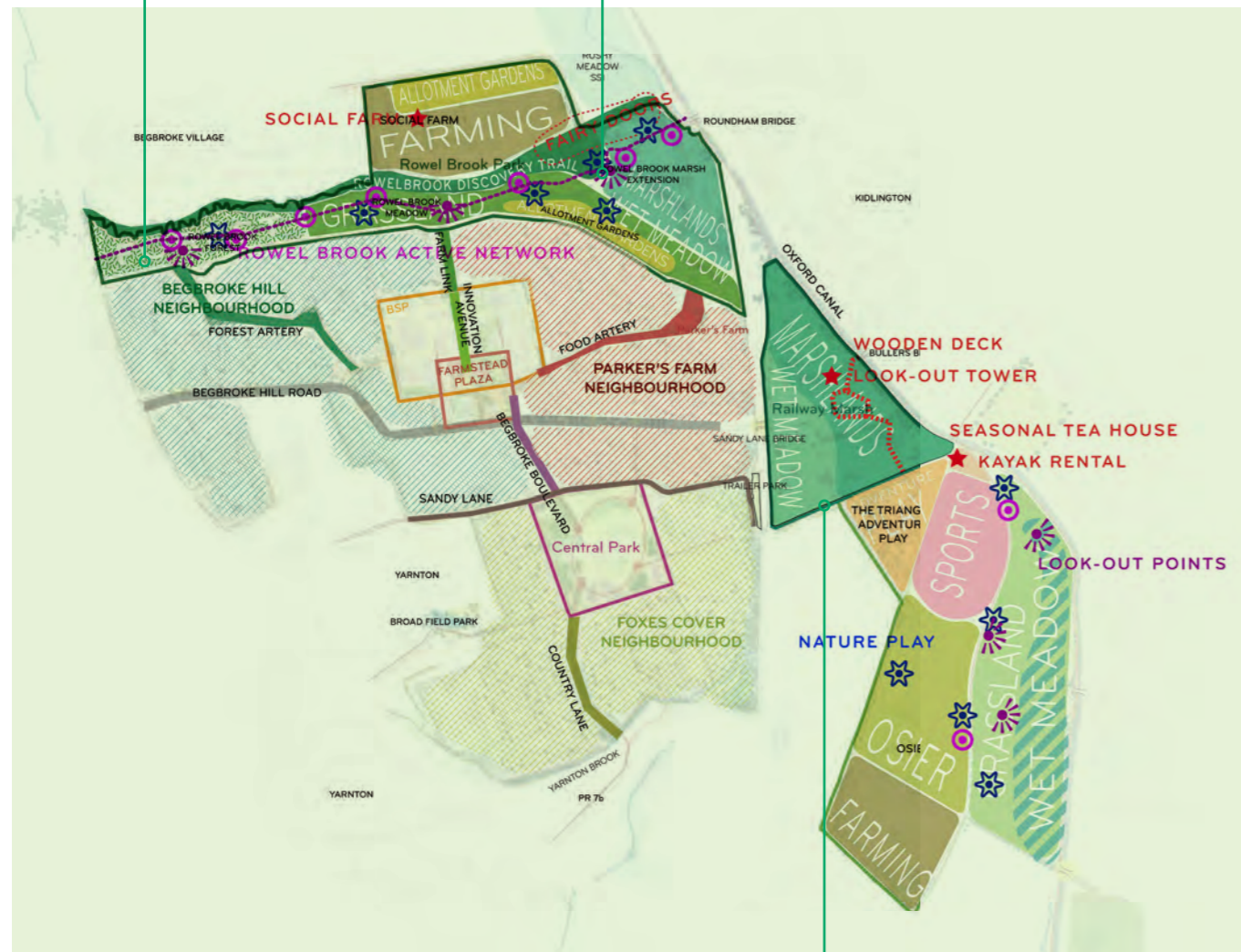
A variety of uses

A scenery for all to enjoy,

A space to reconnect with natural rhythms and providing a scenery for nature itself.

to benefit from,

Inviting people to explore and enjoy the natural qualities of the site, contributing to health and wellbeing.



and to engage with.

Activated through informal sports, play, educational and social interventions.

Level of activity and management



Varying levels of activity and management

The landscape will consist of a variety of characters, combining the natural and rural informal qualities of the site with high quality urban space with a strong sense of place.

Urban areas are expected to support high intensity usage and adopts a more formal and urban character with more hardscape and ornamental planting.

Manicured areas are composed of clearly defined hardscape, accessible and inaccessible softscape. They have a well-kept appearance and support high intensive uses.

Areas with a neutral character combine naturalistic or even wild elements with more manicured elements, for instance through having mowed edges along wildflower meadows within the green arteries.

Naturalistic areas are designed inspired on a natural character, but focus on the interaction with and appreciation of natural features.

Wild areas have a natural character and have limited access. Rewilding is an important strategy, where only the conditions are created for nature to take over.

7.2. Landscape Strategies

Green

Biodiversity connectivity

Restoring, creating and enhancing patches of natural habitats and connections through the development while contributing to ecological networks on a larger scale.

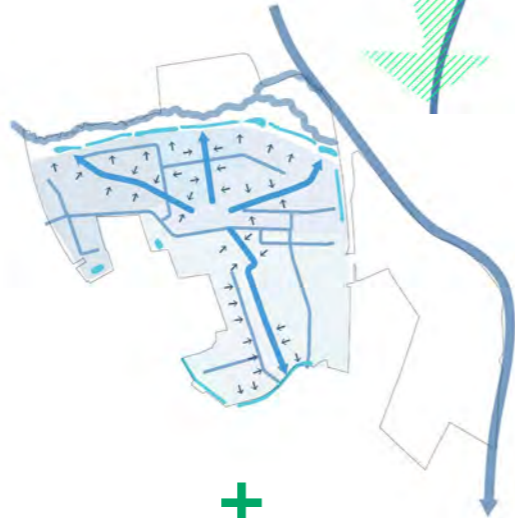


+

Blue

Natural drainage

Natural drainage system for infiltration, conveyance and detention based on the existing topography and soil conditions as an integral part of the landscape spaces.



+

You

Serendipity

People focussed public realm that brings together communities and is accessible and inviting to all.



=

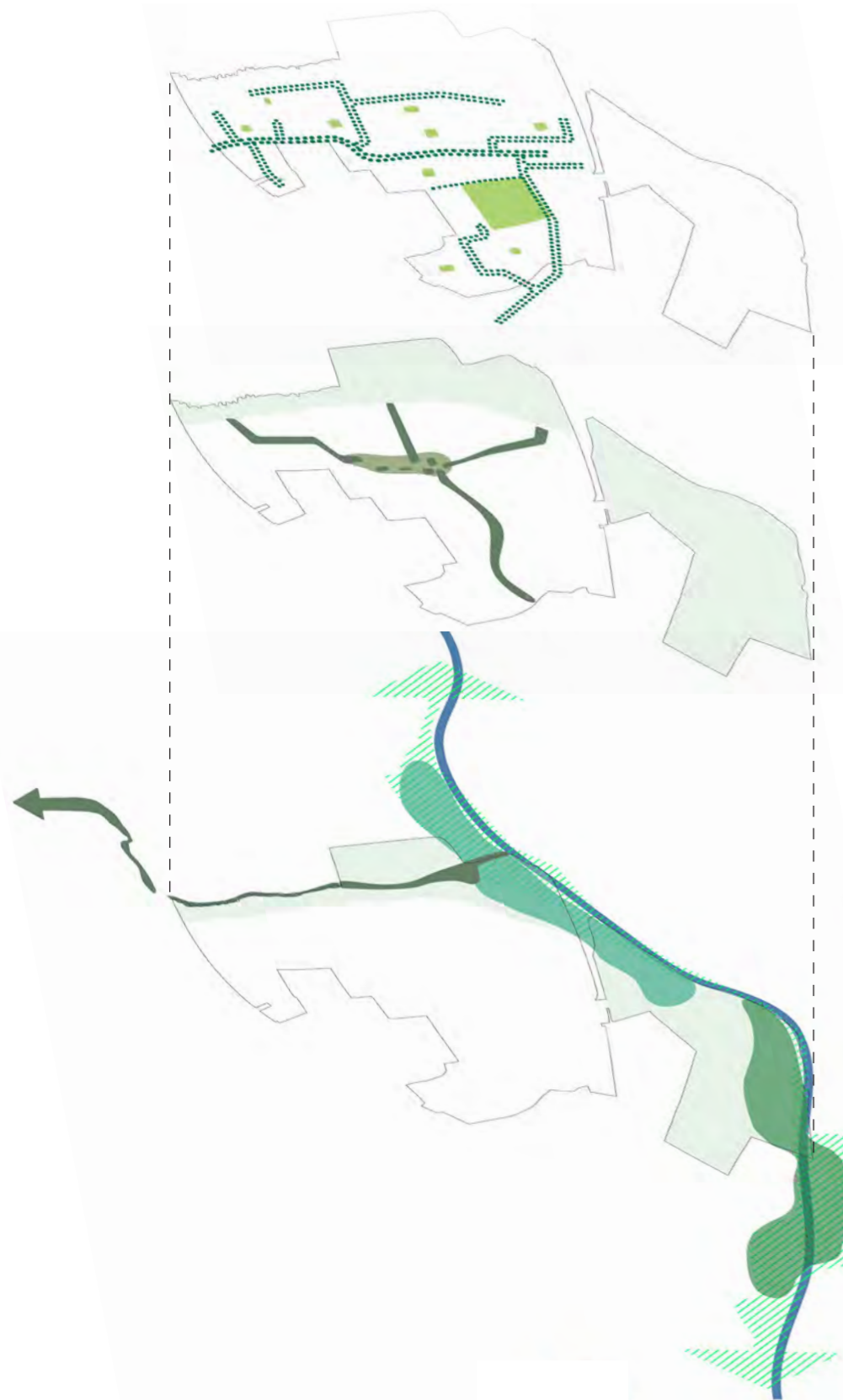


Landscape as a binder

The landscape provides the scenery and opportunity to connect places and people, offering a combination of programmed spaces, quiet spaces and flexibility to cater for the unknown.

7.3. Green

(Flora and fauna)



Internal green arteries

Biodiversity connectivity

As an exemplary model for a peri-urban mixed district, distribution of green spaces is key to the identity of the development. The green arteries provide green access and optimise frontage to open space throughout the whole district, bringing the rural qualities of the site into the core of the neighbourhoods.

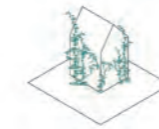
The project site intersects with the Lower Cherwell Valley CTA, as part of which the Oxford Canal links Rushy Meadow SSSI and Stratfield Brake. The development of the district can play an important role in the development of the Oxfordshire Nature Recovery Network by rewilding this link and diversifying a large portion of the retained green belt.

While prioritising ecological qualities of the revised green belt, there is the need to connect people to nature and improve access from neighbouring villages.

Through the introduction of the green arteries, the green qualities of the region to permeate the development, structuring the urban fabric and linking living streets with pocket parks and courtyards and the central park with the wider landscape.

The interconnected green space of the district provides shaded corridors for active mobility and social amenities while embedding biodiversity into the district. The framework will provide the context for a diversified program, linked to active frontages, socially vibrant and safe public space serves to bring together the different user groups rather than separating them.

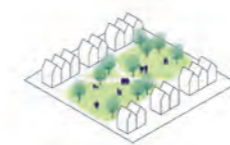
XS Building



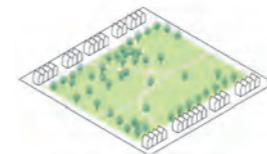
S Block



M Neighbourhood



L Development



XL Network / Regional



Within developments

Building-integrated green provides regular exposure to green, providing health, climate and ecological benefits.

Pocket parks and shared courtyards within developments provide shared green spaces that are easily accessible and encourage informal social interaction.

Within masterplan framework

Linear parks at the core of each neighbourhood provide immediate or close access to green spaces for the district and provide space for shaded active mobility corridors, sports and play facilities while also improving ecological links throughout the site.

The central green park serves as the main green community space at the level of the development, offering a variety of programmed spaces and amenities as well as space for events and informal use for people working, living and learning in the district and neighbouring villages.

Linked up with patches of smaller parks and well connected to surrounding naturalised areas, the retained green belt land offers a variety of parkland with active, passive and nature spaces as part of large integrated green network.

Wider network ecological connection

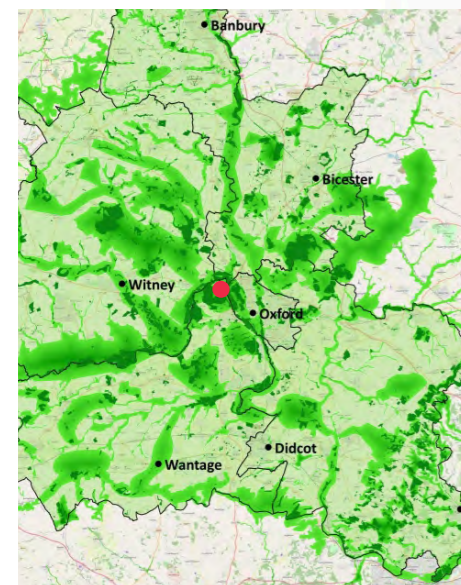
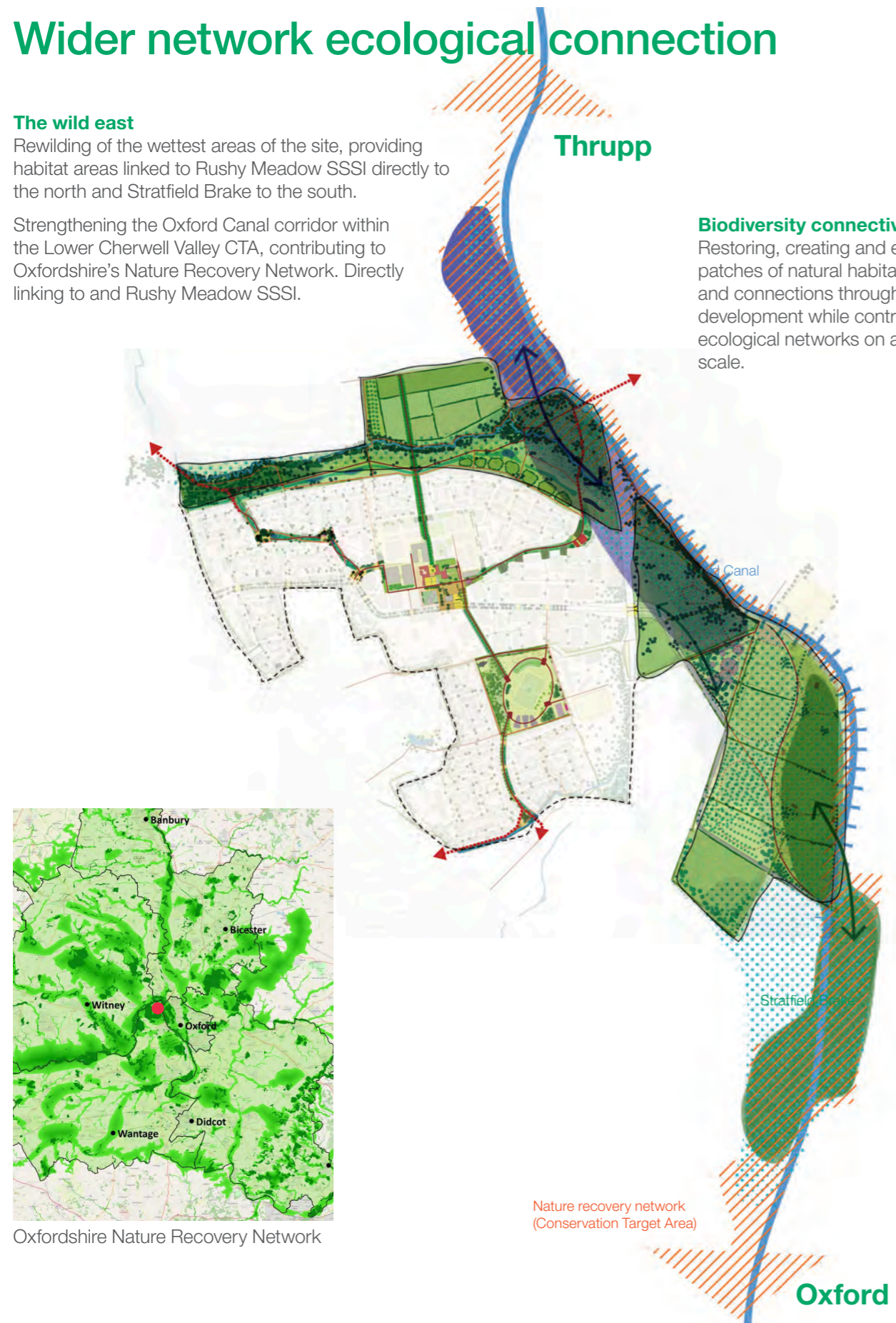
The wild east

Rewilding of the wettest areas of the site, providing habitat areas linked to Rushy Meadow SSSI directly to the north and Stratfield Brake to the south.

Strengthening the Oxford Canal corridor within the Lower Cherwell Valley CTA, contributing to Oxfordshire's Nature Recovery Network. Directly linking to and Rushy Meadow SSSI.

Biodiversity connectivity

Restoring, creating and enhancing patches of natural habitats and connections through the development while contributing to ecological networks on a larger scale.



Oxfordshire Nature Recovery Network

Potential Natural Vegetation

Potential Natural Vegetation, PNV, is the vegetation cover in equilibrium with climate, that would exist at a given location non-impacted by human activities. It is influenced by the climate, soil type and topography. Whilst the site is impacted by human activities, understanding the PNV helps to develop planting strategies that are sensitive to the local natural character and support management strategies to work with, and not against, the natural succession of the site.

Potential Natural Vegetation of the site

On a larger scale, the PNV of UK is temperate deciduous broadleaf forest. (Harvard Dataverse, Global Maps of Potential Natural Vegetation at 1 km resolution, 2018). On a smaller scale, by taking into account the soil type, topography and hydrology, more precise assumptions on the PNV of the Begbroke site can be made.

Oak forest

The higher lying area of the plateau of the Begbroke Hill will eventually become a fresh forest since the soil consist of Clay. It is anticipated that within these conditions an Oak-Birch (*Betulo-Quercetum roboris*) forest would naturally develop, which may eventually transition into a Hornbeam-Oak (*Stellario-Carpinetum*) forest.

Oak-birch (*Betulo-Quercetum roboris*) forest officially refers to the vegetation that would climax in nutrient-poor places, but is also used for places where birch and eventually oak start to grow if a deforested site is allowed to re-develop a forest cover naturally. For this site it is anticipated that at first a young forest would develop with mainly birch and over time oak, with a shrub layer consisting of the species that now also frequently occur in the surrounding area (buckthorn, hawthorn, elderberry and guelder rose, etc.). Eventually the forest floor will have some spring bulbs such as *Allium ursinum* and climax shrubs (such as *Ilex*), ferns (*Dryopteris*, *Polystichum*), etc. After a few hundred years, it would then further develop into a real hornbeam oak forest with oak, hornbeam, ash, lime and a rich shrub layer with *corylus*, *crataegus*, *sambucus*, *ilex* etc.

Willow forest

The lower lying eastern area of the site has a wet soil and is anticipated to develop into a riverine willow woodland (*Salicion albae*), which will be flooded for longer periods mostly in wintertime. The influence (or past influence) of one or more rivers creates a riparian forest. The trees are dry for part of the year and flooded for part of the year. The development of this type of forest is much faster than that of the oak forest, because the forest consists of pioneer species that grow quickly. As a result, willow rejuvenation takes place more quickly and there is a rich and vigorous shrub layer. An important difference with a similar forest type, the forest (alder or birch) carr, is that a carr is almost permanently flooded. Willow forests are more open and dynamic than oak forests, but also much less species-rich because of the extreme conditions. It will be dominated by different species of willows (trees and shrubs) and sometimes poplars.



Oak forest



Willow forest

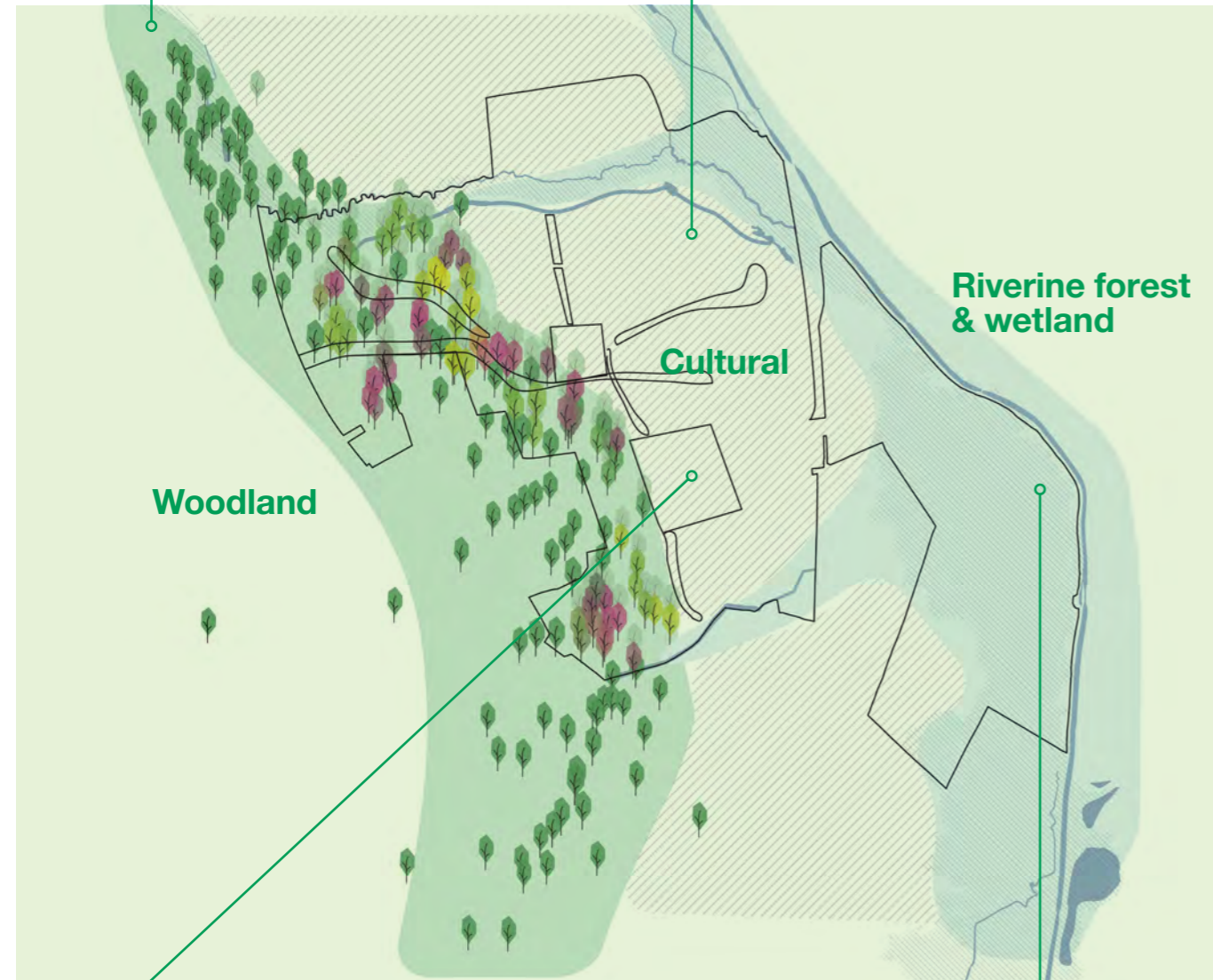
Landscape Character

Woodland

The higher grounds have a more wooded atmosphere, taking on character elements of the oak dominated forest with rich understory, spring bulbs, climax shrubs and ferns which would naturally develop in this area.

Productive

The central strip of the site emphasises on its cultural landscape qualities. The northern including edible landscapes within parks and open spaces as well as incorporating hedgerow species.



Woodland

Cultural

Riverine forest & wetland

Riverine forest and wetland

Within the wetter parts of the site, the more cultivated open fields and wet grasslands are combined with elements of ash and crack willow forest, dominated by different species of willows that would naturally develop in this area.

Country lane

The southern part of the cultural landscape takes on a country village planting atmosphere, where rural species are combined with more cultivated planting in an informal arrangement.

Softscape strategy



Biodiversity

Linking and creating green patches with diverse plant species that provides foraging opportunities for various wildlife.



Seasonality

Diverse species of plants which thrive and bloom in various seasons to maintain its visual appeal and ecological functionality throughout the year, ensuring resilience against changing environmental conditions.



Edible landscape

Providing fresh and sustainable food sources with orchards, edible hedges, allotment gardens which supports community building and social cohesion.



Heat mitigation

Vegetation reduces air temperature through evapotranspiration, provides shading and reduce direct radiation.



Wind mitigation

Strategic implementation of windbreaks of hedges, shrubs, and trees to redirect and diffuse wind current to create comfortable microclimates in urban areas.



Water management

Promote the infiltration of water, reducing stormwater runoff and supporting groundwater recharge, thereby reducing the risk of flooding.

Planting strategy

Layered planting

A multi-tiered approach for planting is applied to all the neighbourhoods. A base of wildflower seedmix forms the first layer, complemented by shrubs and trees species that support the character of each neighbourhood.



Tree types

The planting in each character zoning is classified into 3 types.



General

Local naturally occurring species due to soil type, topography and climate



Accent

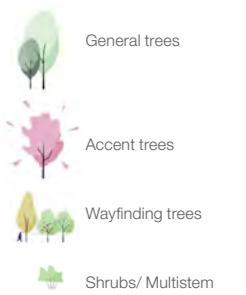
Special species with an element of grandeur in terms of size, colour or structural form. Can be non-native.



Wayfinding

Human scale, visually appealing/engaging (coloured barks, foliage)

Tree planting strategy: Forest



 <i>Acer campestre</i> Field Maple	 <i>Alnus glutinosa</i> Common Alder	 <i>Betula utilis 'Doorenbos'</i> Himalayan birch	 <i>Betula nigra</i> River birch
 <i>Quercus robur</i> English Oak	 <i>Quercus phellos</i> Willow Oak	 <i>Fagus sylvatica 'Asplenifolia'</i> Fern-leaved Beech	 <i>Carpinus betulus</i> Common hornbeam
 <i>Aescullus indica</i> Indian horse chestnut	 <i>Cladrastis kentukea</i> Yellowwood	 <i>Gleditsia triacanthos 'Sunburst'</i> Golden honey Locust	
 <i>Liquidambar styraciflua 'Stared'</i> Sweetgum	 <i>Cornus mas</i> Dogwood	 <i>Illex aquifolium</i> English Holly	

Tree planting strategy: Productive



Prunus padus
Europ. Bird Cherry



Fraxinus angustifolia 'Raywood'
Ash



Juglans regia
Common Walnut



Tilia platyphyllos
Linden



Magnolia 'Heaven Scent'
Magnolia



Malus sylvestris
Wild Apple



Pyrus pyraster
Wild Pear



Prunus avium
Wild Cherry



Crataegus monogyna
Common Hawthorn



Corylus avellana
Common Hazel

Tree planting strategy: Countryside



Acer pseudoplatanus
Sycamore



Acer pseudoplatanus
Norway maple



Castanea sativa
Chestnut



Metasequoia glyptostroboides
Dawn Redwood



Sorbus torminalis
Wild service tree



Pinus peuce
Balkan pine



Stewartia pseudocamellia
Stewartia



Salix x sepulcralis 'Chrysocoma'
Weeping Willow



Cedrus libani
Cedar of Lebanon



Cornus controversa
Giant Dogwood



Nyssa sylvatica
Black Gum



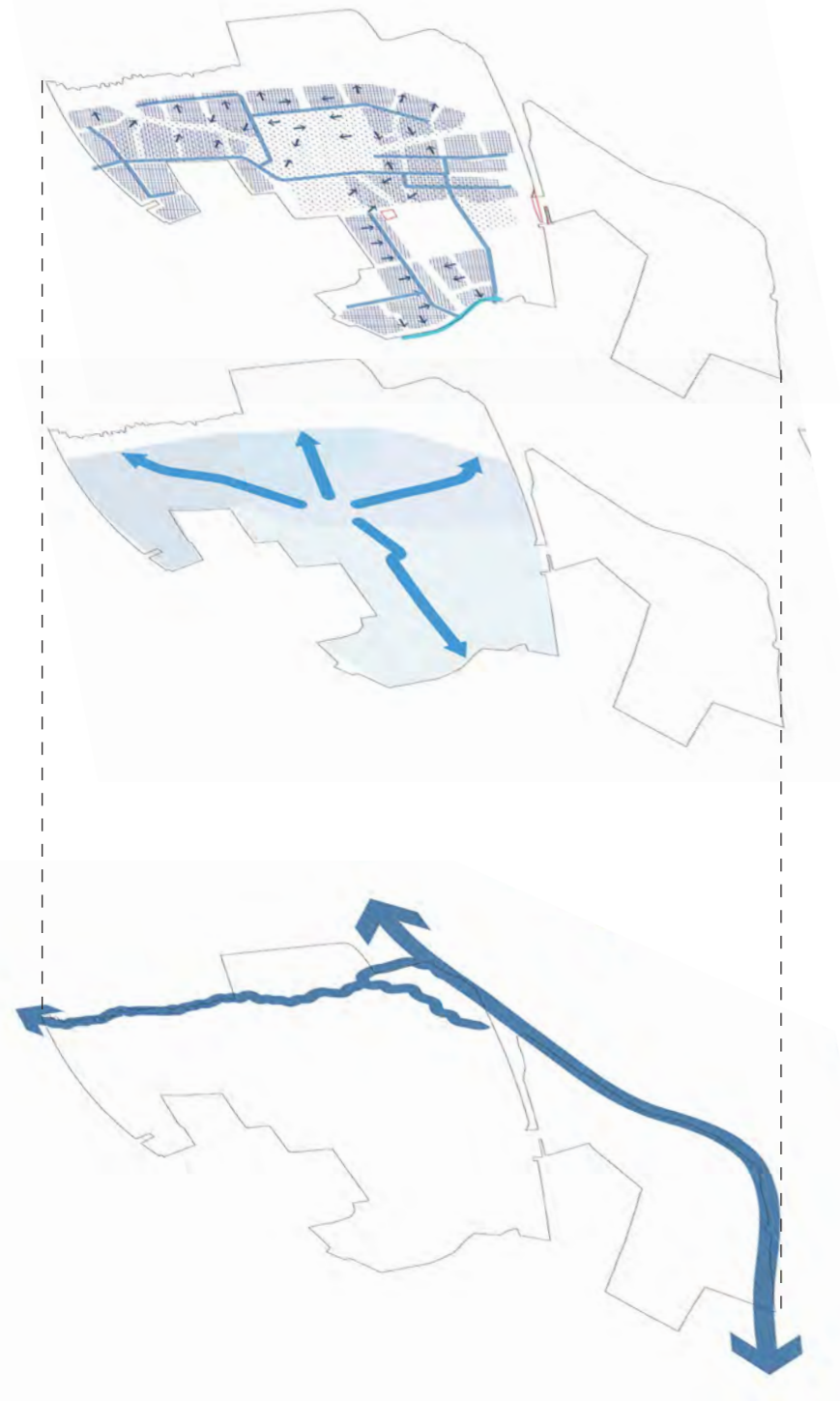
Euonymus europaeus
Common Spindel



Salix viminalis
Willow

7.4. Blue

(Water system and drainage)



Local detention and conveyance

Neighbourhood swales within green arteries

Oxford Canal and Rowel Brook

The masterplan integrates natural SUDs at all levels; source, pathway and receptor, making use of existing topography as much as possible.

Contributing to the character of specific locations within the development, SUDs can have a more natural or urban green character

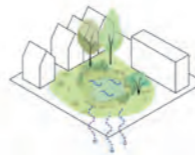
Linked to the green network, the blue network of water management builds upon long term water management and resilience. Using the framework of green arteries to infiltrate surface water where possible, pressure can be reduced on the downstream system.

The system will seek to minimise the discharge of stormwater to the downstream system while making the best use of the available water within the site, including potential for harvesting of stormwater within the developments. On a larger scale, larger natural attenuation areas are embedded within the retained green belt

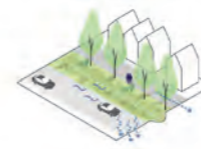
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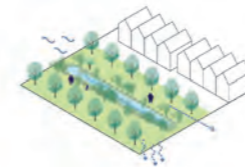
S Block



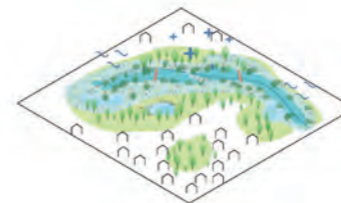
M Neighbourhood



L Development



XL Network / Regional



Within developments

At building level green and blue roofs can be applied to minimise runoff at the source, and directly harvest the available water for re-use.

Common SuDS features at block level can be applied to provide attenuation and infiltration for roof and hardscape runoff during heavy rainfall, minimising the contribution of private runoff in public drainage system.

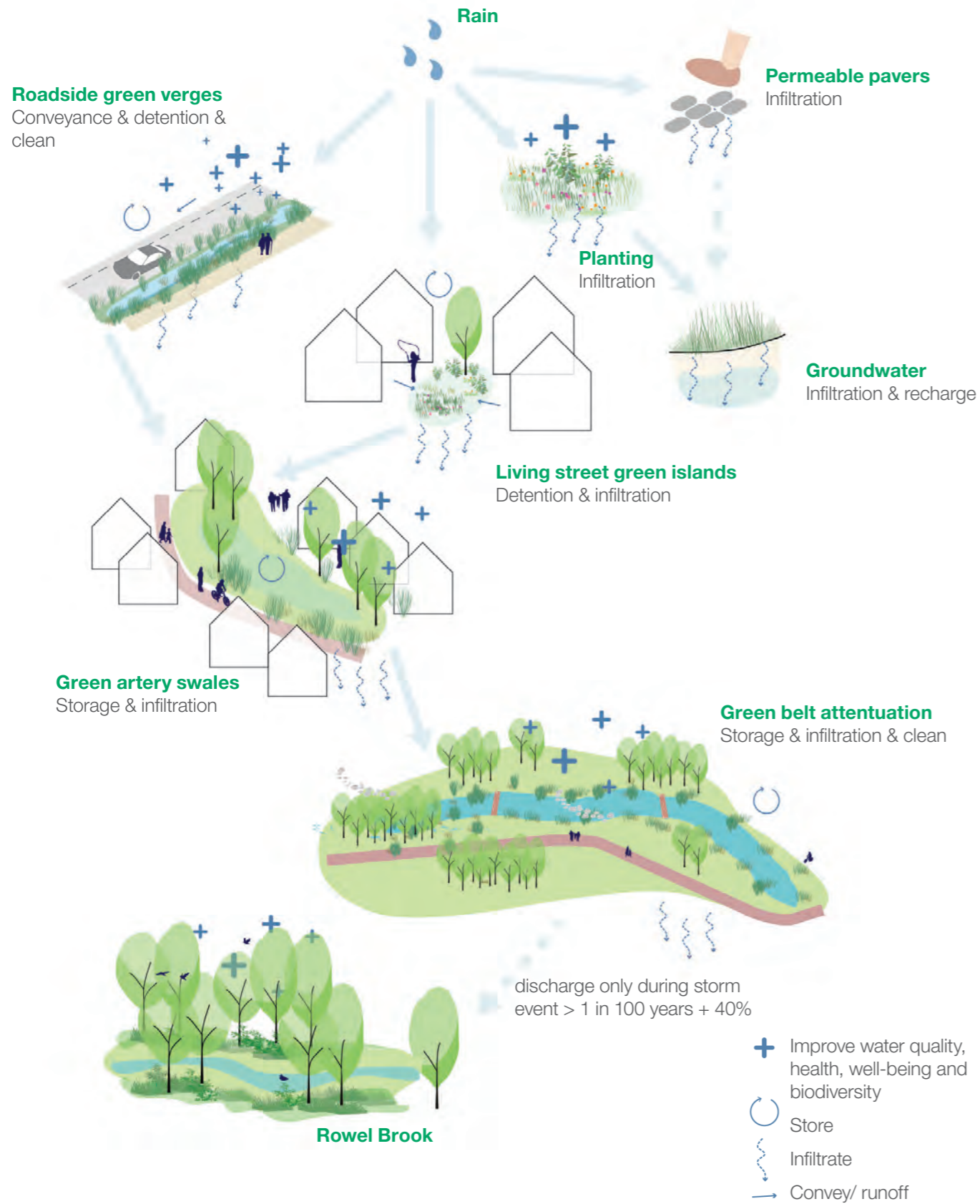
Within masterplan framework

Small roadside swales, hollow roads and paved gutters convey water to the primary system, minimising the need for piped drainage systems and encourage infiltration.

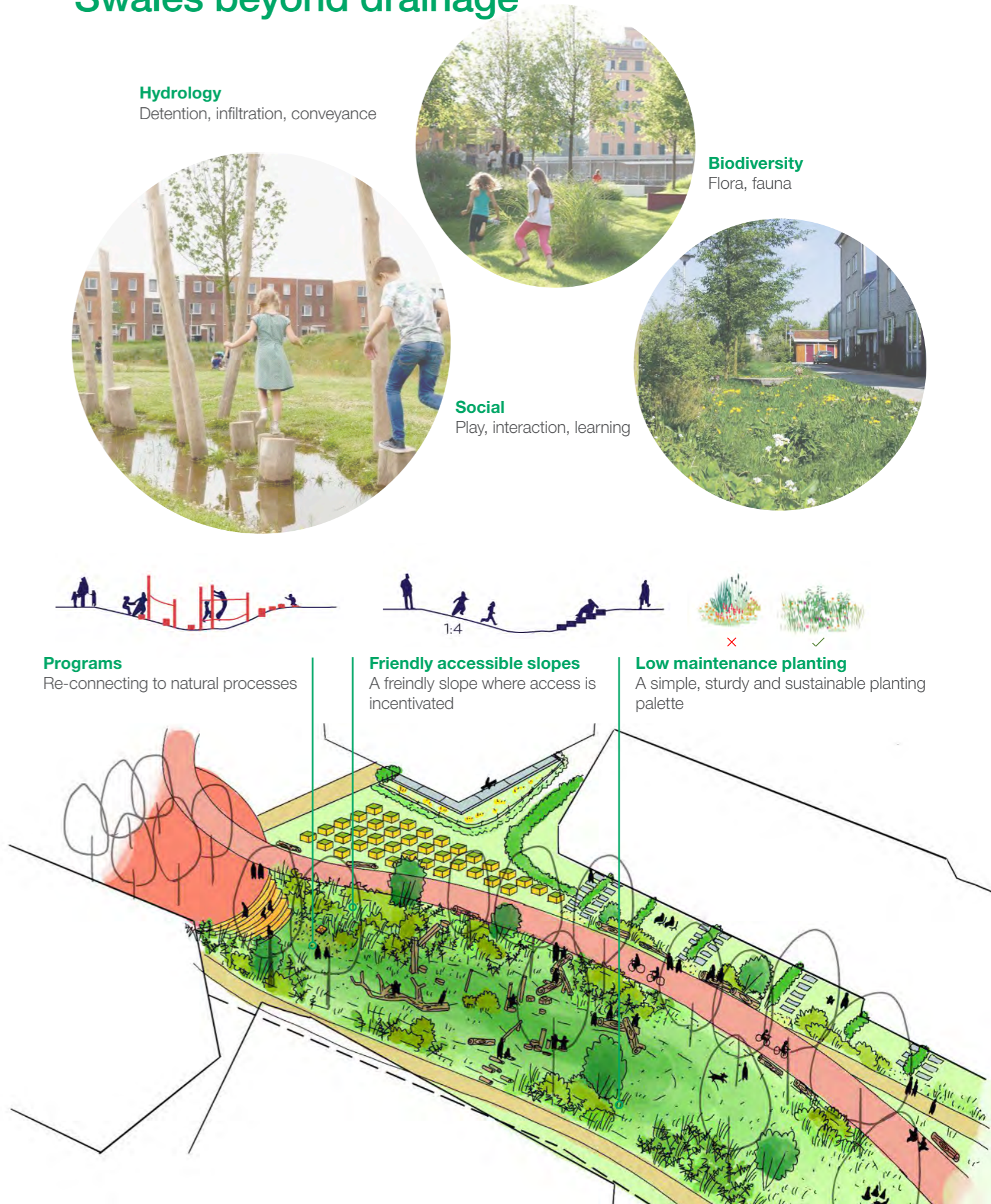
Swales and linked raingardens within the green arteries collect and convey runoff from each neighbourhood, while providing infiltration and attenuation. A larger attenuation area at the end of each green artery further retains the districts runoff.

Within the revised green belt, wetland development around Rowel Brook and the land east of the railway offer a wider flood plain that allows for seasonal flooding and helophyte to improve water quality.

Water system



Swales beyond drainage



7.5. You

(Community and activity)



Living streets serving as community spaces close to home



Green arteries extending into Green Belt serve each neighbourhood



The farmstead and central park are the main community spaces that serve the entire development as well as existing communities

Inviting and inclusive public spaces at different levels allows for people to meet both within and outside their immediate communities.

The farmstead plaza and central park as the main programmed public space for all working, living and learning in the district

The public realm of the development is viewed as a third place. Third places refer to places where people spend time between home ('first' place) and work ('second' place). They play an important role when building communities and are seen as locations where ideas are exchanged, and relationships are built. By creating inclusive and diverse public places that feel welcoming to all and providing basic amenities that make people feel at home, third places can integrate into the public realm at all scales.

Reducing vehicular traffic in most of the streets is not a traffic measure but rather a precondition to be able to designing for them to be community places for neighbours to meet and play rather than traffic spaces. The farmstead plaza and central park are the main community spaces and should feel welcoming to all, this is the place where you don't just meet your neighbour or colleague, but where the entire development comes together.

Landscaping and planting are incorporated into the public realm to provide people with the opportunity for direct contact with the natural world, following biophilic design principles. Public spaces and buildings with intense uses offer direct vistas toward green spaces and gathering, sitting, and resting moments are embedded within a green setting.

XS Building



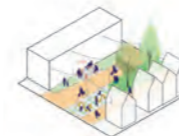
Creating an intermediate zone between buildings and public space allows for the use of buildings to extend into the public space and activate it.

S Block



Courtyards and pocket parks offer shared community spaces for neighbours to meet, rest and play.

M Neighbourhood



Car-lite living streets allow people to make use of their streets in a more social way. For children to play and encouraging social interactions. Parking barns where common parking is provided double up as social hubs with a neighbourhood plaza at the transition from access street to living street.

L Development



The farmstead plaza is the destination heart of the district with all year round program of events and activities and a diverse offering of amenities that attract all types of residents, workers, academics, staff and visitors. The central park is its green counterpart that allows for more flexible and self-organised uses.

XL Network / Regional

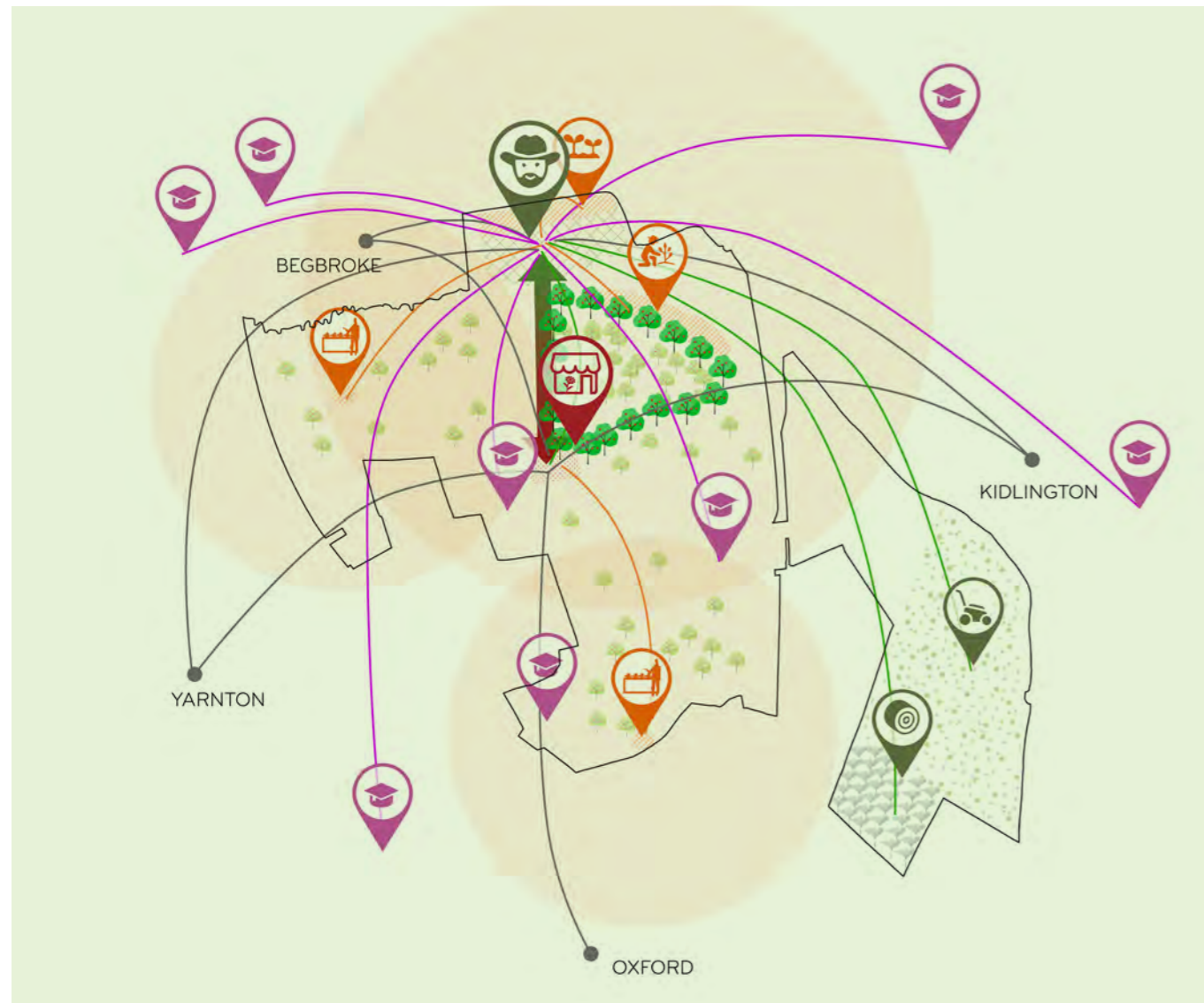


By linking the different social spaces within the district as well as to the neighbouring villages and larger active mobility networks including the Oxford Canal and its towpath, the district can play a role on a regional scale. Engagement stations within the surrounding landscape bring social life into the landscape setting.

Within developments

Within masterplan framework

Building on agricultural heritage



Food production bringing wider benefits to the community and region through sustainable farming practices and local food production

Rooted in architecture, we envision the site to keep playing a role in food production, providing edible landscapes and community gardens

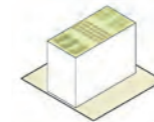
The agriculture allocation offers the opportunity to integrate a small scale community farm and combine farming with landscape maintenance

To retain the rural character and the close connection to food production, we see agriculture not only as something of the past but also of the future. A more sustainable future, where agriculture is more diverse and closer to home.

By providing edible hedges and fruit trees that are free for all to pick, the site can offer easy access to local fruits. Allotments provide residents with the opportunity to grow their own. Special attention should be paid to include people with less time or are based here temporarily, for instance through square meter or pick-your-own gardens. The site also offers the opportunity of integrating a small-scale local leaf/root vegetable farm. It is estimated that a min. 3-5 ha vegetable farm producing could be economically viable, especially if housing at discounted rates is provided.

A community farm model, combining farming and food with community places is a great opportunity for the site. Further, farming can be extended to landscape maintenance for instance through grazing of natural areas (cattle) or extensive greenscape and historical landscape elements in natural areas (hedgerows).

XS Building



Within developments

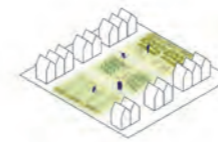
Farming programs embedded within commercial and university building blocks on the roof in the form of roof top gardens.

S Block



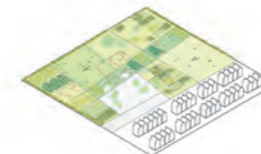
Integration of edible species within living streets and courtyards, including hedges and fruit trees that are free for all to pick, is provided throughout the public realm, giving easy access to local fruits and education about the origins and seasonality of local fruits.

M Neighbourhood



Within each neighbourhood, accessible forms of gardening such as square foot gardens and raised planter beds are integrated within the green arteries.

L Development



Within masterplan framework

Larger traditional allotments are provided in co-location with the local farm in order to provide shared facilities and facilitate knowledge exchange.

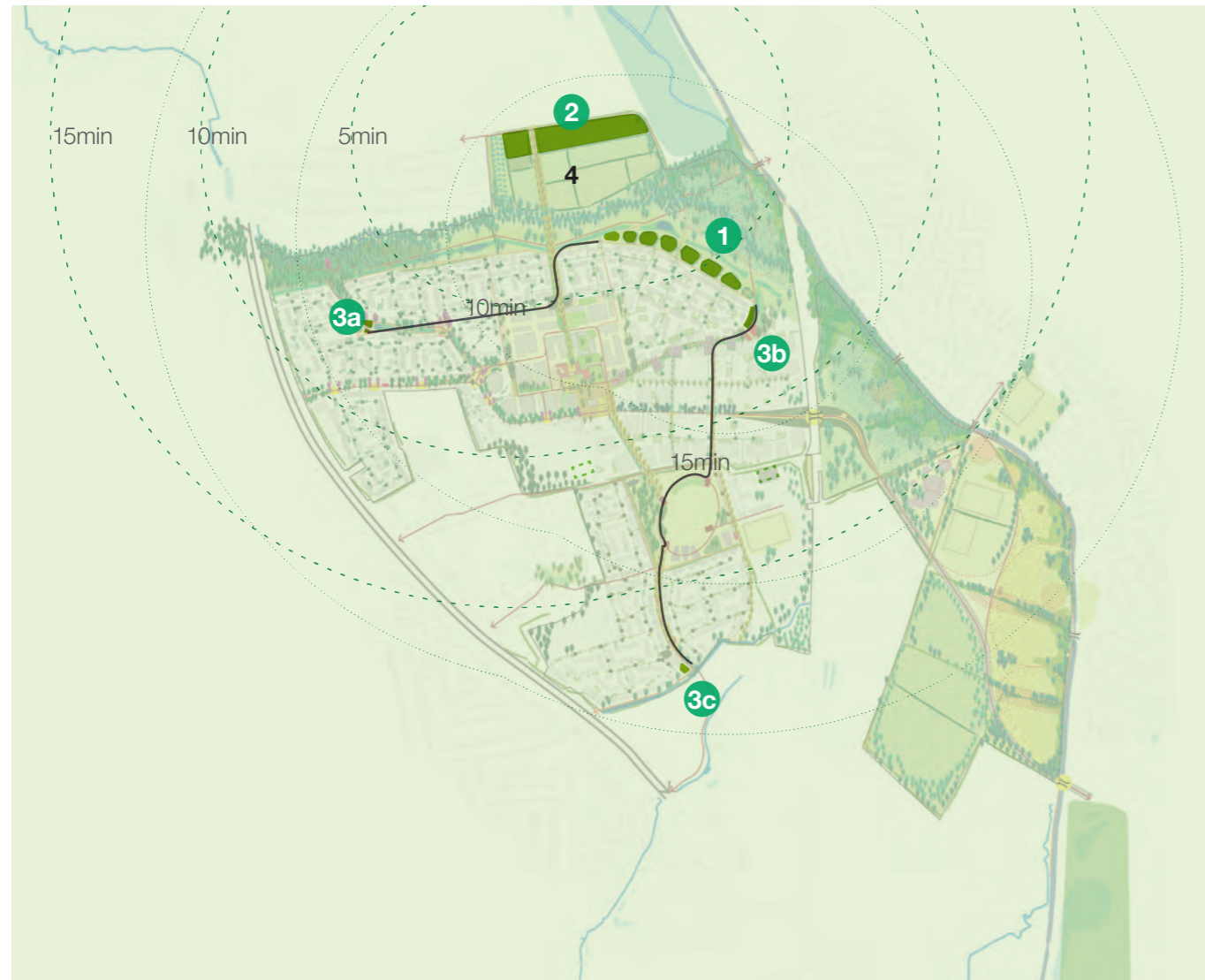
XL Network / Regional



By extending farmland management principles to the open space, a new model of landscape maintenance can be developed, emphasising the rural origins.

Allotment gardens

(all areas are indicative)



1. Parker's farm allotment (0.9ha)

Main new allotment area of development embedded within Rowel Brook Park.
 - Divided in smaller plots surrounded by hedges
 - No sheds taller than hedges
 - No vehicular access to allotments

2. Community farm allotment (1.6+0.7=2.3ha)

Allotments co-located with community farm including relocated existing allotments. Similar facilities to existing.
 - Limited vehicular access
 - Limited sheds

3. Neighbourhood allotments (0,2 ha indicative)

More urban and accessible types of allotments within the community node of each neighbourhood.
 - Square foot gardening
 - Raised planter beds

TOTAL AREA OF ALLOTMENT: 3.4HA**
REQUIRED: 3.2HA*

* Assuming provision based on QUOD Social Infrastructure Requirements- August2022 Q210859 (1.8ha) + relocating existing allotments (1.4ha)
 **Including 13 allotment plots in waiting list

4. Community farm
 With a farm core with shelter for storage, sheltered events/classrooms.
 A public focused engagement farm with more open access, potential to integrate petting zoo, orchards, sensory garden, etc. combined with a productive part with vegetable plots and limited access to public.

EDUCATION

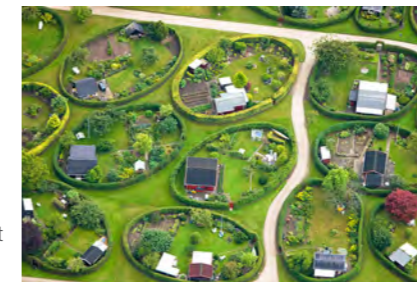


PRODUCTION



SOCIAL

1. Parker's farm allotment



4. Local farm



2. Community farm allotment



2. Local farm allotment sheds



3. Neighbourhood square metre allotment

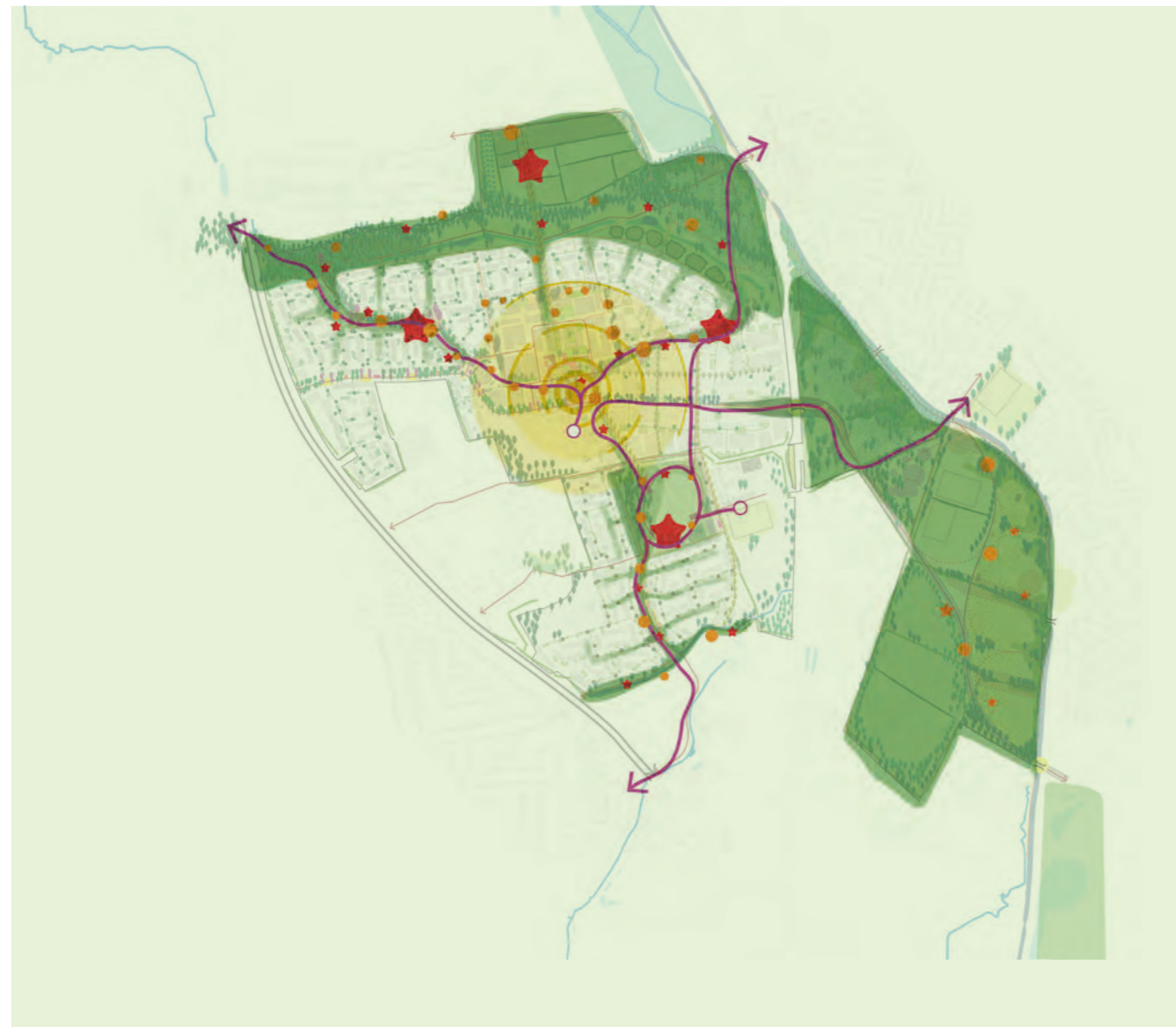







4. Local farm polytunnel



Play and sports

(all areas are indicative)



-  The world around
-  On my way
-  Nature talks
-  Dare to play
-  Play is for everyone

Focus on an active lifestyle, promoting active mobility throughout the district and providing routes

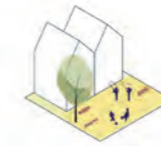
Play is at the center of each neighbourhood and distributed to best serve to different age groups

The public realm is seen as a playful landscape with natural and informal play opportunities

An active lifestyle comes natural within the district. By putting active mobility first, infrastructure is focused on providing walking and cycling routes within the neighbourhood and direct access to the attractive surroundings which encourages walking as well as routes for running, in-line skating or cycling. Signage and work-out station along routes can promote their use further, while specific features such as sports courts, skate parks and climbing walls can be integrated within park spaces.

Sports and play are closely related. The car-lite character encourages daily use of the public space, in extension to which it becomes easy use the public space for play. Not in the last place by just playing football, chalking or a tricycle race in the living streets. More formal play spaces will be distributed throughout residential areas, with spaces for the youngest groups close to home within the living streets pocket parks and courtyards. For children that start to play independently, play spaces are integrated within the green arteries, while the Central Park and Farmstead offer destination play spaces for kids of all ages.

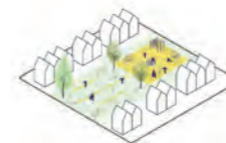
XS
Building



S
Block



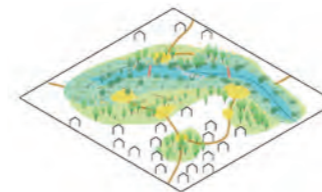
M
Neighbourhood



L
Development



XL
Network / Regional



Within developments

Throughout the district the built environment can encourage formal and informal play by providing a friendly frontage, visibility and accessibility to car-free or car-lite public space.

At living streets pocket parks, courtyards within developments and embedded in the green arteries, small areas of open space for very young children are provided to play close to where they live.

Larger equipped play areas for children who are beginning to go out and play independently are located at the nodes of each green artery.

Located within the Central Park and the Canalside Park, designated sports and play spaces provide a destination amenity for the residents of the district as well as neighbouring villages.

Play spaces, features and playful Aside from the required play spaces, individual play and sports features and natural play and informal play and sports are combined into networks. Together they form a network of sports and play that encourages an active lifestyle.

Within masterplan framework

Play situation

The development aims to put play for all ages at its core. This requires an approach to play that goes beyond the quantitative and qualitative requirements policy requirements for play which focusses on specific uses.

A comprehensive study of the play situation in the UK and abroad reveals opportunities for a more integrated approach where play is seen as something exciting. Integrating it in daily routines encourages children as well as other age groups to spend more time outside. Based on this study, 5 play principles were formulated to better integrate play within the masterplan by embedding it into the daily life of people.

1 in 5 children are 'too busy to play'

20% get less than 1h of free outdoor play per week

In the UK, time playing outside decreased **50%** in a generation

1 in 6 children in the UK had mental disorder in 2021

In 2020-2021, obesity rates reached **25.5%** of the children in the UK

Theory of play

- Play is innate
- Play is for all ages, from infant to adults
- Free play is important for developmental outcomes while teacher-directed play is effective for academic outcomes



60 different forms of play and no playground - Pieter Bruegel the Elder, Children's Games, 1560



Benefits of Play

- Benefits for the individual, the community, the city, the society.
- Benefits of co-creation, mixed-age play, nature and outdoor play.
- Key benefits related to physical and mental wellbeing, cognitive and social skills, social behaviour and caring behaviour.

A new approach: The 5 play principles

1. The world around



State-of-the-art knowledge and the innovative spirit of Oxford University.

2. On my way



Play is integrated into daily routines and re-imagined everyday spaces.

3. Nature talks



A deep connection between players and their environment.

4. Dare to play



Provide spaces to seek out ones limits in an incremental and exciting way.

5. Play is for everyone



Designed for and with people of all ages, backgrounds and abilities to serve their wishes and needs.



Vetenskaps Hus, Sweden



Gigantium Urban Space, Denmark



Pecka Playscape, Czech Republic



Urban Thinkscape, USA



Playground for All, Spain



Air Bubble, Poland



Children's Campus Theodoor, Belgium



Climbing Park, Luofu Mountains, China



ANJI Play, China



Le Volcan, France



Tumbling Bay, UK



Le Moutonium - HéBéééééé, France



Garden of the Forking Paths, Chile



Skatepark & Parkourground, Georgia



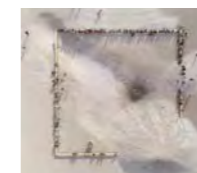
Playground in Belleville, France



Solar Kitchen, Finland



Freeway Park, USA



The Beach and The Time, Brazil



City Museum of St. Louis, USA



Le Casse Tet, France



Experience & New Tech, OOZE works



TransBorda, Brazil



Brooklyn Botanical Garden, USA



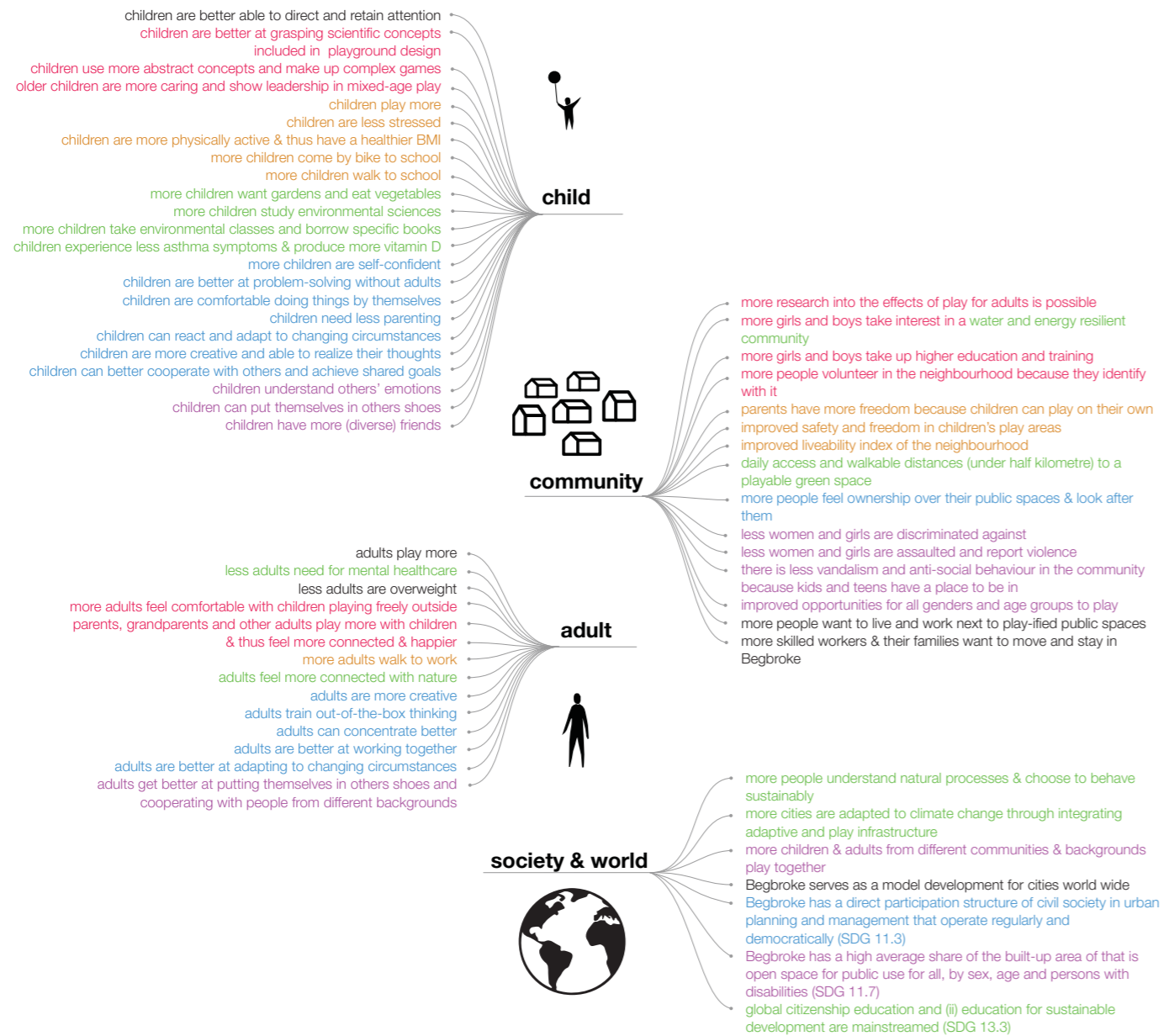
Fast Track, Russia



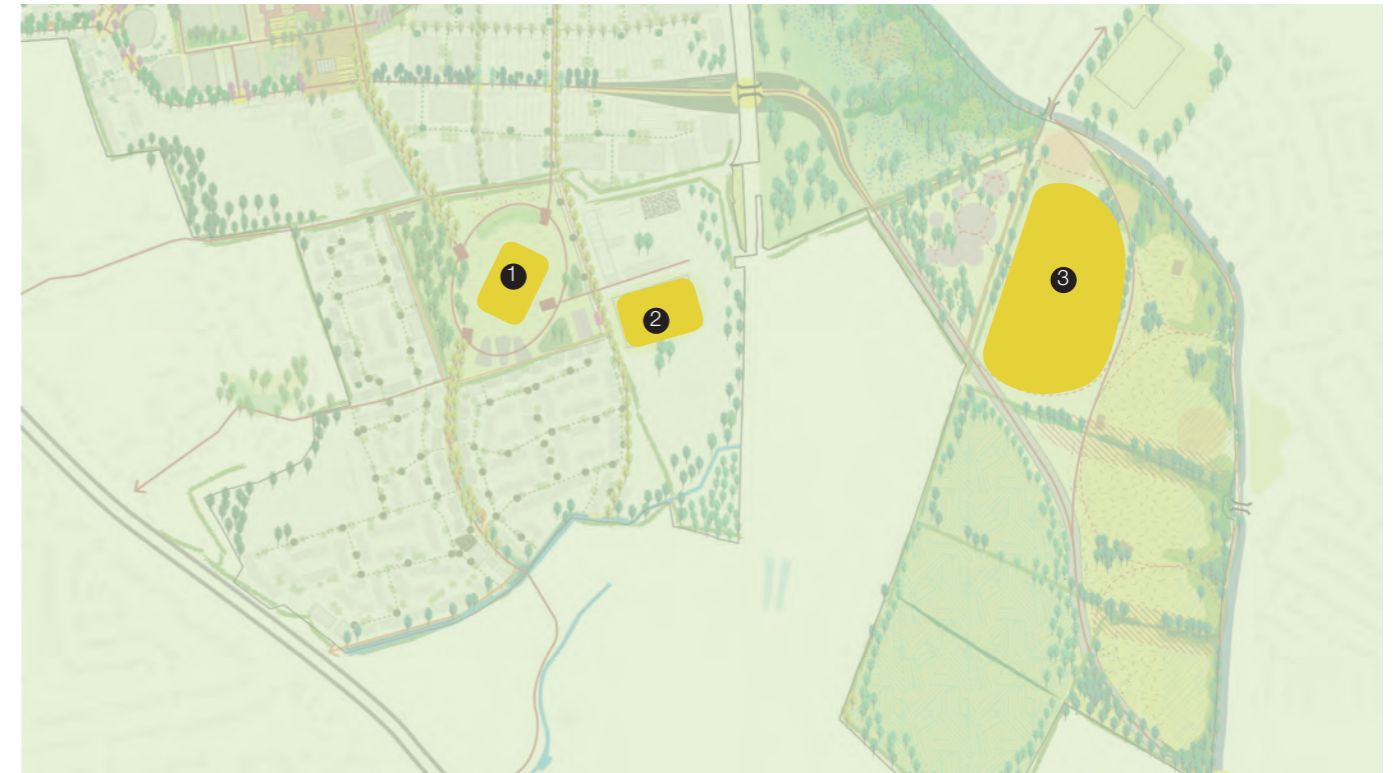
Trissans Hjärta playground, Sweden

The benefits of play applied to the 5 principles

AROUND THE WORLD
ON MY WAY
DARE TO PLAY
PLAY IS FOR EVERYONE
NATURE TALKS



Sports provision



1. Central Park multifunctional sportive lawn (0.8ha)

The multifunctional lawn within the Central Park is sized to fit a senior football field. A 0.74ha Senior Football Pitch 106*70m including 3m safety margin run-off.

It is envisioned for this to be used primarily for unorganised football activities that are free for all to join but may be bookable for organised events during certain hours.

To allow for other park uses, the football field can be fitted with lines, demarcations and goals but no fences.

TOTAL AREA OF SPORTS: 5.5HA REQUIRED: 5.49HA*

* Sports provision based on QUOD Social Infrastructure Requirements- August2022 Q210859.

2. Secondary School Senior Football pitch (0.8ha)

Shared use of a full sized artificial turf senior football pits with the secondary school.

3. Sports fields within Canal Side Park (3.9ha)

Dedicated area for organised sports within the Canalside Park. Different sports might be considered including expansion of the Kidlington Football club on the other side of the Oxford Canal.



1.



2.



3.

Potential Canalside programming

(all areas are indicative)

In the future, the canal side could be activated with diverse temporary and fixed activities that could also enhance the ecological value.

Locations for activity could include:

1. The Fairies- Existing beautiful and vibrant fairy doors amongst the trees and on the woodland floor.
2. Look out Tower- Viewing tower in the marshes
3. The Triangle - A large play space
4. The Tea house - A space for light / mobile amenity
5. Sports fields
6. A way in - Green 'tentacles' with opportunity for nature-based activity linkin the canal and the park.
7. Eco Event Space- An area of open field with potential for tentage and events
8. The Dip- Wet area



Example of activity options to choose from



Furniture strategy



The furniture palette and the placement of its elements aim to promote a sense of community and encourage interactions between different user groups within the development (students, scientists, inhabitants, workers), as well as between the newly created community and visitors from surrounding villages.

Within the public spaces, seating areas are designed to accommodate various uses and situations: large group gatherings, meetings with a couple of friends, or simply enjoying a book in solitude amidst nature.

The specific furniture is designed for both short and long stays, aiming to be inclusive by offering different levels of comfort (backrests, armrests, lounges) depending on the location. The style and materials are simple, rustic, and sturdy, contributing to the distinct character of each area while maintaining overall coherence and continuity

throughout the development.

In addition to formal furniture pieces, a range of informal seating elements such as wooden logs, stones, dry-stack walls, and gabion walls are strategically placed to enhance the desired atmosphere and expand seating options within the public spaces. By carefully positioning, orienting, and combining these individual pieces, a variety of seating arrangements can be created, including sunny spots, shaded areas, group settings, and intimate spaces.



Playful for all ages

Open-ended use of furnitures which also allow for users own interpretation



Different group sizes

Varying sizes and positioning of the sitting elements to accommodate varying group sizes



Community and identity building

Unique style and finishing for the neighbourhoods to add on to the identity of the district



Location and orientation for social collision

Furniture is positioned at intersections to allow for chances for meeting and social interaction.

Site-wide furniture strategy

Rowel Brook Park (Local Nature Reserve)

Recreational area with a naturalistic character: a variety of elements for informal, short, and long stays, reflecting the potential uses of the place.

Railway Marsh (Natural Conservation Area)

Partly inaccessible area, with occasional and minimal places to stay. Focused on an iconic tower and a wooden boardwalk.

Canalside Park

A mix of programmed areas for formal sports, active leisure, and open natural fields. Furniture should cater to both short stays along main routes and long stays within fields (wooden decks) or near play features.

Arteries:

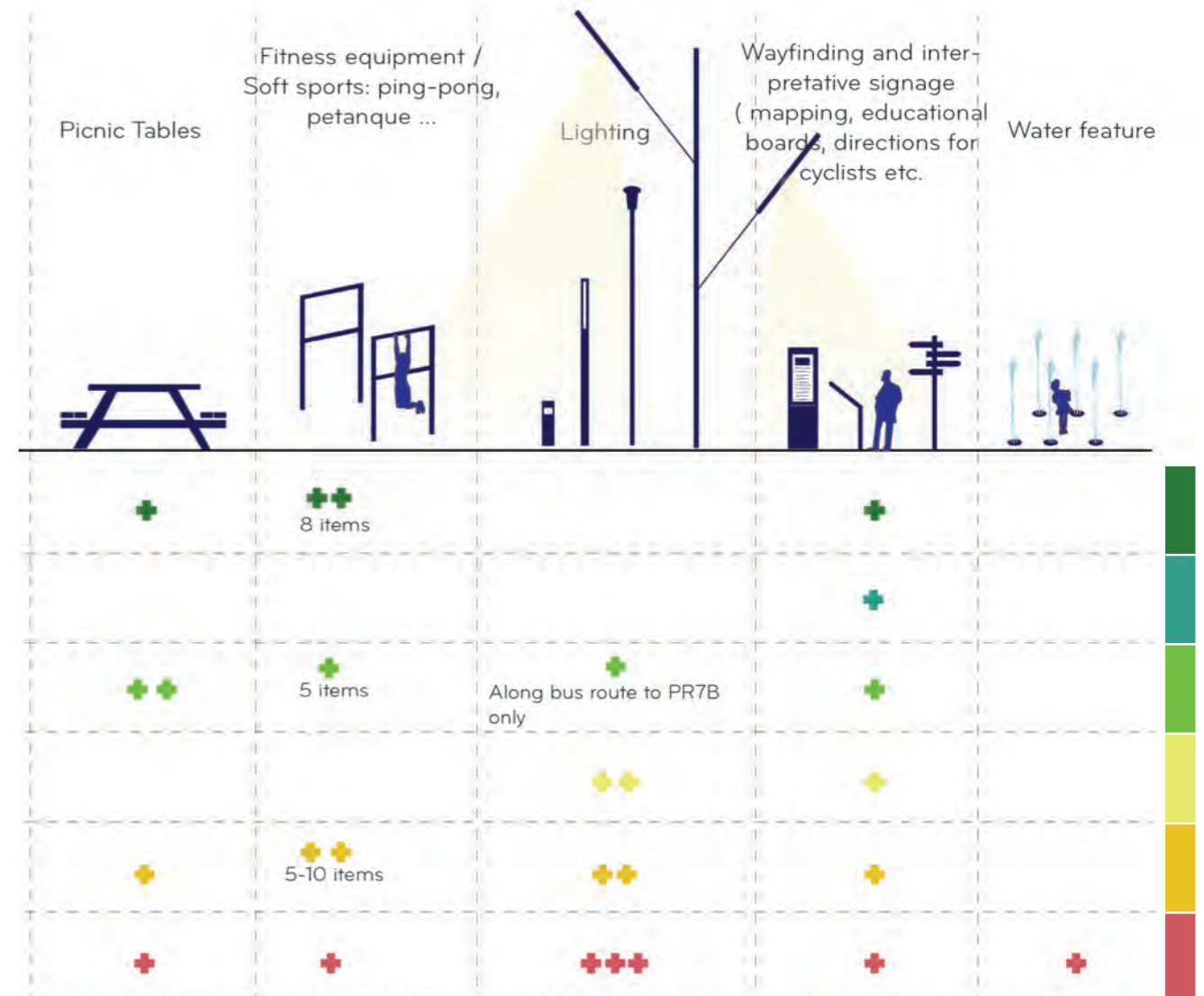
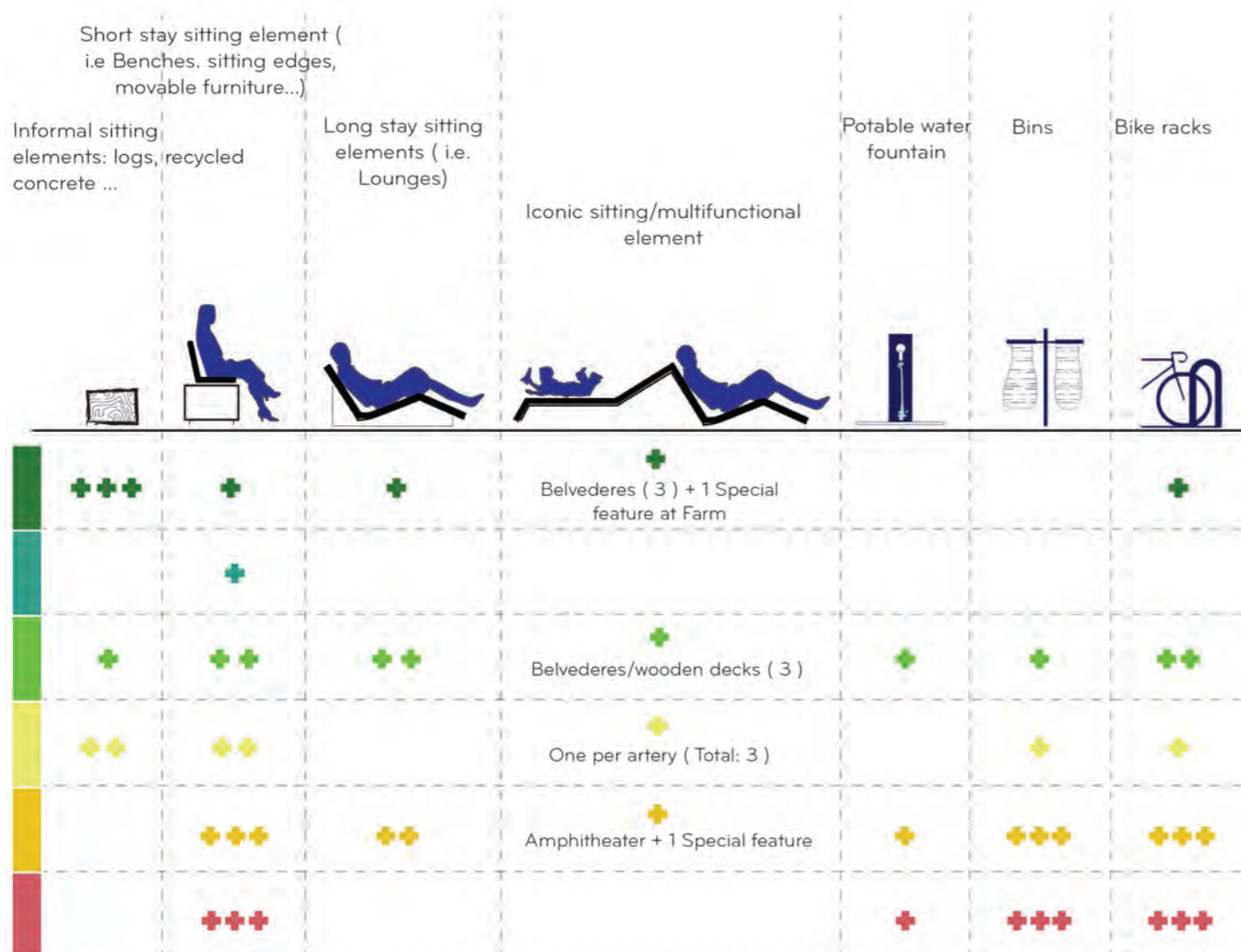
Green corridors at a neighbourhood scale, inclusive for all types of users. Combination of transitional spaces with informal seating options (wooden logs, rocks, dry-stone walls...) and spaces to relax equipped with comfortable long-stay furniture. Presence of iconic elements with a specific identity connected to the neighbourhood atmosphere, characterizing the space and offering opportunities for community bonding.

Central Park

Urban atmosphere, with a mix of intimate spaces, iconic features, and areas suitable for play and sports. Elements for both short and long stays combined with iconic pieces defining the different areas. A running track unifies the space.

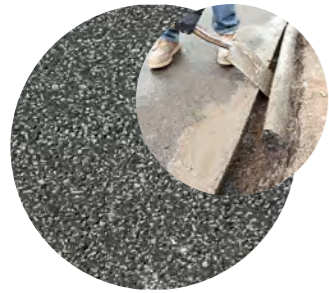
Farmstead Plaza

Landmark and urban active core of the development: hardscape with a variety of active functions and pockets of green.



Paving material palette

The choice of paving materials aims to support wayfinding for users navigating the spaces, while also contributing to the specific character of different neighbourhoods. The palette focuses on simple, rustic, and straightforward materials. It unifies development, creating coherence and continuity, while also varying in details to enhance the atmosphere of each specific neighbourhood.



Light aggregate asphalt with smooth finish and saw cut edge



Light aggregate asphalt with cobble edging



Chip seal asphalt without edging



Begbroke Hill Road : Segregated cycling path in Coloured asphalt (red-brown tones) . Angled "Cambridge" kerb at both sides.



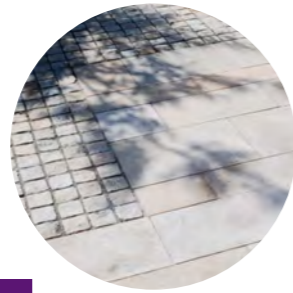
Light aggregate asphalt with cobble edging



Begbroke Hill Road, Secondary routes, raised crossings and generally all pedestrian spaces/sidewalks: concrete setts with permeable joints. Colour mix differing area to area.



Green Arteries Nodes: Concrete setts with permeable joints and a granite-looking finish. Colour mix with accent colour.



Farmstead plaza: Granite setts or flag stones. Warm tones colour mix, various sizes and finishes.



Permeable material, i.e. Self-binding gravel



Pedestrian trails: compacted soil



Wooden deck



Existing Sandy lane to be sized and re-surfaced.



Existing paths, outside plot boundaries, to be potentially upgraded



Permeable pavement

Allow water to infiltrate, filter and replenish groundwater.



Minimalising pavement

Replace hardscape with planting allows for direct infiltration of stormwater while enhancing biodiversity.



High albedo materials

Use light-coloured or reflective surfaces to minimise heat absorption and reduce the urban heat island effect.



Reusable materials

Use repurposed material to reduce waste, and create sustainable and environmentally-friendly outdoor spaces.



Durable materials

Materials resilient to wear and tear ensures longevity, low maintenance, and cost-effectiveness.



Sustainable materials

Select environmentally-friendly options to reduce the ecological footprint.

8. A Coordinated Approach

The link and articulation of our site with neighbouring developments are important. The Railway bridge stands out as a key element, seamlessly connecting the community.

8.1. Neighbours

Newcore Land

Future development at Newcore land will require a coordinated approach to access, pedestrian routes, synergies between different uses, frontages, and architectural response to Begbroke Hill Avenue.

Key

- NewCore land boundary
- Begbroke Hill Road
- Key frontage
- Existing Yarnton Home & Garden

Newcore Land

Hallam Land

A coordinated approach to vehicular access, continuity of green infrastructure, access to amenity, response and setbacks to landscape features.

Key

- Hallam land boundary
- Green Infrastructure
- Main vehicular access
- Secondary vehicular access

Hallam Land

Railway bridge

Network Rail is proposing to replace the level crossing with a ramped cycling and pedestrian bridge over the railway. As a result of community feedback, OUD has explored a pedestrian, cycle and public transport bridge, well-integrated with the rest of the masterplan in consultation with Network Rail, (further details described in the Transport Assessment).

Key

- Begbroke Hill Road
- Railway bridge
- Rail halt
- Landscaped embankments

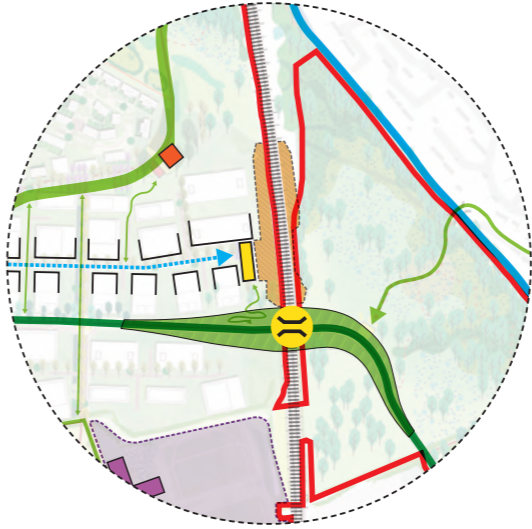
The Railway bridge

Key

- Application site boundary
- A44
- Railway
- Oxford canal
- Green Spines
- Green Links
- Landmark
- Main road

8.2. Railway Bridge

The Railway bridge is not part of this proposal, however, it is the intention of the proposal to integrate it into its design. The images below illustrate how this could be done.



- Application site boundary
- Railway
- Oxford canal
- Railway bridge
- Landscaped embankments



The window

A landmark framing views and creating a break in the journey. Incorporated lighting assist with way-finding and placemaking.



Embankments
Seamlessly connecting to the proposed landscape

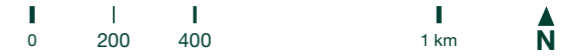
Stairs and ramps
Breaks facilitating connection between workspace and nature

The lighthouse
A lighting feature to recognise the bridge at night time.

9. Transport

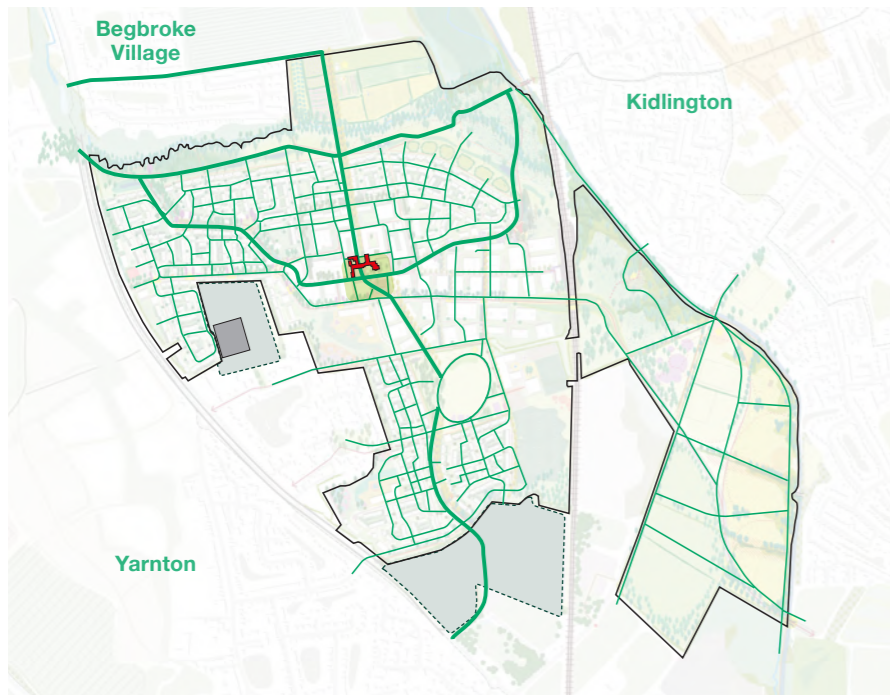
A continuous pedestrian and cycling network, integrated public transport, and the concept of the car as a guest. Together, they create a sustainable and efficient transportation ecosystem. Relevant movement guidance has been included in the Strategic Design Guide.

9.1. Car is a guest



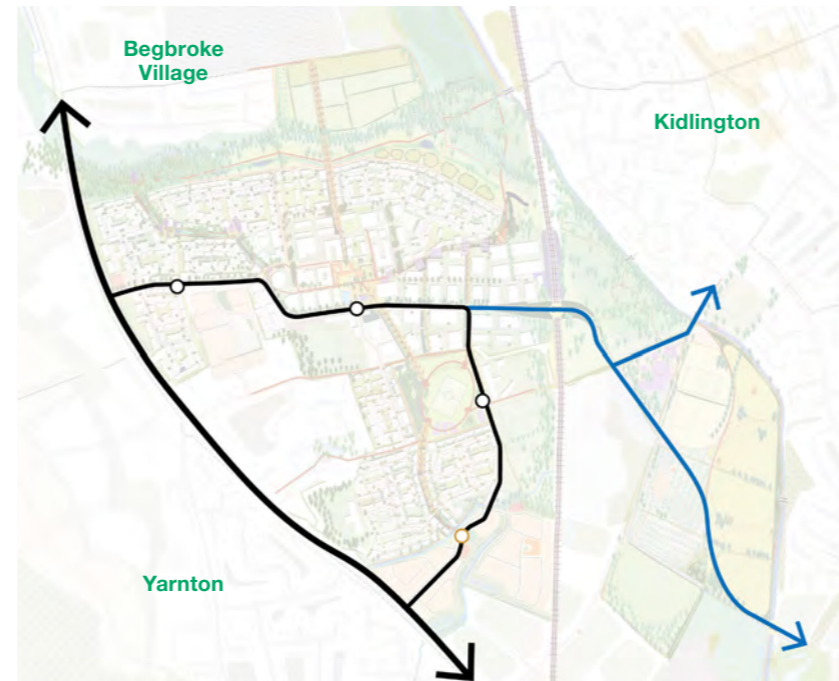
People first

The masterplan provides a strong foundation for pedestrian and cycle movement and connectivity across the Site, placing people not vehicles at the top of the movement hierarchy. Active travel modes are to be prioritised above all other modes. They will be afforded with a permeable, high quality and fine grain network of walk and cycle routes. It will be easier to walk or cycle through the site than by any other mode of transport.



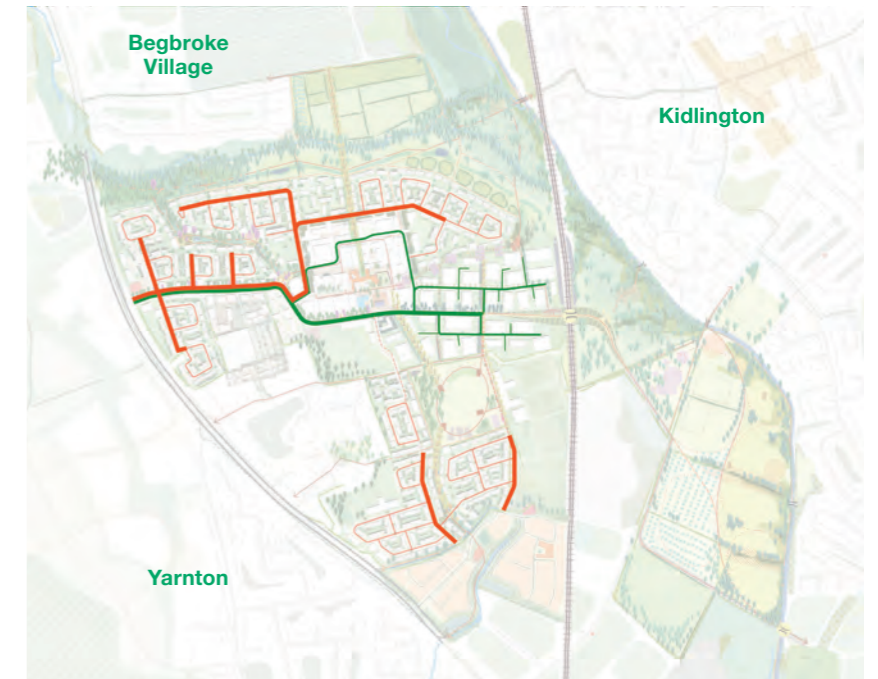
Public transport

A new bus route is anticipated to serve the site, subject to agreement with OCC of the precise route, and is illustrated in the diagram below along with the proposed upgraded S3 service.



Living streets

Low speed roads will connect to a network of 'living streets', which will consolidate on-street parking at the end of the street to make space for more green and social spaces.



Key

- Pedestrian and cycling network
- A network of living streets prioritising people
- Mobility hub within the local centre
- Future proofing for autonomous transport
- Exploring app based demand responsive services
- Off plot parking has potential to be repurposed
- Electric vehicle charging
- Safe-guarding for potential railway station at Begbroke
- Flexible infrastructure across railway line and canal to enable additional sustainable transport

Key

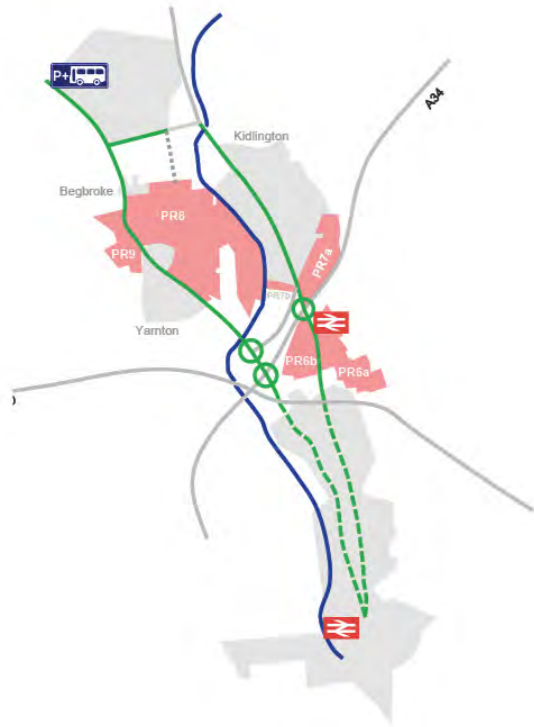
- Current route along A44 - a first phase will see frequency increased
- Second phase - public transport looping through the site off the A44
- Indicative location of a bus stop
- Indicative location of bus stop on third-party land
- Potential public transport route connecting to Oxford Parkway (via site PR7b) or Kidlington

Key

- Main vehicular access to residential areas
- Living streets - low traffic one way road
- Servicing access to R&D buildings

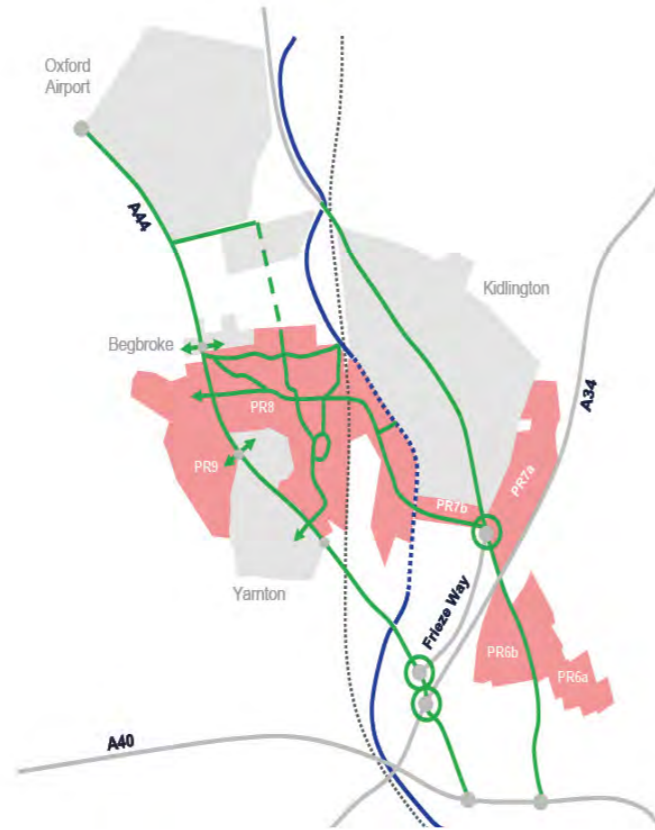
9.2. Connecting to wider networks

Existing walk and cycle network



- Key**
- Walk and cycle corridor improvement
 - Canal Path
 - - - Proposed corridor walk and cycle

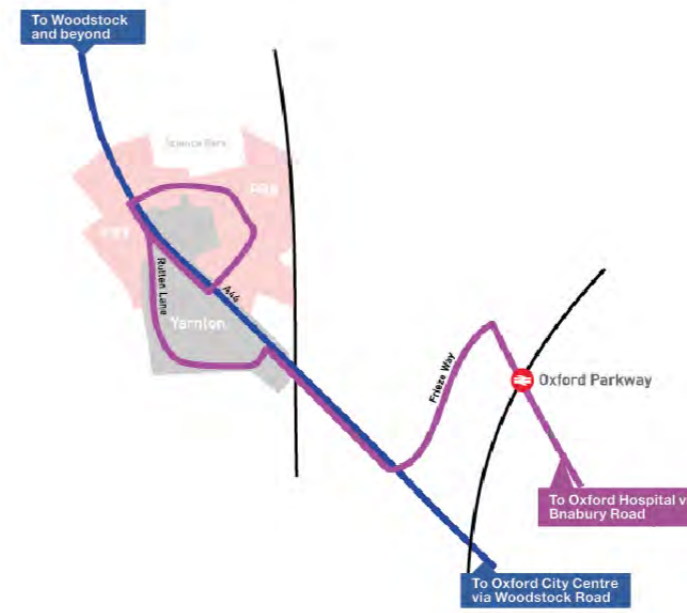
Enhanced walk and cycle network



- Key**
- Walk and cycle corridor improvement
 - ↔ New / improved pedestrian and cycle crossing across A44
 - Junction improvement for walk and cycling
 - Canal towpath upgrade from developer contributions

Public transport strategy

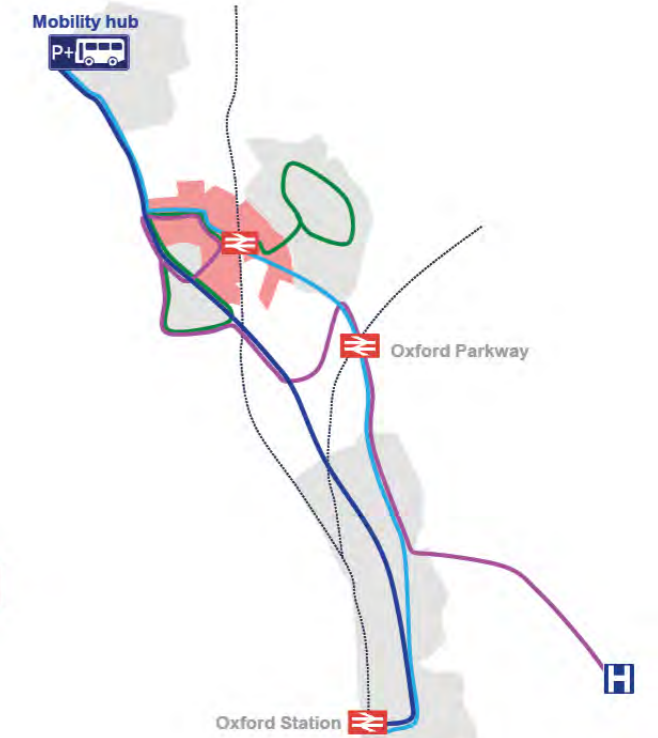
(final bus route subject to agreement with OCC)



- Key**
- A44
 - County Council proposed roads to serve PR8 and PR9

Public transport opportunities

(details to be agreed with OCC at later stages)

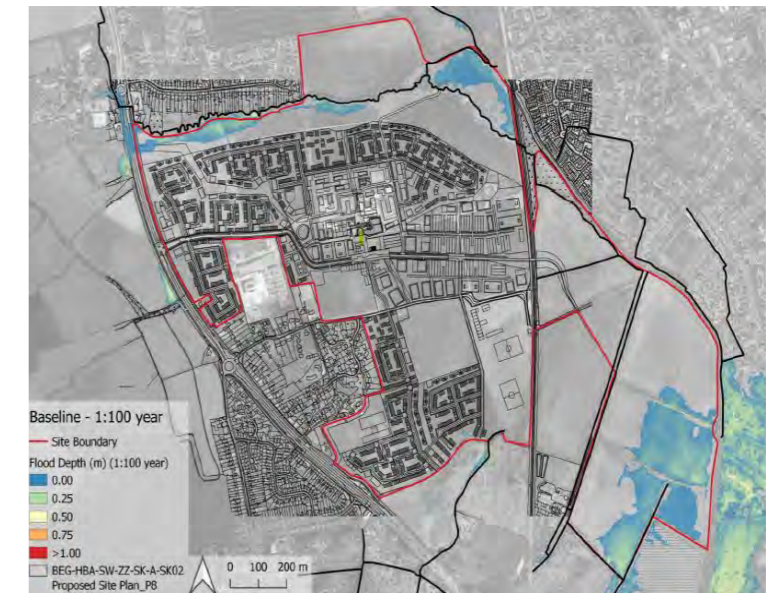
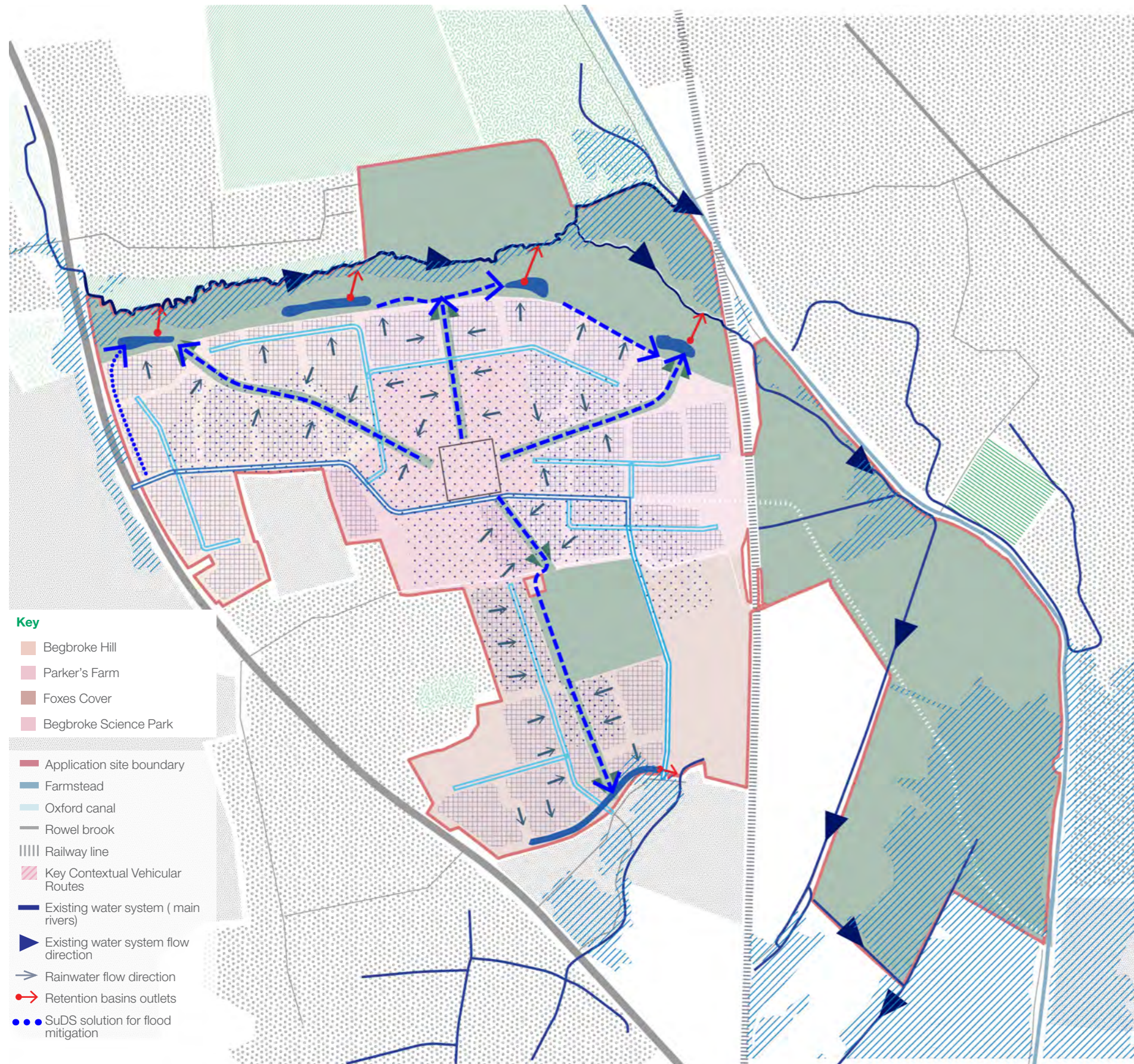


- Key**
- A44
 - County Council proposed roads to serve PR8 and PR9
 - Indicative East-West community bus
 - Potential bus routes with a New Canal Bridge between PR8 and PR7b

10. Infrastructure

Sustainable systems including natural drainage and landscape as resilient infrastructure.

10.1. Flooding and surface water drainage



Baseline 1:100 year flood event
 Illustrating flood mapping for sensitive areas addressed in the design and natural drainage strategy.

- Green Arteries**
 Green Arteries constitute the primary drainage feature of the development. Within these arteries, Sustainable Drainage Systems (SuDS) seamlessly blend with public spaces, creating attractive, highly accessible areas with programmed features. Strategically placed vegetation promotes biodiversity.
- Swales along secondary vehicular routes**
 Planted swale and/or rain gardens along secondary roads help storing, infiltrating and/or convey water. Swales should be planted and attractive, with a focus on biodiversity.
- Rain gardens along Begbroke Hill Road**
 The re-profiled Begbroke Hill road should incorporate planted rain gardens along the roadside. These rain gardens serve the dual purpose of storing and infiltrating rainwater while contributing to the overall ambience of the area and enhancing biodiversity. Swales along the main road should not be accessible to pedestrians.
- Living Streets**
 Within living streets the goal is to prioritize open surface water infiltration and conveyance instead of relying on conventional gutter drainage. Runoff from the streets should be directed towards detention areas within the green islands. In this case
- Potential for infiltration**
 Areas where infiltration is possible due to soil conditions.
- Attenuation Basins**
 Attenuation basins are wet ponds with extra space for storing SW drainage in times of high rainfall, an attenuation basin only stores water in high rainfall events and is often dry.
- Illustrative flood extent**
 Revised flood extent.

10.2. Utilities

The utilities strategy set out the existing utilities services that service the site and assess the potential impacts of the proposed development on the wider network, including the provision of additional services that may be required to deliver the proposed development.

Consultation

Relevant utilities stakeholders have been consulted during the pre-applicatino stage on existing utilities infrastructure, requirements for the development and servicing of Begbroke Innovation District, and the potential for any reinforcement measures or diversions.

Electricity

The electricity network in the area is operated by SSE. An all-electric approach is proposed to achieve Net Zero Carbon emissions from operational energy use when used in conjunction with on and off-site renewable energy sources. Electricity will be used for the heating and cooling of the proposed development, and the operation of electric vehicle (EV) car parking spaces.

Gas

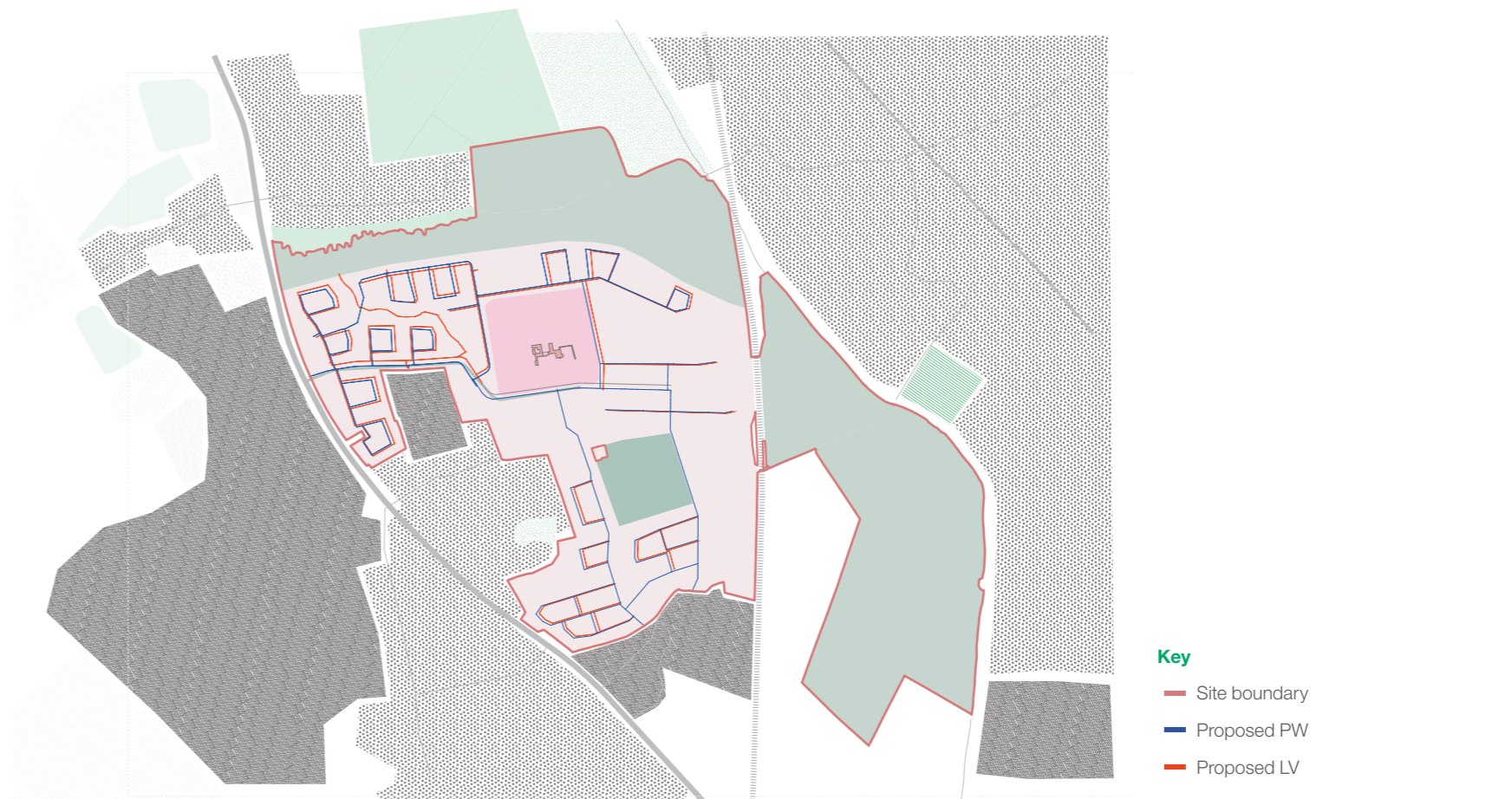
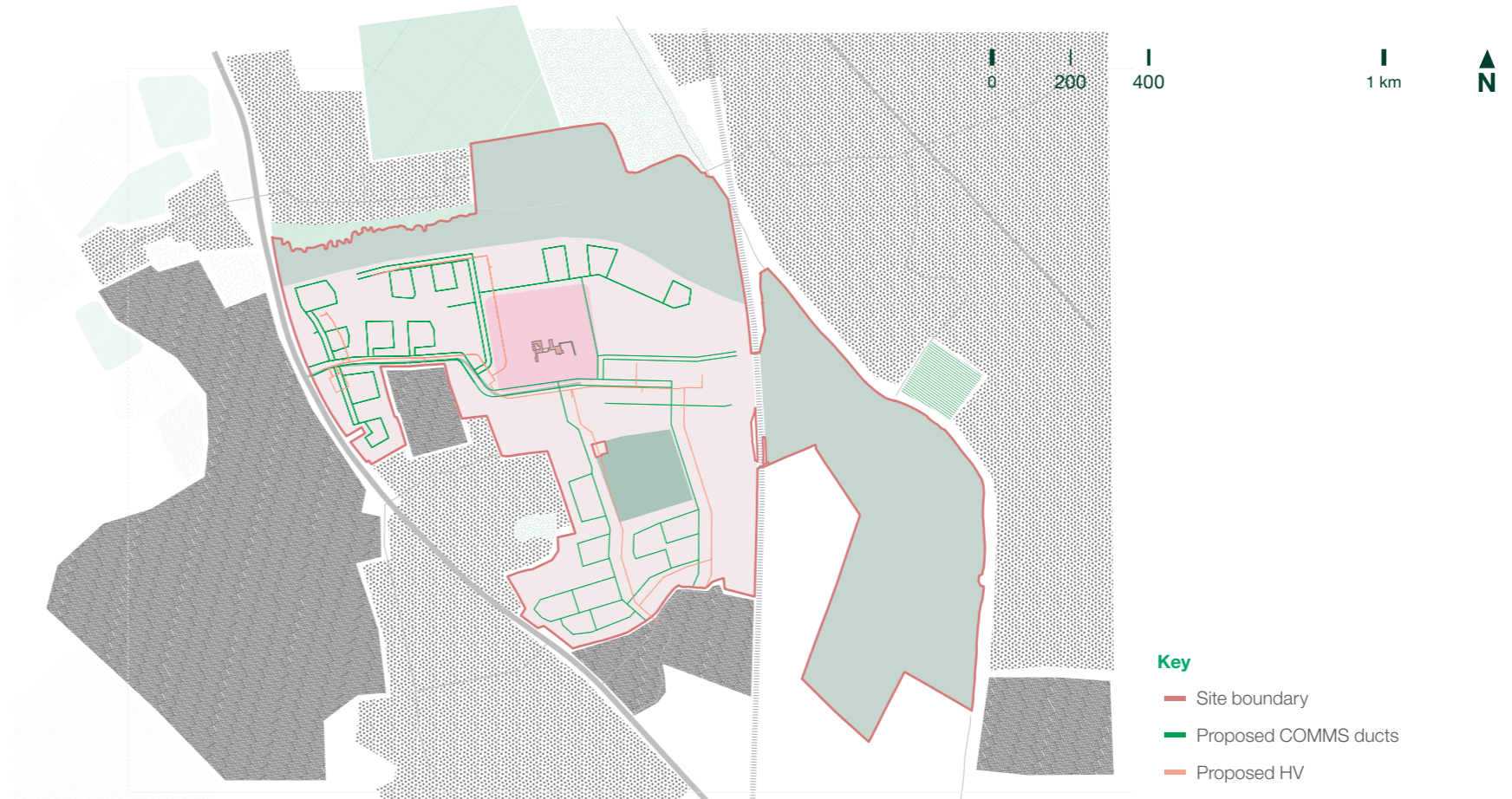
The gas network in the area is operated by SGN. In line with sustainable development principles and the Net Zero Carbon target, Begbroke Innovation District will be a fossil fuel free development. Therefore the new homes will not be connected to the gas network.

Potable Water

Potable water will be supplied to the proposed development by Thames Water. Buildings are designed to be water-efficient, utilising rainwater and grey-water harvesting techniques to minimise potable water demand.

Telecommunications

Openreach own the existing telecommunications infrastructure in the area and are expected to supply connections to the proposed development.



11. Access

Creating an inclusive and accessible community for residential, education, commercial, and recreational uses.

11.1. Introduction and design guidelines

Introduction

This Inclusive Access and Inclusion Statement report outlines how the proposed Begbroke Innovation District scheme proposal will achieve a good level of access and inclusive design. The report sets out the design principles and intentions, confirms the design standards and guidance documents referred to relating to inclusive design that are relevant to this scheme which falls under Cherwell District Council planning authority.

Given that the application is submitted in outline with all matters reserved, specific details relating to accessibility standards is naturally limited at this point. The mixed use nature of the development will help ensure that distances to services and amenities is reduced. The development will be served by public transport links running through the Site

The design will be developed so that it integrates the principles of inclusive design to enable the newly created mixed-use development to be used safely, easily and with dignity by everyone, regardless of ability, age, gender or ethnicity. The intention is to ensure all areas of the community are convenient and welcoming to allow everyone to live, work, and visit independently without undue effort, separation, or special treatment. Wherever possible, adaptability and flexibility will be key elements so that the environment and buildings can respond the evolving needs of the people working and living within the area.

A range of access and inclusive design guidance documents will be referenced during the developing design of the scheme. These cover the external landscaped areas, public realm, non-residential and residential accommodation.

It is recognised by the design team that good design encompasses the seamless integration of inclusive features, and that providing inclusive environments is the norm rather than an exception.

Design guidance references

- Relevant standards include:
- Cherwell Local Plan 2011 – 2031 (adopted 2015)
- Cherwell Local Plan Part 1 Partial Review
- Cherwell Residential design Guide Supplementary Planning Document, 2018
- Building Regulations, Approved Document M Access to and the use of buildings Volume 1: Dwellings (2015 with 2016 amendments)
- Building Regulations, Approved Document M Access to and the use of buildings Volume 2: Buildings other than Dwellings (2015)
- Approved Document K Protection from falling, collision and impact (2013)
- Wheelchair housing Design Guide, Third Edition, Habinteg, 2018
- British Standard BS 8300:2018 Design of Building and their approaches to meet the needs of disabled people – Code of Practice
- Requirements and implications of the Equality Act 2010
- Requirements and implications of the Public Sector Equality Duty.
- Building Bulletins 100, 102 and 103 – educational buildings

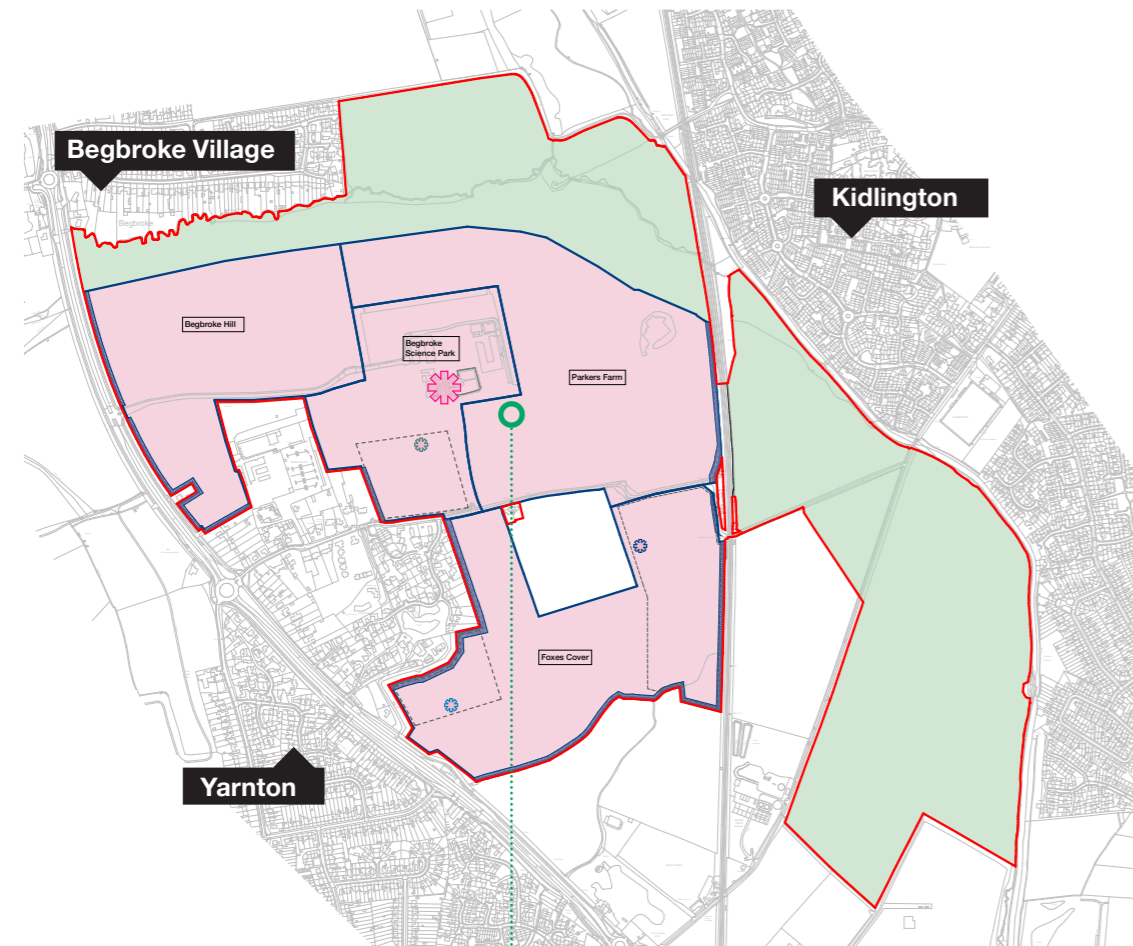


Access Consultant and consultation

As part of the outline planning process, the team has sought input and guidance from an access consultant Vin Goodwin NRAC who has experience with regard to the built environment and the issues around inclusive design and advising on the implementation of practical design solutions.

A robust programme of consultation with the public and key stakeholders has been carried out through the pre-application process, including a series of public consultation events held between July 2022 and July 2023. Full details of the public consultation carried out are set out in the Statement of Community Involvement prepared by community engagement specialists Kevin Murray Associates.

11.2. The district



Site plan indicating development zones



The Begbroke Innovation is a mixed-use development including residential, education, commercial and recreational uses.

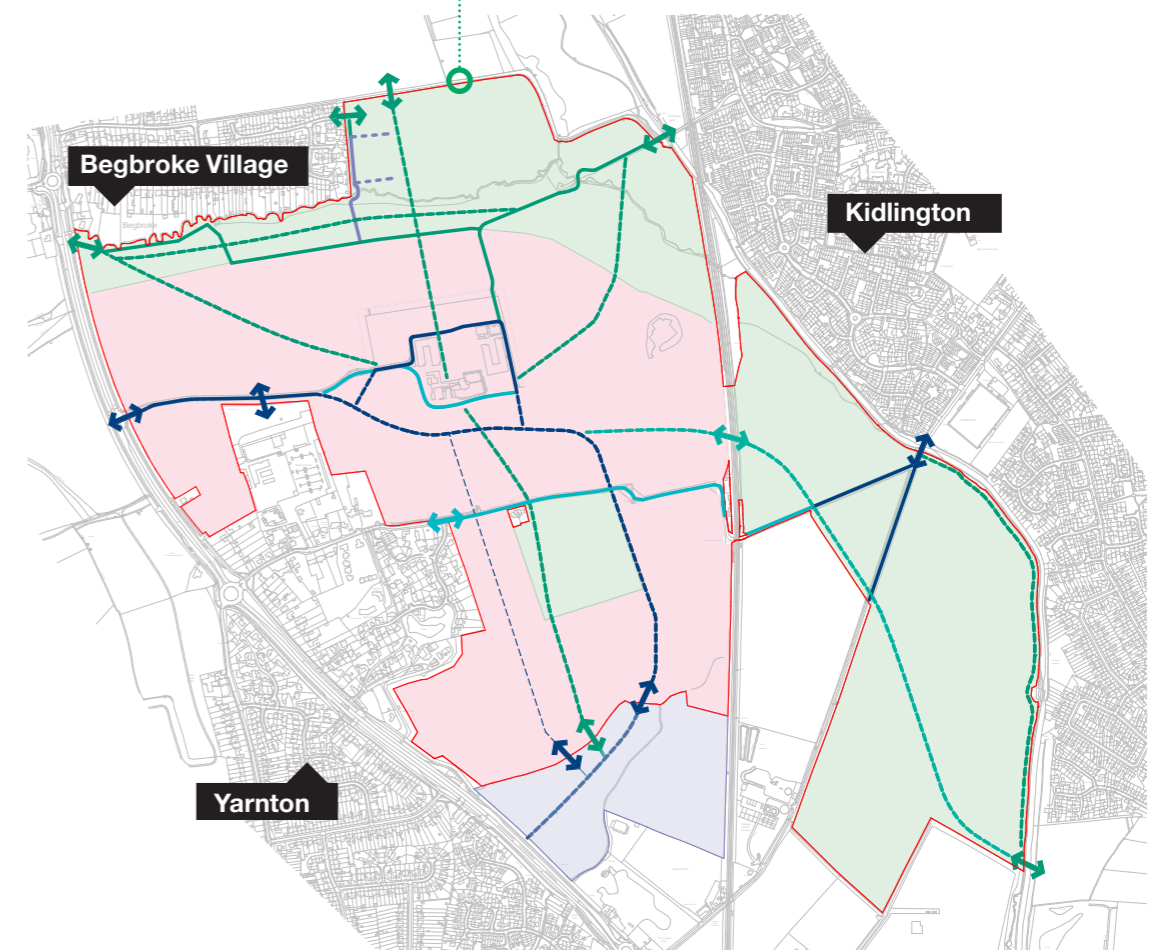
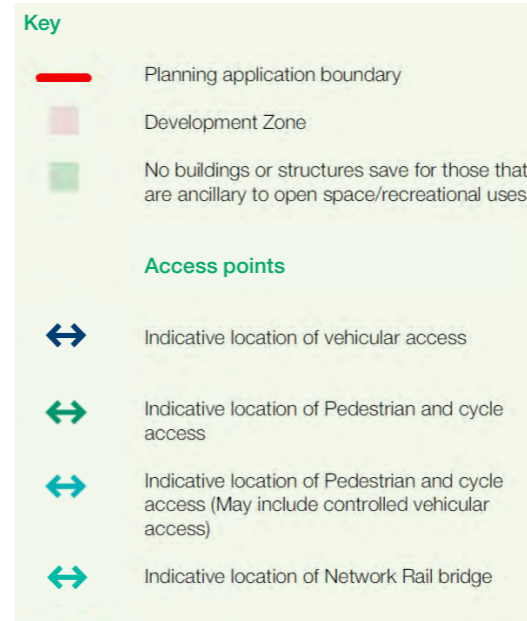
These uses are located around an existing science park which will be expanded. Vehicle access and parking will be provided throughout, for people who need it but the scheme will be designed so that it is also able to work well without an over reliance on cars, and enabling disabled and older people to live more independently and easily within the community.



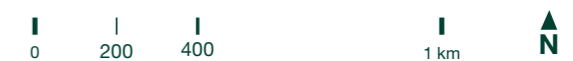
Transport and arrival

Good access is achieved through proximity to the A44 to the west of the site with its existing S3 bus route to and from Oxford. A proposed central mobility hub including pedestrian links, vehicular (car and bicycle) routes and parking provide a range of transport options for a variety of people. An extended loop route for the S3 bus is proposed to further improve public transport links within the site.

- Pedestrian and cycle links are provided from adjacent neighbourhoods including Yarnton and Kidlington with all new pedestrian routes being step free.
- To the east of the site a new railway bridge crossing is proposed though this does not form part of this design scheme and application. It is anticipated that this bridge will have step free access.



Site plan indicating access and movement



Parking

A mixture of on street, surface parking and multi-storey car parking is proposed. Residential units will have on street or within boundary parking as appropriate while the science park employees will use multi storey parking. Car parking located at ground level near the commercial and science park buildings will be the primary location for Blue Badge parking bays to create convenient access for employees and visitors.

A suitable proportion of non-residential accessible parking bays will be provided according to guidance provided by BS8300. Residential accessible parking will be allocated proportional to the accessible housing provision with due regard given to disabled visitors as well as residents.

Where electric car charging bays are provided, it will be ensured that some are also accessible bays.

The design of the accessible bays will meet current guidance with a step free route to the pavement and to building entrances and with suitable resting places on longer routes where necessary.

Suitable secure cycle parking will be provided, associated with residential and non-residential uses. Provision will be made for accessible / adapted cycles as well as powered trikes and scooters with charging facilities. Suitable accessible vehicle drop-off and pick-up areas will be identified where appropriate to serve residential and non-residential buildings.

Landscape and public realm

The scheme proposes many external public and private external landscaped spaces. Zones of the development site to the north, south and east will be recreational or natural only with no buildings proposed.

Through choice of material, road treatments, planting and lighting, each space will be designed to have a clear identity and provide a place for everyone to meet, for communities to integrate and providing welcome views and vistas from people's homes and workplaces

General principles of landscaping

The overriding principle adopted for all external landscaped areas and public realm will be that all spaces will be accessible to all. Landscaped amenity spaces - whether private, public or semi-private - will be created to be distinct in terms of their character and use to facilitate good wayfinding around the site.

While helpful for all users of the environment, the creation areas with recognisable character particularly responds to potential needs of neurodivergent people by assisting in wayfinding without over-reliance on signage or written information or on approaching others for assistance. This principle will also be considered for the architecture by providing a variation in design, style and materiality enhancing legibility and orientation for everyone.

Each area will be designed and detailed to maximise safety for all users, particularly pedestrians by clearly defining areas for cars, bicycles and pedestrians.

Inclusive design features incorporated into the landscape scheme include:

- Route widths sufficient for all users, including wheelchair users, to pass others travelling in the opposite direction.
- Resting places with seating are provided at regular intervals as required.
- Suitable seating design for all – some with arm and back rests.
- Routes will be level or a very shallow gradient of 1:60 or shallower wherever practicably possible.
- Where stepped routes are necessary, these will have an alternative step free route and steps will be designed to be easy going and accessible for as many people as possible.
- Landscaping materials will be specified to maximise independent use by people with visual impairment.
- Where vehicle routes require pedestrian crossings, these will be clearly demarcated and have suitable tactile warning surfaces as required.

Cycle routes will be carefully detailed and prioritised to ensure safety for all users of the public realm. Where cycle paths are separated, these will be carefully delineated for clarity and safety whilst maintain good access for pedestrians including people with visual impairments and wheelchair users.

Throughout the scheme, surface materials will be firm, durable, smooth and slip-resistant in all weather conditions.

Street furniture will be positioned at or beyond the edge of pedestrian access routes so as not to cause an obstruction or hazard. Fixtures will be clearly identified by contrasting visually with surrounding surfaces and be logically grouped to avoid them becoming obstacles. Seating will provide suitable arm and backrests within each seating group plus suitable space adjacent to enable appropriate positioning for wheelchair users, for carers of children with push chairs and people with assistance dogs.



Art impression of Open space within the Research & Development area

Amenity spaces for play and activity, will ensure accessibility for a range of age and abilities, including older and disabled people. Consideration will be given to allocating appropriate space for dog spending by assistance and guide dogs.

11.3. Residential accommodation

It is proposed that around 1800 new homes will be provided within the scheme to address the housing needs of Oxford. The residential accommodation is linked directly with Oxford University though not intended as student accommodation.

The residential accommodation will be served by new retail, commercial and school facilities. The dwellings are expected to be 50 % affordable and 50% open market.

Residential standards

Residential standards adopted will be developed in subsequent design stages with reference to Cherwell District Council's own housing policy and guidance.

Consideration will be given to the provision of a range of housing types including visitable homes (Cat 1), accessible/ adaptable homes (Cat 2) and Wheelchair users dwellings (Cat 3). Wherever practicable, step free access to dwellings will be provided. Where lift access is provided, consideration will be given to procedures when lifts break down or are being maintained.

Where adaptable and wheelchair units are provided, these will be distributed across the scheme, and located in good proximity and travel distance to amenities and transport links.

Consideration will be given to how wheelchair users and others with mobility difficulty will gain access to the public realm and amenity space as well as to the dwellings themselves. Inclusive and convenient access for wheelchair users will be achieved throughout the development, linking the approaches to the neighbourhood, suitable parking places, building entrances and external facilities.

Careful consideration will be given to emergency evacuation from residential dwellings including the feasibility of evacuation lifts to assist in the evacuation of people who find it difficult or impossible to use stairs.

The design of wheelchair accessible and adaptable units will follow guidance in the Approved Document M Volume 1 guidance. Features incorporated would include:

- Step free approach to all units.

- Wheelchair user dwellings only provided above ground floor level where at least two communal lifts are provided to gain access to them.
- Appropriate accessible parking bays provided for for 3% of total units provided with space provided to expand to 7% meeting LLDC IDS guidance.
- Minimum 1500mm by 1500mm space outside the communal entrances and outside dwelling entrances.
- Adequate 850mm clear opening widths to entrance doors and a minimum 300mm space to the leading edge and 200mm nib provided to the following edge.
- Level internal circulation to the dwelling and minimum internal passageway widths of 1200mm where there is a door approached not head on.
- Turning space inside dwelling entrance door, with adequate 300mm clear space to side of leading edge of door protected for 1800mm.
- Clear opening widths of 850mm to entrance door and to all internal doors.
- 1100mm x 1700mm space for wheelchair charging and storage.
- Adequate manoeuvre space in all rooms including bedrooms following guidance in AD M Volume 1.
- Suitable sanitary facilities with required access zones provided adjacent to the internal fixtures and fittings.
- All AD M4(3) adaptable units are designed so that they can be adapted to be fully accessible meeting M4(3) accessible dwelling standards.
- Refuse and recycling facilities will be designed and located to be accessible to as many people as possible, located where they can be reached without using steps and with the minimum practicable travel distance.

Non-residential buildings

- All non-residential buildings will be designed to be accessible for all following guidance provided in Approved Document M and BS8300:2018. This will include clear, identifiable entrances; logical internal layouts; step free access throughout the buildings; suitable sanitary facilities; internal décor and lighting plus adequate provision for safe evacuation of disabled people.
- Education buildings will also be designed with reference to additional guidance found in Building Bulletin 102 and 103 for mainstream and SEN schools plus Building Bulletin 100 referring to fire safety in schools.

12. Conclusion

From local needs to wider results, and back to local benefits, challenging national property development models through the journey.

12.1. Emerging from multiple needs



From diverse needs to an Integrated Community

The Begbroke Innovation District emerges as a result of multiple needs converging into a cohesive vision for an integrated community

Economic growth, technological advancement, sustainable development, and social connectivity, the district is being shaped into a 21st century contemporary village that caters to diverse stakeholders.

The integration of different elements, including businesses, research institutions, educational facilities, housing, and public spaces, fosters collaboration, knowledge exchange, and a sense of community.

12.2. Resulting in tangible benefits

(Indicative figures at this stage)

50%
open space

12 ha
nature
conservation
area

1,400m
Green Arteries

All homes and workplaces within 5 min of open space

An increase of
20%
in biodiversity

Community
and public offer

with up to

6,000m²
Amenities

Such as:

- Community Building
- Farm shop
- Nursery
- Cafe & Restaurant
- Sports pitches
- Retail
- Gym
- Cookery school

155,000m²
Science and
Employment
space

1,800
Homes
50%
Affordable

12 km
walking
trails

neighbourhoods
structured around

**Living
Streets**

focused on
people

One
Multi-modal
hub

75 ha
new
parks

5 ha
community
farm

Space for
primary and
secondary
schools

Artist-in-
residence
& collaboration
with local talent

Innovative
inter-generational
playspace

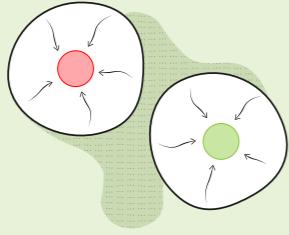
8 km
SuDS
Sustainable Drainage
Systems (SuDS)

Deliver
Net Zero
buildings in
operation

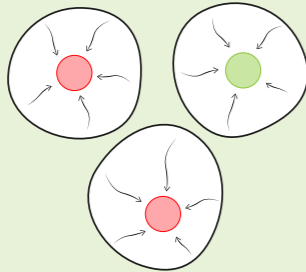
12.3. Shifting development models

from...
current models based on:

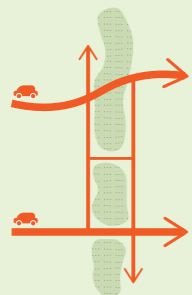
Green buffers



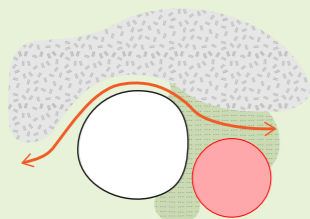
Independent Clusters



Car is the focus

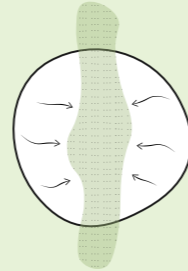


Isolated communities

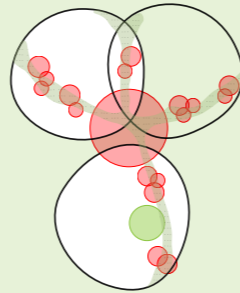


to...
a 21st century
contemporary village:

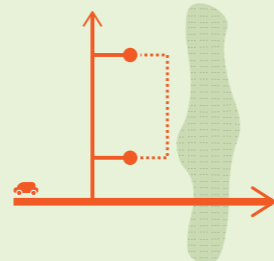
Green arteries



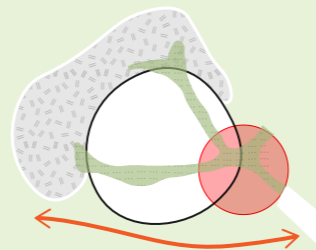
Engineering serendipity



Car is a guest

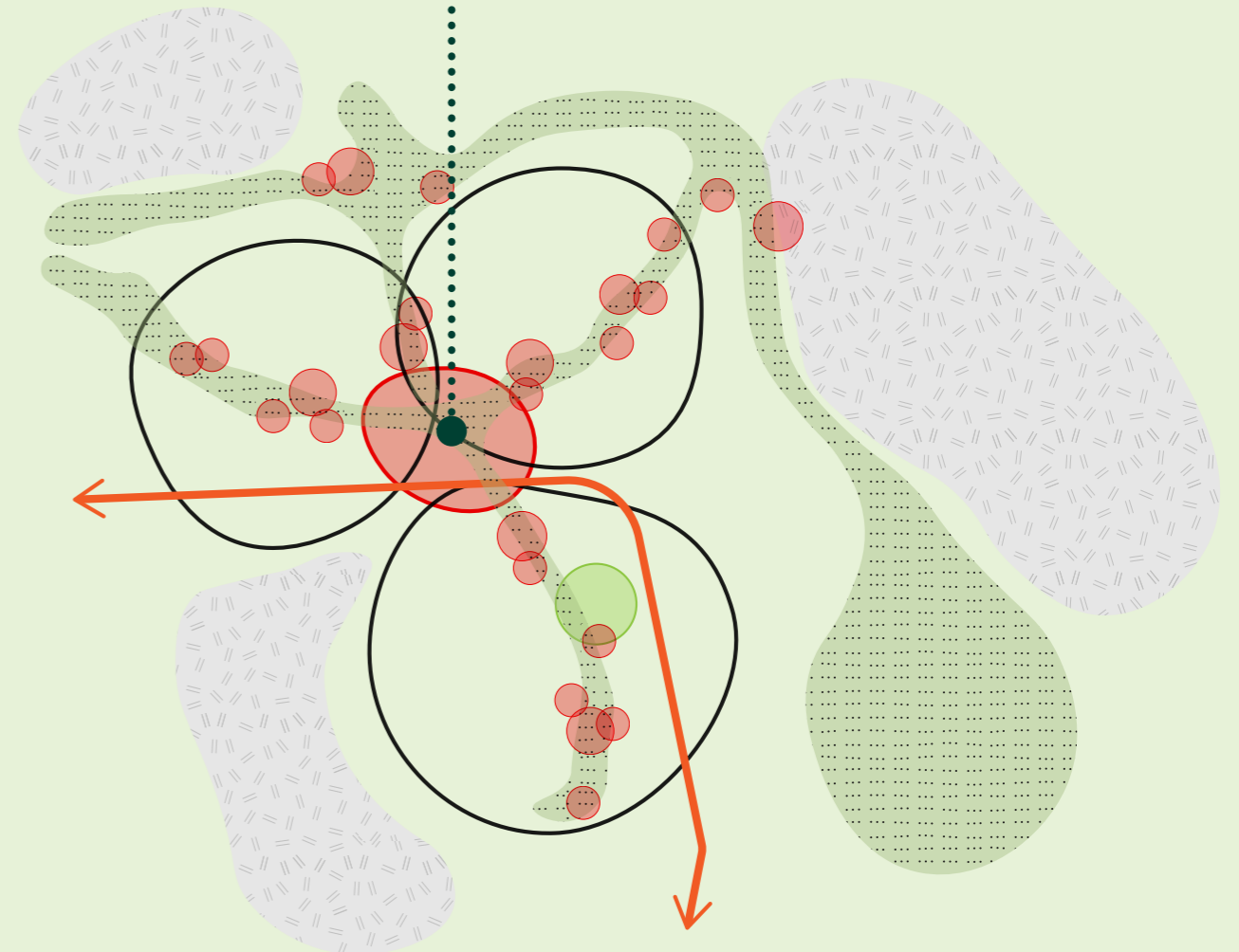


Opening to Oxfordshire



Sharing...

- ...a local centre easily accesible for all communities within and surrounding the site
- ...parks and nature that are open to all
- ...routes for active travel connecting to all areas and communitites
- ...streets that are for people
- ...Begbroke
- ...Oxfordshire



Begbroke Innovation District

Begbroke will be an innovation district both due to the activities taking place in it and by the ways in which it will be developed. It challenges standard models based on private vehicules, green wedges and isolated communities proposing shifts in development models that can cross over cutting-edge science, nature and village life benefiting them all, and that can also permeate into development modes and define new starndards for the 21st century.

12.4. Cultivating a place... from and for Oxfordshire



BEBROKE HILL

Cultivating a place...
to work and
research



Cultivating a place...
to live next to nature



Cultivating a place... where a community can change the world

This is Begbroke.

A destination for local residents, for local communities, and for international business.

A gathering space and cultural hub, designed to facilitate collision. A showcase of science and a meeting of minds.

A community in an extraordinary landscape, with homes that make sustainable living simple.

A mix of homes, a blend of uses, with shared gardens, shared cars, shared interests and shared infrastructure.

Canal and park. Biodiversity and beauty.

A place of graduates, families and teens. Stay at home, work from home.

This isn't work, it's discovery.

An Oxfordshire village. A global exemplar.

A place where anyone is welcome to live, to be part of the story.

To share in the mission.

To create a community that could change the world.



13. Appendix

13.1. Glossary

5YHLS	5-year housing land supply	CIEEM	Chartered Institute of Ecological and Environmental Management	EIA	Environmental Impact Assessment	IUCN	International Union for Conservation of Nature
AADT	Annual Average Daily Traffic flows	CIHT	Chartered Institute of Highways and Transport	EMP	Ecological Management Plan	JNCC	Joint Nature Conservation Committee
AAWT	Annual Average Weekday Traffic	CIL	Community Infrastructure Levy	EPUK	Environment Protection UK	JR	Judicial review
ACMs	Asbestos Containing Materials	CITB	Construction Industry Training Board	ES	Environmental Statement	km	Kilometres
AEP	Annual Exceedance Probability	CLP	Construction Logistics Plan	FE	Form of entry	kW	Kilowatt
ALC	Agricultural Land Classification	CLPP1PR	Cherwell Local Plan 2011-2031 (Part 1) Partial Review - Meeting Oxford's Unmet Housing Need	FFL	Finished floor levels	LAQM	Local Air Quality Management
AOD	Above Ordnance Datum			FRA	Flood Risk Assessment	LCA	Landscape Character Area
AQAL	Air Quality Assessment Level			FTE	Full Time Equivalent	LCT	Landscape Character Type
AQMA	Air Quality Management Area			GCN	Great Crested Newt	LDV	Light Duty Vehicle
ATCs	Automatic Traffic Counts	CMiHT	Chartered Members of the Institute of Highways and Transportation	GEA	Gross External Area	LED	Light Emitting Diode
BAU	Business As Usual			GHG	Greenhouse Gas	LEMP	Landscape and Ecology Management Plan
BGS	British Geological Survey			GI	Green Infrastructure		
BID	Begbroke Innovation District	CMS	Construction Method Statement	GIA	Gross Internal Area	LHA	Local Highways Authority
BIMP	Biodiversity Impact Assessment	CO ²	Carbon Dioxide	GLVIA	Guidelines for Landscape and Visual Impact Assessment	LNR	Local Nature Reserve
BMS	Building Management Systems	COMAH	Control of Major Accident Hazard			LNS	Local Nature Sites
BMV	Best and Most Versatile	CPC	Contaminates of Potential Concern	GP	General Practitioner	LPA	Local Planning Authority
BNG	Biodiversity Net Gain			ha	Hectares	LPP1PR	Local Plan Part 1 Partial Review
BoCC	Birds of Conservation Concern	CRTN	Control for Road Traffic Noise	HDT	Housing Delivery Test	LSOA	Lower-layer Super Output Area
BPM	Best Practicable Means	CTMP	Constructions Traffic Management Plan	HEDBA	Historic Environment Desk-Based Assessment	LTCP	Local Transport and Connectivity Plan
BREEAM	Building Research Establishment Environmental Assessment Method						
		CWS	County Wildlife Sites	HENA	Housing and Economic Needs Assessment	LVIA	Landscape and Visual Impact Assessment
		DAS	Design and Access Statement				
BRES	Business Register and Employment Survey	DBA	Desk Based Assessment	HER	Historic Environment Records	LWS	Local Wildlife Site
		DCMS	Department of Culture, Media and Sport	HESPR	Historic Environment Service Provider Recognition	m	Metres
BS	British Standards					MCCs	Manual Classified Counts
BSP	Begbroke Science Park	Defra	Department for Environment, Food and Rural Affairs	HGV	Heavy Goods Vehicles	MMA	Minor material amendment
BSSS	British Society of Soil Science			HLM	Hallam Land Management	MSW	Municipal Solid Waste
CA	Conservation Area	DHS	District Heating System	HSE	Health and Safety Executive	MVHR	Mechanical Ventilation with Heat Recovery
CAMS	Catchment Management Strategy	DLUHC	Department for Levelling Up, Housing and Communities	IANL	Internal Ambient Noise Level		
CAR	Control of Asbestos Regulations			IAQM	Institute of Air Quality Management	MW	megawatt
CCS	Considerate Constructors Scheme	DMRB	Design Manual for Roads and Bridges			MWLP	Minerals and Waste Local Plan
				ICOMOS	International Council on Monuments and Sites	NCA	Nature Conservation Area
CD&E	Construction, Demolition and Excavation	dpa	Dwellings per hectare			NERC	Natural Environment and Rural Communities
		DSMP	Delivery and Servicing Management Plan	IEMA	Institute of Environmental Management and Assessment		
CDC	Cherwell District Council					NH3	Ammonia
CEMP	Construction Environmental Management Plan	EclA	Ecological Impact Assessment	IHBC	Institute of Historic Building Conservation	NHLE	National Heritage List for England
		EFT	Emissions Factor Toolkit			NHS	National Health Service
CIBSE	Chartered Institution of Building Services Engineers	EHO	Environmental Health Officer	ILP	Institution of Lighting Professionals		

NIA	Net Internal Area	SFRA	Strategic Flood Risk Assessment
NLCA	National Landscape Character Area	SHMA	Strategic Housing Market Assessment
NMA	Non-material amendment	SL	Sandy Lane
NMP	National Mapping Programme	SO ²	Sulphur Dioxide
NO ²	Nitrogen dioxide	SOC	Soil Organic Carbon
NPPF	National Planning Policy Framework (2021)	SPA	Special Protection Area
NR	Network Rail	SPD	Supplementary Planning Document
NSR	Noise and Vibration Sensitive Receptors	SPG	Supplementary Planning Guidance
OAN	Objectively Assessed Need	sqft	square foot
OCC	Oxfordshire County Council	sqm	square metre
OGNA	Oxfordshire Growth Needs Assessment	SRP	Soil Resource Plan
OMH	Open Mosaic Habitat	SSAC	Site Specific Assessment Criteria
OPP	Outline Planning Permission	SSSI	Site of Special Scientific Interest (often referred to as a 'Triple S I')
OS	Ordnance Survey	SSSI	Site of Special Scientific Interest
OU	University of Oxford	SuDS	Sustainable Drainage System
OUD	Oxford University Development Ltd	TA	Transport Assessment
OxCiCo	Oxford City Council	TCPA	Town and Country Planning Act 1990 (as amended)
PIA	Personal Injury Accident	TPO	Tree Preservation Order
PM10	Particulate matter with a mean hydraulic diameter less than 10µm	UDP	Unitary Development Plan
PM2.5	Particulate matter with a mean hydraulic diameter less than 2.5 µm	UKAS	The United Kingdom Accreditation Service
PP	Parameter Plan	ULH	University Linked Housing
PPE	Personal Protection Equipment	ULR	Upward Light Ratio
PPG	Planning Practice Guidance	UXO	Unexploded Ordnance
PRA	Preliminary Roost Assessment	VDV	Vibration Dose Value
RAMs	Reasonable Avoidance Measures	WCA	Wildlife Conservation Act
RMA	Reserved matters application	WFD	Water Framework Directive
RPE	Respiratory Protective Equipment	WHO	World Health Organisation
RTG	Resolution to grant	WRMP	Water Resource Management Plan
S106	Section 106	WSI	Written Scheme of Investigation
SAC	Special Areas of Conservation	ZoI	Zone of Influence
SDG	Strategic Design Guidelines	ZTV	Zone of Theoretical Visibility

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