

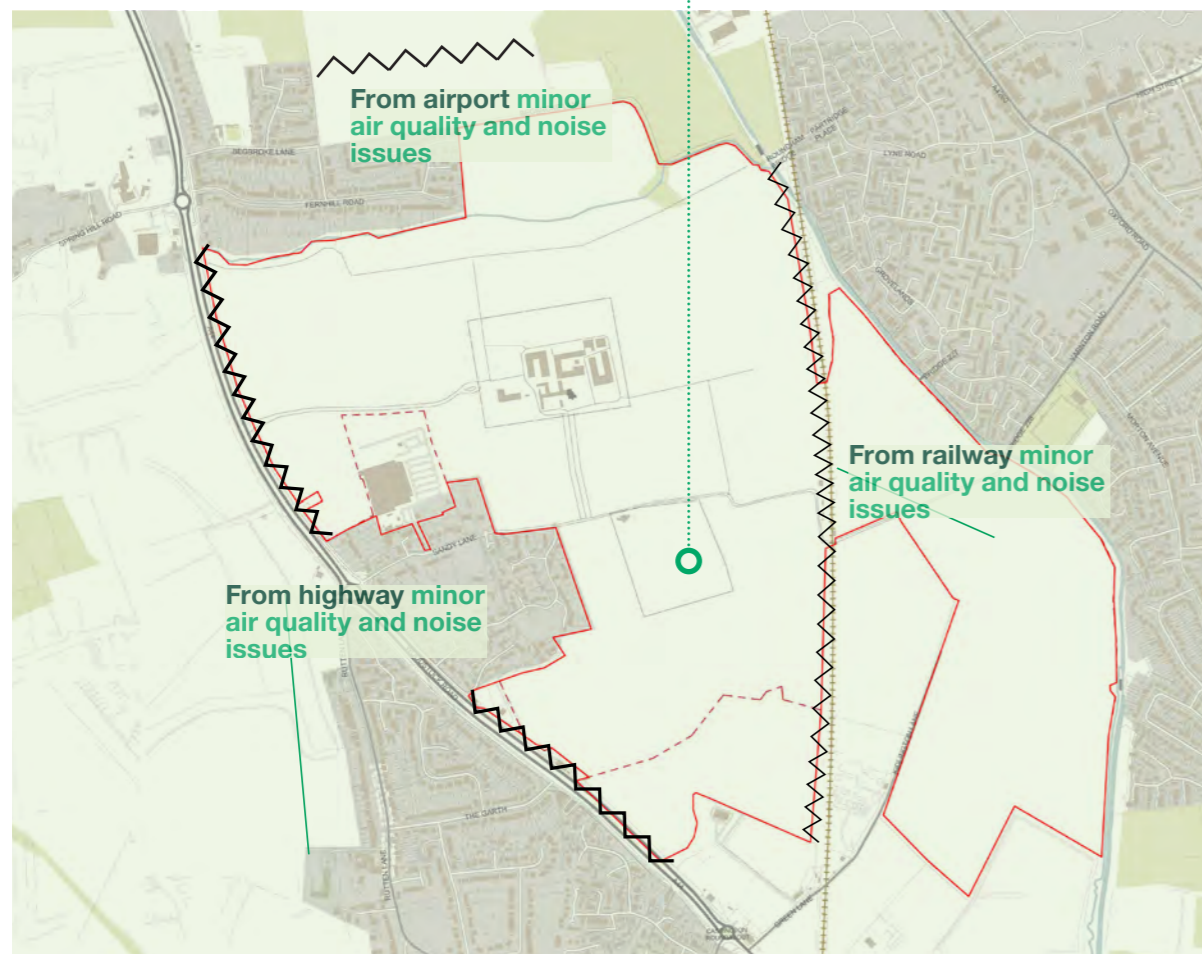
## Noise and air quality

### 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

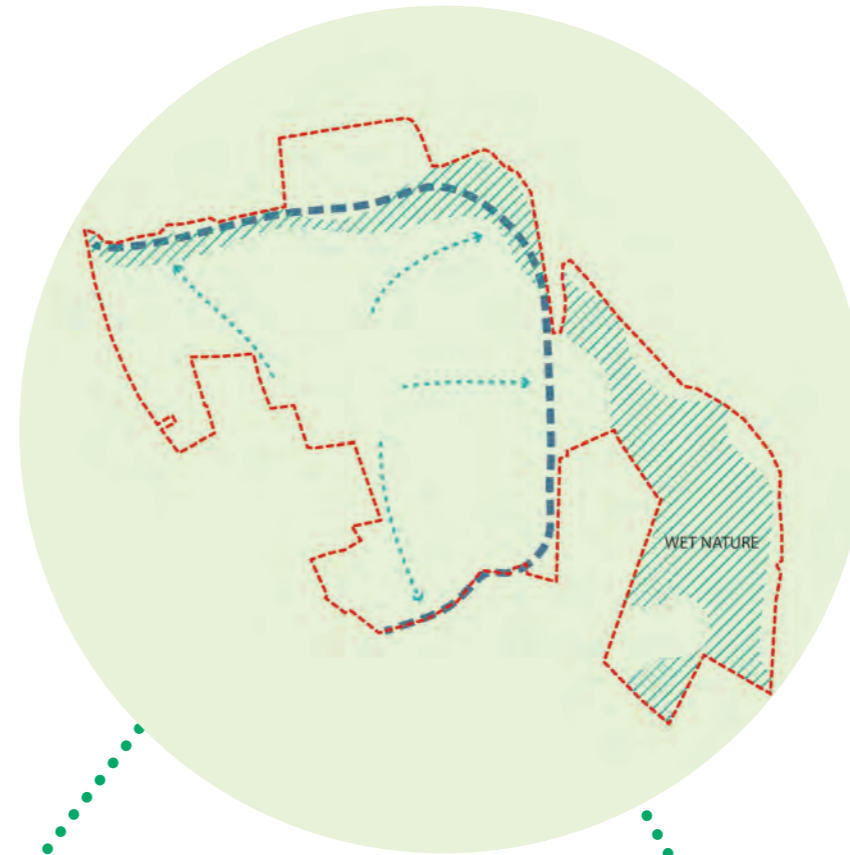
## Site environmental conditions



### Ecology

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

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



### Hydrology

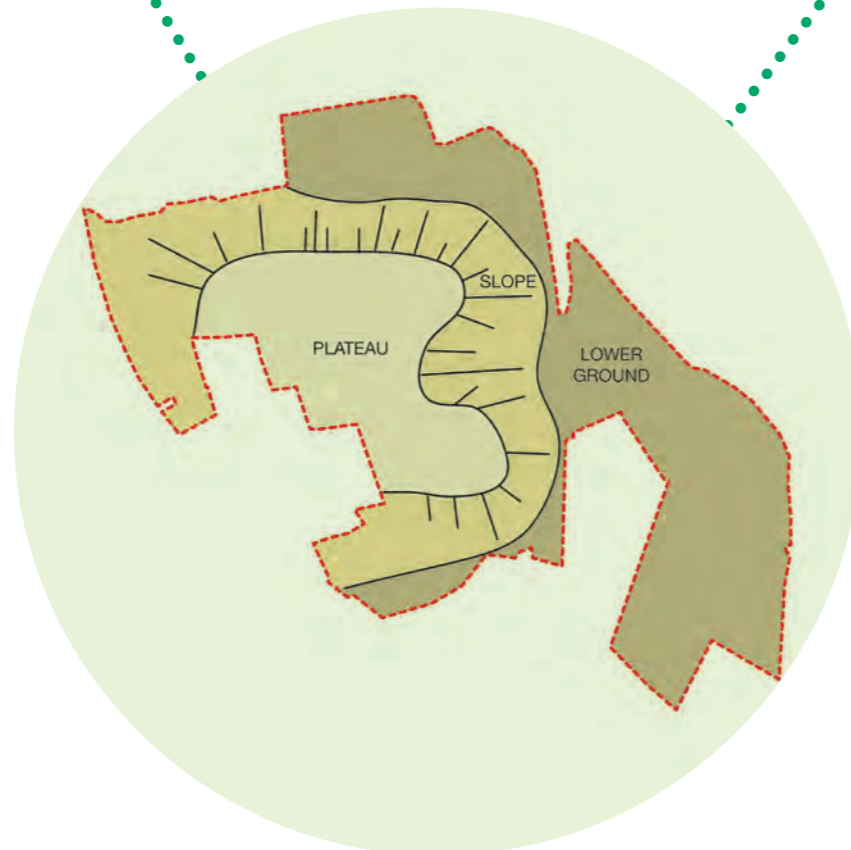
Following the topography of the site, the water runs down from higher to lower floodable areas.

- 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.

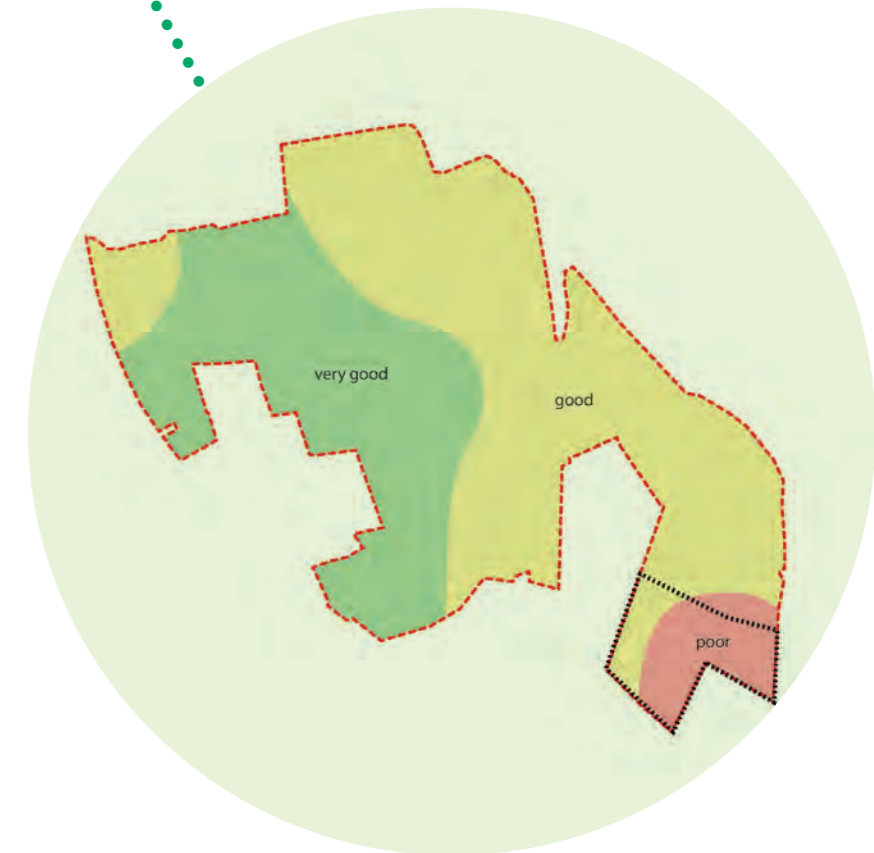
- Beyond it, the site drops to its lower level towards the east.



### 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

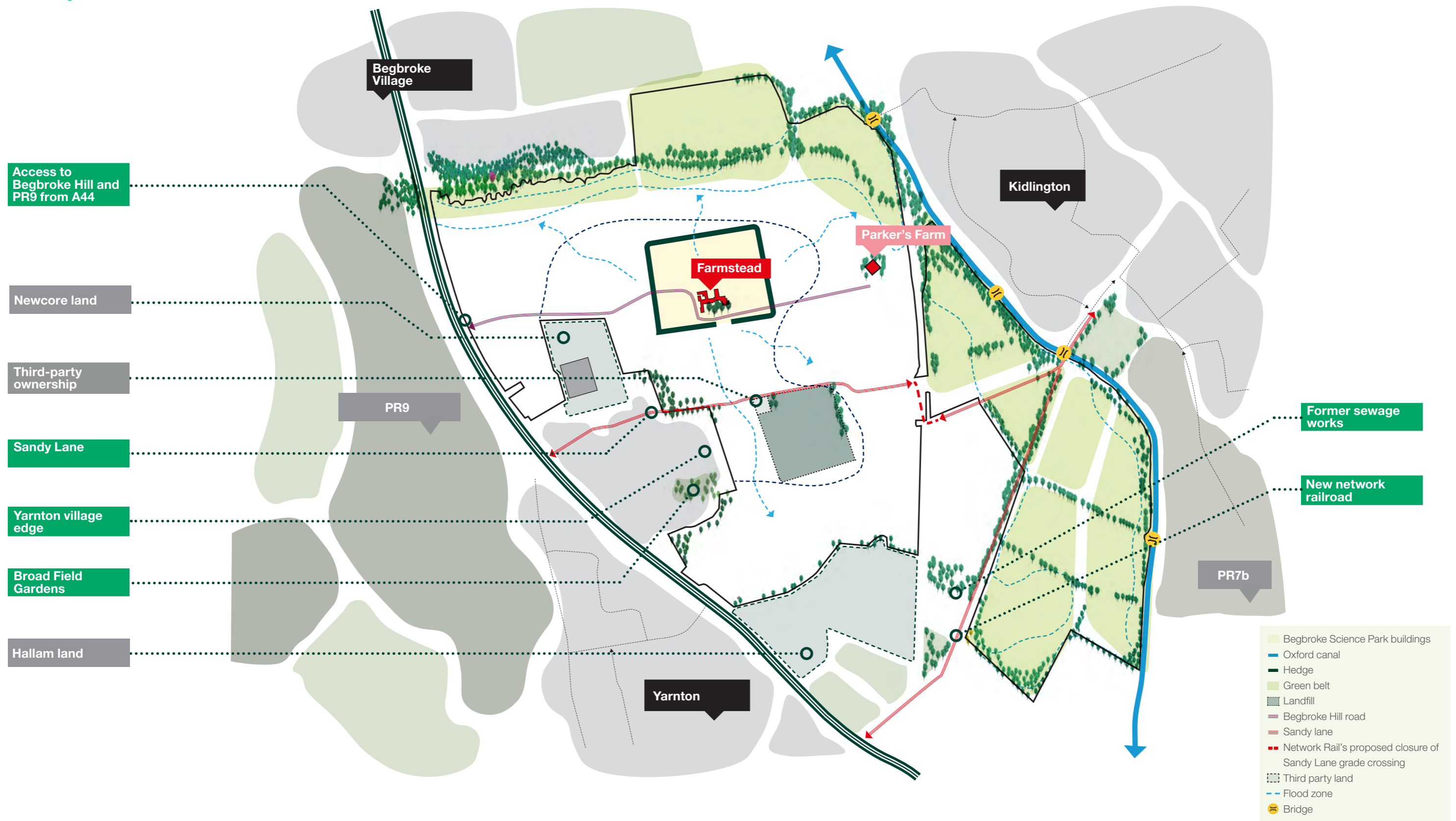


### Common assets

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



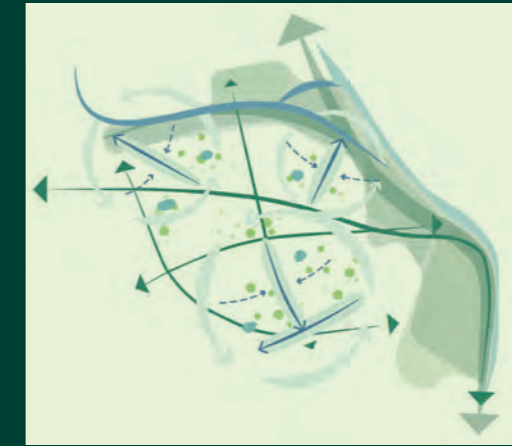
- River/Canal
- Flood zone
- Watersheds
- Topography/slope

## 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

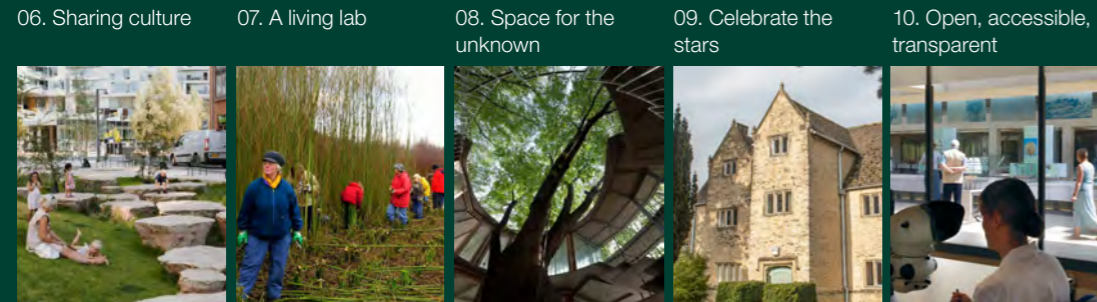
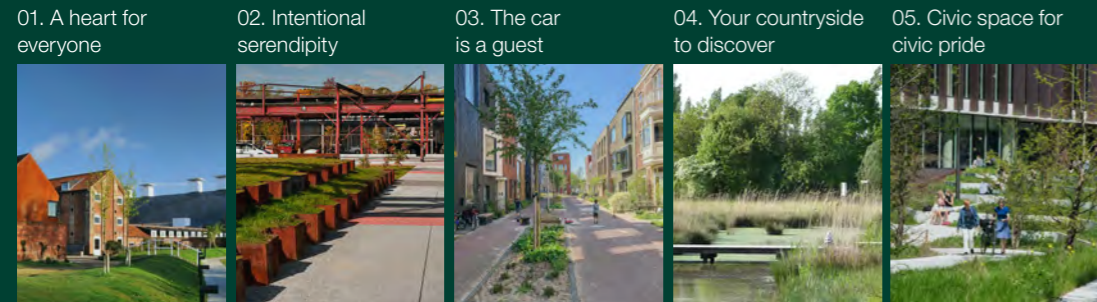
#### CDC/OCC PPA#3 - Key moves

- 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



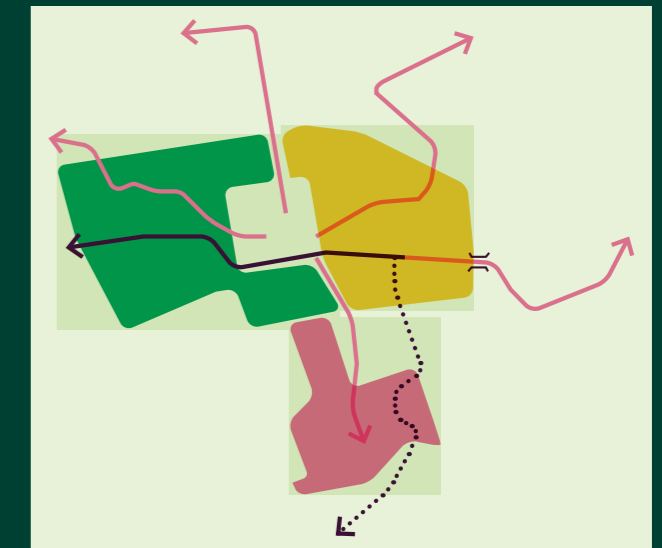
PPA4

## 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

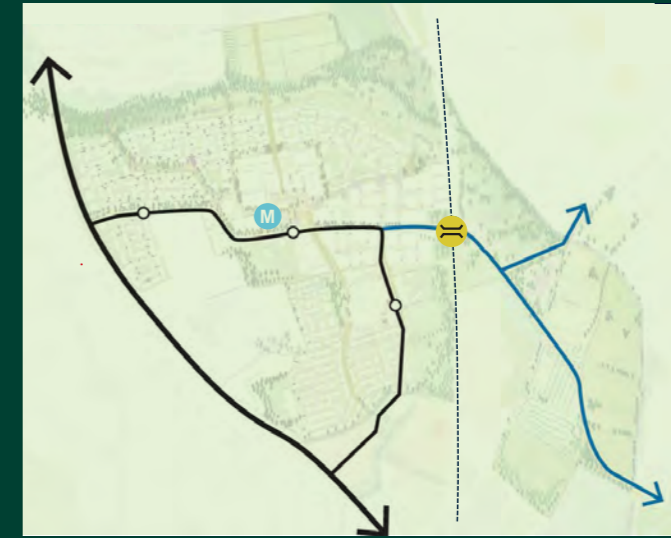


## Natural drainage and water management



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

Internal

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.

