3.3. Sustainable drainage

A restorative landscape

Principles

3.3.1. Drainage systems should control surface water in close proximity to where it falls and replicate natural drainage as closely as is feasible.

3.3.2. Drainage layout should consider and utilise the existing topography as much as possible.

3.3.3. Piped and engineered solutions should be minimised.

3.3.4. Priority should be given to retention and direct infiltration. This can be achieved through the implementation of open-air Sustainable Drainage Systems (SuDs) such as infiltration swales, rain gardens, and permeable paving.

3.3.5. Sustainable urban drainage systems will be designed as attractive features and surrounding landscape, and take into account environmental and archaeological sensitivities.

3.3.6. Green Arteries should constitute the primary drainage feature of the development.

3.3.7. SuDs should be designed to maintain effective hydraulic performance while accommodating active uses where feasible as well as refuge for flora and fauna.

3.3.8. Retention basins should be located outside flood zones and have sufficient capacity to accommodate expected runoff volumes. The shape of the basin should follow the contour lines to minimise impact on existing topography.

Key

- Application site boundary

Neighbourhoods
- Begbroke Hill
- Parkers Farm
- Foxes Cover
- Begbroke Science Park

SuDS
- Green Arteries
  (Green corridors including SuDS running through the centre of each neighbourhood)
- Begbroke Hill Road
  (Potentially lincluding landscaped rain gardens)

- Living streets
  (Residential streets including landscape islands)
- Secondary vehicular routes
  (Potentially including landscaped rain gardens)
- Existing water systems (main rivers)
- Existing water system flow direction
- Rainwater flow direction
- Indicative Retention basins outlets
- SUDs solution for flood mitigation
- Potential for direct infiltration
- Indicative Retention Basins
- Revised flood extent

Other features
- Oxford canal
- Rowel brook
- Key vehicular routes
- Railway line
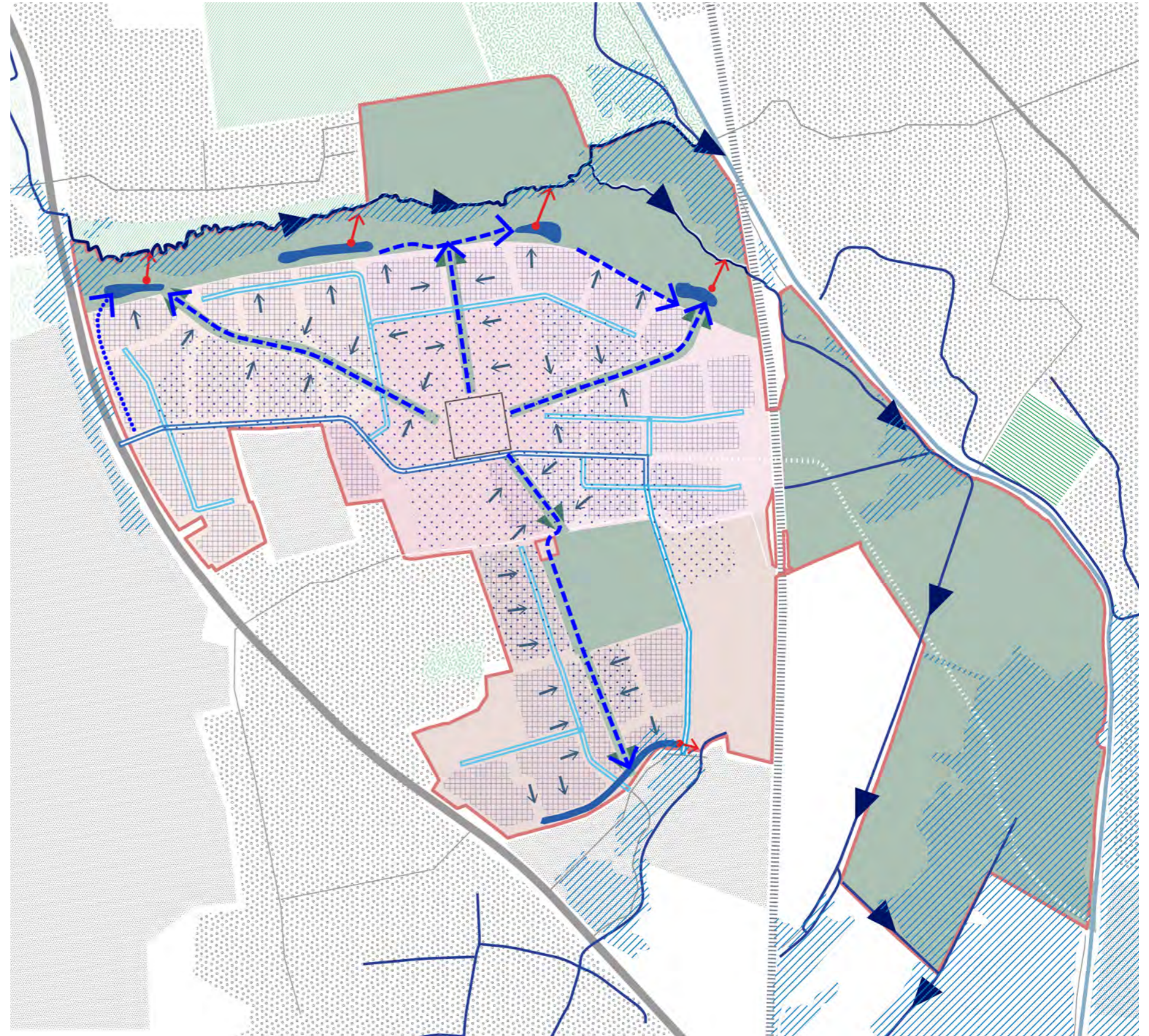
3.4. Play strategy

A restorative landscape

Principles

3.4.1.   Play should be integrated both into the built environment and larger open spaces, forming a cohesive network with abundant opportunities.

3.4.2.   The approach to play should be innovative and encourage people of all ages and abilities to participate.

3.4.3.   The character and materiality of playspaces should be predominantly natural and reflect nearby features and uses.

3.4.4.   Play should include activities such as sports, fitness and active forms of recreation.

3.4.5.   Clearly defined equipped play area should be integrated within each neighbourhood and should benefit from passive surveillance, where practical.

3.4.6.   Focus should be placed on integrating play along routes to schools and the local centre.

3.4.7.   Opportunities to include themes of science and research should be taken into account, especially for play spaces in close proximity to the Begbroke Science
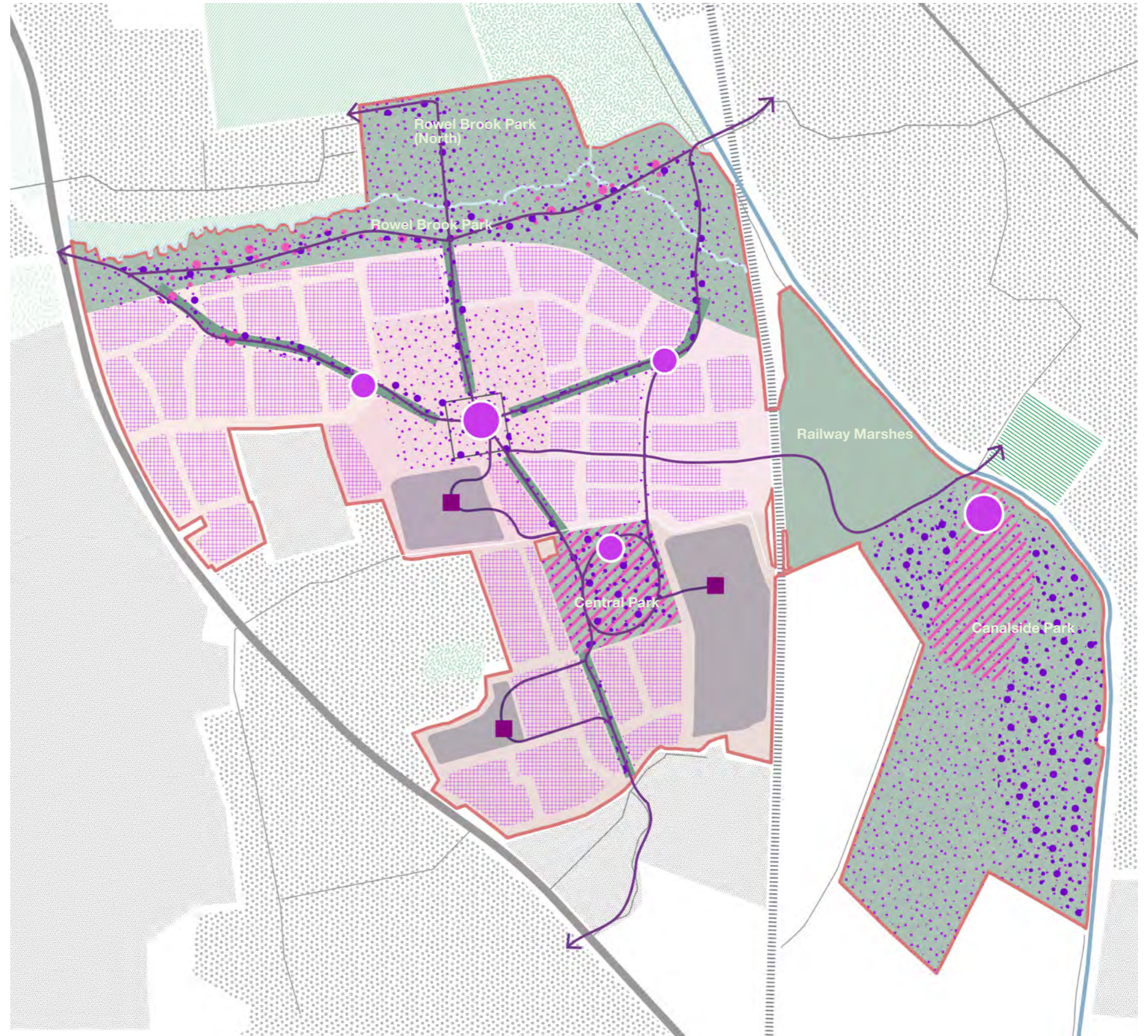
Park.

3.4.8.   Play interventions in the Canalside Park should be inspired by the canal and the movement of water.

3.4.9.   Formal and active sport and play should be concentrated in the Canalside Park. If formal sports are to be implemented they should seamlessly blended into the landscape, minimising disruptive features such as flood lights and fencing

3.4.10.   If additional amenities such as parking, changing rooms or toilet facilities are necessary to support formal sports and play, they should be reduced to a minimum, be combined as much as possible and have a low key character and blend within the landscape.

Key

Application site boundary

Neighbourhoods

Begbroke Hill

Parkers Farm

Foxes Cover

Begbroke Science Park

Play

Green Arteries
(Green corridors including play areas running through the centre of each neighbourhood)

Living streets
(Residential streets with pedestrian focus offering safe areas for unequipped play)

Active-scape
(Network of connected play/sport spaces and features)

Informal sports
(Indicative location of exercise stations)

Formal sports
(Indicative location of sport fields integrated into landscape with no or limited flood lights and no close fencing)

Other features

School sites

Oxford canal

Rowel brook

Key vehicular routes

Railway line

3.5. Edge treatment

A restorative landscape
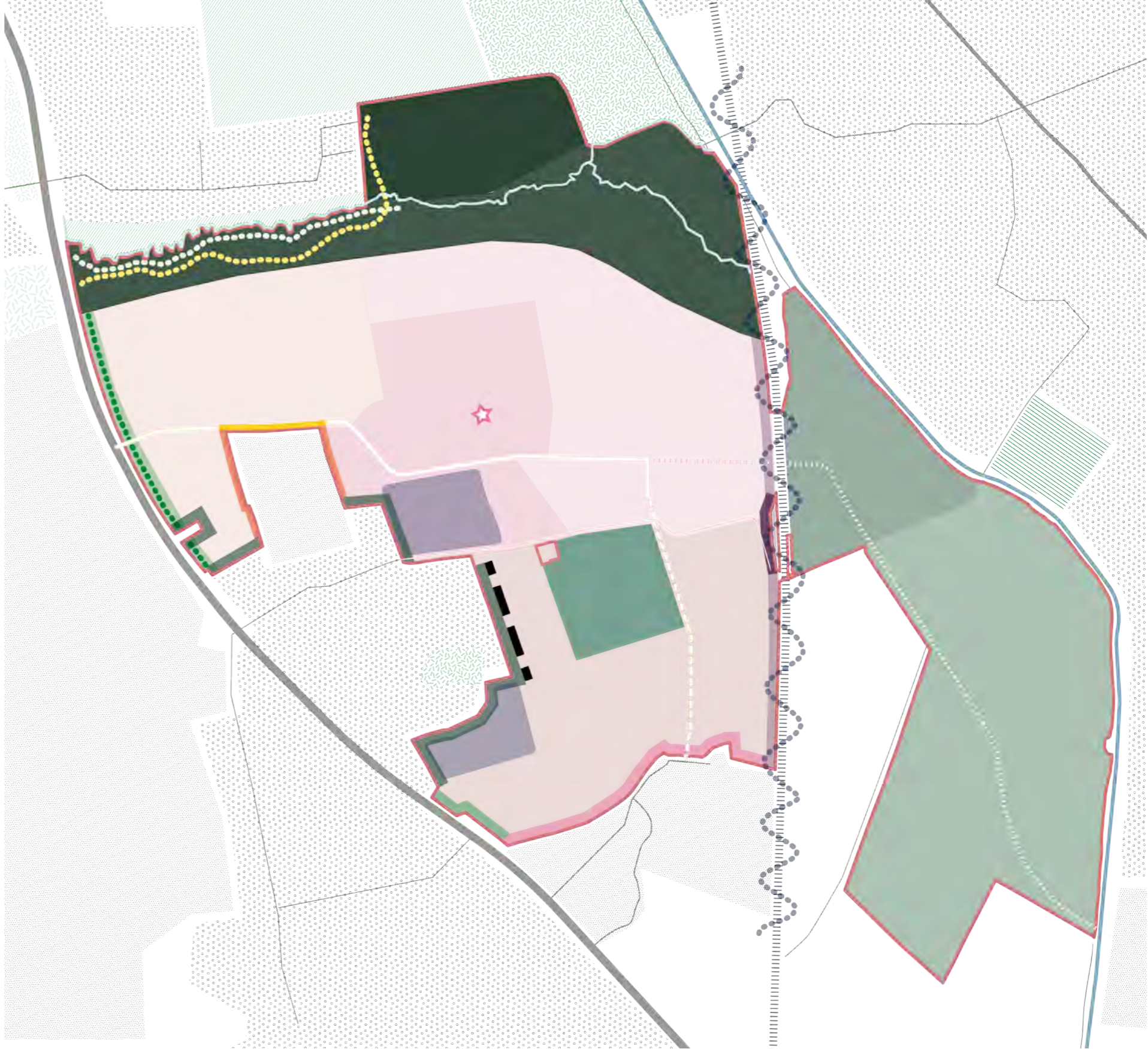
Principles

3.5.1.   The setting of Yarnton, Begbroke and Kidlington will be protected by landscaped corridors with planting in strategic locations to screen and filter views.

3.5.2.   The proposed planting aims to filter/screen views of the Proposed Development.

3.5.3.   Development should be set back and breaks in massing should be introduced, to create buffers with permeable edges where development interfaces with neighbours.

3.5.4.   Areas next to emerging planned development should look to connect routes and/or green infrastructure where practical.

3.5.5.   Buffers should consider landscape features and planting over 'hard' barriers such as acoustic fences, to safeguard the visual quality and amenity of neighbouring residences.

Key

— Application site boundary

Neighbourhoods

  Begbroke Hill

  Parkers Farm

  Foxes Cover

  Begbroke Science Park

Edges

•• Rowel Brook Park Existing Planting

•• Rowel Brook Park Strategic Additional Planting

•• A44 Existing Planting

  A44 Development Setback

— Main frontage to neighbours

— Considered back edge to neighbours

  Setback from landscape features

  Setback from neighbours

  Setback from Railway Line

••• Railway line acoustic mitigation

  Setback from existing houses - Yarnton

•• Building Line Permeability

  School Site Locations

Other features

✫ Farmstead

— Oxford canal

— Rowel brook

— Key vehicular routes

|||| Railway line
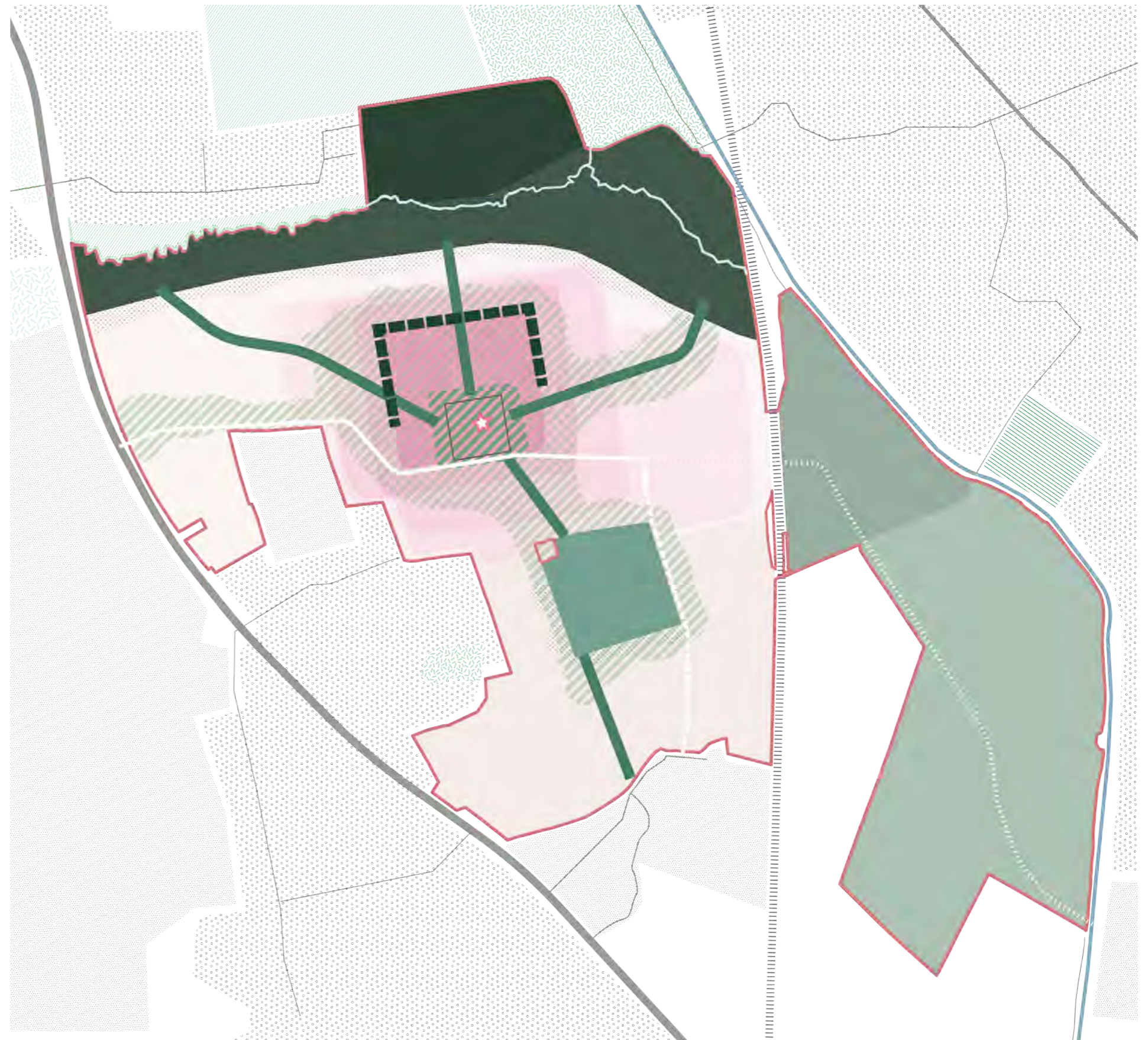
3.6. Activity and use

Engineering serendipity

Principles

3.6.1. Neighbourhood Briefs will identify where active frontages and/or where specific frontage scale and character should be provided.

3.6.2. All buildings will contribute positively to the street or space and should be in scale and proportion to each other and their function.

3.6.3. Blank walls to frontages or fences onto accessible open space should be avoided where practical.

3.6.4. Planting and garden walls will be carefully designed to work as a united composition while providing variety and interest.

3.6.5. Active and vibrant frontage should be encouraged where possible.

3.6.6. Activity should be focused around The Farmstead, with smaller clusters located across the site, to create an inclusive local centre that is easily accessible to the whole site and the wider context.

3.6.7. A mix of uses should be distributed along the edges of main public realm spaces, to create overlaps between different communities.

3.6.8. Green arteries should connect a diversity of uses together, to provide a green network converging at the local centre.

3.6.9. R&D uses should grow out of the existing science park, to harness and expand the existing innovation core.

3.6.10. Residential development should be distributed in proximity to larger open spaces, to facilitate access to nature.

3.6.11. Homes should front onto streets and open spaces to provide security and natural surveillance.

3.6.12. The Proposed Development will be easily navigable and with a clear sense of orientation. Routes throughout the development will be clearly defined and lead to places people want to go.

Key

- Application site boundary

Neighbourhoods
- Begbroke Hill
- Parkers Farm
- Foxes Cover
- Begbroke Science Park

Activity & Use
- Farmstead
- Green Arteries
  (Green corridors with dwelling, play and landscaped areas running through the centre of each neighbourhood)

- Central Park
- Indicative area where a mix of uses should be considered
- Indicative area for amenity
- Existing Science Park
- Indicative expansion of the science park
- Area in closer proximity to nature

Other features
- Oxford canal
- Rowel brook
- Key vehicular routes
- Railway line
- Existing hedge to be strategically thinned down

3.7. Placemaking

Engineering serendipity

Key

— Application site boundary	✦ Central Park	**Other features**
	◉ Begbroke Hill Artery	▬ Oxford canal
Neighbourhoods	(Green corridor with dwelling, play and landscaped areas running through the centre of the neighbourhood)	▬ Rowel brook
Begbroke Hill	✦ Parkers Farm Artery	▬ Key vehicular routes
Parkers Farm	(Green corridor with dwelling, play and landscaped areas running through the centre of the neighbourhood)	‖‖‖ Railway line
Foxes Cover	✦ Farm link & innovation avenue node	▪▪ Existing hedge to be strategically thinned down
Begbroke Science Park	(Intersection between two main movement routes)	▮ Green Arteries
	■ Rowel Brook Park (North)	
Placemaking	✦ Indicative location of a community farm	
🏠✦ Farmstead (Collection of buildings and spaces at the centre of the site)	◉ Indicative landscape nodes	
◉ The Gatehouse (Landmark building)	🌊 Railway Bridge	
◉ Welcome Building (Landmark building)	⊙ Primary Site Entrance	
	◉ Nodes anchored by built forms	
	◉ Nodes within Green Arteries	

3.8. Movement

Car is a guest

Principles

3.8.1. The movement network should consider pedestrians and cyclists first and foremost.

3.8.2. Vehicular network should permeate through all areas of the site but a more direct active route should be provided.

3.8.3. Vehicular routes should avoid crossing green arteries and open spaces Active travel routes and green arteries should benefit from features that prevent unauthorised vehicular access. All such routes should be safe, accessible and welcoming to all users

3.8.4. The cycling and pedestrian network will extend to link to the surrounding villages.

3.8.5. Bus stops should be located to serve the greatest possible catchment area, with the aim of each residence or place of work being within a 5 minute walk from one.

3.8.6. Enabling a future public transport connection to Oxford Parkway should be

considered. Although it has to be noted it would run via third party land (site PR7b across the Oxford Canal)

3.8.7. Residential streetscapes should be 'living streets' that allow space for leisure, play and landscaping by reducing the spatial impact of the car.

3.8.8. Multi-storey car parks that serve the local centre should be positively incorporated into the streetscape and their visual impact minimised. The mobility hub should be a positive element of the civic space and not hidden away. It should be located as to be highly convenient and accessible.

3.8.9. Road layout, in particular the primary route, should allow vehicles to loop around secondary routes, to avoid dead ends and 180 degree turns.

3.8.10. Vehicular movement between neighbourhoods could be restricted where practical, to reduce trips and encourage active travel.

Key

- ▬ Application site boundary

Neighbourhoods
- Begbroke Hill
- Parkers Farm
- Foxes Cover
- Begbroke Science Park

Movement
- Green Arteries
  (Green corridors including active moment running through the centre of each neighbourhood)
- Begbroke Hill Road
  (Enhanced and extended to the existing Begbroke Hill road including cycle, pedestrian and vehicular movement).
- Living Streets
  (Pedestrian- and cycling- priority residential streets)
- Rowel Brook Park (North)
  (Including active mobility routes providing access to the community farm and allotments).
- Rowel Brook Park
  (Including trails)
- Railway Marshes
  (with limited accessibility to the nature conservation area)

- Canalside Park
  (Including active mobility loops)
- Central Park
  (Including active mobility pathways and a loop to activate the park)
- Pedestrian Network
  (Indicative transversal network of pedestrian routes through neighbourhoods)
- Landscape Network
  (Indicative network of recreational pedestrian / cycle trails through the landscape and parks)
- Ⓜ Mobility Hub
- Begbroke Hill Extension 01
  Public transport route
- Begbroke Hill Extension 02
  (Indicative cycling and pedestrian route safeguarded for potential public transport route to link to Oxford Parkway)
- Secondary Vehicular Routes
- Controlled Vehicular Routes
  (Existing vehicular route adapted to pedestrian/cycle route including controlled vehicular access where required)
- Vehicular Loops
  (Indicative location or routes enabling vehicles to turn back avoiding roundabouts or 180 degree turns)

- Science Park Service Route
  (Upgraded and extended existing vehicular access).
- Existing Science Park
  (Including updpdated landscape).
- ● Connections to wider vehicular network
- ● Connections to wider active mobility network
- Indicative new Bridge Locations
- Existing Bridge Locations
- Ⓟ Indicative location of commercial parking
- Ⓟ Indicative Short Stay Parking
- Ⓑ Indicative Bus stop
- ◼ Proposed School Sites
- ▼ Indicative Vehicular Entrance to School Sites
- ▼ Indicative Pedestrian Entrance to School Sites

Other features
- ✶ Farmstead
- ▬ Oxford canal
- ▬ Rowel brook
- ▬ Key vehicular routes
- ‖‖ Railway line
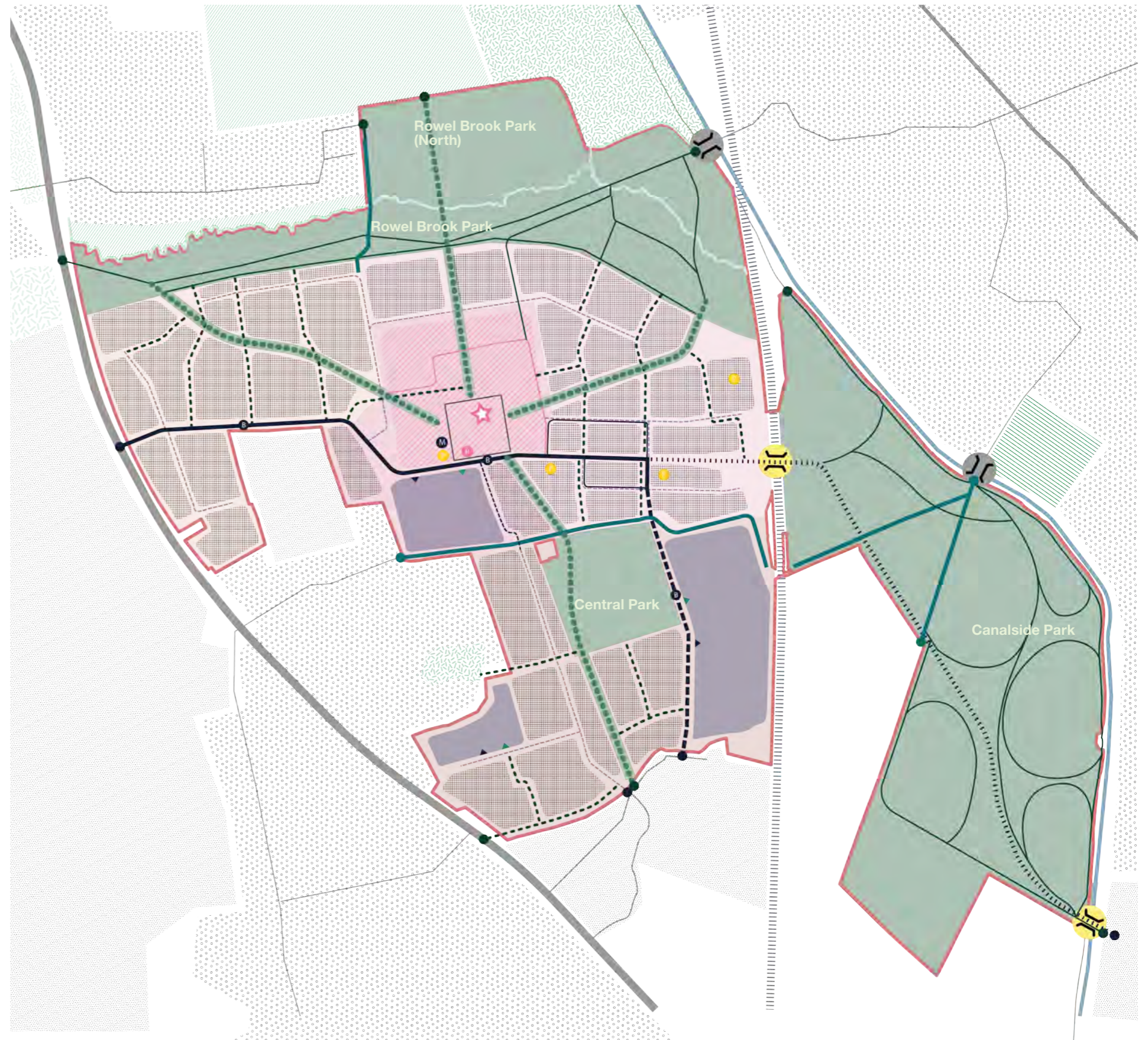
3.9. Character and identity

Opening to Oxfordshire

Principles

3.9.1. The character and layout of each area should be informed by the landscape. Neighbourhood Briefs will identify the character of each relevant area.

3.9.2. The design and character of buildings should contribute to the overall identity of the Proposed Development.

3.9.3. There should be formal and defined transition between each character area by means of landscape and views.

3.9.4. The Proposed Development should appropriately relate to and respect the existing villages, including Yarnton, Begbroke and Kidlington.

3.9.5. The landscape and public realm design of each area should draw its

character from its specific context, history, or uses - e.g. forest areas, old farms or residential areas.

3.9.6. Each area should develop an architectural character emerging from the site history and / or uses that could either reflect or positively contrast the existing character of nearby built development.

3.9.7. A gradation of built development scales should be used to develop neighbourhood characters, with a transition of scale from the dense centre to the open green spaces of the green belt.

3.9.8. Each neighbourhood should seek to provide a healthy mix of uses and tenures.

Key

Begbroke Hill

Begbroke Hill is the gateway neighbourhood to the site that initiates the sequence of arriving into Begbroke. While the neighbourhood is primarily residential, it has a transitional quality from the natural woodlands of Rowel Brook Park to the more urban local centre. This transition from urban to rural is managed through built form but more literally via the green artery that passes through the neighbourhood en route to Rowel Brook Park. It is from the woodland in the park from which the character of the neighbourhoods characterful landscape is derived.

Parkers Farm

Parker's Farm is a mixed use neighbourhood that is home to much of the new innovation and commercial use that expands out from the existing Begbroke Science Park. The neighbourhood however also accommodates residential use that reaches out towards Rowel Brook Park. The green artery that converges upon the old farm itself, has a role in connecting the neighbourhood to the local centre but also Kidlington (via Roundham Lock) and Rowell brook Park. It also constitutes a piece of public realm inhabited by mixed communities

Other features

⬠ Farmstead

▬ Oxford canal

▬ Rowel brook

▬ Key vehicular routes

||||| Railway line

Foxes Cover

Foxes cover sits in the Southern part of the site. The neighbourhood has a smaller urban scale to it, and forms a quieter residential area. Smaller interventions and public spaces should still create the opportunity for community making alongside the larger shared space of Central Park which acts as the focal point for a range of residential typological and tenures as well as a mixing bed for the neighbourhoods schools.

Begbroke Science Park

Begbroke Science Park is the central neighbourhood of the scheme primarily made up of the expansion to the existing science park itself. This is the urban centre of the site and the building footprints reflect the larger scale of the existing commercial uses. Being the convergence point from which all the neighbourhoods feed in, this is the most densely mixed neighbourhood with residential mixing with research and development as well as a rich array of amenity uses and a school adding further variation to the area that centralises itself around the existing farmhouse and newly proposed public square,
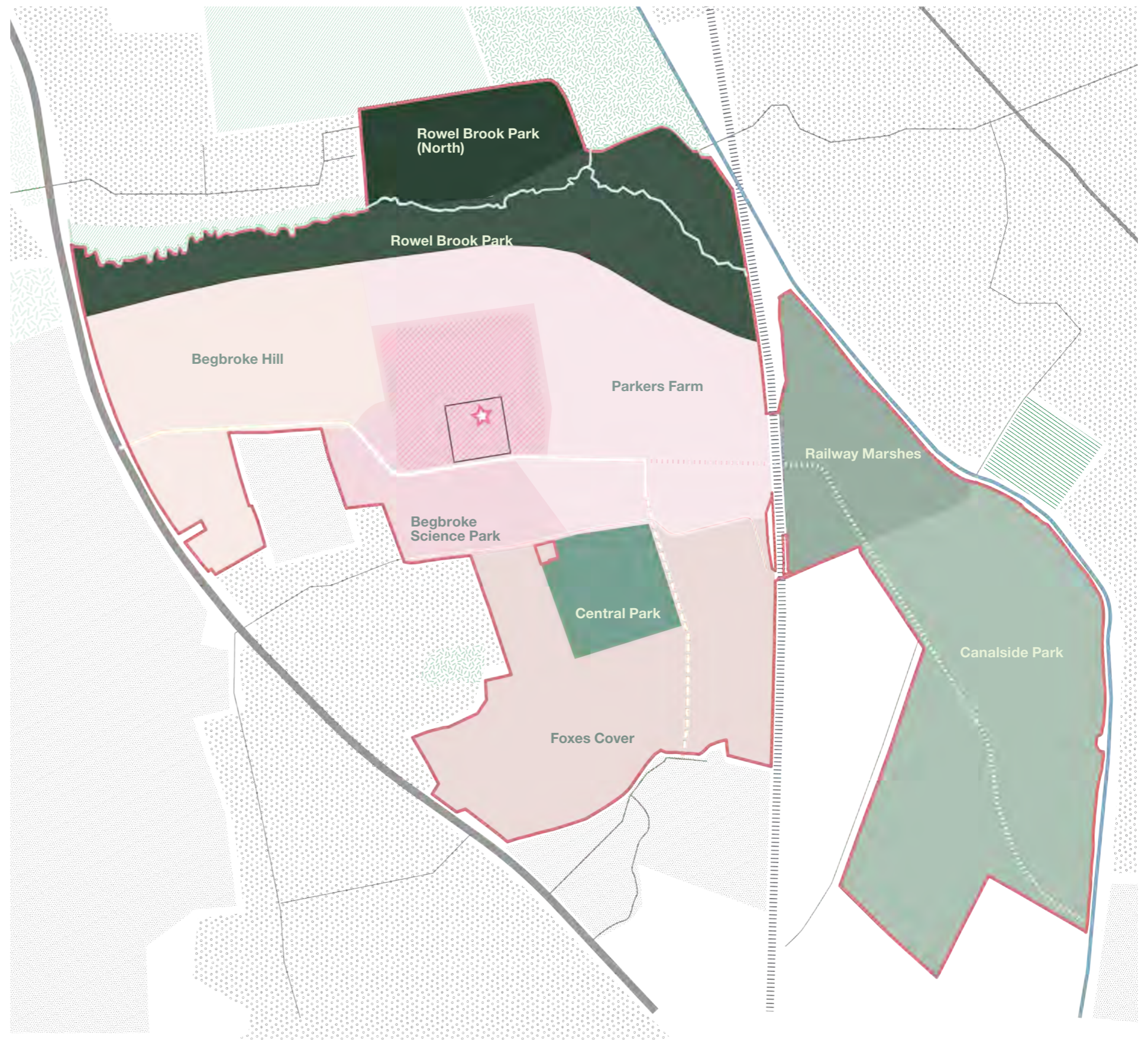
3.10.Heritage

Active stewardship

Principles

3.10.1. The setting of heritage assets will be preserved, and where possible, enhanced.

3.10.2. New development will be appropriately scaled in relation to adjacent heritage elements, including Begbroke Farm House (Grade II listed) and views towards St Mary's Church in Kidlington.
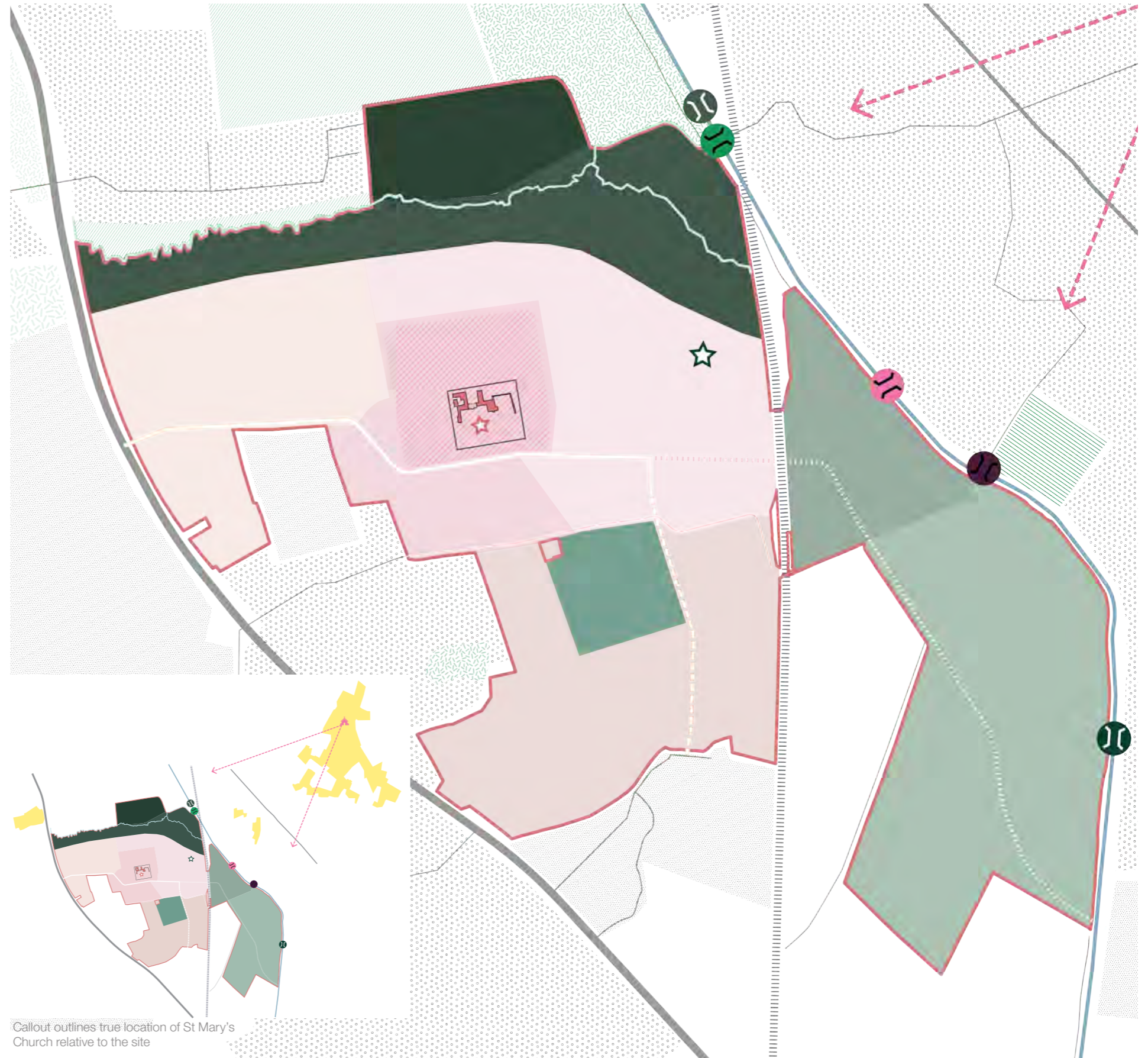
3.10.3. Where heritage assets have distinctive attributes, adjacent development should relate to these.

3.10.4. If the above criteria are satisfied, an active frontage relationship should be employed.

3.10.5. Landscape corridors between Begbroke Science Park and the Proposed Development must be attractive and positive spaces.

Key

Application site boundary

Neighbourhoods
- Begbroke Hill
- Parkers Farm
- Foxes Cover
- Begbroke Science Park

Heritage

Grade II Listed Features
- Farmhouse & Christian Building
- Farmstead

Grade I Listed Features
- Bullers Bridge
- Yarnton Bridge

Other Historical Features
- Roundham Lock
- Roundham Bridge
- Kidlington Lock
- Parkers Farm
- Conservation Area
  (Cherwell Planning Conservation)

Views
- Mary's Church, Kidlington (symbol location is diagramatic and not literal)
- Indicative view to St Mary's Church

Other features
- Oxford canal
- Rowel brook
- Key vehicular routes
- Railway line

Callout outlines true location of St Mary's Church relative to the site

3.11. Building design

Active stewardship

Principles

3.11.1. Begbroke Innovation District will offer a range of housing options, associated support and services, and an inclusive environment to support the existing and new communities.

3.11.2. All homes should be designed to generous space standards, to ensure they meet needs related to living, furniture and the flexible use of homes over time.

3.11.3. Homes will have flexible layouts, to allow for adaptation and extension and be designed to be responsive to innovations in modern living.

3.11.4. All homes should have access to private external space or communal amenity space that is open to the sky. This may be in the form of back gardens, communal amenity areas, balconies or terraces.

3.11.5. Homes should be designded to be tenure-blind with a wide choice of tenures including genuinely affordable homes.

3.11.6. The design of buildings should have regard to the local building character and the wider context of Oxfordshire and reflect that either by positive distinction or drawing inspiration from it.

3.11.7. Materials will be durable, neither ageing or dating prematurely

and wherever possible be original and authentic and not imitation.

3.11.8. The grain and scale of the built form should create transitions from smaller to bigger and avoid jumps of scale, to create a legible built environment and reinforce the sense of mix.

3.11.9. Larger scale residential buildings should be located at key nodes and vistas, to reinforce legibility and wayfinding.

3.11.10. Massing should include breaks and set backs between buildings avoiding long rectilinear spaces where practical, to reinforce the sense of dwelling over movement.

3.11.11. Built form and in particular roofscape should include different solutions and or geometries to assist with wayfinding and sense of variety.

3.11.12. The design of residential buildings should consider the privacy of each occupant, and be achieved through appropriate distances between properties.

3.11.13. All homes will be designed to be safe and secure.

Key

Varied Roofscape

A varied roofscape should be prevalent across the scheme to assist in creating characterful townscapes and contribute to placemaking

Transition in Grain

A transition in the scale of the urban grain should be carefully curated to manage the transition between larger commercial typologies and the smaller scale residential dwellings and streetscapes
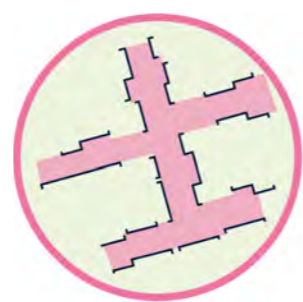
Set Backs & Breaks

To encourage informal gathering and social spaces disrupting the building line should be encouraged to informally create a network of streets and squares

— Application site boundary

Neighbourhoods

Begbroke Hill

Parkers Farm

Foxes Cover

Begbroke Science Park

Other features

✪ Farmstead

— Oxford canal

— Rowel brook

— Key vehicular routes

||||| Railway line