

Landscape network and character

Green and blue infrastructure

An interconnected network of green and blue infrastructure growing from Phase 1 sets a landscape armature for the proposal.



A new urban edge

A green and blue framework establishes a landscape setting to the Eddington urban edge, defining a soft city to countryside interface.



Brook Leys and Storey's Field

Two green spaces, provide space for nature to thrive and larger areas for people to use.



A green network

A network of green infrastructure formed from existing vegetation, new planting, established habitat and new wildlife corridors. It provides continuity with Phase 1 green and blue infrastructure, and existing site features.



Shared amenity

Public open space incorporates community facilities including sports, playable and growing spaces all set out to encourage healthy lifestyles. Foster social interaction and therefore resilience.

Levels

Green and blue infrastructure

The site naturally falls to the Washpit Brook corridor in the west. The existing topography informs the proposed levels, and is integrated into the design of the public realm.



Nature-based solutions

Level changes are mediated using slopes with gradients no steeper than 1:3, which are thoughtfully integrated into the landscape and public realm design. Retaining structures are designed out where possible.

Reducing earthworks

Working with the existing topography minimises movement of earthworks. Brook Leys landforms help to maximise re-use of site won materials. Site won soils reclaimed for re-use on site or offered as a resource for off-site re-use.



Landscape continuity

Public realm levels are designed to ensure inclusive access from doorsteps to open space and amenity. Brook Leys, shared gardens and neighbourhoods are designed holistically to ensure continuity of access across the site.

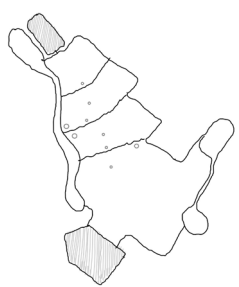
Accessibility and inclusivity

Inclusive design principles ensure access and comfort for all in the public realm, including providing level access to homes, sympathetically graded paths with regular resting points and legible movement routes.

Easy access to green spaces is provided, offering opportunities for both active recreation as well as areas for retreat and calmness.

Community and amenity
Green and blue infrastructure

A distinctive, sustainable and ecologically rich network of open spaces, knitting in to Phase 1.



Proximities

Sports facilities, allotments and play spaces provide hubs of activity distributed to serve the whole community. Within Neighbourhoods and Shard Gardens, play on the way, community growing, cycling and walking are cluster together to foster social interaction.



Sharing

Leisure routes for walking, cycling and running connect through neighbourhoods and open space providing further playable spaces, community growing and informal sport in easy reach of homes.



Community growing

Bringing growing to people's doorsteps, community growing spaces include a water point, seating and positioned close to homes. Further proposals include edible planting and foraging spaces within the public realm and wider landscape.



Play on the way

Playful and playable elements including natural elements and landforms incorporated into the public realm and open spaces weave play into everyday neighbourhood journeys.

Planting and biodiversity

Green and blue infrastructure

Distinctive and biodiverse planting strategy responsive to the local landscape and a changing climate.



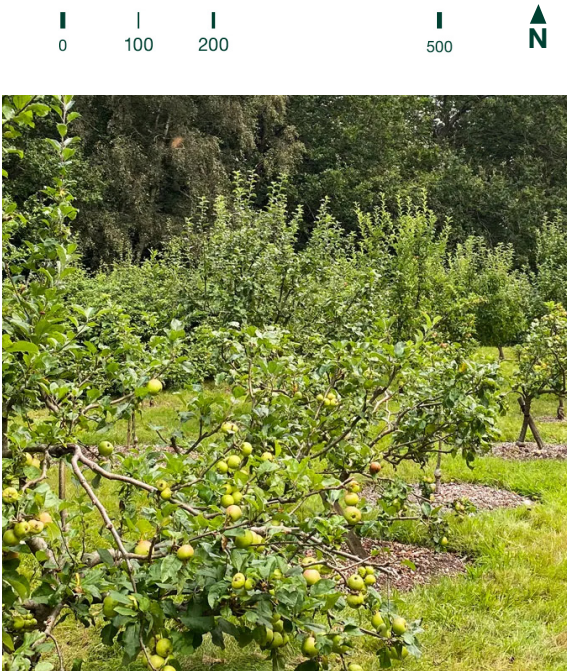
Existing assets

Existing hedgerows, trees, woodland and grassland retained and incorporated into a green and blue framework and enhanced with new woodland and scrub planting, new native species hedgerows and strengthened habitat connections.



Richness and diversity

A variety of natural spaces, each with their own character and role, creating a rich tapestry of habitats and amenity spaces. Evolving from Phase 1, there is a greater emphasis on a naturalistic planting character, drawing the wilder natural landscape in.



Nature and wellbeing

Time in nature is a well-established beneficiary to mental and physical wellbeing. The planting strategy contributes to this, with edible landscapes, seasonality, wayfinding, shade, shelter and beauty.



Biopositive

A habitat led landscape design which builds new connections, extends and protects existing areas to provide more space for nature with increased biodiversity and resilience.

Tree strategy

Green and blue infrastructure

A hierarchy of trees of differing scale, form and massing defining a coherent green framework.



Landmarks
Forest scale trees provide long term canopy height visually breaking development rooflines.



Defining character
Species palettes and arrangements are planned to provide visual breaks and markers to assist with wayfinding, define spaces and moments within the public realm to create a sense of place.



Defining spaces
Form, scale and colour contribute to the legibility of the public realm.



Seasonality
Fruiting and flowering species signal the natural rhythm of changing seasons, providing food for people and wildlife.



Climate resilience
A resilient palette of native and non-native species, suitable for ground and microclimatic conditions perform a variety of valuable functions including shade, shelter, cooling, bringing productive and biodiversity value.

Water and drainage

Green and blue infrastructure

The blue infrastructure evolves from Phase 1, combining above and below ground solutions.



Brook Leys and Lagoon

The existing Phase 1 lagoon and drainage connections including permanent swales and established habitats are retained and integrated into the landscape.



Building from Phase 1

Introduction of greater variety of experience, richness of character and diversity of use to support site wide strategies for health & wellbeing, biodiversity and amenity.



Swales

Planted swales are proposed within more generous and less intensively used open spaces. Planting character focusses on native species supporting site wide biodiversity



Combined systems

Close to homes and within the public realm, a combination of below and above ground drainage solutions create usable green spaces within the site, including rain gardens and detention basins.

Walking wheeling and cycling

Movement and access

The active travel network is denser than the vehicular one, making walking, wheeling and cycling the first choice.



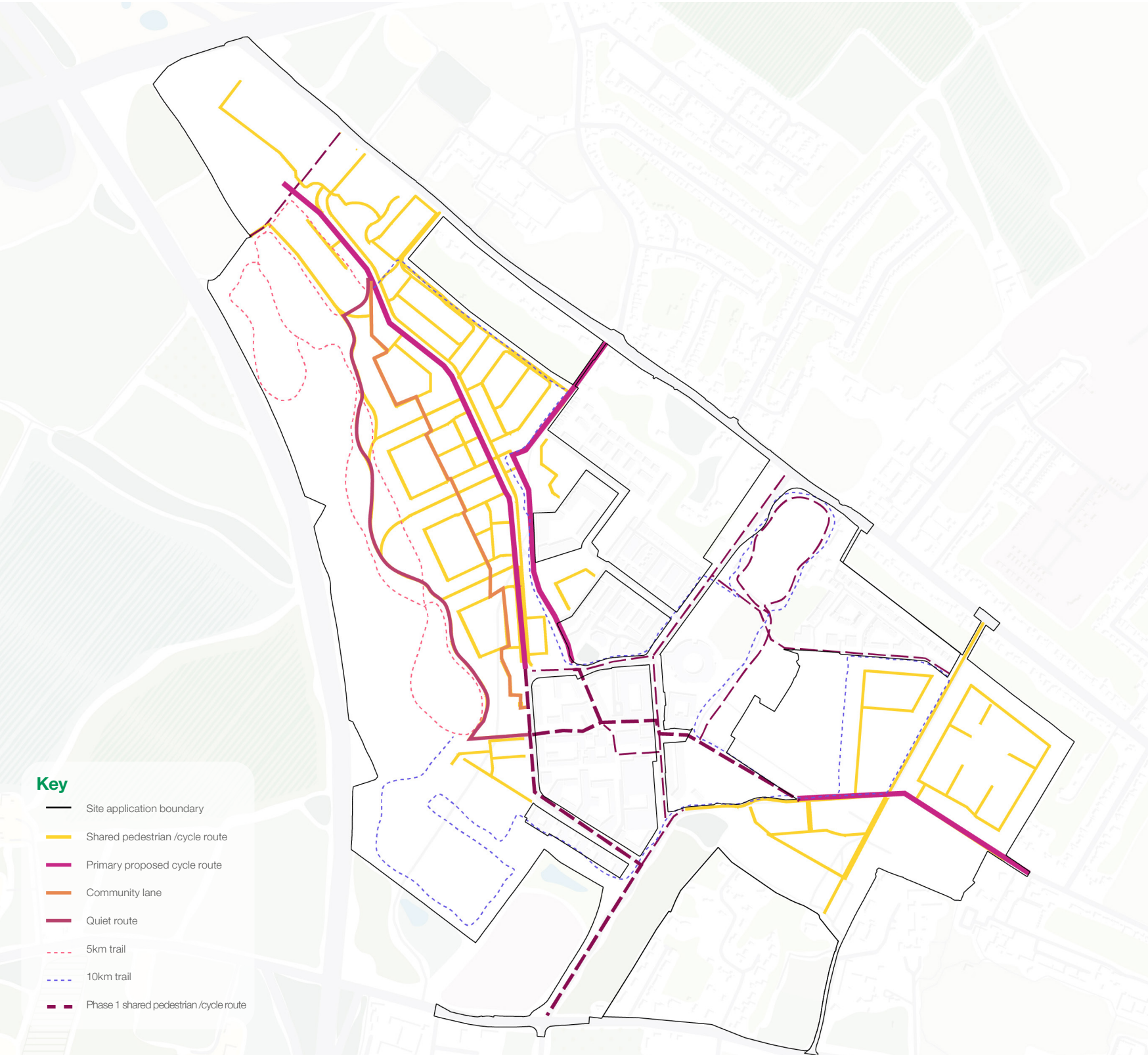
Active by default

Designed to make active travel choices the easiest and most convenient, by placing bikes closer than cars, by designing to pedestrian priority and by making active travel movement networks more interconnected than vehicular ones.



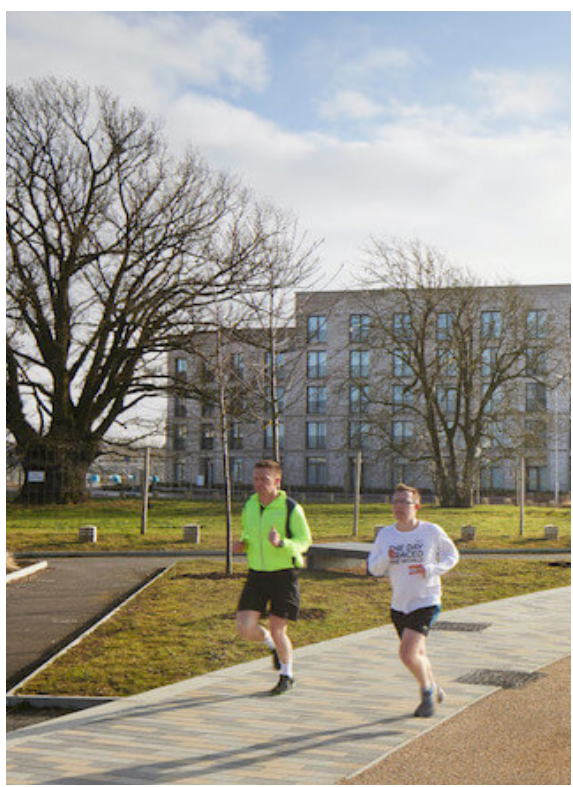
Pedestrian priority

Pedestrians have priority and cars are slowed down through raised crossing and/or sweeping road layouts.



Connecting to and beyond Eddington

The Ridgeway and the cycle lane on Turing Way extend through the Future Phases connecting to Girton, Darwin Green, Cambridge West and the centre of Cambridge through a mixture of segregated and shared cycle lanes.



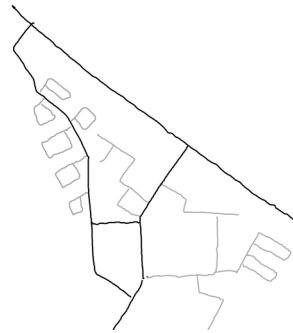
Catering for all needs

A series of running trails complement the walking routes widening the movement offer. Equally, cyclists may decide to jump on to a faster cycle lane along Cartwright Avenue or cycle more leisurely through the neighbourhoods or along Brook Leys.

Vehicles

Movement and access

The vehicular network provides access to every door but prioritises active travel.



Access to the site

Huntingdon Road and Madingley Road are the main routes leading to the site. Beyond them, roads totally or partially delivered as part of Phase 1, Eddington Avenue, Turing Way and Garrod Street lead vehicles into the site for the Future Phases.



Cartwright Avenue and Garrod Street

These two emerging roads provide access to the western and eastern neighbourhoods.



Loop systems

Walkable neighbourhoods are designed for people, not for cars. Access to home doors are organised into loop roads with one junction to Cartwright Avenue or Garrod Street.

Slow neighbourhoods

Within neighbourhoods, speed is designed out by introducing bends and raised crossings that give priority to pedestrians and cyclists.

Car interception

Car storage is distributed along neighbourhood streets using a range of solutions including on-plot, on-street and on-podium. As many spaces as possible are located closer to the junction. This means that people will park their vehicles as soon as they drive off the main roads. This principle of car interception reduces traffic on neighbourhood roads, thus reinforcing their pedestrian priority.

Refuse collection

The loop movement system allows refuse collection, based on the current underground system without vehicle reversing.

Mobility hubs

At least two new mobility hubs will be added to the existing one on Eddington Avenue. In addition to these, a series of smaller neighbourhood mobility hubs further encourage active travel.

Layouts that shape spatial complexity

Built Form

Buildings define the edge of the public realm. Their location, positioning and type contributes to create rich and varied neighbourhoods.



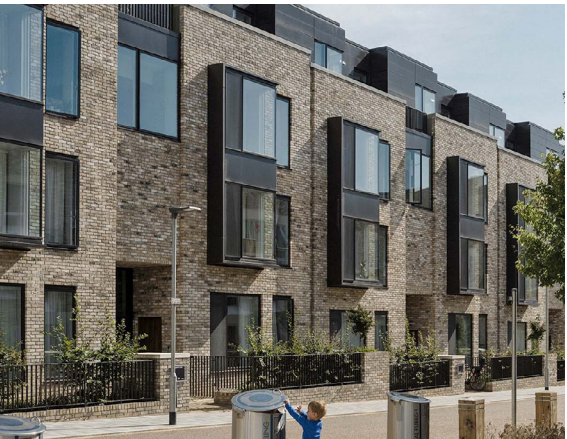
Spatial complexity

The objective is to provide a range of spaces with diverse characteristics that cater for the different needs. That includes streets that are more linear and formal, but also Shared Gardens with a more natural character and informal geometries introducing spatial complexities that can stimulate neural plasticity - please refer to the literature review research at the beginning of this chapter- whilst creating visually interesting and well-defined and inviting spaces.



Defining frontages

Brook Leys defines the transition between the city and the countryside. Rather than fading the city away, the proposal defines a clear frontage.



Defining streets

The Future Phases build on the success of Phase 1 in creating streets with well-defined edges.

Layouts that shape complexity

Built Form

Each Neighbourhood is comprised of a variety of building types adding complexity and interest whilst catering for different needs.



Engaging thresholds

Building entrances and ground floor amenity, private or communal, is a key element activating the public realm, contributing to passive surveillance and providing opportunity for decoration and social life.



Homes

Stemming from the exemplar of Phase 1, proposals for the Future Phases of North West Cambridge add variety whilst maintaining its architectural quality.



Designing for the future

Passivhaus principles, spatial allowance for photovoltaic panels, consideration to overheating, as well as adaptable water management and energy systems.

The energy strategy for Future Phases is driven by 5 core principles: (a.) use passive measures to minimise energy demand and unwanted summer heat gains; (b.) adopt a fabric first approach to minimise the need for space heating; (c.) provide space heating (and cooling for non-domestic buildings) locally to minimise distribution losses as there will be low levels of demand; (d.) avoid the use of fossil fuels to provide space heating and hot water; and (e.) generate electricity on-site via renewable energy sources.



Land use and quantum

Built Form

A mix of uses carefully distributed across the site balancing placemaking and flexibility. Refer to Planning Statement for more detail.



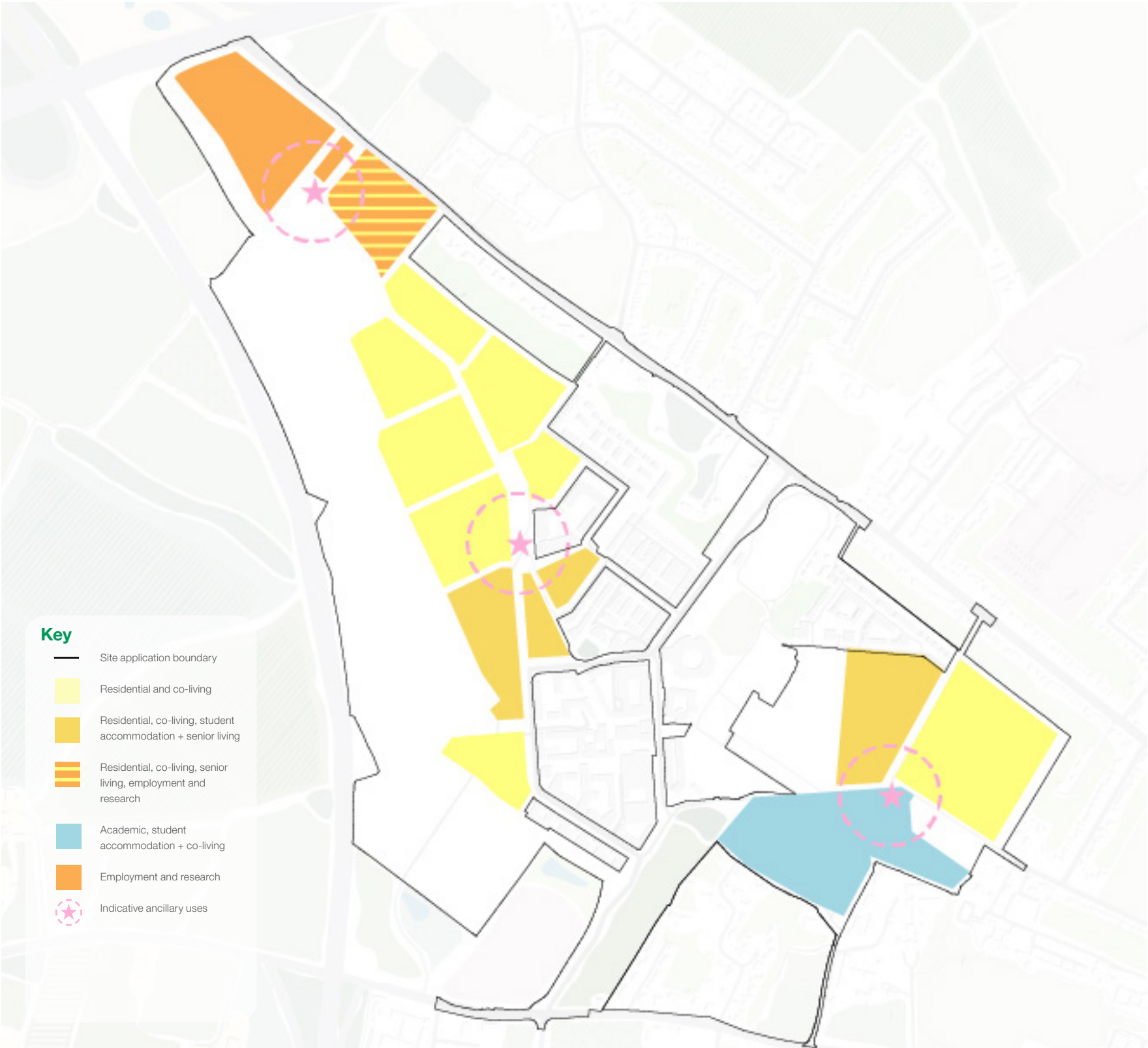
Emerging from Phase 1

A Local Centre, including retail, a Community Centre and primary school has been delivered as part of Phase 1 and provides amenity and social infrastructure for the whole site. A series of hubs are indicatively distributed across the site to complement the offer of the Local Centre providing up to 3,500 Sqm GEA).



Diverse and efficient neighbourhoods

The Core of the Future Phases of North West Cambridge include a mix of residential types. These neighbourhoods work to densities that make an efficient use of the land and infrastructure providing up to 3,800 new homes (up to 365,000 Sqm GEA residential use , up to 52,000 Sqm GEA of co-living, up to 6,500 Sqm Senior Living).



Innovation quarter

To the north of the site, an innovation quarter looks to capitalise on the synergies with Cambridge West introducing flexibility for up to 40,000 Sqm GEA of employment uses.



Academic cluster

To the east of the site, an academic cluster combines up to 52,000 Sqm GEA of student accommodation and up to 60,000 Sqm GEA of academic buildings.

Response to noise

Built Form

The M11 is a noise consideration and a challenge for the design of housing and amenity with appropriate noise levels.

Existing noise constraints

Site is adjacent to M11, a notable noise source. The closest plots are approximately 200m from the M11. South Cambridgeshire District Council's guidance classes the development within a high noise area.

Phase 1 mitigation

As part of the noise mitigation strategy for Phase 1, landscape mounds were installed to the south of Brook Leys. Triple glazing to properties and mechanical ventilation to avoid opening windows have been implemented in Phase 1.

Landscape mitigation

Further site testing has been carried out in relation to noise constraints and further landscape bunds are proposed to the north of Brook Leys to mitigate noise.

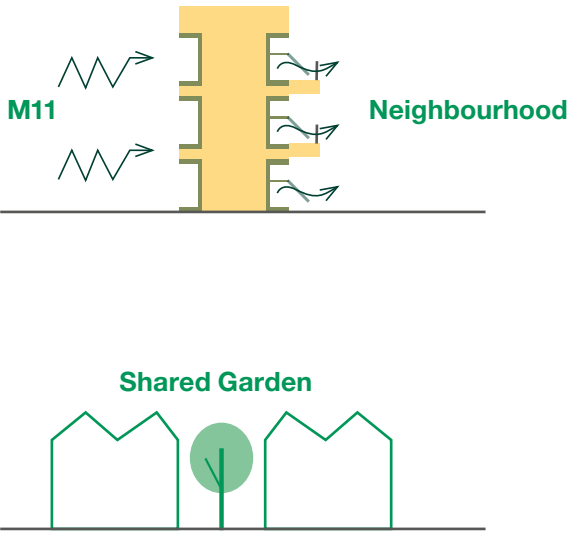


Built form

The following will need to be considered at reserved matters application stage:

Some façades having specific acoustic performance requirements for the glazed and non-glazed elements. For buildings facing Brook Leys, maisonettes and decked access buildings, have been tested to be able to provide openable windows to the eastern side where noise mitigation is not required, allowing natural ventilation without compromising acoustic comfort.

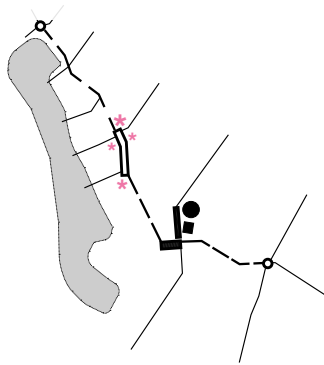
Residential amenity will need to be considered carefully during reserved matters applications and potentially areas designated where suitable external sound levels are achieved. Areas like the Shared Gardens have been designed to have built form acting as both a wayfinding gateway to residential amenity, but also a physical barrier to noise.



Massing and character

Built Form

Tackling the carbon footprint from early stages whilst creating a varied and characterful new edge for Cambridge.



Approach to heights

The distribution of heights has been tested through a number of views in and around the site. Through testing, a series of key principles have been established. These stem from considerations including the optimisation of form factor for carbon efficiency, the redefinition of the urban edge, avoiding a plateau effect through varying heights, legibility of the massing and its contribution to wayfinding, and the massing of the existing neighbours.

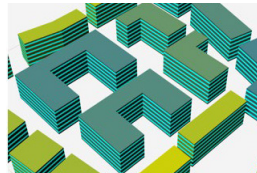
Heights range - reducing the carbon footprint

Residential construction is the largest source of embodied carbon on site. Improving form factor can lead to a reduction in embodied carbon. Increasing heights to 4 - 6 storeys can lead to 4% improvement in embodied carbon. Apartment blocks have been optimised with opportunities to 7 or 8 storey buildings at the centre of the site and stepping down to 4 storeys for better access to light.

4 storeys



6 storeys



An articulated skyline

Localised variations in height, tone, materiality and / or roofscape create an articulated skyline avoiding flat roofscapes and creating a positive new city edge for Cambridge.



Layering and legibility

Massing and height distribution reflect the landscape strategies and utilise the site level changes to introduce a sense of layering. The positioning of the taller buildings contribute to the legibility of the urban structure, assist with wayfinding, moving away from more sensitive areas in proximity to existing neighbours.

7 Places

Place-specific design reinforce and extend the principles set by the Sitewide Strategies.

[SG] Shared Gardens

Beyond connectivity, the Shared Gardens are community assets, inviting spaces where local people gather, children play and nature becomes part of everyday life. They underpin each neighbourhood’s identity and support long-term social and environmental resilience.

[NE] Neighbourhoods

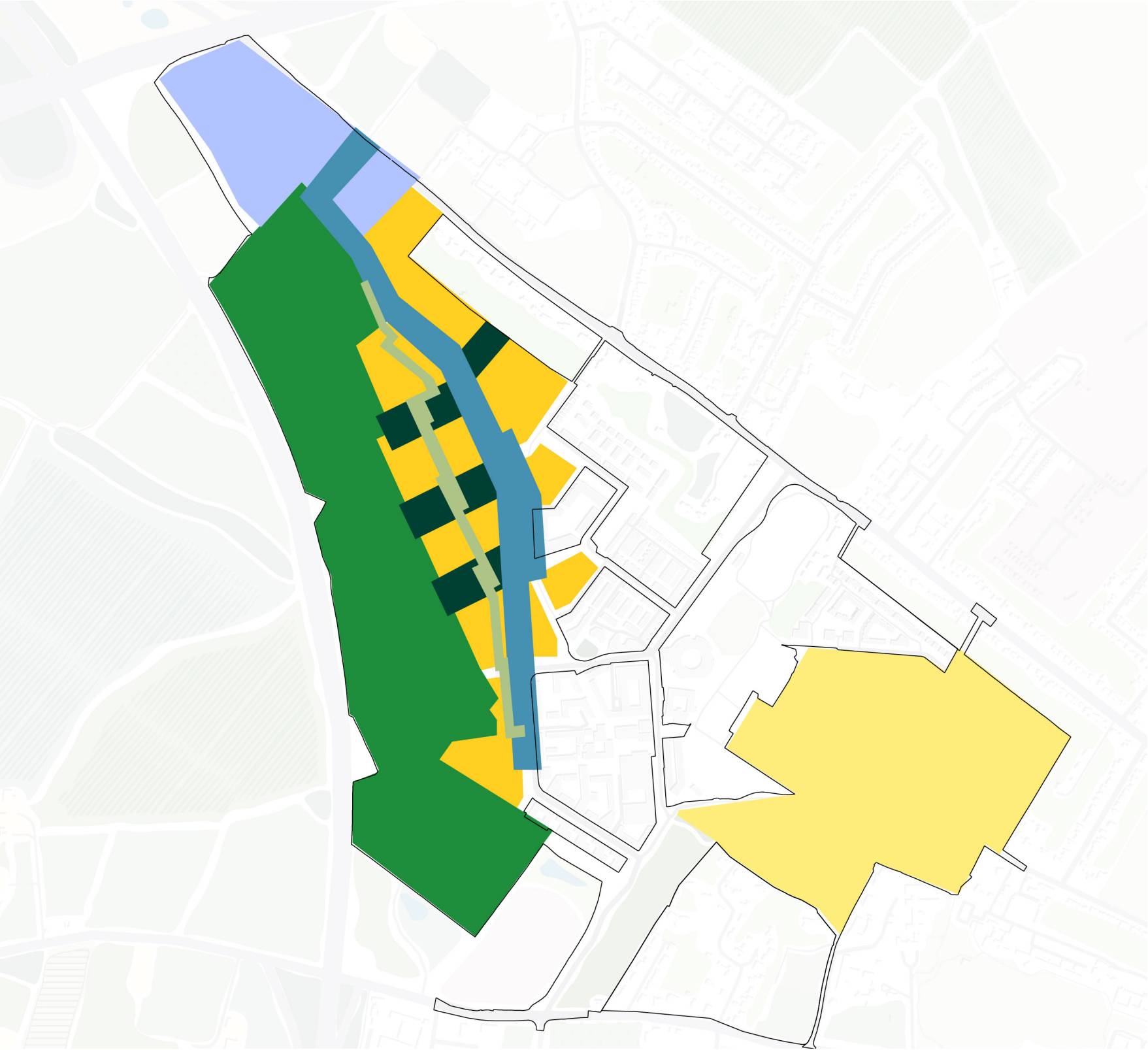
Buildings and landscape contribute to define multi-use streets that have a pedestrian character but allow different forms of movement catering for the practical needs of every home. Nature -planting and water- and community uses -play, growing or cycling- are also embedded in to the streetscape.

[CL] Community Lane

A pedestrian priority, safe and leisurely street. Connecting the school, community centre, and Local Centre, to formal sports and growing areas to the north of the site.

[GH] Gravel Hill

The eastern most part of the site, combining a mix of uses including an academic quarter, residential and student accommodation. Separated from Phase 1 by green infrastructure, it has a unique setting including Storey’s Field and partial extents of the Traveller’s Rest Pit SSSI with its 10m buffer zone.



[CA] Cartwright Avenue & The Common

A spine providing vehicular access to the Western area of the Future Phases. It presents varied conditions along its length, including (describing the journey northwards from Phase 1) a street with unidirectional cycle lane linking to the existing Turing Way, an open space managing levels and different forms of movement, a street with bidirectional cycle lane and a generous landscaped verge.

The Common sits to the south of Cartwright Avenue and is a generous piece of public realm in which movement corridors navigate east and west.

[IS] Innovation Street

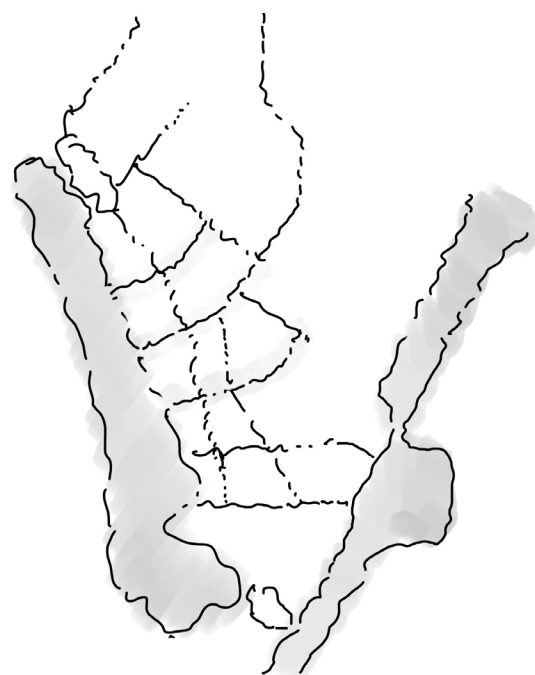
A flexible cluster of innovation uses including mid-tech industries and employment space, organised around a street connected to Cartwright Avenue.

[BL] Brook Leys

A significant piece of public realm, with existing features such as Washpit Brook, and the Phase 1 Lagoon. The space is defined by its varied and undulating natural landscape. A green edge to the development where biodiversity is thriving, proposals will enhance and protect habitats whilst allowing residents to connect to nature.

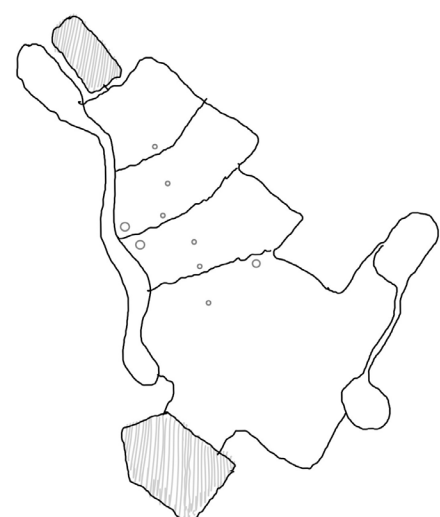
Summary of sitewide strategies

Green & Blue infrastructure



Nature

- Nature on your doorstep
- Regenerative ethos
- Sustainable drainage systems



Sports and amenity

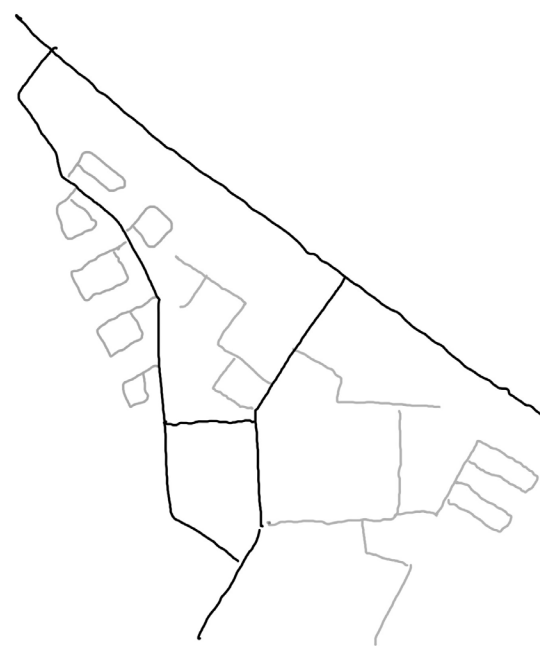
- Enhanced sports and amenity
- Play on the way
- Community growing

Movement and access



Active travel

- Walking and cycling
- Running trails
- Safe for children



Vehicles

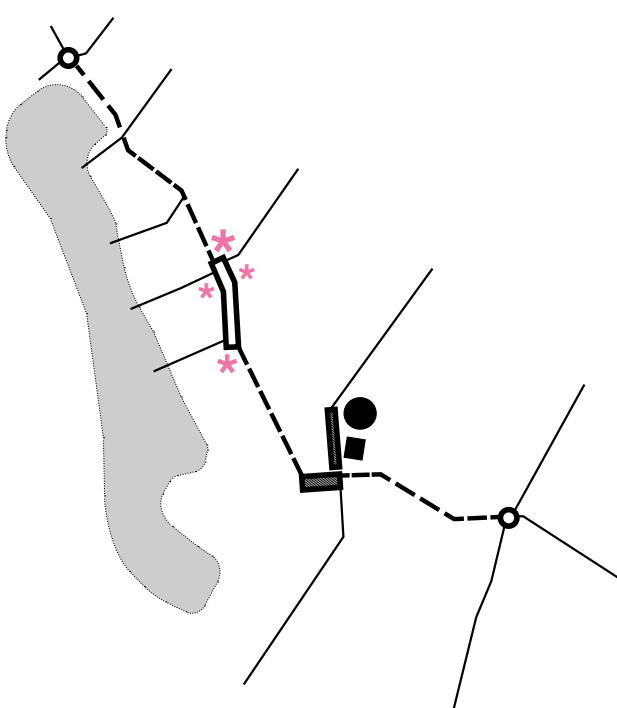
- Loop systems
- Car interception

Built Form



Layout

- Shaping complexity
- Multiple building types



Massing and character

- Working to optimum carbon saving envelopes
- Articulated skyline
- Layering and legibility

Places

The images and diagrams shown on this chapter are taken from the illustrative scheme.

Shared Gardens

The shared gardens are safe, linear, green spaces for the community which link the more urban centre of Eddington with the rural nature of Brook Leys. The character, layout and facilities in the gardens are intended to foster social interaction, provide spaces to dwell, garden and rest outside.

Next to nature
Shared Gardens

Key

2013 Green fingers

2025 Shared gardens

Primary open space

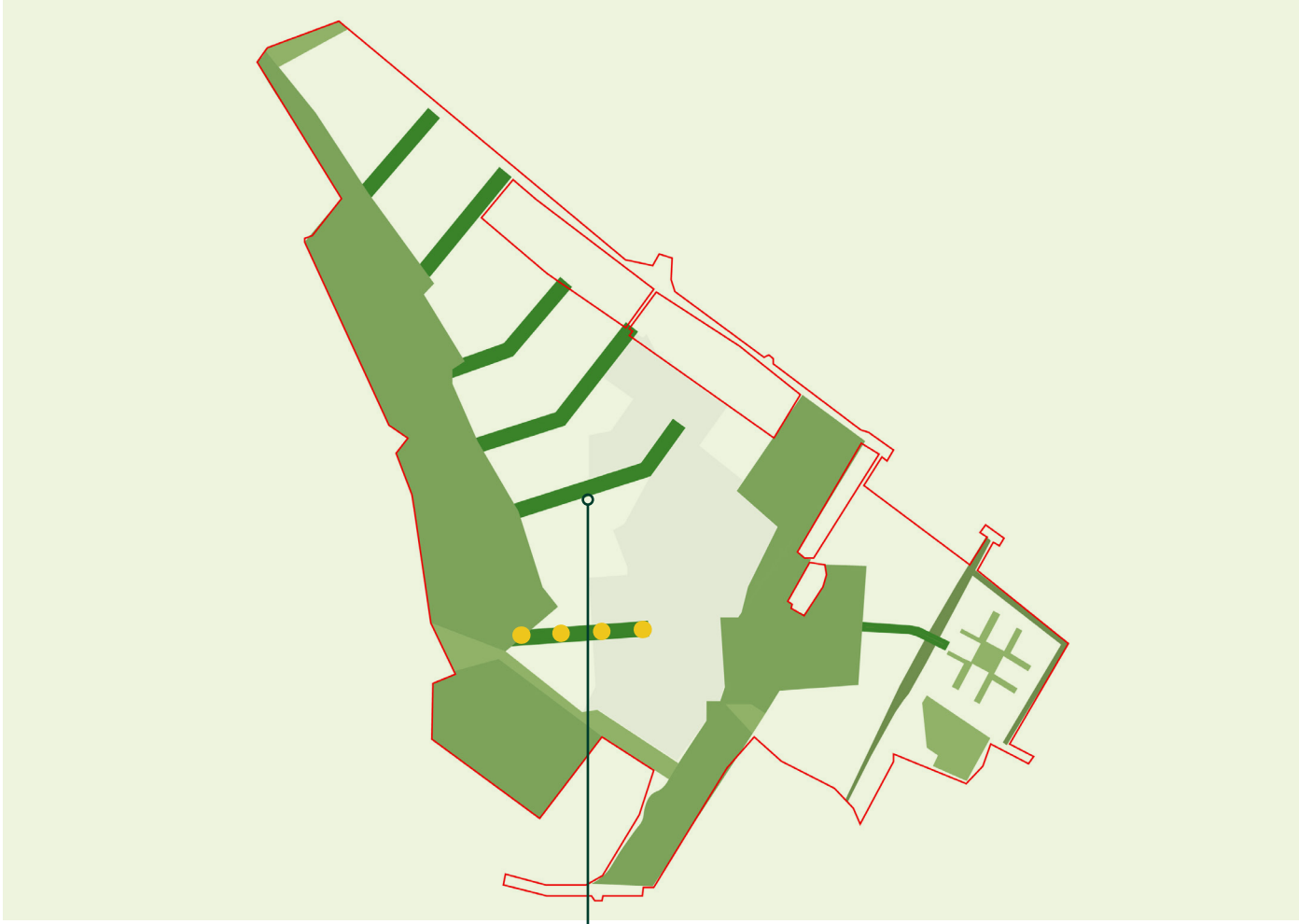
Phase 1 delivered green finger

Green infrastructure in the 2013 Outline Planning Permission



The 2013 Outline Planning Permission established the principles of the Green Fingers as green corridors running east to west.

Green infrastructure now proposed for North West Cambridge



The 2025 proposal builds upon the principles established in 2013 with minor adjustments to the layout to suit the emerging proposal.

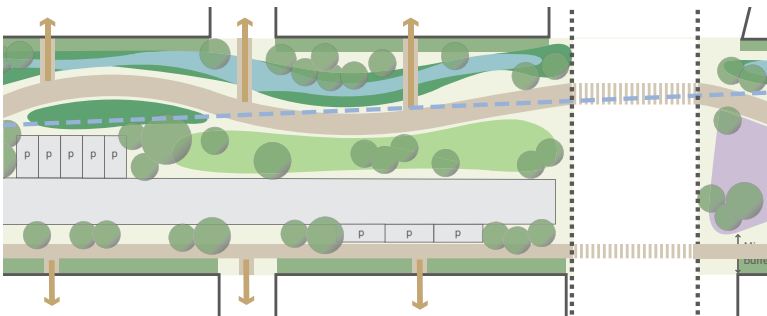
Beyond connectivity

Shared Gardens

2013 Green Finger



Pheasant drive, as built on Phase 1



The 2013 Green Fingers were devised as formal linear corridors including vehicular and active movement, SuDS and biodiversity.

2025 Shared Garden



Vision for the Shared Garden - Eindhoven



The 2025 Shared Gardens are informal open spaces providing opportunity with more variety, complexity and visual interest.

Crucially, vehicular movement is removed from the Shared Gardens, creating safer spaces for children to move on their own as well as more space for communal programming.

Shared Gardens also include communal growing space, SuDS, biodiversity and active travel routes.