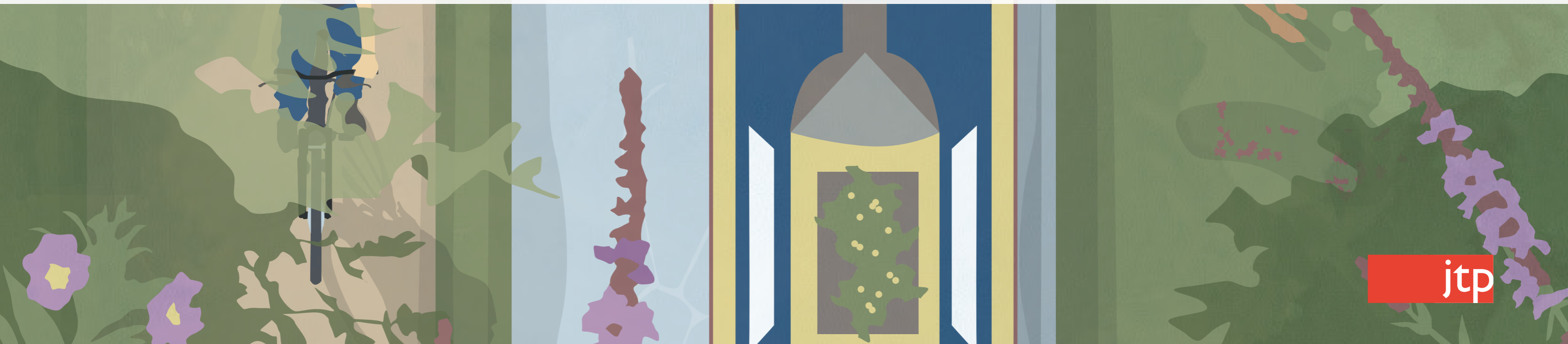




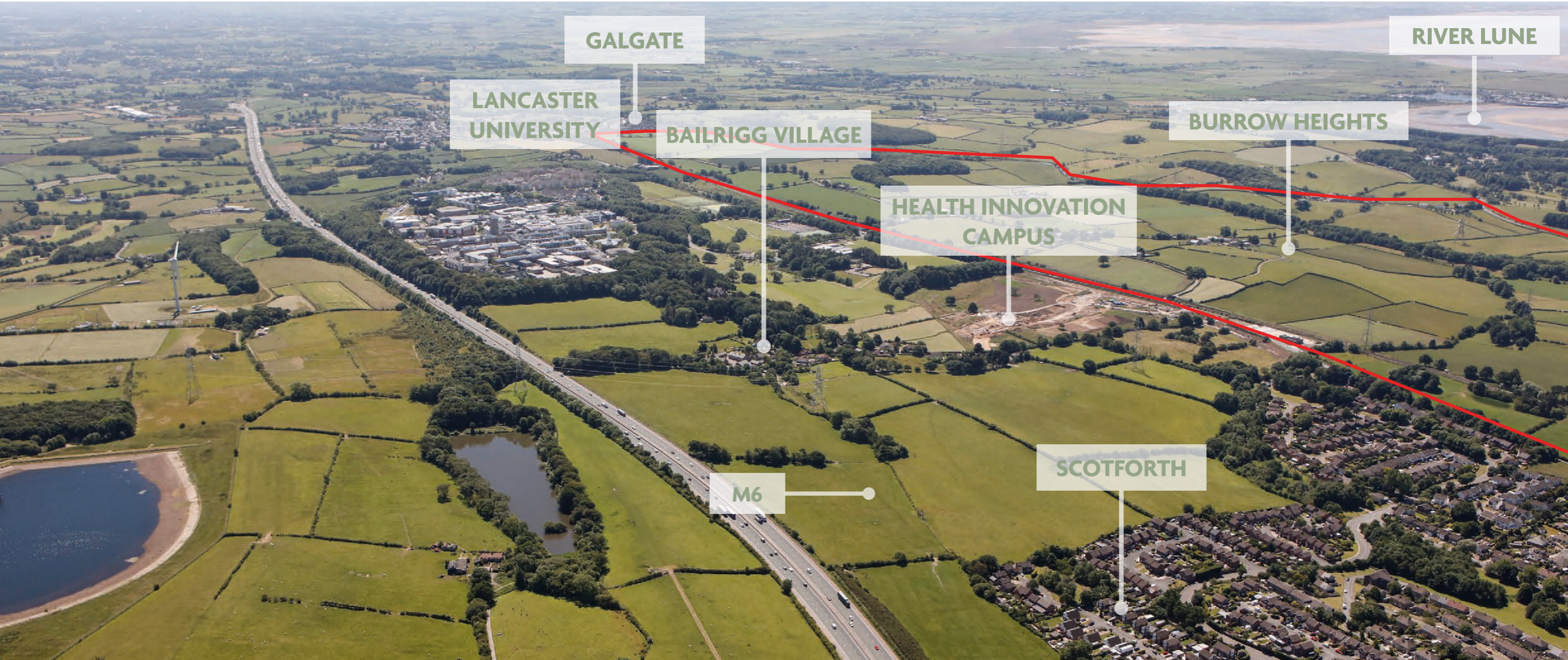
BAILRIGG GARDEN VILLAGE

EMERGING MASTERPLAN PRESENTATION

TUESDAY 2 MARCH 2021



BAILRIGG GARDEN VILLAGE MASTERPLAN



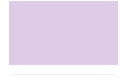










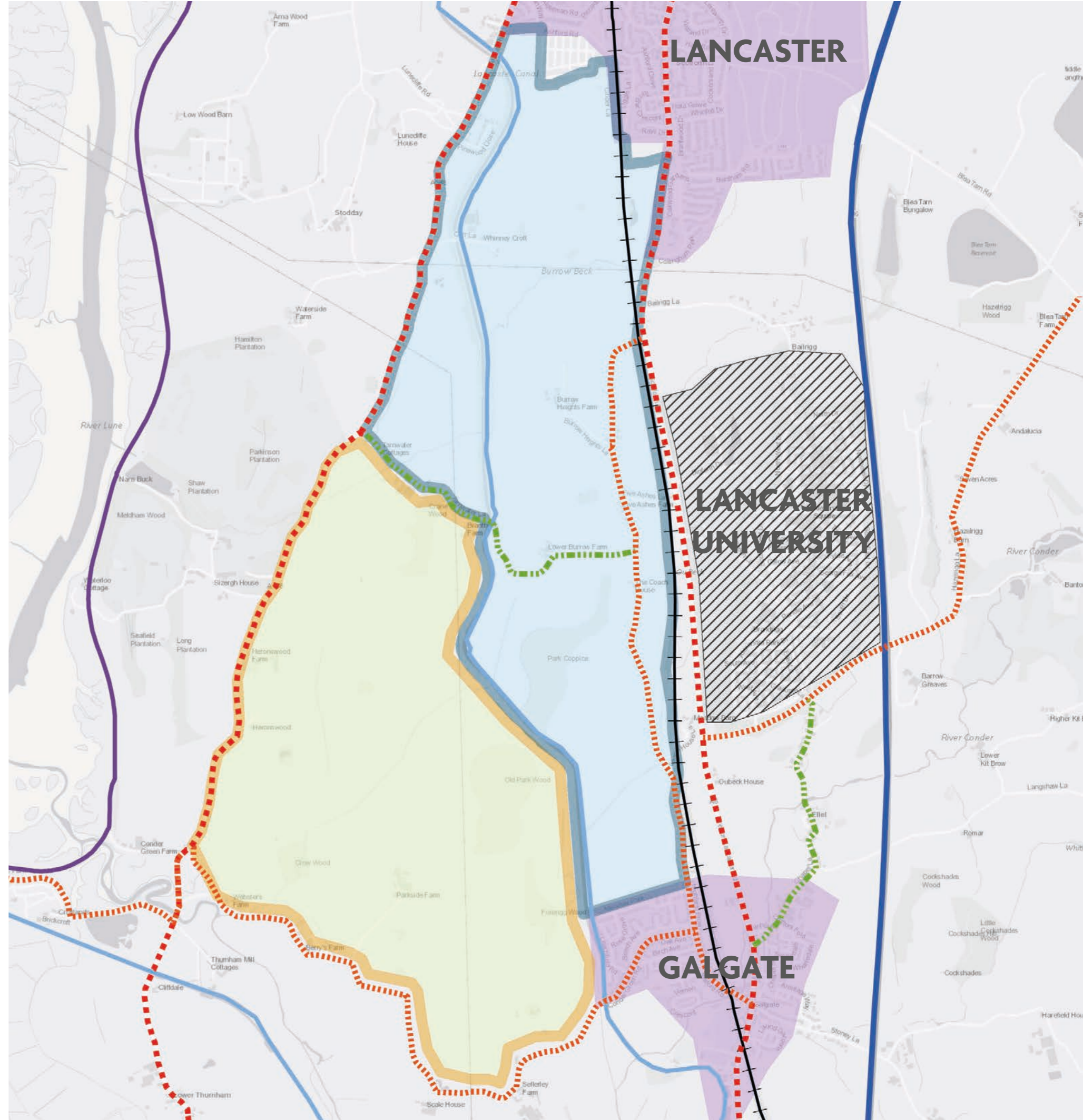
THE TEAM



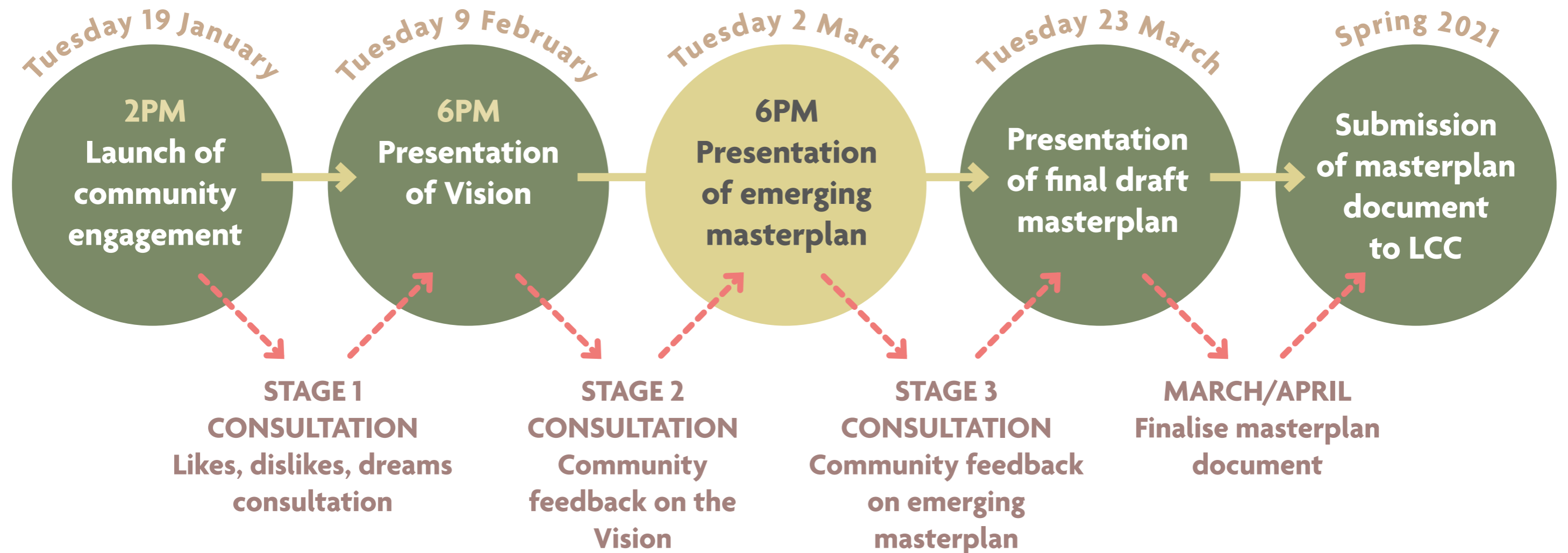
AREAS OF SEARCH

KEY

-  Indicative development area commencing 2022-2031
-  Potential development area commencing 2031
-  Existing settlements
-  Lancaster University Campus
-  Cycle track
-  Canal
-  Railway
- Highway**
-  A Road
-  B Road
-  Unclassified
-  M6



COMMUNITY CONSULTATION TIMELINE



CONSULTATION PROGRAMME

STAGE 1

Tuesday 19 January 2021 - Launch to stakeholders

- Newsletter 1 with questionnaire
- Website launch with Create Communities Consultation Platform

STAGE 2

Tuesday 9 February 2021 - Vision Report Back via Zoom

- Newsletter 2 with the Vision
- Website updated

STAGE 3

Tuesday 2 March 2021 - Emerging Masterplan Report Back Presentation via Zoom

- Newsletter 3 with Emerging Masterplan
- Website updated

STAGE 4

Tuesday 23 March 2021 - Final Masterplan Report Back Presentation via Zoom

- Newsletter 4 with Final Masterplan
- Website updated

STAGE 5

April 2021 - Masterplan Framework submitted

www.BailriggGardenVillage.co.uk

SUMMARY OF STAGE 1 COMMUNITY CONSULTATION

The consultation has been focussed around the project website and the distribution of over 3,000 newsletters to the surrounding community pointing people to the website but also allowing for comments to be sent back by detachable Freepost postcard. In addition meetings have been held with a range of local stakeholders, including community groups.

Total responses

880

The responses have been as follows:

60 *comments in the Zoom chat function during the Launch Presentation*

657 *comments were made on the Create Communities Platform*

91 *people have sent back completed Freepost postcards with likes, dislikes and dreams*

29 *people sent in comments via the form on the website*

6 *Freephone calls have been responded to*

40 *emails have been received, several with attachments including formal responses from:*

- Canals and River Trust
- South Lancashire Flood Action Group
- Bailrigg Hamlet Residents Association
- Scotforth Parish Council

SUMMARY OF STAGE 1 KEY THEMES

- **Principle and size of development** - create a distinct, high quality and sustainable new settlement of appropriate scale
- **Landscape, views & heritage** - minimise the loss of green fields, ancient woodlands, access to wild spaces and much-loved areas of local landscape
- **Lancaster canal** - retain character and setting
- **Flooding and drainage** - design-in sustainable water management and drainage solutions
- **Traffic & movement** - develop a sustainable approach to movement and transport and limit the potential impact of the garden village; avoid putting more strain on village roads and bridges and the more major road network
- **Community services** - offer high quality community amenities and well managed and accessible public realm
- **Building design & character** - respond to the nature and character of the rural environment, taking their cues from historic homes and farmsteads, and local building materials
- **Existing communities** - visual separation and a green buffer between the Garden Village and all existing settlements
- **Community Participation** - make the consultation process not just a “tick box exercise”

STAGE 2 CONCEPT MASTERPLAN

KEY

-  Existing settlements
-  Burrow Heights viewpoint
-  Water courses
-  Existing roads
-  Railway line
-  Village development parcels - Current plan period (2022-2031)
-  Residential parcels - Future plan period (commencing 2031)
-  Indicative village centre and areas for denser development
-  Green space, semi-natural and productive land required for the village
-  Key sustainable transport routes through the village
-  Residential development to be considered through the AAP
-  1 Green buffer to South Lancaster
-  2 Green buffer to Galgate

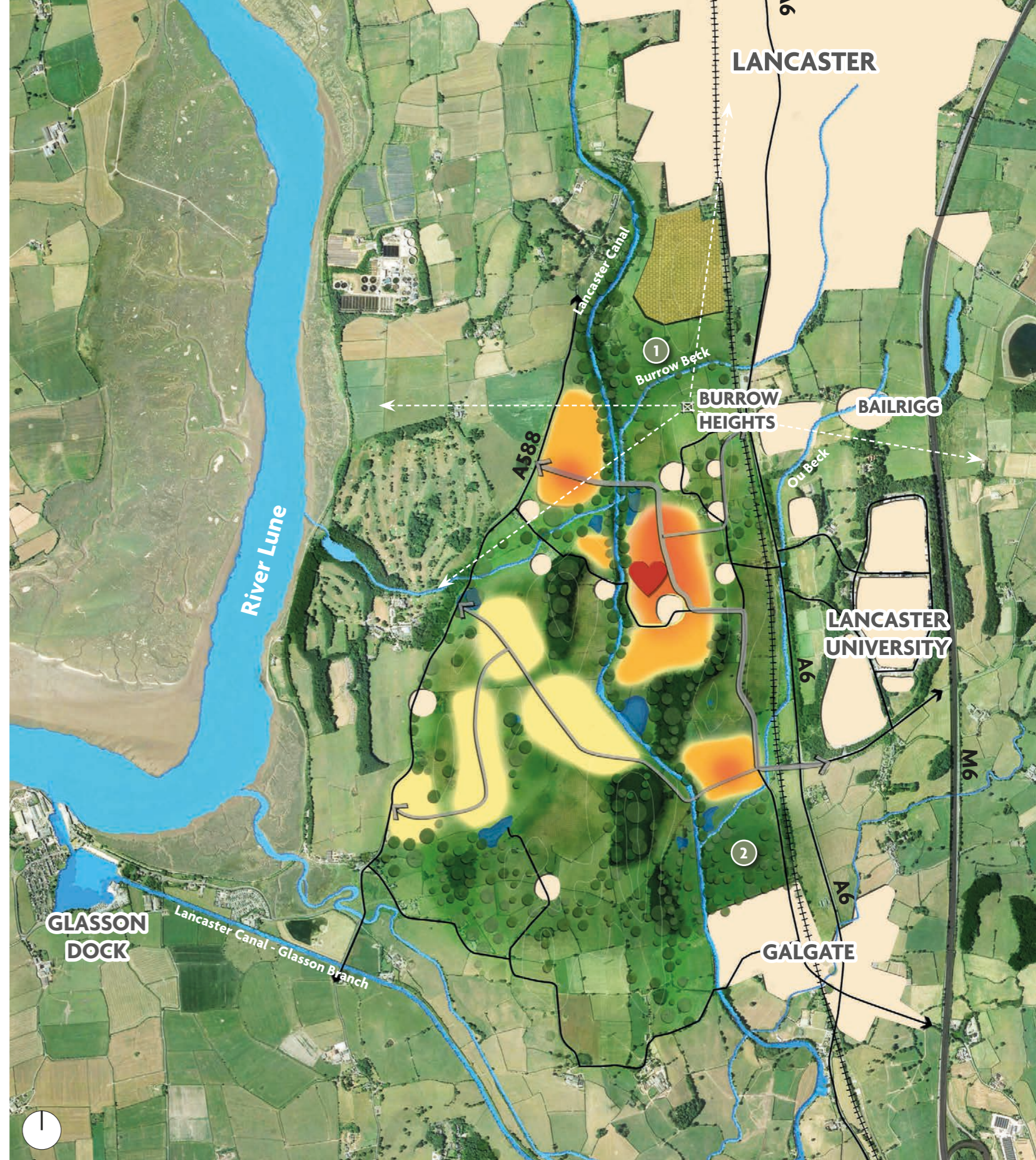
Notes

All concept development areas are subject to much further refinement and to planning.

It does not show all land uses required for the garden village e.g. schools.

It does not show all development ambitions to date advanced by third parties.

It does not show exact size and locations of proposed tree planting.



STAGE 2

CONSULTATION SUMMARY

The consultation has been focussed around the project website and the distribution of over 6,000 newsletters to the surrounding community. In addition meetings have been held with a range of local stakeholders, including community groups.

Total written responses

98

The responses have been as follows:

73 *residents*

17 *businesses, developer, community groups, campaign groups, statutory organisations, environment groups, councillors*

8 *further responses as a result of the meetings*

STAGE 2

CONSULTATION SUMMARY

SO FAR MEETINGS HELD WITH

- **Bailrigg Village Residents Association**
- **Scotforth Parish Council**
- **Burrow Heights Residents**
- **Lower Burrow Residents**
- **Tarnwater Lane Residents**
- **CLOUD**
- **Ellel Parish Council**
- **Aldcliffe with Stodday Parish Council**
- **Thurnham & Glasson Parish Council**
- **Scotforth West Ward**
- **Landscape assets workshop**

STAGE 2

CONSULTATION SUMMARY

SUPPORT FOR

- **Landscape and water-led approach to design to mitigate flooding**
- **Respect for the topography, drumlins, etc**
- **Clusters of houses forming small settlements within the landscape**
- **Parcels with own character will introduce variety (residential, communal garden or play spaces, commercial, etc.)**
- **Support for the heart of the garden village to be near to the canal, which would make it a distinctive settlement with scope for innovative water-led amenities (BVRA and Canals & River Trust)**
- **Green buffer zones between settlements inc varied uses such as food production**
- **Green corridors joining the woodlands and planting new woodlands**
- **Enhancing biodiversity**
- **Continuing community participation**

“Local residents want to stay engaged...it is essential that the local residents play a key role in shaping these proposals”

STAGE 2

CONSULTATION SUMMARY

CONCERNS

- **Who ensures that the original vision is maintained?**
- **Flooding**
- **Phasing - landscape infrastructure to be implemented in advance of the house building**
- **Location of some key roads and use of existing country lanes**
- **How construction will take place, especially in relation to construction traffic / HGVs**
- **Detailed mapping alterations and additions**
- **Eg Cinder Nurseries not identified as a settlement**
- **Héronswood House not identified as a settlement**
- **Oubeck does in fact continue through Sellerley Farm and enters the River Conder just after the Conder flows under the Canal at Galgate.**
- **Practicality of railway underpass re drainage (from Ellel Parish Councillor)**
- **Light pollution**
- **Impact on water supply and shortage – need for new reservoir?**
- **Development encroaching on cemetery in Cinder Lane**

STAGE 2

CONSULTATION SUMMARY

INDIVIDUAL REACTIONS FROM LOCAL COMMUNITY WITHIN SITE AREA INCLUDE

- **Impact on individual residential properties in Burrow Heights, Lower Burrow, Burrow Road, Tarnwater Lane re: value, loss of peace and quiet, countryside outlook etc**
- **What will happen to 2 acres of woodland on own land (planted 16 years ago)?**
- **Name of Garden village? Why Bailrigg?**

SUGGESTION ADDITIONAL FACILITIES FOR GARDEN VILLAGE INCLUDE

- **Disabled accessibility throughout**
- **A space for worship, perhaps co-located with another community facility**
- **Graveyard space / space for burial**
- **Skate Park, pump track, BMX facilities, etc**

STAGE 2

LANDSCAPE ASSETS WORKSHOP



GROUP 1



GROUP 2

COUNTY COUNCIL PROPOSED JUNCTION 33 LINK ROAD

Of the route options the County Council consulted upon in Autumn 2020, Central 1 and 2 found most favour in that order. The County Council has now decided that Central 1 is its preferred but elements of Central 2 could inform further detailed roads planning in the future. This road alignment decision has informed the emerging masterplan.

CENTRAL OPTIONS

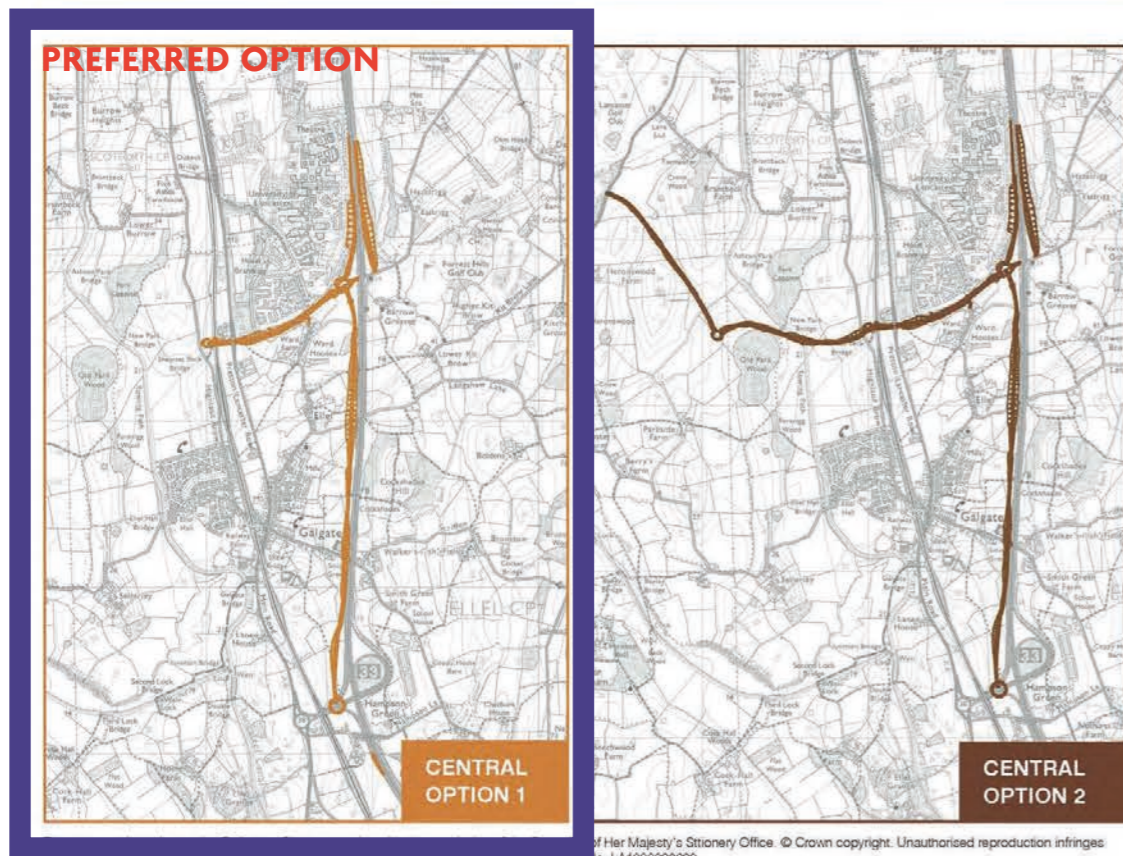


TABLE 3: CENTRAL OPTIONS Advantages

Creates a short direct route from Lancaster to M6J33 which avoids Galgate
 Provides a more desirable alternative route from the A6 than Eastern and Western route options owing to its direct nature

Beneficial Impact on the Galgate Air Quality Management Area. nitrogen dioxide (NO₂) concentrations at all other receptors, and for particulate matter (PM₁₀) and PM_{2.5} at all receptors, are modelled to be below the relevant Air Quality Objectives
 No Local Geodiversity Sites or geological SSSIs within or immediately adjacent

With the exception of the valley the River Conder has cut into the landscape towards the north east of this corridor, no features of significant geomorphological interest
 Routes would be on lower grade (Grade 3) agricultural land

Disadvantages

The link road junctions could become congested without considering higher capacity junction design
 Passes closer to the built up areas than Eastern or Western route options

Development may be necessary within floodplain depending on the design of the River Conder crossing

CENTRAL OPTIONS 1 Advantages

Noise benefits to 43 properties
 Large reduction in NO₂ concentrations (9.5 µg/m³) would occur
 The best option for reducing traffic from Galgate in Opening and Design Year

Disadvantages

Adverse noise impact to 2 properties

CENTRAL OPTIONS 2 Advantages

Provides direct link to the A588 offering accessibility advantages from locations
 Noise benefits to 13 properties
 Large reduction in NO₂ concentrations (11.2 µg/m³) would occur

Disadvantages

Traffic characteristics with A588 link reduce the effectiveness of taking traffic from the A6 over the Central 1 option
 Central 2 link would cross biodiverse marsh land wildlife habitat to the west
 Has to take into account of required electricity line clearance in construction and for operation
 Impact to two notable Ancient Woods (Park Coppice and Old Park Wood)

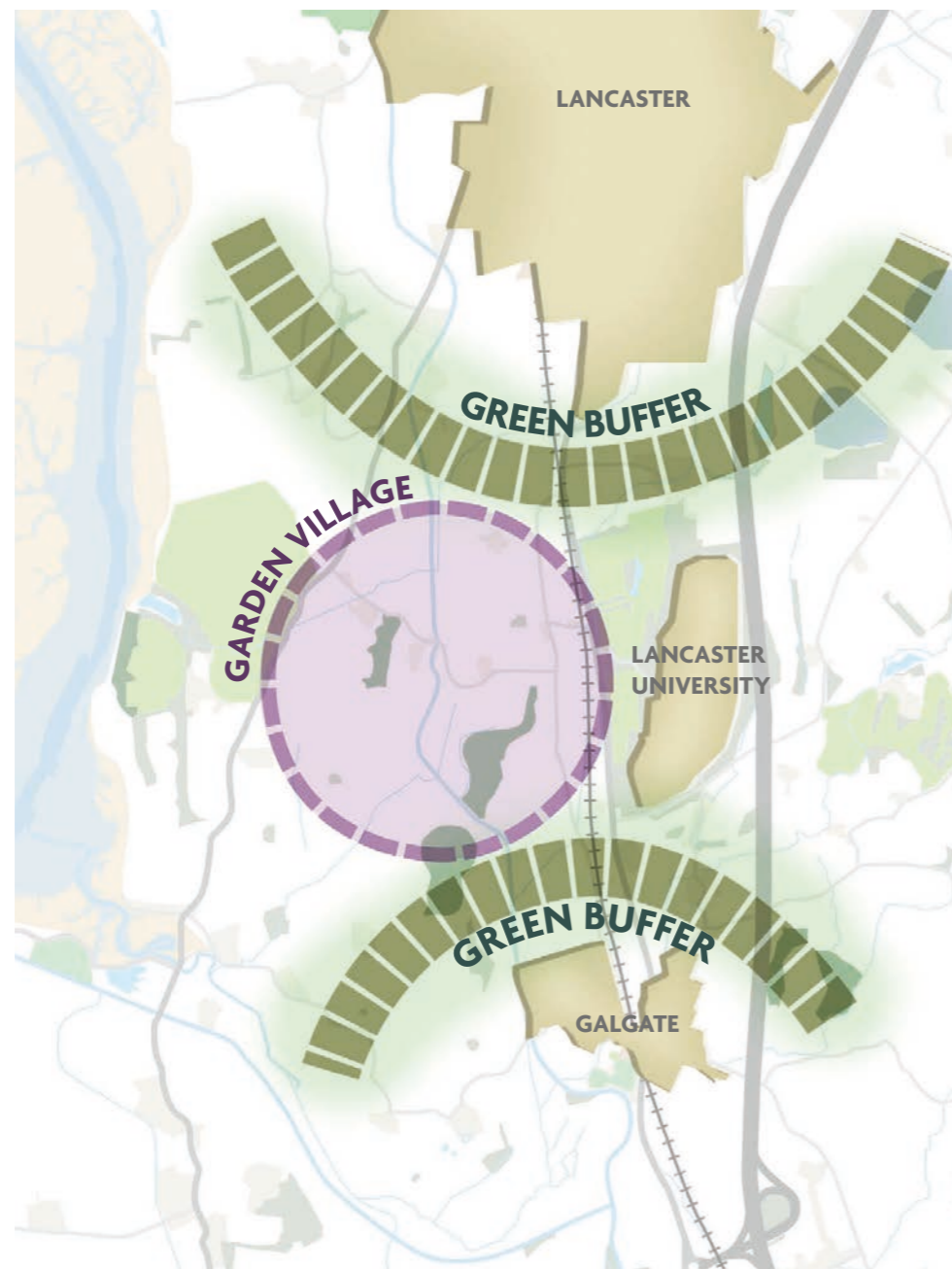
The Central Route Options would closely follow the western boundary of the M6 motorway between the motorway and the villages of Ellel and Galgate.

Central 1 - would join with Hazelrigg Lane on the Galgate/Lancaster University side of the motorway.

Central 2 - follows Central 1 route option but includes an extra 1,000m approx. length of new highway link to connect into the A588 at a location close to Ashton Hall.

DESIGN PRINCIPLES

1. Making the Garden Village a distinct place; physically and visually separate from both Lancaster and Galgate with large areas of landscape inbetween



2. Protecting the existing character of the landscape including the Lancaster Canal; the tops of the drumlins and the associated views; the ancient woodland areas and other key trees



DESIGN PRINCIPLES

3. Responding sensitively to the interface with other existing settlements within the 'Area of Search' to retain visual separation and landscape buffers



4. Connect existing woodland and creating a 'Green Halo' landscape and biodiversity network around the Garden Village



DESIGN PRINCIPLES

5. Restoring the nutrient-poor soil into fertile soil to support productive landscapes and growing areas in close proximity to the Garden Village



6. Sensitively position a cluster of new neighbourhoods to be in harmony with the existing landscape, supported by a sustainable movement network



DESIGN PRINCIPLES

7. Integrate a comprehensive drainage strategy across the Garden Village including areas for water attenuation and retention

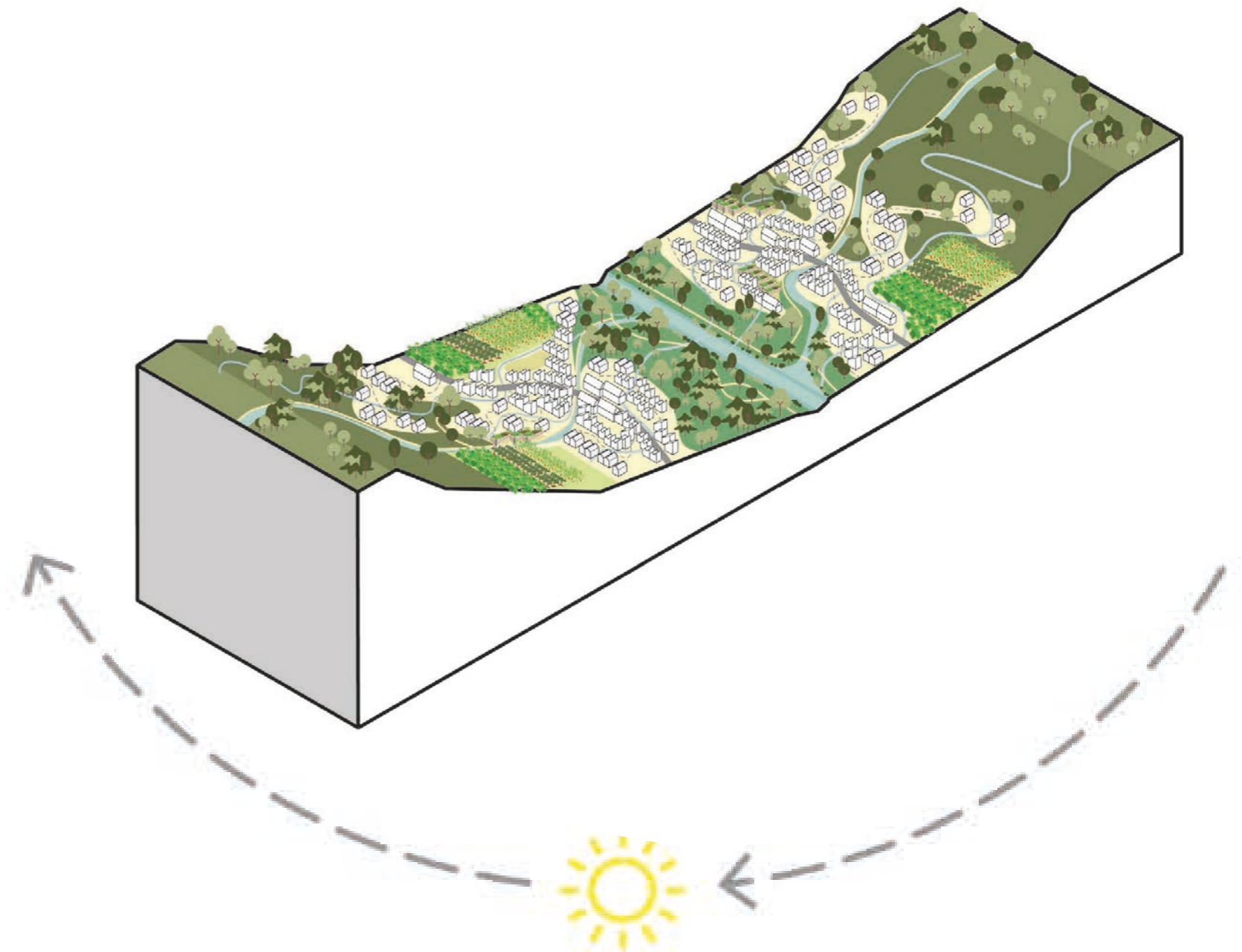


8. Create distinctive character areas with denser and more regular development parcels inside the 'Green Halo' and countryside hamlets outside


















DESIGN PRINCIPLES

- Connect into and enhance the existing landscape and natural features, by aligning development and infrastructure provision with the contours of the site.
- Prioritise pedestrian, cycle and public transport movement over cars.
- Optimise building clusters and homes across the site to ensure they are maximising use of passive design solutions.
- Design areas of settlement to be compact, with all local services within walking distance of housing.
- Develop green and blue infrastructure that enhances the natural environment and reduces local flood risk.
- Ensure strategic investment in road infrastructure is carefully integrated into masterplan proposals.



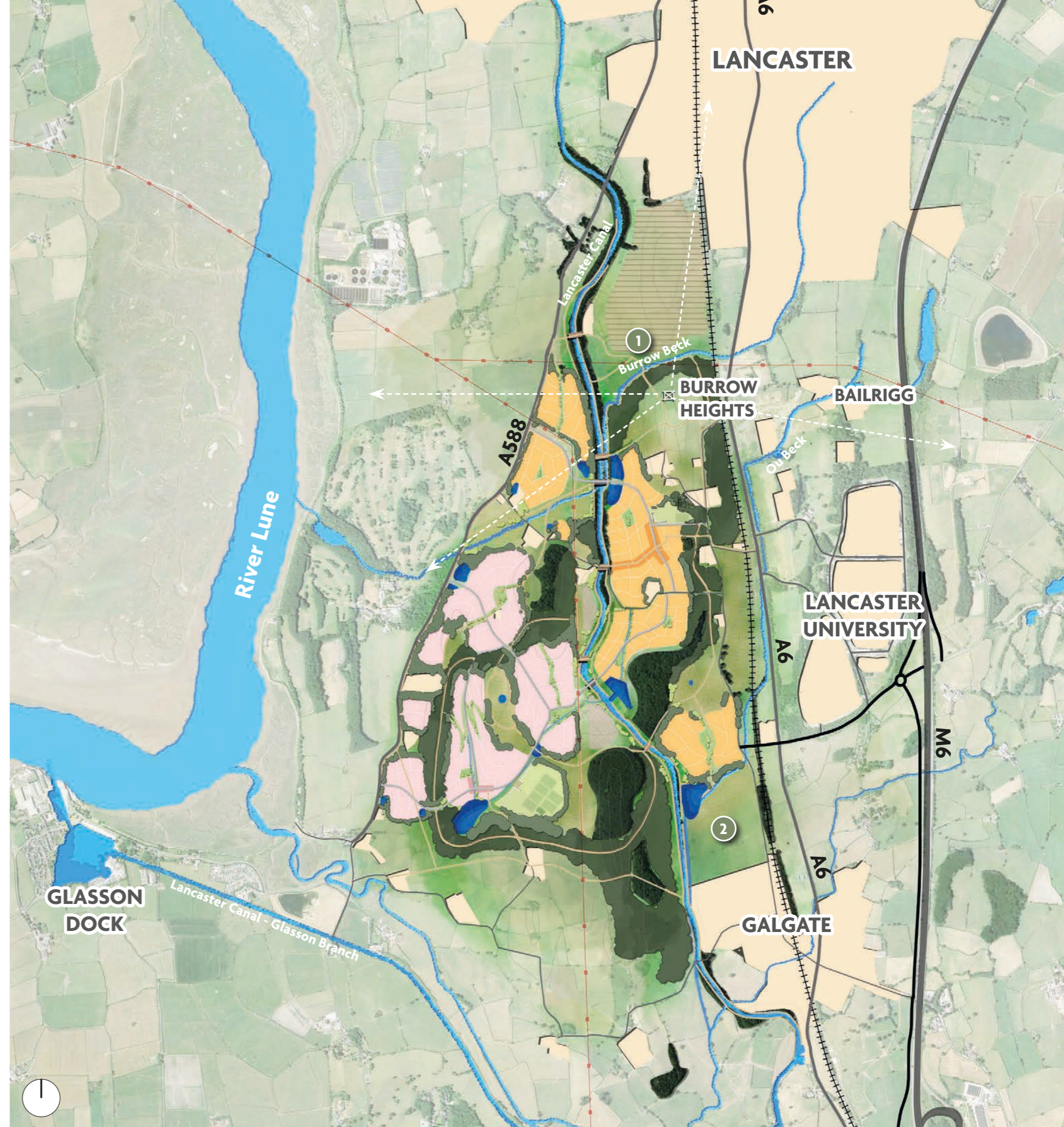
EMERGING MASTERPLAN

KEY

-  Existing settlements
-  Burrow Heights viewpoint
-  Water courses
-  Existing roads
-  Junction 33 Link Road Option 1
-  Railway line
-  Overhead power lines
-  Village development parcels - Current plan period (2022-2031)
-  Residential parcels - Future plan period (commencing 2031)
-  Indicative village centre and areas for denser development
-  Green space, semi-natural and productive land required for the village
-  Key sustainable transport routes through the village
-  Additional residential potential
-  1 Green buffer to South Lancaster
-  2 Green buffer to Galgate

Notes

All concept development areas are subject to much further refinement and to planning.
 It does not show all land uses required for the garden village.
 It does not show all development ambitions to date advanced by third parties.
 It does not show exact size and locations of proposed tree planting.



VILLAGE CENTRE

Education



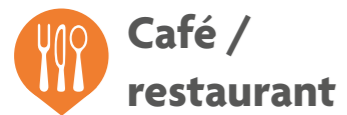
Open Space



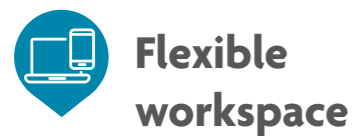
Community



Commercial



Employment















SUSTAINABILITY

VISION

- **Bailrigg Garden Village will be a place where people and nature coexist harmoniously. It will be an exemplar of sustainable village design, creating space for communities to thrive, nestled in the unique local landscape, whilst meeting local and national commitments for net zero carbon development.**
- **Following the garden village principles, clustered and compact developed areas will be surrounded by a productive and resilient green landscape, comprising pastureland, woodland, orchards and allotments, alongside a network of local waterways, including the valuable amenity of Lancaster Canal.**
- **The following principles have been used to set the overall sustainability aspirations for the development:**

Resilience	Resources
A restored thriving natural environment that is resilient to climate change and flooding	A series of zero carbon villages embedded in a local and national circular economy
Connectivity	Community
An accessible place which prioritises active travel and low carbon transport	A place where people can live, work, and visit with all the social infrastructure necessary for comfortable and meaningful lives.

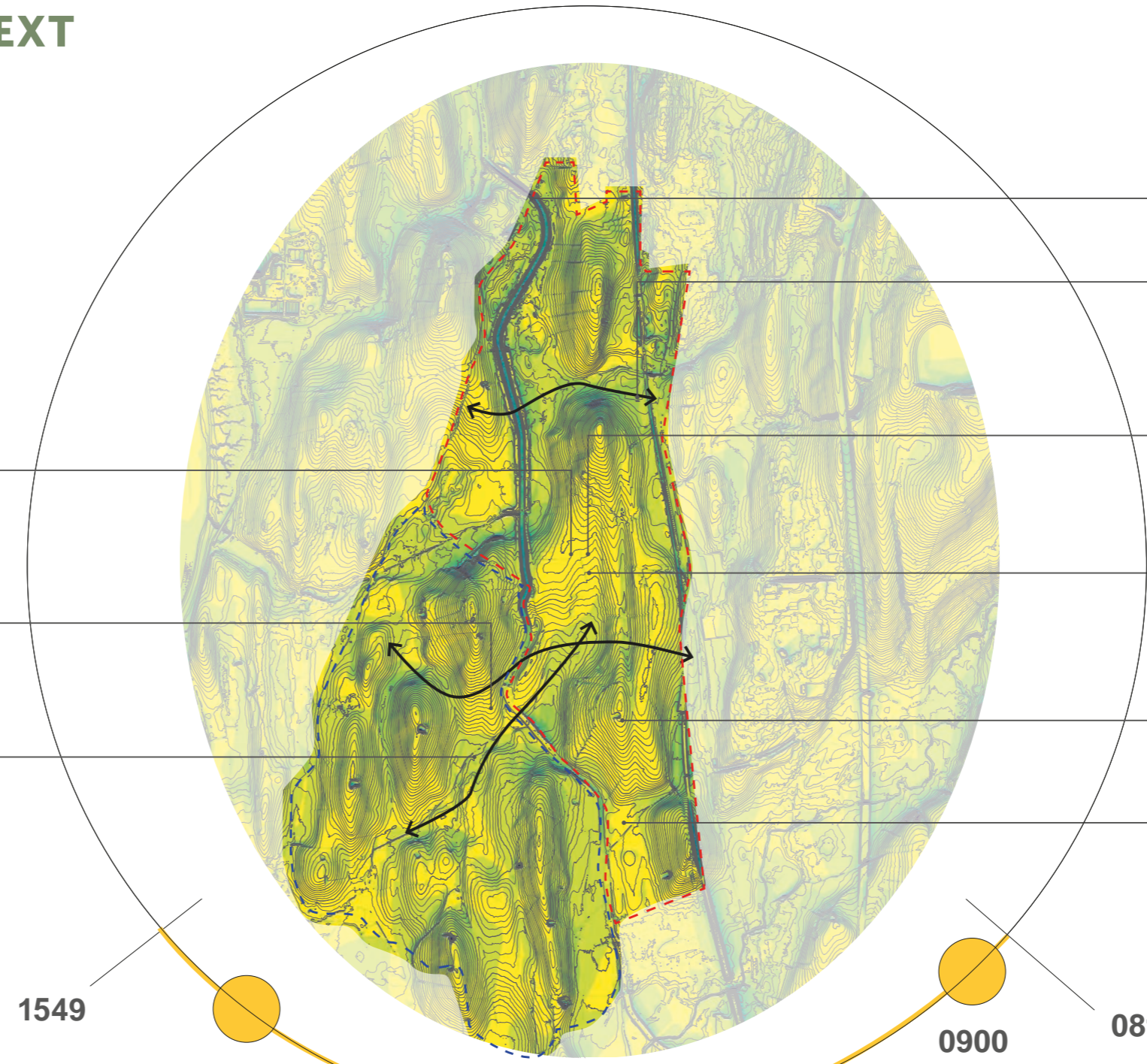
SUSTAINABILITY

RESPONSIVE TO SITE CONTEXT

Detailed microclimate analysis in dense areas to support comfortable communities resilient to future climate scenarios.

Streets and pathways follow contours to facilitate ease of cycling and walking.

Maintain ancient woodlands and existing green spaces to provide health and wellbeing benefits.

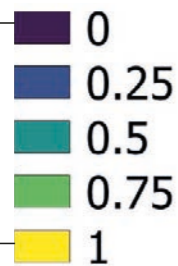


- Preserve existing blue infrastructure.
- Comfortable E-W cycling routes across low gradient and shaded areas of the site.
- High density neighbourhood designed to contours to minimise earthworks and maximise local land value.
- Clustered and compact development areas designed to optimise orientation and to passivhaus principles to maximise solar gains.
- Existing woodland areas on peaks to remain.
- Utilise areas with access to sunlight in the winter for communal play and homes to those who would benefit from all day heating.

KEY

no access to sunlight all day

access to sunlight all day without overshadowing



Sunlight fraction analysis to show availability of light as a result of overshadowing from contours over a single day on the 21st December.

1549

1500
4°
219°

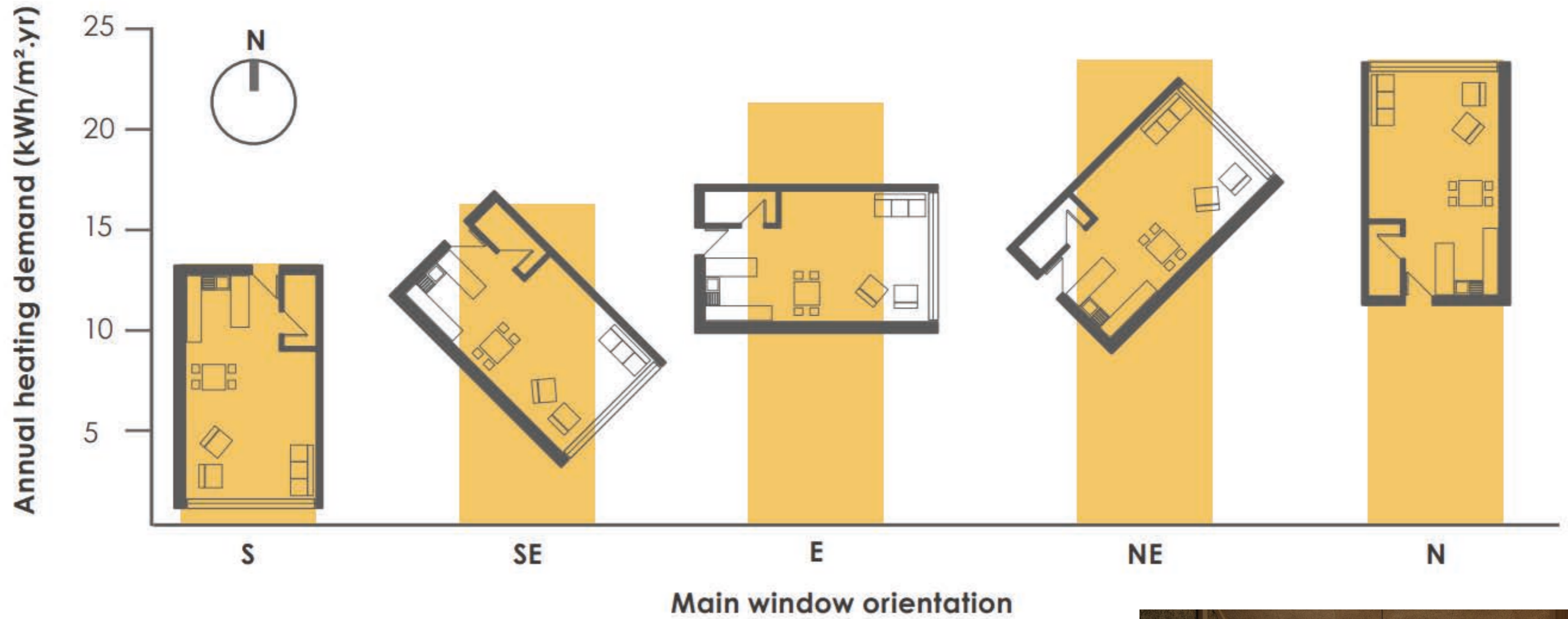
1200
13°
178°

0900
3°
138°

0812

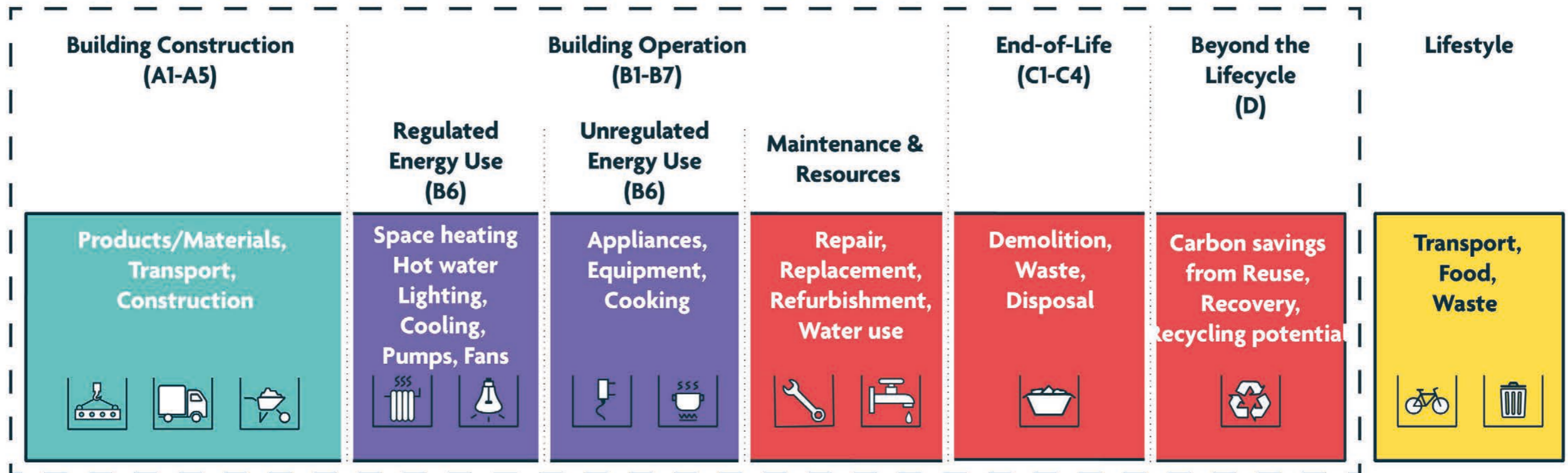
SUSTAINABILITY

PASSIVE DESIGN - ORIENTATION



SUSTAINABILITY

DEFINING ZERO-CARBON - UKGBC



Net Zero Carbon - Construction



Net Zero Carbon - Operational Energy



Net Zero Carbon - Whole Life

SUSTAINABILITY

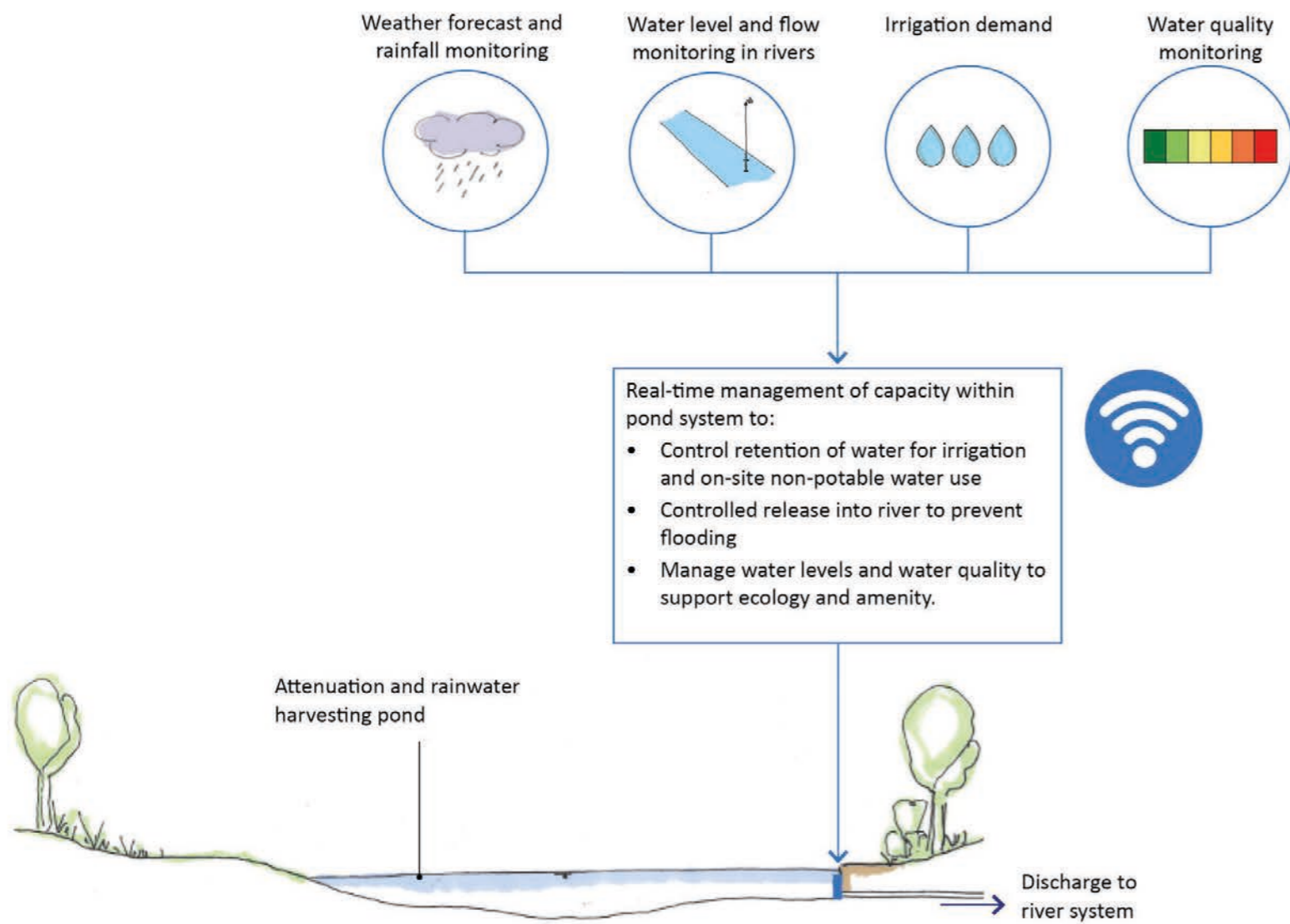
STRATEGIC DESIGN PRINCIPLES - RESILIENCE

The masterplan will...

- **Preserve and enhance the existing green and blue features running through the site, maximising their potential for varied ecological habitats, amenity, and flood resilience.**
- **Where possible surface water runoff from new surfaces will infiltrate to ground and any discharge to the local watercourse will be tightly controlled to not increase, and where possible reduce, local flood risk.**
- **Integrate new landscaped ponds within the landform to attenuate surface water runoff and will include a permanent body of water maximising ecological and amenity benefits.**
- **Take a sustainable approach to surface water drainage will be weaved into all levels of the development, including swales along main roads, bio-retention systems and permeable pavement systems within development plots to control runoff and diffuse pollution at source.**
- **Optimise density considering site location and accessibility. Plan for compact and efficient building massing, while providing dual aspect dwellings, wherever possible.**
- **Protect and enhance existing habitats. Create new biodiversity networks to support migration paths and ensure a resilient local ecology.**
- **Use seasonal planting and green space to provide useful summer shading and prevent overheating, creating a comfortable external microclimate.**

SUSTAINABILITY

WATER MANAGEMENT



SUSTAINABILITY

STRATEGIC DESIGN PRINCIPLES - RESOURCES – CARBON & ENERGY

- **Set a routemap for delivering zero carbon homes through passive design and investment in renewable energy sources.**
- **Build homes to the highest energy efficiency standards, to reduce running costs while contributing to energy resilience and climate change mitigation.**
- **Explore opportunities for local and decentralised energy networks, including the possibility of connecting to Lancaster University's heat network and using the Thirlmere Aquaduct to provide a water source heat pump based heat network.**
- **Plan for higher density and more compact development, to avoid sprawl, protect valued green spaces, and maximise land value, whilst promoting more sustainable lifestyle patterns.**



SUSTAINABILITY

ZERO-CARBON ROUTEMAP - LIFETIME CARBON (60 YEARS) FOR A SINGLE HOME



- | | | | | | | | |
|---|---|--|---|---|--|--|---|
| <ul style="list-style-type: none"> Gas boiler with hot water cylinder No MVHR No PV Unregulated energy based on BEIS survey Embodied - 1000 kgCO2/m2 | <ul style="list-style-type: none"> 75% reduction on Current Building Regulations, regulated energy. No change to unregulated energy Embodied - 1000 kgCO2/m2 | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of <35 kWh/m2.a 100% operational energy offset Fossil fuel free 105 gCO2/kWh (Grid Carbon Factor) Upfront Embodied - 500 kgCO2/m2 | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of <35 kWh/m2.a 100% operational energy offset Fossil fuel free 85 gCO2/kWh (Grid Carbon Factor) Upfront Embodied - 300 kgCO2/m2 | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of <70 kWh/m2.a No renewables Fossil fuel free 105 gCO2/kWh (Grid Carbon Factor) Embodied - 450 kgCO2/m2 | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of <35 kWh/m2.a No renewables Fossil fuel free 85 gCO2/kWh (Grid Carbon Factor) Embodied - 300 kgCO2/m2 | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of 43 8m2 PV Fossil fuel free 105 gCO2/kWh (Grid Carbon Factor) Upfront Embodied - 500 kgCO2/m2 Offsite carbon offset | <ul style="list-style-type: none"> Space heating of 15 kWh/m2 EUI of 35 8m2 PV Fossil fuel free 85 gCO2/kWh (Grid Carbon Factor) Upfront Embodied - 400 kgCO2/m2 Offsite carbon offset |
|---|---|--|---|---|--|--|---|

SUSTAINABILITY

STRATEGIC DESIGN PRINCIPLES - RESOURCES, CIRCULAR ECONOMY

- **Redistribute and consolidate some private space to provide shared spaces, such as community houses, gardens and co-working.**
- **Eliminate waste and retain materials at their highest value over lifecycle by adopting circular design principles. These include designing buildings for**
 - **Disassembly and reuse**
 - **Lifelong, flexible occupation**
 - **Low maintenance**
- **Optimise the masterplan in relation to topography and ensure streets follow contours to minimise earthworks movements and embodied impacts of development.**
- **Design for construction with sustainable and low embodied carbon materials, e.g. timber**
- **Incorporate best practice resource management and ensure waste used as a resource, wherever possible.**



SUSTAINABILITY

STRATEGIC DESIGN PRINCIPLES - CONNECTIVITY

- Encourage compact, walkable neighbourhoods which have good access to local amenities, and that deliver health and wellbeing benefits to local communities. Prioritise people over cars.
- Create excellent walking and cycling routes as part of a network of green infrastructure. Ensure streets and pathways follow landscape contours to facilitate ease of cycling and walking.
- Promote and provide infrastructure to enable a modal shift towards active and low carbon travel.
- Support electrification of transport by provided a network of high-speed charging points.
- Limit vehicle access and choose parking location carefully in order to maximise use of space for homes, as well as green and communal spaces.
- Minimise car parking and give priority to accessible parking and shared transport platforms. Include mobility hubs at the outskirts of each of the Bailrigg Garden Village centres, to provide access to EV car clubs, bike hire, click & collect lockers and logistics/delivery services.
- Provide a dedicated east-west and north-south routes for cycling and buses so that cycling, e-bikes and e-scooters are the quickest choice.
- The masterplan design should encourage use of mobility as a service and e-mobility services through embedded digital connectivity.



SUSTAINABILITY

STRATEGIC DESIGN PRINCIPLES - COMMUNITY

There is a close link between the environmental sustainability strategy and opportunities to create community value.

- **Explore alternative routes to procurement and delivery of homes, including community land trusts and self build models.**
- **Explore community models for stewardship of green infrastructure and local energy services.**
- **Provide access to local services, to the things we need daily.**
- **Create local business opportunities and in particular, encourage those that support the circular food economy.**
- **Provide a mix of unit sizes to enable a range of different businesses.**
- **Provide local work hubs to reduce the need for commuting.**
- **Plan for compact and efficient building massing, while providing dual aspect dwellings, to provide comfortable homes and mitigate impacts of overheating.**
- **Development should be mixed-use and tenure-blind, providing affordable homes for people at all stages of life.**
- **Embed opportunities for local training and employment as part of the construction of the development.**



LANDSCAPE PRINCIPLES

ASPIRATIONS FOR BAILRIGG GARDEN VILLAGE

The landscape will move from relative monoculture to permaculture, with a more mixed landscape that offers something to everyone.

Working with the existing soils

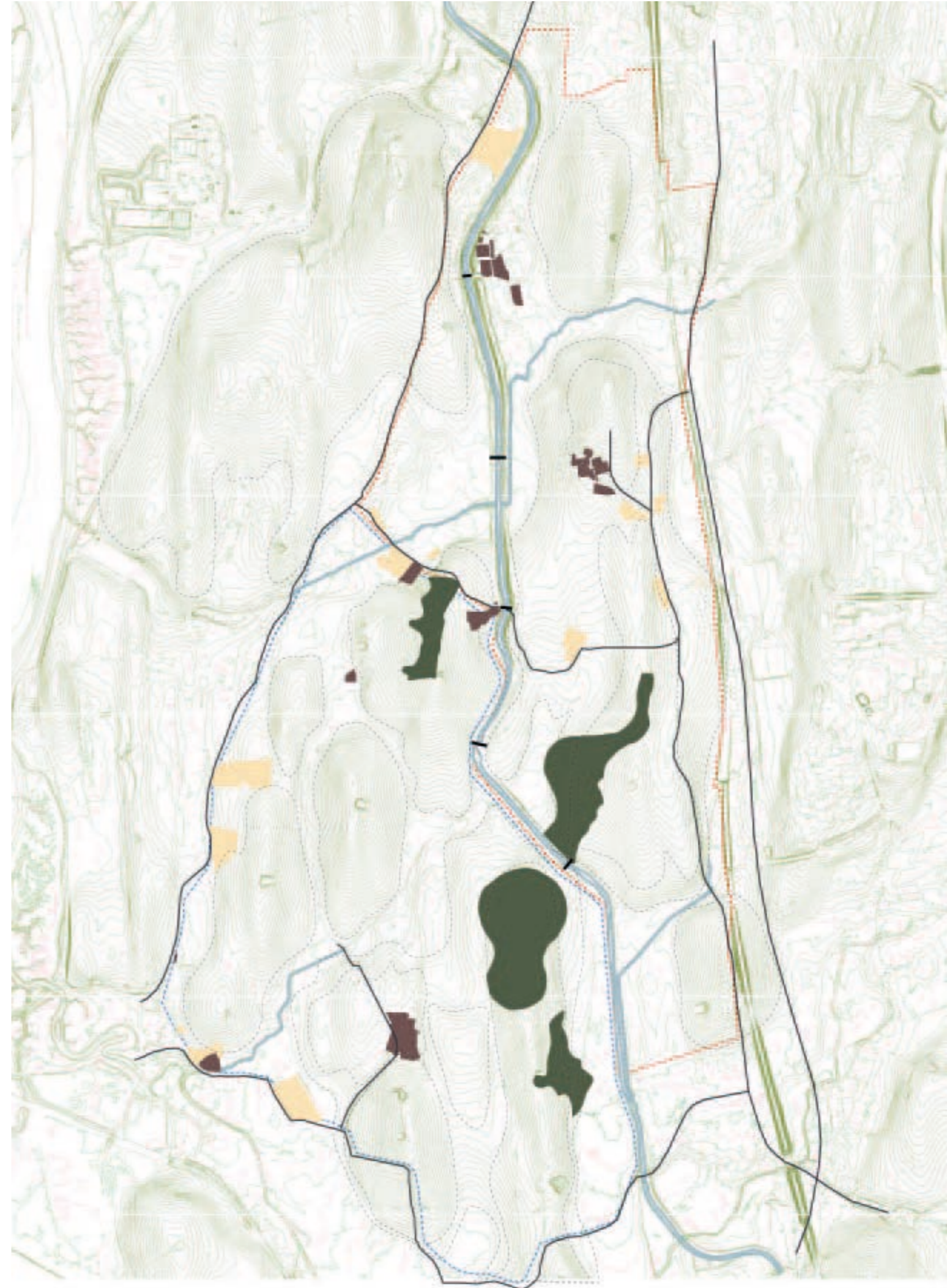
Soil is a very good carbon storage sink and should be left undisturbed where practicable.

It is a living soil with free flow of nutrients and having been manured over the years.

We aim to...

- increase the organic matter in the soil
- increase the respirational rates (organisms)
- avoid loss of carbon
- re-use farm and resident waste to use for fertiliser and soil improvement

- Existing ancient woodland
- Canal
- Existing settlements
- Existing farms



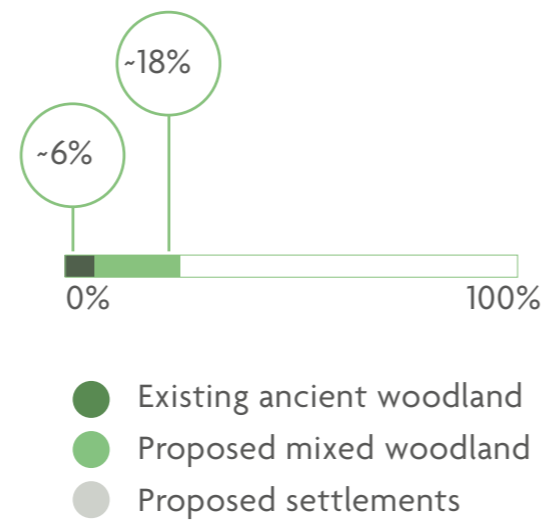
LANDSCAPE PRINCIPLES

WOODLANDS

We propose mixed woodlands creating a network, re-integrating the existing pockets of ancient woodland.

Woodlands could include...

- Educational stations (facts / statistics about what the forest does / captures / produces)
- Sculptural elements
- Amenity for the public



LANDSCAPE PRINCIPLES

OPEN ACCESS GRAZING LAND

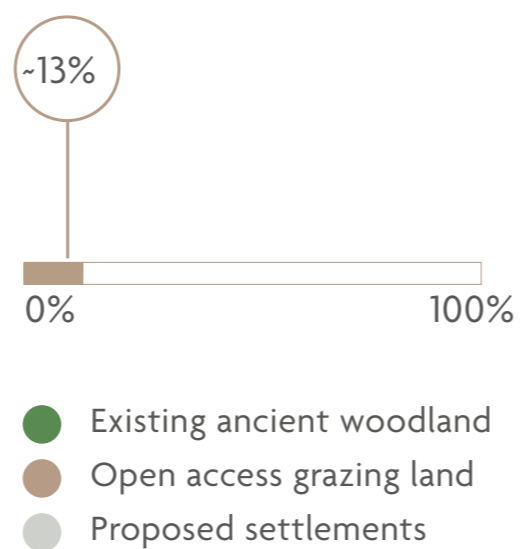
We propose open access grazing grassland with livestock and access to public for amenity.

Productivity

In organic systems the stocking rate will be between approx 0.5-1.8 L.S.U. (livestock units)

Enterprise could equate to:

- Dairying of 100 cows produces between 8600 to 10,000 litres of milk/ha annually.
- Employment 7 people.
- This land is also suitable for beef and sheep grazing.



LANDSCAPE PRINCIPLES

PRODUCTIVE LANDSCAPE

We propose creating a network of small scale horticultural enterprises (max. 2.5- 3ha) on the best land (sunny aspect).

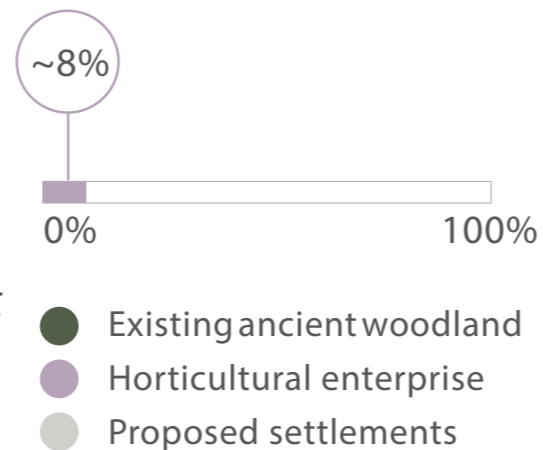
This will include...

- a mix of protected structures/intensive bed systems and open field production.
- integrating seasonal gardens/allotments into the edges of the settlements.

We propose the productive land is located close to settlements. This ensures the 'middleman' is cut out and people have direct access to food.

Productivity

- We propose both small scale and field scale production.
- 2 hectares of intensive horticulture will produce enough food for 100 individuals/households. This will provide employment for 3 people.



LANDSCAPE PRINCIPLES

PRODUCTIVE LANDSCAPE (CONT.)

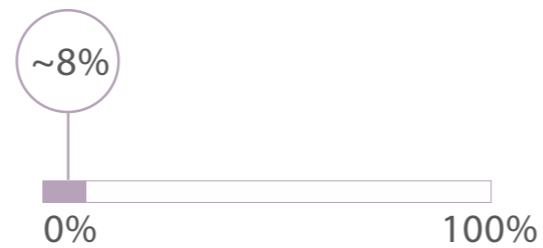
The purple areas on the diagram could be used for:

Example 1

- Horticultural enterprise could produce mixed seasonal vegetables for 1,500 households.
- Would need approx. 10% of area to be under protective cropping.
- This will provide employment for 20 people.

Example 2

- More extensive field scale production eg. crop yields such as:
- Savoy cabbage 2,8000/ha
- Summer pointed cabbage 25t/ha



- Existing ancient woodland
- Horticultural enterprise
- Proposed settlements



LANDSCAPE PRINCIPLES

PRODUCTIVE WOODLANDS

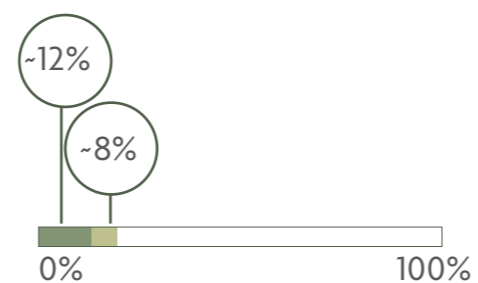
We propose a productive landscape of:

Agroforestry

- Trees planted in rows, min. 14m between rows and underplanted.
- Orientated ideally north to south. Inter row pasture, cropping.
- Bio mass. Conservation grazing.
- Could incl poultry: 1,000 birds/ha
- 280 eggs per bird/annum.

Orchard

- Apple orchards with tree spacing 6m/7.5m in between rows
- First crop 4-5 years.
- Yield organic average: 8-10t /ha.
- Total yield 344t/annum. eg. enterprise. 229,000 bottle of apple juice. vinegars/ ciders.
- Bee hives and honey.



- Existing ancient woodland
- Orchards
- Agroforestry
- Proposed settlements



LANDSCAPE PRINCIPLES

CANAL

We propose a canal that could provide...

- Special moments along canal edge e.g. Bike fixing cafe / pub / small marina / floating market
- Localised pick up points for water taxi
- Upgraded surfaces suitable for walking but in keeping with rural character; some parts could be shared between cyclist and pedestrians
- A retained tranquil and rural character

- Special canal moments
- Proposed settlements



LANDSCAPE PRINCIPLES

ENERGY & WASTE

We propose a sustainable garden village...

- With the potential for windfarm to power new settlements
- That utilise greywater to water seasonal gardens / allotments and / or productive landscape
- That utilise farming by products / waste to fertilise soil /produce energy

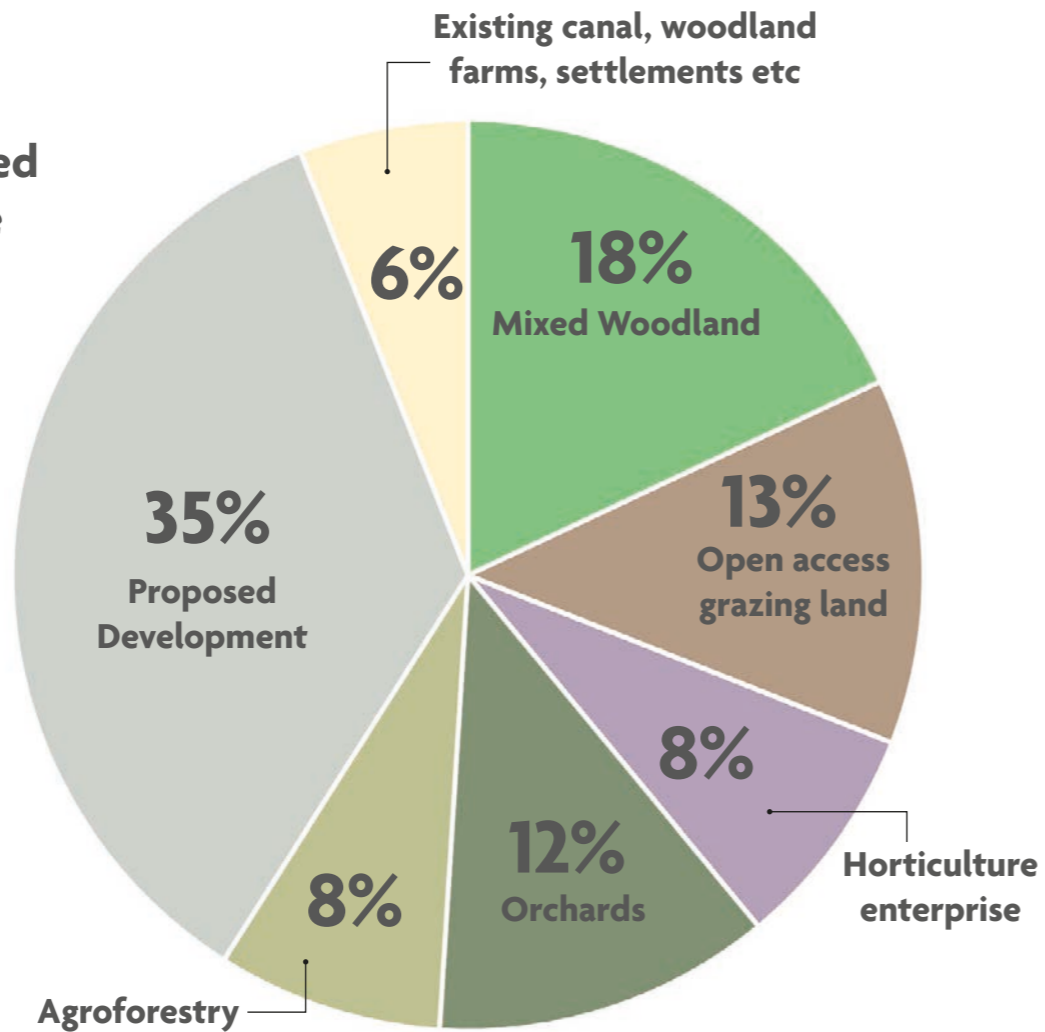


LANDSCAPE PRINCIPLES

MOSAIC OF LANDSCAPES

Approx. **59%** of the site is proposed green infrastructure

Approx. **70%** of proposed green infrastructure is productive



- Existing ancient woodland
- Canal
- Existing settlements
- Existing farms
- Proposed mixed woodland
- Proposed settlements
- Open access grazing land
- Horticultural enterprise
- Orchards
- Agroforestry





SUMMARY OF UPDATES

LANDSCAPE

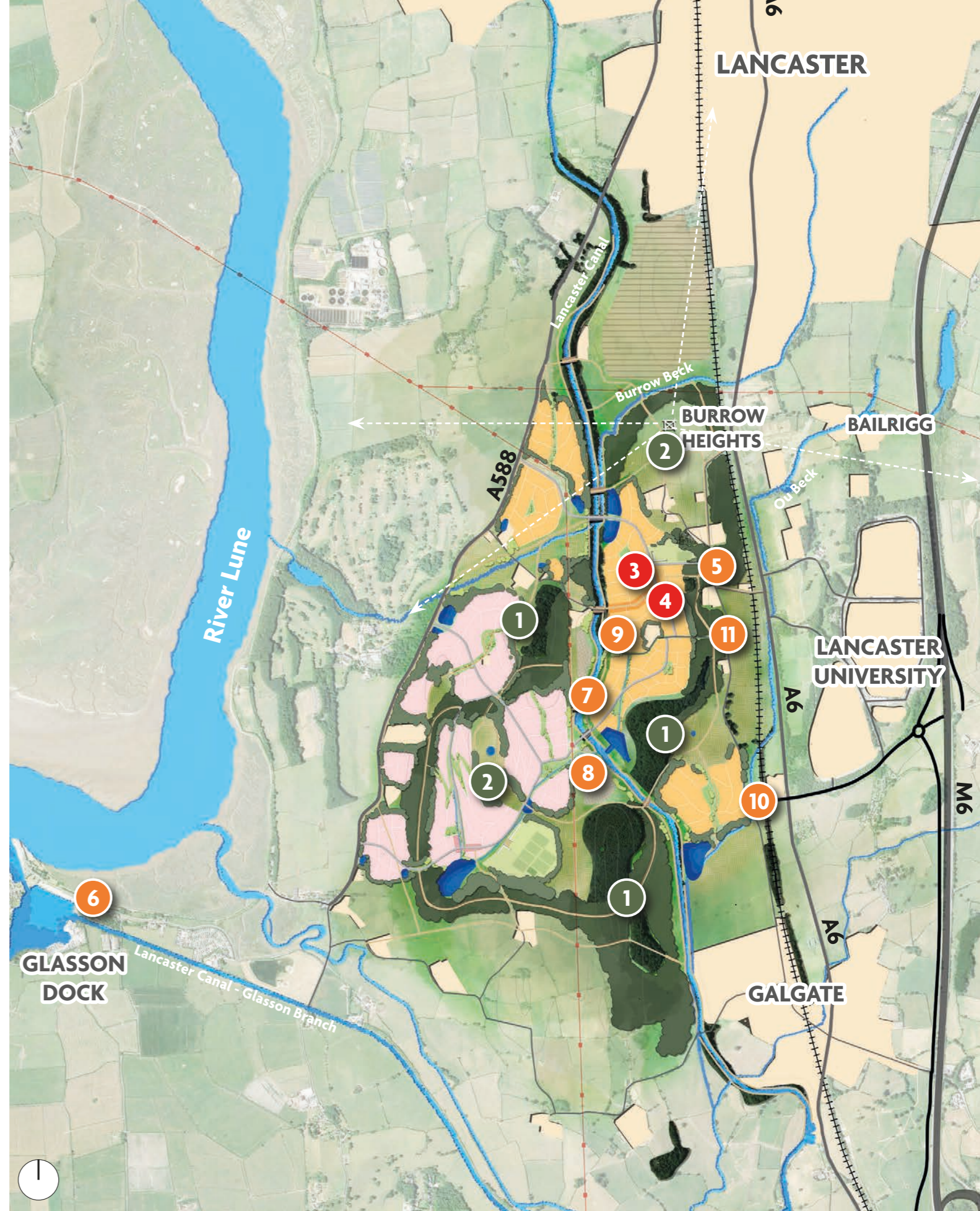
- 1 Retain and connect existing trees and areas of woodland
- 2 Protect important views and landscape character and incorporate existing levels in the design principles

VILLAGE CENTRE

- 3 Improve existing offer of health, care and education facilities within the area
- 4 Provide viable, vibrant and community-focused mixed-use centre within the Garden Village

ACCESS AND MOVEMENT

- 5 Open up access to the countryside and propose a network of safe and attractive cycle and pedestrian routes
- 6 Improve cycling and walking connections to Glasson Dock and University
- 7 Map location of existing canal bridges and integrate them within the cycle and walking network
- 8 Remove the route south of the canal to connect the clusters via the new route from the north over a new canal bridge next to the marina
- 9 Sensitive design around Lower Burrow
- 10 Bus connections
- 11 The move south of the east west road to the south Burrow Heights Lane



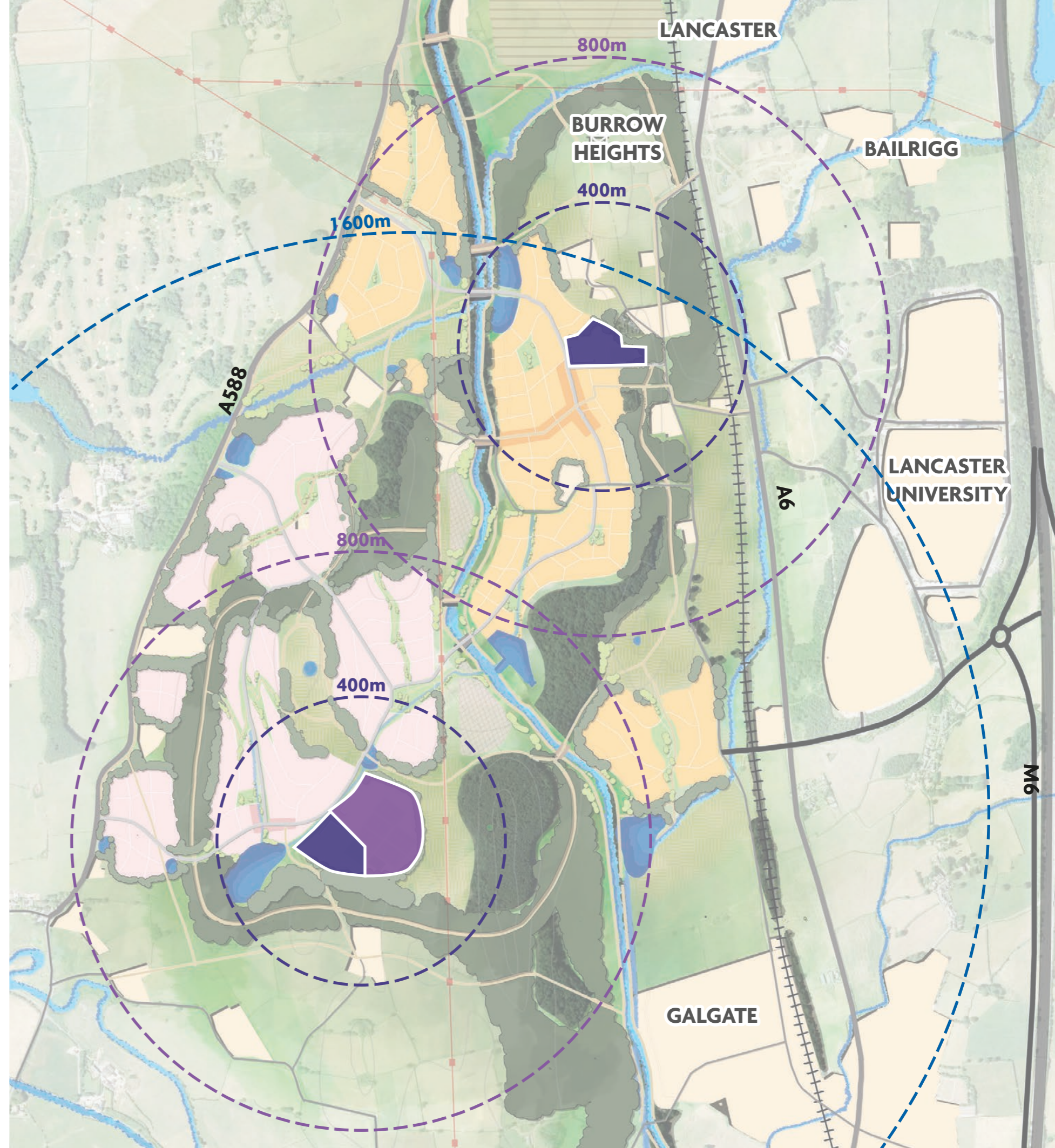
EDUCATION PROVISION

- 2 x 2 form entry primary schools (within 5-10 mins walk from new homes)
- 1 x 4 form entry secondary school (within 10-20 mins walk from new homes)

All proposed schools will be located along bus routes and connected to safe pedestrian and cycle routes within the garden village.

KEY

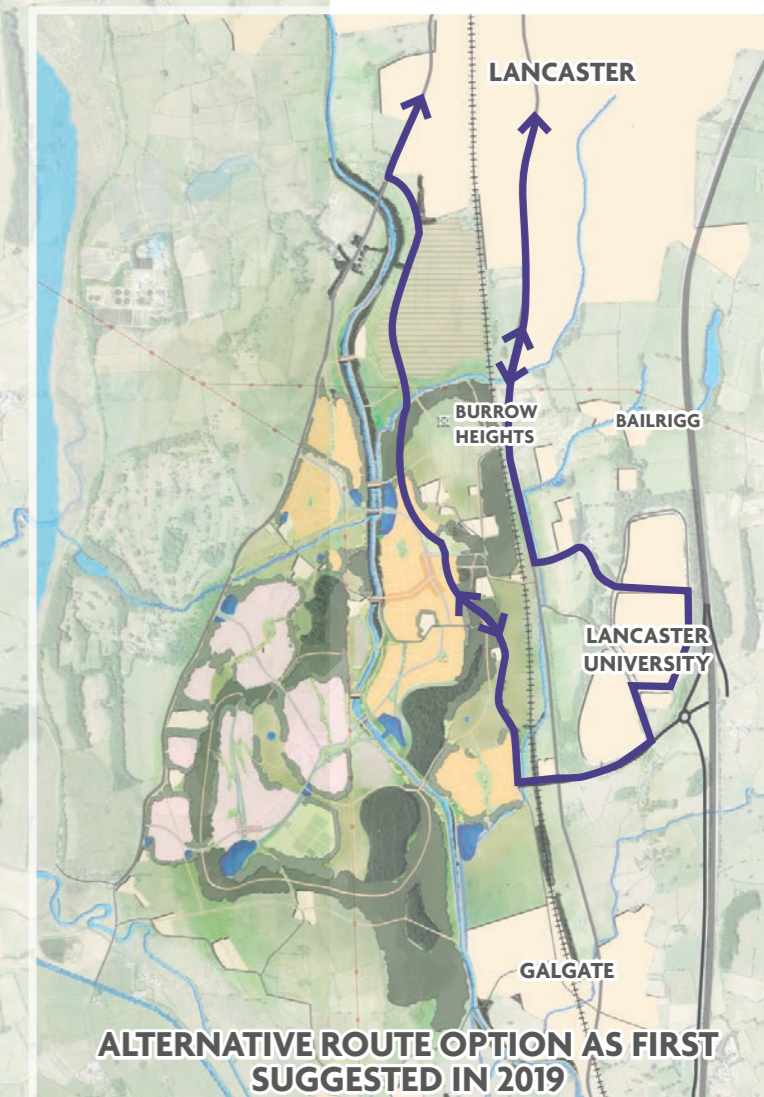
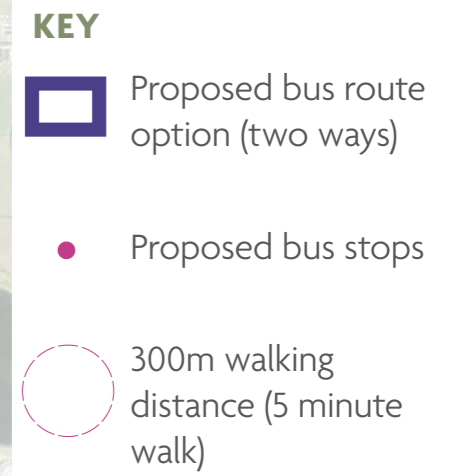
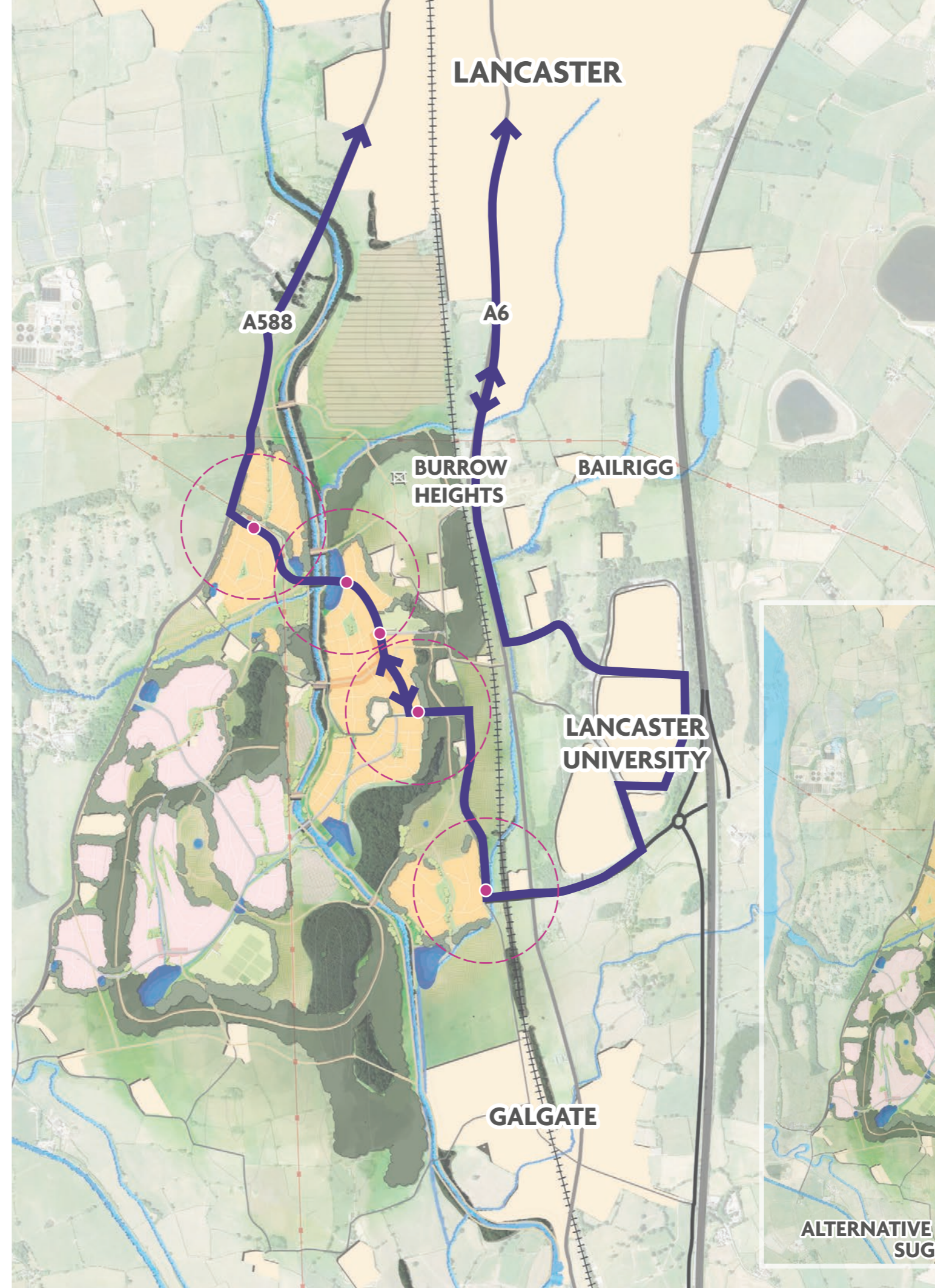
- PRIMARY SCHOOL
- SECONDARY SCHOOL
- 400m ACCESS RADII
- 800m ACCESS RADII
- 1600m ACCESS RADII



SUSTAINABLE MOVEMENTS

TRAVEL BY BUS

- A core sustainable movement route to advantage bus, cycle and pedestrian movements over car traffic.
- Routing through the garden village will be an extension to the existing bus network and serve the new garden village.
- Aim to provide bus stops within 300m of every home.
- Bus stops will be Equality Act 2010 compliant and fully accessible to all with raised kerbs and bus stop clearways.
- Links between cycling infrastructure and bus infrastructure to enable cyclists to easily become bus users and vice versa.
- Options for the core route alignment through the garden village are currently being explored.








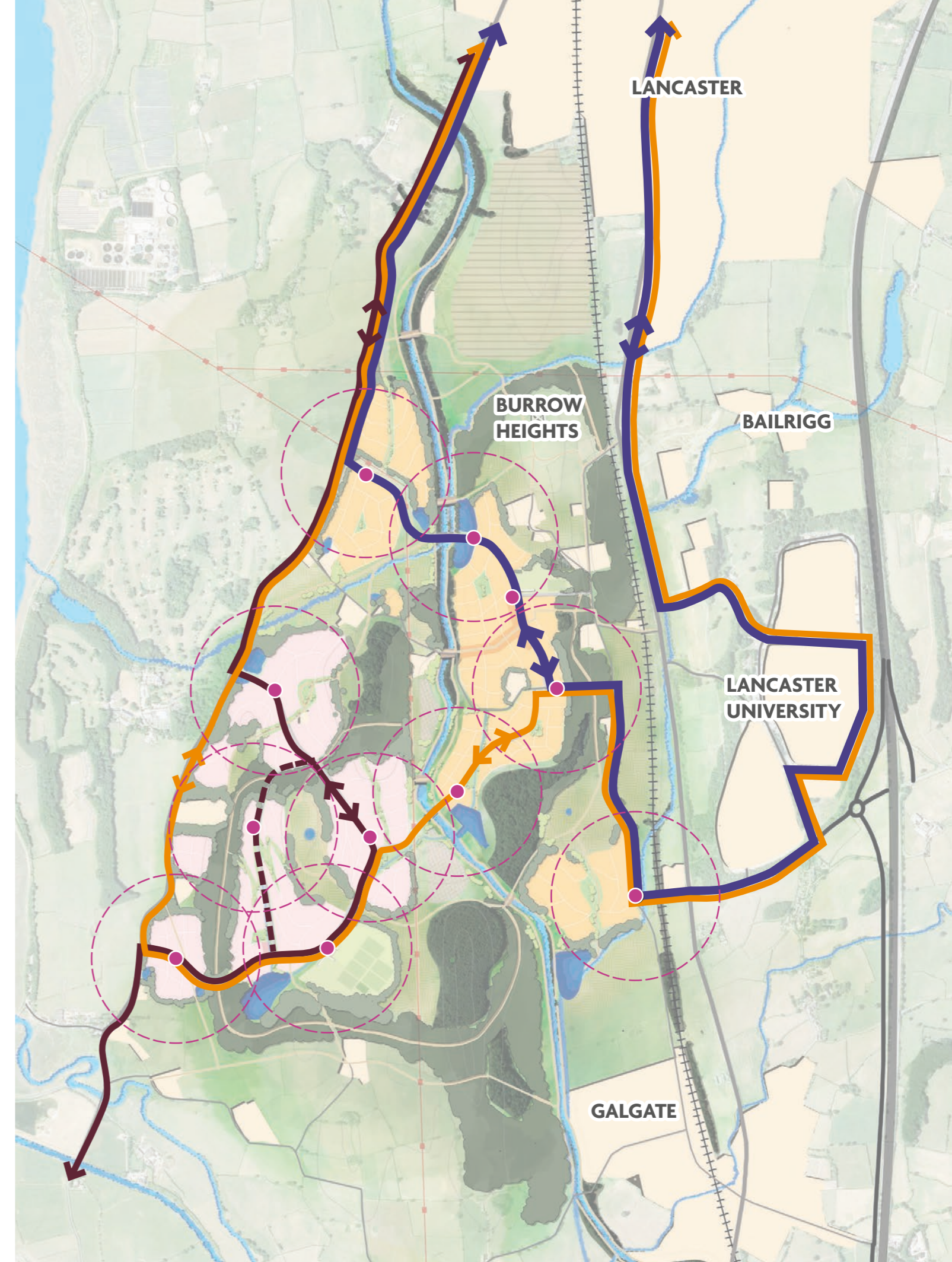
SUSTAINABLE MOVEMENTS

TRAVEL BY BUS (CONT.)

- Additional bus routes to compliment the proposed bus route
- Providing services to Lancaster City, the University and surrounding villages.
- Bus stops located in front of proposed primary and secondary schools to encourage children to travel sustainably to school
- Various models and mechanisms are being explored to understand the feasibility and funding of the bus routes in perpetuity. (e.g. Community Trusts)

KEY

-  Proposed bus route option for the current plan period (two ways)
-  Potential extension or additional route for the future plan period (two ways)
-  Potential rerouting of existing services (two ways)
-  Proposed bus stops
-  300m walking distance (5 minute walk)



ACCESS & MOVEMENT

WALKING AND CYCLING ROUTES









Network of strategic and leisure pedestrian and cycle routes connecting the garden village to the University, Glasson Dock, existing canal, lanes, PRowS, cycle routes, bridges, drumlins and green halo.

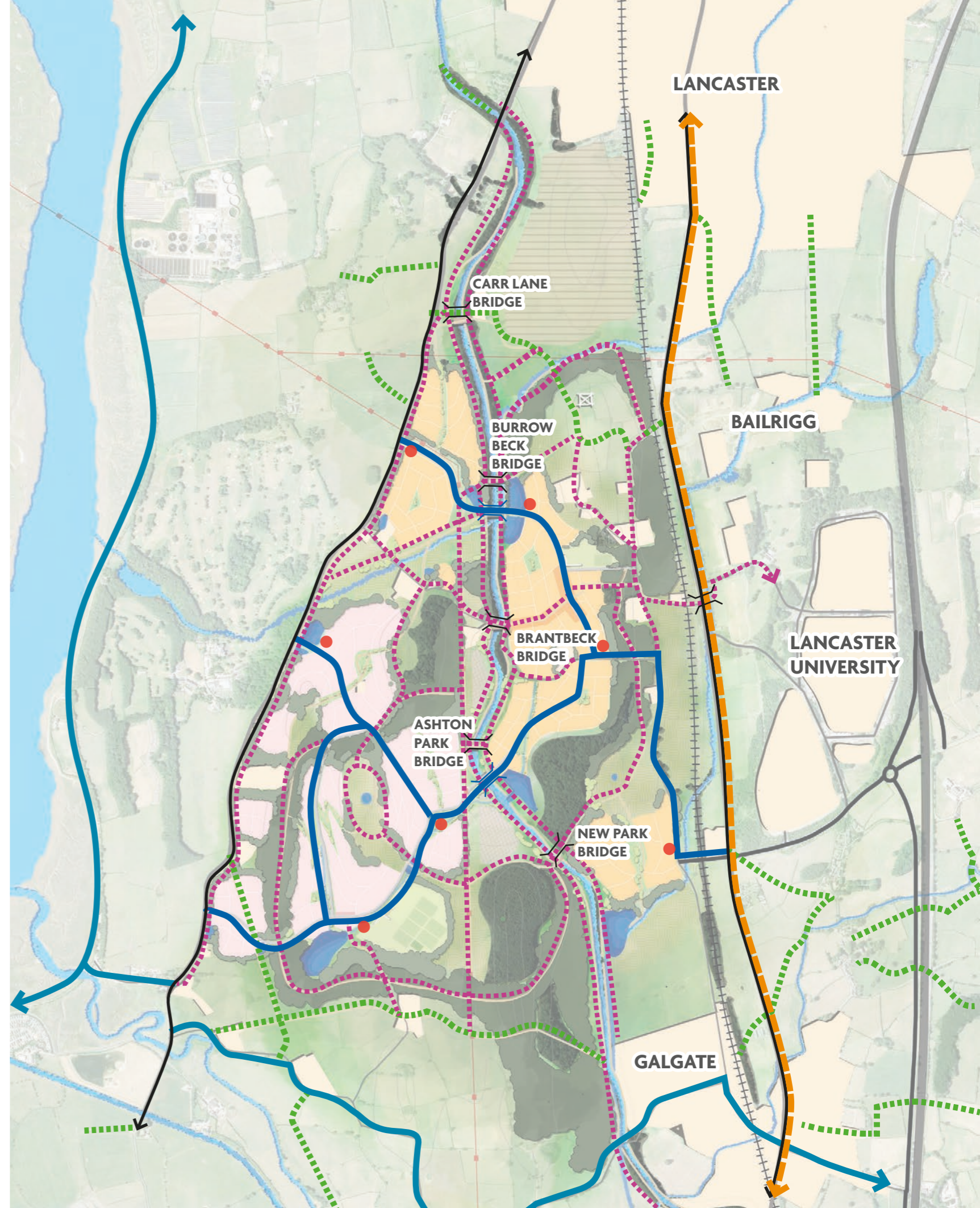
Quiete routes on existing roads for cycling and slow movements only.

Dedicated cycle hub to park / hire bikes.



KEY

-  Existing strategic cycle routes
-  Existing PRowS
-  Proposed super cycleway
-  Proposed strategic pedestrian and cycle routes
-  Proposed pedestrian and cycle 'quiet' leisure routes.
-  Existing bridges
-  Proposed bridges for sustainable modes
-  E-bike cycle hire hubs



INDICATIVE DENSITIES

A series of density studies have been undertaken across towns and villages around Lancashire, including Kendal, Kirkby Lonsdale, Burton-in-Kendal and Sedberg.

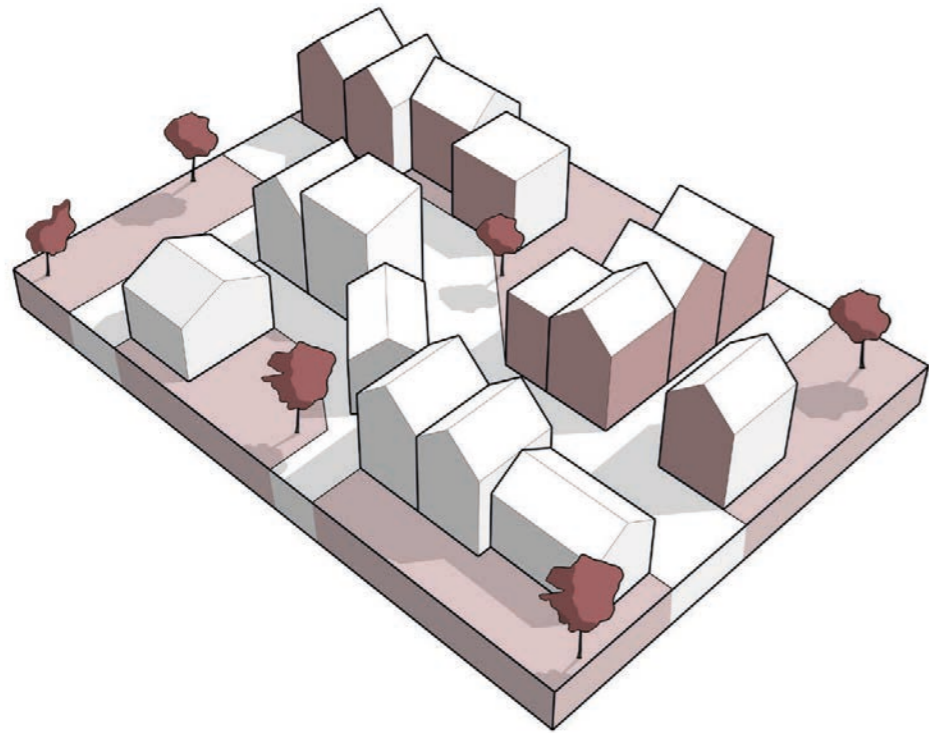
Particularly, this presentation looks at the study of Kendal to envision the densities for Barilrigg Garden Village.

Kendal

1. Town centre core
2. Riverside houses
3. Town edge
4. Housing on the drumlins



INDICATIVE DENSITIES

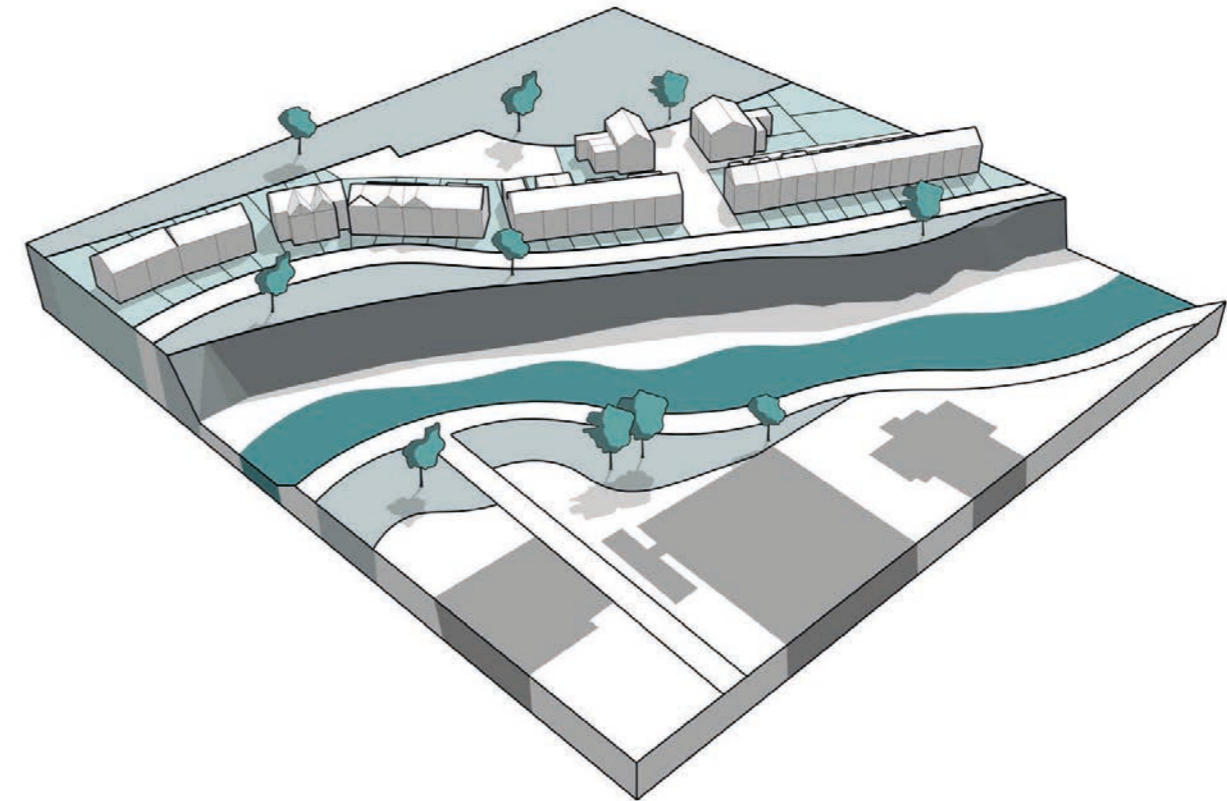


Kendal Town Centre Core

80 - 120dph

2 to 4 storeys in height

Terrace housing, flat block and residential dwellings above commercial are gathered in a dense urban layout in the town centre.



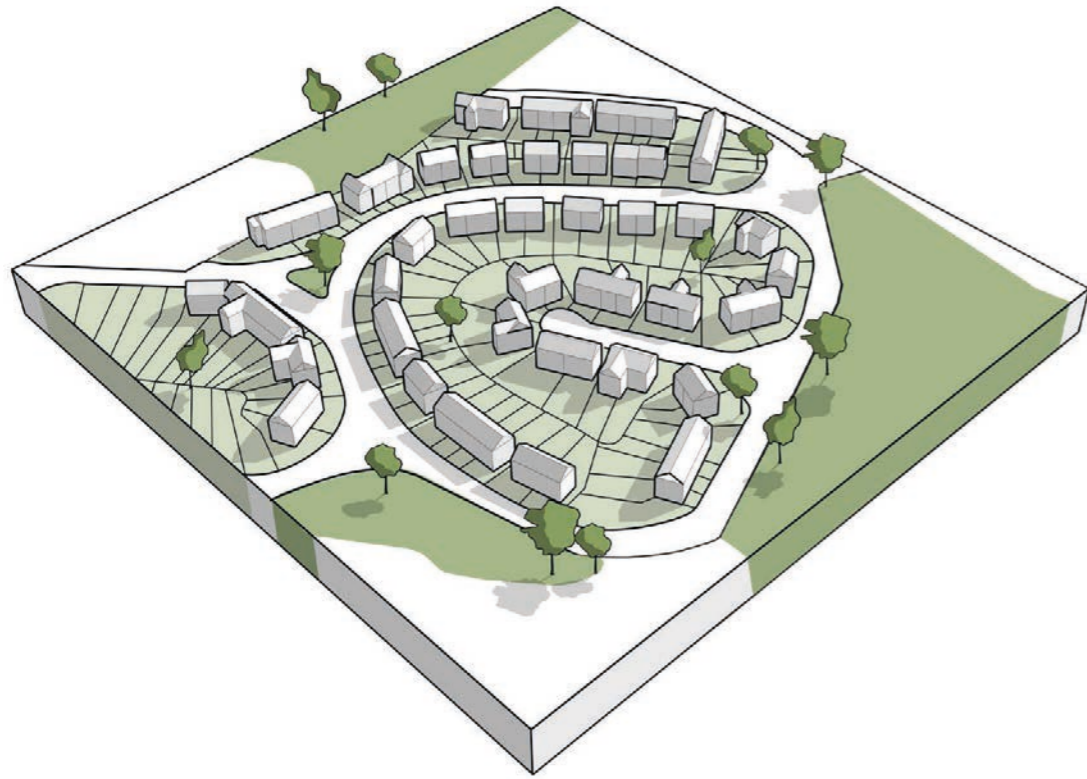
Kendal Riverside

60 - 65 dph

2 to 3 storeys in height

Terrace and semi-detached housing are situated along the river's edge, with parking to the rear of dwellings.

INDICATIVE DENSITIES

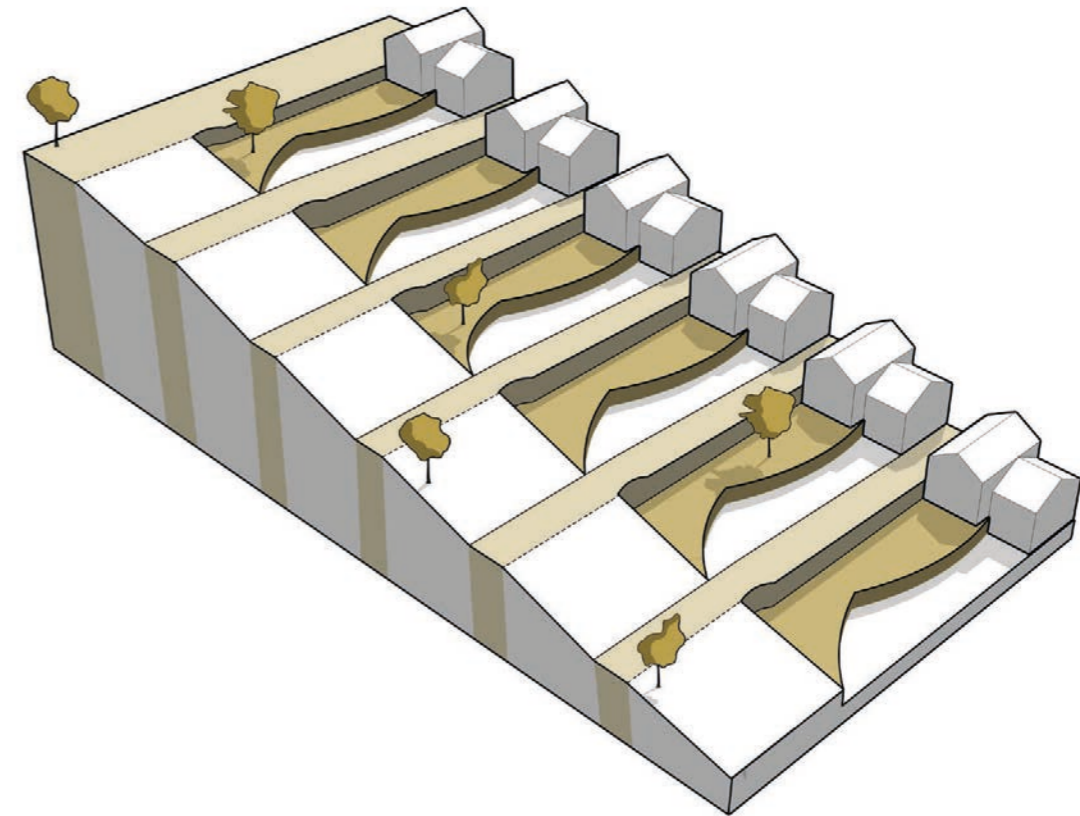


Kendal Town Edge

30 - 35 dph

2 to 3 storeys in height

Housing towards the edge of the town, consists of more suburban detached and semi-detached typologies. With parking located at the front and sizable garden spaces to both the front and rear of the property.



Housing on the Drumlins (Undercliff Road)

20 - 25 dph

1 to 2 storeys in height

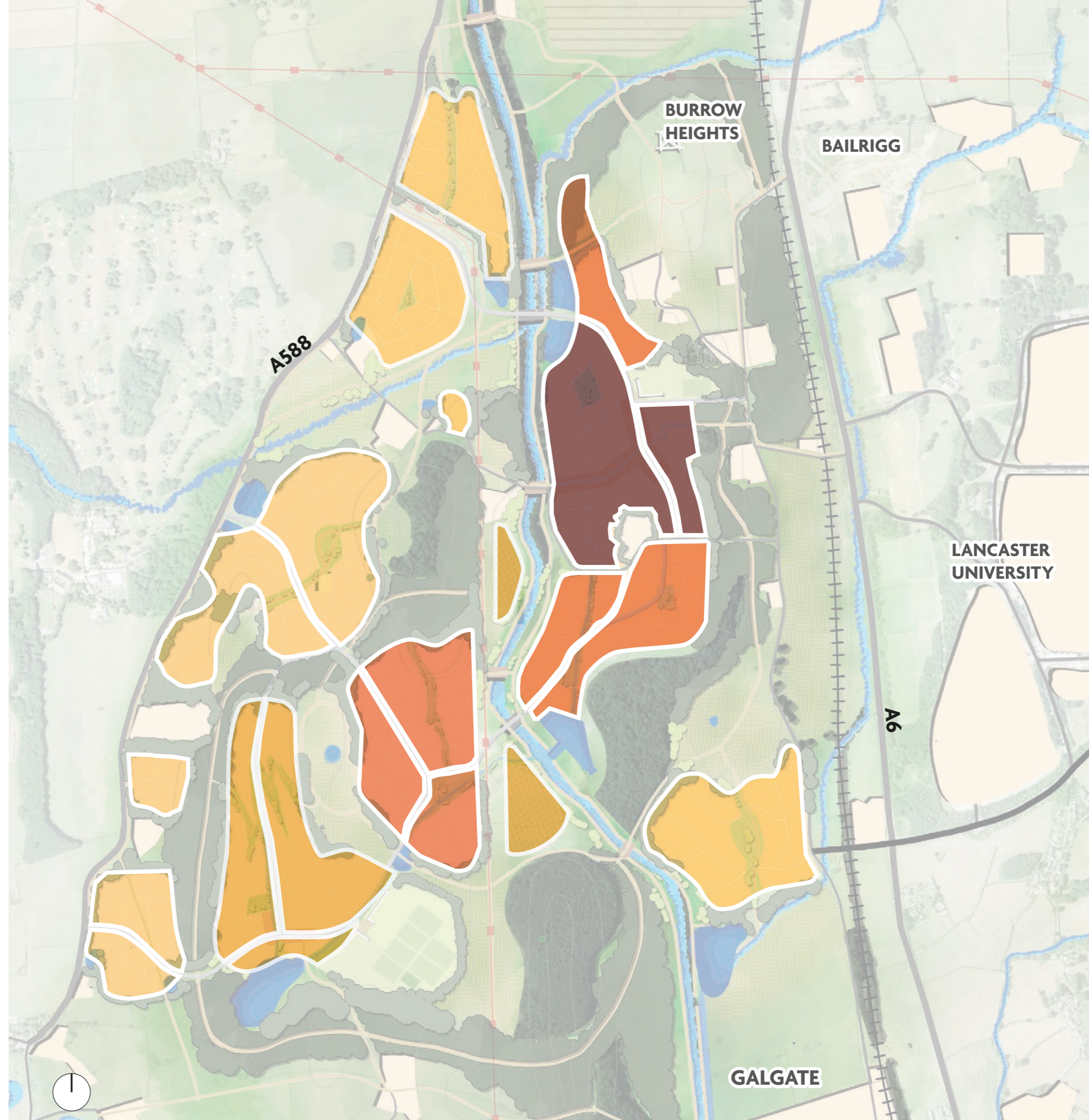
The houses directly respond and adapt to the dramatic topography of the Lancashire landscape. Here we can see that housing has warped itself around the gradient of the land and has also accommodates a large garden and parking areas.

INDICATIVE DENSITIES

KEY

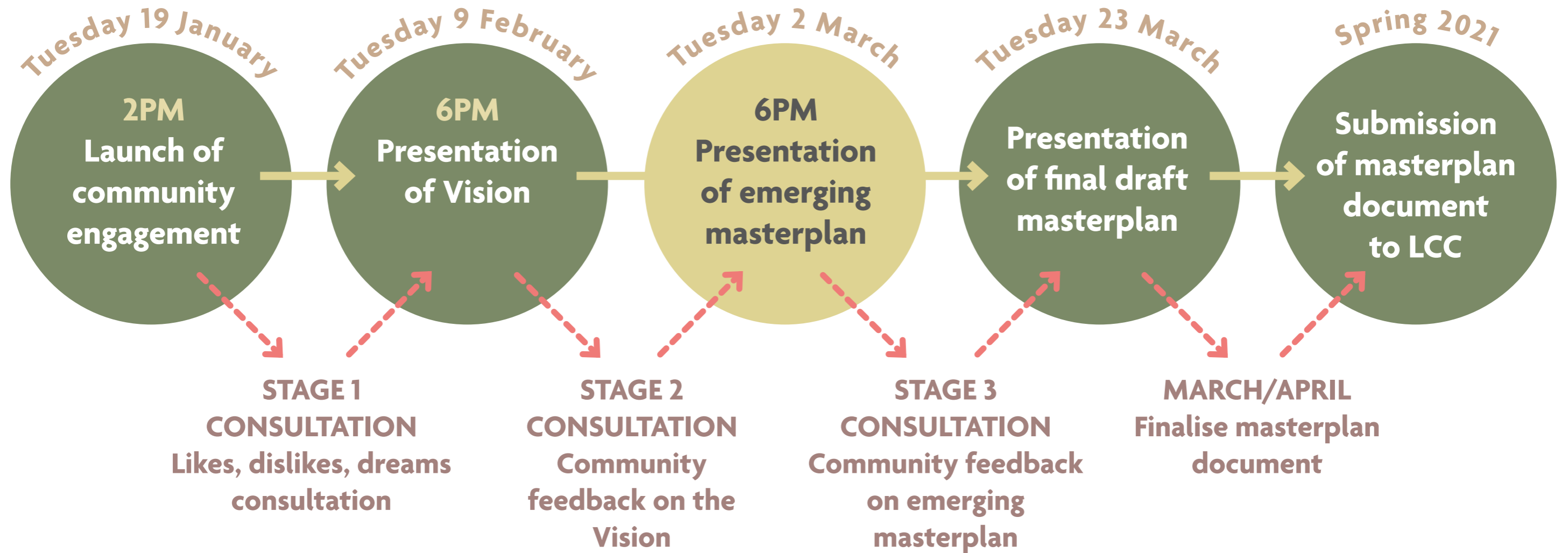
- Up to 80 dph
- 40 - 60 dph
- 30 - 50 dph
- Up to 35 dph

Approx. 5,000 homes



NEXT STEPS

FURTHER ENGAGEMENT



PLEASE SEND YOUR COMMENTS ON THE VISION BY FRIDAY 19 MARCH

BAILRIGGGARDENVILLAGE.CO.UK or FREEPOST JTP

NEXT STEPS

VISION MASTERPLAN

FROM TODAY, 2 MARCH

- **Stage 3 Consultation – comments on emerging proposals via website or email, newsletter with postcard**

23 MARCH

- **Report back draft final masterplan**

APRIL

- **JTP submit masterplan to Lancaster City Council (LCC)**

LATE SPRING

- **Begin Area Action Plan (AAP) process**
- **Masterplan refinement and updating**
- **Design coding**

All with opportunities for further community engagement

2022

- **Area Action Plan target date for adoption by LCC**

NEXT 3-5 YEARS
















- **Early development phases within 3 to 5 years**



THANK YOU

EMERGING MASTERPLAN

KEY

-  Existing settlements
-  Burrow Heights viewpoint
-  Water courses
-  Existing roads
-  Junction 33 Link Road Option 1
-  Railway line
-  Overhead power lines
-  Village development parcels - Current plan period (2022-2031)
-  Residential parcels - Future plan period (commencing 2031)
-  Indicative village centre and areas for denser development
-  Green space, semi-natural and productive land required for the village
-  Key sustainable transport routes through the village
-  Residential development to be considered through the AAP
-  1 Green buffer to South Lancaster
-  2 Green buffer to Galgate

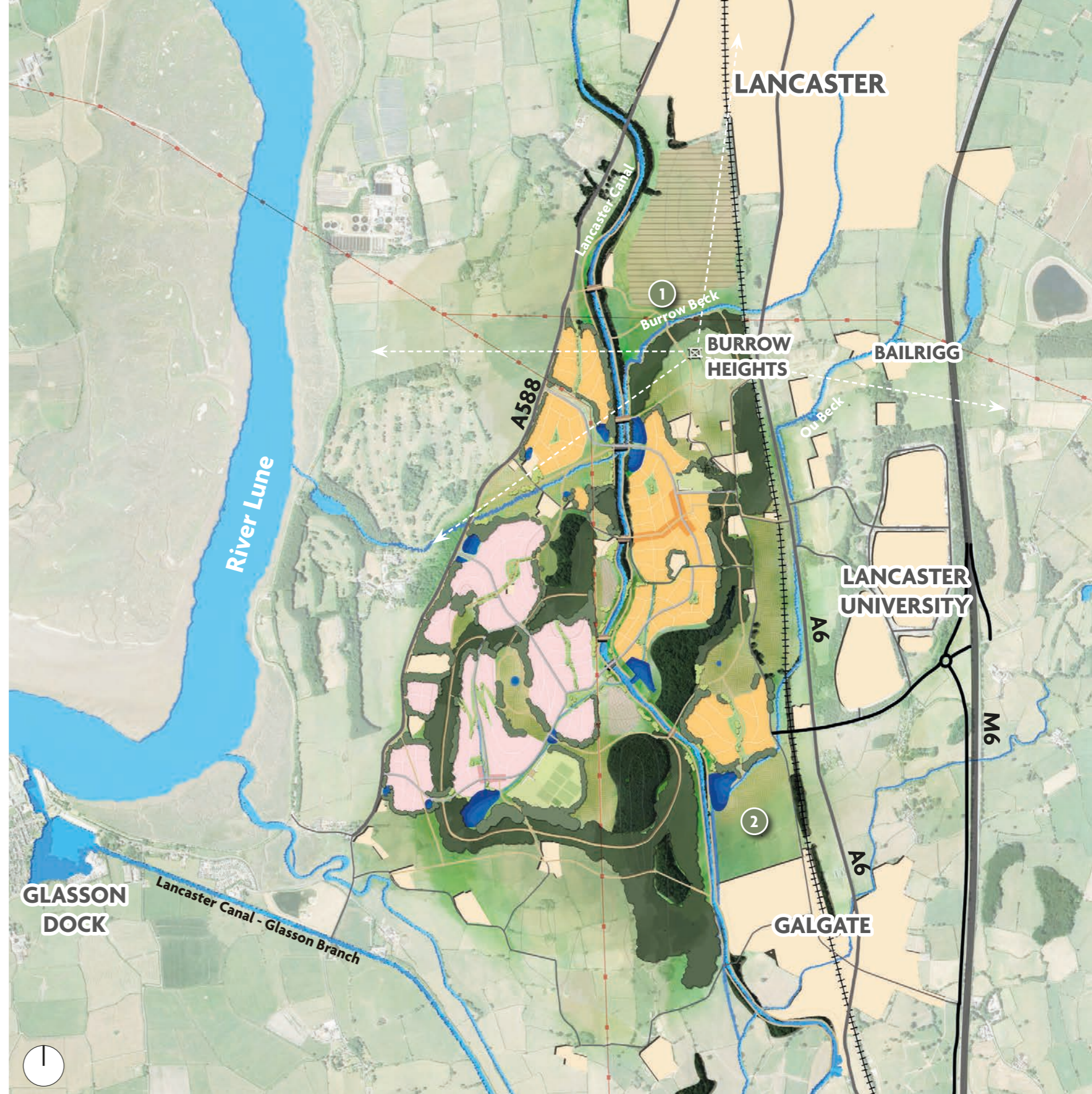
Notes

All concept development areas are subject to much further refinement and to planning.

It does not show all land uses required for the garden village.

It does not show all development ambitions to date advanced by third parties.

It does not show exact size and locations of proposed tree planting.



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