

NW Bicester Masterplan

Vision and Objectives

29th May 2014

north
west
bicester



azdominion 

Project Team

Client

A2Dominion

Masterplan Team

Farrells

Barton Wilmore

Hyder

Bioregional

SQW

Remarkable

FARRELLS

BARTON
WILLMORE

Hyder

SQW

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remarkable[®]

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1 Vision

1.1 Foreword

The natural choice for a healthier community

It is with great pleasure that I present our vision for NW Bicester, the first eco-town in the UK. We hope that this document will give you a greater insight into this exciting flagship scheme and the pioneering work undertaken by the A2Dominion Group and our consultant team and our future aspirations for this project.

From the very start, our guiding principles at A2Dominion have been to make it easy, attractive and affordable for people of all ages to live healthy, sustainable lifestyles without compromising the needs of future generations.

We believe there is no other scheme that incorporates such green infrastructure and energy-efficient design whilst protecting and enhancing the existing landscape. This will be a community of high quality homes that every person can enjoy for generations to come. A place where residents can step into the countryside right outside their front door in a development that leaves no carbon footprint.

We're confident that this scheme can be delivered and are committed to the visionary placemaking of this document.



A handwritten signature in black ink that reads "J. A. Knevett". The signature is written in a cursive, slightly stylized font.

John Knevett
Group Commercial Officer and
Deputy Group Chief Executive

1.2 Spatial Vision

Creating space for a new way of life.

While retaining 40% of the environment at NW Bicester as green space, this pioneering community will not only house up to 6,000 future-proof homes, it will also create outstanding green spaces, a business park and many sports and leisure facilities.

The overall design is centred around four urban and four rural areas interconnected through green "lanes" which include both direct and leisure routes, so everyone can get from home to work, and play, in no time at all.

Key destinations for new and existing Bicester residents to enjoy will be the tree-lined Boulevard, the tranquil Bure Stream and the picturesque Rural Edge, each adhering to the masterplan's aim to fully integrate urban and rural needs.

Set within this unique environment will be high quality homes that every generation can enjoy for generations to come - from starter homes, to family homes of all sizes, bungalows and extra-care provision, together with all the facilities needed to create and sustain a vibrant community life.

These will include new schools, community centres, nurseries, a health practice, a town square, a community farm, allotments, an orchard, a country park and a nature reserve with a mosaic of grasslands in which the local waterways will be revealed and enhanced for everyone to enjoy.

The exceptionally green infrastructure will encourage healthier lifestyles, promote sustainable

transport choices and support start-up business units where sustainable practices are encouraged. In short, this is a community designed to give everyone ample opportunity to stretch their imagination as well as their legs.

To encourage healthy eating, we've included edible landscapes and community allotments for growing local food and we aim to plant a fruit tree in every single garden.



1.3 Energy and Social Infrastructure

Putting energy to better use.

Our guiding principle at NW Bicester is to Reduce, Re-use and Recycle; at every level.

Every new home will incorporate the very latest energy-saving building materials and design to guarantee increased air tightness, super-efficient insulation, passive solar orientation and cooling, together with the best possible use of natural daylight and ventilation. We're building homes that will stay warm in winter and cool in summer – naturally.

Rainwater harvesting will also be incorporated into the design of all residential properties to reduce waste of this precious resource. And if it rains too hard, NW Bicester's Sustainable Drainage Systems will mitigate any risk of flooding.

Community energy centres will provide heat and hot water to people's homes and business, enabling NW Bicester to be a true zero carbon community with local residents and businesses benefitting from reduced energy consumption. Significant coverage of solar photovoltaic panels to homes and businesses will generate energy and help to reduce energy bills.

There will be plenty of opportunities to reduce travel by car and minimise CO2 emissions, because every home will be within 400 metres of a bus stop and within an easy ten-minute walk of local shops and primary schools. With so many beautiful and spacious green lanes, it will be easy for everyone to cycle to work in and around NW Bicester. And for those who travel a little further, there will also be improved cycle and bus routes into Bicester that can connect into improved rail connections to Oxford and beyond. Real time travel information in every home will make use of public transport more accessible.

In keeping with our eco principles, we aim for

zero waste to landfill during the construction of NW Bicester. In addition, every home will have exemplary re-cycling facilities, an allocated space for composting and residents will be encouraged to Freecycle unwanted items.



1.4 Sustainable Vision

Meeting today's needs without harming tomorrow's.

NW Bicester will showcase to the world what a sustainable future can look like by enabling people to live affordable, happy and healthy lives in high-quality homes that use resources wisely and enhance their natural environment.

By pioneering the highest standards in sustainable construction, using low-carbon materials; attracting green businesses; and creating demand for more sustainable products and services across the town, NW Bicester will benefit many future generations.

NW Bicester will provide residents with the opportunity to make sustainable lifestyle choices through the delivery of educational activities, events and green travel planning initiatives. We aspire for the whole of NW Bicester to become a flagship One Planet community following in the steps of the first Exemplar phase.

We are committed to capturing and disseminate learning from the eco town, inspiring multiple audiences including policy makers, professionals and the general public.

The network of rural footpaths and cycle ways and a series of bus only road links will mean public transport is more rapid and frequent; enabling people to make sustainable travel choices. With a car club and network of charging points for electric vehicles, for those that do still require cars for longer journeys, we will inspire the use of hybrid or electric vehicle.

NW Bicester will reduce water use by almost

40% by including water efficiency in all buildings, plus rainwater harvesting linked to an exemplary Sustainable Drainage System – helping local residents to save on resources while also protecting the environment.



1.5 Community Vision

Fresh ideas. Traditional values.

Creating a vibrant community is at the heart of all our plans, because NW Bicester's most valuable resource will be its people.

So we've included all sorts of ways to make residents feel part of something great. There are so many safe places for everyone to enjoy the environment – nature trails, sports and leisure parks, attractive walks to the shops and schools, characterful places to meet in the new town square, public art spaces and no less than four new community halls catering for residents of all ages.

Space will be provided for the potential for a farmers' market that will sell locally produced food. We're even creating edible landscapes to encourage foraging and understanding of wild foods.

Residents will be engaged in community life and have a strong sense of identity and belonging built upon the integrity of NW Bicester's eco-principles.

This visionary place will encourage active involvement from every generation, developing pride in their community and sharing in its success. The community will also have strong connections with the wider area through effective partnerships, ensuring that it is seen as part of Bicester, not separate.

New employment opportunities will be provided to complement the needs of the market and long-term aspirations of NW Bicester, but these will never seek to undermine existing employment opportunities in the local area. NW Bicester will provide one job for each home built within a sustainable travelling distance. On site, this will be supported by a business park

and eco business centre, and both homes and businesses will benefit from a superfast fibre-optic broadband network.

The flexible layout of our eco homes will allow extra space for working from home, which will in turn reduce travelling needs and encourage people to tap into the local economy.

Our whole vision is about creating a green infrastructure that will provide sustainable ways to live and work for people of every age.

NW Bicester.

Innovation for every generation. For many generations.



2 Introduction and Overview

Introduction by Sir Terry Farrell

I am delighted to present this vision for NW Bicester. This ambitious vision, in line with the Eco Bicester One Shared Vision, will strengthen the existing town's economic and community infrastructure, and will set the highest environmental standards, exceeding any similar scale development in the UK.

Eco Bicester will succeed when NW Bicester and the existing town, correctly planned, are one whole place, which is greater than the sum of the parts. The growth of an existing town with environmental credentials and a quality of place will have far reaching potential and implications for the lives of residents, workers and visitors alike. Unlike the "new town" approach which only includes a fraction of the urban population, NW and Eco Bicester will be an example for many other communities to follow.



A handwritten signature in black ink, which appears to read "Terry Farrell".

Sir Terry Farrell, CBE



"NW Bicester and Eco Bicester will be a pioneering example for many other communities to follow"

Strategic Importance of Bicester in Southern England, Thames Valley and Oxfordshire



2.1 Aims and Purpose

The vision for NW Bicester is to create a place and a community which is led by landscape and seamlessly integrates with the existing community in Bicester as well as the rural countryside, to provide new homes, employment facilities within a community structure that demonstrates and achieves the highest level of environmental performance of any similar scale development, in a manner that integrates and benefits the wider town.

The NW Bicester masterplan creates a new landscape led community; that integrates green and blue infrastructure with the existing historic town and communities. This results in creating a 'complete place' and a continuous human landscape which not only provides new green spaces, parks, allotments, sports facilities, a nature reserve, a country park and a riverside landscape for the new community but more importantly increases, the provision of and access to, green spaces, amenity facilities and the countryside; for existing residents of Bicester.

The existing rural farmland which is on Bicester's doorstep is private and not widely accessible to the general public, by strengthening links, improving and upgrading footpaths and the addition of new public footpaths and river and woodland walks, access to the countryside is improved for all and the existing assets including the Bure Stream and existing woodland and hedgerows to the north west of Bicester can be enjoyed by Bicester residents.

In creating a Vision for NW Bicester and Eco Bicester, guidance will be drawn from the 'Supplement to PPS1 ET 1.1' which states that;

Eco-towns should develop unique characteristics by responding to the opportunities and challenges of their location and community aspirations

1. Place making and Landscape
 - History relates to Narrative
 - Site Specific place making
 - Use landscape and green infrastructure as a key driver
2. Energy, Water and Recycling
 - Create a true zero carbon energy use in buildings
3. A green travel plan led development
 - To provide opportunities for change in travel patterns to reduce car use by providing alternative sustainable travel choices.
4. Connect site and surrounding communities together
 - Create a variety of urban places and public realm which provide for the local community
 - Provide new development which fits into the rural character and retains an identity.

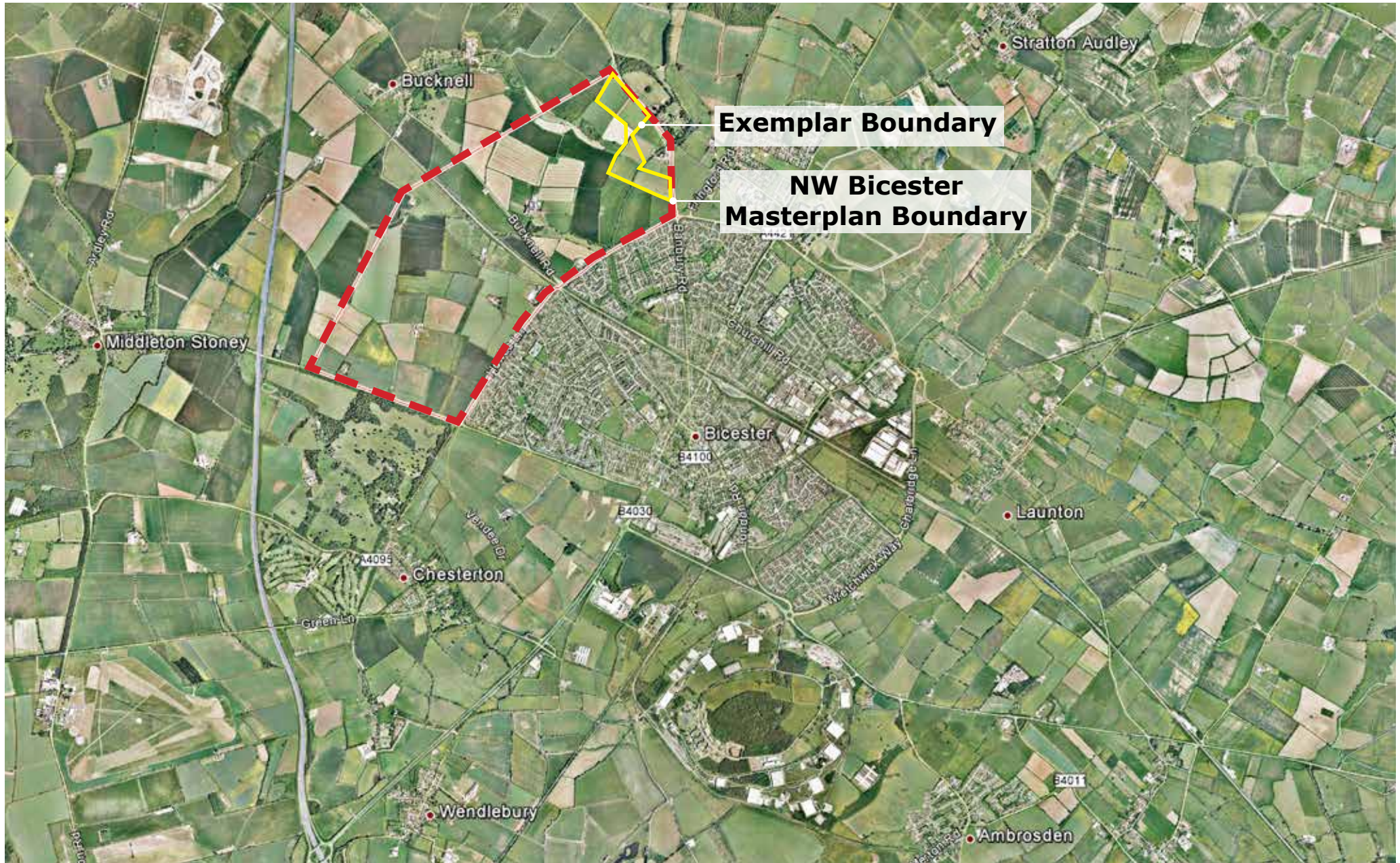
5. Play, work, live and learn
6. Enrich the area with high quality design
7. Grow the social infrastructure to make a sustainable community
8. Proactively engage with the community and stakeholders
9. Meeting the housing needs of the local population
10. Create Employment and management of the Eco Town

A masterplan brief has been prepared with the Council and this has served to guide the formulation of this masterplan, in the context of wide ranging and continuing consultation and engagement.

The Masterplan is intended to set out the framework for the future NW Bicester development and is intended to be used to help guide all forthcoming planning applications.

This framework sets out the content to be illustrated in this chapter, split down into its 10 subject areas; this guidance forms the Vision for the NW Bicester masterplan.

NW Bicester Masterplan Site in the Context of Bicester



2.2 Overview and Status

Following the identification of the land to the North West of Bicester as a proposed site for an Eco-Town by Cherwell District Council (CDC) with support from Oxfordshire County Council (OCC) and Bicester Town Council (BTC), in 2008, NW Bicester was announced by the Government as one of four potential Eco-Towns in the UK, as reflected in the supplement to PPS1 Eco Towns.

A2 Dominion is one of the country's leading registered providers of high quality housing in the UK and are performing the role of lead promoter for the NW Bicester masterplan. A2 Dominion are also developing the exemplar phase and has further land interests throughout the masterplan.

The land to the north of Bicester ('NW Bicester') is generally in agricultural use, and is located outside of the existing A4095 ring road. The site perimeters are approximately 1.5km from the town centre and 0.5km from the villages of Bucknell and Caversfield. The site is surrounded by roads on three sides and is crossed in the middle from North West to South East by the London to Birmingham railway, Bucknell Road and a bridle path.

The search area identified for NW Bicester in the emerging local planning policy framework is approximately 400 hectares.

The development at NW Bicester is planned to be zero carbon and to build a new community of up to 6,000 homes, as well as new employment opportunities and attractive amenities all built to be environmentally, socially and economically

sustainable.

Planning permission has been secured for the first exemplar phase of the development and will provide 393 homes, a new primary school, local shops and offices, an Eco-business Centre and attractive public spaces, connected with a network of green spaces leading to the existing countryside.

The development will be well integrated with the rest of Bicester and its rural landscape; providing an incremental and gradual development, over the next 20 years and beyond to support Bicester's future.

The masterplan is intended to set out the framework for the future eco town. The masterplan responds to the master plan brief and has been submitted to the Council with the intention that it will be used to help guide all future planning applications.

The masterplan has been prepared having regard to requirements of the PPS1 supplement 'Eco Towns', adopted and emerging local planning policy and related documents and the masterplan brief. The masterplan proposals take advantage of the valuable existing features on site (e.g. water courses, established vegetation and bridleways and footpaths), and links the existing urban edge of Bicester to its surrounding rural hinterland.

To date, a number of fundamental principles have been established for the masterplan, including:

- Providing up to 6,000 homes built.
- Ensuring a mix of affordable housing is

included.

- Ensuring 40% of the overall eco town comprises of open spaces and green landscape infrastructure.
- Creating 1 job per home within a sustainable travel distance.
- Achieving a zero carbon energy standard for all buildings.
- Achieving a shift from car use (to below 50%) to other more sustainable travel.
- Ensuring homes are built to a minimum of Code 5 for sustainable Homes level and BREEAM excellent standards.
- Making the best use of technologies in energy generation
- To allow for future climate change adaptation by incorporating forward thinking technologies and design
- Providing real time energy and travel monitoring in every home
- Ensuring high levels of energy efficiency in the fabric of the buildings and their design
- To provide primary schools located within 800m of all homes
- To enable and encourage local food production
- Attaining a net gain in local bio-diversity
- Aspiring to water neutrality




NW Bicester Masterplan in Bicester Masterplan

- Creating a management program to ensure zero waste goes in to landfill during construction
- Making a commitment towards a Local Management Organisation

The development aims to achieve more sustainable ways of living through low carbon lifestyles. The proposals will be developed around local centres to provide facilities to meet the day to day needs of residents and opportunities for employment and to create a focus for community and assist in creating a sense of place. The development will promote walking, cycling and use of public transport over the use of the private car.

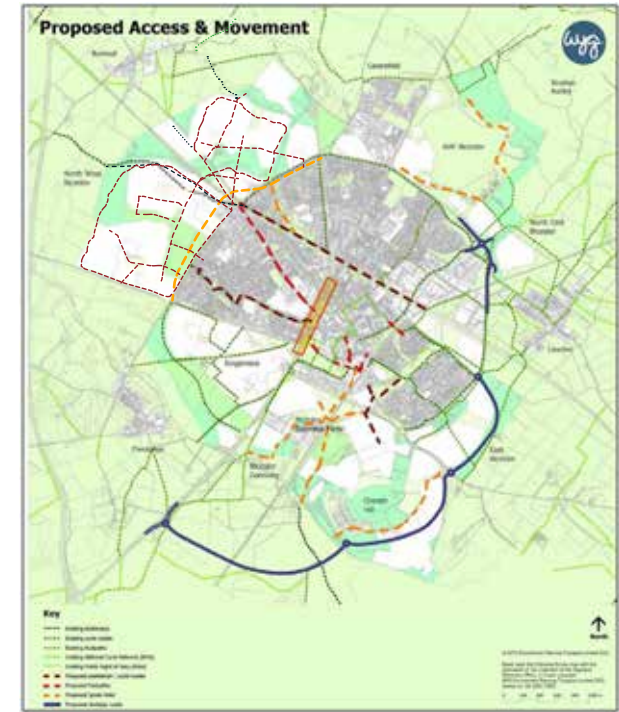
In formulating the proposals, regard has been had to the wider vision for Bicester ('Eco Bicester') and the relationship of the proposals for Bicester as a whole as set out in the White Young Green master plan and the emerging policy framework.

Proposed Key Information

-  NW Bicester Masterplan Boundary
-  Strategic landscape and open space infrastructure
-  Town Centre Action Area



White Young Green Bicester Concept Masterplan
(p.16 Bicester Masterplan Consultation Draft August 2012)



2.3 Process and Iteration

The PPS1 Supplement requires the preparation and submission of a masterplan (ET20). The master plan is the result of continued iteration and has been informed by extensive consultation and engagement.

The identification of land to the north west of Bicester as an Eco Town, in response to the Government's initiative, was promoted by the Council. Halcrow undertook initial work in June 2009, which identified a broad rectangular area of land to the north of Howes Lane and Lords Lane. The area of land has been carried through the emerging local planning policy framework and represents the 'area of search' for this masterplan.

Following the publication of the Supplement to PPS1 and the confirmation of the status of land to the north west of Bicester as a potential eco-town, A2Dominion promoted the 'Exemplar' development of 393 new homes, together with a new primary school and social and community facilities, and employment and retail accommodation. The formulation of the 'Exemplar' application was undertaken in tandem with the preparation of the master plan.

Following the grant of permission for the exemplar phase in 2012, A2Dominion continued with the preparation of the master plan. At the same time, the Council instructed White Young Green to prepare a master plan (Bicester Masterplan Supplementary Planning Document Draft Consultation, August 2012) for the whole of Bicester and has prepared and now submitted its local plan (Cherwell Submission Local Plan 2006-2031). A masterplan brief was prepared and agreed with the Council to guide the process. This brief sets out the Council's aims and objectives and the issues arising. It too is an iterative

document with the latest draft being agreed in November 2013.

The formulation of the master plan was arranged through a series of work stream groups, the topic areas reflected the key areas and matters to be addressed and acted as the forum for discussion and review.

Each workstream comprised relevant stakeholders and consultees. The output of the workstreams formed 'strategies' which serve to underpin the master plan as now presented. These strategies are submitted in support of the masterplan.

Wider consultation and engagement continues. A2Dominion maintain a dedicated website and publish regular newsletters. A series of workshops were held with Members and key officers and stakeholders. In addition to a series of community based events, a wide ranging consultation exercise was held in December 2013. The results of which and further details of the consultation exercise are set out in the Statement of Community Involvement.

This masterplan has been prepared by A2Dominion and has been submitted to the Council with the invitation that the Council has regard to the masterplan in considering subsequent planning applications. It is of course for the Council to determine the status of the masterplan and the weight to be attached in any decisions.



Business Portal Launch 2012



Bike Day 2013

3 NW Bicester Masterplan- Evolution and Formulation

The masterplan has been prepared and informed following a comprehensive consultation and engagement programme that began in 2010 as summarized below.

Consultation and Engagement

A2Dominion and the project consultant team have consulted and engaged with the community and stakeholders through workshops, exhibitions and specific events. Traditional methods of consultation, meetings and briefings have been supported by online information, ensuring different ways for people to access information. In addition, consultation events have been publicised in the media, providing the local community with details of the emerging masterplan and more importantly, the opportunity to participate and inform the masterplan process.

Consultation undertaken in 2010 included;

- Open Planning Week (OPW)
- Public drop-in sessions
- Community masterplanning workshop
- 'Testing Ideas' events
- Exemplar pre-application consultation
- CABE Design Review

These events helped inform the early masterplan prior to further engagement with key community and political stakeholders.

Following previous consultation as outlined above, A2Dominion embarked on a further programme of stakeholder and community consultation in order to inform the masterplan proposals for NW Bicester. This included;

- Identifying and involving a key Bicester stakeholder group in three workshops held April, July and September 2013 - the workshops tested the masterplan brief ahead of taking the draft proposals out to wider public consultation
- CABE Design Review
- Communication by A2Dominion and CDC with Interim Management Board (IMB) group members
- Attendance at informal community events such as Freecycle Live in 2013 to increase early general awareness of the project and gauge informal responses and feedback
- A dedicated drop-in event for Howes Lane residents in November 2013
- Public exhibitions held on 6 and 7 December including stakeholder previews on 5 December
- Updating the dedicated NW Bicester website with supporting materials and information relating to the masterplan and consultation events
- An informal drop-in event held in December 2013 at Emmanuel Church, Bure Park
- Further engagement in January and February 2014 – this included follow up contact with key interest and hard to reach groups to offer meetings and briefings and identify future opportunities for involvement with the project
- Visits to The Cooper School and Bicester Community College, providing students with the opportunity to provide feedback on the masterplan and indicate ways they would like to be kept updated and involved as the project evolves.

Wider awareness of the project has also been achieved through other community events organised by A2Dominion such as educational visits and annual community events such as the Bike Day.

Key Components:

From an early stage, it became clear that a number of key components were fundamental to the formulation of the masterplan:

Spatial Strategy and Green Spaces: At 40% of the total site area, the green spaces provide the opportunity and a challenge to create the sense of place that the team desired. It became clear that the green space strategy was fundamental to the success of the masterplan;

Schools and Facilities: There is a clear need to provide local services and facilities to meet the needs of future residents, in a manner that provides a focus for the community, that does not challenge or undermine the existing town and that is commercially attractive;

Employment: The PPS1 Supplement requires the provision of 1 job per home within sustainable travel distance. This presents again a challenge and opportunity to develop an employment strategy that is integrated with the wider economy of Bicester and is sufficiently ambitious to reflect the evolution of NW Bicester;

Access and Transport: The development must ensure safe access but in a manner that prioritises sustainable modes, which integrates with Bicester as a whole;

Provision of New Homes: There is a need to provide for the optimum level of new homes in a manner that ensures that the needs of the community are met and that the use of land is efficient and will result in a place of quality and character.

These five key elements have been tested and developed since 2010, with the benefit of the exemplar application (now permission). As our thinking has evolved, so has the masterplan.



2013 Public Consultation



2013 Masterplan workshop



Bike Day 2013



Green Street School Competition 2012

Evolution: NW Bicester Masterplan



NW Bicester Masterplan 2010



NW Bicester Masterplan Proposed

Evolution of the NW Bicester Spatial Strategy and Green Spaces:

The NW Bicester masterplan was illustrated in the 2010 consultation for the exemplar Phase. The 2010 masterplan proposed a concept of four villages separated by green spaces. This concept required the green infrastructure to be subdivided to provide at least three areas separating villages. The resultant green areas did not relate well to the existing hedgerows and streams and the green space between housing areas was not of sufficient size to create a distinctive visual and environmental quality or to be suitable for green infrastructure uses.

The current proposed NW Bicester masterplan takes account of the existing hedgerows and streams to create two zones of development and two larger areas of green space with links to wider landscape margins on the rural edge. The proposed green spaces south of the railway provides general amenity, sports and a nature reserve. The current proposed green infrastructure; north of the railway provides general amenity, a country park, a water treatment facility, a woodland cemetery and a community farm.

These larger areas of green space create a robust landscape environment which will allow sufficient space for mixed green infrastructure uses to coexist and create stronger green links to the surroundings.



Existing Landscape features:

- Hedgerows
- Woodlands



Existing Ecological Constraints



2010 NW Bicester Masterplan
Green space subdivided to create four clusters of development



Current NW Bicester Masterplan:
Majority of green space focused in large areas on natural corridors.
Hedgerows integrated within green space in development

Evolution: Schools and Community Hubs

Evolution of Location and Number of Local Centres and Schools since 2010

The NW Bicester masterplan illustrated for the 2010 consultation provided for four villages separated by green spaces and assumed the local centres and community provision would be subdivided into four areas to serve each village.

The residential catchment for four villages of 1000- 1500 homes would have been below the optimum size of 2000-3000 identified as being needed to create viable convenience retail and a cohesive local centre with amenities. The four village concept would therefore have been a constraint on creating viable local centres.

The current proposed NW Bicester masterplan has two larger areas of 3000 homes, integrated with the green infrastructure which allows two local centres to be created supporting convenience, retail viability and community cohesion.

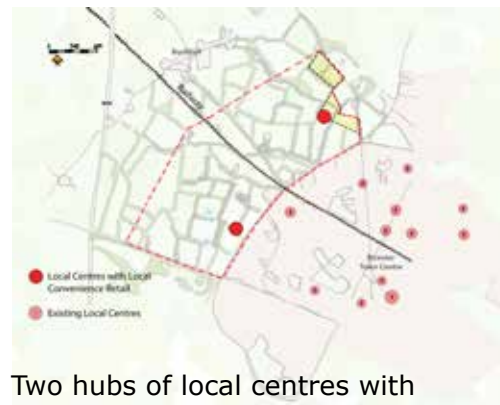
The current proposed NW Bicester masterplan has two local centres located closer to the existing town residents assisting integration between existing housing and increasing footfall to assist viability of local convenience retail. Two primary schools are located adjacent to the two local centres and two further primary schools are located closer to the middle of the housing areas to assist walking distances and containment of travel.



2010 NW Bicester Masterplan: Four hubs of local centres, primary school with convenience retail. One in each of the four clusters



Additional hubs with varied uses to compliment local convenience retail



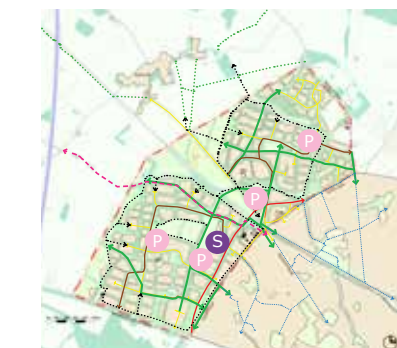
Two hubs of local centres with convenience retail. One north of the railway and one south of the railway



Option considered for three of primary schools



Additional hubs with varied uses to compliment local convenience retail



Current proposed NW Bicester Masterplan with four primary schools

Evolution of Location of Employment Land Use since 2010

The NW Bicester Masterplan from 2010 made provision for land for employment. The current NW Bicester Masterplan proposes a similar area of land for employment for up to 4,600 jobs which includes up to 2,000 on employment land in a larger area, 1,400 in local service jobs distributed in local centres, 140 construction related job and just over 1,100 home based jobs. In addition, the supporting employment strategy identifies the potential to create sufficient off- site jobs to ensure that at least one job per home is created with sustainable travel distance of NW Bicester.

The proposed mix of jobs in NW Bicester is based on environmental goods and services, including sustainable construction, (with the eco business centre as a key catalyst) high performance engineering, light manufacturing, logistics, business financial and professional services serving a local and regional market.

Options were considered for location and size of employment land in one or more locations. The current proposed NW Bicester masterplan locates the employment in one larger area combined with several smaller areas.

The larger employment area was chosen to be located on the South West corner of the site for two main reasons:

1. Many business uses can successfully be interspersed with residential, but some cannot. Businesses do not want to locate too close to housing for fear of disturbance and generating complaints which affect their business practices. NW Bicester should provide employers with a choice of either locating in hubs or in a separate business area to provide a range

of employment opportunities.

2. The SW corner is the most accessible to the strategic road network, and therefore locating the business area there will minimize the movement of goods traffic through existing and new residential areas.

The employment space is designed to be accessible by public transport, on foot or by cycle or car. The action plan which forms part of the economic strategy would identify measures to help attract suitable jobs to the eco development and more generally to Bicester, including apprenticeships and vocational courses.



Employment use spread across the site in four equal portions



Current Proposed NW Bicester Masterplan:
Larger employment area located to South with smaller local distributed areas

Evolution of Access and Transport since 2010

A range of ideas have been considered for the proposed transport links since 2010. The current NW Bicester masterplan looks to deal with traffic in areas with existing congestion, particularly Howes Lane/Lords Lane. The masterplan process studied how to create good connections within the development and minimise traffic going through existing communities. The masterplan process emphasised the need to give priority to strong walking, cycling and bus connections. This would not only lessen car traffic in the new development but would also promote healthier lifestyles.

The options that were explored included:

- Doing the minimum by improving Howes Lane and proposing minor changes to the existing junctions.
- Improving Howes Lane and providing a new railway underpass.
- Moving Howes Lane northwards to enable development to the south, and providing a new railway underpass. This was seen as the preferred option as the new Howes Lane could be designed as an urban spine with mixed mode access and crossings which was seen as a more pragmatic solution in creating pedestrian only place making. This preferred option is in tandem with a walking and cycling underpass of the railway in the site's centre as mentioned below
- A bus/ cycle/ pedestrian only link across the railway in the site's centre
- A traffic (and all other users) link across the railway in the site's centre

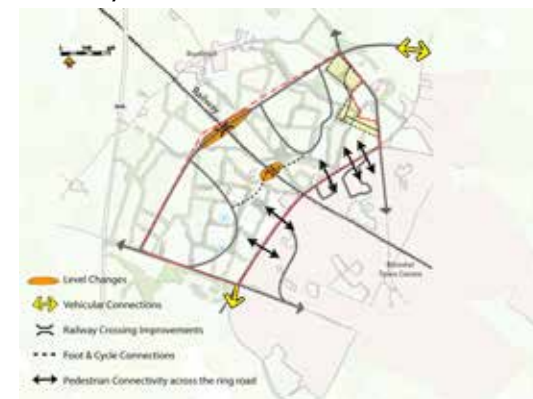
- A walking and cycling underpass of the railway in the site's centre
- A walking and cycling route parallel with the railway going towards the town centre
- The masterplan process also explored OCC's option for a perimeter road, including one around the NW Bicester Site, however this new route was seen as separating rather than joining existing Bicester with the proposed new development.
- Two loops each side of the railway were proposed which would offer a high quality and frequent bus service that would be integrated with the existing bus loops operating in the existing residential areas to the town centre.



Access with two road loops on north and south of railway



Access with single road loop crossing railway in centre



Access with new outer ring road OCC strategic option

Evolution of Housing Numbers since 2010

The current proposed NW masterplan studied different options for the number of houses for the masterplan weighing the pros and cons of each proposal. Two options were proposed:

1. 5000 homes option would require 330HA/800 Acres of land similar to the 2010 NW Bicester masterplan.
2. 6000 homes option would require 400HA/1000 Acres of land.

In the current proposed NW Bicester masterplan the net developable area has been determined on the basis of the assessment of constraints and opportunities. A reduction in net land would be artificial and would compromise the spatial strategy. Likewise, a reduction in the assumed average density would not result in an efficient use of land and would compromise place making ambitions. At approximately 400HA/ 1,000 acres and at an assumed average density of 35 homes per hectare for the residential areas within the NW Bicester masterplan, the total number of new homes will be in the order of 6000.



5000 Homes Option-
Reducing net land



6000 Homes Option

Summary of Main changes From 2010 to December 2013 NW Bicester Masterplan

The December 2013 Consultation NW Bicester Masterplan extended the site area fully within the area proposed by the NW Bicester masterplan (approx 400 hectares) increasing the masterplan potential to 6000 homes. Taking into account the increased site area and fresh consideration of opportunities and constraints, the spatial layout was revised to create two clusters of development, instead of four villages. This enabled green infrastructure to be grouped in larger quantities in strategic locations. Two local centres would also provide a larger catchment/footfall.

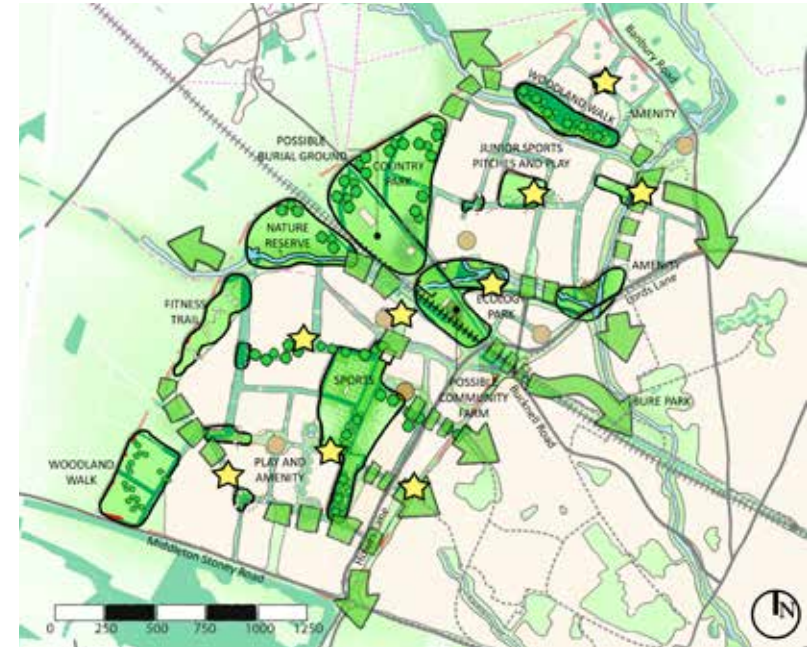
The December 2013 NW Bicester masterplan proposed to realign Howes Lane and a new crossing under the rail in order to create the Urban Boulevard and front new residential on high quality urban streets along with new amenities linking new and existing neighbourhoods. The existing Howes Lane would then have significantly reduced traffic and possible greening.

During the December 2013 consultation these proposals were discussed and principles were generally accepted subject to further detail being presented.

December 2013 NW Bicester Masterplan

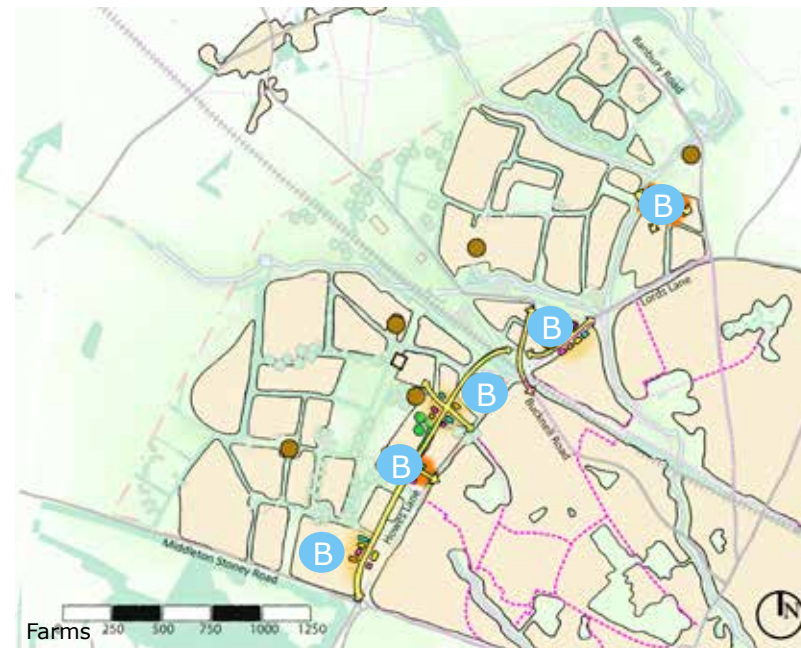


Access and Transport Strategy



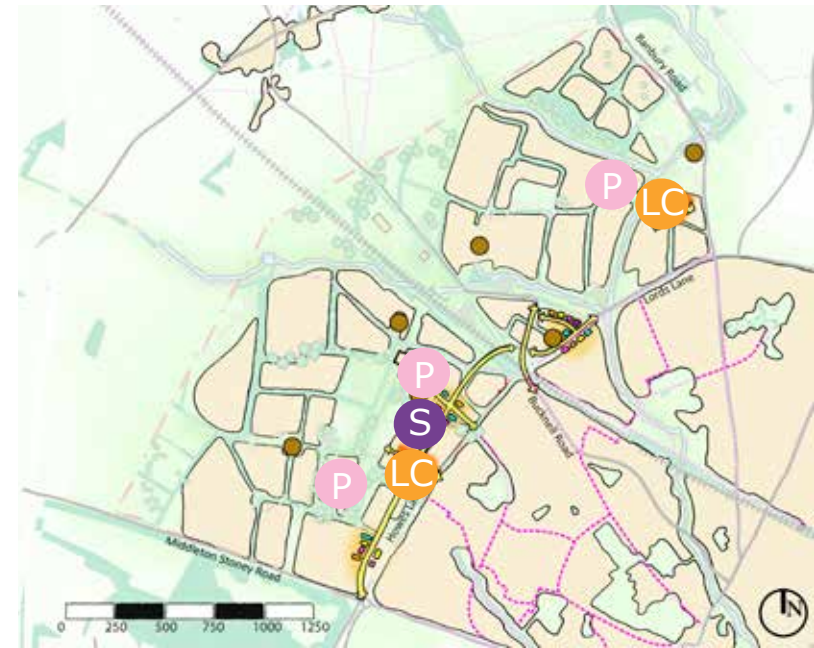
Green Infrastructure

- ★ Play
- Farms
- GI Corridors
- Water
- GI
- Woodland
- Rail Corridor
- Existing Footpaths



Farms Employment

- B Proposed Employment
- Existing



Schools and Community Hubs

- P Primary School
- S Secondary School
- LC Local
- Existing

Summary of Main Changes from December 2013 Consultation to Current NW Bicester Masterplan

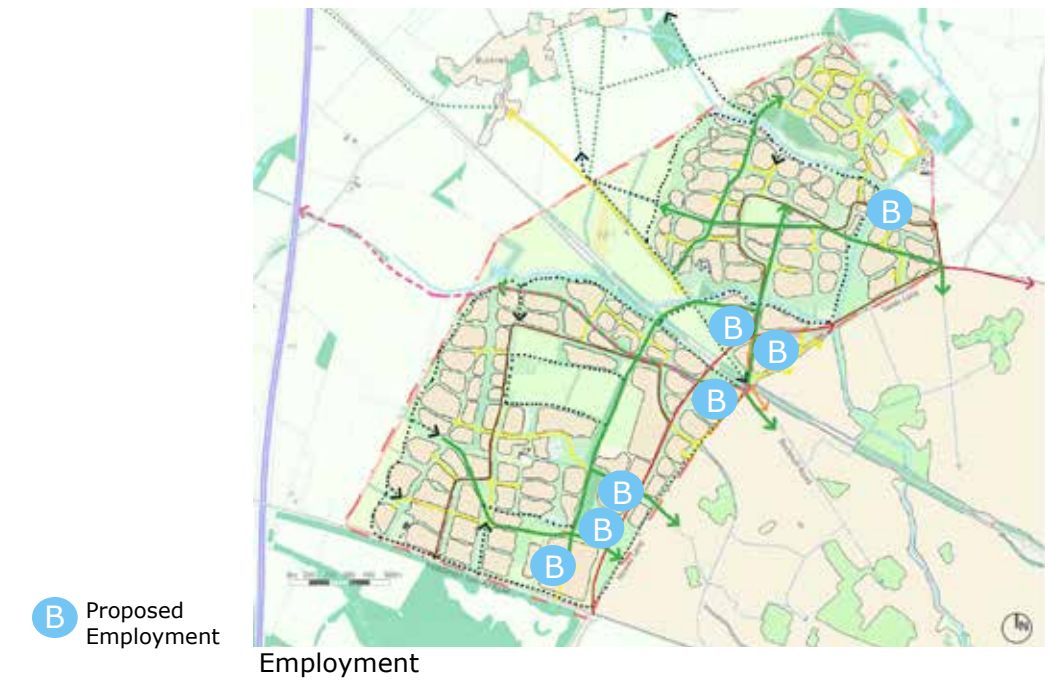
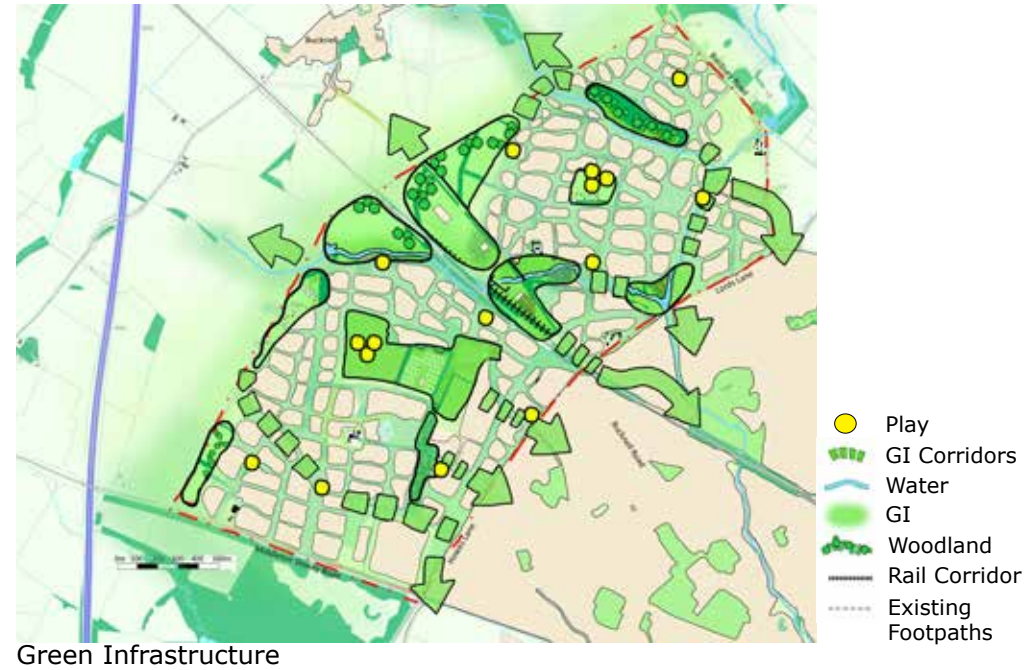
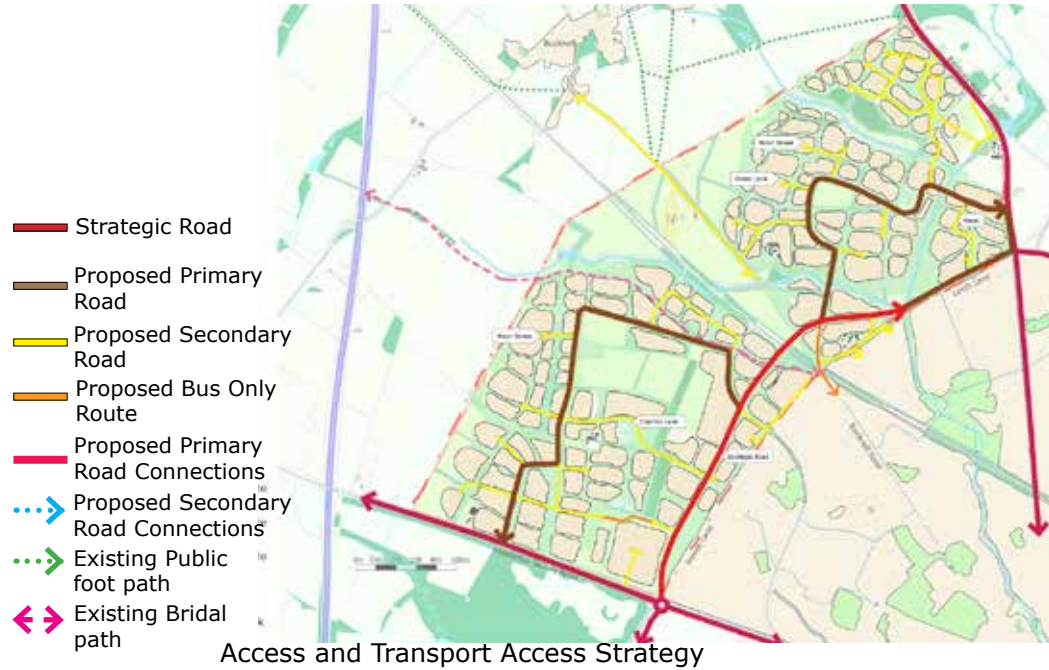
The proposed NW Bicester masterplan incorporates the main principles illustrated in the December 2013 NW Bicester masterplan consultation, which have been developed further as follows:

The alignment of the new "Urban Boulevard" has been amended slightly further west taking into account topography and highway layout constraints crossing under the railway. Bus loops and bus only links are introduced to benefit bus transport.

Footpath and cycleways are identified on the direct routes to key destinations. Four locations for primary schools are provided with a second location added north of the railway, which shortens walking times and improves containment of trips within the masterplan.

The secondary school and public sports pitch's locations slightly changes to increase housing and improve connections adjacent to the local centre and the Urban Boulevard.

Current NW Bicester Masterplan



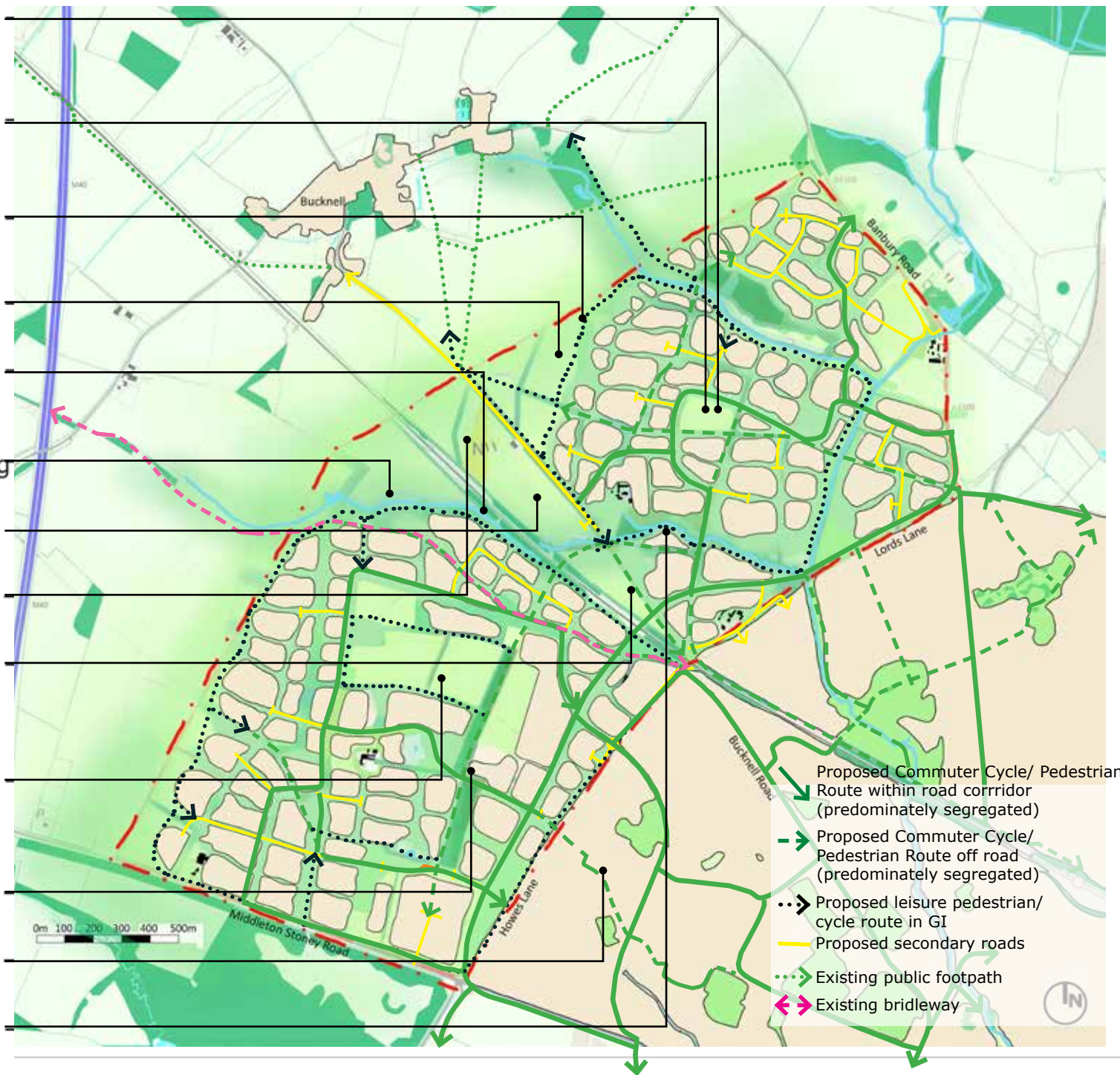
4 NW Bicester Masterplan- Key Principles

- Providing up to 6,000 homes.
- Ensuring a mix of affordable housing is included.
- Ensuring 40% of the overall eco town comprises of open spaces and green landscape infrastructure.
- Creating 1 job per home within a sustainable travel distance.
- Achieving a zero carbon energy standard for all buildings.
- Achieving a shift from car use (to below 50%) to other more sustainable travel.
- Ensuring homes are built to a minimum of Code 5 for sustainable Homes Level and BREEAM excellent standards.
- Making the best use of technologies in energy generation.

- To allow for future climate change adaptation by incorporating forward thinking technologies and design.
- Providing real time energy and travel monitoring in every home.
- Ensuring high levels of energy efficiency in the fabric of the buildings and their design.
- To provide primary schools located within 800m of all homes.
- To enable and encourage local food production.
- Attaining a net gain in local bio-diversity.
- Aspiring to water neutrality.
- Creating a management program to ensure zero waste goes to landfill during construction.
- Making commitment towards a Local Management Organisation.

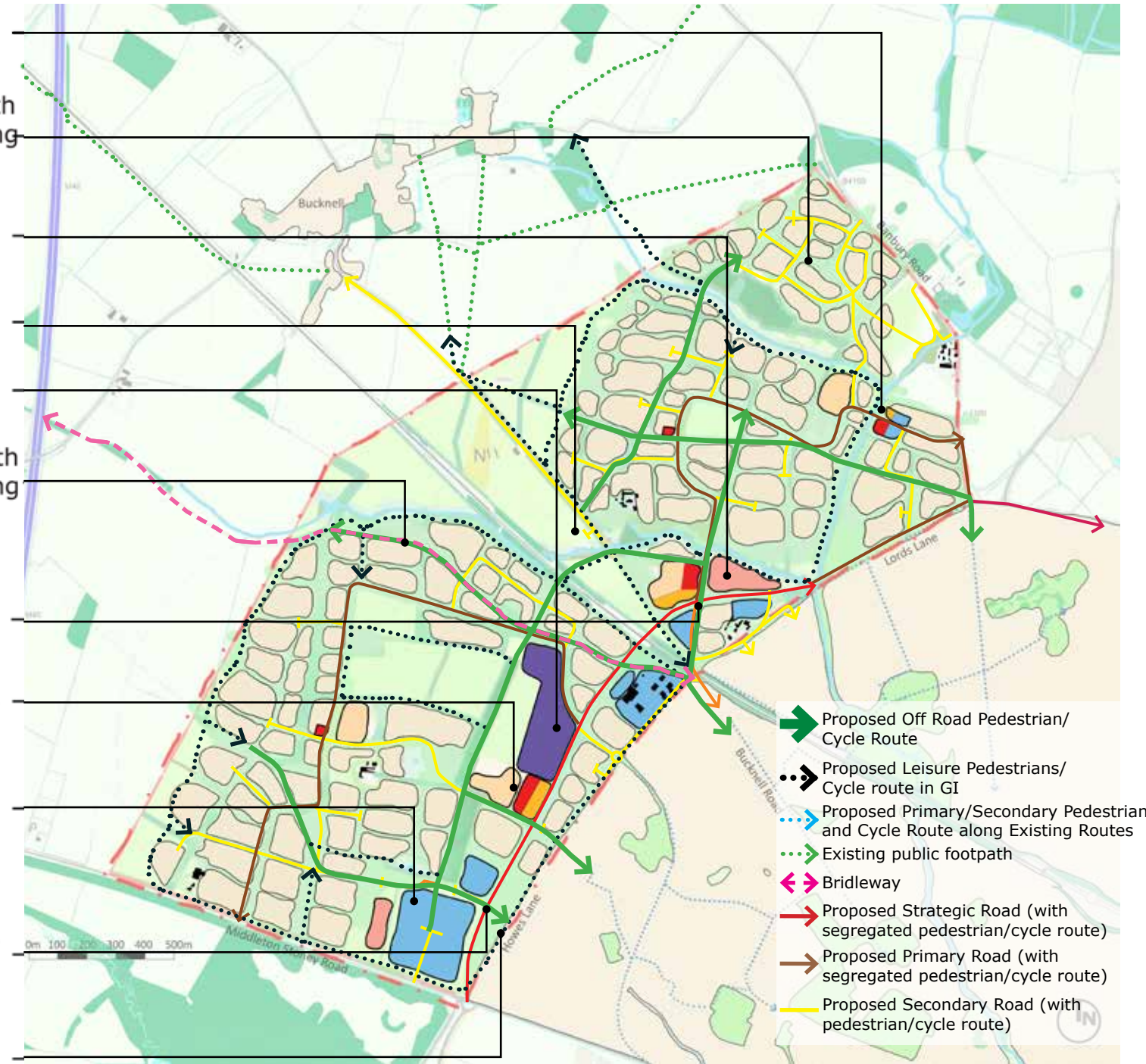
Proposed NW Bicester Masterplan-Green Infrastructure

- Proposed central green with play and amenities.
- A network of local play areas with an emphasis on natural play.
- The Green Loop 'adventure' walking and leisure routes.
- Proposed Country Park.
- Bure River corridor: existing hedgerows and woodlands enhanced.
- Nature Reserve protecting and enhancing the rural habitat.
- Water treatment
- A woodland cemetery.
- The Central Green Gateway between the 'Boulevard' to the West and Lords Lane to the East. Community Farm
- Public sports pitches with community centre and changing facilities.
- 'Everyday' cycling routes between schools, local centres and hubs.
- Existing foot and cycling routes to Town.
- Allotments and orchards accessible to everyone, creating a green buffer to riverside housing.



Proposed NW Bicester Masterplan-Uses

- Exemplar: 393 homes, local community centre, primary school, convenience stores and eco business centre.
- Approx 3000 homes north of railway with extensive green spaces and close walking distance to local centre.
- Community and Business centre, care housing, local store and primary school
- Water treatment and energy centre
- Secondary and through primary school and school playing fields.
- Approx 3000 homes south of railway with extensive green spaces and close walking distance to local centre and primary school
- 'Bus only links to reduce bus journey times to Bicester Town Centre and train stations
- A local community centre and GP health centre
- Business Centre providing up to 2000 jobs.
- The proposed strategic road will be tree lined with pedestrian and cycle paths as well as a through route for cars
- The existing Howes Lane is realigned, with prioritised access and green space.



- ➔ Proposed Off Road Pedestrian/ Cycle Route
- ➔ Proposed Leisure Pedestrians/ Cycle route in GI
- ➔ Proposed Primary/Secondary Pedestrian and Cycle Route along Existing Routes
- ➔ Existing public footpath
- ➔ Bridleway
- ➔ Proposed Strategic Road (with segregated pedestrian/cycle route)
- ➔ Proposed Primary Road (with segregated pedestrian/cycle route)
- ➔ Proposed Secondary Road (with pedestrian/cycle route)

5 NW Bicester Masterplan- Analysis

The masterplan has been shaped by a thorough analysis of the character of the site and surroundings, and a testing of the opportunities and constraints.

Geography:

The town of Bicester has been shaped by its underlying geography, geology and its nearby water courses. It is located in the 'Upper Thames Clay Vale' Character Area 108.

The site is broadly described as having a rolling landform, with underlying limestone geology, characterised by a distinctive pattern of woodlands and mixed farmland - much of which is associated with 18th Century parkland. Most recently, the Oxfordshire Wildlife and Landscape Study (2004), places the site within 'Wooded Estatelands' Landscape Character Type, with the following key characteristics (Ref 1-4):

'Rolling topography with localised steep slopes.

Large blocks of ancient woodland and mixed plantations of variable sizes.

Large parklands and mansion houses.

A regularly shaped field pattern dominated by arable fields.

Small villages with strong vernacular character.'

The geology of Oxfordshire is such that the geological formations lay in bands parallel and sloping down toward the River Thames across the depth of the county. Bicester sits on a flat

plane, formed in the Jurassic period, comprising of Great Oolite above a lower band of Oxford Clay.

The first settlements at Bicester would have been located on the lower Oxford Clay and as such have historically moved North West, uphill, onto the higher and less flood prone ground.

The landform is gently rolling and the geology gives rise to the local landscape characteristic of small streams and springs, running downhill to the plane of Oxford Clay. The water courses historically lead to scattered settlements and farmsteads located near to the water source.

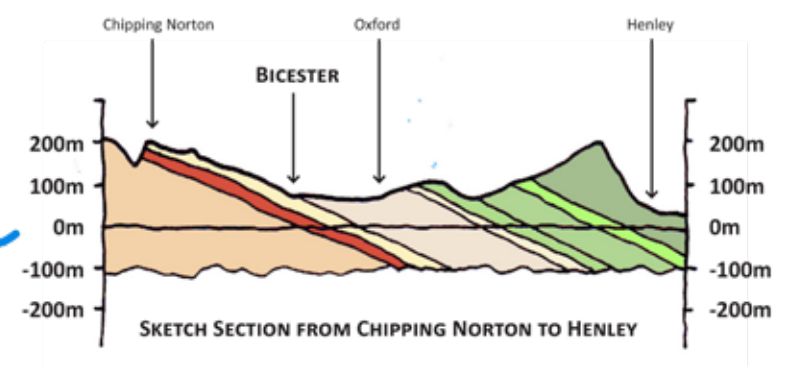
Mixed farmland is the dominant land cover, with arable farming forming the principal use and pasture generally on the steeper slopes. This is a well-wooded landscape with blocks of woodland and corridors of trees bordering valley streams. Fields are generally enclosed by hedgerows, with established ash and oak hedgerow trees also contributing to the wooded character of the landscape.

Settlement is characterised by scattered farmsteads generally with strong vernacular character, reinforced by features such as stone walls and stone buildings with stone or clay tiled roofs. The surrounding agricultural land is generally characterised by a geometric pattern of medium to large fields.

Geography and Geology



MILLIONS OF YEARS		FORMATIONS
TERTIARY PERIOD	50	Reading beds
	65	Chalk
CRETACEOUS PERIOD	99	Upper Greensand
		Gault Clay
	120	Lower Greensand
	145	Whitchurch Sand
JURASSIC PERIOD	144	Portland/ Purbeck Stone
		Kimmeridge Clay
		Corallian
		Oxford Clay
		Great Oolite
		Inferior Oolite
		Upper Lias
		Middle Lias
		Upper Lias
	200	River alluvium
	2000	



Social History: Bicester today and in the future – a place which continues to be shaped by its history

The settlements that formed, what is known today as Bicester, historically followed a pattern of moving up hill out of the river flood plains to higher ground. The town over time has made a shift to the North West of its historic centre. It is a continuation of this natural progression that sets out the concept for NW Bicester.

The Romans built the first settlement which lies south of Bicester, as it is located today. The fort of 'Alchester' was on the confluence of the Gaggle Brook and the Bure stream; at a Roman crossroads near to 'Graven Hill', a rare high point in the flat landscape (figure 1). When Roman 'Alchester' fell into disrepair, around 400AD; the Saxons moved the settlement up hill, out of the flood plains and the second fort of 'Bernecestre' grew on the border between Mercia and Wessex in a strategic location near to the Roman roads, using Graven Hill as a vantage point for military defence (fig 2). 'Bernecestre' thrived for 600 years and was destroyed by a Viking raid in 912AD.

The 11th century settlement again moved up hill, growing around two medieval manor houses (fig 3 & 4a), which form the core of today's historic town centre. The two manors of Kings End and Market End grew on the opposite banks of the Bure stream and were supported by 200

tenant farmers who farmed the burgage plots around the Manor houses (fig 5). As the success of these manors grew and farming began to prosper, 'the Causeway' was built between the two manors bridging the Bure stream. Land to the North was used for agriculture with market fields next to the streams for irrigation and fertile ground (fig 6).

The town grew northwards, with settlements forming around the Bure tributaries and around natural springs that fed water towers which supported the rail network. Streams now provide the corridors for green infrastructure in Bicester, providing green for recreation and natural habitats.

Kings End and Market End were granted market charters in 1377 and 1406; substantial houses were built along 'the Causeway' and Sheep Street was built to bring sheep to the Market Square.(fig 4b) Sheep Street provided a route for sheep and agricultural products to be transported from the fields in the north of Market End. These medieval routes still form the street patterns of Bicester today.

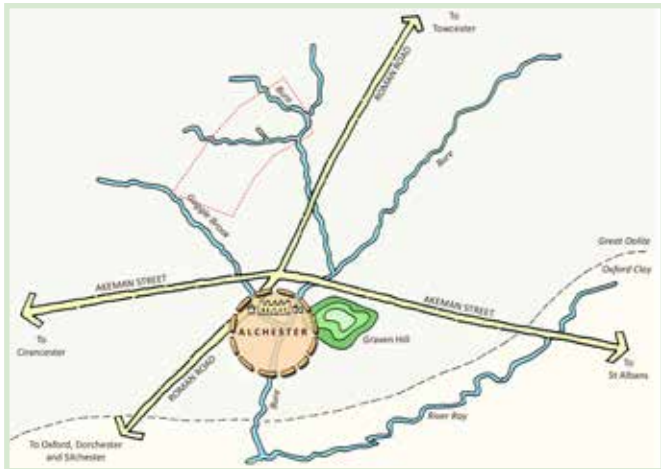
Following the field enclosure act in the 1800's, ownership boundaries shifted and Kings Inn Farm and a later quarry, diverted the top of Sheep Street - two parallel lanes became one lane which extended to Bucknell (fig 6).

Bicester remained as an historic market core surrounded by farms and small manors until the late 18th century when it gradually began to expand its centre with large footprint uses

growing to the North West of the town centre core – with a school and the workhouse. This lopsided growth was further confined by the introduction of the railways in 1830 and 1906 with more accessible land becoming available for development to the North West of the town centre (fig 7).

Bicester, since Roman times has had an association with the military. During WW1, the RAF opened an airfield in Caversfield as a training base, this grew in importance in WW2 and was supported by the Ministry of Defence's largest ordnance depot, to the south of the town (fig 8). The influx of military personnel in the town, and of evacuees from London during the war saw the need for housing increase and the town grew toward the current ring road with new housing estates from the 1960's (fig 9).

As the town moves North West, next to be developed are the market fields, subdivided into two by the railway and the river, the pattern of two centres in Bicester forms the concept for the NW Bicester– joining 2 places (fig 11).



1 **2 ROADS, 1 FORT**
AD 50 - 500



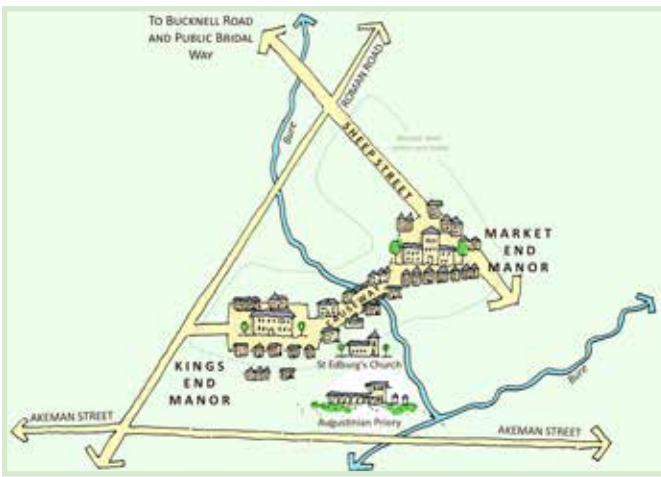
2 **2 KINGDOMS, 2 FORTS**
400 - 1100



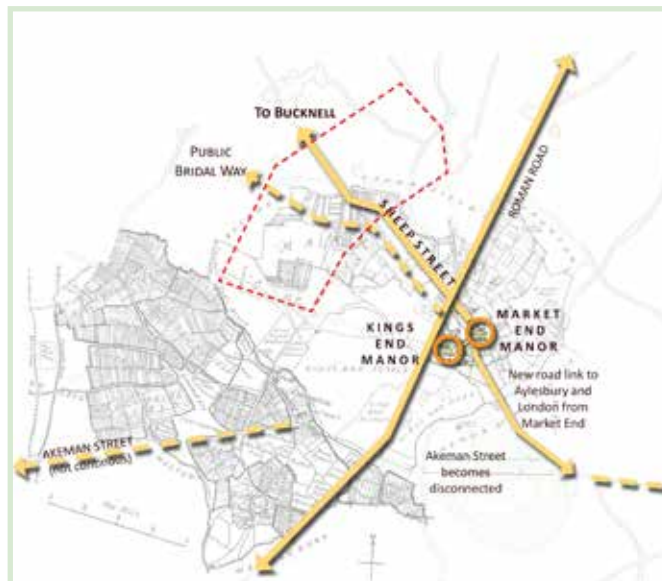
3 **2 MANORS**
900 - 1100



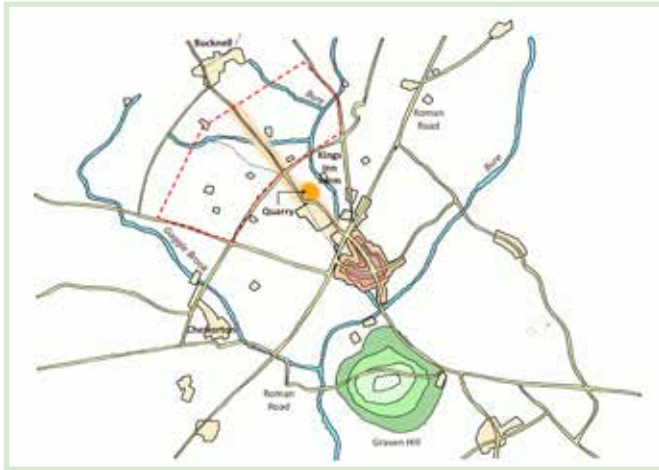
4a **2 MANORS**
1100 - 1700



4b **2 MARKET CORES**
1100 - 1700



5 **2 MARKET CORES**
1100 - 1700



6 **2 TRADITIONS -**
RURAL + URBAN
1700 - 1800



7 **2 RAILWAYS**
1830 - 1910



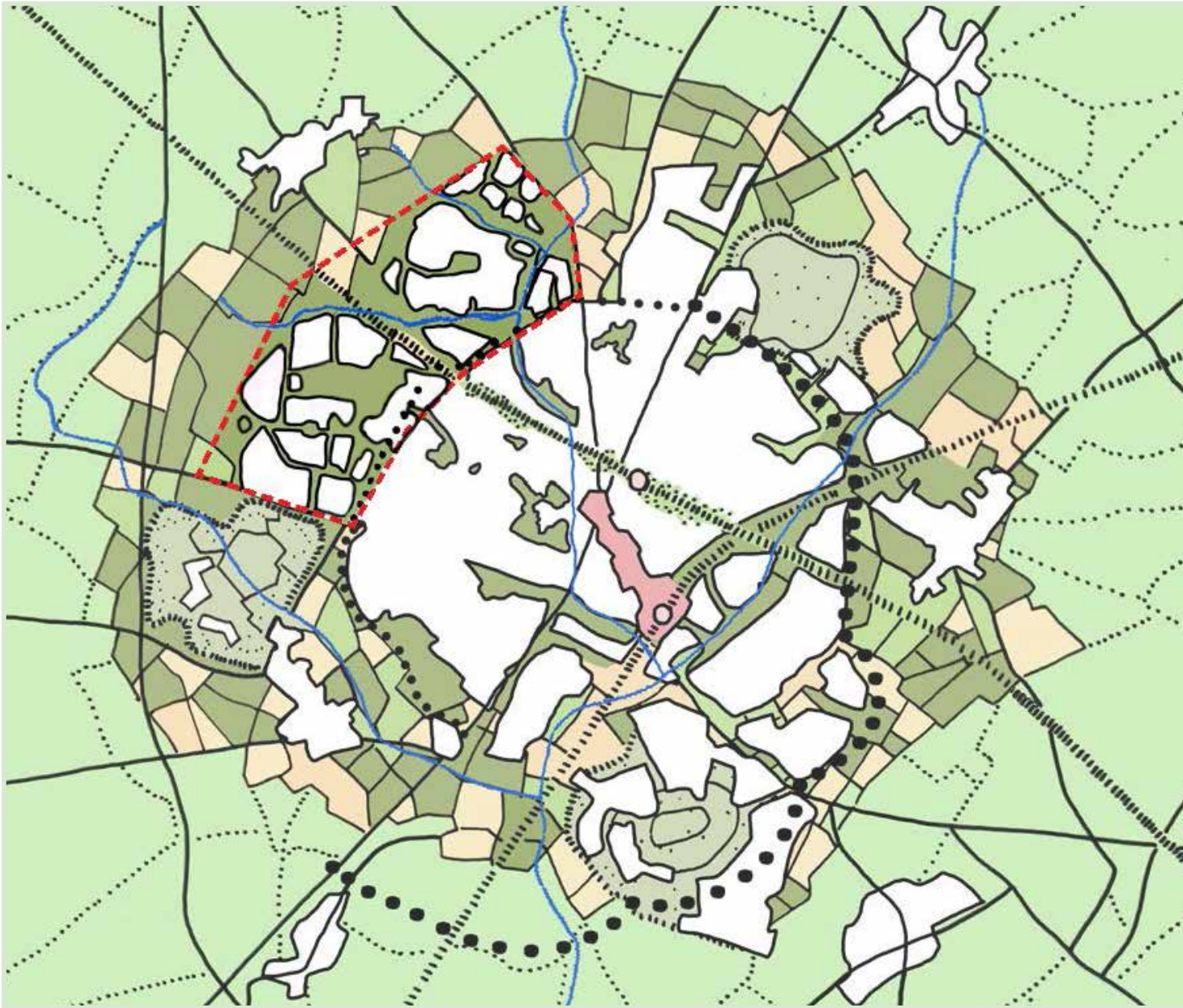
8 **2 MILITARY BASES**
1910 - 1960



9 **2 ZONES:**
RURAL + EXPANDING TOWN
1960 - 1980



10 **2 PARTS:**
DIVIDED BY A RING ROAD
1980 - 2013



**JOINING 2 PLACES:
FOR A COMPLETE ECO BICESTER**

2010 - 2040

6 NW Bicester Masterplan- Key Elements and Proposals

Spatial Structure and Form

NW Bicester will create a series of new places, adding to the quality of the urban realm and integrating existing Bicester with the new development and communities. Our approach has been to create an overlay of great new spaces, providing the new landscape required to meet the challenges in making NW Bicester a key part of the Eco Bicester. This goes further than mitigation.

Four new urban places will be created. Bicester at present has two existing high streets, one in the historic market town core and a 20th century commercial version in Bicester Village. The NW Bicester high streets and urban places will be a mix of identifiable places of a predominantly residential character with some commercial and community uses to create a balance. The four new urban places created will be: the boulevard, the exemplar high street, the cross and the square. These places will be mixed use at the edges close to the existing town creating places for social focus between new residents, local people and visitors. The cross will be a key place at the centre of NW Bicester masterplan, and a gateway where routes cross from under the railway and across the Bure stream.

Four new green places will be created: parks, village greens, green lanes and the green loop. New housing will be grouped around existing landscapes enhanced with new green open spaces and new local urban streets and squares. New parks will be created adding to the existing Bicester town green space connected with a network of green lanes. A network of green lane cycle and walking routes will be created with a combination of direct links between green areas and key destinations and looping interconnected

routes which will allow residents and local people to explore the wider landscape.

Green lanes will make direct shortest route of travel an advantage for foot and cycle connections to the town centre and key connectors, such as train stations, schools and employment areas. Direct links will be provided for frequent bus services providing an advantage in time and accessibility over car use.

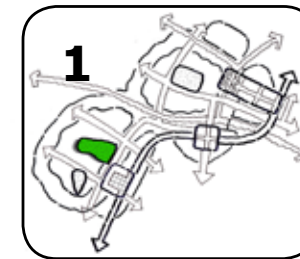
A coherent NW Bicester

The creation of the masterplan relies on the successful connection of existing Bicester; its existing countryside, historic town centre, retail and business areas and existing housing developments; with NW Bicester creating a holistic place.

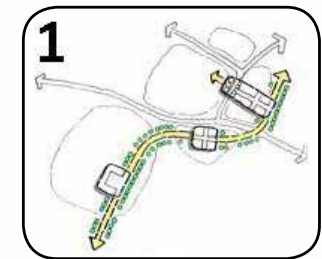
The success of the development relies on successful local connections to the rural countryside, with NW Bicester acting as an intermediary between the rural countryside and urban town. This includes integrating with existing small communities and villages as well as making the countryside more accessible to existing residents.

The surrounding communities

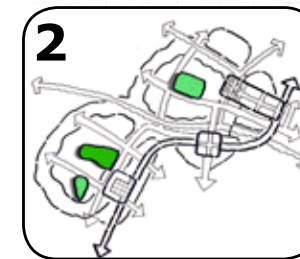
The existing arable farmland which is historically related to a landscape of small villages and farms creating a network to provide food for the town centre market. The surrounding communities and villages have played a large part in Bicester's development to date. Local communities include the nearby villages of Bucknell and Caversfield- historic manor estates and the existing estates in Bicester south of Howes and Lords Lane.



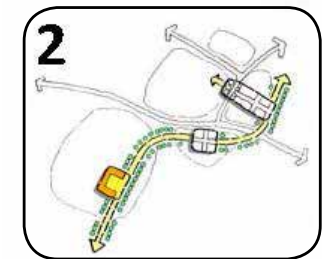
The Park



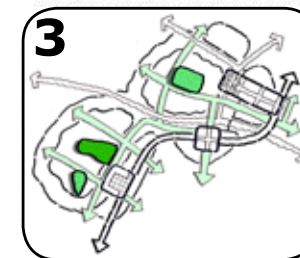
The Boulevard



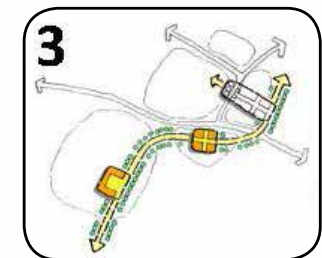
+ Village Greens



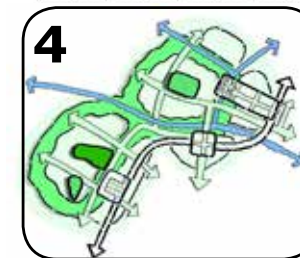
+ The Square



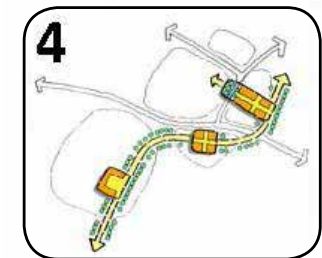
+ Green Lanes



+ The Cross

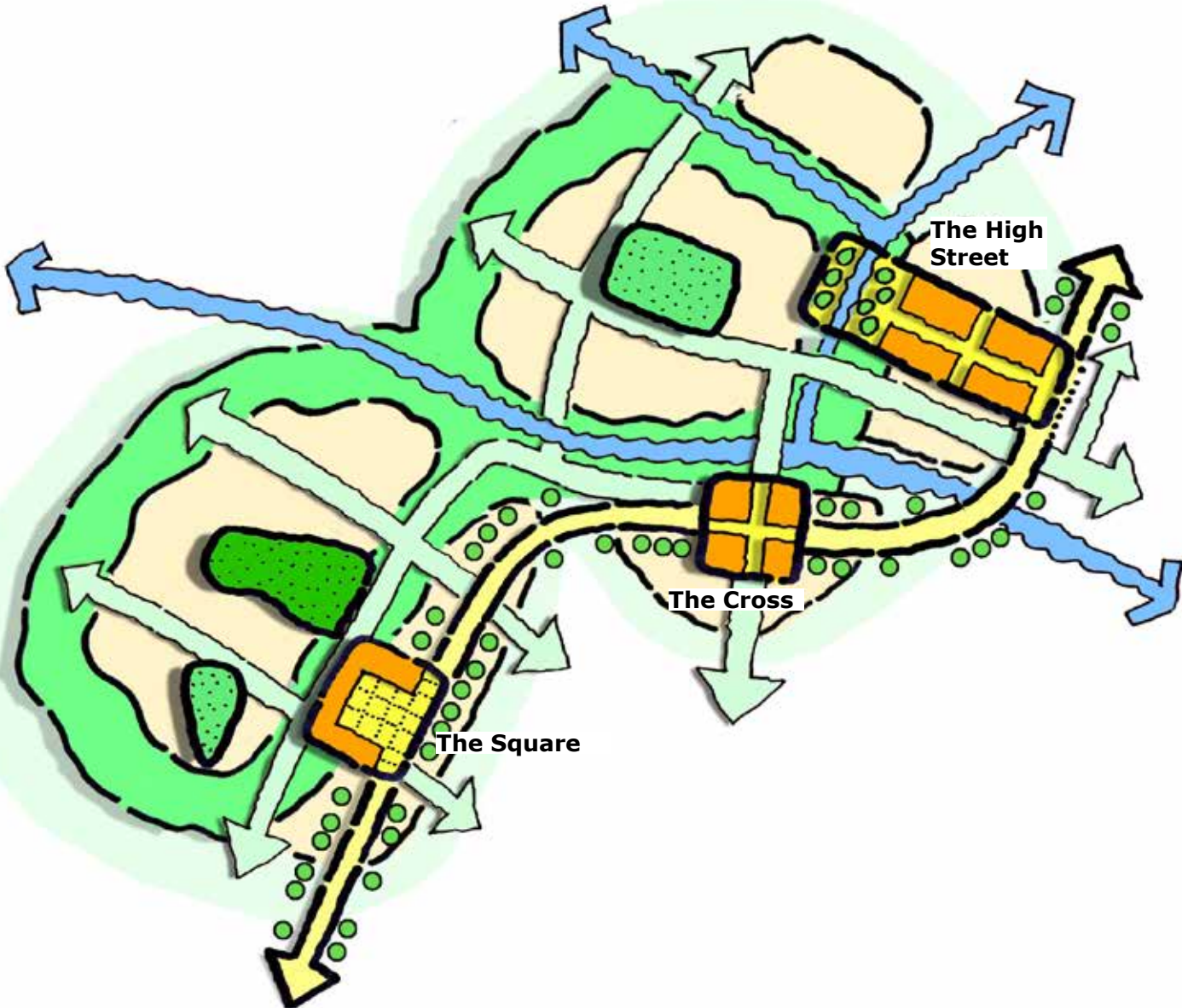


+ Nature & Water Loop



+ The High Street

4 Urban + 4 Green Places = Figure 8



- 3 The Cross
- 4 The High Street



- 1 Park
- 2 Village Greens
- 3 Green Lanes
- 4 Nature and Water Loop

Linking Communities through social infrastructure and transport

Rural meets Urban

Today, existing communities have limited access to the countryside, the only access being a number of footpaths from Bucknell to the north of the site and the public bridleway which runs from Howes Lane to Bucknell and beyond the M40. The masterplan for NW Bicester provides a unique opportunity to 'open-up' the countryside and the Bure stream to the residents living to the south of Howes Lane.

The new development will become the transition between higher density urban development to the south, with its existing hard edge to the country, and the rural farming landscape to the north. This will be achieved by pulling the countryside further into the plan with a series of green links and networks, and allowing the benefits and facilities of new schools, local centres and infrastructure to facilitate the new development.

Both new and existing residents of Bicester will have access to a wealth of green infrastructure such as a nature reserve, parks, sports facilities, allotments and orchards, riverside walks, play areas, rain gardens, woodland and a country park.

Creating new connections

By reducing the barrier of Howes Lane and creating a new Boulevard which encourages green connections north to south and connects with Shakespeare Drive, Dryden Avenue and Wansbeck Drive, the transition between rural and urban can be bridged.

The new Boulevard will provide front doors for homes, shops, business, health, education and community facilities and will create strong pedestrian priority and shared public spaces [see chapter 6.1, *Spatial Structure and Form*].



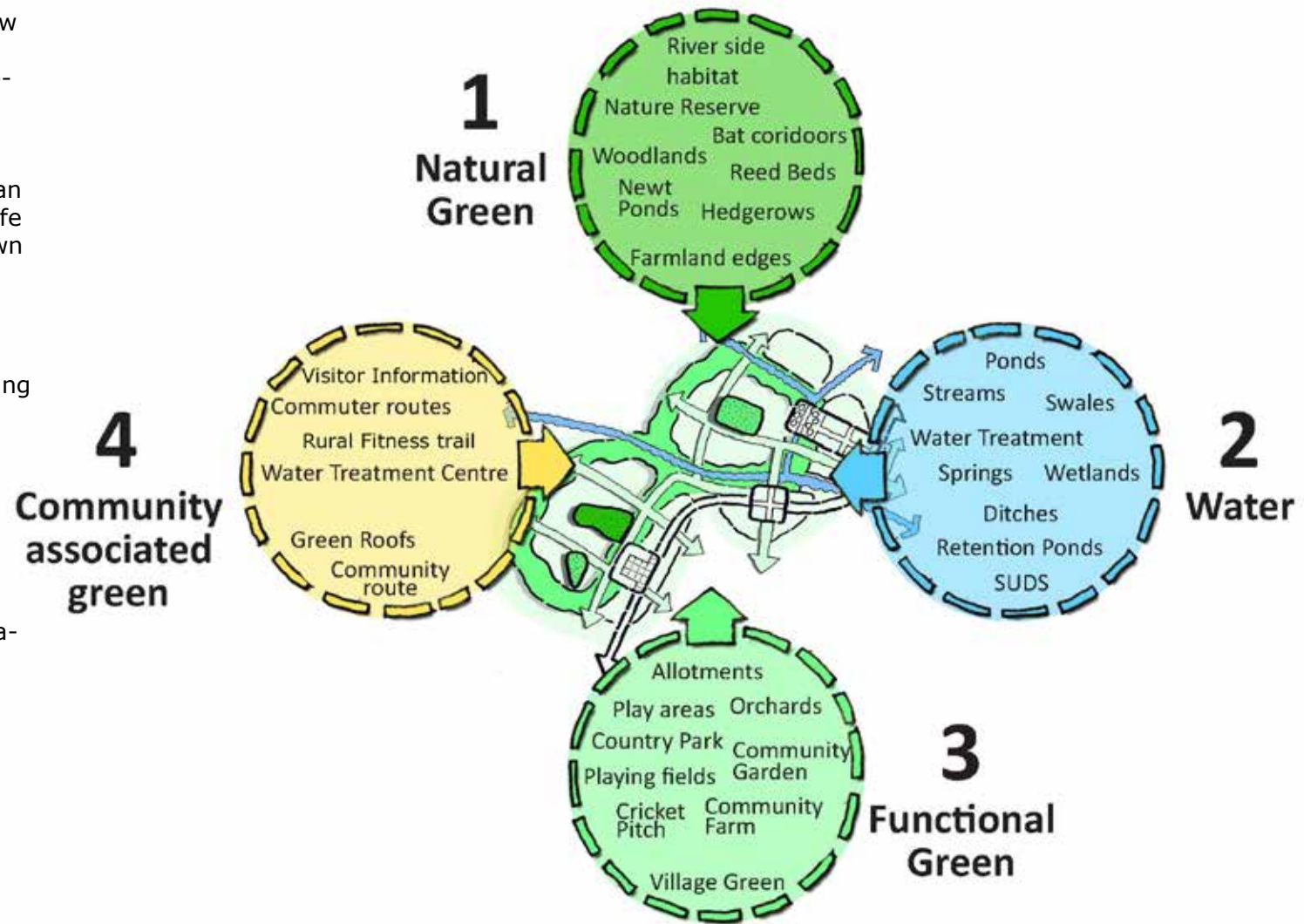
Linking Communities and improving connections to blue and green landscapes

New housing will be integrated with the existing neighbourhoods and pedestrian crossings will be provided on roads between existing and new housing and community infrastructure to integrate the communities providing ease of movement.

A network of new pedestrian and cycle routes will connect to the existing network to create an holistic movement strategy, providing easy, safe and fast access to the railway stations, the town centre and to Bicester Village and Kingsmere. It is key that new routes and connections are legible and easy to understand so that users can easily and safely move through the new development as well as connect with the existing communities in Bicester.

Connectivity through shared amenity and social infrastructure

New community infrastructure will be located within close walking distance of homes to be shared with existing residents. New social infrastructure will include: local shops, a multifaith facility, business centre, schools, community centres, health centres. [see chapter 6.3]



Place Making and Character Areas

It is important that NW Bicester feels like a place, with a set of coherent identities and characters.

The existing site and its rural and urban context is made up from a number of landscape character areas comprising of rural and arable farmland, existing housing estates, Caversfield, Bucknell, Bignell House and Park, Home Farm, Bure Park, the existing historic town centre, the railway, river and M40 corridors. Each of these character areas have many differing characteristics, amongst them; species of trees, ratios of green to urban space, vernacular architecture and materials, habitats and ecologies, micro climates, populations and so on.

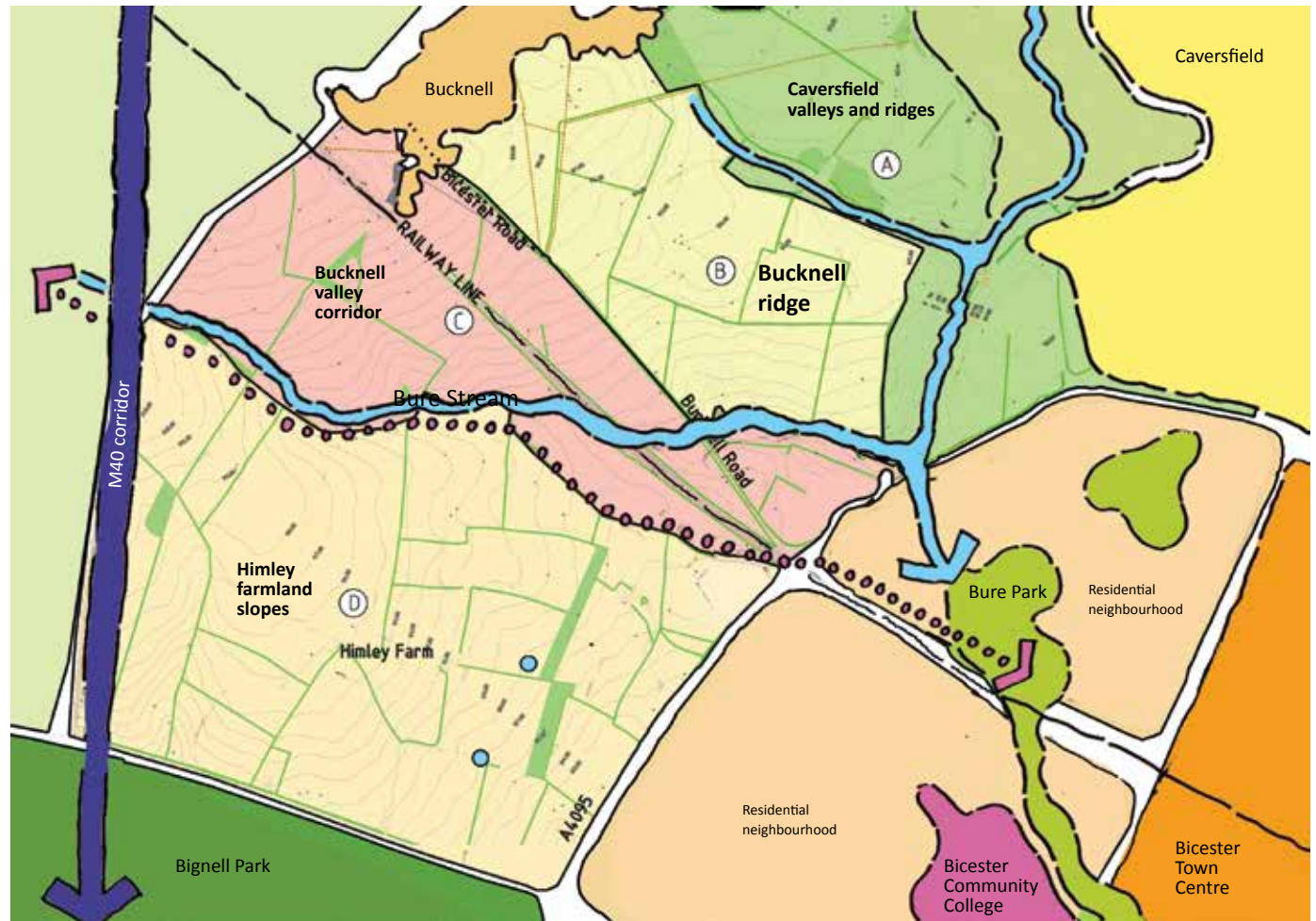
The existing site was surveyed in 2010 to assess the existing landscape character and the local context. Refer to Hyder drawing 'Site landscape character assessment 18-08-2010' for further details. The characterisation can be broken down into the following categories;

A - Caversfield Valleys and Ridges - land to the east of the Bure stream and west of Caversfield. This character area encompasses Home Farm and the rolling landscape and valley sloping down to the Bure stream.

B - Bucknell Ridge - high land contained on all sides by Bucknell village, Bucknell Road and the Bure stream.

C - Bucknell Valley Corridor - corridor between the existing bridle way and Bucknell Road, includes the existing railway line.

D - Himley farmland slopes - farmland between Bignell Park and the bridle way. Characterised by a grid of existing hedgerows.



Proposed Character Areas

By creating a set of new character areas and breaking the masterplan down into areas which are complimentary to existing Bicester, relate to and take influence from the existing landscape characters and retained natural features, we can begin to grow new places which are more site specific and pose less impact on the landscape. This will ensure that the development feels like a special place which is heavily influenced by its location and rural heritage.

The proposed character areas go hand in hand with the proposed density. The boulevard forms a linking road which connects all of the local centres and hubs - from the local centre on the south of the boulevard to the central gateway and onwards to the local centre in the exemplar.

The local village centres and high streets provide the opportunity for higher densities - to create an urban scale with amenities and mixed use accomodation with flats, in street fronting four to five storey buildings.

The permeability of the high street extends through perpendicular lanes, a typical village urban typology; with terrace houses and mews housing courts fronting onto the cross lanes with pedestrian links to the development towards the rural edge and the existing town.

These typologies create clear and distinct character areas. See page 64- 65 for more detail of housing character - scale and density.

To highlight how the masterplan can begin to be broken down with contrasting uses and settings, 3 principal conditions have been illustrated - 'The Boulevard', 'The Bure Stream' and 'The Rural Edge'.



NW Bicester Masterplan density in context of existing Bicester

Excluding green infrastructure the masterplan housing area has an average density of 35 units per hectare with a range of density from 20 units per ha on the perimeter up to 50 units per ha in closer relationship to village centres and to public transport infrastructure. The average density is comparable to existing housing in surrounding areas in Bicester of 30 units per hectare

Lower density housing character area

The housing character in lower density areas is a mix of 2-3 storey detached, semi detached and short terrace house type predominantly perimeter facing to green lanes and wider open green spaces with a smaller number of street facing house types. The lower density character areas provide larger areas of green open space within the housing, creating either central space or open edges to fields and hedgerows and incorporates suds, natural play, allotments, amenity and habitats.

Medium density housing character area

The housing character in medium density area is a mix of 2-3 storey detached, semi detached and short terrace house type predominantly street facing house types with a smaller number of perimeter facing houses. The housing plots are sized to allow the creation of a sense of place with either detached, semi or short terraces of houses or flats, providing an urban sense of enclosure fronting the spaces. The plot size creates a flexible layout for a mix of house types in one block and a variety of solutions for car parking: rear parking in mews housing courtyards and discrete areas of frontage parking on street and in garages.

Higher density housing character area

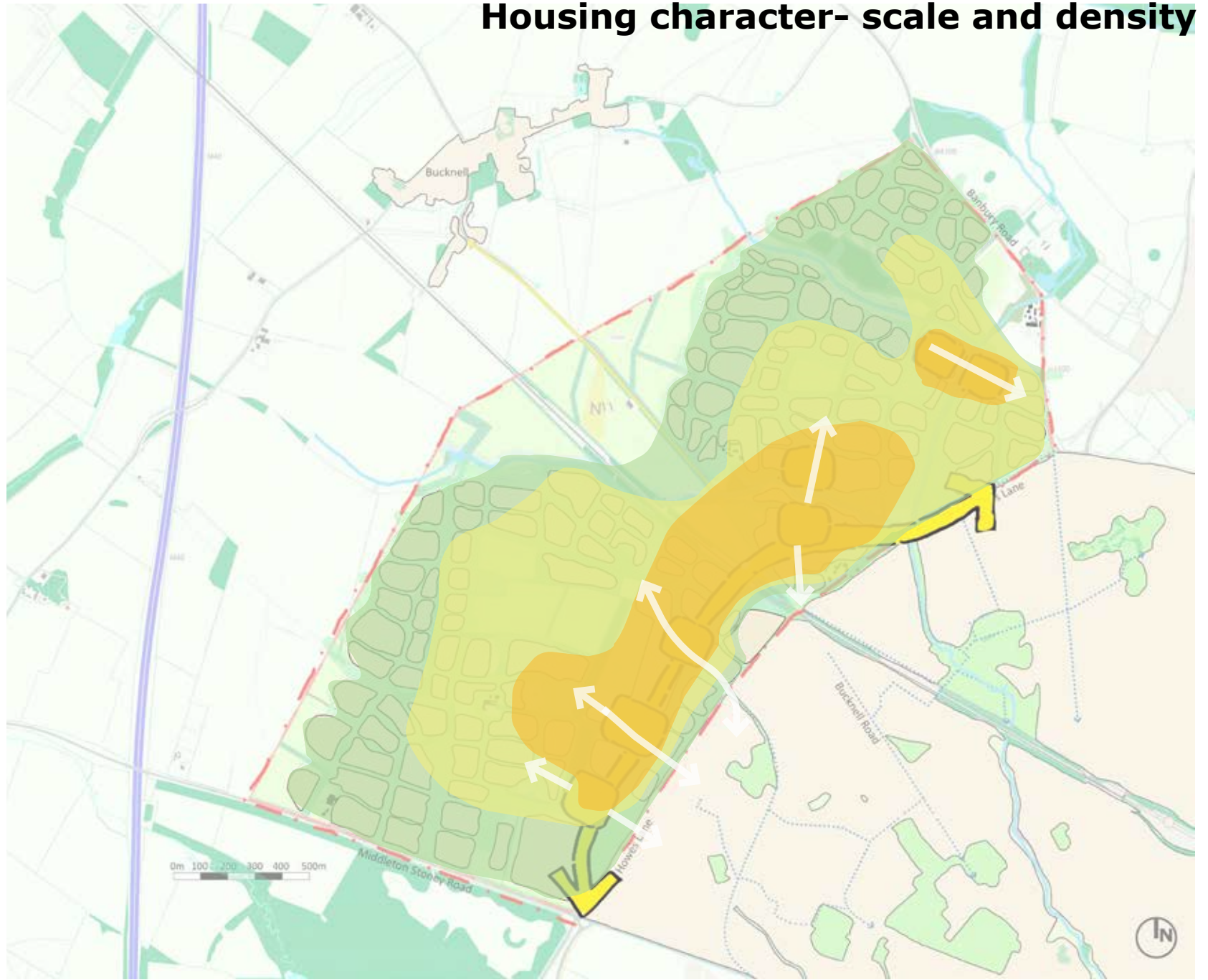
The housing character in higher density area is a mix of 3- 4 storey semi detached and short terrace house and 3-5 storey flats predominantly street facing house types with a smaller number of perimeter facing homes.

The local village centres and high streets provide the opportunity for higher densities create an urban scale with a amenities in mixed use with flats in street fronting four to five storey buildings. The permeability of the high street extends through perpendicular lanes, a typical village urban typology, with terrace houses and mews housing courts fronting onto the cross lanes with pedestrian links to the development towards the rural edge and the existing town.

Street character

A hierarchy of street character and access creates a gradual hierarchy of street width, frontage building scale and landscape detail to establish primary spine roads, secondary access streets, lanes fronting the wider green open spaces and a loose network of tertiary perimeter green lanes, short cul de sacs linked by paths. The layout gradually changes from urban to rural scale and opens a sequence of views from the high street scale towards the rural perimeter fronting open landscape.

Housing character- scale and density



Housing character scale and density

- Medium - high
- Medium
- Low - medium



Boulevard and area of local scale and density



'The Boulevard' Character Study

The Southern Green Gateway connecting to the existing Middleton Stoney Road signifies the entrance to the Boulevard which replaces and relocates existing Howes Lane to a more northerly location. With prioritised access and a heavily landscaped entrance, replacing Howes Lane improves conditions for existing Bicester residents living south of the Lane and allows the provision of public open green space for the enjoyment of existing and new residents. To the north of the boulevard, adjacent to the green space is a proposed business centre, providing up to 2000 jobs.

The "boulevard" will be tree lined with pedestrian and 'every day' cycle paths and routes between schools, local centres and hubs as well as a through route for cars.

Moving North East along the boulevard, a local centre will include a primary school set within existing retained woodland, a health centre and pharmacy, a dentist, a local supermarket, shops, small business space, a community hall and a nursery with green and pedestrian links integrating the centre with existing Bicester - connecting with Dryden Avenue.

Higher density residential development and flats will line the boulevard, creating a continuous reinforced street edge which breaks to allow green spaces and routes to connect north to south. A secondary and primary school and school playing fields connect the local centre with further housing toward the railway crossing

bound by a new east west connection from Shakespeare Drive accessing the development to the north west of the Boulevard.

Further east, the boulevard will cross the existing retained bridleway from Howes Lane to Bucknell and continue underneath the railway to another local centre comprising of an Extra Care village and local supported facilities such as shops, a hairdresser, dentist, small retail units, a nursery and community centre.

Connecting under the railway

For the first time, pedestrians and cyclists will be able to move between the north and south side of the railway on the NW Bicester site. Pedestrian and cycle access will be provided where the Bure currently crosses underneath the railway. This will allow for the two halves of the site to be connected giving access to community and social facilities and public spaces. The Boulevard will also cross underneath the railway with a new bridge and road layout, linking to Lords Lane and giving access to the eastern local centre and Extra Care Village and residential properties beyond. The new road crossing under the railway creates the opportunity for a direct pedestrian crossing and bus only link between Bucknell Road and NW Bicester.



1. View of Wider Boulevard on Howes Lane

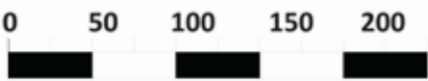


2 View of Local Centre on Boulevard

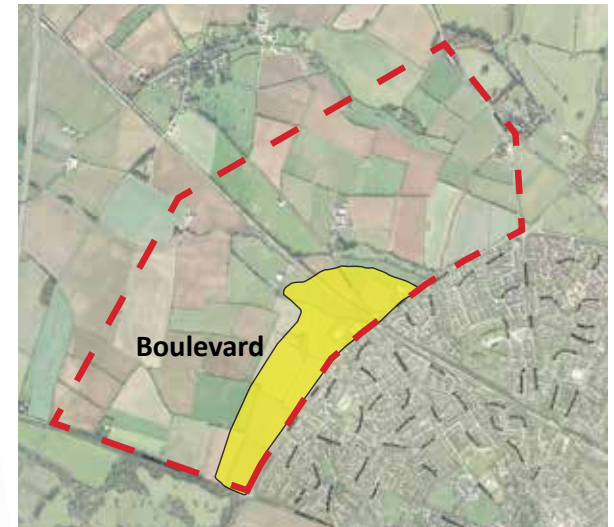


3 View of Wider Boulevard at Lords Lane

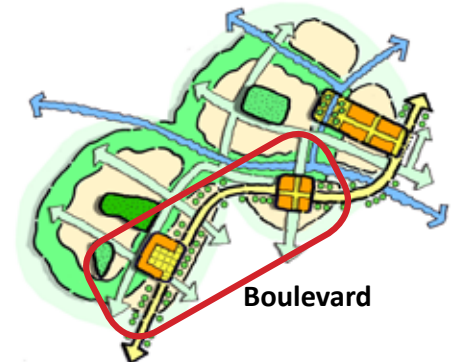
Boulevard



The Boulevard



Location Plans



'The Bure Stream' Character and Uses Study

The existing Bure stream, currently largely inaccessible to the public to the north of Bure Park will become a key landscape feature of the development both to the north and south of the railway. It will provide river views and setting for low, medium and high density homes as it flows toward existing Bicester, footpaths for cycling, walking and jogging will provide stream side access. This character area can be further broken down into sub categories as the river transgresses from rural countryside to urban Bicester.

The first being the **Rural Bure**, the northern edge closely follows the existing bridle path. This arable farmland area furthest away from homes, may provide the setting for a demonstration and education of renewables such as suitable scaled wind turbine and solar PV.

To the south of the stream, a rural fitness trail will follow the edge of the development up toward the river. An existing pond will provide the opportunity for an educational facility and the possible monitoring of water flow with a small water turbine.

Moving toward the town centre, the next segment of the stream is the setting for **Nature and riverside homes**. A nature reserve to the north provides access for visitors at the stream edge, as well as providing educational opportunities. Areas of wetland, created by scrapes close to the stream and tall swamp vegetation could be introduced to create areas of interest and increase the net gain in biodiversity. Secluded areas and screening to the railway will be created with dense scrub to provide habitat for birds. A mosaic of grasslands will provide robust and tussocky grassland for public access in contrast to shorter grasslands and reed beds to create intimate spaces for wildlife to thrive. Tree planting will also be considered here to create screening for the future.

Stream side homes to the south are likely to be of a low density here and will benefit from views onto the Bure and direct access through public footpaths and adjacent green space.

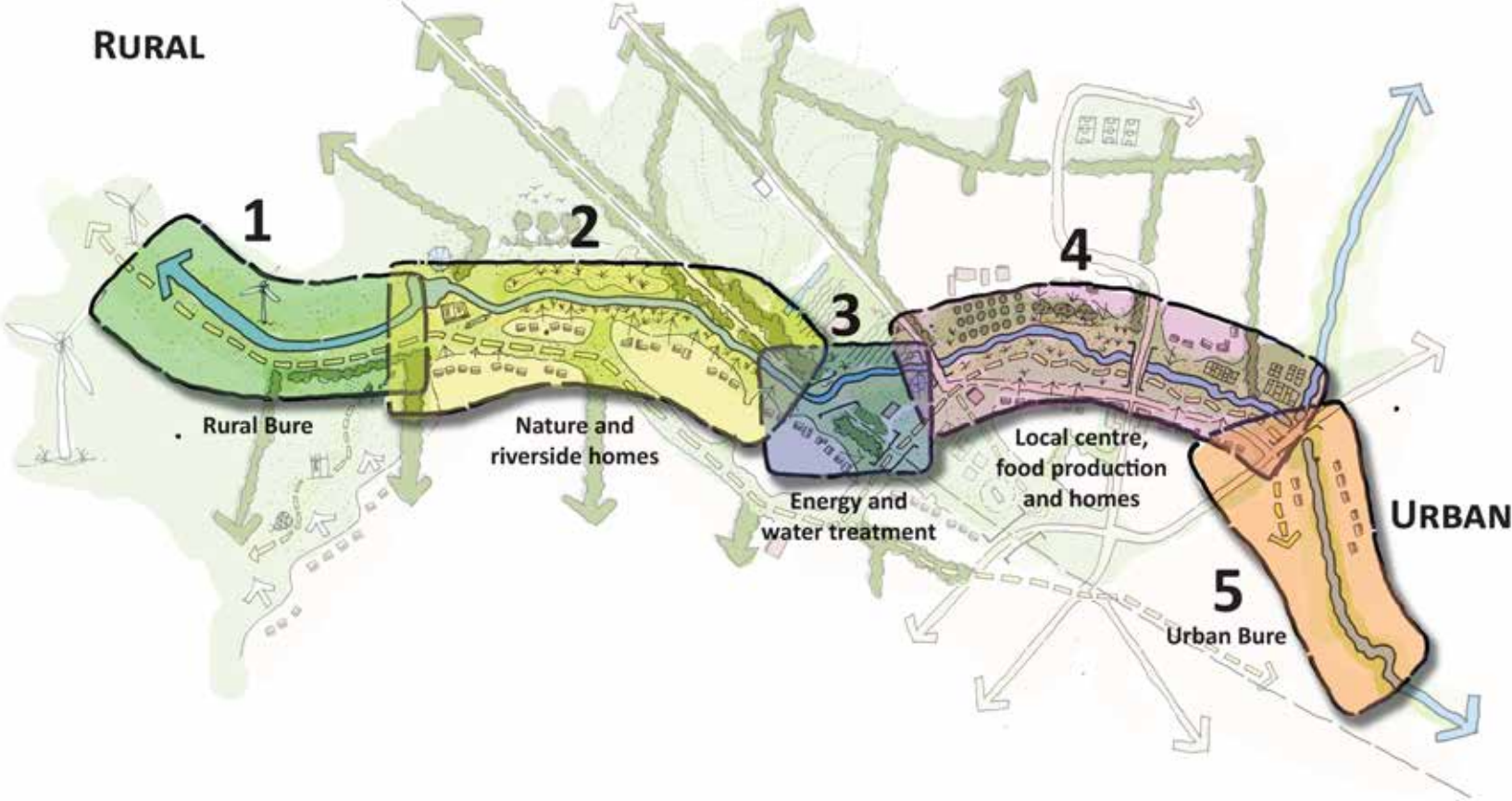
The railway crosses the stream with pedestrian access at the midpoint of the route. Between the railway and Bucknell Road to the east, there is the possibility for a water treatment centre and separate energy centre. The waste water treatment centre could include reed beds for cleaning and treating grey water [see chapter 2.2 for more information on water, energy and recycling].

Before reaching the **Urban Bure** which runs through existing Bicester down to Bure Park, the

stream passes through an area characterised as a **Local Centre- food growing opportunities and homes**. To the north, the south facing banks of the stream are perfectly positioned for an area of local food production, including the provision of allotments and orchards acting as a green buffer to stream side housing to the north.

To the south, the local centre will provide a care home and associated extra care housing with a possible hotel on the south banks of the stream.

The Bure Stream



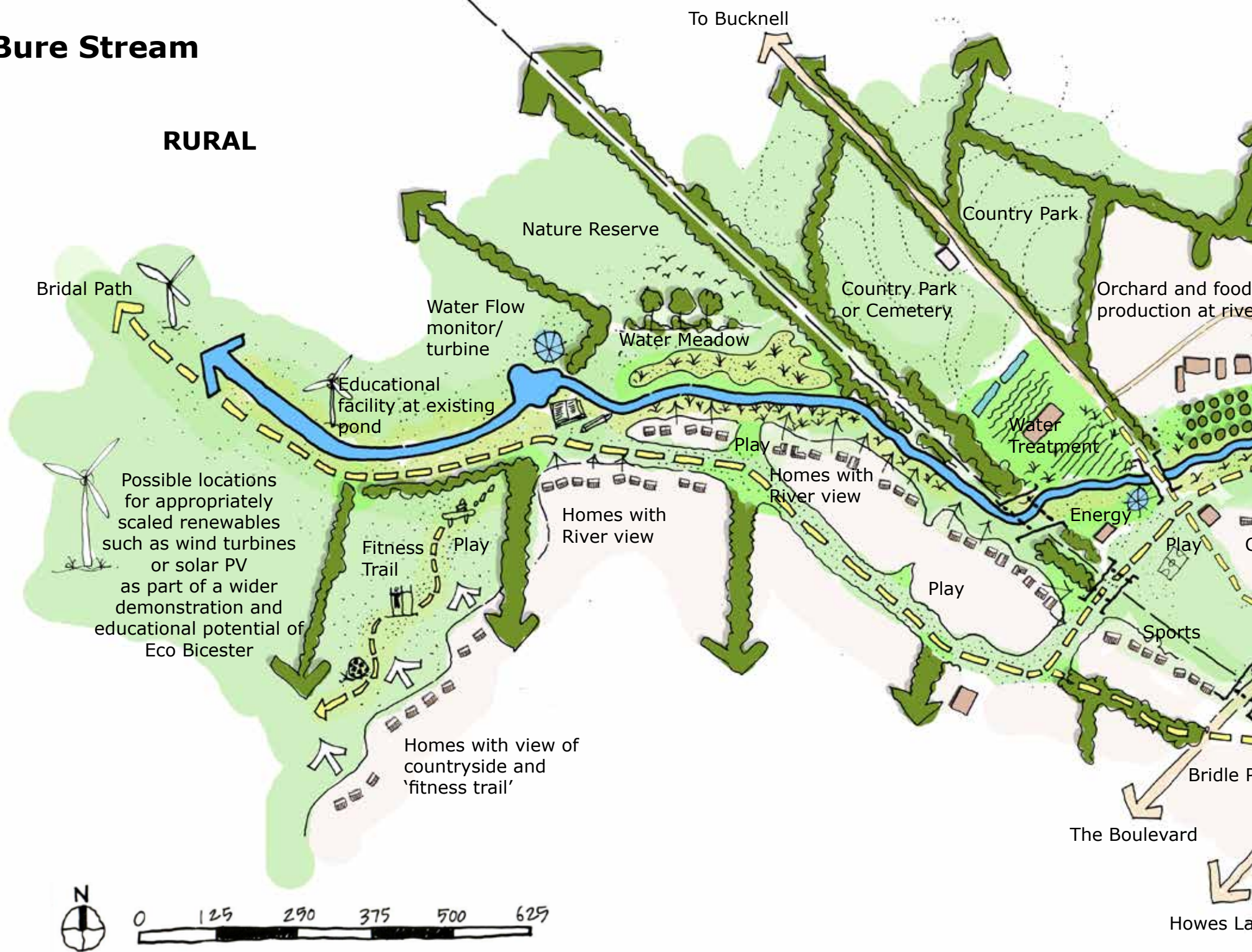
Water Meadow



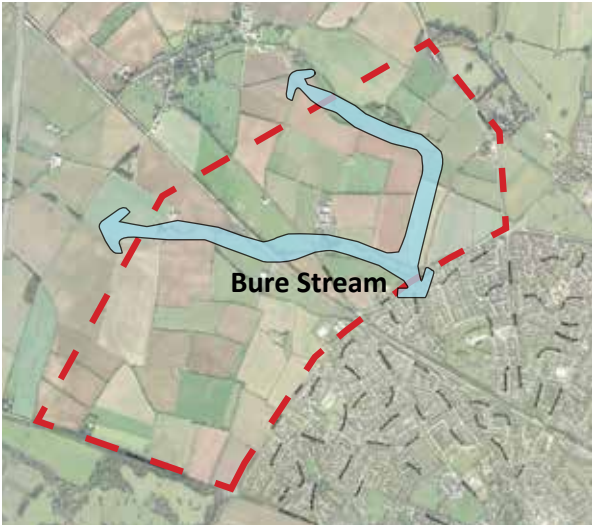
Homes with River Views

The Bure Stream

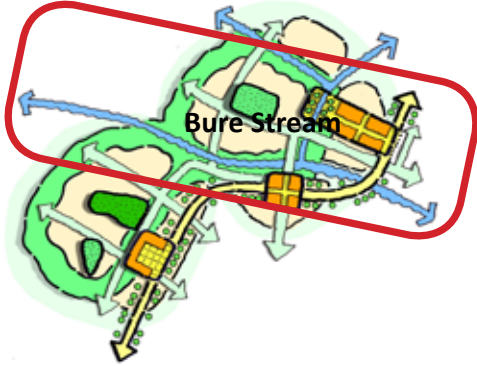
RURAL



The Bure Stream



Location Plans



'The Rural Edge' Periphery Conditions

The masterplan site perimeter, in particular, the agricultural interface, is important to the way in which the development is sited and interfaces with the wider landscape. 'Edges' occur at the borders between two habitats, be it human or ecological. 'Edges' can be highly productive and rich layers of spatial design, particularly important in Green Infrastructure.

Community routes and footpaths should meander through a variety of environments and layers of the development edge. These routes should offer the user a varied experience of the landscape to help intuitively understand site context and to increase activity and natural surveillance where beneficial. e.g. Providing good access to allotments and houses. Development edges should incorporate opportunities for:

- Activity (e.g. Informal play, fitness trails)
- Productivity (e.g. Food / energy / resource production / harvesting)
- Delight (e.g. Reinforce sense of place / identity, public art, access to nature)
- Protection (e.g. Habitat preservation, shelter, natural surveillance, well-being)

NWicester Masterplan

What could the green leisure loop feel like for cyclists?



No division of the two way cycle lane, try and keep to the left and enjoy your leisure cycle. Stop off along the way for a rest on one of the benches which doubles as a sculpture trail. Teach your parents about the different insects and wildlife you've seen along the way.



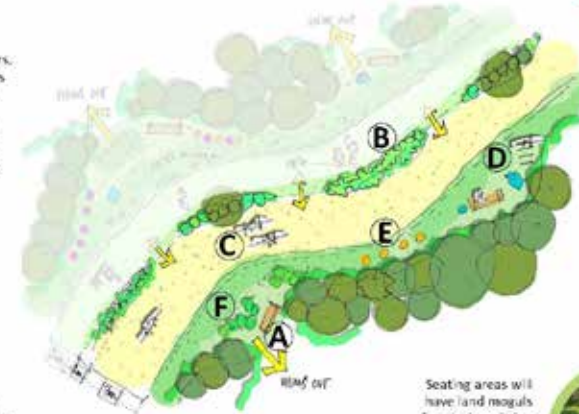
Natural planting, wildflowers, grasses and sensory gardens - smell the lavender as you cycle past. Low level 600-800mm high. Play and hide in the grass, run in and out of the plants.



This a great route for all the family to enjoy cycling and keeping fit together but make sure you bring your helmet.



Stop off at any of the great facilities - pump up your tyres, fill up your water bottle or lock your bike up in one of the bike racks whilst you go for a walk.



Enjoy the educational and fun nature and interactive discovery trail which teaches you all about how to be a good cyclist and the animals and plants along the green loop.



Seating areas will have land moguls for playing, sitting and watching the clouds go by, there's probably even a free wifi tree nearby.

NWicester Masterplan

What could the green leisure loop feel like for pedestrians?



Land moguls and hills for natural play, sitting and laying down along the rural edge in break out spaces. These allow for children to experience the countryside in a play environment, overlooking fields, with long views to Bucknell.



Specimen trees with attractive bark, small fruit trees and flowering blossoms create a shelter band, frame views and provide intimate spaces whilst also providing visual amenity and pleasant fragrances.



Willow, tree and shrub tunnels provide natural play and adventure in a rural setting - for all the family.



Tree and shrub planting breaks to create long views to the countryside and to Bucknell. These provide opportunity to link the leisure loop with existing public footpaths.



Framing long views to the Oxfordshire countryside - a natural and valuable asset to placemaking.



Woodland areas and breakout spaces can provide the opportunity to extend the fitness trail, with simple structures for all the family to keep fit.

CYCLE

WALK

The Rural Edge - Walking and Cycling

The green leisure loop for cyclists and pedestrians

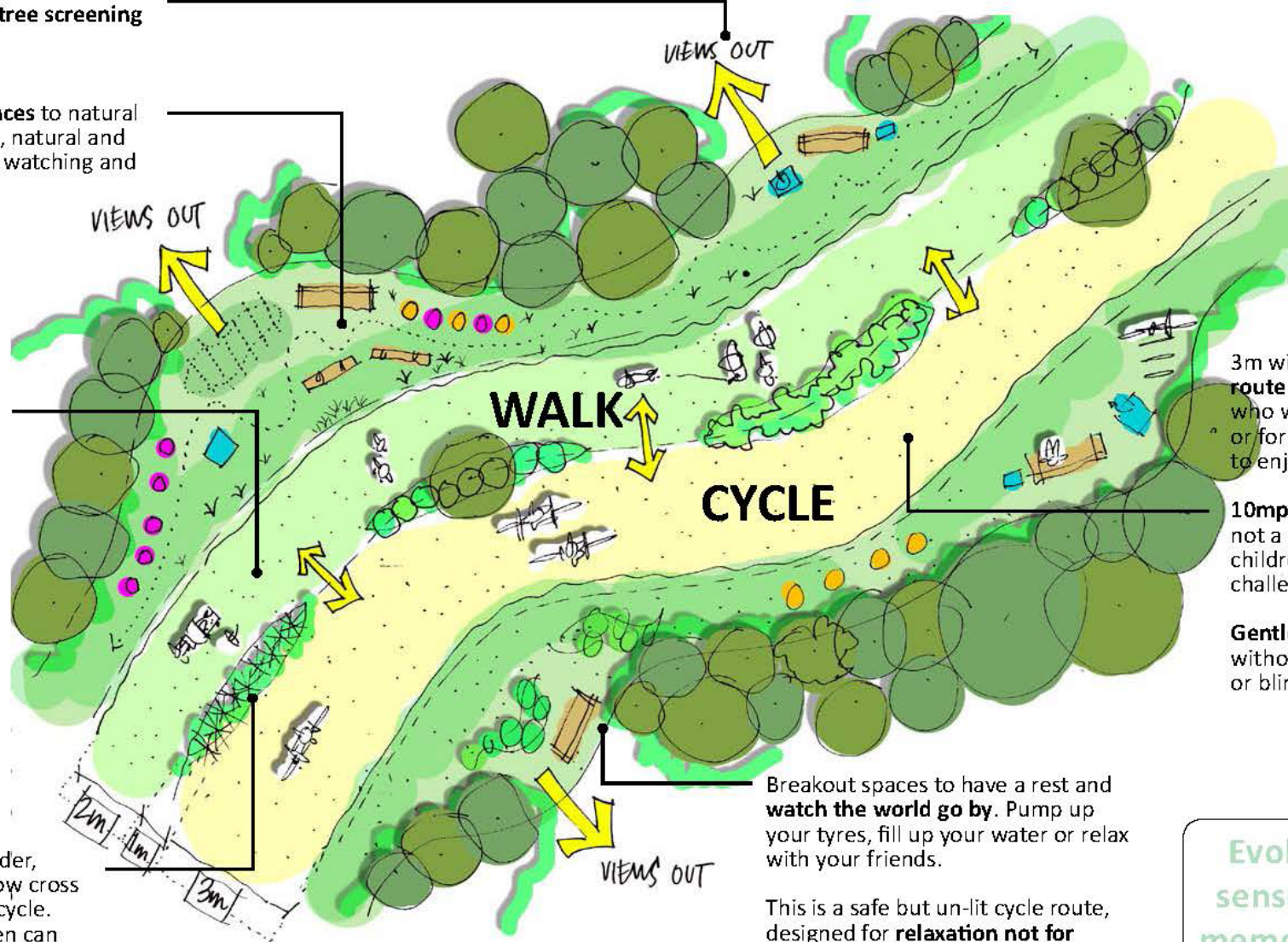
Varied edge treatment - **views** in and out as well as plant and **tree screening**

Occasional **breakout spaces** to natural edge to allow for resting, natural and educational play, sitting, watching and **enjoying the landscape**

2m wide walking green lane which **gently meanders** along the rural edge.
2 way relaxed walking for slow weekend walks, joggers, push chairs, dog walkers.

A **safe route with natural surveillance** where possible for children and adults to enjoy the natural surroundings.
This is an un-lit route.

Modest 1m planting divider, broken every 10m to allow cross over between walk and cycle.
Low planting that children can run through, **play and hide** in but also see over and be seen in.
600-800mm high planting such as **natural grasses and wildflowers**.



3m wide **leisure cycling route** for weekend cyclists who want a loop challenge or for parents and children to enjoy the countryside.

10mph speed limit, this is not a race track but children are welcome to challenge their friends.

Gentle meandering loop, without any sharp corners or blind bends.

Breakout spaces to have a rest and **watch the world go by**. Pump up your tyres, fill up your water or relax with your friends.

This is a safe but un-lit cycle route, designed for **relaxation not for commuting**

Safely park up your bike and **stretch your legs** for a walk and a pub lunch in Bucknell.

Evoking all the senses to create memorable places

Rural Edge



To Bucknell

Existing public footpaths to Bucknell

Proposed new public footpaths

Existing field enclosed to allow farming

Woodland screening

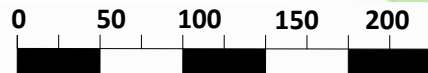
Country Park

Dog walking loop with points of interest

Allotments

Allotments

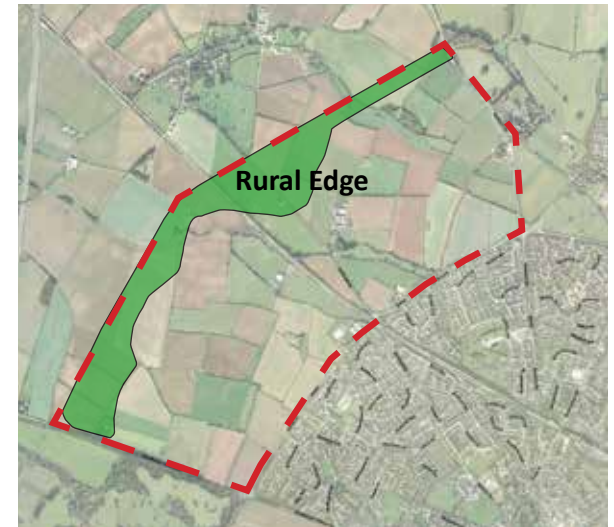
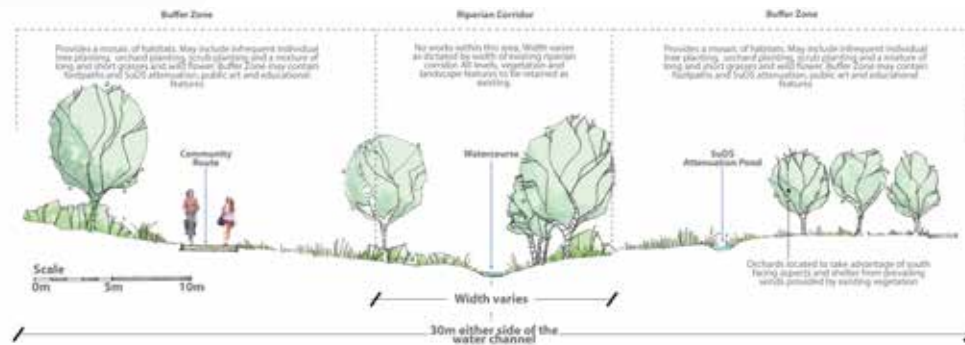
Long views to village centre



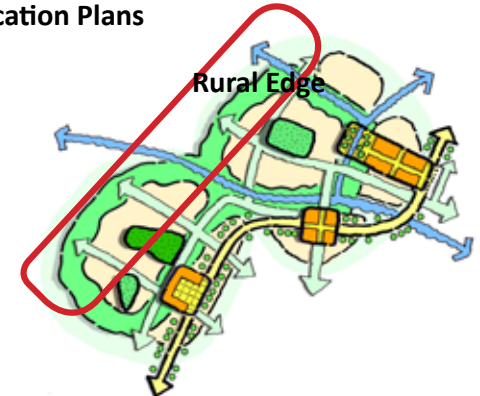
Rural Edge



Allotments



Location Plans



6.2 Landscape and Green Infrastructure

Proposed Landscape

The NW Bicester Masterplan will have 40% green space across the development. This will comprise a mix of public and private open space. By creating an outstanding natural living environment, very different to other high volume residential developments, NW Bicester will encourage a healthy lifestyle with the outdoors on the doorstep. The vision is to emphasise local distinctiveness, whilst protecting habitats, and encouraging outdoor activity for the existing and future residents of Bicester. The masterplan aims to achieve the following criteria;

- To conserve and enhance habitats and provide a net gain in biodiversity
- To demonstrate that 40% of site will be allocated to green infrastructure providing generous multi-functional landscape elements.
- Make green infrastructure the primary infrastructure to connect with existing rural surroundings
- Reveal, enhance and integrate the existing watercourses in open spaces
- Development should be located to utilise the natural topography and existing landscape features, retaining local landscape distinctiveness providing screening, which would augment and protect the existing rural landscape.

Protecting existing natural habitats

The Masterplan has been designed

sympathetically taking into account the existing natural habitat from the outset. Almost all of the existing hedgerows, the woodland and streams will remain to ensure the site's natural beauty and natural habitats are preserved.

New habitats will also be created in the man-made reed beds, swales and ponds, encouraging colonisation by new species and strengthening the value of retained habitats. Meadow grass will be planted in certain areas of the site to encourage wild flowers to grow and biodiversity to flourish, and a nature reserve is also being proposed.

Existing bridle ways and footpaths are integrated into the Masterplan providing access to the wider rural area through the new development.

Opportunities for outdoor activity

Generous landscape and recreation spaces for sports and play will be in central areas, to encourage community use. All of these spaces are designed to be linked by green corridors to provide easy access to outdoor activity for residents of NW Bicester and the surrounding communities.

The Masterplan proposes to consolidate green space for formal leisure activity and sports into two locations to create viable and accessible sport and leisure for all. Alongside the large swathes of sports pitches and plays areas, other options being proposed as part of the Masterplan consist of a nature reserve, a community farm, formal and informal park areas, a green gym

and activities circuit, and a 10km green loop. The design will also incorporate a large number of community allotments to encourage people to grow food and

bring the community together.

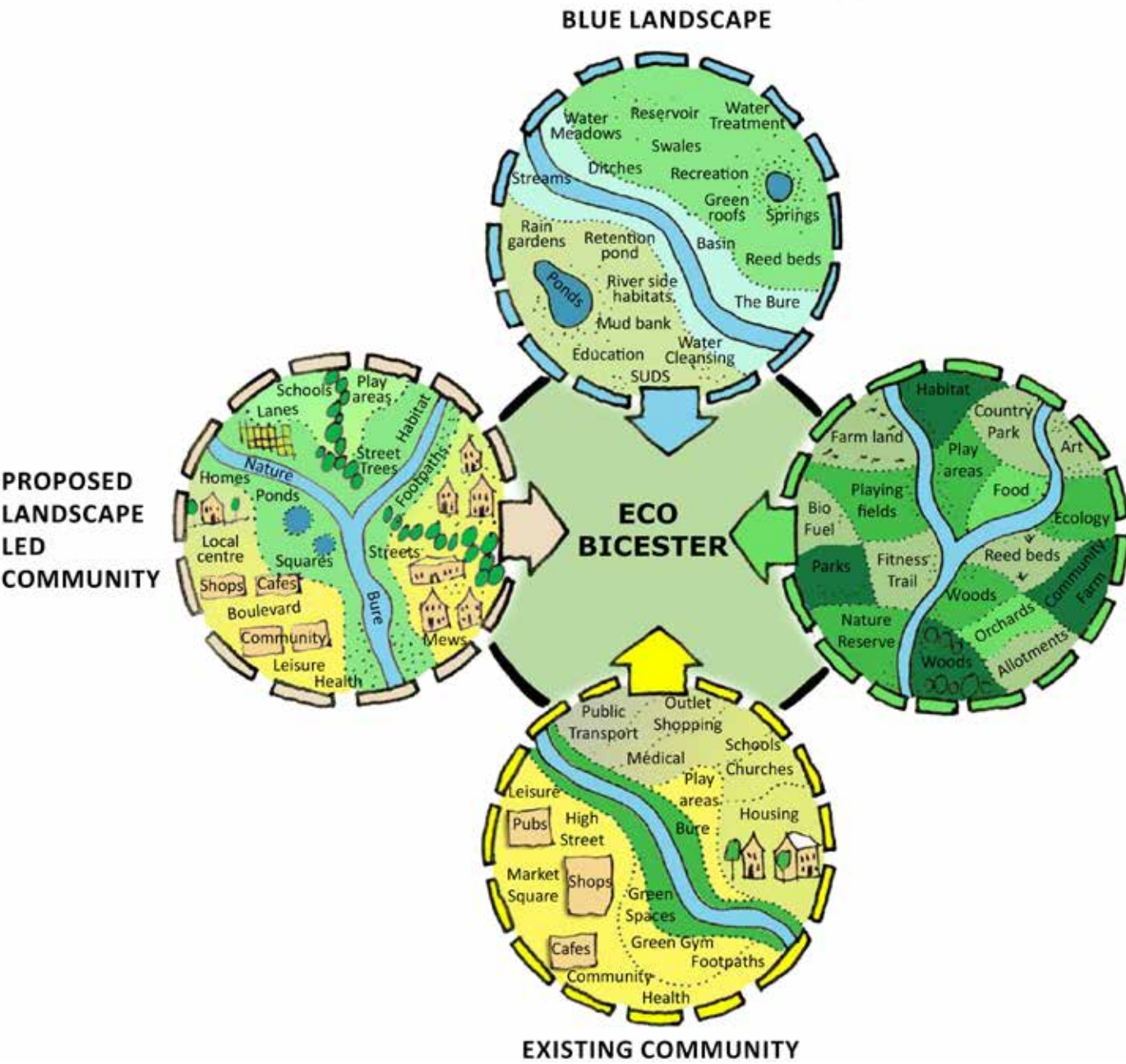
Unique landscape creation

All development will be located to fit within the existing landscape features where possible in order to retain natural distinctiveness which would augment and protect the existing rural landscape.

A mix of urban and rural quality green space with green corridors ensures an attractive and accessible network for both people and wildlife.

Footpaths and cycle routes that interlink throughout the site and connect to the town and the surrounding countryside will encourage such uses and greatly enhance health and quality of life.

Green Infrastructure Opportunities and Constraints



Existing Hedgerows and Woods



Existing Topography and Water Courses



Existing Habitat Constraints

'Green Infrastructure (GI) is a network of high quality green and blue spaces and other environmental features. It needs to be planned and delivered at all spatial scales from national to neighbourhood levels. The greatest benefits will be gained when it is designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits (ecosystem services) for local communities.' Natural England 2014

Green Infrastructure includes parks, open spaces, playing fields, woodlands, wetlands, grasslands, river corridors, allotments, footpaths and cycle ways.

Biodiversity

In brief the Masterplan habitats including hedgerows, the River Bure and its tributaries, broad leaved plantation, broad leaved semi natural woodland, arable land, grassland and ponds support species including common lizard, grass snake, common reptiles, badgers, brown hare, brown hairstreak butterfly, several species of bat and numerous breeding birds including 22 species of conservation concern.

Hedgerows

The majority of the hedgerows within the Masterplan site were species-rich, supporting five or more woody species. Many of the hedgerows were associated with dry ditches that were shaded by the hedgerow shrubs. The hedgerow ground floras were species-poor with few if any valuable hedgerow species. Several of the hedgerows supported mature and semi-mature trees with Ash, Pedunculate Oak, Horse-chestnut and willow the most commonly recorded species. Many had been replanted with a diverse mix of

native shrub species.

The hedgerows provide habitat links across the Masterplan site. They were of value to invertebrates, in particular brown hairstreak butterflies, foraging and commuting bats, common species of reptile, foraging and breeding birds and likely to be of value to hedgehogs.

The River Bure and Tributary

The River Bure and two tributaries of this watercourse cross the Masterplan site. The upper reaches of the tributaries are winterbournes and are dry for large parts of the year. Where water is present, common wetland plants were recorded. The aquatic invertebrate surveys revealed that water quality within the River Bure was "moderate".

The riparian habitats associated with the River Bure and its tributaries were found to be of value to commuting and foraging bats, foraging common reptile species such as grass snake, and also amphibians. However, given the ephemeral nature of these watercourses, they were considered to be of limited value to otter, water vole and aquatic invertebrates including white-clawed crayfish.

Woodland

There were two blocks of semi-natural broad-leaved woodland with a sparse canopy and dense understorey. The ground flora was species-poor. There was one block of broad-leaved plantation that supported a more well-developed structure with semi-mature canopy trees and a diverse understorey, again the ground flora was species-poor. These woodlands were found to be of value to nesting and foraging birds. There

were several tree shelter belts and strips of recently planted woodland within the site, these features comprised young trees and shrubs with a grass-dominated ground flora.

Ponds

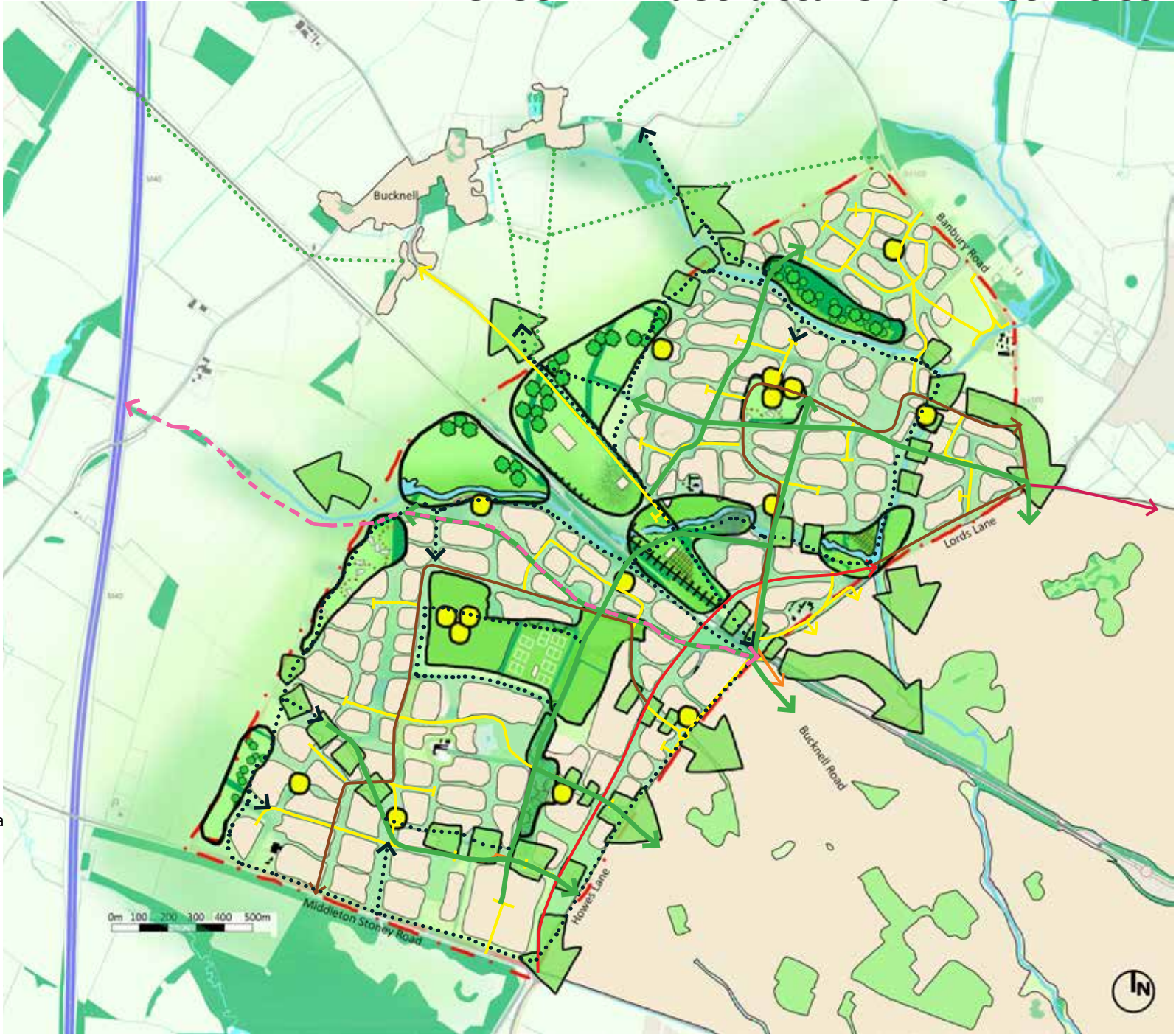
Four ponds were recorded within the Masterplan site, two supported a breeding population of great crested newts and one was a large feature created by a weir in one of the tributaries of the River Bure.

Buffers

Belts of vegetation that support semi-natural vegetation will be created adjacent to the retained hedgerows, ponds, stream corridors and woodlands to maintain and enhance the value to these habitats for wildlife. These belts of vegetation or 'buffers' will support semi-natural habitats in the case of the woodlands and hedgerows they would extend 10 metres-from the edge of the feature (i.e the hedgerows would be retained in a 20 metre-wide belt of vegetation, that would be extended to 40 metres-wide where required to accommodate dark corridors for bats). The river corridor would be 60 metres wide.

The ponds that support great crested news with be retained within a 50 metre-wide buffer, whilst the other two would be retained in the Country Park and Nature Reserve. These substantial belts of newly created semi-natural vegetation represent a considerable enhancement when compared to the narrow belts of semi-natural vegetation that were alongside these features in their intensively managed farmland setting.



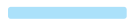







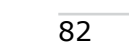
Green Infrastructure and Activities



- Proposed Key Information**
- Play
 - ▶ GI Corridors
 - Water
 - ▶ Proposed Off Road Pedestrian/ Cycle Route
 - ▶ Proposed Leisure Pedestrians/ Cycle route in GI
 - ▶ Proposed Primary/Secondary Pedestria and Cycle Route along Existing Routes
 - ▶ Existing public footpath
 - - - Bridleway
 - ▶ Strategic Road with segregated pedestrian/cycle route
 - ▶ Primary Road with segregated pedestrian/cycle route
 - ▶ Secondary Road with pedestrian/cycle route

Green Infrastructure Concept

Proposed Key Information

-  Connectors
-  GI Corridors
-  Water
-  Proposed Off Road Pedestrian/
Cycle Route
-  Proposed Leisure Pedestrians/
Cycle route in GI
-  Proposed Primary/Secondary Pedestrian
and Cycle Route along Existing Routes
-  Existing public footpath
-  Bridleway
-  Strategic Road with segregated
pedestrian/cycle route
-  Primary Road with segregated
pedestrian/cycle route
-  Proposed pedestrian/cycle route on
Secondary Road



Green Infrastructure Links



Proposed Stream buffers




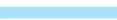








Proposed Buffers adjacent to footpaths



Horse Riding



Proposed Key Information

-  Connectors
-  Water
-  Proposed Off Road Pedestrian/ Cycle Route
-  Proposed Leisure Pedestrians/ Cycle route in GI
-  Proposed Primary/Secondary Pedestr and Cycle Route along Existing Route
-  Existing public footpath
-  Bridleway
-  Strategic Road with segregated pedestrian/cycle route
-  Primary Road with segregated pedestrian/cycle route
-  Proposed pedestrian/cycle route on Secondary Road

Biodiversity

Maximising the retention of existing hedgerows is an important aspect of the biodiversity net gain strategy. They are also a key characteristic of Bicester's landscape pattern, and can beneficially contribute to the compartmentalisation of the development plots.

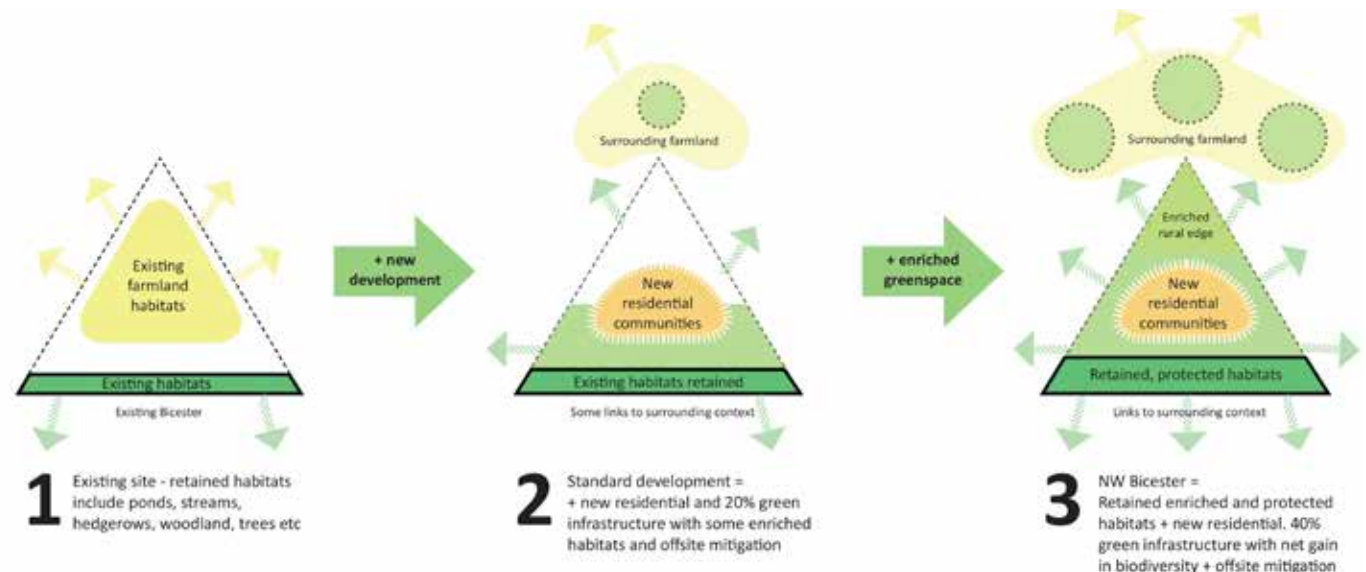
By bringing the existing hedgerows into better management and supplementing the hedgerow habitat with adjacent complimentary habitats the overall hedgerow corridors can be significantly enhanced. The supporting habitat, or 'buffer', should be a minimum of 10m either side of the hedgerow. Some lengths of hedgerow will form part of the longer 'dark corridors' identified for bat feeding. Dark corridors should reserve a minimum of 20m either side of the hedgerow as 'buffer' to development.

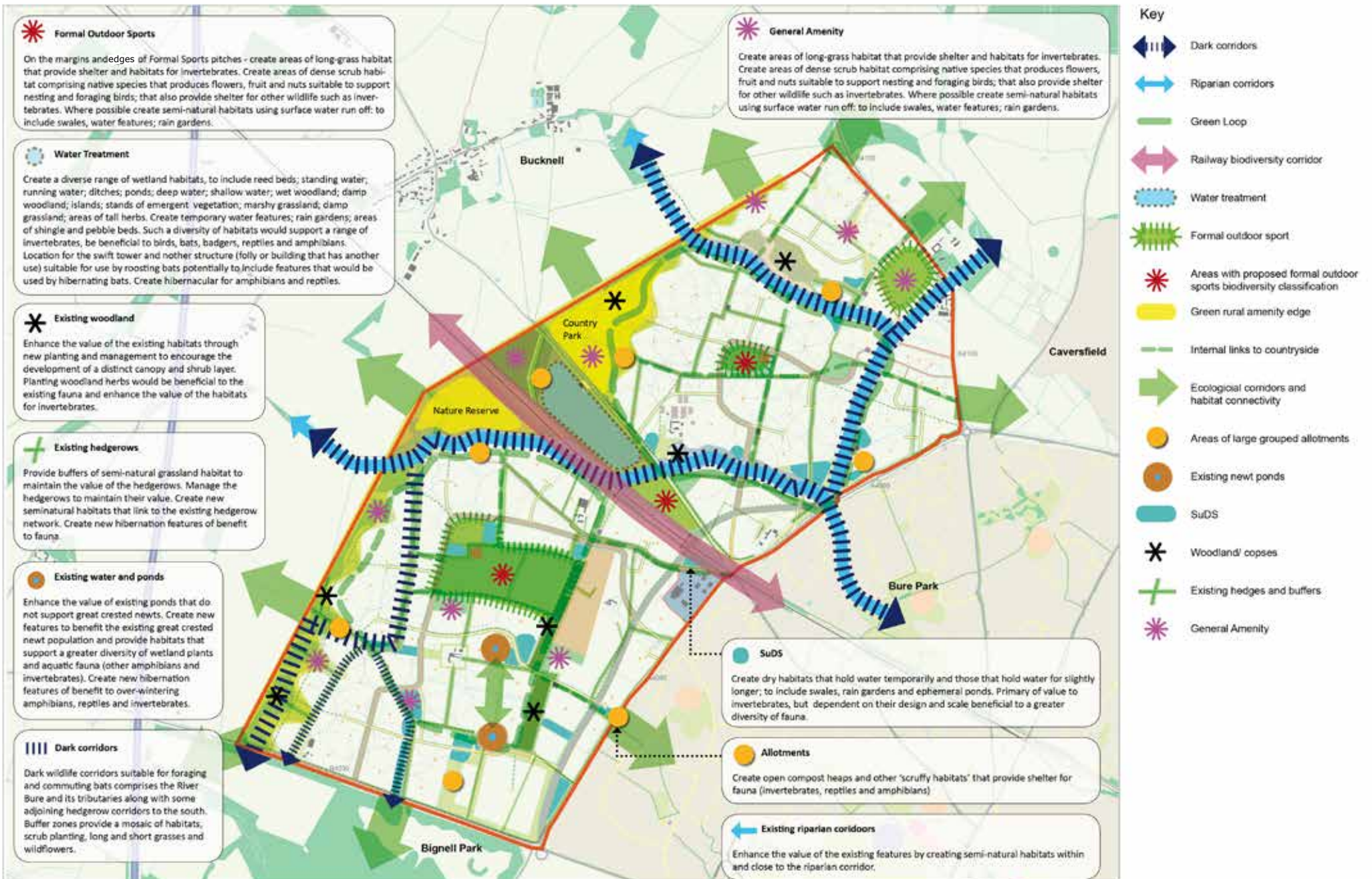
The sample area illustrates a variety of opportunities to treat the interface of hedgerows and their associated 'buffer zones' with proposed housing layouts. Importantly this shows options for either fronts or backs adjoin hedgerow corridors, and also incorporates SuDS swales and pedestrian and community routes.

Certain activities are acceptable within the hedgerow corridors without adversely disturbing the habitat wildlife. These include:

- Passive recreation and natural play
- Restricted / limited user access (e.g. adjoin residents only)

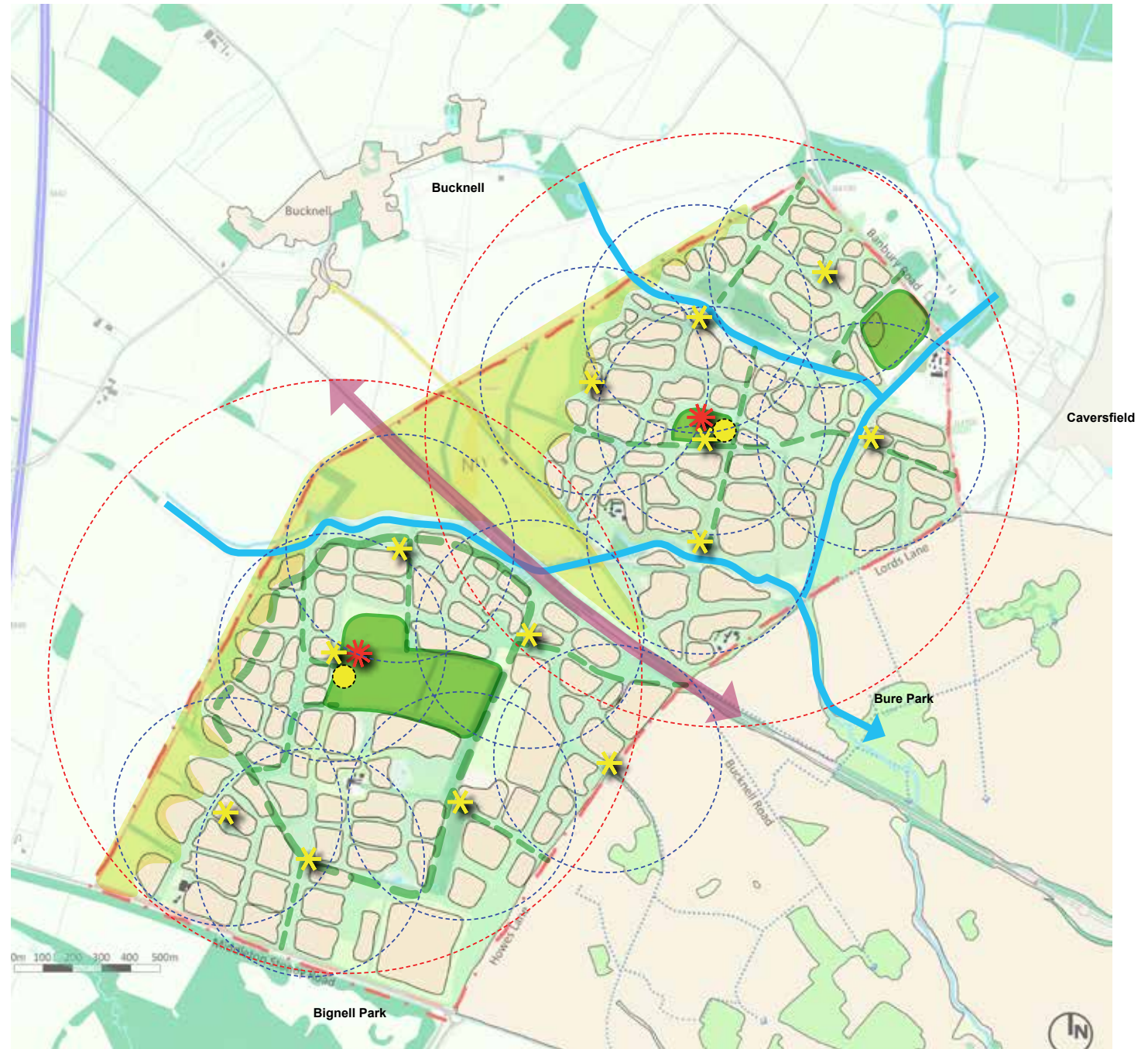
- Footpaths / Community Routes (toward edge of 'buffer')
- SuDS and similar landscape features (e.g. low mounds)
- Infrequent individual tree planting / localised adjoin copse










Play Areas

- Play spaces take advantage of the existing natural elements
- Play areas provide a wide range of experiences
- Play spaces meet CDC age provision requirements
- Natural play is incorporated to play experiences
- Play space allocation is in accordance with distance criteria



Proposed Key Information

- 
 NEAP
 Minimum size = **1000m²**
 Including buffer = 8500m²
 Within 15m - 1200m from homes
- 
 MUGA
- 
 LEAP
 Minimum size = **400m²**
 Including buffer = 3600m²
 Within 5m - 400m from home
- 
 Sports Pitches
- 
 General Amenity

Play Area Design



A. Green Spine - Recreational Space, North Fields

B. Green Spine - North Fields Approach

6.3 Living and Working

The Masterplan will consider the lifestyle and needs of the community now and in the future. Community facilities are intended to benefit both the NW Bicester population and the population of the wider town.

As each phase of the masterplan develops, a social mix and balanced community will be incrementally created through each phase and neighbourhood as it grows.

Creating new facilities

New local centres will provide a strong community focus, and be located close to existing and proposed connections and housing to maximize footfall and viability.

Community facilities on the Masterplan will create two vibrant and mixed use local centres which complement the existing retail and services. Primary schools will be located close to the local centres and green spaces with the secondary school are to be located in the central area to the south of the railway line in close proximity to bus routes and to sport pitches.

There will be the provision of 4 new community halls, 2 for each side of the railway line, 4 new nurseries and a new health practice.

Improving Bicester's existing facilities






















Other contributions will be put forward towards improving facilities off-site, these include: library, adult learning, day care, fire and emergency, community hospital, special education needs, museum resources, skills and training.

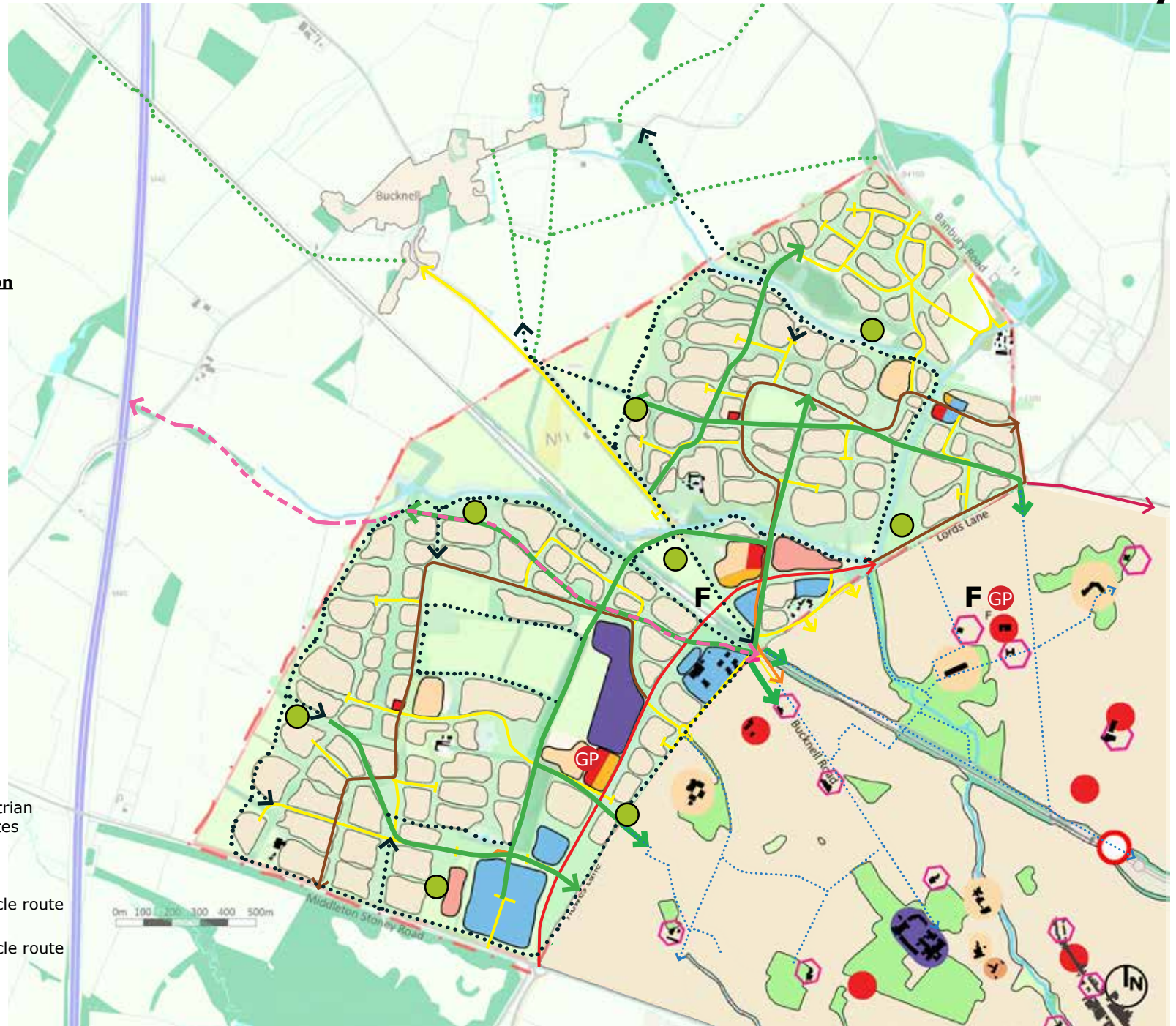
What is a Local Centre?

Each Local Centre will serve the surrounding housing. The Centre to the north of the railway line includes a primary school, an Eco Business Centre, a nursery, a community centre, office space, a pub, a small supermarket and other retail uses.

Social Amenities and Community

Proposed and Existing Key Information

-  Proposed Secondary School
-  Proposed Primary School
-  Business
-  Retail/Leisure
-  Social/Community
-  Hotel or Care Home
-  Extra Care Home
-  Group of allotments
-  Health Care
-  Police Station
-  Public House
-  Faith
-  Train Station
-  Proposed Off Road Pedestrian/
Cycle Route
-  Proposed Leisure Pedestrians/
Cycle route in GI
-  Proposed Primary/Secondary Pedestrian
and Cycle Route along Existing Routes
-  Existing public footpath
-  Bridleway
-  Proposed segregated pedestrian/cycle route
adjacent to Strategic Road
-  Proposed segregated pedestrian/cycle route
adjacent to Primary Road
-  Proposed pedestrian/cycle route on
Secondary Road



A Great Place to Live:

Up to 6000 new homes will be provided, at a range of tenures and forms to meet the needs of the community.

The residential strategy seeks to ensure:

- That new homes are provided in a form that meets the needs of the community over the lifetime of the development;
- That the strategy is sufficiently flexible to accommodate the changing needs of the community;
- That the design of the new homes provides for new greener and sustainable ways of living, both based on current and also future technologies;
- That the design and form of new homes meets the needs of the market and community;
- That the development is viable and achievable.

Housing mix

Types of housing will be in line with the expected future growth for Bicester. The mix of properties will be varied and include a full range of 1,2,3,4 and 5 bed homes; this will predominately be in the form of houses but will incorporate some bungalows and flats.

Homes will be designed to fit in with, and enhance, the existing town and will incorporate affordable housing.

Specialist housing, such as extra care accommodation, will also be incorporated along with other specialist tenures where there is an identified need.

Home specification

Homes in NW Bicester will be built to lifetime homes space standards with a minimum CSH Level 5 for Sustainable Homes. They will incorporate water conservation measures to achieve water neutrality and be highly insulated to achieve high air-tightness.

Low energy equipment and rated white goods will be incorporated throughout as well as the inclusion of highly efficient photovoltaic (PV) solutions to ensure homes are more energy efficient.

Flexibility in house layout will provide opportunities for extra space to enable home working; for example roof trusses in the loft space, or garages convertible to office or work spaces and all homes will have access to a superfast fibre optic broadband network.

NW Bicester: Community-Led Local Management Structure

From the outset, A2Dominion has sought to establish a community-led local management structure at NW Bicester represented by a cross section of local stakeholders and residents that will:

- Progress low carbon living, encouraging growth in a sustainability culture

- Give people the opportunity to make decisions on the management of community assets
- Support the creation of social capital and community cohesion
- Respond effectively to the changing needs of occupants
- Ensure owners and developers take consideration of the community benefit over all stages of development, enhancing the wellbeing of those who live and work there

The Exemplar phase has provided the opportunity to implement the first stages in this process and the intention is that future phases will participate in the process and community led management structure.

The process of establishing a community led management structure is based on three stages. The initial stage is the creation of an Interim Management Board (IMB). This will evolve into an Interim Partnership Board (IPB) and finally, a Local Management Organisation (LMO). The process provides for a decreasing role of the developer and an increasing role of the community in the management and organisation of NW Bicester.

Much depends upon the appetite and desire of the community. Accordingly, the process is designed to be flexible.

Proposed Schools



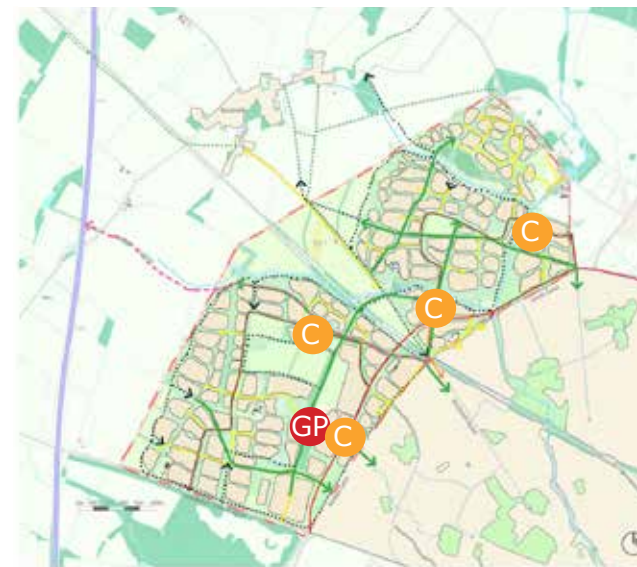
- P Primary School
- S Secondary School

Proposed Local Centres



- LC Local Centre

Proposed Health and Community Centres



- GP Health Services
- C Community Centre and Nursery



Example of Secondary School



Example of a Nursery



Example of a Local Centre



Example of an Organic Market



Example of a Community Centre

Progress So Far

In February 2012, A2Dominion appointed a Strategic Partnership Manager to engage a range of public, private, voluntary and community representatives by conducting seminars and one-to-one interviews to raise awareness of the proposals, develop a sound base of local perceptions and gain stakeholder interest. Between November 2012 – March 2014 A2Dominion has delivered eight participatory workshops with stakeholders to help shape the first stage of the organisation, an Interim Management Board (IMB).

What has been achieved to date?

A2Dominion has successfully established a committed stakeholder IMB working group representing all elements of Bicester's community. This group has shaped the IMB's objectives, initial programme of activities, how it could be structured and set out how it can benefit the whole community.

The involvement of existing stakeholders early on has been viewed positively as a way to integrate the emerging NW Bicester community with the wider town, ensuring it does not grow in isolation.

Stakeholders are positive about empowering local people to make decisions about their area, and believe that bringing together various sectors has strengthened partnership work across the town.

The IMB acts as a sounding board for a robust public consultation process, while helping to shape resources to meet the needs of the community.

Improving environmental quality

The IMB will develop a greater understanding of sustainable living and uphold the integrity of NW Bicester, by:

- Encouraging people to adopt sustainable lifestyles
- Facilitating people to share energy-saving tips and make local sustainable travel choices
- Advising on the management of community facilities and spaces including allotments and orchards
- Promote NW Bicester as a place where people can see eco technologies, providing an educational element for the new and existing community

Improving social well-being

The IMB stakeholders will help to shape a 'welcome pack' for new residents and work with A2Dominion to coordinate welcome to your neighbourhood events to help integrate new residents; actively encouraging them to participate in the IMB. The IMB structure will help develop a strong community identity; bringing residents together with a common focus and sense of belonging to the area, as well as inspiring local democracy, giving people a platform to be heard.

Once NW Bicester is fully occupied and subject to local appetite, A2Dominion is committed to supporting the creation of a formally constituted Local Management Organisation with significant community representation, an established legal structure and long term business plan.

The intention is that residents of future phases will also participate and the expectation is that future planning permissions will require participation by the developer.

A Great Place to Learn:

The masterplan has been developed to provide for new primary and secondary schools. OCC as the Local Education Authority seeks the provision of 4 new primary schools, at a maximum size of 2 form entry and a new secondary school. The timing and final level of school provision will be the subject of further testing and analysis.

The school sites have been located to maximize the benefit that schools can bring in terms of acting as a focus for the community and supporting the local centres.

Exemplar High Street



A Great Place to Work:

The masterplan will stimulate transformational change in Bicester's economy, in three main ways:

- The creation of as many new jobs as homes – previously, many new residents of Bicester's housing areas have had to commute out of the town to work;
- The creation and growth of firms which use NW Bicester as a platform to exploit growing local and regional demand for sustainable construction, and environmental goods and services;
- All firms within NW Bicester, and elsewhere in Bicester, will be encouraged and supported to adopt sustainable business practices.

The masterplan supports the creation of at least one job per home, 4,600 of which are planned to be on the site, the rest within a sustainable travel distance. The employment proposals have been designed to complement provision elsewhere in Bicester, not compete with it. An Eco Business Centre will provide flexible accommodation and supporting facilities and services for firms and homeworkers, targeting those in sustainable construction, and environmental goods and services.

The target mix of jobs on the site will also include high performance engineering, other knowledge intensive activities, logistics, and business financial and professional services. The masterplan includes accommodation for a variety of firms on a business park in the SW corner of the site, which can accommodate up to 2,000 jobs and will be designed to be in keeping with the wider eco town principles. This site was chosen as the most accessible location

and design parameters will ensure fits well with surrounding uses.

In addition, 140 jobs will be created in constructing the eco town, 1,400 local service jobs will be located in three community and business hubs distributed across the site, including offices, retail, health centre and schools. 1,100 jobs will be based in homes on the development, facilitated by careful design of homes and by universal access to a superfast broadband network.

Some jobs serving the future residents are better located off-site – particularly in the town centre, and on other employment sites.

A wide range of measures will be taken to support job creation and growth. In addition to physical provision of business space, a partnership with local public and private sector training providers will ensure the provision of apprenticeships and other training courses, to enable existing and new local residents to develop the skills needed by local employers. The NW Bicester brand will be used to support the promotion of Bicester as a business destination, and links will be created with local universities, for example through the 'Living Lab', which will support research and innovation into sustainable buildings and communities, using NW Bicester as a demonstrator.



Work area in the roof



Work area in ground floor garage



Work area in the back garden

Proposed Employment



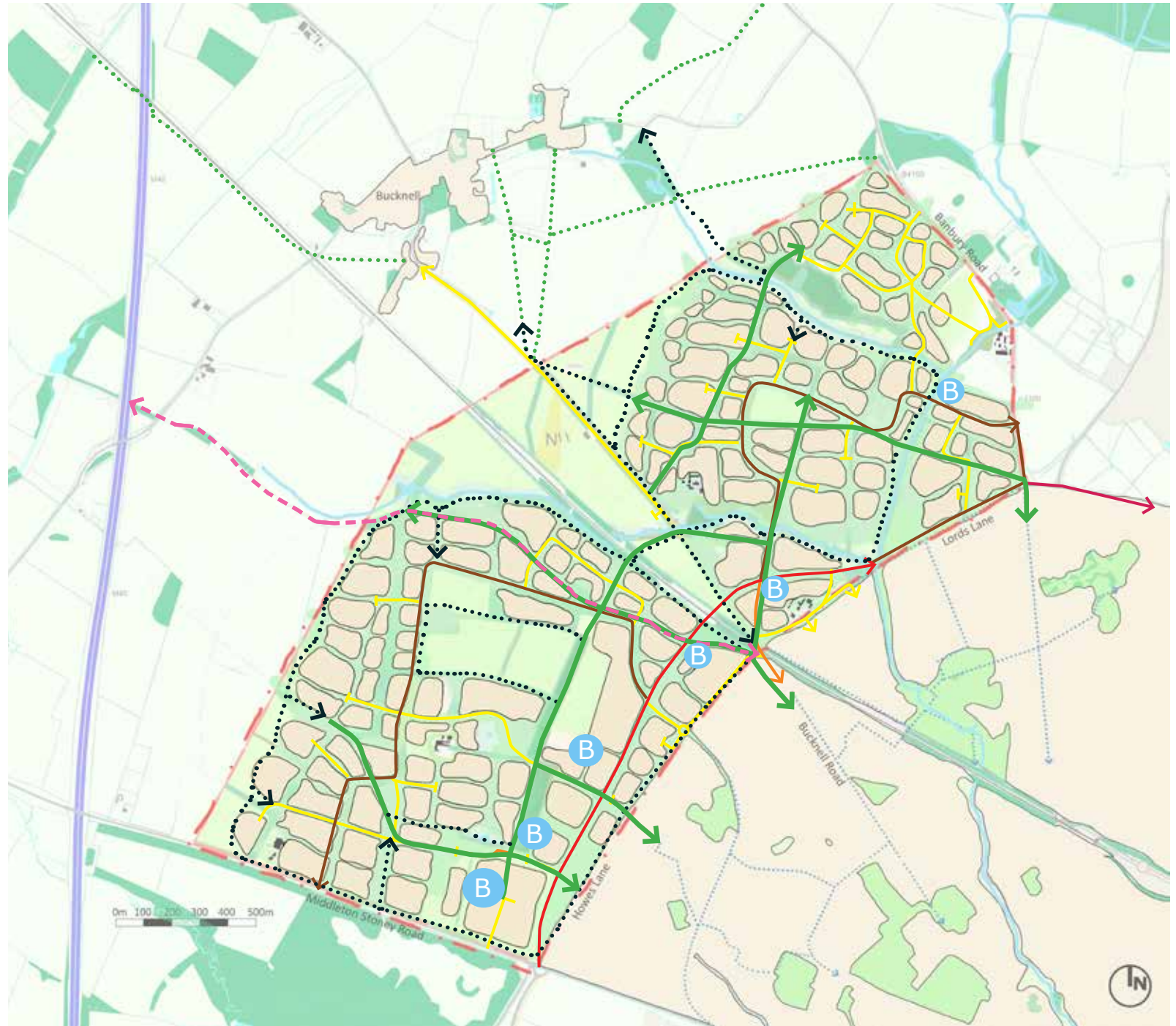
Example of a Business Centre



Example of a Bakery



Example of Light Engineering



B Proposed Employment

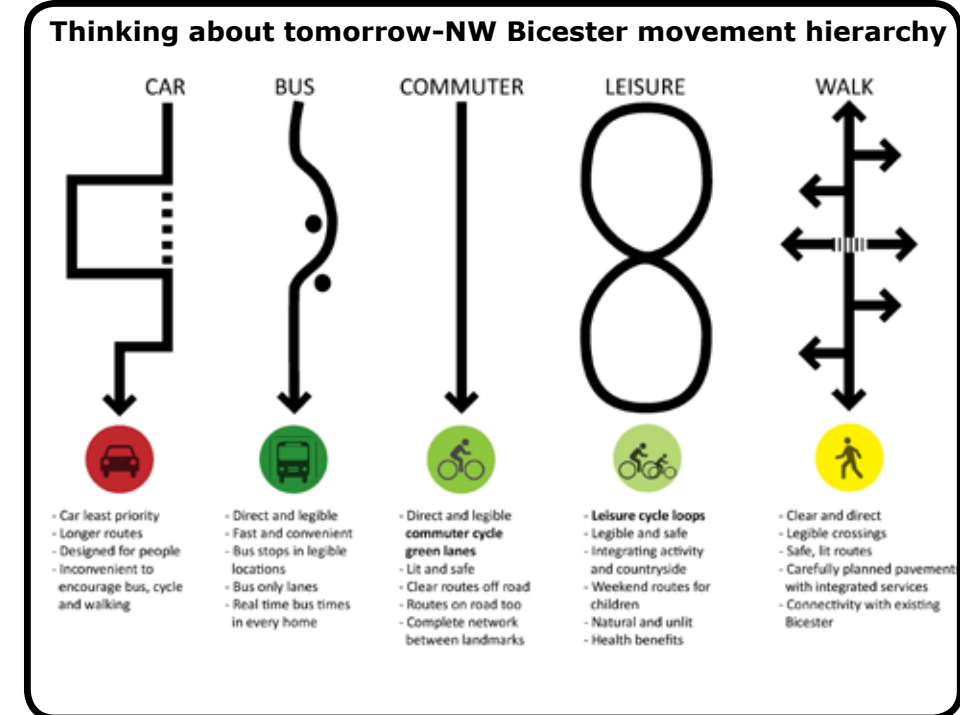
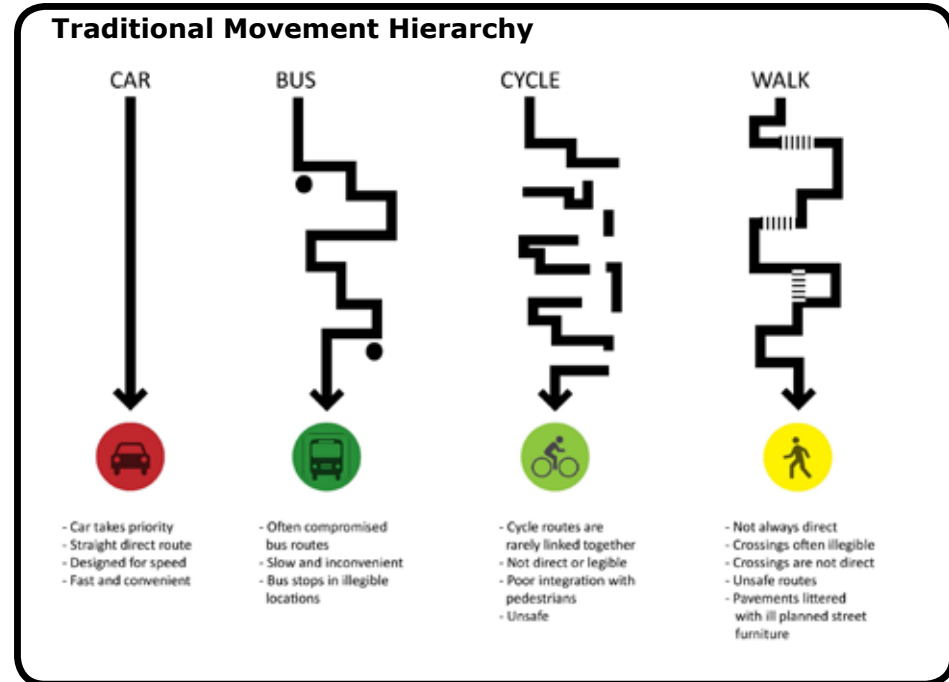
6.4 Access and Movement

The aspiration of the NW Bicester Masterplan is to encourage non-car use with alternative means of sustainable transport, but to ensure that the highways and access arrangements are fit for purpose and provide connectivity to existing routes.

The green travel plan will build on the existing infrastructure of Bicester and its public transport, cycle route network, public bridleways and footpaths and pavements giving priority to options such as walking, cycling, public transport and other sustainable options, thereby reducing residents' reliance on private cars.

Strategic Access

- Ensure future access and connectivity works with the surrounding area and the new proposed development;
- Ensure there are good connections within the development between all facilities;
- Ensure the development is well connected to the rest of Bicester;
- Enable a frequent and high-quality bus service to be provided;
- Give priority to strong walking, cycling and bus connections;
- Minimise traffic going through existing communities.



Vehicular Access Strategy



Ashford, Kent



Exemplar - Secondary road








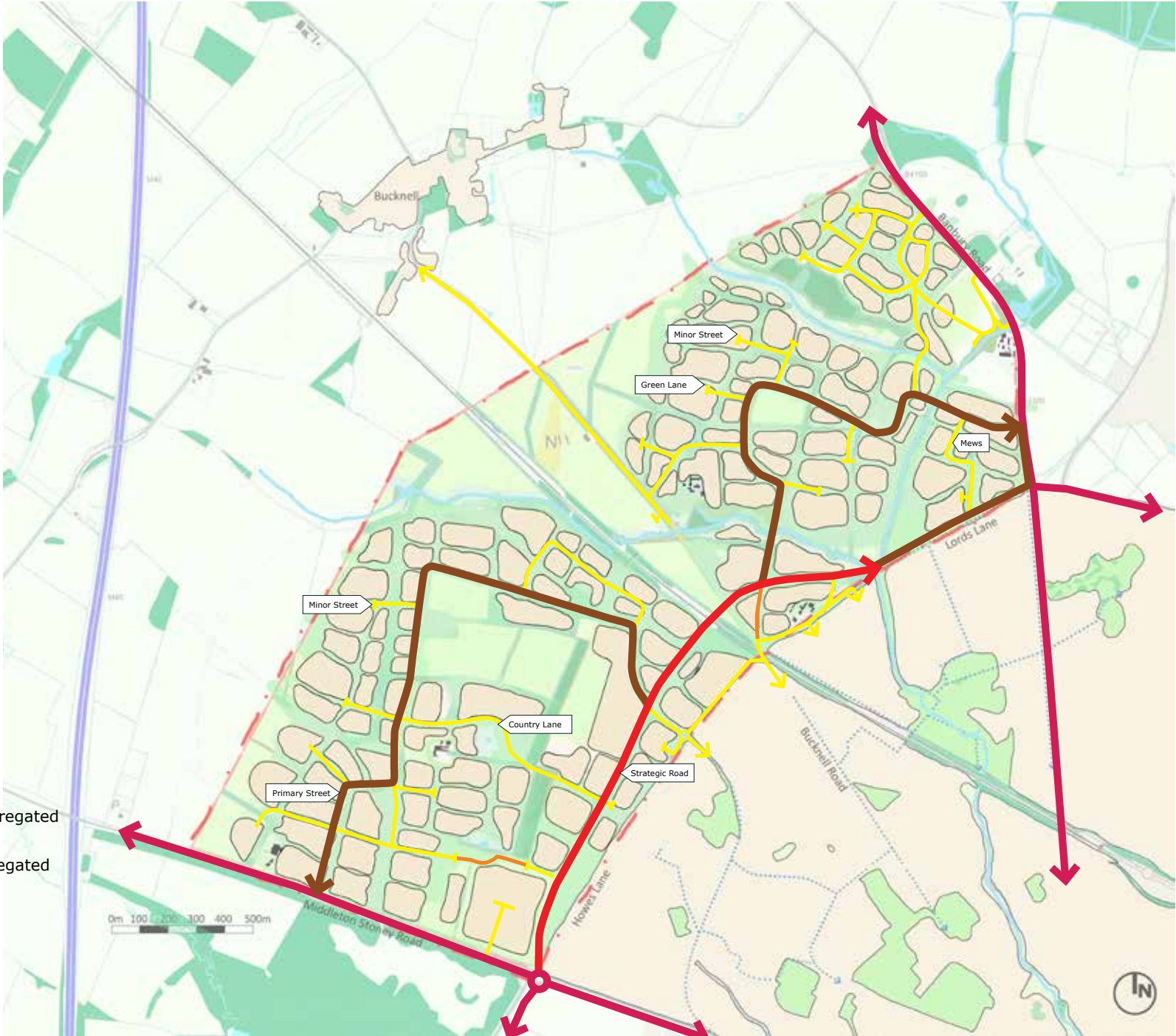
Existing Lords Lane



Existing Shakespeare Drive

Proposed Routes

-  Proposed Strategic Road with segregated pedestrian/cycle route
-  Proposed Primary Road with segregated pedestrian/cycle route
-  Proposed Secondary Road with pedestrian/cycle route
-  Proposed Bus Only Road
-  Proposed primary road network connections



Bus Network

Bus routes will be designed to take residents in the most direct route possible to key destinations in Bicester including local centres, employment sites, and public transport interchanges. A bus service to be provided with frequent, direct links to the town centre, schools and local facilities will be designed to encourage bus travel over car use.

Every home will benefit from real-time bus information in each house.

Establishing a Successful Bus Service:

The Supplement to PPS1 seeks for a minimum of 50% of travel to and from the site to be via non car means and the bus will have a significant role to play in providing a means of sustainable travel for journeys by residents of the site and those employed/ visiting NW Bicester. Moreover, the bus will provide accessibility to education, jobs, services and facilities for those who do not have a car, which in particular will benefit young people, elderly people and those on lower incomes. A service which does this effectively as part of the long term development of the site will be a 'successful' bus service. The masterplan process including consideration of what works elsewhere, has led to the following aims for a bus service for NW Bicester:

Proposed Bus Routes:

The proposed bus routes at the full build out of the development will go to and from Bicester Town Station, through the town centre to Bucknell Road and then loop through the south and north sides of the site. A full loop would be established on both sides of the railway and all services would arrive and depart via Bucknell Road. On the south side the service would be

most likely to operate clockwise through the development so that passengers from the town centre can alight at the employment site first, then residents can board services towards the town centre.

The routes each assume that two bus services operate – one to the north and one to the south – as this provides the shortest journey time to and from the town centre and the station and reflects the phasing of the development. It is recognised that there are disadvantages in this approach as there would be limited connectivity between the two parts of the development (only an opportunity to interchange in the centre of the site). On balance however, it is considered that the priority should be maximising the attractiveness of the routes for the largest number of people, who are more likely to be travelling to and from the town centre (and to the rail stations and connecting to other bus routes).

The development will be phased and built out in different areas of the Masterplan. There is therefore a need to phase bus services to reflect the development phasing.

Routes are also suggested to serve each of the early phases of the development, in order to ensure that there are bus routes within 400 metres of homes as the site builds out. Initially the eastern route would run to Bicester North Station but over time both routes will directly connect to Bicester Town Station:

- Phase 1 – this involves a northern loop (the route planned for the Exemplar) and a southern loop which would provide

access to part of the northern site near Bucknell Road and run on the new Howes Lane. The northern loop gives access to Bicester North Station in the early years of the development prior to Evergreen3 and the increasing services from Bicester Town Station. The southern loop would use Middleton Stoney Road coming out of the town centre to minimise the loop length.

- Phase 2 and 3 – involve the establishment of a full loop on the northern side. The bus would travel up Bucknell Road, along Lord's Lane and Banbury Road, then through the development from north to south. This direction would enable those living at the northern end of the site to use a bus to the centre of the site and walk to the secondary school for example. On the southern site the Phase 1 loop would be extended to provide a bus service to properties close to the Middleton Stoney Road/ site access junction.

Bus Priority:

The Masterplan includes the provision of a bus only link from Bucknell Road to the north side of the development and from the new link to the west side of the development. The means of designing and enforcing the bus links is under discussion.

There is a need to afford greater priority to buses on Bucknell Road and in the town centre, and various measures are under discussion. The use of Bucknell Road as the main bus route in the long term gives advantages to buses in that other routes are expected to be more heavily trafficked.

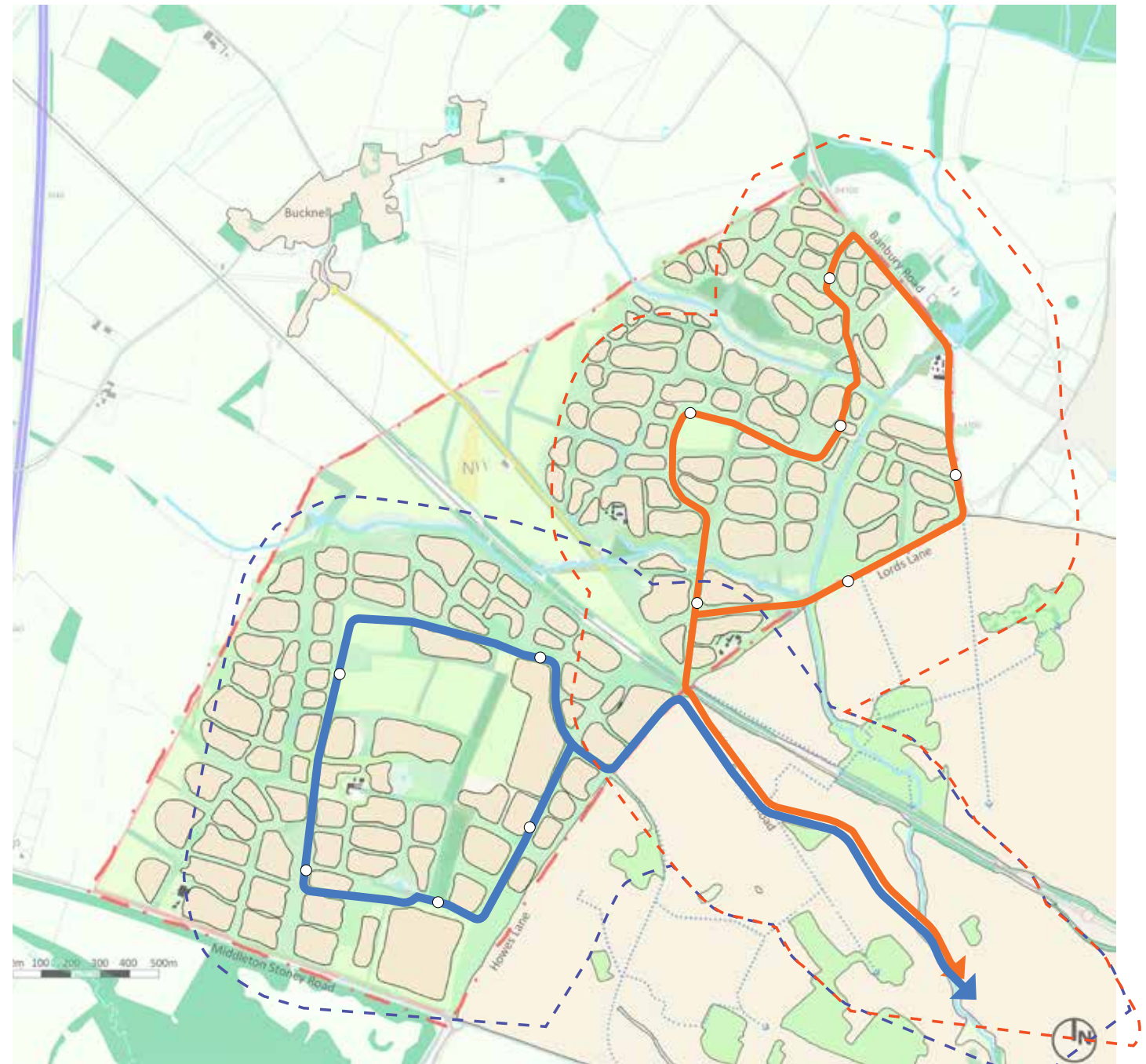
Bus Routes -Development



Bus Routes-Early Development



Bus Routes-Mid Development



Bus Routes-Final Development

Walking and Cycling

Walking and cycling routes will be of a high-quality with all-weather surfacing, well-lit and easily maintained. The layout of home and routes will ensure natural surveillance to increase user safety. Where possible pedestrians and cyclists will be segregated to minimise potential conflicts, with walking and cycling routes segregated from vehicular routes. Safety of pedestrians and cyclists will be ensured by providing routes of adequate widths and with numerous crossing points.

To ensure cycle and walking routes are well used and fit for purpose, they will be split into two distinct categories. 'Direct routes' will act as commuting routes to allow direct and fast access to key local employment areas, schools, local centres and hubs. This allows for the provision of cyclists and walkers travelling to school and to work. As a contrast, a network of 'leisure routes' will be introduced, which allow more 'weekend' routes, longer meandering paths, these will tend to be more rural and will take in the arable farmland, the bure stream and the hedgerows.

In order to achieve the amount of trips by walking and cycling desired, the Masterplan has been developed to ensure a high level of accessibility within the site on foot and cycle and strong connections to off-site destinations. A Walking and Cycling Strategy has been formulated with regard to local and national policy.

The *primary connections* between the development and Bicester, and east-west connecting the different parts of the development, in order to encourage walking and cycling are considered to be:

- Middleton Stoney Road – connecting the SW corner of the development to the south of the town centre, the Kingsmere development and Bicester Village;
- Bucknell Road to Queens Avenue via George Street (past the College and St Mary's Primary School) – connecting the central part of the site to the town centre;
- Alongside the railway from Lord's Lane to Bicester North Railway Station;
- Adjacent to Banbury Road – connecting the east side of the development with the town centre ; and
- Alongside Lord's Lane and Howes Lane – connecting the different parts of the development.
- Connection from Howes Lane to Dryden Avenue and via Greenwood Drive to Shakespeare Drive (Route 9);
- Connection from Leach Road to Kings End via Kingsclere Road (Route 10).

In response to the principles for routes, secondary connections may be:

- Sharing quiet streets with traffic; and
- On gravelled surfaces and potentially unlit if in environmentally sensitive areas.

Other Routes:

In addition to the primary and secondary connections there are certain routes in the wider town that will also be important for connections from NW Bicester, as well as for residents of the town as a whole. Key routes that may require consideration include:

Secondary Connections:

The following connections are considered to be of secondary importance, but still of significance in linking the central areas on the east and west sides of the development into and through the residential areas:

- Shakespeare Drive – connecting the western part of the site south to Middleton Stoney Road and east via Blenheim Drive and Leach Road to George Street (Route 6);
- Routes through Bure Park nature reserve connecting to the railway route – connecting the central part of the east side of the development to the town centre (Route 7);
- From Lord's Lane to Lucerne Avenue through the Bure Park (as above) (Route 8);
- From Bicester North Station area to Launton Industrial Estate. This was not surveyed, but it is noted that there is an existing off road walking and cycling route running to the north of the railway line on Town Walk North and connecting via Town Walk East to the industrial estate;
- From the town centre/ Kings End to Bicester Town Station; and
- From North West Bicester to the Kingsmere development to the south.

Walking and Cycling Strategy



Existing Bridleway



Proposed Exemplar








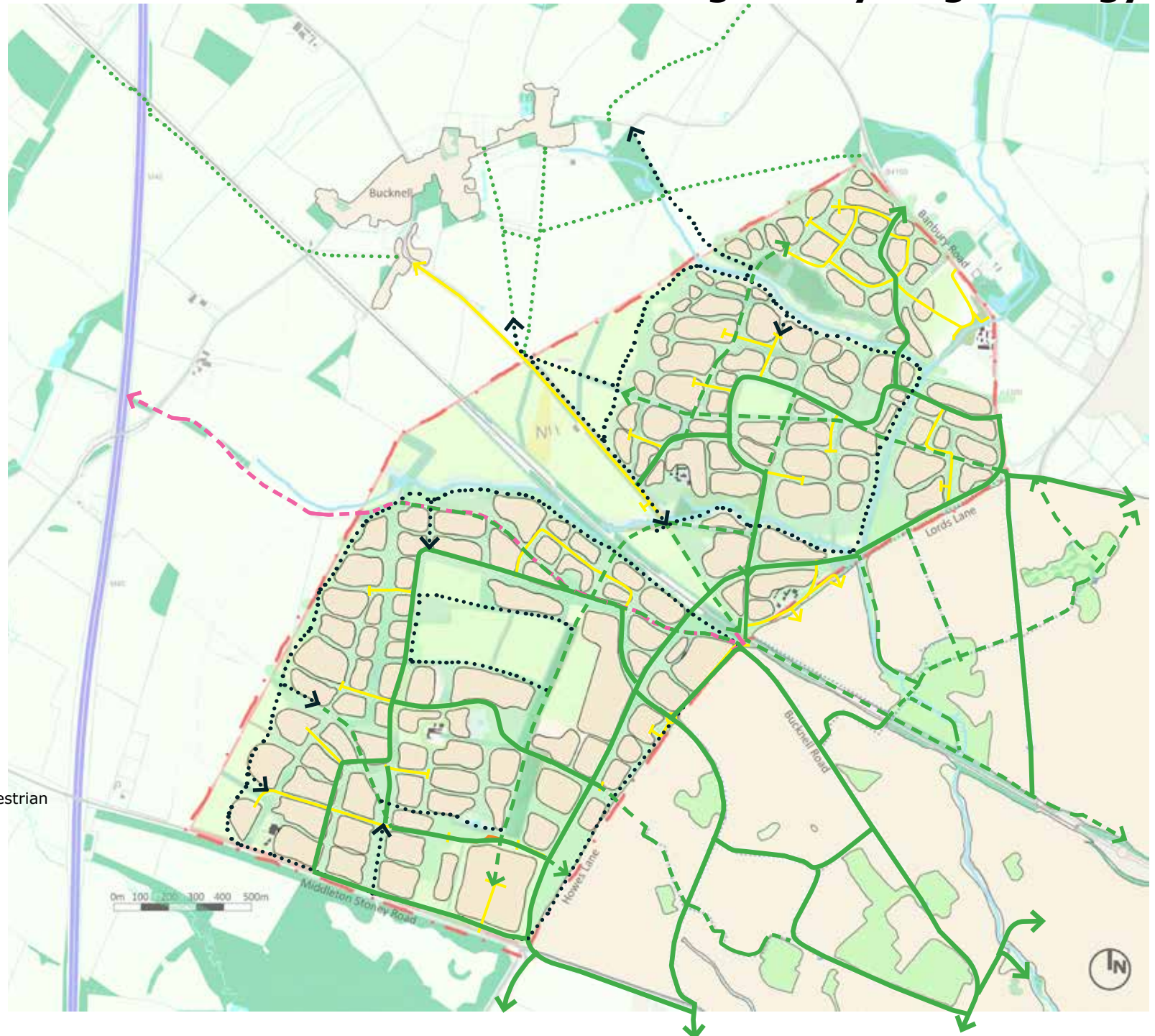
Proposed Family friendly routes



Existing Greenline to Dryden Ave

Proposed Routes

-  Proposed Commuter Cycle/ Pedestrian Route within road corridor (predominately segregated)
-  Proposed Commuter Cycle/ Pedestrian Route off road
-  Proposed Leisure Pedestrians/ Cycle route in GI
-  Bridleway
-  Proposed quiet secondary road - useful through route



Sustainable Travel

Homes will be located within 400m walk of frequent public transport and within 800m of primary schools and neighbourhood services. In addition a zero carbon lifestyle will be facilitated by the introduction of a network of car charging points for electric vehicles, car clubs and car sharing schemes.

A comprehensive range of measures will be developed as part of each phase of the Masterplan to promote sustainable travel and vehicle choices. These will include:

Overarching initiatives

- A travel plan co-ordinator for the Masterplan responsible for co-ordinating sustainable travel initiatives across the development;
- Branding and communication of sustainable travel options through in home information systems, website, newsletters;
- Promoting travel awareness campaigns such as 'Walk to School Week';
- Providing personalised travel planning to all new households and employees

Promoting cycling

Recognising the potential to increase cycling journeys, a range of initiatives are proposed:

- Quality cycle storage at the homes and cycle parking facilities in the local centres and employment areas;
- Cycle incentive initiatives for new residents;

- Promotion of electric bikes through link up with local bike shop offering supply and maintenance;
- Adult/ family cycle proficiency training;
- A programme of events such as Bicester Bike and family fun day to promote and encourage cycling in a safe and fun way, including bike rides;
- Best practice in cycle promotion through cycle to work schemes, cycle to school schemes, Bikeability programme, taking advantage of all the best practice learnt by Sustrans and the Cycling Demo Towns.

School travel

School travel represents a significant opportunity to achieve travel by sustainable modes and School Travel Plans will be implemented with specific measures such as:

- Walking buses;
- Child-friendly route marking of safe routes to school;
- Cycle proficiency/ road safety training provided to all pupils;
- Provision of covered cycle and scooter storage and storage facilities for helmets/ reflective jackets etc.;
- Staff car share spaces and promotion of initiatives; and
- Engagement with national/ OCC initiatives such as 'Walk to School Week'

Travel to workplaces

It is recognised that there will be trips made to NW Bicester from elsewhere in Bicester or further afield to take up job opportunities. Workplace travel plans will be developed with initiatives including:

- Personalised travel plans for each new employee;
- Encourage businesses to have secure cycle storage, showers and lockers;
- Promotion of car sharing – including provision of car sharing spaces and a guaranteed lift home scheme;
- Encourage businesses to make use of electric vehicle fleets, or in the case of the local shops, using cycles for home deliveries.

More Sustainable Car Use

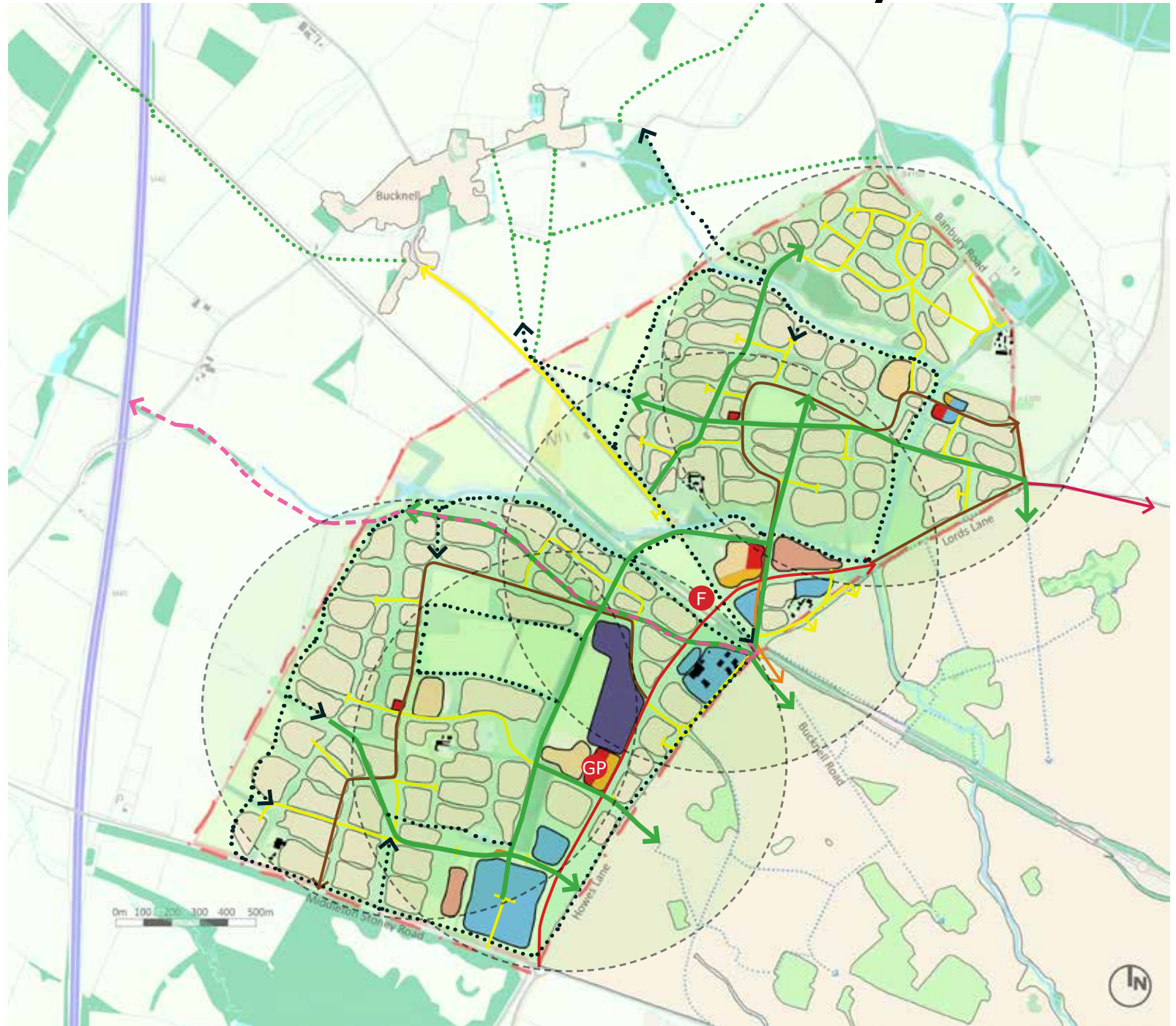
Recognising that residents will use cars, initiatives are also proposed to encourage the use of more environmentally friendly vehicles:

- Local hubs near to the bus route;
- The establishment of a car club;
- Promotion of electric vehicles including charging points, exploring special deals with manufacturers, consideration of using hybrid or electric buses.

Signage and Marketing

Walking and cycling routes will be branded and marketed with essential information on routes, destinations, directions and distance; to ensure that residents of Bicester are aware of routes in the area.

Key Destinations



Proposed Key Information

- Proposed Secondary School
- Proposed Primary School
- 800m radius walking distance
- Business
- Retail/Leisure
- Social/Community
- Hotel or Care Home
- Extra Care Home
- GP Health Care
- Place of Worship

6.5 Energy, Water and Recycling

Energy

Policy requirements

The main national driver for stimulating the uptake of zero carbon energy is the recognition that climate change, which is exacerbated by the impact of man's activities on the global

atmosphere, is leading to rapid global warming.

The PPS 1 Eco-town supplement specifies that "over a year the net carbon dioxide emissions

from all energy use within the buildings on the eco-town development as a whole are zero or below". The TCPA guidance for the development of energy efficient and zero carbon strategies for eco-towns, December 2009, encourage eco-towns to follow best practice to achieve zero carbon as Exemplar developments. The Exemplar eco-towns should be energy efficient, promote renewable energy and minimise energy consumption throughout the year.

The Code for Sustainable Homes (CSH) was introduced in April 2007 as a voluntary measure to provide a comprehensive assessment of the sustainability of a new home and replaces the Eco-Homes methodology. New housing developments are recommended to achieve CSH Level 4 from 2013 (25% carbon improvement on current Building Regulations) and "Zero carbon" from 2016). The Code Level relates to; compliance with mandatory minimum standards for waste, material, and surface water run-off as

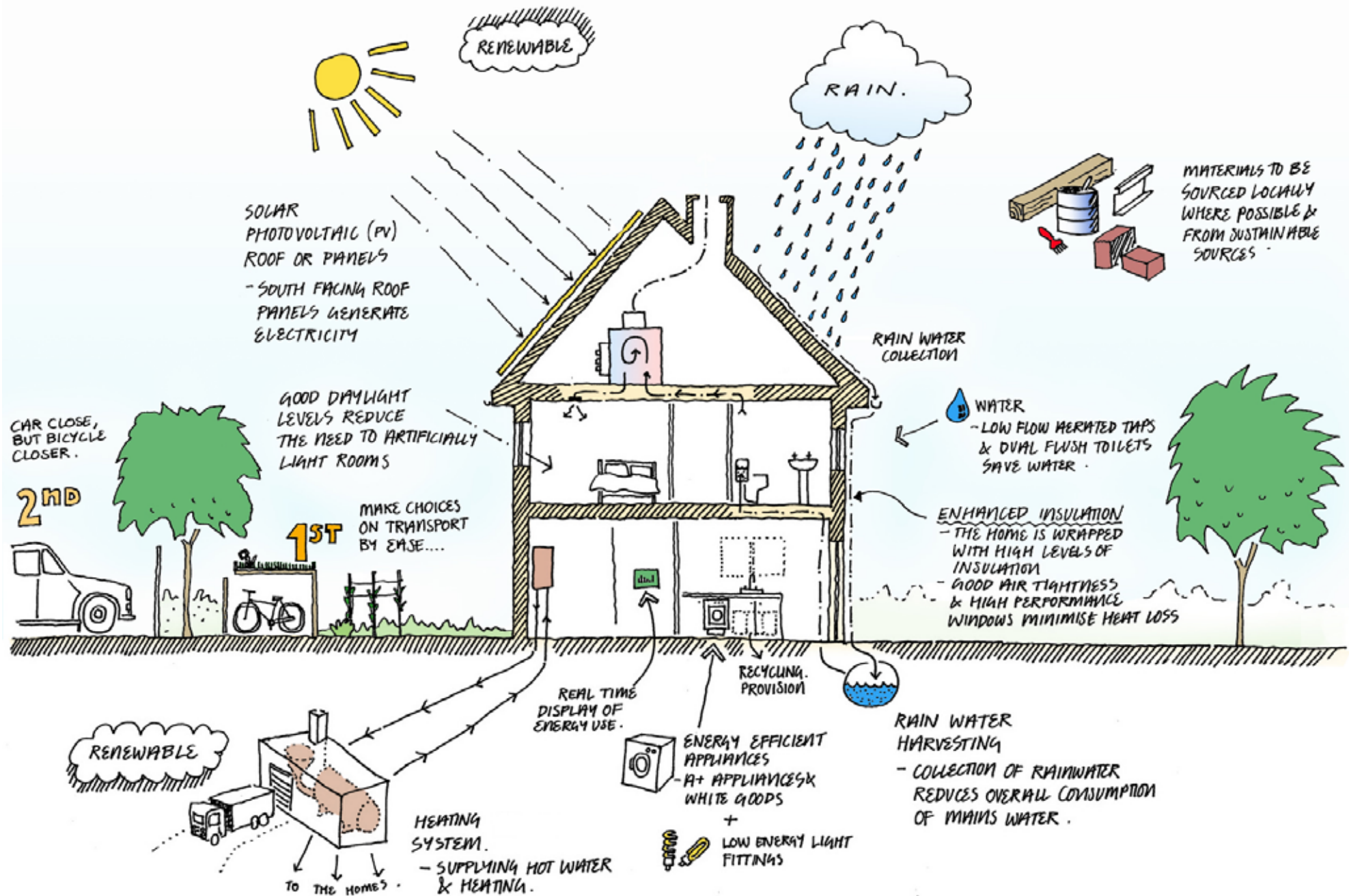
well as energy and potable water consumption. BREEAM have chosen to adopt CSH level 5 as a minimum for all new homes, setting a sustainable benchmark for the future.

In order for NW Bicester homes to achieve CSH Level 5 and the PPS1 Eco town supplement zero carbon standards, it is key for energy reduction and renewables to play a pivotal role. The adoption of a combination of energy efficiency and low and zero carbon technologies will form the basis for achieving this zero carbon target and provide operational flexibility and sustainability.

The Sustainability Strategy which has been developed for NW Bicester sets out three key energy related objectives; within which are a series of targets and key performance indicators. The three key energy objectives are:

1. Ensure Energy Efficiency;
2. Deliver Zero Carbon Energy;
3. Maximise Energy Security.

Environmental Strategy



Energy Strategy

NW Bicester is unique in its aspiration to achieve true zero carbon through on-site measures. To achieve this target the NW Bicester energy strategy follows the energy hierarchy principles of:

- Be Lean
- Be Clean
- Be Green

Be Lean - Reducing carbon emissions through building design strategy

A range of measures to reduce carbon emissions and increase resilience to climate change will be incorporated into building design and include features such as increased insulation, high performance glazing, improved air tightness, reduced thermal bridging, passive solar orientation and cooling, solar shading, use of natural daylight and natural ventilation.

These design features can be supplemented with adaption methods such as green and brown roofs, rainwater harvesting and water conservation.

Creating a strategy which includes all of the design inclusions above as well as relevant efficient technologies, such as 'A rated'

appliances, energy efficient lighting, automatic controls and monitoring energy management systems is the key to promoting and sustaining a strategy for energy reductions and carbon emissions.

Be Clean and Green – Low and Zero Carbon Technologies

The strategy will be aimed at providing flexibility and robustness and therefore includes more than one technology and capitalises on existing and future fiscal incentives. In addition, the strategy will maintain flexibility to enable future technologies to be incorporated and/or use of appropriate allowable solutions to achieve the carbon reduction target.

The strategy for energy will include the provision of:

- Solar Photovoltaic – comprising the use of integrated PV, utilising roof space on buildings

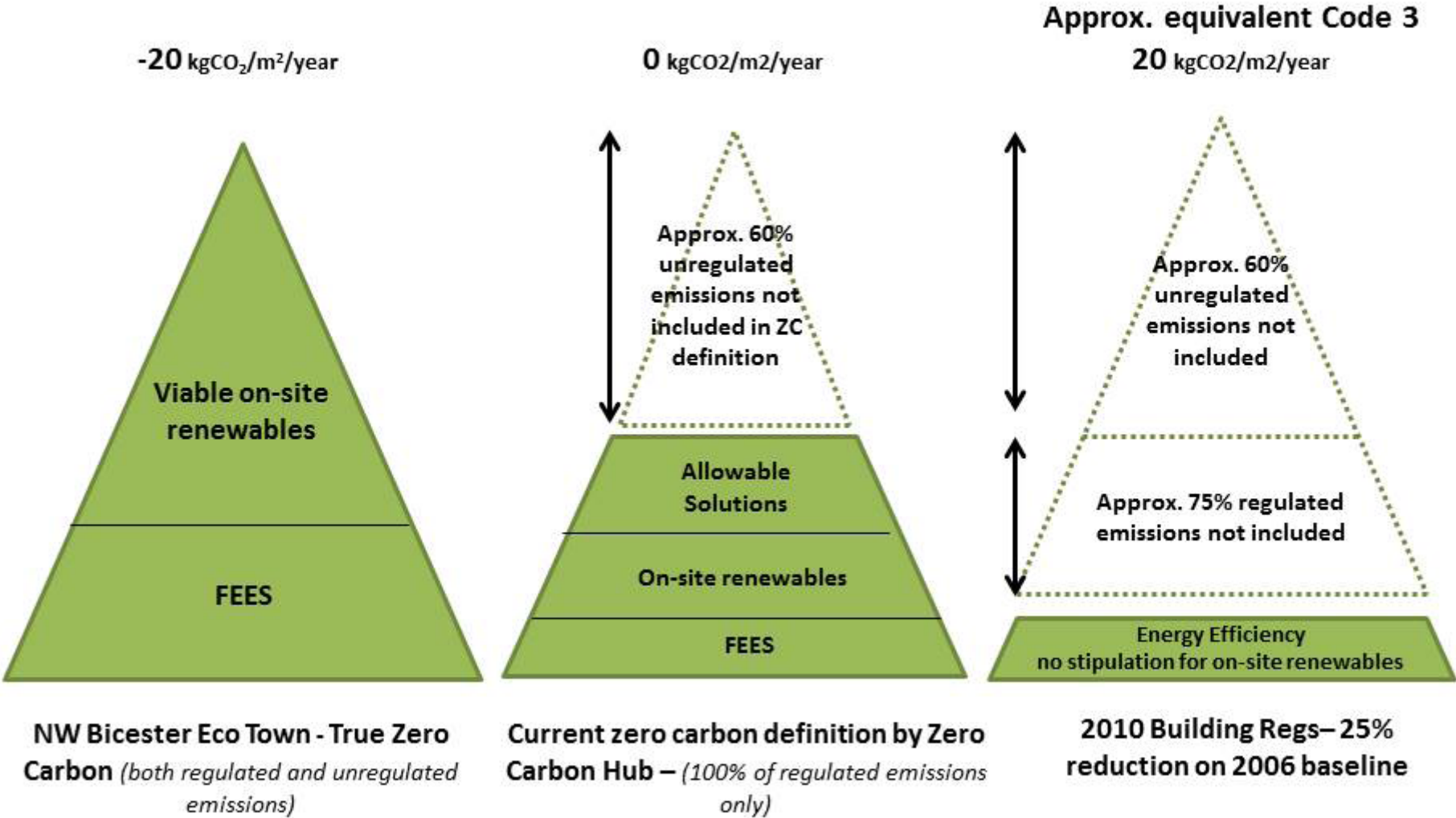
to generate renewable electricity. The provision of solar PV's could be installed on all residential properties, primary and secondary schools, retail and business units and community centres;

- District Heat System – a DHS which allows for future technologies and the potential

for future off-site waste heat sources to be connected to the network;

- Energy Centre – utilising efficient low carbon plant such as Biomass Boiler and/or Biomass CHP, Gas CHP together with supplementary plant and equipment to enable efficient and effective operation, including thermal stores and back- up boilers;
- Utilising energy generated locally reduces energy lost through transmission and distribution, and can often take advantage of more advanced generating technologies that combine to provide energy more efficiently. Local generation, or decentralised generation, is produced on a smaller scale nearer to the point of consumption and can offer a number of benefits.

Definition of True Zero Carbon



FEES= Fabric Energy Efficiency Standard

Water

The vision for the emerging local planning policy framework is to achieve a sustainable balance between water supply and demand. Policies are being developed to make sure development addresses issues of water supply and sewage disposal, reduces the consumption of energy and water, minimizes the risk of pollution, incorporates facilities for reusing water and reducing flood risk.

Water also plays a key role in placemaking, by using existing natural water features on site and creating new ones to link and improve green spaces, green corridors, street and spaces; we can create a development and a place which is specific to its location.

Existing water

There are several surface water features within the existing site; these consist of the Bure stream, ponds and ditches. The Bure stream creates the setting for housing, amenity and recreation throughout the development. The existing ponds should ideally become a focus of the area and should be enhanced, providing the opportunity to promote nature as an educational resource; with their close proximity to primary and secondary schools to the north of the Boulevard. Existing ditches will become part of a network of SUDS features which manage surface water runoff.

Proposed Water Management

A strategic and sustainable approach has been

set out for the management and use of water by all stakeholders throughout NW Bicester. The water infrastructure (potable supply, wastewater collection and wastewater treatment) required to support the housing and employment growth planned for the development and surrounding area has been identified, along with any constraints that may prevent this.

NW Bicester will minimize water demand through the incorporation of extensive water efficiency measures to reduce potable water use and the inclusion of rainwater harvesting and reuse systems will significantly reduce potable water use and move towards water neutrality.

SUDS

The widespread use of Sustainable Drainage Systems (SUDS) and water harvesting will provide sustainable storm water management and create a sustainable resource from rainfall, whilst ensuring that flood risk is reduced for areas downstream and benefitting the local area. NW Bicester will promote good water quality standards, enhancing the local environmental water quality where possible. SUDS will be used to remove any polluted runoff from diffuse sources, such as roads, providing effective natural treatment at source prior to discharge into watercourses.

The use of SUDS will also allow the creation of new wildlife corridors and spaces incorporating wetlands, ponds with a variety of flora and

fauna, creating valuable open amenity areas whilst enhancing the local water environment. The SUDS system will comprise of chains of linked SUDS components which complement one another, such as; rain gardens, swales, permeable paving with storage, attenuation ponds and ditches.

Green and brown roofs offer ecological and environmental benefits. It may be possible to design these roofs for 40% or greater proportion of roof areas. The voids within the roof substrate can provide additional storage of rainfall runoff, making a significant contribution to the attenuation of surface water runoff and complimenting other ground level SUDS drainage facilities.

Attenuation and storage

Attenuation measures would be located both amongst the built up areas at source, and within the public open spaces adjacent to the development areas alongside roads and at strategic locations to ensure surface water is managed effectively. As such, building layouts and road geometry will also be minded to the natural topography to allow surface flow to be routed away from sensitive receptors. A variety of storage structures will be used, to provide attenuation storage, including ponds, basins and cellular storage.

Rainwater Harvesting

Water resources are becoming scarcer, and water reuse provides an opportunity to conserve water and minimise the demand on mains potable water. Rainwater could potentially be harvested across the site and make a significant contribution to the water supply system.

60% of the total household water use in the UK is typically used for flushing toilets, washing

machines and watering gardens. Rainwater harvesting would be able to be used for these purposes and therefore be important part of reducing main potable water use and moving towards water neutrality for the site.

Larger facilities within NW Bicester, such as schools and offices, provide opportunities to harvest rainwater on a large scale for reuse within the buildings for toilet flushing. Rainwater harvesting may also be implemented for irrigation of the local landscaped areas at a strategic level.

Water Treatment

Two potential wastewater treatment (WwTW) options are currently being considered for the development:

- **On-site WwTW** – the provision of an on-site WwTW to serve the development, discharging to the River Bure / Town Brook, allowing for some reclamation of resource should this become the preferred option for sourcing a non-potable supply; or
- **Existing Town WwTW** – transporting the new foul water flows from the development site to the existing Thames Water Bicester WwTW for treatment and discharge in to the Langford Brook.

Discussions are still on-going with Thames Water and the Environment Agency with regard to these options; to ensure that whichever option is chosen will represent the best overall sustainable long term solution.

6.6 Design

The masterplan sets out the spatial framework design of buildings. Spaces and landscape will be subject of further consideration at later stages of the planning process.

Key principles will be:

- Provide buildings of architectural quality through to detail
- Create a variety of social and educational cultural places
- Create a vibrant mixed use place for people to live, work, use and enjoy.
- Create public open space for people of all ages to interact
- Create safe streets that encourage walking in public spaces with active frontages

NW Bicester team with Oxford Brookes have produced a Technology Strategy Board Design for Future Climate adaption strategy considering:

- Higher summer temperature impacts on comfort levels and health risks:
- Using reflective external surfaces
- External shutters & opening windows
- Heavyweight external & internal build
- Changing rainfall patterns and higher intensity storm events:
- Developing outside flood risk areas including rainwater harvesting, SUDS and integrating significant quantities of trees and planting in landscape



Reflective and fixed horizontal shading



Reflective surfaces with sliding shutters



Landscape intergrated SUDS

Examples of Proposed Housing



NW Bicester

Tomorrow's Garden City Letchworth



Accordia, Cambridge



NW Bicester Exemplar

7 Phasing and Implementation

The masterplan identifies development areas and land budgets, together with the key principles and parameters of the proposed development.

In delivering NW Bicester, consideration needs to be given as to the phasing of development and the timing of the provision of the necessary infrastructure, services and facilities. This is set out in the Phasing and Implementation Brief which is being prepared to support and inform the masterplan and consideration of planning applications. It is intended to complete these in May 2014.

The submission of the masterplan will precede the submission of planning applications. These applications are likely to be submitted in outline and as such, the detailed dwelling yield and spatial phasing will be determined through the discharge of reserved matters and various conditions. However, there is merit in considering the sequencing of development in relation to provision of services and infrastructure and also the inter-relationship of the identified development areas, at the masterplan stage. This will assist in identifying:

- Key development triggers, either related to the quantum or spatial pattern of development;
- Any critical path matters or inter-relationship between infrastructure requirements and spatial phasing;
- Any implications for the programme of implementation arising due to approval process or lead-in time or construction phase of infrastructure provision.

In considering the phasing, both temporal and spatial, of the scheme, it is helpful to identify:

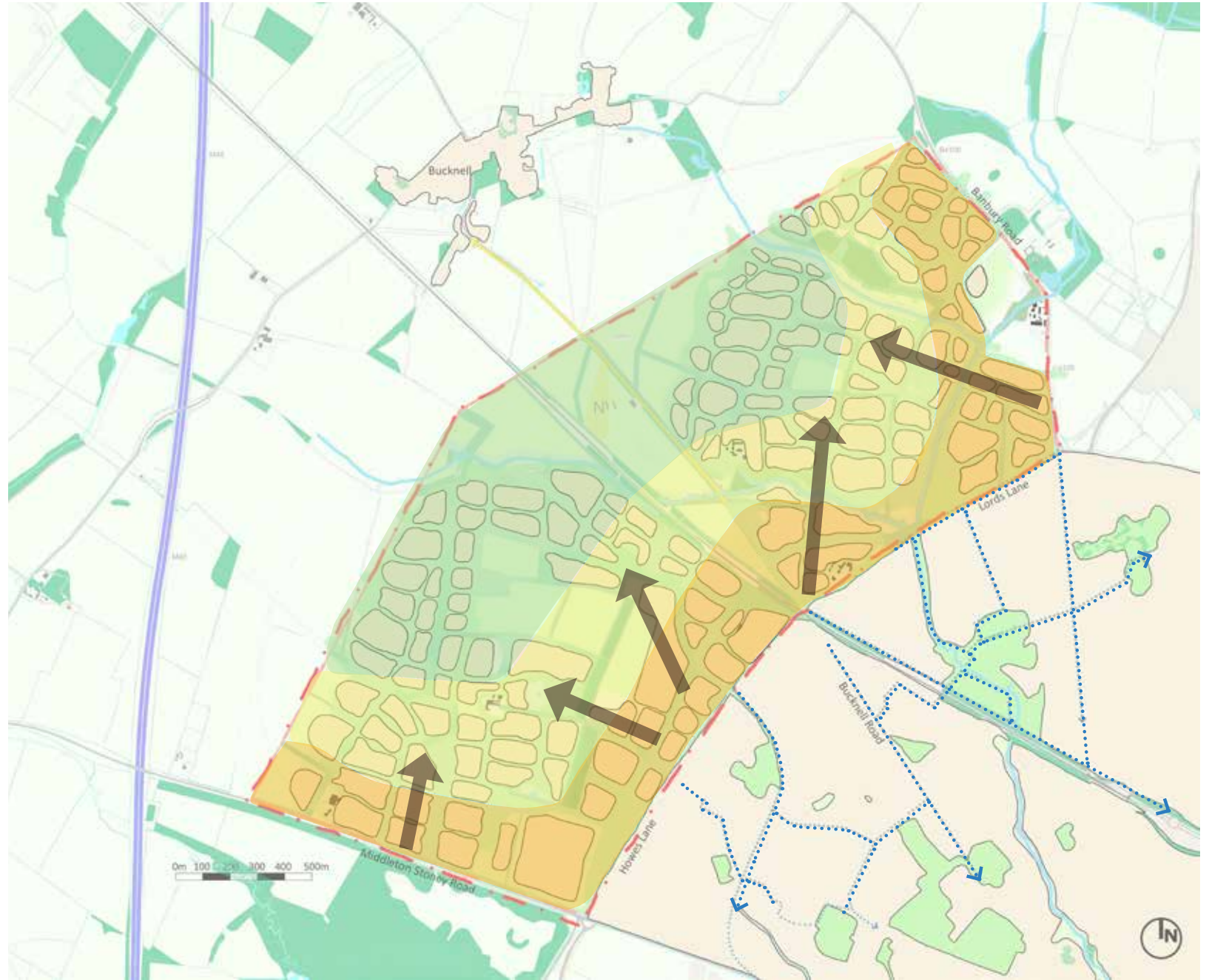
- The timetable for securing permission and implementation;
- The rate of construction and occupations having regard to market demand, the physical constraints of the site and the servicing and infrastructure requirements;
- The requirements in terms of infrastructure delivery, both in terms of servicing the development but also the level of development to generate sufficient demand and revenue;
- The access requirements and the level of occupations required to fund or generate need for improvements;
- The likely wider benefits and affordable housing requirement that is sought by the Council;
- The practicalities of implementation in terms of constructions access and works;
- The requirements of the Council to secure advanced or early provision of key elements of the scheme, such as provision of landscape works and the school site(s);
- The effect upon scheme viability and the need to ensure a viable and deliverable development at all phases.

- The masterplan has been the subject of viability testing and appraisal through collaborative working with OCC and CDC and specialist consultants with A2 Dominion in the viability workstream and this work forms the basis for the consideration of scheme viability.

The Phasing and Implementation Brief will set out a series of development requirements as identified by CDC and OCC together with technical infrastructure requirements.

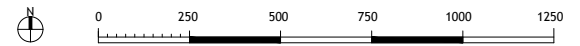
This masterplan does not seek to set the spatial sequencing of development. The masterplan provides an indication as to the likely spatial sequencing of development. Limitations upon development or 'triggers' will be set by the Council at the application stage. However, in order to ensure a comprehensive development, regard will need to be had to the infrastructure requirements as set out in the Phasing and Implementation Brief.

Potential Phasing



➔ Potential Sequencing

- Early Development
- Mid Development
- Later Development



8 Requirements of Future Planning Applications

The masterplan has been prepared by A2Dominion and has been submitted to the Council for consideration. The PPS1 Supplement identifies the need for an 'overall materplan' to 'demonstrate how the eco-town standards' will be achieved. The master plan should be prepared with the benefit of a high level of engagement and consultation with prospective and neighbouring communities (see E20.1).

A2Dominion invite the Council to have regard to the masterplan in considering the merits of planning applications in respect of land at NW Bicester. It is envisaged that a number of applications will be submitted. The applications will need to be comprehensive. To be comprehensive we would suggest that such applications should be consistent with the wider development proposals for NW Bicester, not fetter nor prejudice but actively contribute to the wider Vision and Objectives as set out in this masterplan and supporting documentation.

It is of course a matter for the Council to determine applications as it considers fit having regard to the relevant statutory requirements, policy and other material considerations.

It is suggested that subsequent applications should:

- Set out how the development would be consistent with the principles of this masterplan;
- Demonstrate how the phasing and sequencing of development would relate to the development both already completed and proposed; and assimilation with the existing community;
- Provide an explanation as to how the infrastructure requirements are met in a manner that is consistent with this masterplan and the related strategies;
- Be informed by consultation and engagement;
- Review the 'performance' and 'success' of preceding developments, reviewed against contemporary best practice and based on deliverable solutions.

This masterplan is accompanied by a Strategic Environmental Report, which assesses the likely environmental effects of the development. Whilst not an Environmental Statement, it is suggested that the SER can be used by applicants to assist in the completion of any EIA of development to be the subject of planning applications and the consideration of 'in combination' effects. It is of course for individual applicants to assure themselves as to the accuracy and suitability of the information and update or augment as necessary.

9 Masterplan Submission Plans

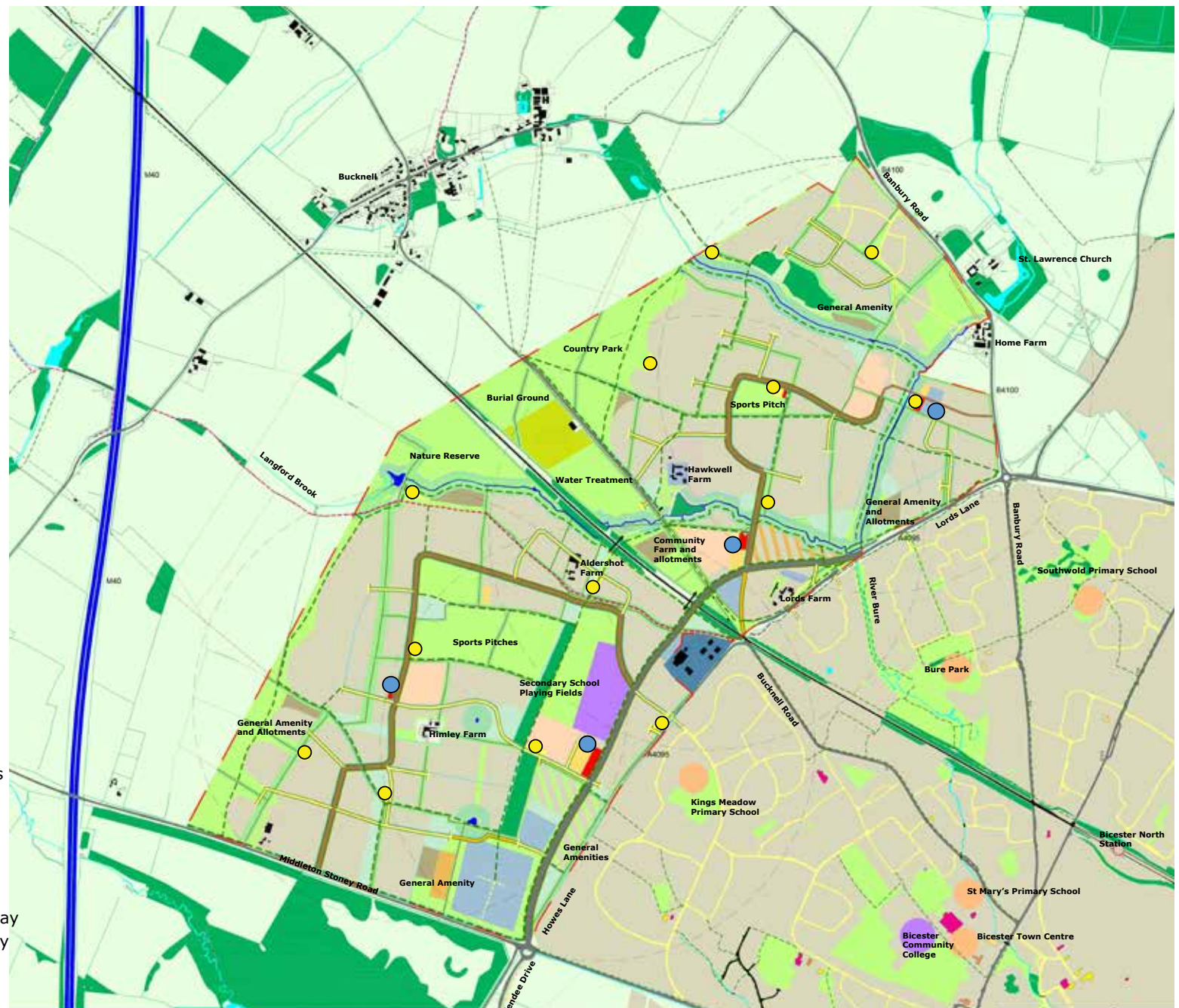
— Masterplan Site Area

Proposed NW Bicester Land Use

- Green Infrastructure
- Existing Woodlands and hedgerows
- Existing Water Corridor and Ponds
- Proposed Woodlands and Hedgerows Buffer
- Proposed Water Corridor Buffer Zone
- Housing
- Primary School
- Secondary School
- Secondary School Sports Pitches
- Existing Business (including green space tbc)
- Existing Farm Use (including green space tbc)
- Commercial/ Business
- Social/Community
- Retail
- Care Home/Hotel/Other
- Extra Care Housing (including green space tbc)
- Energy Centre
- Water Treatment
- Proposed Retention Basins and Attenuation Ponds
- Proposed Swales
- Existing Herbage
- Play
- Proposed groups of allotments

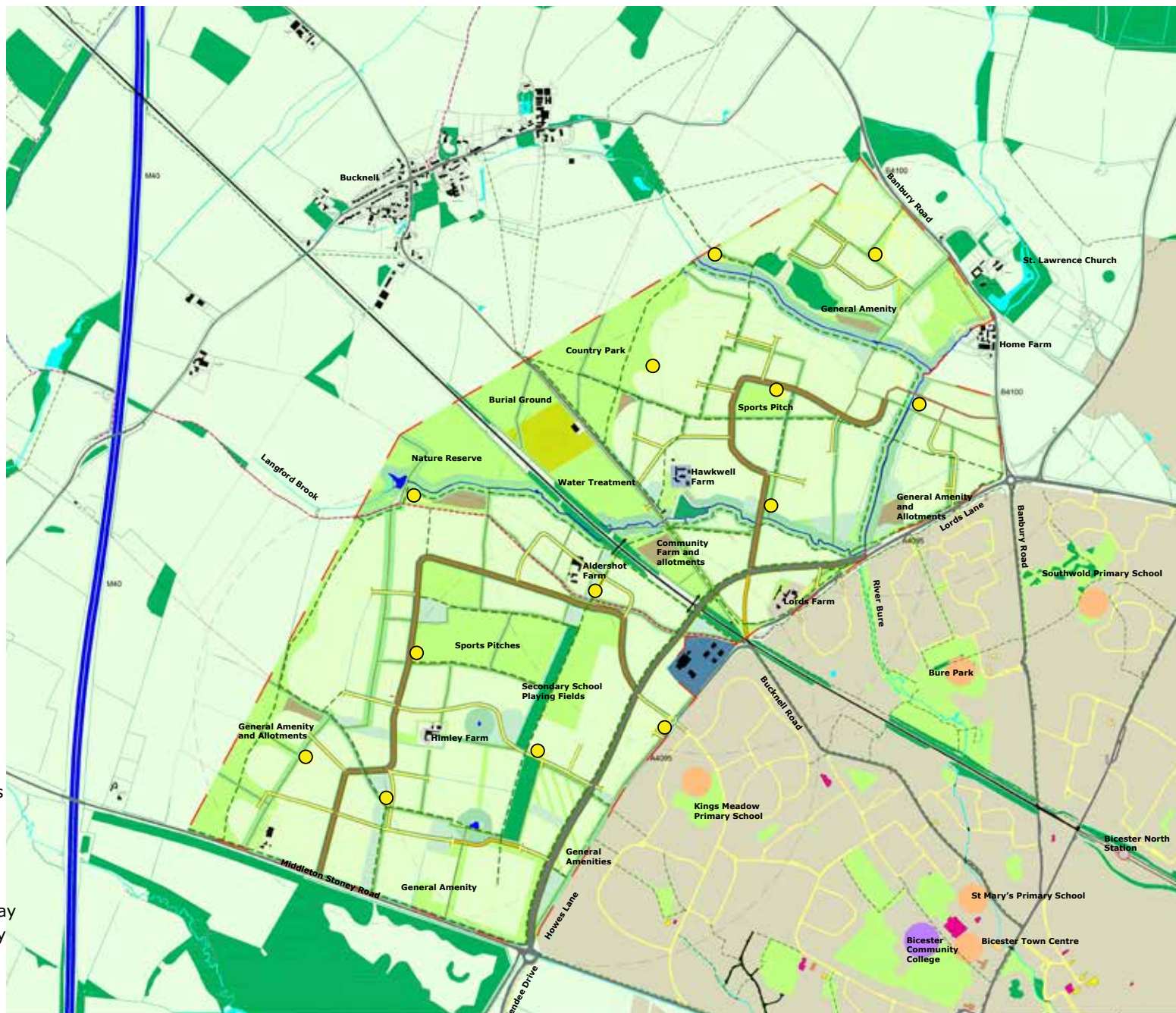
Proposed Connectivity

- Strategic Roads with segregated footpath/cycleway
- Primary Roads with segregated footpath/cycleway
- Secondary Roads including footpath/cycleway
- Off road footpath cycleways
- Crossing under railway
- Existing Bridle Path



BIMP6 01 rev A
NW Bicester Masterplan - Masterplan Framework





— Masterplan Site Area

Proposed NW Bicester Land Use

- Green Infrastructure
- Existing Woodlands and hedgerows
- Existing Water Corridor and Ponds
- Proposed Woodlands and Hedgerows Buffer
- Proposed Water Corridor Buffer Zone
- Existing Business (including green space tbc)
- Existing Farm Use (including green space tbc)
- Play
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- Proposed Swales
- Proposed groups of allotments

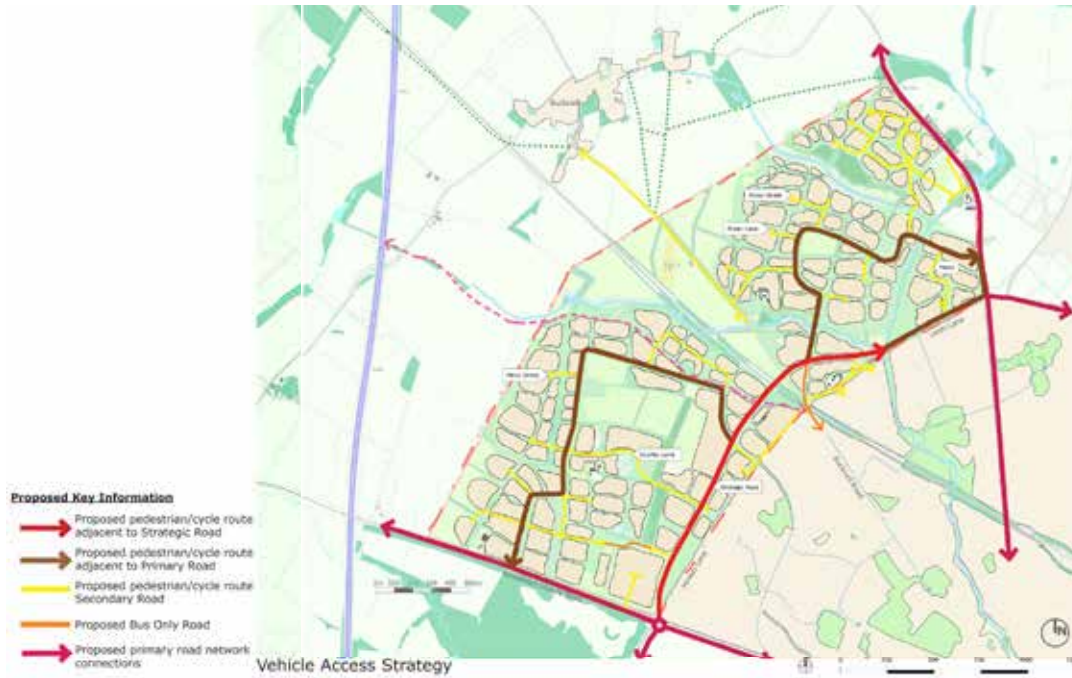
Proposed Connectivity

- Strategic Roads with segregated footpath/cycleway
- Primary Roads with segregated footpath/cycleway
- Secondary Roads including footpath/cycleway
- Off road footpath cycleways
- Crossing under railway
- Existing Bridle Path



**BIMP6 02 rev A
NW Bicester Masterplan - Green Infrastructure**





10 Areas and Glossary

NW Bicester Land Use

		ha	ha
All excluding exemplar			
Housing		160.61	
Extra Care Housing (included in housing)			2.5
Green Infrastructure (excludes Schools GI)	appr. 40%	156.21	8.51
Water Treatment		3.00	
Commercial / Business (excludes green infrastructure)		10.235	
Social / Community		1.18	
Retail/Leisure		0.7	
Care Home / Hotel / Other		1.04	
Energy Production		0.3	
Existing Farms Mixed Use		0.73	
Existing Rail Corridor		6.25	
Existing Bucknell Road		2.24	
Existing Lords Lane		0.59	
Existing Howes Lane		1.3	
Infrastructure/Roads		23.15	
Primary School (includes green infrastructure)		7.54	
Secondary School (includes green infrastructure)		10.45	
Proposed Development:		385.5	
plus Exemplar:		21	
TOTAL:		406.5	

Proposed Open Space and Area Proposed

The following area proposals are made on a basis of average population value 2.4 per household:

Requirements

- 40% Green infrastructure (GI)
- 20% GI publicly accessible
- Biodiversity Net Gain (post development)
- CDC Greenspace Strategy Requirements
- Exclude private gardens

Opportunities

- Holistic GI planning
- Retain existing valuable GI and enhance
- Improve watercourses environs as asset
- Integrate existing edge of Bicester with new
- Use GI to strengthen local distinctiveness
- Respect and enhance existing and historic landscape character
- Incorporate protected species and habitats into GI strategy

GI Provision	ha per 1000 pop	Area Proposed (ha)	Distance Criteria (within) from residential properties		Minimum Size m ²
			min	m	
General Green Space (parks and gardens/natural semi-natural/ amenity green space)	2.74	39.46	15	1200	200
Playspace (combining provision for younger and older children including MUGAs)	0.78	11.23	LAP - n/a LEAP - 5 NEAP - 15	LAP n/a LEAP - 400 NEAP - 1200	LAP -100 inc. buffer - 400 LEAP - 400 inc buffer - 3600 NEAP - 1000 inc. buffer - 8500
Formal Outdoor Sport combining tennis courts, bowling greens and playing pitches	1.13	16.27	10	800	1200
Allotments	0.37	5.33	10	800	2000
Nature Reserve/Park	1.00	14.40	n/a	n/a	n/a
Burial ground	-	4	n/a	n/a	n/a

Glossary of Terms

Masterplan Glossary of Terms and definitions

Title of Development	NW Bicester
Client	A2Dominion
Proposals for the wider Bicester Town	'Eco Bicester'
Local Planning Authority	Cherwell District Council or CDC
County Council	Oxfordshire County Council or OCC
Gross Site Area of Masterplan	Approximately 400 ha
PPS1 Supplement	Planning Policy Statement: Eco-Towns A Supplement to Planning Policy Statement 1 (July 2009)
Cherwell Development Plan	Cherwell Local Plan (1996)
Town Wide Masterplan	White Young Green (WYG) document dated August 2012 entitled Bicester Masterplan Supplementary Planning Document (Consultation Draft) Yet to be adopted by CDC.
Emerging Local Planning Policy	Cherwell Local Plan 2006 - 2031
Employment Target	One Job per home within a sustainable travel distance
Water Neutrality Target	Aspiring towards water neutrality
Carbon Target	True zero carbon as defined in the Supplement to Planning Policy Statement One.
BREEAM Target	Aspiring to achieve BREEAM Excellent
Code for Sustainable Homes Target	In the context of the Supplement to Planning Policy Statement One. All of the key measures that are included within the CfSH should be retained and stated within the masterplan submission (e.g. – ENE 8: cycle storage in every home, MAT2: Responsibly sourced materials, composting facilities, WAS1: space for recycling, WAS3: Compositing facilities, HEA1: Daylighting, Mat 1:use of the green guide)
Green Infrastructure	<i>'Green Infrastructure (GI) is a network of high quality green and blue spaces and other environmental features. It needs to be planned and delivered at all spatial scales from national to neighbourhood levels. The greatest benefits will be gained when it is designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits (ecosystem services) for</i>

	<i>local communities.'</i> Natural England 2014 Green Infrastructure includes parks, open spaces, playing fields, woodlands, wetlands, grasslands, river corridors allotments, footpaths and cycle ways.
Green Infrastructure Target	40 percent (20% of which must be publicly accessible)
New Homes Provision	Up to 6,000
Affordable Housing Provision on Site	30 percent subject to viability
Employment Provision on Site	4,600 jobs, including around 2,000 jobs at the proposed business park, with further provision elsewhere within the local area.
Education Provision	Up to Four x 2FE primary schools One secondary school
Health Provision	One GP Health Centre
Local Centres	Centres of activity to provide a focus for the community, to provide a range of functions such as local retail, community, health and business uses
Governance Structure	A resident-led community management organisation for NW Bicester that gives local people the opportunity to have a say over the decisions that affect their immediate area.

