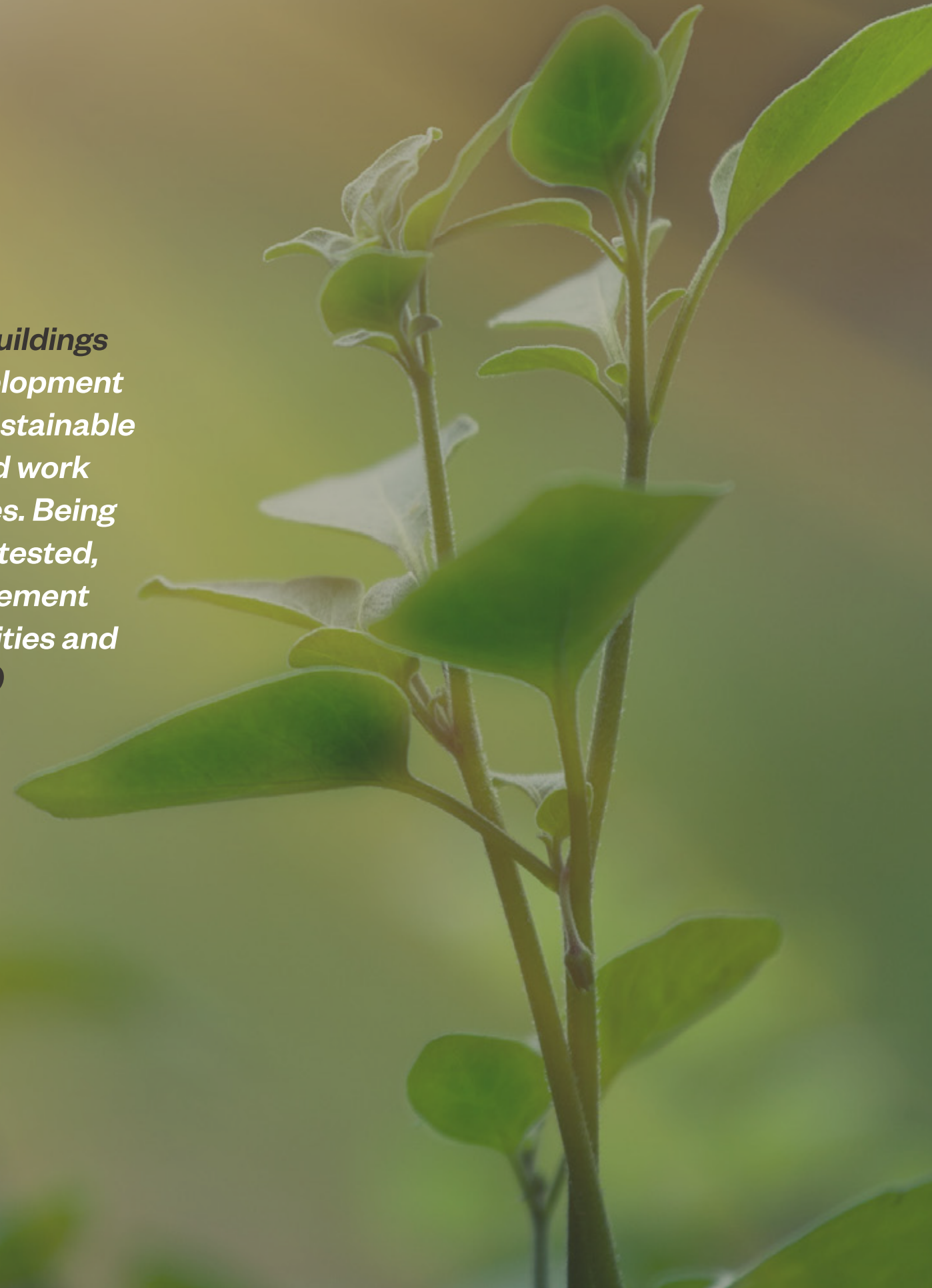


HIMLEY VILLAGE, ■ BICESTER

Design Code

ON BEHALF OF CALA HOMES (COTSWOLDS) LTD
P22-3093_GD_03_D | JUNE 2023





““ *The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process.* **””**

(Paragraph 126, NPPF 2021)

Pegasus Design

Since 2003, we've been solving planning and development problems for our clients successfully, and we're really proud of that. Even though our work is complex, what we deliver for our clients is very simple: we deliver results.

Expertly Done sums up our approach. We listen and learn from our clients, working as true partners who are passionate about delivering excellence and expertise on every step of the journey.

Everything we do is Expertly Done.

Expertly Done.

DESIGN | ECONOMICS | ENVIRONMENT | HERITAGE | LAND & PROPERTY | PLANNING | TRANSPORT & INFRASTRUCTURE

CONTENTS

01	Introduction & Background	4
02	The Framework Plan	18
03	Landscape Strategy & Codes	24
04	General Urban Design Principles	58
05	Character Area Guidance	66
06	Access & Movement Codes	104
07	Sustainability Strategy	126
A1-3	Appendices	138

NOTE: THIS DOCUMENT IS DESIGNED TO BE VIEWED AS A3 DOUBLE SIDED

Pegasus Design
33 Sheep Street,
Cirencester,
GL7 1RQ

www.pegasusgroup.co.uk | T 01285 641717

Prepared by Pegasus Design on behalf of CALA Cotswolds

Pegasus Design is part of Pegasus Group Ltd

June 2023 | Project code P22-3093

© Copyright. The contents of this document must not be copied or reproduced in whole or in part without the written consent of Pegasus Planning Group Ltd.
Crown copyright. All rights reserved. Licence number 100042093.

♻️ Printed material produced by Pegasus Design Cirencester is printed on paper from sustainably managed sources and all parts are fully recyclable.



PEGASUS
GROUP

Hydrock



Tyler
Grange

orion.

01

Introduction & Background

01

Introduction & Background

THE VISION FOR HIMLEY VILLAGE

- 1.1 The overarching vision for Himley Village is to create a sustainable and beautiful place to live, building on the landscape of the site to create a desirable new Eco-Town. The site has the advantage of sitting within an attractive rural area of countryside, whilst being located in a sustainable location close to schools and the amenities of North West Bicester.
- 1.2 A new community of up to 1,700 new homes, public open space including sports pitches and community facilities, children's play areas and parkland. The design of dwellings will respond to the existing character of the surrounding area, celebrating Bicester's architecture, whilst providing a modern and forward thinking approach to the delivery of future homes.
- 1.3 The sustainability focused and landscape-led approach to place making ensures built form and landscape features work in harmony, and are the defining character to the public realm.

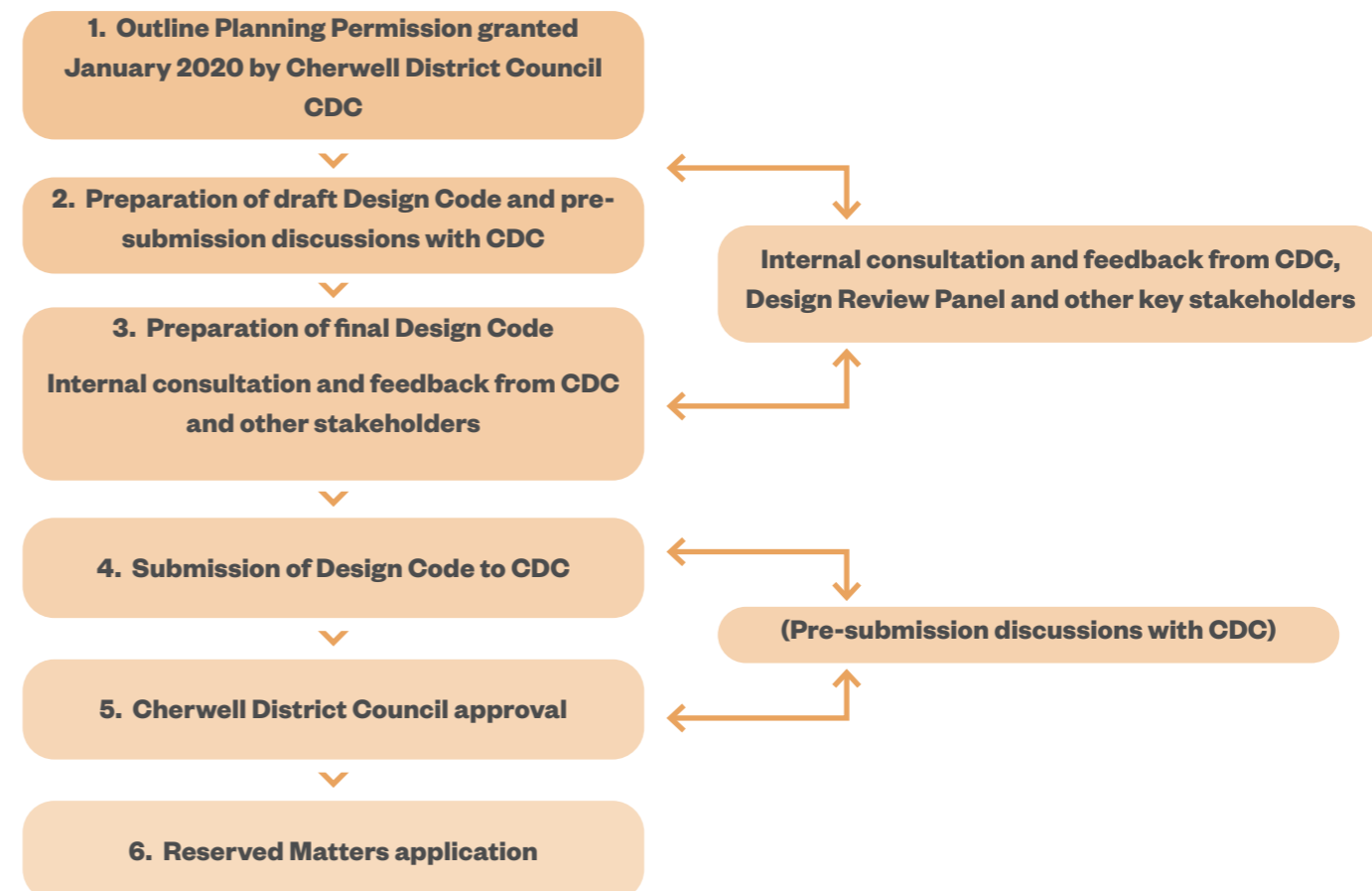
INTRODUCTION

- 1.4 The Design Code for Himley Village, has been produced by Pegasus Group on behalf of Cala Homes (Cotswolds) Ltd.
- 1.5 This document seeks to take the Himley Village site forward as a strategic development as set out in the Cherwell Local Plan.
- 1.6 The site lies to the west of Bicester and east of the M40 and represents an important part of the Council's strategy to meet pressing housing needs in the area. Together with supporting infrastructure, the scheme aims to add value to the local area by providing a high-quality development opportunity.
- 1.7 The purpose of the Design Code is to guide the design of future Planning Applications, ensuring that the design principles and objectives for high-quality design are delivered consistently across the development.

PURPOSE OF THE DESIGN CODE

- 1.8 Cherwell District Council and Cala Homes have discussed the requirements for the Design Code to guide the development of Himley Village. The objective of producing the Design Code is to provide a clear framework for development, that is supported by all parties, to ensure the quality of design is achieved without over complicating the process.
- 1.9 The Design Code is intended to:
 - Establish a long-term vision, and a design-led framework for the site;
 - Build upon the work established in the outline planning application, and the design and access statement for the site;
 - Provide a level of certainty to the landowner, Local Authority, Developer and the community;
 - Provide a clear guide for developers working on individual development parcels; and
 - Set the context for more detailed design work required at the Reserved Matters stage.

- 1.10 The design principles presented in this Site Wide Design Code have been developed to deliver a distinctive development, comprising a series of complementary but unique Character Areas, to guide the future detailed design proposals.
- 1.11 The subsequent Reserved Matters applications will be submitted in accordance with the code. However, variations away from the code may be considered acceptable in exceptional circumstances where design or site constraints dictate a more suitable alternative approach. Where deviation from the Design Code is necessary early engagement with Cherwell District Council is encouraged.

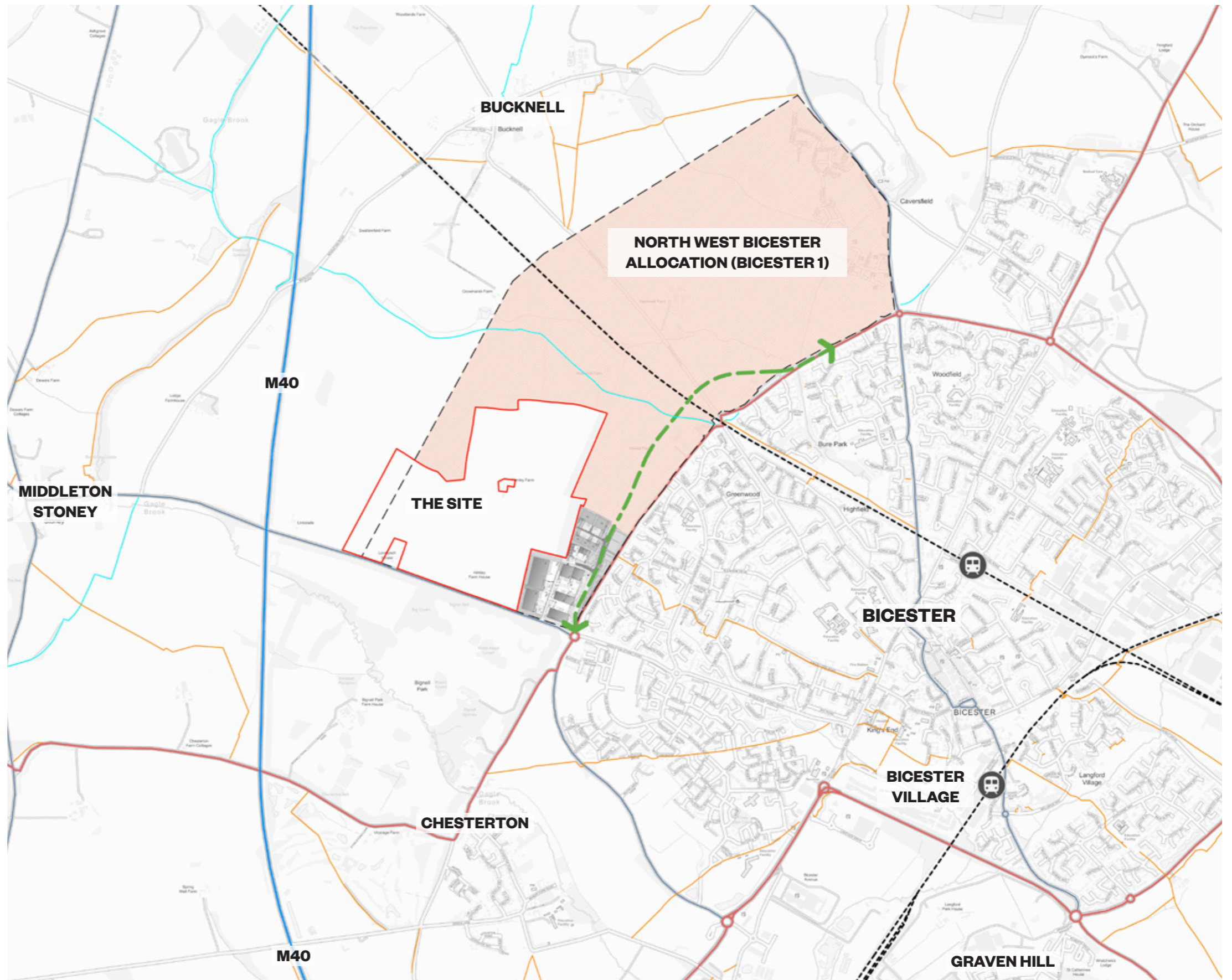


“The vision for North West Bicester is for a high quality development, well integrated with the existing town, which provides homes, jobs and local services in an attractive landscape setting, conserves and enhances heritage assets including historic landscape features, increases biodiversity and addresses the impact of climate change. It is based on the principles of sustainable zero carbon development designed to meet the effects of future climate change including extreme weather events and reduced energy and water use.”

North West Bicester SPD, February 2016



- KEY**
-  Bicester 1 Allocation Boundary
 -  Extent of approved outline permission 14/02121/OUT
 -  M40 motorway
 -  Motorway junction
 -  A road
 -  B road
 -  Railway
 -  Railway station
 -  Existing PRoW - footpath
 -  Existing PRoW - bridleway
 -  Existing PRoW - byway
 -  Potential realignment of A4095 (Howes Lane) (outside of CALA's control)



Wider Site Location Plan

THE SITE

1.12 The site extends to approximately 89.9 Hectares (Ha) and is located approximately 3 kilometres (km) to the west of Bicester town centre. The boundaries of the site are predominantly defined by existing vegetation and hedgerow planting and:

- The B4030 (Middleton Stoney Road), running in a broadly east-west direction to the south of the site;
- New B8 development (Axis J9 Industrial Estate) to the east;
- Agricultural fields, forming part of the wider Bicester 1 Allocation, to the north;
- Sporadic tree and hedgerow planting, with arable agricultural farmland beyond to the west.

1.13 It should be noted that Himley Farm is inset within the site boundary. Whilst Himley Farm is covered by Allocation Policy Bicester 1, it does not form part of this Design Code and will remain as a private residential property.

1.14 The B4030 (Middleton Stoney Road) at the south of the site provide links east into Bicester town, as well as access to Bicester North and Bicester Village rail stations. The A41 provides links to Aylesbury, Buckingham, and Milton Keynes, as well as providing connection to the M40, linking Bicester to Brackley, Banbury and Oxford, and the wider strategic highway network.



View south-west along the existing farm track to the existing central east-west hedgerow



View east across the site from Himley Farm toward the existing plantation along the eastern site boundary



View north-east from Himley Farm to the northern site boundary



- A. View west from existing Himley Farm access track across the site towards Middleton Stoney Road (B4030) and the southern site boundary, with Lovelynych House in the background
- B. View north across the site towards Himley Farm, from the farm access track
- C. View north to Himley Farm, with listed barns on the left hand side of the image
- D. View west across the north of the site towards the existing central north-south hedgerow.
- E. View north along the eastern site boundary and existing plantation in the east of the site.
- F. View east across the south of the site towards eastern site boundary and adjacent Axis J9 Industrial Estate

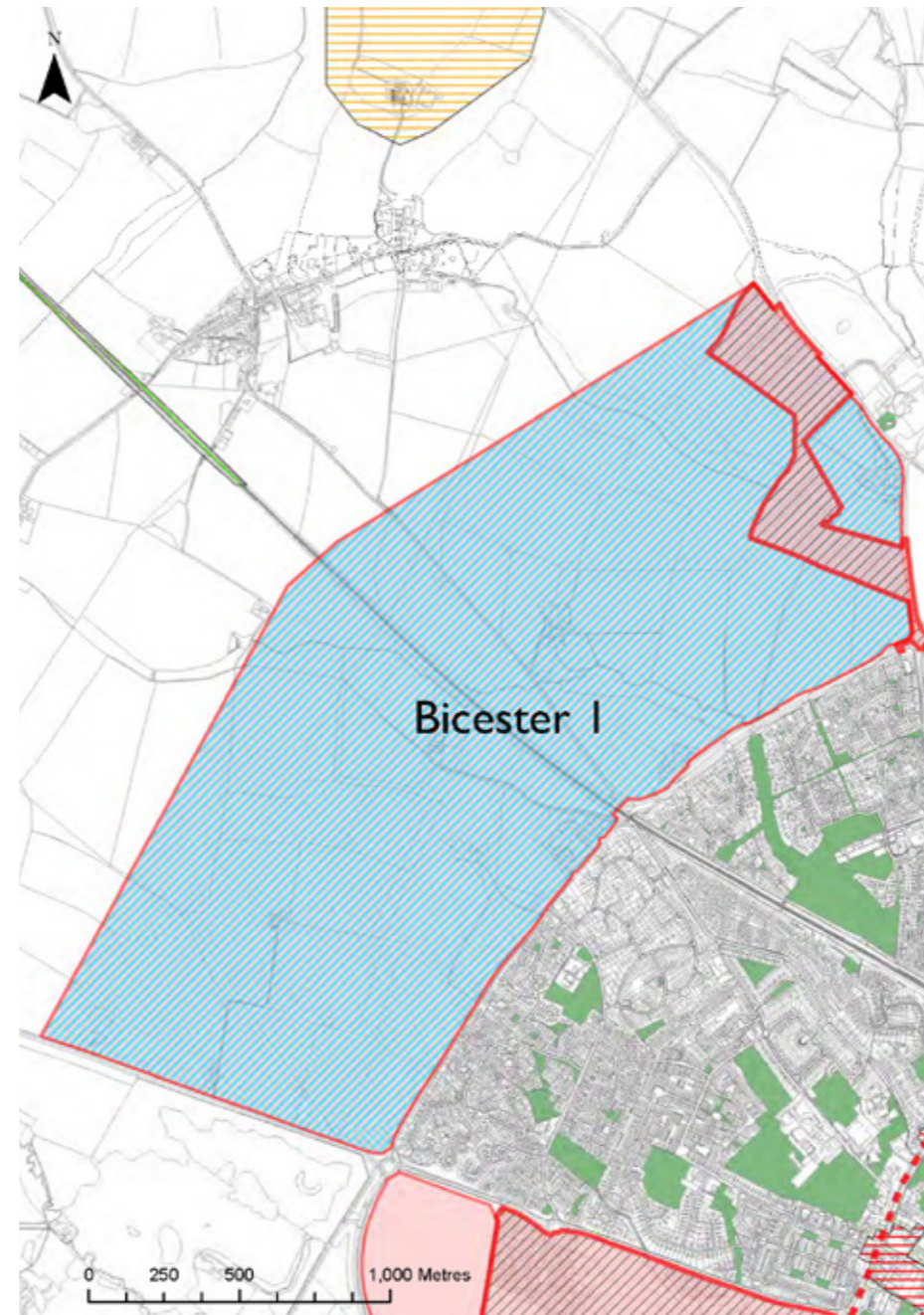


Site photo location plan

PLANNING BACKGROUND

BICESTER 1 ALLOCATION

- 1.15 The site is identified for development as a Strategic Growth Location in the adopted Cherwell Local Plan 2011 - 2031, under Policy Bicester 1.
- 1.16 The policy allocated a 390ha site for a new zero carbon mixed use development to include:
- Up to 6,000 homes including 30% (1,800) affordable homes
 - A minimum of 10ha employment uses
 - Secondary, Primary and Nursey school provision
 - A 7 GP Surgery to the south of the site and a dental surgery
 - Public Open Space including sports pitches, parks and recreation areas
 - Community facilities including leisure, health, retail and library facilities
 - Integration of the new development with the town through road and access improvements, new footpaths and cycleways and the provision of a bus route through the site
- 1.17 The full policy wording is presented in Appendix 1



Policy Bicester 1: North West Bicester Eco-Town, CDC Local Plan 2011 - 2031

LOCAL PLANNING AND DESIGN GUIDANCE.

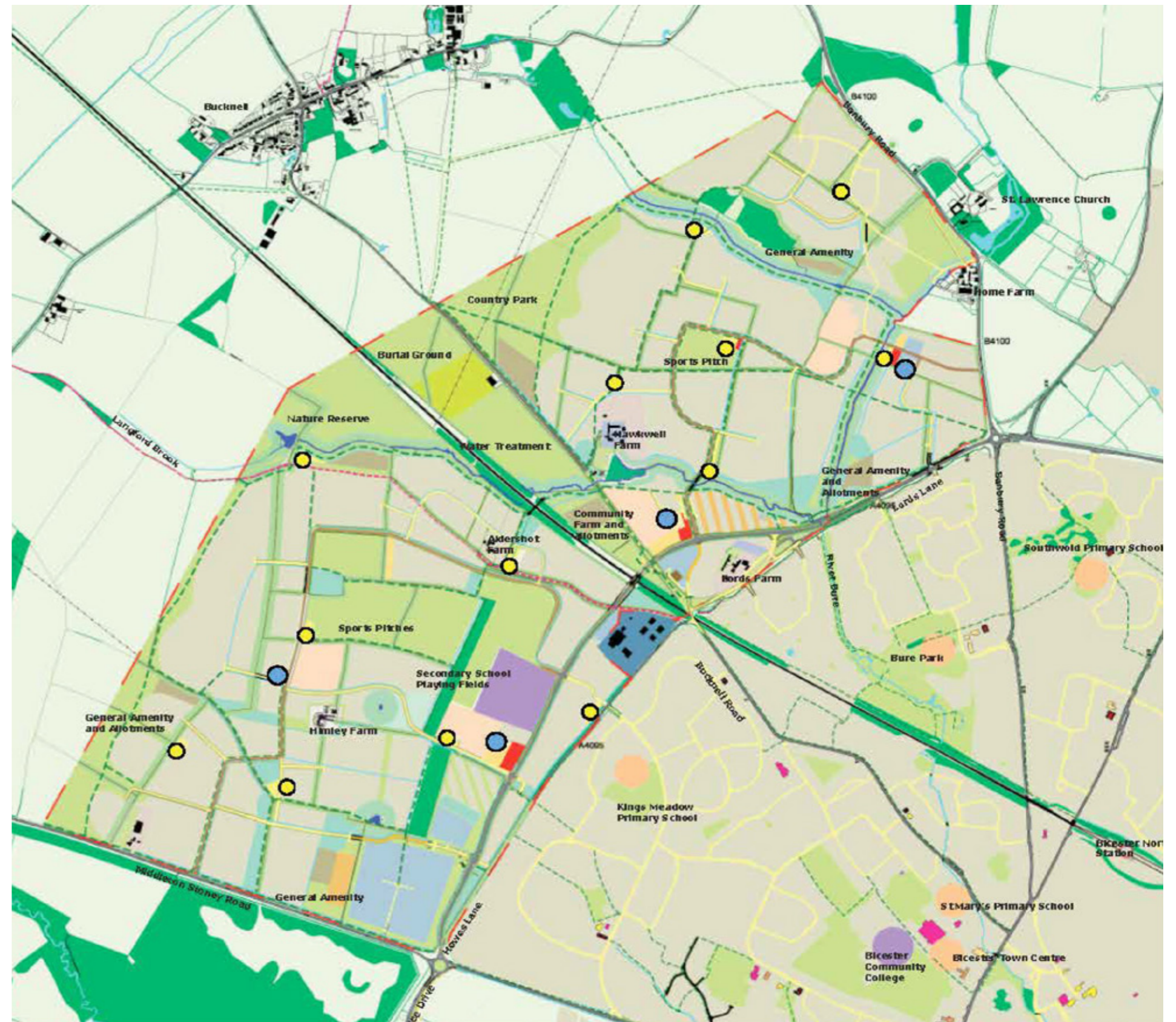
- 1.18 The development proposals have been formulated having due regard to the Cherwell District Council (CDC) Local Development Plan comprising:
- Cherwell Local Plan 2011 - 2031 (Part 1) (incorporating the re-adopted Policy Bicester 13), July 2015;
 - Cherwell Local Plan 2011 - 2031 (Part 1) Partial Review – Oxford's Unmet Housing Need, September 2020;
 - Saved policies of the adopted Cherwell Local Plan 1996 that have not been replaced (see Appendix 7 of the 2015 adopted Local Plan), November 1996;
 - Oxfordshire Minerals and Waste Local Plan (Part 1 – Core Strategy), September 2017; and
 - Saved policies of the Oxfordshire Minerals and Waste Local Plan 1996 (adopted by the County Council) that have not been replaced, July 1996.
- 1.19 Consideration has also been given to the following local planning and design guidance:
- North West Bicester SPD, adopted February 2016;
 - Developer Contributions SPD; adopted February 2018;
 - Cherwell Residential Design Guide SPD, adopted July 2018
 - OCC Oxfordshire Cycling Design Standards, Summer 2017;
 - OCC Street Design Guide, , Summer 2017;
 - MHCLG National Design Guide, 2021;
 - MHCLG National Model Design Code, 2021;
 - DfT Manual for Streets, 2007;
 - CiHT Manual for Streets 2, 2010;
 - DfT LTN 1/20 Cycle infrastructure design, 2020; and
 - TfL Healthy Streets Toolkit, 2007.



View south across the east of the site towards the south-eastern site boundary and Axis J9 Industrial Estate

NORTH WEST BICESTER SPD

- 1.20 The North West Bicester Supplementary Planning Document (SPD), was adopted by CDC in February 2016.
- 1.21 The SPD sets out the vision, spatial disposition of land uses, development principles and infrastructure delivery for the whole of the Eco-Town, as well as establishing a context for future planning applications and design codes which will follow on and contain more detailed proposals.
- 1.22 The SPD is underpinned by a large evidence base, including the following documents:
- Vision and objectives
 - Detailed water cycle study
 - Flood risk and drainage strategies
 - Energy strategies
 - Access and travel strategy
 - Green infrastructure and landscape strategy
 - Economic reports



North West Bicester Masterplan Framework, North West Bicester SPD (February 2016)

OUTLINE PLANNING PERMISSION

- 1.23 Outline planning permission for the site was granted on 30th January 2020 under reference 14/O2121/OUT.
- 1.24 The approved description of development reads:
- “OUTLINE - Development to provide up to 1,700 residential dwellings (Class C3), a retirement village (Class C2), flexible commercial floorspace (Classes A1, A2, A3, A4, A5, B1, C1 and D1), social and community facilities (Class D1), land to accommodate one energy centre and land to accommodate one new primary school (up to 2FE) (Class D1). Such development to include provision of strategic landscape, provision of new vehicular, cycle and pedestrian access routes, infrastructure and other operations (including demolition of farm buildings on Middleton Stoney Road).”**
- 1.25 This consent included the following development elements:
- Up to 1,700 residential dwellings (Class C3)
 - A retirement village (Class C2)
 - Flexible Commercial Floorspace (Classes A1, A2, A3, A4, A5, B1, C1 and D1)
 - Social and community facilities (Class D1)
 - Energy Centre
 - Primary School (up to 2 form entry)
 - Strategic landscape
 - New vehicular, cycle and pedestrian access routes
 - Supporting infrastructure
- 1.26 The outline planning permission was subject to 53 conditions, of which the wording of some has since been amended via two applications for non-material amendments as set out overleaf.

Approved Outline Plans

- 1.27 The following plans were approved as part of the outline planning permission, and should be read in conjunction with this Site Wide Design Guide:
- Site Boundary Parameter Plan 1 (drawing number 592-PL-101 Rev B);
 - Demolitions Parameter Plan 2 (drawing number 592-PL-102 Rev B);
 - Land Use Parameter Plan 4 (drawing number 592-PL-103 Rev K);
 - Building Heights Parameter Plan 5 (drawing number 592-PL-104 Rev H);
 - Density Parameter Plan 6 (drawing number 592-PL-105 Rev H);
 - Landscape Parameter Plan 3 (drawing number 592-PL-106 Rev H);
 - Movement and Access Parameter Plan (drawing number 1665/75/04);
 - SUDs Parameter Plan (drawing number 1665/75/05 Rev B);
 - Document titled ‘Storage Attenuation Volumes of Primary Swales (1665/76) dated July 2015;
 - Tree Survey Report – document reference EED14995-100-R-7-1-3-TA dated January 2015 and accompanying appendices;
 - Sustainability and Energy Statement – document reference PENL2003 dated 17 December 2014; and
 - Surface Water Drainage Strategy and Flood Risk Assessment dated December 2014 and all additional correspondence relating to Drainage and Flood Risk.
- 1.28 Reference should also be made to the Design and Access Statement and Illustrative Masterplan submitted in support of the Outline Planning Application (OPA).
- 1.29 The approved plans are also included at a larger scale within Appendix 2.



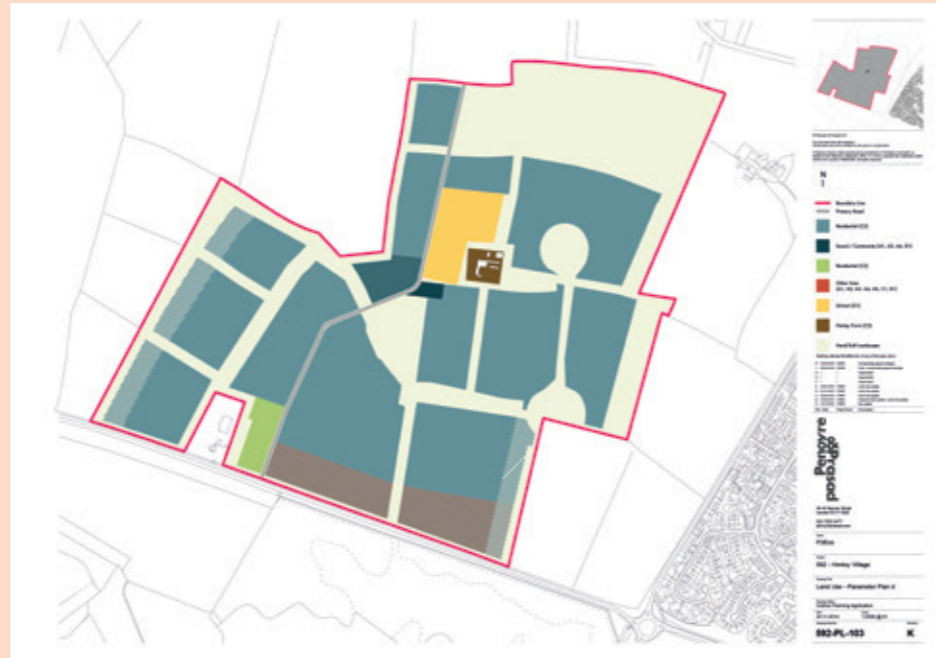
Site Boundary Parameter Plan 1 (drawing number 592-PL-101 Rev B)



Landscape Parameter Plan 3 (drawing number 592-PL-106 Rev H)



Demolitions Parameter Plan 2 (drawing number 592-PL-102 Rev B)



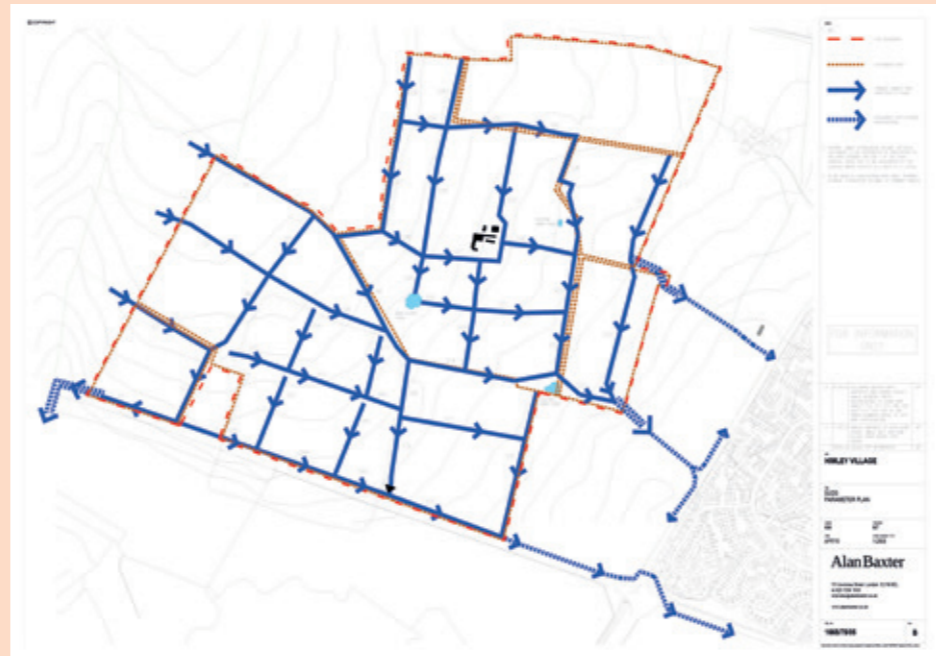
Land Use Parameter Plan 4 (drawing number 592-PL-103 Rev K)



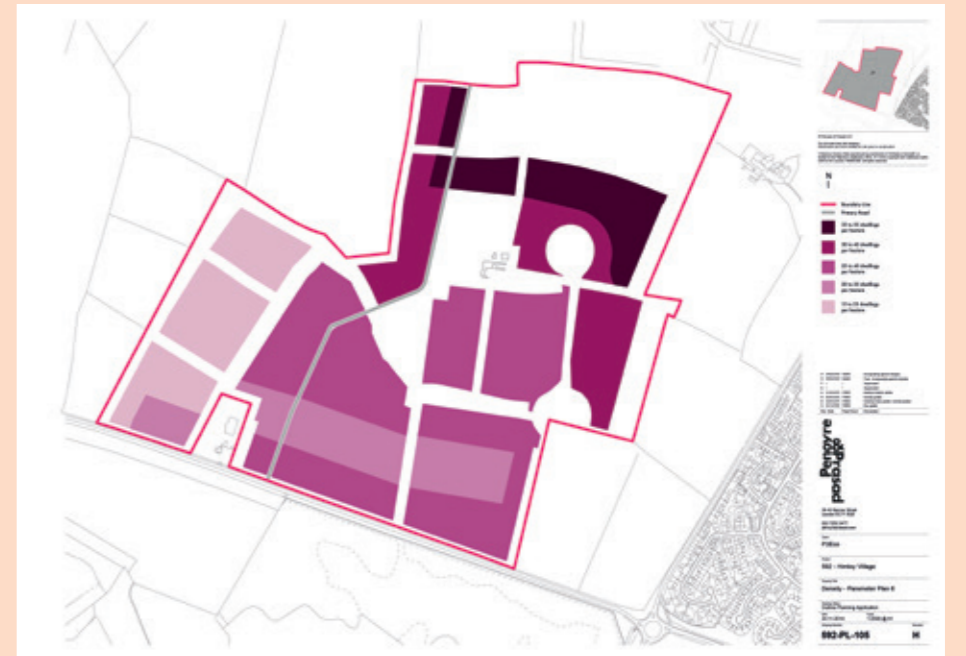
Building Heights Parameter Plan 5 (drawing number 592-PL-104 Rev H)



Movement and Access Parameter Plan (drawing number 1665/75/04)



SUDs Parameter Plan (drawing number 1665/75/05 Rev B)



Density Parameter Plan 6 (drawing number 592-PL-105 Rev H)

22/02375/NMA

- 1.30 Application 22/02375/NMA amended the trigger for Conditions 7 - 11. Originally approved these conditions required submissions to be made and approved prior to the submission of the first Reserved Matters Application (and included the Design Code under Condition 8).
- 1.31 The wording of these conditions was amended via this NMA to require the submission 'Prior to or alongside' the submission of the first reserved matters application, meaning that approval is no longer required prior to a reserved matters application being submitted, but an application needs to be made to discharge the conditions at the same time as the first application for Reserved Matters approval.

22/03492/NMA

- 1.32 The wording of a number of conditions, including Condition 8, was then further amended via the approval of non-material amendment application 22/03492/NMA, which removed the requirement for the First Phase Reserved Matters Application to be a 'residential' application.
- 1.33 This then enabled an 'infrastructure only' Reserved Matters application to be submitted in January 2023, comprising two junctions providing vehicular and pedestrian access into the site from Middleton Stoney Road, and two sections of internal road. This application has been allocated reference 23/00214/REM and is currently under consultation.

Conditions 8 and 9 of 22/03492/NMA

- 1.34 This Design Code is submitted pursuant to the discharge of Conditions 8 and 9 of the approved OPA, and the subsequent Non-Material Amendment (NMA) 22/02375/NMA.

Condition 8

Prior to or alongside the submission of any application for approval of reserved matters for the first phase of the development apart from where the first phase relates to an agreed infrastructure only phase (and other than on the area annotated as 'Other Uses' on Land Use Parameter Plan 4 drawing number 592-PL-103 Rev K where a Masterplan has been approved for that area pursuant to condition 9), a site wide Masterplan and Design Code shall be submitted to and approved in writing by the Local Planning Authority prior to the determination of any reserved matters application for the first phase of the development apart from where the first phase relates to an agreed infrastructure only phase. The Masterplan and Design Code shall set out the urban design approach for the site to include a regulating plan and supporting information to include:

- *Details to provide continuity with adjacent development*
- *A detailed masterplan for the area fronting the Middleton Stoney Road annotated as 'Other Uses' on Land Use Parameter Plan 4 drawing number 592-PL-103 Rev K showing the location of each of the land uses*
- *Key approaches to deliver sustainable development that as a minimum meets the Eco Town PPS standards*
- *The identification of Character areas and for each, the built form and green spaces to include their key features, density, block layout and principles, structure and permeability*
- *Movement network and principles of streetscape including access locations, hierarchy, street type, form and design, cross sections, surface materials and landscaping, cycleways, footways, crossing points, street furniture, bus routes and stop locations*
- *Parking strategy including car and cycle parking standards and approach for residential and non-residential uses*
- *Public realm*
- *Building heights, scale, form, design features materials, architectural details and frontages*
- *Boundary treatments*
- *Key views, vistas, landmarks*
- *Landscape character, landscape types, green infrastructure, amenity spaces, public open space, play areas including their distribution, existing trees and retained hedges and biodiversity measures*
- *Provision and details of buffers to retained hedgerows and dark corridors for biodiversity*
- *Legibility and diversity of built form and landscape*
- *Landscape and boundary treatment principles for the buffer surrounding Himley Farm*
- *Drainage including sustainable urban drainage features*
- *Adaptability*

All reserved matters applications and the development shall thereafter be carried out in accordance with the principles of the approved Masterplan and Design Code.

Condition 9






Prior to or alongside the submission of any application for approval of reserved for the first phase of the development apart from where the first phase relates to an agreed infrastructure only phase and in the event that the Design Code has not been approved, a detailed masterplan for the area fronting the Middleton Stoney Road annotated as 'Other Uses' on Land Use Parameter Plan 4 drawing number 592-PL-103 Rev K, shall be submitted to and approved in writing by the Local Planning Authority prior to the determination of any reserved matters application for the first phase of the development apart from where the first phase relates to an agreed infrastructure only phase. The masterplan shall show the location of each of the land uses, access and parking locations, key frontage and public space conditions and landscape principles. All reserved matter applications for the area covered by the Masterplan approved by this condition 9 shall be made and the development shall thereafter be carried out in accordance with the principles of the approved Masterplan.

02

The Framework Plan



02 The Framework Plan

KEY	
	Bicester 1 Allocation Boundary
	Site wide design code boundary
Landscape Framework and Site Setting	
	Himley Farm - to be retained
	Existing Grade II Listed building
	Contours (1m intervals, LIDAR dataset)
	Existing tree/hedgerow planting (from arb survey)
	Existing woodland/treebelt (on site)
	Existing woodland/treebelt (off site)
	New structural planting
	Landscape buffer
	Existing waterbody
	Existing ditch
	Potential indicative SuDs basins (in addition to swales)
	Potential swales
	Public open space
	Allotments
	Green corridors
	Wildlife corridor
	Dark corridor
	Sport pitches
	NEAP/LEAP (combined provision)
	NEAP
	LEAP/LAP (combined provision)
	MUGA
	Sports pavilion
	Village green
Built Development	
	Residential development
	CA1 Spine Road
	CA2 Green Edge
	CA3 Core Housing
	CA4 Central Green
	CA5 Water Gardens
	CA6 Eastern Green
	CA7 Eastern Edge
	CA8 Northern Edge
	CA9 Western Edge
	CA10 Himley Farm
	Mixed use neighbourhood centre
	Care home
	Primary school
	Infrastructure
	Proposed acoustic fence and bund
Access and Movement	
	Existing bus stop adjacent to allocation area
	Proposed bus stop
	Existing uncontrolled crossing point
	Existing field accesses retained in-situ to provide ped/cycle access through POS
	Existing PRoW - footpath (off site)
	Existing PRoW - bridleway (off site)
	Existing right of access retained to Himley Farm
	Primary vehicular, bus, ped and cycle access point
	Secondary vehicular, ped and cycle access point
	Potential future bus, vehicular, ped and cycle link to wider Bicester 1 allocation site
	Potential vehicular, ped and cycle only link to wider Bicester 1 allocation site
	Potential future bus, emergency vehicular, ped and cycle only link to wider Bicester 1 allocation site
	Indicative primary movement route alignment (designed to accommodate bus route)
	Indicative strategic secondary route
	Indicative segregated two-way cycle only route
	Indicative shared use pedestrian and cycle route

FRAMEWORK PLAN PRINCIPLES

- 2.1 This is a two-dimensional plan that simplifies the Design Code principles. It displays factors that may affect the design development and highlights the features of the site to be focused on. It therefore sets out the design code development parameters, which include:
- Proposed land uses;
 - Key frontages;
 - Key focal spaces;
 - Key building locations
 - Character areas; and
 - Landscaping/open space typology areas.
- 2.2 The features set out on the Framework Plan are intended to increase legibility and aid wayfinding across the proposals, while responding sensitively to the surrounding existing local context. In addition to these principles building and layout design, planting and views will all be utilised to form visual focal points and create identifiable routes.

Character Areas

- Character Areas define the urban form, development pattern and architectural character of the development. They are supported by a series of design strategies, including building heights, key building treatments, materiality and landscape principles.

Landscape Framework

- A variety of landscape typologies have been shown on the Framework Plan. These are structured by the existing landscape features present and further detailed instructions on their design is set out later in this Site Wide Design Code.
- Space for formal and informal play and sports pitches have been provided to ensure space for recreation and community uses can be accommodated.

Trees/hedgerow

- Development is structured by the retained trees and hedgerows within the site. Tree and hedgerow loss has been kept to a minimum, only where explicitly needed to facilitate development.

- The development will be supported by new tree planting within areas of strategic open space, with species and sizes to vary as set out in the tree planting strategy.
- Streets will be tree lined in accordance with the NPPF with varieties chosen for their architectural impact and grouped to ensure longevity of specimens.

Key Cycle Links

- Key cycle links through the development will compliment and enhance the existing National Cycle Network and local cycle routes, providing links to key destinations both on and off-site.
- Reflecting key desire lines to local facilities and services LTN1/20 compliant cycle routes will provide clearly sign posted sustainable transport links across the site

Key Pedestrian Links

- A series of direct and legible key pedestrian links will be created to enhancing pedestrian access across the site, and the wider PRoW network.
- Additional informal leisure and access routes close to residential development will encourage interaction with the landscape and emphasise healthy lifestyle choices and modal shifts.

- 2.3 Further design coded elements that are not shown on the Framework Plan but set development parameters presented later in this document include:

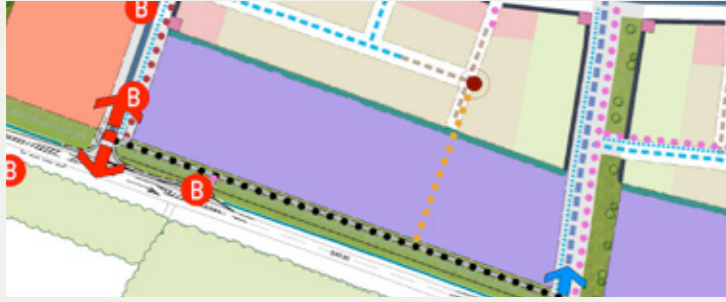



- Street/Movement hierarchy (vehicular and pedestrian);
- Building typologies;
- Housing mix and affordable housing design principles;
- Architectural style and appropriate detailing;
- Building materials and use of colour;
- Boundary treatments;
- Landscaping and Public realm design; and
- Zero-carbon principles and supporting sustainability strategies.

DEVELOPMENT TYPOLOGIES

2.4 The table opposite sets out the key types of development present across the allocation. The table is broken down into:

- Location - where the type of development is located within the site;
- Precedents - a set of appropriate exemplar images that illustrate in broad terms the look and feel of each typology;
- Function - this identifies what the purpose of the development typology is and its function within the site; and
- Rationale and Design Objectives - this sets out what the development type is comprised of, the overall objective to meet the function and early design aspirations to inform the detailed coding later in the document.

LOCATION		RATIONALE AND DESIGN OBJECTIVES
MIXED USE NEIGHBOURHOOD CENTRE CENTRE	To enable a development focus point that also provides a local retail function for the community living, working and socialising in the development, and to provide local job opportunities.	<p>The Mixed-Use Neighbourhood Centre performs an essential role within the development. Located to the south of the site to complement facilities provided within the wider Bicester 1 Allocation, local services falling within Use Classes E and Sui Generis will be provided within easy access for residents and passing trade. The key design objectives are:</p> <ul style="list-style-type: none"> • To comprise local retail uses potentially supported by residential development to keep the area vibrant; • To be integral with the design of the public space in front of it; and • To be a high profile part of the site which will be experienced by many, therefore needing to be of high quality architectural and public realm design.
RESIDENTIAL	To provide new market and affordable homes to meet local demands, suitable for a range of demographics.	<p>The majority of the site will be taken up with residential uses to meet local needs and contribute towards the economic growth of Bicester. The key design objectives are:</p> <ul style="list-style-type: none"> • To provide an appropriate mix of housing types (including 1 bedroom apartments through to 5 bedroom detached family homes); • To provide an appropriate amount of affordable housing; • For design to be tenure blind; • For new homes to be within walking distance of public open spaces and community facilities; and • For high-quality homes to be well designed and appropriate for their location within the site and built form Character Area. Where necessary the proposed design of dwellings will also relate to the local character, especially where heritage assets are within close proximity.
EDUCATION	To provide educational facilities to the proposed and existing communities.	<p>2.22 Ha is set aside for the delivery of a new primary school, with commensurate early years and childcare facilities. The key design objectives are:</p> <ul style="list-style-type: none"> • To support the role of the neighbourhood centre and to support mixed use development at the heart of the new community; • To explore the potential for wider community uses after regular school hours in order to benefit the wider community; • For the building design to be welcoming and open, whilst ensuring the safety and management of school operations; and • To be a key feature of the community and aid legibility in the neighbouring areas.
PUBLIC OPEN SPACE	To provide recreational and social opportunities for the community and to break up areas of built form.	<p>The public open space will be distributed throughout the development, in different forms and sizes.</p> <ul style="list-style-type: none"> • The key design objectives are: • to provide a variety of safe and accessible children's play areas in convenient and well-overlooked locations; • to foster conviviality and playfulness where possible; • to use smaller areas of public open space to break up the built form; and • to strategically locate areas of open space along existing wildlife routes and habitats, so as to maintain and enhance biodiversity throughout the development.

PRECEDENT IMAGES	POLICY / GUIDANCE COMPLIANCE
	<ul style="list-style-type: none"> ✓ Community facilities, including a contribution to or location for NHS facilities, local retail and food outlets as part of a village centre
	<ul style="list-style-type: none"> ✓ 1,700 new homes of a mixed size and type appropriate to the area ✓ Affordable housing as per the Section 106 Agreement
	<ul style="list-style-type: none"> ✓ A new primary school with co-located 56 early years and childcare (D1 use) on 2.7 hectares of land as required by the Local Education Authority through S106 Planning Obligations ✓ Two new 56 place stand-alone early years and childcare nursery (D1 use) each on 0.13 hectares of land as required by the Local Education Authority through S106 Planning Obligations
	<ul style="list-style-type: none"> ✓ Public open space, and informal and formal recreation

03

Landscape Strategy & Codes



Landscape Strategy Plan

OVERARCHING LANDSCAPE STRATEGY

“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 multifunctional resource capable of delivering a wide range of environmental and quality of life benefits (ecosystem services) for local communities.” Natural England 2014

3.1 The role and benefits of Green and Blue Infrastructure provide core components that are considered within the landscape-led Development Framework for Himley Village and have been used as the foundation for the Site Wide Landscape Strategies and principles that are discussed within this section of the Design Code. These have been categorised into the following topics and include:

- Open Space Provision;
- Play Strategy;
- Blue Infrastructure - Drainage Strategy;
- Existing Tree Strategy; and
- Ecology and Biodiversity.

GI Context

3.2 A range of preceding policies, masterplanning documents and the outline approval documentation (planning reference 14/02121/OUT) including the S106 Agreement have all been examined along with recent stakeholder engagement in the development of the site wide Landscape Strategies for Himley Village and have been set out within the Design Code.

3.3 As such, the Green Infrastructure and Landscape Strategy for NW Bicester (March 2014) provides a plethora of site analysis and background information related to the Allocated Site which has been considered within the Landscape Strategy.

3.4 The following GI principles from the NW Bicester GI and Landscape Strategy (2014) have been integral for the development of the Landscape Strategy and Development Framework and are included below:

- Integrate NW Bicester with the existing settlement
- Protect existing site assets (dark corridor etc) and to provide access to them / amenity value
- Create a distinctive landscape feature
- Are accessible from all areas of the site
- Have a ‘presence’, key factor to providing a distinctive ‘place’
- Contribute to health and wellbeing; and
- Incorporate a linear park which will connect and open into wider open spaces.

3.5 Further principles set out within the aforementioned document include the landscape-led place making principles that help to uphold general best practice and the ecotown principles which are transposed within the Site Wide Landscape Strategies set out within this Design Code.

3.6 These are as follows:

1. Work with and extend existing landscape features and elements
2. Provide a diversity of pedestrian and cycle routes appropriate to function and use within the hierarchy or movement network
3. Create durable and interactive landscape features
4. Co-locate non-residential uses with appropriate open spaces
5. Use landscape and open space to form the setting for residential uses
6. Use the different landscape settings to enhance activity and play
7. Ensure continuity and quality of pedestrian and cycle routes across and beyond the eco-town
8. Create a clear durable green infrastructure and landscape structure within which there is value to people and wildlife
9. Wilder open spaces to have specific function – eg. Formal sport, recreation, formal and natural play, food productions, water treatment, edge zones and buffers etc.
10. Maximise landscape productivity and edible / foraging environments for people and wildlife

3.7 Key site-specific design and place shaping principles within Policy Bicester 1 that directly relate to the GI network include (but are not limited to) the following points.

- New footpaths and cycleways should be provided that link with existing networks, the wider urban area and community facilities with a legible hierarchy of routes to encourage sustainable modes of travel
- A well designed approach to the urban edge, which relates development at the periphery to its rural setting and affords good access to the countryside, minimising the impact of development when viewed from the surrounding countryside. Development that respects the landscape setting and that demonstrates enhancement, restoration or creation of wildlife corridors to achieve a net gain in biodiversity. Consideration should be given to maintaining visual separation with outlying settlements. Connections with the wider landscape should be reinforced and opportunities for recreational use of the open countryside identified. Development proposals to be accompanied and influenced by a landscape/visual and heritage impact assessment. Careful consideration of open space and structural planting around the site to achieve an overall improvement in the landscape and visual impact of the site.
- Significant green infrastructure provision, including new footpaths and cycleways, enhancing green modal accessibility beyond the site to the town centre and Bicester Village Railway Station, and adjoining developments. Public open space to form a well connected network of green areas suitable for formal and informal recreation. Preservation and enhancement of habitats and species on site, particularly protected species and habitats and creation and management of new habitats to achieve an overall net gain in biodiversity including the creation of a local nature reserve and linkages with existing BAP habitats. Sensitive management of open space provision to secure recreation and health benefits alongside biodiversity gains. A Landscape and Habitats Management Plan to be provided to manage habitats on site and to ensure this is integral to wider landscape management.
- Provision of sustainable drainage in accordance with Policy ESD 7: Sustainable Drainage Systems (SuDS), taking account of the recommendations of the Council’s Strategic Flood Risk Assessment.

LANDSCAPE VISION

Green (and blue) Infrastructure will ensure Himley Village is an attractive, accessible and connected place where people want to live and where biodiversity thrives. As part of the NW Bicester ecotown, Himley Village will deliver a cohesive, multi-functional and high quality Green and Blue Infrastructure network.

To achieve this we will:

Recognise and integrate the existing landscape (green) and blue framework

Underpinning the Landscape Strategy, the existing landscape framework provides an element of structure within the site. This includes the existing woodland blocks along the eastern edge, the series of hedgerows with field ditches and their occasional hedgerow trees along the field boundaries and the open nature of the fields. The topography of the site is relatively flat providing a strong base for the green and blue infrastructure.

Create a multi-functional landscape for all, to live, work, play and thrive

The creation of a multi-functional Landscape Strategy which integrates the green and blue infrastructure will provide spaces for play, sport and informal amenity and recreation, as well as edible and productive landscapes. This core element of Himley Village will provide balance with the protection of existing habitats and species within the Biodiversity Strategy with greenspaces also designed and management to promote health and well-being for the new and existing community.

Create a place where the community is connected with nature and where biodiversity thrives

The value of nature for both users and wildlife are considered as a core component of the Landscape Strategy with the aim to retain habitats and existing features such as the hedgerows within the development via the creation of hedgerow buffers, Dark Corridor and spaces where wildlife is prioritised.

The creation of habitat including edible and productive landscapes will benefit and enhance biodiversity as well as provide a connection with nature to benefit all. Key habitat and species shall be protected and enhanced through the creation of grassland and new habitat as well as the protection of assets such as the woodland, ponds and hedgerows for commuting and foraging species with the aim to provide an overall biodiversity enhancement.

Provide of a movement network overlaid within the landscape, and providing clear and legible connections into the surrounding area

The site excludes PRow that dissect the site, however the surrounding network of Public Right of Way network has been considered within the development of Landscape Strategy to help safeguard links from the site into the surrounding area and wider NW Bicester allocation. The scheme itself aims to provide a new network of pedestrian and cycle links both formal and informal in nature within the GI network. These routes will be legible, safe and provide connections into the surrounding areas.

Understanding the site's constraints and opportunities to provide a landscape led approach to provide a multi-faceted green and blue infrastructure network

The Landscape Strategy considers the multi-functional elements of the existing site that when overlaid with site wide strategies provides unified a Green and Blue Infrastructure network which can provide a plethora of benefits to the new and existing community as well as being biodiverse.

The Landscape Strategy helps to uphold the eco-town principles, and helps to create a Green and Blue Infrastructure scheme that is functional whilst being visually appealing, of ecological value and sustainable and resilient to climate change. The site's constraints and opportunities such as noise, topography, edges as well as the existing landscape framework shall be integrated to provide a harmonised approach that is sustainable for the future.

As a multi-functional asset, the Landscape Strategy aims to provide a well-designed and landscape led SuDs scheme which shall provide a series of landscaped drainage features that shall provide surface water storage, attenuation features and swales that provide habitat for wildlife and incorporated new planting such as trees, wetland planting and the creation of grassland.

A co-ordinated approach to street furniture, signage, and wayfinding elements along with the materials palette shall help to inform the sense of place at Himley. These elements help to create a public realm that reinforces the the sense of place, hierarchy of spaces and compliments the streetscape, built form and architectural palette. The choice of street furniture, lighting, materials and hard surfaces shall help to define the character areas and key spaces such as the mixed use neighbourhood centre, Himley Village Green and the series of public open spaces.

“The eco-town development will utilise the site's natural features and opportunities to provide a place that encourages a more sustainable way of living in homes that are well designed, energy efficient, accessible to jobs, local well integrated with the facilities and within easy reach of the town existing town, which centre and countryside.”

Extract from the Vision set out within NW Bicester SPD



- KEY**
- Bicester 1 Allocation Boundary
 - Existing vegetation to be retained (unsurveyed)
 - Existing vegetation to be retained to be removed
 - Existing woodland/treebelt (off site)
 - Potential future connection to wider allocation
 - Existing scrub (refer to tree survey)
 - Existing waterbody
 - Existing ditch
 - Potential indicative SuDs basins (in addition to swales)
 - Primary swale
 - Secondary swale
 - Swales through open space
 - Proposed feature tree planting
 - Proposed tree planting
 - Proposed orchard tree planting
 - Proposed tree planting - edible landscaping
 - Proposed landscape buffer planting
 - Proposed amenity grass
 - Proposed species rich long grassland
 - Proposed Wildflower meadow
 - Proposed wildflower meadow / flowering lawn
 - Proposed wildlife meadow
 - Proposed scrub planting
 - Proposed bulb planting
 - Proposed shared cycleway / footpath
 - Proposed footpath
 - Proposed Mown paths
 - Proposed hedgerow buffer
 - Indicative allotment layout

Illustrative Landscape Masterplan



“Green infrastructure – 40% of the total gross site area will comprise green space of which at least half will be publicly accessible and consist of a network of well managed, high quality green/open spaces which are linked to the open countryside. This should include sports pitches, parks and recreation areas, play spaces, allotments, the required burial ground (possibly a woodland cemetery) and SUDS. [Noting that] planning applications shall include a range of types of green space and meet the requirements of Policy BSC11.”

Extract of Policy Bicester 1

OPEN SPACE REQUIREMENTS

POLICY CONTEXT

- 3.8 The Cherwell Local Plan 2011-2031 (CDC, 2015) sets out the policy for open space in Policy BSC11: Local Standards of Provision – outdoor recreation including accessibility standard and minimum provision quantum. However, the open spaces requirements for the North West Bicester eco-development proposals are specifically considered against the requirements of ‘Policy Bicester 1: North West Bicester Eco-Town’ and stated within the S106. This states...
- 3.9 The adjacent Open Space Provision plan shows the distribution of the open space provision which is in broad accordance with approved parameter plans from the approved Outline Application, and the S106 requirements. Key principles prescribed within Policy BSC11 which are to be considered are highlighted below and considered within the overarching strategies for Play, the Sports Park, and Edible landscapes set out within this Design Code.

Green Infrastructure Typologies (GITs)

- 3.10 The following Green Infrastructure Typologies (GITs) as required by the S106 accord with the GI typologies set out within the Cherwell Open Space Strategy (March 2020) and the Cherwell Local Plan.
- 3.11 As per Policy 1 Bicester within the Cherwell Local Plan (CDC, 2015) the GI provision is set as **“40% of total gross site area to comprise green space of which at least half publically accessible”** this equates to 35.95ha of green infrastructure required, with at least 18ha of it being publically accessible. This is primarily categorised as ‘general green space’ excluding where specific GITs apply as set out below:
- **Play Space** - 5no. LEAPs / LAPs and 2no. NEAPS - as per the S106, Schedule 14 (refer to the Play Strategy for further details).
 - **Outdoor Sports Provision** - total area required 12.18ha as per the S106, Schedule 3;
 - **Allotments** - no less than 1.63ha within the site to be used for allotments that is “suitable for the growing of fruit, vegetables, trees, flowers either in pots or in communal areas” as per Schedule 14 of the S106 and in accordance with the Allotment Specification within Appendix 3 of the S106.
- 3.12 Noting the planning requirement of schemes within Policy Bicester 1 to include a range of types of green space and meet the requirements of Policy BSC11 the following requirements (extracted from Policy BSC 11 Table 7: Local Standards of Provision – Outdoor Recreation) are included
- 3.13 General green space** (parks and gardens/natural semi-natural/amenity green space) this includes the following parameters set within BSC 11.
- 5 minute walk (amenity open space) (400m)
 - 15 minute walk other (1200m)
 - 200m² minimum size of provision

3.14 Play space (combining provision for younger and older children including MUGAs).

- 5 minutes walk (400m) except for NEAPs 15 m walk (1200m)
- LAP- 100 sq m activity zone; 400 sq m including buffer
- LEAP- 400 sq m activity zone; 3600 sq m including buffer
- NEAP- 1000 sq m activity zone; 8500 sq m including buffer
- NB In some cases a combined all-age area of play will be preferable to provision of LAPs/LEAPs/NEAPs. Refer to the Play Strategy for details.

3.15 Outdoor sports provision (combining tennis courts, bowling greens, golf courses and playing pitches) (to be accompanied by changing facilities where appropriate)

- Football, rugby, cricket: 10 minute walk (800m) urban, 10 minute travel time (8km) rural areas

3.16 Allotments to be a 10 minute walk (800m) and 0.2 ha minimum size of provision .

Open Space Typologies

General Green Space

Sports Park

Play Space

Allotments

Community Orchards

Landscape sub categories within open space

Dark Corridor

Hedgerow buffer

Area of managed access (for maintenance only) not counted towards accessible open space



Open Space Provision Plan

PLAY STRATEGY

- 3.17 Play opportunities are an integral part of the multi-functional green infrastructure planned for Himley Village. As such the Landscape Strategy aims to fully integrate the play provision within the GI network, compliment the functions of the open space and provide a wide range of exciting, inclusive and accessible play experiences. The location and types of play have been considered to ensure provision is distributed across the site and to meet policy requirements (along with the parameter plans and CDC comments).
- 3.18 Play shall be integrated along with formal sport and recreation opportunities to encourage health and fitness within the public open spaces as part of the health and wellbeing principles for children, young people and their families.
- 3.19 The Play Strategy shall implement the following aims:
- Connections to and encourage awareness of nature;
 - Interactive spaces stimulating for the senses, to aid learning, provide risk and challenges to help development, and the improvement of skills and integrate the site's levels to help shape playable landscapes;
 - Spaces that can be used individually or with others, providing flexibility for different users of all ages and abilities;
 - Clear links between play spaces via permeable, safe and green links with clearly defined walking, cycling and scooter routes;
 - Imaginative, physical, sculptural and social play for all abilities and ages to offer exciting destinations for play on the doorstep, or for visiting with friends;
 - Designed and maintained for play value and environmental sustainability; and
 - Play spaces that help foster a sense of ownership for the community and a sense of place to match the character of its location within the site be it urban or rural.
- 3.20 Key principles and themes to be considered when designing the play provision for Himley Village are discussed on the following pages.

Play Policy & Guidance

- 3.21 As stipulated within Policy BSC 11 "in some cases a combined all-age area of play will be preferable to provision of LAPs/LEAPs/NEAPs" hence the number of play spaces and their distribution has been developed in line with stakeholder engagement, the requirements of CDC and S106 (schedule 14) which stipulates the need for 5no. combined LEAPs/LAPs and 2no. NEAPs.

"Combined play areas (LAP/LEAP/NEAP) allows for the integration of the age groups for the benefit of social interaction of children across the age groups and also allowing parents, grandparents and carers to monitor children of differing age groups from a single location."

Policy BSC 11

- 3.22 In policy and best practise terms a Local Area for Play (LAPs) is designed for children up to 6 years (100m² activity zone), with a Local Equipped Area for Play (LEAP) designed to cater for younger children beginning to play independently with a 400 sq m activity zone and 20m minimum separation between activity zone and the habitable room façade of dwellings. Thus a combined LEAP/LAP aims to cover these needs.
- 3.23 A Neighbourhood Equipped Area for Play (NEAP) is designed for more independent older children and is often a destination play space comprising an activity area of 1000m², it requires a 30m minimum separation between activity zone and the boundary of dwellings. A MUGA shall also be provided adjacent to the northern NEAP within the Sports Park.

Safety

- 3.24 All play equipment to be compliant with European Playground Safety Standard BS EN 1176 and in accordance with manufacturer's specification. All items of play equipment will undergo regular inspections to ensure the equipment is safe and fit for purpose. Maintenance shall be carried out in accordance with BS EN 1176, part 7 and in line with the manufacturer's recommendations, as applicable.

- 3.25 Safety surface will comply with fall heights of relevant equipment and comply with BS EN 1177. Options for safety surface may include grass matting and rubber wet-pour, or grass/bark and chippings for low informal trim trail style equipment.
- 3.26 All play items formal and informal shall be designed and managed in accordance with ROSPA safety standards and the relevant BS Standards referenced above.

Design for Inclusive Play

- 3.27 Overall the play spaces shall provide a variety of play spaces for all ages, which maximise play opportunities through the use of a wide range of formal and informal equipment/items. Teen facilities and play opportunities will be carefully designed to be inclusive for all genders, and to create welcoming social spaces for everyone to use.
- 3.28 Inclusive play will be encouraged to develop an all-welcome atmosphere with accessible and flexible items such as basket swings, wide slides, and certain types of rotating equipment. Careful consideration to the layout and types of equipment shall encourage mixed play for all abilities and prevent segregation.

Boundary Treatments & Miscellaneous Items

- 3.29 Boundary treatments will help to define the spaces for play, this will include earth mounds, ornamental planting, hedgerows, or fencing, depending on location and type of play. Fenced play areas will have at least two self-closing gates, and a maintenance gate. Provision of seating, litter bins, cycle stands and signage will be included at each play space.
- 3.30 Signage shall denote the rules of the space, along with the intended age group for the play equipment along with the contact details of whom to report vandalism and maintenance issues to.

Character

- 3.31 Each play space will imaginatively respond to its setting and character of the open space in which it is situated. Play equipment shall be located outside of root protection areas, with soft landscaping items adding further play value. The themes of the play are set out in the adjacent table.

Eastern LEAP / LAP	Green Edge LEAP / LAP	Himley Farm LEAP / LAP	LEAP / LAP
<p>Character: Semi-urban with scultural play to provide a distinct play opportunity.</p> <p>Materials: Metal elements to be prioritised with appropriate surface eg. bound rubber mulch / wetpour with areas of grass matting to limit wear.</p> <div data-bbox="172 835 777 1117"> </div>	<p>Character: Natural and rural setting within the green corridor</p> <p>Materials: Primarily timber, with some metal elements subject to play equipment type. Surface to be bound rubber mulch and grass matting.</p> <div data-bbox="896 835 1389 1117"> </div>	<p>Character: Natural with some scultural play and nature inspired elements such as animal and wildlife sculptures due to the relationship with the Community Orchard and proximity to Himley Farm.</p> <p>Materials: Primarily timber, sculptural elements with grass matting / surfacing only if required for safety surface / limit wear.</p> <div data-bbox="1513 835 2119 1117"> </div>	<p>Character: Natural and rural</p> <p>Materials: (equipment / surface type): Primarily timber, with some metal elements subject to play equipment type. Surface to be bound rubber mulch and grass matting.</p> <div data-bbox="2178 835 2795 1117"> </div>

Northern LEAP/NEAP - Himley Sports Park	Central NEAP - within Himley Green Community Park
<p>Character: The formal provision of the enhanced NEAP with combined LEAP and MUGA within the Sports Park helps to provide a destination for play. Here the equipment will provide a wide range of opportunities with many innovative pieces for adventure and shared social play.</p> <p>Materials: Primarily metal equipment with some timber pieces. Surface to be bound rubber mulch and grass matting.</p> <div data-bbox="172 1520 1454 1801"> </div>	<p>Character: This destination play space set within the Village Green / Himley Green Community Park will provide a range of formal play with naturalistic elements to create an exciting play space at the heart of the community due to it's close proximity with the School Site. Clear use of mounding to provide separation of spaces within the wider Village Green.</p> <p>Materials: Primarily timber, with some metal elements. Surfaces to be bound rubber mulch and grass matting.</p> <div data-bbox="1507 1520 2789 1801"> </div>

A SUMMARY OF THE PLAY SPACES



Access to play

3.32 In line with local policy and best practice guidance, the access to the play opportunities within the scheme has been considered in conjunction with the movement network within the GI network and residential areas. As per the NW Bicester SPD:

“Play areas should be located where they are accessible to children and overlooked.”

3.33 Thus, the distribution of the play spaces have been carefully considered in accordance with the accessibility requirements which is set as a “5 minutes walk (400m) except for NEAPs 15 m walk (1200m)” within Policy BSC 11.

-  Green Infrastructure
-  Proposed Local Equipped Area for Play (LEAP)
-  Proposed Neighbourhood Equipped Area for Play (NEAP)
-  Proposed combined NEAP / LEAP
-  Sports Park
-  Proposed MUGA (multi-use games area)
-  Accessibility - LEAP (walking distance)
-  Accessibility - NEAP (walking distance)

Play Strategy Plan





“Green space and green infrastructure will contribute to an urban cooling effect and Sustainable Urban Drainage Systems (SuDS) will be designed to respond to future extreme weather events...”

Development Principle 3 - Climate Change Adaptation

BLUE INFRASTRUCTURE

DRAINAGE STRATEGY

- 3.34 As a key part of Green Infrastructure and place making, the SuDS Strategy will follow the principles approved with the Outline Planning Permission where key design principles such as runoff rates are concerned, whilst using the most modern methods of storage, treatment and community use as is practicable during the masterplan development.
- 3.35 In line with the CDC Local Plan Policy ESD 7: Sustainable Drainage Systems (SuDS) the use of a SuDS train within the GI network allows the development to:
- Manage run off volumes and peak discharge rates, protecting downstream catchments from flooding;
 - Maintain or improve the water quality by reducing pollution from run off;
 - Encourage recharge of watercourse and groundwater levels
 - Integrate within sustainable environment and community need and functions within public open spaces;
 - Provide an attractive and functional habitat for wildlife to thrive and provide opportunities for biodiversity enhancements; and
 - To improve the environment we all live, work & play in.
- 3.36 Accordingly the development layout shall encompass as many visually green, sustainable and environmentally beneficial components to encourage and maintain the natural disposal of surface water and make SuDs part of the multi-functional Landscape Strategy.
- 3.37 The current version of the CIRIA SuDS Manual will be used in tandem with the Design and Construction Guidance chapters of the Sewer Sector Guidance as the overarching design guide document for the surface water drainage strategy.

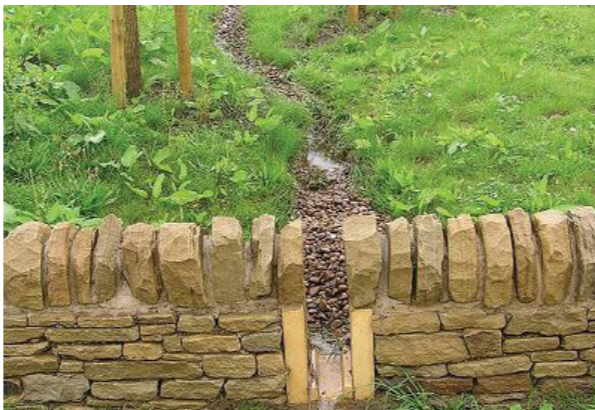
SuDS and Place Making

- 3.38 With the changes made over recent years to the sewer adoption process it has never been easier to include SuDS and green spaces into the masterplanning stage of a development site. As such the Development Framework and Landscape Strategy have been developed to ensure the SuDs are fully integrated and co-ordinated to enable a multi-functional, diverse and accessible green and blue infrastructure network.
- 3.39 The allowance of previously prohibited components into the public sewer network ensures the inclusion of a much wider range of SuDS components that complement and integrate better than ever to benefit the surrounding area and its inhabitants, both human and wildlife and the drainage strategy proposals for the Himley Village development will work in tandem with the existing watercourse network across the site.
- 3.40 SuDS components come in varying form and scale and Himley Village will offer them from small scale rain gardens fronting properties right up to a detention basin capable of storing up to 9,000m³ of water in the most extreme rainfall events.
- 3.41 The SuDs components offer varying degrees of landscape design, visual amenity, function and value which contribute towards the placemaking of Himley Village with:
- Private raingardens offering planting opportunities along with rainwater storage and treatment,
 - Key roadside swales eg. Primary Swales offer extensive planting options for visual amenity, silt & hydrocarbon removal of highway runoff, storage of excess surface water and the ability to break up a hard paved built environment with green spaces and trees.

- Secondary swales & ditches throughout residential streets, and public open space offering the above benefits in addition to being areas of informal play and exploration, with bridges, stepping stones or boulders, dams with permanent water held back as a new area of habitat
- Detention basins offering stepped elevation changes to accommodate permanent water bodies for water storage and habitat creation along with higher levels used rarely for SuDS purposes which can be used for informal play opportunities or pet exercising.
- Along paved corridors the swales will be more formally aligned and utilise shallow slopes with water compatible grasses and specialist tree pits designed to thrive alongside roads.

3.42 The swales and basins out side of the built environment shall be softer and more natural in form to reflect a more peaceful surrounding.

3.43 The mix of planting within each area will be dependent on location and surrounding infrastructure, certain species will be prohibited near public sewers for example, due to their invasive roots so whist native species will be given priority there may be reason for new species to be used where practical.



Precedent Images for SuDs

SuDS Treatment Train

- 3.44 The use of predominantly natural SuDS systems where practicable will enable the rainfall runoff to be conveyed, stored and treated as effectively as possible prior to discharge from the site confines, water will pass through flowering rain gardens, vegetated swales, gravel filled filter drains, basins with permanent water bodies and grassed conveyance ditches to benefit from the water quality improvement these solutions offer.
- 3.45 The use of the “source control” features such as rain gardens or permeable paving shall allow for immediate storage and treatment to reduce reliance on large bore pipes, attenuation tanks or “end of line” basins.
- 3.46 Moving down the train, filter drains and swales will break up the appearance of the built environment, provide storage and the ability to introduce focal planting where hard paved areas would once have been envisaged.
- 3.47 Detention basins to be created in line with CIRIA guidance will offer low flow channels, sedimentation forebays and defined wetland areas to ensure pleasant community areas & new habitat can be created.
- 3.48 The combination of these components will create multifunctional green spaces to assist in the place making of this new settlement.
- 3.49 The whole strategy will be formed around a whole site ethos rather than phased at a local level to enable efficiency in design and layout whilst limiting discharge rates to the 2l/s/ha rate agreed at outline and also accommodating the flows resulting from the 1% annual exceedance probability rainfall event and a suitable climate change allowance.



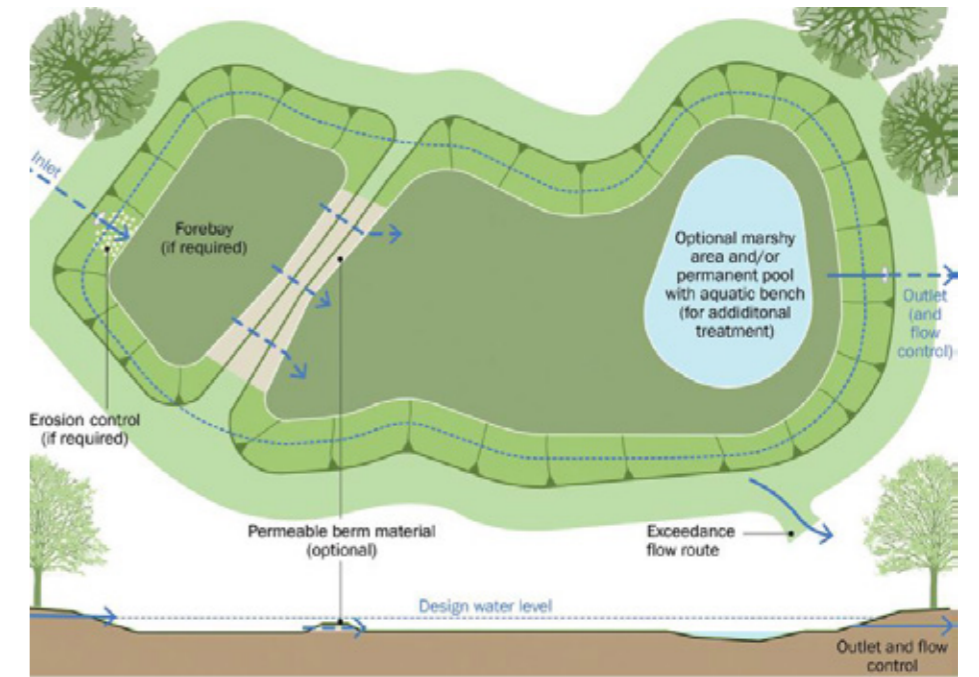
Drainage Strategy Plan

SuDS Design Principles

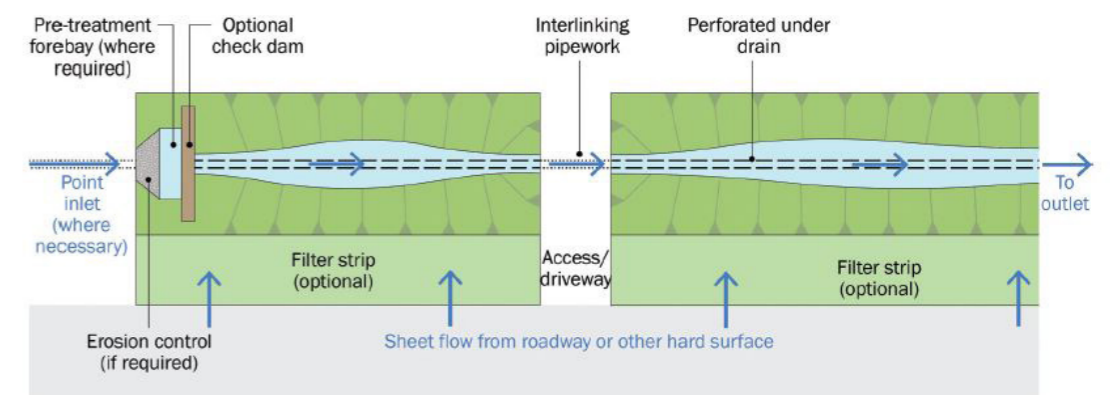
- The following SuDS design principles shall be considered during the detailed design stage of the scheme:
- Existing watercourses will be sympathetically managed and maintained to ensure habitat is protected where possible, and that future function and capacity is provided
- Consider multifunction use of water environment with informal amenity space add safe access/egress
- Consideration to be given to the pedestrian permeability of the SuDS areas with crossings at suitable points to prevent landlocking areas
- Viewing & focal gathering areas to be provided where larger basins and water bodies are located to encourage local mindfulness.
- Design and character of SuDS components are to be specific to the environment local to their position.
- Topography of the site and its SuDS features will be as gentle and welcoming as possible to avoid the appearance of over engineered solutions. Typically bank slopes of 1:4 will be maintained with steepening to no greater than 1:3 per CIRA guidance if necessary.
- SuDS components will include safe egress for wildlife. Where necessary, drainage features shall be fitted with amphibian ladders to ensure safe passage of smaller animals and amphibians.
- Head walls and inlets shall be sympathetically designed to fit in with the surrounding character where feasible in line with adoption requirements. The use of pre-cast concrete and extensive steel safety railings is to be avoided where possible.
- Fencing and kneel rails will be kept to a minimum to avoid the restriction of flow from one area to the next; and
- Opportunities to provide interpretation boards to educate and raise awareness of SuDS within public open spaces. Content to include information concerning biodiversity and function, including seasonal variations and safety and shall be implemented as part of the Wayfinding Strategy

Attenuation Basins

- 3.50 Whilst the majority of the treatment of surface water flows is undertaken by the conveyance system through a site, the bulk of the water storage at times of extreme or extended rainfall is provided by the detention basins.
- 3.51 The basins play a key part in the SuDS chain, with sediment removal, treatment of hydrocarbons and large volumes of storage in addition to their role in biodiversity gain & habitat creation.
- 3.52 The basins within the Himley Village masterplan will utilise permanently wet areas for habitat creation, occasionally wet areas for regular attenuation and then areas likely to be rarely wet for time of extreme events of long duration rainfall.
- 3.53 The ability to provide the three different stages of attenuation is key in allowing for multifunctional spaces rather than single depth basins so these shall be provided wherever space allows.
- 3.54 Basins should not have banks steeper than 1:3, with 1:4 being more desirable. Any areas of permanent water should be a minimum of 0.75m and there should always be slack gradients at suitable locations for emergency egress in the event of somebody falling in.
- 3.55 Formal and informal planting can be provided to screen headwalls and visually blend any engineered retention that may be required. The basins themselves can be planted internally subject to appropriate drought/ inundation resistant species being chosen.
- 3.56 Informal mown paths will be required around the basin to allow for maintenance and these can be merged with pedestrian links throughout the public open spaces



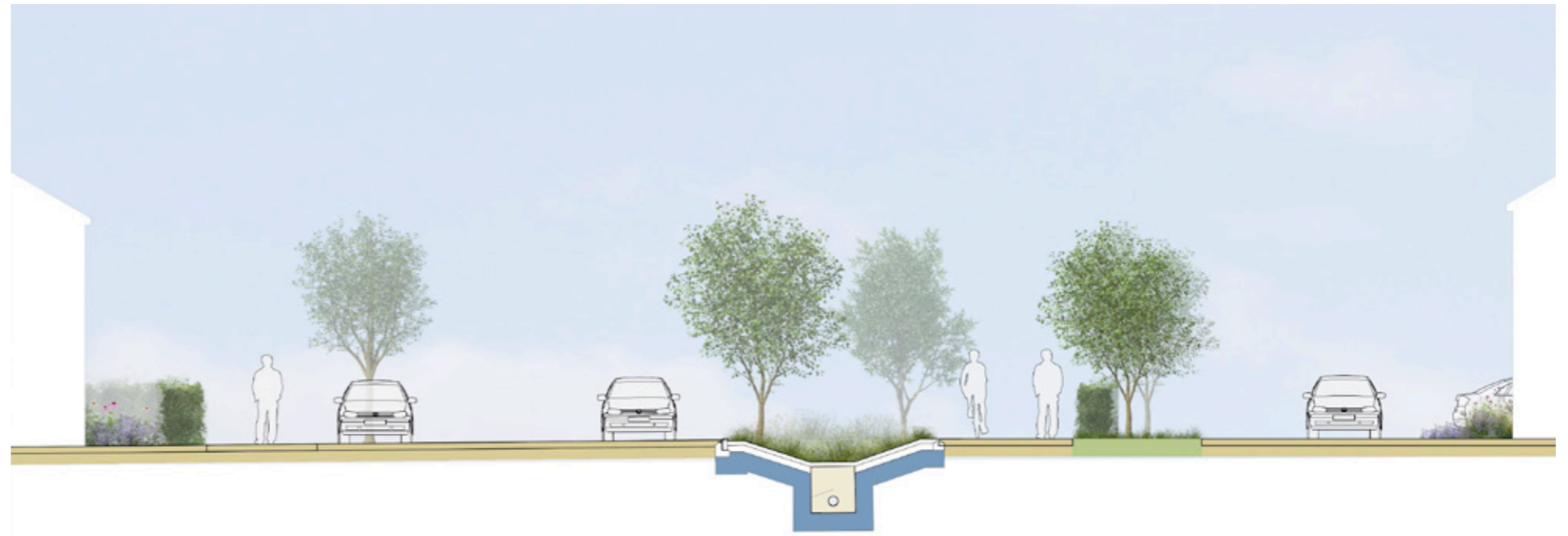
Indicative attenuation basin



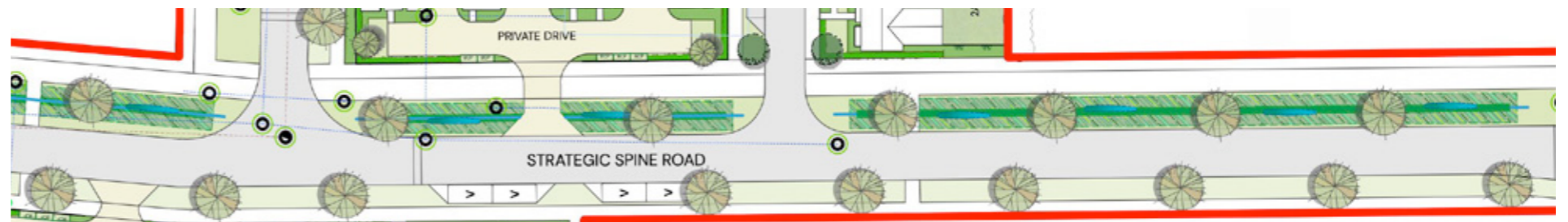
Indicative attenuation swale

Primary Swales

- 3.57 Situated along the key infrastructure routes of the site, including the two southern access points and the north south/east west spine roads, these will be wider and deeper than the swales elsewhere on the site.
- 3.58 They will be situated between the carriageway and the LTN 1/20 compliant cycle routes to break up the built form and allow for tree planting and wild grasses.
- 3.59 They will typically be very shallow sloped with an expectation of 1:4 and a depth not exceeding 0.75m so that they can be easily mown and maintained. Due to their dual use in serving both highway and private runoff they will feature a carrier pipe under them surrounded with gavel to increase storage capacity and accordingly will hold rainwater only in the most extreme of events.
- 3.60 There is no expectation of vehicle restraint systems being required due to the depth and form, however cycle proof knee rails may be required on the offside.
- 3.61 They will ordinarily be fully grassed with occasional trees, which will be confined to proprietary tree pits allowing for root protection and drainage to ensure the trees can thrive.



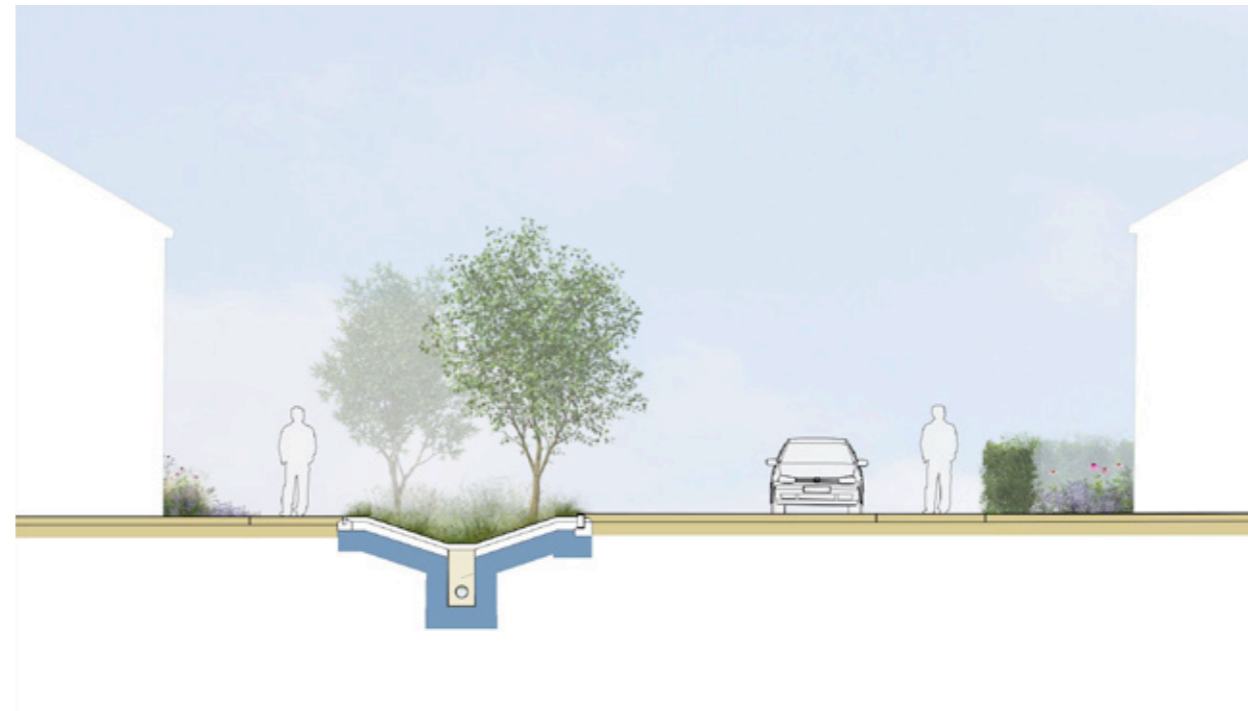
Indicative primary swale section



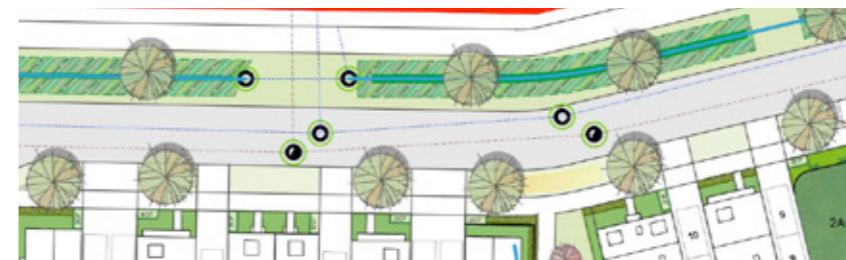
Indicative primary swale plan

Secondary Swales

- 3.62 Typically located along residential roads and throughout public open space, these will accept runoff from driveways and immediate surrounding surface as well as conveying flows from further upstream.
- 3.63 They will be limited in width compared to the primary swales but will still likely utilise under-drains.
- 3.64 These will often be privately maintained and will offer a greater potential for planting with smaller shrubs, their locations will allow for an increased multi-function role because they won't be adjacent any busy roads and therefore can be used for play with boulders, stepping stones and dams.



Indicative secondary swale section



Indicative secondary swale plan

EXISTING VEGETATION, ECOLOGY AND BIODIVERSITY

3.65 Habitat protection, enrichment and management considerations have been integrated within the Landscape Strategy which aims to improve the value of the site for wildlife along with new residents and the existing community. The Landscape Strategy has been developed in line with the preceding site specific policy and local planning strategies for NW Bicester. Such measures like the hedgerow buffers, dark corridor, retention and creation of grassland habitats as well as new planting strategies aims to provide a strong landscape framework for the scheme which overlays multi-functional spaces such as SuDs, edible landscapes and formal amenity and recreation that creates a truly diverse and verdant scheme.

Baseline

3.66 The application site predominantly comprises of improved grassland, hedgerows and scattered broadleaved trees with ponds, scrub and an orchard also present. Whilst the majority of the site is of low ecological importance, some features for biodiversity value are present.

3.67 In terms of Ecology, no protected sites, including internationally designated nature conservation sites or Sites of Special Scientific Interest, are present within the zone of influence of the site and none are expected to be impacted as a result of the proposal.

Summary of habitats on site

3.68 The habitats present on site comprise improved grassland, native species-rich hedgerows, wet ditches and three ponds. The dominant habitat on site is improved grassland with a short sward height. Other habitats consist of deciduous plantation woodland, rough grassland, tussocky grassland, wooded copse and an orchard. A small single storey building is situated in the south of the site. Plant species on site were identified as widespread and common. Hedgerows were identified as native and species-rich. Within the wider area are farmlands with the M40 situated to the west and Bicester town to the east of the site.

Biodiversity Net Gain

3.69 A strategy for the delivery of Biodiversity Net Gain has been produced which will provide guidance for the provision of at least +10% net gain. This strategy will include the production of a Biodiversity Net Gain metric for each plot of the development in order to provide certainty that a gain can be achieved with a wider Biodiversity Strategy to be implemented for the site as a whole.

3.70 As part of this Biodiversity Net Gain strategy, features ecological importance (such as waterbodies, hedgerows and trees) are being retained, protected and enhanced as part of the proposals, wherever possible. New habitats of ecological importance would also be created including wildflower grassland and new hedgerow and tree planting which would compensate for losses and provide improved opportunities for biodiversity.

3.71 Specific mitigation and enhancement measures would also need to be implemented with respect to protected species recorded at the site. This includes the provision of a sensitive lighting strategy and the creation of 'dark corridors' along retained hedgerows for the benefit of bats and other nocturnal species as long as hedgerow buffers.

3.72 Mitigation strategies in respect of badgers, reptiles, hazel dormouse and great crested newts will also be integrated within the Landscape Strategy, although post-development new habitat creation would provide improved opportunities for the protected species anticipated to be present at the site, creating overall gains for biodiversity.

3.73 The following key principles as shown on the plan overleaf are core elements of the schemes approach to ecology and biodiversity.

Dark Corridors

3.74 The aim of Dark Corridors is to create a 20m buffer along both sides of the hedgerow to provide habitat corridor forming a foraging and community corridor for bats and nocturnal wildlife.

3.75 It is recommended that an appropriate sensitive lighting scheme is implemented to retain dark corridors along retained and created habitat, especially around the boundaries of the development.



“Biodiversity mitigation and enhancement shall be incorporated into development proposals to provide a net biodiversity gain at Himley Farm in accordance with Development Principle 9 (e)” –

Biodiversity of the NW Bicester SPD.



-  Existing woodland/treebelt (on site)
-  Dark corridor (minimum 20m either side of hedgerow)
-  Hedgerow buffer (minimum 10m either side of hedgerow)
-  Wildlife corridor
-  Green infrastructure
-  Areas of managed access (for maintenance only)
-  New structural planting
-  Existing waterbody
-  Existing field ditch
-  Potential indicative SuDs basins (in addition to sw)
-  Potential swales
-  Potential future vehicular links to wider Bicester 1 allocation site (excluded from POS calcs)

Ecology and Biodiversity Features Plan

HIMLEY VILLAGE, BICESTER

Existing Tree and Hedgerow Strategy

- 3.76 Existing trees (although infrequent) and hedgerows are present along the existing field boundaries within the site, and around the site's boundary which help to define the existing landscape framework and character of the site. In addition the young woodland plantation forms part of the eastern edge of the site and is a key opportunity within the Landscape Strategy.
- 3.77 The overall aim is to maximise the retention of existing hedgerows and the hedgerow trees which has been a key influence on the Development Framework. Any loss in trees will be mitigated through the landscape proposals with the aim to maximise biodiversity and provide trees for the future be it trees within public open space and street trees in line with the eco-town principles.
- 3.78 A BS5837 Tree Quality Survey has also been undertaken to steer the Development Framework, plotting root protection areas (RPAs), canopy extents and mapping the quality and condition of trees in the context of BS5837:2012 criteria.
- 3.79 There are no Tree Preservation Orders (TPOs) on-site and the site is not within a Conservation Area. No Ancient Woodlands are present on-site and no veteran or notable trees are present within the red line boundary.
- 3.80 Existing trees will be retained and protected from development activities wherever practical, or replaced with new planting in accordance with Policy ESD 13 where losses are unavoidable. The Root Protection Zones (RPZ's) of existing trees and hedgerows have been considered within the proposals. The extent of removals will be subject to the future detailed design of drainage strategy and associated surveys.
- 3.81 All development must be located outside of these, with arboricultural methods statements and sensitive construction considered should RPZ's be impact by the detailed design, in line with best practice guidance and BS 5837:2012 "Trees in relation to design, demolition and construction"
- 3.82 The management of the existing tree stock should be considered to help ensure the longevity of canopy cover, biosecurity challenges that may affect trees in the future and climate resilience in tandem with new planting aspirations. Diversity of species and choosing the correct species for the scenario is important to ensure the long term canopy cover to compliment the existing tree resource within the site.



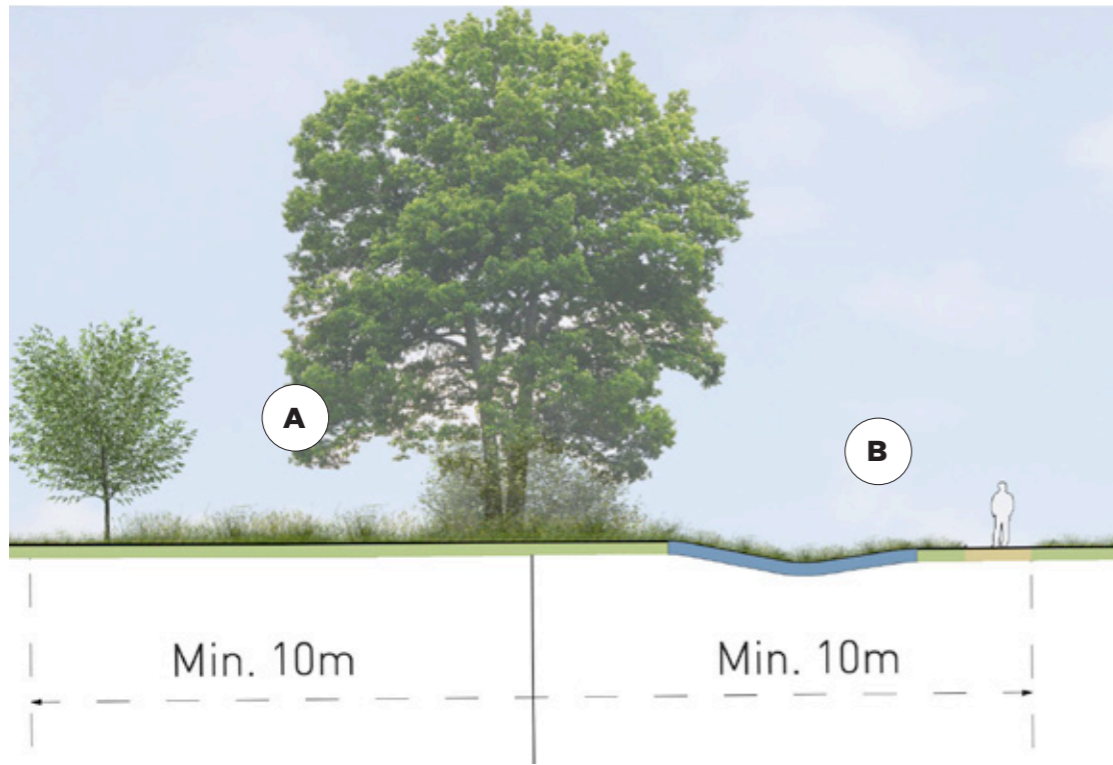
Hedgerows

- 3.83 Hedgerows on site are species rich, providing high quality established habitat, and a network of green infrastructure of value for facilitating the movement of wildlife across the site. The vast majority of hedgerows on site will be retained and incorporated into public open space. Retained hedgerows will be protected to BS 5837:2012. Where removal is required species rich native hedgerow will be planted"
- 3.84 Retained hedgerows are to be protected and integrated with the GI network via the creation of buffer zones. These 10m (min) areas besides the hedgerows have been a key framework element in the creation of the Development Framework for the site and shall be protected, maintained and enhanced to provide multi-functional green spaces within the GI network.

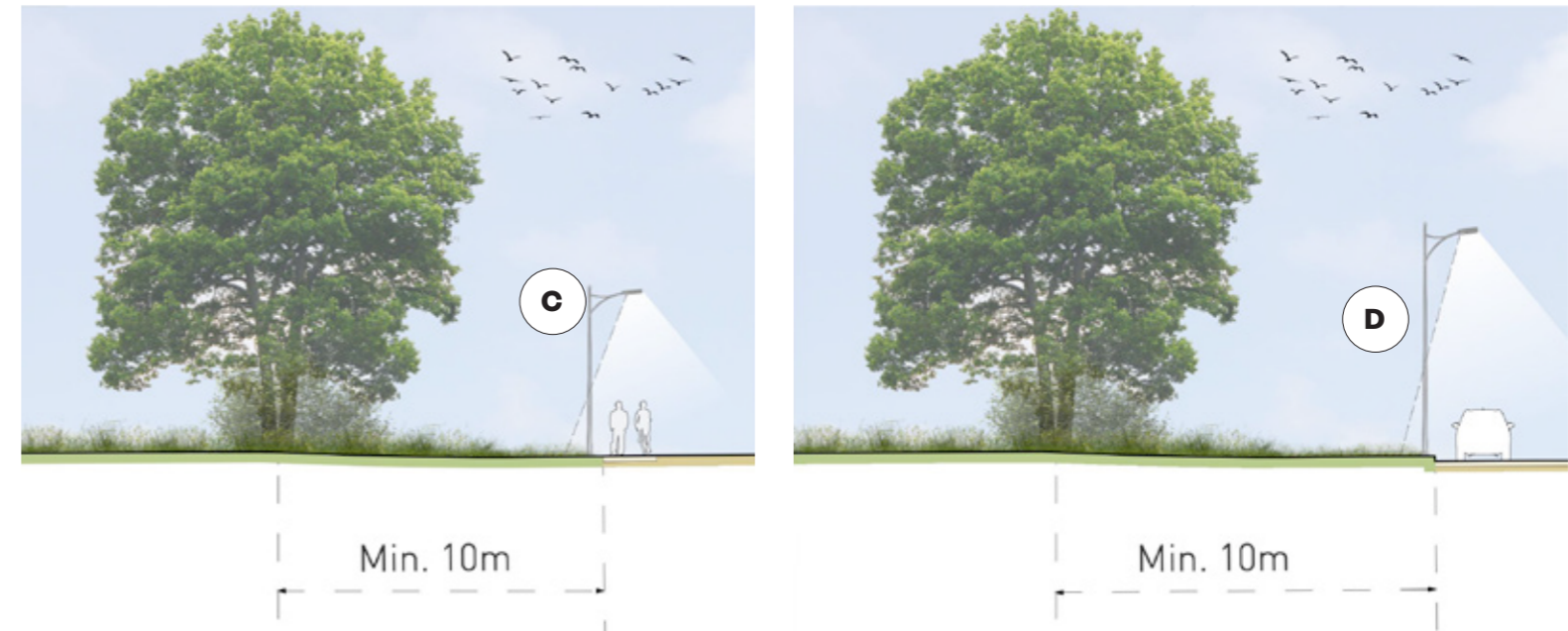
3.85 Hedgerow buffers shall follow the principles below:

- Minimal lighting with buffer zones (lighting design to work with the movement network to ensure the creation of safe green links;
- Supplementary planting to enrich the existing hedgerows through infill planting (where gappy and fragmented), development of hedgerow ground flora,
- Adjoining development orientated to provide natural surveillance over the spaces with no built development within the buffer zones
- The root protection zones of existing trees will be respected with no built development within these areas.
- Incorporate SuDs features such as swales and drainage basins where necessary to fully realise the conjoined Green and Blue infrastructure
- Provide pedestrian and cycle routes as necessary to provide a network of formal and informal routes
- Provide habitat for wildlife such as foraging and commuting species as well as nesting opportunities through the integration of hibernacula, bird and bat boxes, bug hotels and log piles in suitable locations

Indicative Hedgerow buffer landscape principles



Indicative Hedgerow buffer landscape principles - within Dark Corridor



- A** Infrequent individual tree planting with grassland (long and amenity grass subject to location) with long grass adjacent the hedgerow.
- B** The corridor may include SuDs features, footpaths / cycleways and landscaping features as grassed mounds.
- C** Where footways within buffer keep to outside edge where possible. Lighting to path to face away from hedgerow with lighting column to have shield to direct light away from the hedgerow to restrict light spill.
- D** Where edge of buffer is required for highway lighting it should face away from the hedgerow with shield to restrict light spill into the hedgerow.



“Existing trees should be celebrated as landscape features, and can be used to aid legibility, terminating views along streets. Along with hedgerows they can provide placemaking punctuation across the development, when combined with areas of new tree planting.

This will ensure the longevity of the tree resource across the site, providing a resilient landscape framework, and benefiting the new community at Himley Village. “

3.86 The Landscape Strategy will include the retention of all ponds, scattered trees and broadleaved plantation woodland and the vast majority of hedgerows. The loss of a small number of minor sections of hedgerow is unlikely to create a significant impact on commuting and foraging bats. Retained habitat of value to commuting and foraging bats is to be buffered from development by the proposed GI network, which will include scrub, shrub, and buffer planting along with species-rich meadow grassland.

Semi-natural woodland and mature broadleaved plantation

3.87 The blocks of broadleaved woodland that provide a distinctive edge to the scheme along its eastern edge shall be maintained and integrated into the GI network with the consideration of how the residential edge and open spaces face them and provide connections into them and a landscape resource.

3.88 As such the woodland shall provide a pedestrian route with designated paths and routes limited in order to help minimize disturbance and limit excessive trampling with the aim to help preserve the ground flora. Here, wayfinding and interpretation signage shall help to educate users on the habitats and species present and indicate that this part of the site prioritises nature conservation.

3.89 An integrated program of woodland management can also be sought in relation to retained sections of denser tree cover to enhance the retained tree stock in conjunction with new planting proposals. This can include the coppicing of woody vegetation as part of an integrated management plan linked to the scheme proposals to further enhance diversity in the age of tree stock, promoting tree growth and improving structural diversity in the ground and canopy layers. Selected thinning would also assist with opening up areas that are currently over-shaded to encourage diversity in ground flora.

Edges

3.90 Where new residential boundaries are to adjoin the green infrastructure, sensitive boundary treatments have been considered within the intervening public open space and design principles attached to the residential character areas. Here, principles to reduce the potential disturbance effects from members of the public and future residents, have been considered for example the hedgerow buffers, incorporation of new planting, such as the implementation of an eco-tone structure of grasses, shrubs and tree planting where space permits to offer structural diversity.

- 3.91 Key considerations for the existing Tree and Hedgerow Strategy which includes retention and removal includes:
- Removal of trees (where agreed with the LPA) to facilitate access minimising tree loss through design of routes;
 - Removal of Category U trees, and unsafe trees to ensure user safety in line with best practice. Where able, the retention of category ‘U’ trees that have remnant ecological value has been considered, where appropriate and safe to do so within the context of the proposed scheme e.g. within wooded areas with low public access, or where dead trees can be reduced to a safe height to be retained as standing deadwood stems (monoliths);
 - Any tree works to be undertaken in accordance with best practice eg. British Standard for Tree Work BS 3998:2010 (or latest version);
 - Protection of existing trees in accordance with BS5837: 2012 Trees in Relation to Design, Demolition and Construction - Recommendations;
 - Where trees are to be removed, re-use on site for habitat eg. hibernacula, log piles or tree stumps (including chainsaw art) is to be encouraged;
 - Tree loss will be mitigated through replacement tree planting within areas of public open space, replacement trees will native and semi-ornamental species that offer biodiversity enhancement and the ability to adapt to changing climates and conditions.
 - Where non-native tree species are proposed, the aim will be to provide tree species with multiple benefits, be it wildlife potential, nectar & pollen resource, as well as physical and visual attributes such as form, seasonal interest and ability to survive in urban settings;