Appendix 1

DRAFT

Chelmsford Garden Community

Development Framework Document

The best of town & country, the best of neighbourhoods & nature

A SHARED PLACE

DECEMBER 2022 REV E

Aerial View of Chelmsford Garden Community

FOREWORD

CONSORTIUM FOREWORD

The Development Consortium are proud to be part of the promotion, planning and delivery of Chelmsford Garden Community and are pleased to present this comprehensive vision, ethos and masterplan.

We hope that this Development Framework Document and its supporting documents demonstrate the outcome of genuine collaboration between the local community, stakeholders and the City and County Council.

By placing people, the environment and communities at the heart of the design process we hope to build a sustainable place that delivers what we promise.

We believe that this DFD demonstrates our commitment to quality place making, to creating homes and communities that are built to last and adapt over time, providing Chelmsford with a place to be proud of, for living, for working and for leisure.

Building on the continued successful delivery of Beaulieu and Channels, these proposals demonstrate an opportunity to grow the Garden Community further, to complement the existing facilities but to provide new opportunities and community space for the future community and to live side by side with nature whilst rising to the challenges presented by climate change.

We, the Development Consortium, are dedicated to delivering high quality design, construction and long term stewardship of the Garden Community, creating a legacy for future generations to come and to have a lasting long term positive effect on the natural environment.

By utilising the Development Consortium skills, experience and track record, we are also committed to the timely and coordinated delivery of not just housing but the crucial delivery of strategic infrastructure including highway, community facilities, sports provision, health care, education and a substantial quantum of green infrastructure.

We hope that by continuing to work collaboratively both now and in the coming months, the detail and design of the Garden Community will evolve and be shaped by those that will eventually live, work and play within it.

Chelmsford Garden Community Consortium

CITY COUNCIL FOREWORD

When we have development, it's vital that we build communities for people, not just houses. That's what Chelmsford Garden Community is about. It is a unique opportunity to create new neighbourhoods that address some of today's big issues.

That not only means housing that is affordable, but real action on the climate and ecological emergency, building key infrastructure on time, delivering new jobs, and supporting sustainable travel. All to create communities that people are proud to call home.

The City Council is working with development partners to make this a reality at Chelmsford Garden Community. This draft document outlines the ambition, and you can help us shape it further by giving us your feedback through this consultation.

Councillor Stephen Robinson
Leader of the Council

COUNTY COUNCIL FOREWORD

Effective place-making and place-keeping enshrined in the Town and Country Planning Association's Garden City principles are the cornerstones to creating successful garden communities. Essex County Council expects these principles to be integral to the conception, planning and implementation of new garden communities to ensure they are well designed and of a high quality both now and well into the future.

As a Council we want to see truly sustainable communities delivered – those which provide adaptable and affordable homes to meet all needs, not just respond, but innovate, to meet the climate challenge head on, deliver a wide variety of jobs and routes to access them, have thriving and accessible hearts, and encourage active and healthy lifestyles within a green and pleasant environment.

We have welcomed the opportunity to help shape the masterplanning of the Chelmsford Garden Community so far, and encourage residents to take this opportunity to help plan a truly exemplar development for Chelmsford.

Councillor Lesley Wagland
Cabinet Member for Economic Renewal, Infrastructure and Planning

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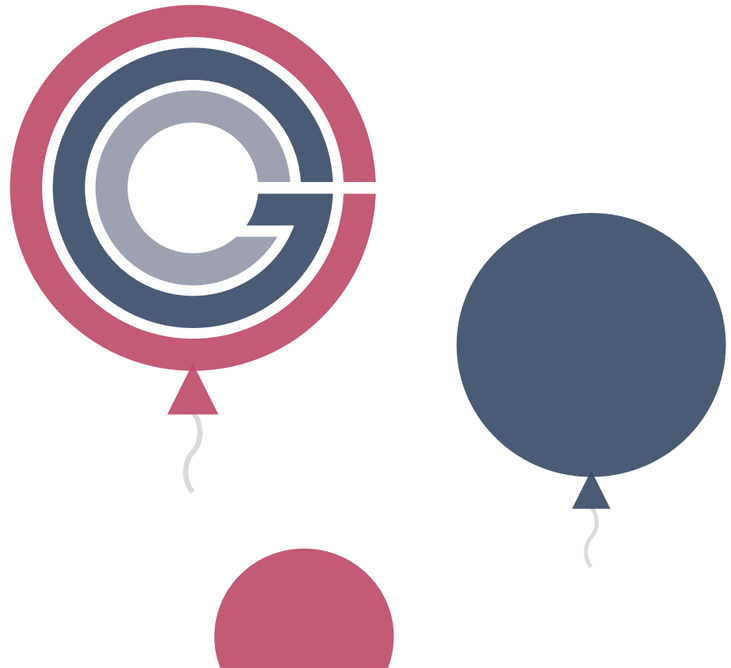

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01.

INTRODUCTION

INTRODUCTION

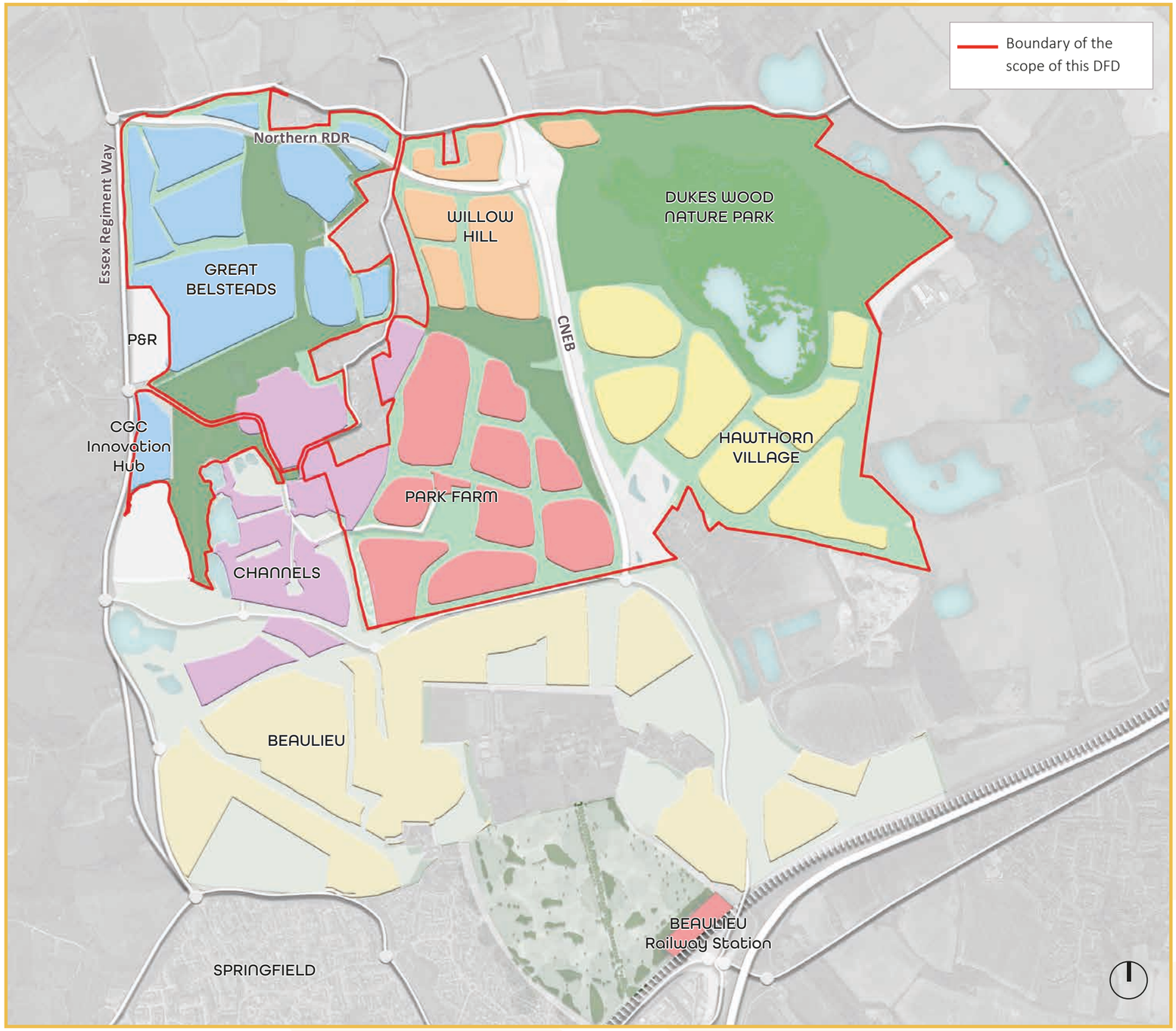
Chelmsford Garden Community (CGC) is allocated in the Chelmsford Local Plan (Adopted May 2020) to deliver an exemplar, comprehensively planned, new, sustainable Garden Community that will provide much needed housing, employment and sustainable travel opportunities within a high-quality landscaped setting which follows Garden City principles.

The Garden Community is located in North-East Chelmsford, and will build on the success already achieved at Beaulieu and Channels, which, when combined, will deliver around 10,000 new homes, wide ranging facilities and infrastructure for Chelmsford including a new railway station, an extension to high-quality bus routes and services, a substantial new active travel network, a Radial Distributor Road (Northern RDR), the Chelmsford North East Bypass (CNEB) as well as schools, community, retail and health facilities and destination parklands.

The site has been given formal status by Homes England as Chelmsford Garden Community, which encompasses all the land allocated in the Local Plan that is the subject of this Development Framework Document (DFD), as well as the successful emerging communities of Beaulieu and Channels. The Garden Community provides an opportunity to deliver high quality new homes, places to work, play and learn within a sustainable new place which leads the way in transitioning to a net zero carbon economy that is resilient to the effects of climate change. It will respect and celebrate local landscape character and heritage, provide healthy lifestyle choices, and be designed to meet the needs of Chelmsford's residents both now and into the future.

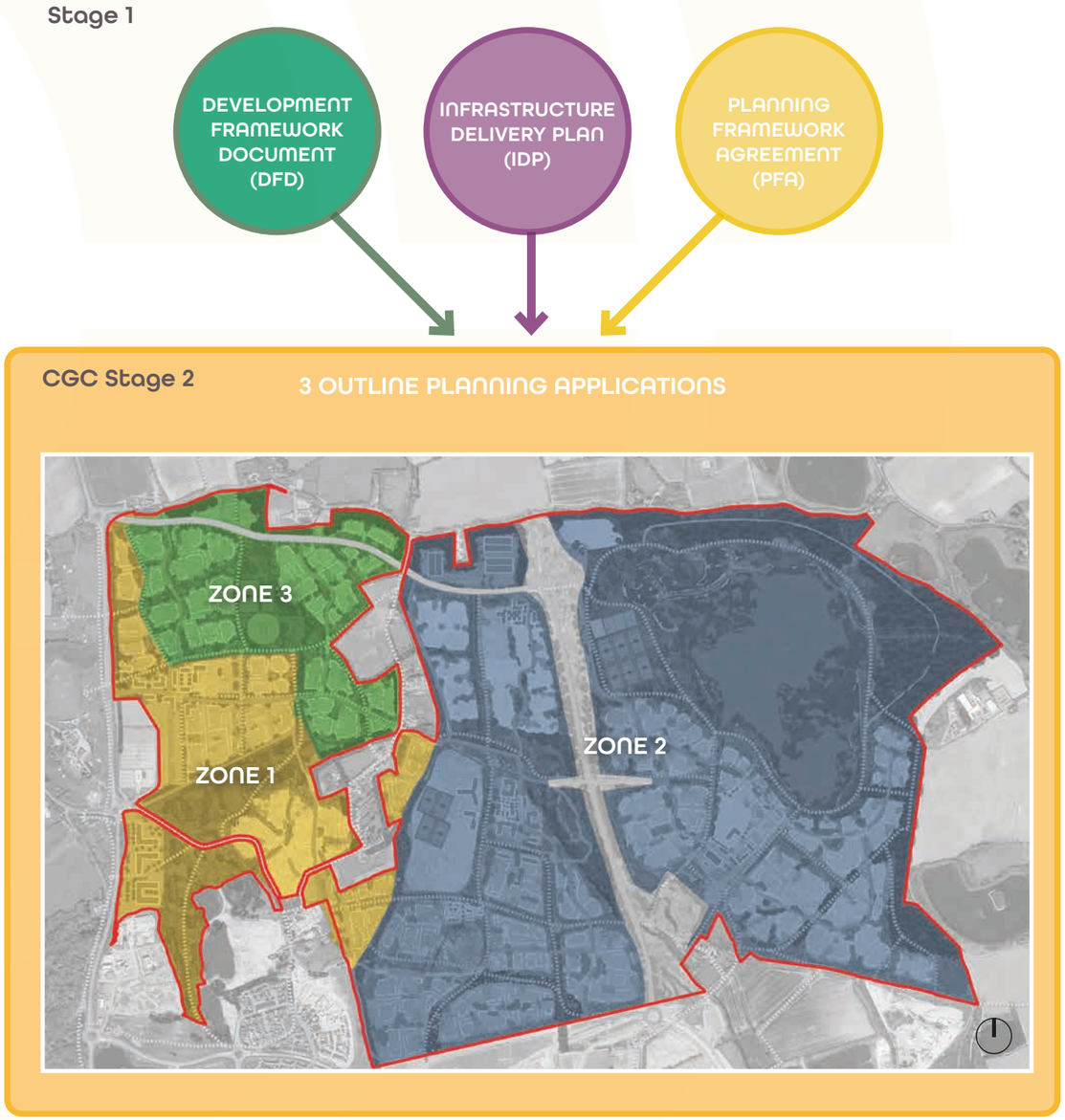
The Vision, which is set out in this DFD, will ensure that masterplanning, design and delivery take place through a process of consultation and collaboration. This will involve a wide range of stakeholders including both new and existing residents, with mechanisms enshrined in binding structures that ensure long-term stewardship and place keeping by the community which in turn delivers a long-term legacy that Chelmsford will be proud of and will be the envy of others.

In partnership with Chelmsford City Council, Essex County Council and Homes England, the Garden Community will be delivered over approximately the next 20 years by a consortium of developers and promoters, led by Countryside L&Q (North East Chelmsford) LLP ('CLQ'), who are delivering the Beaulieu development, Ptarmigan Land Ltd who are delivering the Channels development and Halley Developments Ltd.



INTRODUCTION

The Stage 1 Masterplan for Chelmsford Garden Community is comprised of the following three core documents, as set out below:



PLANNING FRAMEWORK

Local Plan Strategic Growth Site Policy 6 (SGS6) requires that development proposals accord with a Masterplan that is approved by the City Council. For the purposes of SGS6, Stage 1 of the Masterplan comprises, the following three interdependent core documents:

1. This **Development Framework Document (DFD)** -sets out what kind of place CGC should be and its ethos including the guiding framework principles, or 'golden rules', that development should follow. It also contains the Framework Parameter Plans, an illustrative masterplan, the approach to design coding, delivery and phasing and how the place should be managed in perpetuity. This will ensure the overarching Vision is delivered in a cohesive and comprehensively planned manner
2. The **Infrastructure Delivery Plan (IDP)** - that will set out the framework for what infrastructure needs to be delivered, by whom, by when and at what cost; and
3. The **Planning Framework Agreement (PFA)** - that will be an overarching legal agreement for the entire garden community that future Site-Specific Section 106 Agreements for individual Outline Planning Applications will need to comply with

The Stage 1 Masterplan documents set out above are the mechanisms that bind land promoters together and are supported by a range of technical evidence-based documents that are interrelated, to ensure design quality, delivery and long-term stewardship are addressed in a seamless, consistent and comprehensive manner across the Garden Community.

Reference to the IDP and PFA is made throughout this DFD and all three documents should be read together, and where possible, information is not repeated in each document.

The Stage 2 Masterplans will comprise the three Outline Planning Applications (OPA's) to be submitted by the developers that make up the Consortium. The OPA's will need to be in broad conformity with the approved Stage 1 Masterplan Documents which will be significant material considerations in the determination of planning applications

02.

PLANNING POLICY AND THE ROLE OF THE DFD

PLANNING POLICY AND THE ROLE OF THE DFD

LOCAL PLAN POLICY

INTRODUCTION

Planning Policy
The National Planning Policy Framework (NPPF) (2021) requires Local Planning Authorities to positively plan to identify appropriate land for homes and promotes the use of masterplans to help ensure that land is used efficiently while also creating beautiful and sustainable places.

Chelmsford City Council's adopted Local Plan (2020) sets out the vision for how the City will develop to 2036 and allocates the Garden Community under Strategic Growth Site Policy 6 (SGS6) for a high-quality comprehensively planned new sustainable urban extension.

SGS6 outlines the Councils Site specific policy requirements for the Site including but not limited to:

- around 3,000 new homes (the wider allocation may have capacity For a further 2,500 homes)
- 5,000sqm of employment
- travelling showpeople site for 9 serviced plots
- a new country park
- single carriageway road (or phase 1) of the chelmsford north east bypass within the site boundary
- new radial distributor road (Northern RDR) from Essex Regiment Way
- neighbourhood centres incorporating provision for convenience food retail, community and healthcare provision
- provision of a new All through school and primary schools with co-located early years and childcare nurseries
- appropriate provision of community space and significant new multi-functional green infrastructure

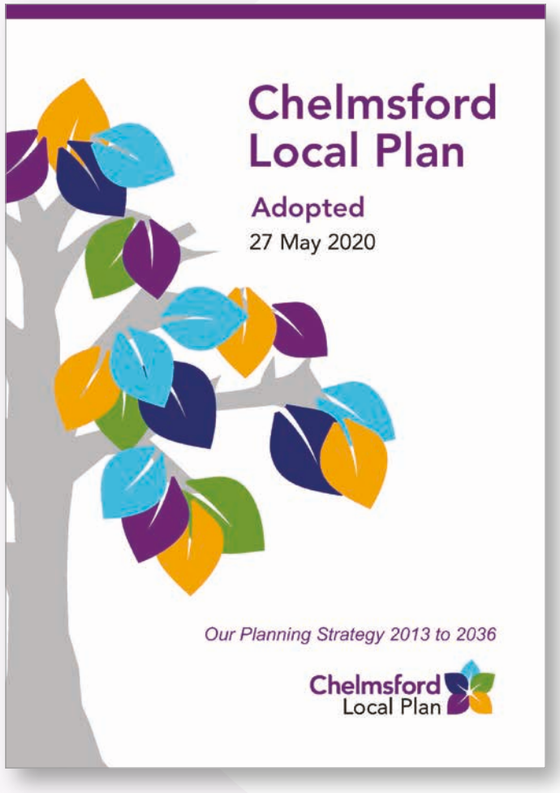
Section 38 (6) of the Planning and Compulsory Purchase Act 2004 and section 70(2) of the Town and Country Planning Act 1990 requires applications for planning permission to be determined in accordance with the development plan, unless material considerations indicate otherwise. All Garden Community applications for planning permission will be assessed against CCC's adopted Local Plan and relevant local policies specific to key themes are referenced throughout the Guiding Framework Principles section of this DFD (Chapter 6).

Other relevant Local Plan documents include the Essex Minerals Local Plan (2014) and the Essex and Southend-on-Sea Waste Local Plan (2017)

Material Planning Considerations relevant to CGC include the NPPF (2021), National Planning Guidance, Chelmsford Planning Obligations SPD (2021) and Chelmsford Making Places SPD (2021). When approved, this DFD will also be a significant material consideration in the determination of all CGC applications for planning permission.

Policy SGS6 requires development proposals to accord with a masterplan approved by the Council. As previously referenced, the CGC Masterplan will be delivered in two stages, with Stage 1 comprising the DFD, IDP and PFA, and Stage 2 comprising the OPA's. The DFD does not supersede any national or local planning policies but provides a clear vision for how they will be applied and implemented in the Garden Community.

The DFD is underpinned by a series of interrelated principles set out in the Vision which are based on the Town and Country Planning Association Garden City Principles, as well as ensuring that sustainability is the golden thread running through the Masterplan.

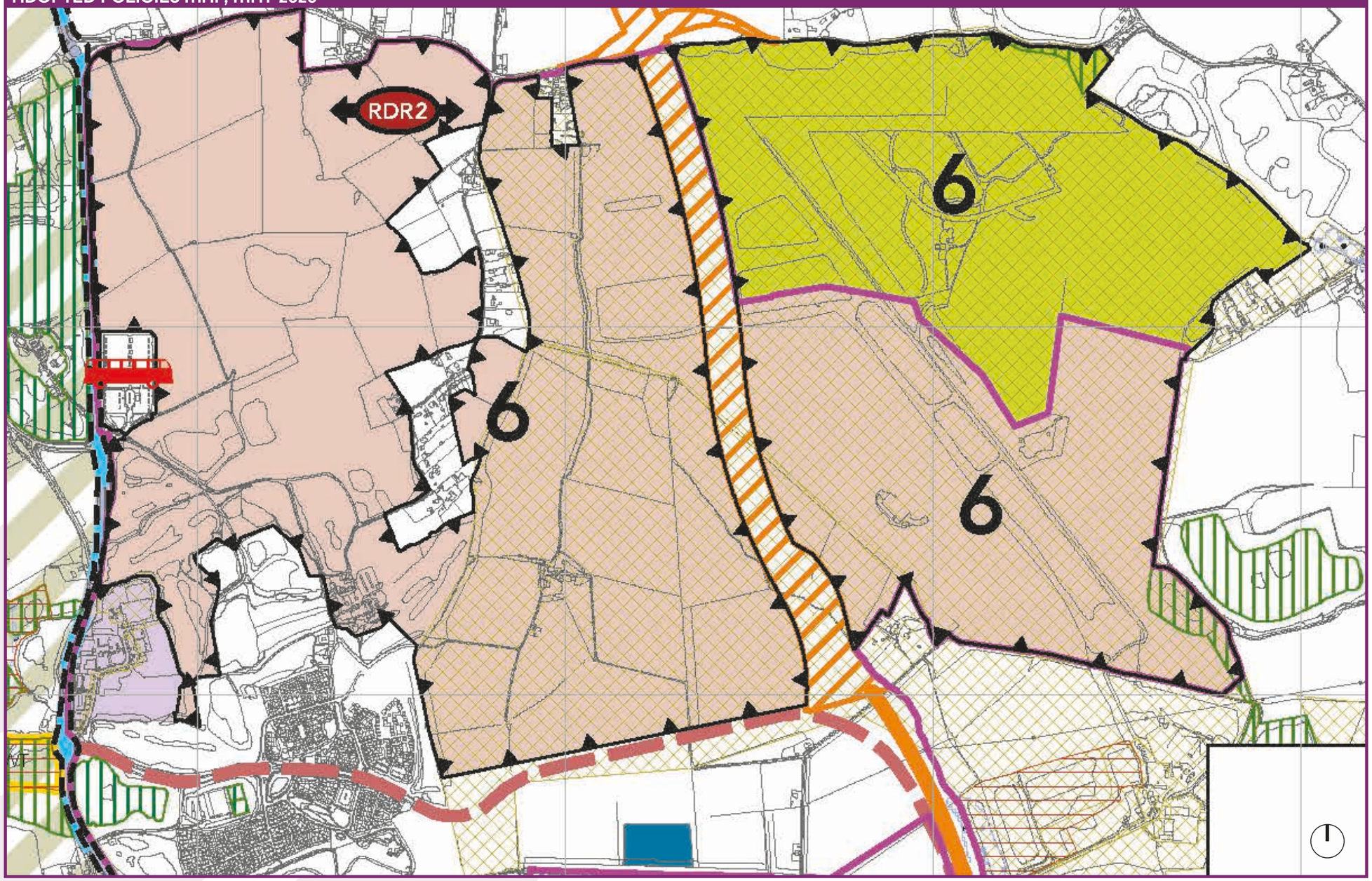


Chelmsford Local Plan Document, May 2020

PLANNING POLICY AND THE ROLE OF THE DFD

LOCAL PLAN POLICY

ADOPTED POLICIES MAP, MAY 2020



Key

- Boundary of Strategic Growth Site Allocation 2, 3a, 6 & 7a
- New garden community for major housing and employment development (SGS6)
- Proposed Country Park
- Proposed Chelmsford North East Bypass Safeguarded Corridor
- Open Space (S11, DM21)
- Minerals and Waste Site
- Existing Employment Area (S8, DM4)
- Location for Primary School
- Radial Distributor Road (RDR1)
- Proposed Radial Distributor Road (Northern RDR) detailed design within new garden community masterplan area (S9, SGS6)
- Existing Park & Ride

THE ROLE OF THE DFD

THE DFD

WHAT IS INCLUDED IN THE DFD?

The DFD provides a comprehensive, thorough and robust framework for delivering CGC that will guide and inform all future Planning Applications and ensure that the overarching Vision is delivered within the adopted Local Plan period to 2036 and beyond.

Whilst many of the policies in the adopted Local Plan apply across the City, the DFD sets out detailed Guiding Framework Principles (GFP's) which are specific to the implementation of Policy SGS6. The GFP's will act as the golden rules for the development going forward, providing clarity on how the Local Plan Policy requirements should be translated to achieve a well-designed, sustainable and successful place.

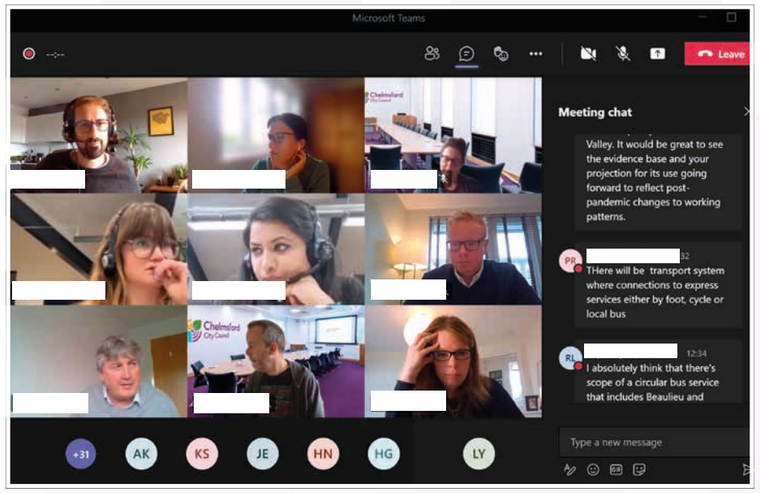
At its heart are two Framework Parameter Plans:

- Land Use and Access; and
- Green Infrastructure

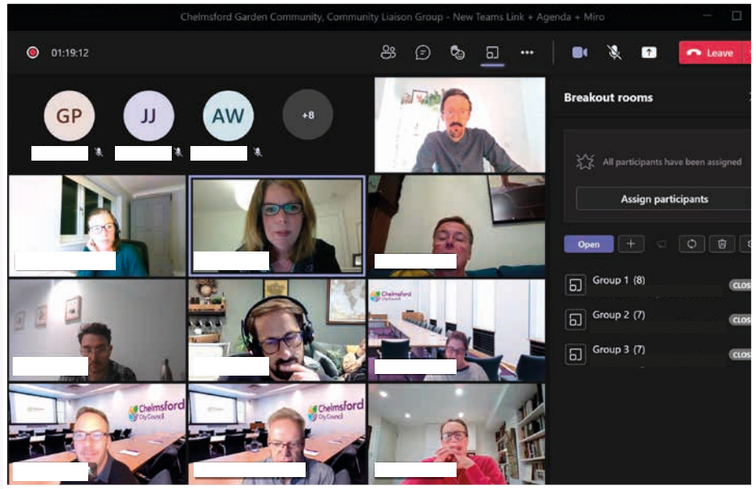
The Land Use and Access Framework Parameter Plan quantifies land uses and establishes indicative alignments of primary elements of the movement network. The Green Infrastructure Framework Parameter Plan differentiates and quantifies the different green infrastructure including open space, parklands and Greenways.

These two Framework Parameter Plans in turn inform an Illustrative Masterplan based on an indicative development specification that brings to life a representation of how the Garden Community could look. The Stage 2 Masterplan OPA's will be informed by the Stage 1 Documents but flexibility will be required to enable the overall Masterplan to evolve over time in response to more detailed information emerging as Environmental Impact Assessments are undertaken.

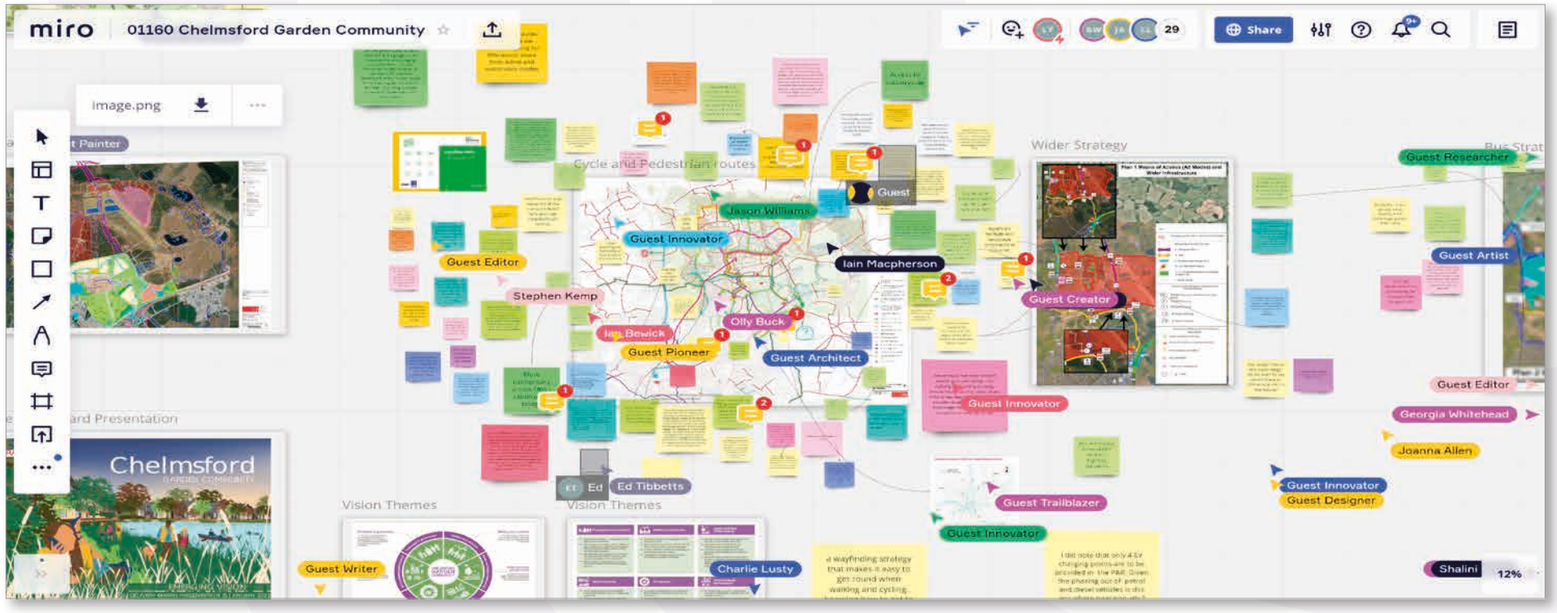
In addition to the DFD contents, further background information and evidence bases can be found in the appendices.



Movement & transport workshop Teams chat



Community Liaison Group 3 workshop, Teams report back



Interactive online consultation for movement

THE ROLE OF THE DFD

Community Liaison Group 3 workshop

Vision Workshop

HOW HAS THE DFD BEEN PREPARED?

The DFD was commissioned by the developer Consortium, and produced in partnership with Chelmsford City Council (CCC), Essex County Council (ECC) and Homes England, led by masterplanners, JTP, alongside planning consultants, DWD, and a range of other environmental and technical consultants. It has been shaped by a co-design process which included a wide-ranging stakeholder and community engagement exercise including a series of technical and masterplanning workshops and design charrettes from June 2021 to October 2022.

WHO SHOULD USE THE DFD?

This document is intended for use by anyone who is interested in the planning, delivery and future stewardship of CGC. It should be used by existing and future residents, planners, developers, builders and agents including masterplanners and architects in shaping development proposals.

HOW WILL THE DFD ENSURE COMPREHENSIVE DEVELOPMENT?

The purpose of the DFD, Illustrative Masterplan, IDP and PFA is to ensure that the CGC is developed in a comprehensive manner, with place making and Garden City Principles at the heart of it.

The DFD will sit alongside the PFA, which secures the commitment of landowners and development partners to work collaboratively in delivering a comprehensively planned new garden community which is `landownership blind'. This will ensure that infrastructure is in the right place at the right time and will maintain standards and consistency of approach in terms of design quality, sustainability and future proofing.

PFA matters secured include, but are not limited to, affordable housing requirements, strategic infrastructure (and obligations on landowners to make land available as and when required so as not to undermine delivery), sustainability, biodiversity net gain, transport modal shift, waste management, provision of green infrastructure, and template planning conditions to apply to each outline planning permission.

HOW WILL THE DFD APPLY IN THE FUTURE?

The DFD will ultimately perform a variety of functions throughout the life of the development, including to inform outline and reserved matters planning applications, subsequent detailed design codes, phasing, delivery, stewardship to optimise the potential of the site.

CGC will be implemented over approximately 20 years with the first 3,000 homes anticipated to be delivered within the current Local Plan period up to 2036 and beyond that around an additional 2,500 homes. It will be important that the DFD and other masterplan documents are capable of responding to future demands so that it remains a leader in delivering sustainable place making and therefore the guiding framework principles in this DFD have been future proofed to be adaptable to legislative and policy changes, as well as best practice.

The Stage 1 Masterplan provides for a Garden Community of around 5,500 new dwellings and the infrastructure items required to support the CGC are outlined in the IDP and referenced in this DFD. Alongside the DFD and IDP, the PFA will establish the principle for site-wide triggers.

The final development capacity of the site as well as the trigger for the delivery of each infrastructure item will be established by the Stage 2 Masterplan OPAs, which will include a S106 agreement. The IDP will be updated accordingly to ensure CGC provides the necessary supporting infrastructure to meet demand at the appropriate time as well as allow for growth beyond the local plan period to ensure the optimum use of land.

The approach to review of the overarching planning framework will be set out in the PFA. The purpose of this is to ensure that the role of the DFD remains relevant and current and that any future applications that are approved will be based upon the most up to date legislation, policy, and guidance applicable at that time.

POLICY STATUS OF DFD

As the masterplan is a requirement of Local Plan policy, and has been subject to wide ranging public consultation, it is a significant material consideration when determining planning applications both for the developer consortium itself and any other developer that might build elements of CGC in the future.

03.

SITE CONTEXT

SITE CONTEXT

CONTEXT

The following text sets out a summary of the site's context. A more detailed set of background information can be reviewed as part of evidence base documents.

SITE & THE SURROUNDING AREA

The Site

The site is located to the north-east of Chelmsford City, within the County of Essex and is bound to the north and east by arable land, to the south by the Beaulieu and Channels Developments, and to the west by Essex Regiment Way. The total area extends to 472ha and historically has had multiple uses including, farming, mineral extraction, landfill, aviation and leisure activities including the former Channels Golf Course. The current site comprises mainly arable land that has been restored following mineral extraction, the former Channels golf course to the south-west. To the east is known as the former Boreham Airfield, which is currently undergoing mineral extraction for sand and gravel known as Bulls Lodge Quarry. Park Farm within the centre is currently in arable use but has consent for future mineral extraction.

The site is not the subject of any landscape related designations such as Green Belt or Areas of Outstanding Natural Beauty (AONB) and is not affected by any other international, national or regional environmental or nature conservation designations.

The topography is gently undulating, with the highest point in the north-western corner and levels generally fall to the south-east towards Park Farm Brook which runs through the central area. There are no Listed Buildings or Conservation Areas within the Site, however, it is within the setting of a number of Listed Buildings.

Domsey Lane runs through the Site from Cranham Road in the north to Pratts Farm Lane in the south and is currently rural in character. However, the majority of the properties and land along Domsey Lane are excluded from the Masterplan area due to separate ownership.

Access will be from Essex Regiment Way to the east, Beaulieu Parkway (RDR1) to the south and eventually the Northern RDR to the north.

Mineral extraction has resulted in the modification of the existing landscape within the east and south-west of the site resulting in the removal of any archaeological deposits within these areas and future mineral extraction in the south and west of the Site will have the same result.

Surrounding Context

Essex Regiment Way (A130) forms the western boundary of the Site and the existing Chelmer Valley Park and Ride facility is accessed from Pratts Farm Roundabout. To the west of Essex Regiment Way is the Chelmer North Green Wedge, which follows the River Chelmer and encompasses Local Wildlife Sites including Little Waltham Meadows Nature Reserve. Further to the west are Little Waltham and Broomfield residential settlements including Broomfield Hospital.

Wheelers Hill and Cranham Road form the northern boundary where it meets Boreham Road in the north-east. The land to the north is mostly open countryside in arable farm use. To the east is also mostly open countryside in arable farm use with a number of open water bodies as well as the Essex Police Workshop accessed from Waltham Road.

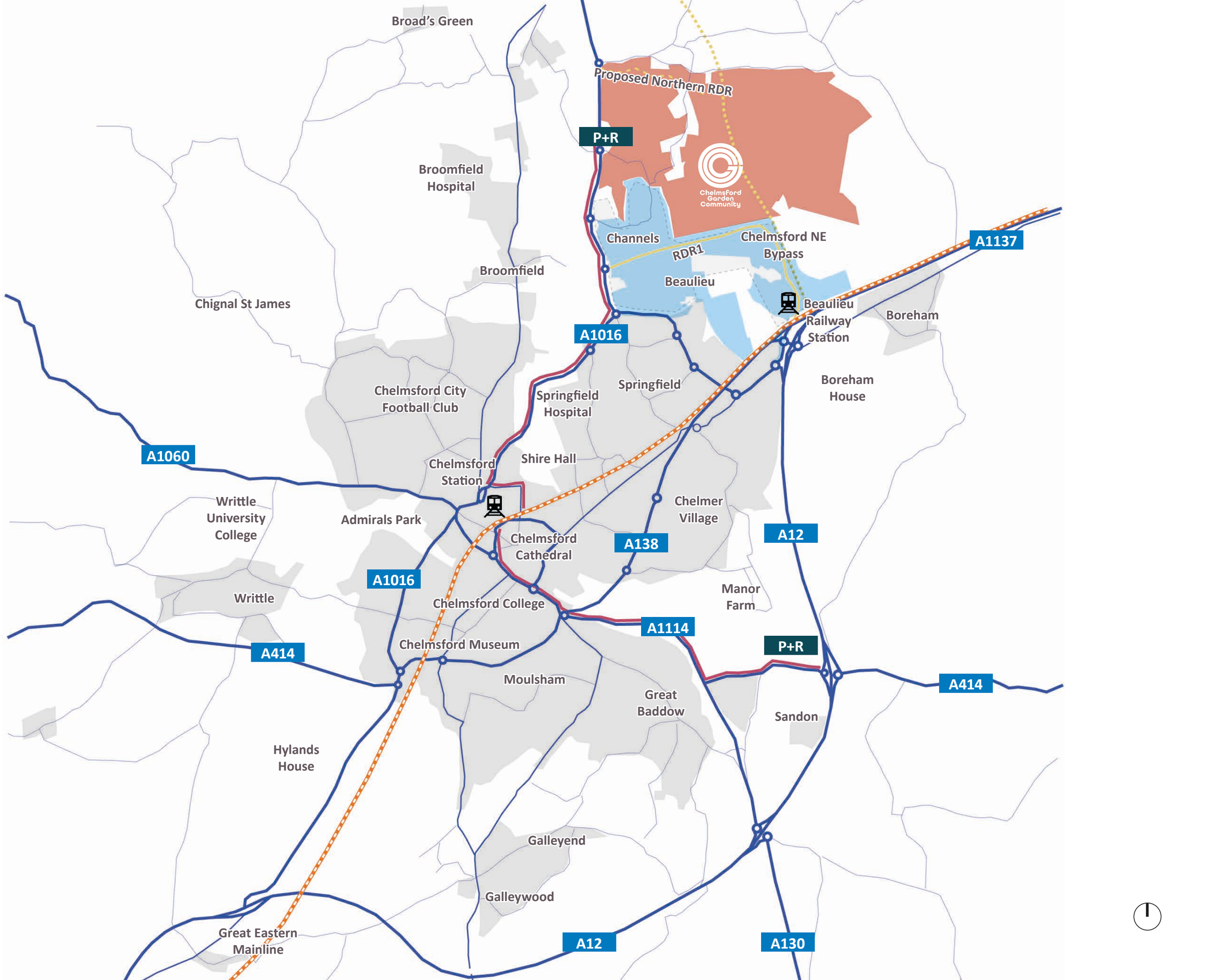
To the south of the Site are the new neighbourhoods of Beaulieu and Channels, which are the first phases of CGC. Beaulieu will deliver up to 3,600 homes set within 71 hectares of open space including allotments, play facilities, community gardens, sports facilities and reinstated historic estate parkland. A new neighbourhood centre at Beaulieu Square provides amenities for local residents including a community centre, retail and a health centre as well as the first "All Through' School in Essex opened in September 2018, with a primary, secondary and early years nursery school and a future sixth form college. A second primary school is due to open in 2025. Beaulieu Train Station, Station Hub and Beaulieu Exchange Business Park will be delivered in future phases. Channels is located to the south-west of the Site and comprises up to 750 new homes set within 21 hectares of open space including a Country Park, a series of lakes, skate park, play areas and growing areas. The wider Channels Estate includes a hotel, bar, brasserie and wedding venue.

To the south-west of the Site is Essex Regiment Way Business Park accessed from Channels Drive Roundabout and comprises an existing drive-thru McDonalds, Costa Coffee and a Shell Petrol Station. Planning permission was granted in April 2021 (Ref: 20/00071/FUL) for a 2,228sqm foodstore (expected to be Morrisons), a 175sqm café/drive thru, a 118sqm café as well as 16,680sqm of B2/B8 uses with access off Eagle Way.

Channels Estate

Channels landscape character

Beaulieu landscape character


Broad's Green
Proposed Northern RDR
P+R
Broomfield Hospital
Chelmsford Garden Community
Channels
RDR1
Chelmsford NE Bypass
A1137
Broomfield
Beaulieu
Beaulieu Railway Station
Boreham
Chignal St James
A1016
Springfield
Springfield Hospital
Boreham House
Chelmsford City Football Club
A1060
Shire Hall
Chelmsford Station
Writtle University College
Admirals Park
Chelmer Village
A12
A138
Chelmsford Cathedral
A1016
Manor Farm
Writtle
Chelmsford College
A1114
A414
Chelmsford Museum
P+R
A414
Moulsham
Great Baddow
Sandon
Hylands House
Galleyend
Galleywood
Great Eastern Mainline
A12
A130

SITE CONTEXT

SITE CONSTRAINTS

The following is a summary of the site's constraints. A more detailed set of background information can be reviewed as part of the evidence base documents.

TRANSPORT AND MOVEMENT

Land will be safeguarded for an extension to the existing Chelmer Valley Park & Ride Facility which will be enhanced to respond to the City Council's aim for it to become a comprehensive "transportation hub" providing access on to Chelmsford and Beaulieu Railway Stations as well as Stansted Airport.

Land is also safeguarded for the Chelmsford North East Bypass (CNEB) which will provide a strategic link between the A131 and the Boreham Interchange via Beaulieu Parkway (RDR1). Access to CGC from the CNEB will be provided by a roundabout to the north of the Site that will link to the proposed Northern RDR and Essex Regiment Way.

HERITAGE AND ARCHAEOLOGY

There are no designated heritage assets within the Site however a number of Listed Buildings are adjacent including Belsteads Farmhouse and Barn and Channels Farmhouse to the south-west, Powers Farm, Hobbits, Shuttleworth and Shoulderstick Haul to the north, Peverel's Farmhouse on Domsey Lane, Mount Maskells to the south-east and New Hall to the south.

Various areas of the site are also considered to have archaeological potential.

MINERALS

All of the Site to the east of Domsey Lane is designated minerals safeguarded land and is either restored, active mineral extraction areas or future extraction land. Extraction of sand and gravel is being undertaken under extant planning consents for Bulls Lodge Quarry (including Boreham Airfield and Park Farm). The phasing and delivery of the Garden Community will allow for the continued mineral extraction of Bulls Lodge Quarry. The Boreham Airfield Site restoration plans include a 51-hectare lake that will be incorporated into the future Country Park.

LANDSCAPE & DRAINAGE

Due to previous and future mineral extraction the topography of the Site has been altered but is mostly gently undulating and falls from north-west to south-east towards Park Farm Brook which runs thorough the Site. The entire Site is located within Flood Zone 1 (i.e less than 1 in 1000 annual probability of river or sea flooding) classes as low probability risk.

Chelmer Valley Park and Ride

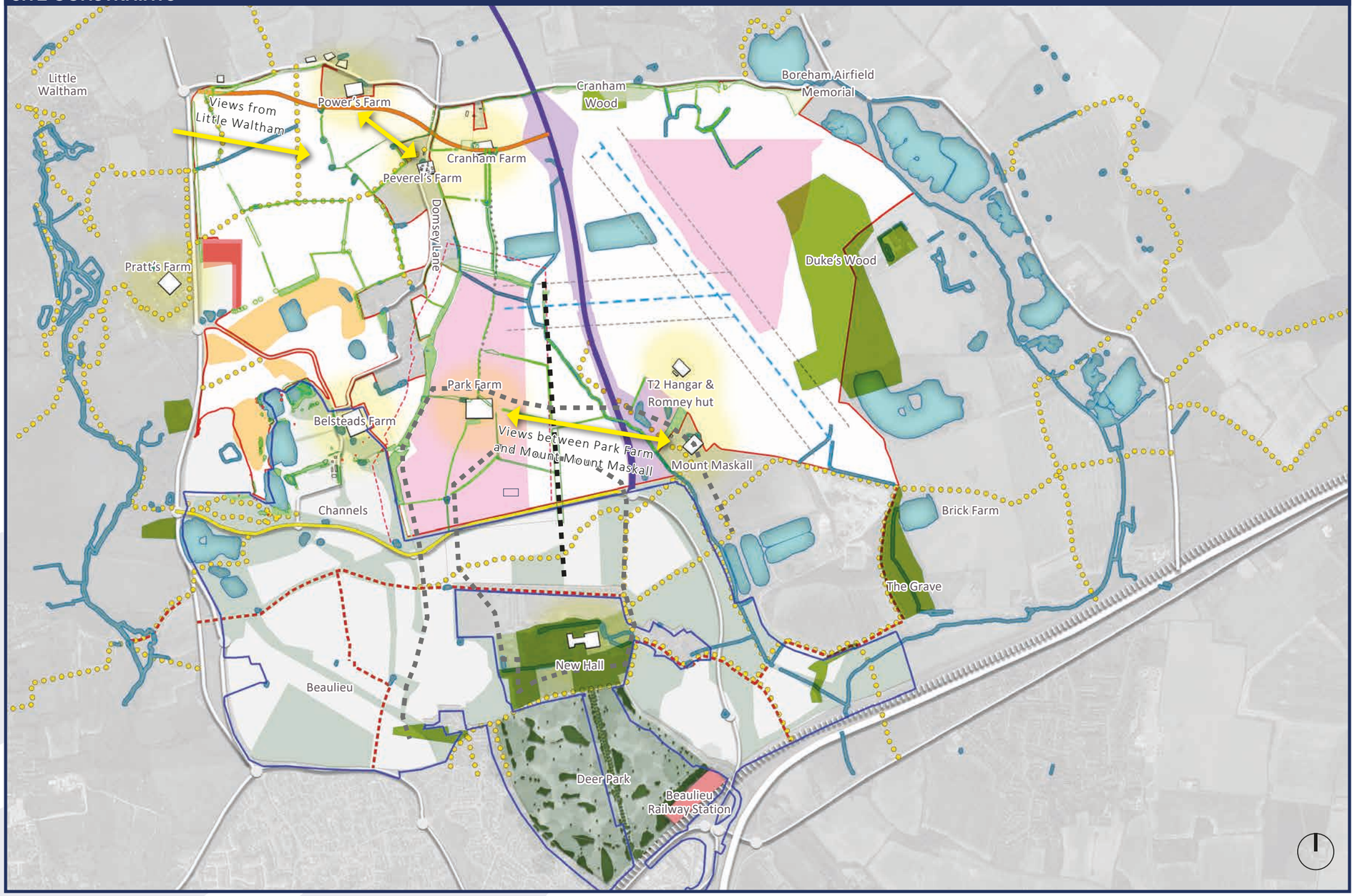

A lagoon associated with the mineral extraction process


Listed Peverel's Farmhouse


Listed Channels Farmhouse

SITE CONSTRAINTS

SITE CONSTRAINTS



Key

- CGC Site boundary
- Existing Pond / Watercourse
- Existing PROW (footpath)
- Existing PROW (Bridleway)
- Existing hedges / tree line
- Historic Landfill
- P&R safeguarded expansion area
- Chelmsford North East Bypass (CNEB)
- Planning Application Bypass Corridor
- RDR1
- Northern RDR
- Future Mineral extraction area
- Mineral extraction offset
- Mineral conveyor belts
- Mineral conveyor offset
- Approximate position of previous historic woodlands
- Existing heritage assets
- Important landscape and heritage views
- Postulated line of earlier Park Pales
- 'The Ride' - historic lane

Note: For location of Archaeological Assets please see Figure 2 of submitted Cultural Heritage Desk Based Assessment.

SITE CONTEXT

THE MINERAL EXTRACTION PROCESS

EXTRACTION PROCESS, PHASING & TIMESCALES

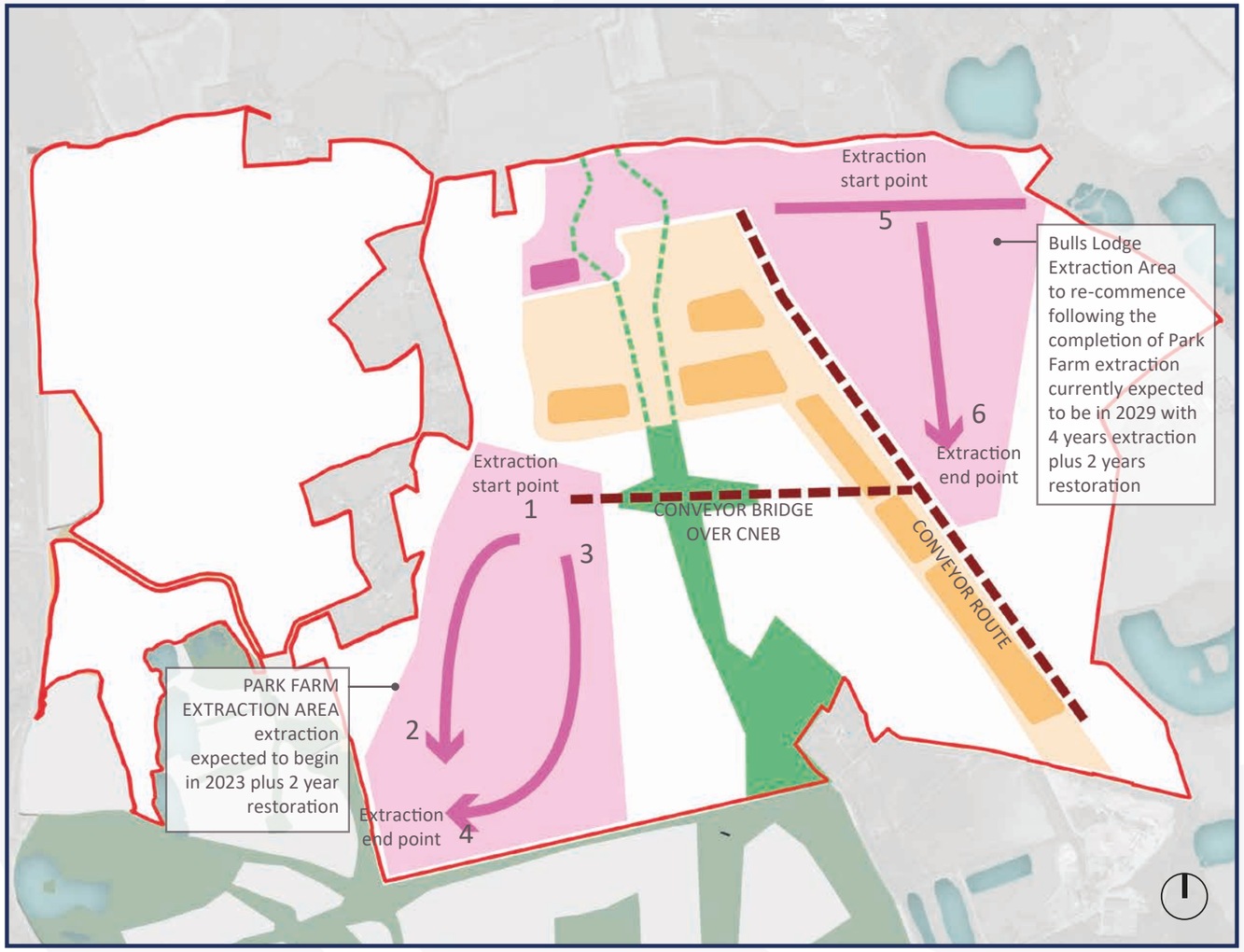
The phasing of the minerals extraction in both the Bulls Lodge Farm and Park Farm areas is expected to follow the process shown on the diagram opposite. The Park Farm extraction is planned to be completed over a period of 6 years and 2 year of restoration. Once restoration works are complete in Park Farm extraction, activities will return to Bulls Lodge for a further 4 years followed by 2 years restoration works.

The extraction works will comprise a number of stages through the process including:

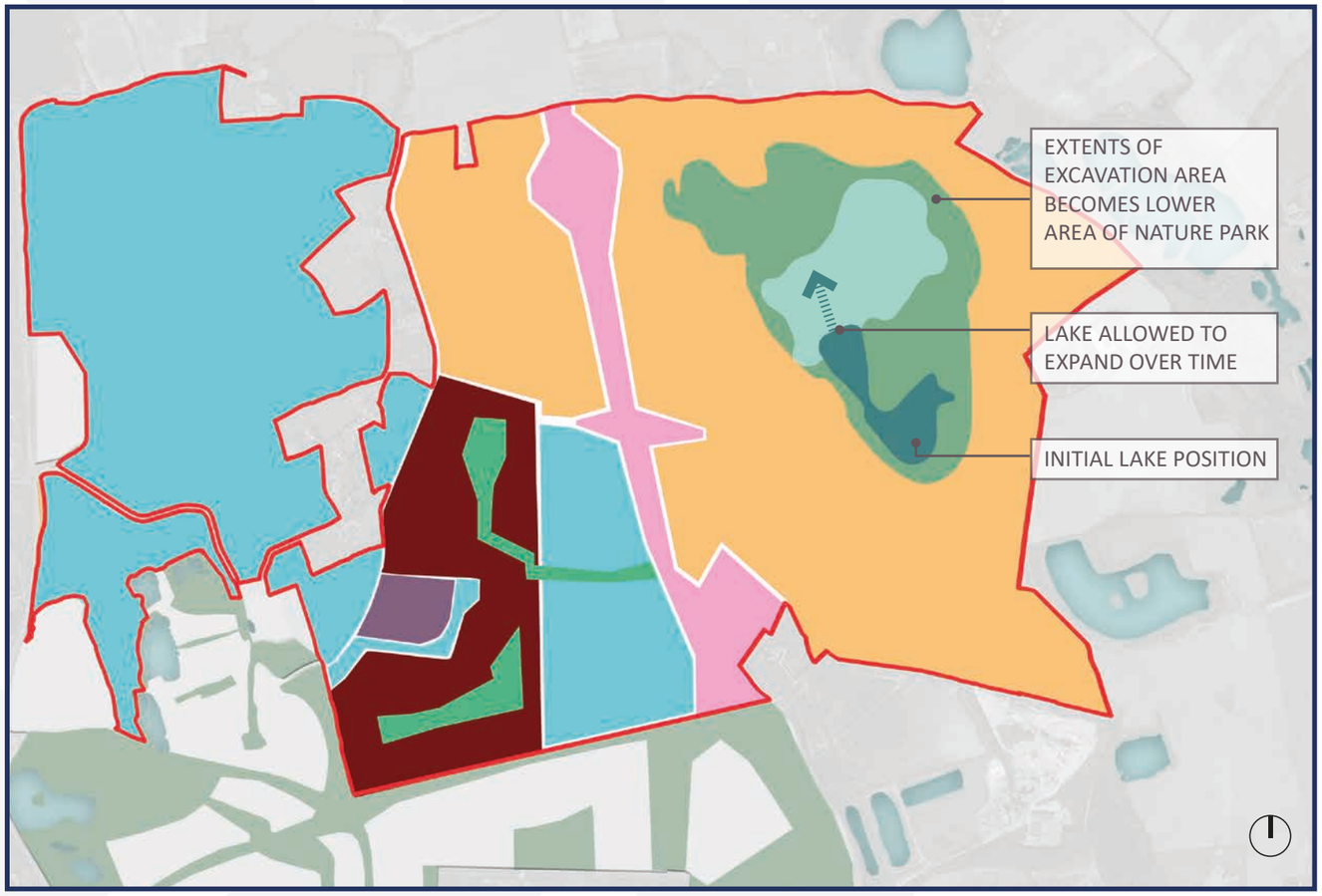
1. Removal of topsoil and stockpiling for later reuse
2. Removal and storage of overburden (material that is not set for extraction but is on top or the sands and gravels)
3. Excavation of sands and gravels
4. Replacement of overburden and topsoil

The stockpiles of material are to be strategically positioned to provide visual and acoustic screening during the extraction process, details of this are as outlined in the relevant minerals extraction planning applications.

Mineral Extraction Areas



Restoration Strategy Plan



Key

- Land outside of extraction area
- Land reserved for CNEB
- Bulls Lodge restoration area
- Park Farm extraction area to be restored to existing levels
- Park Farm lowest area of restored ground
- Gently sloping interfaces between existing and restored levels

PARK FARM LAND RESTORATION AND LEVELS

Once the extraction process is completed in the Park Farm area, the residual holes will be infilled with the removed overburden and top soil. This restored ground will not however be brought up to the pre-extraction level. Where the new restored levels meet the existing levels around the edges of the extraction area, the land will have to be reprofiled to connect the two levels. These gradients will be designed to be gentle enough for pedestrians and cyclists to easily negotiate. This is demonstrated on the top diagram.

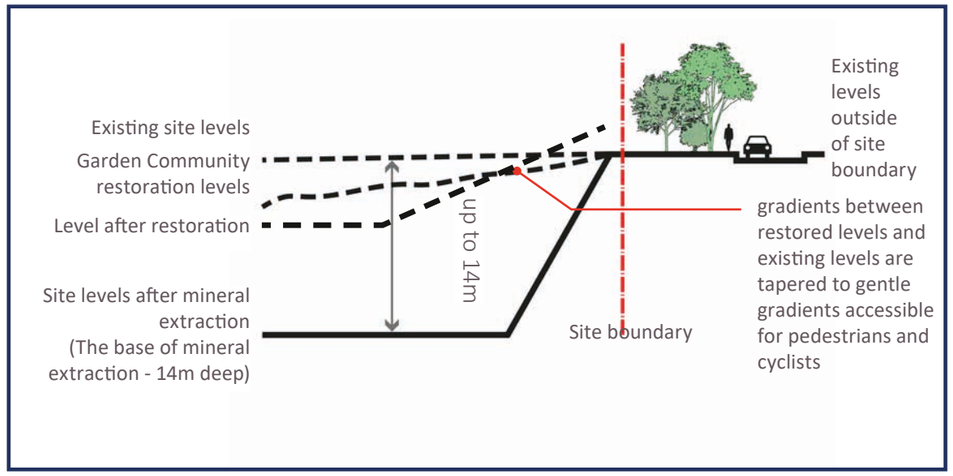
DUKES WOOD NATURE PARK & LAKE

As set out on the previous page the area designated as Dukes Wood Nature Park will not become available until the extraction process is completed this is expected to be around 6 years after minerals extraction activities return to the Bulls Lodge Area.

Following mineral extraction, the Duke's Wood Nature Park will be left with a large excavation area of lower ground. This will fill with water and become a lake over approximately 20 years.

Initially the lower lying area will be landscaped to provide an open habitat mosaic of grassland and scrub with the surrounding banks planted with woodland. Over time the lake will fill the area highlighted in the diagram opposite, providing water frontage and sustainable drainage opportunities to the development. In the long-term the lake will be allowed to expand across the lower area of the Nature Park.
For further information on Dukes Wood Nature Park refer to Chapter 8.

Restoration Levels Diagram




Chelmsford
Garden
Community

04.

THE VISION

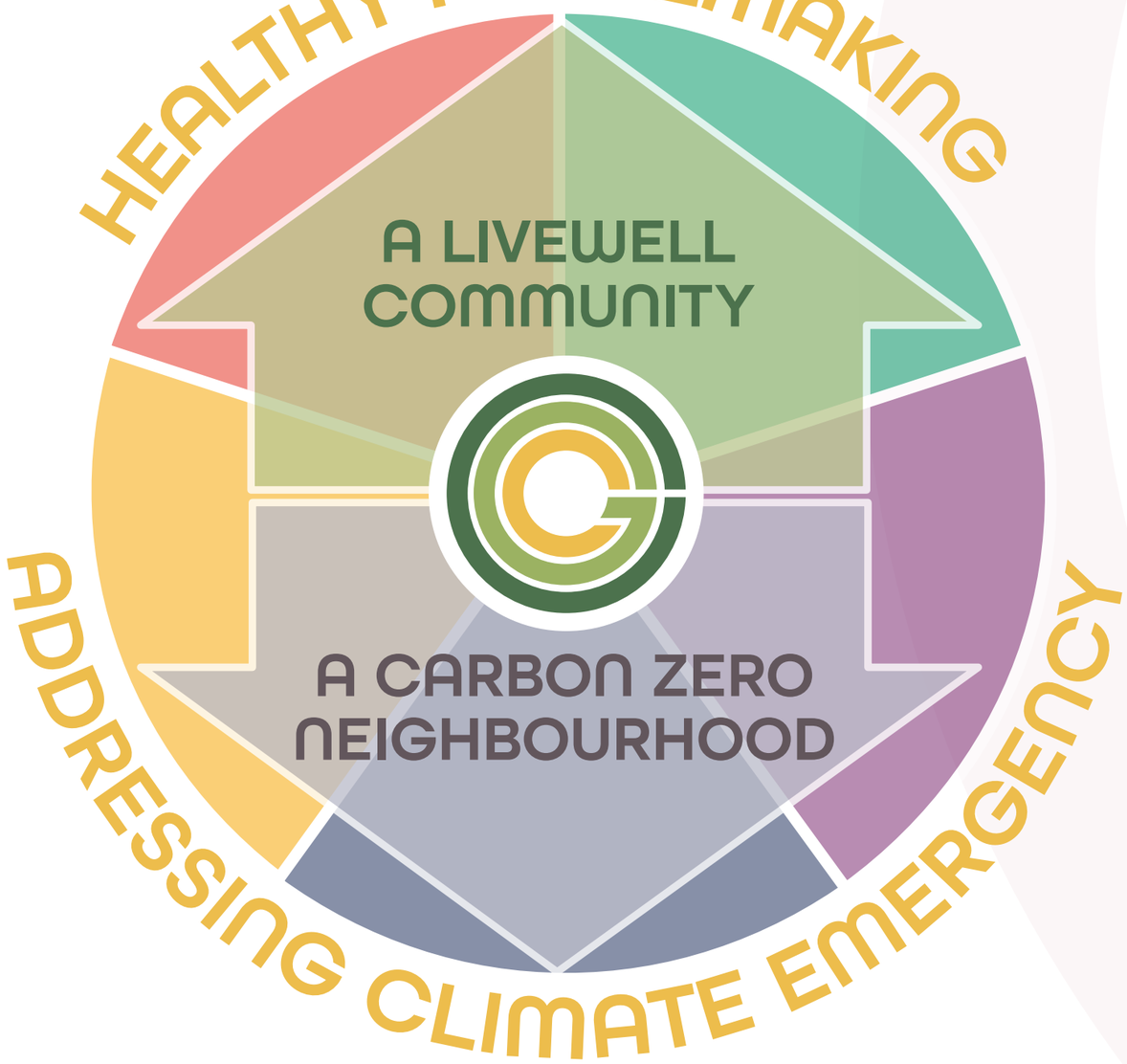
Chelmsford Garden Community

A SHARED VISION

Shaped by those who will live there and those who already do.
Imagined with our planet's future in mind.
Designed for shared landscapes, journeys, streets and lives.
A place where nature and people exist in balance.

Chelmsford Garden Community
OUR SHARED PLACE

A SHARED VISION



The vision for Chelmsford Garden Community (CGC) is of a shared place displaying an ethos of equality. A place to live and work alongside nature, one that integrates a symbiotic natural landscape within an enhanced and resilient ecological network.

CGC will comprise adaptable and resilient buildings and facilities including homes for all, new schools, healthcare, community facilities, shops and employment - all easily and safely accessible by cycling and walking. Streets will be designed for people over private vehicles. It will be a place where active travel and public modes of transport are the most convenient, appealing and efficient choices for short journeys.

CGC will support a 21st Century environmentally-conscious community aspiring to sustainable, healthy lifestyles, self-sufficiency and efficient use of resources. It will offer a home to a community leading the way on the path to Net Zero Carbon, in an environment resilient to the effects of climate change.

CGC will be a place with a distinct identity, made up of distinct but inter-connected neighbourhoods, where people are free to live in a shared and balanced environment. It will offer unexpected delight and interest, found in the twists and turns of an organically formed new place that has been fundamentally shaped by the characteristics and heritage of the context into which it will grow.

CGC offers a precious opportunity to create a place that can support the achievement of better health outcomes for people, responding directly to the objectives of the Livewell Campaign in Essex. This objective of Healthy Placemaking can be further supported by positive steps along to the path to decarbonisation: measures taken to achieve reductions in embodied and operational carbon are in many instances ones that can indirectly contribute to physical and mental wellbeing - through the nature of, and patterns of use within, the environments that are created.

THE VISION

A SHARED ETHOS BASED ON GARDEN CITY PRINCIPLES

HOW THE WAGON WHEEL WORKS

Over the following sections, where one of the five key pillars of the ethos has informed part of the Vision or Guiding Framework Principles, the wagon wheel will appear on the page. The relevant quadrant of the wagon wheel will be highlighted to demonstrate which part of the Ethos has informed the relevant part of the vision or each individual Framework Principle.

EXEMPLIFYING AMBITION

The ambition for Chelmsford Garden Community is that it becomes exemplary. That it goes above and beyond the typical. That it has a shared ethos - and an ethos of sharing - that reflects the collaboration behind its development. That it can be shared equitably by its community in the future.

Informing every element of the Vision and embedded in every part of the ethos is the need to become Carbon Zero and to embed Chelmsford's Livewell strategy throughout the Vision and masterplan.

The Chelmsford Shared Ethos has five key pillars born out of the extensive collaborative process undertaken with Chelmsford City Council and Essex County Council, Stakeholders and the CGC Consortium over the past 2 years.

The Five Key Pillars of the CGC Ethos:

1. REWILDING EVERYDAY LIFE
Green and blue infrastructure everywhere

2. PARTICIPATORY GOVERNANCE
Pro-active community

3. PROMOTING ACTIVE TRAVEL
Walkable, cyclable, connected

4. INCLUSIVE VILLAGES
Accessible, affordable, liveable

5. 15 MINUTE NEIGHBOURHOODS
Circular economy

The pillars of this shared ethos permeate every element of the Development Framework Document (DFD). They are also embedded in every layer of the masterplan.

THE VISION

A SHARED ETHOS BASED ON GARDEN CITY PRINCIPLES

15 MINUTE NEIGHBOURHOODS
circular economy

REWILDING EVERYDAY LIFE
green and blue infrastructure everywhere

INCLUSIVE VILLAGES
accessible, affordable, livable

PARTICIPATORY GOVERNANCE
Pro-active community

PROMOTING ACTIVE TRAVEL,
walkable, cyclable, connected

THE VISION

GARDEN CITY PRINCIPLES

The Town & Country Planning Associations Garden City Principles were used as a starting point and an understanding of the principles formed the basis of our own ethos:

1. Land value capture for the benefit of the community

2. Strong vision, leadership and community engagement

3. Community ownership of land and long-term stewardship of assets

4. Mixed-tenure homes and housing types that are genuinely affordable

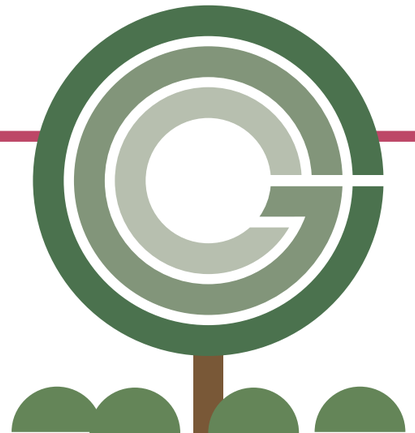
5. A wide range of local jobs in the Garden City within easy commuting distance of homes

6. Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy communities, and including opportunities to grow food

7. Development that enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains, and that uses zero-carbon and energy-positive technology to ensure climate resilience

8. Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods

9. Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport



Chelmsford Garden Community
Our Shared Place:

- **Shared principles** agreed on workshops with the local community;
- **Shared between** the city and the country;
- **Shared** and shaped by those who will live there, and by those who already do;
- **Shared spaces** and landscape for people and nature;
- **Shared streets** for movement of vehicles, bikes, and pedestrians;
- **Shared workspaces** offering flexible and multi-purpose working environments;
- **A Sharing culture** where items, produce, knowledge, skills and spaces are borrowed and exchanged;
- **A Shared commitment** to long-term management and collective stewardship;
- **A Shared economy** where the community benefits from the prosperity of the neighbourhoods; and
- **Shared experiences** a fun, memorable and fascinating place to live.

THE VISION

KEY TARGETS & METRICS FOR THE GARDEN COMMUNITY

50%

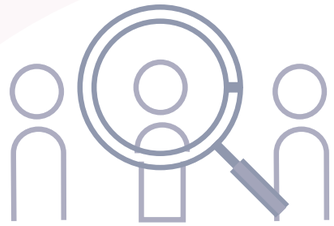
GREEN INFRASTRUCTURE

A Garden Community embedded in landscape

20%

A TARGET OF BIODIVERSITY NET GAIN

Ecologically enriching the site to the benefit of wildlife



1

JOB PER DWELLING

An estimate that CGC will generate a job for every home

15

MINUTE VILLAGES

Create neighbourhoods where day-to-day needs are accessible by an active journey of less than 15 minutes

10+

THE POWER OF

Clustering complementary mixed uses and facilities such that they become greater than the sum of their parts

100%

WORKING TOWARDS WASTE DIVERSION FROM LANDFILL

Supporting a culture of re-use and recycling

3

TREES PER DWELLING

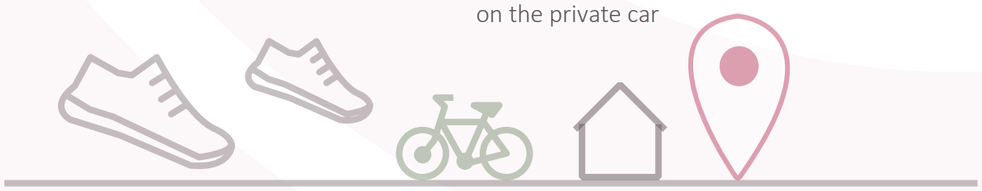
Routes and spaces enriched by the planting of over 16,000 trees

AT LEAST

60%

OF TRIPS BY NON-CAR AND ACTIVE MODES OF TRAVEL

Placemaking that fundamentally reduces reliance on the private car



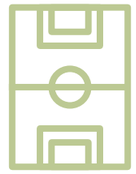
KEY TARGETS & METRICS FOR THE GARDEN COMMUNITY

Around 5500 New Homes
Strategic delivery of much-needed dwellings in a comprehensively planned and delivered new community

4 New Villages Creating areas of distinct character and identity within the wider settlement

Over 9ha of Employment Land
Offering opportunities for a diverse range of businesses and employment activities as part of Chelmsford's growth

Over 17ha of Formal Sports Pitches Catering to a range of outdoor sports and recreation activities, as part of wider healthy placemaking objectives



Railway Station and Bypass Strategic transport infrastructure in support of the major expansion of the City

New and Enhanced Bus Services With routes and priorities through the new neighbourhoods that will maximise their appeal and convenience

20km of Multi-Functional Greenways
Creating a network of movement routes - for people and for nature

2 Levels of Mobility Hubs
Making sustainable transport choices appealing and convenient

3 New Destination Parks Covering 150ha
Major new public open space that will serve Chelmsford and the wider area

Up to 4 New School Sites
Providing up to four primary schools with co-located early years, a secondary school, and potentially sixth form. All accessible by safe and sustainable means of transport.

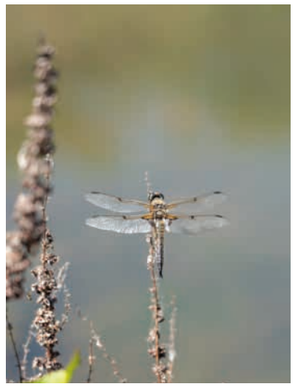
THE VISION

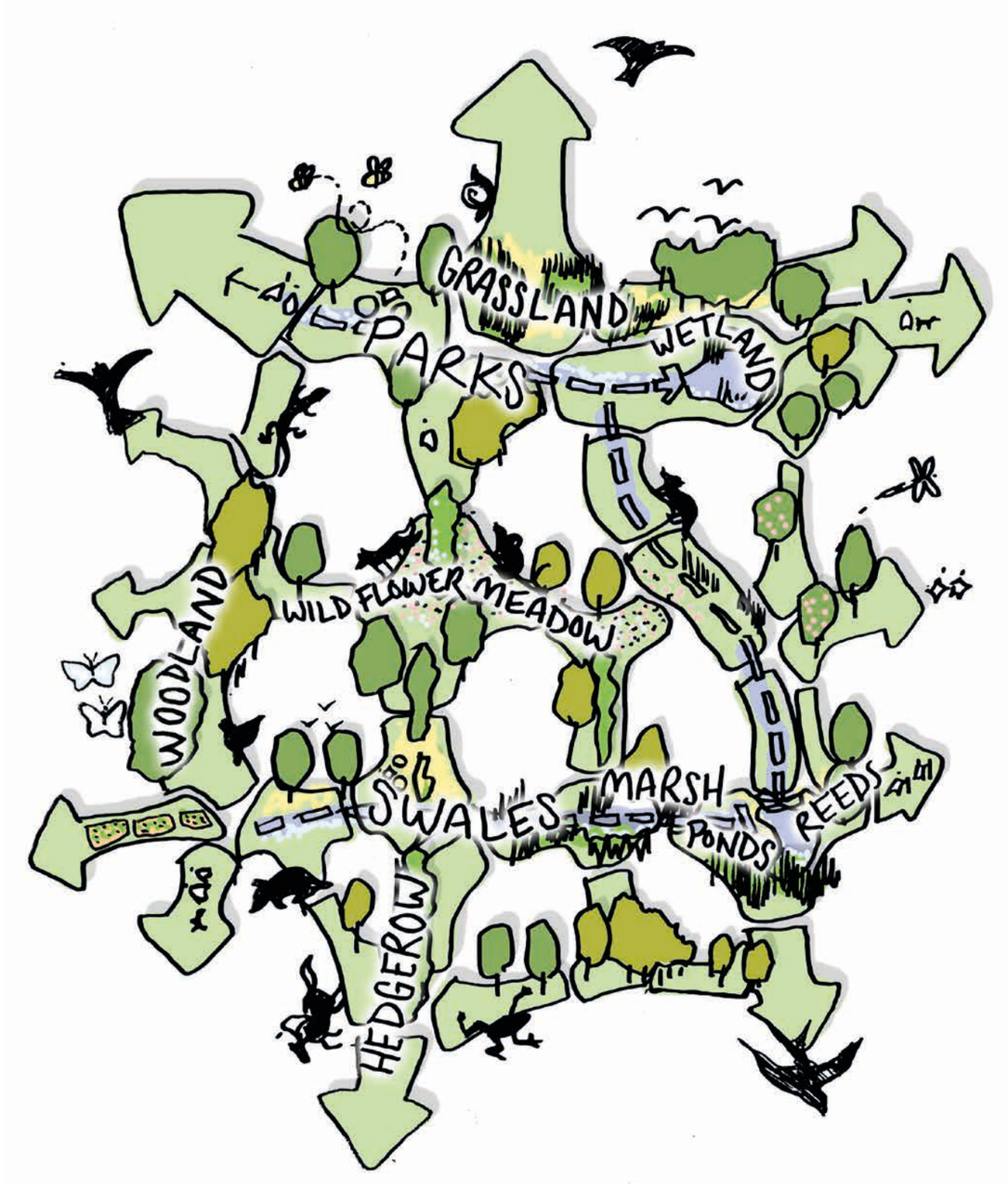
REWILDING EVERYDAY LIFE

GREEN AND BLUE INFRASTRUCTURE EVERYWHERE

TO ACHIEVE THE SHARED ETHOS OUR COMMUNITY WILL;

- Be shaped by its inherited landscape, history and ecological assets
- Prioritise nature recovery and connect people with nature
- Create a linked network of unique, inclusive and diverse parkland destinations
- Celebrate the area's rich heritage through a network of Discovery Trails
- Prioritise active travel by creating attractive, inviting and safe multifunctional Greenway corridors
- Retain and enhance key habitats and create a mosaic of interconnected habitats rich in biodiversity
- Encourage wildlife into the built realm and public open spaces to increase biodiversity and connect people with nature





THE VISION
REWILDING EVERYDAY LIFE
GREEN AND BLUE INFRASTRUCTURE EVERYWHERE

Green corridors that are havens for both people and wildlife

THE VISION

REWILDING EVERYDAY LIFE

GREEN AND BLUE INFRASTRUCTURE EVERYWHERE

KEY STRATEGIES

1) Nature Recovery Networks
2) Destination Parks
3) Discovery Trail
4) Inclusive Play
5) Outdoor Sports
6) Productive Landscapes
7) Sustainable Drainage

1) Nature Recovery Networks New multifunctional Greenways will protect, restore, enhance and create nature-rich habitats through a connected habitat mosaic which embraces CGC's landscape, ecological and historical assets and connects existing fragmented and isolated habitats, encouraging species movement and population growth.

2) Destination Parks Three substantial new Destination Parks will be provided in locations evenly distributed across the development.

50%

of CGC will be blue, green infrastructure.

3) Discovery Trail A network of routes that celebrate, reference and interpret the area's rich history. The Discovery Trail will run through the Greenways and destination parks along surfaced paths, connecting important assets and highlighting the area's heritage via methods such as information boards and public art.

4) Inclusive Play
Play areas will be accessible via pedestrian and cycle routes, providing safe, inclusive and sustainable movement between open space destinations; They will respond to the individual character of their setting, landscape and heritage assets and offer unique experiences that create stimulating spaces to promote imaginative play.

5) Outdoor Sports Formal sports pitches as well as large amounts of open spaces ideal for informal activities such as cycling, running and walking.

6) Productive Landscapes
Community gardens, orchards and allotments will provide an accessible growing landscape for residents to cultivate, produce and grow food. Informal opportunities can exist within the Greenways and open spaces for the foraging of berries, nuts and herbs as part of the planting palette.

“ The majority of new homes located within a 7 minute walk of a park ”

7) Sustainable Drainage A network of swales and ponds drain rainwater off the land. Water naturally returns to the ground and surrounding water courses. The SUDs network has the added benefit of providing wetland habitats for wildlife.

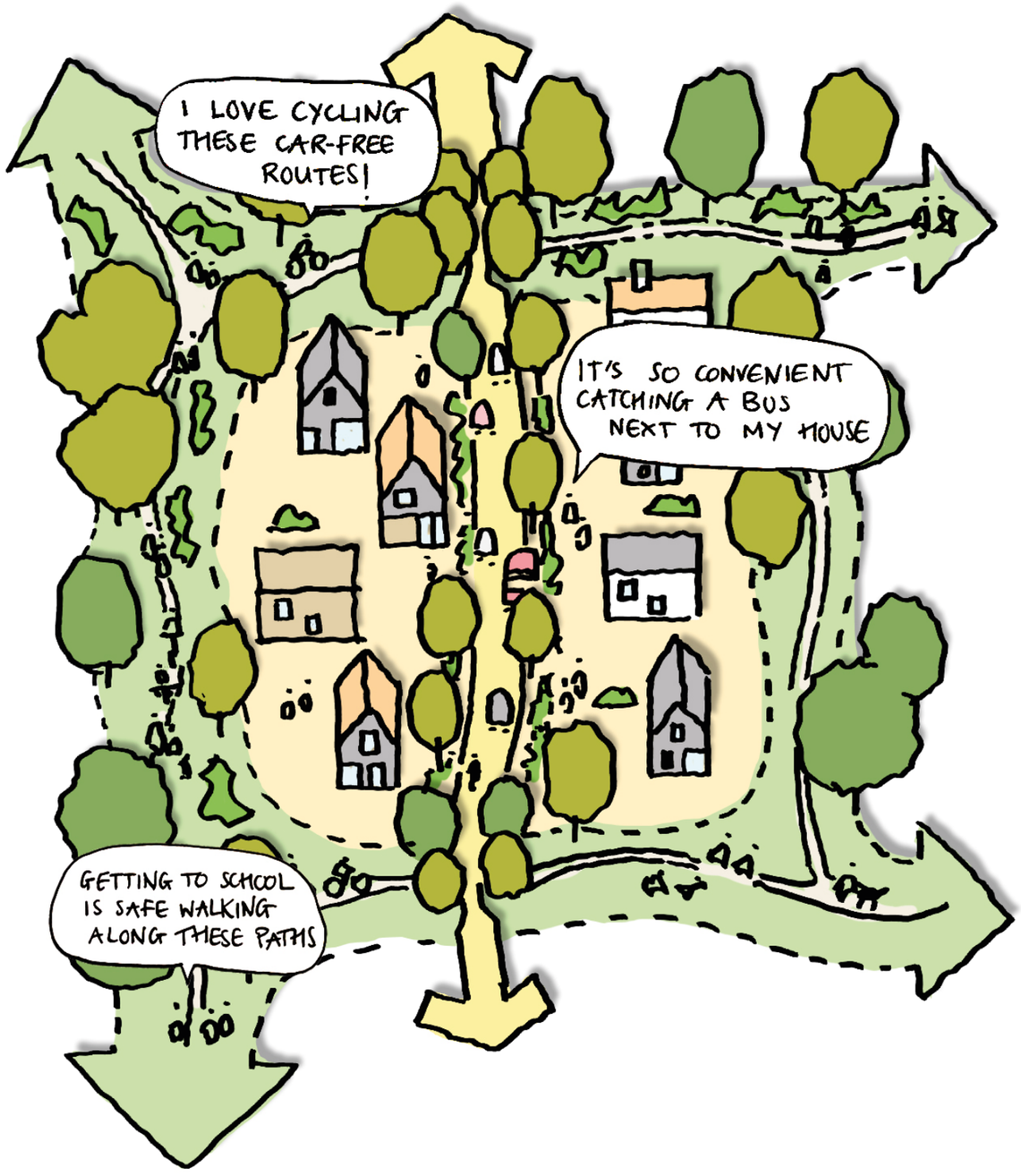
THE VISION

PROMOTING ACTIVE TRAVEL

WALKABLE, CYCLABLE, CONNECTED

TO ACHIEVE THE SHARED ETHOS OUR COMMUNITY WILL;

- Make at least 60% of trips by non-car and active modes of travel
- Maximise trips by bus - create a culture of travel by bus and ensure the services are commercially viable with bus stops targeted to be within of 400m walk from every home
- Provide a connected and safe movement network for pedestrians and cyclists to maximise trips by active modes
- Minimise parking provision with an aspiration in the long term to deliver a parking ratio of less than 1 per dwelling
- Monitor and adapt in order to capitalise on the spatial and environmental benefits of reduced car ownership



THE VISION

PROMOTING ACTIVE TRAVEL

WALKABLE, CYCLABLE, CONNECTED

Active travel route integrated with the landscape

THE VISION

PROMOTING ACTIVE TRAVEL

WALKABLE, CYCLABLE, CONNECTED

KEY STRATEGIES

1) At least 60% of trips by non-car and active modes
2) Bus Travel Culture
3) Prioritised Walking and Cycling
4) Discouraged Car Ownership
5) Two levels of Mobility Hubs
6) Mobility Hubs within a 15 min walk
7) Monitor and Respond

The image below illustrates a typical bus route with a SUDs feature groups of trees and a curve in the road for slowing the traffic down.

Key

1) At Least 60% of Trips By Non-Car And Active Modes Of Travel The garden community will seek to provide a development, where at least 60% of trips originating in the new neighbourhoods are to be made by walking, cycling or buses.

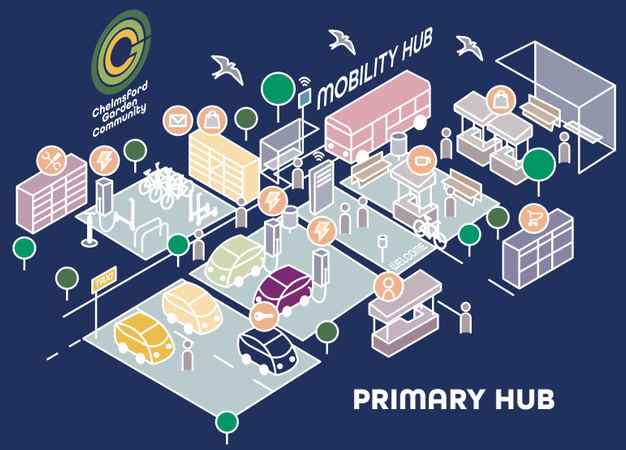
“ CGC will facilitate and encourage behavioural change - excessive usage of the private car will be a thing of the past! ”

2) Bus Travel Culture New and extended services, with a target that bus stops are within 400 metre walk of every home connecting to key destinations such as Chelmsford City Centre and the new Beaulieu Railway Station.

3) Prioritised Walking and Cycling A direct and secure network of pedestrian and cycle routes will be provided throughout the site.

5) Differenet levels of Mobility Hubs The primary mobility hub will cluster together all of the transportation services along with retail and cafes. All of the other village centres will feature slightly but fully functional smaller secondary hubs.

Two Levels of Mobility Hubs

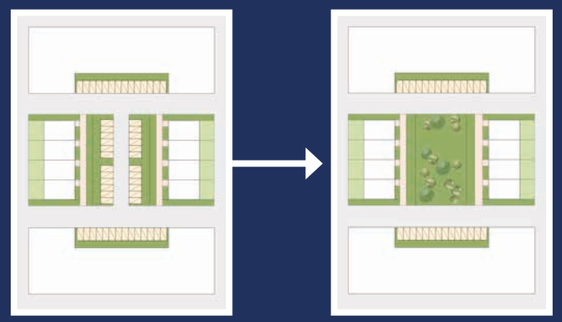


PRIMARY HUB

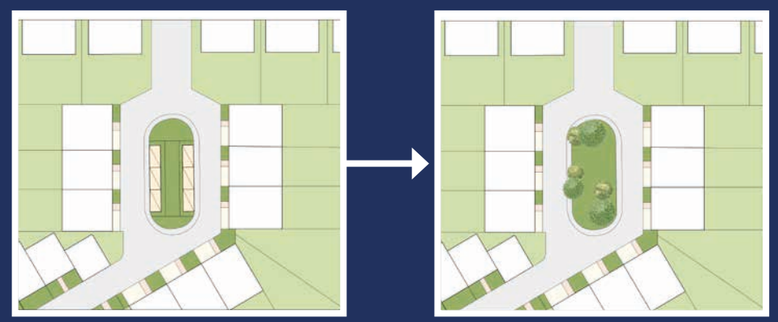
15min walk

target to the nearest mobility hub

7) Monitor and Respond Flexibility will be at the heart of the community - to be able to deliver infrastructure required to accommodate future advances in transport and highway related technologies.



Indicative diagrams showing transition to green space



6) Mobility Hubs within a 15 minute walk of each dwelling The mobility hubs are well distributed across the masterplan in each village centre.

4) Discouraged Car Ownership

In parallel with the implementation of public transport, active travel routes and evenly distributed car clubs within 400m of every home, on plot parking will be limited car and further reduced as the development progresses and car ownership patterns change. Off plot parking will be promoted and designed to enable the transformation into public spaces as car usage patterns change.

THE VISION
INCLUSIVE VILLAGES
ACCESSIBLE, AFFORDABLE, LIVEABLE

TO ACHIEVE THE SHARED ETHOS OUR COMMUNITY WILL;

- **Deliver a wide mix of homes - variety of tenure, type and sizes**
- **Homes and places welcoming to all - catering to a range of needs and designed with connectivity and community in mind**
- **Create streets with multiple functions - full of life and not of cars**
- **Connect everyone through smart enabled homes**
- **Deliver homes and buildings fit for a carbon zero future**
- **Create equal opportunities for access to the natural environment, employment and education**
- **Be a place where people can lead healthy lives**

KEY STRATEGIES

1) A varied mix of homes
2) Net zero ready homes
3) Cluster town centre uses to create places that are greater than the sum of their parts
4) A home for life
5) Everyone connected
6) Inclusive and adaptable design

Car free streets become community spaces creating an opportunity to inhabit the street with...

1. Informal planting
2. Benches
3. Chalk pavement drawings
4. Communal picnic benches
5. Deck chairs
6. Outdoor play
7. Bike Storage is easily accessible and close to the door
8. EV Car club parking bays in convenient locations
9. Bus stops within easy reach of all homes
10. Street trees
11. Variety of sizes and tenure of homes
12. Low ownership car parking kept clear of streets
13. Rain gardens, permeable paving and swales
14. In the future unused car parking spaces can be reclaimed as private gardens or communal spaces

THE VISION
INCLUSIVE VILLAGES
ACCESSIBLE, AFFORDABLE, LIVEABLE

WHAT IS THE POWER OF 10+?

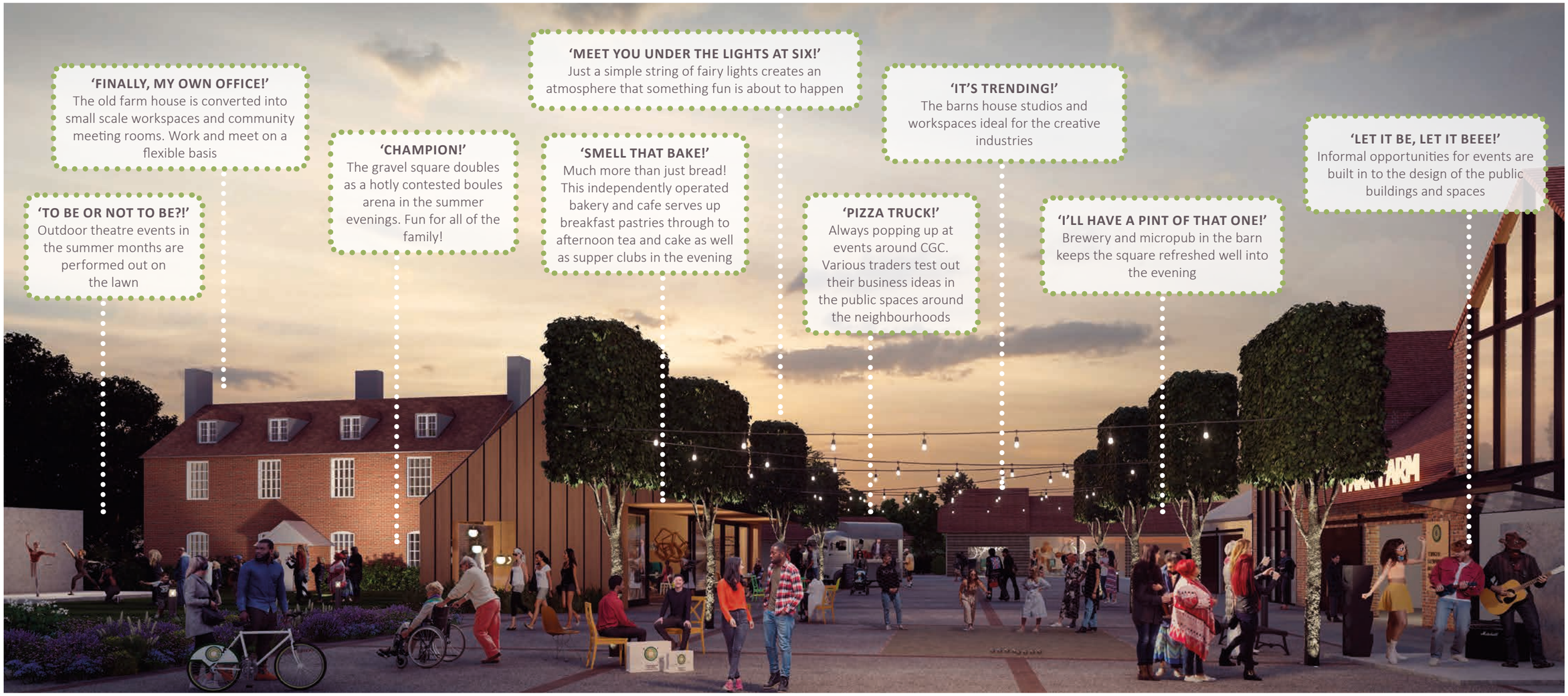
The Power of 10+ demonstrates that a well-planned and well-visited place can become greater than the sum of its parts, and that, by providing people with ten or more reasons to visit a place, the chances of them visiting and supporting various activities there will increase significantly.

Each of the four new village centres will seek to achieve the Power of 10+. They will become 'community anchors', offering a rich range of reasons to visit them. From a bench to a grocery store, from a post box to a cafe, each of these reasons is stronger if coupled with a couple more.

When these reasons add up to ten or more then a new form of self-sustaining synergy can be achieved, a place can thrive and the range of activity it supports can be expected to increase further over time.

An evening economy could be promoted via methods such as conditions on café/restaurant operating times, targeted floorspace allocation for use classes, well designed lighting schemes and provision of attractive and safe public spaces.

Applying the principle of power of 10+ to Park Farm



THE VISION

INCLUSIVE VILLAGES

ACCESSIBLE, AFFORDABLE, LIVEABLE

1) A varied mix of homes
Homes in a varied mix of types, sizes and tenures will be provided across all phases of CGC. Apartments, townhouses, semi and detached houses will be able to accommodate changing housing needs for residents.

2) Construction of net zero ready homes which utilise high fabric performance and renewable energy technologies.

4) A home for life
The range of homes at CGC, ease of getting about and a strong community spirit will help support residents through all life's stages.

6) Varied, flexible and accessible facilities CGC will provide facilities that serve the needs of a variety of different groups of people, including those who are disadvantaged or with disabilities.

7) Inclusive and Adaptable Design
Neighbourhoods will provide a range of homes including those that are adaptable and wheelchair accessible.

"...our community will give people the opportunity to meet and enjoy the sense of belonging, encouraging social support and interaction; play and active recreation; enjoyment of green and natural environments, growing healthy food; and taking exercise such as walking and biking..."

3) The power of 10+ Clustering of community facilities that are greater than the sum of their parts.

"We will be at the forefront of setting a clear pathway with the construction of net zero ready homes"

5) Everyone Connected
High efficiency connections across the development that will support smart homes, low carbon heating and water efficient homes.

THE VISION
15 MINUTE NEIGHBOURHOODS
CIRCULAR ECONOMY

WHAT IS A 15 MINUTES NEIGHBOURHOOD?

Sustainable and healthy places cannot be ones that are predicated on the use of the car, and cannot be ones where those who live and/or work there have to travel by motorised transport to access the simple needs of their day-to-day routines.

Carefully planned and organised new neighbourhoods can ensure that these simple needs can be met by undertaking a short journey which constitutes a pleasant walk or a short cycle ride. The benefits of such environments are not only ones of convenience: they extend to physical and mental health and wellbeing, social interaction and cohesion, active travel being prioritised over car use, reduced traffic and congestion and the creation of places that can enjoy enhanced self-sufficiency while supporting a circular economy.

A careful balance must be struck in the provision of facilities that can be commercially sustainable at the heart of communities: those uses must be tailored in their range and scope to become genuinely beneficial to those living within a 15 minute one way journey from them. Some uses cannot be provided within every neighbourhood, and for these the provision of frequent and direct public transport is provided.

At Chelmsford Garden Community the masterplan has been carefully evolved to maximise the opportunity for the creation of 15 Minute Neighbourhoods.

SO MUCH WITHIN 15 MINUTES...

THE VISION
15 MINUTE NEIGHBOURHOODS
CIRCULAR ECONOMY

KEY STRATEGIES

1) 15 Minute Neighbourhoods
2) Four mixed use Village Centres
3) Logistics hub
4) Innovation Hub
5) Multiple schools and early years provision
6) Working towards 100% diversion of waste from landfill

The space is filled by a mixture of uses – a community café spills out onto the square and a community centre presents an active frontage. To the rear, a market is underway. Rain garden planting with the opportunity for substantial trees reflects the approach to landscape in CGC – informal, abundant and promoting biodiversity.

THE VISION

15 MINUTE NEIGHBOURHOODS

CIRCULAR ECONOMY

TO ACHIEVE THE SHARED ETHOS OUR COMMUNITY WILL;

- **Provide flexible, high quality spaces to encourage the local economy**
- **Prioritise reduce and re-use before recycling waste**
- **Provide a mix of flexible employment spaces**
- **Embed community facilities within the neighbourhood hubs**
- **Target zero waste to landfill through a year-on-year reduction in household waste**
- **Support increased working from home and smart residential and commercial technologies**

1) 15 Minute Neighbourhoods A range of community facilities are embedded within the neighbourhood centres across the masterplan to enliven and enrich the entire development and ensure people can meet most of their needs locally.

2) Four Village Centres will provide a range of retail, leisure, commercial and employment floorspace. They will embed the principles of the 15 minute neighbourhood.

15

minutes walk or cycle for all daily needs

4) Innovation Hub The Innovation Hub could target the office/high tech sectors, as well as other key growth areas: creative, digital and media, and business and professional services.

5) Multiple schools and early years provision One all-through school, three primary schools and early years provision in every village centre. Schools will be within a short, safe cycle or walk from all homes.

3)Logistics hub

A potential Logistics Hub at Willow Hill would have easy accessibility to the strategic highway network, enabling the hub to connect with customers within CGC and the wider area.

“Work to live and not live to work - from anywhere in the community!”

6) 100% Diversion of waste from landfil Prioritising reusing and reducing before recycling, CGC will work towards 100% diversion of all wastes from landfill through a year-on-year reduction in household total waste.

THE VISION

PARTICIPATORY GOVERNANCE

PRO-ACTIVE COMMUNITY

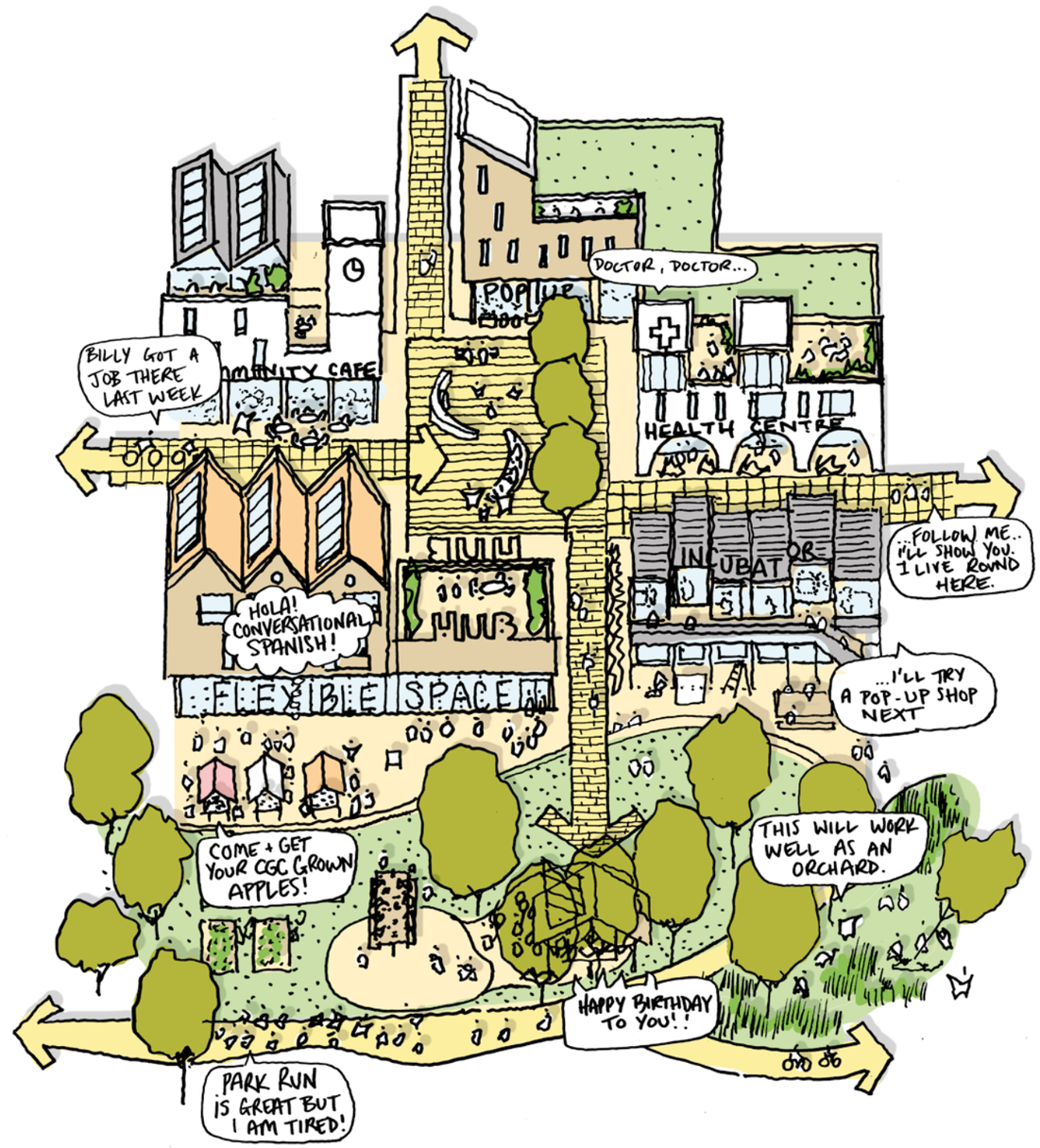
STRATEGIES ARE BASED ON GARDEN COMMUNITY PRINCIPLES

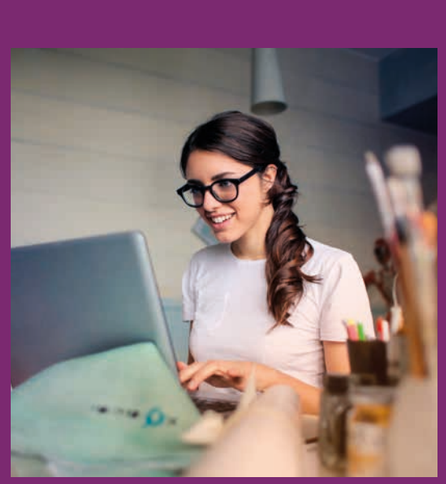
TO ACHIEVE THE SHARED ETHOS OUR COMMUNITY WILL;

- **Introduce a number of stewardship initiatives**
- **Establish long term management and maintenance of green and blue infrastructure**
- **Deliver local community cohesion**
- **Enable collaborative stewardship**
- **Deliver an educational and skills resource**
- **Support health and wellbeing improvements for the residents**

KEY STRATEGIES

1) Early establishment of stewardship bodies
2) Site-wide stewardship
3) Stewardship Steering Group
4) Common principles and structures of community-led management
5) Garden Community Management Trust
6) A Programme of Community Initiatives





1) Early establishment of stewardship bodies
By putting in place robust structures and approaches to stewardship from the inception of the Garden Community, gives the stewardship organisation more chance of becoming self-sustaining and effective.

> **Stewardship is considered early on in the planning of CGC and hardwired into delivery, financial and governance arrangements**

2) Site-wide stewardship Across all phases, parks and villages, site-wide stewardship is essential for ensuring a consistant approach to the management of high quality environments.

3) Stewardship Steering Group
Could include members of the local community, Parish Council, City and County Councils, the developer Consortium, and other local residents, resident groups and stakeholders.

4) Common principles and structures of community-led management The stewardship body, formed from members of the Garden Community, will establish the structures and principles that will govern the Management Trust.

6) A Programme of community initiatives
The Community Management body will be in charge of organising community events, health and well-being initiatives, educational opportunities as well as the maintenance of community assets.

5) Garden Community Management Trust Will establish arrangements for community-led management and the design and funding of open space, public realm and Green Infrastructure. The Management Trust will also consider potential for income generating assets.

> **Partnership with local residents that is open to democratic and transparent procedures**

05.

ILLUSTRATIVE MASTERPLAN

ILLUSTRATIVE MASTERPLAN DELIVERABLES

The following Illustrative Masterplan is based on an indicative development specification that brings to life how the Garden Community can deliver the vision and ethos described in the previous section of this document. Space has been created for; building inclusive neighbourhoods; a network of parks and Greenways forming the framework of green and blue Infrastructure; direct active travel and convenient public transport choices; a circular economy based on the 15-minute neighbourhoods and a place which encourages pro-active community throughout. The wider context masterplan demonstrates how the new Garden Community will be connected cohesively to the existing communities in Beaulieu and Channels and the wider City.

KEY DELIVERABLES

The development will deliver the following:

- Around 5,500 new homes of mixed size and tenure, of which 35% will be affordable.
- 9.19ha of dedicated employment land.
- Four new mixed use Village Centres.
- A new all-through school (including 1 x primary with co-located early years, 1 x Secondary and potentially a sixth form), up to three further primary schools (with co-located early years) and at least two standalone early years facilities, as demand requires.
- 238.5 hectares of green and blue infrastructure (including the 108.8 hectare Dukes Wood Nature Park).
- 17.3 ha of new outdoor formal sports facilities.
- Comprehensive infrastructure to support sustainable travel modes.
- New Radial Distributor Road 2 from Essex Regiment Way.
- Safeguarding of land for the future expansion of Chelmer Valley Park and Ride.
- Safeguarding of land for Chelmsford North East Bypass and provision of future bridge crossings.
- Travelling Showpeople site for 9 serviced plots.

INCLUSIVE NEIGHBOURHOODS

Chelmsford Garden Community is comprised of the existing Channels and Beaulieu communities along with four newly proposed Villages at:

Park Farm: Located at the heart of CGC, it will be the principal village including a mix of village centre uses at ground floor such as shops, cafes, community, co-working, healthcare and commercial floorspace. A primary Mobility Hub alongside the proposed All-Through School and a standalone early year's childcare facility. The existing Park Farm buildings, where possible will be reconditioned as a community, business and arts and cultural space.

Great Belsteads: Forming the western entrance of CGC, it will announce a key arrival to CGC from Essex Regiment Way. The village centre will feature commercial, and community uses at ground floor of apartment buildings, a secondary mobility hub, a primary school and a standalone early year's childcare facility.

Willow Hill: Will be the smallest of the village centres with a small selection of shops and commercial uses, a secondary mobility hub and primary school.

Hawthorn: Hawthorn Village is characterised by its proximity to the proposed Dukes Wood Nature Park.

EMPLOYMENT HUBS

A total of 9.19 ha of employment land is proposed across two main employment sites, as well as a smaller site adjacent to the existing Channels complex as follows:

CGC Innovation Hub: (4.79ha) This area could target the office/ high tech sectors, as well as other key growth areas such as creative, digital, media and, business and professional services and provide around 39,940sqm of floorspace.

Willow Hill Employment Hub: (3.89ha) Is proposed as an area for 'last mile' logistics activity due to its position adjacent to a key transport node and its ability to intercept HGVs from key arterial roads and provide around 15,566sqm of floorspace. The location would enable the transition of goods to more sustainable last mile delivery vehicles into CGC and the wider City.

Channels Employment Hub: (0.51ha) This will provide office space in the form of co-working premises and small-scale workspace hubs and provide around 1,440sqm of floorspace.

A further 9,757sqm of village centre uses can be accommodated across the four new Village Centres to support the local economy including approximately 250 to 500 sqm of flexible co-working floorspace within each Village Centre.

ILLUSTRATIVE MASTERPLAN DELIVERABLES

NON-RESIDENTIAL FLOORSPACE

A table identifying the indicative mix of non-residential floorspace is provided within Appendix 4.

DESTINATION PARKS AND SPORTS HUBS

Three substantial new Destination Parks are proposed, evenly distributed across CGC. One in the west, one in the east and one centrally located:

Channels Discovery Park - extending from Channels Park to the south up to the northern boundary at Wheelers Hill, the 32 hectare park will feature ponds and wetland habitats, coppices of trees and the Great Belsteads Sports Hub (6.1ha).

Park Farm Meadows - following the alignment of Park Farm Brook, it will be centrally located with Park Farm Village forming the backdrop to the 11 hectare park.

Dukes Wood Nature Park - the 108.8 hectare nature park is proposed to occupy the north eastern quadrant of CGC. Its centrepiece will be a 48 hectare wetland area and in addition extensive areas of new woodland planting is proposed around the north and eastern edges and to the west a new Dukes Wood Sports Hub will be delivered (7.36ha).

GREENWAYS

The villages will be interconnected by around 20km of strategic Greenways that will protect, restore, enhance and create nature-rich habitats encouraging species movement and wildlife to thrive. Blue infrastructure will also be accommodated in the Greenways in the form of swales and ponds rich in biodiversity.

A SUSTAINABLE CONNECTED COMMUNITY

In addition to Greenways and Discovery Trails, a network of pedestrian and cycle friendly routes that connect into the wider active transport network outside the site are proposed.

An efficient network of bus routes and mobility hubs is proposed within a short walk of all homes, businesses and attractions as well as key destinations. Mobility hubs are proposed around the site that will accommodate a variety of facilities and services such as travel planning, electric scooters and bikes and car club rentals.

A series of bus gates are proposed across the masterplan that will restrict and discourage direct travel by private motor vehicles making journeys by walking, cycling or buses more convenient, more direct and the preferred choice.

HOUSING

The illustrative masterplan provides for around 5,500 new homes, of which 65% will be market housing and 35%will be affordable.

The mix of housing will be provided in accordance with the most up to date Planning Policy (presently Policies DM1 and DM2), the Strategic Housing Market Assessment (SHMA) and the Council's Housing Strategy.

The delivery will include appropriately accessible and adaptable housing, which meet building regulations, as well as specialist housing. Where required, financial contributions towards specialist housing may be made to support delivery in more appropriate locations.

The Chelmsford Garden Community also presents an opportunity for the delivery of community-led housing; through high levels of community participation and engagement, as set out in the Stewardship Statement, the ability to potentially include community-led housing schemes can be explored.
The precise mix and density of units will vary depending on the local context of each RMA land parcel as they are brought forward.
Self build and custom build housing will be provided in line with Planning Policy with phasing and delivery details to be discussed as part of OPA's and RMA's.

DOMSEY LANE

Land is identified on the Illustrative Masterplan outside of the CGC allocation boundary along Domsey Lane which bisects the site. These properties and parcels of land may come forward as part of future standalone planning applications which must demonstrate how they integrate within the masterplan, deliver suitable new east west connections and accord with the DFD and wider planning framework including proportionate contributions in accordance with the IDP.

Key

VILLAGES

1 Village Centres

DESTINATION PARKS

2 Channels Discovery Park
3 Park Farm Meadows
4 Dukes Wood Nature Park
5 Channels Park

EMPLOYMENT AREAS

6 CGC Innovation Hub
7 Willow Hill Employment Hub
8 Channels Employment Hub

SPORTS

9 Sports Hubs

SCHOOLS

10 Primary School
11 All Through School

HERITAGE ASSETS

12 Park Pales
13 'The Ride'
14 Park Farm
15 Powers Farmhouse
16 T2 Hanger and Romney Hut
17 Channels Farmhouse
18 Peverel's Farmhouse
19 Pratt's Farmhouse
20 Belstaed's Farmhouse
21 Mount Maskall
22 New Hall (Beaulieu Palace)

OTHER USES

23 Travelling Showpeople
24 Development north of Northern RDR

MOVEMENT

25 Park And Ride
26 Chelmsford NE Bypass
27 Northern RDR

CGC Site boundary
Primary street
Bus Gates
Walking and Cycling routes
28 Park and Ride (Land safeguarded for extension)
Primary Mobility Hub
Secondary Mobility Hub
Key site access points

Park Farm Village

Park Farm Community Hub

Active Travel

Green Corridors

06.

GUIDING FRAMEWORK PRINCIPLES

GUIDING FRAMEWORK PRINCIPLES :

MOVEMENT STRATEGY

“ CORE OBJECTIVE

Create a development, with integrated and accessible transport systems, with **walking, cycling and public transport designed to be the most attractive forms of movement.** This will be underpinned by a Modal-Share Target of **60% of all trips originating** within the development **to be by non-car means** by completion of the development. The target within the development will be for trips by Active Modes to represent the majority form of travel.

The delivery of infrastructure and transport incentives required to meet these targets, will ensure that a **sustainable and healthy culture will thrive** within the Garden Community and in turn contribute towards minimising vehicular emissions. ”

GUIDING PRINCIPLES

1. Provision of a connected movement network, which provides high quality network of primary and secondary links for pedestrians and cyclists. The on street cycle network will be designed in accordance with the requirements of LTN1/20 or any successor documents with protection for cyclists provided in accordance with Table 4.1 of LTN1/20.

2. Providing Bus Services to Chelmsford City Centre/NE Chelmsford Railway Station/ Broomfield Hospital and the wider public transport network through delivery of new and extended bus services from Beaulieu and Channels that will benefit from the implementation of an affordable single fare zone.

3. Incorporate bus-gates to create sections of ‘Bus/Cycle Only’ roads within the development, to ensure that all non-car uses have a clear journey time advantage over users of the private car.

4. Bus Stops will be easily accessible and located within 400 metres walk from every home.

5. Provide access to a Car Club, with a target that one space is available within 400m walk of every home to encourage a transition to households living without ownership of a private car.

6. Delivery of a network of Primary and Secondary Mobility Hubs throughout the site with varying functions, facilities and scale to encourage journeys by sustainable means because it is the most efficient way to travel.

7. Enhance connectivity to key destinations in the immediate and wider surrounding area through delivery of a series of transport related improvements and interventions.

8. Respond to successes and failures through monitoring performance against the Modal Share and Active Mode Targets to ensure at all times the Garden Community leads the way in delivering sustainable travel alternatives.

GUIDING FRAMEWORK PRINCIPLES : MOVEMENT STRATEGY

A sustainably planned movement network with space for different transport modes and technologies will be required in order to deliver a forward looking, high-quality place, which leads the way in transitioning from ownership of the private car and therefore optimises social, environmental, economic and health benefits.

Sustainable movement, which can be categorised as non-car and active modes, will be at the heart of the development with integrated healthier, safer, inclusive and non-polluting choices that promote more sustainable forms of transport to ensure they become the most convenient way to travel. This applies across the development and includes the movement of people, goods and services within and around the site.

Each OPA will be accompanied by a Transport Assessment, which will reference the access strategy, series of infrastructure proposals and travel plan measures in accordance with the following DFD GFP's and will need to demonstrate how they will contribute to achieving both the Modal Share and Active Mode Targets. *Full details of these proposals are contained within the Evidence Base*

THE BUS STRATEGY

Bus travel has proven to be a huge part of the success story of the first stages of CGC at Beaulieu and Channels in shifting travel patterns away from use of the private car.

The next stages of the Garden Community will deliver further enhancements to build on this success with the key components of the proposed Outline Bus Strategy including:

- The creation of new and extended services, consistent with the target of providing bus stops within 400 metres of every home where possible and connecting to key destinations such as Chelmsford City Centre and the new Beaulieu Railway Station, including inter-connections at Chelmer Valley Park and Ride.
- Connecting other destinations outside CGC such as Broomfield Hospital through services directly from a series of Mobility Hubs around the Garden Community.
- A package of marketing and incentive measures for every resident such as free bus fares for every new resident for a year will encourage journeys by bus.

THE ACTIVE MODES STRATEGY

The definition of Active and Non-Car Modes is shown in the table below;

Active Modes	Non-Car Modes
	All Active Modes
Walking	Scheduled Bus Services
Wheelchair and Mobility Scooters	Demand Responsive Bus Services
Cycling	Private Hire Passenger Transport Services, for example School Buses, Coach Trips
E-Cycles, Tricycles and adapted bikes	

Table 1: Mode Definitions

The target is that the Active Modes represent the majority mode of travel for trips within the Garden Community, through:

- The provision of a comprehensive, inter-connected, direct, and secure network of new pedestrian and cycle routes within the Garden Community.
- Inclusion of incentives within the marketing measures to encourage journeys on foot and by cycle by residents and employees within the development.
- The provision of secure cycle parking at various points within the Garden Community and hire schemes for Active Modes included within the mobility hubs

THE PARKING STRATEGY

The approach to parking will be integral in ensuring the Garden Community does not encourage increased levels of car ownership. The proposed parking strategy will restrict on-plot parking to an average of 1 space per dwelling in the early phases, with off-site provision in nearby parking clusters linked to the network of Mobility Hubs. Over time, if car ownership falls the parking cluster can be returned to other beneficial land uses.

THE MODAL SHARE STRATEGY

To achieve the proposed Modal Share Target, the modal share strategy will be an integral part any success.

It is proposed that new and enhanced connections will facilitate at least 60% of trips leaving the development, and 60% of trips inside the development, to be by non-car means.

In order to achieve the Modal Share Target, active travel will be promoted as the primary mode of travel within the CGC. For definition, active modes include for walking including wheelchair and mobility scooter use, cycling including e-bikes, tricycles and adapted bikes and other user propelled micro-mobility options. Meeting these targets will also be promoted via high-quality bus provision and accessibility to mobility hubs.

GUIDING FRAMEWORK PRINCIPLES:
MOVEMENT STRATEGY

ACTIVE MOVEMENT - WALKING & CYCLING

“ OBJECTIVE

Enable Active Modes of travel to become the norm to get in, around and out of the Garden Community to deliver the ambitious target for at least **60% of journeys within the development to be undertaken by non-polluting means.** An interconnected network of active travel routes will ensure exemplar provision for wheelchair users, mobility scooters, cyclists (including e-bikes), tricycles and adapted bikes and other user propelled micromobility options that are available now and those that will emerge in the future. ”

GUIDING PRINCIPLES

1. Deliver a comprehensive highly connected secure network of primary and secondary active travel routes that directly connect the site to its own surroundings including employment, retail and leisure destinations.
2. In accordance with the current LTN 1/20 Guidance and any successor guidance segregate cyclists from the private car, particularly with priority at the majority of junctions, except for lightly trafficked roads, with low speed limits, where LTN1/20 Guidance recognises that a cyclist can comfortably make the journey on street.
3. Deliver a coordinated, simple, consistent and legible approach to wayfinding and signage for all users, especially for those with disabilities and special needs such as partial sightedness.
4. Lead the delivery of the Cycle Strategy to improve connectivity to and from the Garden Community to Chelmsford City Centre, Broomfield and Beaulieu Railway Station and mitigate severance by providing additional pedestrian and cycle crossings of Beaulieu Parkway, Essex Regiment Way and the Chelmsford North East Bypass.

ACTIVE MOVEMENT - WALKING AND CYCLING

ESSEX REGIMENT WAY SUSTAINABLE TRANSPORT CORRIDOR (ERWSTC)

It is proposed to create an Essex Regiment Way Sustainable Travel Corridor that will see a reduction to the existing speed limit on a substantial part of Essex Regiment Way from 50mph to 40mph following the opening of the Chelmsford North East Bypass.

The proposals are predicated on the assumption that the road transitions from a Priority 1 Road and a Strategic Route in ECC's Route Network to a Sustainable Travel Corridor.

The new Corridor will enable the provision of additional pedestrian and cycle crossings of Essex Regiment Way helping to reduce east-west severance, together with the provision of a new north-south cycleway substantially along the western side of the road that will provide an active travel route from the Garden Community to a new cycleway along the Chelmer Valley Road connecting with existing active travel routes to the city centre.

The precise detail of the measures associated with the ERWSTC will be agreed at the OPA stage.

IDP References: C11

CYCLING

A comprehensive cycle network is proposed within the Site as shown on the Land Use and Access FPP, this includes principle active travel routes predicted to experience high cycle demand or higher vehicle flows and the provision of priority for cyclists at the majority of junctions within the development.

Beyond the site, key destinations for cycling have been identified as follows:

- Chelmsford City Centre, Railway Station and Anglia Ruskin University
- Broomfield Hospital
- Great Leighs, Great Notley, Braintree
- Beaulieu Exchange Employment Area, and Beaulieu Railway Station and
- Springfield Business Park, Winsford Way

A proposed strategy for delivery of these improvements is contained within the Movement Strategy Evidence Base. Each OPA will need to demonstrate how it will contribute to the CGC Cycle Strategy through delivery of the following component parts:

- Creation of a comprehensive cycle network that seamlessly links each area of the site
- Contributions towards, or provision of, new or upgraded cycle routes to the key destinations surrounding the site and wider area
- Provision of information and incentives to encourage journeys by cycle including discounts for educational initiatives such as cycle proficiency training to encourage residents to feel more comfortable and confident to make journeys by cycle to key destinations

IDP References: C12, C13, C14, C15, C17 C18, C19, C24, C26, C27

WALKING

Walking will be an important part of the experience for anyone living, working and visiting the Garden Community. It will provide the ability to travel to work, see friends and experience the built and natural environment that is being delivered.

A network of primary and secondary active travel routes will crisscross and run throughout the development and allow users to make their way to key destinations without the need to take extended routes or encounter excessive interaction with private vehicles. The design, location and function of these pathways will be important to ensure users, not only have a positive aesthetic experience of using the routes, but also feel safe. Primary routes will be hard surfaced with lighting, usable at all times of day and year, with segregated pedestrian and cycling lanes. Secondary routes will be leisure routes with a variety of surfacing, lit where appropriate.

Within and around the Garden Community are a number of Public Rights of Way (PROWs) that, where possible, will be retained and enhanced to ensure the consistency of movement for existing users and to provide attractive, well-connected routes for all users in the development. Diversions of PROW's may be considered where it would complement or improve the wider objectives and strategies set out in the DFD.

IDP References: C16, C17, C19, C20 C26, C27

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
The Active Mode Strategy	✓		✓	✓
Provision of on-site cycle infrastructure	✓	✓	✓	
Provision of Off-Site Cycle Infrastructure	✓			✓
Travel Packs and Cycling Incentives	✓			✓
Planning Policy	S9, SGS6, DM27			
Evidence Base	Movement Strategy Summary Report – Appendix A3 – Cycling and Walking Strategy Final Rev C			

GUIDING FRAMEWORK PRINCIPLES :
MOVEMENT STRATEGY

WIDER ACTIVE TRAVEL ROUTES

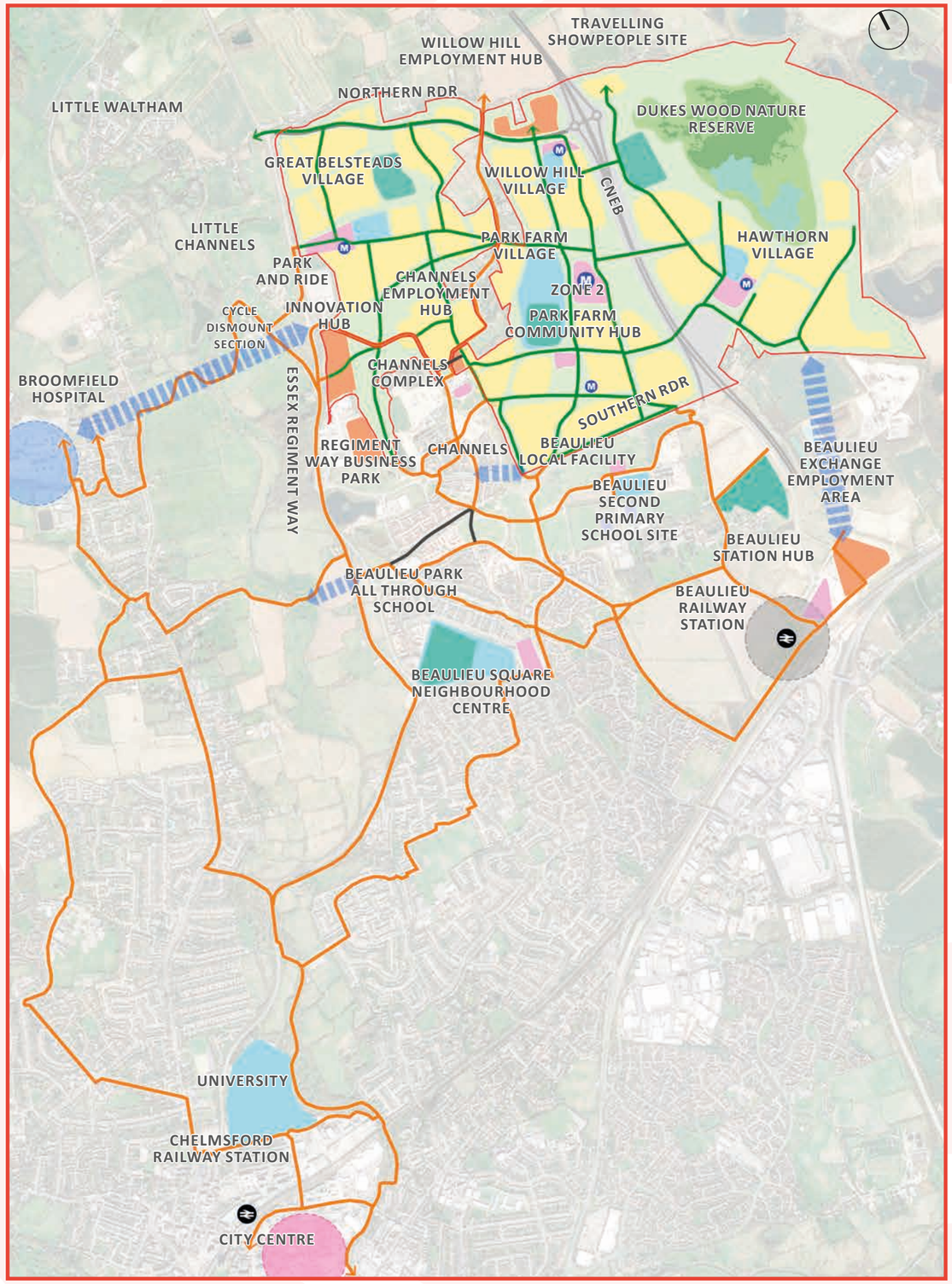
The primary active travel network is indicated opposite. The solid green lines show the Primary Active Travel Routes within the CGC. The orange lines show strategic routes and connections beyond the CGC boundary only within the public highway.

Primary Active Travel Routes proposed at CGC will link into the wider network, connecting the community with key destinations in the City centre and wider area. The expansive network will tie in into the existing routes in Beaulieu and Channels, and allow direct access to Beaulieu Railway Station. To the west routes will connect to Broomfield Hospital and down Essex Regiment Way to Chelmsford City Centre, the University and Railway Station. To the west and north there will also be connections to Little Waltham, the Chelmer Valley Great Leighs, Great Notley and Braintree.

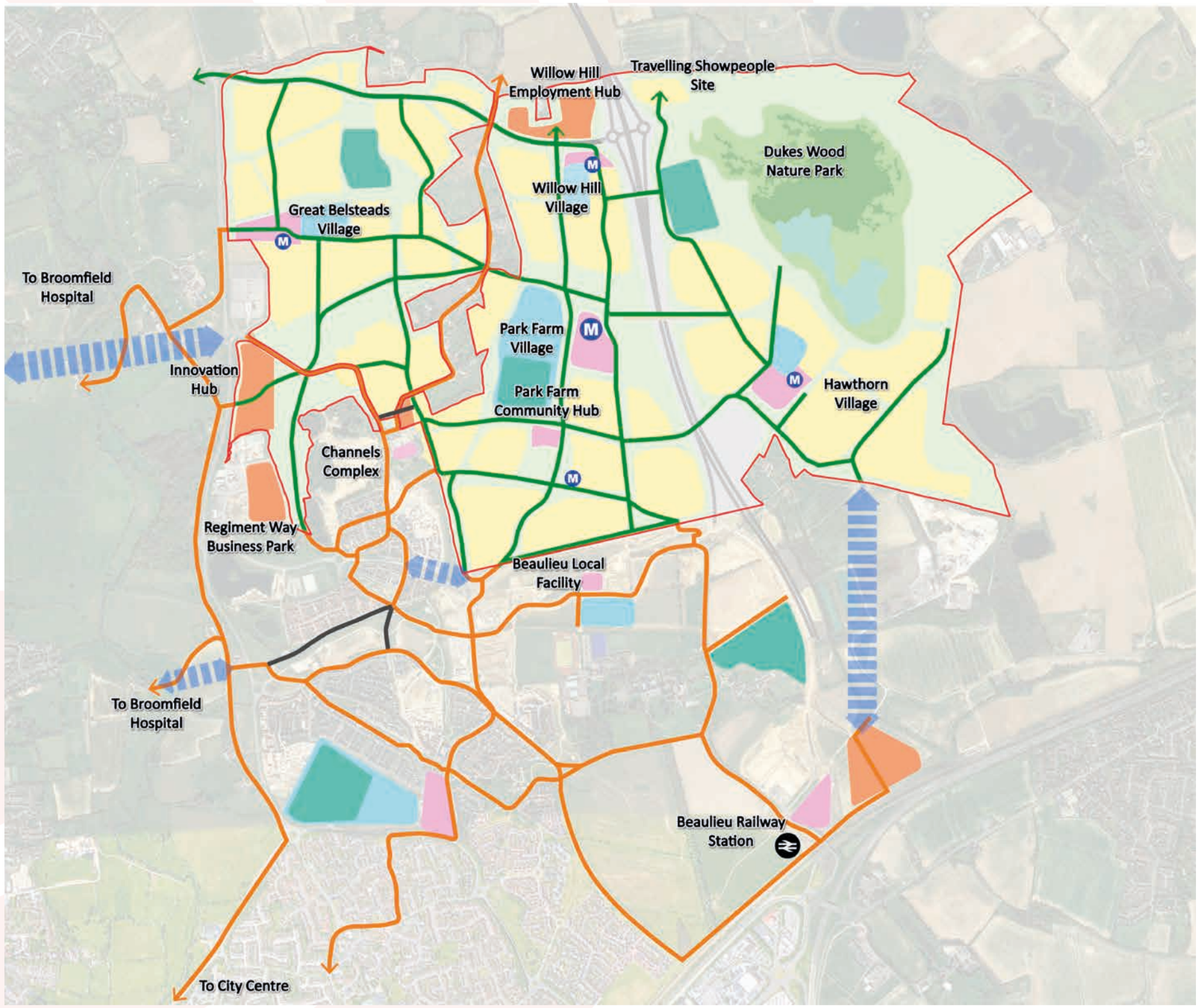
- Primary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Secondary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Existing and Programmed, Active Travel Routes including those to be delivered or subject to contributions by the Consortia*
- Secondary Existing and Programmed, Active Travel Routes and PRoW including those to be delivered or subject to contributions by the Consortia *

*Refer to the Evidence base (Movement strategy, Appendix 3)

- Potential improved Routes, specification subject to land availability, technical and ecological constraints, to be assessed at OPA stage
- Aspirational Routes - final alignment and specification subject to land availability and technical constraints, to be considered further at OPA stage
- Proposed educational area
- Proposed Centres and local facilities
- Sports and recreation facilities
- Employment Area
- Primary Mobility Hub
- Secondary Mobility Hub



PRIMARY ACTIVE TRAVEL ROUTES



The extensive network of primary active travel routes shows how the entire community will be interlinked, making active travel the most attractive and convenient mode of travel. In addition to villages and neighbourhoods, there will be a significant amount of routes through the green infrastructure - destination parks and greenways, allowing people to commute as well as cycle or walk for pleasure.

Primary Routes will be lit and constructed to an adoptable standards. These will be hard surfaced with 3m for cycleways and 2m for pedestrians and lit. Where routes are on street cycle routes will be LTN1/20 compliant.

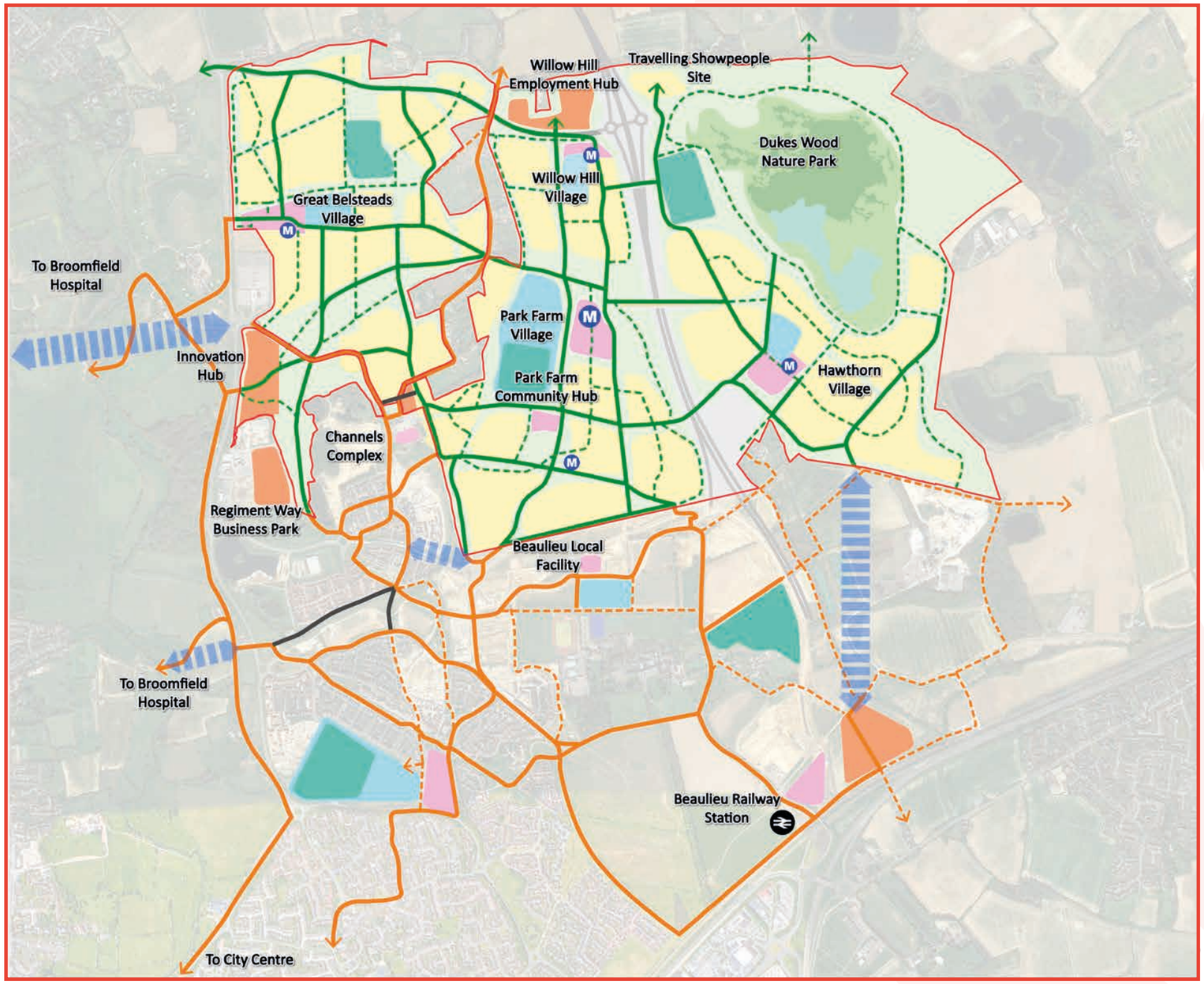
- Primary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Secondary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Existing and Programmed, Active Travel Routes including those to be delivered or subject to contributions by the Consortia*
- Secondary Existing and Programmed, Active Travel Routes and PRoW including those to be delivered or subject to contributions by the Consortia *

*Refer to the Evidence base (Movement strategy, Appendix 3)

- Potential improved Routes, specification subject to land availability, technical and ecological constraints, to be assessed at OPA stage
- Aspirational Routes - final alignment and specification subject to land availability and technical constraints, to be considered further at OPA stage
- Proposed educational area
- Proposed Centres and local facilities
- Sports and recreation facilities
- Employment Area
- Primary Mobility Hub
- Secondary Mobility Hub

GUIDING FRAMEWORK PRINCIPLES : MOVEMENT STRATEGY

PRIMARY AND SECONDARY ACTIVE TRAVEL ROUTES



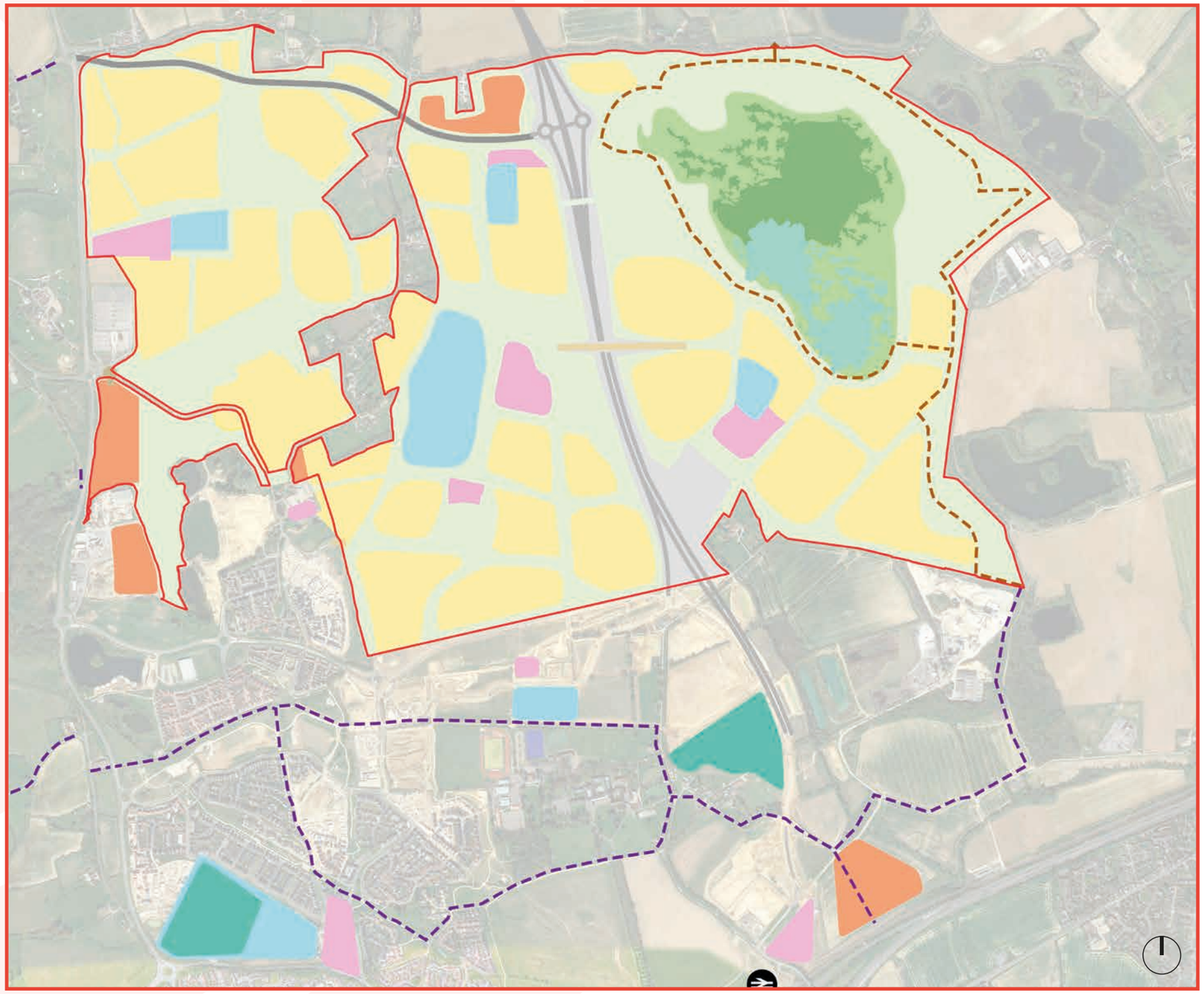
Complementary to the Primary Active Travel Routes, Secondary active travel routes routes will provide additional connectivity throughout the Garden Community. These will be shared surface routes, 3.5m wide and lit where appropriate.

- Primary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Secondary Active Travel Routes - exact alignment and specification of routes will be determined at OPA stage and beyond
- Existing and Programmed, Active Travel Routes including those to be delivered or subject to contributions by the Consortia*
- Secondary Existing and Programmed, Active Travel Routes and PRoW including those to be delivered or subject to contributions by the Consortia *

*Refer to the Evidence base (Movement strategy, Appendix 3)

- Potential improved Routes, specification subject to land availability, technical and ecological constraints, to be assessed at OPA stage
- Aspirational Routes - final alignment and specification subject to land availability and technical constraints, to be considered further at OPA stage
- Proposed educational area
- Proposed Centres and local facilities
- Sports and recreation facilities
- Employment Area
- Primary Mobility Hub
- Secondary Mobility Hub

EXISTING BRIDLEWAYS AND PROPOSED MULTI USER ROUTES



Existing bridleways surrounding the site will be connected with the newly proposed multi-user route leading up to and around the Dukes Wood Nature Park within Zone 2.

Key

- Existing Bridleways
- Proposed Multi-user Routes

GUIDING FRAMEWORK PRINCIPLES :
MOVEMENT STRATEGY

BUS PROVISION

“ OBJECTIVE

Provision of integrated, **well connected high quality new and expanded bus services,** building upon the successes within Beaulieu and Channels so that bus travel is not only available, but an essential and preferable alternative to the use of the private car whilst complementary toward the need **to switch to active modes of travel such as cycling and walking.** ”

GUIDING PRINCIPLES

1. Each phase of development will target through good masterplanning, design and layout such that every home be located within 400 metres walk from a bus stop.
2. Ensure a competitive advantage for Buses over private cars through the incorporation of a series of Bus Gates (or similar measures to enforce bus only use) along the primary route network that will prioritise bus therefore ensuring that trips by bus are the most efficient way of getting around.
3. Create an affordable approach to bus travel through implementation of a single fare zone within the Garden Community that will include the existing communities of Beaulieu and Channels.
4. Ensure key destinations are well served from bus stops and mobility hubs and deliver fast, efficient, and direct bus services to Chelmsford City Centre and the new Beaulieu Railway Station and wider destinations outside of the Garden Community.
5. Provide incentives for all new residents within dedicated travel packs including free travel for residents on initial occupation of their homes for a period of one year, together with discount schemes after that to establish and embed a culture of travel by bus.

Chelmsford Garden Community

BUS STOP

BUS PROVISION

The implementation of a successful Bus Strategy that discourages use of the private car is a critical component in the success of any new sustainable garden community.

The emerging CGC developments of Beaulieu and Channels have led the way in delivering significant results in terms of modal share and the next stages will build on this model and further enhance it whilst adapting to future trends and technological advances to ensure buses always remain an attractive, affordable, and convenient way to travel both in, around, and out of the community.

Provision of Bus Services
The provision of Bus Services will be dealt with at the OPA in accordance with the principals set out in the Outline Bus Strategy.

Bus Infrastructure
The proposed Bus Network will extend as the masterplan is implemented across each OPA with pump priming, and early provision forming a key requirement to ensure they are an embedded part of the culture of movement from the outset. This will follow the principles established at Beaulieu, where the first bus stops were provided whilst the internal network was still being completed.

As part of the strategy to ensure sustainable travel methods are the 'go to' option over the private car , a series of 'bus only' through roads throughout the development are proposed as set out on the illustrative masterplan. This will be achieved through implementing bus gates with enforceable technology to restrict the use of designated roads to buses and cyclists only and therefore discourage people from using private cars for shorter journeys. Each OPA will need to confirm the location of the proposed Bus Gates within their respective masterplans and parameter plans with the detail to be secured within the subsequent Reserved Matters applications.

Each OPA will be expected to set out the requirements in terms of the provision of bus stops

BUS STRATEGIES

Bus strategies for each OPA will need to demonstrate how they will contribute towards meeting or exceeding modal share targets by including the following elements in the specification and the Travel Plan requirements:

- Integrated Bus timetables that are coordinated with train departures and arrivals at Chelmsford and Beaulieu stations.
- Provide bus services that are inclusive and make provision for users throughout the day, including those who do not make part of their journey during the core part of the day such as shift workers.
- Provision of travel incentive packages such as free bus travel for one year to ensure bus use from the outset of residents moving into the development.
- Delivery of Mobile Ticketing facilities to minimise boarding times for buses, whilst providing a paper ticket option for those without access to mobile devices.
- The creation of a Plus Bus Zone with a single fare zone that covers the new Garden Community area as well as incorporating Beaulieu and Channels which will allow a consistent and affordable approach to fares for destinations such as the new Beaulieu Railway Station.

OPA's must demonstrate how new Bus Routes will seamlessly integrate with primary and secondary Mobility Hubs within their areas and where interchange(s) can take place between a variety of modes of travel such as walking or e-scooters.

IDP References: C1, C2, C5

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
The Bus Strategy	✓			✓
Provision of Bus Infrastructure (including Bus Gates) – Bus Only	✓	✓	✓	
Planning Policy	S9, SGS6, DM24, DM27			
Evidence Base	Movement Strategy Summary Report – Appendix A2 – Outline Bus Strategy Final Rev E			

GUIDING FRAMEWORK PRINCIPLES : MOVEMENT STRATEGY

BUS PROVISION

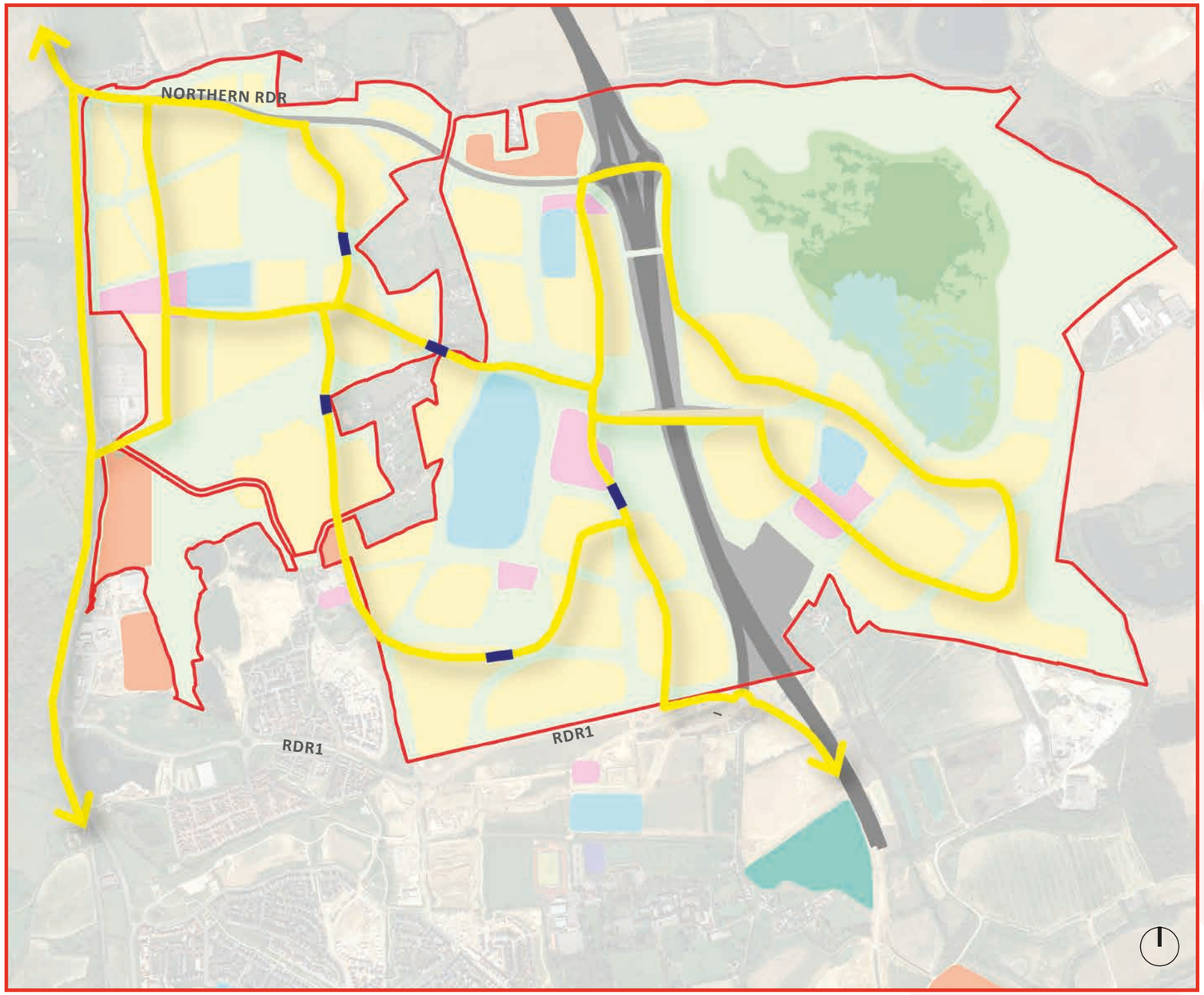


Diagram:

Proposed Bus Routes

Key

- DFD Site Boundary
- Bus Routes
- Bus Gates
- Proposed educational area
- Proposed centres and local facilities
- Sports and recreational facilities
- Employment area

WIDER BUS PROVISION

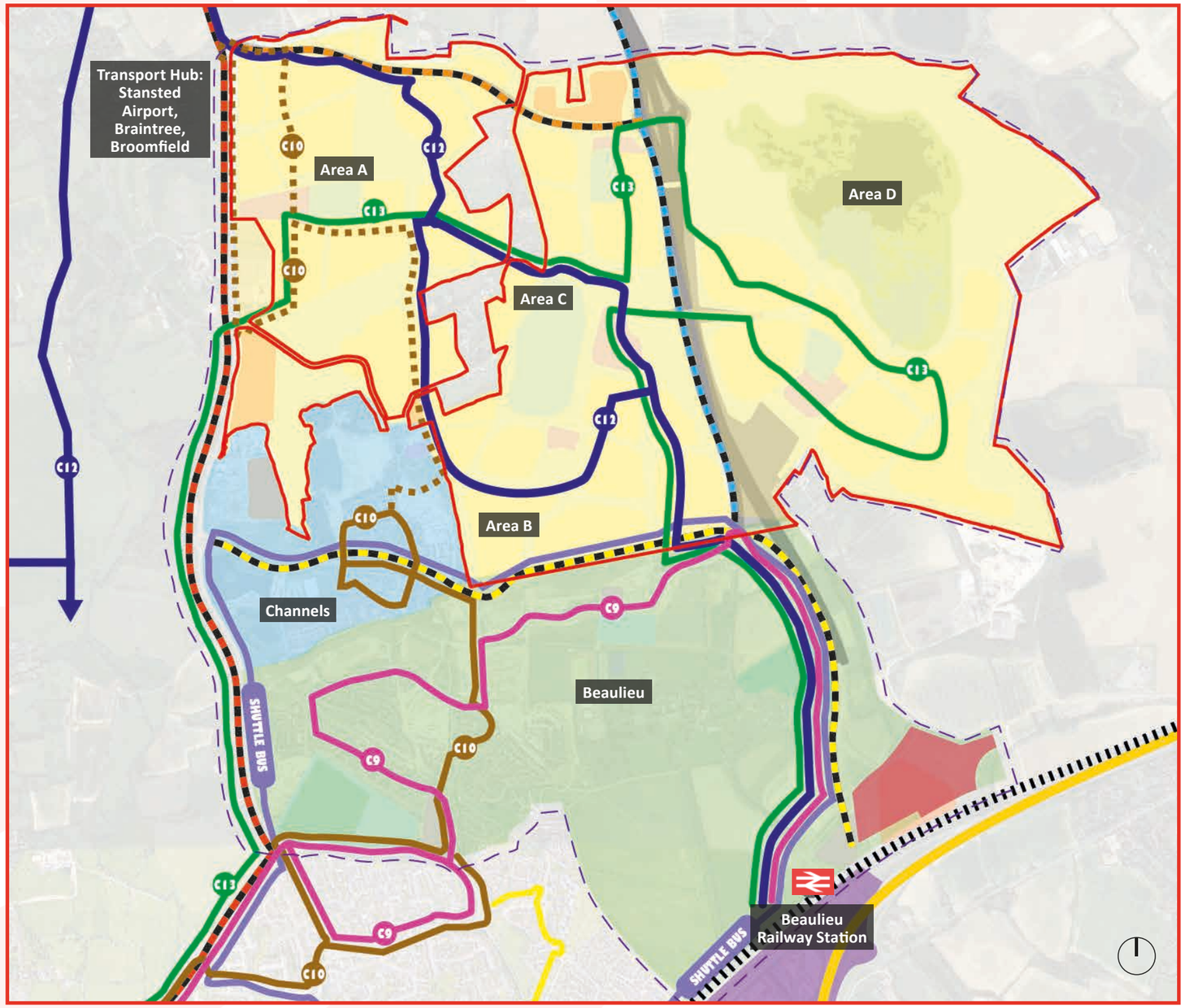


Diagram:

Bus Routes Through Channels, Beaulieu and Beyond

Key

- CGC Site Boundary
- RDR1
- Northern RDR
- North East Bypass
- Essex Regiment Way
- Fare Zone

- Chelmsford Garden Community
- Channels Village
- Beaulieu Village
- Beaulieu Exchange

Existing Bus Service

- Route C8
- Route C9
- Route C10
- Shuttle Service

Proposed Bus Services

- Route C12
- Route C13
- Route C14
- Route C10 Extension

GUIDING FRAMEWORK PRINCIPLES :
MOVEMENT STRATEGY

VEHICULAR ACCESS, MOBILITY HUBS & PARKING

OBJECTIVE

The Parking Strategy has been designed to be consistent with the Modal Share Target and Active Mode Target and the benefits that will ensue in terms of **the creation of a culture within the community, to live in a sustainable and healthy manner which minimises CO_2 emissions.** Parking standards will limit on-plot parking whilst allowing additional off-plot parking that can adapt in the future as car ownership reduces and be complemented by a network of Mobility Hubs. The Access Strategy will ensure that **non-car modes form the major part of access into and around the Garden Community.**



GUIDING PRINCIPLES

1. Implement measures to limit private car use whilst promoting active travel, mobility hubs and the use of public transport.
2. Deliver a network of primary and secondary Mobility Hubs within 400m from every home with varying functions, facilities and scale to encourage journeys by sustainable means because it is the most efficient way to travel.
3. Provide access to a Car Club, with the target that one space is available within 400m of every home to encourage a transition to households living without ownership of a private car.
4. Deliver sustainable infrastructure, including provision of electric vehicle charging points for both private and public spaces, together with planning for and building in resilience to changes in technology.
5. Create a culture of living without a private car from the outset by informing each and every new resident of the CGC ethos and measures proposed to discourage car ownership through distribution of comprehensive travel information prior to sale and occupation.
6. Implement marketing plans and undertake comprehensive monitoring of the parking strategy to ensure it is making the necessary contributions to the Modal Share Targets.
7. Underpin the parking strategy, with monitoring and enforcement measures consistent to the requirements of spaces which are adopted or that are privately managed areas.

VEHICULAR ACCESS & MOBILITY HUBS

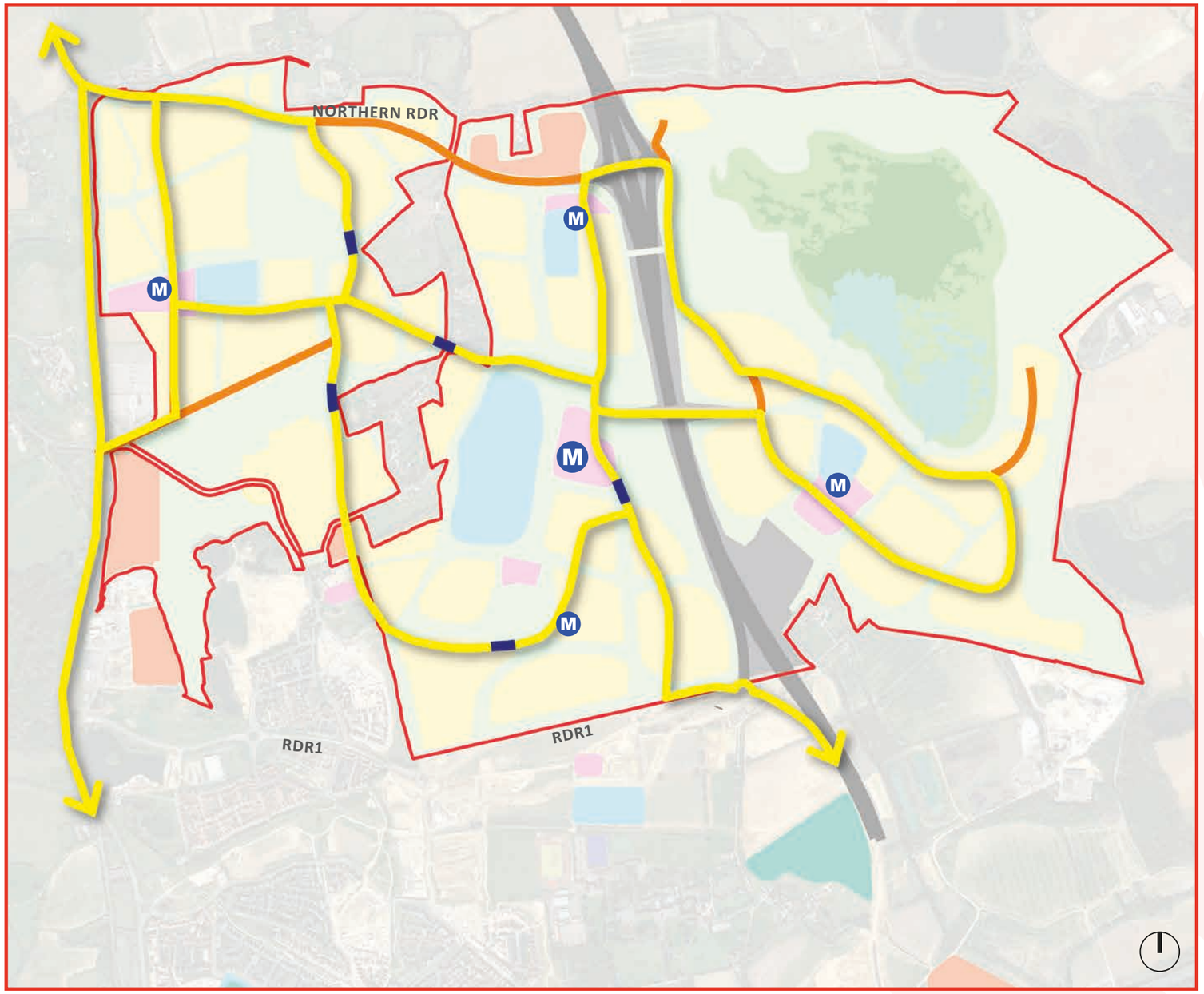


Diagram:

Primary Street Network - completed masterplan

Key

- CGC Site Boundary
- Primary Road without Bus Routes
- Primary Road with Bus Routes
- M Bus Gates
- M Primary Mobility Hubs
- M Secondary Mobility Hubs
- Proposed educational area
- Proposed centres and local facilities
- Sports and recreational facilities
- Employment area

MOBILITY HUBS

The Garden Community must be responsive and adaptable whilst leading the way in steadily transitioning to a model where car ownership substantially reduces and travel by non-car modes becomes preferable due to its better efficiency and convenience.

Development in the early stages must be cognisant of the fact that the preference for ownership of one or more private vehicles is not going to change overnight.

PRE-OCCUPATION INFORMATION

OPA's will include a requirement in Pre-Sales information and reinforced in the moving in Travel Packs to set out to new residents of all tenures to ensure that there is an appreciation from occupiers at the outset that they are committing themselves to a lifestyle in low traffic neighbourhoods with reduced parking provision and an expectancy that trips will be made by non-car modes.

IDP Reference: C5

THE EARLY IMPLEMENTATION OF THE NON-CAR AND ALTERNATIVE METHODS

OPA's will be expected to provide for non-car modes of travel as early as possible in the development. The provision and set up of Car Clubs should be delivered as early as possible and preferably a pre-occupation requirement with growth in the number of cars in service expanding throughout the lifetime of CGC.

IDP Reference: C7

THE PROVISION OF MOBILITY HUBS

Each OPA will set out the location of primary and secondary mobility hubs which will be located throughout the development within 800m of every home. Each Mobility Hub will allow for interchange between active modes and bus services, through measures such as provision of cycle storage and will include various facilities consistent with living a life without the use of a private car. Detailed specification for the Mobility Hubs is contained in the Evidence Base **Appendix A4.**

IDP References: C8 and C9

In addition to Mobility Hubs, further spread out across the development will be a range of sustainable transport promoting measures. This would include, but not be limited to, bus stops and car club spaces.

Final specifications and locations of Mobility Hubs and additional transport infrastructure will be secured via OPAs and RMAs.

THE PROVISION OF EV CHARGING AND ACCOMMODATION OF FUTURE CHANGES

OPA's will be expected to make provision for EV charging commensurate with delivery of one space per dwelling for all on-plot parking in the early phases of development and in communal parking clusters confirm details of the approach to standard EV and Rapid Charging.

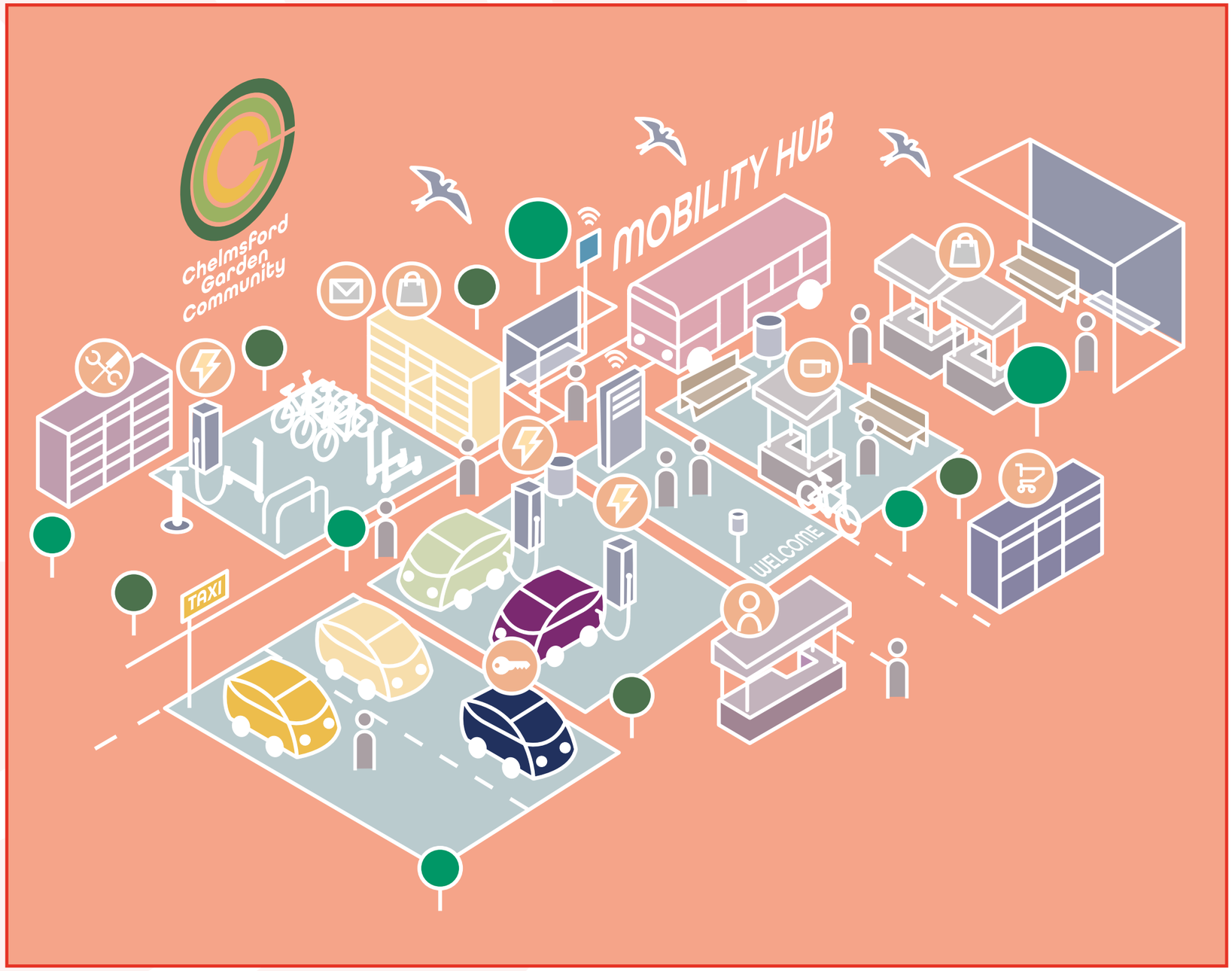
ONGOING MONITORING

Controls to restrict on-street parking outside of designated areas will form a requirement of the detailed street design and will be enforced through appropriate Traffic Regulation Orders.
Ongoing monitoring of car parking need will take place through the Travel Plan Monitoring such as occupancy surveys and traffic counts together with attitudinal surveys.

IDP References: C6 and C10

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
The Parking Strategy	✓		✓	✓
The Access Strategy	✓		✓	✓
Provision of Mobility Hubs	✓	✓	✓	
Provision of EV Charging	✓	✓	✓	
Travel Plan and Parking Monitoring	✓			✓
Travel Packs and Parking Ethos	✓			✓
Car Club Spaces		✓	✓	
Planning Policy	S9, SGS6, DM24, DM27			
Evidence Base	Movement Strategy Summary Report – Appendix A4 – Parking Proposal Final Rev E Movement Strategy Summary Report – Appendix A6 – Access Strategy Rev C			

MOBILITY HUBS



The difference between Primary and Secondary Mobility Hubs is generally about the quantity of the facilities provided. The Primary Mobility Hub will have more cycle stands, more bikes available to hire, more car club spaces etc. The Primary Mobility Hub might also incorporate food and beverage facilities.

In addition to the mobility hubs, the network of bus stops around CGC will also be grouped with cycle parking, car club spaces and other mobility services and equipment.

Diagram:

Typical Mobility Hub

A TYPICAL MOBILITY HUB CONTAINS:

1. E-Scooter hiring / parking / charging
2. Cycle parking stands / lockers
3. Cycle repair shop
4. Bus stop
5. Car club parking
6. Interactive journey planning / way finding
7. Vehicle hire collection / return
8. Taxi parking
9. EV car charging
10. Secure community concierge lockers
11. Shelter
12. Signage / branding
13. Wifi / phone charging
14. Security

PARKING STRATEGY

PARKING STANDARDS BASELINE

The Parking standards within this chapter are proposed in the context of a development where Non-Car and Active Travel connections will be of a high quality from the outset. In order to further enhance a modal shift to non-car means, a phased reduction in parking provision is proposed as demand for private parking reduces and the network of mobility enhancing features expands (i.e. mobility hubs, car club spaces, and Beaulieu Station).

The Parking standards below are intended as a baseline for consideration against which future planning applications will be assessed, cognisant of the desire that both housebuilders and future residents will become increasingly confident over the lifetime of the development with low or zero parking.

The approach to delivery and the legal mechanisms to secure this transitional phasing will be secured in Site Specific S106 agreements. The parking standards will be tested throughout the OPA stages based on deliverability, viability, and adopted Planning Policy, with the final parking standards being approved via the OPA determination. The PFA and the Site Wide Design Considerations that will be set out in each zone's Detailed Design Codes will ensure parking standards are consistent across the Garden Community. Amendments to the parking baseline will only be considered when justified circumstances are demonstrated with evidence or there are sound urban design reasons or both.

To ensure the appropriate parking provisions are provided, each RMA will include a Parking Strategy that would review the baseline parking standards against the following criteria:

1. Annual monitoring review of the Garden Community car parking and car usage.
2. Review of EV Charging technology/standards and how this would operate against with off-plot parking.
3. The detail of the parking strategy will be addressed within each zone's Detailed Design Codes stages.
4. Review of the detailed layout and how the parking standards could be applied responding to the individual characteristics/constraints/character/density/mix of each phase.

Baseline Parking 0-5 years

Dwelling Type	Vehicle Parking	Cylce Parking
1 bedroom	Maximum of 1 space off plot in a parking cluster.	1 space per person*
2 bedroom flat	Maximum of 1 space off plot in a parking cluster.	1 space per person*
3 bedrooms	Maximum of 1 space on plot, the remainder off plot in a parking cluster with a cap of 2 parking spaces.	1 space per person*
4 + bedrooms	Maximum of 1 space on plot and up to 2 spaces off plot in a parking cluster or no provision on plot and up to a maximum of 3 parking spaces off plot in a parking cluster	1 space per person*
Visitor	Maximum 0.25 per dwelling in parking cluster or on street	Within Mobility Hubs and Sheffield Stands (0.1 per dwelling)

Baseline Parking 6-10 years

Dwelling Type	Vehicle Parking	Cylce Parking
1 bedroom	Maximum of 1 space off plot in a parking cluster	1 space per person*
2 bedroom flat	Maximum of 1 space off plot in a parking cluster	1 space per person*
3 bedrooms	Maximum of 2 spaces off plot in a parking cluster	1 space per person*
4 + bedrooms	Maximum of 1 space on plot and up to 1 space off plot in a parking cluster or 2 parking spaces off plot in a parking cluster	1 space per person*
Visitor	Maximum 0.25 per dwelling in parking cluster or on street	Within Mobility Hubs and Sheffield Stands (0.1 per dwelling)

Baseline Parking 10 years plus and within 400m of Mobility Hub

Dwelling Type	Vehicle Parking	Cylce Parking
1 bedroom	Car Free	1 space per person*
2 bedroom flat	Car Free	1 space per person*
3 bedrooms	Maximum of 1 space off plot in a parking cluster	1 space per person*
4 + bedrooms	Maximum of 2 spaces off plot in a parking cluster	1 space per person*
Visitor	Maximum 0.25 per dwelling in parking cluster or on street	Within Mobility Hubs and Sheffield Stands (0.1 per dwelling)

* Precise details of cycle parking location and specifications to be addressed in each zone's Detailed Design Code. The principal objective will be to ensure cycle provision is made more convenient by high quality design, than travel by car

Other Parking Aspects

Other	Baseline
Car Club	Maximum Walk Distance 400metres
Local Cycle Store	Maximum Walk Distance 200metres
EV on Plot	1 per dwelling (where practical)
EV Parking Clusters	Initial 30% (passive provision for 70%)
EV Rapid Charge	5% in Parking Clusters
Mobility Parking	In accordance with current Council standards

Baseline Parking 10 years plus and beyond 400m of a Mobility Hub

1 bedroom	Maximum of 0.5 spaces off plot in a parking cluster	1 space per person
2 bedroom flat	Maximum of 0.5 spaces off plot in a parking cluster	1 space per person
2 bedroom house	Maximum of 0.5 spaces on plot in a parking cluster	1 space per person
3 + bedrooms	Maximum of 1 space off plot in a parking cluster	1 space per person
4 + bedrooms	Maximum of 2 spaces off plot in a parking cluster	1 space per person
Visitor	Maximum of 2 spaces off plot in a parking cluster	Within Mobility Hubs and Sheffield Stands (0.1 per dwelling)

GUIDING FRAMEWORK PRINCIPLES :

GREEN AND BLUE INFRASTRUCTURE

LANDSCAPE STRATEGY

“ OBJECTIVE

Deliver a comprehensive Green and Blue Infrastructure (GBI) network that will **connect landscapes, nature, Green Infrastructure assets, heritage features and communities** through the delivery of exemplar multifunctional green spaces and corridors, **creating a place where people live in harmony with nature.** ”

GUIDING PRINCIPLES

1. Prioritise nature recovery and connect people with nature through delivery of a comprehensive, and well designed, multifunctional green and blue network for the safe movement of wildlife and people.
2. Create a linked network of unique, inclusive and diverse parkland destinations, each responding to the local landscape context and integrating existing heritage and landscape features.
3. Provide a network of discovery trails that celebrate and connect important heritage assets, providing the opportunity for interpretation and wayfinding within the GBI network.
4. Respond sensitively to existing heritage assets including their setting, along with exploring opportunities to enhance these settings as part of the landscape design process.
5. Prioritise active travel by delivering attractive, inviting and safe multifunctional Greenways that are available on people’s doorsteps and serve as landscaped leisure routes, connecting key destinations and nature corridors that promote and enhance local biodiversity and optimise the benefits for wellbeing.

Green Infrastructure (GI) is the term used to describe the network of natural and semi-natural spaces and corridors in a given area. These include open spaces such as parks and gardens, allotments, orchards, woodlands, fields, hedges, lakes, playing fields, footpaths, cycle routes, water courses and private gardens as per Town and Country Planning Association guidance.*

GREENWAYS

Greenways are multifunctional green corridors that connect key destinations within Chelmsford Garden Community and beyond, whilst providing green amenity for the residential development. The Greenways are an important part of the pedestrian and cycle movement strategy as well as the biodiversity and habitat proposals.

Approximately 20 kilometres of new multifunctional Greenways are proposed that will protect, restore, enhance and create nature-rich habitats through a connected habitat mosaic that embraces CGC's landscape, ecological and historical assets and connects existing fragmented and isolated habitats, encouraging species movement and population growth. The greenways form part of the proposed natural greenspace as illustrated on the Green Infrastructure Framework Parameter Plan in **Section 7.**

They will link into the wider GI network by providing connections south into the existing open spaces at Channels and Beaulieu, north and east into the wider Public Right of Way Network and where possible west across Essex Regiment Way to the Chelmer Valley. The Greenways will accommodate the principal active travel routes connecting all the proposed villages and the key destinations throughout the Garden Community.

* Garden City Standards for the 21st Century: Practical Guides for Creating Successful New Communities - Guide 7 Planning for Green and Prosperous Places. TCPA (2017, revised 2018)

Widths, function and character of Greenways will vary depending on location, and where possible will accommodate the following uses: a shared cycle and pedestrian surfaced route (including horse riders where appropriate); integrated nature focused SuDS; native hedgerows, tree and shrub planting; incidental 'play on the way' features / trails; informal sport (outdoor gym/fitness trails); and areas for seating to stop and rest.

Each OPA will be required to set out within their Green Infrastructure Strategy, masterplans, parameter and phasing plans where Greenways will be delivered including their widths. Each RM phase will set out the detailed layouts of these areas and the approach to maintenance through submission of detailed Landscape General Arrangement Plans, Landscape Management and Monitoring Reports and detailed planting plans.

IDP Reference: F11

DESTINATION PARKS

Three substantial new Destination Parks will be provided in locations evenly distributed across the development as illustrated on the Green Infrastructure Framework Parameter Plan in **Section 7;**

- **Channels Discovery Park –** To be delivered by OPA's 1 & 3
- **Park Farm Meadows –** To be delivered by OPA 2
- **Dukes Wood Nature Park –** to be delivered by OPA 2

The parks will include a mosaic of habitats, managed to conserve nature and provide opportunities for people to experience, interact with and appreciate nature and heritage alongside a wide range of recreational and educational opportunities. The parks will provide space to relax, exercise and socialise, with the opportunity to experience nature through a range of habitat typologies and biodiversity enhancements.

These parks will serve both the existing and new parts of the Garden Community to provide a variety of unique, publicly accessible, high quality, green and natural open spaces with a target that they be within 800m walking distance of all homes.

At a local scale, the destination parks will be supplemented by a series of Village Greens serving the different neighbourhoods, located close to the village hubs. Further details on key Character Areas can be reviewed within Section 8 of this document.

Each OPA will be required to set out within their masterplans, parameter and phasing plans where the destination parks are proposed. Each RM phase will then set out the detailed layouts of these areas and the approach to maintenance through submission of detailed Landscape General Arrangement Plans (which may include a design brief), Landscape Management and Monitoring Reports and detailed planting plans.

IDP Reference: F8, F9a, F9b, F10a, F10b

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Green Infrastructure Strategy	✓			
Green Infrastructure Parameter Plan	✓		✓	
Landscape Management & Maintenance Report		✓	✓	
Landscape General Arrangement Plan		✓	✓	
Detail Planting Plan		✓	✓	
Planning Policy	S9, S11, SGS6, DM14, DM16, DM17, DM18, DM23, DM24			
Evidence Base	Landscape & Visual Technical Note, Cultural Heritage Desk Based Assessment, Chelmsford Garden Community Nature Recovery Network			

GUIDING FRAMEWORK PRINCIPLES :
GREEN AND BLUE INFRASTRUCTURE

HERITAGE

“ OBJECTIVE

Celebrate the rich heritage of the site and its surroundings by seeking to **recreate and reconnect its historical significance,** whilst delivering high quality development that is sensitive to and **enhances the historic environment,** which in turn will contribute towards and create a sense of **shared community and a place derived from the area’s history.** ”

GUIDING PRINCIPLES

1. Wherever possible, understand the rich and diverse historic environment of the site and its surrounds through detailed assessments of the heritage assets, both built and buried and seek to embed, preserve and enhance the historic environment into all aspects of masterplanning and design.

2. Through positive masterplanning seek to respect and protect the setting of heritage assets to ensure their significance is preserved and wherever possible enhanced. Where harm is unavoidable it will be minimised and mitigated.

3. Retain or reinterpret the historic layout of hedgerows, lanes and historic landscape features where possible in order to respect the historical context and evolution of the site.

4. Create a sense of place that is shaped by local heritage so that there is a tangible and noteworthy connection between the past and the future through a network of proposed Discovery Trails that also act as a recreational and educational resource by connecting existing and former heritage assets at destinations around and along the proposed Discovery Trails.

HERITAGE

The Site's historic landscape is characterised by its rural and agricultural nature which is largely formed of dispersed post-medieval farmsteads, enclosed agricultural land, the remnants of the former New Hall Estate, and the 20th century Boreham Airfield.

Surviving features, such as historic farmsteads, lanes and trackways, hedgerows and military structures have a high sensitivity to change but also provide opportunities for enhancement through incorporation into the masterplan. In addition, the area is known to be rich in buried archaeological remains dating from the prehistoric to the modern period that offer both challenges and opportunities to further increase our understanding of past societies while emphasising the area's shared past through community engagement.

The cultural heritage baseline is set out in a Desk-based Assessment within the DFD Evidence Base. Future OPAs will build on this and undertake detailed Settings Assessments of Heritage Assets to inform how the Garden Community can integrate, enhance, and promote the historic environment and create a sense of shared community and place derived from the area's rich history.

SITE CONSTRAINTS

In some instances, opportunities for preservation and/or enhancement of heritage assets within the Garden Community may be restricted by the constraints imposed by consented and forthcoming developments such as the Northern RDR, CNEB, and mineral extraction at Bull's Lodge Quarry and Boreham Airfield. Where this is the case, through good masterplanning, informed by settings assessments, the OPAs will seek to minimise harm to heritage assets where it is unavoidable.

HISTORIC PLACE-MAKING

The masterplan for each OPA will build on the guiding framework principles to ensure the area's heritage is embedded within the Garden Community to establish authentic neighbourhoods that acknowledge and commemorate the historic environment. Efforts will be made to retain the link to the New Hall Estate, Boreham Airfield and the wider post-medieval agricultural landscape and scattered farmsteads where practical and feasible. The heritage assets of the former Boreham Airfield - the T2 Hangar and the Romney hut are, if practical and feasible, to be retained and repurposed.

BUILT HERITAGE

Development on the site should take account of the desirability to sustain and enhance the significance of its heritage assets and their settings to provide an attractive and distinctive Garden Community.

At the OPA stage Detailed Settings Assessments will be undertaken of key heritage assets, both designated and non-designated, within and surrounding the site where development may have the potential to cause harm.

The intention will be to either preserve or enhance the setting of the above heritage assets wherever possible. Where this is not possible, Outline Planning Applications and Reserved Matters Applications will be expected, if practical and feasible, to propose appropriate ways of minimising harm through mitigation measures.
Where residential and non-residential development parcels are proposed in proximity to, or within the setting of heritage assets, the highest design quality will be expected. The requirements and parameters to achieve this will be set out within the relevant Detailed Design codes with which Reserved Matters Applications will have to comply.

The key heritage assets include:

- Grade II listed farmsteads, including Peverel's Farmhouse, Channels Farmhouse, Belstead; Farmhouse, Shuttleworth, Hobbits, Shoulderstick Haul, Powers Farmhouse, Pratts Farmhouse and Mount Maskalls;
- Non-designated farm buildings such as Wheeler's Farm and Park Farm; and
- Non-designated extant structures of the former Boreham Airfield, including a Romney Hut, and war memorial.
- Historic alignments of the Ride and Park Pales relating to the former Palace of Beaulieu.
- New Hall and its Grade II Registered Park & Garden, Little
- Waltham Conservation Area and the T2 Hangar.

The list is not exhaustive and the full range of heritage assets to be assessed and factored into masterplanning and design will be agreed as part of EIA scoping for future OPAs.

HERITAGE

DISCOVERY TRAILS

A series of Discovery Trails are proposed across the Garden Community within the Greenways and Destination Parks, where applicable, as part of a waymarked trail that passes through, or close to sites of historic and environmental interest, with either interpretation boards, public art and/or landscape features along the way that tell a story and celebrate, reference and interpret the area's rich history in each location. The indicative location of the Discovery Trail is illustrated on the GI FPP.

The Discovery Trails will also connect key heritage assets within the Community to the wider Chelmsford area.

One of the Discovery Trails will reinstate and interpret the postulated line of the earlier Park Pales and Ride from New Hall by using landscape features such earthworks, tree planting and where appropriate
public art.

Each OPA will be required to set out within their Green Infrastructure Strategy, masterplans, parameter and phasing plans where the Discovery Trail will be located within the Greenways and Destination Parks. Each RM phase will set out the detailed approach to the Discovery Trail through submission of detailed Landscape General Arrangement Plans.

IDP Reference: D11

ARCHAEOLOGY

Intrusive and non-intrusive surveys will be undertaken as part of EIAs for each OPA to ensure a robust understanding of the baseline of the site and to inform masterplanning.

Where significant archaeological remains are encountered, preservation *in situ* will be considered or design will ensure avoidance of harm. Where this is not possible a coordinated framework across the Garden Community will be established to ensure a comprehensive record is produced on a phase-by-phase basis through a programme of archaeological investigations.

A consistent and comprehensive mitigation strategy will be agreed with the relevant stakeholders and set out in an Overarching Written Scheme of Investigation (OWSI) for the OPA submissions and in a site-specific Written Scheme of Investigation (WSI) for each RMA.

HISTORIC LANDSCAPE

Features of the historic landscape will be retained and enhanced where it is feasible to do so. These, include, but are not limited to, features of the New Hall Estate, Boreham Airfield and the rural and agricultural use of the area.

Historic hedgerows will be preserved and reinstated where possible, as set out in the DBA. Features of interest which will be considered for preservation or reinstatement where possible following mineral extraction on Park Farm and Boreham Airfield quarries include:

- Hedgerows and field boundaries associated with New Hall's former deer parks;
- Hedgerows and field boundaries of the post-medieval rural and agricultural landscape;
- Historic lanes and trackways connecting the New Hall estate and its lodges (Duke's Lodge Lane) as well as those linking post-medieval farmsteads (Park Farm Lane, Dukes Lodge Lane); and
- Features associated with the former Boreham Airfield.

OPA Stage 2 Masterplans will build upon the information made available and where possible look to preserve and reinstate historic features. If further information is identified prior to RMAs this can be incorporated as part of the specific phase's detailed design.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Desk-based Assessment and Detailed Settings Assessment	✓	✓		
Intrusive and Non-intrusive Archaeological Surveys	✓	✓	✓	
Overarching Written Scheme of Investigation (OWSI)	✓		✓	
Site-specific Written Scheme of Investigation (WSI)		✓	✓	
Planning Policy	S3, SGS6, DM13, DM14, DM15			
Evidence Base	Cultural Heritage Desk-based Assessment			

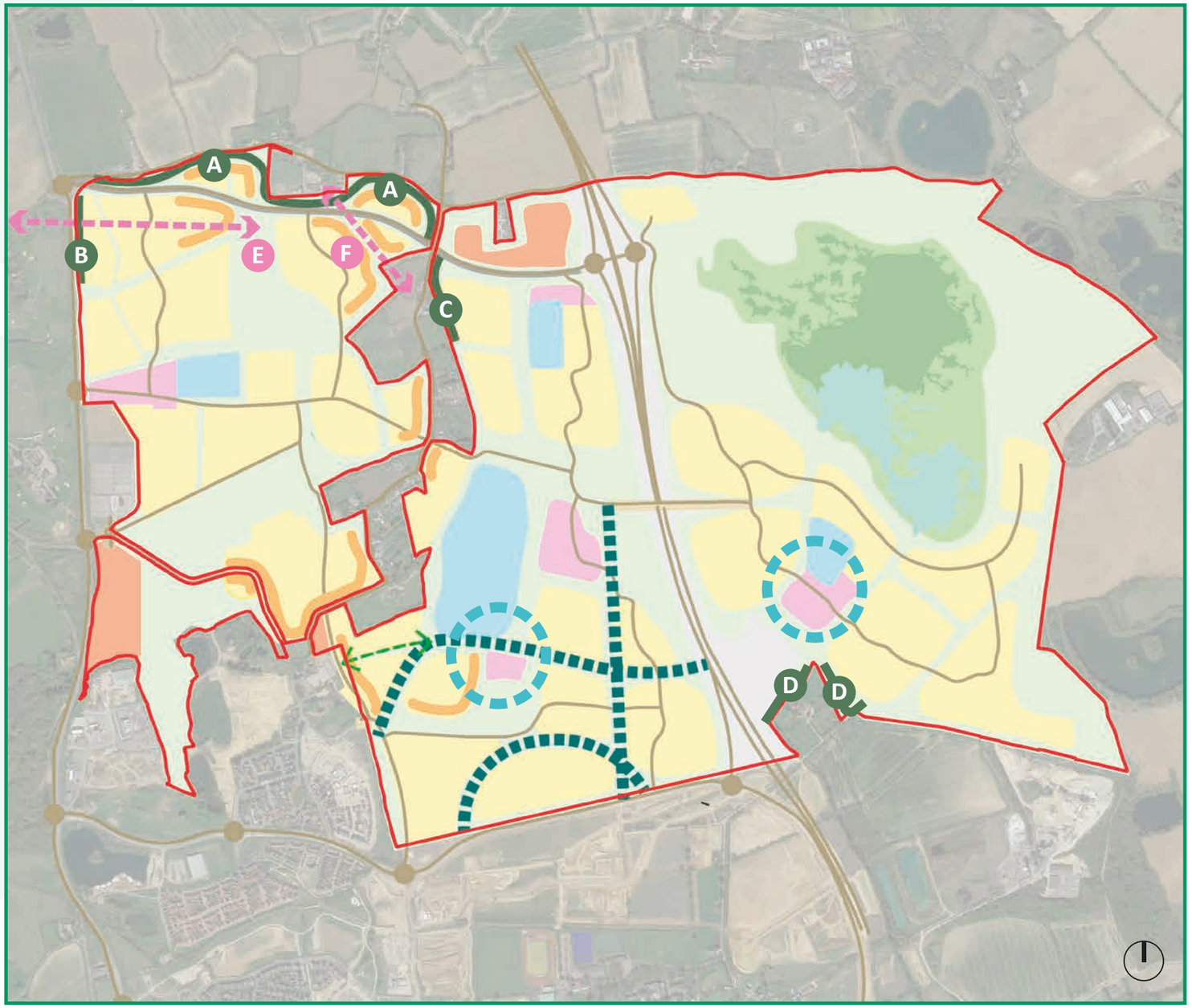
HERITAGE INTERVENTIONS

Plan:

Heritage Interventions

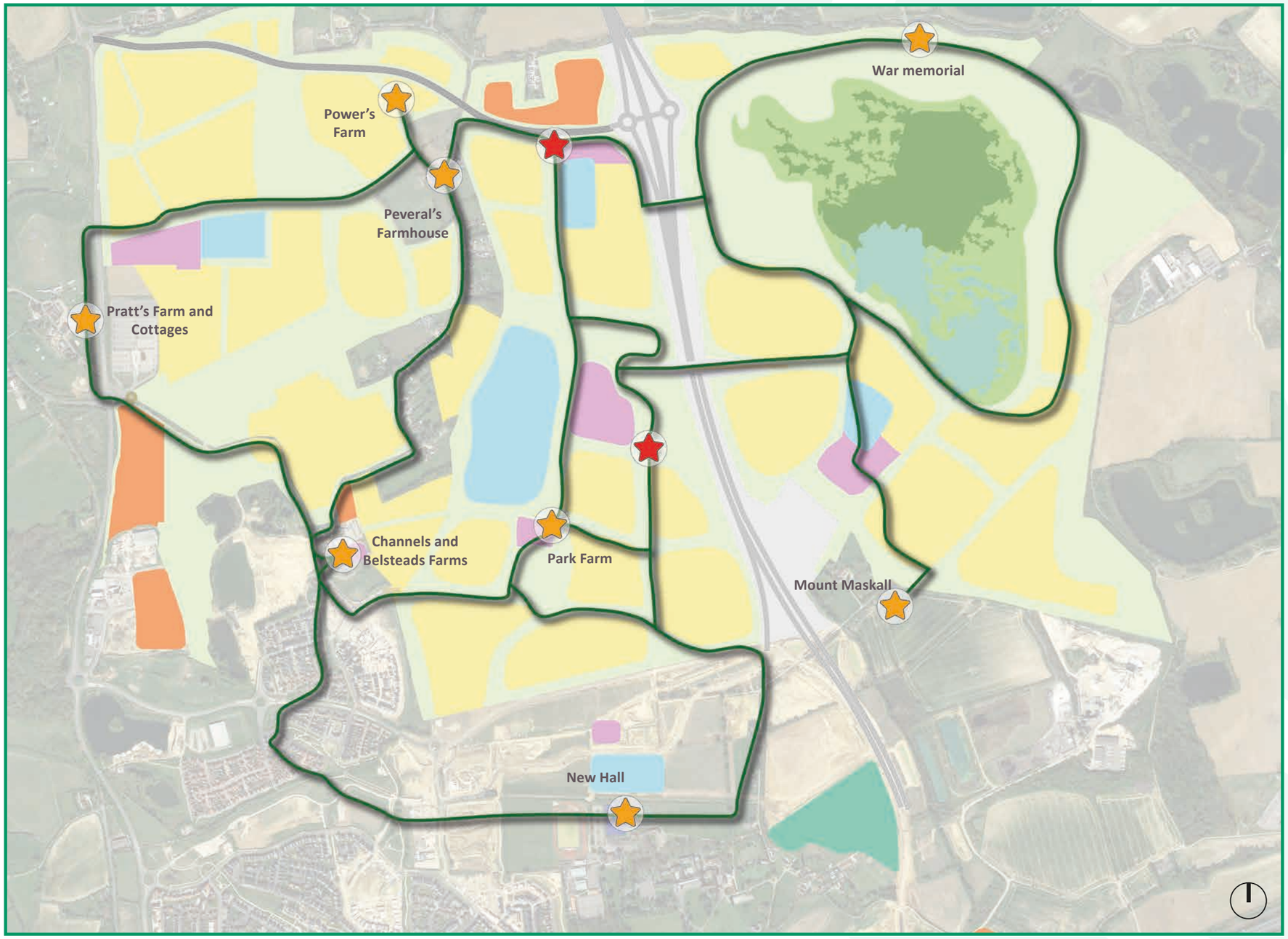
Key:

- **A** **Buffer planting** - tree and shrub planting with a depth of 40-50m. Planting screens views of CGC from heritage assets on Wheelers Hill
- **B** **Buffer planting** - tree and shrub planting with a depth of 15-20m. Planting screens views of CGC from Little Waltham
- **C** **Buffer planting** - tree and shrub planting with a depth of 15-20m. Planting screens views of CGC from Peverels Farm
- **D** **Buffer planting** - existing tree and shrub planting enhanced with a minimum depth of 20m. Planting screens views of CGC from Mount Maskall
- **E** **Views** - Discovery Park positioned on the highest land in the western area of CGC to reduce the visual impact of development visible from Little Waltham and views of the village from the Discovery Park
- **F** **Views** - a view corridor has been positioned to retain the historical visual link between Powers and Peverels Farm
- **Sensitive edge** - development to be lower in scale, 2.5 storeys maximum with appearance, materials and details to be sensitively designed to reflect historically significant settings. Development will allow for future connections across Domsey Lane and incorporate greening where possible.
- **Landscape Corridor** - strategic Greenways on historically significant routes or view corridors
- **Park Farm and Boreham Airfield** - Historical assets such as the Park Farm, T2 Hangar and Romney Hut to be retained and reconditioned if possible.
- **Park Pales and The Ride** - previously lost historical features commemorated in new landscaped park areas.



GUIDING FRAMEWORK PRINCIPLES : GREEN AND BLUE INFRASTRUCTURE

DISCOVERY TRAILS



Discovery Trails - a network of discovery trails criss-cross the landscaped greenways. The trails will feature information boards and public art dedicated to remembering the areas past. For further information refer to the Green Infrastructure plan on pages 124-125 and the character areas section.

Key

- Heritage Route
- Existing Landmark and/or Heritage Asset
- New Landmark

Note: *Plan demonstrates an indicative route and the final route and signage to be confirmed via OPA's and Site Wide Design Principles Document.*


Ock Valley Primary

GUIDING FRAMEWORK PRINCIPLES :
GREEN AND BLUE INFRASTRUCTURE

BIODIVERSITY NET GAIN

“ OBJECTIVE

Deliver ambitious Biodiversity Net Gain (BNG) targets by creating strategic nature recovery that reconnects nature within, **to and from the Garden Community.** This will include structural woodland planting and diversification of habitat types to **create a vastly richer mosaic of biodiversity friendly areas than currently exist.** ”

GUIDING PRINCIPLES

1. To seek to achieve an aspirational target of 20% for BNG, attained within the Garden Community itself or off-site, via the application of the BNG good practice principles*. This is to be applied to the entirety of the Garden Community in its end-state rather than for each and every phase of development.
2. To achieve a level of at least 10% BNG for each of the areas covered by the three OPA’s that are proposed, whether this be achieved through delivery at the Garden Community or off-site.
3. To prioritise delivery of BNG at the Garden Community itself, seeking off-site BNG only if 10% net gain for the areas of each of the OPA’s cannot be attained.
4. Maximise the opportunities to deliver the BNG targets on-site through the creation of a site-specific nature recovery which will provide landscape scale connectivity for people but most particularly, biodiversity.
5. Provide mitigation for protected species that is linked to BNG provision where possible.

* BNG good practice principles for development, A practical guide. CIRIA (2019).

BIODIVERSITY NET GAIN

A TARGET OF 20% BIODIVERSITY NET GAIN

In the battle against climate change biodiversity enhancement is an integral part of sustainable development and plays an important role in creating functioning landscapes that supply oxygen, clean air and water, pollination of plants, pest control, wastewater treatment and many other ecosystem services. Through the creation of joined-up, complementary habitats the Garden Community will allow biodiversity to thrive alongside urban development and provide a healthy ecosystem that, in turn, contributes toward wider health and well-being objectives.

Wildlife features will be incorporated throughout the GBI network to support ambitious Biodiversity Net Gain targets, and planting will be structurally diverse - maximising species diversity by including a range of native and non-native species, sizes and ages - to ensure resilience against climate change, pests and disease.

NATURE RECOVERY

Comprehensive Nature Recovery is proposed throughout the site in the form of GI, as set out on the Green Infrastructure FPP (DFD Section 7) that will provide landscape scale connectivity for people and wildlife. Mitigation for the effects of potential fragmentation will be directed by species specific surveys which will guide the type, specification and location of mitigation to facilitate ecological connectivity, for example through implementation of wildlife friendly lighting.

Each OPA will include a Biodiversity Gain Statement to set out a framework approach to how it will deliver its respective part of the site wide nature recovery and could include the following:

- A species and habitat priority list focused by their local and national conservation properties and their ability to enthuse the public about nature.
- Species and habitat specific ecological surveys should be undertaken to ensure that appropriate mitigation is provided.
- A hierarchy of priority actions including, but not limited to, (a) improvement of core wildlife sites; (b) increased the size of core sites; (c) increased the numbers of core sites; (d) improved the 'permeability' of the surrounding landscape for the movement of wildlife; and (e) creation of corridors of connecting habitat.
- Spatial mapping will be used to demonstrate the location of habitats including core habitat areas and locations for key measures and the outcomes including the location of wildlife permeability measures as well as habitat connectivity.
- If off-site BNG is required, this will be located in close proximity to the site where practical and feasible.

RMA's will then provide Detailed Biodiversity Gain Plans.

IDP References: F3 and F4

APPROACH TO DEMONSTRATING THE DELIVERY OF BIODIVERSITY NET GAIN

In line with the Government's consultation on BNG Regulations and Implementation (Jan-April 2022) each OPA will provide a Biodiversity Gain Statement to provide core BNG information on:

- The pre-development biodiversity value;
- The proposed approach to enhancing biodiversity on-site; and
- Any proposed off-site biodiversity enhancements that have been planned or arranged for the development and including details on how these will be secured.

Accompanying each RMA will be a Biodiversity Gain Plan. This will provide detailed information on specific BNG delivery including what BNG will be delivered, where it will be delivered and how it will be delivered. For BNG provision that is to occur on the Garden Community, it will be intrinsically linked to the wider landscape strategy. If it is related to off-site provision the mechanism for securing this will be detailed. The biodiversity gain plan will also include a copy of the completed BNG metric itself.
To inform the OPAs made, baseline and post development BNG will be measured using the most up to date DEFRA metric. Future BNG measurements, for example to inform biodiversity gain plans that will accompany RMA's will, in terms of the metric used, align with relevant guidance in place at that point in time.
IDP Reference: F2

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Biodiversity Gain Statement	✓		✓	
Detailed Biodiversity Gain Plan		✓	✓	
Planning Policy	S4, SGS6, DM16			
Evidence Base	Nature Recovery Network at Chelmsford Garden Community, ECRAMS			

GUIDING FRAMEWORK PRINCIPLES :
GREEN AND BLUE INFRASTRUCTURE

SUSTAINABLE SURFACE WATER DRAINAGE



OBJECTIVE

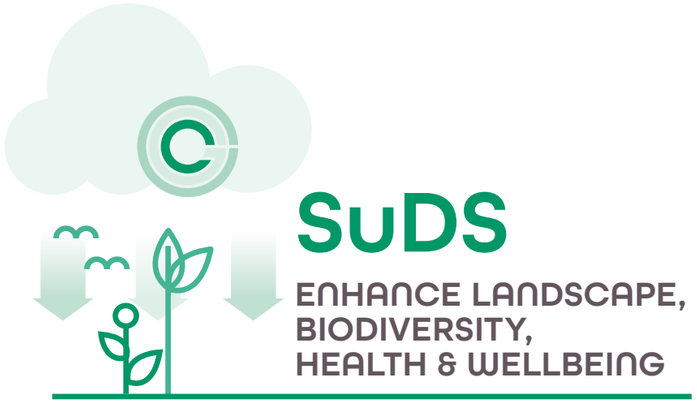
Help preserve and enhance the landscape through implementation of a comprehensive network of **Sustainable Drainage measures across the Garden Community that will build in resilience to climate change** by mitigating flood risk and reducing pollution whilst generating attractive green spaces and water features, creating new habitats for plants, insects and animals, and enhancing areas of ecology within the site to contribute towards BNG targets.

GUIDING PRINCIPLES

1. Utilise green spaces throughout the development that allow for the creation of ecologically diverse drainage features that will also act to openly retain excess surface water and create beautiful green water landscapes.
2. Consider the use of sustainable drainage measures through simple mechanisms like water butts, planters, green/ brown roofs at property level (e.g. sedum on garden sheds or bike stores) that help to capture rainwater before entering the ground.
3. Build in permeable surfaces associated with some streets, where appropriate, that can capture and filter rainwater before slowly releasing it back to the ground.
4. Incorporate planted drainage channels and planters in community gardens and open spaces to absorb rainwater while protecting and enhancing the site's ecological diversity.

GUIDING FRAMEWORK PRINCIPLES : GREEN AND BLUE INFRASTRUCTURE

SUSTAINABLE SURFACE WATER DRAINAGE



The implementation of Sustainable Drainage Systems (SuDS) across the Garden Community will create a fully integrated drainage strategy that celebrates the inclusion of water within the landscape, deepens the types of habitats on offer and future-proofs against changing rainfall patterns, including higher intensity rainfall events and increased drier periods. These elements will be multi-functional providing landscape, biodiversity, and health and wellbeing benefits to local residents through their dual role of being both an amenity space and drainage resource.

SUSTAINABLE DRAINAGE SYSTEMS (SUDS)

The surface water system will be designed in accordance with The Sustainable Drainage Systems Design Guide for Essex (2020) alongside the guiding principles for the scheme. This will be achieved through the provision of treatment and storage features including, for example, detention basins, swales, green roofs, permeable paving, etc. to suit the character of the area in which they are positioned.

Attenuation features can be in some cases multifunctional, providing amenity space during periods where rainfall is less than the critical rainfall events. They could incorporate opportunities for people to play, interact and learn about the SuDS feature. Larger features such as swales and retention ponds should work with the landscape and, where appropriate, incorporate both formal and informal crossing points, interpretation, decking and viewing platforms.

Each OPA will submit a Surface Water Drainage Strategy based on the existing greenfield runoff rates. The Strategy will ensure the OPA aligns with the wider CGC.
SuDS will be promoted within the Strategy to prevent the wider environment being adversely affected by increased surface water runoff and the increased risk of pollution as a result of the development.

Core elements of the surface water drainage strategy:

- Definition of catchment areas to ensure that these are retained in order to not adversely affect the existing water flows in surrounding watercourses.
- Treatment of Surface Water at source to enhance the quality of water discharged from a parcel.
- Management of surface water runoff by minimising the volumes and rate of surface water runoff from the development.
- Provision of visible drainage routes through the development with a clear hierarchy of routes, including overland flood routing.
- Agreement of discharge rates in consultation with the Lead Local Flood Authority to ensure that it complies with the most current and up- to-date legislation, policies and guidance.

At RMA stage, the Detailed Drainage Strategy will confirm how every application aligns with the site wide approach to drainage and its links to other phases of development.

IDP Reference: F5

MAINTENANCE/ADOPTION

A Framework SuDS Maintenance Plan for all the drainage elements proposed will be submitted at OPA stage. A detailed maintenance plan will be developed and agreed with relevant stakeholders such as the LLFA and the highway authority through the RMA stage. This will include items such as, adoption responsibilities, maintenance activities and their required frequency as well as identifying the individuals responsible for their upkeep and ensuring their operation as designed.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Strategic Surface Water Drainage Strategy	✓		✓	
Detailed Drainage Strategy		✓	✓	
Framework SUDS Maintenance Plan	✓		✓	
Detailed SuDS Maintenance Plan		✓	✓	
Planning Policy	S2, S9, DM18			
Evidence Base	CGC Onsite Civil Engineering Infrastructure Statement - 1 March 2022			

GUIDING FRAMEWORK PRINCIPLES :
GREEN AND BLUE INFRASTRUCTURE

ARBORICULTURE

OBJECTIVE

Retaining existing trees to **create a sense of place and provide a landscape led Garden Community** which uses existing and historical hedgerow alignments to define development parcels. Utilising trees where possible to enhance amenity value and mitigate impacts of climate change.

GUIDING PRINCIPLES

1. Trees, woodlands, and hedgerows will be retained where practical and any dead, dying, and diseased trees will be replaced.
2. Deliver a landscape-led development, where a target delivery of at least three new trees will be planted for every new home. The planting will contribute to rainwater retention, as well as a wider benefit to the climate, soil quality and biodiversity.
3. Enrich the existing trees, woodlands and hedgerows through additional planting and appropriate management to further support the ecosystem and environmental services they provide.
4. Provide tree-lined streets where feasible and acceptable in planning terms and where issues relating to adoption can be suitably managed and/or overcome.
5. Any timber from trees which need to be felled for safety reasons will be used on site in an imaginative way for ecology, play or art to enhance people's connection to the natural environment.
6. Provide opportunities for the community to carry out woodland and hedgerow conservation tasks under guidance to help with landscape improvements, placemaking and community building.
7. Reinstate areas of historic woodland in Dukes Wood Nature Park.

ARBORICULTURE

Trees are amongst the most permanent and significant features within our towns and countryside. The existing trees and hedgerows provide the core of the green infrastructure for the master plan and frame the landscape, providing natural delineation of land use.

Planting trees will enhance the appearance of a development whilst providing rich habitats for a range of wildlife. Trees will also provide cooling and shading during summer months, shelter from wind and rain during the winter months, enhance environmental quality through absorbing noise and pollution, provide oxygen and privacy, and can help to improve soil quality and stabilise land.

At the forefront of the developments design is the need to respect the existing landscape characteristics and protect all trees where possible. Through this retention the original historic field layout can be reflected in the new development. Where retention is not possible, trees will be replaced.

Where trees are required to be felled, these will be used within the development to promote the use of the outdoors, this could take the form of habitat creation (I.e., bug hotels and log piles), carved wood art and furniture, or as part of natural play spaces for children. This should be spread out across the development to promote the reuse of materials and the connection of people to the natural environment.

Further to the retention of trees, the development will be enriched through the target to deliver a minimum of 16,500 trees, which is the equivalent to three new trees per household. These trees will be located across the development within the three new destination parks, the linked greenways, village greens and, subject to the approach in the GFP's, a network of tree lined streets. Additional to this will be lines of hedgerows which will support the movement of ecology across the development and connect to the wider area. The development of these spaces will provide attractive visual spaces through a range of species that add visual variance through shape, colour and seasonal blooming.

The creation of woodland and landscaped areas will also be used to promote community activities. This could take the form of framing open spaces, or by providing green spaces that community groups can manage and enhance with localised features.

The landscape led approach will also be used to provide a range of knock-on benefits such as protecting amenity by screening road noise, reducing surface water run-off through large canopies intercepting rain, protecting soil structure and quality, and improving air quality through the capture of Carbon Dioxide and release of Oxygen.
OPA's will identify areas where key areas of woodland and tree planting will be located. The detailed layout and species mix will then be secured by RMA's. The final location will need to consider positioning to allow space for the mature tree without causing obstruction or interfering with property, infrastructure, street lighting or junction sightlines.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Woodland and Tree Planting Strategy	✓		✓	
Detailed Planting Plan		✓	✓	
Planning Policy	S4, SGS6, DM17			
Evidence Base	Arboricultural Report for North East Chelmsford Garden Village – 16 August 2018 Ref: SHA 743 Rev A			

GUIDING FRAMEWORK PRINCIPLES :
GREEN AND BLUE INFRASTRUCTURE

OPEN SPACE, PLAY AND SPORT



OBJECTIVE

Facilitate and **encourage the community** to make use of the variety of open spaces, play and sport facilities within the development. This can be achieved through ensuring locations are accessible by sustainable and active modes of travel, are inclusive to people of all ages and abilities and provide a wide range of **imaginative high-quality options for use.**

GUIDING PRINCIPLES

1. Provide public spaces that are suitably sized for the population and promote a range of uses across the development.
2. Create a wide range of safe and accessible green spaces to meet the amenity, recreational and functional needs of the community, ensuring people have easy access to high quality and spacious local green spaces close to where they live.
3. The design of the open spaces should be multi-functional for users, by incorporating imaginative, versatile elements that can support play, relaxation, active travel and learning, and support the natural environment through trees, hedgerow planting and ecological enhancements such as bat and bird-boxes.
4. Encourage learning through play by providing a range of spaces and activities for children of all ages.
5. Deliver open spaces that provide opportunities to promote healthy living and include a network of active travel routes that promote walking, cycling and running.

OPEN SPACE, PLAY AND SPORT

3 NEW DESTINATION
PARKS COVERING
OVER **150HA**

Formal and informal sports facilities and recreational open spaces will be evenly distributed across the development to ensure accessibility for all with provision phased to serve the community as it grows.

Sports and recreational facilities are to be co-located near to community facilities and schools along key active travel routes and are intended to deliver a range of multi-functional sport experiences that accommodate all abilities whilst promoting social interaction and active communities. Open spaces will provide, not only for sports, but allow for a range of other benefits such as learning, relaxing, and socialising.

The Local Plan Appendix B (Development Standards) sets out the quantum of open space required from all developments and based on around 5,500 new dwellings the following quantities of open space will be provided and their locations shown on the Green Infrastructure FPP in **Chapter 7:**

- Allotments, Community Gardens & Orchards: 4ha
- Play Space - 5no NEAPs, 10 LEAPs and numerous for LAPs and informal 'play on the way'
- Over 150ha of Destination Parks
- Over 17ha of Formal Sports
- Over 78ha of natural and semi-natural open space (including Amenity Green Space for new provision)

Each OPA will be required to set out within their Green Infrastructure Strategy, masterplans, parameter and phasing plans where openspace and recreation will be delivered including their size. Each RM phase will set out the detailed layouts of these areas and the approach to maintenance through submission of detailed Landscape General Arrangement Plans, Landscape Management and Monitoring Reports and detailed planting plans. In addition to open space, a four court sports hall is to be delivered in the All Through School, and a multi purpose indoor hall will be provided in the Community Centre, to be delivered in Great Belsteads Village. A Co-located Sports Facilities Management Plan will be secured as part of the OPA S106 for the All-Through School.

PLAY

Play provision should, where possible, adhere with Fields in Trust (FIT) benchmark guidelines, policy standards and design requirements for minimum activity zones, buffer zones, and walking distances.

The development will provide an appropriate mix of formal, equipped children's play, including 5 Neighbourhood Equipped Areas of Play (NEAPs), 10 Local Areas of Equipped Play (LEAPs), Local Landscaped Area for Play and Local Areas of Play (LAPs). This provision will also include additional informal space along greenways and key pedestrian routes for spontaneous play such as 'play on the way'.

Play spaces, where possible, should:

- Be accessible via pedestrian and cycle routes, providing safe, inclusive and sustainable movement between open space destinations;
- Provide adequate seating, be well overlooked and enclosed by landscape features rather than fencing; and
- Respond to the individual character of their setting, landscape and heritage assets and offer unique play experiences that create stimulating spaces to promote imaginative play.

Each OPA will be required to set out a Play Strategy, masterplans, parameter and phasing plans identifying where play-space will be delivered, including their size, function and how it meets localised needs. Each RM phase will set out the detailed layouts of these areas through submission of detailed General Arrangement Plans.

IDP Reference: D6

GUIDING FRAMEWORK PRINCIPLES : GREEN AND BLUE INFRASTRUCTURE

OPEN SPACE, PLAY AND SPORT



OVER **16HA** OF FORMAL SPORTS PITCHES

FORMAL SPORTS

Two Council run Sports Hubs are proposed together with a co-located sports facility at the all-through school will ensure areas of formal sport are evenly distributed across the community - that provide a critical mass to enable flexibility for a range of pitch layouts to allow for existing and future local needs. Formal sports provision will be located in the following locations and will include:

Great Belsteads Sports Hub:

- 6.1ha formal sport provision - Comprising 3no. senior football pitches, 3no. junior football pitches and 1no cricket pitch seasonally located over the football pitches, a sports pavilion (including sports club rooms, toilets and 6 dual changing rooms, a groundsman store and yard), equipped play space, and a minimum number of carparking spaces, to be agreed at OPA stage, will be provided at the northern end of the Channels Discovery Park.

Dukes Wood Sports Hub:

- 7.36ha formal sport provision - Comprising 3no. senior football pitches, 3no. junior football pitches and 1no cricket pitch seasonally located over the football pitches, a sports pavilion (including sports club rooms, toilets and 6 dual changing rooms, a groundsman store and yard), equipped play space, and a minimum number of carparking spaces, to be agreed at OPA stage, will be provided at the western side of Dukes Wood.

All Through School:

- 4.49ha formal sport provision - 4no. Senior football pitches.

An all-weather 3G floodlit pitch will be provided at the All Through School and a second 3G floodlit pitch will be provided at Dukes Wood. Subject to assessment at OPA Stage, there is potential for a MUGA to provided at the All Through School or Dukes Wood. The final sports pitch provision will be determined at OPA stage and secured through a S106 agreement. The final layout will be agreed at RMA stage.
The open spaces and greenways within the development will also include areas of informal sport including outdoor gym facilities, running / walking / cycling trails (2km, 5km and 10km loops) and informal recreation areas.

Each OPA will be required to set out within a Outdoor Sports Strategy, masterplans, parameter and phasing plans where outdoor sports will be delivered, including their size and proposed facilities available. Each RM phase will set out the detailed layouts of these areas through submission of detailed General Arrangement Plans, Landscaping Plans, Landscape Management and Monitoring Reports and detailed planting plans. A Sports Hub Delivery Mechanism will be secured within the S106 to ensure the hubs are delivered in-line with occupations within the CGC.

At the time of the RMA for the All Through School sports provision, a car-parking study and management plan will be required to be submitted.

In addition to outdoor sport, it is also confirmed that a four court sports hall will be provided at the All Through School (sized to Sport England Standards). This facility will be secured for community use and will include changing facilities. Other opportunities for community fitness could be provided in commercial gyms and community halls.
IDP References: D8 and D9

PRODUCTIVE LANDSCAPES (COMMUNITY GARDENS, ORCHARDS AND ALLOTMENTS)

Productive landscapes will will provide an accessible growing landscape for residents to cultivate, produce and grow food. Informal opportunities will be provided within the greenways and open spaces for the foraging of berries, nuts and herbs as part of the planting palette.

Productive landscapes should:

- Be accessible via pedestrian and cycle routes, providing safe, inclusive and sustainable movement between open space destinations;
- Include interpretation boards and signage, where located in public open space, to reference species, how to use and suggested recipes;
- Consider infrastructure requirements where appropriate to facilitate management - water, seating and picnic tables, composting areas and secure storage facilities (sheds); and
- Offer access points for community gardens and allotments for vehicle delivery and servicing, and where necessary appropriate provision of car and cycle spaces.

Each OPA will be required to set out within a Productive Landscapes Strategy, masterplans, parameter and phasing plans where these productive landscapes will be delivered, including their size. Each RM phase will set out the detailed layouts of these areas and the approach to maintenance through submission of detailed Landscape General Arrangement Plans, Landscape Management and Monitoring Reports and detailed planting plans.

IDP References: F6, F7, F8, F9a, F9b, F10a, F10b

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Green Infrastructure Strategy	✓		✓	
Landscape Management & Maintenance Report		✓	✓	
Co-located Sports Facilities Management Plan	✓			✓
Play Strategy	✓		✓	
Outdoor Sports Strategy	✓		✓	
Sports Hub Delivery Mechanism	✓			✓
Productive Landscapes Strategy	✓	✓	✓	
Planning Policy	DM20, DM21, DM22, DM24, Appendix B Development Standards			
Evidence Base	The Essex Design Guide **https://www.essexdesignguide.co.uk/**			

GUIDING FRAMEWORK PRINCIPLES :

WASTE, ENERGY AND UTILITIES

WASTE

“ OBJECTIVE

Lead the way in promoting a circular economy during construction and the life of the development ensuring prevention, reuse and **recycling of waste reduce the impact on the environment and facilitate more sustainable use of resources** for the benefit of society and the planet. Contractors and residents will be supported to generate the minimum amount of waste that is practicable , keeping waste as high up the waste hierarchy as possible with a target to **work towards 100% diversion of all wastes from landfill** through a year-on-year reduction in household total waste. ”

GUIDING PRINCIPLES

1. Manage all wastes generated from the development in a sustainable manner to reduce both its quantity and impact on climate change, and to maximise resource efficiency and circularity.
2. Storage space and collection systems will be designed-in to buildings and facilities allowing for maximum segregation of waste of all types including dry recycling, food recycling and garden waste whilst facilitating improved quality recyclate and less residual waste.
3. Embed an understanding of waste through stewardship by developing skills and support through proactive education, engagement and enforcement ensuring residents and occupiers of all buildings understand how to achieve higher levels of waste prevention, reuse, recycling, and composting.
4. Ensure services are accessible by all members and users of the community ensuring participation in, and a strong contribution to, the sustainable management of wastes generated.
5. Considered street design to provide efficient and safe access paths and allow for future resilience to collection services and transfer of activities.
6. Waste storage facilities across the development will enable safe and convenient segregation and collection, and avoid hazards for collection workers and do not give rise to adverse amenity or recreation impacts such as odour and are complementary to the street scene and character of the area.
7. Consider the lifespan of materials used in construction of all buildings and avoid unnecessary waste by ensuring they either reusable or recyclable at the end of their lifespan.

GUIDING FRAMEWORK PRINCIPLES : WASTE, ENERGY AND UTILITIES

WASTE

FINAL WORDING TO BE AGREED

Fully integrated sustainable waste management will be a key element in CGC being at the forefront of working within a circular economy. The principles of re-use across every aspect of the development and consumer use process from design to lifecycle use, retirement, reuse and finally recycling will be promoted and applied. Waste management across the development will take place as far as possible at the top end of the waste hierarchy and the location of waste storage, collection and processing facilities will be designed to work in harmony with the street scene and allow adaptability for innovative approaches to waste collection and management in the future.

OVERARCHING WASTE STRATEGIES (OWS)

To achieve the principles set out above each OPA will set out a roadmap that requires each RMA to detail core targets to ensure that the materials used reduce waste, ensure a long and functional lifespan, with easy maintenance when necessary, and can be reused or recycled in to other useful purposes where practical, feasible and viable to do so. In addition, RMA's will be accompanied by a construction waste management strategy which clearly sets out how construction waste will be sustainably managed.

RMA's will also need to demonstrate how the transport and manufacturing impacts of materials have been effectively managed and minimised, for example through re-using materials (such as soil, aggregates and timber) on-site and off-site manufacture.
Within road maps and the waste management strategies the commitments set out below should be followed, where applicable.

WASTE IN BUILDINGS

Assist those involved in the design and management of buildings to best provide for the storage and transfer of wastes to maximise the type and amounts that can be reused or sent for recycling or repurposed. Designing-in future capacity as the range of recyclable or bio-degradable materials is likely to increase, in line with progressive government policy. Due consideration will be given to assisted collections for eligible residents such as older people or disability or mobility affected residents that are unable to present their waste at the kerbside for collection. All non-residential buildings must have an offstreet collection area at ground level and built bin storage area doors must not open over the public footway or road.

For houses, fitted kitchen units should incorporate segregated recycling and refuse bins, and household waste should be stored neatly and safely in a location that is easy to use and easy to collect from. Bin stores located at the rear of properties with pathways to the street must be avoided as they can be difficult to access and use. Instead, front and side solutions designed solutions that are integrated into the streetscape are preferred.

For apartments, fitted kitchen units should incorporate segregated recycling and refuse bins, and communal waste and recycling stores should be provided with capacity to fully segregate waste streams and be accessible to all residents, including wheelchair users and children. They should be secure and locked at all times, located within the building curtilage and should be easy to access for collection teams. Where these are inside buildings, they should be ventilated and include wash-down facilities so they can be cleaned. For other buildings including commercial, community and education, sufficient space must be provided to fully segregate recyclables and meet the necessary spatial requirements of the calculated container footprint, as per forecast waste outlined in the submitted waste strategies for that phase.

PROMOTE INDUSTRIAL SYMBIOSIS AND FACILITATE CIRCULAR SUPPLY CHAINS

CGC will work effectively with the entire value chain, facilitating a shift from the traditional linear model to a circular economy approach and enable the selection and procurement of sustainable materials that improve resource productivity, efficiency and keep products and materials in use, allowing higher reuse and reconditioning.

Developers should be encouraged in waste strategies to embrace reclaimed and remanufactured materials and components, allowing designs to be dictated by what is available and seek, where possible to aim to deliver construction materials from secondary materials.

WASTE

In addition to this, an incremental target for recycling Construction and Demolition waste should be set for specific phases that is achievable and deliverable.

This, in turn will unlock opportunities to create markets for secondary materials through stimulating demand. Strategic design principles should be considered throughout the life of the development to ensure that materials are chosen that aid efficiency, disassembly, adaption, and value conservation.

A balanced approach to cut and fill should be applied, incorporating all excavated material in design and landscaping where practical, feasible and viable. Furthermore, landscaping will utilise local tree and plant species and local materials to spatially integrate resource and vision.

ENSURE MATERIALS HAVE A LIFE BEYOND THEIR INITIAL PURPOSE

The Garden Community will unite, equip, and mobilise its contractors and residents, and enable them to recognise and implement resource efficiencies, to design out waste and pollution, keep products and materials in use and regenerate natural systems.

Facilities will be provided with sufficient space for all development types with a target to fully segregate household (including flats), commercial and industrial waste at source. This will allow for cleaner higher quality recyclate, that can be reprocessed into higher circularity value materials, and remain in the supply chain for longer. This will enable more waste materials from the community to be recycled. Critical to this, will be improving recycling infrastructure through strategic partnerships, to ensure as much material is captured for reuse and recycling and therefore reduce the residual waste proportion. Focus will be given to understanding better the types of waste generated by the development to ensure the correct collection services are provided.

An ambitious incremental target for recycling household and commercial waste has been set, as well as a target to progressively work towards diversion of 100% waste from landfill. To facilitate this, the Council will be required to develop the necessary recycling infrastructure to encourage kerb-side recycling. A number of stewardship initiatives could be introduced, including a reuse/repurpose site, where residents can bring items they no longer want/use for disposal, or for others to utilise or upcycle. Other initiatives could include a community composting project utilising garden/food waste generated from the development and public incentives schemes to incentivise participation in recycling, including performance-based charging schemes.

Where bring sites or composting schemes are considered it will be important to ensure that they are acceptable in planning terms and particularly ensure protection of amenity of others in relation to matters such as noise and odour.

WASTE WISE STEWARDSHIP AND EDUCATION

Effective implementation of good waste management concepts will connect residents and businesses with their footprint. The CGC will deliver a range of education, training and awareness initiatives. Stewardship will underpin education and help foster a better understanding of waste. An interactive education programme will instill a strong sense of resident participation in sustainable waste management from the outset. Education initiatives to promote waste and environmental issues will include school visits, business visits and support to community projects. Integration with schools and businesses will help establish a long-term connection, and community ownership. A clear element of this is engaging with recycling services, so that reducing waste and maximising recycling becomes an integral part of everyday. This will promote a better understanding of waste prevention and recycling services and facilitate positive behaviour change. Education packs will be distributed and positive messages about the development's achievements in resource and waste management and local benefits will be promoted.

WASTE TARGETS

Overall strategy will be to work towards the following waste targets:

Short term:
- 2021 - 100% compliance with Environment Act 2021
- 2021 – year on year reduction in total household waste
- 2025 - 65% mixed municipal waste to be recycled and 100% diversion from landfill
- 2025 - 65% Commercial & Industrial (C&I) waste to be recycled and 100% diversion from landfill

Medium term:
- 2028 - 80% Construction and Demolition (C&D) waste to be reused, recycled or recovered
- 2030 - 70% mixed municipal waste to be recycled and 100% diversion from landfill
- 2030 - 70% Commercial & Industrial (C&I) waste to be recycled and 100% diversion from landfill

Long term:
- 2032 - 95% C&D to be reused, recycled, or recovered
- 2033 - Food waste generated by CGC to be composted and re-used within the site

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Overarching Waste Strategy (OWS)	✓		✓	
Site Waste Management Plans (SWMP)		✓	✓	
Planning Policy	DM26, Essex and Southend-on-Sea Waste Local Plan 2017			
Evidence Base	Waste Strategy			

GUIDING FRAMEWORK PRINCIPLES :
WASTE, ENERGY AND UTILITIES

ENERGY

OBJECTIVE

To ensure a clear pathway to achieving a **net zero carbon** development through the delivery of **net zero ready homes**. Support UK and local Government targets on climate change, whilst putting low carbon energy production and minimising consumption at the heart of a sustainable development that sets high standards, **embraces innovation and is flexible to respond to emerging technological advances.**

GUIDING PRINCIPLES

1. Develop standards, definitions and boundaries for energy and carbon which set a clear pathway towards the Garden Community being a Net Zero Carbon development, delivering Net Zero buildings from 2035.
2. Ensure that energy and carbon design is integrated across all disciplines such as transport, water, green infrastructure, materials and waste so that a joined-up approach to energy carbon and resource efficiency is interwoven within the development.
3. Implement and adhere to an operational Energy Hierarchy that ensures a fabric first approach is placed at the heart of all forms of development and includes, amongst other things, the principles of passive design.
4. Commit to an all-electric development for new homes so that they are gas free and employ low carbon technologies such as heat pumps from the outset whilst embracing and implementing emerging low carbon heating solutions in the medium and longterm.
5. The delivery of an all-electric development so all homes and buildings benefits from the decarbonisation of the electricity network and can operate Net Zero through the purchase of certified renewable electricity.
6. Take account of embodied carbon emissions resulting from activities across the whole building lifecycle, so they can be calculated, the quantity of materials and waste can be reduced, and sustainable low carbon design options can be identified.
7. Protect against volatile utility costs by minimising energy demand, through measures that could include highly efficient fabrics, heat pumps and where practical, feasible and viable, provision of renewable energy generation in each property alongside battery storage technology where viable.
8. Awareness raising through smart data and tools so that users of residential and non-residential buildings have sufficient information to monitor and control energy consumption.
9. Where achievable, monitor and evaluate post-occupancy data to review the customer experience to ensure lessons are learned and the best solutions are delivered that give tangible results on the path to net zero carbon.
10. Deliver Electric Vehicle (EV) smart charging to all homes with onplot parking, as well as provision for visitor spaces and carpool clubs with passive capacity across the development.

NET ZERO CARBON READY

The Development will be guided by policy and best practice guidance such as that published by the UK Green Building Council (UKGBC), the London Energy Transformation Initiative (LETI) and the Governments Future Homes (FHS) and Future Buildings Standards (FBS). This will assist in setting the definitions and boundaries for current and future energy consumption and carbon emission targets in order to achieve Net Zero Ready by 2025 and Net Zero Carbon by 2050.

Each OPA will contain a framework Energy Strategy and upon the granting of planning consent, conditions will be attached to ensure each RMA sub phase provides a detailed Energy Statement setting out how the principles set out above could be implemented.

It is recognised that technology and solutions to our net zero challenge will evolve quickly over time and therefore the energy strategy will be flexible enough to respond to the opportunities that are likely to be available from 2030 and beyond.

It is also important to recognise that the carbon emitted as a result of the energy used within the CGC will fall over time in line with continued decarbonisation of the national grid. This is a strong justification to promote an all-electric energy strategy and design out fossil fuels where possible.

The strategies should include approaches to the following key elements:

FABRIC FIRST AND ENERGY EFFICIENCY

In accordance with the Energy Hierarchy, a 'fabric first' approach to building design will be adopted addressing thermal performance alongside minimising unregulated energy demand such as through specifying A / A+ Rated Energy Efficient Appliances. This should be addressed first before then considering the use of efficient mechanical and electrical building services systems (such as efficient lighting), the installation of renewable energy measures (such as roof mounted Solar PV) and where possible, supply of low-carbon heating and hot water.

The fabric first approaches that could be deployed in the short term would typically include:
High levels of thermal performance for wall, floor and roof insulation
High thermal and visual performance glazing
High levels of air tightness
LED lighting

As technologies emerge OPA's will reflect the latest best practice to ensure it fully supports the transition to a net zero economy. Building form and design will be optimised to maximise the benefits of passive design. Occupant thermal comfort requirements will be maintained taking account of changes in future air temperatures as a result of climate change. This will be demonstrated by an overheating assessment at the design stage following best practice guidance such as CIBSE TM59[1].

Street lighting will also be provided by LED lights alongside other measures focused on reducing operational energy across the community infrastructure.

Operational energy targets

The development will be guided by a set of increasing energy performance targets, transitioning the development of residential and non-residential development to Net Zero over time.

At this stage this comprises a range of short, medium, and long term targets. These targets are indicative at this stage and will be investigated and tested as part of OPA's and RMA's to ensure they are commercially and technically viable.

The targets are set out under the following time frames which assume development will start from 2025.

- Short term (2025 - 2029)
- Medium term (2030 - 2035)
- Long term (>2035)

Short Term - FHS / FBS+

In the short term The Development will will meet the requirements of the FHS and FBS as a minimum, delivering homes and buildings which are Net Zero Ready and in alignment with the Government's current Net Zero trajectory for new development.

Medium Term - Net Zero Ready

In the medium term The Development will aim to meet a range of energy performance targets set out below to deliver buildings which target Net Zero for total energy, reducing total carbon emissions, or meeting the requirements of future Government Net Zero Policy, whichever is greater.

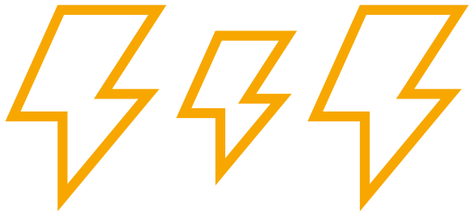
Long Term - Full Net Zero

The long term strategy aims to deliver buildings which are fully Net Zero delivering the equivalent of PassivHaus levels of energy performance, balancing on-site residual energy demand with renewable energy generation.

The following energy intensity targets are proposed for The Development, outlining how buildings will transition to being fully Net Zero over time.

GUIDING FRAMEWORK PRINCIPLES : WASTE, ENERGY AND UTILITIES

ENERGY



The targets below are drawn from available national guidance on delivering low carbon development, including the RIBA 2030 Challenge and LETI Design Guide, they go significantly beyond the Governments targets as set out in the FHS and FBS. During the outline and reserved matters design stages extensive modelling, design and costing will be undertaken to determine the commercial and technical feasibility of these targets and therefore whether they are deliverable and viable.

Domestic Energy Use Intensity Target:

- Medium Term: 50kWh/m2/yr
- Long term: 35kWh/m2/yr

Non-domestic Energy Intensity Target are set from 2025 onwards

- Office Buildings -Medium term: 75 kWh/m2/yr, Long Term: 55 kWh/m2/yr
- School Buildings – Medium term: 85 kWh/m2/yr, Long Term: 65 kWh/m2/yr
- Retail Buildings – Medium term: 130, Long Term: 85 kWh/m2/yr
- Leisure Buildings – Medium term: 125, Long Term: 92 kWh/m2/yr
- Innovation Buildings – Medium term: 90, Long Term: 65 kWh/m2/yr

Domestic Space Heating Energy Target:

- Short Term: 15-20 kWh/m2/yr
- Medium Term: 15 kWh/m2/yr
- Long Term: <15 kWh/m2/yr

Non-Domestic Space Heating Energy Target:

- Short Term: 15-20 kWh/m2/yr
- Medium Term: 15 kWh/m2/yr
- Long Term: 15 kWh/m2/yr

LOW CARBON HEATING

For technologies such as electric heat pumps should be considered where practical, feasible and viable, to provide low carbon energy efficiency heating. Air source heat pumps could be one form of technology supplied for most properties with ground source heat pumps potentially used for community buildings if sufficient space is available for heat exchange. The viability and practicality of future heating technologies and systems such as hydrogen and district heating may be considered in at the appropriate stages in the future when they are capable of large-scale deployment to ensure adaptability and flexibility as technologies emerge and mature.

RENEWABLE ENERGY GENERATION AND ENERGY STORAGE

Renewable energy generation will help reduce reliance on electricity from the grid for low carbon heating and other activities and therefore help to minimise fuel bills. Each Phase and Sub Phase will need to consider the use of renewables generation for all buildings where feasible allowing for site specific topography and potential impacts such as shading from trees and other buildings. In addition, where practical, feasible and viable, battery storage could also be considered to allow homes and business to utilise more of the electricity generated from renewable sources within their buildings. This could be sized so that a proportion (targeting at least 50% where viable) of the renewable power is used within the building.

Opportunities to undertake renewable energy projects within the landscape such as capturing heat from the ground, water or sewers to re-use within the community may be explored.

REFRIGERANTS

Whilst heat pumps have an advantage of using low carbon electricity, they also use refrigerants as part of the process to raise the temperature of the natural heat source in the air, ground or water for a building's heating and hot water requirements. Some refrigerant gases when released or leaked into the atmosphere can give rise to Greenhouse Gases. Therefore, limits on the Global Warming Potential (GWP) from refrigerants used in domestic heat pumps systems used on site will be set with a target to be determined at outline design stage and reviewed as heat pump technology evolves.

EDUCATION AND MONITORING

Each sub phase should set out an approach to helping occupiers of both residential and non-residential buildings to understand their choices and how new technologies work in their homes, businesses and communities. In order to enable users to be conscious about their energy consumption, a variety of education and monitoring methods will be considered including:

- Smart metering to enable people to make conscious decisions about the quantity, cost and the timing of energy they use.
- Educational user guide packs for new residents and occupiers to ensure they are aware of good practice to reduce energy consumption and how to make best use of new technologies including within their homes or building.
- Gathering Home User feedback on how well the technologies perform, cost and their functionality to ensure they are used effectively and easily.

As part of the delivery of The Development As part of each phase of development, i.e. short and medium term, developers will carry out Post Occupancy Evaluation on a proportion of homes with data and learning utilised in the design and construction of future phases of development.

ENERGY

INTEGRATING ELECTRIC VEHICLES

Each RMA will ensure that all active devices provide as a minimum 7.5KVa (32A) AC 'smart charging' points internally or externally on garage buildings or on external walls adjacent to all on-plot allocated spaces.

RESIDENTIAL ON PLOT AND OFF PLOT

Additional EV charging will also be provided for non-allocated spaces and visitor parking. Charge points will be easy to locate and be integrated within the wider transport and mobility strategies. It is anticipated that subject to technological advances, electric vehicles could also potentially play a role in optimising power demand across the development acting as mobile battery storage facilities whilst being flexible in terms of times and locations they can be charged. Where possible all properties with off-plot parking should have an adequate supply of power and the passive technology (the cabling and infrastructure) to add EV smart charging devices in future. All carpool club spaces will have the passive network available to provide EV charging to each space across the development

MOBILITY HUBS

The Rapid Charge EV points will be provided within the primary Mobility Hub. The Secondary and Tertiary Mobility Hubs will contain standard smart EV points at a number to be confirmed as part of the RMA stages and these will be dictated by the location and nearby facilities/ amenities i.e. on a predicted demand basis, for each Hub across the site. Smart EV charging points for scooters and bikes will be coordinated within secondary and tertiary
transport hubs.

EMBODIED CARBON

Prior to construction of sub phases, sustainability and Energy Statements should provide for the calculating the embodied carbon of materials, construction and maintenance activities to help guide design choices on low carbon materials, and evaluate construction practices that could include:

- Adopting, where practical, feasible and viable, Modern Methods of Construction such as timber frames in house building which improves sustainability whilst raising the quality and pace of delivery.
- Sourcing materials and skills locally to improve sustainability of construction and provide positive feedback into the local economy

To reduce the embodied carbon of new buildings The Development will target delivering buildings that meet the embodied carbon targets set out in the RIBA 2030 challenge.

Residential Embodied Carbon Targets:

- Short term: <800kgCO2/m2
- Medium term: <675kgCO2/m2
- Long Term: <500kgCO2/m2

Non-residential Embodied Carbon Targets:

- Short term (Schools): <675kgCO2/m2
- Short term (Offices): <970kgCO2/m2
- Medium term (Schools): <540kgCO2/m2
- Medium term (Offices): <750kgCO2/m2
- Long term (Schools): <540kgCO2/m2
- Long term (Offices): <600kgCO2/m2

It is widely recognised that the supply chain will need to radically decarbonise as we move toward our net zero targets. However at present there are very few low embodied carbon materials on the market that can be used as alternatives to traditional materials. There is of course the opportunity for CGC to stimulate this market over time and this will be a key aim of the embodied carbon strategy.

Specific building targets for upfront carbon (which covers construction carbon) are proposed at this stage based on available targets from the RIBA 2030 chalenge. Wider embodied carbon targets can be developed over time as further information across the industry is developed.

Future Reserved Matters applications will ensure that embodied carbon emissions resulting from the construction and the use of the buildings over its entire life, including its demolition and disposal will be calculated and incorporated into the net zero strategy in the future.

In leading the way on the path to Net Zero the Consortium will assist in exploring how production and construction methods can be made Net Zero and sustainable by 2050 although it is recognised that this is reliant on the availability of low carbon material alternatives and a low-carbon upskilled supply chain and labour force.

The Carbon Framework set out here, and in particular the short term targets, are intended as a baseline for consideration against which future planning applications will be assessed, cognisant that technology and solutions to the net zero challenge are evolving over time. The Framework will be tested throughout the outline and Reserved Matters planning application stages based on deliverability and viability considerations. The Carbon Framework is intended to ensure there is a consistent approach to reducing carbon emissions across the Garden Community. Amendments to the Carbon Framework will only be considered when justified circumstances are demonstrated, with evidence provided.

GUIDING FRAMEWORK PRINCIPLES : WASTE, ENERGY AND UTILITIES
ENERGY

DELIVERING NET ZERO DEVELOPMENT

As part of the development proposals each stage of development, i.e. the short and medium term, will include measures to support the continued decarbonisation of future phases. Such as:

Encouraging the enhancement of supply chains - Encourage supply chain investment to build resilience for key equipment including heat pumps. Provide clear communication to housebuilders on the ambition for CGC. New and emerging technologies such as battery storage and smart energy systems will be trialled in specific dwellings.

Supporting skills gap training - The developers will look to support employment and skills training, for example supporting education charities. This will aim to improve construction skills to help improve air tightness.

Delivering Post Occupancy Evaluation - The Development will carry out POE on up to 10% of homes at each stage, i.e. during the short and medium term stages, with data and learning to be utilised in the design and construction of future phases.

Pilot Projects - During the short and medium term stages of The Development pilot projects on up to 5% of homes at stage stage, carried out with the aim of understanding design and construction requirements of future phases of development, taking learning from the POE and supporting enhancements to the supply chain and skills gap training.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Energy Strategy	✓		✓	
Energy Statement		✓	✓	
Non residential units BREEAM Excellent		✓	✓	
Planning Policy	S2, S9, DM 19, DM 23, DM 25			

A SUSTAINABLE HOME

Illustration to show how some measures could be incorporated in to a typical house.

GUIDING FRAMEWORK PRINCIPLES :
WASTE, ENERGY AND UTILITIES

FOUL WATER

OBJECTIVE

Implement a foul water strategy that provides **sufficient on-site capacity whilst ensuring no detriment** to the existing foul network within the vicinity of the site.

GUIDING PRINCIPLES

1. Work with the sewerage undertaker to provide phased primary infrastructure capable of connecting to the water recycling centre east of Chelmer Village adjacent to the A12.
2. Implement utilities early to ensure each planning application area can be delivered within the relevant phased period of development.
3. Ensure the foul water strategy contributes towards wider objectives relating to water conservation.

FOUL WATER

As CGC expands and grows a well-planned network of foul water drainage will be required to ensure retrospective works will not be required. Any foul water drainage strategy will therefore aim to provide a network that delivers an environmentally responsible solution that efficiently conveys the waste from the site to the strategic network.

Foul Water Drainage strategies will be developed in accordance with relevant legislation and policy including, but not limited to, The Water Act (2014), National Policy Statement for Waste Water (2012), the local Drainage and Waste Water Management Plan (DWMP) and Code for Adoption (2020).

Each OPA will be responsible for early engagement with the Local Planning Authority and Sewerage Undertaker to agree:

- Points Of Connection to ensure a joined up and cohesive approach across the Garden Community and wider networks.
- Appropriate discharge rates to ensure the development does not have adverse impacts on the existing surrounding foul network.
- Routing of the foul water network to meet phasing and delivery criteria.

Each OPA will be expected to submit an indicative Foul Water Drainage Strategy, followed by a Detailed Foul Water Drainage Strategy for each RMA in order to demonstrate how the detailed development ties in to the wider Strategy.

MAINTENANCE & ADOPTION

The drainage network established will be offered for adoption as a publicly maintained sewerage system in accordance with prevailing guidance and legislation at that time. A Maintenance Plan will be submitted at each RMA stage to ensure the longevity of the foul water network with development then brought forward in accordance with that Plan following which the sewerage undertaker will then take over and maintain the system in perpetuity.

MONITORING & EVALUATION

The sewerage undertaker will be responsible for ensuring that the foul water meets both the Garden Communities and surrounding area requirements and remains fit for purpose. Should changes to the foul water network be required then consultation with relevant master developers and plot developers will identify and implement necessary solutions for the relevant phase.

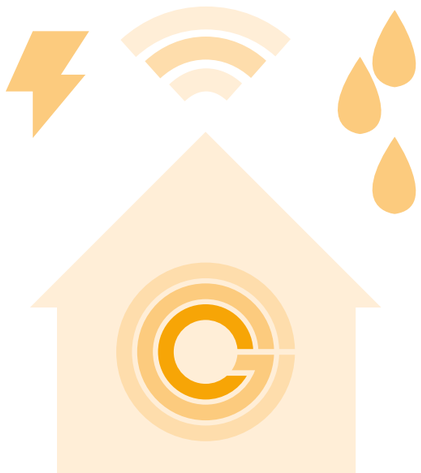
Delivery Item	Application Submission		Secure By		
	Outline Application	Reserved Matters	Condition	S106	Other
Foul Water Drainage Strategy	✓		✓		
Detailed Foul Water Drainage Strategy		✓	✓		
Maintenance Plan		✓	✓		
Planning Policy	Policy S2, S7				
Evidence Base	Onsite Civil Engineering Infrastructure Statement				

GUIDING FRAMEWORK PRINCIPLES:
WASTE, ENERGY AND UTILITIES

UTILITIES (ELECTRICITY, POTABLE WATER & BROADBAND)

OBJECTIVE

Delivery of **sustainable utilities and services** to enable the delivery of high efficiency connections across the development that will support **smart homes, electric vehicle charging, low carbon heating and water efficient homes.**



GUIDING PRINCIPLES

1. Secure and distribute a sufficient capacity of electricity that supports high efficiency, low-carbon, electric heating methods to ensure there is no requirement for gas in any residential dwelling and build in resilience to changing technologies and future capacity demands.
2. Deliver high speed electric vehicle charging throughout the development ensuring provision for every home and in visitor parking areas to support the transition to more sustainable forms of travel.
3. Provide superfast connectivity by installing Fibre To The Premise (FTTP) broadband for all homes and business on site to support increased working from home and smart residential and commercial technologies.
4. Ensure suitably sized potable water connection is sourced to minimise the impact on the surrounding network.

GUIDING FRAMEWORK PRINCIPLES: WASTE, ENERGY AND UTILITIES

UTILITIES (ELECTRICITY, POTABLE WATER & BROADBAND)

Utilities play a vital role in the economic and social successes of an area, as it provides critical infrastructure to the function of all day-to-day activities and will be integral in promoting environmental sustainability on a larger scale such as ensuring there is sufficient electricity capacity to deliver the roll out of electric vehicle charging points

A High-Level Utilities Layout will be established through OPA's, with a final Detailed Utilities Layout specific to a development parcel being secured through RMA's.

ELECTRICITY

The use of a high efficiency electrical network will eliminate the need for gas in residential homes and reduce its demand in other buildings within the development ensuring its harmful environmental impacts are minimised and the transition to a low-carbon development is be supported.

Through use of an Independent Distribution Network Operator (IDNO) the loads required for the residential dwellings' charging and heating requirements will be substantially diversified, therefore minimising the overall impact on the surrounding Electrical Network.

OPA's will need to demonstrate that electrical utilities will have a capacity that ensures high efficiency electric heating methods, such as Air Source Heat Pumps, can be operated across the site.
This will result in there not being a need for a gas network to be installed for residential uses. However, there are likely to be circumstances where other land uses within the masterplan area may require the use of gas, but in such situations, use of the electricity network will be encouraged. Additionally, OPA's will ensure the electrical capacity supports proposals for a single 7kW electric vehicle charger per residential dwelling throughout the development, as well as localised communal charging locations within Mobility Hubs.

POTABLE WATER

As part of the significant upsizing of the water mains, carried out as part of the original Beaulieu and Channels development, the additional supply of this development is already available. Regarding the on-site network, this Connections will make it possible for a New Appointment and Variation (NAV) company to adopt the on-site water network. This would provide new homeowners with an independent water supplier and ensure service and price can be as competitive as possible.

Within dwellings, the Building Regulations optional requirement for water efficiency of 110 litres per person per day will be achieved.

BROADBAND

FTTP, also known as 'Superfast Broadband' will be available. This is an important factor when delivering smart-enabled homes. This will ensure that fast, reliable broadband is available to all domestic and commercial premises.

The benefits of this include:

- Reliable connections that will allow business to operate with the security of services.
- Improved work-life balances through the ability to work from home.
- Capacity for 'smart' homes and businesses to support multiple devices.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
High Level Utilities Layout	✓		✓	
Detailed Utilities Layouts		✓	✓	
Planning Policy	S9, DM25			
Evidence Base	Onsite Civil Engineering Infrastructure Statement. Utilities Report			

GUIDING FRAMEWORK PRINCIPLES :

HEALTH & COMMUNITY INFRASTRUCTURE

OBJECTIVE

Create a place that encourages healthy behaviour as a form of preventative care whilst **building a strong community served by excellent facilities.** Address the real health challenges of the 21st century through innovative solutions for not only the physical causes and symptoms of poor health, but also the social, economic, and environmental components of total well-being.

GUIDING PRINCIPLES

1. Develop a range of community facilities embedded within the neighbourhood centres across the masterplan to enliven and enrich the entire development.
2. Ensure buildings and floorspace are provided in a flexible way to ensure health and community uses can respond to demand and evolving habits in a way that supports sustainable growth of the new community.
3. Provide facilities that serve the needs of a variety of different groups of people, including those who are disadvantaged or disabled, through development of multi-purpose and functional spaces, opportunities for co-location of different uses for example around neighbourhood centres and the use of school facilities outside school hours and term times.
4. Provide sufficient floorspace for community facilities to ensure that as the population of the Garden Community grows there will not be pressure on their availability when needed the most.
5. Ensure the long-term viability and sustainability of community facilities through stewardship and ongoing monitoring.
6. Support the health and wellbeing of the residents and users of the Garden Community by delivering a wide range of health and social infrastructure on-site, and through implementation of the Chelmsford City Council Livewell Development Accreditation Scheme.
7. Design open spaces to support healthy communities by encourage preventative health care, and allocation of space for non-traditional health measures such as community gardens, and allotments.

GUIDING FRAMEWORK PRINCIPLES :

HEALTH AND COMMUNITY INFRASTRUCTURE

A community is about more than buildings, it is about people and with the right provision of flexible floorspace within the Garden Community they will be given the opportunity to meet and interact and develop the sense of belonging which comes with that.

The development will support the health and well-being of the residents and users of the Garden Community by delivering a wide range of health and social infrastructure on-site. This, alongside the implementation of the Chelmsford City Council Livewell Development Accreditation Scheme, will help to promote the physical and mental well-being of all those who experience the development.

The Site could accommodate a resident population of up to 13,200 people (based on an average household size of 2.4 - derived from 2011 Census data for Chelmsford City). It is therefore important that social infrastructure provision meets the needs of these new residents and households from a range of demographic backgrounds who have different interests and demands. The amount of health and community floorspace will be secured at OPA stage, and then the detailed design and layout will be established at RMA stage.

The following section has been drafted based on the assumption that the Developer Consortium is currently proposing a total of 5,500 new homes for the Chelmsford Garden Community. In the event, the overall number of homes proposed changes, the approach to health and social infrastructure provision will be reviewed to ensure the proposals meet the needs of the population. Updates will be possible through the IDP which is a 'live' document. Any updated requirements will then be secured via a S106 as OPAs are determined.

DEVELOPMENT AT VILLAGE CENTRES

The Garden Community will comprise of four distinct new village centres identified on the Illustrative Masterplan in Section 5:

- Park Farm Village
- Great Belsteads Village
- Hawthorn Village
- Willow Hill Village

Each village centre will have the ability to deliver a range of community facilities. Facilities secured by the IDP include:

- Primary healthcare e.g. GPs, pharmacies, dentists, and opticians (IDP Reference B1)
- Community Space at Great Belsteads Village and Park Farm Village (IDP Reference D4 and D5)

Other community facilities that could come forward include, but are not limited to:

- Libraries
- Gallery/exhibition space
- Museums
- Public houses
- Places of worship
- Indoor Sports facilities (i.e. gyms); and
- Open spaces
- Arts and Cultural Facilities

Whilst Park Farm Village will be the largest centre, and delivered in Phase 3 (See DFD Section 9), each phase brought forward in advance of this will be connected to local facilities. The majority of Phase 1 and 2 development will be serviced by either Great Belsteads Village or Willow Hill Village (both delivered in Phase 1), whilst the southern portion of OPA 2 delivered in Phase 1 will be connected to Beaulieu to the south via a crossing over the RDR1 (Beaulieu Parkway). This phasing ensures no residents are left without sustainable access to local facilities, whilst the CGC reaches a critical mass to support the larger and more centralised Village Centre.

Each OPA will identify an amount of non-residential floorspace within these centres, including a breakdown of floorspace by Use Class. The detailed range and mix of community floorspace within this will need to be reviewed as part of an on-going process as the scheme progresses and residents' needs become clearer. Final details would be secured within RMAs. The composition and range of uses located within these centres will vary in terms of their size and when they are delivered, but they will be designed to ensure that uses within them complement rather than compete with those elsewhere in the development. The character and density of these areas are described further in Section 8 of this DFD.

IDP Reference: D5

GUIDING FRAMEWORK PRINCIPLES :

HEALTH AND COMMUNITY INFRASTRUCTURE

HEALTHCARE PROVISION

The overall population size suggests potential demand for approximately eight GPs (plus associated primary healthcare services) once the development is complete and fully occupied. Interim provision could be provided in the earlier years of the development, co-located within neighbourhood centres in line with growth in demand and subject to the needs of the local Clinical Commissioning Group (CCG).

Prior to submission of all OPA's pre application discussions will take place with the Mid-Essex CCG (soon to become part of new Integrated Care Systems). Once the capacity and trigger for delivery is established through the OPA's the IDP will be revised accordingly to ensure the Garden Community provides the necessary primary healthcare capacity to meet demand at the appropriate time.

Healthy communities will also be supported through the design of both open space and streets promoting active movement (See Movement and Green and Blue Infrastructure GFP sections for more information).

IDP Reference: B1 and B2

COMMUNITY SPACE

Early provision of community space (which can accommodate a range of different uses) will make a significant contribution to placemaking and feelings of wellbeing and belonging as new residents move onto the site.

Where appropriate, community uses will be co-located with each other and/or shared between different groups and users. This makes efficient use of community assets, supports long-term viability of facilities, and encourages positive interaction between different demographics that might not otherwise take place.

The masterplan allows for provision of a range of different types of community floorspace. This has been informed by the following benchmarks/standards (as identified through discussions with CCC and ECC):

- 111sqm per 1,000 people (based on neighbouring South Cambridgeshire's standard) for community meeting space e.g. village halls, community halls, church halls and pavilion buildings;
- 73sqm per 1,000 people (based on standards applied by the Arts council and the former Museum, Libraries and Archives (MLA)) for arts and cultural space (including libraries);
- The Sport England Facilities Calculator (outputs for 5,500 homes/13,200 people).

It is important to note that there is likely to be considerable overlap between the various community, arts/cultural, and indoor sports uses on-site. It is also expected that some of these uses will be based in facilities such as schools subject to a Community Use Agreement (as is likely to be the case with the majority of the indoor sports provision although the community meeting spaces can still be designed to accommodate use for indoor sports use on a smaller scale)

IDP Reference: C4

Public Art
Public art will play an important role in enhancing place making across the community. The Site Wide Design Principles Document will include a strategy for public art that each OPA will need to adhere to.

CIL PAYMENTS

In addition to the delivery of community infrastructure, a financial contribution to Chelmsford's infrastructure will be made via the Community Infrastructure Levy secured at OPA stage.

The list of infrastructure that CCC considers could be funded, wholly or partly by all CCC Community Infrastructure Levy payments, is set out in the Council's Regulation 123 List. Examples of funded infrastructure include leisure centre improvements, Widford Park and Ride (IDP Reference C4), improvements to landscape, habitats and access to the countryside, and healthy living and well-being initiatives.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Quantum and location of facilities	✓			✓
Detailed design and layout of facilities		✓	✓	
Planning Policy	Policy S5, S9, S10, SGS6 & DM20			
Evidence Base	DFD Health and Social Infrastructure Technical Appendix			


YARD FARM
Marshall

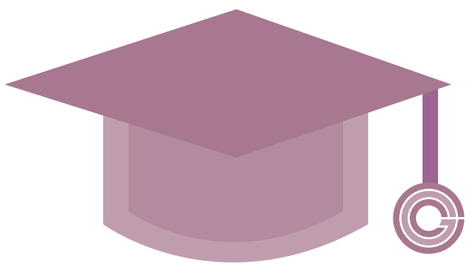
GUIDING FRAMEWORK PRINCIPLES :
COMMUNITY INFRASTRUCTURE

EDUCATION



OBJECTIVE

Deliver outstanding educational facilities where pupils' health is promoted by encouraging safe and active travel to school, **where their educational journey supports them reaching their maximum potential** through modern well-designed spaces, and where the community benefits through schools being located within village centres and providing shared facilities for wider use.



GUIDING PRINCIPLES

1. Ensure a range of inclusive, integrated and high-quality educational facilities are available to the local population to meet demand as the development grows and homes are occupied.
2. Provide schools and educational settings that prioritise the health and well-being of children through well-designed amenity and play spaces, as well as being accessible by active modes of transport
3. Address the educational needs of all children living in the Garden Community, including those with additional and/or special needs.
4. Set schools in locations that make active travel the most attractive mode of transport; minimise school run traffic and enable school buildings to face onto high quality traffic free public realm.
5. Deliver a sustainable built and natural environment around each school that enhances learning, health and well-being.
6. Support life-long learning, community use and local sports clubs through spaces that can be hired outside of school hours.

EDUCATION

Access to high quality education and training can play a major part in breaking down inequalities and improve social mobility. By providing high quality education facilities CGC will allow the best possible chance for pupils to enjoy learning and reap the benefits this brings at later stages in life.

The allocation of appropriately located and sufficiently sized sites for childcare facilities and schools will be secured as part of OPAs, with the detailed design being secured as part of relevant RMA's. The process for the delivery of schools, shared use facilities and any Education Contributions will be established as part of future S106 agreements with the OPAs.

The following section has been drafted based on the assumption that the Developer Consortium is currently proposing a total of 5,500 new homes for the Chelmsford Garden Community. In the event, the overall number of homes proposed changes, the approach to education provision will be reviewed to ensure the proposals meet the needs of the population. Updates will be possible through the IDP which is a 'live' document. Any updated requirements will then be secured via a S106 as OPAs are determined.

NUMBER OF SCHOOLS

As the Garden Community will deliver around 5,500 new homes it is critical that the proposals include a range of educational provision to meet the needs of the new resident population.

This provision will take the form of five schools delivered across four sites This provision will take the form of five schools delivered across four sites - as shown on the Land Use and Access FPP in Section 7. There will be four primary schools (with co-located early years provision) and one secondary school (potentially with a sixth form if required – subject to advice from DfE). A summary of the proposed school sites and their broad locations is provided below:

Primary Schools

- 1 x primary school (2.4ha site) in the Great Belsteads Village (OPA1);
- 1 x primary school (2.1ha site) in the Willow Hill Village (OPA2);
- 1 x primary school (2.1ha site) in the Hawthorn Village (OPA2);

All Through School

- 1 x All Through School (12.1 ha total site, including 1 x Primary School and 1 x Secondary School) in the Park Farm Village (OPA2).

As part of the CGC's commitment to education, a contribution to education and training (skills of post-16 adults is provided in the IDP and land within the All Through School site is provided for a 6th Form College.

The targets for the delivery of school facilities and places will be established through the Stage 2 Masterplan OPA's kept under review via the agreed IDP mechanisms as the development progresses to ensure that provision keeps up with demand and, similarly, where demand does not reach anticipated levels, that facilities are not expanded or do not come forward unnecessarily.

The new schools proposed would be delivered in addition to those already operating or proposed as part of the Beaulieu development to the south of the Site - these include an all-through school and a standalone primary school.

IDP Reference: A3, A4, A5, A6, A7, A8, A9

EARLY YEARS AND CHILDCARE PROVISION (EY&C)

The three primary school sites and the all-through school site will each accommodate a co-located EY&C facility (each 56 place). Two 56 place standalone early years facilities have also been identified to be delivered in Great Belsteads and Park Farm village centres. However, depending on the demand arising from the development, there is flexibility within the village centres across the Garden Community to deliver up to a further two standalone facilities (based on 5,500 qualifying dwellings), as demand requires. This will be monitored through the IDP. These facilities will need to be delivered to an appropriate standard, supported by appropriate financial contributions, and provide the range of early years and childcare services for children aged 0-5, along with additional childcare provision (e.g. wrap around and holiday club care for all children aged 5-14 and children aged 5-25 with special educational needs and disabilities (SEND). Further information on needs, costings and design is set out in the Essex Developers' Guide.

IDP Reference: A1 and A2

SPECIAL EDUCATIONAL NEEDS (SEN).

Those with SEN that can be educated in mainstream environments will be catered for on-site. Children with more specialist needs will be educated off-site in the County's existing SEN support infrastructure. These more specialist needs are met by developer contributions through the IDP (IDP Reference A10).

Much of the SEND provision will come in the form of specific equipment or detailed internal design, however details of matters such as level access, safe car parking and the provision of adequate space and facilities (i.e. disabled washrooms) will be provided at RMA stage.

IDP Reference: A10

GUIDING FRAMEWORK PRINCIPLES : COMMUNITY INFRASTRUCTURE

EDUCATION

LOCATIONAL REQUIREMENTS

The school sites will be located to ensure that ECC's requirements for exemplar education layouts can be accommodated in detailed RMA stages of planning and design. This includes consideration of school premises in relation to roads; walking and cycling routes; and village centres. Schools will be located next to village centres so that they are not separated from these community focal points and this will be secured within masterplans as part of each OPA.

There will be a target that each school site be within walking distance of homes (where possible within 800m) and with good access to safe walking, cycling and public transport routes/networks, so that parents and pupils can travel to school using active means without concerns over travel time or road danger.

The location of the schools will ensure that each neighbourhood is served by its own primary school within walking distance of households. The secondary school will have a wider catchment that covers not just CGC but potentially areas beyond the site boundary depending on pupil/parent preferences and choice.

Due to its central location, the all-through school will be designed to enable community use of facilities on-site (via a Community Use Agreement with the future school operator).

In line with ECC requirements, each OPA will submit a Land Compliance Study for each school site located within the OPA boundary. This will be undertaken to ensure that the sites identified within the masterplans are suitable and deliverable for education purposes.

PROCESS FOR DELIVERY

Whilst the process for delivering each of the schools on-site is subject to further review, it is expected to involve the following stages in close consultation with ECC:

- Agree the size, location and servicing requirements of each site at the OPA stage and secured via the S106 agreement;
- Occupation triggers will be agreed and inputted within in the IDP, with ECC, for when the school sites needed to be handed over;
- In accordance with the agreed trigger for delivery, ECC will be provided with a serviced site which will be prepared to meet the standards set out in ECC's Developers' Guide to Infrastructure Contributions (2020) or any other relevant successor document;
- ECC will then take forward the design and construction of the school in question and submit separate full planning applications and reserved matters applications to CCC;
- A developer Education Contribution will be paid to ECC which will also be linked to housing occupations as set out in the most up to date IDP.

Further information on the process for delivering schools is set out in ECC's Garden Communities and Planning School Places document

This process will be established as part of future Site Specific S106 agreements, which will be agreed as part of the OPAs. The detailed design of the schools at RMA stage will include matters such as secure access, cycle parking, green spaces, biodiversity enhancements, the material of the buildings and the internal layout.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Location of land for schools	✓			✓
Land Compliance Study	✓			✓
Design and Delivery of School		✓*		
All Through School Shared Use Facilities	✓			✓
Education Contributions	✓			✓
Planning Policy	Policy S9, S10, SGS6 & DM20			
Evidence Base	Education Technical Appendix			

Note: *further detail on the potential delivery process for each school is set out in more detail in the supplementary text below.*
** Schools to be delivered by Essex County Council.*

GUIDING FRAMEWORK PRINCIPLES :

EMPLOYMENT

“ OBJECTIVE

Provide high quality, amenity-rich employment space that serves the emerging local and wider population and accommodates a range of uses to facilitate a self-sustaining and mixed-use Garden Community, minimising the need for external travel. ”

GUIDING PRINCIPLES

1. Provide a mix of employment spaces for small, medium and large businesses, and the potential for multiple users including expanding businesses, SMEs and start-ups.
2. Provide flexible floorspace that can respond to changing economic drivers and demands for different technologies over time.
3. Deliver high quality buildings and spaces, including attractive amenity space co-located alongside other facilities, to create a healthy and sustainable working environment.
4. Locate employment provision at accessible and sustainable locations across the Garden Community, connected by safe pedestrian/cycle routes and public transport corridors, to encourage more sustainable patterns of movement.
5. Deliver energy-efficient buildings that are constructed with a fabric first approach, incorporating renewable energy technologies where possible, and that make provision for EV Charging and battery storage (where feasible).
6. Provide ‘Superfast’ broadband connection to all homes and businesses to meet the needs of a range of behavioural work patterns across different commercial sectors including home and flexible working arrangements.

GUIDING FRAMEWORK PRINCIPLES : EMPLOYMENT

By providing a variety of different opportunities for employment the development will support the economic success of not only the Garden Community, but also the wider Chelmsford area. By providing a variety of flexible employment Hubs CGC will, as much as possible, support a reduction in private vehicle movements and help create a sense of local identity and healthier happier communities.

Amount of Floorspace

Policy SGS6 allocates 45,000sqm of high-quality office/business park employment floorspace, with the prospect for an Innovation Park that could attract leading businesses in the Research and Development, and High Technology sectors. This allocation would deliver over 80% of the City Council's employments provision across the current Local Plan period.

The Evidence Base Employment Space Summary demonstrates that there is capacity for around 57,000sqm of dedicated employment floorspace within the three Employment Hubs. This will be supplemented by around 9,700sqm of non-residential commercial, employment and community floorspace in village centres to support the local economy. Around 9.2 hectares of land is allocated for dedicated employment use across two main hubs of a similar size, and smaller scale flexible employment hub north of the existing Channels Complex.

The proposed Employment Hubs will complement the existing and emerging employment areas at Regiment Business Park, Beaulieu Square, Beaulieu Exchange and Beaulieu Railway Station Hub to ensure CGC will contribute significantly to the economic growth of the City.

Use and Location of Floorspace

A balance of provision will be achieved to address both the strategic employment offer and local functions providing jobs close to where people live that will make an important contribution to delivering placemaking and sustainability.

Flexibility and adaptability will be important characteristics for the provision of employment uses as business and market needs change and evolve. Flexibility will be required to address:

- Change over time: provide a 'ladder' of premises with reference to size and price point, to retain businesses as they grow – provide for start-ups, grow-on space and larger footprints for established Businesses.
- Change between uses: provide adaptability within buildings.
- Choice of premises: from serviced plots to completed buildings of different sizes, for lease and purchase.
- Temporary uses: the long-term phasing of the CGC is likely to create a need for temporary uses to be accommodated.

Despite the need for flexibility, it will also be important to secure the long-term use of sites for employment. This would be secured through the use of appropriately worded planning conditions.

The potential use types and location of the key employment locations are as follows and as identified on the Illustrative Masterplan in Section 5.

CGC Innovation Hub

The CGC Innovation Hub (4.79ha) could target the office/high tech sectors, as well as other key growth areas such as creative, digital, media and, business and professional services. Locating the Innovation Hub on Essex Regiment Way would concentrate higher employment density uses close to the primary road network and public transport services. This high-profile location at one of the gateways to the CGC will be important in attracting future occupiers within the parkland setting of Channels Discovery Park. Based on the Employment and Village Centre Uses Space Summary this could accommodate around 39,940sqm of employment floorspace.

Willow Hill Employment Hub

Concentrating 'last mile' logistics activity at the Willow Hill Employment Hub (3.89ha) would help create critical mass and the benefits that arise from clustering. The Northern RDR and CNEB would provide accessibility to the strategic highway and rail networks, enabling the hub to integrate with the wider economy of the East of England. The strategic location could enable the transition of goods to more sustainable last mile delivery vehicles to CGC and the wider City. Based on the Employment and Village Centre Uses Space Summary this could accommodate around 15,566sqm of employment floorspace.

Channels Employment Hub

Part of the Channels Village Extension, the Channels Employment Hub (0.51ha) will take the form of a small collection of barns ideal for small business or co-working spaces. Based on the Employment and Village Centre Uses Space Summary this could accommodate around 1,440sqm of employment floorspace.

Village Centres

The four Village Centres will support the local economy and provide a range of retail, leisure, commercial, arts, cultural, community, healthcare, education, and employment floorspace. Based on the Employment and Village Centre Uses Space Summary the four villages could accommodate around 9,757sqm of flexible non-residential village centre uses. This could accommodate around 250 to 500sqm of co-working and small-scale workspace hubs in each village. This would support small-scale business in a sustainable location and could be particularly important to support the predicted increase in home working.

The final quantum and location of employment floorspace will be established by the Stage 2 Masterplan OPAs, whilst the detailed design will be delivered as part of subsequent RMAs.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Amount and location of employment land	✓		✓	
Detailed Design		✓	✓	
Retention of employment uses		✓	✓	
Planning Policy	Policy S6, S8, SGS6, DM4,			
Evidence Base	North East Chelmsford Garden Community Employment Study. Chelmsford Industrial Market Report, BNP Paribas Real Estate. Chelmsford Garden Community Employment Space Summary.			

GUIDING FRAMEWORK PRINCIPLES :

STEWARDSHIP

OBJECTIVE

Facilitate and implement governance structures that provide for and fund the long-term management of the Garden Community, ensuring residents have ownership over decision-making, and place-keeping whilst facilitating creativity, health and well-being and generating community spirit to foster a sense of pride and belonging.

GUIDING PRINCIPLES

1. Establish stewardship bodies early on in the planning and delivery process, following appropriate consultation as part of the preparation of an outline planning application, to ensure that they have a key role in the delivery of new communities from the start.
2. Site-wide stewardship will support the high-quality environments, biodiversity and wildlife enhancements that are being delivered ensuring they thrive beyond the construction period and contribute to the sense of place.
3. Robust management of open space and recreational resources will ensure that CGC delivers significant health and wealth being improvements for its residents.
4. Ensure long term management and maintenance of accessible green infrastructure and public realm that is collaborative and accessible with accountability that gives residents a say in what happens in their communities.
5. Deliver and facilitate local community cohesion and social value to help contribute towards a true sense of place.
6. Deliver an educational/skills resource, working with local schools and further education establishments.
7. Create a Stewardship Steering Group to ensure partnership with local residents and that is open to democratic, transparent and scrutiny procedures.
8. Create a Garden Community Management Trust, or other agreed body, involving early engagement with stakeholders and residents regarding the management and maintenance regimes and the design and funding of open space, public realm and Green Infrastructure within the Garden Community and consider the potential for income generating community assets.

GUIDING FRAMEWORK PRINCIPLES : STEWARDSHIP

It is critical that long term management and stewardship is considered early on in the planning of CGC and hardwired into delivery, financial and governance arrangements. If it is left until late on, there is the risk that a patchwork of management and maintenance approaches to the various public assets within the community could arise, with varying approaches to funding in order to be self-sustaining in the long term. This would make it very difficult for the local community to engage with the site's stewardship in a meaningful way.

Putting in place robust structures and approaches to funding to secure long term stewardship is one of the core TCPA Garden City Principles. Outline Planning Applications will therefore put in place sustainable long-term arrangements for funding, management and maintenance of public spaces as well as community assets and will be an important aspect of the approach to place-keeping for the Garden Community.

STEWARDSHIP STATEMENT

Putting in place robust structures and approaches to funding to secure long term stewardship is one of the core TCPA Garden City Principles. OPAs will therefore be required to put in place sustainable long-term arrangements for funding, management and maintenance of public spaces as well as community assets and will be an important aspect of the approach to place-keeping for the Garden Community. The proposed process for this will be set out within a Stewardship Statement submitted at OPA stage.

The Stewardship Statement will set out the approach to delivering:

1. One stewardship body across the CGC (excluding Beaulieu and Channels unless otherwise agreed by the respective entities).
2. Promotion of community led development ensuring high levels of community participation and engagement.
3. Appropriately costed and minimised service charges (subject to democratic changes).
4. The body being a not for profit entity.
5. The inclusion of assets (i.e. community buildings / sports provision).

STEWARDSHIP BODY

A consistent approach to stewardship and place-keeping will be established across the Garden Community. This will be secured through obligations set out within Site Specific Section 106 Agreements for each OPA Area that will require the establishment of a Garden Community Management Trust that shall be resourced and established by the first occupation of any new home. Such a body would be funded via a Service Charge approach. The final choice of structure will be agreed when site specific section 106 obligations are entered into and prior to the first occupation of
any home.

The Management Body will act in accordance with an agreed set of common principles and structures to establish arrangements for community-led management of the strategic green and open spaces as well as health and well-being initiatives, community events, educational opportunities, maintenance and renewal of community assets; and guidance on the approach to funding, such as administration of service charges and responsibilities.

To secure the service charges, or other agreed funding systems, mechanisms will be used by developers that include legal covenants in plot purchasers' deeds. Covenants will also be used to cover matters such as the upkeep of front gardens and property alterations.

SITE WIDE STEWARDSHIP STEERING GROUP

Alongside the Garden Community Management Trust, a formal governance structure will be established with oversight for the whole Garden Community to ensure appropriate common collaborative arrangements are in place.

The Stewardship Steering Group will have key oversight role in steering and advising the Management Body on strategic decisions and facilitating linkages between the new community and the wider area.

Such a group could include members of the local community, Parish Council, City and County Councils, the developer Consortium, and other local residents, resident groups and stakeholders.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Stewardship Statement	✓		✓	
Stewardship Body set up implementation	✓			✓
Site Wide Stewardship Steering Group	✓			✓
Planning Policy	Policy S10			


150 PARKING SPACES
SPORTS HUB: 5.45HA
SPORTS HUB: 7.36HA
Community Gardens
SPORTS HUB: 4.49HA
Community Gardens
Community Gardens
INCIDENTAL SPORT: 0.05HA
Community Gardens
INCIDENTAL SPORT:

07.

FRAMEWORK PARAMETER PLANS

FRAMEWORK PARAMETER PLAN
LAND USE AND ACCESS PLAN

FRAMEWORK PARAMETER PLANS AND DEVELOPMENT SPECIFICATION

This section will set out two Framework Parameter Plans (FPP's) which have informed the Illustrative Masterplan in Section 5 and are the first stage in defining the individual development plots within the Garden Community area and set the broad framework to inform the OPA's for the Stage 2 Masterplan as described in Section 2.

The FPPs have been informed by baseline assessments of the site's context and it's constraints, the Guiding Framework Principles and associated Evidence Base Documents.

The two FPPs are as follows:

(a) Land Use and Access
(b) Green Infrastructure

The FPP's will be used to guide the future Stage 2 Masterplan which will be the subject of more detailed assessment and testing through, for example, Environmental Impact Assessments. As such the alignment of Land Use boundaries and access routes will be subject to further urban design and engineering considerations as more information and knowledge becomes available through the OPA and RMA stages. Therefore the layouts should be considered indicative at this stage with precise quantums of land for each use and Green Infrastructure to be agreed within the parameter plans and Stage 2 masterplan at the OPA stage.

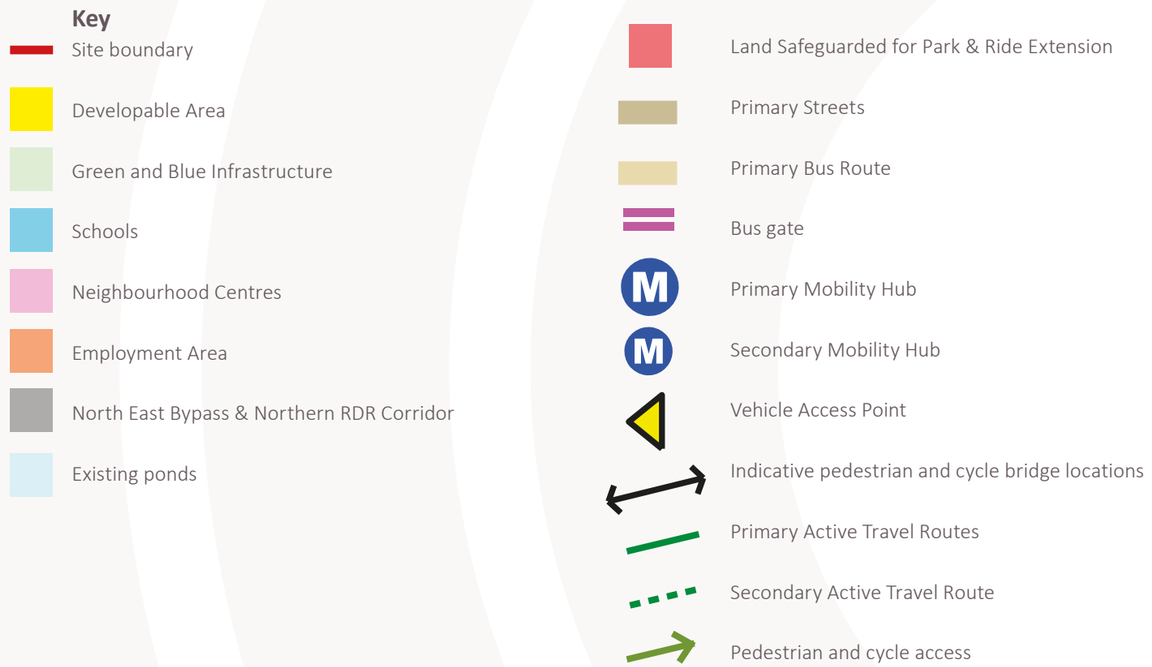
LAND USE AND ACCESS FRAMEWORK PARAMETER PLAN

The Land Use and Access FPP quantifies land uses and establishes indicative alignments of primary elements of the movement network.

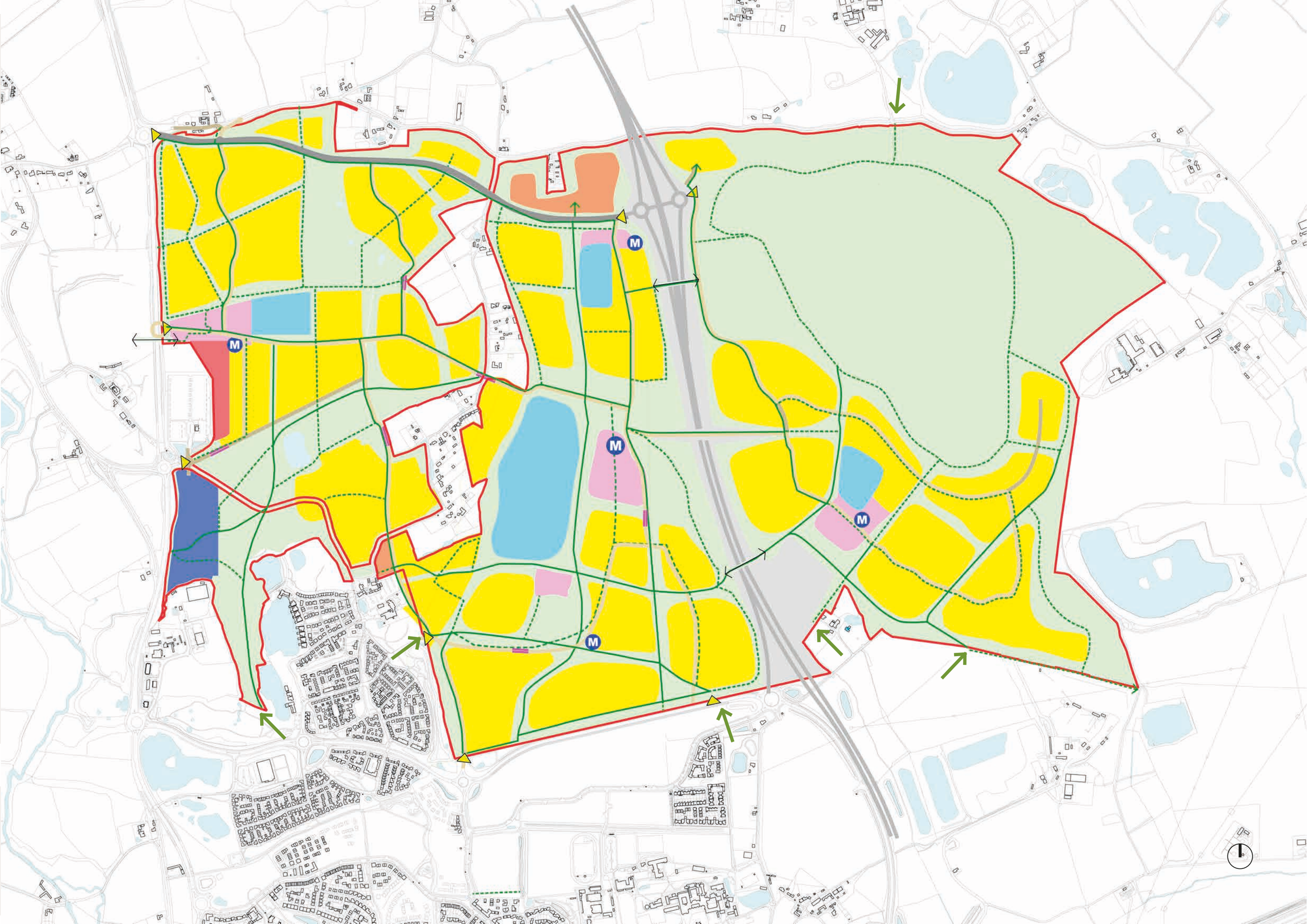
Development Specification

The Land Use and Access FPP allocates the following indicative quantum of land for each land use:

- 164.3 ha of residential land;
- 9.8 ha of mixed-use village centres;
- 9.2 ha of employment land;
- 17.8 ha of education land (three primary and one all-through school).



Note: *Land use boundaries and the alignment of indicative routes within the site will be subject to urban design and engineering considerations as part of Outline Applicaitons and the approval of reserved matters.*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FRAMEWORK PARAMETER PLAN
GREEN INFRASTRUCTURE PLAN

GREEN INFRASTRUCTURE FRAMEWORK PARAMETER PLAN

The Green Infrastructure FPP differentiates between the different green infrastructure (i.e. Destination Parks, Greenways, woodland areas, formal sports facilities, allotments and community gardens and natural green space).

For the purpose of this plan, Green Infrastructure is defined as *"the network of natural and semi-natural spaces and corridors in a given area. These include open spaces such as parks and gardens, but also allotments, orchards, woodlands, fields, hedges, lakes, playing fields, footpaths, cycle routes, water courses and private gardens. GI is not limited to traditional green spaces, but can include various interventions to thread nature into streetscapes, or provide corridors of connectivity between the GI and heritage features (assets). Green Infrastructure is defined by its multifunctionality and can deliver a range of benefits to people, as well as biodiversity and landscape."*

50% of the Garden Community site coverage will be Green and Blue Infrastructure (GBI) based on the total publicly accessible areas, as per the Green Infrastructure FPP, plus an assumption that 34% of the developable areas will include on plot GBI, which includes private gardens and green roofs in accordance with Garden City Standards*.

DEVELOPMENT SPECIFICATION

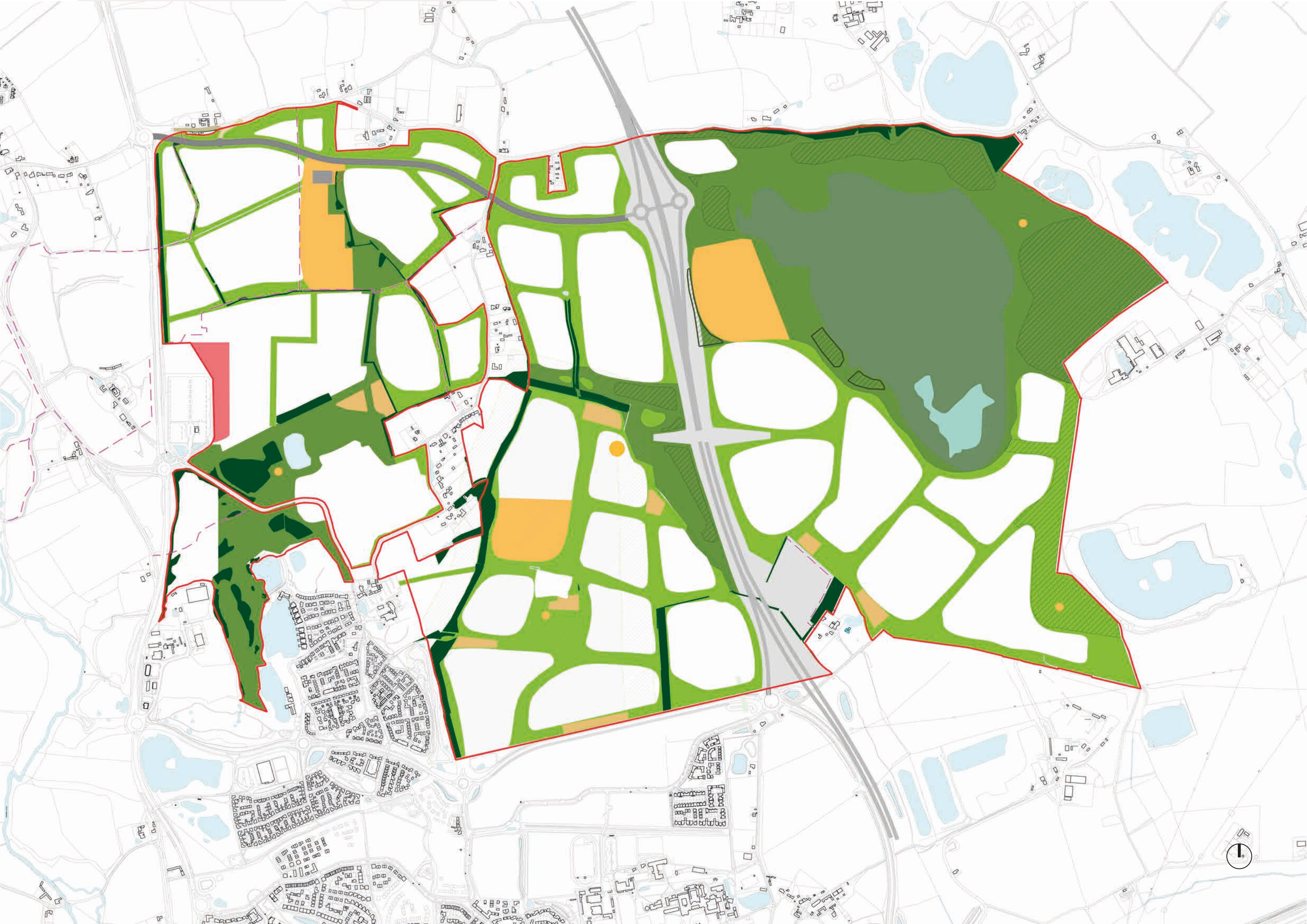
The Green Infrastructure FPP allocates the following indicative quantum of land for GI as follows:

- 83ha of amenity green space and Greenways
- 4ha of allotments/community gardens;
- 17.3ha of formal sports facilities;
- 34.7ha of proposed key areas of woodland
- 150.1ha of Destination Parks (including sports hubs, woodland and wetland)

* Garden City Standards for the 21st Century: Practical Guides for Creating Successful New Communities - Guide 7 Planning for Green and Prosperous Places. TCPA (2017, revised 2018)

Note: *Land use boundaries and the alignment of indicative routes within the site will be subject to urban design and engineering considerations as part of Outline Applicaitons and the approval of reserved matters.*

**to be agreed at OPA and RMA stages.*



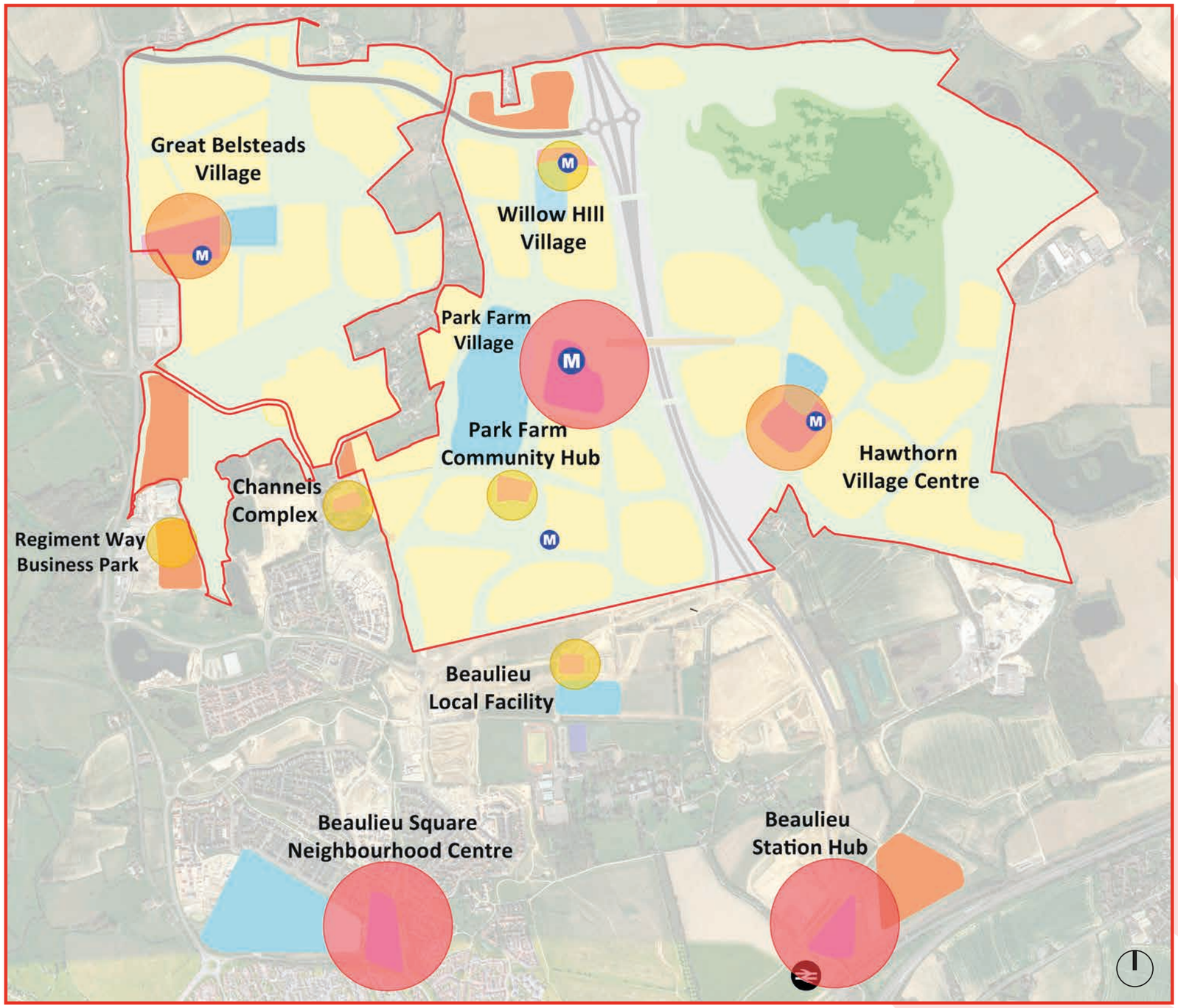
08.

CHARACTER AREAS

The masterplan comprises a series of linked but distinct neighbourhoods, or villages. The envisaged function and identity of each - including the Channels Village Extension and the CGC Innovation Hub - is illustrated and described in this section, starting with Park Farm Village.

CHARACTER AREAS

VILLAGE CENTRES HIERARCHY DIAGRAM



CGC Illustrative Masterplan shows an array of village centres and hubs, each with its own character, size and mix of uses and each with a key role to play in the overall hierarchy of the new community.

Park Farm Village Centre will be the principal centre and will play the same role as Beaulieu Square and Beaulieu Station Hub to the south. These three principal centres will be supported by two secondary centres at Great Belsteads Village and Hawthorn Village.

There will then be smaller hubs at Willow Hill Village, Park Farm Community Hub, Beaulieu Local Facility, Regiment Way Business Park and Channels Complex.

Park Farm Village is in the geographical centre of CGC and is an optimum location on the crossroads of all key bus routes and major Primary Travel Routes making it the most sustainable and connected location within CGC.

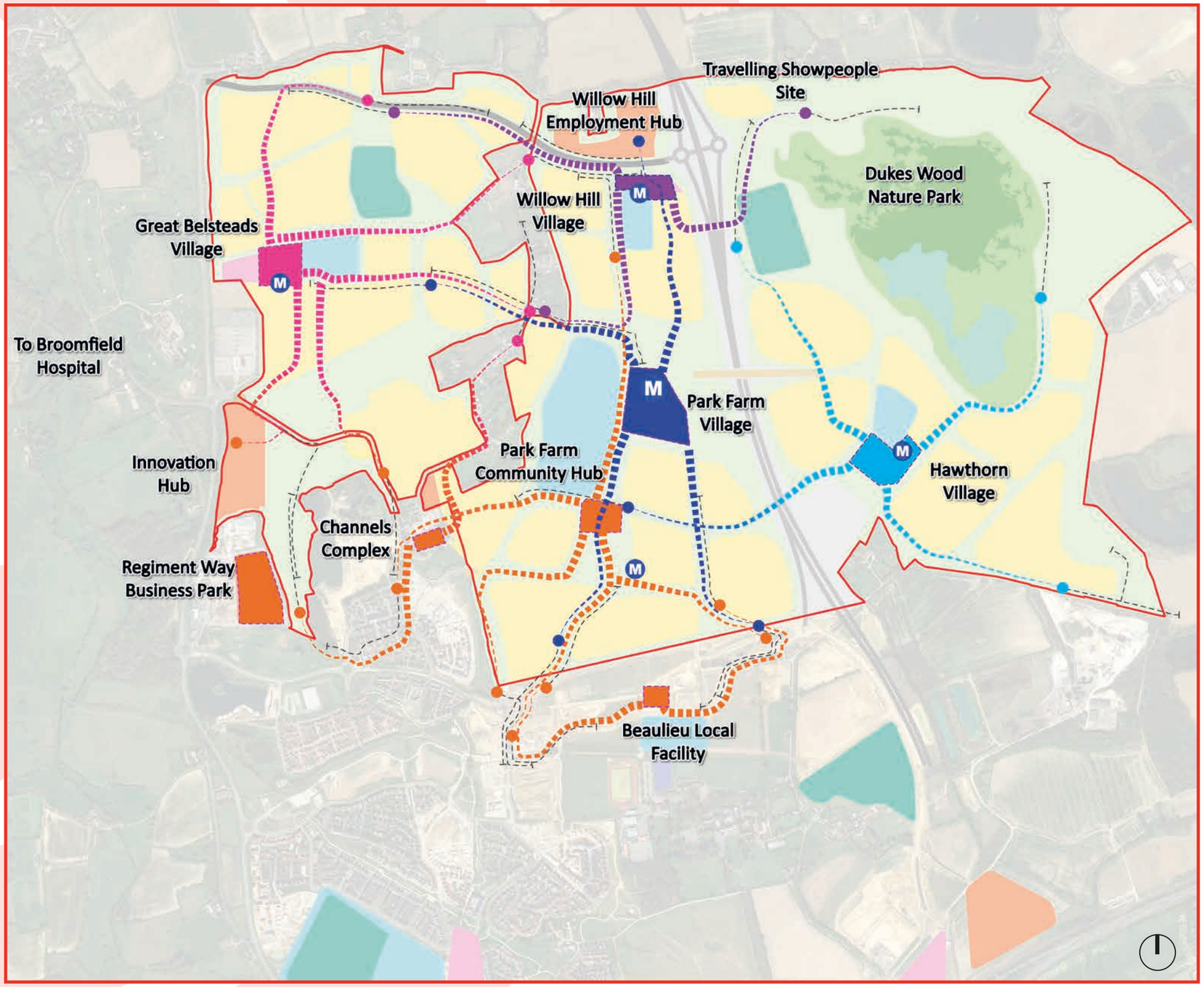
Willow Hill Village serves the Employment Area to the north of the Northern RDR as well as the travelling showpeople site and Dukes Wood Sports Hub to the west.

Each of the Village Centres plays an important role in the overall strategy for CGC, making it a diverse and vibrant place that offers a variety of choices and caters to everyone's needs.

Key

- Principal Centre
- Secondary Centre
- Tertiary Centre

VILLAGE CENTRES ACCESSIBILITY



The over-riding principle for the DFD is the implementation of the 15 minute Village concept, that is to say a maximum 15 minute journey to all your daily needs whether shops, work, leisure or schools. The adjacent diagram shows how this has been achieved and illustrates that over 95% of homes are conceivably within a 10 minute walk (800m) from a neighbourhood centre.

Key

- Proposed educational area
- Proposed centres and local facilities
- Sports and recreational facilities
- Employment area
- Developable area
- North East Bypass & Northern RDR Corridor
- Indicative 10 (800m based upon the average person's walking speed)
- Additional 5 minute walk (total 15)
- Mobility Hub

CHARACTER AREAS

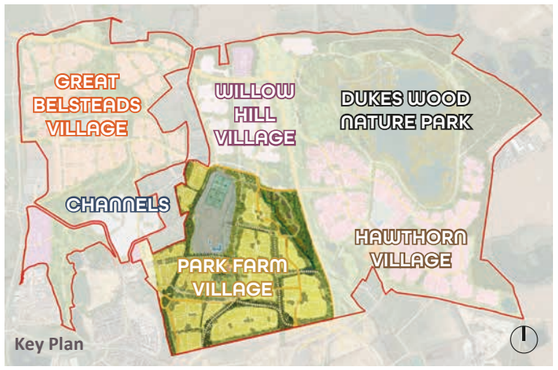
PARK FARM VILLAGE

Park Farm Village is the principal village centre of CGC. Strategically located at the centre of the masterplan, the village centre houses a selection of shops, cafes and commercial space set around a public square. This mix of uses will service the day to day needs of the local community.

The main entrance of the All-Through School is accessed from the square. A landscaped Greenway links the village centre to the historic cluster of Park Farm buildings. Park Farm is to be refurbished and redeveloped as a community facility. The village centre will include a primary mobility hub, featuring bus stops, access to e-scooters and cycle hire, and supplementary uses.

The eastern edge of the Village Centre is bounded by Park Farm Meadows and Park Farm Brook. Homes along this edge take advantage of views over the landscaped ponds and swathes of tree planting.

Density Strategy:
Density of development increases around the village centre with 4 to 5 storey apartment buildings forming the core. Towards the edges of the village centre homes take the form of 2 to 3 storey townhouses. In the outer edges of the village density gradually decreases. Further information on densities can be found in the Density and Character Section.



Key Plan

Left:

01 Aerial View of the Village Centre from the North

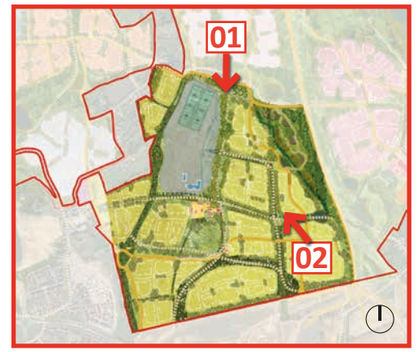
Key

1. Key feature buildings punctuate the arrival into Park Farm Village from the north
2. A substantial public square forms the heart of Park Farm Village
3. A pedestrian and cycle boulevard links the Village Centre with the retained Park Farm

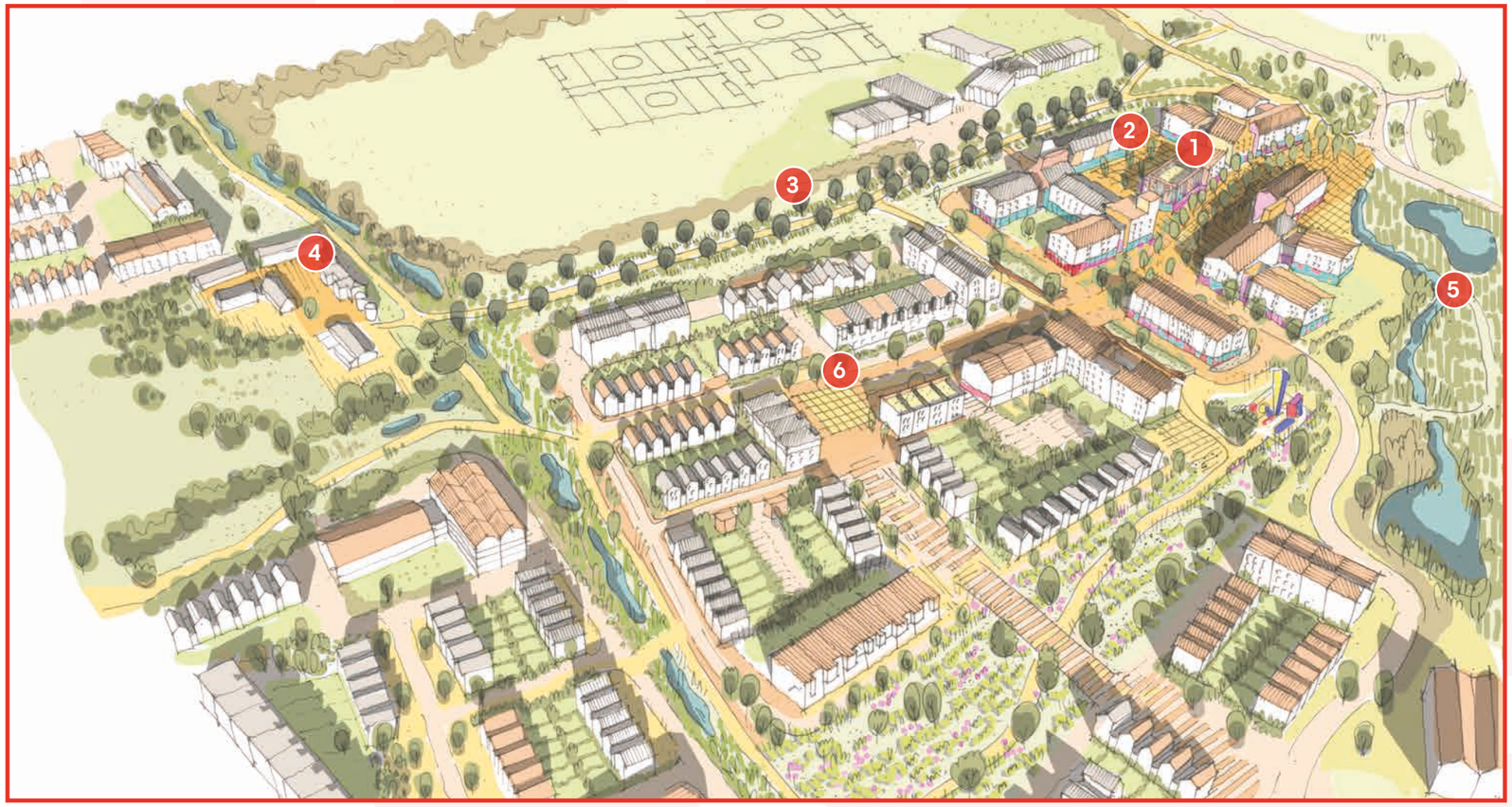
Below:

02 Aerial View of the Village Centre from the Southeast

4. The Park Farm buildings are reconditioned into a Community Hub
5. Park Farm Meadows frames the eastern side of the Village Centre
6. The central spine of the Village Centre is concieved as a series of public spaces



Key Plan: Aerial Viewpoints



CHARACTER AREAS

PARK FARM VILLAGE

Plan:

Illustrative Plan of the Village Centre

Key

1. Village Square
2. All-Through School
3. Park Farm Meadows
4. Park Farm Brook
5. The Ride - Heritage Trail
6. Park Farm Community Hub
7. Pedestrain & Cycle Boulevard
8. Sports Pitches
9. Primary Mobility Hub
10. Domsey Lane
11. NE Bypass

All-Through School

Apartment buildings with mixed uses at ground floor

Park Farm Village Centre will provide:

- Medical centre
- Sports facilities
- Primary mobility hub
- All Through School
- Flexible community facilities
- Stewardship office
- Parish Hall
- Co-working space
- Wayfinding & Info
- Retail and grocery schopping
- Public Square
- Restaurants and cafes

CHARACTER AREAS

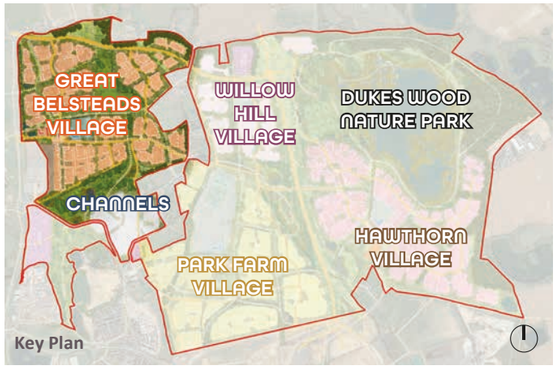
GREAT BELSTEADS VILLAGE

Great Belsteads Village announces the entrance into Chelmsford Garden Community from Essex Regiment Way. The threshold into the Garden Community takes the form of a landscaped arrival space - a transition space that sets the tone for the new neighbourhood through blue and green infrastructure.

Great Belsteads Village centre is slightly smaller than that of Park Farm Village. The majority of the shops, cafes, commercial and community spaces are located around a small car free village square.

The square also serves as the main entrance to the primary school. This positioning has the added benefit of separating the school building from the surrounding roads. Safe and peaceful walking and cycling routes to the school and village centre are incorporated into surrounding Greenways and pedestrian prioritised shared surface streets. The broad greenway to the southern boundary has the additional benefit of separating the road from the school site.
A secondary mobility hub located at the centre of the village, with direct access to the Chelmer Valley Park and Ride makes getting about even easier. One of the most distinctive features of Great Belsteads Village is Channels Discovery Park which forms its southern and eastern boundaries.

Density Strategy:
The village centre is comprised of four to five storey apartment buildings around the village square. Regular, dense, gridded streets of three storey townhouses provide the critical mass of density for a lively community heart. Further information on densities can be found in the Density and Character Section**.**



Key Plan

Below:

01 Aerial View of the Village Centre from the South

Key

1. A landscaped entrance area creates a sense of arrival at CGC
2. Shops, cafes and community facilities open out onto a car free landscaped public square
3. The primary school is also accessed from the square creating a safe and peaceful arrival space
4. The secondary mobility hub is conveniently located in the heart of the village centre with easy access to the Park and Ride
5. Greenways surround the school providing safe, car-free routes to the primary school
6. The public square is designed to be a pedestrian friendly area with raised road tables and planting to calm traffic

Key Plan: Aerial Viewpoint

CHARACTER AREAS

GREAT BELSTEADS VILLAGE

Plan:

Illustrative Plan of the Village Centre

Key

1. Village Square
2. Primary School
3. Secondary Mobility Hub
4. West entrance from Essex Regiment Way
5. Greenway
6. Pedestrian priority shared surface street
7. Landscaped buffer to school boundary
8. Landscaped entrance area
9. Terraces of townhouses and small apartment buildings
10. Land reserved for Park & Ride extension
11. Chelmer Valley Park & Ride
12. Channels Discovery Park
13. Traffic calmed public square
14. Potential access points to Park & Ride

Primary School

Apartment buildings with mixed uses at ground floor

Pedestrian bridge

Great Belsteads Village Centre will provide:

- Wayfinding & Info
- Primary School and Nursery
- Restaurants and cafes
- Community Facilities
- Secondary mobility hub
- Retail and grocery schopping
- Public Square
- Community Centre
- Co-working space

CHARACTER AREAS

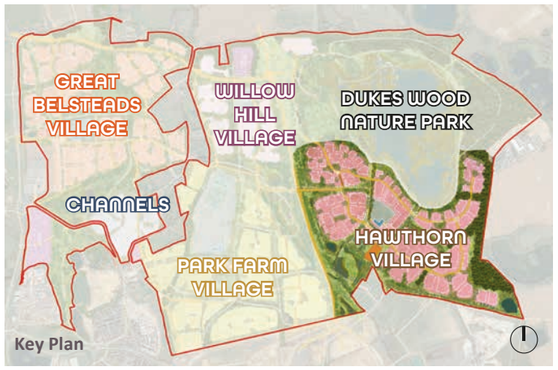
HAWTHORN VILLAGE

Hawthorn Village is the gateway to Dukes Wood Nature Park. The wetland habitat environment of the Nature Park is welcomed into the streets at the northern end of the village. Swales and green spaces in the surrounding streets draw the atmosphere of the wetlands into the residential neighbourhoods.

Greenways link the Nature Park directly to the village centre, promoting walking and cycling out into the various trails around the park. The heart of the village centre is a small village square activated with shops, cafes and commercial uses to cater to everyday needs. Forming the other side of the public space is a primary school.

The heritage assets of the former Boreham Airfield - the T2 Hangar and the Romney hut are, if possible, to be retained

Density Strategy:
Hawthorn Village is a secondary village centre. A grouping of three and four storey apartment buildings form the centre. Quickly the density reduces to terraced streets. Outside of the village centre lower densities and closer to the lake lower densities might be expected. Further information on densities can be found in the Density and Character Section**.**

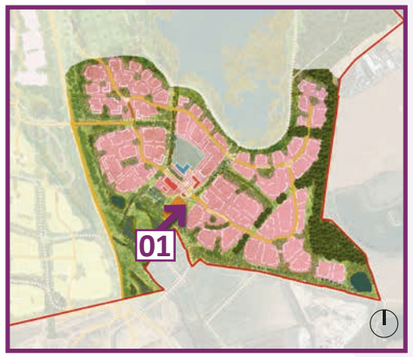


Right:

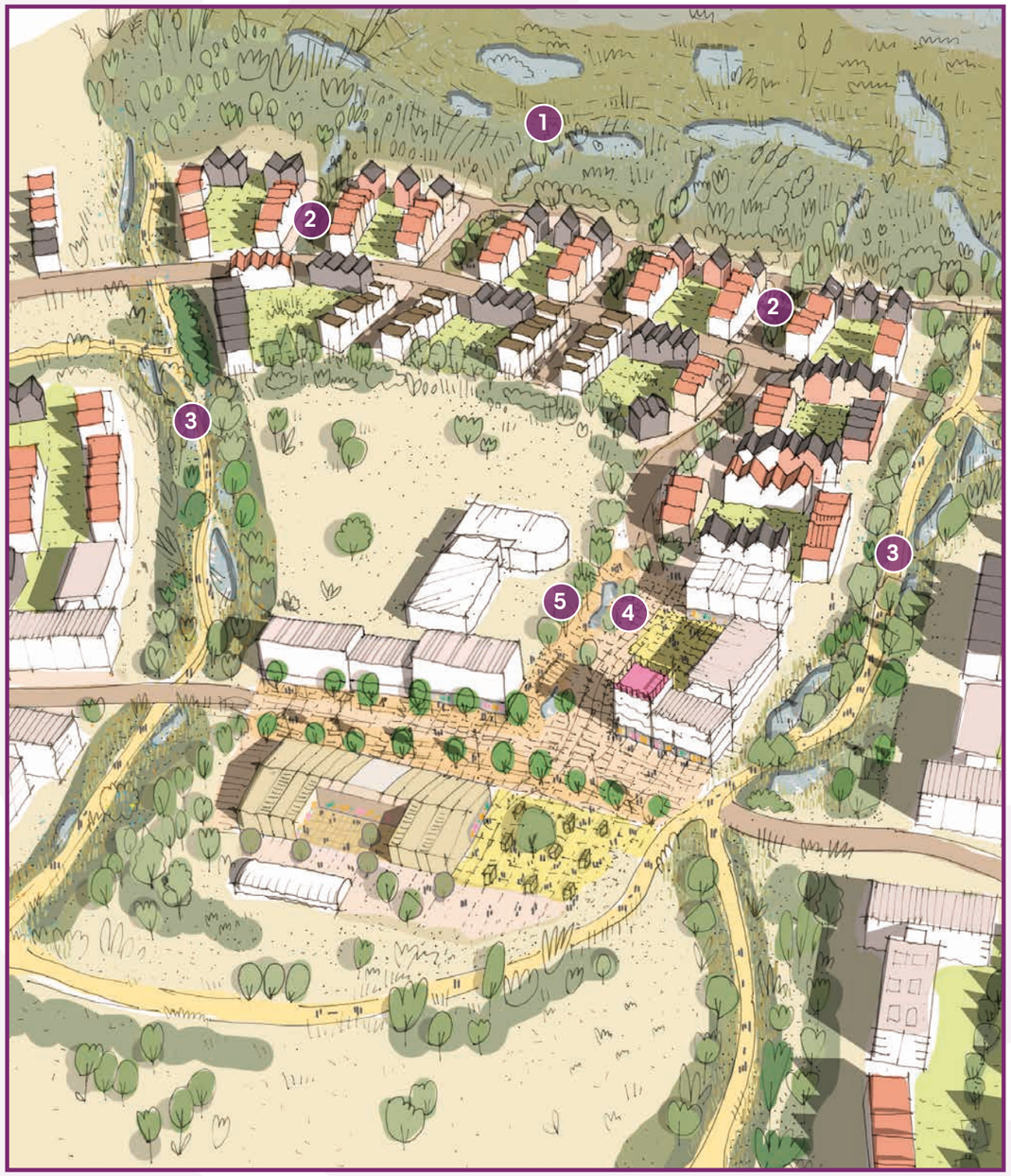
01 Aerial View of the Village Centre from the Southwest

Key

1. Dukes Wood Nature Park informs the character of Hawthorn Village
2. Wetland environments are directed into the surrounding streets
3. Greenways allow the Nature Park to be brought into the Village Centre
4. The pedestrianised Village Square features shops, cafes and community spaces
5. The traffic free school entrance is off the square too



Key Plan: Aerial Viewpoint



CHARACTER AREAS

HAWTHORN VILLAGE

Plan:

Illustrative Plan of the Village Centre

Key

1. Village Square
2. Primary School
3. Greenway
4. Village Green
5. Swale streets leading to Dukes Wood Wetland
6. Secondary Mobility Hub
7. Attenuation pond area for NE Bypass
8. Dukes Wood Nature Park

Primary School

Apartment buildings with mixed uses at ground floor

Hawthorn Village Centre will provide:

- **Secondary mobility hub**
- **Retail and grocery schopping**
- **Restaurants and cafes**
- **Co-working space**
- **Wayfinding & Info**
- **Community Facilities**
- **Primary School and Nursery**
- **Public Square**

CHARACTER AREAS

CHANNELS COMPLEX EXTENSION

Channels Complex Extension is seen as a complementary addition to the existing Channels Village and a continuation of the character of the Channels neighbourhood.

The new employment hub takes the form of a small collection of barns surrounding a modest landscaped square. The barns will be ideal for small businesses or co-working spaces. The square will connect to the proposed orchard as a series of public spaces. To the east of the orchard, a crescent space directs the walking and cycling routes down the Greenway to Park Farm.

Homes facing onto Pratt's Farm Lane and Domsey Lane will be sensitively designed to respect the character of the existing country lanes.

New homes in the Channels Complex Extension will respond to the character of the historic lanes and farm buildings as well as the more recently built homes in the area. The new development will continue to combine pocket parks and squares within the neighbourhoods as well as more extensive parkland on the doorstep.

Density Strategy:
Channels Complex extension will continue with a similar density to the earlier phases of the village. Low rise, medium density will be introduced to respect the setting of the heritage farmsteads in the village centre. Densities around the green edges could decrease. Further information on densities can be found in the Density and Character Section**.**

Existing Channels Complex

Existing Channels Complex

Existing Channels Complex

Existing Beaulieu Complex

Existing Channels Complex

CHANNELS COMPLEX EXTENSION

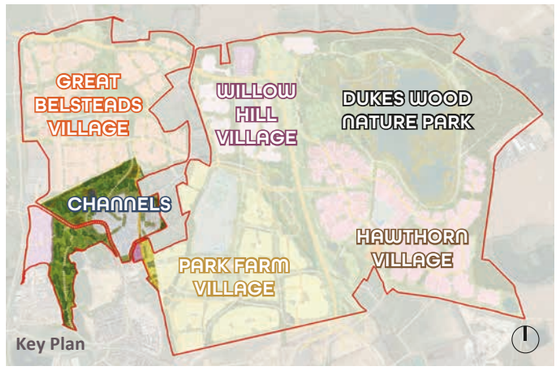
Plan:

Illustrative Plan of the Village Centre

Key

1. Channels Village Centre
2. Channels Employment Hub
3. Channels Orchard
4. Greenway to Park Farm
5. Channels Discovery Park
6. Vehicle entrance from Channels
7. Channels Phase 6 (under construction)
8. Pratts Farm Lane - active travel route
9. Village Green
10. Domsey Lane

Existing buildings



Channels Complex provides:

- Restaurant and cafe
- Hotel
- Co-working space
- Wedding venue

CHARACTER AREAS

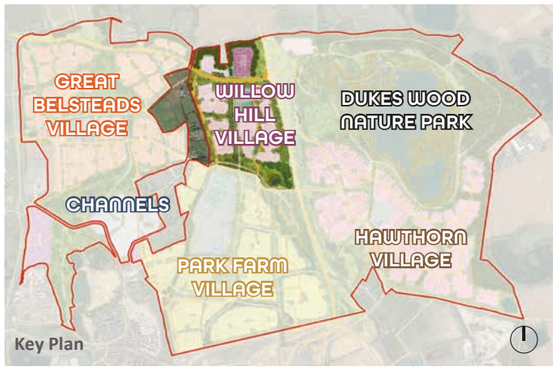
WILLOW HILL VILLAGE

Willow Hill Village lies east of Domsey Lane, and adjacent to the deep landscaped buffer that will define the western edge of the future North East Bypass. It will be connected to Dukes Wood Nature Park by one of the principal crossings over the bypass corridor.

The mixed use centre of the Village is envisaged as of a height and density that will provide a strong and protective edge towards the road junction, sheltering the public square and Primary School entrance to the immediate south-west.

The smallest of CGC's village centres, the village square is designed to accommodate a cluster of shops and amenities to serve the local population as well as workers from the employment area across Northern RDR. The employment area is located to take advantage of the direct connections to the North East Bypass. This relationship would be ideal for distribution or light manufacturing uses.
Willow Hill Village is well served by a central Greenway. The connection promotes active travel to and from the village centre from the rest of the Garden Community.

Density Strategy:
The village itself is formed from a dense network of two to three storey terraces, raising up to four storeys around the village square. The terraces closest to the Bypass are orientated to reduce views over the road and further screened by a planted buffer to the road edge. Further information on densities can be found in the Density and Character Section**.**



Key Plan

Below:

01 Aerial View of the Village Centre from the North

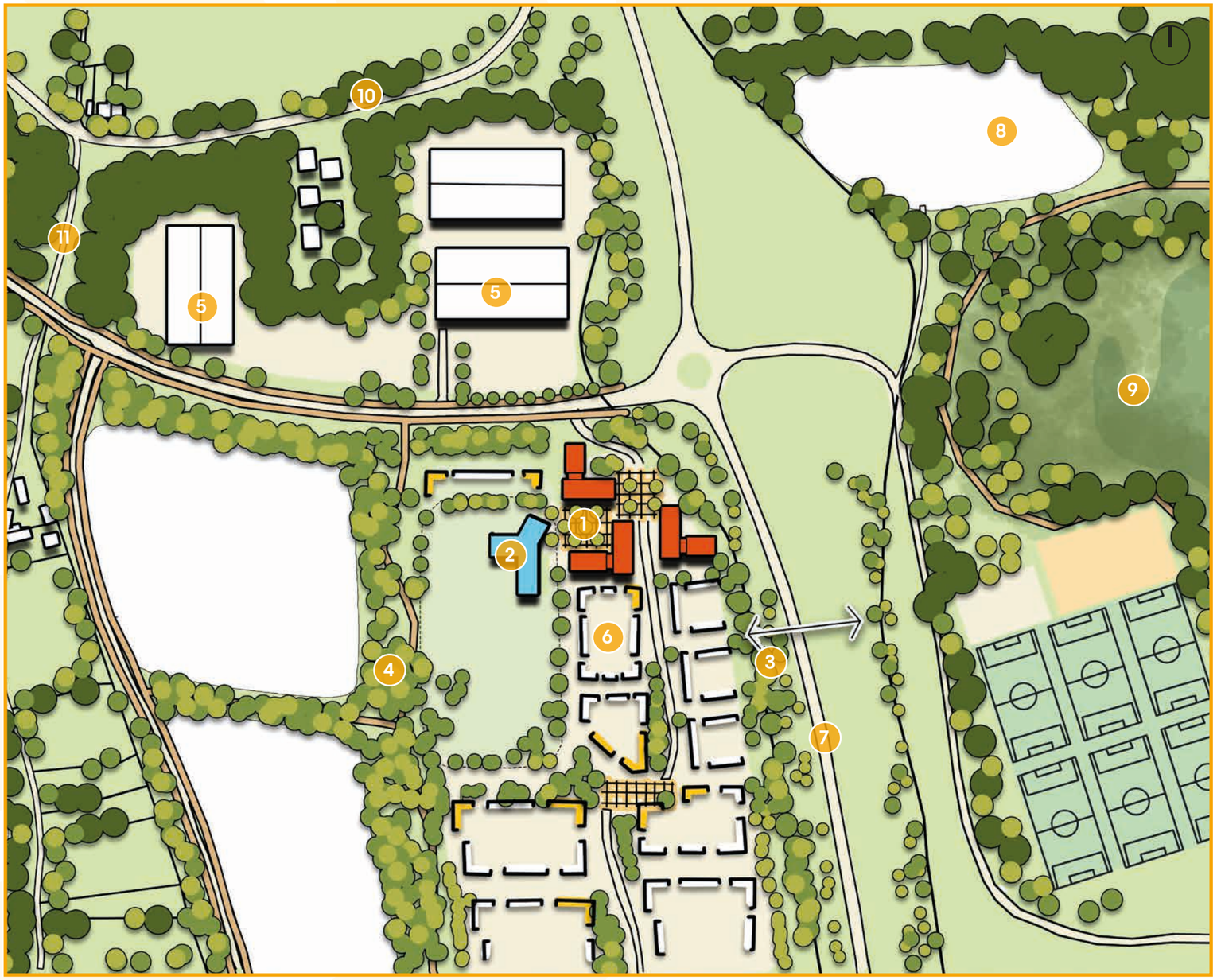
Key

1. A strong landscaped buffer provides screening to the Village Centre from CNEB
2. Apartment buildings are laid out to frame the public square as well as further shelter from the road junction
3. The Primary School is accessed from the car free landscaped square
4. The central Greenway spine connects the Village Centre to Park Farm Meadows
5. Access to Duke's Wood Nature Park is via the pedestrian and cycle crossings at the adjacent road junction

Key Plan: Aerial Viewpoint

CHARACTER AREAS

WILLOW HILL VILLAGE



Plan:

Illustrative Plan of the Village Centre

Key

1. Village Square
2. Primary School
3. Landscaped buffer to NE Bypass
4. Greenway
5. Willow Hill Employment Hub
6. Terraces of townhouses and small apartment buildings
7. North East Bypass
8. Travelling Show People Site
9. Dukes Wood Nature Park
10. Cranham Road
11. Domsey Lane

Primary School

Apartment buildings with mixed uses at ground floor

Pedestrian bridge

Willow Hill Centre will provide:

- **Local retail**
- **Wayfinding & Info**
- **Secondary mobility hub**
- **Primary School and Nursery**
- **Restaurants and cafes**
- **Public Square**

CHARACTER AREAS

WILLOW HILL EMPLOYMENT HUB

EMPLOYMENT HUB

The Employment Hub provides a new high quality, logistics and technology focussed business in Chelmsford. A variety of employment opportunities will be provided to allow people to both live and work at Chelmsford Garden Community. By providing a range of unit sizes on site, new businesses will have the space they need to develop and grow over time. With secure grounds it will be located directly adjacent to the key facilities within the Willow Hill village centre.

Key layout principles

- Relatively formal, generally orthogonal groupings of buildings, defining courtyard spaces varying in both size and shape with high-quality landscape.
- Simple forms, inspired by large rural buildings, with contemporary detailing.
- Buildings are dual aspect, with views to the village centre and Cranham Road/Domsey Lane.
- Carefully landscaped parking areas to the inward facing and side frontages of buildings.
- Buildings maximise active frontage towards the Northern RDR and address the key corner at Northern RDR and North East Bypass junction
- Carefully landscaped shared courtyard with parking and loading areas in front of buildings.
- Appropriate levels of parking provided alongside secure and convenient cycle storage facilities.
- Parking areas broken up with green spaces to accommodate landscape and/or tree planting and minimise visual impact.
- Appropriate Northern RDR crossing to provide a walking and cycle connection to the village centre and the greenway.
- Additional traffic calming measures included within the access roads and parking areas to limit vehicle speeds and encourage pedestrian and cyclist friendly environment.
- The size and location of service areas and waste storage facilities carefully considered and discretely placed to avoid visual intrusion and nuisance from daily use.

Plan:

Illustrative Plan of Willow Hill Employment Hub

Key

1. Employment Hub
2. Village centre
3. Primary School
4. Employment Hub access
5. At grade pedestrian and cycle crossing
6. Landscaped parking

CHARACTER AREAS

TRAVELLING SHOWPEOPLE SITE

SITE CHARACTERISTICS

The CGC provides for a 2.02ha site to accomodate nine travelling showpeople plots.

The site is located to the north of the CGC with ready access to the CNEB and the Northern RDR. The site is within easy walking distance of the primary school and facilities at Willow Hill Village (approximately 10 minutes walk) and also Hawthorn Village (approximately 15 minutes walk). Additionally, the site is close to the Dukes Wood Sports Hub and Destination Park and all the leisure benefits on offer.

The site will be designed in consultation with the Guild of Travelling Show People and their guidelines.

CHARACTER AREAS
NORTHERN RDR

The land parcels to the north of NRDR is recognised as having its own distinct character. This is informed by the existing residential properties within this area along Wheelers Hill and nearby Domsey Lane. This area also accommodates a number of Heritage Assets, namely Listed Buildings, whose setting is an initial consideration. The NRDR will require to facilitate safe and convenient access across it to CGV for existing residents and to maintain existing PROW's. The aim is that the development parcels to the north of NRDR utilises this provision, at the rural fringe of CGV.

A range of potential planning uses can be considered for the eastern and western development parcels (1 & 9), as follows;

Net Zero/Passiv Haus
- Zero Carbon/(Passiv Haus) low density housing
- Self-Build Housing
- Senior Living / Retirement Village
- Community Interest Company (CIC) Housing
- Key Worker Housing

Other Acceptable Planning Uses
- Hospice
- Private or Specialist Care (Institutional Use)
- Co-located (Community Land Trust)
- Or suitable uses in combination

This list is not an exhaustive or exclusive list of planning uses and these can be expanded upon, based on the City Council confirming an acceptable development proposal coming forward.

A detailed analysis of the eastern and western parcels north of NRDR will be undertaken in terms of their future development at the OPA stage. This will take account of the following planning considerations:

- Subject to the form and function of the detailed NRDR design, its crossings, access/egress and alignment;
- Heritage Assessment
- Landscape Design/Mitigation
- Meeting Sound Placemaking Objectives/Principles

It is important that any development or range of potential planning uses are undertaken at a lower density that reflect the distinct character of this area north of NRDR, as bordering the rural fringe.

- Low density
- Careful development contained within a distinct landscape setting/ framework
- Respect the setting of nearby heritage assets and existing residential properties
- Ensure ease of connectivity for pedestrians/cyclists across NRDR into Great Belsteads Village and Discovery Park North
- Link into Active Routes south of NRDR, CGV and into Chelmsford City
- Ensure this distinct character area, on the rural fringe and at a gateway of CGV, is considerately developed

The City Council and County will be provided with full information, as detailed above, upon which an informed and evidenced based planning assessment and decision can be taken for any development proposal(s) for the eastern and western land parcels to the north NRDR.

CHARACTER AREAS
DOMSEY LANE

Domsey Lane is a charming tree lined country lane running from Cranham Road in the north to the Channels complex in the south. Originally, a farm lane providing access to the farmsteads along the lane, today the lane is home to around 30 characterful dwellings of varying age and style.

The Design Framework seeks to minimize the impact on the existing community and the character of Domsey Lane whilst creating meaningful links for the surrounding Chelmsford Garden Community.

The northern crossing (crossing No1) is the connection to the future RDR road to the north of the CGC and will be a left in/ left out junction. The centre crossing (Crossing No 2) will be carefully designed to relate to the scale and character of the Lane. Domsey Lane either side of the crossing requires a little widening to create passing spaces but ,where practical, the widening only occurs on one side of Domsey Lane with the aim of retaining as many existing trees as possible. The southern crossing (Crossing No 3) is the connection to the new road which links Great Belsteads with the Channels Complex and beyond.

To ensure that the character of Domsey is retained, traffic will be regularly monitored. If necessary, traffic regulating features will be introduced.

The crossing points have been designed to restrict through movements and therefore retain the character of Domsey Lane in order to protect its character including minimising the amount of Street Furniture. Crossing 2 in particular will not allow cars to pass through or enter Domsey Lane, nor will it allow cars to use Domsey Lane as a route in to the CGC. If at the detailed approval stage any features are proposed to manage traffic flows or speeds, they would be in accordance with the Rural Nature of the Road, but only implemented if they are shown as a requirement due to ongoing monitoring.

In order to maintain access to Domsey Lane during construction, works will be sequenced or arranged in order to ensure that in order to ensure that all users will maintain the ability to access or exist the lane. The details of this will be secured within a detailed Construction Management Plan.

Domsey Lane junction with Pratt's Farm

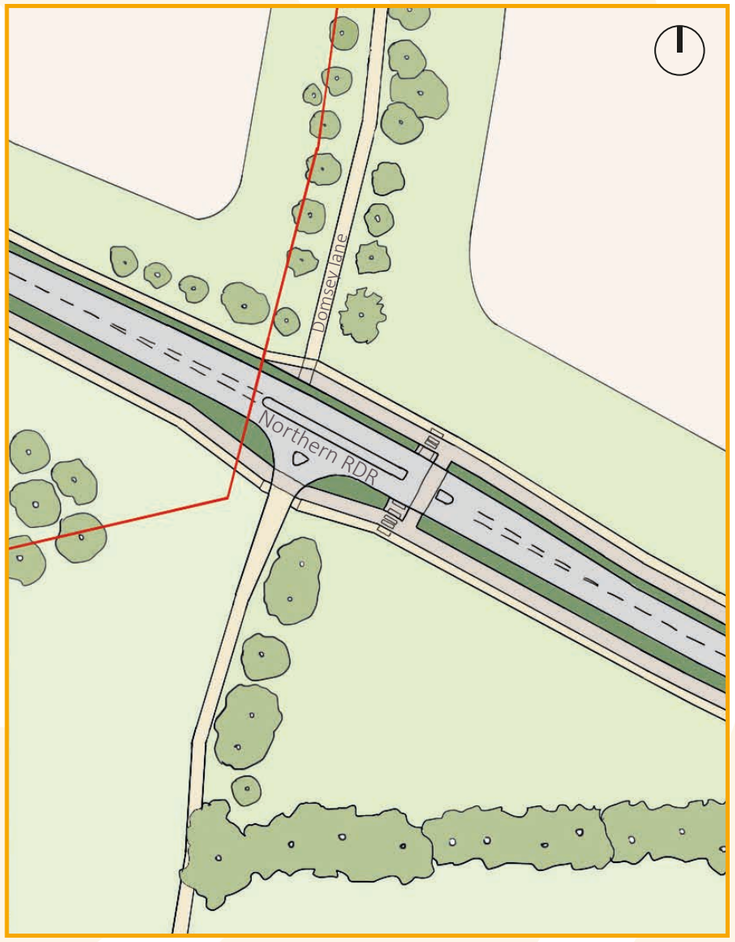
General character of Domsey Lane

Typical housing along Domsey Lane

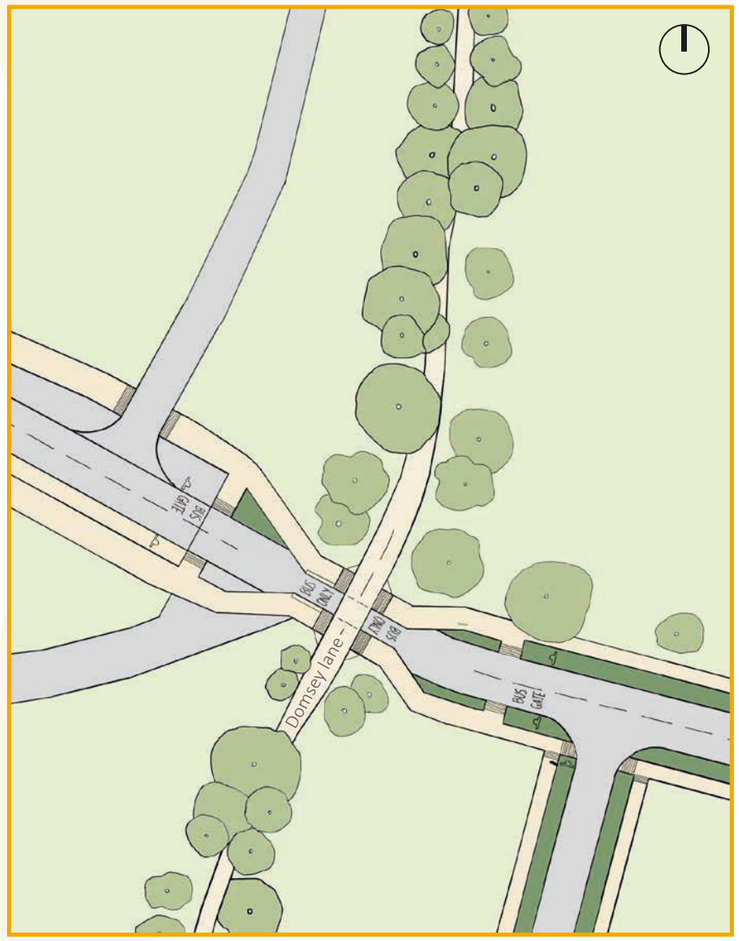
Plan

CHARACTER AREAS

DOMSEY LANE



Crossing 1 (Northern RDR)



Crossing 2

Crossing 3

CHARACTER AREAS

CGC INNOVATION HUB

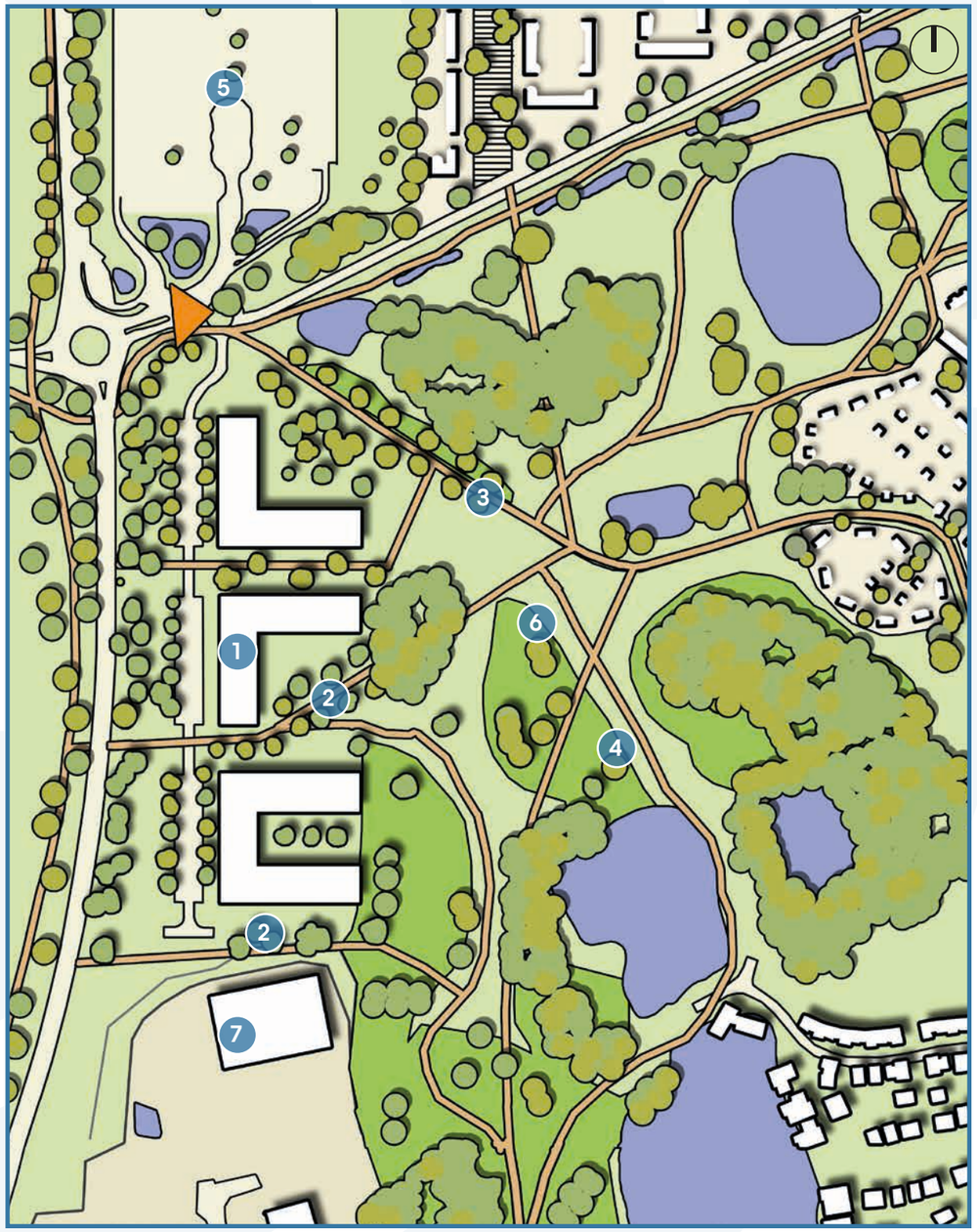
CGC Innovation Hub is the primary employment area of the Garden Community. Offering commercial space targeting high-tech industries, the facilities would also suit creative, digital, media, business and professional services.

The four to five storey buildings create a backdrop to Channels Discovery Park, screening the parkland from Essex Regiment Way. The blocks are arranged to allow walking and cycling permeability through to Essex Regiment Way Sustainable Travel Corridor. These connections strategically connect the corridor into the wider CGC active travel network.

The Innovation Hub benefits from its adjacency to the Chelmer Valley Park and Ride to the north. It also forms a consistent strip of commercial uses along Essex Regiment Way along with the Regiment Business Park to the south.

Workspaces within CGC Innovation Hub will be designed to cater for expanding high-tech and creative industries. The buildings will respond to the beautiful setting of the Channels Discovery Park opposite. Offices will focus on the wellbeing of occupants as well as being energy efficient, in line with the ethos of the Garden Community.

CGC INNOVATION HUB

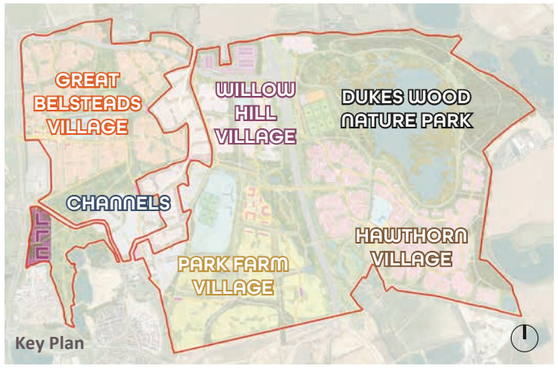


Plan:

Illustrative Plan of CGC Innovation Hub

Key

1. CGC Innovation Hub
2. Walking and cycling connections through to Essex Regiment Way
3. Pratts Farm Lane - active travel route
4. Essex Regiment Way Sustainable Travel Corridor
5. Chelmer Valley Park & Ride
6. Channels Discovery Park
7. Regiment Business Park



Key layout principles

- Building layout support pedestrian connectivity between Essex Regiment Way Sustainable Travel Corridor and the Discovery Park.
- Feature building with higher corner element addressing the site gateway / Park & Ride roundabout to the north of Innovation Hub.
- Buildings are set back from Essex Regiment Way to ensure retention of the existing character, trees and hedgerows.
- Building arrangement defining courtyard spaces varying in both size and shape with high-quality landscape with retained trees.
- Buildings are dual aspect, with views to the park and attractive frontages towards Essex Regiment Way.
- Carefully landscaped parking areas in front of the buildings providing a buffer between the existing road and the building frontages.
- Landscaped courtyard spaces facing the Discovery Park.
- Appropriate levels of parking provided alongside secure and convenient cycle storage facilities.
- Parking areas broken up with green spaces to accommodate tree planting and SuDs in order to minimise visual impact.
- Additional traffic calming measures included within the access roads and parking areas to limit vehicle speeds and encourage pedestrian and cyclist friendly environment.
- The size and location of service areas and waste storage facilities carefully considered and discretely placed to avoid visual intrusion and nuisance from daily use.
- Access to Regiment Business Park will be explored at future OPA stages

CHARACTER AREAS

DENSITY AND CHARACTER

The indicative Density diagram opposite identifies the principles of how residential density and heights may vary across the character areas within the Garden Community.

Variations in residential density and heights across a masterplan are important for a number of reasons, including:

- Reinforcing the creation of the different character areas within the masterplan, helping establish richness of local identity in a considered way for different areas within a wider coherent whole;
- Responding to existing constraints within or directly adjoining the site, helping to enable different areas within the proposed development to relate to their immediate contexts in an appropriate way; and
- Ensuring that a wide range of dwelling types can be successfully accommodated and located appropriately within the wider masterplan so that a mixture of household needs can be met.

Four density ranges are suggested within the masterplan; the principles guiding their characteristics and general location within the masterplan are described here and demonstrate that the Garden Community has the potential to deliver around 5,500 new homes across the masterplan as a whole.

Residential Density - highest
The central areas of the village centres might feature apartment buildings of four to five storeys with mixed uses at ground floor. It is anticipated that these localised areas of the tallest apartment buildings might achieve a density of 50-150 dwellings per hectare.

Residential Density - higher
Spreading out from the tallest areas, but still forming a coherent core to the Village Centres, might be a dense network of residential streets made up of townhouse typologies of around two to four storeys. Interspersed around these rows of houses might be small apartment blocks of three to four storeys. It is anticipated that these areas might have density of 40-50 dwellings per hectare.

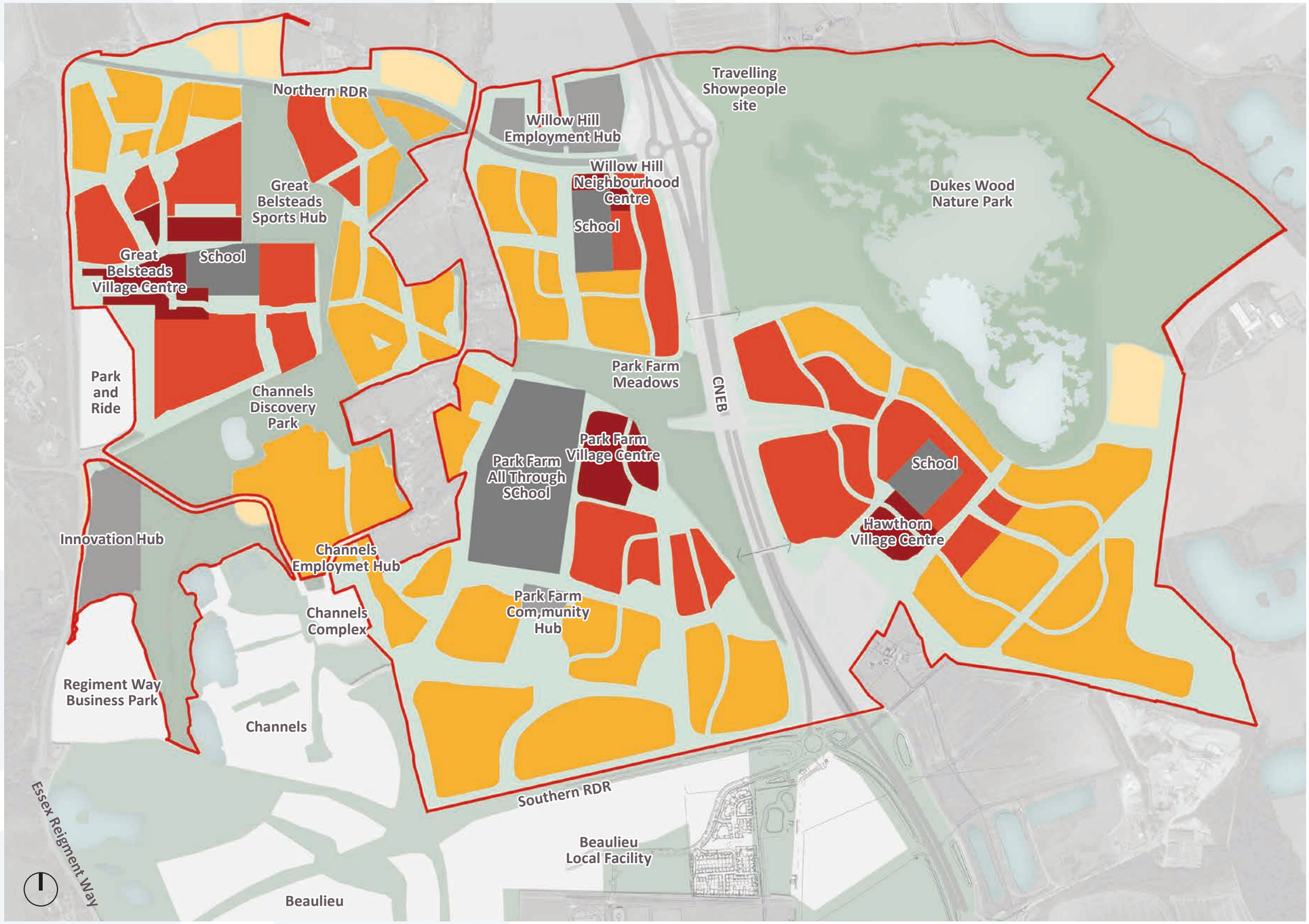
Residential Density - medium
Height and density decreases moving away from the Village Centres with potentially more informal residential streets featuring a mix of detached and joined homes of two to three storeys. Apartment blocks may still be present in a lower concentration than the higher density areas. The blocks might be three to four storeys. The density of these areas is expected to be around 30-40dph.

Residential Density - low
The lowest density areas are generally distributed around the areas of the site with more sensitive context. Here the prevailing character may be detached and semi detached houses of two to three storeys. It is anticipated these homes will generate a density of 20-30dph.

It should be noted that these density ranges are indicative at this stage and are used to provide further information in order to illustrate how densities can inform the differentiation between Character Areas across the Garden Community. More specific detail will be subject to further testing and refinement as part of the Stage 2 Masterplan OPA's and then in further detail within the Detailed Design Code that will inform the RMA's.

CHARACTER AREAS

DENSITY AND CHARACTER



20-35 dph: Heights two to three storeys, predominantly houses; terraces, semi-detached and some detached homes.

25-45 dph: Heights two to three storeys, predominantly houses but with some apartment buildings around key nodes.

35-65 dph: Heights two to four storeys, primarily a mix of townhouse typologies and small apartment buildings - three to four storeys.

45-150 dph: heights four to five storeys, primarily apartment buildings with mixed uses at ground floor

Key

- 20-35 DPH
- 25-45 DPH
- 35-65 DPH
- 45-150 DPH

CHARACTER AREAS

ILLUSTRATIVE BOUNDARY FRONTAGES

Plan:

Boundary Conditions Diagram

Key

A Wheelers Hill Frontage
Very low density development sensitive to heritage context to the north. Pedestrian and cycle permeability allowed for access to Wheelers Hill

B Frontage to Northern RDR
In addition to the 3m verge on either side of the road, a landscape buffer screens the development from the road on either side. If necessary, noise mitigation measures are to be included in the buffer strip.

C Boundaries to the rear of Domsey Lane properties
Green infrastructure buffer included along boundaries to the rear of properties on Domsey Lane. The buffer provides screening whilst connecting wildlife corridors. Opportunities for future active travel and road connections across Domsey Lane are reserved along key desire lines.

D Domsey Lane frontage
Sensitive frontage to historical lane. Development will allow for future connections across Domsey Lane and incorporate greening where possible. For further information refer to the Heritage Interventions Diagram on page 81.

E Boundary to CNEB
A buffer of 20m within the CGC red line is reserved for dense vegetation screening and noise mitigation measures. Further screening will be provided by the tree planting proposed within the land reserved for the CNEB.

F Boundary to Beaulieu and RDR1
A buffer of 10m within the CGC red line has been reserved for planting screening and noise mitigation measures. Access points at either end of the southern boundary will provide active travel and road connections into the community.

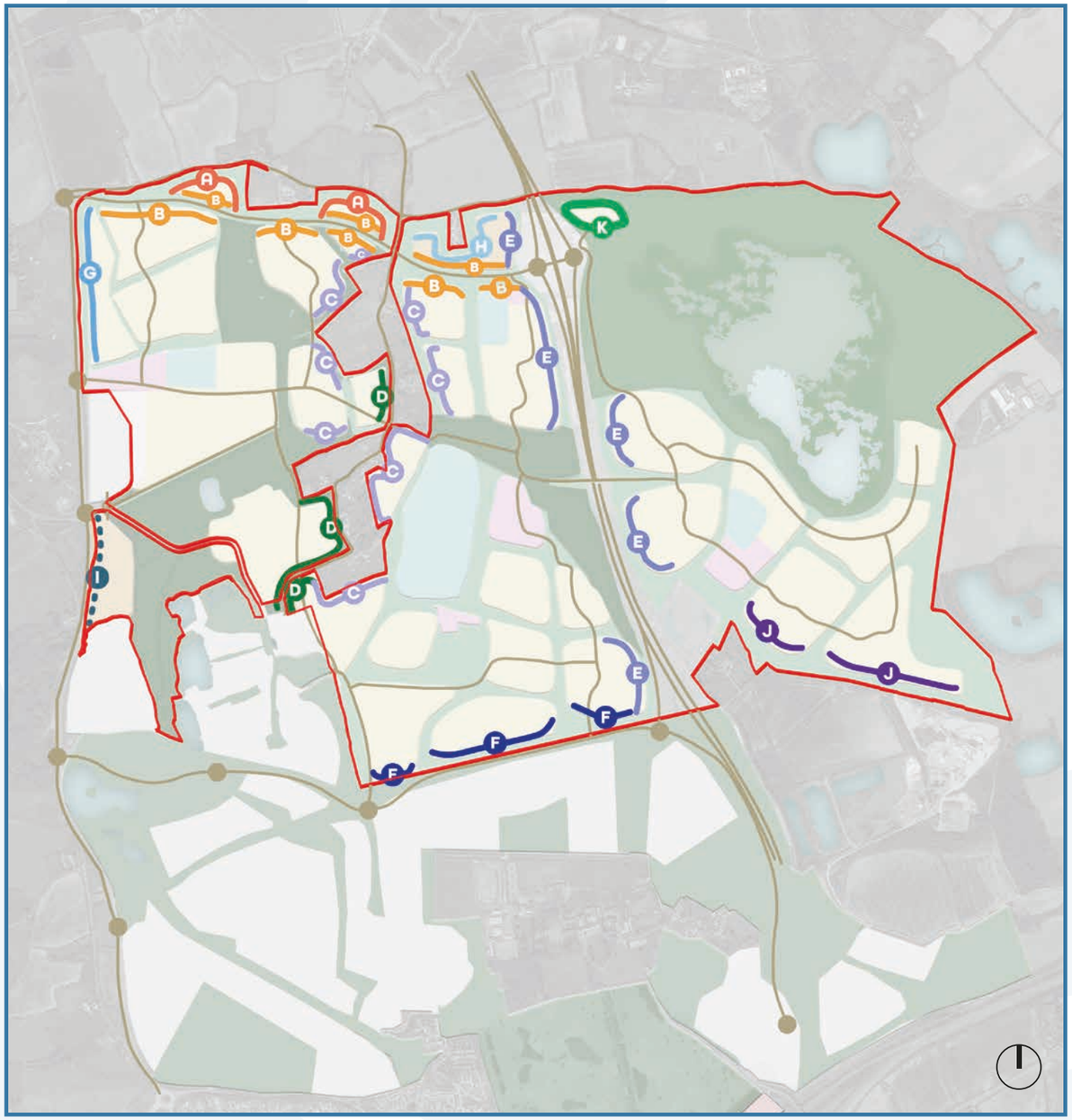
G Essex Regiment Way Boundary North
A buffer of 16m has been reserved along Essex Regiment Way to allow for wildlife connections as well as noise mitigation measures. Further planting will add to the existing tree line outside of the redline boundary. Glimpses through into the development will be created at specific locations such as significant proposed landscape features.

H Willow Hill Employment Hub Northern Boundary
Broad buffer planting to Cranham Road with potential future pedestrian and cycle connections into CGC

I Innovation Hub Essex Regiment Way Frontage
Office type buildings of four storeys will create a strong presence and will form the first glimpse of CGC when arriving from the City centre along Essex Regiment Way. Active travel connections between the buildings will allow permeability from ERW through to the Discovery Park connecting CGC to the Essex Regiment Way sustainable travel corridor.

J Hawthorn Village Southern Boundary
Green buffer along the boundary screens CGC from unknown potential future uses whilst allowing for opportunities for walking and cycling connections out

K Travelling Show People Boundary
The boundary treatment to travelling showpeople site to be developed in dialogue with Travelling Show People.



Note: details subject to OPA stages

CHARACTER AREAS

ILLUSTRATIVE LANDSCAPE FRONTAGES

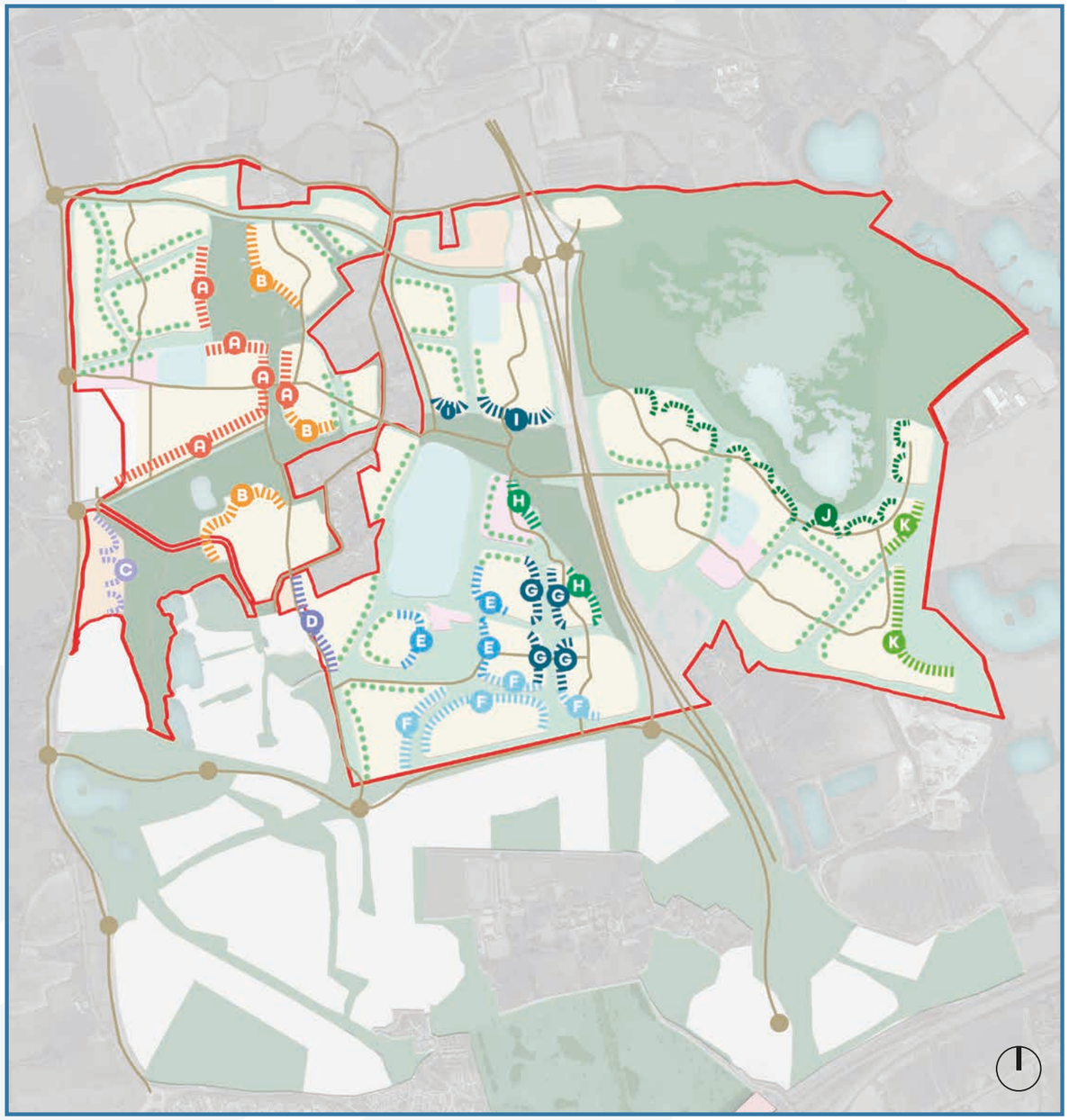


Diagram:

Illustrative Landscape Interfaces Character

Key

Greenway frontage
Character varies across the network of Greenways however all areas provide strong frontage to the Greenways with high levels of overlooking for passive surveillance of the landscape

A Discovery Park Frontage - Formal
More formal frontage with strong presence overlooking Discovery Park reflecting straighter parcel geometries. More regularity, rhythm and repetition of building line

B Discovery Park Frontage - Informal
Less formal edge reflecting curved parcel frontages. Building line could be more broken up with less repetition and regularity.

C Innovation Hub Frontage
Strong frontage of commercial buildings to Discovery Park. Indicatively 3-4 storeys. High levels of pedestrian and cycle permeability through parcel to Essex Regiment Way

D Channels frontage
Frontage responsive to Channels complex and heritage assets. Landscaped space in front of the building line celebrates and creates distance from the existing Channels complex

E Park Farm Frontage
Frontage responsive to Park Farm setting. Frontage onto open space to be a contemporary interpretation of the village green frontage - strong frontage with informality and variation

F Park Pales Frontage
Strong frontages with formality and repetition to create coherency to the crescent landscape set piece

G The Ride Frontage
Strong frontages with formality and repetition to create coherency to the linear landscape set piece

H Park Farm Meadows Frontage - South & East
Generally apartment buildings of Village Centre creating back drop to parkland. Outdoor spaces of the buildings to be orientated towards park to create animation to the building facades and benefit from views onto open space

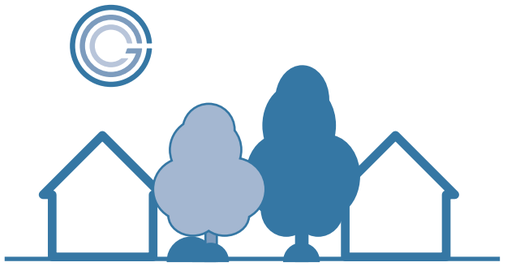
I Park Farm Meadows Frontage - North
Lower in scale than the southern boundary of the park however a strong frontage to be provided with homes maximising views over the parkland

J Nature Park Frontage
Openings in parcel frontages draw landscape deep into the development along perpendicular streets and spaces

K Woodland Frontage
Character of parcel frontages responsive to woodland setting. Informal character of development maximising views out into trees.

CHARACTER AREAS

NORTHERN RDR AND PRIMARY STREETS TYPOLOGIES



Streets play an important part in connecting all elements of the CGC and promoting sustainable movement across the site. Achieving high quality street typologies is therefore necessary for successful placemaking.

The streets will incorporate nature and drainage in order to create a positive environment to encourage active travel. Typologies will promote active travel for cyclists and pedestrians.

A Movement Network Plan will be submitted at OPA stage to identify the function of different streets and the broad volumes in terms of vehicle, bus and active mode use. This will then determine the form of priority provided for active travel modes based upon the relevant guidance at the time.

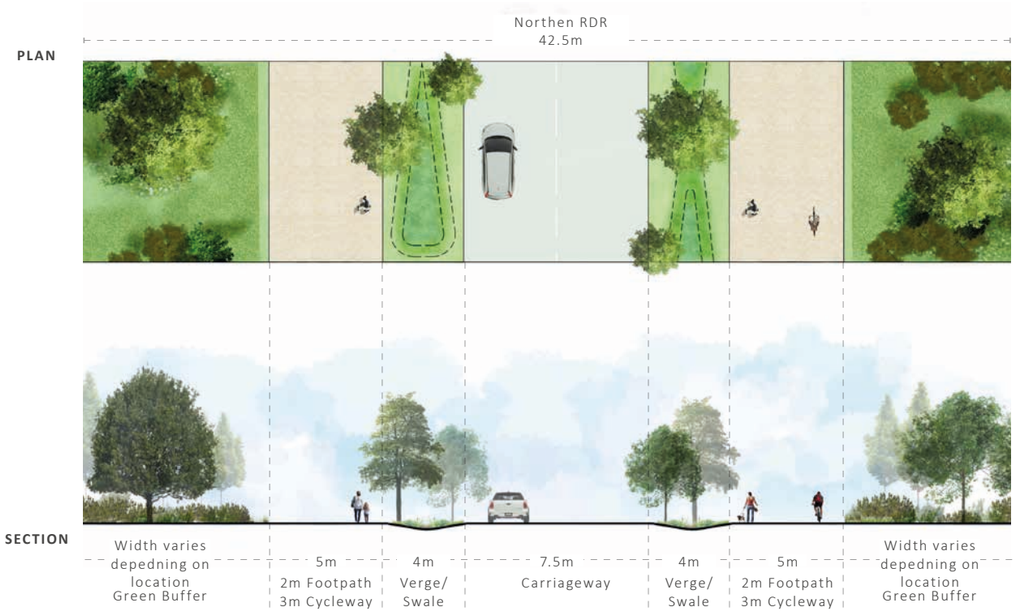
Based on the Movement Network Plan, detailed primary, secondary and tertiary street typologies will be developed as part of each OPA.

The majority of Primary Streets will be Bus Routes with the amount of through vehicular traffic considerably reduced by providing Bus Gates. Most of the network therefore will have vehicle flows of less than 2000 vehicles per day. The two illustrative options for Bu Routes that have been are:

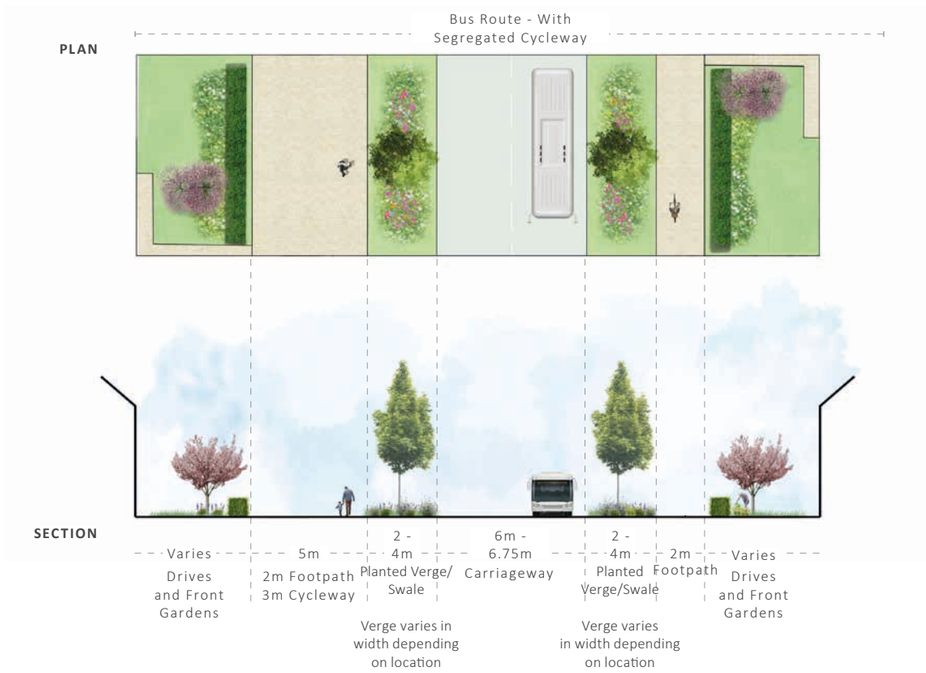
1. Bus Only Section of Road, where the general flow exceeds 2000 vehicle per day and therefore cycle segregation is proposed or the speed may be 30mph.

2. Bus Only Section of Road, where the general traffic flow is les than 2000 vehicle per day and therefore in accordance with LTN1/20 cycling would be comfortably accommodated on street, in accordance with the LTN1/20 criteria Whilst the road width is shown as 6.75m, it is proposed that lower widths are considered where it might discourage higher vehicle speeds and clearly on bends there may be a requirement for increased width to allow buses to pass.

NORTHERN RDR

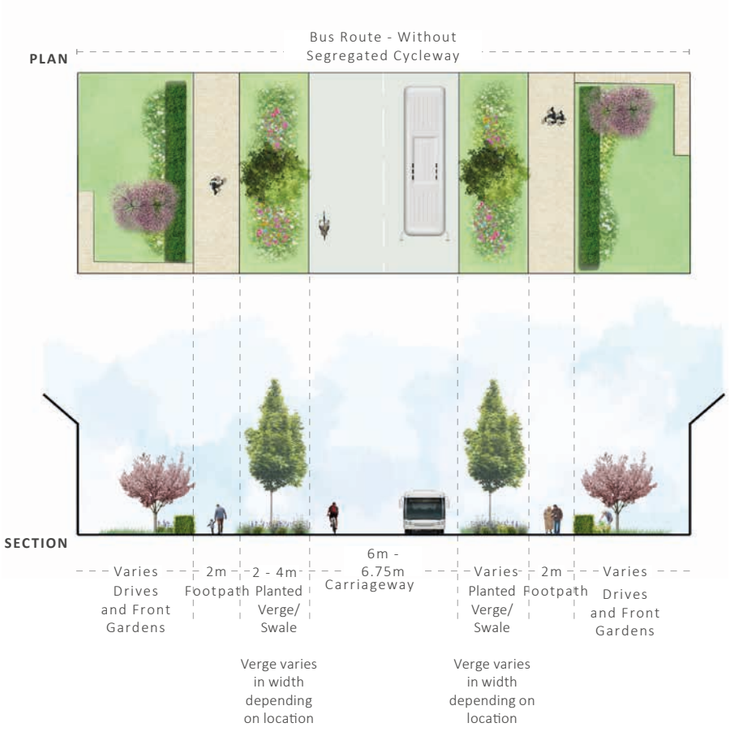


PRIMARY STREET - BUS ROUTE WITH SEGREGATED CYCLEWAY



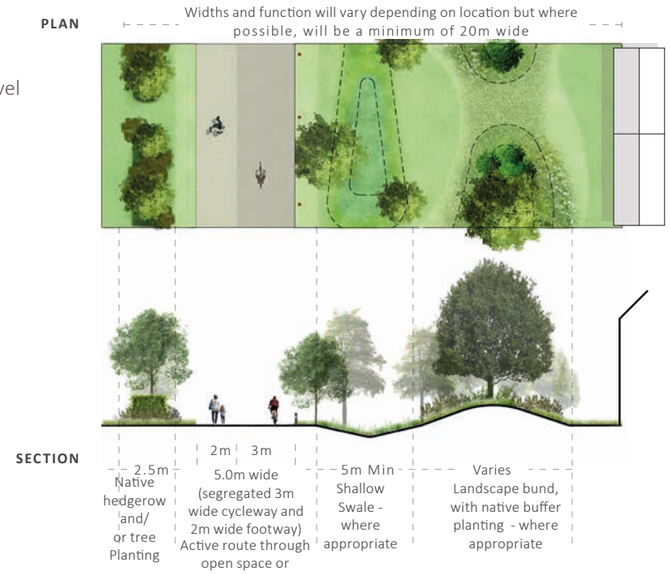
INDICATIVE STREET AND ACTIVE TRAVEL ROUTE TYPOLOGIES

PRIMARY STREET - BUS ROUTE WITH ON-STREET CYCLING

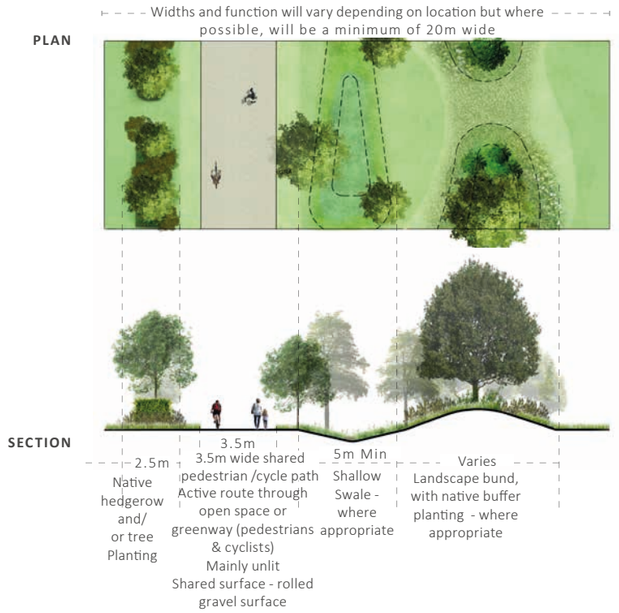


ACTIVE TRAVEL ROUTE THROUGH LANDSCAPE & OPEN SPACE

Primary active travel route



Secondary active travel route



CHARACTER AREAS

LANDSCAPE CHARACTER AREAS

DESTINATION PARKS

Three substantial new Destination Parks will be provided in locations evenly distributed across the development (Channels Discovery Park, Park Farm Meadows and Dukes Wood Nature Park. At a local scale, the destination parks will be supplemented by a series of Village Greens serving the different neighbourhoods, located close to the village hubs. The parks will include a mosaic of habitats, managed to conserve nature and provide opportunities for people to experience, interact with and appreciate nature and heritage alongside a wide range of recreational and educational opportunities. The parks will provide space to relax, exercise and socialise, with the opportunity to experience nature through a range of habitat typologies and biodiversity enhancements. These parks will serve both the existing and new parts of the Garden Community to provide a variety of unique, publicly accessible, high quality, green and natural open spaces with t target that they be within 600m walking distance of all homes.

CHANNELS DISCOVERY PARK

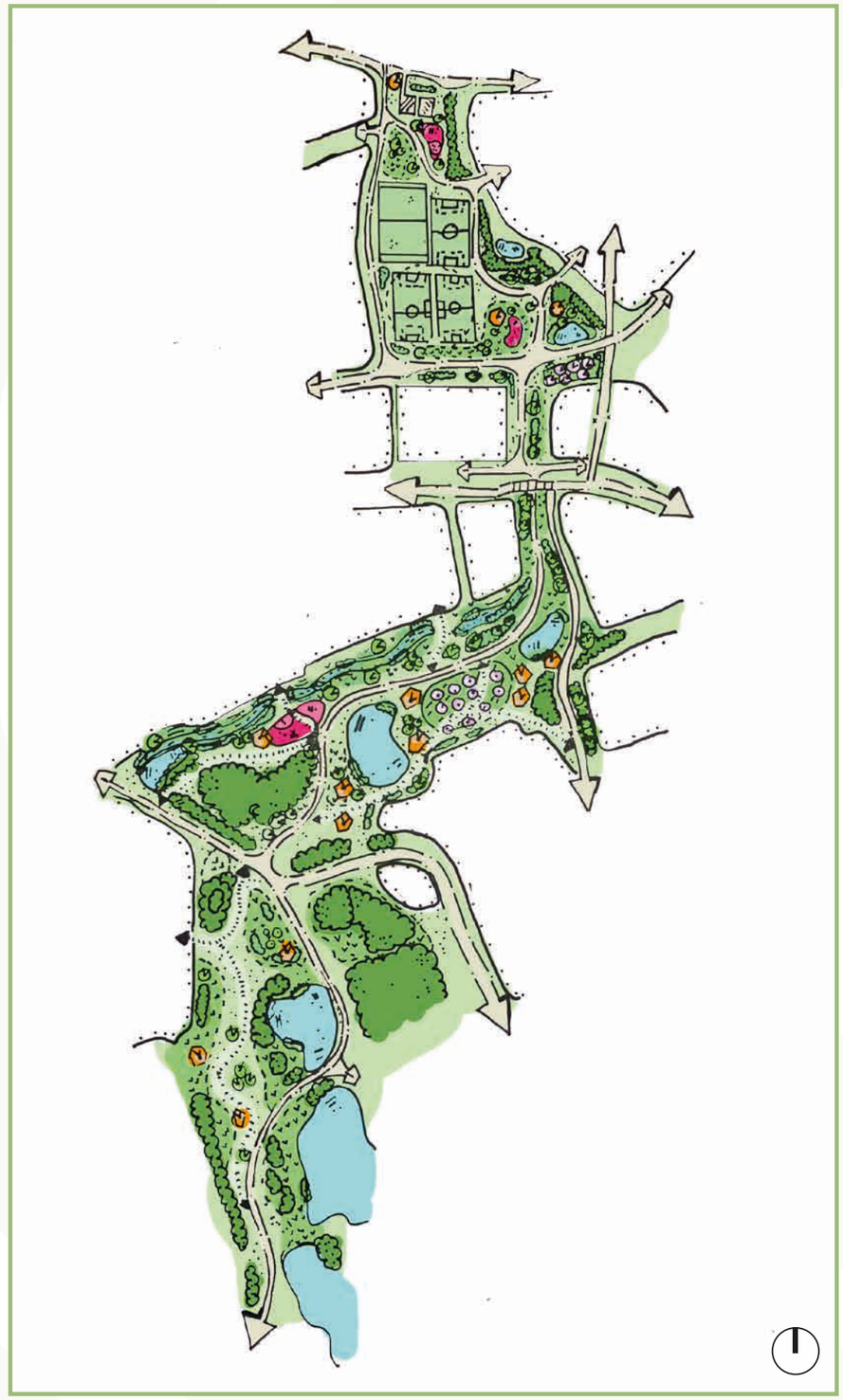
Is proposed in the west of the Site and is intended to serve the early phases of the development. It will provide a north / south linear park that links with existing green open spaces at Channels and Beaulieu, whilst providing onward connections to the west into the Chelmer Valley and to the east across Domsey Lane to Park Farm Meadows. The park will function as a recreational park with multifunctional large open spaces providing opportunities for meeting, gathering, picnicking, events, playing and exercise. This Park will include a formal sports hub, a series of equipped (NEAP and LEAP) and natural play areas, community gardens and orchards, all linked by a network of surfaced paths for pedestrian and cyclists. The parkland will be supplemented with new areas of planting and, where possible, retain existing woodland, hedgerows, trees and wetlands if deemed appropriate following more detailed surveys.

Plan:

Illustrative Plan of Channels Discovery Park

Key

- Development Parcels
- Active travel routes
- Suds Attenuation Pond
- Formal Sports Pitches
- Proposed Trees
- Species Rich/Meadow Grassland
- Mown Amenity Grass Paths
- Woodland Blocks
- LEAP/NEAP
- Native Hedgerows
- Orchard/Community Gardens



**sports pitches illustrative and not to scale*

LANDSCAPE CHARACTER AREAS

PARK FARM MEADOWS

Is proposed in the central area of the New Community, along the Park Farm Brook corridor, and will provide an ecologically wetland focused parkland destination, that includes pollinator friendly species, locally prevalent native planting and seasonal wetland habitats. The drainage strategy proposes to drain the development into this part of the GI network with the opportunity to create wet and dry attenuation SuDS features, that would provide the basis for wetland habitats. The meadows incorporate attenuation ponds and an existing waterway that forms a key part of the drainage strategy. The parkland will function to aid the connectivity of people and wildlife between the Discovery Park in the west and Dukes Wood Nature Park in the east - linking to existing green open spaces at Beaulieu in the south. The parkland will include Park Farm Brook, swathes of species-rich meadow and wetland grassland, tree planting, SuDS (both in the form of permanent and seasonally wet attenuation ponds) and pockets of amenity landscape for informal recreation and play.

CHARACTER AREAS

LANDSCAPE CHARACTER AREAS

DUKES WOOD NATURE PARK

Is proposed in the north-eastern part of the Site and will further develop and enhance the minerals restoration scheme for the Bulls Lodge Quarry into a wildlife focused parkland - featuring a mosaic of new habitats including wetlands, grasslands and woodlands, supporting and enhancing local biodiversity. It will provide a sub-regional scale area of accessible natural open space, serving the new Garden Community and the wider City as a whole. It will reinstate areas of historic woodland previously lost (Dukes Wood), through new tree planting, which will permeate into the wider site to contribute to its character. It will include a formal sports hub in the west, as well as informal sports opportunities (outdoor gym / fitness trails), along with a series of equipped (NEAP and LEAP) and natural play areas, all linked by a network of surfaced paths for pedestrian and cyclists. As the final form of the Nature Park will only be known once mineral extraction is finished it is proposed that a Design Brief be consulted upon, prepared and submitted along with the relevant RMA at the appropriate time.

Plan:

Illustrative Plan of Dukes Wood Nature Park

*sports pitches illustrative and not to scale

CHARACTER AREAS

HERITAGE LANDSCAPE INTERVENTIONS

Plan:

Park Pales & The Ride

Key

Park pale

1. Active travel route following the assumed alignment of the historic Park Pale
2. Active travel route along alignment of earlier Park Pale along the apex of landforms
3. Undulating landforms to re-interpret the sense of enclousure
4. Linear suds features, such as swales and dithces in addition to strategic suds features incorporated along the Park Pale enhancing undulating landscape
5. Proposed tree species selection to reflect an estate Parkland character
6. Incidental play features, seating and areas of amenity landscape integrated along the Park Pale
7. Opportunities for a variety of amenity spaces for community use
8. Integrated public art and wayfinding features as part of The discovery trail

The Ride

9. Public art and wayfinding features, as part of the discovery trail, at the end of vistas - to guide users and create a terminus at each end of the ride
10. The ride will be characterised by linear landscape features along its length such as; tree lines, permeable woodland and native hedgerow
11. Active travel route framed either side by landscape features to re-interpret the historic access route
12. A series of open amenity landscape areas (garden rooms) will be provided along its length, to accommodate Community uses - such as formal gardens, play and picnic areas

CHARACTER AREAS

HERITAGE LANDSCAPE INTERVENTIONS

DISCOVERY TRAILS

The Discovery Trails will celebrate, reference and interpret the area's rich history by connecting key heritage assets within the Site and linking to the wider area through a network of waymarked north, south, east and west trails. The trails will run through the Greenways and destination parks along surfaced paths, connecting important assets and highlighting the area's heritage, through interpretation using either boards / signage, wayfinding, landscape features and / or public art. The trials will reinstate and interpret the postulated line of the earlier Park Pales and Ride from New Hall and use landscape features such earthworks, tree planting and where appropriate public art.




EVIDENCE BASE DOCUMENTS

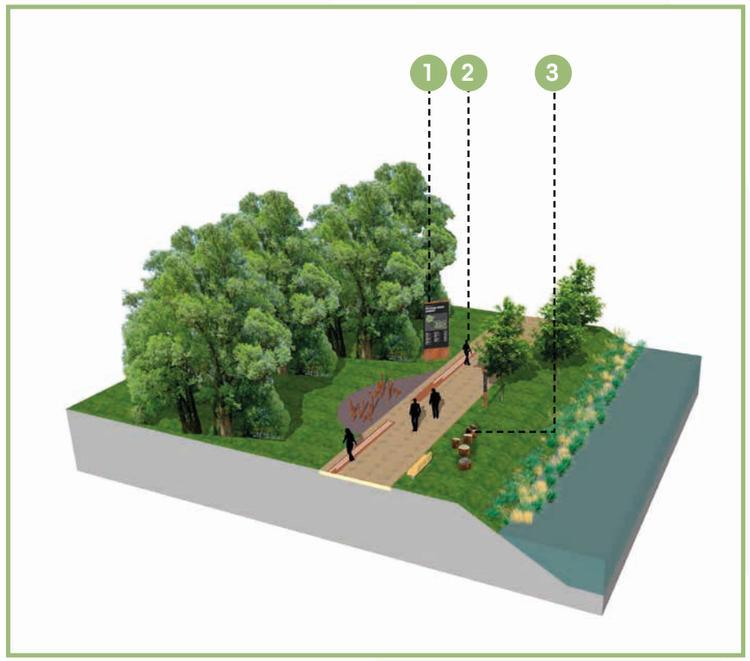
Landscape & Visual Technical Note,
Cultural Heritage Desk Based Assessment, Chelmsford Garden Community Nature Recovery Network

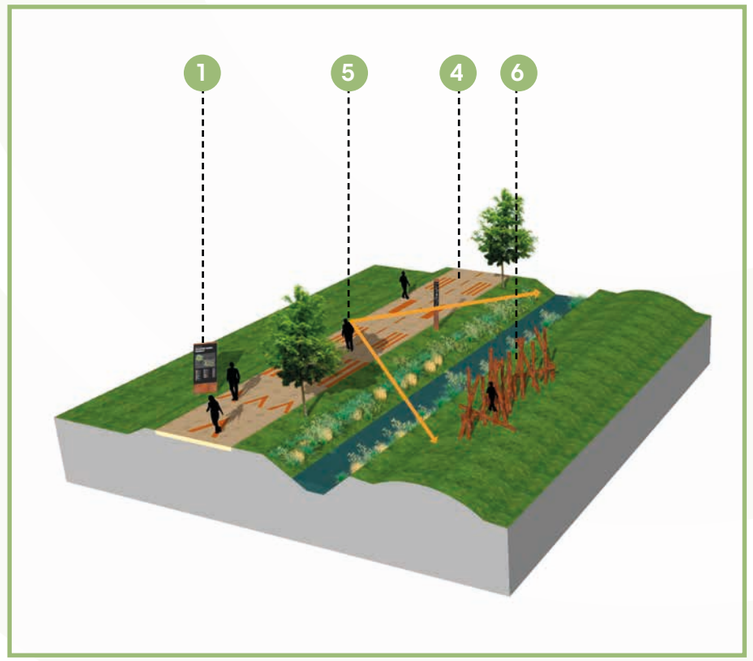
Diagrams below:

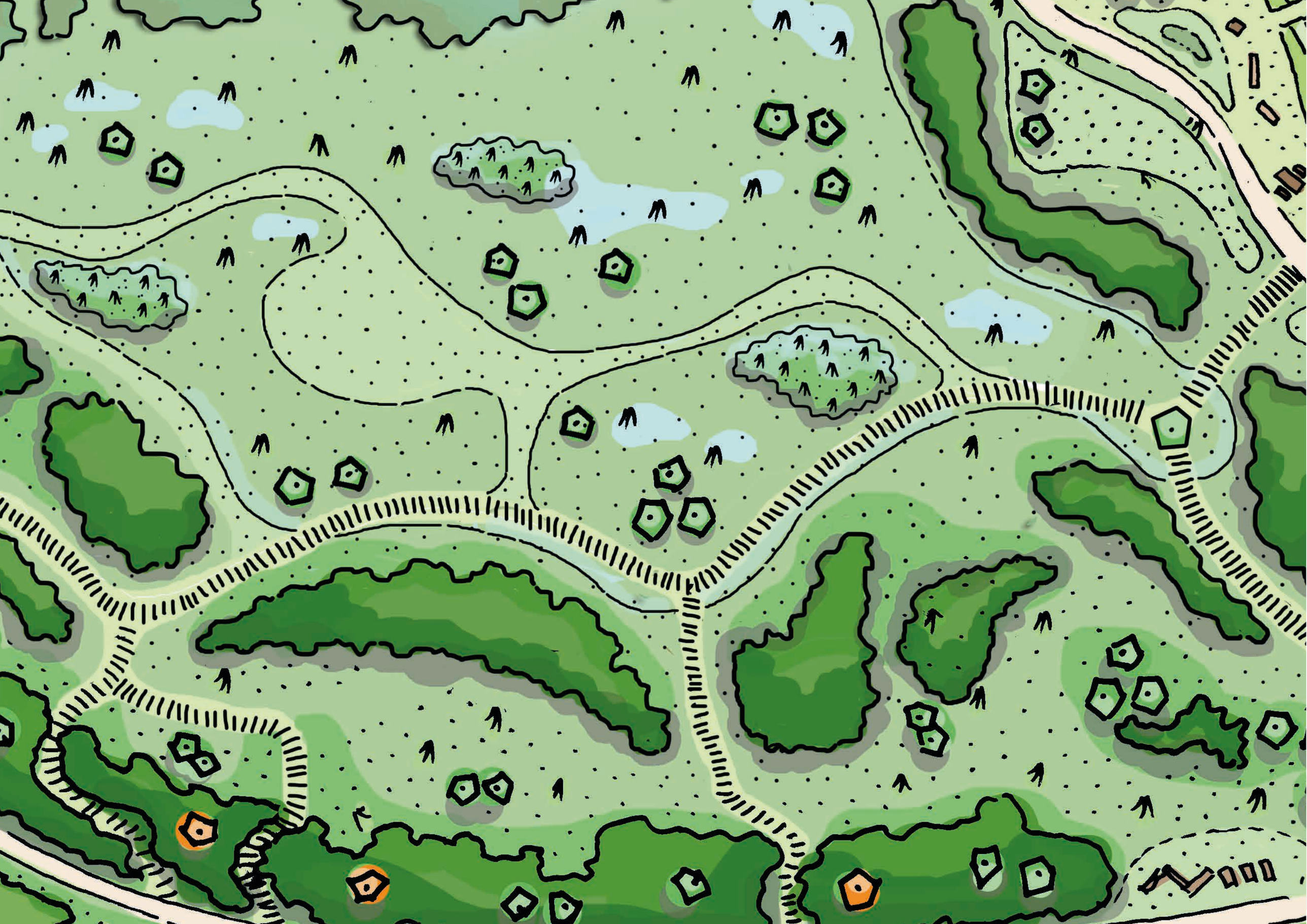
Typical Discovery Trail Components

Key

1. Heritage wayfinding boards at key locations as part of the Discovery Trail, developed as part of a site wide wayfinding strategy.
2. 'Heritage along the way' – key dates and information regarding the site using surface material/art.
3. Play activities which complement and reference the heritage of the site.
4. Opportunity to interpret the former Boreham Airfield taxiways through surface materials, tree planting and recreational activities.
5. Planting used along discovery trail to frame views of existing heritage assets.
6. Public art (developed as part of a public art brief) at key locations to reference, complement and celebrate the site's history.







09.

DELIVERY AND PHASING

OBJECTIVE

To ensure that the Garden Community is delivered on a landownership blind basis each Stage 2 Masterplan OPA will be designed such that it has to demonstrate how it fits cohesively within the Stage 1 Masterplan framework to ensure a joined-up approach to placemaking and infrastructure delivery.

PHASING STRATEGY KEY PRINCIPLES

The development is proposed to come forward in four key overarching phases as set out in the Plans and Table within this Section. Within those, it is likely that areas will be divided into sub phases that will come forward simultaneously to expedite delivery. The aim within each phase is to ensure the right infrastructure is prioritised and to allow for self-sufficiency and the establishment of sustainable behaviours early on to set the tone for the rest of the development.

Each phase and sub phase should result in a cohesive place with the creation of natural boundaries between development plots and surrounding landscaped areas to limit disruption to established and establishing communities whilst future adjacent plots are being built. All phases and sub phases will be properly connected to the road network and have such facilities to sustainably accommodate their needs. Where the full range may not be feasible in the earlier phases, meanwhile uses should be considered if practical, feasible and viable.

Key accesses and primary streets should be delivered first and where appropriate, feasible and viable, green open spaces and neighbourhood centres should be provided as early as possible, and concurrently alongside the delivery of housing.

SITE WIDE PHASING STRATEGIES

A Site Wide Phasing and Delivery Strategy for each OPA area must be submitted to demonstrate how the various development parcels will be delivered with reference to the requirements set out in the IDP, the indicative phasing Plans at **pages 162-165** and the Phasing and Delivery Schedule at **pages 166- 169.**

It should be noted that the current phasing strategies are indicative and will necessarily evolve as more information becomes available through the OPA's and therefore the timing and precise location of each of the phases may be subject to change. In addition, it is likely that there will be overlap in delivery of certain items within each phase where commencement begins in one phase and overlaps into the next.

The Site Wide Phasing Strategies should clearly identify the boundaries of each phase and subphase and highlight the provision of:

- Housing, including custom build plots.
- Transportation infrastructure including primary roads, vehicular access/es, active travel routes, mobility hubs and other sustainable transport infrastructure.
- Green & Blue infrastructure including, nature recovery, open space provision, formal and informal recreation.
- Drainage including SUDS features and foul water solutions.
- education provision including early years childcare facilities primary and secondary schools (where relevant).
- Community and leisure facilities including village centres, healthcare provision, sports facilities and any required meanwhile uses.
- Services and utilities including superfast broadband, electricity, water and communications solutions.

The above list is not exhaustive and therefore all relevant items associated with an OPA should be included.

Strategies should also set out indicative timeframes for the delivery of each phase and subphase, and trigger points for the construction of specific facilities or infrastructure as set out in the list above and in order to deliver the requirements of the IDP.
The PFA will be responsible for agreeing triggers for various factors, such as the timing of a Stewardship Body.

MINERALS

The parts of the site affected by extant minerals permissions as set out on the constraints plan at Section 3 will need to propose phasing strategies that allow for extraction to be completed and restored whilst ensuring, where possible, that relevant land is made available to deliver the overarching phasing strategy and the requirements of the IDP.

Should mineral extraction affect the timing of delivery of key strategic infrastructure items, a review will be undertaken and, if required, alternative locations for such items shall be identified that are capable of coming forward in accordance with the agreed trigger for delivery.

INTERDEPENDENT INFRASTRUCTURE DELIVERY

Each development phase should deliver its part of requisite interdependent strategic infrastructure, such as, primary roads, services, utilities, active travel routes and bus routes to the edge of OPA boundaries and at all times enable the opening up of successive complementary parcels that allow access to the next and should not result in piecemeal developments which prejudice other parts of the masterplan coming forward.

MONITORING & REVIEW

A consistent approach should be agreed for each OPA that makes provision for annual monitoring and accountability, including a mechanism to identify and overcome barriers to development over the longer term and be complementary to the monitoring and review requirements set out in the IDP.

The process for monitoring and review is set out in the PFA.

Delivery Item	Application Submission		Secure By	
	Outline Application	Reserved Matters	Condition	S106
Site Wide Phasing Strategy	✓		✓	✓
Annual Monitoring Report				✓

DELIVERY AND PHASING

PHASING AND DELIVERY

Plan:

Phase 1 (2025-2029)

Phase 1 will see the opening up of five key accesses into the Garden Community as follows:

- Southern Access from RDR1 (Beaulieu Parkway) into Park Farm Village
- New junction from the south into the Channels Village extension
- New Access from Essex Regiment Way north of the Park & Ride into Great Belsteads Village.
- Junction Improvements and new access as part of RDR2 at Wheelers Hill roundabout and the Junction of the North-East Bypass.

Other key transport infrastructure will include the full length of RDR2 to connect with the new North-East Bypass as well as north-south and east-west primary routes from Channels into Great Belsteads Village and extending to Essex Regiment Way in the west and Domsey Lane in the east.

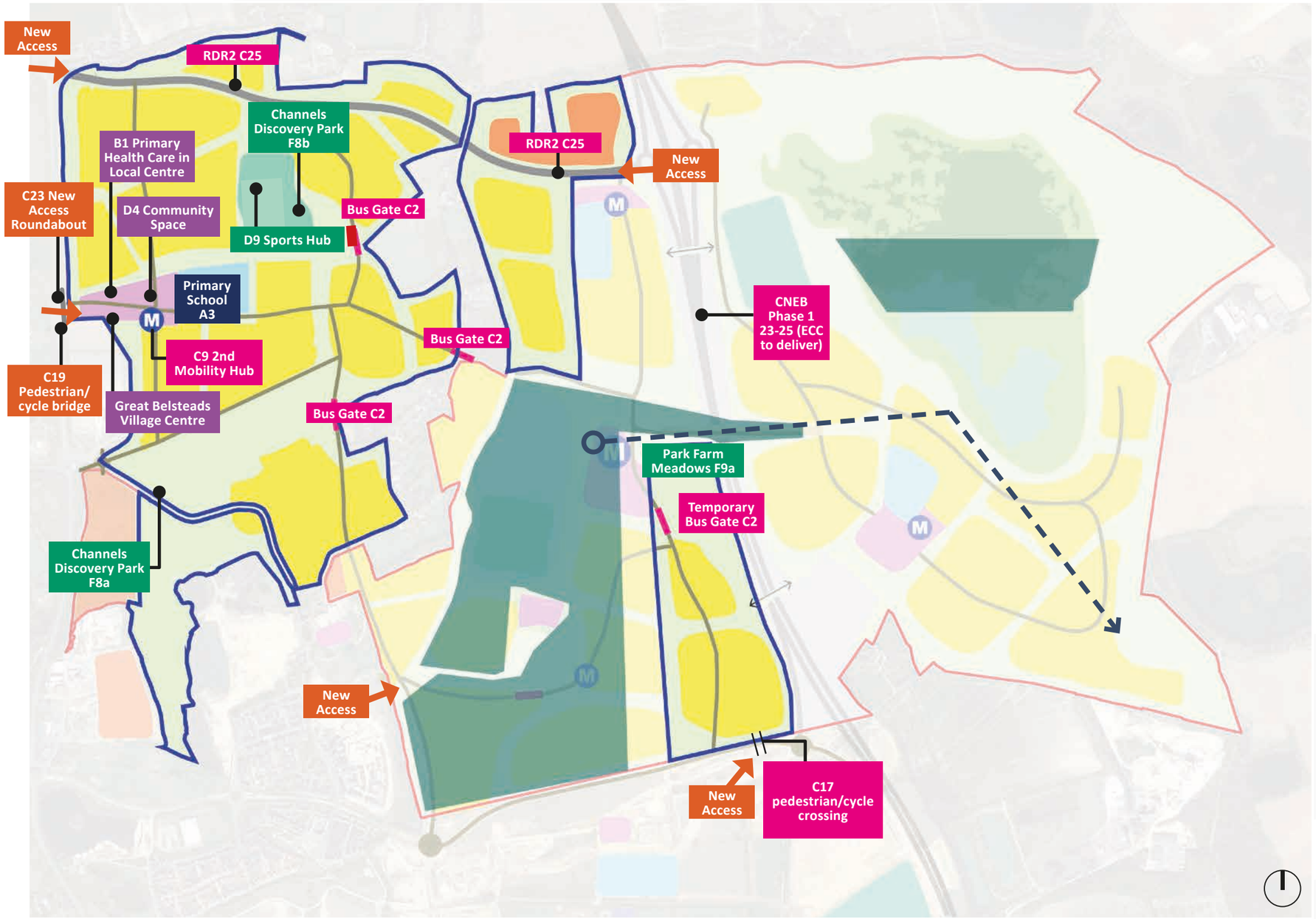
A new Pedestrian and Cycle bridges will be constructed across Essex Regiment Way at the gateway to the development.Community infrastructure will come forward in the form of the Great Belsteads Neighbourhood Centre and Primary School.

The southern and northern phases of the Channels Discovery Park will bisect Great Belsteads Village and see the delivery of the first significant sports hub in the northern section. New access arrangements will also be formed for the Willow Hill Employment area from RDR2 and for residential parcels south of the RDR.

Key

- Phase boundary
- Developable Areas with the Phase
- Green and Blue Infrastructure
- Schools
- Neighbourhood Centres
- Employment Area
- North East Bypass & Northern RDR Corridor
- Mineral Extraction Areas within the Phase
- Conveyor Route

Note: *Phasing plans may be revised and some phases may occur concurrently*



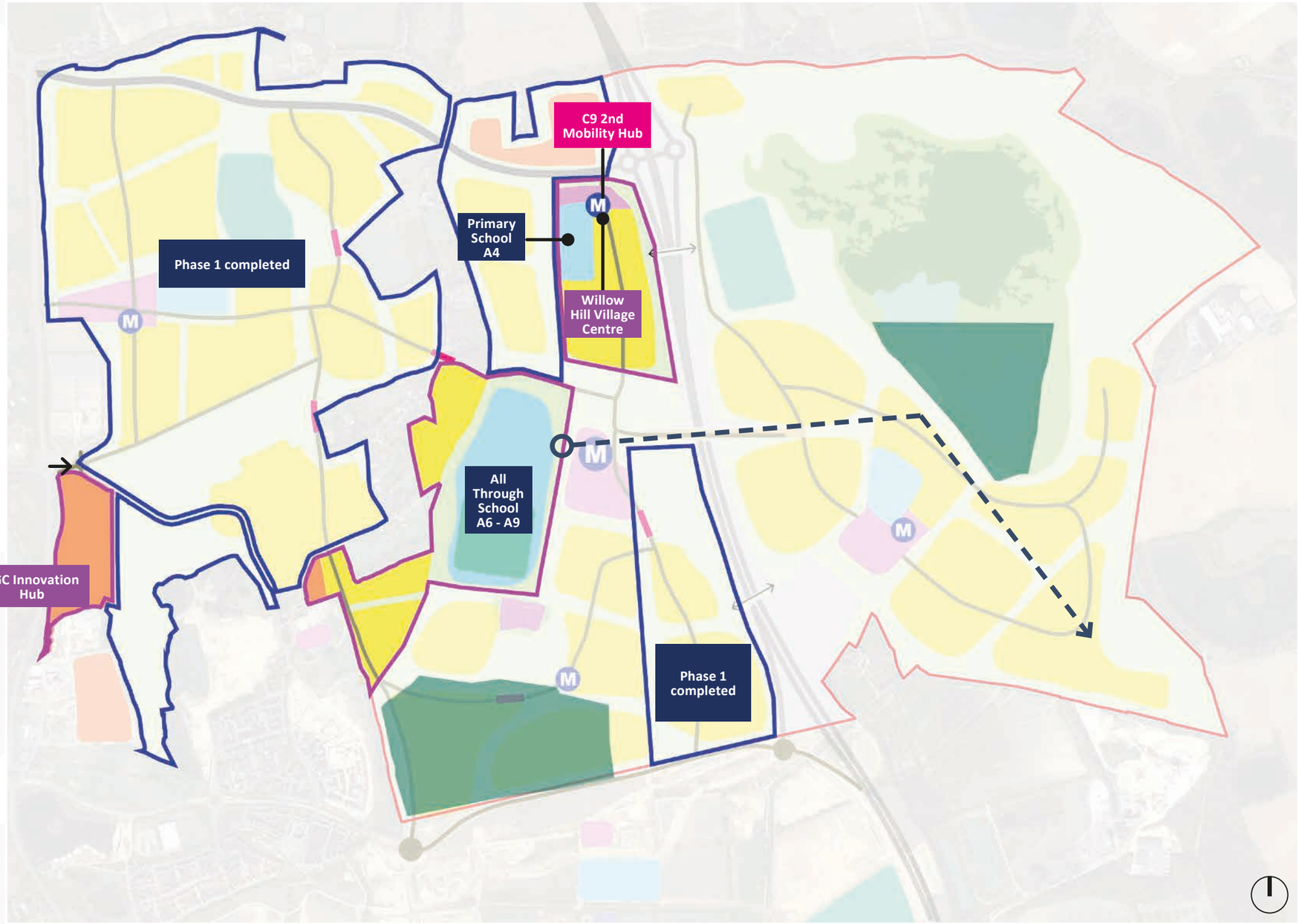
DELIVERY AND PHASING

PHASING AND DELIVERY

Key

- Phase boundary
- Developable Areas with the Phase
- Green and Blue Infrastructure
- Schools
- Neighbourhood Centres
- Employment Area
- North East Bypass & Northern RDR Corridor
- Mineral Extraction Areas within the Phase
- Conveyor Route

Note: *Phasing plans may be revised and some phases may occur concurrently*



Plan:

Phase 2 (2030-2034)

Phase 2 will see the further delivery of substantial employment and educational land including the CGC Innovation Hub.

Following completion of mineral extraction activities, the new All Through School will be delivered to the north of the existing Park Farm heritage buildings.

A new neighbourhood centre called Willow Hill will be constructed to the west of the north-east bypass which will include the second new Primary School.

An area of land will also be serviced to be able to accommodate development of 9 travelling showpersons plots with a new access for this formed from the North East Bypass junction with Northern RDR.

New access arrangements will also be formed for the CGC innovation Hub through junction improvements and remodelling at the existing Pratts Farm Roundabout.

DELIVERY AND PHASING

PHASING AND DELIVERY

Key

- Phase boundary
- Developable Areas with the Phase
- Green and Blue Infrastructure
- Schools
- Neighbourhood Centres
- Employment Area
- North East Bypass & Northern RDR Corridor
- Mineral Extraction Areas within the Phase

Note: *Phasing plans may be revised and some phases may occur concurrently*

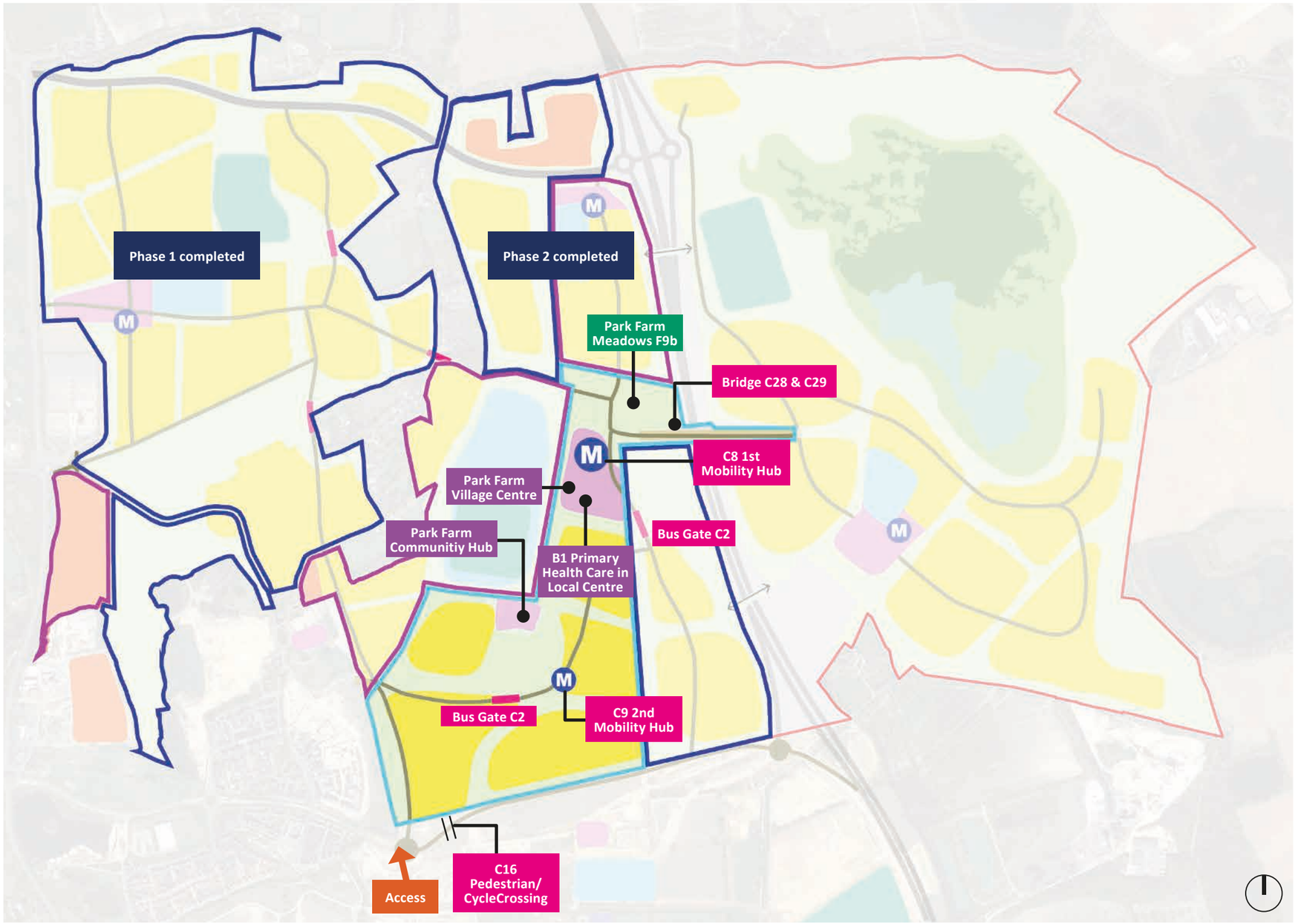
Plan:

Phase 3 (2035-2039)

Phase 3 will see junction improvements and a new access delivered to the south of the site from RDR1 and the upgrading of the minerals conveyor bridge that will cross the North-East bypass into a new multi modal bridge that will act as a key access route into Phase 4.

There will be further community infrastructure delivered in the form of the Park Farm village centre, and a new community hub surrounding the Park Farm heritage buildings.

In terms of Green Infrastructure the second destination parkland will be delivered in the form of Park Farm Meadows adjacent to the Park Farm Village centre and North-East Bypass.

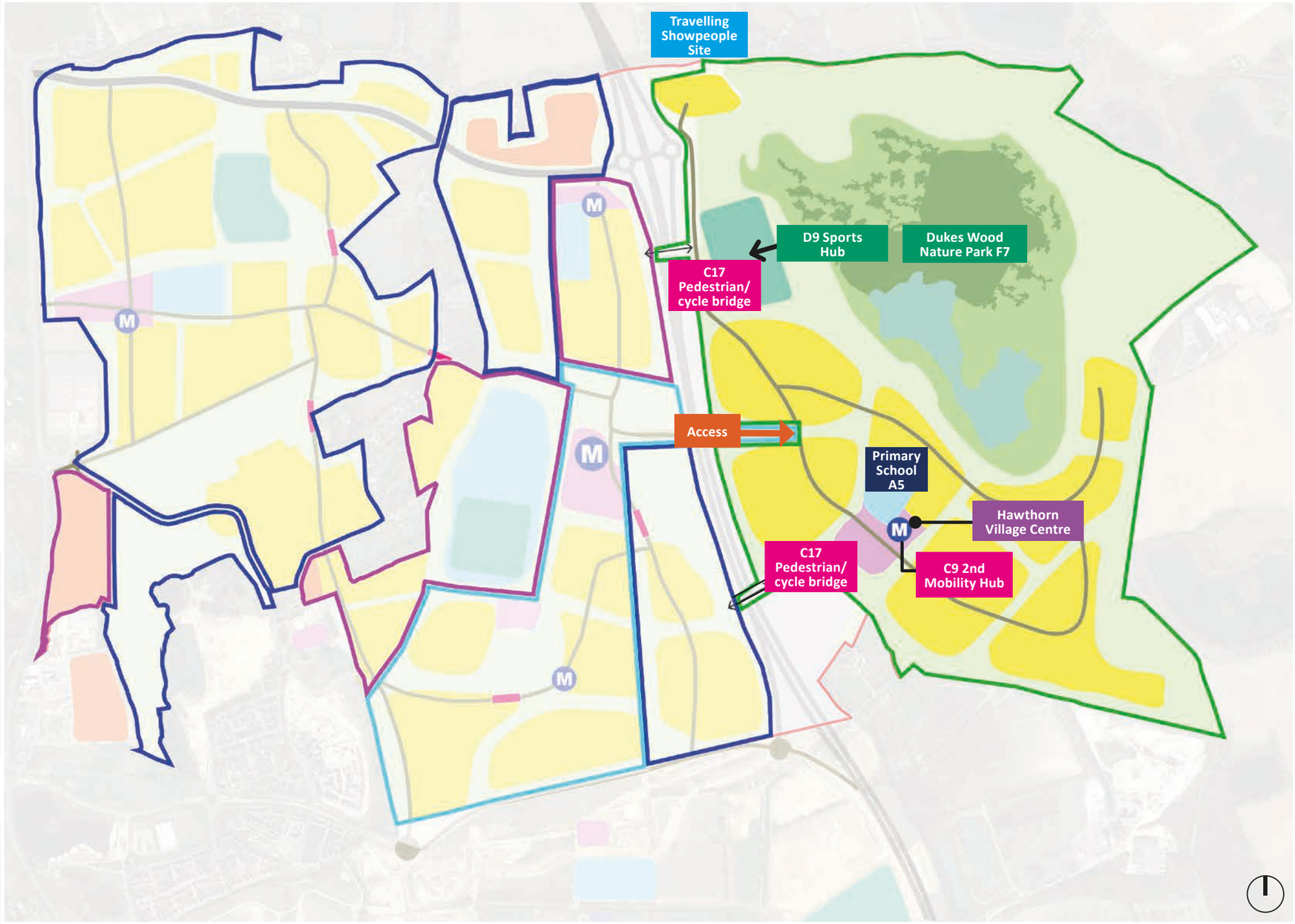


PHASING AND DELIVERY

Key

- Phase boundary
- Developable Areas with the Phase
- Green and Blue Infrastructure
- Schools
- Neighbourhood Centres
- Employment Area
- North East Bypass & Northern RDR Corridor
- Mineral Extraction Areas within the Phase

Note: *Phasing plans may be revised and some phases may occur concurrently*



Plan:

Phase 4 (2040-2044)

As described in Phase 3 the predominant access into Phase 4 will be from the newly formed crossing of the North-East Bypass and a key deliverable will be the final village centre known as Hawthorn which will include the delivery of a further primary school.

In addition to the vehicular access point a new pedestrian/cycle footbridge will be delivered at the southern end of the North-East Bypass and a new footbridge to the north which will connect the wider development to a significant new sports hub.

Following the completion of minerals restoration activities the landform will be utilised to deliver the final and most significant destination parkland known as Dukes Wood Nature Park.

DELIVERY AND PHASING

PHASING AND DELIVERY

		OUTLINE PLANNING APPLICATION AREA		
PHASE	**TOPIC**	**CGC OPA 1 Ptarmigan Land (IDP Reference in brackets where relevant)**	**CGC OPA 2 Countryside L&Q (IDP Reference in brackets where relevant)**	**CGC OPA 3 Halley Developments (IDP Reference in brackets where relevant)**
PHASE 01 2025 - 2029	Governance	**Establishment of the stewardship body**		
	Highway	• New Access Junction from Essex Regiment Way (C23) • East - West Corridor to Domsey Lane • Channels North - South Link Road	• New Access from RDR1	• Delivery of Northern RDR (C25)
	Sustainable Travel	• Bus Service (C1) • Bus Gates (C2) • Secondary Mobility Hub – Great Belsteads Village (C9) • Safeguarding of land for P&R (C3) • Travel Plans / Packs (C5) • Car Clubs (C7)	• Bus Service (C1) • Travel Plans / Packs (C5) • Car Clubs (C7)	• Bus Service (C1) • Bus Gates (C2) • Travel Plans / Packs (C5) • Car Clubs (C7)
	Active Travel	• Cycle/Footbridge over Essex Regiment Way (C19) • PROW Improvements (C20)	• RDR1, Roundabout 4 Pedestrian/Cycle Crossing (C17)	• PROW Improvements (C20)
	Formal & Informal Recreation	• Channels Discovery Park (South) (D6, F9a, D11)	• Park Farm Meadows (South) (D6, D11)	• Discovery Park - Sports Hub (D8)
	Green Infrastructure	• Channels Discovery Park (South) (D6, F9a, D11) • Habitat Network Connectivity (F4) • Allotments Community Gardens and Orchards (F7) • Greenways (F11)	• Park Farm Meadows (South) (D8, F2, F10a, D11) • Habitat Network Connectivity (F4) • Allotments Community Gardens and Orchards (F6) • Greenways (F11)	• Channels Discovery Park (North) (D6, F9b, D11) • Habitat Network Connectivity (F4) • Greenways (F11)
	Employment	• Channels Employment Hub • Great Belsteads Village Centre (D10)	• Willow Hill Employment Hub	
	Education	• Great Belsteads Primary School (A3, A10) • Standalone Early Years Childcare Facility (A1)		
	Local Centres	• Great Belsteads Village Centre (D10)		
	Drainage	• SUDS (F5) • Sewers Points of Connection & Improvements	• SUDS (F5) • Sewers Points of Connection & Improvements	• SUDS (F5) • Sewers Points of Connection & Improvements
	Utilities	• Utilities Points of Connection & Improvements • Broadband Provision	• Utilities Points of Connection & Improvements • Broadband Provision	• Utilities Points of Connection & Improvements • Broadband Provision

PHASING AND DELIVERY

		OUTLINE PLANNING APPLICATION AREA		
PHASE	**TOPIC**	**CGC OPA 1 Ptarmigan Land (IDP Reference in brackets where relevant)**	**CGC OPA 2 Countryside L&Q (IDP Reference in brackets where relevant)**	**CGC OPA 3 Halley Developments (IDP Reference in brackets where relevant)**
PHASE 02 2030-2034	Highways	• Upgraded Access to P&R and CGC Innovation Hub	• East - West Road from Domsey Lane to Park Farm Meadows	• Junction Improvements at Wheelers Hill
	Sustainable Travel	• Bus Service (C1) • Travel Plans / Packs (C5) • Car Clubs (C7)	• Bus Service (C1) • Travel Plans / Packs (C5) • Car Clubs (C7) • Secondary Mobility Hub – Willow Hill (C9)	
	Active Travel			
	Formal & Informal Recreation	• Discovery Trail	• Park Farm All Through School Sports Provision	
	Green Infrastructure	• Habitat Network Connectivity (F4) • Greenways (F11)	• Habitat Network Connectivity (F4) • Greenways (F11)	
	Employment	• CGC Innovation Hub	• Willow Hill Village Centre (D10)	
	Education		• Willow Hill Primary School (A4, A10) • Park Farm All Through School (A6, A7, A8, A9, A10)	
	Local Centres		• Willow Hill Village Centre (D10)	
	Drainage	• SUDS (F5) • Sewers Points of Connection & Improvements	• SUDS (F5) • Sewers Points of Connection & Improvements	
	Utilities	• Utilities Points of Connection & Improvements • Broadband Provision	• Utilities Points of Connection & Improvements • Broadband Provision	

PHASING AND DELIVERY

		OUTLINE PLANNING APPLICATION AREA		
PHASE	**TOPIC**	**CGC OPA 1 Ptarmigan Land (IDP Reference in brackets where relevant)**	**CGC OPA 2 Countryside L&Q (IDP Reference in brackets where relevant)**	**CGC OPA 3 Halley Developments (IDP Reference in brackets where relevant)**
PHASE 03 2035-2039	Highways		• RDR 1 Roundabout 3 Toucan Crossing (C16)	
	Sustainable Travel		• Bus Service (C1) • Bus Gates (C2) • Travel Plans / Packs (C5) • Car Clubs (C7) • Primary Mobility Hub – Park Farm (C8) • Secondary Mobility Hub – Park Pale (C9)	
	Active Travel			
	Formal & Informal Recreation		• Park Farm Meadows (North) (D6, F2, F10b, D11)	
	Green Infrastructure		• Park Farm Meadows (North) (D6, F2, F10b, D11) • Habitat Network Connectivity (F4) • Allotments Community Gardens and Orchards (F6) • Greenways (F11)	
	Employment		• SUDS (F5) • Sewers Points of Connection & Improvements • Park Farm Village Centre (A2, D10)	
	Education		• Utilities Points of Connection & Improvements • Broadband Provision • Standalone Early Years Childcare (A2)	
	Local Centres		• Park Farm Village Centre *(A2, D10, B1**) • Park Farm Community Hub	
	Drainage		• SUDS (F5) • Sewers Points of Connection & Improvements	
	Utilities		• Utilities Points of Connection & Improvements • Broadband Provision	

*Inclusive of Parish Hall

**Medical Centre to be located within Park Farm Village Centre. Subject to OPA liaison with CCG on existing capacity and delivery triggers.

PHASING AND DELIVERY

		OUTLINE PLANNING APPLICATION AREA		
PHASE	**TOPIC**	**CGC OPA 1 Ptarmigan Land (IDP Reference in brackets where relevant)**	**CGC OPA 2 Countryside L&Q (IDP Reference in brackets where relevant)**	**CGC OPA 3 Halley Developments (IDP Reference in brackets where relevant)**
PHASE 04 2040-2044	Highways		• CNEB Mineral Conveyor Bridge Upgrade (C28, C29)	
	Sustainable Travel		• Bus Service (C1) • Travel Plans / Packs (C5) • Car Clubs (C7) • Secondary Mobility Hub – Hawthorn Village (C9)	
	Active Travel		• Southern CNEB Bridge Crossing (C26) • Northern CNEB Bridge Crossing (C27)	
	Formal & informal recreation		• Dukes Wood Nature Park (D6) • Dukes Wood Sports Hub (D9)	
	Green Infrastructure		• Dukes Wood Nature Park (D6, F2, F8, D11) • Habitat Network Connectivity (F4) • Allotments Community Gardens and Orchards (F6) • Greenways (F11)	
	Employment		• Hawthorn Village Centre (D9, D10)	
	Education		• Hawthorn Primary School (A5, A10)	
	Local Centres		• Hawthorn Village Centre (D10)	
	Drainage		• SUDS (F5) • Sewers Points of Connection & Improvements	
	Utilities		• Utilities Points of Connection & Improvements • Broadband Provision	

DELIVERY AND PHASING

FUTURE PROOFING

The Garden Community will be delivered over approximately the next 20 years and therefore it must ensure that it can adapt to changing policy, technology, demographics, environment and cultural behaviours during this time. It must also meet the needs of the present without compromising the ability of future generations to meet their own needs. Ensuring the Stage 1 Masterplan is 'future proofed' has therefore been a key consideration in the overall design.

Whilst reasons for changes can come from a variety and mixture of factors, the following text sets out a number of key change catalysts and provides examples of how the Stage 1 Masterplan has been designed to adapt to these.

The PFA will set the mechanisms for review and the approach for monitoring aspects of the CGC, such as transport movements. This will provide a formal process for future-proofing the development proposals and encouraging positive change over time.

PLANNING POLICY & LEGISLATION

Whilst the Stage 1 Masterplan and future OPA Stage 2 Masterplans will be approved at fixed times, it is important that the future development is able to respond to changes in policies; such as planning, environmental and transport. Examples of adaptation methods include:

- If a revised Local Plan is adopted, and any OPA's are not approved, then the DFD will be revised in accordance with the new Local Plan policies and any future OPA's will need to be revised to reflect this.
- The cycle network's final design will be agreed at each RMA stage, consistent with the overall cycle network, but ensuring a responsive approach to emerging trends and best practice.
- Street Typologies will be updated at RMA stage in accordance with amendments to national and local design and safety standards.
- Open space and green infrastructure delivery will be reviewed at RMA stage to ensure the ability exists to incorporate historical features or strategies not accounted for at the OPA stage.
- The Waste Strategy will be conditioned as part of an OPA, and targets will be reviewed throughout the project lifecycle to ensure they are being met and are at a minimum in line with national and local policy.
- Employment floorspace will be secured via planning conditions to avoid any future changes in use via policy changes such as the General Permitted Development Order.

TECHNOLOGY

The phasing of the CGC is predicted to run until beyond 2040, as such the development will need to adapt and take advantage of advances in technology. Examples of where this can be done include:

- Bus use will be promoted throughout the life of development by encouraging the modernisation of facilities as well as technology to keep users up to date on locations, timings and sustainable transport initiatives.
- Travel Plans will undertake reviews at 3-year intervals to understand emerging technologies such as automated vehicles and whether it is practical, feasible and viable to deliver them in future phases of the development.
- Archaeological surveys will be agreed on a phase-by-phase basis and respond to future advances in technology to help reimagine buried remains and avoid harming historical assets.
- RMA Drainage will respond to emerging technologies and best practice to ensure CGC is at the forefront of implementing modern sustainable drainage measures.
- Layouts of buildings, both residential and non-residential, will be reviewed at RMA stage to ensure the design incorporates the potential for future technologies.
- On-site energy trials and post-construction monitoring could be undertaken to inform future development phases and assist in evolving energy strategies for future development phases.
- Future technological advances will improve efficiency and off-set an element of the potential additional electrical requirements that may come forward through increased populations.
- Passive network provision and capacity for off plot EV charging will be provided to secure a sufficient electricity supply to cater for future modes of electric vehicle travel.

DEMOGRAPHIC

As the CGC grows, the population will grow and overtime the demographics of the development will shift. In order to balance any shifts in population numbers and ages the following will be secured:

- Cycle routes and walking paths will be designed to a capacity that allows significant space for an expanding community.
- Infrastructure will be provided to allow an additional electrical load in the future without significantly altering core elements of the design.

FUTURE PROOFING

- Utilities networks will be closely monitored to ensure that any advances will sufficiently sized and any additional capacity that may be required is sourced as efficiently and responsibly as possible.
- Sufficient floorspace will be provided to ensure that as the population of the Garden Community grows there will not be pressure on the availability of facilities.
- School land allocated will enable the ability to expand should demand dictate.
- Regular monitoring will be undertaken to ensure school sites are brought forward at a point where it meets demand, but does not undermine the sustainability of the school itself or other schools within or nearby the CGC.
- Schools will be designed in such a way to enable them to adapt as the needs of the new community develops.
- Housing will be provided to meet a range of size needs as well as needs for accessible dwellings and care units as well as other specialist housing.

ENVIRONMENT AND CLIMATE

In July 2019, Chelmsford City Council declared a climate and ecological emergency and pledged to take action to make the Council's activities net-zero carbon by 2030. Sustainable development principles run throughout the DFD, however in order to ensure the development is built with resilience to change the following will be implemented:

- The GBI network will be designed to be resilient to climate change by incorporating mitigation and adaptation, including a diverse planting palette of native and non-native species, selected to be robust and able to withstand dramatic changes in weather, pollution, water logging and drought whilst managing responses to infectious diseases such as Ash Dieback and Dutch Elm Disease.
- Surface water features will be designed using multiple, worst case, rainfall data profiles to build in resilience to climate change within the system.
- Buffer zones will be included within attenuation features to adapt to rainfall events that may fall outside of the design probability criteria.
- Large canopy trees will provide shading and assist with slowing surface water runoff.
- As trees mature on site their ability to capture carbon and release oxygen will be enhanced and promote healthier air.
- Buildings (including school and early years facilities) will be required to meet high sustainability standards to support the transition to a net zero economy and ensure the impacts of climate change are mitigated.
- Construct Environmental Management Plans will be secured by OPA conditions and provided at the RMA stage to ensure best practice is undertaken as part of the development delivery stages.
- A progressive shared vision will drive successful waste management and facilitate innovation in the need to reduce waste.

BEHAVIOURAL

It is recognised that people's views and attitudes to a range of lifestyle factors change over time, and as a result the development will need to be able to adapt to changes in demand. The following examples within the CGC allow for these changes:

- Comprehensive transport monitoring will ensure all measures are performing to expectations and can adapt where necessary to ensure CGC leads the way in supporting changing habits in terms of car ownership.
- Parking numbers will be monitored to adapt to a reduction in parking need in each phase and allow alternative uses for the spaces to come forward.
- Green infrastructure is designed to promote low carbon behaviour by creating safe, attractive, high quality, inclusive, green open spaces on people's doorsteps, easily accessible by sustainable modes of travel, reducing the need to travel by car.
- Formal sport is provided as a critical mass to enable flexibility for a range of pitch layouts to allow for existing and future local needs.
- Sports hubs provide large areas of informal recreation and amenity space close to Village Centres and allow for the flexibility for future outdoor community events, gatherings and other local needs.
- Passive network provision and capacity for off plot EV charging will securing a sufficient electricity supply to cater for future modes of electric vehicle travel.
- Buildings will be designed with sufficient flexibility to ensure that floorspace will be available for a wide range of health and community facilities as new households move in and community groups form.
- During the early phases of the development, consideration will be given to meanwhile uses and the ability of spaces to be used flexibly so that they can adapt according to the individuals, groups and organisations who wish to use them.
- Flexible and resilient employment floorspace will be provided that can be adapted to meet changing needs of businesses.
- Super-fast broadband provision will support home working and smaller workspace hubs for start-up business.
- The Site Wide Stewardship Steering Group will ensure long term monitoring is carried out to be adaptable to changing needs across the development.

FINAL WORDING TO BE AGREED

10.

DETAILED DESIGN CODE FRAMEWORK

DETAILED DESIGN CODE FRAMEWORK

DETAILED DESIGN CODE STAGES INCLUDING SITE WIDE DESIGN CONSIDERATIONS

CONTEXT

Three outline planning applications (OPAs) will be prepared for each zone. They will vary in extent, with each one covering approximately 1000 to 3500 dwellings, together with varying amounts of open space, employment, commercial, community and mixed uses floor space. Each OPA will need to demonstrate compliance with Stage 1 of the Masterplan (i.e. the DFD, IDP and PFA), albeit allowing for agreed refinements in response to progression of the evidence base (including EIA) and the outcome of consultation exercises throughout the OPA stage, thus ensuring a joined-up approach to comprehensive masterplanning. The outline planning permissions (OPPs) will then comprise Stage 2 of the Masterplan.

Design coding should focus on medium-term development, rather than development that may be many years away from construction. On schemes of several thousand homes it is therefore appropriate to establish a phased design coding regime, which allows for a series of codes to be produced over time. The regime ensures that all codes are demonstrably compliant with the Masterplan, and are produced to a consistent level of detail and prescription.

Each OPP will include a pre-commencement condition requiring the approval of a DDC for the relevant area of the development prior to the submission of any RMA.

DESIGN CODING FRAMEWORK

Site Wide Design Consideration(SWDC):
The SWDC are aspects of site wide (Entire NE Chelmsford Garden Community) infrastructure that will be considered when preparing individual Detailed Design Codes (DDCs) and will be the common thread across all three OPA Zones. This will include, but may not be limited to design of wayfinding, signage, primary and secondary active travel routes, design and surface materials, bus stop design, parking standards, lighting, public art, heritage trails, street furniture, branding, bus gates, mobility hubs, car club and signage & surfacing materials. The SWDC will therefore provide a clear link between the aspirations of the DFD, the production of future DDCs and the delivery of individual RMAs thus setting out a commitment to a consistently high quality of design across the Garden Community.

The definitive list of what is included as a SWDC will reflect the outcomes of consultation and negotiations during the OPA stage. The PFA will set out the process to approve the SWDC including the scope and ability to undertake future reviews.

Detailed Design Code Structure and Content:
The NPPF makes it clear that the degree of prescription within detailed design codes should be tailored to the circumstances and scale of change in each place, and should allow a suitable degree of variety. For a site with a Masterplan and Vision, codes should be detailed and specific. Best practice indicates they should carefully distinguish mandatory design instructions from discretionary design guidance. The DDCs for CGC will vary in their extent, but will be consistent in their objectives and in how they stipulate design quality. Each OPP will include a pre-commencement condition requiring the approval of a DDC for the relevant area of the development prior to the submission of any RMA.

All DDCs will include a common thread Chapter detailing the design specification for all agreed SWDC to ensure consistency across CGC. The PFA will provide the necessary clause to ensure all Consortium members are consulted when agreeing approve any the SWDC design specifications that are submitted to CCC for approval. Following the approval of the first DDC, all subsequent DCCs will, include the same SWDC Chapter to ensure consistency across all three Zones, unless revisions are agreed in accordance with the PFA or approved by the City Council.

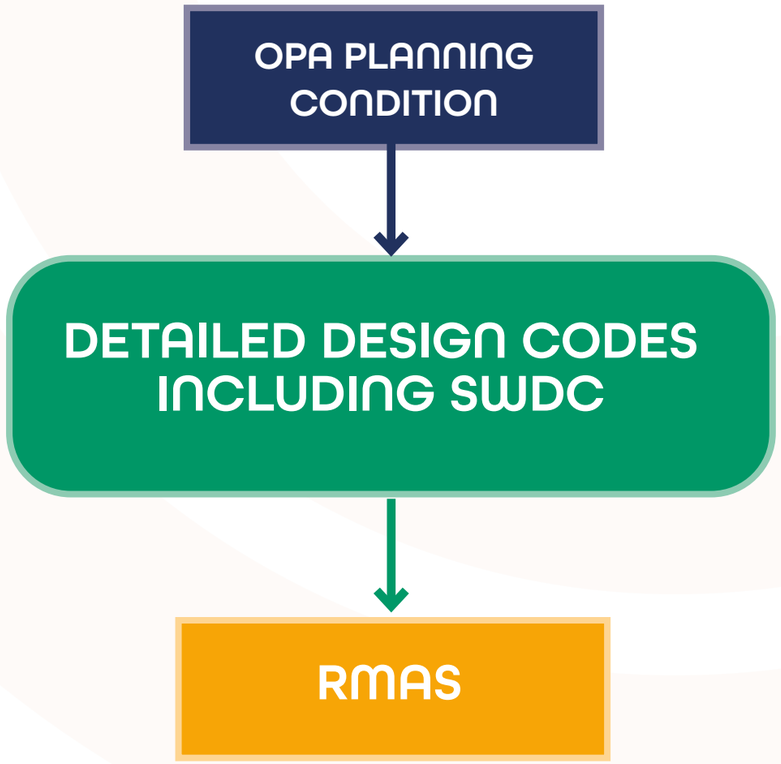
Each DDC might be expected to cover a part of the site that, in its delivery, could represent up to approximately five years in programme and/or up to 1500 homes in coverage. This will allow for the smaller OPA areas to be coded in single documents, and the larger area to be coded in phases, reflecting their longer duration in design and delivery. It may be appropriate for certain elements to have their own DDC: these could include enabling works or infrastructure, or particular uses that need to be delivered independently such as schools or employment areas.

Minimum specifications for the DDCs, and for other types of design guidance documents, is included at Appendix 2 of this DFD. Each DDC will include a Regulatory Plan (i.e. a single scalable drawing), which refers back to the Framework Parameter Plans and any approved OPA Parameter Plans, together with instructions on how to interpret the same. The Regulatory Plans will address layout issues; i.e. the framework of routes and spaces that connect across the sub-area in question and into adjacent sub-areas, and the proposed patterns of blocks.

The DDCs will address aspects of design not prescribed at Outline Planning stages, including the stipulation of building typologies appropriate to parcel frontages and character areas. The DDCs will extend to aspects of land use, landscape design, and architectural design / style / materials. It is envisaged that the DDCs will be more prescriptive along the edges of development parcels, where built form fronts key spaces and streets. Greater flexibility will be permitted within the development parcels.

The DDCs will also extend to aspects of sustainability and building performance by referring to appropriate industry-recognised standards including the Future Homes Standard and Building Regulations.

In combination the DDCs with SWDC chapter will ensure that design quality is protected throughout the production of RMAs and the implementation stages.



FINAL WORDING TO BE AGREED

11.

IMPLEMENTATION PLANNING APPLICATION REQUIREMENTS

ZONE 3

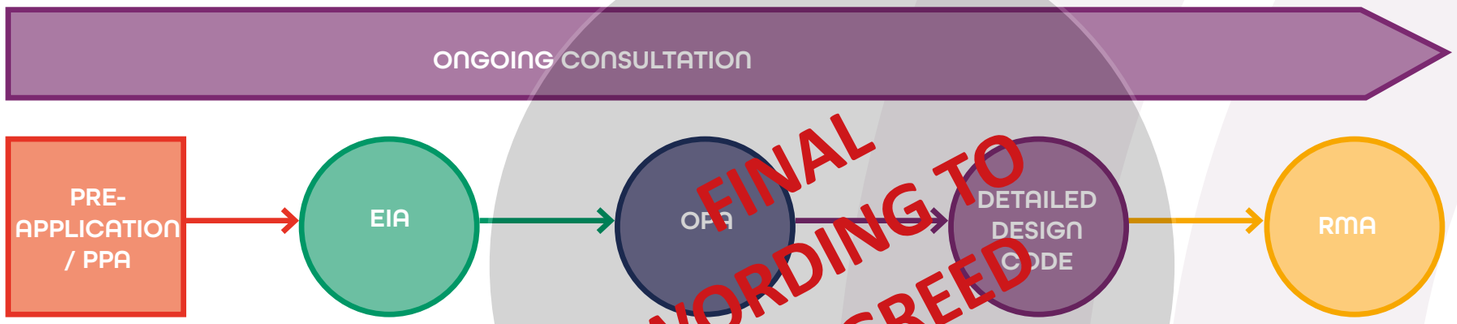
ZONE 1

ZONE 2

FINAL WORDING TO BE AGREED

IMPLEMENTATION - PLANNING APPLICATION REQUIREMENTS

PRE-APPLICATION/PPA



Before the delivery of the Garden Community can commence the planning process will go through the following stages.

FINAL WORDING TO BE AGREED

ONGOING CONSULTATION

Whilst the pre-application engagement will involve a range of public consultation, at all times throughout the CGC's development the public will have the opportunity to be involved in the planning process. This opportunity will largely be through commenting on planning applications (either individually or as part of local groups), but they will also be able to contact local Councillors to highlight ambitions, or make comments through local interest groups.

Regular site visits will be carried out with Members and other key Stakeholders in liaison with the Site Wide Stewardship Steering Group.

PRE-APPLICATION/PPA

In order to ensure each applicant undertakes the relevant assessments prior to submitting an OPA, pre-application engagement between the applicant and the City and County Councils will be critical.

To maximise the benefit of these discussions and provide certainty for all parties, a 'Planning Performance Agreement' (PPA) will be agreed. This is an agreement which the local planning authorities and applicants can use to agree timescales, actions and resources for handling particular applications. It will cover the pre-application and application and post-application stages.

The OPA pre-application stages will include:

- at least one public Consultation Exhibition.
- up to two Member briefings
- stakeholder meetings to be agreed via the PPA
- EIA Scoping - To ensure the correct assessments are undertaken

ENVIRONMENTAL IMPACT ASSESSMENTS (EIA)

Each OPA will be EIA development and will be supported by an Environment Statement (ES) to determine the potential environmental, social, and health effects of a proposed development.

As the Stage 2 Masterplan OPA are brough forward, it is important that the EIA strategy is cohesive and incorporates all available evidence when assessments are made to ensure adequate cumulative assessment.

Each OPA will use the following EIA strategy:

- the EIA for each OPA area will, where appropriate and required, consider the potential cumulative effects of the wider development proposals within the Garden Community as set out in this DFD
- the starting point for consideration of potential cumulative effects of the wider development proposals will take into account the relative certainty of each OPA area at that time with reference to 'PINS Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects'. Whilst Advice Note 17 sets out a staged approach to cumulative effects assessment for Nationally Significant Infrastructure Projects, due to the scale of redevelopment proposed within the CGC, it provides helpful context for assessing the cumulative effects of the different developments that are likely to come forward
- the tiered approach to assessing cumulative effects, will be dependent on the information available at the time in the public domain and reasonable assumptions, using the DFD and IDP inform this. E.g., where later developments are submitted for OPA, more detailed information will be available to base a cumulative effects assessment on, compared with earlier OPA's

For the CGC this would mean that:

- the first OPA will take its assumptions for unknown data from masterplan documents (the DFD, PFA & IDP) and any other information available at the time
- the second OPA will then be able to use the information in the first outline EIA, as well as the masterplan documents for other areas
- this chain would continue for the subsequent OPA until all environmental impacts have been assessed

- Each EIA Scoping Opinion Request Report will set out how the wider CGC will be assessed cumulatively within its EIA (and/or incorporated into future baselines where relevant).

PRE-APPLICATION/PPA

FINAL WORDING TO BE AGREED

OUTLINE PLANNING APPLICATIONS (OPA)

The OPA will be supported by a number of Parameter Plans for approval that will be based upon and in broad conformity with the DFD Framework Parameter Plans. Appendix 1 of this document sets out the key themes that are to be covered in the application, the documents needed to be submitted, and what the documents will be delivering. An application will need to comply with this list to ensure the application is validated (See Appendix 1).

Each Stage 2 Masterplan OPA will be required to be based upon and in broad conformity with the Stage 1 Approved Documents including this DFD and associated documents, which are significant material considerations.

Should any OPA not be approved by the time any revised Local Plan is adopted, then the DFD will be revised in accordance with the new Local Plan policies and all future OPA's will need to be revised to reflect this.

Each OPA will include a set of Outline Conditions that establish restrictions and further details that are required at the reserved matters application stage (RMA). These Outline Conditions will be agreed at the OPA Stage and will worded in such a way that allows flexibility for later phases to incorporate the latest technology and adhere to updated policy and legislation.

SWDC AND DETAILED DESIGN CODE

It is proposed that prior to the submission of any RMA's a single Site Wide Design Considerations Document (SWDC) is approved for all areas of CGC. This will allow subsequent Detailed Design Codes to be prepared for different parts of the site that will vary in their size and content, but that are consistent in their objectives and how they stipulate design quality – while making reference back to the overarching SWDC. The ability to ensure that all parties collaboratively agree the SWDC will be secured by the PFA.

The Detailed Design Codes will address aspects of design not prescribed at Outline Planning stages, including the stipulation of building
typologies appropriate to parcel frontages and character areas.

The Code will extend to aspects of land use, landscape design, and architectural design / style / materials. It is envisaged that the Codes will be more prescriptive along the edges of development parcels, where built form fronts key spaces and streets. Greater flexibility will be permitted within the development parcels.

RESERVED MATTERS APPLICATIONS (RMA)

Reserved Matters applications will seek approval for the following:

- **appearance -** aspects of a building or place which affect the way it looks, including the exterior of the development
- **means of access -** covers accessibility for all routes to and within the site, as well as the way they link up to other roads and pathways outside the site
- **landscaping -** the improvement or protection of the amenities of the site and the area and the surrounding area, this could include planting trees or hedges as a screen
- **layout -** includes buildings, routes and open spaces within the development and the way they are laid out in relations to buildings and spaces outside the development
- **scale -** includes information on the size of the development, including the height, width and length of each proposed building

The Phasing Plans, shown on **pages 162-165**, anticipates delivery of the wider development, however this will likely be broken down further into smaller Reserved Matters Areas.

A.

APPENDIX 1
EVIDENCE BASE

APPENDIX 1

EVIDENCE BASE

To ensure that the development can deliver the best of town and country, and the best of neighbourhoods and nature, a range of environmental and technical baseline studies have been undertaken to inform the DFD. These are presented in the form of 'Evidence Base' documents covering economic, social and environmental characteristics and prospects of the area that have in turn guided the content of this document.

The full list of the Evidence Base documents, alongside the list of responsible consultants is set out in the table below.

Document	Consultant
North East Chelmsford Garden Community Employment Study, July 2020	Lichfields
Chelmsford Industrial Market Report, September 2021	BNP Paribas Real Estate
Chelmsford Garden Community, Employment Space Summary	JTP
Landscape & Visual Technical Note, March 2022, Rev C	Bradley Murphy Design
North East Chelmsford Tree Survey, August 2018	Sharon Hosegood Associates
Health and Social Infrastructure Technical Appendix, November 2022	Quod
Educational Technical Appendix, November 2022	Quod
Energy & Sustainability Workshop Feedback, March 2022	Arcadis
Carbon Framework Technical Note, December 2022	Turley
Waste Strategy, February 2022	Arcadis
Cultural Heritage Desk Based Assessment, September 2021	Aecom
Nature Recovery Networks at Chelmsford Community Garden, May 2022	Southern Ecological Solutions
Onsite Civil Engineering Infrastructure Statement, May 2022	Aecom
Utilities Report, January 2022	TriConnex
Movement Strategy, Incorporating: • **Movement Strategy summary** • **Appendix A1 Modal Share targets** • **Appendix A2 Walking and Cycle Strategy** • **Appendix A3 Parking Strategy** • **Appendix A4 Bus Strategy** • **Appendix A5 Content of OPA's** • **Appendix A6 Access Strategy**	Mayer Brown and TPA
Statement of Community Involvement May 22	JTP

APPENDIX 2

DESIGN CODE FRAMEWORK


ChelmsFord
Garden
Community

DETAILED DESIGN CODE FRAMEWORK

A consistent structure will be required for all Detailed Design Codes, to include the following content where these codes cover principally residential and mixed use areas:

PART A: BACKGROUND

Chapter 1 - Introduction

1.1 Purpose of the SWDC and OPP Detailed Design Code
1.2 Status of the SWDC, Detailed Design Code and Relationship to DFD Masterplan
1.3 Vision & Design Objectives - reference to DFD
1.4 Outline Parameter Plans
1.5 Using the Detailed Design Code
1.6 The Regulatory Plan
1.7 Illustrative Masterplan
1.8 Detailed Design Code Compliance Checklist

Chapter 2 - Context
2.1 Location & Scope of Project Phase
2.2 Wider Planning Context including adjoining CGC Phases
2.3 Existing Site Features (e.g. Topography, Watercourses, Heritage Assets, Existing Woodland Blocks and Public Rights of Way)
2.4 Movement and Transport network

PART B: SITE WIDE DESIGN CONSIDERATIONS (SWDC)*

*to be the same in all DCCs to ensure consistency across all three CGC Zones

Chapter 3 – SWDC

3.1 Design of Wayfinding signage
3.2 Primary and Secondary active travel routes design & surface materials
3.5 Bus Stop Design
3.4 Green Infrastructure Lighting Design
3.5 Public Art Strategy
3.6 Design of Heritage Trail signage
3.7 Green Infrastructure Furniture design
3.8 CGC Branding
3.9 Bus Gate design
3.10 Mobility Hub design
3.11 Car Club signage and surfacing material
3.12 Parking standards

PART C: SPATIAL

Chapter 4 - Landscape

4.1 Landscape Vision and Framework
4.2 Key Open Spaces
- 4.2.1 Primary Green Infrastructure Component A
- 4.2.2 Primary Green Infrastructure Component B
- 4.2.3 Primary Green Infrastructure Component C etc.

4.3 Key Groupings
4.3.1 Key Grouping A
4.3.2 Key Grouping B
4.3.3 Key Grouping C
4.3.4 Key Grouping D etc.
4.4 Sustainable Drainage Features

Chapter 5 - Movement & Access

5.1 Movement and Access 'Guiding Design Principles' and Regulatory Plan
5.2 Access Points
5.3 Mobility Hubs
5.4 Street Hierarchy and Active Travel Routes
- 5.4.1 Primary Street
- 5.4.2 Secondary Street
- 5.4.3 Cross Parcel Permeability and Tertiary Streets
- 5.4.4 Tertiary Streets: Standard
- 5.4.5 Tertiary Streets: Home Zone / Shared Surface
- 5.4.6 Tertiary Streets: Private Drives

5.5 Cycle and Pedestrian Network
5.6 Bus Network and Bus Gates
5.7 Vehicular Parking
5.8 Cycle ParkingChapter 6 - Built Form
6.1 Built Form Guiding Design Principles and Regulatory Plan
6.2 Key Elements
6.3 Frontage Character
6.4 Character Areas
6.5 New Neighbourhoods
6.6 Dwelling Typologies
6.7 Parking Typologies
6.8 Boundary Typologies
6.9 Residential Density
6.10 Building Heights
6.11 Residential Plot Layout Rules
6.12 Architectural Principles for Residential Built Form
6.13 Principles for Mixed Use Built Form
- 6.13.1 Community Uses
- 6.13.2 Employment Uses
- 6.13.3 Commercial Uses
- 6.13.4 Later Living etc

6.14 Refuse & Recycling Strategy

PART D: DETAIL

Chapter 7 - Detailing the Place

7.1 Public Realm Palette
- 7.1.1 Hard Landscape Materials
- 7.1.2 Street Furniture Materials
- 7.1.3 Existing Vegetation
- 7.1.4 Planting Strategy
- 7.1.5 Productive Landscape Strategy
- 7.1.6 Biodiversity & Ecology Strategy
- 7.1.7 Lighting Strategy
- 7.1.8 Wayfinding Strategy*
- 7.1.9 Public Art Strategy *
- 7.1.10 Private & Semi Private Spaces

7.2 Boundary Strategy & Palette
- 7.2.1 Boundary Treatment Types
- 7.2.2 Materials and Planting

*May form a separate strategy prepared alongside design cod

PART E: TECHNICAL

Chapter 8 - Technical Standards

8.1 Private Amenity Space (Residential)
8.2 Parking Standards
8.3 Site-Wide Utilities Accommodation
8.4 Electric Vehicle Charging
8.5 Accommodating Bin Storage and Waste
8.6 Play Provision Strategy
8.7 Sport Provision Strategy

APPENDIX 3
KEY VALIDATION REQUIREMENTS

APPENDIX 3

KEY VALIDATION REQUIREMENTS

APPENDIX 3 - PLANNING APPLICATION REQUIREMENTS

Planning applications for all development to be accompanied by written and illustrative material to demonstrates how proposals align with the Local Plan, DFD, Framework Parameter Plans and all other material planning considerations.

Key themes to be covered with the application submission documents will include:

- Land use and amount
- Residential development
- Employment development
- Education
- Social & Health
- Movement and Utilities
- Access and movement
- Strategic utilities
- Green Infrastructure and Open Space
- Connected green infrastructure
- Public Open Space
- Open space tiers

OUTLINE PLANNING APPLICATION

The documents to be submitted as part of any Outline Planning Application (OPA), and what these will include, is detailed in Table 1 below. The final list will be determined by each application area's site-specific characteristics and agreed with Chelmsford City Council through the PPA Pre-Application Process and EIA Scoping.

Table 1 – Outline Planning Application Requirements

Plans	Details
Site Location Plan	Should be at an identified standard metric scale and show the direction of north. It should show the application site boundaries outlined in red and a blue line should be drawn around any other land owned by the applicant that is close to or adjacent to the site. The plan should identify roads and or buildings on land adjoining the application site.
Site Plan (Block Plan)	Should be at an identified standard metric scale and show the direction of north. Should show the proposed development in relation to the site boundaries and other existing buildings on the site, with dimensions specified including those to the boundaries.
Outline Parameter Plans	The DFD includes a number of quantified Framework Parameters. The Parameter Plans for each OPA will be scalable drawings, which include detailed breakdowns of quantities as appropriate: e.g. amounts (in ha) of developable land, broken down by types; extents (in ha) of local centres; and amounts (in ha) of green infrastructure, broken down by type, etc. All OPA Parameter Plans will be produced to a common drawing specification and style, which will be agreed with CCC before the first OPA is submitted. Together the various OPA Parameter Plans will provide a complete picture of the development proposals across CGC as a whole. This will include land use, building heights, areas of potential built development, access and movement, landscape (green and blue infrastructure), public open space and other key structuring and placemaking components and be in accordance with the DFD FPP's. The Outline Parameter Plans will inform the EIA and should be used in a way that does not inhibit the evolution of detailed proposals. For example, setting maximum parameters for aspects such as building heights can still allow flexibility in determining the detailed design of a scheme.
Illustrative masterplan	This will provide an illustrative image of the site layout based on the submitted details

APPENDIX 3

KEY VALIDATION REQUIREMENTS

Documents	Details
Outline Application Form and Certificates	
Draft Section 106 Heads of Terms	In accordance with the Stage 1 Masterplan DFD, IPD and PFA.
Planning Statement	To identify the context and describe the proposed development and includes an assessment of how the proposed development accords with the relevant national, regional and local adopted planning policies, as well as the Stage 1 Masterplan DFD, IPD and PFA.
Affordable Housing Statement	This will set out the overall level of affordable housing proposed as well as the indicative number, size, type and tenure of the units. Included in the Planning Statement.
Minerals and Waste Infrastructure Impact Assessment	To provide evidence that waste sites and infrastructure are able to continue their operation without being impacted by the proposal.
Minerals Supply Audit	To include: · Information on anticipated volumes (aggregates / site enabling, and building supplies if avail) · Identification where possible of material arising from development of this site; · Aggregate needed to implement the proposed development; · How this is going to be phased over the lifetime of this development. · Identify if a supply market for aggregates & minerals been identified to support the delivery of this site. The transport of minerals material to and from the site will need also to be taken into account.
Strategic levels report	To provide rationale on cut and fill strategy
Agricultural land survey	Where relevant this will assess the quality of agricultural land
Design and Access Statement	Should explain the design thinking behind the prodevelopment, making it easier for the City Council, consultees and interested parties, to understand how the scheme has developed. It should show how the proposed development will be accessible for different people. It should include details of the proposed uses, quality, layout, scale, landscaping and access. It should also include the approach to phasing and delivery as well as Detailed Design Code.
Statement of Community Involvement	This will detail the measures taken to consult and involve the local community in the development, before the application was submitted. It will also set out how the views of residents have been incorporated into the development.

APPENDIX 3

KEY VALIDATION REQUIREMENTS

Environmental Statement (ES) and Non-Technical Summary (NTS)	This will identify the potential environmental effects of the proposed development and propose relevant mitigation.
Transport Assessment and Travel Plan (Inclusive of Bus Strategy, Active Mode Strategy, Parking Strategy and Access Strategy)	To be included as an Appendix to the ES. This will confirm the impacts upon the local highway, how impacts will be mitigated and how sustainable modes of transport will be promoted.
Flood Risk Assessment and Drainage Strategy (to include Framework SUDS Maintenance Plan)	To be included as an Appendix to the ES. This will confirm that the development will not be at risk of flooding and will also confirm a drainage strategy to ensure no unacceptable impacts occur within or outside of the CGC.
Ecological Survey and Report / Biodiversity Gain Statement	To be included as an Appendix to the ES. This will confirm the impacts upon localised ecology, how impacts will be mitigated, the BNG baseline (using most up-to-date DEFRA metric) and how ecological gains could be achieved.
Arboricultural Survey and Report	To be included as an Appendix to the ES. This will confirm the impacts upon localised arboriculture and how impacts will be mitigated.
Archaeological Assessment	To be included as an Appendix to the ES. This will confirm the archeology on the site and how risk to any potential archaeology will be mitigated.
Land Compliance Study for Schools	To confirm the proposed school locations are appropriate and deliverable. This will be in line with 'Essex County Council Developers' Guide to Infrastructure Contributions' document (2019).
Stewardship Statement	To confirm how the long-term stewardship of the site will be secured.
Viability Assessment	This will be covered by the IDP and PFA
Specialist Housing Statement	This will demonstrate how specialist housing needs have been considered. This will be included within the Planning Statement.

APPENDIX 3

KEY VALIDATION REQUIREMENTS

Documents	Details
Economic Strategy	This will consider: • A realistic level of self-containment is achieved, with as many commuting journeys as possible undertaken through walking, cycling and public transport; • Sustainable access to employment opportunities in neighbouring major employment centres; • A mix of employment uses aligned with a clear sectoral strategy; and • Innovation infrastructure including business and academic networks, spaces for collaboration.
Noise Assessment	To be included as an Appendix to the ES.
Air Quality Assessment	To be included as an Appendix to the ES.
Landscape and Public Open Space / Green Infrastructure Strategy	To be included as an Appendix to the ES.
Sustainable Drainage Strategy	To be included as an Appendix to the ES.
Ground Investigation Report	To be included as an Appendix to the ES.
Outline Construction Management Plan	To be included as an Appendix to the ES.
Heritage Statement	To be included as an Appendix to the ES. To include Desk Based Assessment and Detailed Setting Assessment.
Utilities Report (to include high-level utilities layout)	To be included as an Appendix to the ES.
Community Facilities Strategy	To be included as an Appendix to the ES.
Education Strategy	To be included as an Appendix to the ES.
Energy and Sustainability Strategy	To be included as an Appendix to the ES.
Overarching Waste Strategy (OWS)	To be included as an Appendix to the ES.
Foul Water Drainage Strategy	To be included as an Appendix to the ES.
Health Impact Assessment	To be included as an Appendix to the ES.
Non-intrusive Archaeological Surveys / Overarching Written Scheme of Investigation.	To be included as an Appendix to the ES.

APPENDIX 3

KEY VALIDATION REQUIREMENTS

Environmental Statement Chapters (subject to Scoping Opinion)
1. Introduction
2. Description of the Site and Surrounding Area
3. The Development Proposals (including waste)
4. Planning Policy Context
5. Methodology for the Environmental Statement
6. Air Quality
7. Archaeology and Historic Environment
8. Biodiversity
9. Carbon and Climate Change
10. Ground Conditions and Soils
11. Health
12. Hydrology and Hydrogeology (including Flood Risk and SuDS
13. Landscape and Visual
14. Noise
15. Socio-economics
16. Traffic and Transport
17. Major Accidents and Disasters
18. Cumulative, In-combination and Interactive Effects
19. Conclusions of Significance
20. References
21. Glossary
22. Alternative Site Assessment

Where external documents are referenced, the most up-to-date version of the document will be reviewed and complied with at the time of submission.
The submitted Environmental Impact Assessment will include:

1. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.
2. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects of the development.
3. A description of mitigation measures proposed to prevent, reduce and where possible, offset any significant adverse effects on the environment.

APPENDIX 3

KEY VALIDATION REQUIREMENTS

RESERVED MATTERS APPLICATION

Subject to the approval of any OPA, Reserved Matters Applications (RMAs) would need to be submitted for various phases of development. The documents to be submitted as part of any RMA, and what these will include, is detailed in Table 2 below. The final list will be determined by each application area's site-specific characteristics and agreed with Chelmsford City Council through the PPA Pre-Application Process.

Table 2 – Reserved Matters Application Requirements

Plans	Details
Site Location Plan	Should be at an identified standard metric scale and show the direction of north. It should show the application site boundaries outlined in red and a blue line should be drawn around any other land owned by the applicant that is close to or adjacent to the site. The plan should identify roads and or buildings on land adjoining the application site.
Site Plan (Block Plan)	Should be at an identified standard metric scale and show the direction of north. Should show the proposed development in relation to the site boundaries and other existing buildings on the site, with dimensions specified including those to the boundaries.
Existing and Proposed Floor Plans	Drawn to a scale of 1:50 and showing all relevant information such as openings, windows and doors.
Existing and Proposed Elevations	Drawn to a scale of 1:50 and showing all relevant information such as materials, windows and doors. Final details would be secured by a condition.
Existing and Proposed Sections	Drawn to a scale of 1:50 and showing all relevant information.
Landscape Plan	Should show how green infrastructure will be incorporated into the proposed development.
Parking Plan	Should demonstrate how parking has been considered across the site and provide an adequate provision that aligns with the OPA.
Documents	**Details**
Accommodation Schedule	Lists all residential units proposed and captures key information about each unit, such as bedroom numbers, Nationally Described Space Standards information, accommodation type and tenure.
Affordable Housing Statement	This will set out the overall level of affordable housing proposed as well as the indicative number, size, type and tenure of the units. Included in the Planning Statement.
Design and Access Statement	Should explain the design thinking behind the proposed development, making it easier for the City Council, consultees and interested parties, to understand how the scheme has developed. It should show how the proposed development will be accessible for different people. It should include details of the proposed uses, quality, layout, scale, landscaping and access. It should also include the approach to phasing and delivery as well as Detailed Design Codes.
Ecological Survey and Report / Biodiversity Gain Plan	This will confirm the impacts upon localised ecology, how impacts will be mitigated and how ecological gains will be achieved. It will also provide detailed information on specific BNG delivery including what BNG will be delivered, where it will be delivered and how it will be delivered.
Sustainable Development Checklist	This will explain how the scheme incorporates sustainable design features to reduce carbon dioxide and nitrogen dioxide emissions, and the use of natural resources.
Arboricultural Survey and Report	This will confirm the impacts upon localised arboriculture and how impacts will be mitigated.
Drainage Technical Note	This will confirm how the proposed development aligns with a site wide drainage strategy.
Unilateral Undertaking to support the Essex Coast Recreational Disturbance Avoidance and Mitigation Strategy.	This will secure a fee to contribute to ensure habitat mitigation measures are in place as advanced by the Essex Coast Recreational Disturbance Avoidance and Mitigation Strategy.
Planning Statement	This will identify the context and describe the proposed development and includes an assessment of how the proposed development accords with the relevant national, regional and local adopted planning policies, as well as the Stage 2 OPA Masterplan.

Final details of matters such as lighting, materials, street signage, hard and soft landscaping, biodiversity, construction, energy, utilities, archaeology and contamination will be approved as part of conditions which are secured through both the OPA and RMA processes.

APPENDIX 4

NON-RESIDENTIAL FLOORSPACE

APPENDIX 4

INDICATIVE NON-RESIDENTIAL AREAS

	Zone 1			Zone 2							Zone 3	
USE (USE CLASS)	**Innovation Hub**	**Great Belsteads Village**	**Channels Employment Hub**	**Willow Hill Employment Hub**	**Willow Hill Village**	**Park Farm Village**	**Park Farm ATS**	**Park Farm Community Hub**	**Hawthorn Village**	**Dukes Wood**	**Great Belsteads Sports Hub**	**TOTAL**
Employment Office (Class E(g))	39,940m²	500m²	1,440m²		250m²	500m²			500m²			**43,130m²**
Employment (Class B2 /B8 /E(g))				16,000m²								**16,000m²**
Medical Centre (Class E(e))						1,200m²						**1,200m²**
Standalone Day Nursery (Class E(f))						500m²						**500m²**
Four Court Sports Hall (Class F2)							1200m²					**1,200m²**
Sports Pavilion (Class F2)										600m²	600m²	**1,200m²**
Flexible community and education floorspace including meeting rooms, art, and cultural space (Class F1 and F2)		600m²			250m²	500m²		400m²	250m²			**2,000m²**
Class E - Retail		2,120m²			500m²	2,000m²			1,000m²			**8,020m²**
Class E / Sui Generis					200m²	1,000m²		200m²	1,000m²			
TOTAL												**73,250m²**

School Sites		2.4ha			2.1ha		11.15ha		2.1ha			
Formal Sports Facilities							4 x adult football (incl. 1 x 3G pitch)			7.36ha	6.1ha	
Travelling Showpeople Site										9 Plots (2.02ha)		
Children Play Space (LEAP)	0.66ha (to be spread out across OPAs)											
Youth Play Space (NEAP)	0.66ha (to be spread out across OPAs)											
Allotments or Community Garden or Orchard	3.96ha (to be spread out across OPAs)											

* Subject to OPA1, OPA2 & OPA3

Chelmsford
Garden
Community