

Design Codes

Final report

February 2024



Quality review

Project role	Name	Position	Action summary	Signature	Date
Locality	Annabel Osborne	Neighbourhood Planning Officer	Review and approval of Final Report	Annabel Osborne	03-11-2022
Qualifying Body	Tony Calton & Bob Cook	NP Steering Group	Draft Report Submitted for comments	Tony Calton & Bob Cook	18-10-2022
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Contents

1a. Scoping	05
1b. Baseline	09
Policy review	10
Road & street hierarchy	12
Green infrastructure	14
Blue infrastructure	16
Heritage	18
Area types	20
02. Design vision	29
Movement	32
Nature	34
Built Form & Identity	36
03. Design guidelines and codes	39
04. Delivery	93

1a

Scoping

The structure of this document is organised around the following steps.

1a

Scoping

Introduction to the objectives and methodology for the report

1b

Baseline

Initial analysis of the physical conditions and relevant policies

2a

Design vision

Aims for future development

2b

Area types

Identify the different areas to apply the design codes

03

Design guidelines and codes

Design actions and guidance for developments

04

Delivery

Next steps and how this guide can be used by different stakeholders

Scope

AECOM has been commissioned to provide design support to the Earls Colne Parish Council through the Department for Levelling Up, Housing and Communities (DLUHC) Programme led by Locality.

The Steering Group has requested professional advice on general design guidelines and codes for future development within the parish. This document should be read as part of the Neighbourhood Plan policies that guide the assessment of future development proposals and encourage high-quality design. This document advises on how to design the physical environment to create distinct and lively places integrated within the Neighbourhood Plan area.

Objective & method

The main objective of this document is to develop design guidelines and codes to guide any future development in the area. This document gathers the residents' aspirations and the work being undertaken in the drafting of the emerging neighbourhood plan policies to produce design guidelines and codes that respond to, retain and enhance the intrinsic features of the area.

The key steps in the method to produce these design guidelines and codes are:

- **1b. Baseline:** the review of the existing policy together with the analysis of the physical characteristics of the area constitutes the base to understand the objectives and aims for the plan and the residents' input into design.
- **2a. Design vision:** the proposed design guidelines and codes need to be based on a vision for the place. The vision can be understood as the set of ambitions that the design codes will need to respond to.

- **2b. Area types:** area types with common features are identified in this section. They will be used to identify the locations with specific characteristics where the conditions detailed in the design guidelines and codes apply.
- **03. Design guidelines and codes:** the design guidelines and codes constitute the specific design actions that any future proposed development will need to implement. They are organised following the categories outlined in the design vision and are applied specifically to the different area types.

Area of study

Earls Colne is a village in Essex, England named after the River Colne, on which it stands, and the Earls of Oxford who held the manor of Earls Colne from before 1086 to 1703. Colne was a settlement included in the Domesday Book.

The original village spread along an east/west axis with the main part of the village to the west of the church and later developed as far as the river to the east. In later years, suburban extensions have expanded the village to the north and south of that axis.

For many years Earls Colne had a strong agricultural connection with both large and small farms surrounded by a rolling landscape, open countryside and woods.

Businesses within the village have reflected this agricultural heritage over the years, with blacksmiths, a wood yard and, most notably, an iron works specialising in farm machinery in the Atlas Works complex. Industry is now mainly located on the site of the wartime airfield at the southern edge of the village.

Earls Colne had 3,695 residents at the time of the 2011 Census. Since then, around 320 new homes have been built or are planned, potentially increasing the population of the village by around 1,000 (25%).



1b

Baseline

Policy review

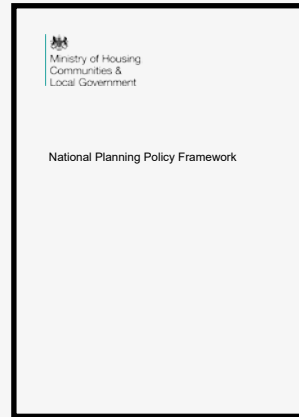
This policy review ensures that the design codes in following sections are up to date with the latest guidance. New proposals should be aware and respond to the latest policies and guidelines at the different governance levels.

The documents and reports on this and next page have informed the current document. These guidelines have been produced at national, district or neighbourhood area level.

This section specifies how the specific policies and guidelines have been incorporated in the production of the design codes included in the current document.

New planning applications should be familiar with these documents and make explicit reference to how each of them is taken into account in the proposal.

National policy & guidance



National Planning Policy Framework
Ministry of Housing, Communities & Local Government
2021

The White Paper proposes a new planning system reform, as a step into stronger neighbourhood planning.

This paper can be understood as an attempt to consolidate design codes, not merely as guidelines but as rules. These are to be prepared locally and to be based on community involvement so that local residents have a genuine say in the design of new development.

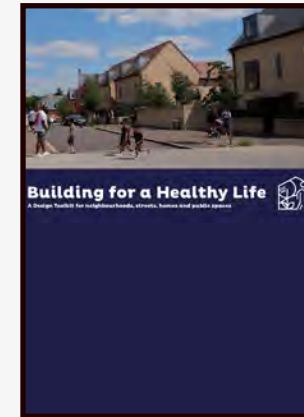
The Current Document and the design codes herein should be read in the light of the White Paper.



National Model Design Code
Ministry of Housing, Communities & Local Government
2021

The National Model Design Code provides a detailed guidance of design codes, guides and policies to promote successful design.

This guide expands on 10 characteristics of good design set out in the National Design Guide.

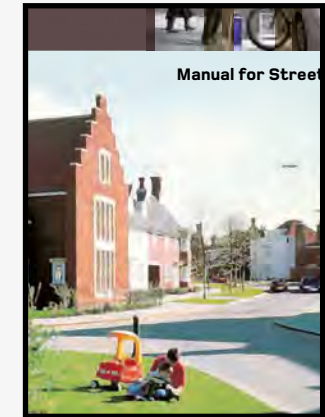


Building for a Healthy Life
Homes England
2020

The Building for a Healthy Life report (BHL) updates the original Building for Life 12 report, a widely-used design tool for creating better places for people and nature.

The original 12 point structure and underlying principles within Building for Life 12 are at the heart of BHL.

The BHL report should be read in conjunction with the design codes in the Current Document to achieve the best possible outcome.



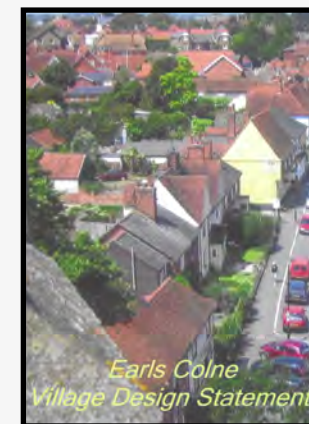
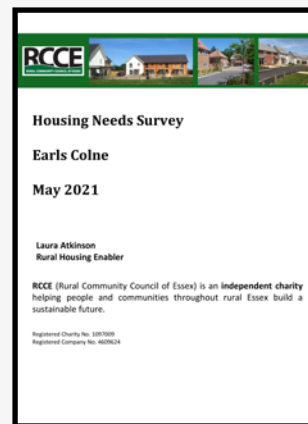
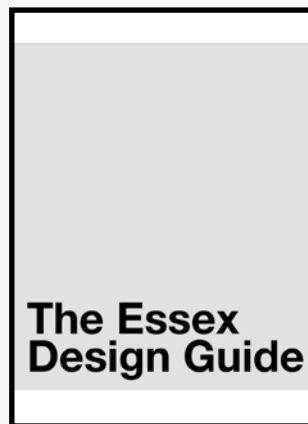
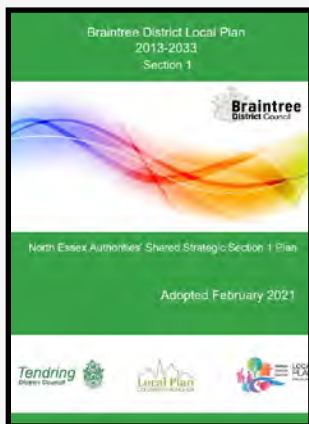
Manual for Streets
Department for Transport
2007

This manual collects standards and best practices on street design.

This manual should be read in conjunction with the design codes in the current document to achieve the best possible outcome.

Local policy & guidance

NP policy & guidance



Local Plan - Section 1 (Adopted Feb 2021)

Local Plan - Section 2

Essex Design Guide

Housing Needs Survey

Housing Needs Assessment

Village Design Statement

Braintree District Council

Braintree District Council

Essex County Council

Earls Colne NP Group

Earls Colne NP Group

Earls Colne NP Group

2021

2022

2005

2021

2020

2007

The Local Plan (Section 1) sets out the level of growth which needs to be planned for in the Braintree Local Authority boundary.

Section 2 of the local plan includes a map that details residential and employment allocations as well as open spaces and green areas within Earls Colne Settlement boundary and within the NP area boundary. These maps have informed the Spatial Vision Plan in section 2a of the current document.

The Essex Design Guide is included as part of the Evidence Base Documents that support the new Local Plan.

The aim of this survey is to determine the existing and future levels of housing need for local people.

This analysis provides an indication of the need for different types and sizes of homes in Earls Colne.

The Village Design Statement reflects the perception of the village that residents in Earls Colne have. It acts as an inventory of assets and liabilities in the village and aspects that were acceptable and unacceptable by villagers.

The housing requirement per annum is 716 homes and the minimum housing requirement for the plan period is (2013-2033) is 14,320 homes.

Braintree District Council have advised that they do not envisage any further sites being allocated in Earls Colne in order to meet their housing targets for the duration of the Local Plan (up to the 2033).

The aim of the guide is to encourage new developments to respect and fit in with the character of traditional Essex towns and villages.

The findings of the survey reflect the perception of residents in relation to future housing needs. The survey also contained questions on current household composition and housing conditions. Households experiencing or expecting to be in housing needs were able to provide further detail.

This study responds to four research questions regarding the tenure and affordability of homes, the type and size of homes, the conditions for specialist housing for older people, and housing for newly-forming households/ first-time buyers.

This document has acted as the only reference for design to assess planning applications.

This document also sets out the planning policies which the Council will use in determining planning applications.

The Essex Design Guide has informed the design codes in the current document.

The aspirations and views reflected in this survey have informed the design vision and codes in the current document.

The design conditions that are relevant to the preoccupations in the HNA have been responded to as part of the design codes in the current document.

This document has informed the Design Principles and the Spatial Vision Plan in section 2a of the current document.

Road & street hierarchy

The village of Earls Colne is connected via an east-west axis towards Halstead to the west and Colchester to the east. At the heart of the village is the High Street, where the village centre is located and residential streets branch out north and south from it.

Earls Colne is located 5km to the east of the market town Halstead and 18km west of Colchester. Running east-west across the village is Halstead Road (A1124), with the portion running through the heart of the village becoming its High Street. The village hub is formed along the High Street and streets immediately adjoining to it, where shops, restaurants, the parish church and village hall are located. North-south access across the village is provided along Station Road, Hayhouse Road and B1024.

Branching out north and south from Halstead Road and the High Street is a network of secondary and tertiary roads, providing access to residential areas of the village. Earls Colne is also home to an extensive network of public footpaths, connecting the village with nearby fields, farmlands and woodlands - as well as the River Colne to the north of the village.

There is a quick transition from the rural landscape along the A1124 and key routes entering the village into a more suburban residential character on the approach to Earls Colne village.



Figure 02:
Earls Colne High Street.



Figure 03:
A1124 approach to Earls Colne (Source: Sabre).

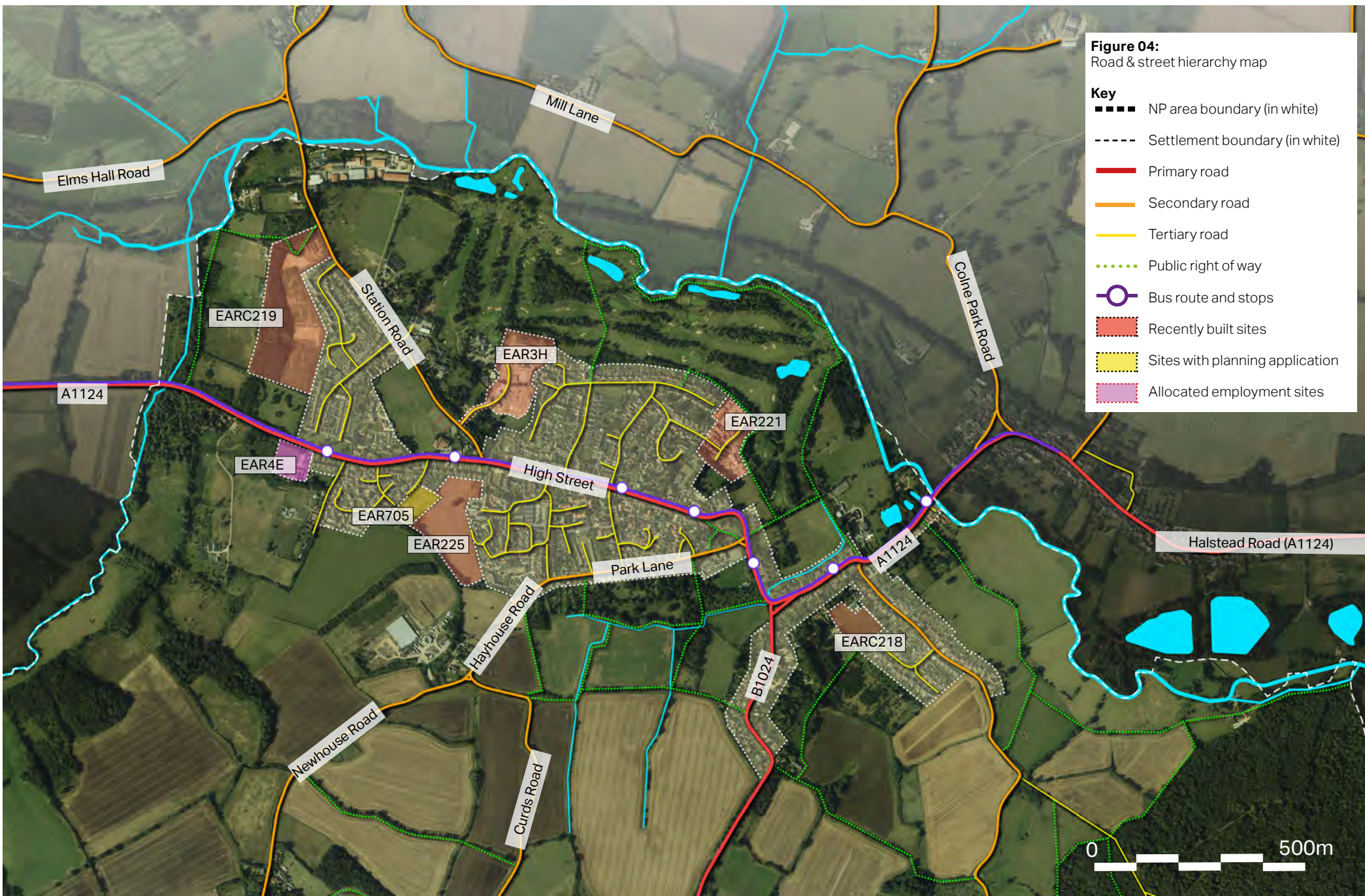


Figure 04:
Road & street hierarchy map

Key

- NP area boundary (in white)
- Settlement boundary (in white)
- Primary road
- Secondary road
- Tertiary road
- Public right of way
- Bus route and stops
- Recently built sites
- Sites with planning application
- Allocated employment sites

Green infrastructure

The landscape of Earls Colne is characterised by a steep topography in the north which levels off to the south. Farmlands and woodlands are common landscape features found in Earls Colne. There is a Site of Special Science Interest (SSSI) located to the east of Earls Colne village. Future planning applications should be mindful of impacts to the site.

Landscape Designation

The Chalkney Wood SSSI (Ref. 1001685) is located approximately 0.7km from Earls Colne Village. Any future planning applications within the area should take into consideration any potential impacts and risks posed to the SSSI. The existing network of footpaths extend into northern edge of the SSSI, providing pedestrian and cycling access.

Habitats

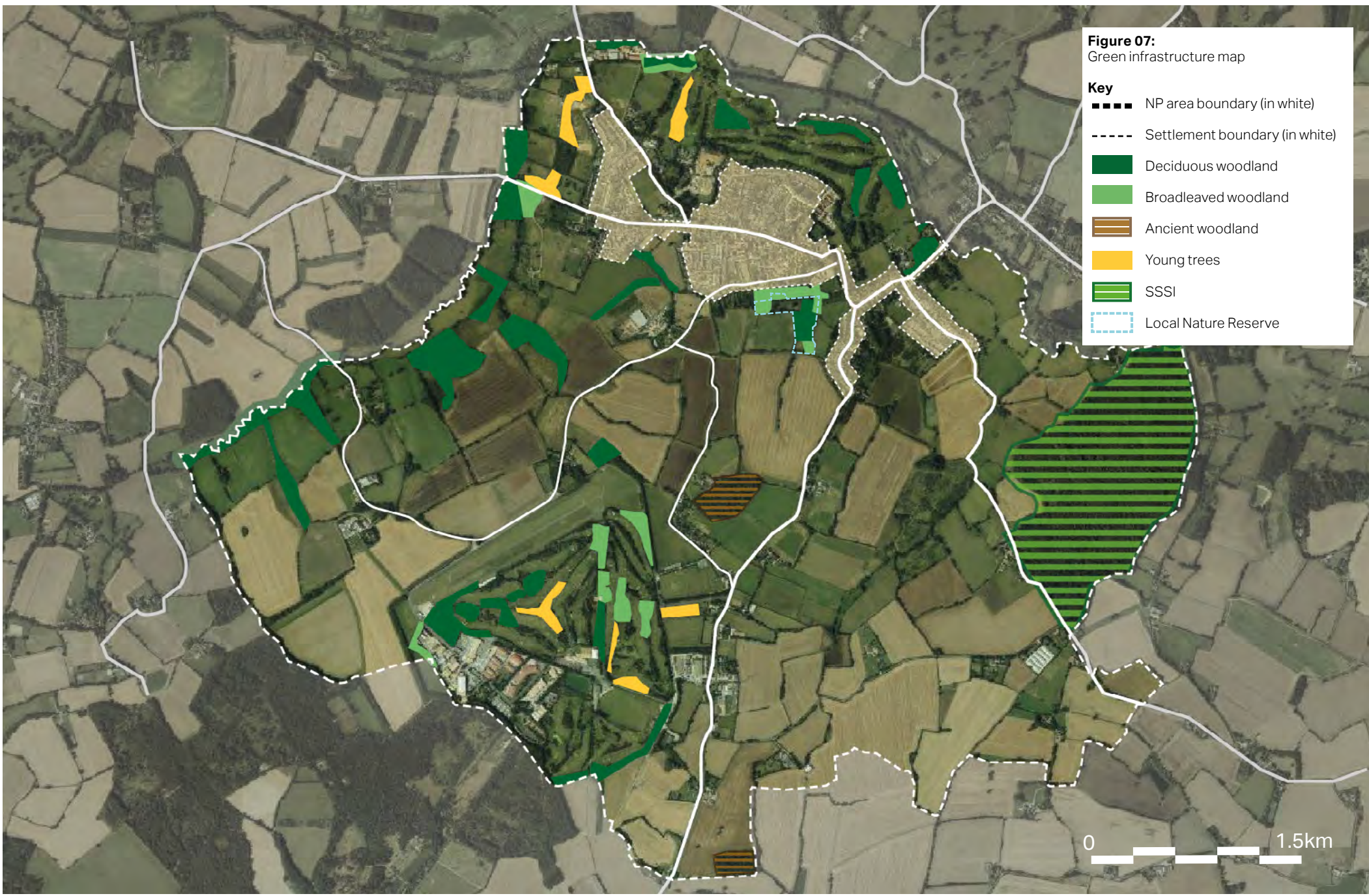
The immediate surroundings of Earls Colne consists of picturesque farmlands and woodlands, with some dispersed across a steep topography - contributing positively to its rural character. Much of the woodlands across the parish are broadleaved deciduous woodlands. Many of these pockets can be found within the existing golf courses in the northern part and southwestern part of the parish. Richard's Grove located in the centre of the parish, and Willow Wood located in southern edge, are classified as Ancient and semi-natural woodlands. Rows of young trees are also seen across the parish. Lastly, a Local Nature Reserve is located to the south of the settlement boundary. These together with the classified woodlands should be appropriately preserved.



Figure 05: Woodlands in Chalkney Wood SSSI (Source: Essex Wildlife Trust).



Figure 06: A view of St Andrews Church framed by the rolling hills and woodlands in Colne Valley Gold Club, to the north of the village (Source: Colne Valley Gold Club).



Blue infrastructure

The meandering River Colne runs along the northern edge of Earl's Colne village, towards White Colne to the east and Halstead to the west. The river and associated water features contribute significantly to the village's character. Areas in close vicinity to the river are subjected to flood risks. Woodlands and farmlands across the parish serve as important floodplains to buffer against flooding for residential built up areas.

Rivers and Water bodies

Earls Colne village is set in the valley of the River Colne, which flows east towards the town of White Colne and west towards Halstead. Bourne Brook - a tributary of the River Colne flows along the southwestern edge of the parish, embedded within woodlands and fields.

According to the National Flood Warning mapping system, the northern and eastern outskirts of Earls Colne village is subject to medium to high risks of flooding from the rivers in some of these areas. However, much of the areas currently prone to flooding are buffered by unhabited farmlands and woodlands.

Flood Risks and Development Sites

All designated development sites are currently not falling within the identified flood risk zones. However, development sites in the east and west of the parish are located closer to flood risk zones than others. New developments on these sites should take careful precautions to mitigate against potential flood risks.



Figure 08: River Colne flowing alongside woodlands of Earls Colne (Source: Colne Angling Society).



Figure 09: River Colne flowing through Colne Valley Golf Club - north of Earls Colne village (Source: Colne Valley Golf club).

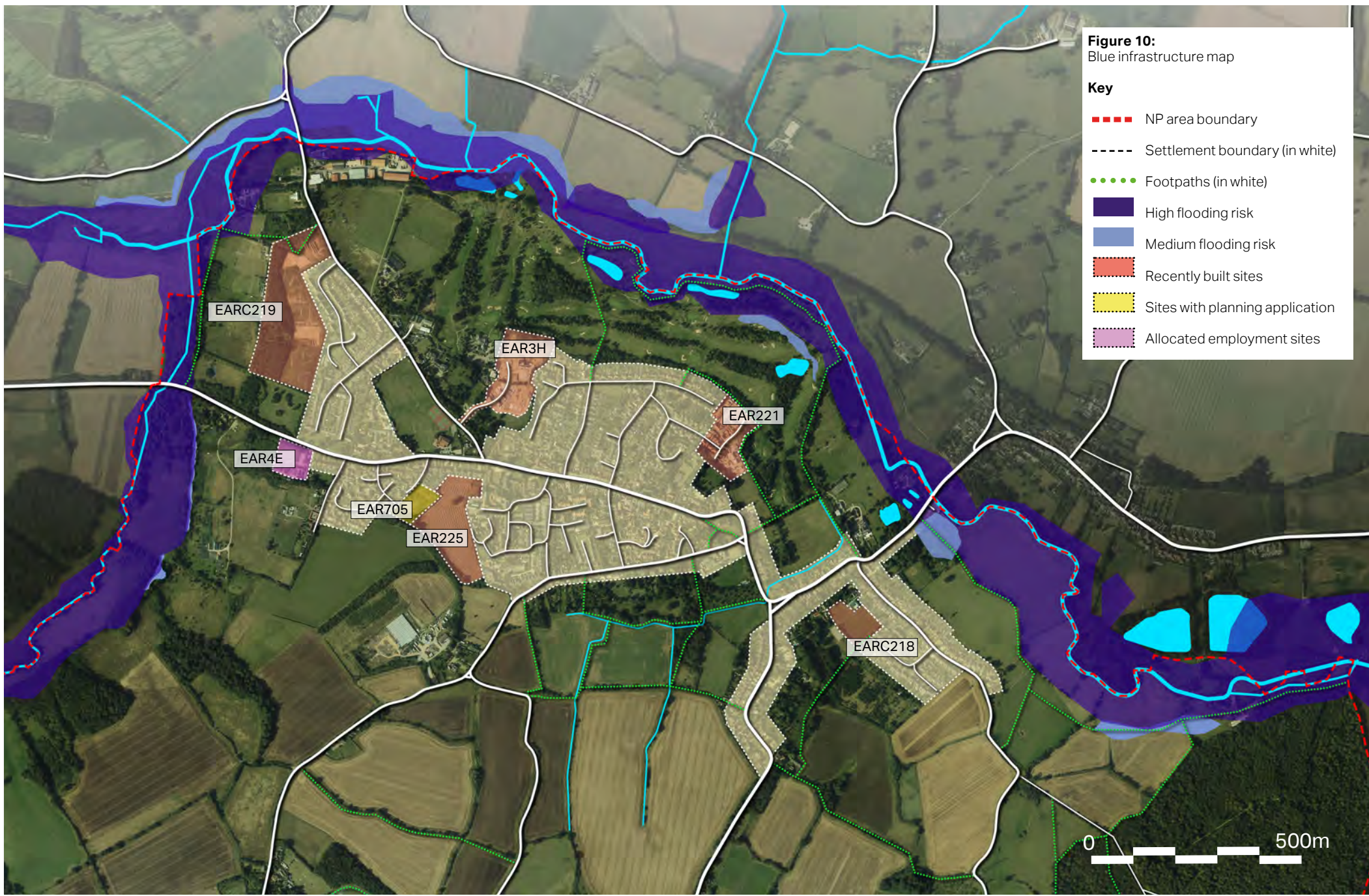


Figure 10:
Blue infrastructure map

Key

- NP area boundary
- Settlement boundary (in white)
- ... Footpaths (in white)
- High flooding risk
- Medium flooding risk
- Recently built sites
- Sites with planning application
- Allocated employment sites

0 500m

Heritage

Boasting written historical information dating from 1086, Earls Colne recorded history spans over a millenium. In addition to the religious and education fields, Earls Colne is linked to a rich industrial past as part of the Atlas Works and the Cooperative Society buildings.

Earls Colne is named after the River Colne and the Earls of Oxford, who held the manor of Earls Colne from before 1086 to 1703. Colne was a settlement included in the Domesday Book, in the hundred of Lexden and the county of Essex. By 1086 It had a recorded population of 85 households, including it the largest 20% of settlements recorded in the book.

The Colne Priory monastery was founded in the parish by Aubrey de Vere I in about 1103-4. The parish church is dedicated to Saint Andrew. The date of the original church is unknown. The current church was built between 1313 and 1360, the present tower was started in 1460 and completed in 1534. The monastery was surrendered to Henry VIII in the same year.

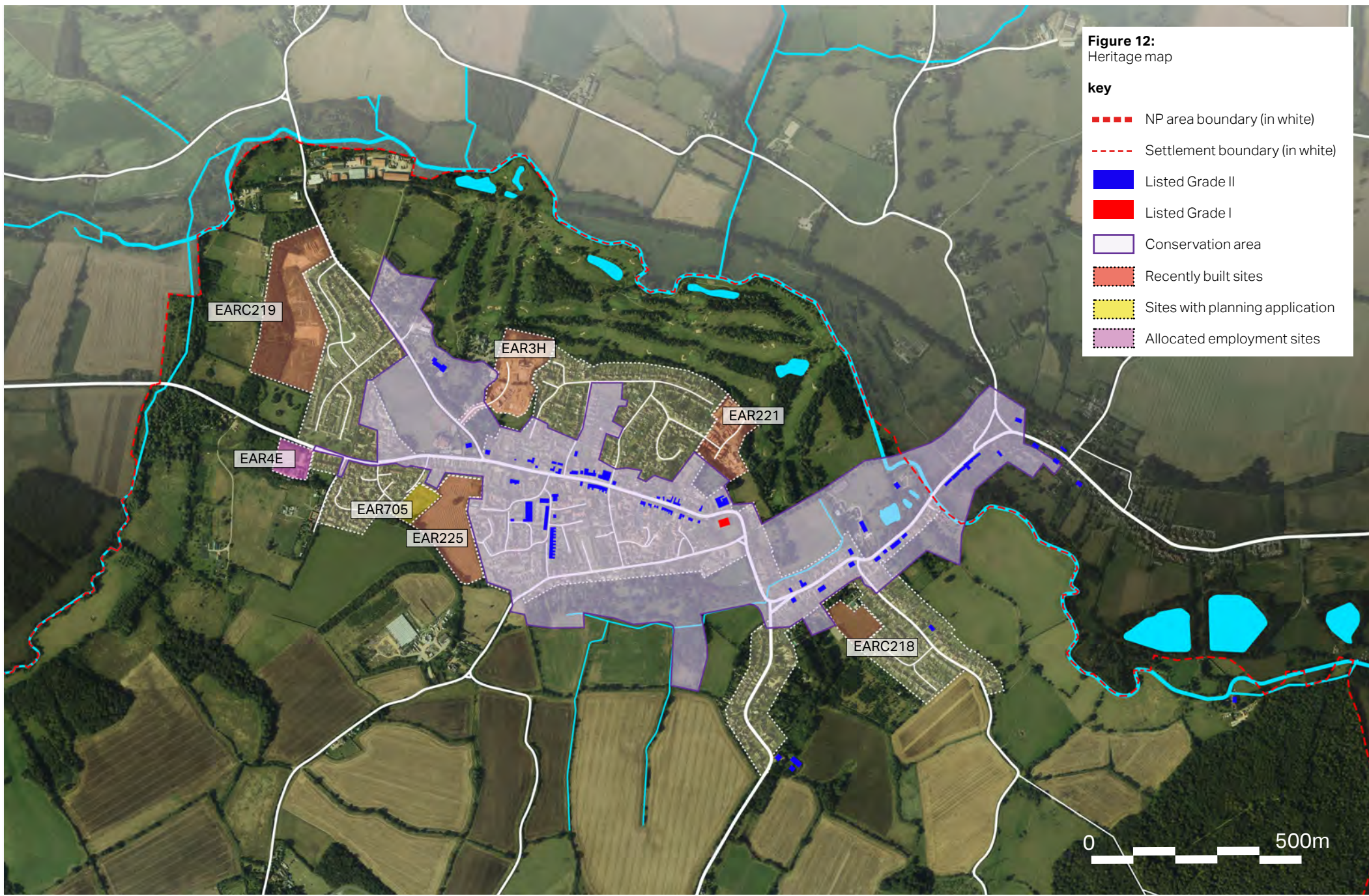
In 1824 Robert Hunt, a millwright from Soham in Cambridgeshire, settled in Earls Colne and set up a millwrighting and wheelwrighting shop and smithy at what was to become the Atlas Works. Today, the Earls Colne Heritage Museum occupies the former water tower of the Atlas Works after the closure of the factory in 1988.

Central to late nineteenth and early twentieth century life in the village was the Earls Colne Industrial and Co-operative Society. One of the last remaining independent village co-operative societies in Essex and Suffolk. Today it occupies a building dating to between 1480 and 1510, the roof timbers being preserved and exposed in-store.

Earls Colne Airfield, which is situated approximately 1-mile (1.6 km) south-southwest of the village, was a bomber station used by the RAF and USAAF between 1942 and 1955. It is now a golf course, business park and UK and civilian airfield for light aviation.



Figure 11:
Coop village shop.



Area Types

Earls Colne village is composed of areas with unique characteristics, each one significantly contributing to the character of the village.

This chapter focuses on the different character areas within the Earls Colne Neighbourhood Plan Area. These different areas are characterised, among other things, by variations in settlement patterns, land uses, street patterns, building forms, and architecture. This section will offer a brief analysis of the above elements.

The Village Design Statement, produced to reflect how the people of Earls Colne perceive the character of their village in the 21st century, offers a more detailed description of each character area and should, thus, be read in conjunction with this section.

While some of the character areas have clearly distinguishable boundaries and are well defined, there may be overlaps and elements of mixing. The character area types identified within the Neighbourhood Area are shown hereby and are analysed on the next pages:

- **CA1** - Historic core
- **CA2**- Industrial Heritage
- **CA3**- Mixed Residential

CA1- Historic Core

CA2- Industrial Heritage

CA3- Mixed Residential



Figure 13:
Earls Colne Character Area Types map

Character Area Types

- NP area boundary (in white)
- Settlement boundary (in white)
- Sites with planning application
- Roads (in white)
- CA1: Historic Core
- CA2: Industrial Heritage
- CA3: Mixed Residential
- Recent Development
- Green Infrastructure and countryside

CA 1 - Historic Core



Earls Colne's historic cores are concentrated along Halstead Road and High Street, extending east along Upper and Lower Holt Street (A1124) leading out of the parish. Much of the buildings date from before 1850, including key landmarks such as the Baptist Chapel on Halstead Road and St Andrews Church on Church Hill. This character area forms a large part of Earls Colne's Conservation Area which encompasses much of the parish's heritage assets and listed buildings. Properties in these areas also present a rich variety of architectural styles and use of materials that are typical of the region.



Figure 14: Earls Colne High Street with a view of Parish Church of St. Andrews.



Figure 15: Houses along A1124 with lesser setback, fronting onto narrow pavements.



Figure 16: Rows of terrace houses on narrow plots providing continuous frontages along the High Street, comprising of residential houses, shops and civic uses such as the public library.

CA 1 - Historic Core

Land use	Although mostly residential, many of the village's non-residential uses - such as shops, pubs, the post office, the parish church and village library are concentrated within the historic core.
Layout of buildings / Development patterns	Development follows a linear pattern mostly along High Street, Upper and Lower Holt Street with irregular plot widths, depths, and sizes. There is a variety of building sizes and typologies. Most buildings are either adjoining or spaced closely with one another, creating high levels of enclosure and a rich and dynamic streetscape.
Building line/ Plot arrangement	Due to the linear development pattern and the prevalence of terraced housing typology, the building lines are relatively continuous and therefore, the street frontage is coherent. Building setbacks are generally regular with the majority of the buildings fronting directly onto the pavement, whilst others have small-sized front gardens. Where properties have been converted to shops, shopfronts are often fronting directly onto the pavement with no setback - making them more accessible for pedestrians. This creates a dynamic frontage and visually interesting views along the streetspace. Property entrances and windows consistently face the road creating an active street scene, whilst offering good levels of natural surveillance.
Boundary treatment	The historic core area is characterized by mainly hard boundary treatments, whilst there are also examples of soft elements along the street. In particular, the hard boundary treatments, where front gardens are present, include attractive low brick and stone walls. In some occasions, front gardens are also decorated with plants, flowerbeds, bushes and trees.
Heights & roofline	Most buildings are two storeys in height with some bungalow cottages. There is a variety of roof shapes and orientations, and the roofline is often punctuated by prominent gable end chimney stacks and ornate dormer windows. This creates a dynamic and evolving roofline rather than a uniform one which adds visual interest along the streetscape.
Public realm	Roads are laid out in a linear pattern, with tertiary roads branching out to residential neighbourhoods. Pavements are generally provided along both sides of streets, but they are narrow in width for most parts of the historic cores. Public and private spaces are clearly defined by attractive property boundaries, mainly, in the form of low brick and stone walls. The high level of enclosure created by continuous frontages instills an intimate village atmosphere. The street furniture such as benches are provided along the western end of High Street, and green verges can be found along some unbuilt road sections help retain an attractive rural character.

CA 2 - Industrial Heritage



Significant to Earls Colne's heritage is its industrial legacy during the 19th century where an iron foundry - Atlas Works owned by the Hunt Family was located in the heart of the village. Much of the housing in this character area was built at the end of the 19th century and beginning of the 20th century on redundant foundry land, houses are mostly concentrated along Foundry Lane, Massingham Drive, Reuben Walk and Nonancourt Way, as well as a small cluster of cottages concentrated on Burrows Road. Some notable landmarks in this character area include the Earls Colne Heritage Museum, which occupies the retrofitted water tower of the old foundry, and the Earls Colne Social Club for its distinctive architectural features.



Figure 17: Recent apartment and housing developments with red brick finish built on redundant foundry land of Atlas Works, Massingham Drive.



Figure 18: Victorian-style brick houses built by the Hunts Family in 1890s.



Figure 19: Terrace houses, which served as workers accommodation, with narrow front gardens separated from the pavement by low stone walls and metal railing, adjacent to foundry warehouses, Foundry Lane.

CA 2 - Industrial Heritage

Land use	The character area is predominantly residential interspersed with some offices, retail and businesses. The Earls Colne Heritage Museum is also located in this area, along with a GP surgery and the Earls Colne Village Hall.
Layout of buildings / Development patterns	Houses are arranged along winding edge lanes and cul-de-sacs branching south of High Street. Older housing stock, such as terraces along Foundry Lane and Burrows Road are arranged on long and narrow burgage plots typical of the 19th century. Newer developments built on redundant foundry land are configured in clusters with more regular plot widths, depths, and sizes. These are mostly in keeping with the style, use of materials and brickwork patterns of existing foundry buildings built with a mixture of red and yellow bricks.
Building line/ Plot arrangement	Building lines vary in this character area as well as housing density. Therefore, building plots and sizes differ from one street to another creating a visual interest along the streetscape. The introduction of cul-de-sacs in this character area also contributes to this variety. Building setbacks are irregular with properties having either no gardens with buildings fronting directly onto the pavement, which is the prevailing style, or with properties having from small to well-sized front gardens. In addition, housing typologies range from terraces and semi-detached to detached houses.
Boundary treatment	Front gardens are generally uncommonly seen in this character area, similar to CA1 and thus, the landscape is mainly hard. Some houses directly front onto pavements without setbacks, whilst others have small strips of green verges or landscaping to buffer from the pavement or road. Exception is Foundry Lane, a good example of a street, which is bordered with houses with more vegetation compared to the rest of this character area.
Heights & roofline	Most buildings are two storeys in height with some of the retrofitted warehouses associated to the foundry having higher ceilings. Recurring roof styles in this character area include black or red slate pitched roofs and hipped roofs, some of these feature dormer windows and gable chimneys.
Public realm	Roads are laid out in an organised pattern, with gentle bends and are similar in width. Pavements are provided along both sides of roads, but they tend to be narrow. Public and private spaces are clearly defined by property boundaries in the form of low brick walls, low cast iron gates, green verges or even buildings themselves where properties have no front gardens. Pockets of play areas and recreational spaces can also be found interspersed with housing. The unique industrial character of this area is well preserved through the retrofit of some of the existing industrial warehouses, and newer developments that blends in by in keeping with the existing Victorian style palette.

CA 3 - Mixed Residential



This character area comprises of Victorian style houses built in the late 19th century and early 20th century. This includes houses located to the north of High Street on Queens Road, Burrows Road, Monks Close and Josselin Close to the north, and those on York Road, Swallow Field, Ashwell Meadow and Shut Lane. These are interspersed with infill developments built by Braintree District Council during the post-war period (Atlas Road and De Vere Road) and later developments between the 1960s and 1980s. The housing typologies and sizes also vary across this character area. A key landmark in the area is the Quaker Meeting House.



Figure 20: Victorian-style semi-detached brick houses on Queens Road, with landscaped front gardens.



Figure 21: Semi-detached houses with generous front gardens and council housing block on De Vere Road.



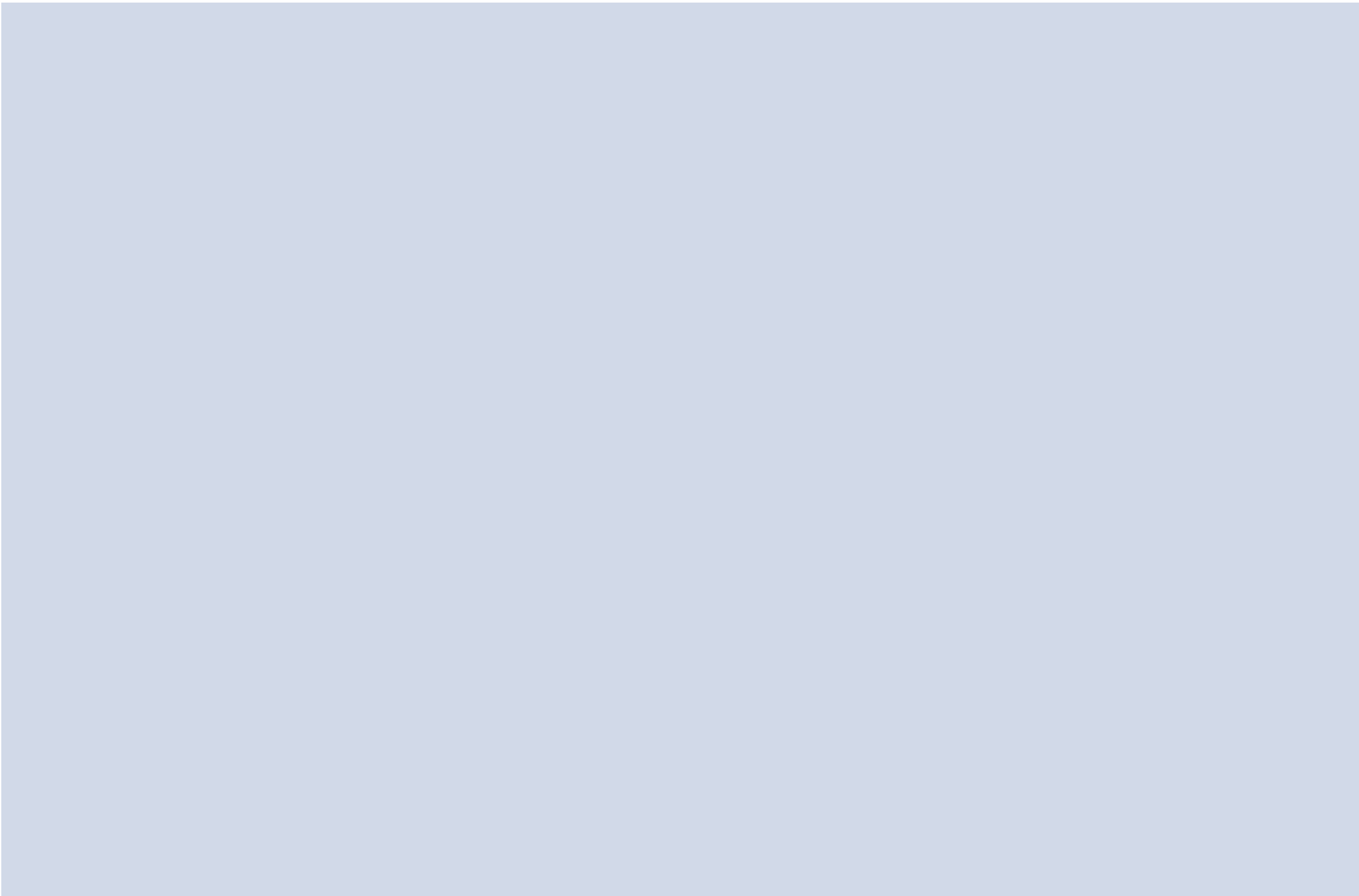
Figure 22: Bungalow and terraced houses clustered around a central parking courtyard, Tey Road.



Figure 23: Houses backing onto nearby open fields and countryside, Homefield Way.

CA 3 - Mixed Residential

Land use	Developments are almost exclusively residential, with a small amount of businesses and retail interspersed. The Quaker Meeting House and several play areas can also be found in this area. Some light industrial uses and warehouses can be found to the east of Station Road - including a brewery and some car repairing services. Colne House Care Home is also located on Station Road.
Layout of buildings / Development patterns	There are several linear streets in this character area, whilst the rest of the street network is characterised by cul-de-sacs. Plot widths and sizes are generally regular, whilst front and back gardens have more generous sizes compared to CA1 and CA2. Some houses are arranged around a communal courtyard - such as those on Sims Close and Emeralds Close. Semi-detached, detached and terraced two-storey houses predominate, along with some clusters of bungalows on Sims Close, Burrows Road, Atlas Road and Dudley Road. Some of the properties in this character area closely relate with surrounding fields and countryside - especially those along Park Lane, Hillie Bunnies, Homefield Way, Coggeshall Road and Tey Road.
Building line/ Plot arrangement	Building lines are regular in this character area, with setbacks offering well-sized front gardens. Both examples of perimeter blocks and cul-de-sacs are present, providing a good level of permeability for residents. Houses along Coggeshall Road and Tey Road occupy relatively larger plots. Parking is mostly provided at the front of houses, with some on-street parking and parking courtyards that are surrounded by clusters of houses (e.g. Tey Road).
Boundary treatment	This character area offers more soft landscape compared to CA1 and CA2. All houses address the road and pavement with their fronts, and are usually adequately setback from the pavement and buffered by landscaping and hedgerows in front gardens. Low brick walls typical of Earls Colne are also widely seen as ways to delineate between private and public spaces. Green verges and hedgerows are used to soften corners and edges of roads. Houses along Halstead Road (A1124) have a larger degree of setback to buffer from the busy main road.
Heights & roofline	Houses range between 1-2 storeys in height. Typical roof styles include pitched tiled or slated roofs, hipped roofs can also be found on some houses. Many houses are also seen with dormer windows, porches and gable chimneys - adding variety to the rooflines whilst maintaining visual interest.
Public realm	Pavements are provided along both sides of roads and are generous in width. Pockets of green spaces can be found where houses are arranged around a shared courtyard. Queens Road and Tey Road Play Areas and allotments at the rear of the Quaker Meeting House serve as recreational spaces for the area. Additionally, some of the properties have direct access to the High Street via footpaths - such as those on Oxford Court and Sims Close. Footpaths also link houses along Hillie Bunnies and Homefield Way to the Colne Valley Golf Course, and connect Tey Road and Coggeshall Road with the Chalkney Wood SSSI to the east of the parish.



2

Design vision

Design vision

The design vision plan is included together with the design objectives in this section. This spatial vision plan provides the direction in which Earls Colne should develop in the long term.

Earls Colne Neighbourhood Plan Design Vision

'To protect and secure the rich history, rural environment and community spirit of our village. To enhance Earls Colne as a residential and business community offering wide ranging housing stock, good employment opportunities, local sport and leisure facilities within an attractive, safe and friendly environment.'

This vision, set out by Earls Colne NP Group, will help structure the spatial vision plan.

The Spatial Plan

The plan in the following section summarises the key moves that constitute the long-term development design vision for Earls Colne in relation to the following design objectives:

1. Movement;
2. Nature; and
3. Built Form & Identity.

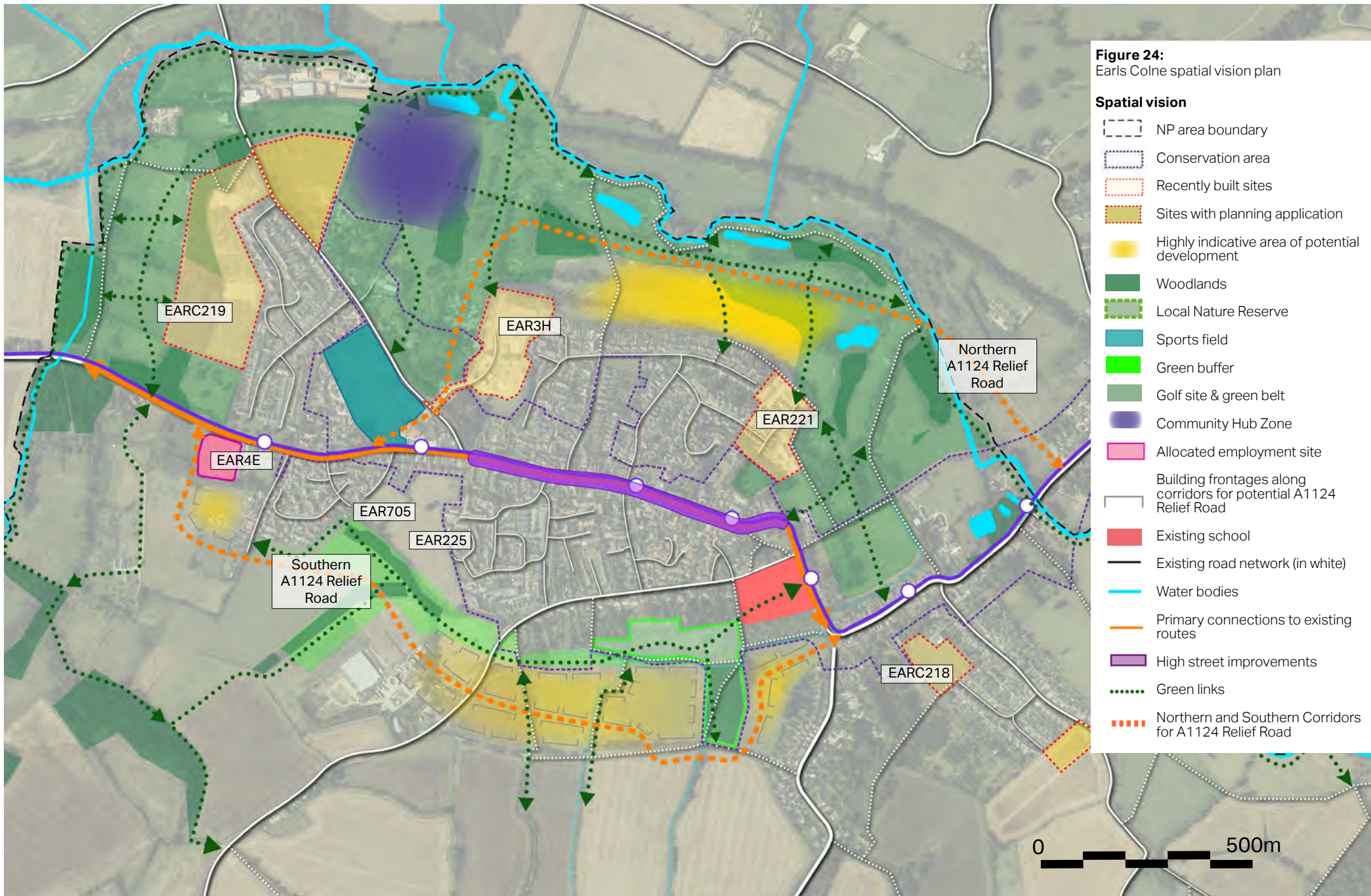
In the following pages and plans will look into these design objectives in more detail.

Design principles

The spatial vision plan will be accompanied by a number of design principles, presented in Chapter 3, classified under the following topics: In keeping with the local character, access and movement, landscape, nature and open space, built form and sustainability.

These principles are aligned to both the objectives of the Local Plan and those of the Neighbourhood Area in a seamless fashion, one that is coherent with the needs of the Borough as a whole and specific to Earls Colne.

The design principles can be understood as those that any development in the area should aim for.



Movement

This section will focus on analysing the design actions for the spatial vision plan in relation to movement.

1 Improve pedestrian movement & access to the surrounding countryside

A network of green links is suggested to offer connections to the surrounding countryside to the north and south. In addition, a green buffer is suggested to the south along the settlement boundary to mitigate potential visual impact to any future development.

2 Alleviate traffic from the high street

Corridors should be maintained to permit a potential future re-routing of the A1124 either to the north or south of the village. This would then assist with regeneration of the conservation area and provide a significant reduction of traffic congestion in the High Street.

Extensive investigations, consultations and studies would be required to determine the most suitable route for any relief road however in the interim the potential for both options should be maintained.

3 Design inclusive streets

The road network should offer an hierarchy of streets to filter movement. Therefore, any new street should aim to complement the existing network and improve vehicular and pedestrian flow. In particular, the suggested link road will have the character

of a secondary street, which would alleviate some traffic from the high street, while also maintaining the speed limits low.

4 Make high street more attractive and pedestrian friendly

The public realm improvements along the high street combined with the reduced vehicular traffic will improve the current environment and enhance pedestrian flow.

5 Improve legibility

A strategic signage system is suggested to aid navigation. Signposts, totems and other elements can be placed in strategic locations to inform people about the network of footpaths, habitats and other important destinations within and around the village. Wayfinding techniques should be implemented along the high street and the green links.

6 Improve access to public transport

Access to public transport is key to provide people with choices for everyday journeys beyond the immediate neighbourhood. Therefore, high street improvements, green links and the potential link road, all together help improve the access to the bus services that run along the high street.

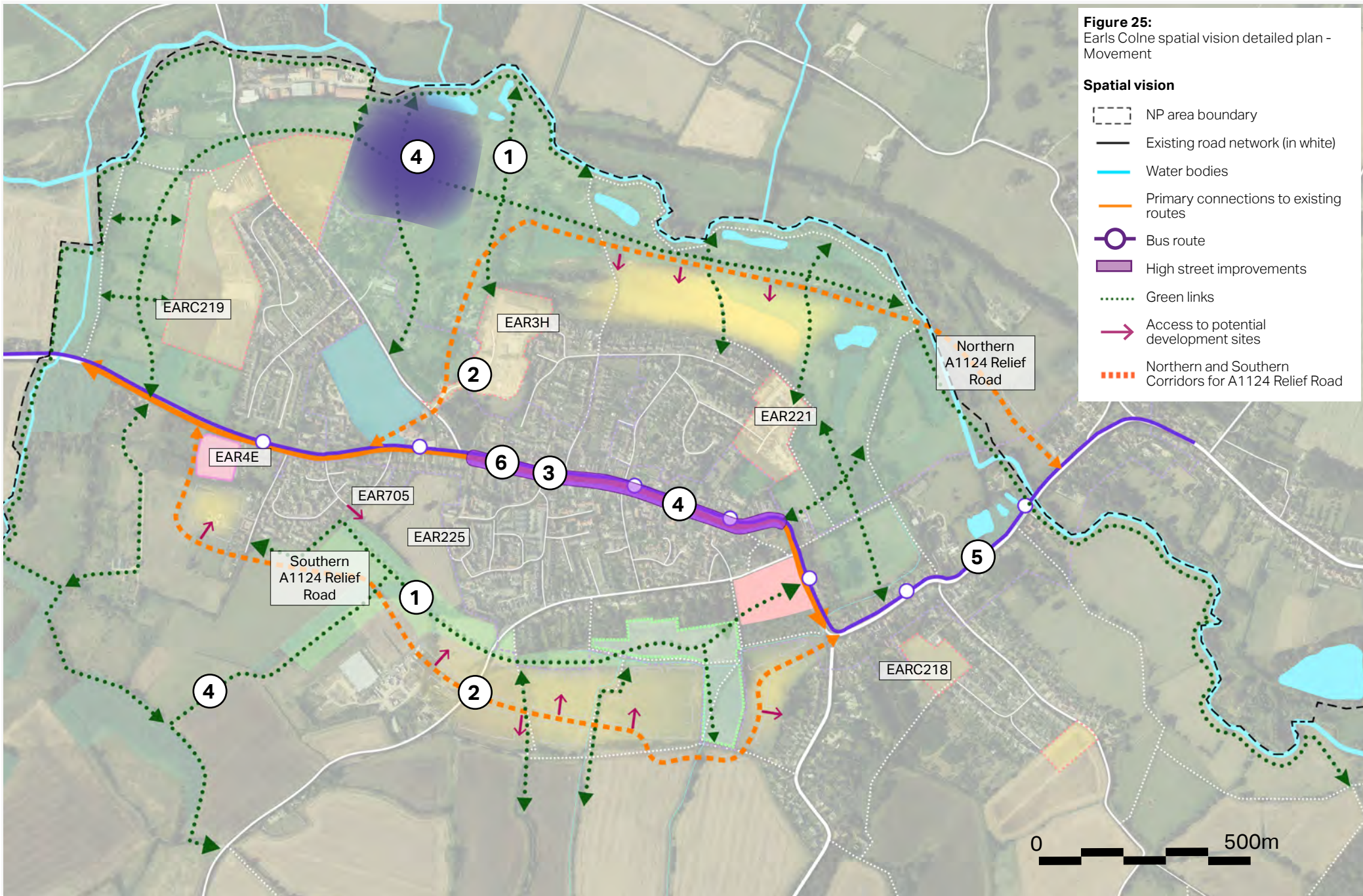


Figure 25:
Earls Colne spatial vision detailed plan -
Movement

Spatial vision

- NP area boundary
- Existing road network (in white)
- Water bodies
- Primary connections to existing routes
- Bus route
- High street improvements
- Green links
- Access to potential development sites
- Northern and Southern Corridors for A1124 Relief Road

Nature

This section will focus on analysing the design actions for the spatial vision plan in relation to nature.

① Create green networks

A green belt is suggested to the north of the village, including the current Colne Valley Golf Course extent and adjacent areas linked to the river. This belt offers a level of protection for any potential development, while providing an opportunity for a landscaped environment for the locals. This green provision would be fully realised if the golf course activity was to cease, but seasonal use could be explored, whilst it is still in use. New green connections from the built areas are suggested as part of the green network into the park.

A secondary belt is suggested as part of the future allocation for development to the south of the village. This belt would mitigate any potential visual impact from future development, whilst connecting the built areas with paths that link to the landscape to the south.

High street improvements include the implementation of green elements along the street to improve the environment and enhance the rural feel of the village.

② Design with water

Managing water can reduce flood risk and improve water quality while providing habitats and recreation. The suggested network of footpaths will facilitate the access to the River Colne and therefore, integrate water bodies into the design process as well. In addition, the suggested green belts can incorporate SuDS to help minimise water drainage from the built environment.

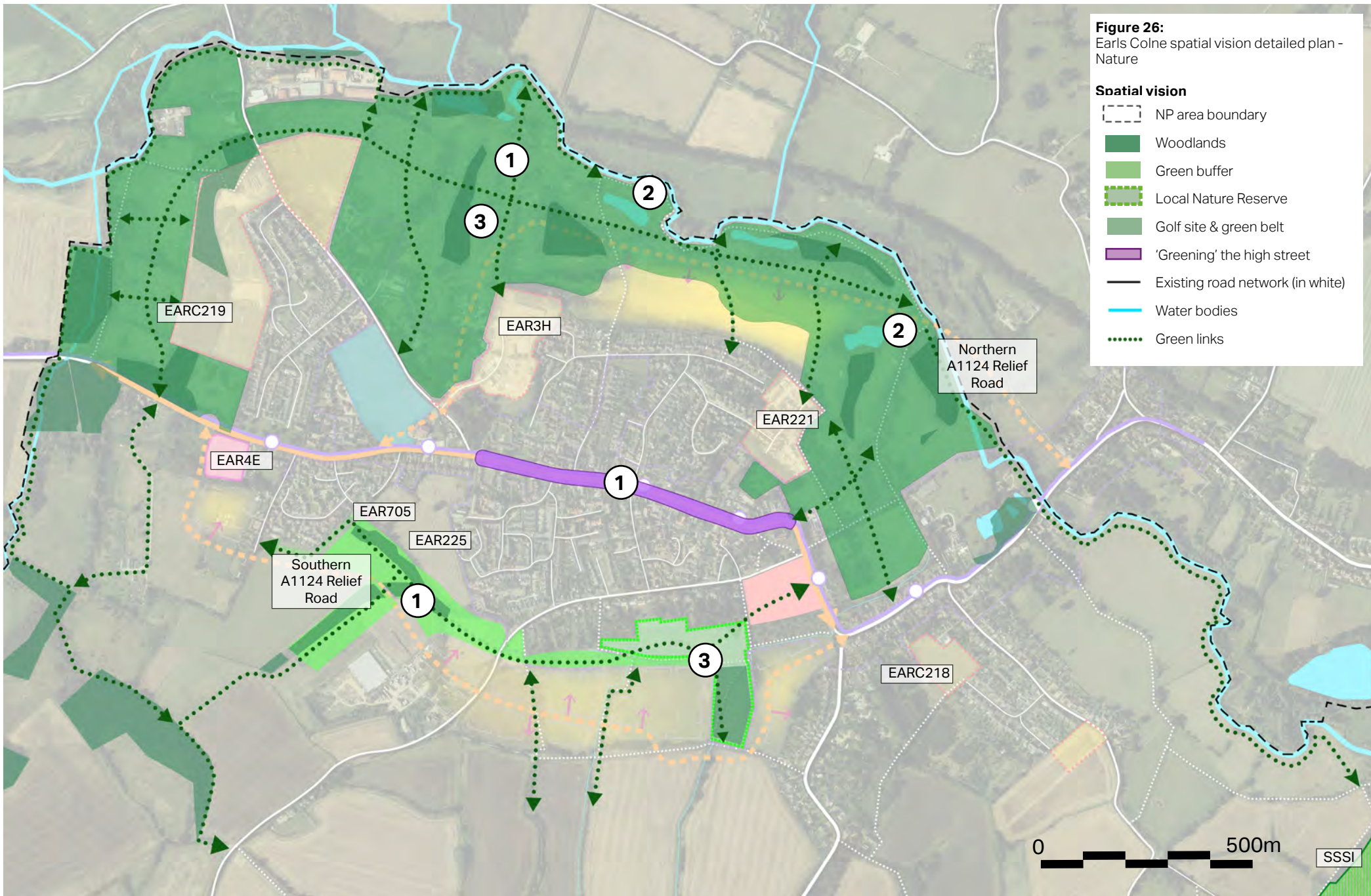
③ Enhance biodiversity

There is a variety of habitats (woodlands, local nature reserve and trees) around the built up area that need to be improved and enhanced. Those habitats are integrated, and therefore protected from any future development, within the suggested green belts. The suggested green links offer connections to those habitats encouraging people to visit them.

Figure 26:
Earls Colne spatial vision detailed plan - Nature

Spatial vision

- NP area boundary
- Woodlands
- Green buffer
- Local Nature Reserve
- Golf site & green belt
- 'Greening' the high street
- Existing road network (in white)
- Water bodies
- Green links



Built form & Identity

This section will focus on analysing the design actions for the spatial vision plan in relation to built form and identity.

① Create active streets and frontages

Buildings should always front the street to improve activity and sense of safety. Therefore, should any future development takes place along the suggested link road, buildings should have active frontages along the street to improve natural surveillance and encourage pedestrian movement.

② Provide opportunities for future development

Two development options are suggested on the spatial vision plan, subject to the final decision regarding the location of the link road. Option 1 link road offers the possibility for a low density development adjacent to the existing settlement boundary with back to back properties. Option 2 link road offers the possibility for back to back properties along the suggested green belt to the south. Either development options should provide housing based on the particular needs over that time.

③ Respect existing heritage assets

Heritage assets constitute referential elements that consolidate the identity of a community. New developments should respect and enhance heritage assets

and their setting. Any potential future development is suggested at distance from the conservation areas, minimising the impact to the heritage assets

④ Promote mixed use development

High street improvements will enhance pedestrian flow and therefore, give a boost to the local economy. In addition, improvements to shop fronts could be considered as part of a High Street regeneration strategy.

The rise in population deriving from future developments which would increase demand for primary school places could be accommodated by relocation of the school to the "Community Hub Site" to the NW of the village.

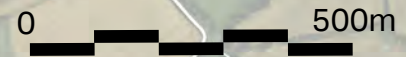
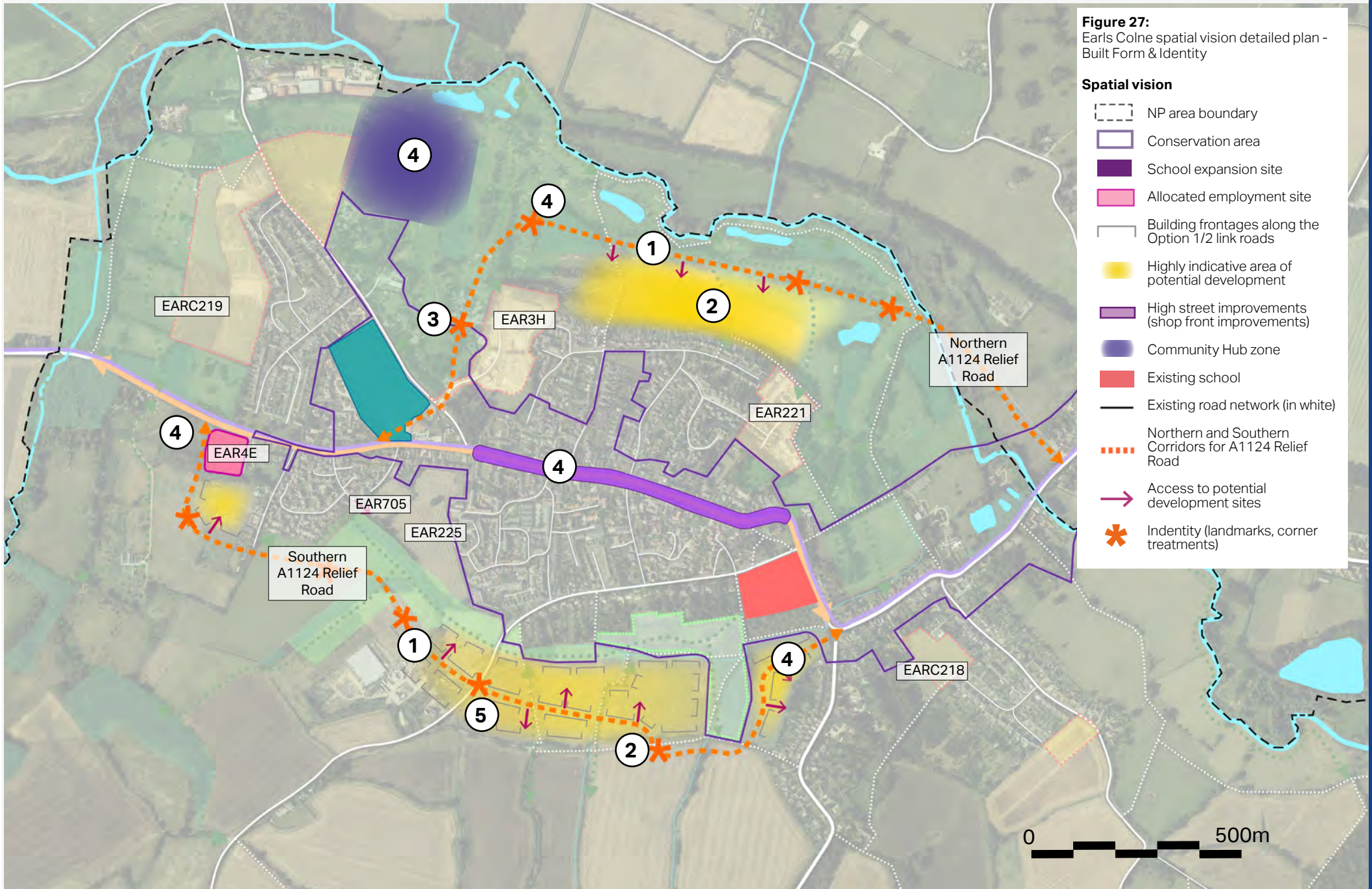
⑤ Enhance the identity of the village

A series of landmarks are suggested along the suggested link road to improve legibility and enhance the identity of the place. Landmarks could have the form of totems signalling the history of the village, large trees or other natural elements or corner buildings that slightly stand out from the rest of the housing to create focal points for drivers and pedestrians.

Figure 27: Earls Colne spatial vision detailed plan - Built Form & Identity

Spatial vision

- NP area boundary
- Conservation area
- School expansion site
- Allocated employment site
- Building frontages along the Option 1/2 link roads
- Highly indicative area of potential development
- High street improvements (shop front improvements)
- Community Hub zone
- Existing school
- Existing road network (in white)
- Northern and Southern Corridors for A1124 Relief Road
- Access to potential development sites
- Identity (landmarks, corner treatments)



3

**Design guidelines
and codes**

This chapter provides guidance on the design of development, setting out the expectations that applicants for planning permission in Earls Colne Parish will be expected to follow.

Placemaking

What urban designers and planners call 'placemaking' is about creating the physical conditions that residents and users find attractive and safe, with good levels of social interaction and layouts that are easily understood.

The placemaking principles set out in the following pages should be used to assess the design quality of future development or regeneration proposals.

These key principles should be considered in all cases of future development as they reflect positive place-making and draw on the principles set out in many national urban design best practice documents.



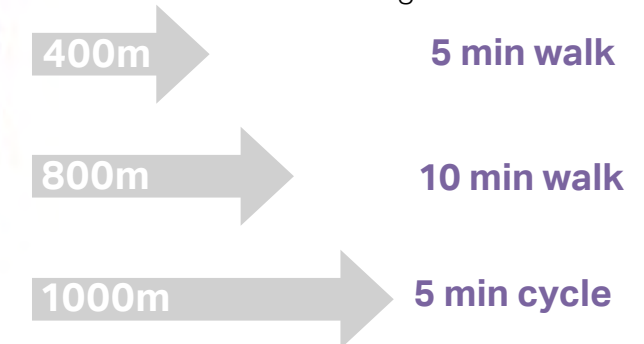
Figure 28: The 10 characteristics of well-designed places. (Source: National Design Guide, page 8).

Pedestrian and cycle routes

Compliance with the national and district policies for pedestrian and cycle ways should be prerequisite for any new development in Earls Colne Parish.

The success of a place is influenced by how walkable it is. It is good practice to plan new homes within a 400 metres walking distance (= 5 minutes) of bus stops and within 800 metres (= 10 minutes) of convenience stores or community buildings.

Residents who are able to use alternatives to the car should be encouraged to do so.



General principles and guidelines

The design guidelines and codes, with reference to Earls Colne Neighbourhood Plan Area, will follow a brief introduction of the general design principles.

The guidelines and codes developed in the document focus on residential environments including new housing development in the Parish, as well as any potential in-fill or small scale development or housing extension.

In any case, considerations of design and layout must be informed by the wider context, considering not only the immediate neighbouring buildings, but also the landscape and rural character of the wider locality. The local pattern of streets and spaces, building traditions, materials and natural environment should all help to determine the character and identity of a development.

It is important that full account is taken of the local context and that the new design embodies the 'sense of place' and also meets the aspirations of people already living in that area. Therefore, some design principles that should be present in any design proposal are:

- Respect the existing pattern of the village to preserve the local character;
- Respect the heritage, landscape and key views identified in the Parish;
- Aim for high quality design that reflects and respects the local vernacular;
- Integrate with existing paths, streets, circulation networks and improve the established character of streets, greens and other spaces;
- Harmonise and enhance existing village in terms of physical form, architecture and land use;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features; and
- Aim for innovative design and eco-friendly buildings while respecting the architectural heritage and tradition of the area.

Earls Colne design guidelines and codes

This section introduces a set of design principles that are specific to Earls Colne Parish. These are based on:

- Baseline analysis of the area in Chapter 2;
- Understanding national design documents such as National Design Guide, National Model Design Code and Building for Healthy Life 12 Documents which informed the principles and design codes; and
- Discussion with members of the Neighbourhood Plan Steering Group.

The codes are divided into **5 sections**, shown on the next two pages, each one with a different number of subsections. Each section and subsection is numbered (e.g DC.01) to facilitate its reading and consultation.

Theme	Code	Title
DC.01 In keeping with local character	1	Heritage, views and landmarks
	2	Development affecting heritage assets
	3	Patterns of growth within the rural landscape
	4	Set in rural landscape/development edges
	5	Social and community infrastructure
DC.02 Access and movement	6	Accessible and attractive footpath network / access to the countryside
	7	Prioritise walking and cycling
	8	People friendly streets
	9	Parking and servicing (Electric vehicle charging points)
	10	Cycle parking
DC.03 Green and blue infrastructure	11	Create a green network
	12	Biodiversity
	13	Water management
	14	Trees
	15	Open spaces
DC.04 Built form	16	Housing mix
	17	Building lines and roofline
	18	Legibility and wayfinding
	19	Continuity and enclosure
	20	Building scale and massing
	21	Corner treatment
	22	Boundary lines and boundary treatment
	23	Materials and architectural details
	24	Hard landscaping, materials and street furniture
	25	Street lighting
DC.05 Public realm	26	Minimising energy use
	27	Lifetime and adaptability
	28	Minimising construction waste
	29	Recycling materials and buildings

Code.1 Heritage, views and landmarks

Earls Colne Parish has a rich heritage dating back to 1086 both in terms of structures, buildings, landscape, views and landscape features. Therefore, any new development needs to be aware of their existence and stimulate ways in which those assets could be further promoted and protected. Some design guidelines are:

- Scenic views towards the countryside should be retained and enhanced in any future development;
- Views towards Colne Valley golf course, extended to the Colne Valley to the north of the village characteristically important to the area and therefore should be respected on this merit;
- New development proposals should maintain visual connections to the surrounding landscape, whilst development density should allow for spaces between buildings to preserve views of countryside setting;
- Potential employment buildings within the rural landscape should be setback from the road bordered with rich vegetation to mitigate any visual impact from the road. In addition, the height of new employment buildings should be sensitive to the surrounding landscape and not generally exceed 3 storeys;
- Creating short-distance views broken by buildings, trees or landmarks helps to create memorable routes. Creating views and vistas allows easily usable links between places; and
- Gaps between buildings, open views and vistas should be respected and aim to demonstrate the significance of a landmark asset.



Figure 29: The Lion - a Grade II listed pub on High Street, an important gathering place and landmark for Earls Colne. (Source: Historic England)



Figure 30: View of the Parish Church of St Andrew - a Grade I listed church and key landmark of Earls Colne village, framed by the High Street. (Source: Visit Essex)

Code.2 Development affecting heritage assets

There are many elements of historic significance in Earls Colne Parish which make a positive contribution to the character of the area. In particular, the grade I, II and II* listed buildings, within its historic core along the High street and the eastern part of the village, which include historic landmarks like Parish Church of St Andrew, Colne Priory and the central block of Atlas Works. Therefore, design guidelines should be in place to guide development in close proximity to the above assets. Those guidelines are:

- New development in close proximity to designated and non-designated heritage assets must propose green screenings to mitigate any unpleasant visual impact;
- The historical setting of the listed buildings along the High Street as well as the tree lined character on Church Hill should be preserved by any development;
- New development proposals should not be visually intrusive or block key views to and from heritage assets. This should be achieved through the appropriate scale and design including screening where appropriate;
- New development should retain the existing open spaces, vegetation and trees to preserve the historic form and pattern of development in the Parish; and
- The scale and massing of new development should be sensitive to the surrounding heritage assets.



Figure 31: Colne Priory (Grade II listed building) - examples of listed buildings within Earls Colne Parish that should be respected and appropriately integrated into new development through proposals for rich physical boundary treatments and generous gaps. (Source: Historic England)



Figure 32: Central block of Atlas Works (Grade II listed) - redundant warehouses associated with Atlas Work Iron Foundry, retrofitted and refurbished as office spaces for local businesses. (Source: Historic England)

Code.3 Patterns of growth within the rural landscape

The Parish owes much of its character to the historic pattern and layout of the roads and buildings as well as its close relationship with the surrounding countryside. Some design guidelines for new development within Earls Colne village are:

- New development in close proximity to designated and non-designated heritage assets must propose green screenings to mitigate any unpleasant visual impact, while also preserving key views;
- New planting should adequately mitigate the impact of the new development and the loss of natural features. Of particular consideration, should be any proposal adjacent or in close proximity to Chalkney Wood SSSI and Brickfield and Long Meadow LNR;
- New development should be within the village footprint or a modest development annexed to it, while also protecting important views to the countryside;
- New development must demonstrate a good understanding of the scale, building orientation and enclosure of the surrounding built environment as well as consider the proximity to Chalkney Wood SSSI and Brickfield and Long Meadow LNR;
- Any proposal that would adversely affect the physical appearance of a rural lane, or give rise to an unacceptable increase in the amount of traffic, noise, or disturbance must be avoided;
- Development densities should reflect the character of the village;
- The size of plots and their pattern should be varied to contribute to the rural character of the village;
- Building setbacks should be slightly irregular to introduce an informality, but, in general, the building lines along the main roads should maintain a linear character;
- The roofline should be set lower than the vegetation backdrop, avoiding hard lines of the silhouette against the sky;
- Existing hedges, hedgerows and trees should be integrated into design, whilst more planting and vegetation is encouraged to form part of the green network strategy; and
- Appropriate signage should be incorporated along the road to indicate the low speed limits or provide navigation.



Figure 33: Positive example of small scale development within the village that respects the surrounding density, while also offering a variety of architectural styles and physical boundary treatments to create a pleasant visual outcome respecting the rural identity and views of the village where it sits, Oxford Court.

Code.4 Set in rural landscape/ development fringe

Earls Colne Parish has a strong rural landscape which should not be undermined by new development. Some design guidelines on how new development should treat development edges are:

- Development adjoining public open spaces and important gaps should either face onto them to improve natural surveillance or have a soft landscaped edge;
- New development should conserve existing native trees and shrubs along the lanes as well as incorporating any green asset within design. Any unnecessary loss of flora should be avoided. For example, the deciduous woodland screening between the EAR225 and Hunt Road, as well as the dense tree corridor along Station Road should be preserved;
- Abrupt edges to development with little vegetation or landscape on the edge of the development should be avoided;
- Green spaces and woodlands should be protected and enhanced where possible. For example, the woodland adjacent to Bourne Brook and Millenium Green along the western boundary of the Parish should act as a natural screening and barrier between future developments and the Colne Valley;
- Ensure that small and isolated woodlands in the parish are linked to larger green areas nearby (such as Chalkney Woods, Brickfield and Long Meadow LNR and Colne Valley LNR) to protect connectivity of habitats and biodiversity;
- Landscape schemes should be designed and integrated with the open fields to avoid coalescence with other neighbouring settlements; and
- Edges must be designed to link rather than segregate existing and new neighbourhoods. Green corridors can provide additional pedestrian and cycle links that will contribute to the successful integration with the Parish.



Figure 34: Example of a well-proportioned development set at the edge of the village with views of nearby open fields and countryside, Homefield Way.



Figure 35: Example of an edge lane somewhere in UK, where buildings front the landscaped area, while shared surfaces allow different users to co-exist peacefully.

Code.5 New houses and infill development

Infill development is generally accepted within the village, however each application needs to be considered on its merits. Proposed designs should be appropriate and sensitive to the rural setting and therefore, some design guidelines are needed and presented below:

- Any new build should be confined to brownfield sites and infill within the village envelope unless under exceptional circumstances when community gain would outweigh any disadvantage e.g. a relief road scheme or community hub site;
- The agricultural heritage of the village should be preserved. Therefore, planning consent for dwellings outside the village envelope will need careful consideration;
- Infill development should complement the street scene into which it will be inserted. It needs to reflect the scale, massing and layout of the surrounding properties;
- Infill development should conform to the existing surrounding architectural details and materials;
- The above elements also need to be considered in relation to topography, views, vistas and landmarks;
- Careful consideration of off-street infill development is needed in the case of the Historic Core area, as this could create the risk of detracting from the overall appearance of the area. Therefore, off-street infills are not generally recommended within the Historic Core area; and
- New building lines should be reasonably consistent along a street with existing buildings.



Figure 36: Positive example of a recent infill development somewhere in UK that fits nicely into the local rural context in terms of scale, massing, architectural styles and details.



Figure 37: Positive local example of an infill development that respects the existing built form and character, York Road.

Code.6 Social and community infrastructure

There is already a wide range of local amenities in the area concentrated along High Street, Atlas Works and nearby business parks to meet the needs of Earls Colne residents. However, it remains a consensus that existing amenities should be enhanced and made more accessible, especially in anticipation of new developments in the village. Guidelines related to social and community infrastructure are:

- Existing and proposed social and community infrastructure should be sympathetic with the existing architectural style of the surrounding buildings;
- Any new social and community infrastructure should be designed to high standards to act as a focal point and landmark for the area and improve the civic pride and the character of Earls Colne;
- New development should propose green space provision between any new residences and connected with the rest of the village via footpaths and cycleways;
- New development should propose facilities for young people, teenagers and young families;
- In terms of parking provision, new facilities should not create additional congestion in the area and parking dominance should be avoided;
- Signage and wayfinding should be used to highlight options for sustainable transport modes and promote walking and cycling. This could potentially increase movement and activity in the streets enhancing natural surveillance and therefore, minimising any possibility of antisocial behaviour.



Figure 38: Play area overlooked by surrounding houses and backing onto nearby countryside, Nonacourt Way.



Figure 39: A selection of shops, services and restaurants located along Earls Colne's High Street to meet the essential needs of residents.

Code.7 Accessible and attractive footpath network/ access to countryside

There is a good network of footpaths in the parish that connects the village with surrounding countryside and key open spaces - such as Chalkney Woods and Brickfield & Long Meadow Nature Reserve. This existing network should be adequately protected and enhanced to encourage active travel. New developments should also make sure that safe and suitable footpath networks are provided and maintained. Some guidelines are:

- Newly developed areas must retain or provide direct and attractive footpaths between neighbouring streets and local facilities and amenities. Establishing a robust pedestrian network across new developments and among new and existing development is key in achieving good levels of connectivity and promoting walking and cycling;
- Where possible, new proposed footpaths should link up green and blue spaces and woodlands to create a network of green walking routes and promote biodiversity. For example, footpath connections and other green links could connect new developments with Colne Valley Golf Course, Brickfield & Long Meadow Nature Reserve, Chalkney Wood and surrounding woodlands forming part of an integrated green infrastructure network;
- Design features such as gates or barriers to footpaths must be kept at a minimum and the latter must be avoided;
- Strategically placed signposts can assist pedestrians and cyclists with orientation and increase awareness of publicly accessible paths beyond the parish to surrounding villages and towns, e.g Halstead. However, new signposts must respect the rural character of the parish and avoid creating visual clutter; and
- Footpath network needs to be in place before first occupation of houses on the sites.



Figure 40: Footpath connecting houses along Burrows Road with Colne Valley golf course and the wider Colne Valley.



Figure 41: Appropriate signage to indicate the footpath/cycle lane within a rural landscape, elsewhere in UK.

Code.8 Prioritise walking and cycling

One of the strengths of Earls Colne village is the walking distance to the centre. This encourages people to walk over drive. In addition, there is a well established network of footpaths. However, despite the existence of policies at national and district level, there are currently no designated cycle paths in the parish, which undermines cycling.

Maintenance of the existing footpath network and the pavements needs to be improved and enhanced to promote safe active travel to local amenities, surrounding countryside and nearby villages. Therefore, some guidelines are:

- Varied links should be enabled and created to favour pedestrian and cycle movement. These routes should be always overlooked by properties to create natural surveillance and offer good sightlines and unrestricted views to make people feel safer;
- Pavement width should be minimum 2m. Along the High Street, however, anything

wider than 2m is highly recommended to improve pedestrian flow and enhance the feeling of safety for its users;

- Cul-de-sac development pattern should be avoided in new developments. However, if it is proposed then it should be connected to footpaths to avoid blocking pedestrian and cycle flow;
- Design features such as barriers to vehicle movement, gates to new developments, or footpaths between high fences must be avoided; and
- All newly developed areas must provide direct and attractive footpaths between neighbouring streets and local facilities. Streets must be designed to prioritise the needs of pedestrians and cyclists.



Figure 42: Local example of a footpath integrated within residential development offering alternative walking and cycling routes to people, Earls Colne.



Figure 43: Local example of a green link, Earls Colne.

Code.9 People friendly streets

It is essential that the design of new development includes streets that incorporate the needs of pedestrians, cyclists, and, if applicable, public transport users. Some guidelines for future development are:

- Streets must meet the technical highways requirements, as well as being considered a 'place' to be used by all. It is essential that the design of new development includes streets and junctions that incorporate the needs of pedestrians, cyclists, and if applicable, public transport users;
- It is important that on-street parking, where introduced, does not impede the access of pedestrians and other vehicles and it is well vegetated;
- Within the development boundaries, streets should not be built to maximise vehicle speed or capacity. A range of traffic calming measures could be introduced by design;
- New streets should be linear with gentle meandering, while also providing evolving views to the surrounding countryside;
- Routes should be laid out in a permeable pattern, allowing for multiple choices of routes, particularly on foot and cycle. Any cul-de-sacs should be relatively short and provide onward pedestrian links;
- Streets must respect the existing vegetation, while also incorporating new opportunities for landscaping, green infrastructure, and sustainable drainage;
- Separate footways are always expected; and
- Any new development should provide well-connected streets of varied character to filter traffic and speed. A legible street hierarchy should include primary, secondary, tertiary roads and edge lanes. The next pages present illustrations examples of those street typologies.

Primary streets

- Primary streets are the widest neighbourhood roads and also the main routes used for utility and emergency vehicles, as well as buses;
- Primary streets must be defined by strong building lines. Primary frontages alongside the road should include taller and more dense developments; and
- Street trees and/or green verges along the road should be provided to contribute to the village identity, local biodiversity, and provide cooling and shading.

Secondary streets

- Secondary streets should accommodate carriageways wide enough for two-way traffic. On-street parking should preferably be inset into green verges;
- Carriageways should be designed to be shared between motor vehicles and cyclists. Vertical traffic calming features such as raised tables may be introduced; and
- Where possible, secondary streets should be tree-lined on both sides.

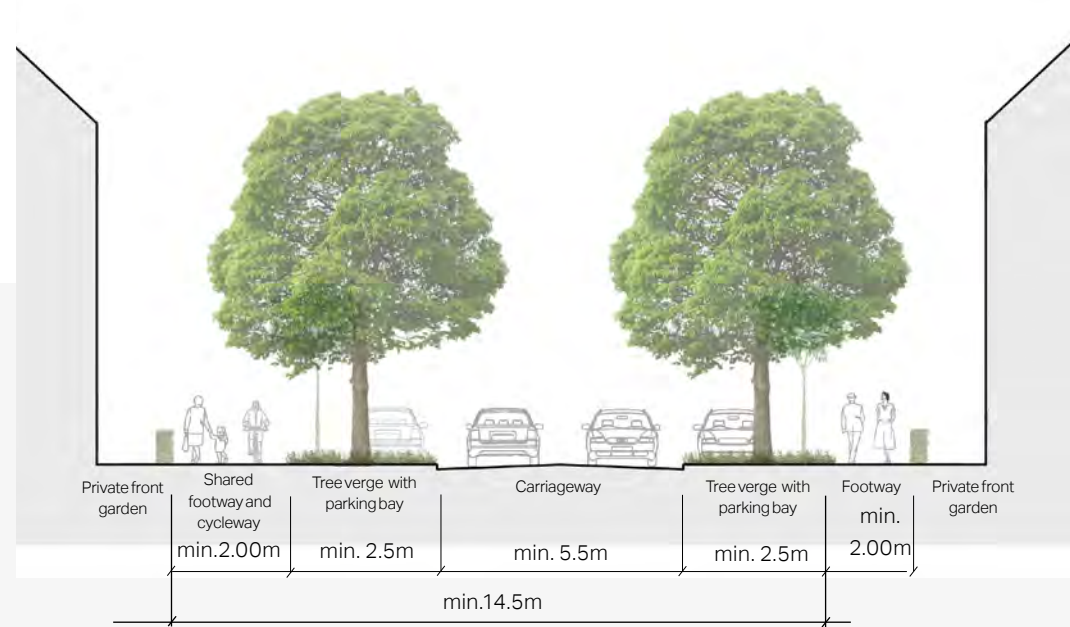


Figure 44: Cross-section to illustrate some dimensions for primary streets.

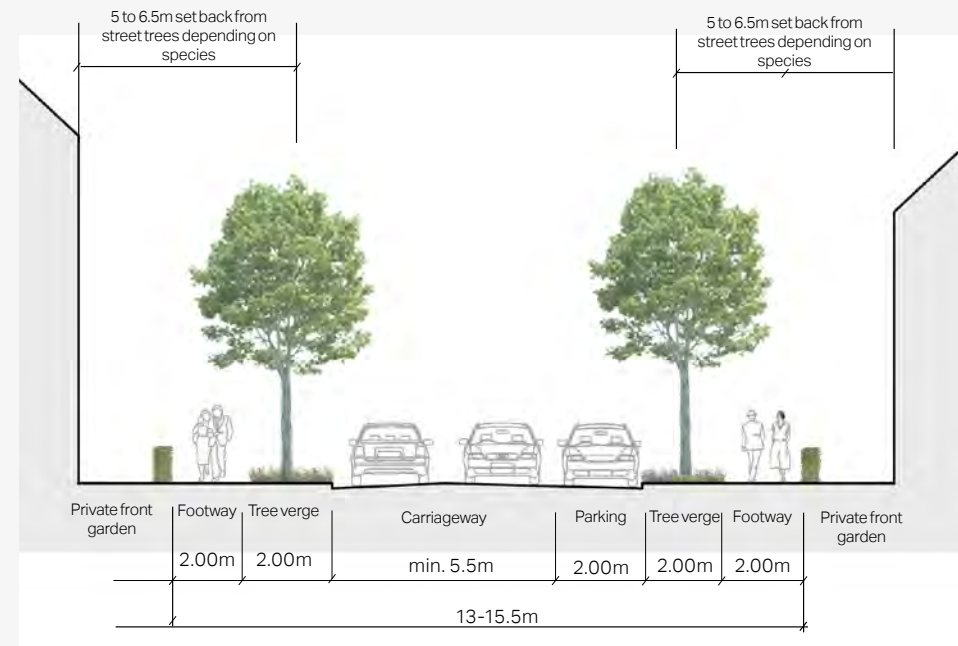


Figure 45: Cross-section to illustrate some dimensions for secondary streets.

Tertiary streets

- Tertiary streets have a strong residential character and they should be designed for low traffic volumes and low speeds, ideally 20 mph;
- These streets must be designed for cyclists to mix with motor vehicles. Traffic calming features such as raised tables can be used to prevent speeding;
- Tertiary streets should be formed with a high degree of built form enclosure, with consistent building lines and setbacks; and
- Street trees should be provided with suitable gaps wherever possible.

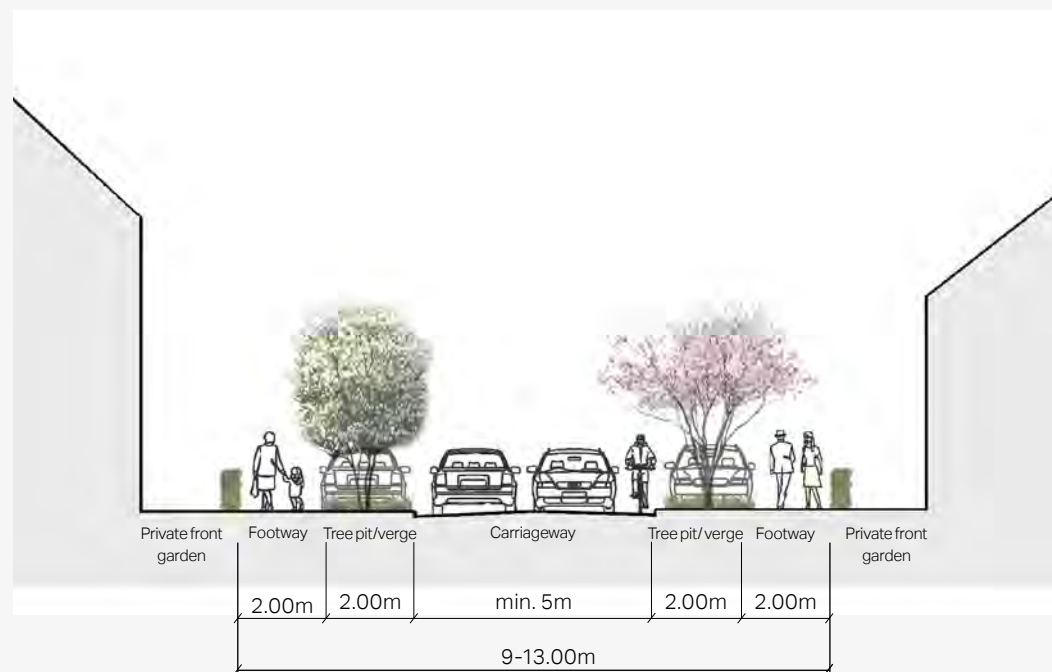


Figure 46: Cross-section to illustrate some dimensions for tertiary roads.

Edge lanes

- All the edges of new development areas should be served by continuous edge lanes to provide high level of connectivity;
- Edge lanes are low-speed streets that front houses with gardens on one side and a green space on the other. Carriageways typically consist of a single lane of traffic in either direction, and are shared with cyclists; and
- Variations in paving materials and textures can be used instead of kerbs or road markings.

Green links

- Green links should be located within minimum 7.5m wide corridor adjacent to retained green assets;
- Shared or segregated footpath and cycleway to be provided within corridor;
- Footpath and cycleway to be hard surfaced and constructed of bound material which may also combine with vehicle access;
- Combined width of unsegregated footpath and cycleway to be a minimum of 3.0m; and
- Where required, SUDs features to be incorporated into corridor beside the surface of shared footpath and cycleway.

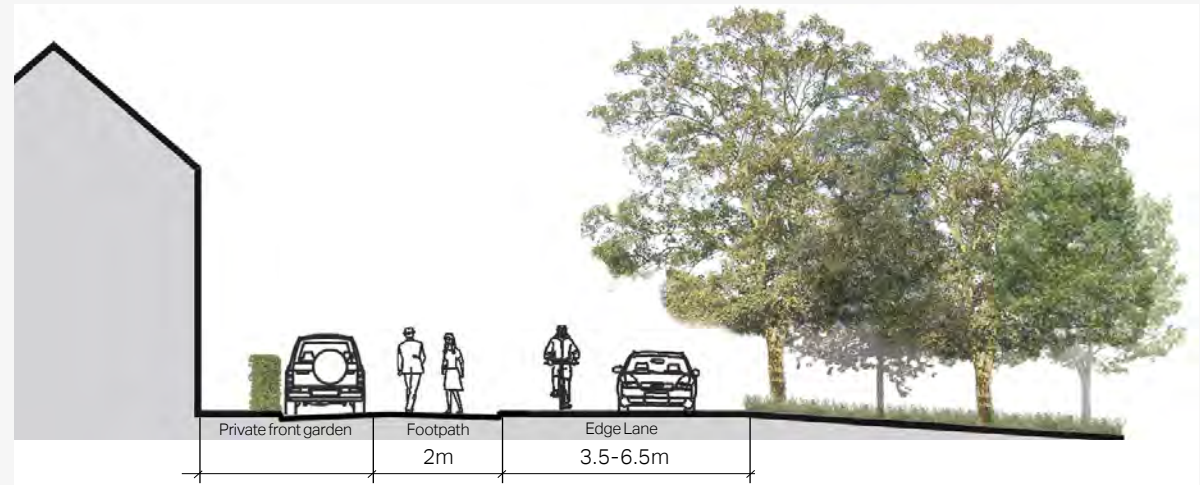


Figure 47: Cross-section to illustrate some dimensions for edge lanes.

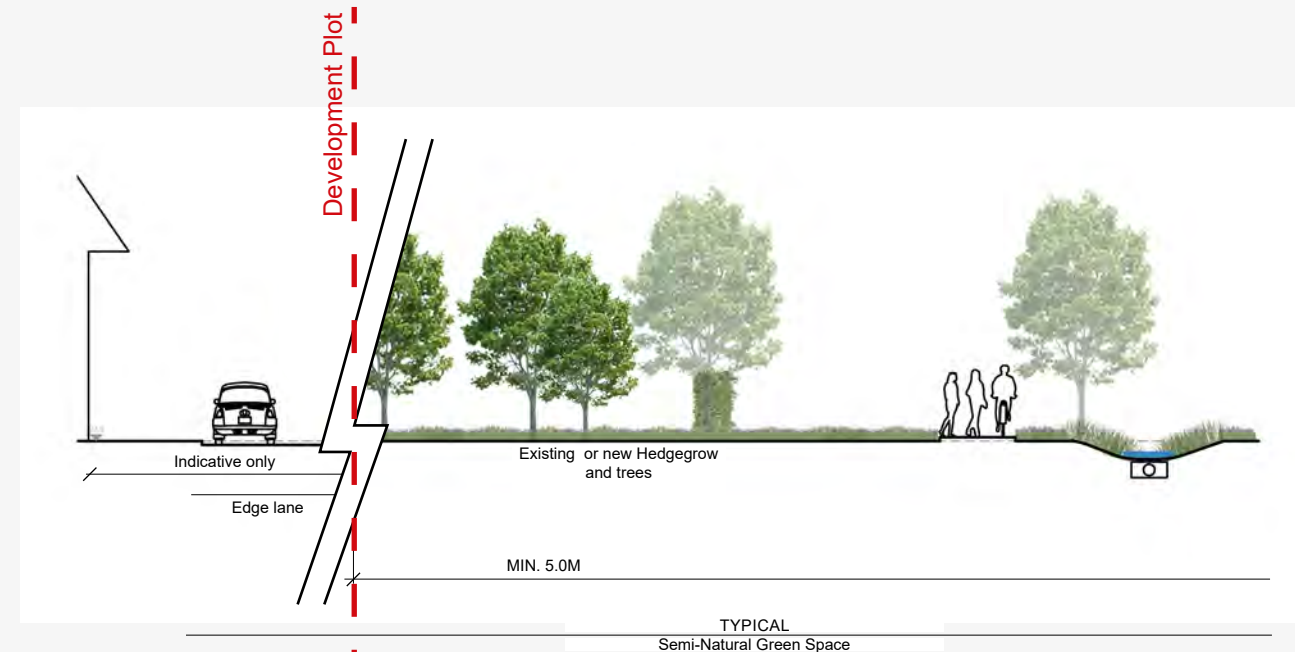


Figure 48: Section to illustrate some dimensions for green links.



Figure 49: Example of a primary street with large street trees and green verges along the carriageway, Halstead Road (A1124).



Figure 50: Secondary street with inset parking bays alternating with street trees on both sides of the street in Derwenthorpe York.



Figure 51: Tertiary street with inset parking bays alternating with trees on both sides in Dewenthorpe, York.



Figure 52: Local positive example of a meandering edge lane where properties with well vegetated front gardens overlook the adjacent open space, Nonancourt Way.



Figure 53: Local example of a pedestrianised edge lane with spaces for parking, Earls Colne.

Code.10 Parking and servicing (Electric vehicle charging points)

Although, the aim to create a good network of walking and cycling routes within Earls Colne Parish is a priority, the demand for private cars currently remains high, therefore car parking has to be carefully integrated into the design. Energy efficiency is becoming more and more important, with the shift to electric vehicles on the rise.

The car parking typology mainly found in the Parish is on-plot parking; however, there are also cases of on-plot garage parking, on-street parking and parking courts. Therefore, the design guidelines on the next pages will focus on the above mentioned typologies.

Guidelines for on-plot or on front car parking

- Parking should be well integrated into design so as not to dominate the public realm;
- High-quality and well-designed soft landscaping, hedges, hedgerows, and trees, should be used to increase the

visual attractiveness of the parking and enhance the rural character of the Parish; and

- Hard standing and driveways must be constructed from porous materials, to minimise surface water run-off and therefore, help mitigate potential flooding. This is important to the area and therefore should be respected on this merit.

Guidelines for parking courts

- Parking courts should be acceptable for small building clusters and permeable paving should be used where possible;
- Parking courts must be overlooked by properties to increase natural surveillance; and
- Planting and vegetation should be integrated into design to soften the presence of cars and preserve the rural character of the area.

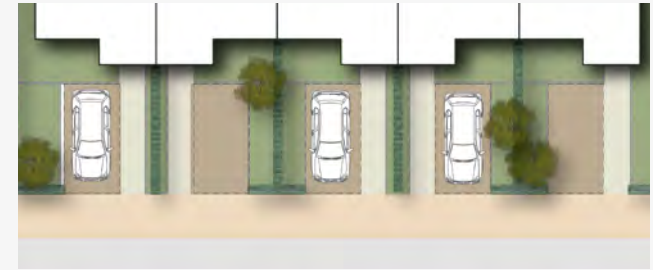


Figure 54: Illustrative diagram showing an indicative layout of on-plot front parking.

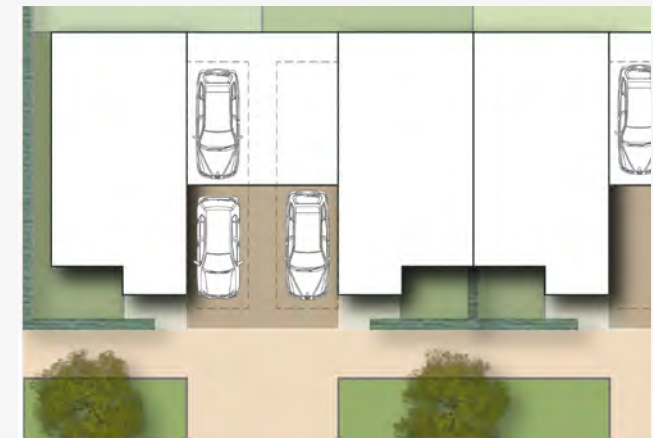


Figure 55: Illustrative diagram showing an indicative layout of on-plot side parking.



Figure 56: Positive example of a parking court that is overlooked by surrounding houses to maximise surveillance, Tey Road Close.

Guidelines for on-street car parking

- The streetscape should not be dominated by continuous on-street parking spaces. Where possible, tree planting and grass areas can be incorporated between parking bays to improve aesthetics;
- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists and other vehicles; and
- On-street parking should be widened to allow each bay to be able to charge electric vehicles. Please see page 64 for more details on electric charging points.

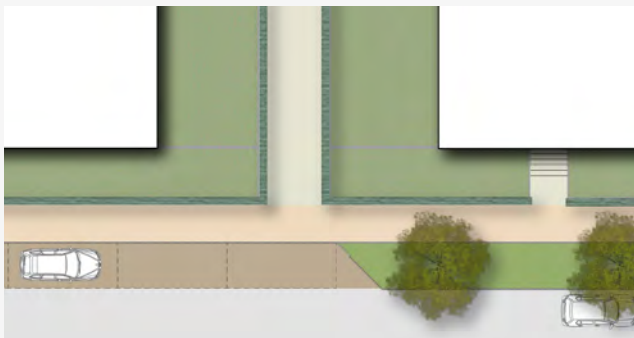


Figure 57: Illustrative diagram showing an indicative layout of on-street inset parking.



Figure 58: Example of on-street parking with parking bays and street trees to mitigate the impact of the cars on the streetscape, Poundbury.

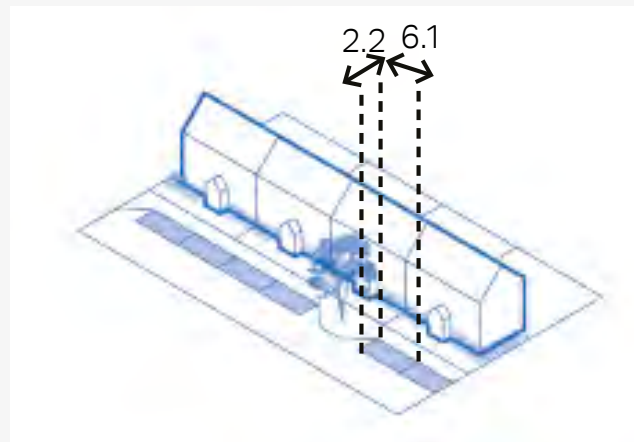


Figure 59: Illustrative diagram showing an indicative layout and recommended dimensions of on-street parking spaces.

Guidelines for garages

- Garages must not dominate the appearance of dwellings and must not reduce the amount of active frontage to the street; and
- They should provide minimum 3m x 7m internal space to park a car and provide space for storage to avoid the garage to be used for storage purposes only.

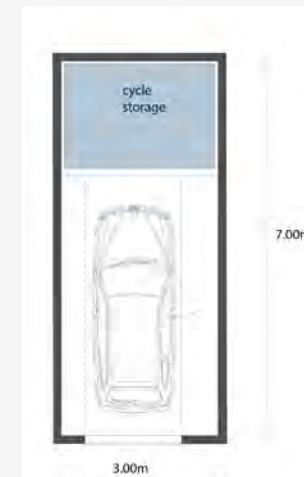


Figure 60: Indicative layout of a garage with a cycle storage area.

Servicing

With modern requirements for waste separation and recycling, the number and size of household bins has increased posing a problem with the aesthetics of the property and the management of the bins. Therefore, some guidelines for new development are:

- When dealing with waste storage, servicing arrangements and site conditions should be taken into account; in some cases waste management should be from the front of the building and in others, from the rear. It is recommended that bins are located away from areas used as amenity space;
- A specific enclosure of sufficient size should be created for all the necessary bins;
- Bins should be placed as close to the dwelling's boundary and the public highway, such as against a wall, fence, hedge but not in a way as to obstruct the shared surface for pedestrian and vehicle movements;
- Bins should be placed within easy access from the street and, where possible, with the ability to open on the pavement side to ease retrieval;
- Wheelie bin storages are recommended to improve the aesthetics of the environment; and
- Bin storage could be combined with cycle storage.



Figure 61: Example of wheelie bin storage for front gardens that include a green element to improve the aesthetics.



Figure 62: Local example of a community garden utilising top of bin shed to store harvests to be shared locally. Earls Colne.

Electric vehicle charging points

The provision of electric vehicle charging points are strongly encouraged by Braintree District Council as a means to promote more sustainable forms of transport. These can be integrated both on and off street. Some design guidelines on how new development should design for electric vehicle charging points are:

On-street car parking or parking courts

- Car charging points should always be provided adjacent to public open spaces. Street trees and vegetation is also supported to minimise any visual contact with the charging points;
- Where charging points are located on the footpath, a clear footway width of 1.5m is required next to the charging point to avoid obstructing pedestrian flow; and
- Car charging points within parking courts are highly supported, since they can serve more than one vehicles.

Off-street car parking

- Mounted charging points and associated services should be integrated into the design of new developments, if possible with each house that provides off-street parking; and
- Cluttering elevations, especially main façades and front elevations, should be avoided.



Figure 63: Example of on-street electric vehicle charging points.



Figure 64: Example of electric vehicle charging points in a parking court.



Figure 65: Example of off-street electric vehicle charging points.

Code.11 Cycle Parking

There is potential for cycling, either for commuting or recreation, to be a more common activity in the Parish. Therefore, provision for cycle parking should be an integrated part in the design for new developments.

Houses without garages

- Houses will usually have garages. However, for homes where there is no on-plot garage, covered and secured cycle parking should be provided within the domestic curtilage;
- Cycle storage must be provided at a convenient location with an easy access;
- When provided within the footprint of the dwelling or as a free standing shed, cycle parking should be accessed by means of a door at least 900mm and the structure should be at least 2m deep; and
- The use of planting and smaller trees alongside cycle parking can be used.

Houses with garages

- The minimum garage size should be 7m x 3m to allow space for cycle storage;
- Where possible, cycle parking should be accessed from the front of the building either in a specially constructed enclosure or easily accessible garage;
- The design of any enclosure should integrate well with the surroundings; and
- The bicycle must be removed easily without having to move the vehicle.

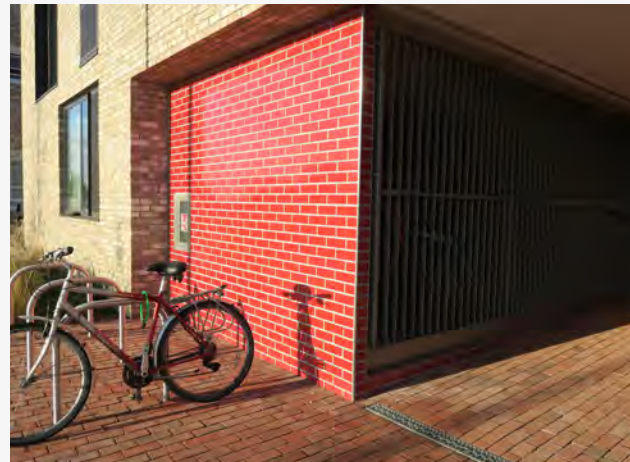


Figure 66: Example of cycle parking for houses without garages, Cambridge.

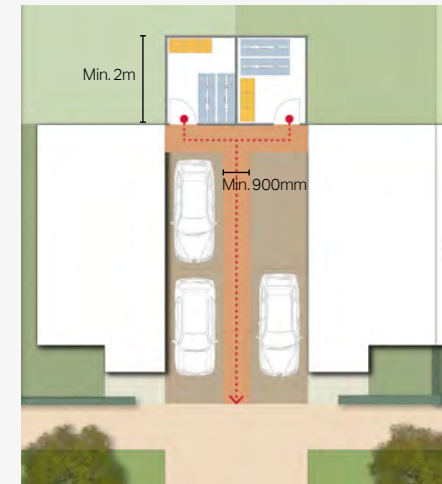


Figure 67: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.

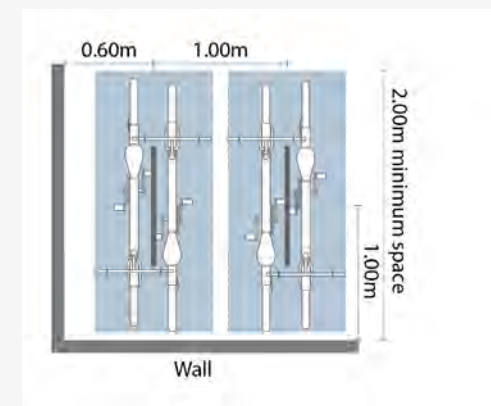


Figure 68: Sheffield cycle stands for visitors and cycle parking illustration.

Code.12 Create a green network

A well connected green network should be created throughout new developments to connect people with the countryside and to link habitats. Opportunities should be sought to introduce green assets into design and contribute to biodiversity. Some design guidelines on green networks are:

- New development should avoid harming existing ecological assets, e.g. habitats and dependent local biodiversity, with the recognised wildlife corridors. Green assets should be identified and integrated into the design process early on;
- New development should propose green links to enhance the links between Earls Colne's wildlife network and the ecological/habitat connectivity between the regionally important Colne Valley and the locally important Chalkney Wood SSSI and Brickfield and Long Meadow LNR;
- Green networks should link existing and newly proposed street trees, green verges, front and rear gardens, open spaces, habitat sites and the countryside together;
- New development should front onto green assets and access should be granted for all groups of people;
- SuDS should be introduced, where possible, and incorporated into design of the green network to mitigate any flooding issue; and
- Green networks could contain some formal provision, such as a Neighbourhood Equipped Area of Play (NEAP), playing fields and an area for active recreation. Their many benefits include the improvement of the health and well-being of individuals and promotion of the development of inclusive communities.

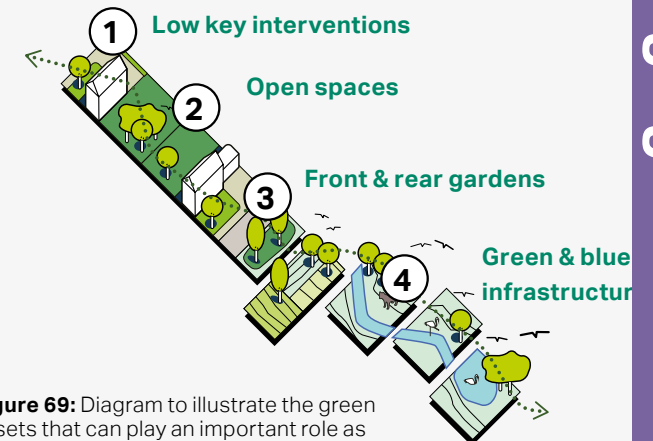


Figure 69: Diagram to illustrate the green assets that can play an important role as wildlife corridors.



Figure 70: An example of a SuDS corridor - Upton Urban Extension, Northampton.

Code.13 Biodiversity

Under the wider backdrop of climate change and global warming, protection of biodiversity is becoming an important priority and should start at the local level. It should therefore be in the interests of new developments to prioritise its enhancement through design. Some design guidelines for this are as follow:

- New development should protect and enhance the existing habitats and wildlife corridors (as identified in the Green Infrastructure map in Section 1b). In particular, help increase movement between isolated populations and provide escape cover from predators and shelter during bad weather;
- Biodiversity, woodlands, hedgerows, ditches should be protected and enhanced where possible and be an integrated part of the design process rather than an afterthought;
- New development proposals should aim for the creation of new habitats and wildlife corridors, e.g. by aligning back and front gardens or installing bird boxes or bricks in walls;
- Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. For that reason, rich vegetation and planting is suggested;
- Blue assets can also contribute to biodiversity connectivity. Therefore, any existing ditches and lakes should be considered in design proposals when planning for wildlife corridors;
- All areas of biodiversity that require further planting/ enhancement should be planted before start of construction; and
- The choice of plants in new development should be appropriate to the setting of the proposal and its proximity to the Colne Valley. English Oak, Field Maple, Hawthorn, Blackthorn, Hazel and other species are recommended.



Figure 71: Example of a structure used as a frog habitat corridor located in an outdoor green space.



Figure 72: Example of a birdbox located on a grass area opposite a public footpath.

Code.14 Water management (SuDS, permeable paving, slow release)

With the River Colne running along Earls Colne's northern and eastern boundary, and Brook Bourne running along the west, some parts of the parish are more prone to high to medium levels of flooding than others - particularly for some of the designated sites for new developments. Therefore, the introduction of some sustainable drainage systems, known as SuDS, could be beneficial to the village in mitigating against flood risk.

The most effective type or design of SuDS to apply would depend on site-specific conditions, such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. However, there are a number of overarching principles that would be applicable to new developments:

- Manage surface water as close to where it originates as possible;
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down, so that it does not overwhelm water courses or the sewer network;
- Improve water quality by filtering pollutants to help avoid environmental contamination;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- SuDS are often also important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream;
- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water, whilst increasing the biodiversity value of the area;
- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water; and
- SuDS should be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.



Figure 73: Example of swales check dam integrated with a crossing point, somewhere in UK.



Figure 74: Example of SuD designed as a public amenity and fully integrated into the design of the public realm, Stockholm.

Storage and slow release

Rainwater harvesting refers to the systems allowing the capture and storage of rainwater as well as those enabling the reuse in-site of grey water.

Simple storage solutions, such as water butts, can help provide significant attenuation. However, other solutions can also include underground tanks or alternatively over ground gravity fed rainwater systems that can have multiple application areas like toilets, washing, irrigation. In general, some design guidelines to well integrate water storage systems are:

- Consider any solution prior to design to appropriately integrate them into the vision;
- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes; and
- Combine landscape/planters with water capture systems.



Figure 75: Examples of water butts used for rainwater harvesting in Reach, Cambridgeshire.

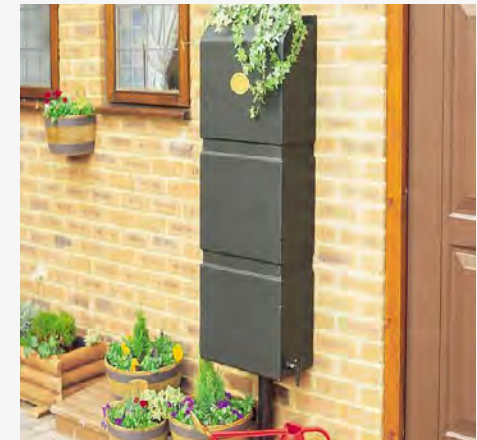


Figure 76: Example of a gravity fed rainwater system for flushing a downstairs toilet or for irrigation.



Figure 77: Diagram illustrating rainwater harvesting systems that could be integrated into open space and residential developments.

Permeable paving

Most built-up areas, including roads and driveways, increase impervious surfaces and reduce the capacity of the ground to absorb runoff water. This in turn increases the risks of surface water flooding.

Permeable paving offers a solution to maintain soil permeability while performing the function of conventional paving. Therefore, some design guidelines for new development are:

- The choice of permeable paving units must be made depending on the local context; the units may take the form of unbound gravel, clay pavers, or stone setts; and
- Permeable paving can be used where appropriate on footpaths, private access roads, driveways, car parking spaces (including on-street parking) and private areas within the individual development boundaries.

Regulations, standards, and guidelines relevant to permeable paving and sustainable drainage are listed below:

- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems¹.
- The SuDS Manual (C753)².
- Guidance on the Permeable Surfacing of Front Gardens³.

1. Great Britain. Department for Environment, Food and Rural Affairs (2015). Sustainable drainage systems – non-statutory technical standards for sustainable drainage systems. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

2. CIRIA (2015). The SuDS Manual (C753).

3. Great Britain. Ministry of Housing, Communities & Local Government (2008). Guidance on the Permeable Surfacing of Front Gardens. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7728/pavingfrontgardens.pdf

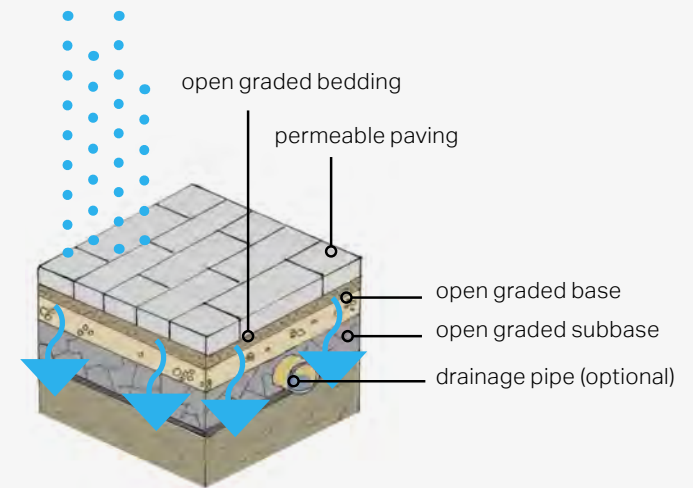


Figure 78: Diagram illustrating the function of a soak away.



Figure 79: Example of a permeable paving that could be used from driveways.

Code.15 Trees

New street planting helps maintain visual consistency along the public realm. It is associated with better mental health and well-being by reducing stress, lessening heat islands, and providing protection from natural elements such as wind and rain. Some guidelines for new development are:

- Aim to preserve existing mature trees and hedges by incorporating them in the new landscape design;
- To ensure resilience and increase visual interest, a variety of native tree species is preferred over a single one;
- Flower beds, bushes and shrubs should be welcomed in new developments, since they contribute to the liveliness of the streetscape and create visual interest and colour to their surroundings;
- Hedgerows can be planted in front of bare boundary walls to ease their visual presence or they can be used to conceal on-plot car parking and driveways within curtilages;
- Native trees can normally be used to mark reference points and legibility;
- Native trees should also be present in any public open space, green or play area to generate environmental and wildlife benefits; and
- The success of tree planting is more likely to be achieved when it has been carefully planned to work in conjunction with all parts of the new development, parking, buildings, street lights etc.



Figure 80: Example of street planting along main road with green verges and open views to the surrounding countryside encouraging walking and cycling, Northwest Cambridge.



Figure 81: Positive example of new development where open space is equipped with trees and overlooked by properties, elsewhere in UK.



Figure 82: Local positive example of a street bordered with lines of street trees and green verges improving the aesthetics of the neighbourhood, Church Hill.

Code.16 Open spaces and leisure

Open spaces across the village play a vital role in creating an attractive environment and preserving the rural character of Earls Colne. These are places that encourage communities to gather and engage - creating lively, harmonious and diverse neighbourhoods. New development should therefore prioritise the design of open spaces, some key design guidelines are:

- The location of new open spaces within new developments should be decided based on the location of the existing ones whilst considering the needs of existing residents;
- Green buffer zones between older and new development are acceptable and can be used for useful pedestrian and cycle links;
- Substantial recreational space should be provided to include woodland walks, sport pitches and play areas;
- All recreational spaces should be designed to link up with each other and also link up with existing adjoining sites

taking particular note of enhancing green fingers;

- Surrounding buildings should overlook play areas and public spaces to encourage movement and natural surveillance;
- Open spaces should be equipped with good quality of street furniture to create pleasant seating areas, shaded spaces avoiding hidden spots; and
- The materials and style of any street furniture in the open spaces should be consistent throughout the parish and aim to proudly represent the local character.



Figure 83: Local example of a well-equipped children's play area, Earls Colne.



Figure 84: Positive local example of a public open space with grass areas, large green trees and street furniture overlooked by nearby properties, Halstead Road.

Code.17 Housing mix

It is the aspiration for the parish to provide affordable housing that meet the needs of local residents, and to ensure that new housing are designed with a mix of sizes and tenures to satisfy the diverse needs of a broader range of people as well as multi-generation households. Some design guidelines for new development are:

- New development should propose a mix of housing to include a range of house types and sizes, both developer and self built, to allow for a variety of options and bring balance to the population profile. The needs of the wider age group (older or young residents who wish to downsize, families etc.) should be taken into account;
- Future housing projects should include community led developments to provide truly affordable homes for existing local residents. and
- The quality and architectural design of affordable housing should be of high standards to complement the local vernacular.



Figure 85: Semi-detached houses on Burrows Road with generous setback from the road and front gardens.



Figure 86: Bungalows on large plots on Tey Road.



Figure 87: Recently built 2-storey terrace houses along Reuben Walk.



Figure 88: Flats on De Vere Road with green verges and parking court at front.

Code.18 Building lines and roofline

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guidelines in achieving a good variety of roofs:

- The scale of the roof should always be in proportion with the dimensions of the building itself;
- Monotonous repetitions of the same building elevations should be avoided, therefore subtle (not dramatic) changes in roofline should be ensured during the design process;
- Traditional local roof materials, shapes, and detailing should be considered and implemented where possible in cases of new development; and
- Dormers can be used as a design element to add variety and interest to roofs. They should be proportional to the dimensions of the roof and façade, and their design should be coordinated with the materials and architectural style used on the rest of the elevation.



Figure 89: Positive local example of houses with well-proportioned roof with the building, use of material is typical of Earls Colne, Homefield Way.



Figure 90: Residential street with continuous and relatively consistent roofline with subtle variations in elevation, Queens Road.



Figure 91: The roofline of the dwellings that are located in close proximity to the surrounding countryside is less consistent, as the variations on the eaves are evident, and less continuous as the gaps between the buildings are more irregular, Coggeshall Road.

Code.19 Legibility and wayfinding

When places are legible and well signposted, they are easier for the public to understand, therefore likely to both function well and be pleasant to live in or visit. It is easier for people to orient themselves when the routes are direct and visual landmarks clearly emphasise the hierarchy of the place. Some design guidelines are:

- Buildings which are located at corners, crossroads or along a main road could play a significant role in navigation. For that reason, the architectural style of those buildings could be slightly differentiated from the rest to help them stand out;
- New signage design should be easy to read. Elements like languages, fonts, text sizes, colours and symbols should be clear and concise, and avoid confusion;
- Signage can also help highlight existing and newly proposed footpaths and cycle lanes, encouraging people to use them more;
- Signage should relate well to the setting of the host building, whilst illuminated signage will not be recommended; and
- Applicants are encouraged to use wooden, hand painted and non illuminated signage, avoiding the use of garish or day-glow colours.
- Signage could be strategically located along walking and cycling routes to signalise location of local and heritage assets. For instance, Earls Colne Heritage Museum, and key open spaces such as Chalkney Woods and Brickfield and Long Meadow LNR could be highlighted with signage to encourage people visiting them, as well as the location of important local facilities;
- Obvious and unambiguous features should be designed in new development. Those will help create memorable routes;
- Buildings, as well as public arts, historic signage totems or even an old and sizeable tree could act as landmarks;



Figure 92: Example of signage that could be integrated along footpaths to navigate people towards important destinations.



Figure 93: Positive example of signage to indicate the location of public footpaths, elsewhere in UK. The material of the sign post could fit perfectly into a rural context.

Code.20 Continuity and enclosure

Focal points and public spaces in new development should be designed in good proportions and delineated with clarity. Clearly defined spaces help create an appropriate sense of enclosure - the relationship between a given space (lane, street, square) and the vertical boundary elements at its edges (buildings, walls, trees).

Some design guidelines that should be considered for achieving satisfactory sense of enclosure are:

- When designing building setbacks, there must be an appropriate ratio between the width of the street and the building height. Ratios between 1:2 and 1:3 (building height/street width) will generally create spaces with a strong sense of enclosure;
- Careful positioning of walls, railings, landscaping and paving can achieve visual continuity and well-defined open spaces to link buildings together and define public and private spaces;
- Buildings should be designed to turn corners and create attractive start and end points of a new street or frontage;

- Trees, hedges, and other landscaping features can help create a more enclosed streetscape in addition to providing shading and protection from heat, wind, and rain; and
- In the case of terraced and adjoining buildings, it is recommended that a variety of plot widths, land use, building heights, and façade depth should be considered during the design process to create an attractive streetscape and break the monotony.

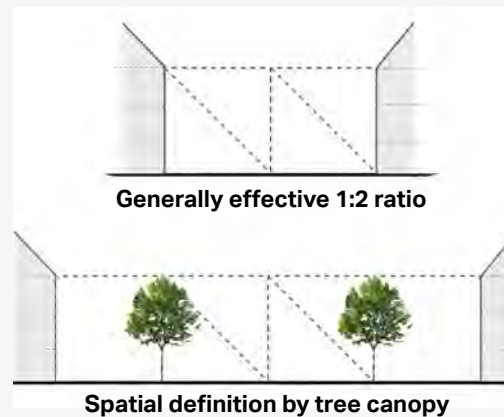


Figure 94: A ratio of 1:2 (top) or 1:3 is generally appropriate for residential streets. In addition, enclosure can be defined by trees instead of buildings (bottom).



Figure 95: The great sense of enclosure along this footpath is given by the close distance of buildings in relationship to the width of the footpath, Poundbury.



Figure 96: A good level of enclosure can be achieved by a slightly meandering road, small building setbacks and physical boundary treatments, Nonacourt Way.

Code.21 Building scale and massing

The average building height in Earls Colne existing settlement is 2.5 storeys. Some guidelines for new development are:

- Buildings should be sympathetic in scale to the context of the site;
- Subtle variations in height should be created by altering eaves and ridge heights to add visual interest. The bulk and pitch of roofs, however, must remain sympathetic to the tree canopy, the local vernacular, and the low-lying character of the town. Another way to achieve visual interest could be by varying frontage widths and plan forms.; and
- The massing of new buildings must ensure a sufficient level of privacy and access to natural light for their occupants and avoid overshadowing existing buildings. New buildings must not significantly compromise existing property views of open and green spaces and the sky.



Figure 97: The building massing along Halstead Road (A1124) is consistent with subtle variations to maintain visual interest.



Figure 99: Well-proportioned massing that is sympathetic of surrounding context and building heights, Oxford Close.



Figure 98: The building massing along Atlas Road in the Mixed Residential areas is consistent with subtle variations.



Figure 100: Largely consistent massing with subtle variations in building heights, Swallow Field.

Code. 22 Corner treatment

Together with the creation of potential local landmarks, one of the crucial aspects of a successful townscape and urban form is the treatment of corners. Because these buildings have at least two public facing façades, they have double the potential to influence the street's appearance. Therefore, the following guidelines should apply to corner buildings.

- Buildings should be designed to turn corners and terminate views. Corner buildings should have both side façades animated with doors and/or windows. Exposed, blank gable end buildings with no windows fronting the public realm should be avoided;
- If placed at important intersections the building should be treated as a landmark and thus be slightly taller or display another built element, signalling its importance as a wayfinding cue;
- Given their prominence, decorative architectural elements should also be considered in treating corner buildings;
- The form of corner buildings should respect the local architecture characters that improves the street scene and generates local pride;
- All the façades overlooking the street or public space should be treated as primary façades. They should have some form of street contact in the form of windows, balconies, or outdoor private space; and
- Streets should have a strong continuity of frontage not only for being visually attractive and enhancing the streetscape, but also for providing high levels of natural surveillance.

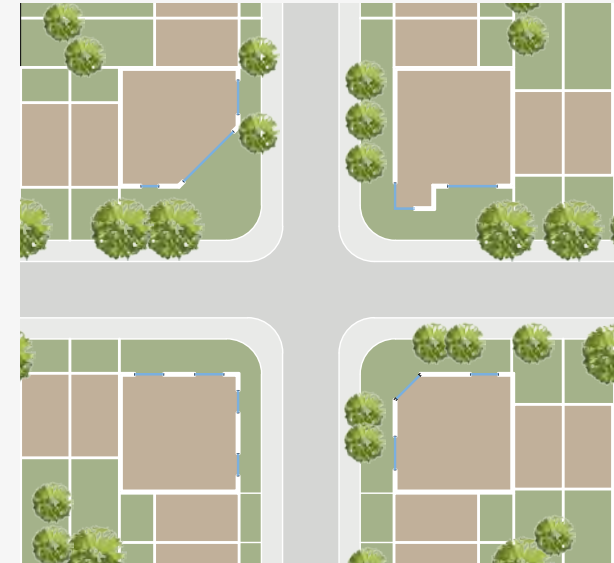


Figure 101: Diagram reflecting design principles for corner buildings.



Figure 102: Local positive example of corner treatment where the building façades overlook the street on both sides, whilst hedges and trees create a curved boundary around the plot offering good visibility for pedestrians, Foundry Lane.

Code.23 Boundary lines and boundary treatment

Aside from the creation of potential local landmarks, treatment of corners, boundary lines and treatments and urban form are also crucial aspects for successful streetscapes. The following guidelines should be applied in new developments:

- Buildings should front onto streets. The building line should have subtle variations in the form of recesses and protrusions, to follow the existing context of Earls Colne. Gaps between buildings are generally encouraged to allow for views to the surrounding countryside;
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street;
- Natural boundary treatments should reinforce the rural character of the village and help define the street. They should be mainly continuous hedges and occasionally low-height walls made of traditional materials found elsewhere in the Parish such as local bricks;
- In the case of edge lanes, natural boundary treatments can act as buffer zones between the site and the countryside and offer a level of protection to the natural environment and open unobstructed views;
- If placed at important intersections the building could be treated as a landmark and thus be slightly taller or display another built element, signalling its importance as a wayfinding cue;
- All the façades overlooking the street or public space should be treated as primary façades; and
- Road layouts should be designed to slow traffic and advantage pedestrians over vehicles.



Figure 103: Local positive example of a slight meandering residential road with green elements to enhance the aesthetics of the environment, Burrows Road.



Figure 104: Positive example of a meandering edge lane where properties with well vegetated front gardens overlook the adjacent open space, Newquay.

Code.24 Materials and architectural details

Earls Colne has a broad palette of architectural styles and details which can act as references for new development and help to avoid any potential loss of identity. Some design guidelines for new development are:

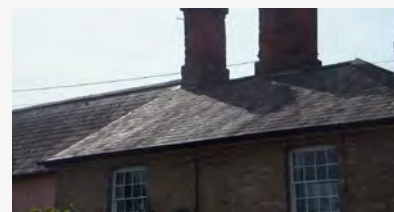
- Architectural design shall reflect high quality local design references in both the natural and built environment and make a valuable contribution to the rural character of the village;
- Appropriate materials may include timber, naturally finished timber boarding, tiles, slate, shingles, brick, flint, pebbledash, pargeting and appropriately coloured plaster render;
- The choice of colour and finish of materials is an important design factor in reducing the impact of the buildings on the surrounding landscape; and

- The use of traditional, natural and preferably locally sourced materials is generally more appropriate than man-made synthetic, pre-coloured materials, as there lack the variation on colour and texture found in natural materials.

Roofing



Peg tiles on pitched roofs on the High Street



Grey slate roof tiles



Local peg tiles



Gabled dormer windows



Gabled roof with chimney



Gabled roof with shed dormer

Walling & boundaries



Timber (dark) boarding



Clay tiles



Traditional pebble dash



Off-white render



Red and yellow brick



Local stone combined with brick



Painted brick



Tudor style timber frame



Low height red brick wall



Iron railing bordering front gardens



Hedges and trees along the boundary lines



Hedgerows along boundary lines

Windows, doors & other details



Bay windows with timber frame



Modern casement windows



Traditional casement window on listed building



Bow window on listed building



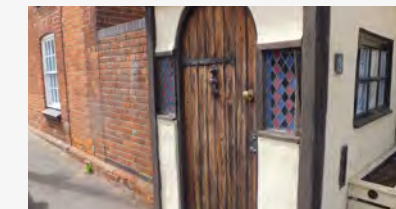
Old bowtop windows



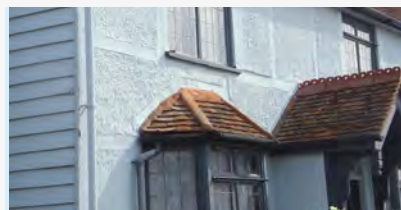
Sash window



Casement windows with painted timber frame



Wooden bow door with stained glass windows



Gabled porch and windows



Gabled porch with timber door



Rooftop solar panels



Small round decorative window

Code.25 Hard landscaping, materials and street furniture

Paved areas are a major element within most developments and their design has a significant impact on the overall appearance, quality and success of a scheme. Care must be taken when choosing appropriate materials and when detailing paved areas as part of the overall design.

High quality materials such as stone, gravel and brick can provide a durable and attractive hard surface, although there is an extensive range of modern materials that can contribute positively to the quality of outdoor spaces if chosen with care. The laying pattern and materials used should make a significant contribution to the overall appearance, quality and success of a scheme. If laying patterns, random bond, broken bond, gauged width, and the European fan should be preferred .

Some guidelines for new development are:

- The public realm should provide high quality paving that is of a cohesive design using a palette of sustainable and durable materials. Permeable paving should

be preferred to contribute to rain water infiltration.

- Materials should be robust, aesthetically attractive and with excellent weathering characteristics defining a sustainable and attractive place for residents and visitors.
- The laying pattern and materials used should make a significant contribution to the overall appearance, quality and success of a scheme.
- Large unbroken areas of a particular surface material should be avoided, especially tarmac. Areas can be made distinctive by using materials of a similar colour but with different textures.
- Larger development projects with more than one developer should employ the same consistent palette of materials and designs.



Figure 105: Examples of quality materials and visually pleasing layout patterns that could be considered for public realm surfacing.

Code.26 Street lighting

Artificial light provides valuable benefits and it makes areas feel more welcoming on a night-time. However, in rural areas, like Earls Colne Parish, street lighting needs to be sensitive to the surroundings and issues of light pollution must be avoided. The 'dark skies' character of the countryside should be protected since it benefits both people and wildlife.

Therefore, any new development should minimise impact of lighting within the hamlets and reduce light pollution that disrupts the natural habitat and human health. The following guidelines aim to ensure there is enough consideration given at the design stage:

- Ensure that lighting schemes will not cause unacceptable levels of light pollution particularly in intrinsically dark areas. These can be areas very close to the countryside or where dark skies are enjoyed;

- Consider lighting schemes that could be turned off when not needed ('part-night lighting') to reduce any potential adverse effects;
- Foot/cycle path light should be in harmony with surrounding rural landscape. Lightings, such as solar cat's-eye lighting, reflective paint and ground-based lighting could be introduced;
- Choice of lighting should be energy-efficient and sustainable. The installation of motion sensors on the lights should be encouraged; and
- Any new developments and house extensions designs should encourage to use natural light sources.



Figure 106: Example of a foot/cycle path which is lit by solar cat's-eye providing some light for pedestrian and cyclists without creating any disturbance to the nearby properties or unacceptable levels of light pollution.

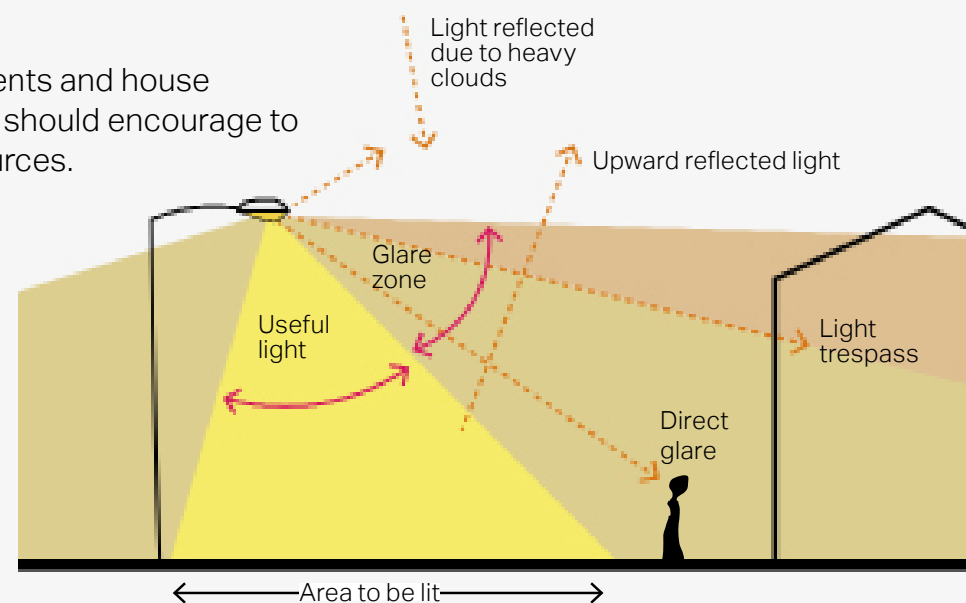


Figure 107: Diagram to illustrate the different components of light pollution and what 'good' lighting means.

It is a general consensus within Earls Colne village that any opportunity on environmental sustainability needs to be taken into consideration. Therefore, the Codes 27-30 summarise some guidelines that could be applicable to any new development, as well as be retrofitted into the existing built environment.

Code.27 Minimising energy use

Buildings contribute almost half (46%) of carbon dioxide (CO2) emissions in the UK. The government has set rigorous targets for the reduction of CO2 emissions and minimising fossil fuel energy use.

Starting with insulation, there is a good number of energy efficient technologies that could be incorporated in buildings. The use of such principles and design tools is strongly encouraged to futureproof buildings and avoid the necessity of retrofitting.

Energy efficient or eco design combines all around energy efficient appliances and lighting with commercially available renewable energy systems, such as solar electricity and/or solar/ water heating.

F.110 features an array of sustainable design features. Those on the top show the features that should be strongly encouraged in existing homes, while those on the bottom show additional features that new build homes should be encouraged to incorporate from the onset.

Code.28 Lifetime and Adaptability

'Lifetime' homes means designing in the flexibility and adaptability needed to allow for easy incorporation of wheelchair accessibility, addition/removal of internal walls, and ease of extension - both vertically and horizontally. This is particularly important for the aged, infirm or expanding/contracting families who may be dependent on nearby friends and family for emotional and physical support.



Figure 108: Use of shingle-like solar panels on a slate roof, with the design and colour of the solar panels matching those of the adjacent slate tiles.



Figure 109: Positive example of implementing solar panels since the design stage.

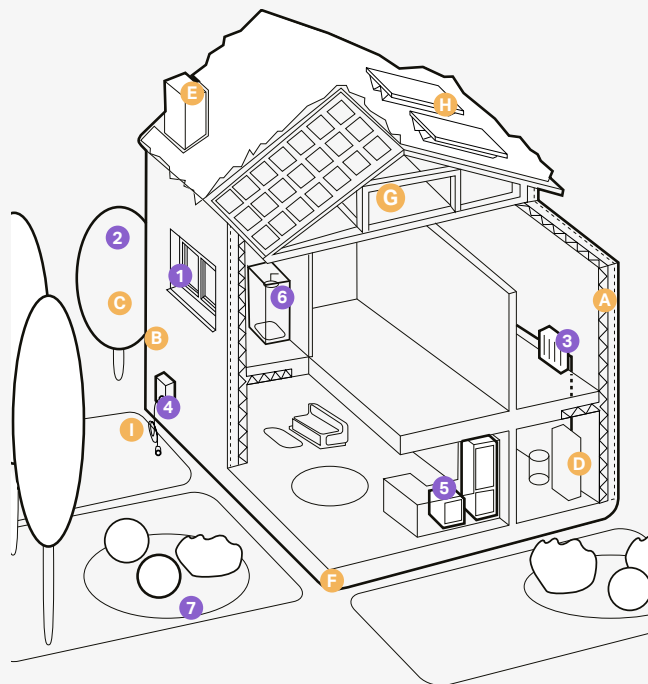












Figure 110: Diagram showing low-carbon homes in both existing and new build conditions.

Existing homes

- 1  **Insulation**
in lofts and walls (cavity and solid)
- 2  **Double or triple glazing with shading**
(e.g. tinted window film, blinds, curtains and trees outside)
- 3  **Low-carbon heating**
with heat pumps
- 4  **Draught proofing**
of floors, windows and doors
- 5  **Highly energy-efficient appliances**
(e.g. A++ and A+++ rating)
- 6  **Highly waste-efficient devices**
with low-flow showers and taps, insulated tanks and hot water thermostats
- 7  **Green space (e.g. gardens and trees)**
to help reduce the risks and impacts of flooding and overheating

Additional features for new build homes

- A  **High levels of airtightness**
- B  **Triple glazed windows and external shading**
especially on south and west faces
- C  **Low-carbon heating**
and no new homes on the gas grid by 2025 at the latest
- D  **More fresh air**
with mechanical ventilation and heat recovery, and passive cooling
- E  **Water management and cooling**
more ambitious water efficiency standards, green roofs, rainwater harvesting and reflective walls
- F  **Flood resilience and resistance**
e.g. raised electrical, concrete floors and greening your garden
- G  **Construction and site planning**
timber frames, sustainable transport options (such as cycling)
- H  **Solar panel**
- I  **Electric car charging point**

Code.29 Minimising construction waste

As part of the environmental management system it is important that the waste generated during construction is minimised, reused within the site or recycled.

Developers should plan to re-use materials by detailing their intentions for waste minimisation and re-use in Site Waste Management Plans. The actions that this plan will include are:

- Before work commences, the waste volumes to be generated and the recycling and disposal of the materials will be described;
- On completion of the construction works, volumes of recycled content purchased, recycled and landfilled materials must be collated;
- Identify materials used in high volumes; and
- The workforce should be properly trained and competent to make sure storage and installation practices of the materials is done under high standards.



Figure 111: Diagram to illustrate the 4 main stages where waste management practices can be implemented.

Code.30 Recycling materials and buildings

To meet the government's target of being carbon neutral by 2050, it is important to recycle and reuse materials and buildings. Some actions for new development are:

- Reusing buildings, parts of buildings or elements of buildings such as bricks, tiles, slates or large timbers all help achieve a more sustainable approach to design and construction;
- Recycling and reuse of materials can help to minimise the extraction of raw materials and the use of energy in the production and transportation of materials; and
- Development should also maximise the re-use of existing buildings (which often supports social, environmental and economic objectives as well. Any new developments and house extensions designs should encourage to use natural light sources.

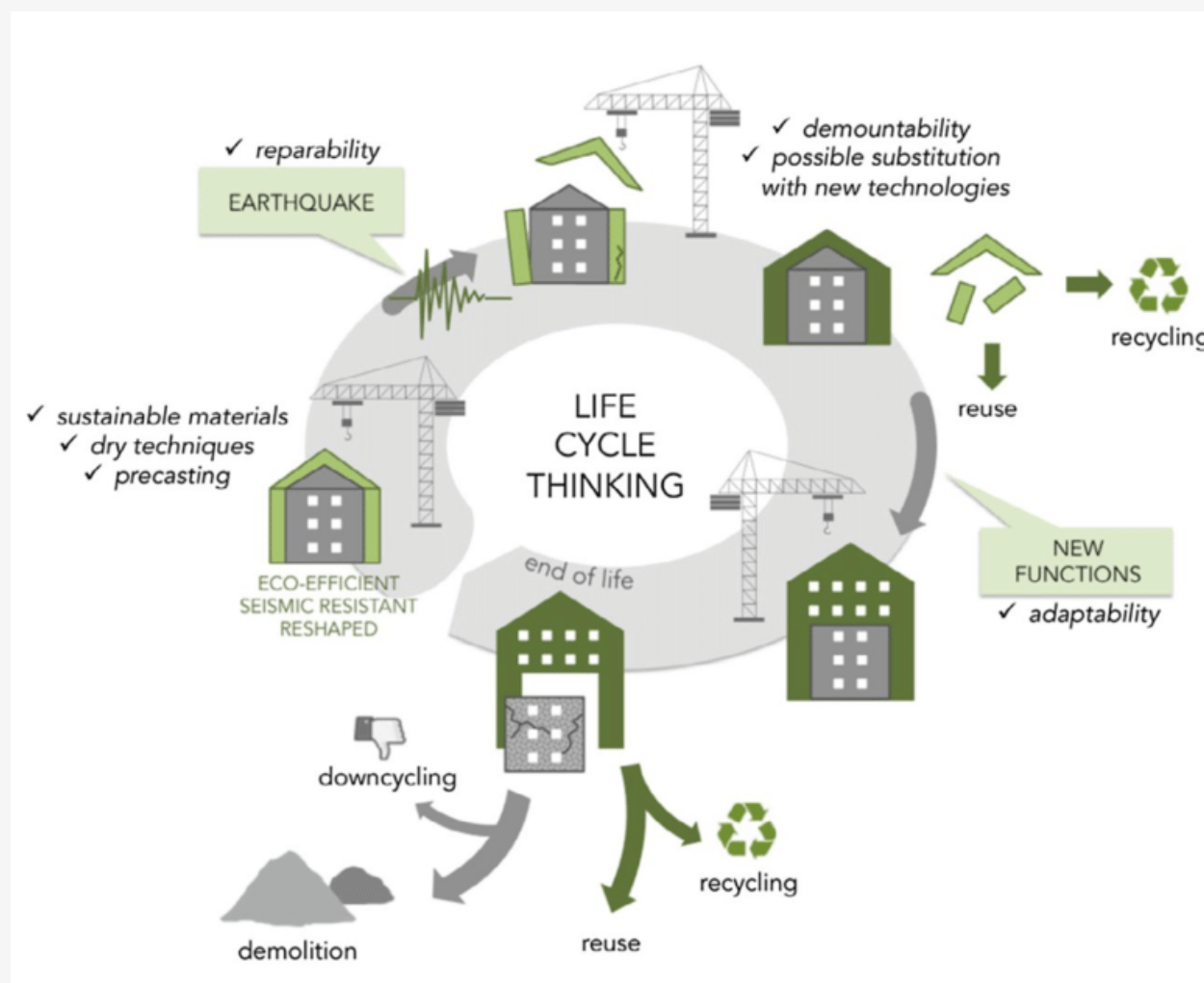


Figure 112: Diagram to illustrate the life cycle thinking for recycling materials and buildings. (Source: https://www.researchgate.net/publication/319464500_Combining_seismic_retrofit_with_energy_refurbishment_for_the_sustainable_renovation_of_RC_buildings_a_proof_of_concept)

Checklist

Because the design guidance and codes in this document cannot cover all design eventualities, this chapter provides a number of questions based on established good practice against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has considered the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in all proposals. These are listed under 'General design guidance for new development'. Following these ideas and principles, several questions are listed for more specific topics on the following pages.

1

General design guidelines for new development:

- Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the character of streets, greens, and other spaces;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Positively integrate energy efficient technologies;
- Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

Street grid and layout:

- Does it favour accessibility and connectivity? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists and those with disabilities?
- What are the essential characteristics of the existing street pattern; are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

3 (continues)

Local green spaces, views & character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?
- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

3

Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Can green space be used for natural flood prevention e.g. permeable landscaping, swales etc.?
- Can water bodies be used to provide evaporative cooling?
- Is there space to consider a ground source heat pump array, either horizontal ground loop or borehole (if excavation is required)?

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between hamlets?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

5 (continues)

Buildings layout and grouping:

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?

5

Buildings layout and grouping:

- Subject to topography and the clustering of existing buildings, are new buildings oriented to incorporate passive solar design principles, with, for example, one of the main glazed elevations within 30° due south, whilst also minimising overheating risk?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night? This is to reduce peak loads. And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

6

Building line and boundary treatment:

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Has the appropriateness of the boundary treatments been considered in the context of the site?

7

Building heights and roofline:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale?
- If a higher than average building(s) is proposed, what would be the reason for making the development higher?
- Will the roof structure be capable of supporting a photovoltaic or solar thermal array either now, or in the future?
- Will the inclusion of roof mounted renewable technologies be an issue from a visual or planning perspective? If so, can they be screened from view, being careful not to cause over shading?

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood, and does it have an adverse impact on neighbouring properties in relation to privacy, overbearing or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In case of side extensions, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?
- Does the extension offer the opportunity to retrofit energy efficiency measures to the existing building?
- Can any materials be re-used in situ to reduce waste and embodied carbon?

9

Building materials & surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

9

Building materials & surface treatment:

- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design? For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?
- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

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04

Delivery

Delivery

The Design Guidelines & Codes will be a valuable tool in securing context-driven, high quality development in Earls Colne, especially on potential sites that might come forward in the future. They will give more certainty to both developers and the community in securing developments that are designed to the aspirations of the community and potentially speed up the planning process.

The opposite table summarises the various ways that this document can be used by each actor in the planning and development process.

Actors	How they will use the design guidelines
Applicants, developers, & landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 01: delivery



About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations world-wide. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, our work is transformative, differentiated and vital. See how we deliver what others can only imagine at aecom.com and [@AECOM](https://www.instagram.com/AECOM).

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