bluepencil

Design Code

15.06.2023

Extension to Flitch Green, North of Baynard Avenue - Essex

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Introduction

Aerial photograph showing the application site outlined in red

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1.1 Introduction

This document has been prepared on behalf of Baker Metson Ltd, by Bluepencil Designs Ltd Chartered Architects, with input from:

- The Landscape Partnership - Landscape
- GL Hearn - Planning
- Create - Highways, Transport, Drainage and Energy

1.2 The purpose of this document

This document sets out Design Codes in order to set a standard of quality and practice for determining the reserved matters applications that follow the Outline Application.

It is submitted as part of the hybrid planning application for development of land north of Baynard Avenue, Flitch Green, Essex. The outline application is for: The construction of up to 72 no. dwellings, a community building with flexible uses falling within class E (which may include a cafe/wine bar and shared work space), new vehicle access, site-wide highways works, and provision of associated landscaping and amenity space (including SuDS).

The structural landscape forming the western boundary and the vehicular access from Baynard Avenue are submitted in full with all matters for approval.

This document must be read in conjunction with the approved Parameter Plans.

i Within this Design Code are images and plans that are for illustrative purposes only. They are intended to show how the development *could* look and their role is indicative. These illustrative elements are clearly marked with a green lower case letter *i* in a green box.

M All element within this Design Code that are mandatory ‘rules’ are marked with a red capital letter M in a red box. These rules (such as road widths, distances between buildings, density etc.) and are the design codes which must be followed by designers of the reserved matters application/s in due course.

1.3 The Site

The aerial Photograph on the facing page shows the application site shaded in red. It lies west of the development known as Flitch Green and south of the Flitch Way which separates the site from Little Dunmow to the north. Great Dunmow lies to the north west and Felsted to the south east.

The Design Code

What is a Design Code?

Design code: A set of illustrated design requirements that provide specific, detailed parameters for the physical development of a site or area. The graphic and written components of the code should build upon a design vision, such as a masterplan or other design and development framework for a site or area.

The National Model Design Code describes a design code as a set of simple, concise, illustrated design requirements that are visual and numerical wherever possible to provide specific, detailed parameters for the physical development of a site or area.

The National Model Design Code is a toolkit to guide planning authorities on the design parameters and issues that need to be considered and tailored to their own context when producing design codes and guides as well as methods to capture and reflect the views of local communities.

The proposed design code for the land west of Baynards Avenue, Flitch Green, required by UDC, will operationalise the design guidelines and frameworks which have been established through the design process. The Design and Access Statement accompanying the outline planning application has developed that vision and this design code will add further detail.

It will be accompanied by a design rationale that explains the objectives, with the design code providing instructions to the appropriate degree or precision of the more detailed design work.

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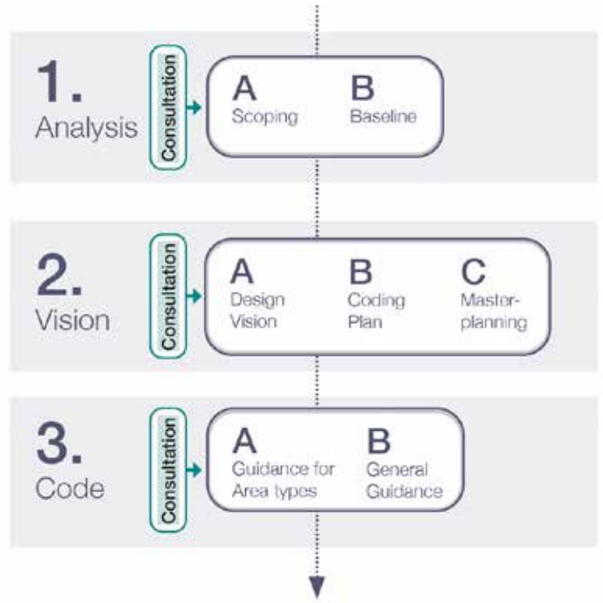
In line with the National Model Design Code the design code for the land west of Baynards Avenue, Flitch Green will set a standard of quality and practice for determining the planning applications that will follow this Outline Application and will include:

- The layout of the new development including street pattern
- How landscaping should be approached including the importance of streets being tree lined
- The factors to be considered when determining whether facades of buildings are of sufficiently high quality
- The environmental performance of place and buildings ensuring they contribute to net zero targets
- That developments should clearly take account of local vernacular and heritage, architecture and materials.



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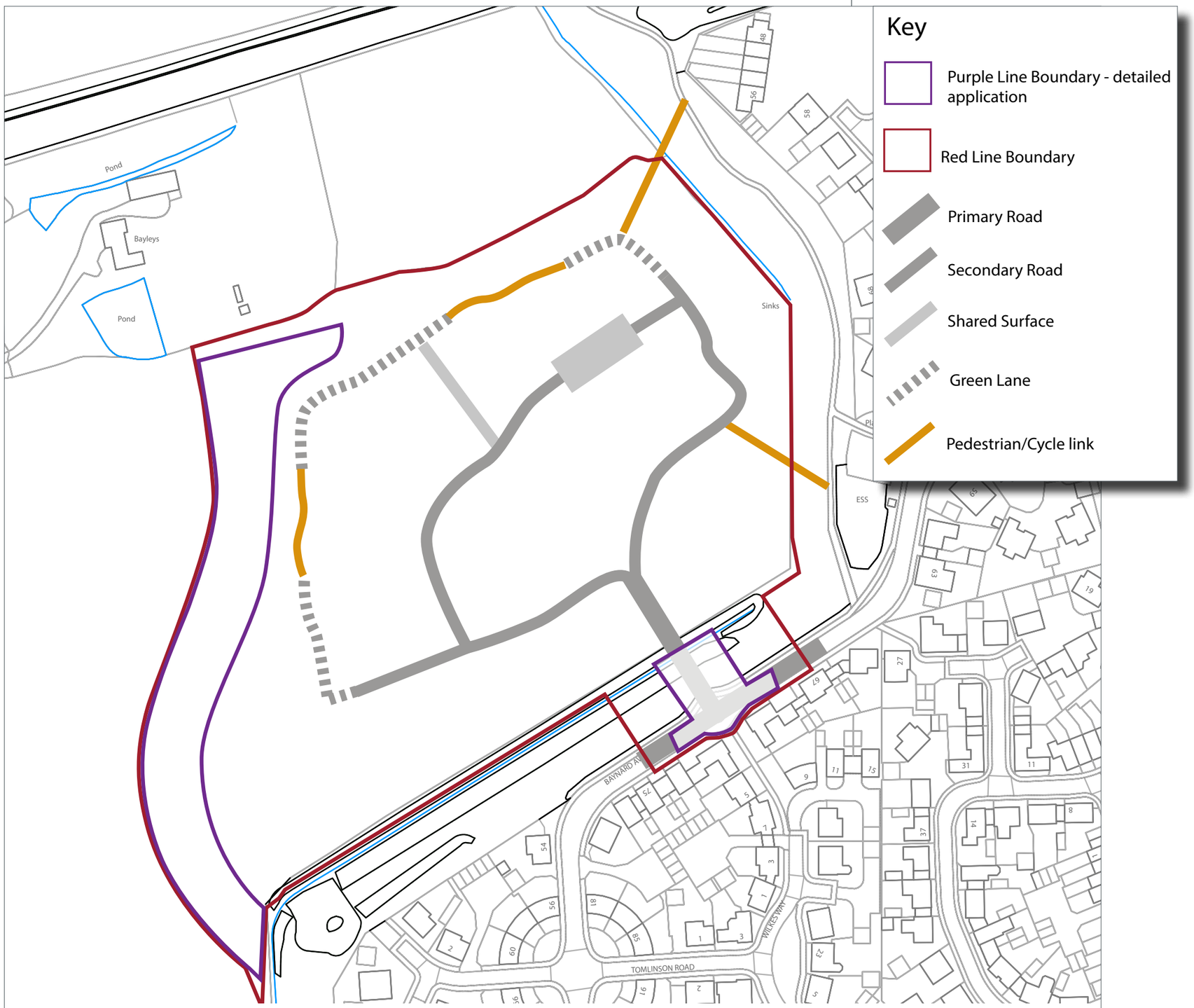
The Street Codes

The Streets Coding Plan



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The Streets Coding Plan

The Streets Coding Plan adjacent, identifies the street types that are coded on the following pages. This is not a Parameter Plan and is for illustrative purposes only, It is based on the layout shown on the Outline Planning Application illustrative layout (reproduced, for information, in the appendix of this document).

The plan shows three street types as follows:

1. Secondary Street
2. Shared Surface
3. Green Lane

The Street Coding Plan is used as a way of locating the three different street types (in red on the following pages). These street types are coded in this section of the document.

Each Street type has a table of mandatory codes and an illustrative cross-section which shows how the codes could be applied.

The access road within the purple line is not coded because this is part of the detailed application. The detailed drawing of the access can be found in the appendix of this Design Code.

All street types must comply with the Essex Design Guide.

If designers deviate from the mandatory codes, they must provide their rationale for doing so and must get the approval and agreement of the local authority prior to submission of reserved matters applications.

Secondary Street

M

The Secondary Streets connect the internal roads to Baynards Avenue.
The carriageway is 5.5m with 2m footways on either side of the carriageway.

The Secondary Street is designed to 20 mph speeds. Access and egress to and from private drives is permitted directly off the secondary street.

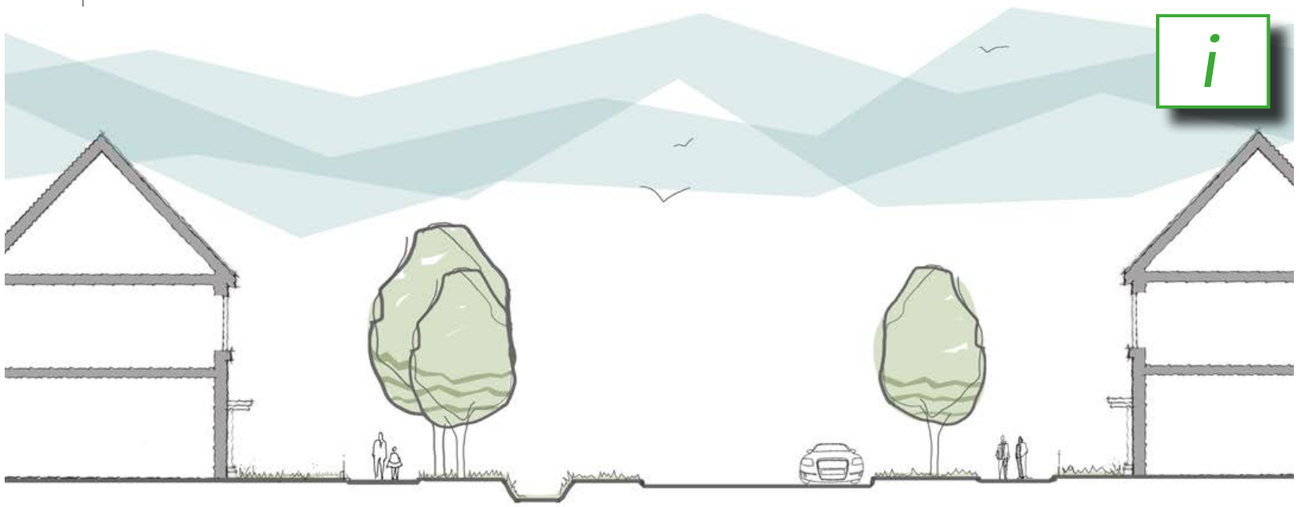
The predominant surface material must be tarmac. Traffic calming features must be raised tables or road narrowing, with concrete sets or paving to create a variation in colour and texture. The precise location of traffic calming features will be determined at reserved matters stage but they must be located at junctions and changes of street type, such as the transition between the secondary road and the shared surface

Design Codes

M

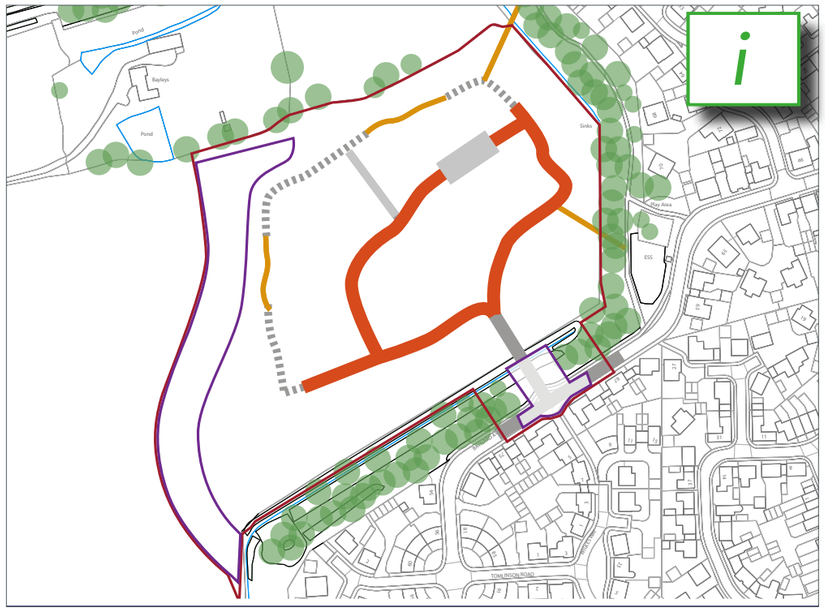
- 12m minimum distance between buildings
- 2 x 2m footpaths, may be separated from carriageway by a variable width verge.
- 5.5m carriageway
- Direct access and egress permitted directly onto street
- Materials to be predominantly tarmac with parking bays and traffic calming features to be surfaced in setts or paving.

i



Illustrative section through Secondary Street

i



Secondary streets (in red) location plan

Shared Surfaces

M

Shared Surfaces (or Mews) branch off Secondary Streets and were traditionally located behind grand houses. Shared surfaces can be of variable width and can include trees and plants

Vehicles must to be able to manoeuvre safely and residents must able to open windows and doors safely without obstructing movement of vehicles, pedestrians or cyclists.
The start of a Shared Surface must be clearly marked by a change in material and/or texture to signal a change of street type and assist drivers.

The inclusion of a section of shared surface in the layout will contribute to traffic calming and help to create a sense of place.

Design Criteria

M

- 9m minimum distance between building facades
- Shared Surface must include 2m service strips
- Access and egress permitted directly onto Shared Surface
- Must be designed to meet requirements for fire tenders and waste collection vehicles
- Materials to be a quality material such as setts or cobbles and must be approved by UDC. Tarmac will not be acceptable.

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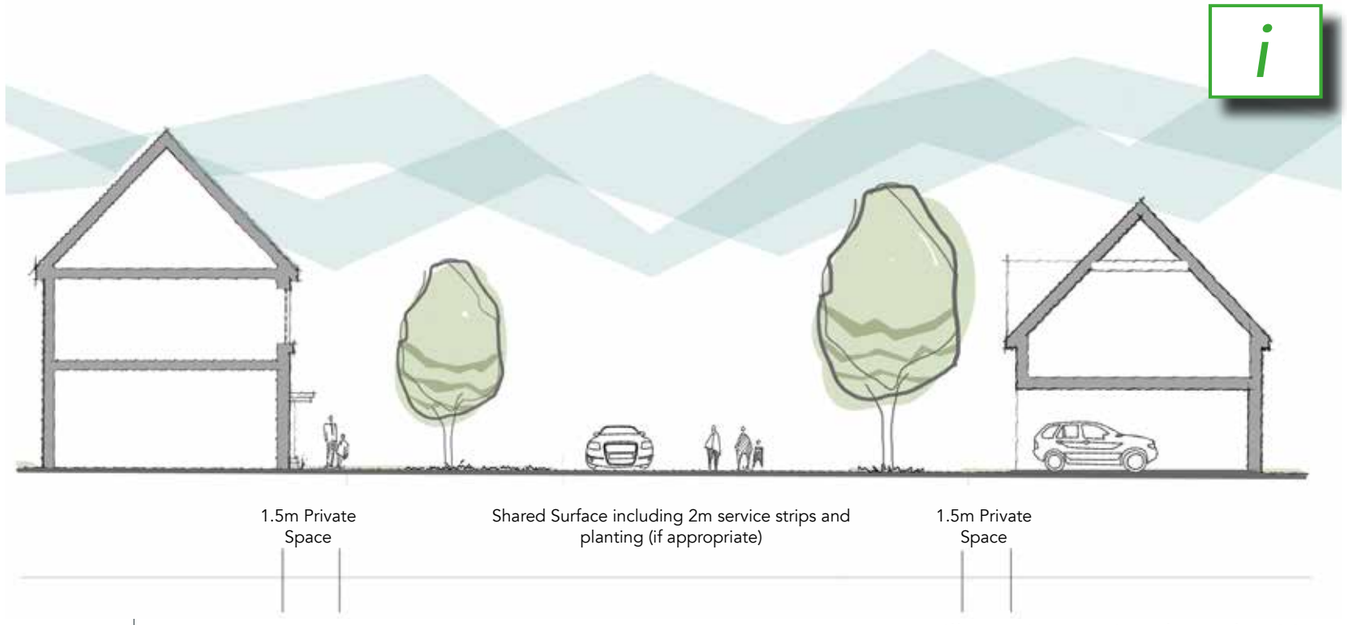


Illustrative section through a Mews

i

Shared surfaces (in red) location plan

Green Lanes

M

Green Lanes are found on the edges of the development where the built from meets the Green Infrastructure. Green Lanes branch off secondary streets and shared surfaces and have a footway on the built side only.

Green Lanes must be a quality material such as bonded gravel, or permeable paving where a 'soft' edge to the development is required. Timber knee rails may be used to prevent vehicles from parking on the grass. Visitor parking may be in bays as shown in the image below. Private drives branch off Green Lanes. Typically the speed limit on these lanes would be 5mph.

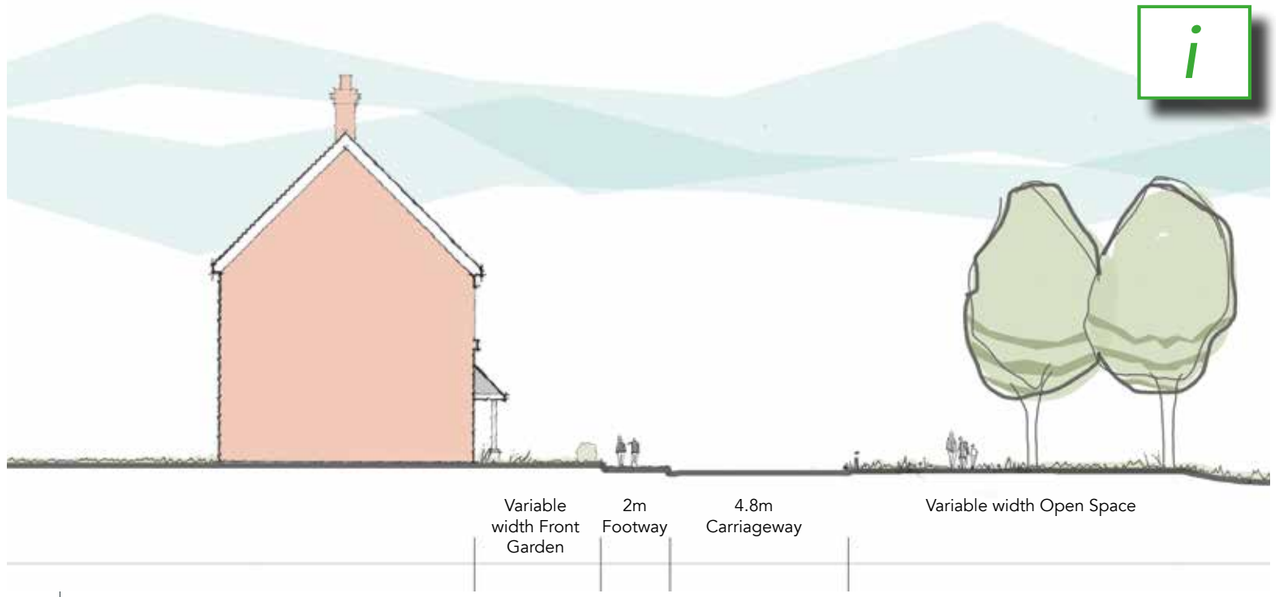
The layout must be designed to prioritise walking and cycling and the low speed limits of the many Green Lanes shown on the layout encourages this. Green Lanes help to create a sense of place and foster a sense of belonging.

Design Codes

M

- Buildings to one side of the lane only
- 1 x 2m footpath on the building side of the lane
- 4.8m carriageway
- 3m minimum swale, if required, not necessarily immediately adjacent to the lane
- Access and egress permitted directly onto lanes
- Materials to be a quality material such as permeable paving or bonded gravel.

i



Illustrative section through a Green Lane

i

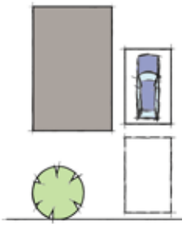
Green Lanes (in red) location plan

Parking - Access and Movement

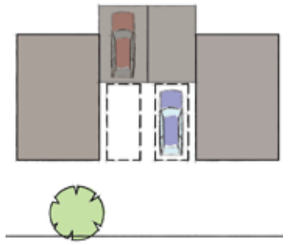
M

Guidance from the Essex Design Guide states that proposed developments require a minimum of:

· 1 space for 1-bedroom dwellings;
· 2 spaces for 2-3 bedroom dwellings;
· 3 spaces for 4+ bedroom dwellings;
· 0.25 spaces per dwelling as visitor allocation;
· 2 secure covered cycle spaces per dwelling (this can be provided through the provision of a secure area within the curtilage of a dwelling);
· If no secure space is provided within the curtilage of a dwelling, then:
- 2 covered/secure cycle spaces per dwelling
- 2 covered/secure cycle spaces per 8 dwellings;
· 1 PTW space per 20 vehicular parking spaces (for the first 100), then 1 PTW space per 30 vehicular parking spaces afterwards;
· Disabled spaces are not required if parking provision is within curtilage of a dwelling.



Detached



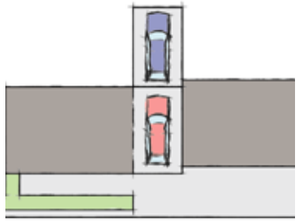
Semi detached integral

On Plot parking

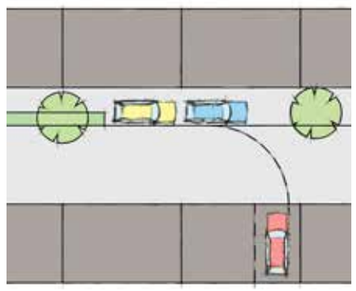
On plot parking may be in garages, integral or surface. Triple tandem parking will not be acceptable. Garages must be of sufficient size to accommodate cycle and refuse storage. The plan on the facing page shows an acceptable garage size.

Parking requirements and surface parking bays must be designed with Building Regulations Part M4 (2) in mind.

Parking arrangements must satisfy Secure By Design criteria.



Semi detached Surface

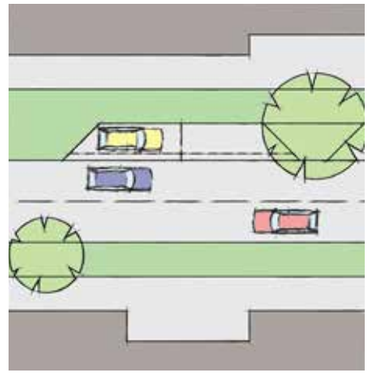


Mews

M

On Street

The Location of on street visitor parking will be determined at reserved matters stage. However the intention is to provide on street visitor parking in pairs within parking bays as shown on the adjacent illustration, or at the side of Green Lanes as shown in the Green Lane example street type earlier in this section of the document.



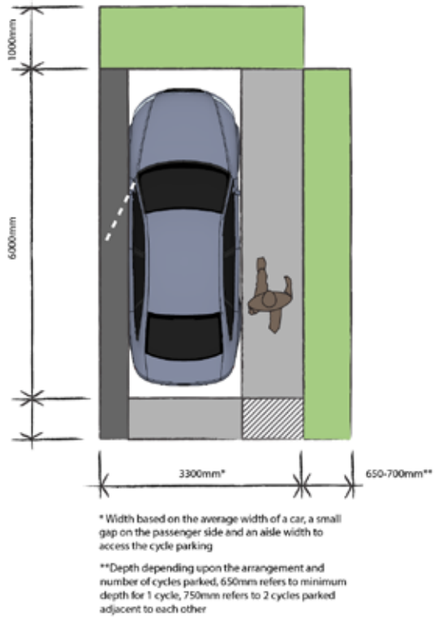
On Street in pairs of bays

Cycle Parking - private

All dwellings will be designed to provide safe cycle parking. This will be in garages as illustrated or within secure structures on plot.

Cycle Parking - public

Public cycle and motorised vehicle parking under covered secure structures will be provided close to the community building. The use of cycles is very much encouraged and the layout must be designed with this in mind and must provide for safe routes and secure storage.



Vehicle Charging Points

All dwellings will be provided with electrical vehicle charging points.

Community Parking

There will be short term limited parking provided in front of the community building for visitors

The parking bays will mostly be provided for Blue Badge holders.

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The Area Codes

Design References

The images on these pages show how the analysis work could shape the layout by taking its references from the surrounding villages studied. This work was presented and well received at the second pre-application meeting with UDC.

Finchingfield Characteristics:
houses grouped around a pond

Felsted Characteristics:
linear form with courtyards

Stebbing Characteristics:
tight knit streets

Little Dunmow Characteristics:
houses on a rural edge

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Character Areas

The Character Area plan shows four different character areas. These areas are identified on the plan below by coloured circles. Each area provides the opportunity to create different character areas that reflect the characteristics of the surrounding villages as studied and set out in the Design and Access Statement. In this way the design will be appropriate for its context, sympathetic to its surroundings and with its own legible identity.

Purple - Central
Tight knit, predominantly 2 storey with undulating ridges and buildings at the back edge of pavements as, found in Stebbing.

Blue - Woodland Edge
Informal, woodland edge, predominantly 2 storey, low density with dwellings on the rural edge, as found in Little Dunmow.

Orange - Courtyard
Formal, predominantly 2 storey with some three storey in the form of a courtyard, reflecting the Essex barn aesthetic, as found in and around Felsted

Pink - Village Edge
Informal, predominantly 2 storey with buildings facing the village green, as found in Finchingfield

The following pages set out the design codes for each character area including boundary treatments, the use of materials on buildings and streets, storey heights and density. Planting will be coded in the Landscape Codes section of this document.

If designers deviate from the mandatory codes, they must provide their rationale for doing so and must get the approval and agreement of the local authority prior to submission of reserved matters applications.

Central - Design Codes

M

This Character Area area shows traditional architecture with locally sourced materials reflecting the aesthetic of the surrounding villages, with buildings at the back edge of pavements..

Design Codes

M

Materials:
Predominantly buff and red brick with some pastel coloured render. Plain tile or slate roofs.

Boundary Treatments:
Predominantly walls and railings with small areas of low level planting and occasional street trees.

Road Surfaces:
Predominantly tarmac with buff or grey coloured setts in places.

Reference: Stebbing

Historic Example

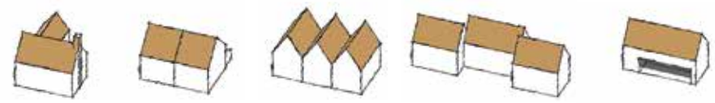
i

Design Codes

M

Density:
Between 20 and 30 dwellings per hectare

Typologies
Detached, Semi detached and Terraced, with some Courtyards and Coach Houses.



Storey Heights:
Up to 2.5 stories.

Landscape Character:
Hard landscape with shrubs and small street trees

Woodland Edge - Design Codes

M

This Character Area shows traditional architecture with local materials and modest architectural features and details reflecting the historic farm houses and agricultural buildings in the area.

Design Codes

M

Materials
Predominantly white weatherboard with red brick and light colour render, some black weatherboard on garages. Plain tile or slate roofs.

Boundary Treatments
Post and rail fences, hedges and open front gardens to reinforce the rural character. Cheshire railings at the interface between the housing and the woodland edge.

Road Surfaces
Bonded gravel or sets in light buff. Permeable paving where appropriate.

Reference: Little Dunmow

i

Design Codes

M

Density:
Between 15 and 20 dwellings per hectare

Typologies
Detached, Semi detached and Terraced.

Storey Heights:
Up to 2.5 stories.

Landscape Character:
Soft landscape with indigenous species.

Courtyard - Design Codes

M

This Character Area area shows its references from Felsted, noted for its school and courtyard arrangements of larger scale buildings than the other villages studied. This area includes the three storey apartments, as identified on the Density and Storey Heights Parameter Plan.

Design Codes

M

Materials:
Predominantly buff and red brick with some black boarding. Iron details and metal features in places. Plain tile or slate roofs.

Boundary Treatments:
Predominantly walls and railings with small areas of low level planting and occasional street trees.

Road Surfaces:
Predominantly buff coloured setts with some grey in places. Resin bonded gravel edged with sets and some tarmac in places.

Reference: Felsted

i

Design Codes

M

Density:
Between 20 and 40 dwellings per hectare

Typologies
Detached, Semi detached Terraced, Apartments, with some Courtyards and Coach Houses.

Storey Heights:
Up to 3 stories.

Landscape Character:
Hard landscape with shrubs and small street trees

Village Edge - Design Codes

M

This Character Area area shows buildings arranged to overlook and enclose the 'village green'. Like Finchingfield, the houses have varying in ridge heights but a continuous building line.

Reference: Finchingfield

Design Codes

M

Materials:
Predominantly red brick and pastel coloured render with some black boarding on garages. Plain tile or slate roofs. Limited areas of flint.

Boundary Treatments:
Small front gardens with low walls and hedges with low level planting and occasional street trees.

Road Surfaces:
Predominantly tarmac with grey or buff coloured setts in places on traffic calming features and parking bays.

i

Design Codes

M

Density:
Between 15 and 30 dwellings per hectare

Typologies
Detached, Semi detached, and Terraced.

Storey Heights:
Up to 3 stories.

Landscape Character:
Hard landscape with shrubs and small street trees

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Indicative Street Elevations (for illustrative purposes only)

The Indicative Street Elevations show the scale, height and massing of the buildings and their relationship to one another.

A combination of red brick under red plain tiles and buff brick under slate with some render. There are also a few houses that are white weatherboard clad, to reflect the more modest agricultural buildings of historic Essex. The apartment building shows an Essex barn aesthetic with its black weatherboard and slate roof

The street-scape, building design and use of materials have been carefully considered and chosen as a result of the research and analysis carried out and presented in the first part of the Design and Access Statement. This work has helped to shape design codes that are appropriate to the site and its location and is sensitive to its context. In this way it will knit into the existing fabric of the village rather that appearing to have been 'placed' there.

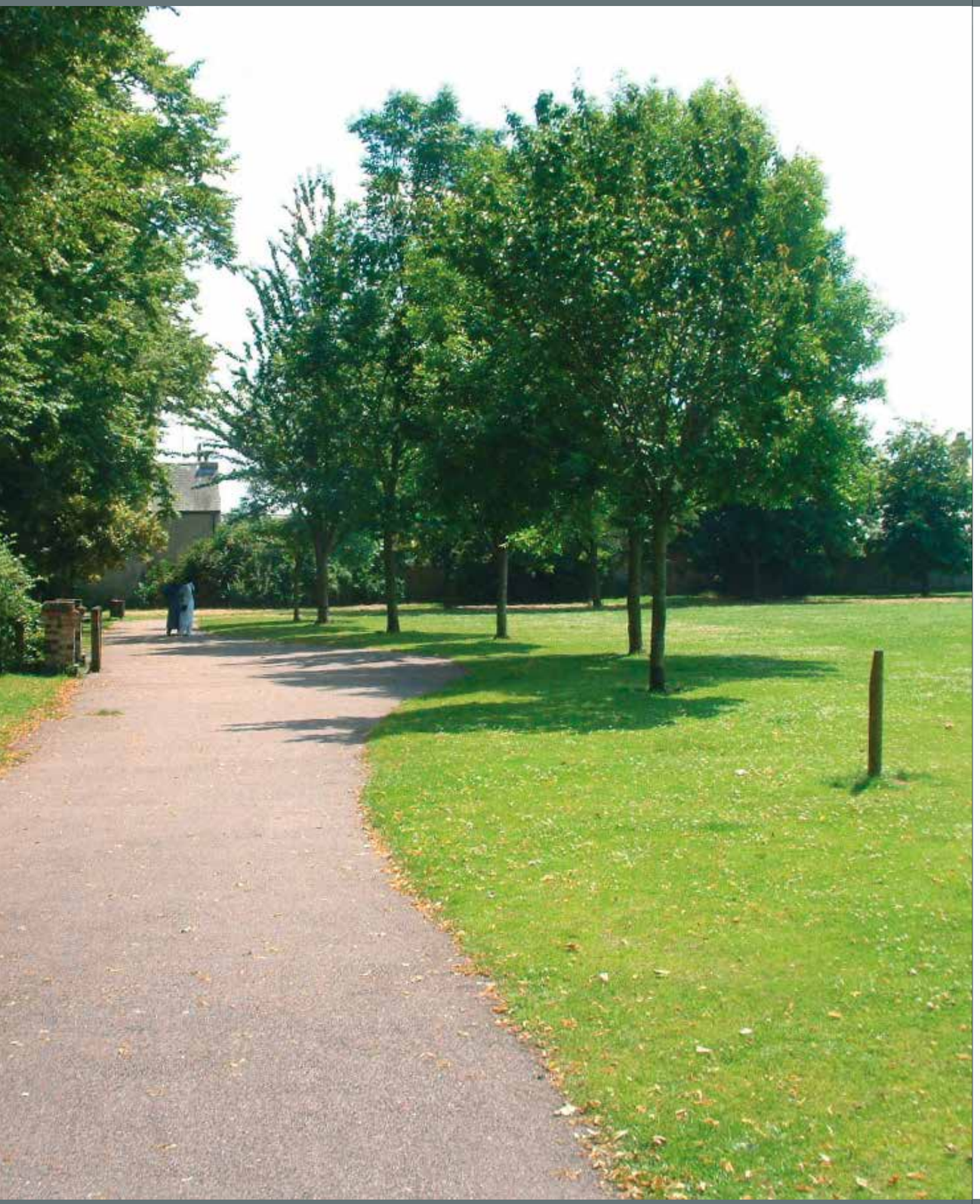
These indicative elevations show how the street scenes might look if designed according to the design codes.

Elevation AA

Elevation BB

Elevation CC

Street Elevation Location Plan



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4

The Landscape Codes

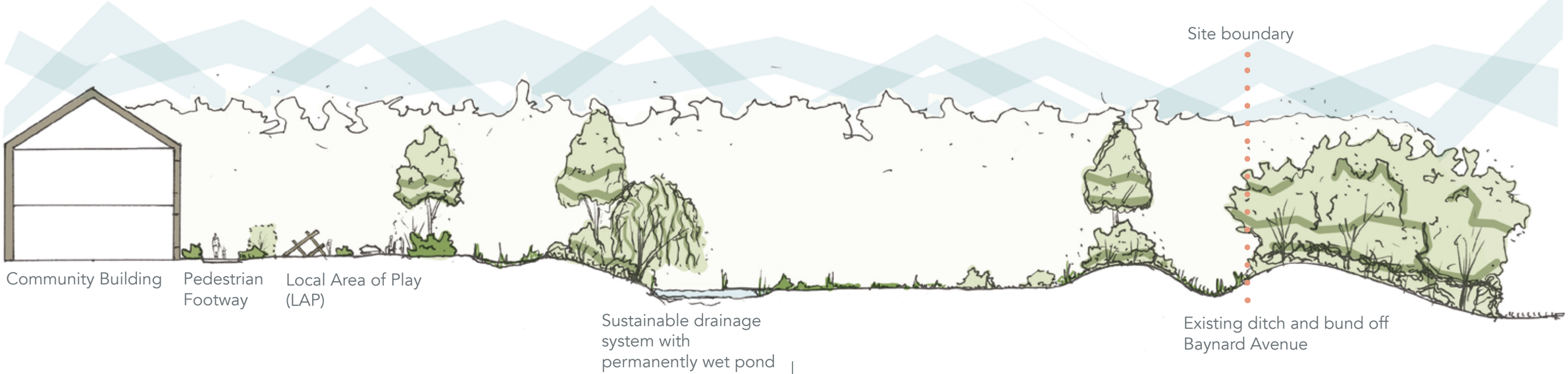
The Landscape Coding Plan

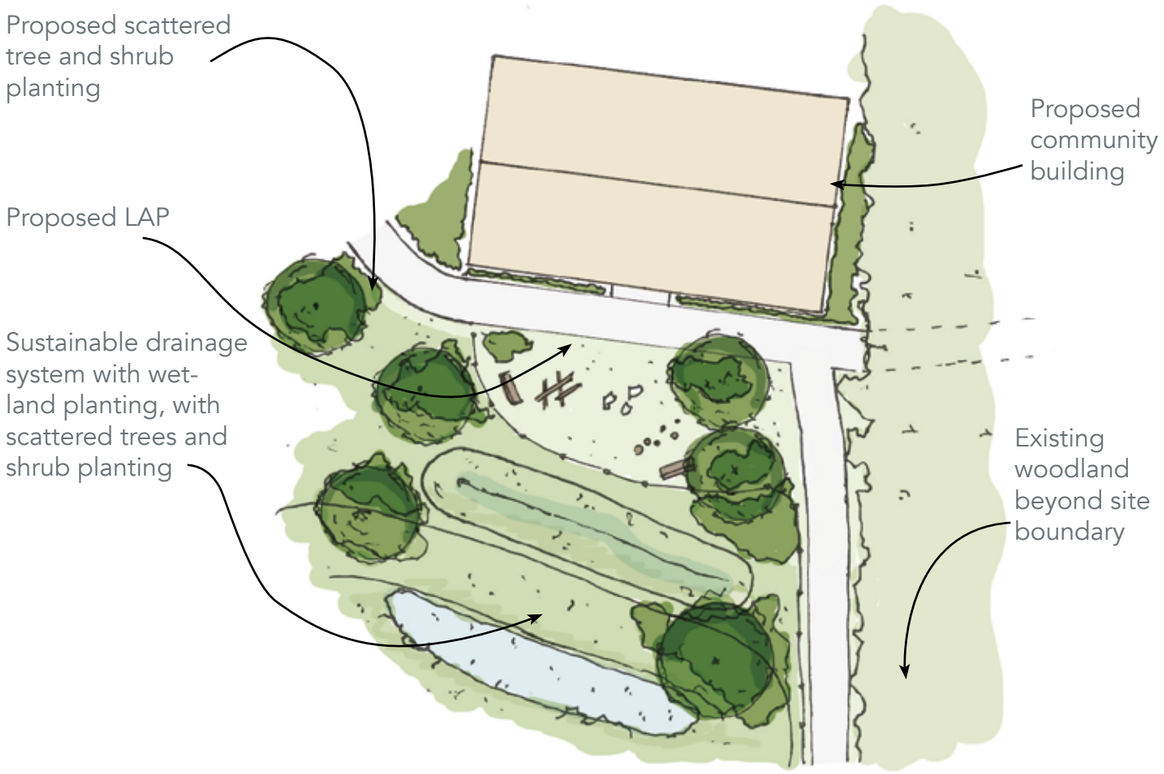
Green and Blue Infrastructure

The provision of green and blue infrastructure elements are an integral component of the proposed development. The location of the main features are illustrated on the Landscape Coding Plan opposite and include:

- A 20m wide native woodland belt is to be planted to the western boundary and connecting with established woodland areas to the north and south. (NB This woodland belt forms part of the detailed submission showing layout and species as submitted with the application on Drawing E21858-TLP-400).
- Existing trees within the site to the northern boundary are to be fully retained and protected in accordance with an Arboricultural Impacts Assessment and Arboricultural Method Statement (documents to be submitted under reserved matters).
- Existing tree belts outside the site boundary to the east and south are to be retained except for locations to provide the proposed vehicular site access from Baynard Avenue and the pedestrian cycle link to the north-east.
- Open space areas are to be provided between the residential areas and perimeter tree belts to the north, west and south-east to comprise informal open space including: native tree and shrub planting, species rich grassland and amenity grassland.
- A buffer of native trees and shrub planting to the southern boundary (west of the vehicular access point) to safeguard the tree belt and ditch.
- SuDS features in the form of attenuation basins with both wet and dry elements and associated planting to the south-west and south-east.
- A Local Area for Play (LAP) located within the south-east open space.
- Street tree planting along the site access route and following sections of the secondary road.

Cross Section through South-Eastern Boundary





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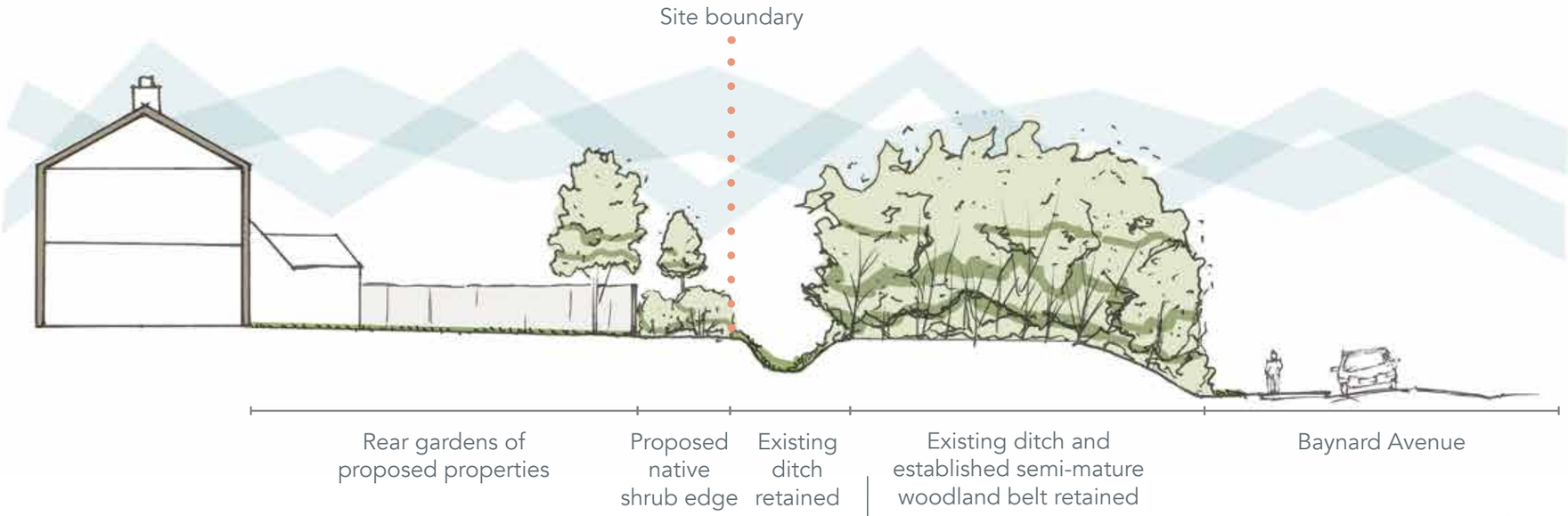
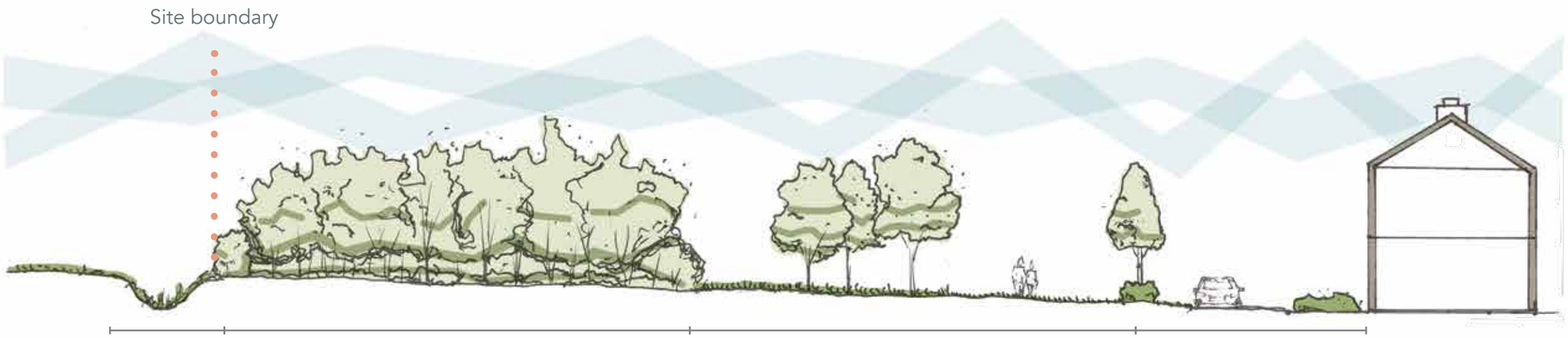
Cross Sections through Southern and Western Boundaries



Section through southern boundary



Section through western boundary

Street Planting

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- Minimum sizes of 12-14cm girth and 350-425cm height
- To be container grown
- Full specification for planting and maintenance to be submitted with reserved matters application
- Species to be selected from the those in the table below:

Species	English name	Minimum Size (Girth)	Height 350-425cm
Acer campestre 'Elsrijk	Field Maple	12-14cm	350-425cm
Carpinus betulus 'Fastigiata'	Hornbeam	12-14cm	350-425cm
Malus tschonoskii	Ornamental Apple	12-14cm	350-425cm
Pyrus calleryana 'Chanticleer'	Ornamental Pear	12-14cm	350-425cm
Sorbus area 'Lutescens'	Whitebeam	12-14cm	350-425cm

Acer campestre 'Elsrijk'

Carpinus betulus 'Fastigiata'

Malus tschonoskii

Open Space Planting

M

- Trees to be minimum sizes of 10-12cm girth and 300-350cm high and container grown
- Grassland areas to include both species rich grassland and amenity grassland areas in broad proportions of 50%:50% by area.
- Native shrub planting to be provided in c 10% of the open space. Species to reflect (Drawing E21858-TLP-400).
- Planting species associated with SuDS features to reflect drainage and ground conditions.
- Full specification for planting and maintenance to be submitted with reserved matters application.
- Tree species to be selected from the those in the table below:

Species	English name	Minimum Size (Girth)	Height 350-425cm
Acer campestre	Field Maple	10 - 12 cm	300 - 350 cm
Alnus cordata	Italian Alder	10 - 12 cm	300 - 350 cm
Carpinus betulus	Hornbeam	10 - 12 cm	300 - 350 cm
Prunus avium 'Plena'	Native Cherry	10 - 12 cm	300 - 350 cm
Quercus robur	English Oak	8 - 10 cm	250 - 300 cm
Salix fragilis	Crack Willow	10 - 12 cm	300 - 350 cm
Tilia cordata	Small leaved Lime	10 - 12 cm	300 - 350 cm

Acer campestre

Alnus cordata

Soft Landscape to Residential Areas

- Ground cover, low shrubs and hedging (<600mm) to plot frontages
- Avoid small areas of grass (<2m wide) and use planting instead.
- Small to medium shrubs to side elevations/boundary walls and fences (<1.2m).
- Large shrubs and specimens use as features.
- Full specification for planting and maintenance to be submitted with reserved matters application.
- Sizes and densities to provide good cover at initial planting as reflected in schedule below:

Type (mature height)	Example species (to aspect and space available allowing for growth)	Density per sqm	Pot size (litre)	Size – Height cm
Ground Cover <600mm 	• Ceanothus thyrsiflorus ' Repens', • Euonymus fortunei 'Emerald Gaiety', • Lavender Spp • Lonicera 'Maigreen' • Vinca minor	4-6	2L	20-30
Medium Shrubs 600-1200mm 	• Hebe spp, • Hypericum 'Hidcote', • Mahonia 'Apollo', • Philadelpus 'Belle Etoile', • Sacrcococca confusa, • Viburnum 'Eve Price'	3-4	2-3	30-60
Large Shrubs 1200-1800mm 	• Cornus alba, • Choisya 'Aztec Pearl' • Pyracantha spp	1-3	3-5	60-90
Specimens 	• Amelanchier, • Mahonia 'Charity', • Viburnum Bodnantense 'Dawn'	Indivudual	10-25	90-120

Local Area for Plan (LAP) to include:

- minimum area 100sqm (0.1ha)
- 5m min separation between activity zone and nearest property containing a dwelling
- bench
- natural play equipment suitable for very young children

Hard landscape

- Enclosure to private gardens to be provided by low walls, metal estate railings or picket fencing (c. 500-900mm)
- Permeable paving to private parking areas
- Paths to frontages in blocks to use bound gravel or slabs
- Suitably sized area to store all refuse bins away from the frontage of properties (unless an integral bin store in brick/timber is provided)
- Meter boxes to be places away from front elevations.

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Climate change

5.1 Climate Change

Sustainability Objectives
- Seek to minimise and further reduce environmental impacts created by the development of the available land.
- Incorporate sustainability strategies to ensure that all new developments are designed sustainably and meet the future climate emissions targets. Achieving this through the promotion of energy, waste, and resource efficiency.
- Promoting the established energy hierarchy for developments and integration of methodology of; Be Lean, Be Clean, Be Green.
- Integration of sustainable surface water drainage strategies for the development.
- Optimising passive design measures.
- Minimising the use of all fossil fuel resources.
- Design and construction carried out to respond to sustainability constraints and opportunities, and able adapt to future impacts of climate change.

Sustainability Policy
Sustainable development will be at the core of the scheme, in the creation of well-designed, integrated, and sustainable new communities, with the provision of affordable, accessible and energy efficient buildings. All new homes will be encouraged to follow Building for Life 12 design tools to structure discussions proposed for the new residential development between home builders, local authorities, communities, and other stakeholders.

Energy Strategy
The vision for the development is to embed sustainability in the construction of greener homes and sustainable place making. A broad array of principles of sustainable design and construction should be adopted for the development, addressing the key environmental issues within the region.

Energy Efficiency
All dwellings as part of the developments will be expected to meet or exceed the requirements of Building Regulations Part L: Conservation of Fuel and Power. The energy hierarchy shall be at the core of the development, ensuring that passive design measures are implemented first and foremost to reduce energy consumption, using material with increased thermal performance, increasing levels of thermal insulation and further improving upon the air permeability of the building.

Considerations such as the orientation of the buildings and layout of the floor plans should be evaluated when assessing how daylight, solar gains and other passive principles could be optimised to further reduce energy consumption.

It is encouraged that Passivhaus methodology is explored, where feasible and economically viable to do so. To achieve a further reduction in the Carbon Dioxide emissions from the development, the incorporation of renewable technologies should be explored, and an assessment provided to assess the most technically feasible and economically viable solution available for the development.

Water Conservation
The conservation and quality of water resources has been identified as a particular challenge by the local authorities, with East Anglia being one of the driest regions. Water conservation measures will therefore be paramount to the reduction of potable water consumption across the development. To address these challenges, all water fittings within will be installed to meet or exceed the National Base Level. Residential developments will be targeted to ensure that water consumption is less than 110 litres per person per day.

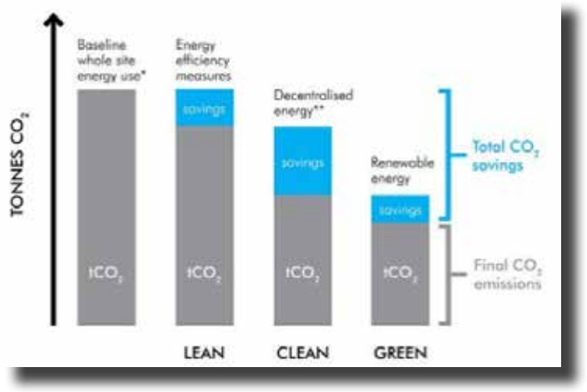
Electric Vehicle Charging
The Local Authority closely monitors the local air quality within the region. One of the significant contributions of air pollution in Essex coming from motor vehicles. To address this, an increase in the uptake of electric vehicles is being encouraged and allowed for, and the use of zero emission vehicles is being promoted. A key part of this will be to allow for the provision of such infrastructure to ensure that the development can adapt to future changes and uptake of electric vehicle usage, whilst identifying network constraints. The vision for the development is to allow the necessary infrastructure for future uptake in electric vehicles, allowing homeowners the ability to add electric vehicle charging points as and when required. Provisions should be allowed for on the infrastructure to the below principles.

- Dwellings with off road parking to have one charging point per dwelling.
- Dwellings with communal parking (non-designated) to be 10% of car park space.

Electricity capacity may be supplemented from renewable technologies, such as solar photovoltaics, and a phased infrastructure upgrade over the development lifecycle may need to be explored to accommodate the future uptake of electric vehicles.

Sustainable Construction
All measures below will be encouraged as part of the sustainable construction approach during the development:

- Energy Use: Adoption of energy efficient and C02 saving measures. Working to reduce carbon emissions during construction and occupancy.
- Water: Adopting and sourcing water saving appliances to reduce potable water consumption.
- Surface Water Run-Off: Integration of effective sustainable drainage methods.
- Material Selection: Sourcing and making efficient use of sustainable materials, through working with the supply chain to reduce carbon emissions.
- Construction Waste Management: sourcing materials capable of being recycled to reduce extent of construction waste sent to landfill.
- Health and Well being: Provision of good daylighting, sound insulation, accessibility, and adaptability.
- Pollution: To reduce carbon emissions associated with the construction and occupancy of the buildings.
- Ecology: Work towards the protection and enhancement of the ecology within the areas, through
- efficient use of buildings and land.



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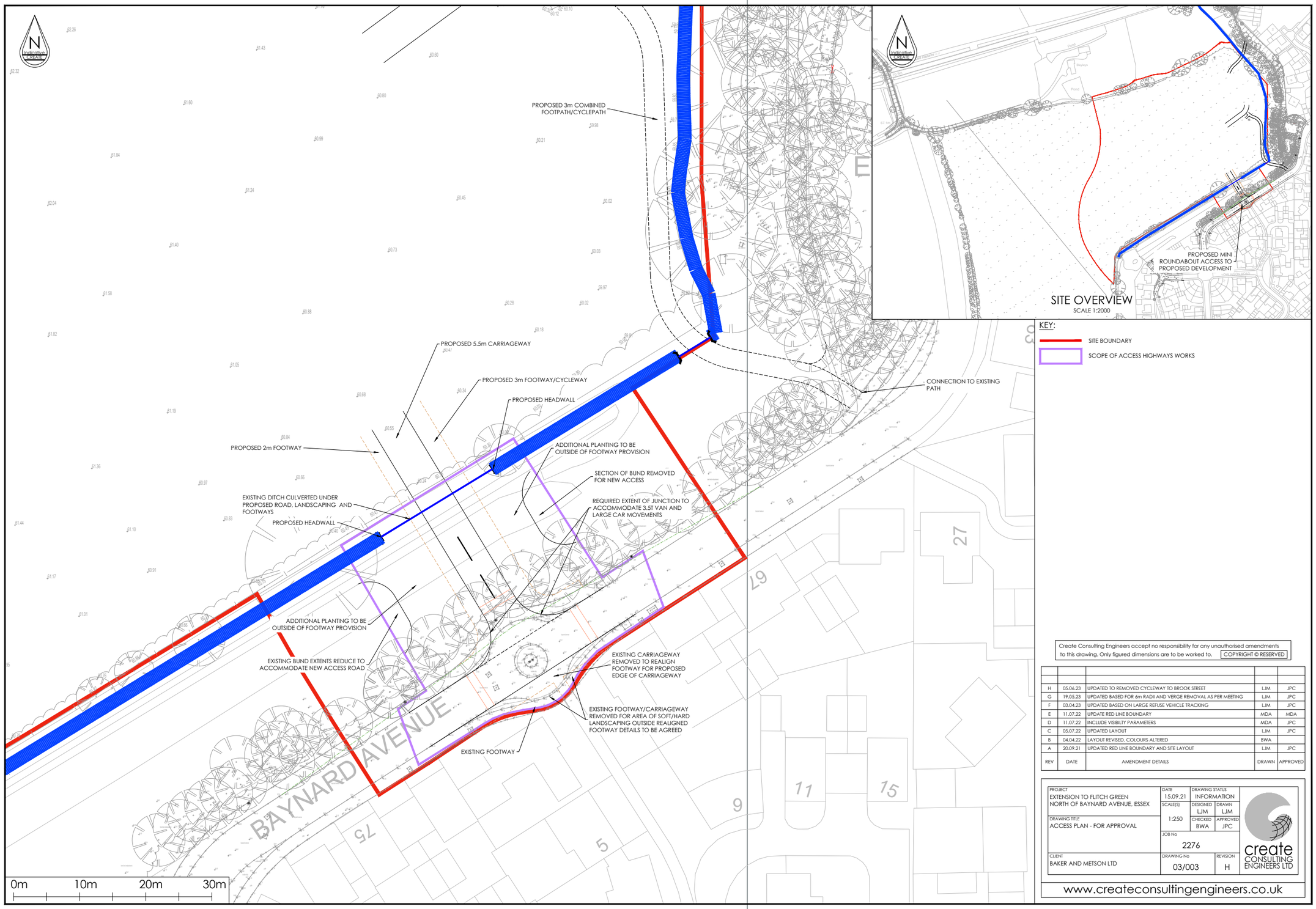
Appendix



SITE OVERVIEW
SCALE 1:2000

KEY:
- SITE BOUNDARY
- SCOPE OF ACCESS HIGHWAYS WORKS

REV	DATE	AMENDMENT DETAILS	DRAWN	APPROVED
H	05.06.23	UPDATED TO REMOVED CYCLEWAY TO BROOK STREET	LJM	JPC
G	19.05.23	UPDATED BASED FOR 6m RADII AND VERGE REMOVAL AS PER MEETING	LJM	JPC
F	03.04.23	UPDATED BASED ON LARGE REFUSE VEHICLE TRACKING	LJM	JPC
E	11.07.22	UPDATE RED LINE BOUNDARY	MDA	MDA
D	11.07.22	INCLUDE VISIBILITY PARAMETERS	MDA	JPC
C	05.07.22	UPDATED LAYOUT	LJM	JPC
B	04.04.22	LAYOUT REVISED, COLOURS ALTERED	BWA	
A	20.09.21	UPDATED RED LINE BOUNDARY AND SITE LAYOUT	LJM	JPC

PROJECT: EXTENSION TO FLITCH GREEN NORTH OF BAYNARD AVENUE, ESSEX	DATE: 15.09.21	DRAWING STATUS: INFORMATION	
	SCALE(S): 1:250	DESIGNED: LJM	DRAWN: LJM
DRAWING TITLE: ACCESS PLAN - FOR APPROVAL		CHECKED: BWA	APPROVED: JPC
	JOB No: 2276		
CLIENT: BAKER AND METSON LTD	DRAWING No: 03/003	REVISION: H	

create CONSULTING ENGINEERS LTD

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DO NOT SCALE ORIGINAL SHEET SIZE - A1 Landscape

Detailed drawing of access arrangement

PLANTING SPECIFICATION NOTES

General:

1. Before planting the Landscape Contractor is to ascertain the exact location of existing or as-built services and is responsible for ensuring that services are not damaged. If necessary, planting locations may need to be adjusted locally.
2. No plant species, size or location should be altered without prior approval of the Landscape Architect.

Topsoil:

3. Existing topsoil to be utilised, where available. Any imported topsoil to make up any deficit in the topsoil requirements for the proposed planting scheme shall be in accordance with BS 3882:2015 and of multi-purpose grade, from a local source or similar in type, easily moulded when wet, with a pH equivalent to the soils in the local area, and free of chemical and other pollution, stones of greater size than 65mm, weed seeds, roots of perennial weeds, vegetation (including material from plants prohibited under the Wildlife and Countryside Act 1981) subsoil and other foreign matter. Soil to be free of concentrations of contaminants that would cause a significant risk to human, flora or fauna health and the environment and to be tested and assessed by a competent testing laboratory for its suitability for use in a general forestry area.
4. Topsoil depths to be:
   - 300mm for hedgerows and woodland area;

Supply of plants

5. All plants shall be supplied in accordance with the National Plant Specification, by nurseries accredited by the Horticultural Trade Association.
6. The Contractor is to provide copies of Plant Passports to the Client, Principal Designer, Clerk of Works and Landscape Architect upon purchase of plants, prior to planting.
7. It is the Contractor's responsibility to ensure all provided plants are pest and disease free, and with plant passports provided (as per above point)

   If the contractor suspects any newly planted trees or any existing trees are contaminated with any notifiable pest or disease, they should report it immediately to https://treealert.forestresearch.gov.uk/ as well as the Client, project Landscape Architect and Main Contractor (if appropriate). **The contractor should not attempt to destroy or move infected material.** For additional information relating to reporting a notifiable pest or disease additional information can be found at the following link: https://www.gov.uk/guidance/report-a-tree-pest-or-disease-overview.

   DEFRA Xylella recommendations can be found at the link below:

   https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/686156/xylella-fastidiosa-impl-trade.pdf

Ground Preparation and Planting:

8. All groundworks and planting operations shall be in accordance with the following British Standards:
   - BS 3936;
     - Part 1 (1992) Nursery Stock - Specification for Trees and Shrubs;
     - Part 4 (2007) Nursery Stock - Specification for Forest trees, poplars and willows;
   - BS 4428 (1989) Code of Practice for General Landscape Operations (excluding Hard Surfaces);
   - BS 3882 (2015) Specification for Topsoil;
   - BS 8545 (2014) Trees: from nursery to independence in the landscape. Recommendations.
9. Effective weed control shall be carried out prior to cultivation. All planting areas to be cultivated to a depth of 400mm **except within the RPAs of existing trees where pits should be hand dug.**
10. Topsoil to be fully cultivated to a depth of 400mm to produce an even tilth, free of stones and debris greater than 50mm diameter. Any plough pan must be removed through appropriate method.

Planting Protection

11. Rabbit Protection - Native shrub and tree species (Transplants, Feathered and Standards) to be provided as follows:
    - All native tree species and native shrubs (except Evergreen shrubs and very bushy shrubs) to be fitted with biodegradable spiral tree guards 60cm x 38mm - To be biodegradable (e.g. 'Rainbow TreeBio', green), or otherwise approved. Guards to be fixed with study bamboo canes. Multi-stem plants to have one each stem, cut to size as necessary.
    - All evergreen and very bushy native shrubs (including Ilex, taxus and Corylus) to be fitted with Green Tech Tubex Acorn Treeguard Open Mesh Tree Shelter, size to suit plants or similar approved. to be supported with a 90cm x 2.5cm square stake inserted into ground.

Timing /Implementation of Works:

12. Planting shall occur by the end of the next planting season following commencement of the built development. Bare root stock to be planted in the next appropriate planting season (Nov-February) after completion of the built development. If planting is carried out outside this season, the specification should be changed to container grown plants only.

Woodland Mix - Tree and Shrub Planting:

13. Bare root trees and pot grown plants - to be planted at their natural level in holes larger than the extent of the root system. Roots of bare root plants shall be spread out to their natural position and cut back to remove any minor damage to roots and shoots. Backfill material shall be trodden down firmly to remove any air pockets around the root system.

    Mulch- Surface mulching comprising of 50mm depth of woodchips (or otherwise approved) to be supplied and spread to all plants at 500mm diameter around each plant, with intervening areas maintained as bare earth through weed-killer applications.

Meadow:

14. Wildflowers - General Purpose, Classic Hay Meadow 100% seed mix by Barenbrug or similar approved, to be sown at a rate of 2g/m2 in March to May or August to October, avoiding excessively hot and dry conditions.

Defects Liability:

15. Any trees/shrubs/plants which are dead, dying or otherwise defective 12 months after practical completion or six weeks after the second leafing out of plant material, whichever is the later, must be replaced. Plants are to be replaced with the same size and species to that originally specified unless otherwise instructed.
16. The Defects Liability period for soft works will commence upon the issue of a Certificate of Practical Completion and will last for twelve months, as above.
17. At the end of this period the Landscape Architect will prepare a schedule of any defects arising, which the Contractor shall make good at his own expense.

Establishment Maintenance:

18. Establishment period to be three years. The following maintenance operations to be undertaken during the establishment period:
    - remove and replace all dead, dying or diseased plants to the same specification as the original plants
    - keep area clear of weeds and litter
    - prune plants to remove dead, dying and diseased wood and to promote healthy growth, but maintain a natural shape
    - regularly check condition of guards and canes, adjusting and replacing as necessary
    - All guards and canes to be removed in Year 5 and removed from site
    - re-firm loose trees and shrubs as necessary
    - top-up mulch as required around all plant stations and along hedge lines

Grass Cutting

31. Wild Flower and Grass Mix Seeded Areas

    First Year:

    Mow newly grass areas as follows:

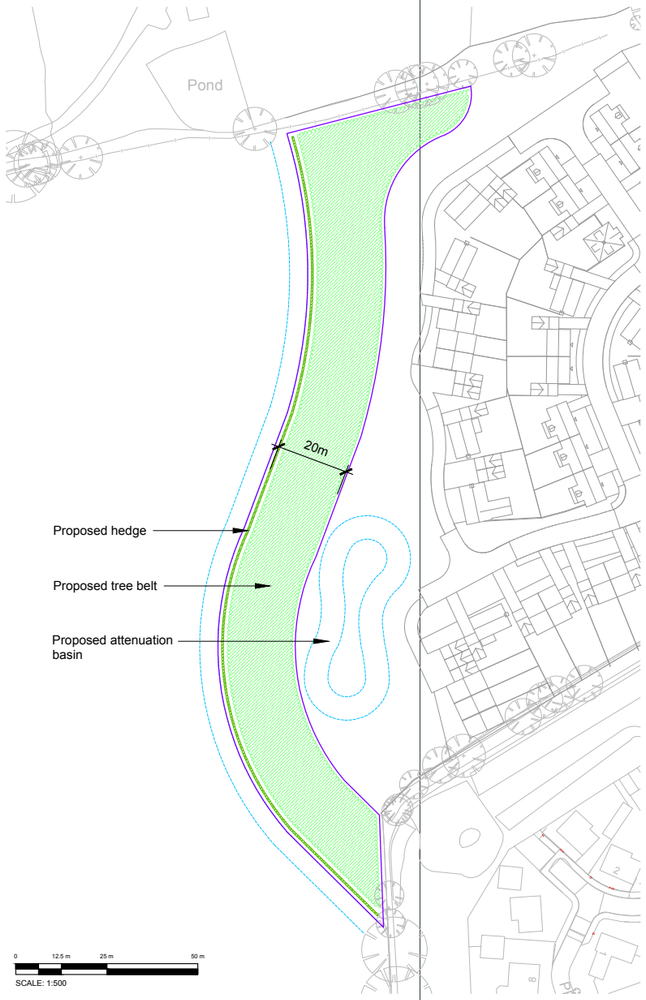
    - 1st Cut - Grass to be cut to a height of 50mm when it reaches 150m high.
    - hereafter - cut twice pa in June and October. Arisings to be left and spread within planting area
    - Carefully dig out or spot treat any residual perennial weeds such as docks.

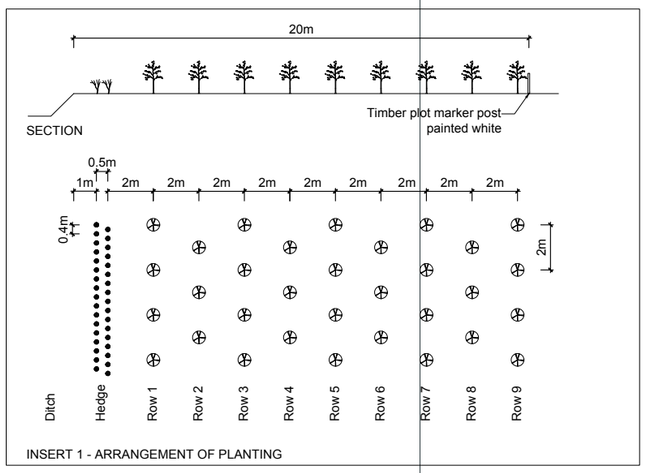
    Second Year Onwards:

    - Cut in June and October.

Long Term Management:`

19. Establish arrangement for long term management of planting, to be as for establishment and also include:
    - pruning, thinning and replacement of shrubs only where necessary, but maintaining natural form (1 visit per year)
    - thinning of trees following guidance of a landscape management plan
    - native hedge cutting - 1 cut per year between October and February when the hedge reaches 1.8m (avoiding bird nesting season)
    - tree works as required (inspect safety of all trees every two years)





INSERT 1 - ARRANGEMENT OF PLANTING

KEY

- Landscape area for Full element of Hybrid Application
- Existing tree
- Proposed woodland belt
- Proposed hedgerow

PLANTING SCHEDULE

No.	Mix %	Name	Height	Age/condition or number of times transplanted	Pot	Root condition	Habit	Ctrs (m)
Native Hedge Mix								
	20	*Acer campestre*	40-60cm	1+1 or 1/1		B		*arranged as 2 no staggered rows at 2.5 plants per linear meter*
	5	*Cornus sanguinea*	40-60cm	1+1 or 1/1		B	Branched	
	20	*Corylus avellana*	40-60cm	1+1 or 1/1		B	Branched	
	30	*Crataegus monogyna*	40-60cm	1+1 or 1/1		B		
	5	*Euonymus europaeus*	40-60cm	1+1 or 1/1		B	Branched	
	5	*Ilex aquifolium*	40-60cm		2L		Leader and laterals	
	10	*Prunus spinosa*	40-60cm	1+1 or 1/1		B	Branched	
	5	*Viburnum opulus*	40-60cm	1+1 or 1/1		B	Branched	
Native tree/shrub Mix								
	10	*Acer campestre*	40-60cm	1+1 or 1/1		B		*staggered rows of trees and shrubs. 2 meter between plants/ 2 meters between rows.*
	10	*Betula pendula*	40-60cm	1+1 or 1/1		B		
	5	*Carpinus betulus*	60-80cm	1+1 or 1/1		B		
	3	*Cornus sanguinea*	40-60cm	1+1 or 1/1		B	Branched	
	12	*Corylus avellana*	40-60cm	1+1 or 1/1		B	Branched	
	13	*Crataegus monogyna*	40-60cm	1+1 or 1/1		B		
	3	*Euonymus europaeus*	40-60cm	1+1 or 1/1		B	Branched	
	3	*Ilex aquifolium*	40-60cm		2L		Leader and laterals	
	2	*Malus sylvestris*	40-60cm	1+1 or 1/1		B		
	10	*Prunus avium*	40-60cm	1+1 or 1/1		B		
	5	*Prunus spinosa*	40-60cm	1+1 or 1/1		B	Branched	
	10	*Quercus robur*	40-60cm	1+1 or 1/1		B		
	3	*Salix fragilis*	125-150cm	0/1/2		B		
	3	*Taxus baccata*	40-60cm		3L		Bushy	
	5	*Tilia cordata*	40-60cm	1+1 or 1/1		B		
	3	*Viburnum opulus*	40-60cm	1+1 or 1/1		B	Branched	

NB native tree/shrub mix to be planted in groups of 3 - 7

Detailed drawing of buffer planting

Design Code - Extension to Flitch Green, North of Baynard Avenue, Essex

3D Model of Illustrative Layout (for illustrative purposes only)

bluepencil
DESIGNS

Chartered Architects

: bluepencildesigns.com
: info@bluepencildesigns.com
: 01621 841053

practice membership number: 20013364
ARB registration number: 055941E
Company number: 8176840