DAP

3.0 CONTENT

This document has been designed to be a record of key objectives, decisions and outcomes from each stage of the RIBA Plan of Work, building to provide you with a complete narrative of the life of your project.

KELVEDON. RD

SPATIAL COORDINATION

MARDEN HOMES LTD.

16.12.21 1432

RIBA STAGE 3

Spatial Coordination

Doc#3+

www.daparchitecture.co.uk

3.1 SITE LOCATION

Site Address

Land at Kelvedon Road
Tiptree
Colchester
CO5 0LU

Administrative Area

The site is situated within Tiptree Parish Council and it is also on the south western outskirts of Colchester Borough Council's constituency.

Objective

The aim of this document is to provide a short summary of the Preparations + Brief and Concept Design documents, and to show how both have influenced the final proposed design.

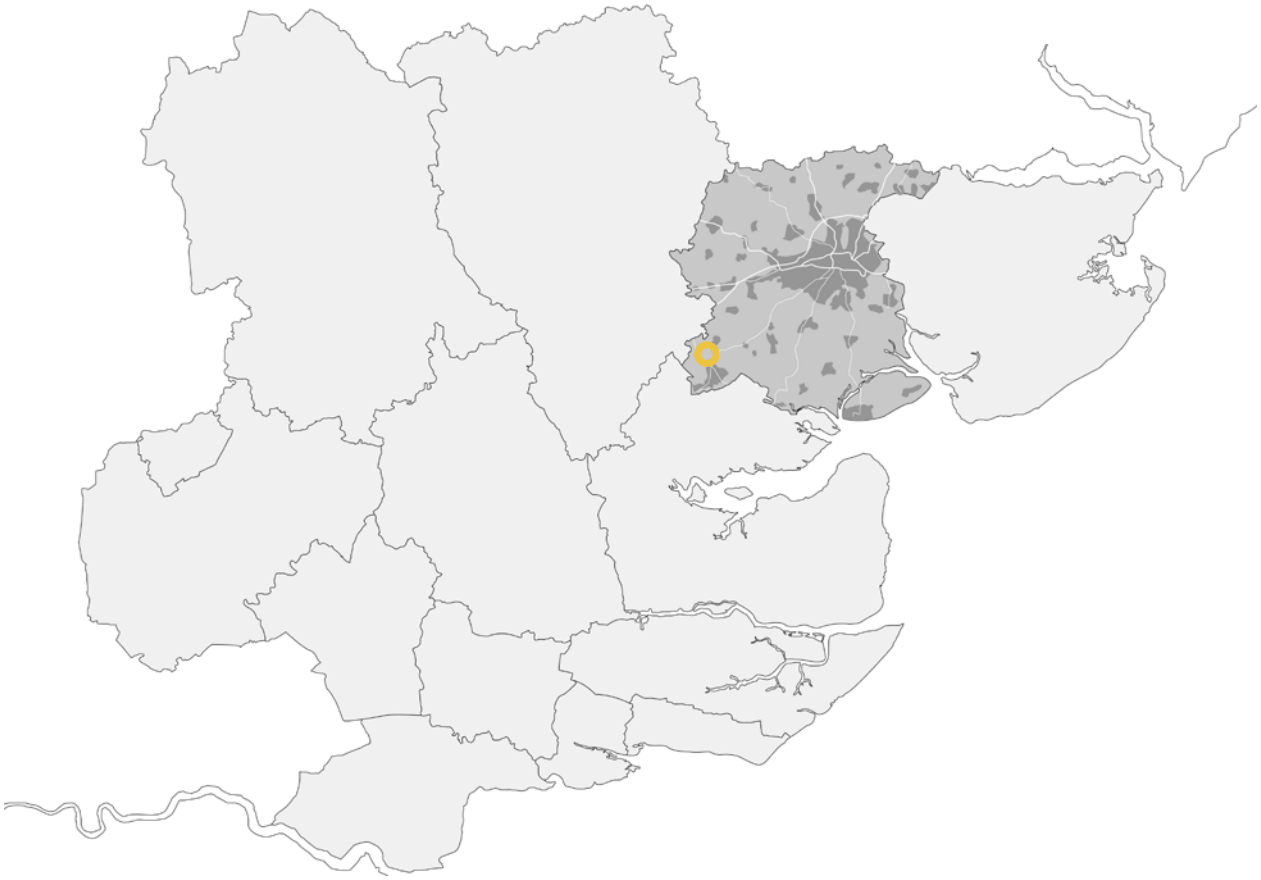


Fig 3.1.1 - Map to show site location within Essex County

Fig 3.1.2 - Existing Site Photo

3.2 PLANNING POLICY CONTEXT + HISTORY

PLANNING POLICY

Colchester Borough Council are currently in the process of progressing a new **Local Plan**. Section 2 of the Emerging Local Plan has proposed the designation of Tiptree as a sustainable settlement, based on its larger population, concentration of jobs, facilities, services and function.

The Plan proposes the allocation of 600 homes to Tiptree, within emerging **Policy SS14**. This policy also identifies broad areas of growth, including to the north east, along Kelvedon Road, which this site therefore directly corresponds with.

Due to the dismissal of Section 1 of the Emerging Local Plan at Examination, there is likely to be significant delay in the adoption of Section 2 of the Emerging Local Plan. As such, it can currently be afforded minimal weight and CBC should be considering sustainable opportunities for delivery of housing in the meantime to maintain a suitable supply of housing.

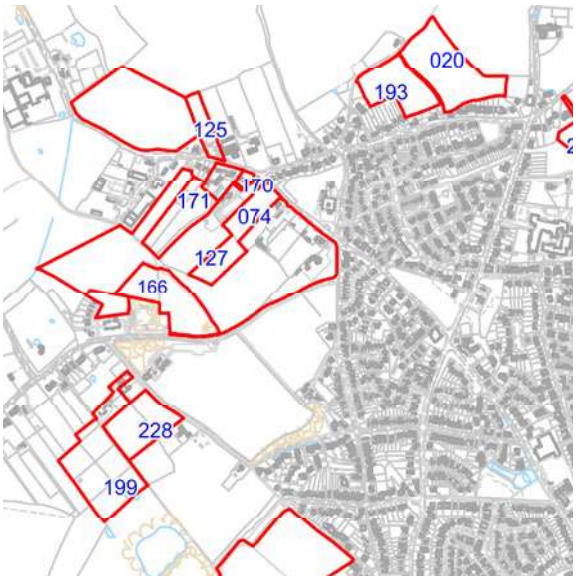


Fig 1.66 - Call for sites: submitted for consideration

NEIGHBOURHOOD PLAN

The Neighbourhood Plan, submitted to Colchester Council for consultation, details Tiptree Parish Council's Vision for the development of Tiptree. The objectives for Homes and Housing are as follows:

- To favour new developments to the north and west of the village on sites that allow access to main routes with minimal impact on the village centre.

The yellow areas on the Policies Map are earmarked for future development, this includes the proposed site at Kelvedon Road. It is clear within the Policies map that the Parish Council intend for a primary street running through the proposed site to:

i) connect Kelvedon Road with Grange Road. It must be sufficient to accommodate a public bus route and non-residential traffic. The route should have grass verges, wide pavements and vehicular access to residential areas. No dwellings should front directly onto this road. This road to include roundabouts at the junctions with Grange Road and Kelvedon Road (In accordance with **Policy TIP07**);

Fig 1.67 - Tiptree Neighbourhood Plan.

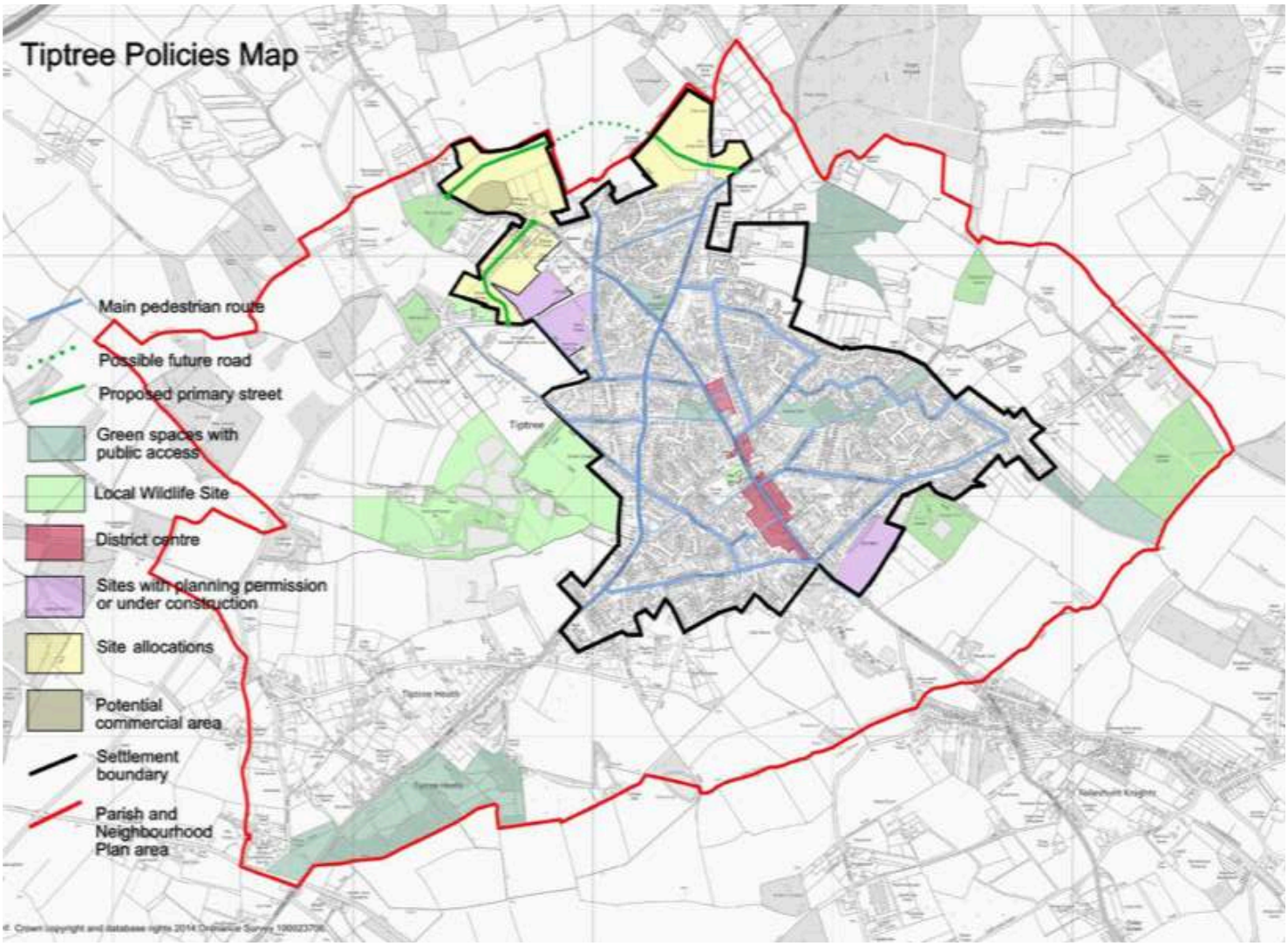


Fig 1.68 - Tiptree Policies Map (submitted as part of the of the Neighbourhood Plan)

3.3 OPPORTUNITIES

The land south of Kelvedon Road presents a number of opportunities and positive attributes that can be taken advantage of at this site. However, there are also constraints, issues that may require mitigation. The opportunities have been highlighted on the diagram on the adjacent page.

OPPORTUNITIES

- Potential to provide a development which is a natural infill in the existing north-western development growth in Tiptree.
- Due to good transport links via Kelvedon Road, there is potential to provide easy access to Tiptree's village centre, nearby towns, services, employment and sources of leisure.
- Potential to promote sustainable access to services and promote healthy life styles, due to good pedestrian and cycling links via the existing infrastructure, Public Rights of Way and the National Cycle Way.
- Potential to create a local identity and enhance the local character by taking precedent from the listed buildings in Tiptree
- Due to the flat topography of the site there is potential for easy development,
- Due to a minor slope in topography to the south east and because most of the site sits back from the frontage onto Kelvedon road, the impact on the street-scene is reduced.
- Potential to take advantage of the views out of the site to the south-west.
- Opportunity to provide a central green focal point providing large open space for residents to enjoy.
- The existing vegetation offers a natural boundary screening and instant maturity to the proposal.

SITE

TREES

VEGETATION

ECOSYSTEMS

SITE FRONTAGE

BUS STOP

PROW

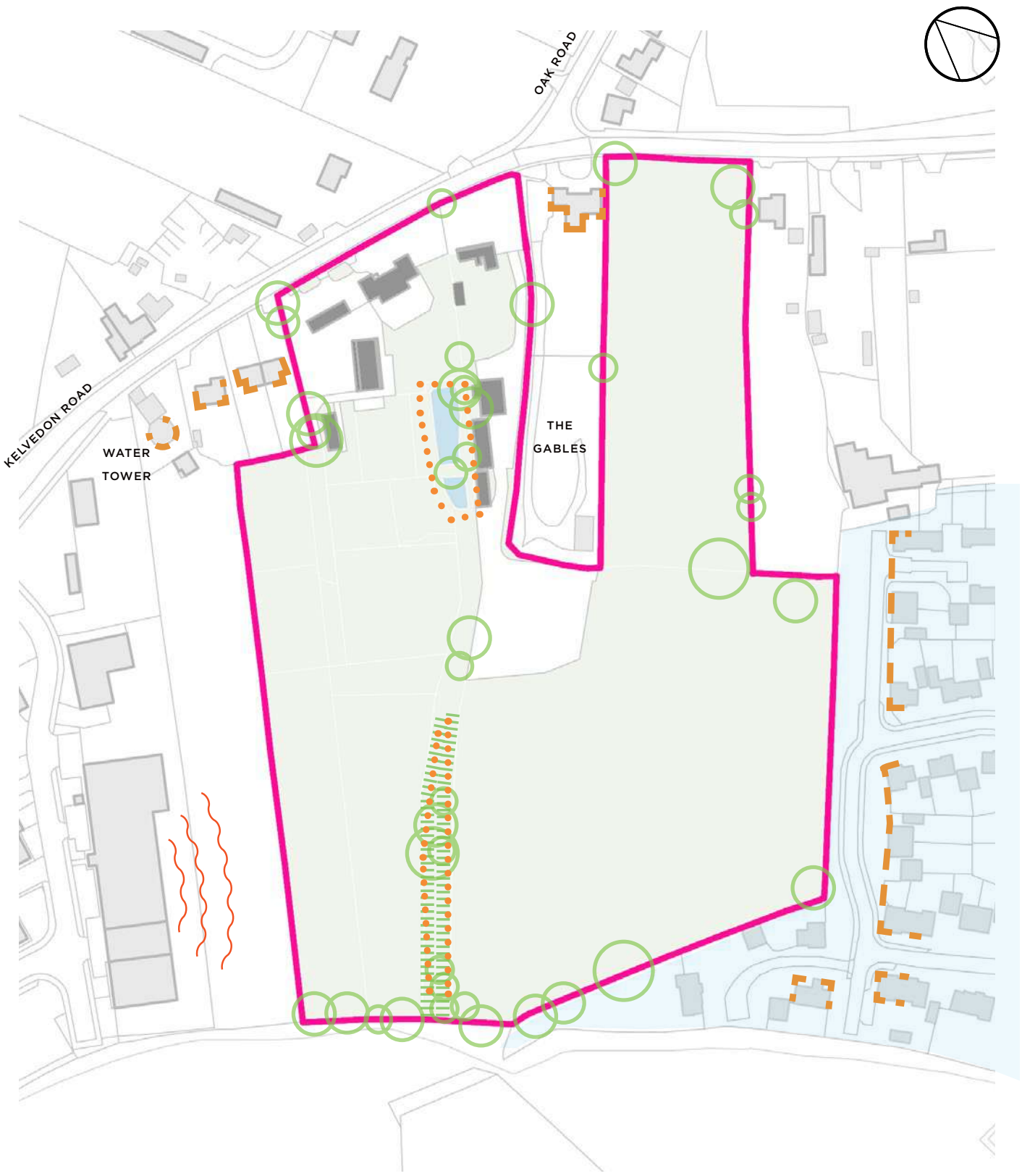
SITE UNDER CONSTRUCTION

3.4 CONSTRAINTS

The land south of Kelvedon Road presents a number of opportunities and positive attributes that can be taken advantage of at this site. However, there are also constraints, issues that may require mitigation. The opportunities have been highlighted on the diagram on the adjacent page.

CONSTRAINTS

- All trees on site are registered TPOs therefore they must be retained
- The overlooking from the water tower must be considered in the orientation of the layout.
- Similarly the overlooking from the Coronation Cottages and The Gables, needs to be taken into account.
- Rear garden and privacy of the dwelling at The Gables must be respected.
- Utilities, such as the overhead electric cables may need relocating.
- Retention of the vegetation on the site, and associated ecosystems, restricts the site.
- Location of the new site access is limited and will require the construction of a new roundabout, in order to ensure safe access to the site.
- Necessary to retain views of the water tower, both from the site and through the site from key views along Kelvedon Road.
- Establishing access and connections to the neighbouring development at Grange Road.


OAK ROAD
KELVEDON ROAD
WATER TOWER
THE GABLES
SITE
TREES
VEGETATION
ECOSYSTEMS
NOISE
BUILDING FRONTAGES
SITE UNDER CONSTRUCTION

3.5 PROGRAMME

CLIENT'S BRIEF

Marden Homes have instructed DAP Architecture to create a high quality residential development of circa 150 units, with appropriate landscaping at the proposed 5.15 hectare site along Kelvedon Road, Tiptree.

DESIGN AIMS

The development aims to be low to mid density, with approx 30 dwellings per hectare.

Similarly, the design aims to inject character back into the north western end of Kelvedon Road. Currently there is a poor mix of architectural styles, along both Kelvedon Road and Oak Road.

The layout of the site needs to have the potential to link to the Neighbourhood plan's master plan for the surrounding area. This vehicular transport link will extend from the entrance on the north western boundary, through to the south west edge.

However, pedestrian scale is also an essential requirement of the Neighbourhood plan for Tiptree. So pedestrian links will precedence in the design of the site, as this is a more sustainable mode of movement; encouraging people to walk, cycle or use public transport to access the local facilities.

In order for the site to have ease of use, there will need be provided by a road hierarchy, continuity of frontage and visual focal points.

The scheme must promote high quality and inclusive design to make a better place for residents and visitors.

Creating a locally distinctive, people friendly area which has taken precedent from the local heritage assets will assist in achieving this level of quality.

Selection of award-winning precedents, thorough knowledge and application of the Essex Design will further add to the quality of the design giving it natural surveillance, built character, injected with a fresh visual interest.

SUMMARY OF KEY REQUIREMENTS:

- circa 150 homes
- low density
- roundabout at access point
- potential to link to local masterplan
- refined character areas
- clear street hierarchy
- landscape driven design
- green corridors for foot and cycle paths
- retention of green spaces
- retention of TPOs


OAK ROAD
KELVEDON ROAD
line up with existing street frontage
THE GABLES
overlooking from water tower
where existing vegetation quality is poor would be removed and improved
Tower Business Park to North
retention of vegetation creates green spaces also essentials as TPOs
gentle slope of site leads to potential location of SUDs
PRoW
New development at Grange Road
SITE
TREES
POTENTIAL SUDS
SITE FRONTAGE
NO OVERLOOKING
GREEN SPACE
SITE ENTRANCE
OVERLOOKING
POTENTIAL VIEWS

3.6 PROGRAMME

TIPTREE NEIGHBOURHOOD PLAN

- Sufficient off-road parking
- Front gardens
- Varied housing densities and styles
- New developments should integrate green ‘corridors’ for foot and cycle paths, and wildlife.
- Provide a mix of dwelling sizes in accordance with **Policy TIP05**
- 0.27Ha is provided as green space for community use
- Pedestrian and cycle access into surrounding housing estates, towards the village centre and towards Perrywood Garden Centre is provided.

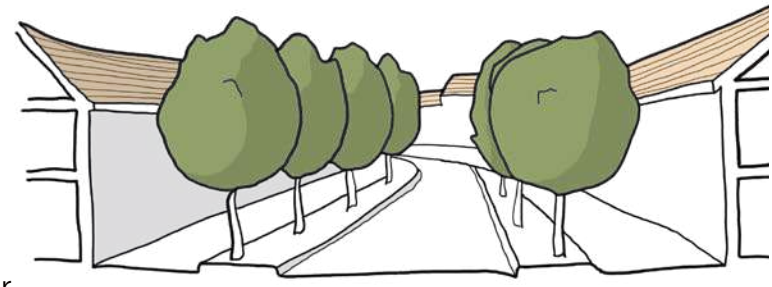


Fig 2.11 - EDG street example

ESSEX DESIGN GUIDE

Advised requirements for schemes of a density higher than 20 dwellings per hectare.

Fig 2.12 - EDG retaining street scale

CONTINUITY OF FRONTAGE

- Continuity of **built frontage** is desirable as it **encloses spaces** and creates continuous pedestrian routes.
- Joining a high proportion of dwellings to each other in terraces can create a powerful continuous frontage. This need not mean suppression of the individuality of each dwelling
- Terraces offer improved insulation and are therefore energy efficient.

Fig 2.13 - Mix of storey heights

PEDESTRIAN SCALE

- To **encourage walking** and to create spaces in which people feel comfortable, any publicly accessible spaces must be visually satisfactory to the pedestrian.
- Sufficient visual interest to engage the eye.
  i) Changes of frontage-widths and building lines.
  ii) The surface textures of facing materials.

iii) Window and door types.
iiii) Features such as gables, projecting wings, bays etc.
iv) A varied skyline incorporating chimneys and dormers.

- Limiting visual length by taller terminal building
- Limiting visual length by curve in street

Fig 2.14 - Fenestration flexibility

USE OF LANDSCAPING IN URBAN SPACES

- Trees and hedges can be used as part of the built frontages
- Used as a centre point to punctuate and reinforce the character of a space

Fig 2.15 - Tree as part of frontage

MODELLING

- The three dimensional modelling of buildings by set-backs, projecting bays or gables should be manipulated in order to play a deliberate role in the street scene
- Insertion of three-storey element adds variety - apartments block inserted among house dwellings
- Balance in design through proportioned elevations

RESIDENTIAL USER REQUIREMENTS

- Layout to meet **national** and local **planning policies** and design guidance
- To meet or exceed NDSS housing standards
- To provide sustainable, well-ventilated and efficient new homes to provide a healthy living environment
- To provide an inclusive development that gives access to all users no matter their capability
- To provide well designed private and shared amenity for residents and visitors to enjoy safely and securely

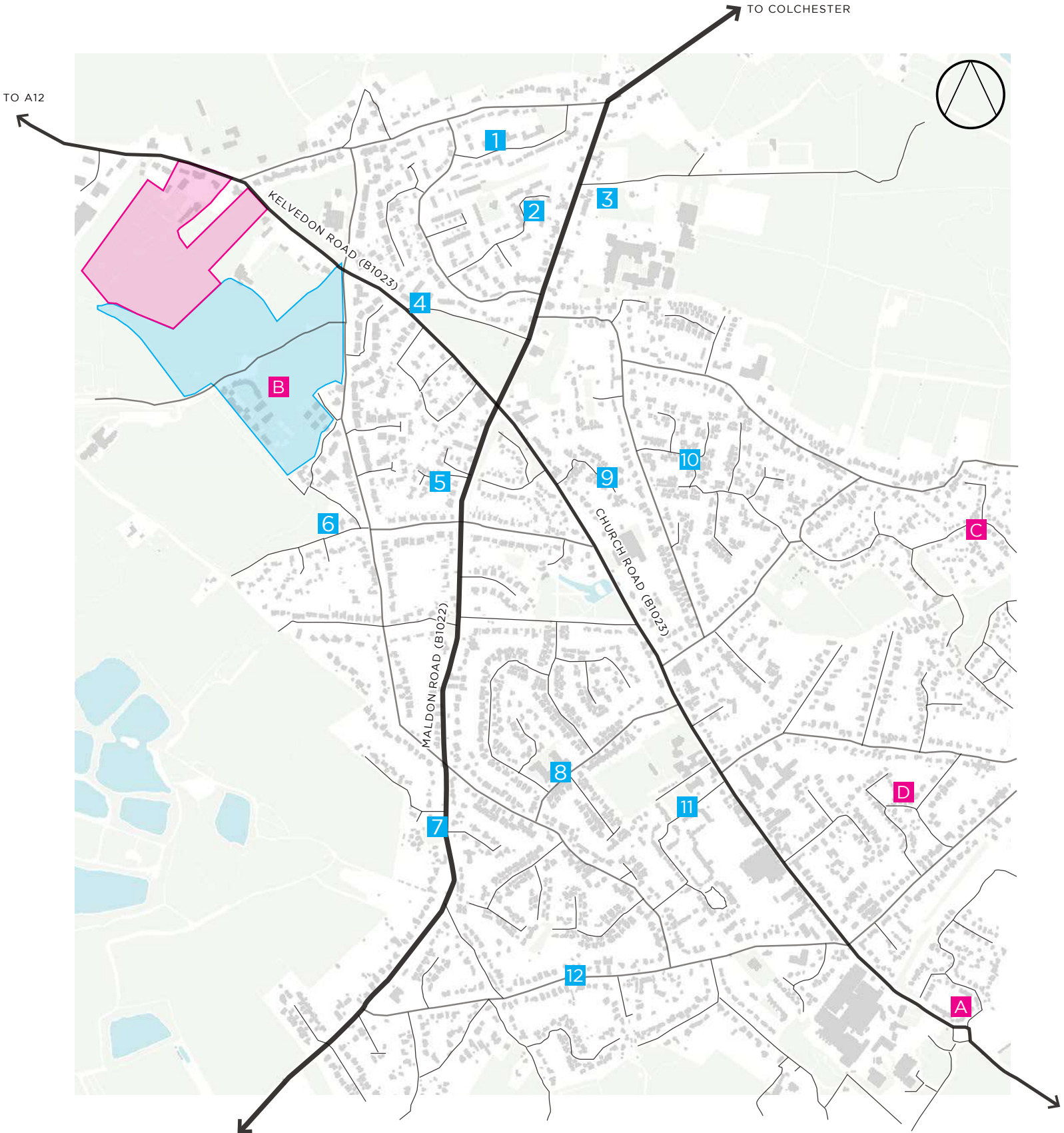
Fig 2.16 - EDG garden frontage

3.7 ARCHITECTURAL INVESTIGATION

Brick Houses. A common house typology in the Northern end of Tiptree. These brick houses are commonly featured on linear streets in terraced and semi-detached forms. Front to back roofs, soldier course and tile creasing detail to windows. No other notable detailing.

Render Houses. Similar to the Brick house typology also found in the Northern end of Tiptree though only feature in this cul-de-sac on Chestnut Way. Front to back roofs, tile creasing detail to windows, and brick corbelling utilised. Storage area to front of dwellings. No other notable detailing.

Town Border Houses. Located on the eastern boundary of Tiptree along Maypole Road. These dwellings are fully rendered with heavy cills and chimneys to the roof, otherwise limited details to speak of.



In this section of the document we will be taking a look at additional examples of the residential development that can be found in and around Tiptree, some of the examples will include more recent development such Nine Acres which is still under construction at the south end of the village (A). This section will also be looking further afield than the examples given in Doc#1 which looked predominately at examples within the sites immediate vicinity. The purpose of this Investigation is to highlight that Tiptree has some good examples of Architectural Design and the development proposed by this application has sought to implement a similar material palette and details to assimilate with its context.

3.7 ARCHITECTURAL INVESTIGATION

4

11-14 Kelvedon Road. A relatively new development of dwellings south of the Application site. Featuring an enthusiastic use of multiple materials, including weatherboarding, different render colours, brick, 2 different roof tile colours and types and brick and stone detailing to window heads and cills. Resulting in a busy, cluttered elevation.

5

Mill Close. A recent development of 5 new dwellings all served by a private drive. Brick built, with interesting ground floor corner features, double height bay windows with varying render colour finish. Columns supporting porches provides a level of grandiosity as do multi bar casement windows and chimneys.

6

Harrington Close. Mix brick and render dwellings. 'L' Shape orientation of dwelling with attached garage and habitable space above utilised elsewhere in Tiptree including on Oak Road (Doc#1). Simple material palette and detailing applied.

7

Maldon Road. New development of 7 large dwellings located on Maldon Road. Cleanly finished, features a mix of fully render or brick houses, with additional features such as wide bay windows, stone window head and cill details, stone gable features and brick plinths. Gablets used to create varied eaves line and add visual interest.

8

Over 50's Development. Large scale development of 1 and 2 bed apartments for over 50's spread across 3.5 storeys. 2 and 3 storey projecting gabled bays add visual interest and break the roof line. Octagonal corner elements also feature. Materiality is simple, brick and render used, arched brick headers applied to windows.

9

Millwrights. A very common building typology featured in many towns and villages. Brick piers provide visual separation between otherwise terraced/semi-detached dwellings. Ground floor typically finished in brick with first floor either render, tile hanging or weatherboard. Windows are typically large and uPVC.

3.7 ARCHITECTURAL INVESTIGATION

10

Heycroft Way. Part of a large development of dwellings of this style stretching between Green Lane and Barbrook Lane, these properties feature many of the details as Millwrights: large openings, brick piers, mixed materiality applied to frontages, semi-detached/terraced properties. The properties above are rare examples of the use of buff brick in Tiptree.

11

Caxton Way. New development of flats and houses. Mix between 2/2.5/3 storeys, flats featured above are sited on the prominent corner into the development. Materials include Brick, differing shades of render, buff coloured brick headers provide contrast to red brick finish, stone cills are applied to brick elevations.

12

Tiptree Bungalows. There are multiple streets of Bungalows found in Tiptree. They can be identified on the plan easily by looking for linear streets and less dense areas, this is due to deep plots consisting of long rear garden and generous front garden and well spaced buildings. The style of the bungalows is eclectic, featuring multiple materials, forms and details and this occurs almost exclusively on Bungalows in the town.

3.8 NINE ACRES

Nine Acres. A very recent development of dwellings constructed by Crest Nicholson on the edge of Tiptree, with some aspects still under construction. Like much of Tiptree the development features prominent use of red brick and render. As can be seen above Chimneys punctuate the roof line to add visual interest.

Building scale ranges between 2 and 3 storeys. 3 Storey is utilised in key locations such as above. Typical Essex Design Guide principles employed, strong built frontage, short front gardens, playful roofscapes etc.

3.9 FLORENCE PARK

Florence Park/Grange Road. Florence Park is the name for the development that has been referred to in these application documents as the Grange Road development. Much of it is still under construction however some elements of it are complete and are now being lived in.

Bearing some similarities with the development at Nine Acres but also with Caxton Way and Maldon Road, many of the details and materials are the same. The part of the site featured above is orientated to face outwards across Colchester United's Training Ground. As this is a very linear section of the site abutting the training ground the dwellings have been plotted and designed to create a varied and interesting roofscape by inserting projecting gables and dormers to break up the eaves line.

The scale of the development to date is predominantly 2-storey with 2.5 storey dwellings located in prominent positions such as that above adjacent to Grange Road, a gateway into Tiptree.

Details include splayed stone headers and stone cills, arched brick headers, dummy windows, brick plinths, projecting gables, bay windows. Additionally the brick used varies between red and buff, render colours also vary between pastel tones however there is, as can be seen above random application of bright blue render which negatively attracts focus from the rest of the street scene. Weatherboard is deployed however it is used sparingly.

3.10 WILKIN DRIVE

Wilkin Drive. Wilkin Drive is a large newish development located on the eastern edge of Tiptree. An image of the development is featured in the Draft Tiptree Neighbourhood Plan under the Local Character and Design section, the implication being that the design of this development is viewed as good quality for the local area.

As per the previous 2 developments discussed at Nine Acres and Florence Park and some of those featured during out investigations many of the details, materials and proportions are typical of Tiptree. Though this development seems to have been more playful with its use of differing colours of render which is most evident above where shades of Yellow, Pink, Purple, Orange and Green can all be identified. Red brick plays a secondary part in this street scene, reserved for use on plinths and chimneys.

The previous image is located deeper within the development, the above is taken from where the site adjoins an older part of Tiptree. As such the playfulness of the materiality is more reserved. Dwellings within this development are almost exclusively 2-storey, the roofscape is varied through the use of projecting gables and chimneys.

Details within this development include soldier course headers, stone cills, brick plinths, string courses, projecting gables, bay windows and gable brick features. Additionally the brick used varies between red and buff with some instances of different red bricks being used to accentuate details such as headers or string courses. As has been discussed render colours also vary between numerous pastel tones which creates a colourful and vibrant streetscene. Weatherboard is deployed however it is used sparingly for flying links or porches.

3.11 BERRYFIELD CLOSE

Berryfield Close. Berryfield close is another recent development in Tiptree located on the former Tiptree United site at the southern end of the village. An infill site the dwellings are organised around a central internal open space, with rear gardens aligned back to back with pre-existing dwellings.

The scale of the development to date is exclusively 2-storey, as an infill development this is respectful of the surrounding properties and their acquired amenity.

Details within this development include Splayed brick headers, stone cills, brick plinths, angled first floor oriel windows and bay windows (limited). The brick used varies between red and buff, though the use of buff brick is limited. The render colour used is also limited to yellow and cream, weatherboard is used more prominently in this development in a blue/green tone.

3.12 PROPOSAL

AMOUNT

The proposed plan is comprised of 130 homes. This includes a variety of apartments and a broad range of house types and sizes.

The dwellings provided will be a mix of private and affordable. Affordable housing provision will meet Colchester's Planning Policy in this regard and provide 30% (39no. dwellings).

Overall housing mix:

- 9no. 1 bed apartments (affordable)
- 13no. 2 bed apartments (affordable)
- 17no. 3 bed dwellings (affordable)
- 48no. 3 bed dwellings (private)
- 38no. 4 bed dwellings (private)
- 5no. 5+ bed dwellings (private)

LAYOUT

The layout has been designed in a logical way and makes use of the best urban design practices. The entire proposal is designed with public 'fronts' overlooking streets and open spaces, offering surveillance and a positive active street frontage.

Blocks and frontages have been orientated to enclose streets and overlook play spaces, while optimising where possible rear views out over the wider countryside. Streets and footpaths provide good connections around the development for pedestrians and cyclists, offering convenient links to local amenities such as the allotments to the south.

The street hierarchy begins with a tree-lined entrance avenue, which offers access to the south-west of the site and potential access to further development beyond the site boundary. A secondary road breaks off to the south-east. Shared surfaces take access from both roads. This treatment prevails through much of the development and will reduce vehicle speeds with the emphasis on pedestrian safety.

Finally, 3 dwellings will be served by a private drive off of Kelvedon Road, in order to fit in with the existing character of the road.

It is concluded that the proposed layout adopts many positive design principles.

CHARACTER

The layout has been split into 3 different character areas that add variety and respond to both their location within the site, as well their neighbouring areas. The design and layout of the character areas follow guidance set out in the Essex Design Guide (Opposite). These areas are designed to carry out different design objectives including:

- Creation of smaller focal spaces
- Specification of different building densities and set backs to create pinch points and a variety of street enclosures and frontages
- Incorporation of varying road types
- Provision of different material treatments with an emphasis on render
- Overlooking of open spaces and pedestrian routes
- Inclusion of public and private space for soft landscaping

The character areas help to create a new place with distinct, interlinked areas. The character areas also relate to the ecological parameters of the site. They are as follows:

1. The Avenue
2. Village Streets
3. Rural Lane

Character areas

3.20 A large residential area should vary in character between its different parts. This variation should not be based on development density or artificial creation of social differences, but on different types of space, building forms and materials. While it is certainly important to build a sense of place and identity into all parts of a development, the creation of a particular identity in a particular part of the development will do much to define the special character of each area. In addition, the creation of such areas avoids repetition and allows for a clear sense of direction and place – something that is particularly important to older people and those with dementia.

Extract from EDG

Contrast in character between adjacent areas

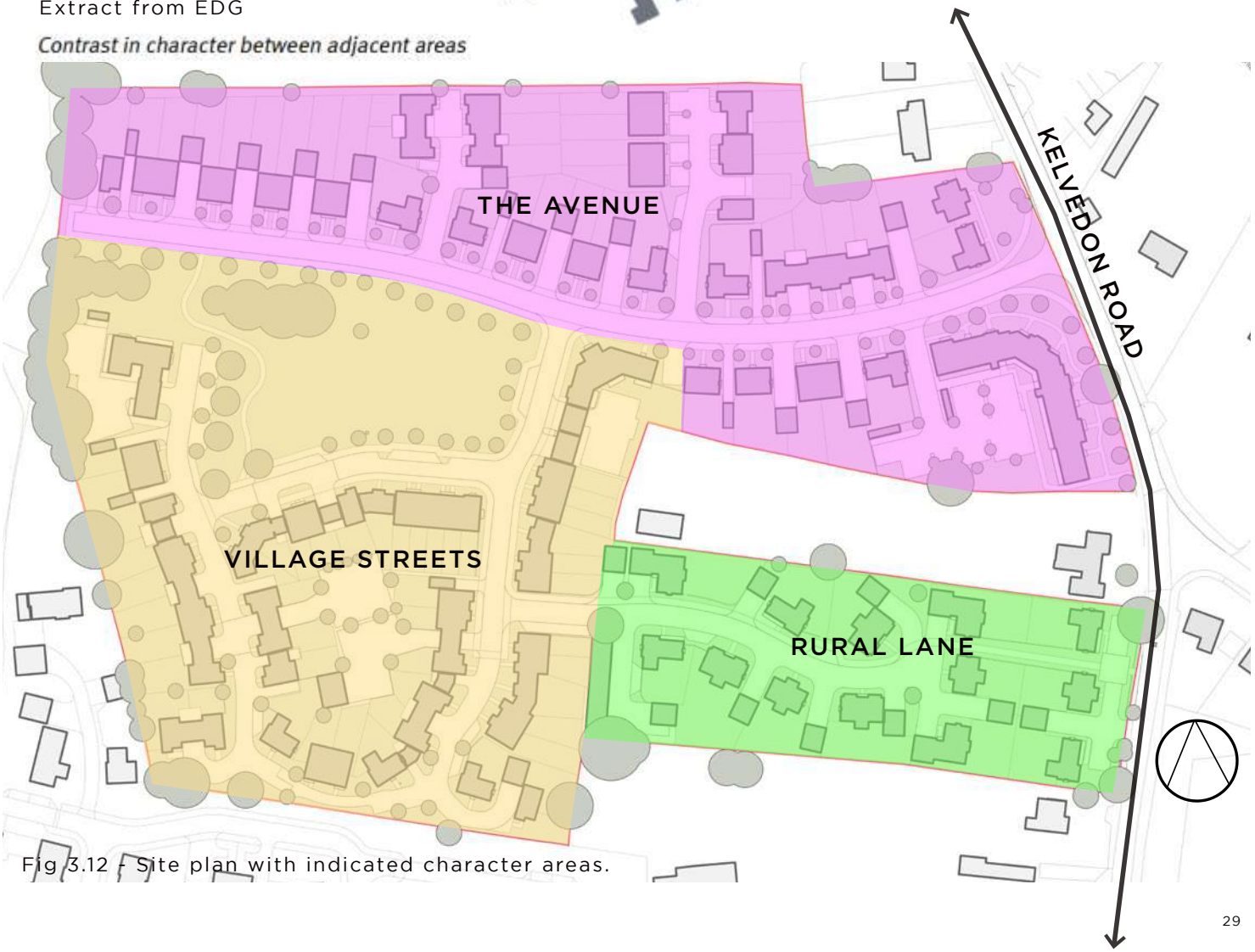


Fig 3.12 - Site plan with indicated character areas.

3.13 CA1: THE AVENUE

This area will provide the main frontage to the development and the main entrance to the rest of the site.

A key aspect of this area is the frontage onto Kelvedon Road. The buildings will reflect the existing character. They will be set back from the main road, following the existing building line determined by the neighbouring dwellinghouses on Kelvedon Road, however this is balanced against the need to provide a strong gateway to the development, therefore Apartment Block C will act as a landmark entrance to the site with its 3-storey corner feature.

The Avenue is a wide residential street, the purpose of which is for future proofing the development to allow widening of the roads and footpaths. Trees will be planted at regular intervals in the front gardens along its route, creating a buffer between the main road and the proposed dwellings. This adds to the existing green corridor that will be retained along the southern edge of the road. Furthermore, it creates a clear route through the site for both vehicular and pedestrian use. The dwellings branching off of the main road running through The Avenue, will have private shared drive access. Furthermore amenity standards are met in this area, and proposed amenity has views over green space external to site's boundary line.

DENSITY

This character area, has a density of approx. 23dph, making it the mid-density of the 3 character areas.

In accordance with the requirements for an area of this density in the EDG, there will be visually attractive routes for pedestrians through the area, alongside the existing and proposed landscaping and retained tree line. The proposed building line reflects the continuity of the main route through the site, with minimal breaks in the building line, to add variation to this character area there are courtyard spaces and private drives which branch off the main road.

SCALE

The dwellings in this character area will be between 2 and 3 storeys high. The differentiations in height helps to add to the variety of the area, it also makes the natural overlooking more dynamic, giving the open spaces a safer atmosphere. 2.5-storey dwellings are proposed at the head of the primary branch off the main road into the southern section of the site, and opposite the proposed open space to provide passive surveillance and strong frontages.

MATERIALS

Dwellings proposed within the Avenue utilise the most diverse palette of materials and draw in elements from the 2 other character areas of the development. For instance the frontage along Kelvedon Road is provided with the more decorative Georgian multi-bar windows, and dwellings in prominent corner locations also use this window type, elsewhere a more compact form of development is proposed off the branch roads from the main thorough-fare similar to the Village Streets areas. In terms of materials a wide palette of materials is used with multiple variations of render colour and weatherboard proposed. These external materials are combined with detailing such as pentice boards and stone cills, all of which combine to create a diverse streetscene.

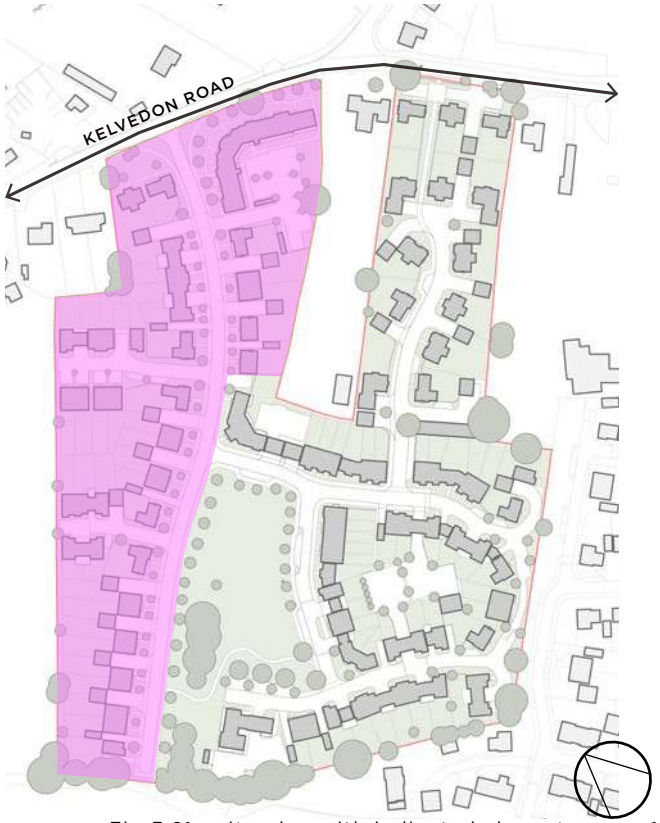


Fig 3.21 - site plan with indicated character area 1.

Fig 3.22 - Street scenes from The Avenue.

Fig 3.23 - HT3.6 From The Avenue.

Fig 3.24 - Material palette in The Avenue.

3.13 CA1: THE AVENUE

LAYOUT

As mentioned previously the Avenue combines elements from other areas of the development, the main road cuts through the site from east to west and enables a generously wide neighbourhood street with tree planting and pathways along its route. Branch roads to the northern side of the road provide access to enclosed courtyard style areas with dwellings orientated to face each other. Furthermore to prevent vehicles from reversing into the main street a secondary access road is provided parallel to it on either side, creating a wide and open entrance into the development. The main road continues to the western boundary, this was at the request of the Parish council to provide future access to the fields beyond.

PARKING

The majority of dwellings in this area have garages, set back from the road, and located alongside dwellings, with extra spaces located in front of the garages. The other dwellings have under croft parking located in-between dwellings - this retains a strong street scene, minimising breaks in the built frontage.

PEDESTRIAN CONNECTIVITY

There will be highly visually attractive routes for pedestrians through the area, alongside the boulevard trees and existing, retained tree line. Connecting straight onto Kelvedon Road, optimising pedestrian links.

Building Height	2/2.5/3 Storey
Building Form	Terraced, Semi's and Detached
Building Style and Materials	Red multi-stock brick, mixed roof materials with consistent rhythm, Predominance of Render / weatherboarding
Density	23dph
Parking Typology	Parking Garages and Side On-Plot
Frontage Set Back	1.5m - 10.5m
Garden Treatment Hard / Soft	Clipped hedge with large front garden, shrub planting
Road Treatment Hard / Soft	Macadam road and footpath, 2m grass verge with tree planting

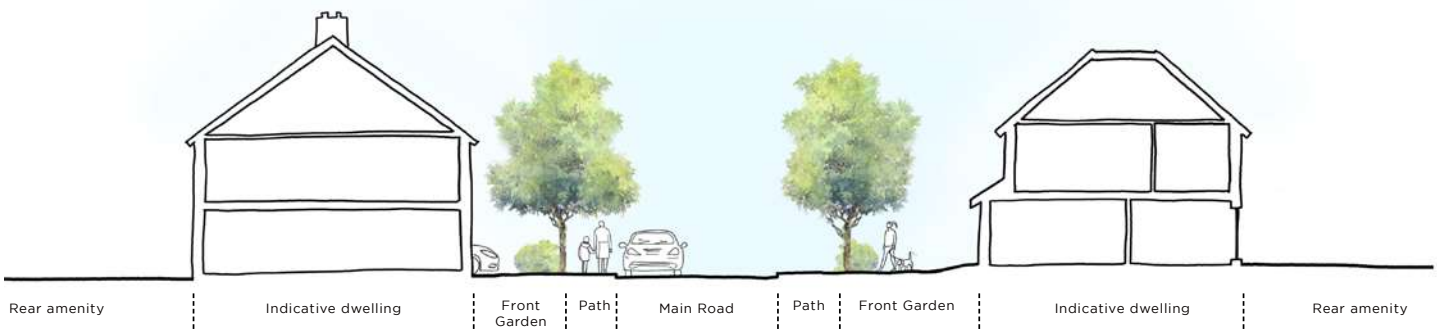


Fig 3.25 - Illustrative section of The Avenue.

Fig 3.26 - Prop Site Plan


LOVE
NEW
YORK

3.14 CA2: VILLAGE STREETS

This area will be characterised by a higher density and a more urban layout. There are also key relationships with the neighbouring site at Grange Road and the existing ecological features on the site. An important feature of this area are the continuous building lines, making use of carports and linked dwelling to create an organic building line.

The proposal is for dwellings located along the shared boundary with the Grange Road development to face outward, looking over a landscaped pedestrian route that will provide access to the fronts of the properties. Meanwhile, parking will be accessed to the rear in a shared parking court. This orientation will provide natural overlooking, and a usable green space between both sites.

Another key aspect is the relationship with the existing green corridor which runs through the site, and associated ecosystems that need to be retained. The site has been designed in such a way that these ecological features are incorporated into the site; forming a part of the site's open-space, while also forming a buffer between the open space and the main road. This document will touch on other ecological features later.

DENSITY

This character area has a density of approx. 32dph, making it the highest density of the 3 character areas.

In accordance with the requirements for an area of this density in the EDG, there will be visually attractive routes for pedestrians along the open space. There is good mix of dynamic spaces, through three key corridors. Each limits visual length by slight curves in the road, while still creating clear linear spaces for manoeuvring the site while retaining amenity standards to the rear of the property. Apartments have an allocated amenity of at least 7.5sqm per flat.

SCALE

The dwellings in this area will be between 2-3 storeys high, with one feature dwelling and Apartment Block A standing at 3 storeys high landmarking key locations. The differentiations in height helps to add variety of the area. The Apartment Blocks which flanks the western edge of the large open space provides an excellent level of passive surveillance over this area, increasing user safety.

MATERIALS

Dwellings proposed within the Village Streets area utilise the same diverse palette of materials as The Avenue however there is a greater use of Brick which gives greater prominence to the dwellings that are finished in Render or Weatherboard.

PARKING

The predominant parking typology in this area are parking courts located to the rear of dwellings or garages set back from the road, forming a strong street scene, minimising breaks in the built frontage.

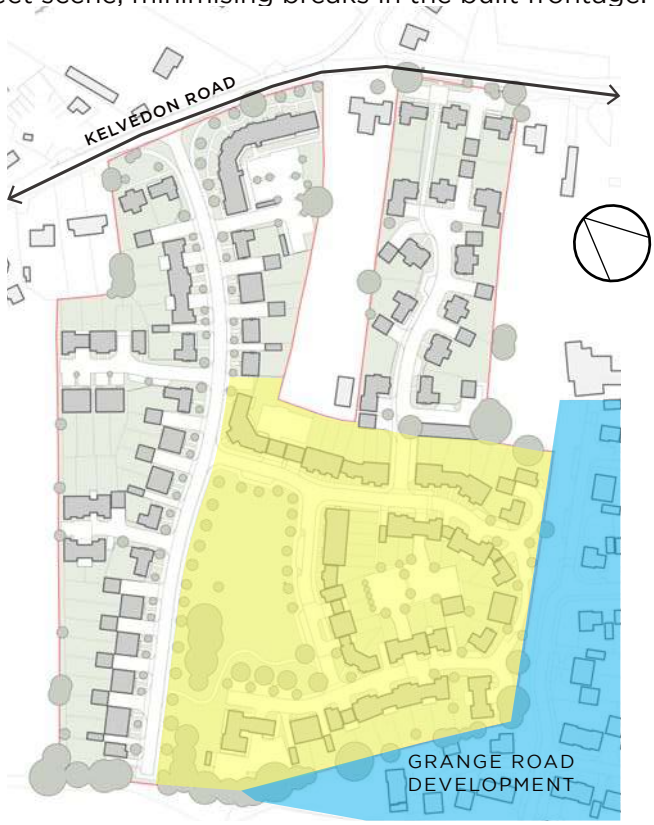


Fig 3.31 - site plan with indicated character area 2.

Fig 3.32 - Street scenes of Village Streets.

Fig 3.33 - HT3.9 From Village Streets.

Fig 3.34 - Material palette in Village Streets

3.14 CA2: VILLAGE STREETS

LAYOUT

The layout of the Village Streets character area is defined by its continuous almost unbroken building line that borders almost every section of road within. Dwellings are connected by either linked elements with accommodation above or simple carports. Parking areas are located to the rear of dwellings in order to maintain this street frontage.

PEDESTRIAN CONNECTIVITY

This area is designed to be more pedestrian orientated, so the road is a shared surface, with a change in colour to notify users that they have entered a different area. Similarly, the bends and curvature of the roads provide natural traffic calming measures.

Building Height	2/2.5/3 Storey
Building Form	Terraced, detached and Apartments
Building Style and Materials	Red multi-stock brick, mixed roof materials with consistent rhythm, Predominance of Render / brick
Density	32dph
Parking Typology	Parking Court and Side On-Plot
Frontage Set Back	1.5m - 7.5m
Garden Treatment Hard / Soft	Clipped hedge with front garden, shrub planting
Road Treatment Hard / Soft	Permeable block paving

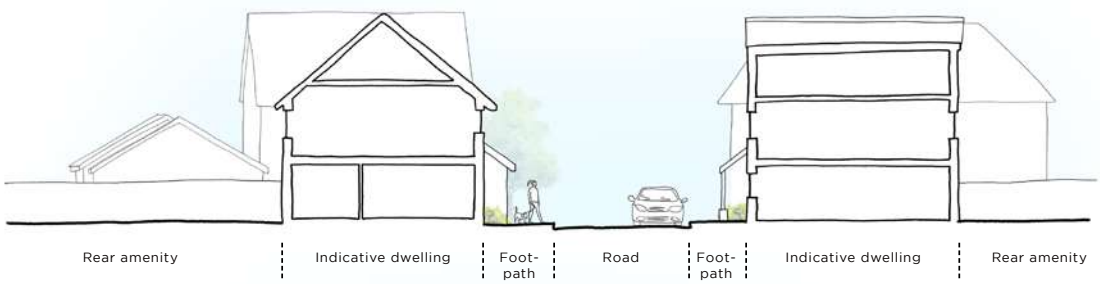


Fig 3.34 - Illustrative street sections of Urban Streets.

Fig 3.36 - Prop Site Plan


BLAINE
DAPA1


Park Road

3.15 CA3: RURAL LANE

This area will be the lowest density, giving it a rural dynamic, this is due to its close relationship with the land at The Gables.

A key aspect of this area is the frontage onto Kelvedon Road, similar to CA1. The buildings will reflect the existing character and architectural details of the surrounding area. The 3 dwellings facing outwards onto Kelvedon Road will be set back from the main road, and will follow the building line of the existing dwellinghouses.

The access from the main road to these three dwellings is also key in retaining this street frontage on Kelvedon Road. These dwellings will have a storey height no greater than 2 storeys.

Rural Lane will have the characteristics of an Arcadia style development, with reduced density, larger houses, larger gardens and more landscaping forming the street frontage. This will ensure that there is greater buffering between the proposed dwellinghouses and The Gables, through more landscaping along the site boundaries and the boundaries of plot amenities.

DENSITY

This character area, has a density of approx. 16dph, making it the lowest density character area on the site.

The goal of an Arcadia style development is to create the illusion of a rural environment, drawing on the 'picturesque'. As noted in the EDG the guiding principle of an Arcadia layout is to encourage pedestrians to meander through. A footpath connects this area to the dwellings facing Kelvedon Road, ensuring pedestrian links throughout the site to the wider area.

Its key to note that the three dwellings that face Kelvedon Road do not reflect an Arcadia style, they reflect the existing layouts of kelvedon Road, and they will have a their own access off of Kelvedon Road.

SCALE

The dwellings in this character area are all 2 storeys high, so as not to impose greatly on the neighbouring dwelling at The Gables or the wider Kelvedon Road street scene.

AMENITY

All the dwellinghouses in the Rural Lane character area are well over the required standards for amenity areas, providing the residents with generous gardens and private amenity space.

The large gardens further improve the relationship with the neighbouring property at The Gables.

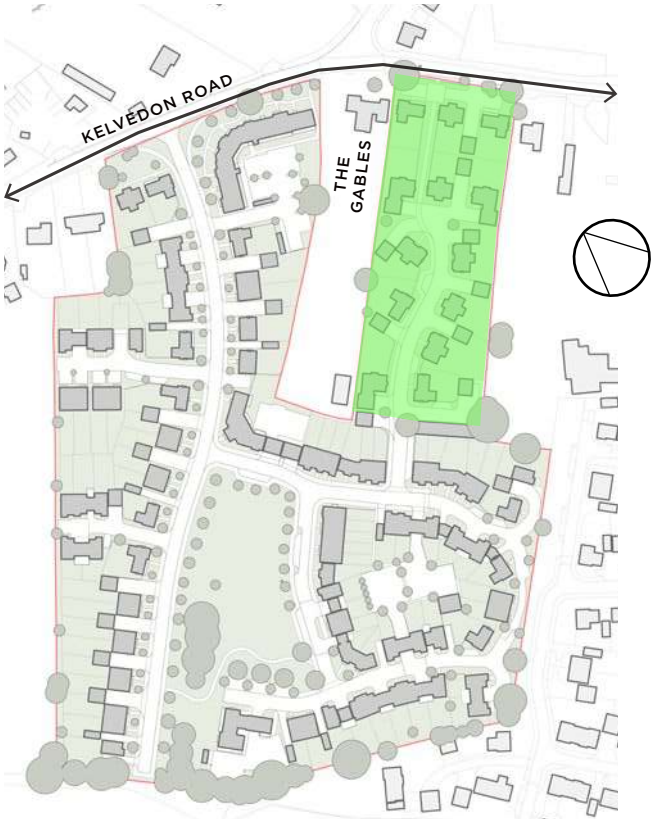


Fig 3.41 - site plan with indicated character area 1.

Fig 3.42 - Street scenes along Rural Lane

Fig 3.43 - HT3.9 From Village Streets.

Fig 3.44 - Material palette in Rural Lane

3.15 CA3: RURAL LANE

LAYOUT

The layout of the Rural Lane character area is defined by a broken building line that is more defined by the presence of landscaping an trees. Generous Parking areas are located to the side of dwellings with the addition of double garages for the majority of dwellings.

PARKING

The majority of dwellings in this area have private garages next to the dwelling or set back slightly. These elements will not be hidden by walls rather they will be planted around to ensure that the landscape dominates the area.

PEDESTRIAN CONNECTIVITY

A 6m wide road is proposed but to further promote pedestrian connectivity a 2m wide footpath is also provided along the northern side of the road linking from the primary site access to a new path connection through the 3 easterly located dwellings. The reduced density means there will be lower vehicular traffic in this area making it safer for pedestrian use and curvature in the road reduces vehicular speeds.

THE GABLES

The reduced density in this area softens the relationship with the Gables, which sits to the west of CA3. Furthermore, the Arcadia style of the character area means an increase in landscaping along the site boundary and plot amenity boundaries.

Building Height	2 Storey
Building Form	Detached
Building Style and Materials	Red multi-stock brick, mixed roof materials, Predominance of Render / weatherboarding
Density	16dph
Parking Typology	Private garages
Frontage Set Back	1.5m - 6.5m
Garden Treatment Hard / Soft	Clipped hedge with front garden, extensive shrub planting
Road Treatment Hard / Soft	Bonded gravel

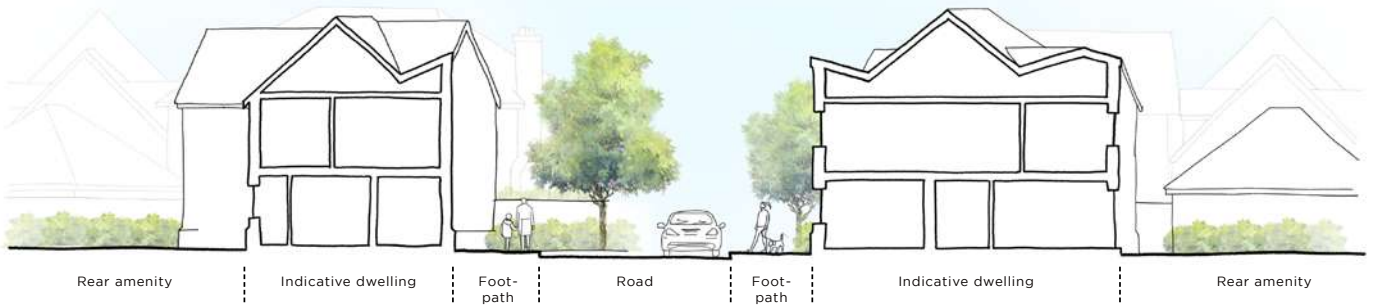


Fig 3.45 - Illustrative street sections of Urban Streets.

Fig 3.46 - Prop Site Plan

3.16 APPEARANCE

BUILDING MATERIALS

Building materials have been specified to add variety and reinforce the different character areas. They have also been inspired by local details; key influences were the water tower which lies to the south of Kelvedon Road, but north of the site, the listed buildings in and around Tiptree and the examples of previously approved schemes that have been featured in the Tiptree Neighbourhood Plan. As previously noted in the site analysis document there is a lack of notable character in the immediate area, hence the reference to listed buildings.

BRICK

Two types of brick will be specified. A red-multi brick will be used along with a red solid-brick for variety. Red brick is a prevailing material in the local area with limited use of buff or other brick colours.

TILE

Two tile types are specified including a red plain tile and a grey plain tile. These colours will be evenly distributed around the site and chosen to help reinforce character.

TREATMENTS

Render is prevalent in the local area with some additional, decorative use of weatherboarding as such these are applied regularly throughout the layout in key locations. Pink, yellow, cream and blue render is located throughout the scheme. On dwellings where render and weatherboarding appear together due to flying links black weatherboarding is used. White/Grey and Black weatherboarding is used more conservatively as is typical of the local area.

BRICK AND STONE FEATURES

Additional brick details include string courses, feature bands, brick plinths and splayed brick window heads, these add more detail to dwelling elevations giving them extra three dimensionality. Furthermore, stone cills will be used to add further visual value to the street elevations.

CHIMNEYS AND PORCHES

As was highlighted in Document 2, the use of porches and chimneys will bring more visual interest and dynamism to the scheme. This will enable the creation of a varied and interesting roofscape both at eye level, with the use of a variety of different porches including ‘A’ frame, lean-to, and ‘A’ frame and post and at roof level where varying ridge and eaves heights will be punctuated by regular use of chimneys throughout the scheme.

WINDOWS

Two window styles inspired by the precedent dwellings exampled in Document 2 have been incorporated into the design. Georgian styled multi-bar windows are deployed to the Kelvedon Road facing aspects of the development, with the larger houses within the Arcadia section of the scheme also fitted with this style. A simpler window with horizontal bar only is applied to the more dense areas of the development.

PENTICE BOARDS

A number of the listed buildings featured in Doc#1 made use of Pentice Boards around windows. Render and weatherboard dwellings within this proposal are therefore also provided with this detail. Rendered dwellings also feature stone cills.

SITE

GREY ROOF TILE

RED ROOF TILE

RED BRICK

BLUE RENDER

PINK RENDER

YELLOW RENDER

CREAM RENDER

BLACK BOARDING

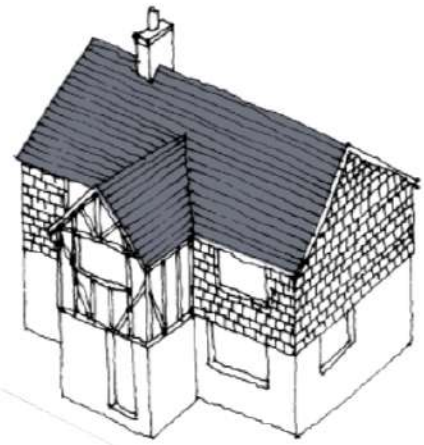
GREY BOARDING

3.16 APPEARANCE

Appropriate Use of Materials

1.39 Facing and roof materials should be selected from the range of regional materials characteristic of Essex, or of that part of Essex where the project is located. This means using those materials present on pre-20th century buildings in the locality. The traditional range includes red, yellow stock and white gault bricks, smooth rendering, black- or white-painted horizontal weatherboarding, plain clay tiles, clay pantiles, slates and thatch.

Material changes and detailing should be used in such a way as to explain the building



False half-timbering and alien materials such as the tile-hanging should be avoided

1.40 The use of clay pantiles should be limited to single-storey ancillary buildings. It is appropriate to use different facing materials on different houses in a development, and to use different materials on different parts of a house. However, feature panels of a different material – such as false half-timbering or vertical tile-hanging – are not appropriate (and also not characteristic of Essex).

1.41 If different facing materials are to be used on a single house, the change from one to another should appear logical. Typically, different materials might be used on different storeys or in order to articulate different parts of the structure – such as a front facade or architectural feature like a gable triangle, bay window or plinth. Elements such as lintels and plinths can also be enhanced by picking them out in a different material, or through the use of decorative detail. Used in this way, material changes and detailing can help to 'explain' the building.

1.42 Historic streets in Essex towns and villages invariably have a majority of rendered houses. If, as is desirable, the character of historic settlements is to be reproduced in new development, this high proportion of rendered houses should be perpetuated.

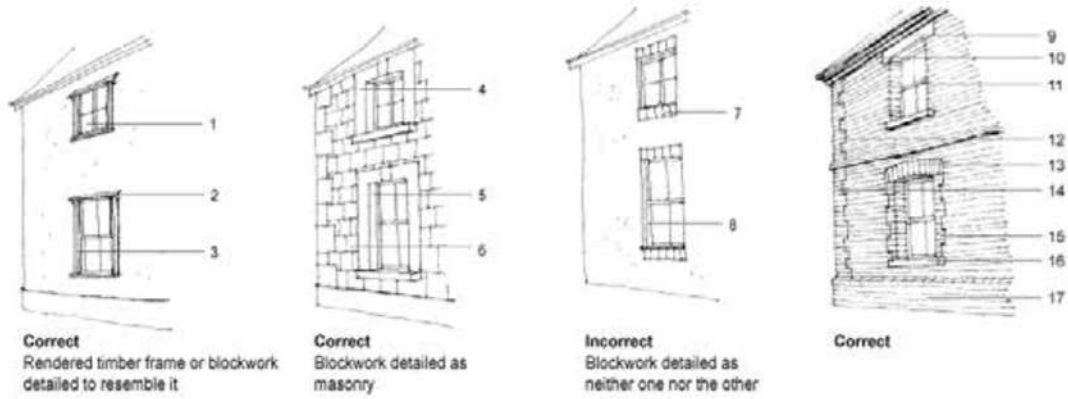
APPEARANCE AND THE ESSEX DESIGN GUIDE

On these 2 pages we have included extracts from the Essex Design Guide which discuss the appropriate use of materials and detailing for dwellings and buildings in Essex. These paragraphs in combination with the Architectural Investigation and Context study carried out in the early stages of the design process have guided the design process to the eventual submission of the designs to the Local Authority.

Appropriate Detailing for the Materials Used

1.43 Any detailing used should emphasise the character of the material – and where appropriate, be of a type that has evolved traditionally.

1.44 Some common forms of brick detailing:



Correct
Rendered timber frame or blockwork detailed to resemble it

Correct
Blockwork detailed as masonry

Incorrect
Blockwork detailed as neither one nor the other

Correct

1. Window on face of wall 2. Pentice board 3. Painted timber architrave 4. Heavy head sill and surround 5. Window inset within opening 6. Ashlar effect markings 7. Brick detail inexplicably showing through 8. Window slightly inset 9. Lintel in different material 10. Projecting eaves course 11. Window inset within opening 12. String course 13. Lintel that appears adequate for load 14. Quoin 15. Contrasting window surround 16. Sub-sill 17. Plinth

3.16 APPEARANCE

HOUSE TYPES

The layout has been carefully designed to provide a broad variety of homes to suit varying lifestyles and help to create a diverse and vibrant community.

The mix comprises 1 and 2 bed apartments, and a variety of 3, 4 and 5 bed dwellings. There are well over 15 different typologies, each with different styles and features. In addition, the palette of materials used will generate even greater variety, varying both due to location and the character area. Render is applied playfully in various colours to create a stimulating and visually interesting place to live.

As well as a mix of brick and roofing materials with render and boarding treatments, other features will be applied to add visual interest for example features mentioned earlier including string courses, brick plinths, and a variety of porch styles.

APARTMENTS

The Apartment Blocks provide some flexibility in their proposed building lines enabling the framing of some aspects of the development. This has been implemented most obviously adjacent to the open green space, where the scale of the buildings have been increased to give an impressive built frontage. The 3 Apartment Blocks have been sited in key locations, on key junctions and gateways into and around the site. Apartment Block C sits confidently at the entrance of the site, providing a strong built form and building line that acts as a landmark for residents and visitors to the site (see extract from EDG below). A concerted effort has been made to break the Apartment blocks up into visible distinct elements, with playful application of differing materials and finishes, this is to give the Apartment Blocks the appearance of being attached residential dwellings befitting of their location amongst neighbouring on-site dwellinghouses.

Landmarks

3.27 Landmarks include distinctive buildings, spaces, sculptures and similar recognisable structures. They should be placed at points in the network where they can aid orientation and navigation. They can be particularly useful in areas away from nodal points or other distinctive places; they may also fulfil a useful function in aiding orientation when viewed from a major road.

3.28 A landmark may take the form of a distinctive building or simply a taller one, designed to be visible from a wider area. Landmarks do not always need to be new features: the retention, integration and enhancement of existing features into new developments can serve the same purpose, and aids in retaining local distinctiveness and familiarity. The familiar nature of landmarks and their propensity to aid in orientation also helps to promote independence, a recognised mental health benefit.

Landmark building

Bishop Mead, Chelmsford

EXTRACT FROM EDG

Fig 3.61 - House type 3.6.

Fig 3.62 -House type 4.5.

Fig 3.63 - Flat block C.

3.17 LANDSCAPE STRATEGY

The site layout has been carefully developed to respect the existing landscape features throughout the site. This is key as the all trees on site are registered TPOs.

The development is bisected by the existing green corridor running through the site, on the south side of the spine road, bordering this green corridor in the Village Streets character area is a multifunctional open space, formed naturally by the retained hedgerows, trees and water areas and physically by the apartment blocks. These hedgerows and tree lines form the backbone of the landscape proposals, which are to be strengthened and enhanced through new planting, to create a diverse and robust green corridors that run through and around the boundary of the site.

PLAY & RECREATION STRATEGY

The aspiration is to create a landmark green/play area to act as a hub for residents and a core aspect of the development.

The size and location of the open space area alongside the proposed apartments enhances the quality of life of the residents in this area, ensuring that they have ease of access to the recreation areas. The proximity of the apartment blocks and the naturally increased number of possibilities for surveillance also increases security of the space by having more natural overlooking of the area.

As outlined by the EDG our open space will be for socialising, informal play, nature, landscaping, informal recreation, water management, cultural activities and entertainment.

Sufficient shade will be provided in the area from the existing mature trees and then additional landscaping that will be added to enhance the area, it will also be accessible from multiple locations, from both The Avenue and Village Streets character areas, enabling residents to make optimum use of the area.

Fig 3.71 - Existing vie of tree line (water line)

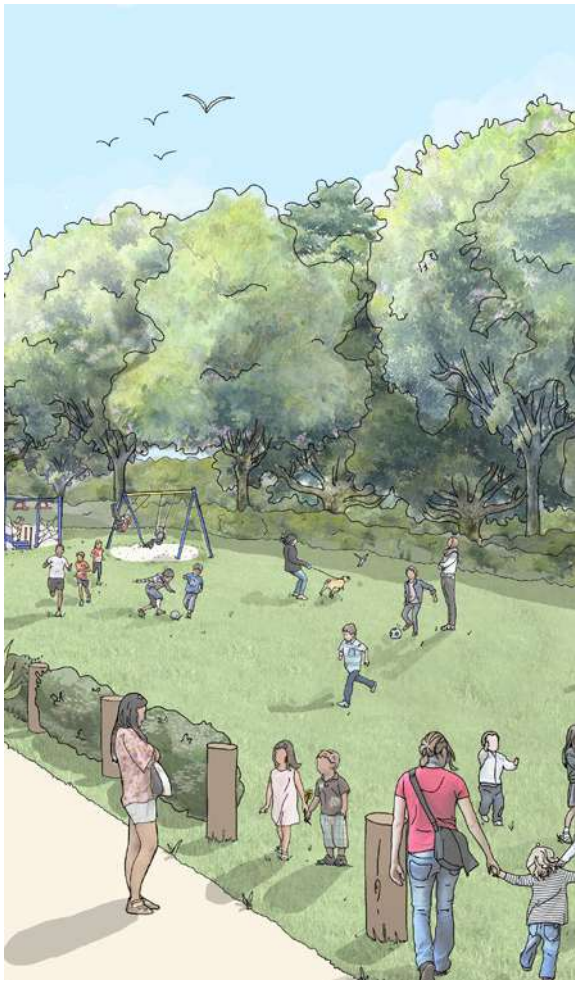


Fig 3.72 - Amenity/playground sketch

Fig 3.73 - Prop Site Plan

3.18 PARKING

RESIDENT CAR PARKING

Allocated car parking for dwelling houses is based on EDG standards. These are:

• 2+ bed dwellings - 2 spaces

Allocated parking for Apartments is provided with the same level of parking required by the EDG, namely:

- 1 bed flat - 1 spaces
- 2 bed flat - 2 spaces

Each space measures 5.5m x 2.9m. Most allocated spaces are located on-plot. In some instances, allocated parking is located off-plot or within parking courtyards. Any communal or off-plot spaces will be clearly allocated to their plot to avoid any conflict. Parking will be provided in a variety of typologies to add variety.

Most are located on-plot and to the side, behind the building line. Some spaces are located in front of integral garages. Other spaces are grouped in small areas off of private drives or in courtyards.

VISITOR PARKING

There are 33 visitor parking spaces that are located around the site which represents 1 space per 4 dwellings, this meets the EDG requirement of 0.25 spaces per dwelling. All visitor spaces are fully integrated into the street scene and are provided at the required bay size.

CYCLE PARKING

All properties without a garage will be provided with covered and secure cycle parking. Houses and bungalows will have small cycle sheds located in rear gardens. Apartment residents will have access to communal cycle storage

ELECTRIC CAR CHARGING POINTS

To facilitate the inevitable change from Petrol and Diesel powered cars to Electric Vehicles, every dwelling on the site will either be provided with an electric vehicle charging point or the infrastructure to enable one to be installed at a later date. These spaces are marked green on the plan opposite.

SITE

PRIVATE PARKING

VISITOR PARKING

DISABLED PARKING

ELECTRIC CHARGING POINT

3.19 PEDESTRIAN PERMEABILITY

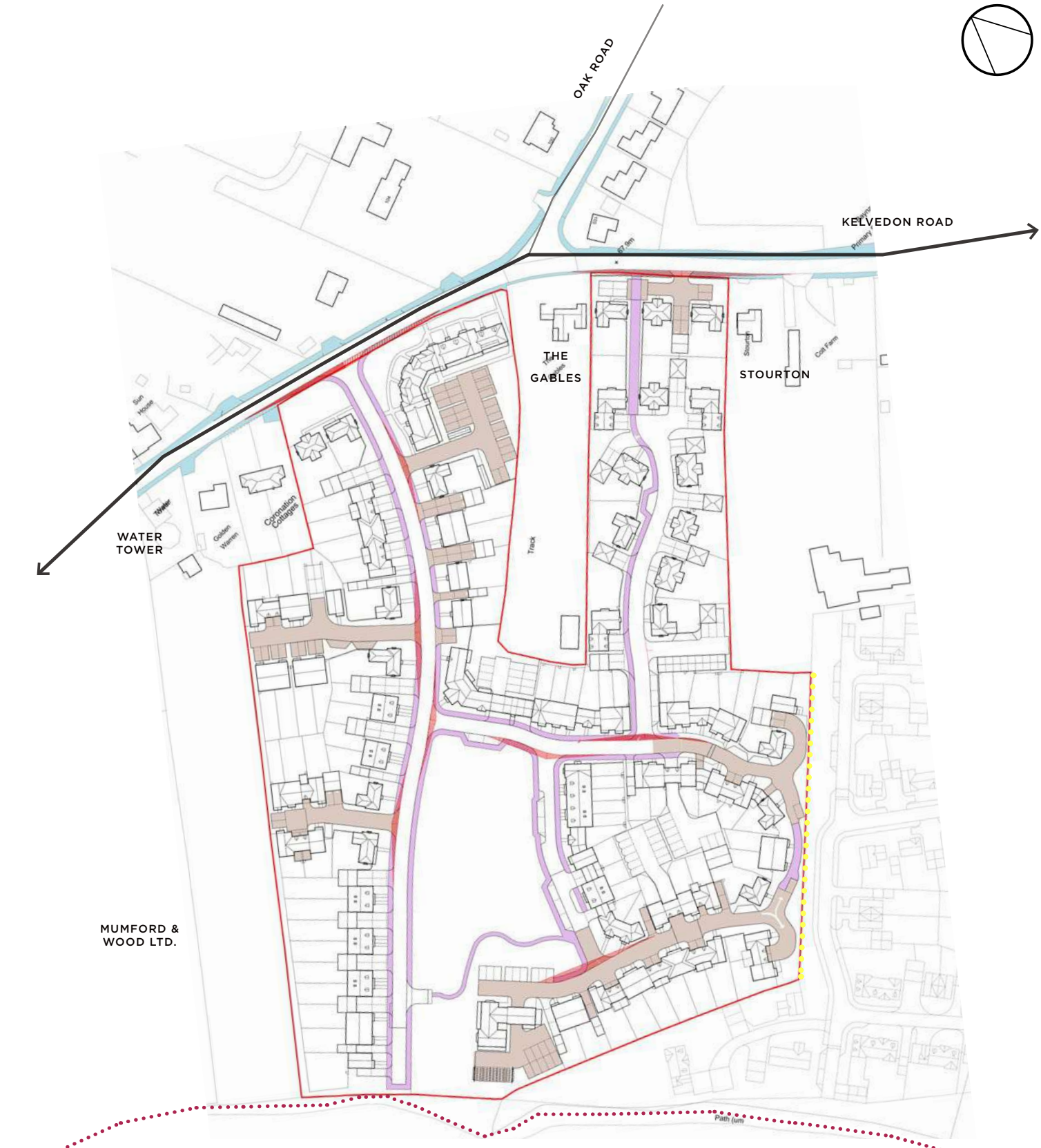
The plan opposite demonstrates that the proposed development will offer a good level of Pedestrian connectivity throughout the site and beyond where it is able.

The principal road running across the site to the western boundary parallel to the existing watercourse features 2no. 2m footpaths provided either side, these continue southwards along the eastern edge of the Public Open Space. 1no. 2m footpath continues through the Rural Lane Character Area to Kelvedon Road. The east-west footpaths proposed along the main road will enable a connection to the Public Right of Way and walkers route that exists beyond the application sites red line.

Where the road transitions into a shared surfaces the footpaths taper into the shared surface at a 45 degree angle as per the guidance in the Essex Design Guide. The Shared Surface then becomes a space for both pedestrians and vehicles to use, and this principally happens in the Village Streets Character Area. An additional footpath connects the 2 sections of Shared Surface on the sites southern boundary. The intention is for the site to be able to connect to the Grange development to the south however as the path would need to cross third party land this connection cannot be implemented with any degree of certainty at present.

Existing footways abutting Kelvedon Road which share a boundary will be widened to 2m.

The boundary between the Grange Road development and this proposed scheme will be left open. Although a formal physical connection cannot be proposed over the third-party land, the open nature of this boundary will allow/ enable informal permeation between the 2 developments.


OAK ROAD
KELVEDON ROAD
THE GABLES
STOURTON
WATER TOWER
MUMFORD & WOOD LTD.
Coronation Cottages
Golden Warren
Sun House
Track
Path (um)
SITE
2M FOOTPATH
SHARED SURFACE
FOOTPATHS BEYOND REDLINE
PUBLIC RIGHT OF WAY
OPEN BOUNDARY FOR INFORMAL PERMEATION

3.20 SUSTAINABILITY

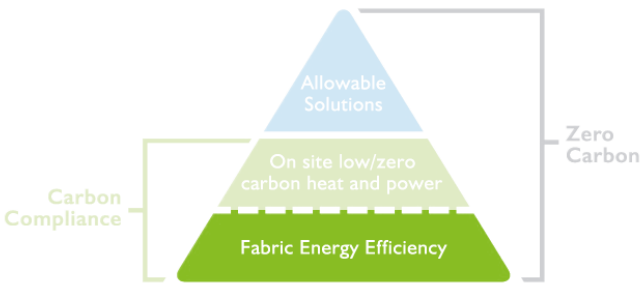
To emphasise the green credentials of the development the following design principles have been adopted in during its design: Solar gain and solar shading; passive ventilation; use of locally sourced materials; high performance double glazing; air tightness; and off grid heating and electricity. Whilst most dwellings would normally incorporate a small number of the above principles, the proposed scheme would use a combination of them all resulting in a development which is significantly innovative and sustainable in its construction. Furthermore, the proposal would be highly sustainable in its construction meeting at least level 4 of the Code for Sustainable Homes.

The aim of the proposed energy strategy is to reduce the future developments reliance on energy imported from the grid, whilst also minimising the impact on day to day operations and the lifestyle of its inhabitants, with a careful approach to energy regulation and where possible on-site storage.

The proposed dwelling will employ a number of techniques and technologies in relation to energy generation, heating, building fabric, ventilation and/or cooling. The proposed development will follow the principles of "Be Lean, Be Clean, Be Green" which are outlined further below.

1. "Be Lean" and use less energy
2. "Be Clean" and supply energy more efficiently
3. "Be Green" and use renewable energy

These principles should be applied consecutively and should focus on achieving the best results from "1 - Be Lean" before moving onto the next step, and so on. This is the approach undertaken through the design process of the scheme.

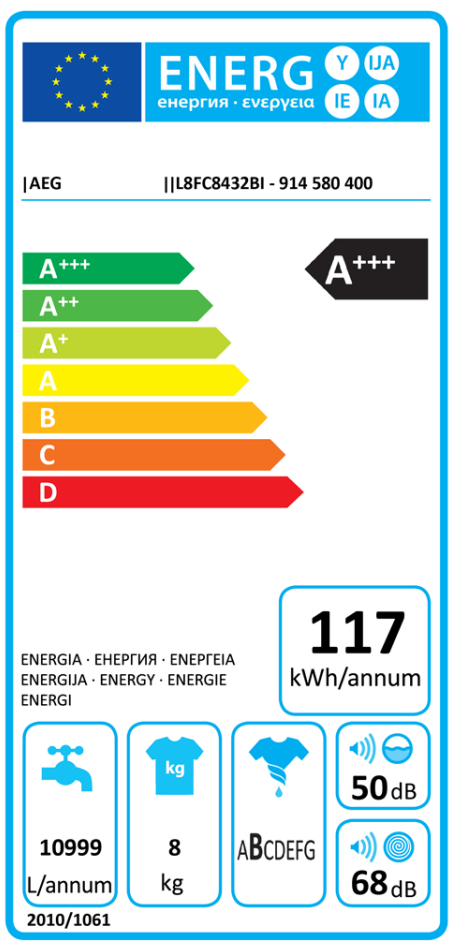


"Be Lean" will be addressed by using passive design measures. This includes maximising the controlled use of passive solar energy in the layout and orientation of buildings and windows, natural ventilation, and improving the building fabric.

"Be Clean" will be addressed by reducing the amount of energy that needs to be supplied by ensuring the consumption of energy is more efficient.

"Be Green" will be addressed by utilising low energy technologies including Photovoltaic (PV) Panels, energy efficient lighting and appliances and Combined Heat and Power (CHP) Boilers.

The Fabric Energy Efficiency Standard (FEES) is the proposed maximum space heating and cooling energy demand for zero carbon homes, as this is a detached dwelling the maximum energy demand for space heating and cooling is 46kWh/m²/year and the maximum on site carbon emissions permitted arising from heating, cooling, hot water use, lighting and ventilation is 11kgCO2/m²/year.



Building Fabric

Thermal insulation must be able to deliver significant carbon emission reductions throughout the life of the development, therefore high performance material must be provided. High insulation levels will ensure optimum occupant comfort all year round and significantly reduce the heating energy demand.

This is particularly relevant for glazed surfaces that may suffer from overheating in summer or over-cooling and condensation formation in winter. A low U-value is recommended to avoid radiant temperature asymmetry in winter.

The building fabric performance for the new dwelling will meet or exceed the Part L 2013 requirements where applicable.

Maximising fabric energy efficiency is a key part of meeting the National and Local policies. One of the foremost elements of the wider low carbon energy strategy is the utilisation of a highly efficient building envelope, which comprises high levels of insulation for instance using cellulose insulation made from recycled newspaper, high airtightness, high performance glazed windows and mechanical ventilation heat recovery systems. These items are essential to the implementation of a ‘fabric first’ approach to building design and will improve energy efficiency in for example heat generation and reduce carbon emissions.

3.20 SUSTAINABILITY

With a highly efficient building envelope employed to all dwellings, the next consideration was how energy could be generated on-site. An assessment of the siting, orientation and aesthetic considerations made clear that the most suitable renewable energy source would be solar.

The prevalent use of pitched roofs to all dwellings provides good potential for solar power generation. PV electricity is clean and zero-carbon and will offset against carbon intensive grid power. Unlike solar thermal systems, all electricity produced by PVs can be utilised with negligible losses regardless of the installation size/capacity.

Availability of unobstructed solar energy is considerable on the numerous roofs of the proposed development with some of course having a better orientation in relation to the solar path. With this in mind systems such as solar thermal, solar photovoltaic and hybrid solar PVT technologies should be considered.

An EDDI energy management system will manage the energy produced by the solar panels so that it is used to heat water or rooms rather than exporting it to the grid. To ensure energy usage is as efficient as possible A+++ rated appliances will be installed throughout.

Further to the above and as per council policy found in the Emerging Local Plan all dwellings will be provided with 1no. Electric Car Charging Points.

FIG 3.20.1. PHOTOVOLTAIC SOLAR PANELS.

Air Source Heat Pumps

The scheme proposes the use of Air source heat pumps to further reduce the energy consumption and carbon emissions associated with other heat generation methods.

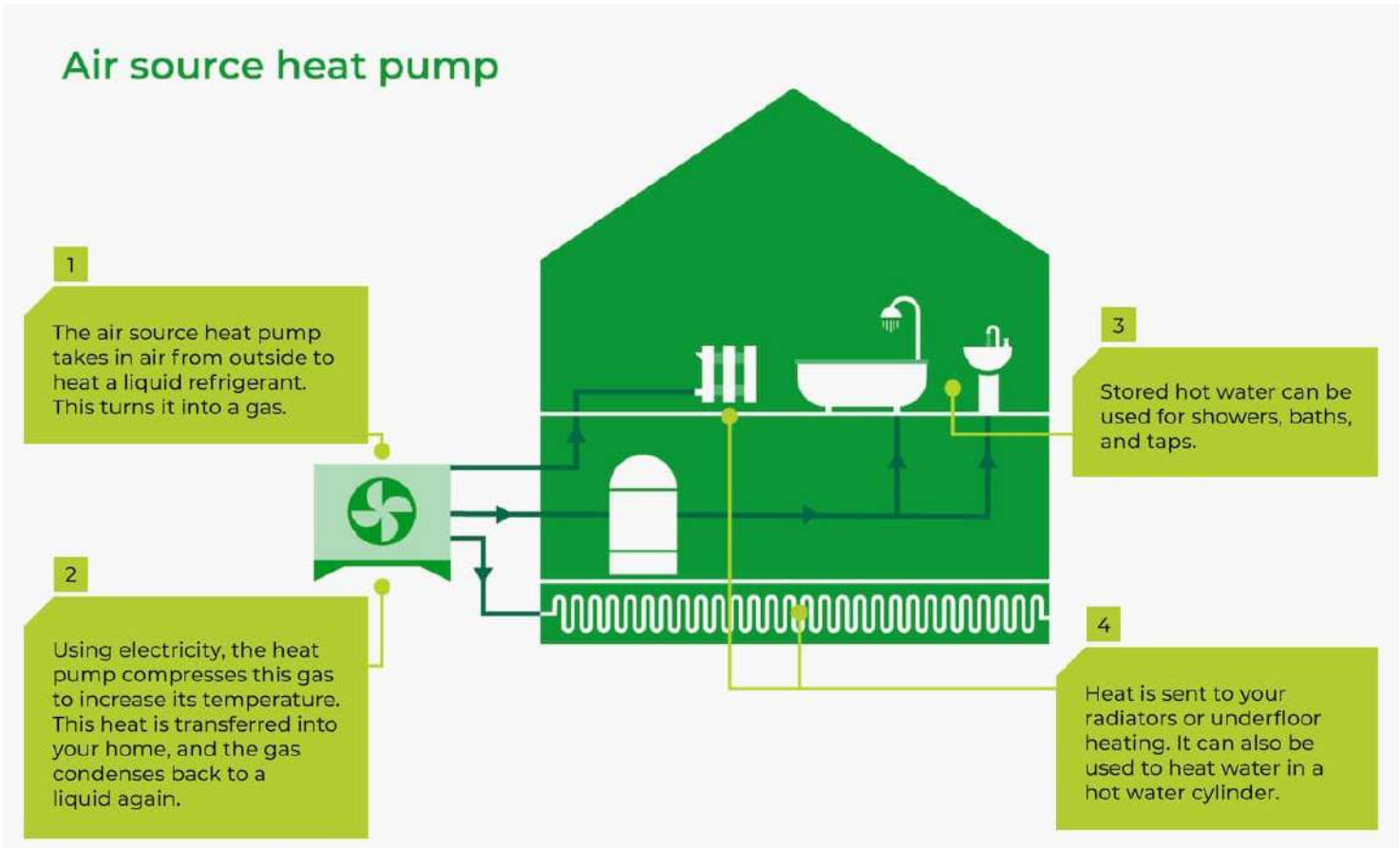


FIG 3.20.2. AIR SOURCE HEAT PUMP DIAGRAM

3.19 SUSTAINABILITY

Water Use

To reduce potable water demand and use the resource efficiently, a combination of the following strategies will be adopted:

- Specification of water efficient appliances, including washing machines and dishwashers.
- Dual and low flush toilets.
- Reduced flow (low pressure) showers and aerated taps. An example being Ideal Standard's Concept Blue Range.
- Flow restriction on piped water supplies to sinks and basins.
- Minimisation of leakage by installing isolation valves and leakage detection.

These will ensure potable water demand falls within the limit of 110 litres/person/day in accordance with the optional requirements of Building Regulations 17.K.

The table opposite shows a water consumption calculation for the dwelling and demonstrates that the minimum water use of 110 litres/person/day for residential developments is achievable.

Installation Type	Unit of measure	Capacity/ flow rate	Litres/ person/ day
Is a dual or single flush WC specified?		**Dual**	
WC	Full flush volume	4	5.84
	Part flush volume	2.6	7.70
Taps (excluding kitchen and external taps)	Flow rate (litres / minute)	5	9.48
Are both a Bath & Shower Present?		**Bath & Shower**	
Bath	Capacity to overflow	167	18.37
Shower	Flow rate (litres / minute)	8	34.96
Kitchen sink taps	Flow rate (litres / minute)	5	12.56
Has a washing machine been specified?		**Yes**	
Washing Machine	Litres / kg	8.66	18.19
Has a dishwasher been specified?		**Yes**	
Dishwasher	Litres / place setting	0.92	3.31
Has a waste disposal unit been specified?		**No**	0.00
Water Softener	Litres / person / day		0.00
		Calculated Use	110.4
		Normalisation factor	0.91
Code for Sustainable Homes	**Total Consumption**		**100.5**
	Mandatory level		**Level 3/4**
Building Regulations 17.K	External use		5.0
	Total Consumption		**105.5**
	17.K Compliance?		**Yes**

FIG 3.20.3. WATER EFFICIENCY TABLE

Sustainable Urban Drainage Systems
Colchester's Emerging Local Plan requires developments to utilise sustainable forms of drainage systems.

SUDs alleviate flood risk by reducing and controlling the peak rate of discharge in compliance with design requirements; facilitating the detention of storm-water, for subsequent discharge over an elongated period of time. SUDs can significantly reduce the harm to water resources, and improve the quality of the built environment, by moderating flows and filtering run-off.

Permeable Driveway Surface
In terms of this application SUDs can be implemented through the use of a permeable paved driveway surfaces which allows water to pass through the surface allowing the storage, treatment, transport and infiltration of water. This technique will be deployed across all shared surfaces.

Central Attenuation Basin
The central public open space will also double as a communal attenuation basin, collecting surface water from all dwellings, slowing down the flow rate, before being filtered and eventually naturally discharging into a nearby ditch along the northern boundary.

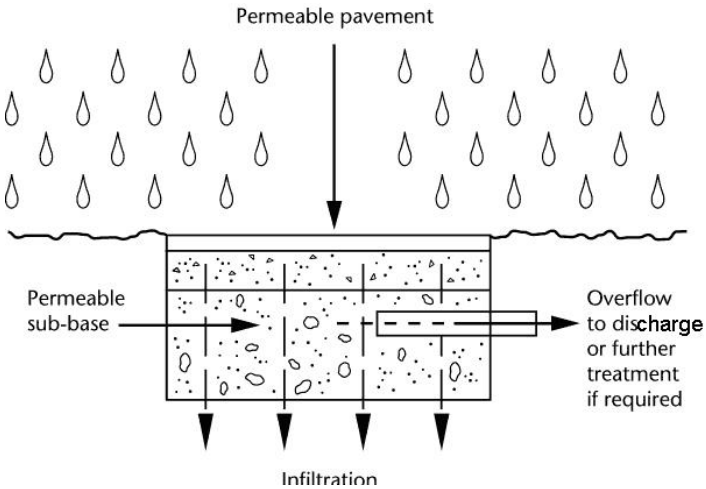


FIG 3.20.4. PERMEABLE PAVING DIAGRAM

Rainwater Harvesting
The sites location makes Rainwater harvesting an attractive inclusion to the projects wider sustainability strategy, much like the energy strategy previously discussed the point of these components is to reduce the proposed dwellings reliance on existing water and energy infrastructure.

Water butts are the most common means of harvesting rainwater, although they are primarily designed for small scale use such as in gardens. Therefore the relative cost, maintenance and performance of water butts when compared to other larger rainwater harvesting systems are significantly less. All dwellings with private amenity space in the form of a rear garden will be provided with a Water Butt connected to the downpipe of a roof gutter, water collected in this way can then in turn be used to water plants, irrigate lawns, fill up ponds, wash windows or cars whilst conserving water from mains supplies.

FIG 3.20.5. EXAMPLE WATER BUTT SYSTEM

3.21 LAYOUT PRINCIPLES

1 The dwellings in this location have been orientated to face Kelvedon Road. This serves to provide a continuous built frontage from the Water Tower to the North (in combination with other elements of this development) through to the Paddocks to the south.

Open green space provided in front of dwellings provides opportunities for landscaping and planting to soften the appearance of the development adjacent to the road edge.

2 Apartment Block C has been positioned amongst the Kelvedon Road frontage. It ranges between 1.5 and 3 storeys in height to provide a landmark building on the main site access. As per the Essex Design Guide landmark buildings may take the form of a distinctive building or a taller one, designed to be visible from a wider area (Please refer back to Section 3.16 Apperance for more information). The building will act as a gateway marker to residents and visitors to the development alike.

Further to the above the Apartment block is generously set back from the Kelvedon Road edge, following the pre-existing building line and the new access road through the development. These open spaces allow for careful landscaping and planting opportunities which will soften the presentation of the development in a key location.

3 To improve pedestrian connectivity through the site, a footpath is provided between the dwellings which links directly to the footpaths on Kelvedon Road.

4 As per point 1, the development has been designed to provide built frontage to Kelvedon Road where it can on either side of the property called The Gables. These aspects of the development follow established building lines and fills in gaps between existing properties in this location. Scale, massing and materials have been based on the examples evidenced on the buildings in the local area and the sites immediate vicinity.


Coronation Cottages
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Track
The Gables
104
103
67.9m
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3.21 LAYOUT PRINCIPLES

1. Apartment Block C not only sits amongst the Kelvedon Road frontage but also turns the corner into the site, providing a strong built form to the site entrance. The section of the block which turns into the site is at a height of 2 and 3. The building will act as a gateway marker to residents and visitors to the development alike.

   The appearance of the Apartment Block is designed to appear as a series of attached dwellings to integrate it with its direct neighbouring dwellinghouses. Further to this the amenity balconies for the Apartment building are located on its rear elevation therefore taking advantage of the south and west facing orientation of those elevations.

2. Due to the sites 'C' shape the shared boundaries with the neighbouring property known as The Gables required mitigation and consideration. This required an offset from the existing fence line to ensure a degree of privacy for the existing residents with the proposed dwellings orientated so that the rear fence line would be shared with the Gables. It also enables the retention of existing trees and hedges along the boundary, with little to no construction impact.

3. The sole access to the southern half of the site is provided from the junction off the main road adjacent to the proposed Public Open Space. The Public Open Space is an important feature of the development incorporating aspects of the sites existing hedge row and drainage channel. As such it was important that the POS was given suitable built frontage to enable passive surveillance across the space as and when it was in use. Much like Apartment Block C, Block B also turns a corner to provide a continous built frontage, parking is located behind the Apartments to prevent vehicles from crowding the street-scene.

   To integrate the block with its neighbours the scale of the building is kept to 2-storey with a corner feature providing visual interest. Once again the building is given the appearance of multiple attached dwellings, this is important as the block sits within the denser Character area: VIllage Streets.

4. As per Point 2, it was important to respect the shared boundary with The Gables. As such dwellings are orientated to back onto those boundaries rather than face out across them, this maintains privacy for the existing resident. The density of this section of the development also increases and the built form appears continuous, as per the Essex Design Guide which recommends this approach.


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The Gables
Track
Coronation Cottages

3.21 LAYOUT PRINCIPLES

1 As per the Opportunities and Constraints identified in Doc#1, there is a level of noise pollution that arises from the neighbouring business development. As such dwellings were orientated with their gardens abutting the boundary to maximise the distance between the source of the noise and the dwelling windows. Should further assessments need to be undertaken by way of condition and as advised by Environmental Health Officer, additional mitigation measures could be provided such as Acoustic Fencing along the affected boundary.

Further to this, at the request of the Council's arboricultural consultant a 2m buffer zone has been provided from the site boundary to enable the maintenance and upkeep of the boundary hedge.

2 The development is bisected by the existing green corridor running through the site, located on the south side of the spine road this ecological element was explicitly earmarked for retention. These 2a hedgerows and tree lines form the backbone of the sites landscape proposals. Their retention informed the design of the road layout, creating a parcel of land adjacent to the North Boundary, the depth of the parcel enabled 2 smaller side accesses for additional development (2a) which are perpendicular to the site boundary to minimise the noise pollution received by those dwellings.

3 The dwellings on the north side of the spine road are provided with generous plot depths, as such they are all provided with access to 2no. side parking spaces and a garage. This part of the proposed scheme has a looser built form than the Village Streets zone relying less on physical connection between the dwellings. This is to provide visual distinction with other sections of the scheme and to give more prominence to the individual blocks of detached and semi-detached houses. The combination of the strict geometric pattern, and enclosure of space by Trees and Hedges is derived from the EDG (Please see extract from EDG Opposite).

4 An important part of the design process and consultation with various Stakeholders made clear the importance of providing a through route to the land beyond the site on the western boundary. Much like this site, and the adjacent development to the south this open space has been earmarked in the Neighbourhood Plan as an area for potential future development and it was important that access to it was provided through the Application site.

Boulevard planning at densities up to 20 houses per hectare (8 houses per acre)

3.40 A further variation is possible in a layout that employs a subtle combination of landscape and buildings. Part of the composition relies on creating and enclosing spaces by trees and hedges; part relies on enclosing space with groups of buildings. The appropriate relationship must be created between the height of both buildings and trees and the width of the spaces between them, following the principles elsewhere in this guide.

3.41 While the use of detached houses is possible in this context, achieving a positive effect will depend on the use of a common architectural style and detailing for all the houses; on locating garages to the rear of residences; and on using gateways, arches, railings and similar to link houses into a single composition.

3.42 Similarly, the houses must be positioned in a strict geometric pattern. It is this geometry of crescent, circus, oval or rectangle that will provide the necessary order. The success of such layouts also depends on abundant and appropriate tree-planting. Sparing use should be made of this layout, with developments of over 20 houses per hectare (8 houses per acre) predominating. This layout is not appropriate for use in smaller sites.

3.21 LAYOUT PRINCIPLES

1 The development has been designed to provide built frontage to Kelvedon Road where it can on either side of the property called The Gables. These aspects of the development follow established building lines and fills in gaps between existing properties in this location. Scale, massing and materials have been based on the examples evidenced on the buildings in the local area and the sites immediate vicinity.

2 2a Much like other areas of the proposed layout, the site shares boundaries with existing neighbouring properties, because of this dwellings are orientated to face inwards towards their road accesses with gardens sited to the rear and thus sharing a boundary fence with the existing properties. In this location the plot depths are generous enabling a respect for the privacy of adjacent land owners. Where dwellings are sited closer to the boundaries (2a) these units are corner turning so that any windows on the side elevations parallel to the boundary are kept to a minimum or can be furnished with obscured glazing. Further to this it enables the retention and upkeep of existing boundary hedging.

3 As explained previously this aspect of the development was designed to incorporate the characteristics of an Arcadia style development, with reduced density, larger houses, larger gardens and more landscaping forming the street frontage. This will ensure that there is greater buffering between the proposed dwellinghouses and The Gables, through more landscaping along the site boundaries and the boundaries of plot amenities.

The goal of an Arcadia style development is to create the illusion of a rural environment, drawing on the 'picturesque'. As noted in the EDG the guiding principle of an Arcadia layout is to encourage pedestrians to meander through. A footpath connects this area to the dwellings facing Kelvedon Road, ensuring pedestrian links throughout the site to the wider area.

Its key to note that the three dwellings that face Kelvedon Road do not reflect an Arcadia style, they reflect the existing layouts of kelvedon Road, and they will have a their own access off of Kelvedon Road.

Criteria for Layout at Densities Below 20 Dwellings Per Hectare

3.31 As with higher density layouts, the aim here is the creation of a pedestrian-scaled environment by use of enclosing space and structuring chains of spaces. The difference is that the space is enclosed by trees, hedges and shrubs rather than buildings, which become free-standing rather than space-enclosing elements and are contained within the landscape. This is the legitimate context for the detached house.

3.32 From the outset of any new development, an appropriate balance must be struck between the design principles of the Arcadia and Boulevard layouts set out below. This balance must address the needs of all users – including people of any age and varying physical and mental abilities.

3.33 One way to do this is to incorporate into a development some flexibility to adapt or 'customise' parts of dwellings to make them more identifiable – for example, the colour of front doors or rendering, or specific types of planting. This may help to orientate and reassure the partially sighted and people with dementia.

Arcadia, densities up to 8 houses per hectare (3 houses per acre)

3.34 In layout terms, Arcadia is the creation of the illusion of a rural environment. It draws on the 'picturesque' approach to landscape design typified by the layout of the parks of British country houses in the eighteenth century.

3.35 The guiding principle was the use of meandering walks which revealed successive surprise features hidden in a dominant landscape. In the same way, early 'leafy' suburbs of the nineteenth and early twentieth century conceal houses among mature trees so that the visitor is more aware of the landscape setting than of the houses themselves.

3.21 LAYOUT PRINCIPLES

1. To prevent the development from being completely inward looking an effort was made for the proposed dwellings to face outwards where they can. This happens for instance along Kelvedon Road, Apartment Block A also looks out in multiple directions, similarly on the southern boundary where the proposal site adjoins the Grange Road development the dwellings have been orientated to face the boundary. This forms an Edge condition as discussed in the extract from the EDG below.
2. Dwellings from the Grange Road development are able to provide vista stops at the end ofs the shared surface roads within the proposal site while a buffer zone between the 2 developments also enables a degree of soft landscaping. This creates a visual connection between the developments which helps identify them as part of the same new neighbourhood rather than being read as 2 island sites with no connections.
3. It should be made clear that the Applicant would be willing to provide a pedestrian connection upto the southern site boundary to connect the 2 sites, however beyond the site boundary an agreement would need to be put in place for any proposed path on adjacent land.
4. The Grange Road development has an unusual site boundary with a triangular shaped element protruding from its main body to border this proposals Western boundary, the dwellings proposed in this triangle section restricts the possibility of orientating dwellings in this proposal outwards across the countryside. Instead best practice dictates that the dwellings be orientated with the rear gardens abutting the neighbouring garden and facing into the Application site.

Edges

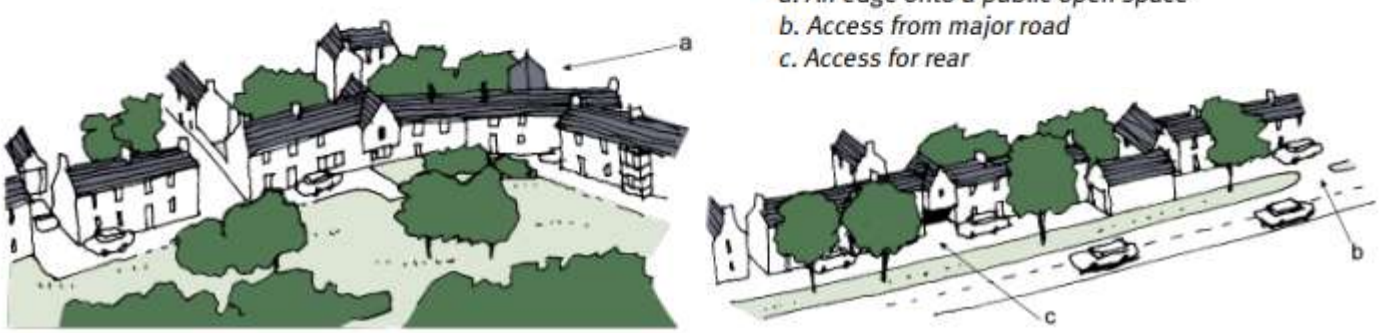
3.21 Edges occur where one type of place or space meets another – for example, where an urban space meets the countryside; where houses meet a major road; where a development meets an open space; or where two developments of different characters meet.

3.22 Edges should be treated in different ways according to their importance. For example, public open spaces should be treated as focal points onto which houses front, rather than being tucked away behind residences.

3.23 In order to avoid rear fences dominating the view, edges where houses sit beside major roads or open countryside should be treated similarly. Houses should front such edges even where it is not possible to provide vehicular access direct from the major road, and where access must instead be taken from service roads or private drives running parallel to or behind the road.

3.24 Such edges should be clearly defined in terms of both purpose and status (i.e. public or private). Clear distinctions allow people to understand such spaces, and are particularly important for the partially sighted or people with dementia, who might otherwise become confused or disorientated.

a. An edge onto a public open space
b. Access from major road
c. Access for rear

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NEIGHBOURING
DEVELOPMENT ADJACENT
PLOT OUTLINES

3.21 LAYOUT PRINCIPLES

1 The layout of the Village Streets character area is defined by its continuous almost unbroken building line, this is an important design feature promoted by the Essex Design Guide, more detail on this can be found in the extract below. A central island is defined by the road layout, enclosing outward facing continuous attached dwellings, their rear amenity gardens and an internal parking court which is provided with structural landscaping to soften its appearance.

Dwellings are connected by either semi-detached/terraced or provided with linked elements with accommodation above or simple carports. Parking areas are located to the rear of dwellings in order to maintain this street frontage.

Furthermore, this area is designed to be more pedestrian orientated, so the road switches to a shared surface, with a change in colour to notify users that they have entered a different area. Similarly, the bends and curvature of the roads provide natural traffic calming measures, in some areas the width of the road is reduced to enforce the role of priority to oncoming traffic.

2 The centre of the island created by the enclosing roads is the location of a central parking court serving a number of the dwellings in this area. It is accessed beneath flying links of the proposed dwellings. The court itself is split into 2 with tree planting between to reduce the hardness of the appearance of what would otherwise have been purely hard-landscaping. Bays provided, as throughout the development are Essex standard sizes of 2.9x5.5m, a 6m wide manoeuvring area is provided in front of the spaces to enable vehicles to access and egress from their parking spaces.

Continuity of Frontage

3.69 Continuity of built frontage is desirable because it helps to enclose spaces and creates continuous pedestrian routes. Continuity of built frontage is not always easy to achieve, but the following guidelines show how common problems can be avoided or overcome:

3.70 Joining a high proportion of dwellings to each other in terraces can create a powerful continuous frontage. This need not mean suppression of the individuality of each dwelling; historic towns and villages are largely made up of individual buildings which happen to be joined to one another. Terraces are comparatively economical to construct and offer improved insulation. They are therefore energy-efficient and easy to connect to district heating systems, renewable energy sources, waste distribution systems and other digital infrastructure. If a high proportion of detached houses is desired, they should be provided within a lower density context.

3.71 Even where space is required between buildings for vehicle access, it is possible to maintain continuity by bridging over at first-floor level.


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1

3.21 LAYOUT PRINCIPLES

1. The dwellings on the north side of the spine road are provided with generous plot depths, as such they are all provided with access to 2no. side parking spaces and a garage. This part of the proposed scheme has a looser built form than the Village Streets zone to provide visual distinction with other sections of the scheme and to give more prominence to the individual blocks of detached and semi-detached houses. Front garden spaces provide opportunities for planting and urban greening, which will be an important link between the retained hedge and tree planting in the centre of the site and the dwellings which are provided with views across the open space. 2.5-storey dwellings especially will benefit from the roof space accommodation with views across the adjacent open space.

2. Apartment Block A is located on the western edge of the proposed green space, due to its relatively isolated location it is proposed as a combination of 2.5 and 3 storeys. This provides occupants with views across the open space to the east and the countryside to the west. It also acts as a landmark for the open space sitting proudly within its setting. Once again the majority of the parking for this block is located to the rear, keeping the outward appearance of the scheme relatively car free and pedestrian friendly.

3. The dwellings on the south side of the Public Open Space sit within the village streets character area, because of this they appear as one continuous, natural block which frame the open space. Continuity of built form/frontages are an important aspect discussed in the EDG and featured on the previous pages, as are the Edge conditions which were discussed in relation to the relationship between the south of the site and the Grange Road development. Once again 2.5 storey dwellings are deployed to provide strong visual built form against the softness of the open space, a corner feature 3 storey dwelling sits on a key junction again providing a visual landmark for users of the site. Furthermore localised reductions in the width of the road are used to reduce vehicular speeds and increase pedestrian safety.

4. The site layout has been heavily influenced and designed around the retention of the existing green corridor and ecological feature that runs essentially through the site. It was therefore logical that the Public Open Space be located adjacent to this feature therefore making it a prominent aspect of the development. Furthermore the Open Space allows for the possible introduction of 400sqm LEAP, well surveilled and overlooked by dwellings on all sides. The Open Space consists of over 11% of the total site area, meeting the councils policy of 10% provision of Public Open Space.

   The open space additionally serves as the sites Attenuation Basin, serving the development in extreme rainfall events but otherwise remaining dry and eminently usable.

3.51 Most public spaces should be faced by the fronts of buildings and their entrances, not by a predominance of flank elevations or side or rear boundaries. This helps to reinforce visual character, define spaces and promote pedestrian movement. It also contributes to better security by enabling the informal supervision of public spaces by residents. The provision of natural surveillance is thereby likely to reduce both the incidence and fear of crime while increasing the use of spaces by people of all ages and abilities. This in turn promotes social inclusion and community cohesion.

3.22 CONCLUSION

This document is a follow up to the previous iteration submitted with the Planning Application to Colchester Borough Council (ref: 190647). The purpose of this document in combination with Doc#1 and Doc#2 submitted with the Application is to demonstrate that the site has been carefully assessed and evaluated and that a range of factors have been taken into account during the design process. Specialist consultants have been appointed to advise on the design and council officers have had the opportunity to comment on the proposal in the form of a pre-application meeting with written advice.

The proposal has been designed to comply with local policy, government and development plan guidance which has been outlined within this document to support a residential scheme.

The empty site provides an ideal opportunity to provide high-quality housing for those seeking to live within the growing village of Tiptree and a number of smaller villages and amenities between, whilst also being close to large expanses of green spaces and agricultural land surround the site. Principally it will increase visual interest on the southern side of Kelvedon Road by filling the gaps between the existing built form. As previously mentioned, the site is located within a sustainable location within close proximity to local amenities, schools and also easily accessible by various modes of public transport.

An extensive investigation into the character and design of the existing housing stock within Tiptree has been carried out to ensure that the comprehensive high quality design appears in-keeping with the scale and massing of the immediate surrounding context, whilst providing an opportunity to enhance the overall character of the area by using a carefully selected material palette drawn by local examples in a Traditional design style.

Sustainable principles have been evaluated at each stage of the design process to ensure the proposal has been designed and will be constructed to make the fullest contribution to climate change mitigation and adaptation. Therefore minimising overheating, reducing flood risk, improving water efficiency and protecting and enhancing green infrastructure, as well as taking steps to reduce carbon dioxide and other greenhouse gas emissions.

Furthermore the majority of the existing vegetation along the boundaries will be retained, poor quality/ dead trees have been identified and will be removed and additional landscaping and planting will be provided throughout the scheme to soften its presentation. Parking layouts have been designed alongside a specialist consultant to optimise space and usage. Other aspects such as drainage and ecology have all been considered within the proposal.

Great effort has been made to ensure the proposal has considered all the relevant associated planning policy requirements including; housing, highways, landscape and trees; and viability and economic considerations. The proposals therefore accord with the Development Plan and will contribute to meeting the Council's supply of housing land. We are therefore pleased to present this proposal for determination by the council.

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