

IDA Darwin Hospital
Fulbourn old Drift, Fulbourn, Cambridgeshire

Design Justification Statement

Prepared for the Reserved Matters Application on behalf of Morris Homes Ltd
December 2020

Revision A - June 2021





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1
Introduction

1.0 Introduction

This document has been prepared as part of a Reserved Matters planning application for the construction of 203 new homes over 2 phases on land formerly occupied by the IDA Darwin Hospital which is located off Fulbourn Old Drift in Fulbourn, South Cambridgeshire.

This document should be read in conjunction with the Design and Access Statement prepared for the outline planning submission by Savills and Murphy Philipps along with the Fulbourn ‘Village Design Statement’ being a supplementary planning document adopted January 2020.

The contents of this document which will seek to explain the rationale of the former hospital site and will be split into these specific key areas: -

The Existing Site

This section will outline the parameters of proposed development site, its location and former use.

The Village of Fulbourn

This section will discuss the existing village, its character and history along with key parameters taken from the Village Design Statement.

Planning Context

Within this section we will explain the current position with the planning process and the main parameters set out within the application. These together with our own pre application discussions and meetings will ultimately inform the reserved matters applications for this development.

Design

The design element of this document will be split into these different criteria: -

- 1. Existing Site Constraints and Opportunities.
- 2. The Design History.
- 3. The Design Response.
- 4. The Detail.

Access and Movement

Often overlooked, this section will look at how the movement through the scheme will take shape for vehicles, cyclists and pedestrians.

Final Scheme and Placemaking

Good design can make or break a scheme and we intend to explain our rationale and its design. Good design creates good communities.

Landscaping

A simple structure will show how the landscaping will influence the character of the scheme whilst our company landscaping principles and the use of native species will enhance the area for wildlife.

Building for a Healthier life

A simple take on the narrative. Using what we know and our extensive knowledge of the surrounding village, we intend to show how the development will not only provide much needed housing in the area, but how it will also enhance the existing by seamlessly integrating the scheme into its surroundings. Building for a Healthier Life will also seek to show how the development meets the criteria in every aspect.

Conclusions

A summary of this document and our final thoughts.

To help in producing this document we will be referring to and using content from the following publications.



In 2018, the Council was awarded funding from the Ministry of Housing Communities and Local Government to develop exemplar village design guidance, working in collaboration with village communities undergoing significant growth and change, in order to develop locally specific design guidance.

These Village Design Statements were produced for the differing boroughs of Cambridge in order to ascertain a clear brief on the existing historical elements and how any proposed development within these boroughs would need to be designed using these design codes in order to seamlessly blend in to the respective villages.

The Fulbourn VDS was developed by the local parish council, the local community and headed up by the Village Design Steering Group.

It was adopted as a supplementary planning document in January 2020, 3 months after outline approval was granted.



The Design & Access Statement for the outline approval which was completed by Savills and Murphy Philips for the NHS Foundation Trust back in 2017 and accompanied the outline application.

This document sought to outline the Hospital site and its current constraints, whilst looking at the proposed masterplan and housing detail.

Although quite a weighty document that relies heavily on text we will pick out the elements that best describe the development and use them to enhance our design journey.

The Landscape element will be focussed in a separate document for the purposes of this application as we felt that the existing and proposed public realm was an important factor of the proposals.



Building for a Healthy Life is the latest edition of and the new name for Building for Life 12. It is still a tool to help people improve the design of new and growing neighbourhoods.

Organised across three headings, 12 considerations are presented to help those involved in new developments to think about the qualities of successful places and how these can be best applied to the individual characteristics of a site and its wider context.

- These 3 new headings are: -
- 1. Integrated Neighbourhoods.
 - 2. Distinct Places.
 - 3. Streets for all.

Together with the help of Astle Planning & Design we intend to show how the scheme at IDA Darwin will easily achieve the required criteria.



2

Existing Site

2.0 The Site

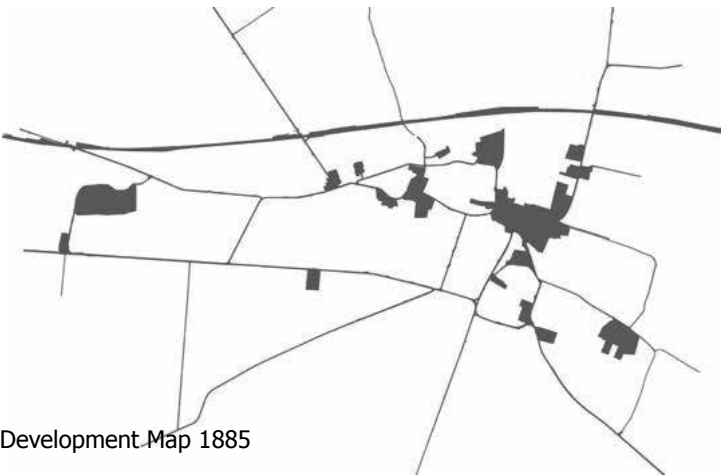
2.1 The Village of Fulbourn

The village itself is compact and situated in a tree-rich hollow at the edge of the fen land. It developed from Roman and Saxon times at the junction of winding country roads, which still today shape the village. The historic core has a substantial number of pre-Victorian buildings, many of which are grouped around green spaces at the junctions of the old lanes. The northernmost group is focussed on the High Street (then known as Church Street). A second group is located at Pound Green and a third group at Home End (then Town Street). The 13th Century St Vigor’s Church, set in its large churchyard, provides a central focal point adjacent to the manor house. The Six Bells Pub, still active on the High Street, is the oldest and dates from the 16th century. Along the earlier streets there are a number of timber framed 14th century medieval farmhouses, and cottages dating from the 16th and 17th centuries with thatched or plain tiled roofs.

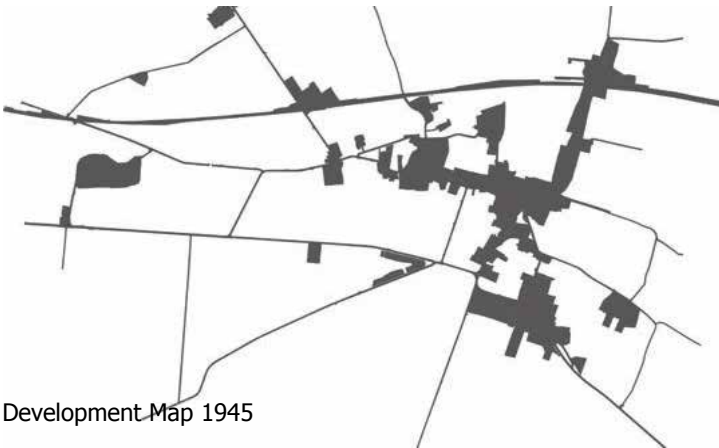
In the 18th century drainage ditches in the low lying fenland allowed improved cultivation and increased prosperity. By the mid 1800s the Windmill and the Dissenting Meeting House (now the United Reformed Church) were built, paid for by well-off local families. Poor Well and the Horse Pond on Frog End Road (now Cow Lane) are place names referring to the importance of water management in the village. In the 19th century commercial water extraction to serve the city of Cambridge led to further changes in the land and the construction of the large company building in Cow Lane. The ater pumping station closed in 1987 and the water pattern nearby has changed yet again with waterlogged lower fields giving rise to new wildlife areas adjacent to Poor Well and the chalk stream arising there.

Late Victorian times endowed the village with its school, the almshouses and Fulbourn Hospital for mental health patients, then isolated in the countryside. In the 19th century linear development started to extend northwards along Station Road (previously Hay Street), from the core to the then railway station on the Cambridge/Ipswich line. This gave impetus to industry as goods could be transported to other parts of the country and to the ports. This legacy remains, with a number of industries, including the mill, which still deals internationally and generates significant traffic locally.

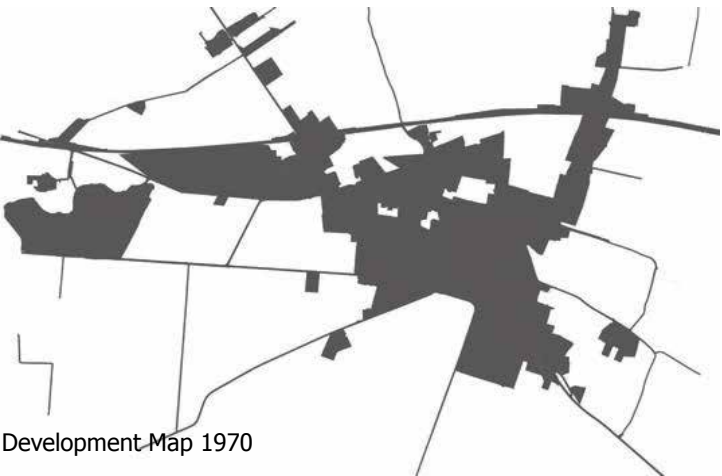
Starting with Council homes in the 1930s, but especially with the development of the Sixties and Seventies, the village expanded rapidly with several housing estates. These were built adopting patterns and building forms more typical of commercial suburban development and represented a departure from the main character of the village. However, with time, they have acquired some of the local diversity, trees and planting. In 2015 The Swifts replaced the former Windmill Estate (a system built 1960s development) and introduced a new layout, with mixed building types around a green.



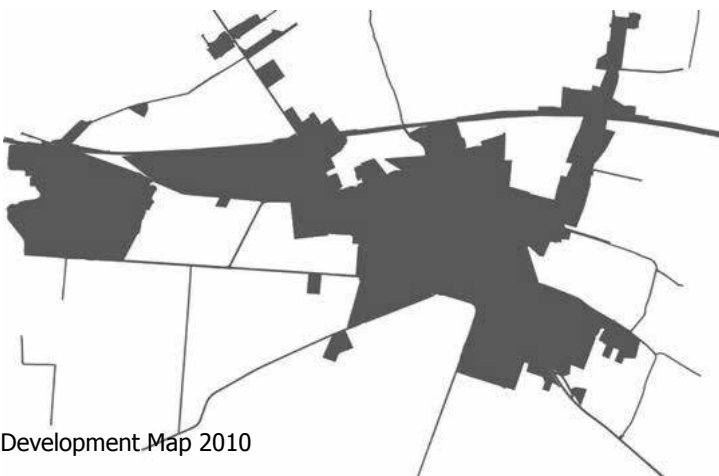
Development Map 1885



Development Map 1945



Development Map 1970



Development Map 2010



Points of Interest within the Village.

1. St Vigor of Fulbourn Church

2. United Reformed Church

3. Fulbourn Primary School

4. Cambridge Steiner School

5. Landmark international School

6. Townley Memorial Hall (Fulbourn Parish Council)

7. The Fulbourn Windmill.
8. The IDA Darwin Development Site

9. Fulbourn URC Church

10. Twelve (Fulbourn Church Centre)

11. The Hat and Rabbit Public House

12. The Six Bells Public House

13. The White Hart Country Inn

14. The Fulbourn Recreation Centre

15. The Horse Pond



View looking down the Village High Street



The existing Fulbourn Windmill.

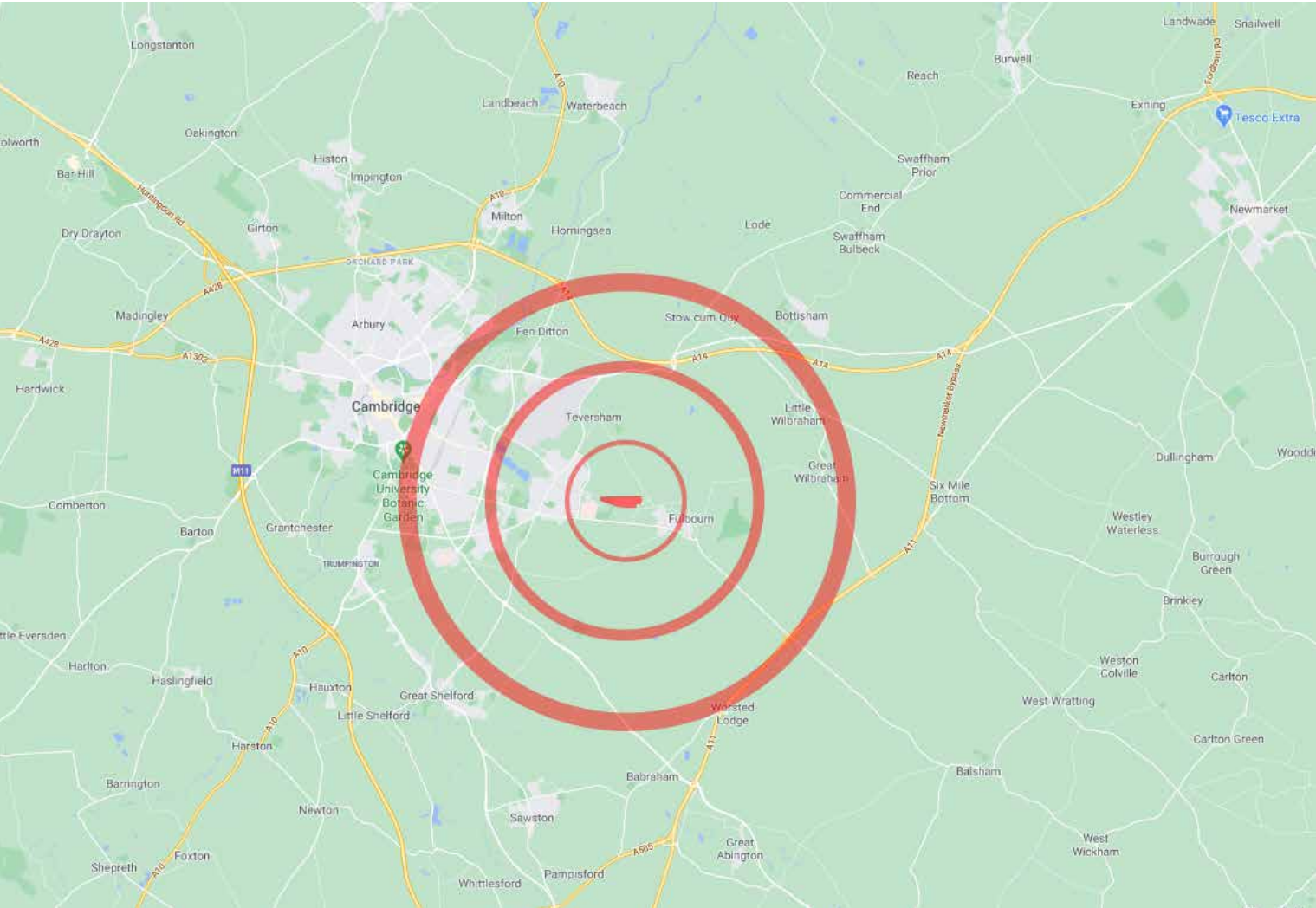
2.2 Site Location

The proposed development site is located to the north-west of the village of Fulbourn, which itself lies approx 8km due east of the City of Cambridge. The site occupies the former IDA Darwin Hospital, part of which has recently been demolished to facilitate the new development.

The site is bordered by existing housing to the east, open agricultural fields to the south, the Cambridge to Newmarket single Railway line to the north with open fields beyond and an existing woodland area to the west. The site is accessed from Fulbourn Old Drift which was the original road leading to both the IDA Darwin and Fulbourn hospitals before their part closure.

Fulbourn lies in the East Anglian Chalk Landscape Character Area. The village is surrounded on all sides by land designated as Green Belt. To the west of Fulbourn, only a narrow strip of land - including the Fulbourn and IDA Darwin Hospital sites - separates the village from its neighbour, Cherry Hinton, which is already a suburb of Cambridge.

The surrounding landscape consists of high quality grade-2 agricultural land, with large arable fields on the slopes of the rolling chalk hills to the south and mainly flat open farmland to the east and north. Countryside comes right into the village at several points, to the south and east of the village, where the low density of development is still very rural in character and contributes to the gentle transition from village to open countryside which is more abrupt at the western end.



Map showing the relationship of the village of Fulbourn within its wider context.



Map showing the relationship of the development site to the neighbouring towns and villages.



Development Site Location Plan.



TOWNLEY MEMORIAL HALL

3

Planning Context

3.0 Planning Context

3.1 Planning History

The development of 203 homes in a range of different sizes was approved at Outline stage by South Cambridgeshire District Council on the 7th November 2019. As part of this approval it phased the site into 2 separate areas with phase 2 not receiving vacant possession until 2024. There is to be a retained pump station located in phase 2 which will be decommissioned at the same time the phase 2 buildings are demolished and an electrical sub station which is to remain live until the new one is commissioned.

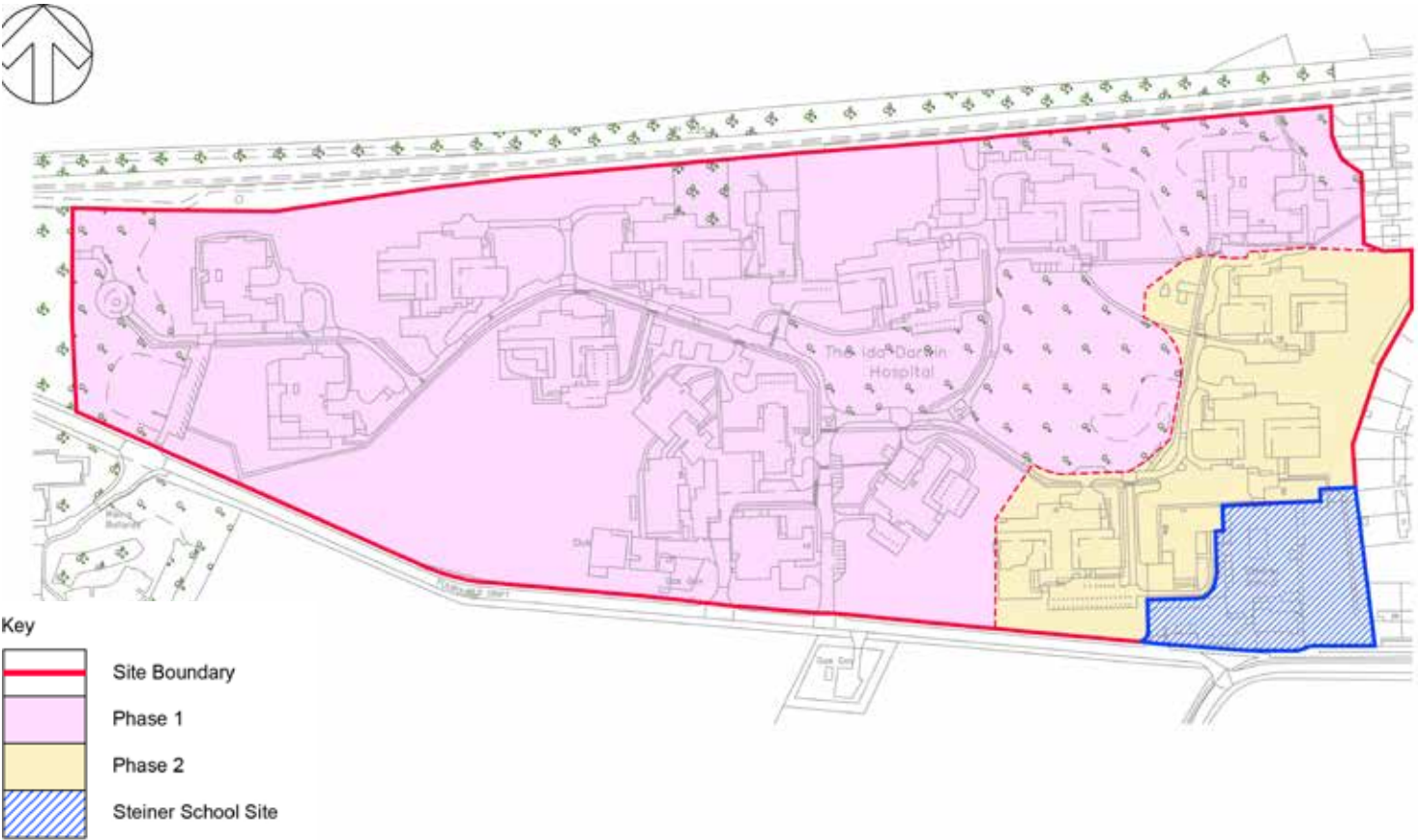
The outline approval contained 39 conditions of which xx were timed as prior to any development, there is also xx conditions which require discharge prior to the submission of any reserved matters application, however due to the restrictions surrounding COVID 19 and the difficulty in being able to meet through pre application stage it was agreed by SCDC that these conditions could be submitted at the same time as the first reserved matters application and run concurrently to each other.

These conditions are: -

- Condition number 17 - Requiring the submission and approval of a surface water drainage strategy.
- Condition number 28 - A Waste Management & Minimisation Strategy (WMMS) to be submitted and approved.
- Condition number 32 - Requires the submission and approval of a design statement.
- Condition number 38 - Requires the submission of a strategy for the delivery of sustainable show homes.

These conditions will be submitted alongside the first reserved matters application.

The planning officer throughout the outline planning stage was Rebecca Ward. unfortunately she has since left the council and so our pre application would be dealt with by Michael Sexton Senior Planning Officer for SCDC.



Approved Outline Phasing Plan

3.2 Pre Application Process

Morris Homes originally contacted SCDC about the scheme at IDA Darwin Hospital in Sept 2019. Michael Sexton confirmed he would be the case officer and said he would require a formal request for pre application comments in order to proceed. It wasn't until November 2019 that Morris Homes managed to submit a formal request for pre application comments on their scheme and supporting information.

The information submitted was the basis of the Land bid document showing proposed layout amongst other supporting information.

We continued to speak with Michael Sexton over the next few months, before COVID halted the process. Morris Homes decided to press on with their design and were informed by Michael Sexton that we needed to attend the council's design review workshop and in turn their independent design enabling panel, so contact was made to Bonnie Kwok in March 2020, being the council's urban designer and the person leading the process of design review workshop. Bonnie responded in April 2019 asking for Trovino Monteiro to be copied into all correspondence as he was the urban design team leader and was heavily involved with the outline application. Morris continued to speak with the LPA in an attempt to set up the required design review panel, however due to COVID and lockdown restrictions we were unable to do so.

Morris then contacted Hana Loftus who heads up the Village Design Steering Group who were synonymous in the publication of the approved Fulbourn Village Design Statement SPG to make her aware that we were about to commence design discussions with SCDC and would like her to be involved in some way. She was asked to be kept informed of progress but that she didn't need to be involved throughout.

Morris then made contact with the Parish Council to again make them aware that they had been chosen as the preferred developer and issued the bid document for their information. Mary Drage (Parish Council Chair) responded again asking to be kept informed of any progress and if she was available at the time he may attend some design meetings.

It was in May of 2020 when Morris Homes were informed that Michael Sexton would no longer be the case officer looking after the scheme and that Emma Ousbey would be taking over. Morris Homes contacted Emma in order to brief her on the progress to date and request again the importance of a design led video meeting, however despite many months of trying it wasn't until August 2020 that we managed to set up the first design team meeting with SCDC.

3.3 Design Meetings and Feedback

Design Meeting 01

Set up via Microsoft Teams the first design meeting was held on the 06th August 2020 and was attended by the following personnel: -

Toby Williams	South Cambridgeshire District Council	Planning Area Team Leader
Emma Ousbey	South Cambridgeshire District Council	Principal Planning Officer
Trovino Monteiro	Greater Cambridge City Council	Team Leader Urban Design
Bonnie Kwok	Greater Cambridge City Council	Principal Urban Designer
Des Wain	Homes England	Development Manager
Amy Burbidge	Homes England	Snr Design and Master Dev Manager
Garry Goodwin	Morris Homes - Group	Group Design and Planning Director
Mark Shannon	Morris Homes - Group	Group Design Manager

The main focus of this meeting was that the LPA apologised for the time it had taken to finally meet to discuss the scheme and that they were heavily behind the process to assist Morris Homes in gaining the necessary approval up to and including planning submission. The urban design team did however state that the masterplan to which Morris' scheme related was not how they saw the development progressing and they requested a redesign following a more village vernacular. Morris went away and started to look at restructuring the scheme following the comments received, below is the scheme that was issued for comments: -



The restructure of the layout (shown here) was as a direct result of the comments and feedback from the design team meeting 01.

The main amendment was surrounding the road layout, the previous loop around the woodland has now been cut and so the road hierarchy of primary, secondary and tertiary roads is now designed around a sporadic village vernacular.

A continuous green wedge from the eastern boundary through to the western parkland area has been added along with good footpath and cycle connections throughout.

Feedback on this initially was positive and moving in the right direction.

Design Meeting 02

Set up via Microsoft Teams the second design meeting was held on the 27th August 2020 and was attended by the following personnel: -

Emma Ousbey	South Cambridgeshire District Council	Principal Planning Officer
Trovine Monteiro	Greater Cambridge City Council	Team Leader Urban Design
Bonnie Kwok	Greater Cambridge City Council	Principal Urban Designer
Emma Davies	South Cambridgeshire District Council	Sustainability Officer
Carol Newell	South Cambridgeshire District Council	Landscape officer
Des Wain	Homes England	Development Manager
Mark Shannon	Morris Homes - Group	Group Design Manager

The meeting notes of design meeting 02 are available on request, however the main focus of this meeting was based around the layout and the character of the scheme. The LPA wanted the scheme to follow the approved Village Design Statement and be more reflective of the village vernacular. The house types were discussed along with the character zones. Trovine Montiero requested the character zones to be: -

1. **The Edge Character**
Which covers both the Fulbourn Old Drift frontage and the northern edge to the Ecological Buffer.
2. **The Inner Core**
Which covers the woodland edge and Western edge to the Parkland.
3. **Intimate Streets**
The secondary and tertiary streets and lanes within the development, these are to feel more intimate with narrow front to fronts and random building lines.

Following this Morris Homes went away to look at the scheme again following the feedback received and started to look at the proposed dwelling types in terms of working to a village vernacular and in order to assist in their designs requested a separate meeting with Trovine Montiero to discuss their thoughts on house types and details. This meeting was set up for the 9th September 2020.

Intimate Design Meeting

Via Zoom this design meeting was set up as an intimate meeting and was held on the 9th September 2020 and was attended by the following personnel: -

Trovine Monteiro	Greater Cambridge City Council	Team Leader Urban Design
Garry Goodwin	Morris Homes - Group	Group Design and Planning Director
Mark Shannon	Morris Homes - Group	Group Design Manager

During this meeting Morris Homes presented 2 separate schemes to Trovine both of which used a village design code for their implementation. This approach was to understand the aspirations of the LPA so that any future designs were on the correct path straight away removing the need for lots of revisions.

The focus of this meeting was the previous Morris Homes developments Wootton Fields in Northampton and Alconbury Weild in Huntingdonshire.

The feedback from the LPA was that the scheme at Wootton Fields was too dense and did not reflect the scheme proposed at IDA Darwin Hospital, however, the scheme at Alconbury contained a good reflection of the proposed aspirations of the village of Fulbourn and that was where Morris needed to start in order to crate the new vernacular for the IDA Darwin development. So that's what they did.

In the meantime Trovine Montiero said that they would look to send through a list of context images that would allow Morris Homes to start thinking about their designs in relation to the village extension that the LPA required.

The Following list and images were issued by the LPA in order for us to tart looking at our types and how we could implement some of the details shown to create a seamless village extension.

1. Cat-slide dormer window - Check proportion and detailing of dormer (to be used cautiously); pantile roof and painted brick
2. Half Hipped Roof projecting at first floor- unique and recurring profile; green pastel render and clay tiles
3. Georgian Façade with Vertical large sash windows and emphasised entrance Portico; red brick and gravel drive
4. Viewing internal gallery on first floor with stained timber boarding contrasted against white render
5. Curved Roof Dormer giving the house a unique character and identity; large roofs quite common.
6. Simple, clean detailed elevation using segmental arched openings, sash windows with stone sills; slate roof and render.
7. Simple but well detailed façade with stone sills/lintels, sash windows and semi- circular arches which are frequently seen in Fulbourn.
8. Parapet Gables give entrances/dormer windows a presence, and character. See use of semi-circular arch.
9. Use of highlighted window surrounds/large windows, highlighted portico entrance and curved roof dormer symmetrical design

11. Gable Mansard roof with dormer windows; pastel yellow render
12. Simple detailed buff brick stone sills, brick flat arched, clean eaves. See use of vertical sash windows.
13. Georgian proportioned window with circular arched openings.
14. Articulated stone bay windows and contrasting brick quoins and decorative detailing
15. Contrasting red brick arched window detail to buff brick with sash windows
16. Black stained timber weatherboarding with contrasting windows
17. Arched semi circular door on gable
18. Detail brick and arch detail quite common



Fulbourn Context images 01

Fulbourn Context images 02

In response to the comments raised in design meeting 02 and the village context images received, Morris Homes produced a small presentation containing a new restructure plan and some typical street elevations showing how they intended to design in some of the details as requested. The re structure can be seen below: -



Design Meeting 03
Set up via Microsoft Teams the third design meeting was held on the 24th September 2020 and was attended by the following personnel: -

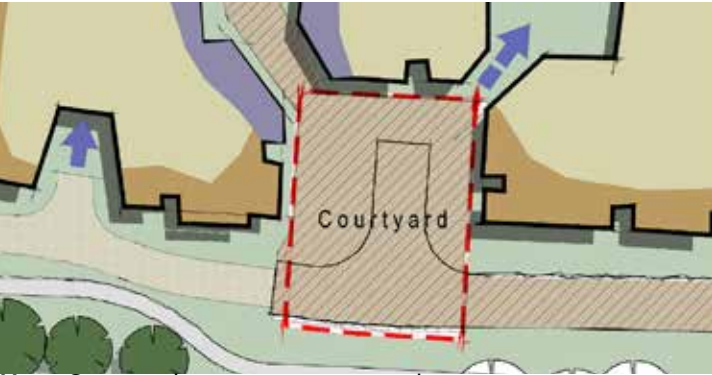
Emma Ousbey	South Cambridgeshire District Council	Principal Planning Officer
Trovine Monteiro	Greater Cambridge City Council	Team Leader Urban Design
Carol Newell	South Cambridgeshire District Council	Landscape officer
Garry Goodwin	Morris Homes - Group	Group Design and Planning Director
Mark Shannon	Morris Homes - Group	Group Design Manager

The meeting notes of design meeting 03 are available on request.

The LPA Started by stating that the new structure had made huge leaps forward and to a certain extent was agreed in principle subject to seeing the new layout. Focus was discussed on areas within the scheme whereby further clarification was requested these were: -

Mews Courts

The LPA liked the square sections as shown on the new structure plan and said that they mirrored similar mews courts in the area. They likened them to a new development of almshouses on Cambridge Road close to the development site. Seen below: -



Mews Court as shown on re structure plan



Mews Court of almshouses developed close to the site.

Focus on this type of development having a green carless frontage was requested and Morris Homes were to look into whether this could be achieved.

Carless Frontages

The LPA liked Morris Homes’ approach to the open space being car less with the properties being accessed from the rear, but wanted further clarification on these areas to ensure that they weren’t huge areas of parking.

Landscape Led Approach

The LPA requested clarification on the landscape designs. Carol Newell (Landscape Officer) was positive of how the scheme was shaping and was very excited to see how the designs were progressing. Extra focus was needed around a sporadic village landscaping scheme and the play area locations. Morris Homes were to provide further clarification on these items.

Sustainable Drainage

Again although indicative at this stage, the LPA were appreciative of the propose SUDS attenuation ponds shown. Morris Technical team were to provide further details on these areas when they were designed.

Views of the Existing Windmill

The LPA were still requesting details of how Morris Homes were to create views across the fields to the south to the existing Fulbourn Windmill. Morris Homes to provide further clarification on this but stated that the landscape architects were looking into possibilities.

Proposed Community Building

This was still in its infancy although a site and location of the building was agreed in principle. It was now up to Morris Homes and their external architects to design something that would be fitting of its central status within the scheme yet that would blend seamlessly into the proposed development vernacular.

Following this meeting Morris looked to take the scheme a step further and produce a sketch based on the last re structure and feedback received. Sketch Layout 06 was then issued along with some further details on proposed house type elevations, Character Zones and the proposed Community Building.



Sketch Layout 06 and the images of the potential Community Building



Design Meeting 04

Set up via Microsoft Teams the fourth and final design meeting before submission was held on the 27th October 2020 and was attended by the following personnel: -

Dean Scrivener	South Cambridgeshire District Council	Principal Planning Officer
Trovine Monteiro	Greater Cambridge City Council	Team Leader Urban Design
Carol Newell	South Cambridgeshire District Council	Landscape officer
Des Wain	Homes England	Development Manager
Garry Goodwin	Morris Homes - Group	Group Design and Planning Director
Mark Shannon	Morris Homes - Group	Group Design Manager

Just prior to this meeting being arranged, Morris Homes learned that Emma Ousbey the planning officer who had been looking after the scheme since the process began earlier in the year had left the council to peruse other things. Her replacement was to be Dean Scriviner who was unaware of the scheme and how we had arrived at this point in the process. He had a brief meeting separately with Trovine Montiero to attempt to get up to speed with the design and proposed time line.

This meeting took the form of Morris Homes presenting their redesigns to the LPA and Homes England all of which can be found within the Section 4 of this document. The proposals were very well received and everyone seemed happy for Morris Homes to proceed on this basis.

Parish Council Meeting

As part of the ongoing consultation with the LPA, the Parish Council have been included in all meeting updates and correspondence with regular emails and conversations throughout. Cllr Graham Cone has also expressed an interest and has spoken at length with Mark Shannon at Morris Homes about the scheme and the design evolution with both Cllr Cone and the Parish Council being very pleased with the way the development has progressed.

It is Morris Homes’ intention to present the final scheme to the Parish Council and Cllr Cone following the submission of the reserved matters application, so that they have a full picture of the proposals when they are asked to comment as a statutory consultee.



4

Design

4.0 Design

4.1 Layout Evolution



The original outline approved masterplan



Morris Homes' Original Bid Layout.



Morris Homes Scheme as part of the presentation - May 2020

Here you will see the evolution of the Morris Homes scheme starting with approved outline masterplan, the first Morris Homes bid compliant layout below which formed part of the original land bid documents to Homes England, through the early resketch phases 1 and 2.

The layouts changed many times throughout the process before ending with the final scheme which can be seen in section 5.

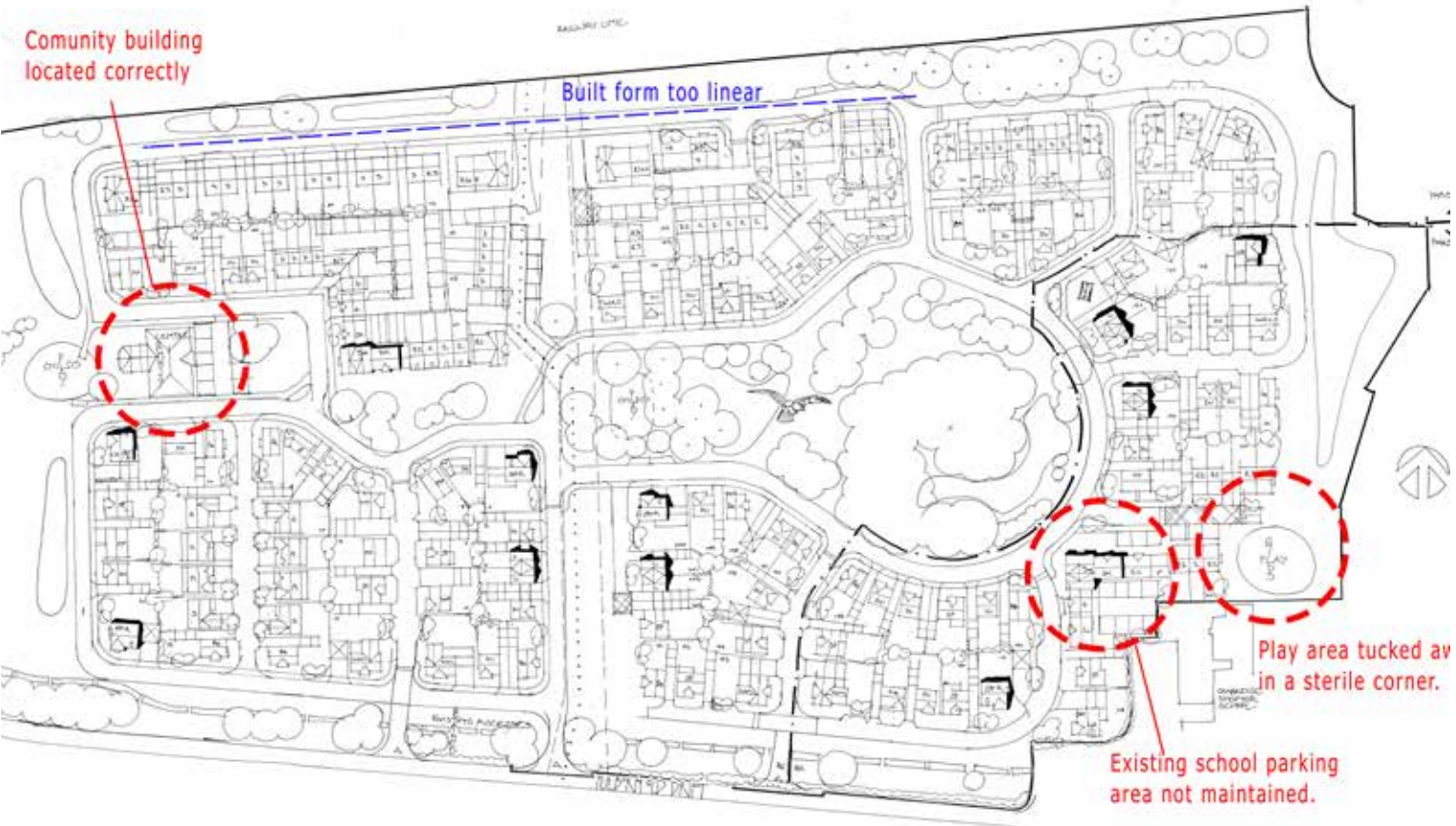
The original masterplan was based around the on site constraints... being: -

- The retained woodland to the centre.
- The existing Gas Easement.
- The existing Award Drain Easement.
- The existing Steiner School.
- The approved entrance point.
- The 10m ecology buffer zone.
- The proposed phasing of the retained administration buildings.

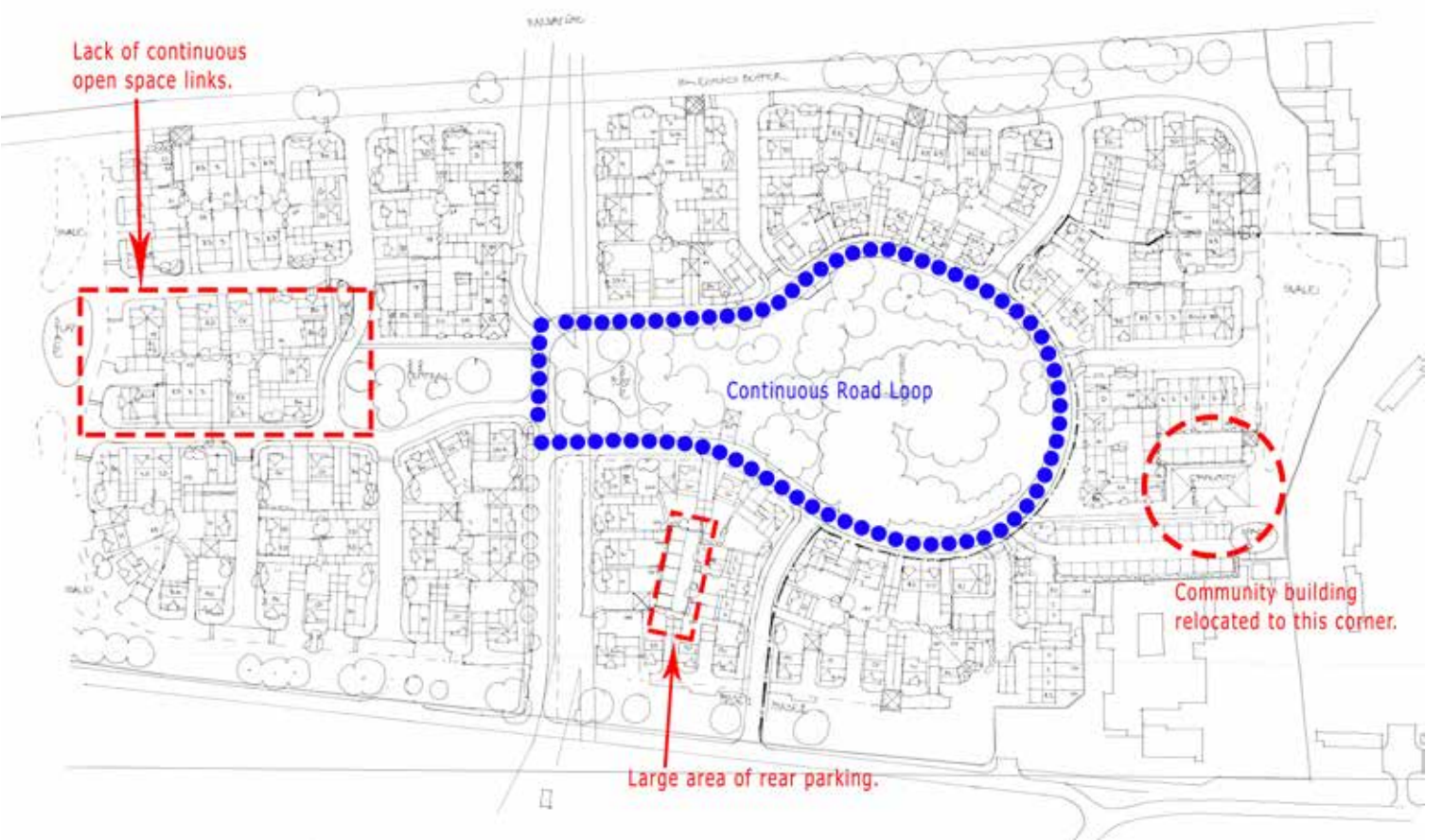
The development blocks were designed around a perimeter block formation all facing outwards to their respective open space areas.

Phase 2 was up to 53 dwellings in total.

Affordable housing was spread across the scheme into both phases.



SK01 - Sketch layout prepared by David Smith Architects in January 2020



SK02 - Sketch layout prepared by David Smith Architects in February 2020

4.2 Existing Village Vernacular



- Traditional run of terraced houses utilising different roof heights.
 - Buff Facing brick with red brick detailing.
 - Grey roof tile with open eaves detail.
 - Drive under access to rear parking.
 - Horizontal banding within facade.
 - Repetitive chimneys.
 - Deep windows giving vertical emphasis.
- This type of property can be clearly seen within the older parts of the village which once housed the workers who settled there. A small walled front garden finishes the character also allowing a linear emphases to frame the street.



- Beautiful double fronted Georgian style house.
- Deep windows and simple 'cross bar' fenestration.
- Predominately buff brick with contrasting red roof tile.
- Double chimney detail.
- Facade landscaping.
- Walled rear garden.
-
- This type of property is commonplace around the village. Used in locations close to the street to allow a tighter framing of the road, the symmetrical fenestration makes for an interesting frontage which we can replicate on the new proposals.



- Almshouses style courtyard.
 - Buff brick with white fascia detail.
 - Structured landscaping boundary.
 - Black railing detail.
 - Dormer detail to upper floor.
- The Almshouse was synonymous in the Cambridge and surrounding area used to house the local people through charitable means and so we will look to replicate a similar character on the frontage to Fulbourn Old Drift which will enhance the historical nature of the village.



- Double fronted house utilising a rendered facade with buff brick gables.
 - Gable chimneys.
 - Simple door canopy is very effective in the street.
 - Georgian bar sliding sash windows.
 - Native hedge boundary give good defensible boundary.
- Similar to the double fronted property above, this is a good example of how different materials and fenestration treatments can create a different character within the street.

Good use of a landscaped boundary to emphasise the building whilst allowing parked cars to be hidden.



- Ornate terraced houses with protruding front gables.
- Walled front gardens.
- Good landscaped separation.
- Larger windows to the ground floor than the upper floors.
- Buff Brick with red brick banding course.

4.5 Existing Character Analysis



The High Street

This is the traditional heart of Fulbourn and part of the Conservation Area, with the High Street, the church, the manor and the almshouses within a few hundred metres. It is a busy crossroads of narrow lanes with heritage buildings, traditional walls and tall trees. Views of the countryside beyond reach its core. It is characterised by:

- Narrow streets
- Frontages directly at the back of pavement on and near the High Street
- Buildings of many periods, with layers of alterations and attractive steeply sloped roofs



Station Road Area

Station Road is a linear development leading to the former rail station site and the farms / business area beyond. It is characterised by:

- Houses of different styles and periods, from Victorian to recent times.
- Single storey houses with big roofs, now progressively altered by addition of an upper floor.
- Deep and lush front gardens on the eastern side and long back gardens and green edge towards the west.
- Narrow street which ends up being dominated by cars and parking.
- Front garden features and landscape are poor in some cases.



Home End Area

Nestled in the conservation area Home End is one of the oldest parts of Fulbourn. It has thatched cottages, Victorian buildings and village greens situated at junction locations.

- Hedgerows and mature trees are set within the houses.
- A mix of buildings, with cottages, old houses, community halls.
- Flint walls and simply decorated gate posts.
- Highway engineering has partly eroded the traditional character.



Residential Estates

These are planned estates built from the 1930s/1940s (council houses), with the majority taking place in the 60s. They introduced large groups of houses of similar design along highway designed streets with styles and materials more suitable to the suburbs of Cambridge than Fulbourn. With time, the estates have partly matured adopting some of the positive features of the village, a process of diversification which should be encouraged:

- A community orchard was planted on a previously bare green space
- In some front gardens hedgerows, flowers or creepers were planted
- Sensitive extensions added diversity to repetitive buildings



Poor Well Area

This is a unique highlight in Fulbourn and partly in the Conservation Area. It has links to the heritage of water management and fenland agriculture, and brings nature directly into the village. The tall trees and green aspect of Cow Lane at this location provide a memorable image of the village within trees:

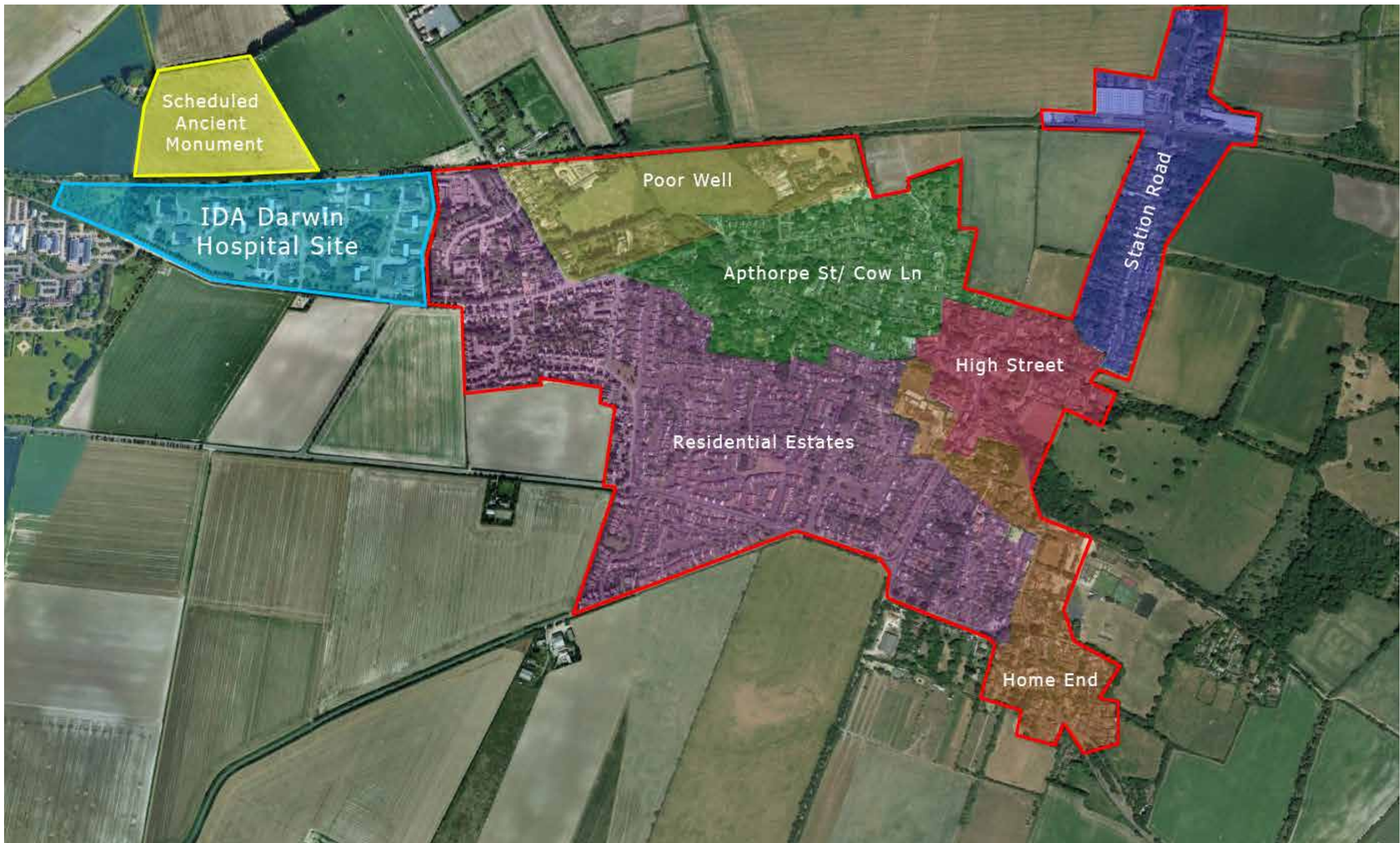
- It has a part natural/part agricultural feel
- It has ditches running along the roads, a chalk stream and wetlands
- It contains small industrial buildings and the grand Victorian building of the former Cambridge Water Company



Apthorpe St/Cow Lane Area

The winding loop formed by Cow Lane and Pierce Lane is for most people what defines the image of Fulbourn. Most of the area is part of the main Conservation Area of Fulbourn:

- Diversity of buildings ranging from medieval times to recent decades yet with unity in scale, simplicity of detailing and use of traditional materials
- Informal alignment, with big trees in front gardens and pocket spaces
- Tidy gateposts and well defined walls, picket fences or hedges defining most front gardens
- Visually successful contemporary upgrades and small infill
- No dominance of car parking, screened by planting and walls



Existing Village Character Map

4.4 Proposed Character Analysis



Landscape led boundary treatments soften the street.



Use of render and differing roof colours



Enhancement of materials for nodal points - Sliding Sash Windows



Enhancement of materials for nodal points - Parapet Gables



Use of Stone and contrasting Red Brick detailing



Proposed Character Analysis

The development has been carefully designed to create several distinct character areas which will not only help integrate the development into both its semi-rural setting and the existing characteristics of the village of Fulbourn, but will also help create a sense of arrival and place in and around the development. Each character area will work with both the new and existing landscape features and contain local architectural references and detailing which help provide subtle distinctions between each area. The character areas have been named but not limited to Development Edge; Woodland / Green Edge and; Intimate Street and are described as follows:-

Proposed Character Zones



Development Edge

Whilst there are 3 distinct edges to the development this character area has been developed primarily for the Fulbourn Old Drift road and then adapted to the Western Parkland frontage and the ecology corridor to Northern railway boundary. First and foremost the Fulbourn Drift frontage development has been set back so as to provide a linear park along its entire length which contains some of the mature boundary trees being retained.

This has been further enhanced with additional trees, native hedge planting and estate railings and, a footpath / cycleway which links the windmill viewing areas in the south eastern corner of the site and the middle of the parkland. Local flint walling has been used and around the site entrance and the first gateway buildings, which themselves will be distinguished with sliding sash Georgian bar windows; the use of render; crafted brick eaves and Voussoir brick window heads and tiled window cills. The remaining buildings consist mainly of detached 2 storey dwellings of many varied forms to give the appearance of a village built over time. Local architectural references include 'eye brow' windows; cat slide roofs; modest timber porches and Georgian stone surrounds.

To help re-create the often eclectic mix of dwelling sizes and types in and around the Fulbourn village the development edge is broken up with 2 distinct mews courts at its eastern and western end. These have been designed with carless frontages with parking instead relegated to the hidden corners. The high quality local distinctive architectural details such as brick eaves etc has been carried through to these mews courts but a change in brick roof, and window style has help distinguish them from the rest of the character areas. Railings and hedge planting will also add to their character of an area of higher density housing required in the village for either the Industrial Revolution or Post War housing need.



Street Elevation of the proposed Development Edge Character

The two remaining western & northern edges has been continued in the same form of predominantly detailed detached dwellings, but instead of repeating the mews court in a formulaic approach the western edge has been broken up by the community building and the northern edge by the 'pump houses' that form part of the Intermit Street character areas. They of course are also distinguished by their unique landscaped setting, with the western edge containing the frontage over the parkland with its formal play area, and the northern edge over the ecology corridor containing a band of existing trees and shrubs. The western edge will be slightly more formal with its railings and hedge planting continuing round from the Fulbourn Drift Road frontage and the northern edge will utilise robust timber posts to bleed the development into the ecology corner.

Woodland Edge

The Woodland Edge is the central part of the development built around the central woodland which formed part of the former hospital grounds. This has been designed to create a more open feel to the development allowing the woodland to flow and integrate onto the dwelling frontages. In contrast to the 'Development Edge' the garden frontages to the dwellings have been increased and a verge treatment introduced to the perimeter road around the woodland, where new trees can be provided.

The development continues as predominantly 2 storey detached but alternative local architecture detailing has been utilised such as stone slip window cills and horizontal bar windows to help distinguish the change in character. The Gateway buildings first encountered on the site entrance are also utilised in the Woodland Edge with their distinctive materials, parapet walls and sliding sash windows, but also building typologies from the other character areas, for instance the 'pump houses' from the 'intimate street' character areas are used to help create more distinctive gateway buildings around the open space and footpath links. Again the design ethos of a village built over time is achieved by stepping building lines forwards and back and creating what will appear to be a street scene where every house is different.



Street Elevation of the proposed Development Edge Character

Intimate Streets

These are the linking streets between the 'Development Edges' and the 'Woodland Edge'. The density of dwellings on these streets has been purposefully increased utilising 2 storey mews and semi-detached dwellings and apartment buildings. These have then been placed closer to their road frontage so as to create a more 'intimate street'. Parking for cars on frontages has been avoided by relegating the parking to driveways at the sides of dwellings.

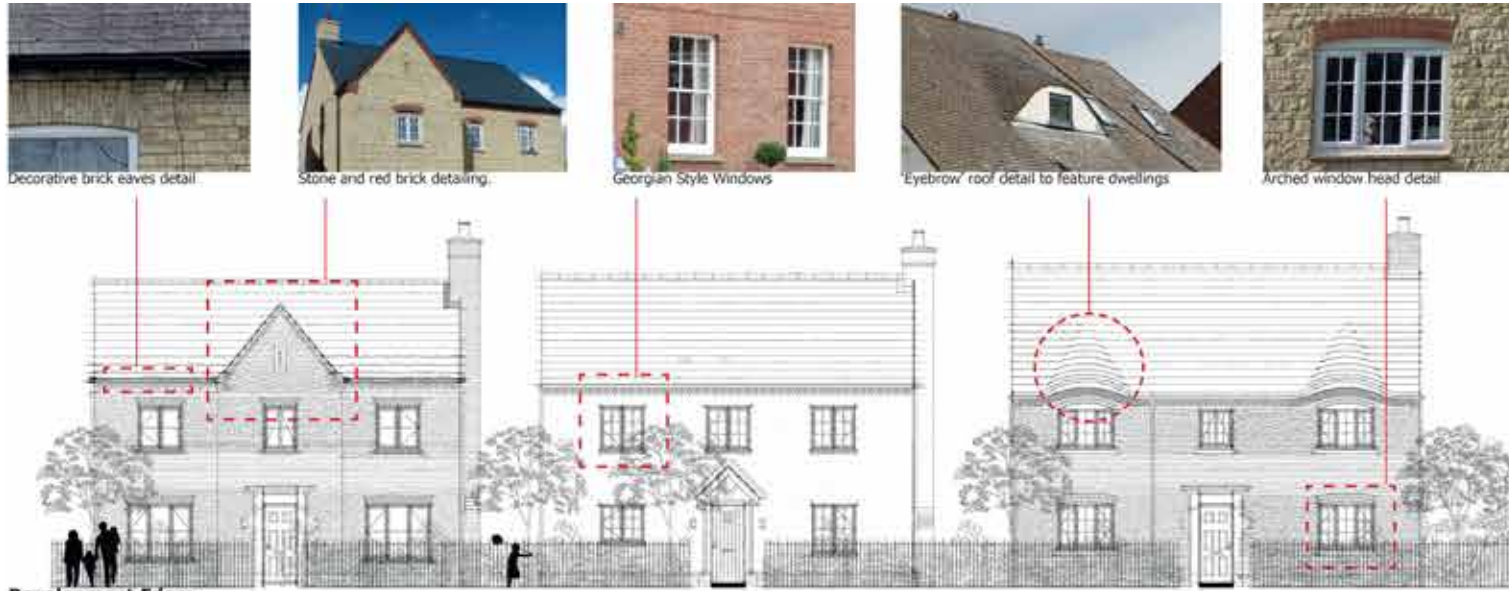
Some of the distinctive local architectural detailing from the mews courts in the 'Development Edge' along the Fulbourn Drift Road have been carried through to these streets, but they have also been provided with their own distinctiveness by subtle changes such as stone window heads & cills and a different window style. Whilst the apartment buildings are a specific requirement of the affordable housing mix it is important that these maintain the 'village' design ethos of the development and do not become monolithic blocks alien to the rest of the street scene. For this reason the apartments have been grouped together in small blocks, often forming the gateway between character areas that can then be elevated to make them appear like a single large dwelling.

Then taking local architectural references from larger Victorian buildings such as local pump houses, these buildings have then been utilised to really create distinctive place making. The buildings increase their eaves height to accommodate arch topped windows with contrasting red brick detailing set against the main yellow bricks. Large gables and loft room dormers help emphasis them vertically, as do the tall chimneys. All of this combines to help create an 'intimate street' which co-joins the other character areas whilst maintaining the village design ethos throughout.



Street Elevation of the proposed Development Edge Character

Proposed Character Analysis



Development Edge:

- Predominantly detached family dwellings overlooking the edge of development with a splattering of semi-detached and mews in courtyards to break up the built form.
- A mixture of Buff Brick and white Render facing material.
- Brick head and tiled cill detail. Contrasting red brick colour?
- Parapet gables to focal dwellings.
- Grey roof tiles to blend into the village vernacular.
- Mixture of 'Sliding Sash' and 'Southern' style Upvc windows in white.
- Parking by garage or carport within plot.
- Landscaped front gardens with black railings and mature hedge boundary detail.



Sketch of Development Pod



Intimate Streets/Lanes:

- Predominantly mews housing in terraced and semi-detached form.
- A mixture of Buff Brick and white render facing material.
- Grey roof tiles.
- A mixture 'Georgian' and 'Southern' style Upvc windows in white.
- Smaller front gardens with no boundary detail.
- Reduced front to front distances.
- Some frontage parking.



Woodland/Green Edge:

- Structural tree planting to the dwelling side road verge.
- A good mix of mews and detached dwellings.
- A mix of garage/ carport and driveway parking.
- A mixture of Buff Brick, Ivory render and Stone facing materials with black stained timber cladding on feature plots.
- A mixture of grey and red roof tiles.
- Grey 'Southern' style Upvc windows
- Stone heads and cills.
- Larger front gardens with low boundary wall detail



Nodal/ Feature Buildings

4.5 Proposed Materials

The proposed materials palette has been chosen to replicate the village vernacular of buff brick and grey roof tiles, although we have introduced contrasting colours to emphasise the difference in character zones. Red brick will pick out the mews courts and inner streets whilst splashing of render and red roof tiles will accentuate the focal building locations.



Proposed Materials Distribution

Materials Legend:

	Buff Facing Brick 1, Reddish Limestone Multi Yellow Stock, with medium buff (50%) (40% Clay 10% Sand)
	Buff Facing Brick 2, Reddish Limestone Multi Cream Stock, with medium buff (50%) (40% Clay 10% Sand)
	Red Facing Brick, Black Parkhouse Road, with medium buff (50%) (40% Clay 10% Sand)
	White Through Colour Render
	Grey Roof Tile, Parkhouse Green - Slate Grey
	Grey Roof Tile, Parkhouse Green - Mixed Rustic

Materials Legend:

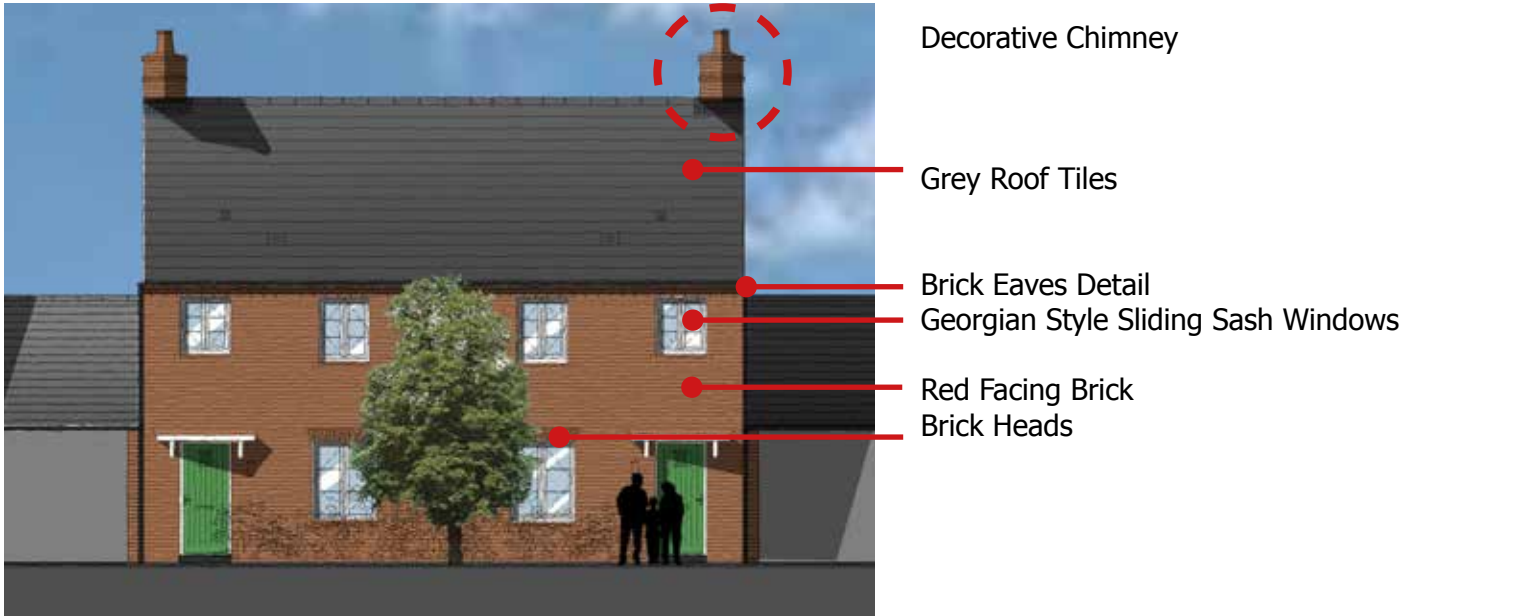
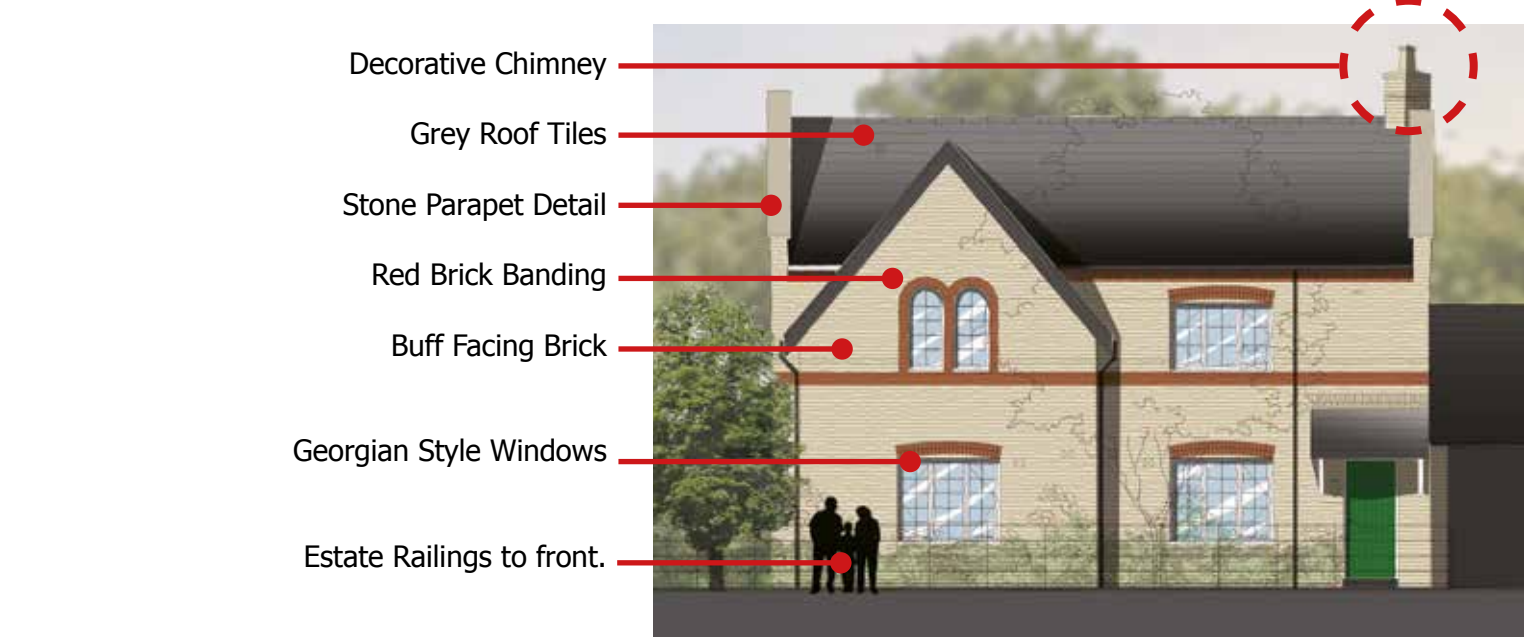
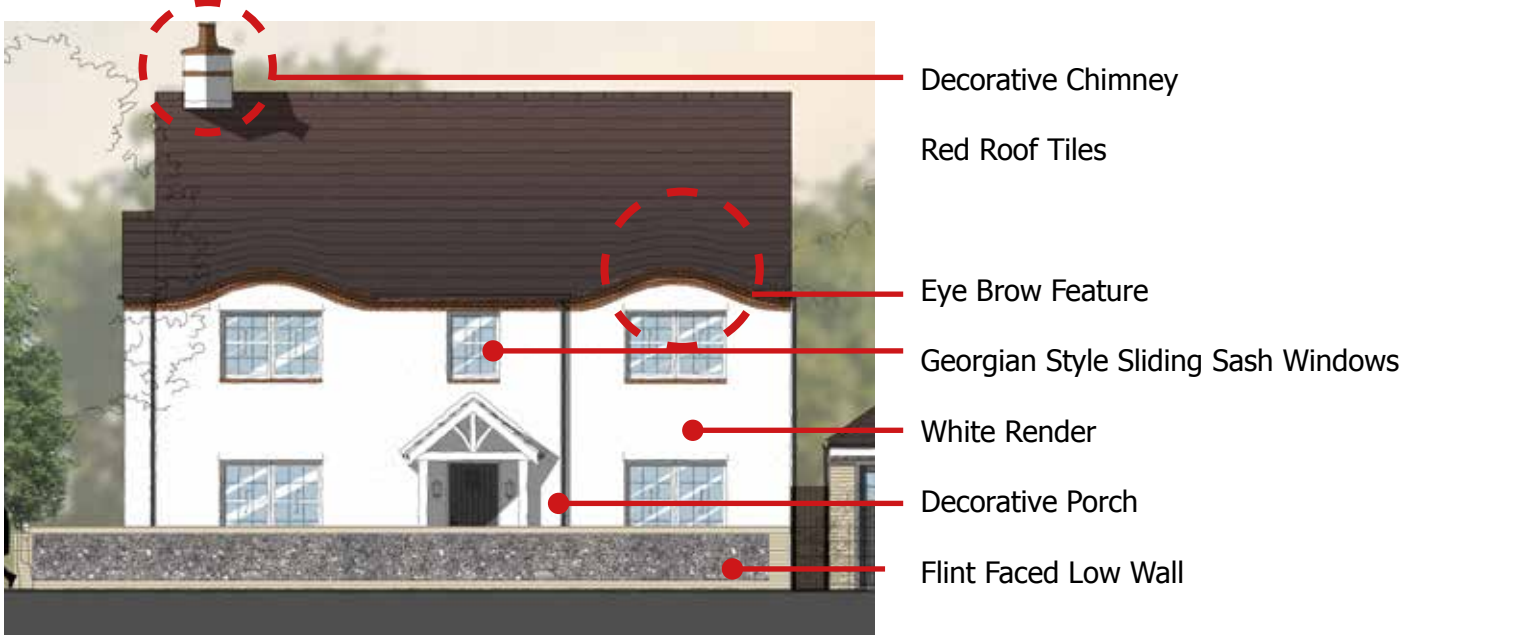
	Mansfield Tegel Pavement, Colour: Permanent (grey, white, or cream)
	Mansfield Tegel Pavement, Colour: Permanent (grey, white, or cream)
	Spray Finish Resin Bound Gravel, Brown Rounded Golden Gravel with Mansfield Permanent Grey Tegel Edging Strip
	Denotes Focal Buildings
	Denotes the plots that will require skiving roof windows - Refer to the plot specific issues list drawings for location & quantities. Colour: White Ash

Materials Legend:

	1.2m High Timber Post and Panel Fence
	1.2m High Brick and Plaster Wall
	1.2m High Concrete Post and Panel Fence
	1.2m High Brick and Plaster Wall
	1.2m High Timber Post and Panel Fence

Materials Legend:

	1.2m High Timber Post and Panel Fence
	1.2m High Brick and Plaster Wall
	1.2m High Concrete Post and Panel Fence
	1.2m High Brick and Plaster Wall
	1.2m High Timber Post and Panel Fence



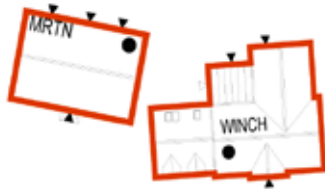
4.6 Proposed Focal Buildings

In addition to the developments character separation we needed to outline areas of interest. It was clear from early on in the process that the parish council did not like to see specific 'gateway properties' as we would normally show in order to outline focal junctions and nodal points within a development. Discussions with the SCDC LPA and urban designers throughout the pre application process outlined this and how we would need to address this design ethos very differently.

We decided to test the idea of adding interesting buildings to certain locations that allowed them to be part of the development, not stand out as a separate entity. These buildings would be known as 'Focal buildings' as they would be different to their urban neighbours by simply material and detail changes. We also looked at the surrounding villages to pick out any details or characters which we felt would work well in emphasising these buildings.

In our research we kept coming back to an existing building located within the neighbouring village of Cherry Hinton. This building, known locally as the Old Pump Lodge or Waterworks was constructed in 1852 when waste was the Milton Sewage Works. It sadly closed in 1921 when the new Fleam Dyke was opened. Today it remains as a residential home.

We decided to use this as our inspiration for some of the focal buildings within the development namely the apartment buildings that face the central open space and the dual aspect maisonettes which are dotted around the scheme. These will be known as Character Focal 01 Buildings.



The Pump Lodge in Cherry Hinton

Focal Building 01

The existing Pump Lodge, shown here in its Cherry Hinton setting is constructed from a deep buff facing brick with a smooth red banding detail and a red quoin detail around the windows.

Also note the double arched window detail with a simple cross glazing bar sliding sash window. Raised gablettes with stone parapets give a good vertical emphasis whilst the decorative chimney completes the look.

What we wanted to do was to take elements of this building design and replicate it on our focal buildings.

We felt that using this design ethos adjacent to our proposed material palette would make these buildings feel special without standing out too much in the street scene. Using this approach keeps the history alive within a brand new setting and pays particular homage to the village historical links.

Apartment Building

As you will see, using elements of the Pump Lodge detail we have replicated a similar building which sits adjacent to the northern boundary and ecological buffer.

Utilising the double arched windows with red brick detailing, raised gablettes with stone parapets and tall chimneys it feels very similar to its Cherry Hinton cousin.

Adding a rendered element to the side gives the impression of a building that's been constructed over time.

The proposed apartments are the only element on the development that exceeds the maximum 2 storey height, however it does this by dropping the eaves of the roof to allow the third floor accommodation to be almost within the roof space.



The Proposed Apartment building using Focal 01 Character

As well as the Pumphouse focal buildings, we looked at how we could add another type of focal building which would replicate the large detached dwellings that you see on the edge of a village settlement usually adjacent large areas of open space. These houses (or hamlets) would sit in their own right on corners taking advantage of a dual aspect position and would benefit from large rear gardens and a front garden bounded by a low wall and timber gate.

In addition to this approach these dwellings needed to relate to the character that they were in and so materials needed to be seamless. We call these the Focal Buildings 02 and 03.

Focal Building 02

These dwellings will sit on the corners of development pods in focal locations and are identified on the Materials Distribution Plan by a thick red line around the plot itself.

Utilising a string buff brisk focus with red brick detailing and a mixture of red and grey roof tiles depending on their location.



The Proposed dwelling using Focal 02 Character



Similar style dwelling on the Alconbury Wield development

Focal Building 03

Similar to Focal building 02 but this type is to be picked out in a white render with red roof tiles.

This dwelling shows an 'eye brow' detail above the windows at eaves level which is a detail seen in and around the village.



The Proposed dwelling using Focal 03 Character



Similar style dwelling on the Alconbury Wield development

4.7 Self Build Properties

As part of the outline approval the reserved matters application needs to include for an element of self build properties which will form part of the overall application in terms of allowing an area of development to be set and the precedent to be approved. However, each separate dwellings will need to be designed and be submitted to and approved by the local planning authority at the time of their implementation.

The number of properties Morris Homes are proposing to allow within the development is 6 being the required number.

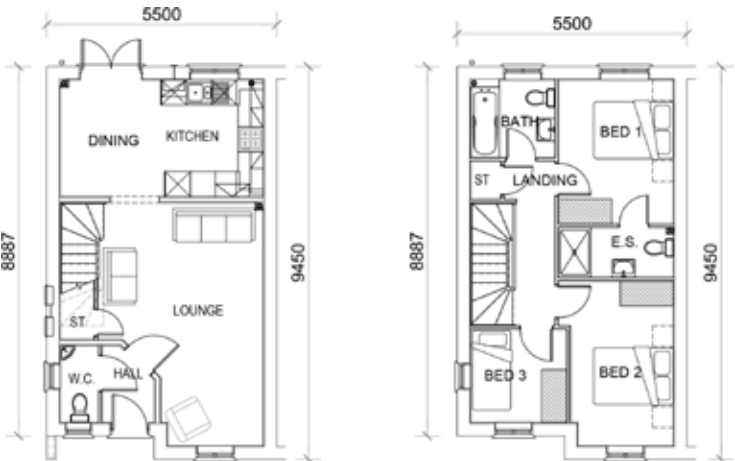
The area within the development sites within phase 1 and is almost self contained.

The 6 dwellings proposed range in size and we feel that they will reflect the need of the local area.

Self Build No.	Plot no.	Morris Type	Sqft
01	132	Rydale	952
02	133	Downley	957
03	134	Downley	957
04	135	Rydale	952
05	136	Timperley	934
06	137	Timperley	934



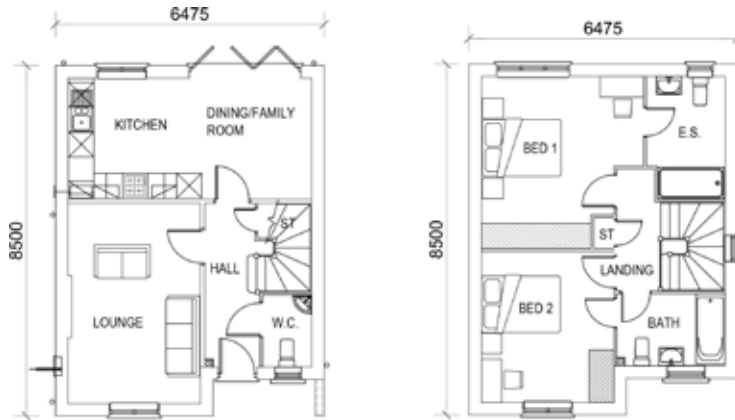
Plan showing the area of the proposed Self Build dwellings



The Timperley plans and front elevation



Isolated Plan showing the area of the proposed Self Build dwellings



The Downley plans and front elevation





10m Ecological Buffer

Village Green

Sub Stn

Retained
Woodland Area

Final Scheme &
Placemaking

5.0 Final Scheme and Placemaking

5.1 Final Scheme Layout

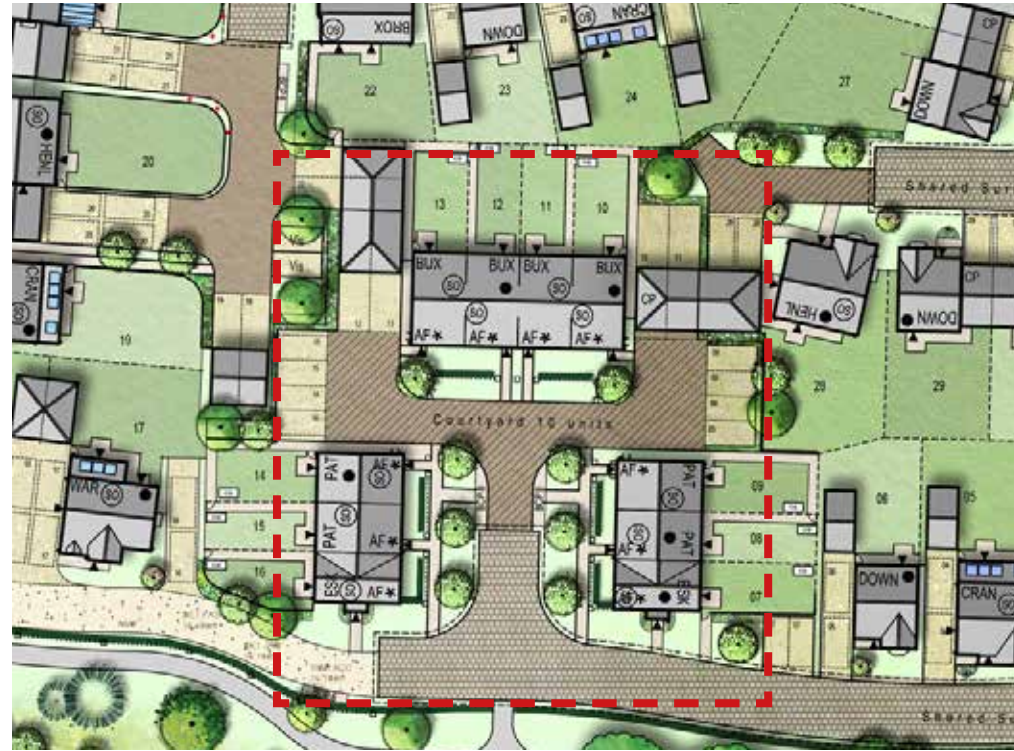


5.2 Placemaking

Placemaking is not just about designing a park or plaza. It involves taking into account the surrounding activities taking place within the space, then fine-tuning the space with a well thought out building form, quality landscape changes and the addition of street furniture (where applicable). The end result should be a cohesive unit that creates greater value for the community than just the sum of its parts.

Within the proposed development placemaking is about creating spaces with the tools that we have and that these spaces are to feel safe, usable and inclusive. By placing buildings in such a way to respect the street and its ultimate use we can design a well informed scheme where people will aspire to live.

Below shows some of the different types of spaces we are creating within the IDA Darwin setting.



Mews Courts

The mews courts located within the Fulbourn Old Drift frontage are a reflection of the small hamlet development on Cambridge Road not too far from the site.

These small courts add 2 interesting points in what is a linear edge settlement of mainly detached houses.

With parking fed around the rear the courtyard feels green in its nature allowing them to seamlessly integrate into the street.



Entrance Features

Bookends aren't a feature we wanted to replicate on the IDA Darwin scheme as its meant to feel like a village built over time, however the character of the frontage does allow us to pick out the 2 large detached houses either side of the open entrance.

Utilising different materials and detailing makes these 2 houses feel different without sticking out too much.

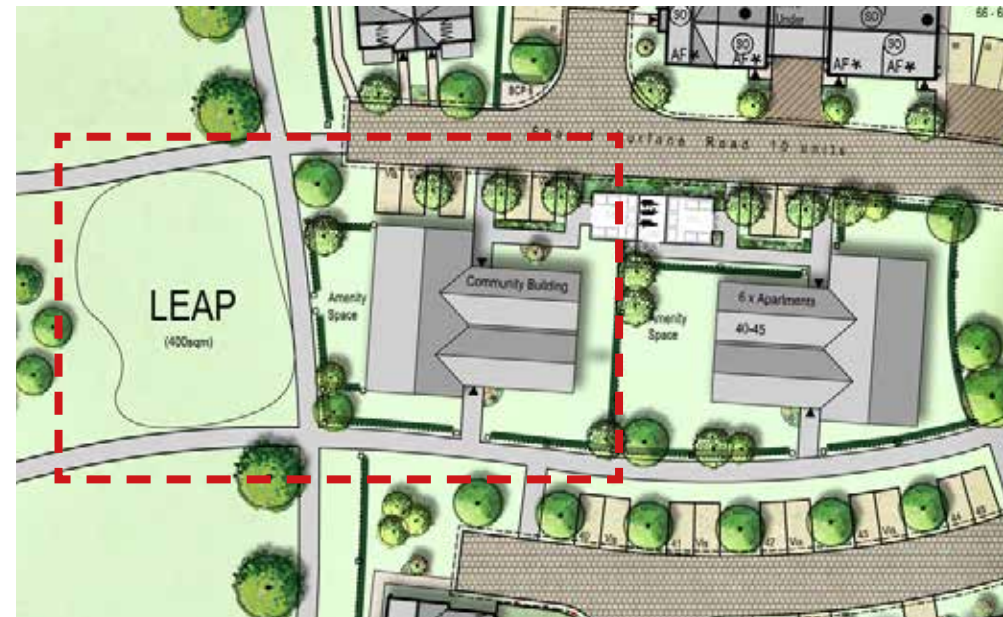


Central Village Heart

The existing easements restrict development through the centre of the development, so rather than think of this as a constraint we used it to create an open green extension to the existing woodland area.

An drainage attenuation/habitat pond is located here and with careful landscaping designs integrated into the area creates a central space which feels open but integral to the scheme.

The landscaping scheme proposes long woodland grasses around this area and the footpath meanders through which completes the design ethos.



Community Facility and LEAP

Different to the character of the scheme itself, the community building and adjacent apartment block have been designed to reflect a contemporary vernacular whilst still using simple detailing.

The LEAP being overlooked by the community building completes the area.



Pumphouse Bookends

Again not wanting to create bookends it made sense to mirror the new apartments which have been designed to reflect the existing pumphouse in Cherry Hinton over the central open space area.

These will add another dimension to the legibility of the development.





Community Orchard
A simple but effective well designed area where the local people can be part of the natural parkland designs.

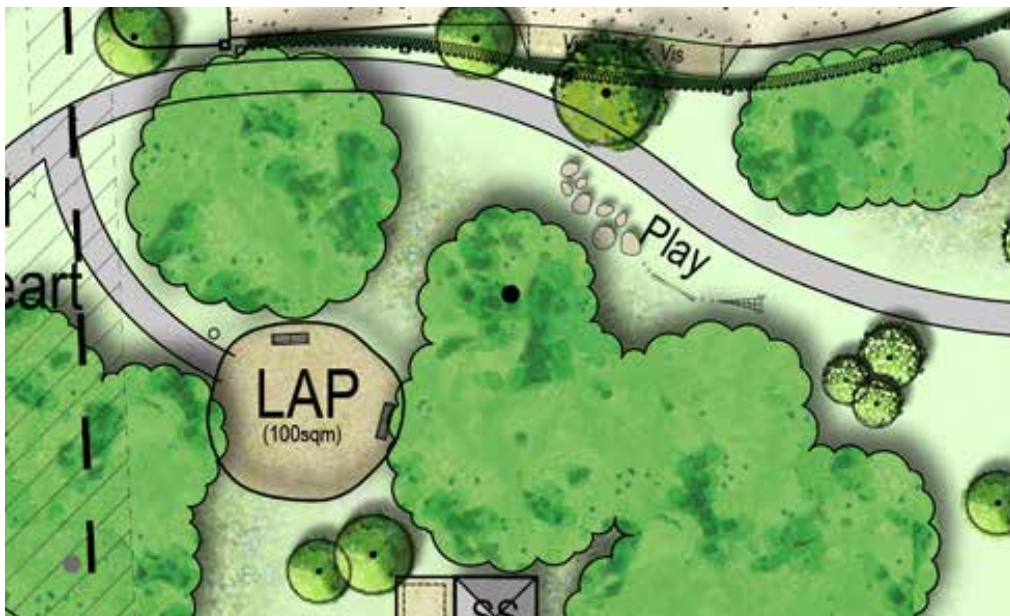
It also assists in masking and framing the LEAP which will be used by local children.



Woodland Pathways
When we first started to design the scheme we wanted to ensure that the local people could access and navigate the site from the start of the Fulbourn old Drift through the woodland area and into the parkland.

We have done this with an extensive network of footpaths/cycleways which meander through the whole development and ultimately back out to the main road and beyond.

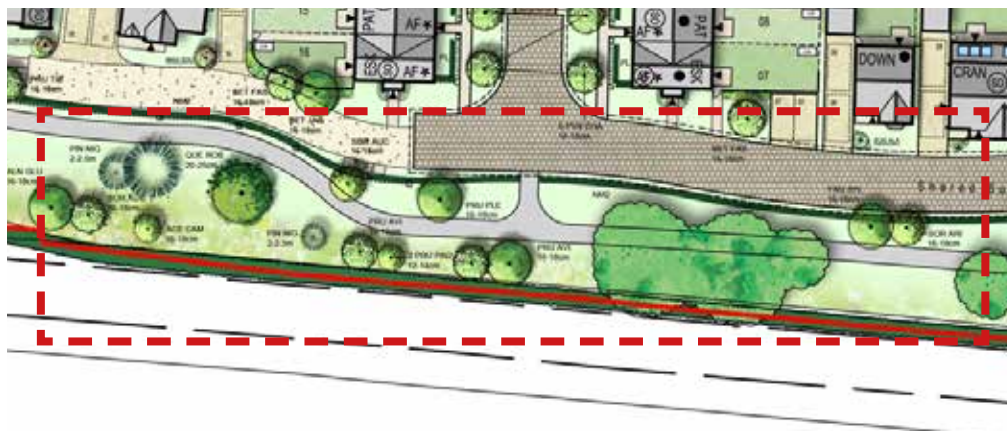
This was purposefully done to allow people to enjoy the open space areas whether you live on the IDA Darwin scheme or simply walking past.



LAP and Trim Trails
The required LAP areas shown are simply areas to sit and reflect on the space.

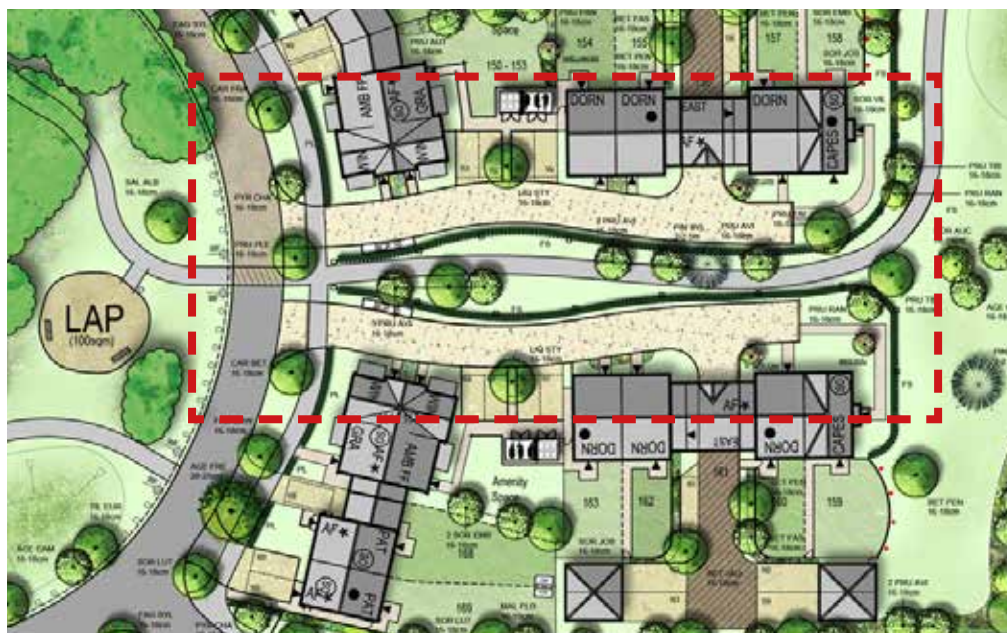
These have been located to be quiet and surrounded by trees both new and old.

The trim trail play spaces will be small pockets of natural play along the woodland path network.

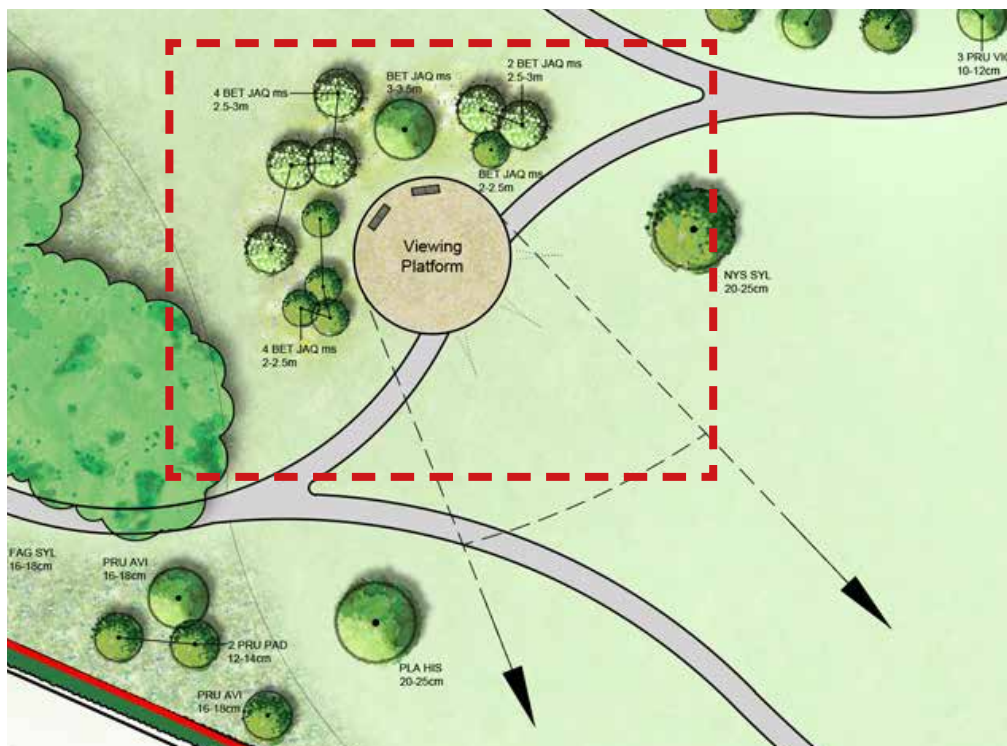


Linear Park
The whole frontage to Fulbourn Old Drift is to become a linear park containing existing and new trees along with a meandering footpath leading to the parkland area.

Fronting the detached dwellings to these areas allows a similar character to the park edges within the village.



Narrow Pedestrian Routes.
The Eastern edge of the development utilises a narrowing of the built form. This allows us to focus pedestrians through the larger woodland area in to the eastern open space area with a close linear set of houses that feel intimate as the character zone suggests.



Windmill Viewing Areas
Creating specific raised viewing points in order to view the existing windmill adds interest and a focus point to the already open nature of the parkland and open spaces.

These areas will become integral parts of the village in years to come.



5.3 Community Building

Within the planning approval Morris Homes are to provide details of a proposed Community building which is to be centrally located in the proposed development. This community building and the land to which it resides is to be offered to the local Parish Council for them to ultimately manage and maintain.

There are some planning hurdles to overcome initially with respect to the marketing of the building and who builds the building but one agreed the building itself is to be transferred to the parish council.

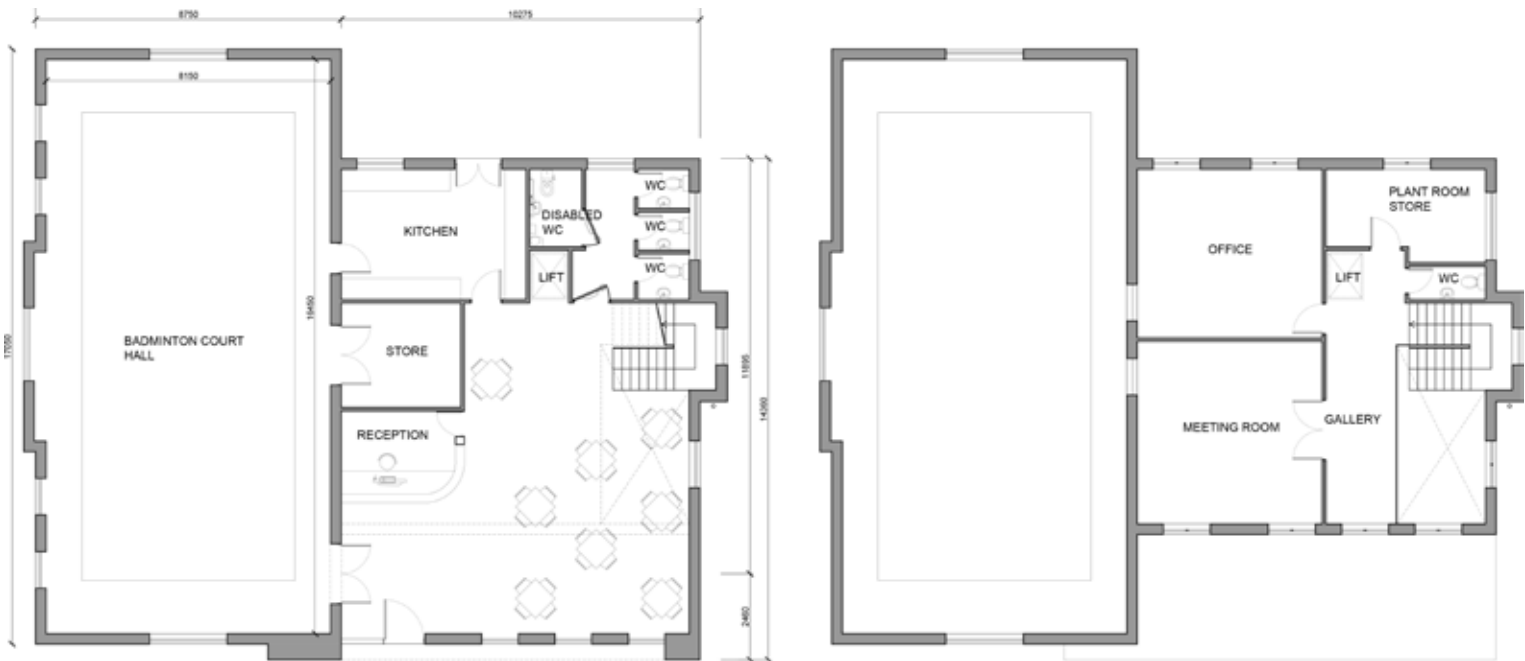
Below you will see the area for which the community building is to be located along with preliminary designs of the building in relation to its contemporary setting.



Plan showing the location of the Community Building



Proposed Elevations of the Community Building



Community Building Plans

The proposed elevational treatment of the community building is still to be agreed, however Morris Homes completed a similar Community Building in the town of Fenstanton at their Crown Place development.

This deign was shown to the LPA and design team as being a possible solution for the Community Building at IDA Darwin as the contemporary elevations would contrast the village vernacular of the remaining scheme and give the building a clear identity. it was clear from this point that this was an agreeable solution and so Morris Homes proceeded on this basis.

The form of the building will be replicated adjacent by an apartment block containing 6 x 2 bed apartments which when constructed will enclose and frame the area to which the community Building sits.

The proposed LEAP will sit within the same land allowing the parish council to manage the community building and LEAP as one entity for the local community to use and enjoy.



Image of a similar community Building at the Morris Homes Fenstanton Development



Image of a similar community Building at the Morris Homes Fenstanton Development

5.4 Storey Heights

The outline approval restricts storey heights to a maximum of 2 storeys which we have adhered to with the exception of the apartment buildings to the central northern open space. These have the corner elements at 3 stories simply to add an element of heigh to this location, but the third floor is solely within the roof space. Although this contradicts the development brief it has been discussed throughout the application with officers and stakeholders and agreed that it doesn’t pose a material issue.

5.5 Affordable Housing Provision

Morris Homes have embraced the requirement to provide 40% affordable housing and have carefully considered the delivery and procurement of the affordable housing. Morris Homes recognise the aspirations for high quality and have a track record within the profession of delivering such schemes.

We consider that it is essential that the new development reflects, as far as possible, the desires of the local community and is a place where people feel “at home”.

Morris Homes currently delivers all tenures of affordable housing through housing developments across the North West, the East and West Midlands and the South of England and are currently delivering between 10-40% affordable housing on these sites depending on which Local Authority area the affordable housing is being delivered.

As detailed in the Core Strategy we are providing 40% affordable housing which equates to 81 affordable homes

We are proposing 28 x 1 bedroom homes, 34 x 2 bedroom homes and 19 x 3 bedroom homes with a tenure split of 70% social housing for rent and 30% Intermediate

We will with best endeavours not dispose of more than 60% of the Market dwellings until 50% of the affordable units have been practically completed and transferred to an RP at the affordable price.

We are in discussions with Registered Providers who operate in the area with regards to the delivery of the affordable homes. A partner has not yet been selected as we do not have an agreed affordable housing scheme until detailed planning permission is granted but the quality of our affordable homes has earned a reputation that enables Morris Homes to work selectively with those Registered Providers that have proven track records in active quality management and stewardship.

We are aware that an existing community already exists in the local area and the incorporation of outright sale and affordable homes will offer a wider choice to assist in the creation of a sustainable and balanced community. The location of the affordable homes has been highlighted on the site layout. The affordable homes are in distinct clusters on the site for ease of housing management by our Registered Provider Partner. The affordable homes will be tenure blind in terms of design, quality, location on the site, phasing and access to services and amenities.

It is the intentions that The Registered Provider Partner will enter into a Nominations Agreement with South Cambridge to ensure that such provisions of affordable both first and for subsequent occupiers of the housing are ascertained.



Proposed Affordable Housing Distribution

IDA Darwin Hospital - Cambridge

Schedule of Accommodation

NAME	DESCRIPTION	SIZE (sqft)	Units	Bed Spaces	TOTAL (sqft)	Total %
Affordable Housing						
Windermere	1 bed 2 person dwelling	543	10	20	5430	40%
Ambleside	1 bed 2 person dwelling	605	6	12	3630	
Grasmere	1 bed 2 person dwelling	504	6	12	3024	
Eastbury	1 bed 2 person dwelling	685	6	12	4110	
Patterdale	2 bed 4 person dwelling	825	16	64	13200	
Eskdale	2 bed 4 person dwelling	843	6	24	5058	
Buxton	3 bed 5 person dwelling	963	18	90	17334	
Bramley	3 bed 5 person dwelling	986	1	5	986	
Apt Abbey	2 bed 3 person apartment	645	6	18	3870	
Apt Kensington	2 bed 3 person apartment	645	4	12	2580	
Apt Rosebury	2 bed 3 person apartment	703	2	6	1406	
			81	275	60628	
Private Housing						
2 bed Dwellings						
Apt 01	2 bed apartment	650	3		1950	30%
Apt 02	2 bed apartment	650	3		1950	
Budworth	2 bed mews dwelling	687	9		6183	
Dorney	2 bed mews dwelling	934	9		8406	
Downley	2 bed detached dwelling	957	11		10527	
Chesterfield	2 bed mews dwelling	952	2		1904	
3 bed Dwellings						
Disley	3 bed mews dwelling	934	5		4670	31%
Timperley	3 bed mews dwelling	934	8		7472	
Dunham	3 bed detached dwelling	957	11		10527	
Cotswold	3 bed mews dwelling	952	11		10472	
Rydale	3 bed mews dwelling	952	3		2856	
4 bed Dwellings						
Brereton	4 bed dual aspect detached dwelling	1172	2		2344	35%
Broxton	4 bed dual aspect detached dwelling	1172	3		3516	
Moreton	4 bed detached dwelling	1326	2		2652	
Moreton SA	4 bed detached dwelling	1326	3		3978	
Cranleigh	4 bed detached dwelling	1358	9		12222	
Westbury	4 bed detached dwelling	1410	3		4230	
Warwick	4 bed detached dwelling	1424	5		7120	
Henley	4 bed detached dwelling	1462	7		10234	
Oxford	4 bed side aspect detached dwelling	1498	1		1498	
Winster	4 bed side aspect detached dwelling	1796	5		8980	
Bletchley	4 bed detached dwelling	1798	3		5394	
5 bed Dwellings						
Winchester	5 bed detached dwelling	2085	2		4170	3%
Pailton SA	5 bed detached dwelling	2128	1		2128	
Pailton SA (sp)	5 bed detached dwelling	2128	1		2128	
			122		137511	
			203		198139	

BUILDING FOR A HEALTHY LIFE

Integrating into the neighbourhood

"The development of the scheme at IDA Darwin site has been heavily influenced and guided by the Building for Healthy Life Document and The Fulborne Village Design Guide".

Natural Connections
Create places that are well integrated into the site and their wider natural and built surroundings. Avoid creating isolated and disconnected places that are not easy places to move through and around.

The proposed vehicular access is from Fulbourn Old Drift in accordance with the outline planning approval. An additional temporary access will be provided from Fulbourn Old Drift due to phasing proposals. This will allow access to the remaining healthcare buildings while still in operation.

All the proposed new routes connect to existing routes. The key objective of the movement framework is to create clear streets within the development with good connectivity to ensure the area and its surroundings are easily accessed by foot while enhancing the local and strategic footway connections. The movement hierarchy has been balanced to avoid a car led development. Movement priority has focused on pedestrians who will be placed at the top of the hierarchy. The layout design has addressed the position of existing buildings and land uses along the boundaries of the site in order to create the most appropriate vehicle and pedestrian connections. The Village Design Guide focuses upon

"Pedestrian routes and cycleways forming a network connecting to the village core and community facilities/services".

An extensive network of new footways are proposed across the site, interlinking into areas of shared surface, main highways, areas of public open space and the surrounding uses. Direct footpath connections are proposed to the west and east of Fulbourn Old Drift, tying into the existing footpath along the road, creating a continuous flow of pedestrian connectivity.

The layout has respected the site's development edges. The layout responds to the existing site topography whilst creating a positive road frontage overlooking Fulbourn Old Drift. Separation distances have been considered between the proposed and the existing dwellings along the eastern boundary, ensuring that good urban design principles are achieved with private backs to private backs and public fronts to public fronts.

The existing trees have been subject to Arboricultural investigation and will be retained where possible to retain the containment they provide. The location of the existing trees have influenced the structure of the proposals to ensure that well overlooked areas of flowing and connected green

infrastructure is created as the heart of the scheme with pods of development framing these areas. This ensures that a well connected development is proposed with no areas of isolation that are not easy to move around, making it assessable for both new and existing village residents.



Vehicle Access from Fulbourn Old Drift



Temporary Access from Fulbourn Old Drift for hospital buildings



Pedestrian links to Fulbourn Old Drift/ Cambridge Stenier School



Pedestrian link to Fulbourn Old Drift

Walking, Cycling & Public Transport
Places that offer social, leisure and recreational opportunities a short walk or cycle from their homes

The layout encourages both new and existing residents to use public transport through the new and enhanced connections to the existing footways surrounding the site and therefore the existing bus stops. The aim of the new network of footpaths is to create direct, safe and pleasant green routes that are convenient for people to use in hope that walking would be the instinctive choice. A series of off-site works were proposed at outline stage to upgrade the accessibility of the site via foot and cycle. This included upgrading the route between IDS Darwin and the village centre and the provision of cycle improvement works on Hinton Way connecting into Cambridge Road.

The site benefits from being in close proximity to regular public transport services along Fulbourn Old Drift which connects Fulbourn village with Cambridge, reducing the reliance on the car for access to both local and wider higher level amenities.

Cambridge & Cambridge North Train Station are within approx 3.5 miles of the site where direct connections are available to Central London (Kings Cross), Norwich, Brighton & Birmingham New Street. From these locations, airports are accessible for international connections.

Cambridge Airport is approximately 4 miles from the site.



Connectivity surrounding the site - plan taken from the VDG



Regional Context plan taken from the outline DAS



Bus stop locations on Fulbourn Old Drift



Pedestrian links to Fulbourn Old Drift/ Cambridge Stenier School

BUILDING FOR A HEALTHY LIFE

Integrating into the neighbourhood

Facilities and Services

Short trips of up to three miles can be easily made on foot or bicycle if the right infrastructure is in place, helping to improve public health and air quality whilst also reducing local congestion and carbon emissions.



The Village Design Guide (VDG) stated that there was the need to

"strengthen community facilities to ensure that they continue to be well used by future residents as well as by the existing ones."

As existing Fulbourn Village contains a range of facilities including a Primary School, local shops, a Health Centre and community facilities. The Swifts at Haggis Gap contains rooms for community events and has Library facilities. The Fulbourne Centre includes meeting rooms and sports facilities in addition to the recreation ground. A Tesco supermarket is accessible via foot to the west of the site at Cherry Hinton.

The development proposals has really focused upon the recreational opportunities that the site can provide through the following;

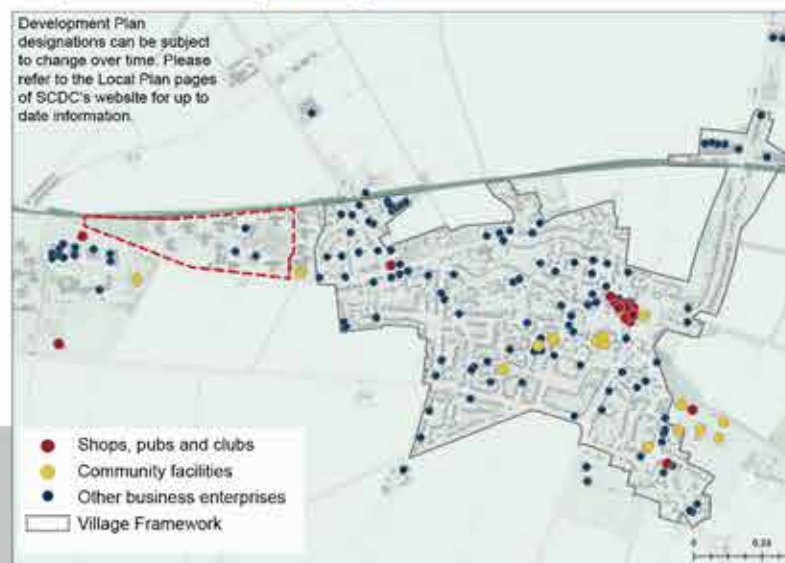
- 'Retention of the existing woodland' with retained woodland trees, attenuation ponds and new localised areas of play.
- 'Creation of a central village heart' with natural trim trails and setting areas.
- 'New proposed parkland' with local equipped area of play.
- '10m ecology buffer' along the northern periphery of the site with a linear green walkway set into the woodland tree backdrop.

The proposals above are intertwined with footpaths that connect across the site, creating a 'play on the way' environment with sustainable drainage systems that contributes to creating an accessible network of public spaces for both new and existing residents to enjoy.

In the centre of the site adjacent to the LEAP a community building is proposed which will be managed by the parish council. This is planned to have an early years nursery through the day and activities such as badminton etc. of an evening but will also be available for community functions.



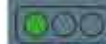
Proposed Community Building



Immediate local amenities plan taken from VDG

Homes For Everyone

A range of homes that meet local community needs.



The village design guide expresses

"that there is 'the need for a housing mix, including suitable dwellings for the elderly and for younger households.'"

The development includes a range of housing types ranging from 1-5 bedroom dwellings in detached, mews, semi-detached and apartments. There are 203 dwellings proposed, 81 of those are affordable tenure in a range of 1-3 bedrooms. The extensive range will create a well balanced, mixed community of first time buyers, family homes, downsizing opportunities and supported living.

The final mix of dwelling types have been through discussion with the local Council, which enables the mix to respond to local need.

All dwellings have access to outdoor space to allow for health an wellbeing needs.



Affordable dwellings locations



Allocation of range of bedroom types

BUILDING FOR A HEALTHY LIFE

Distinctive Places

Making the most of whats there
Understand and respond

The detailed constraints and opportunities were discussed and reviewed in detail at outline planning stage which inturn influenced the design parameters for the site.

The topography of the site has defined the layout, with the western end of the site being cleared of buildings and returned to landscape as a green wedge to provide habitat opportunities. The existing trees within and around the sites boundaries creates a strong landscape structure and setting which softens the impact of development , described within the VDG as being

"the hallmark of the site and its legacy, and should be its main feature in future"

The trees have been assessed and those of importance and value have been retained. These main areas are within the central area of the site and around the perimeter.

The existing single use railway line that runs along the northern boundary is a local source of noise and the existing trees here will help create a noise buffer. Although the railway line has minimal usage of possibly twice a day. It has also been considered important to not propose development in close proximity to the railway line, therefore a 10m ecology buffer along this boundary was proposed at outline stage, creating an ecological haven for local wildlife and a pleasant green corridor to walk. This also adds an additional level of visual protection to the sheduled ancient monument to the north of the railway line.

There's an existing school (Cambridge Stenier) adjacent to the boundary which uses the access and parking-area on site. This needs to remain and has been included within the development proposals.

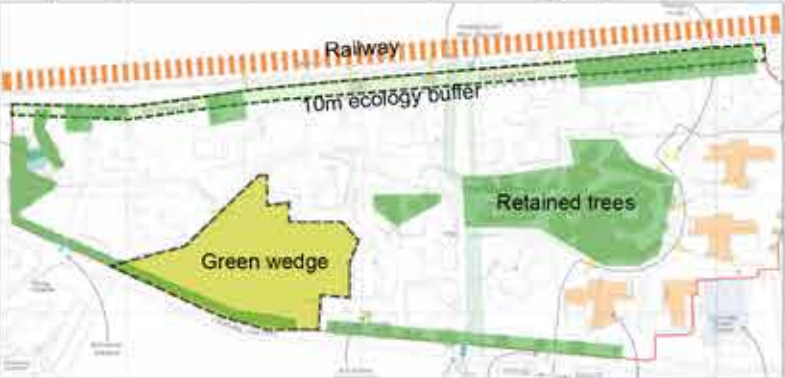
An existing easement from the gas main and award drain that run from the existing entrance on the southern-boundary through to the northern boundary splitting the development in to 2 natural parcels. This creates the opportunity for an entrance boulevard which will be tree lined with semi-mature trees and dwellings fronting. The phasing allows for the 4 existing hospital administration buildings to remain until 2024

whilst they are de-commissioned and relocated to new premises. An existing pump house is also to remain throughout the phase 2 element and will only be de commissioned and removed one the existing hospital buildings are removed.

The existing electric sub station is to be retained until the new proposed sub station is constructed and live.



Temporary access and retained hospital builings in phase 2



10m ecology buffer, existing trees and retained green wedge



School with retained onsite parking facilities/approved access

A memorable character
Creating places that are memorable

As described within the Village Design Guide

"Fulbourn has a marked village character, which dominates the mental image of most residents: the rural setting and heritage, the varied environment of different houses arranged informally along traditional lanes and streets, and the tall trees of the English countryside. Buildings are typically simple: single blocks, steep roofs, rendered or brick-faced. Boundary walls of pale bricks and flint or thick boundary hedges are also common."

This has been focused on while developing the character of the proposals.

The strong existing landscape structure provides a distinctive character that would define the new development. The mature trees defining the block structure would establish a garden village character, with distinctive new architecture. Following discussions with the council urban designers, 3 character areas have been created, incorporating elements from the local character as follows;

Development Edge Character – predominantly detached dwellings as you would see on the edge of a settlement, predominantly buff brick with grey roof tiles with splashings of render and red tiles. Boundaries will be estate railings with native hedge behind to replicate the village.

Woodland Edge – a more softer feel again with detached and semi-detached but now we are showing a meandering tree lined verge the width of which differs throughout the site. As these dwellings front the woodland they're to have an open boundary with hedges in part and larger front gardens.

Inner Streets – The space in between the previous 2 characters areas, predominantly semi-detached and terraced dwellings with little or no front garden. These streets are meant to feel tight and enclosed giving the impression of older village streets. Elements of red brick are introduced in these.

Focal buildings will be constructed to match their neighbours within that character but will have red brick detailing on buff

facing brick which is synonymous to the Cambridge area with Georgian bar sliding sash windows, raised gables with stone parapets and finished off with a low wall faced in flint.

The two separate courtyard areas on the front shown as terraced squares are designed to replicate the alms houses that you can see in and around the area.

Fulbourn Windmill is a listed building and historical landmark for the village with views to this being raised within the Village Design Guide as being important. Within the proposals, views to this have tried to be incorporated along the new network of footpaths as a journey. If you enter the site adjacent to the school there is a clear view across the fields to the windmill which is why a 'pause' place has been created in the form of a seating area. After you have travelled along the footpaths to the Parkland and elevated view is proposed through a mounded hill and spiral walkway.



Woodland Edge



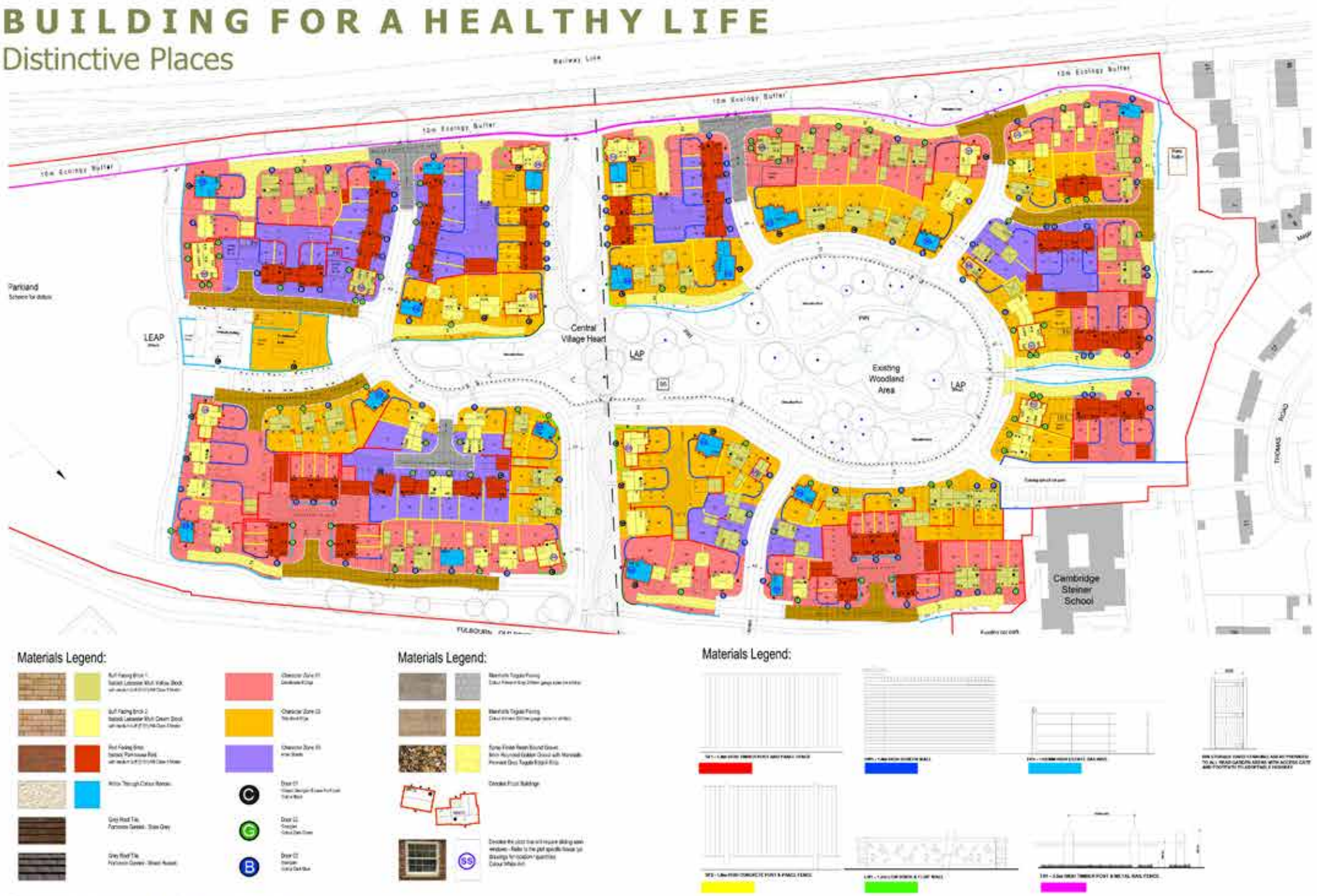
Development Edge



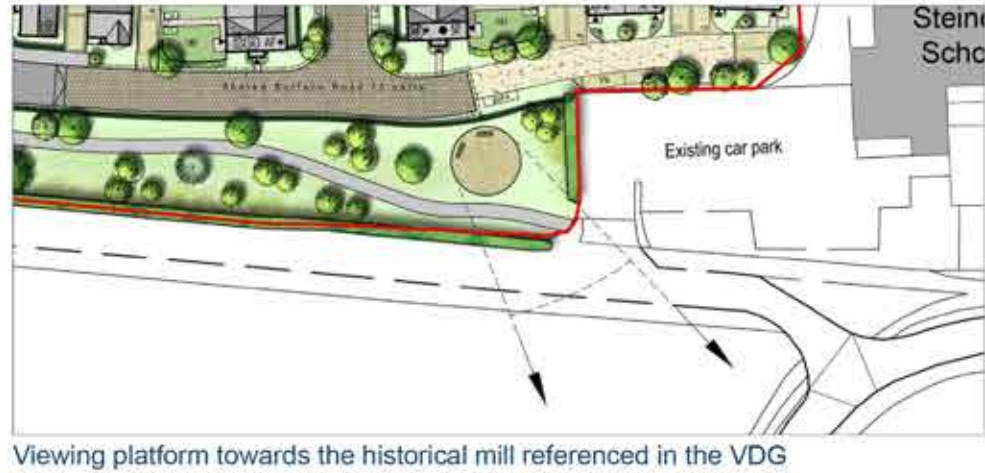
Inner Streets

BUILDING FOR A HEALTHY LIFE

Distinctive Places



Extracts from VDG - Appropriate design approaches for Fulbourn which have influenced the evolution of the scheme



BUILDING FOR A HEALTHY LIFE

Distinctive Places

Well defined streets and spaces
Create a network of streets and spaces that are well enclosed by buildings and/or structural landscaping, taking care to ensure that front doors and the principal facades of buildings face streets and public spaces.

The new streets have been designed to be part of an extended pedestrian route through the site which is well overlooked to allow natural surveillance.

The scheme provides continuity of street frontages and the enclosure of space by development that clearly defines private and public areas through the use of attractive and distinctive landscaping. Tree planting throughout the development is used to break up the built form.

The proposal has developed continuous active frontages that wrap around and frame the areas of public open space. The geometry of the blocks, together with the need for pedestrian and vehicular linkages generates key corner turning buildings which take on importance in setting focal points within the development.

All housing is positioned at the edge of the street with a semi-private space that varies in width along the street depending on which of the three character areas it is. The front doors are always on the street promoting active frontages and social interaction between neighbours.

Primary Street -
5.5m wide road (Bitmac)
2m footways
Green tree lined verge

Secondary Shared Surface
6.5m wide (Tegular Paving)
500mm service verge
street visitor parking

Territory Driveways
Spray finish resin bound golden gravel
Tegular edging strip

Marshalls Tegula Paving
Colour Pennant Grey 240mm gauge sizes (or similar)

Marshalls Tegula Paving
Colour Harvest 240mm gauge sizes (or similar)

Spray Finish Resin Bound Gravel
6mm Rounded Golden Gravel with Marshalls
Pennant Grey Tegula Edging Strip

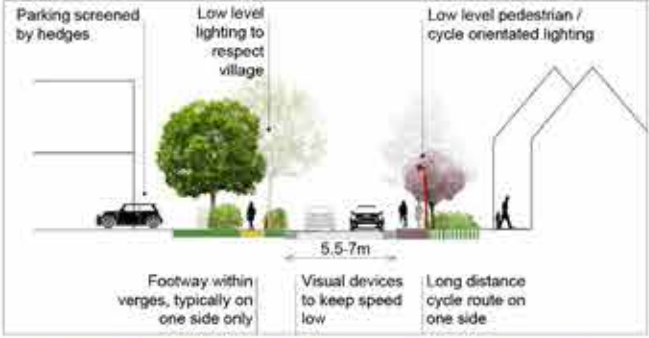
Street Hierarchy Materiality

Easy to find your way around
Use legible features to help people find their way around a place

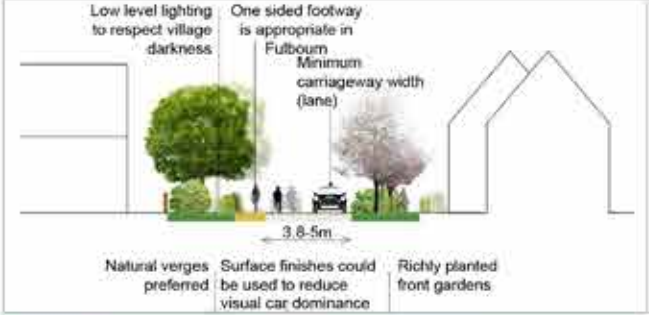
The layout proposes a Movement and Connections Framework which, sets in place a well-defined and easily understood pattern of development parcels and streets. It also provides an easily understood framework with a clear hierarchy of pedestrian, cycle, and vehicular movement routes that is defined by changing widths and materiality. The starting point is making good connections with the existing streets and footpaths. In accordance with Manual for Streets (DfT/CLG 2007), streets will be designed as high-quality places with five principle functions: place, movement, access, parking and utilities. Of the five principles, place and movement will be the most important in determining character and helping to navigate the development. This proposal follows this by placing buildings to terminate view lines. These key landmark buildings are defined by architectural detailing of red detailing brick and buff facing brick with Georgian sash windows, raised gables, parapets with a low boundary wall faced with flint. This will in turn create memorable way markers while moving around the development.

The well-connected and accessible green areas helps with navigation due to the flowing nature, connecting back into the road network. The layout carefully manipulates vistas, pinch points, block massing and positioning. Attractive and distinctive landscaping adds further to this effect.

The hierarchy of streets is split into three characters of hard landscaping. The primary street is 5.5m wide and 2m footways is constructed in Bitmac. This becomes the central green spine of the development defined by a tree lined boulevard. The secondary shared surface streets are 6.5m wide with 500mm service verge which allows for visitor parking along one side with two cars still being able to pass. These are constructed in a tegular paving. The territory driveways are constructed in resin bound gravel. The three character areas of the development helps to create different spatial characteristic, building typologies, building to street relationships, landscape strategies and boundary treatments which all aid in navigating around the development.



Through road design enhancements comparison between the VDG and the proposals



Lane design enhancements comparison between the VDG and the proposals



Proposed street hierarchy

BUILDING FOR A HEALTHY LIFE

Streets For All

Healthy Streets

Streets are different to roads. Streets are places where the need to accommodate the movement of motor vehicles is balanced alongside the need for people to move along and cross streets with ease. Activity in the street is an essential part of a successful public realm.

The VDG pays particular attention to ensuring that

"highway design and improvements should recognise and enhance the special character of the village, and adopt a style of street design appropriate to the village...while Design attention should be given to the streets and routes more frequently used by children to encourage walking and cycling".

The planning layout shows how the new streets have been planned to be safe and accessible by designing the street as more intimate place through turns to slow cars down to a minimum to increase the safety for pedestrians. Streets are designed as green and pedestrian centred.

The layout has been designed to encourage social cohesion and reduction in crime through the arrangement of the development blocks and public spaces. The layout positions all housing at the edge of the street with a semi-private space that varies in width along the street. The front doors face onto the street and turn corners promoting active frontages and social interaction between children and neighbours.

There is a very clear definition between public and private space. The public space is well overlooked by the new properties, and will be attractive and safe. An outward looking development is proposed, so the central and perimeter green spaces are well overlooked.

The streets are designed as multi functional spaces for pedestrians and vehicles through a clear and distinct hierarchy. Pedestrian and cycle movement intertwine between the public open space and movement framework with clear crossings across junctions creating a clear balance between movement and function.

Images adjacent are taken from VDG - Landscaping features that contribute to creating healthy streets which has been considered within the proposals.



Trees in verges as per the proposals



Large trees in streets and pocket spaces



Wildlife rich hedgerows



Taken from VDG - Parking concealed behind walls and hedges

Cycle and Car Parking

Well-designed developments will make it more attractive for people to choose to walk or cycle for short trips helping to improve levels of physical activity,

Accommodating car parking is crucial to the quality of housing and to the choices people make in how they travel. The level of parking provision is influenced by the location of the site. This site is highly accessible to a range of amenities and alternative transport modes ensuring that it is well placed to meet national, regional and local policy.

The scheme has been designed in line with local standards and recommendations set out in the English Partnerships document 'Car Parking - What Works Where' and the recommendations from the VDG

"Parking arrangements should remain incidental and have minimal visual dominance on the house frontage and the street; prefabricated parking sheds and large parking surfaces in front of houses should be avoided".

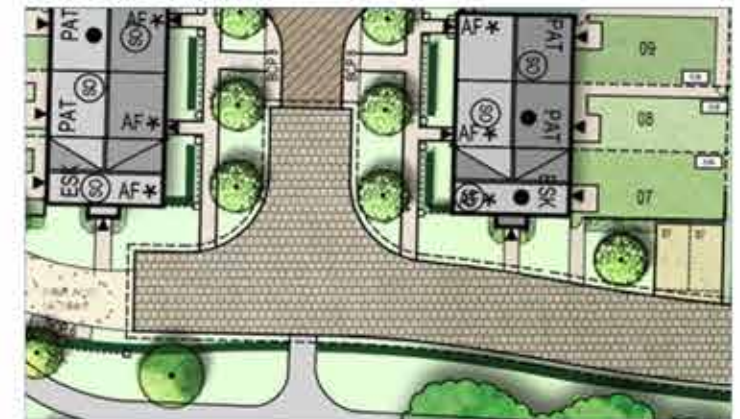
Car parking and garages have minimal visual impact. Parking is generally on plot to the side of the dwelling with a small amount of upfront parking bays in minimal instances for visitor parking and these are populated with landscaping to break up the areas of hard landscaping. Rear parking courts are well overlooked by dwellings and garages are plotted behind the build line in order to not dominate the street scene.



Taken from VDG - Strong frontage edge with walls and trees



Primary Street - Tree lined green verge and hedge planting to help conceal the parking arrangement which is plotted behind the build line.



Secondary Shared Surfaces - estate railings with native hedge behind to replicate the village help to conceal the parking. On street visitor parking spaces



Rear Parking Courts - Help to conceal parking from the street scene by creating overlooked rear parking courts which are populated with landscaping to break up areas of hard landscaping.

BUILDING FOR A HEALTHY LIFE

Streets For All

Green and blue infrastructure

Creative surface water management such as rills, brooks and ponds enrich the public realm and help improve a sense of wellbeing and offer an interaction with nature. As the richest habitat for a range of flora and fauna, they are also a key play in achieving the net gain in biodiversity

The development's Green Infrastructure (GI) has been a key feature of the proposals. The layout is based upon a connected network of accessible green spaces, providing significant landscape, biodiversity, sustainability and recreational well-being benefits for the local and wider community.

The proposed development retains the sites key landscape features, including the perimeter trees and central spine of trees. In addition the proposals include retained open areas, areas of new woodland, tree and hedgerow planting. It was an aspiration of the LPA that the central and western areas of the site are carless and the above achieves this while respecting the VDG

"the unbuilt part of the site to the west should be established in permanence as a natural area, with trees and high biodiversity value".

The footpath network is key for attracting pedestrians into the development. There are three main open space areas. The eastern edge which contains an attenuation pond, the sustainable drainage forming an important part of the landscape design, with attenuation basins permeating the layout. The central heart of the site which contains the woodland, two seating areas and two small trim trail play areas consisting of simple logs and stones/rocks that the children can veer off to play on whilst there walking through the site. The third being the main Parkland area to the west. The above respects the requests of the VDG to have planted and irregular 'soft edges' at the interface with the countryside and using green buffers between new development and existing built up area of the village to protect privacy.

Surfaces, landscape materials and proposed street furniture are practical, robust and simple and 'natural' in their design and appearance

Areas of open space will be maintained by a management company in order to retain the quality and appearance.



Western green wedge - Parkland

Back of pavement; front of home

Garden cities, towns and suburbs used hedges to define public and private spaces, helping to create characterful and biodiverse places. The space between the back of the pavement and the face of buildings has a significant impact on the quality of a place. Clear demarcations between public and private spaces can encourage people to personalise the front of their homes whilst also offering opportunities to integrate level changes, utility boxes and waste storage.

The VDG states that bins, cycle parking, meter boxes and other infrastructure should be integrated in the design. External storage will be provided within the plots, with sheds or external stores. This would allow for cycles and other items to be stored within the curtilage of your property at the rear so that it doesn't dominate the street scene. Storage space would also be provided to the side or rear of the plots for bins and recycling facilities, recognising the changing needs for facilities.



Eastern Fringe - Attenuation area



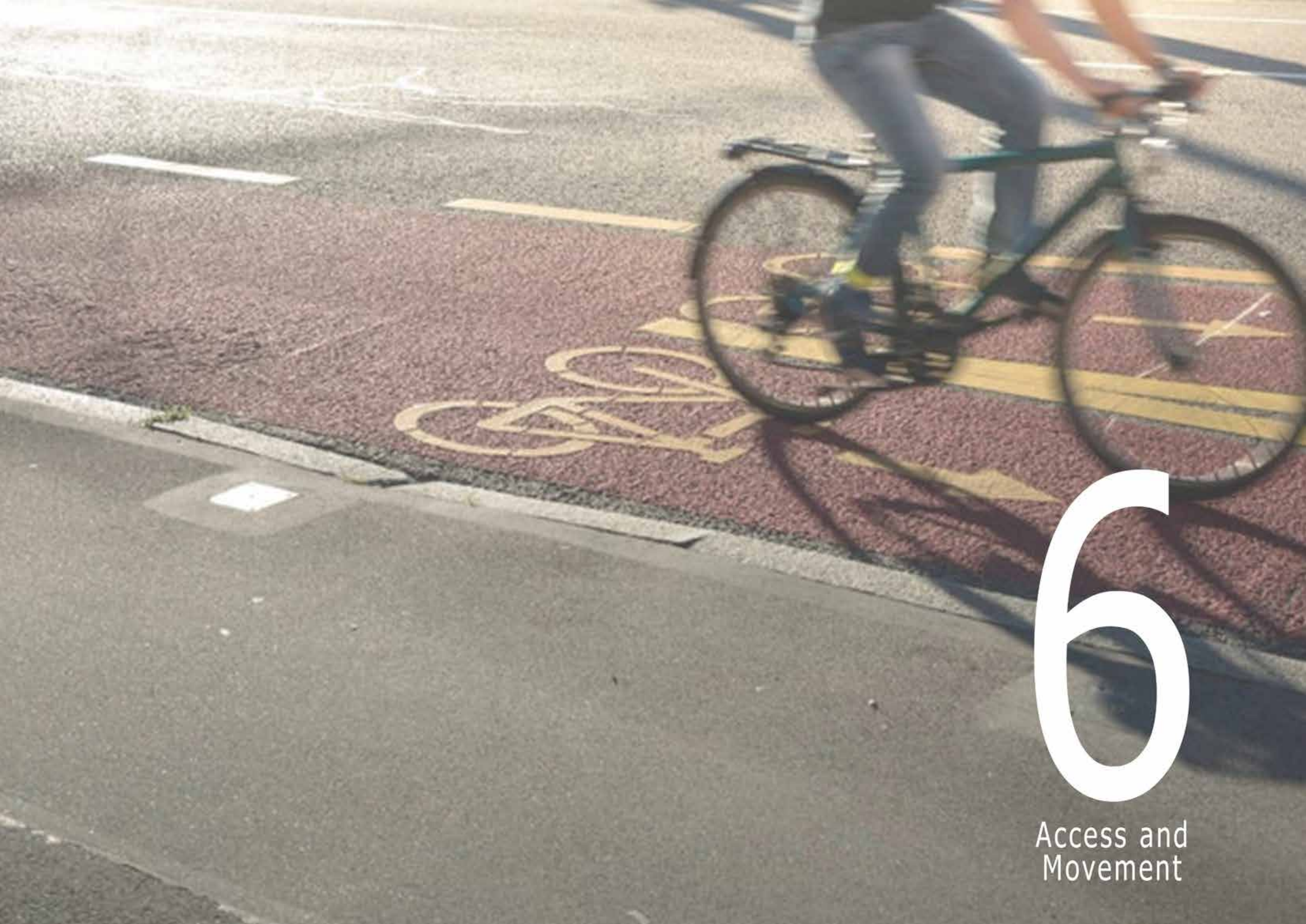
Central area - Green spine, central woodland heart



inappropriate design approaches for Fulbourn from VDG



External storage in the rear of plots



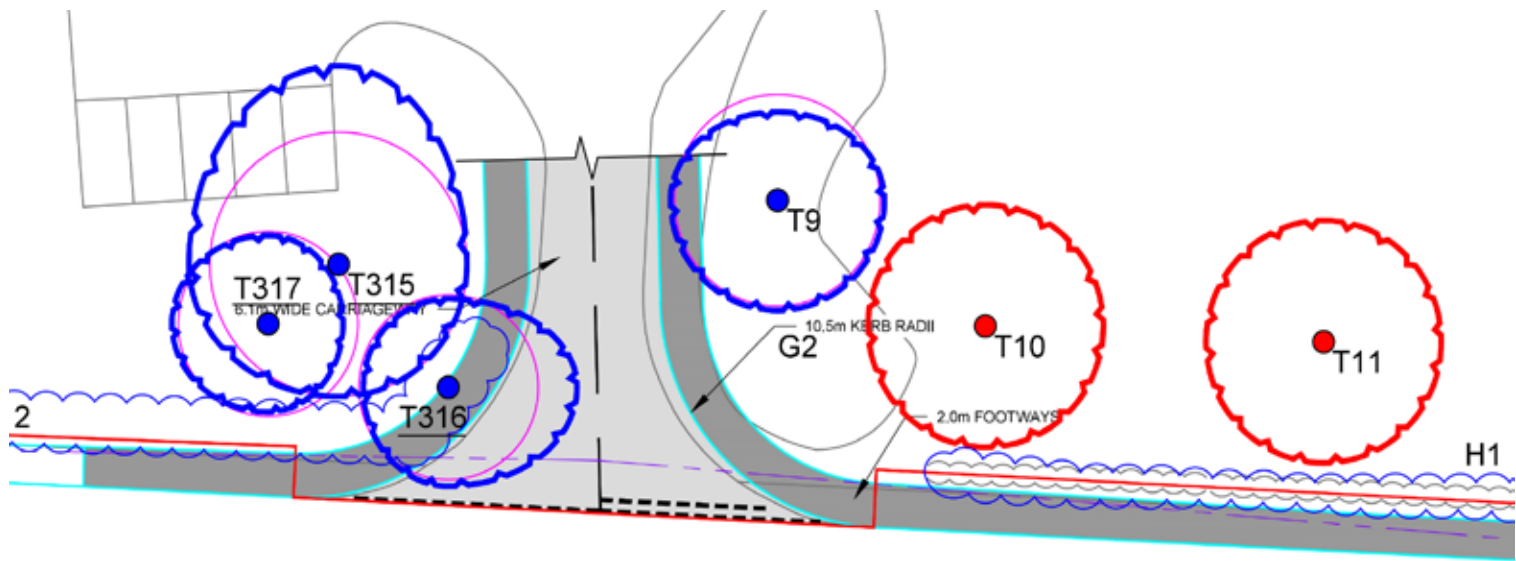
6

Access and
Movement

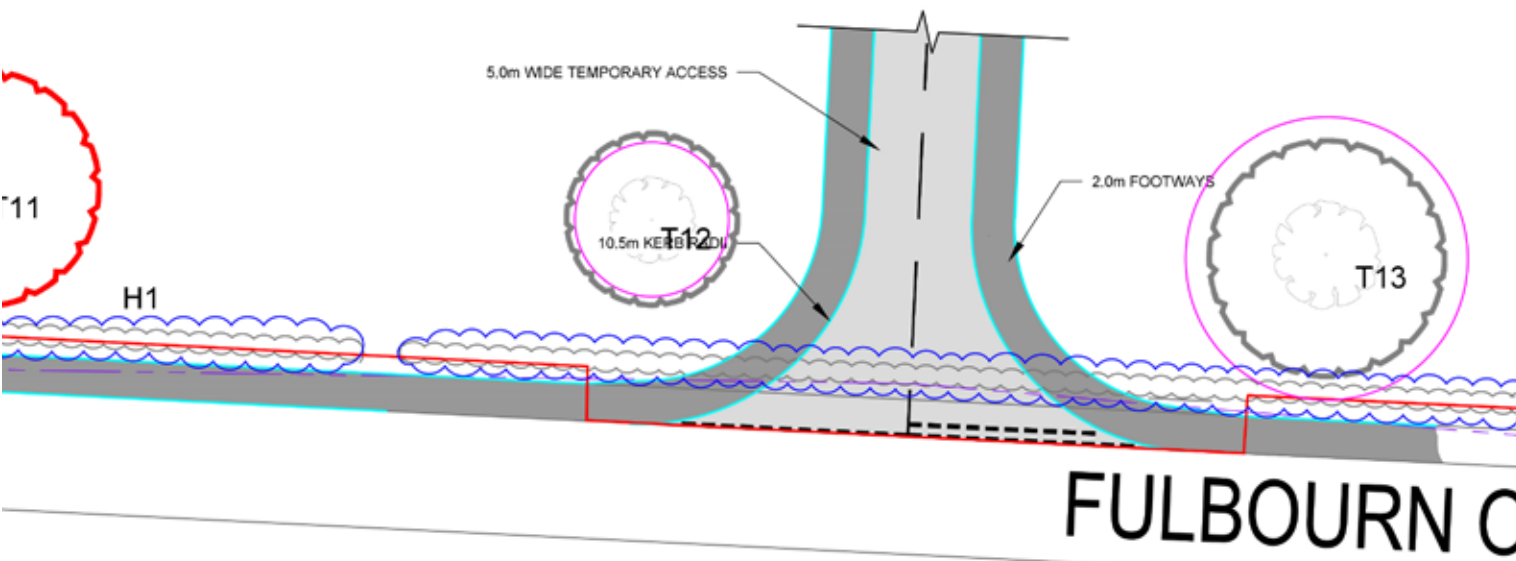
6.0 Access and Movement

6.1 Access

The main vehicular access into the development site was designed and approved as part of the outline application. This can be seen below.



Main Vehicular Access Point



Secondary Vehicular Access Point (temporary for construction of phase 2)

6.2 Street Hierarchy

It is important to create a harmonious development when thinking about its use. circa 200 new homes will bring with it many new vehicles to the area so setting a hierarchy of road type is important.

Below you will see the proposed scheme in terms of how the roads are to be used. Primary roads carrying the majority of vehicles, secondary roads /shared surfaces giving direct points to the different parts of the scheme and tertiary more private driveways for the use of the dwellings only.



Street Hierarchy Plan



Primary Streets

Main vehicular access from the main Fulbourn village road network into and around the development. This road type will give direct access to the new community building.



Secondary Streets

Shared surface roads, 6.5m wide and constructed from softer materials these roads will feel slower in comparison to the primary route. Typical within a village setting the shared surface usually terminate at a point giving a more private feel.



Tertiary Driveways and Access Ways

Private routes to dwellings. Usually kept to a maximum number of houses unless adoptable turning points are added.

These private driveways will be under the ownership of the dwellings that use them not part of the S38.

6.3 Street Hierarchy

When designing a large housing development refuse collection is one of the main issue we face. Every house these days has at least 3 separate wheelie bins plus perhaps a recycling bag or box and these need somewhere initially to be stored out of sight on plot.

They also need a route whereby they can be brought to an adoptable road link to be collected/emptied on bin collection day.

The strategy at the IDA Darwin site is no exception. We have made sure that all dwellings will have a hard standing area within their rear garden to store wheelie bins away from the street, and a clear route to a collection point whether that be in front of their home or if on a private driveway/shared area within a collection point provided.



In Cambridgeshire and surrounding villages they have 3 separate wheelie bins.

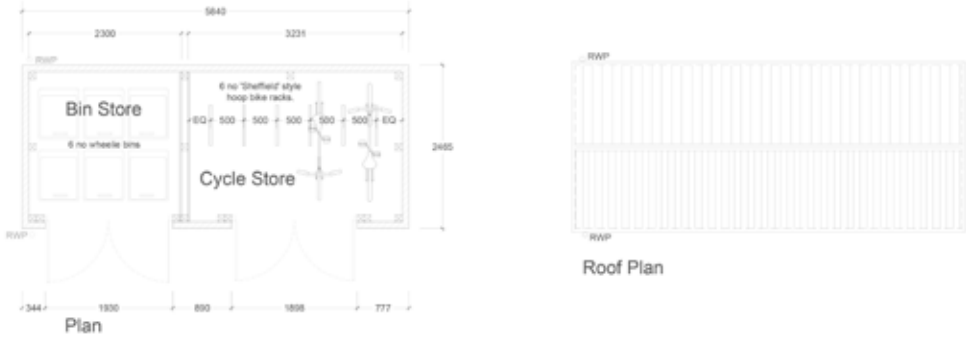
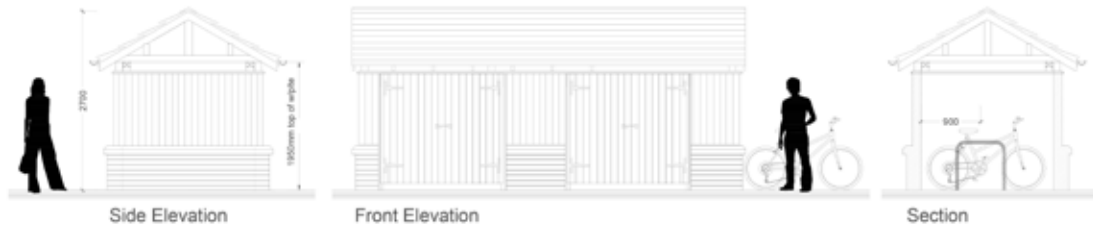
Black - General waste
Green - Garden and Food Waste
Blue - Paper, Cardboard, Metal (anything recyclable)

The bins in Fulbourn are usually collected on a Monday on a 3 week rotation.

6.4 Cycle Storage

Every dwelling will be assigned secure cycle storage under the councils current planning policy. This may well be as part of the garage as they are designed to take cycles in addition to the vehicle. if the property doesn't have a garage a secure lockable shed will be provided.

See below for details of the proposed cycle storage provision.



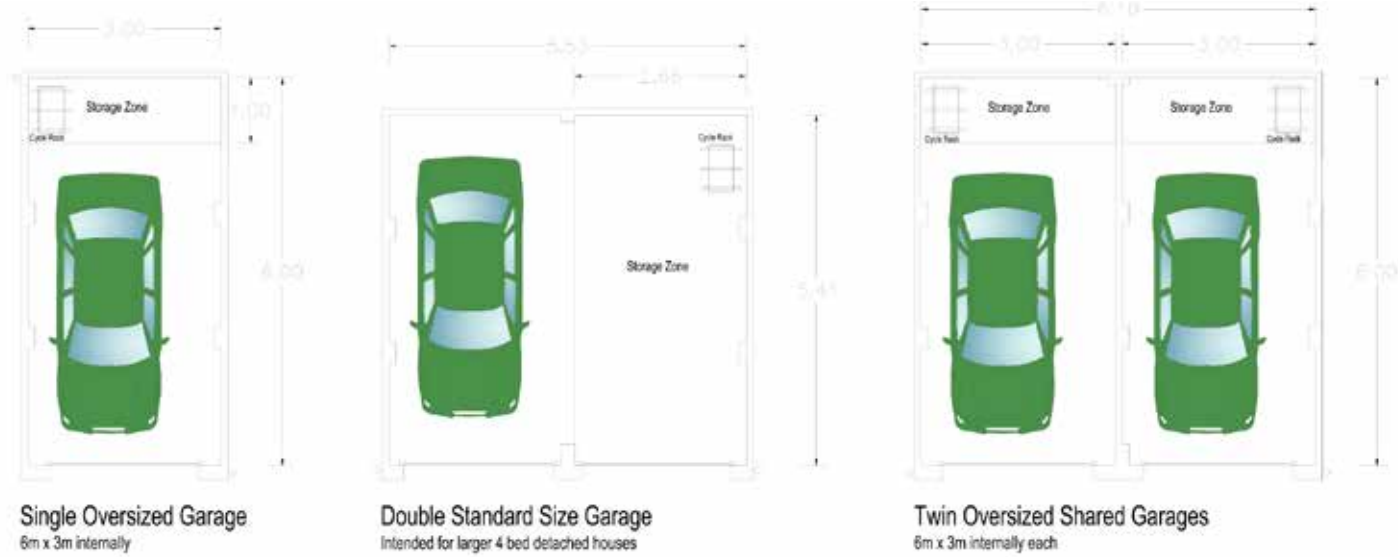
Refuse Strategy Plan Showing the route sand collection

6.5 Parking Provision

Each dwelling will be assigned vehicle parking within their respective plot with an element of on street visitor spaces shown in addition to visitor spaces allocated to parking areas. The councils policy is: -

- | | |
|---------------------|--------------------------|
| 1 bed dwellings | 1.5 spaces per dwelling. |
| 2 & 3 bed dwellings | 2 spaces per dwelling. |
| 3 bed and over | 3 spaces per dwelling. |

In some cases these ratios are over provided, these will be shown on the enclosed Parking Strategy Plan as additional parking. As stated above the garages are designed to be larger than standard in order to allow an area for garden tools and secure cycle storage. See below: -



A photograph of a dirt path winding through a dense forest. The path is made of brown earth and is flanked by lush green trees and undergrowth. The sunlight filters through the leaves, creating a dappled light effect on the path. The overall scene is peaceful and natural.

7

Landscaping
and Ecology

7.0 Landscaping & Ecology

7.1 Landscape Structure Plan



Landscape Structure 1 Of 2



Landscape Structure 2 Of 2



Existing Trees



Proposed Landscaping



Natural Play

Natural play areas will be established throughout the scheme within areas of open space. The play areas are to comprise natural materials including stone boulders and timber structures with appropriate surfaces such as gravel or sand.

The provision of informal and naturalistic play will allow these areas to integrate well into their surrounding open space to create visually attractive play spaces that are appropriate within the context of the wider scheme.



7.0 Landscaping & Ecology

7.1 Landscape Structure Plan

Barnes Walker Landscape Architects were appointed to provide proposed landscaping designs following the brief from Morris Homes and the comments and feedback from the LPA during our 4 pre application design meetings.

With respect to the details these can be fund within the application itself, however the 3 main areas are shown here in more detail, they are: -

The Proposed Parkland

This is the large area of green belt land which we are looking to redesign to meet the village vernacular and aspirations of the local people and parish council. The Landscape Statement will discuss the reasoning behind the designs but it was important to create an area that was usable and fitted in with the current village theme. An elevated viewing area was also designed into this part of the development in order to allow good visual amenity toward the existing Fulbourn Windmill.

A small community orchard has also been added which will give the local residents something to maintain over time and enjoy the fruit spoils from the trees. Large areas of usable space exists fro children to play as well as areas of retained woodland for playing within.



Extract of the Landscape Designs focussing on the Parkland Area.



Extract of the Landscape Designs focussing on the Central Woodland.

The Central Woodland Area

This is the large area of retained woodland to the centre of the development. This has always, since day 1 been an area of retention as there are many mature trees some of which are good specimens.

Barnes Walkers’ brief was to retain what was required, but to enhance the area with new trees and landscaping which was to propose a meandering path through the area in order to give the local people a non vehicular route from the eastern open space through to the community building and into the parkland area.

Along these footpaths would be a series of attenuation ponds acting as the surface water drainage for the scheme along with a number of small natural play spaces by way of a trim trail. Within these play spaces will be simple logs or boulders located in such a way that children can veer off to play as their journey meanders through the woodland and open space network.

2 separate LAP areas will also be located here, these were part of the outline approval masterplan and will consist of a 100m2 grassed area with seating and a bin for rubbish. These areas of celebration are more of a meeting place than an area of play.

The approval required a LEAP for the use of the local area as well as the residents of the new development. This is situated adjacent to the community building as shown and will be detailed though the application process.

The Eastern Open Space Area

The open space area to the eastern boundary protects the existing dwellings front the development proposals whilst connecting the green infrastructure by way of the footpath links, this area will also house a large attenuation SUDS pond to mitigate the surface water run off from the development site.

The main landscaping strategy throughout the development is to replicate the sporadic village nature with native species of trees and hedges. This is a common theme throughout with the exception of the area surrounding the community building which has a structured landscaping scheme to further reflect the contemporary vernacular.



7.2 Landscape Details

Morris Homes have worked alongside **Barnes Walker Landscape Architects** for many years on schemes all over the country, so it made sense that when we wanted to write a set of manuals on how the landscaping should be approached, we partnered with them to produce a comprehensive set of documents outlining everything from species types to soil management.

The next few pages show a snapshot of these documents and how our approach to landscaping is maintained at a high level throughout all out developments.

These documents contain detail which are widely used by gardeners and landscapers who work on our schemes in order to ensure the quality finish we require.



Design and Planting Guidance

This document outlines how the designer should approach the landscaping structure first and foremost with the detailing specification outlining how to finish the project.



Illustrative Plant selection Guide

This document is a pictorial reference guide which should be read in conjunction with the design and planting guide above.

This shows images of all the species which we use and which ones work well together in the same vicinity.

Hedges along front boundaries
Where reasonable runs (single or split) can be accommodated. Minimum length for individual sections 2m

Ha1
Principal access routes and junctions



Ha2
Principal junctions and corners



Ha3
Properties at end of T-junctions



Ha4
Special situations and properties. Town houses, crescents, properties overlooking open space. Often associated with boundary railings and access routes.



Hedges to divide properties & parking
Include hedges to divide selected front drives to help screen views of parked cars

Hb1
Use hedges to divide drives and screen cars. Regular divides for townhouses create an attractive landscape arrangement. Elsewhere, dividing hedges should be included for at least every 4 properties in a row.



Hb2
Include sections of hedge within parking courts to help screen and soften the impact of parked cars. Take care not to conflict with the sense of space



Hedges as beds

Hc1
Clipped box hedging as alternative to shrub planting. Gives structural definition where larger hedges unsuitable.



Hedges

Hedges are probably the most important component in any good landscape scheme and achieving the optimum balance and distribution across the development is key to the overall success of that scheme. They are rarely planted by homeowners and must be planned into the scheme from the outset.

- Evergreen hedges create a smart, unified green edge to residential roads. They are visually prominent and are key elements of the street scene.
- They define front garden boundaries, divide plots and provide privacy and protection.
- They link other landscape elements and bring visual coherence and structure.

Trees as regular rows
Include rows of the same species along front boundaries or maximum impact and to complement structural housing layout

Ta1
Plant at regular spacings (5m-9m) to one or both either sides of road to create an avenue or partial avenue (same species)



Ta2
Plant at end of hedges dividing drives. Most effective at regular spacings (5m-9m) to the front boundary of townhouses, to complement and emphasise curved or straight frontage layouts



Ta3
Where possible plant within courtyards to complement the geometry of the space (same species)



Individual trees and informal groups
Mixed species

Tb1
Where space allows include large growing/ large stock single trees to prominent key positions



Tb2
Informal groups, themed groups or single trees to suit the more informal housing layouts (eg. cul-de-sacs)



Tb3
Where trees cannot be planted within front gardens or verges, rear gardens may provide opportunities for planting trees that are visible as part of the street scene



Tb4
Parking courts are usually open spaces bounded by rear gardens and present an opportunity to plant trees where soil/ bed width allows



Trees

Trees are key structural elements within any landscape scheme and their contribution to the visual quality and character of the street scene and of the development overall cannot be overstated.

Spatial constraints restrict opportunities for planting trees and so these need to be designed into the scheme from the outset as part of the planned, and implemented, landscape structure for the development overall. Trees are rarely planted by home owners.

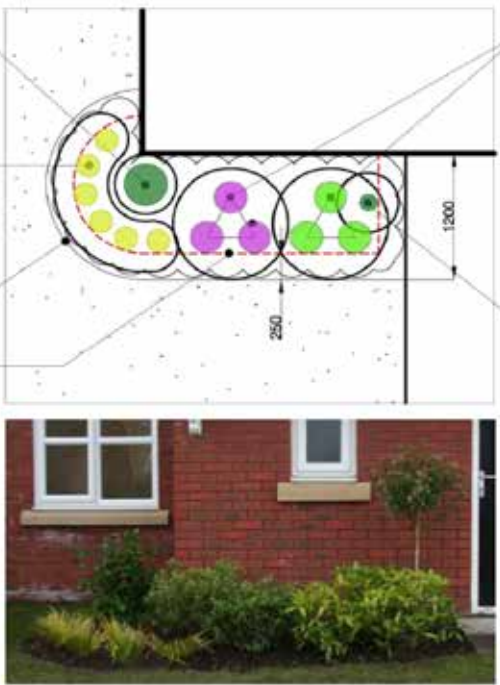
- Key structural elements of a scale that cannot be achieved by other plants
- Visually prominent and key elements of the street scene
- Provide the sense of place, character and setting for homes.

Tall, bushy specimen to key positions i.e. where visually prominent without obscuring windows

Lowest growing species planted as linear trim to front of larger species. Plants should only be layered if there is a clear difference in height and beds are wide enough to allow this structure to develop

Curved beds shaped to a pure arc. Lawn edges cut sharply

Edge of plant no closer than 250mm from edge of lawn/ planting bed



Shrub species planted generally as discrete triangular groups of 3 where shrub beds are wide enough (at least 1000mm). These read as a single shrub when first planted and continue to develop as one as the plants mature.

Triangles to be arranged and aligned to create the best effect overall.

Group of 2 can be included as a linear element or when plants are bushy enough to read as a large single.

Groups should be clearly defined as such and separated slightly from each other.

Tall clear stemmed specimen, positioned carefully in relation to the other plants to give accent, interest and balance.

ZONE 1 Principal access routes and connecting spurs

Busier through routes with a mixture of house types, garden and driveway arrangements.

- LANDSCAPE PRIORITIES**
- Identifying the extent of this zone is key : focus treatment for these zones closer to main entrances and along the busier through routes **only**. Apply as focused highlights only further from main entrances
- **Evergreen hedges to front boundaries**
Although this will vary for each development, as a guide limit to no more than 30% of plots overall
 - **Regularly spaced trees**
as continuous runs and avenues of the same species
 - **Shrub planting is supplementary only**



Occasional beds against boundaries inject colour and variety. Focus where most visible by paths and front doors

Beds against houses soften walls and bring personality to gardens but include sparingly. Limit to 1 plot in 5 as a maximum

Include evergreen boundary hedges as a priority where reasonable runs can be achieved. Avoid short sections and a disjointed overall appearance. Always include behind any railings. Return hedges to building lines to complete hedge runs or 'frame' selected frontages

Include regularly spaced tree runs and avenues to garden boundaries as a priority where space allows

Hedges and / or low shrubs to divide drives and screen cars - approximately 1 in every 4 adjacent drives. Return hedges into buildings to define key arrangements



Ornamental shrub beds for plot planting
Include as below

Sh1
Individual beds against the road. These plants are clearly visible from the road and contribute directly to the street scene.

Sh2
Beds to divide properties/ drives. These screen or soften views of parked cars. They extend to the road edge and contribute directly to the street scene.

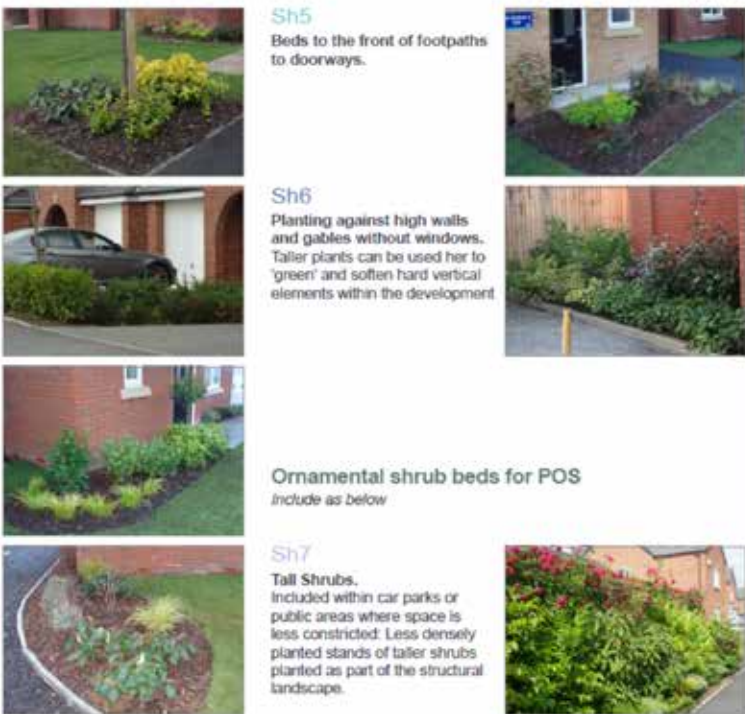
Sh3
Shrub beds against the front and side walls of the house. Such beds have a significant value and are characteristic features of gardens

Sh4
Beds to internal corners. Such beds partially define and protect the front gardens of properties on the corners of quieter roads as an alternative to hedges.

Sh5
Beds to the front of footpaths to doorways.

Sh6
Planting against high walls and gables without windows. Taller plants can be used here to 'green' and soften hard vertical elements within the development

Sh7
Tall Shrubs. Included within car parks or public areas where space is less constricted. Less densely planted stands of taller shrubs planted as part of the structural landscape.



General Shrub Planting

General shrub planting is included to supplement structural hedges and trees and to bring colour, character and diversity to individual gardens and to the landscape scheme overall.

The shape, location and function of these beds is widely variable, and the ongoing assessment of existing schemes has identified the following beds types as the most effective.

Landscape schemes should include a mix of these bed types

Entrance zones

Entrance Zones are always treated separately and a site specific design will be prepared for each to set the tone and profile for the development.

Public Open Space (POS)

Areas of Public Open Space are always treated separately and a site specific design will be prepared for each.

These proposals will be developed and detailed take into account the specific requirements of the Local Planning Authority. Plants from the single supply may be used if appropriate but additional plant stock will be included as required.



PC Parking courts

Parking courts are associated with mews or terraced properties and access is localised to these properties only.

LANDSCAPE PRIORITIES

- Tall, mainly evergreen shrubs against boundary walls and fences to soften an otherwise hard space. Plant mixes are simpler and less ornamental and plant groups slightly larger at 5 to 7
- Include trees where ever possible as space and soil widths allow.



ZONE 4 Courtyards

Mews or terraced properties around a central rectangular court. Local access to these houses and associated parking courts only.

LANDSCAPE PRIORITIES

- Linear shrub beds or hedges to the edge of the courtyard to define and accentuate its rectangular form. Avoid filling centre with tall shrubs.
- Combine with clipped topiary or standards to set a distinctive tone within limited space
- Trees arranged geometrically to accentuate courtyard form and character. Include trees with light foliage or bark



J1 Principal junctions

High profile detached homes or town houses often overlooking green open space and arranged as curved crescents.

LANDSCAPE PRIORITIES

- Evergreen boundary hedges to the back of feature railings or low walls
- Landmark trees at prominent corners contrasting species and larger stock than adjoining avenues
- Shrub planting to visible gable ends or feature corners only
Shrub planting within gardens supplementary as budgets allow



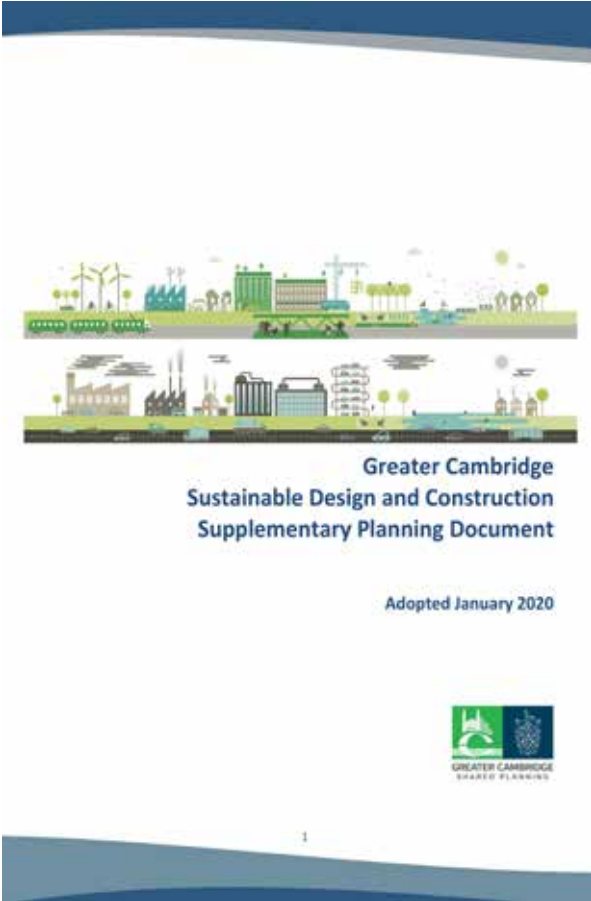
Special locations and arrangements

High profile detached homes or town houses often overlooking green open space, sometimes arranged as curved crescents.

LANDSCAPE PRIORITIES

- Evergreen boundary hedges to the back of feature railings.
- Regularly spaced avenue trees and feature trees as space allows
- Shrub planting against rear garden walls to the road edge.
- Shrub planting within gardens supplementary only as budgets allow





Sustainability in Construction

Although adopted following the approval of the outline it was clear that the LPA wanted us to use the information contained within the Supplementary planning document entitled ‘Sustainable Design and Construction’ to inform our sustainability strategy.

Morris Homes appointed AES Sustainability Consultants Ltd to assess the proposed scheme in order to outline the best way of creating a sustainable form of development using the South Cambs adopted planning policies along with the sustainable drainage strategy which was agreed at the outline stage.

These together with the sustainability specific planning conditions allowed AES to form their assessment of the proposed scheme.

Sustainability Conditions

There were 2 planning conditions relating to sustainability specifically, these were: -

Condition 35
Prior to the commencement of development on a phase, a scheme for the provision of on-site renewable energy on that phase to meet 10% or more of the projected standard operational baseline energy requirements of the development, including a timescale for its implementation, shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be implemented in accordance with the approved scheme and timescale.

Condition 36
Prior to the commencement of any development on a phase, a water conservation strategy for the development of that phase, including a timescale for its implementation, shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be implemented in accordance with the approved scheme and timescales.

Overall Energy and CO₂ Reduction

Through a combination of the described fabric first approach to sustainable construction and the installation of solar PV panels, the development will deliver energy demand reductions in line with Condition 35, through a 4.95% reduction in energy demand from the Part L baseline through improved fabric measures, and a further 10% reduction in energy demand after these fabric measures have been applied through the use of PV, resulting in a total energy reduction from the Part L baseline of 14.45%.

Water Conservation

In line with the South Cambridgeshire Local Plan Policy CC/4: Water Efficiency, water use will be managed effectively throughout the development through the incorporation of appropriate efficiency measures.

Water efficiency measures including the use of efficient dual flush WCs, low flow showers and taps and appropriately sized baths will be encouraged with the aim to limit the use of water during the operation of the development to limit water use.

Table 15 in the Sustainability checklist which forms part of the application shows an indicative specification demonstrating how the development could achieve a result less than the required 110 litres/occupier/day.

Sustainable Drainage Strategy

In addition to these measures it is proposed to drain 100% of the on site surface water via on site soakaways. These attenuation basins will be located within the grass and woodland areas of the proposed open space as per the outline approved strategy and create area of bio diversity and habitat as well as creating a natural way of draining the development.

The strategy and details can be found within the application documents.

As part of the landscaping remit, Barnes Walker Landscape Architects were tasked with ensuring these attenuation areas were designed to allow their seamless integration to the scheme so as to give them beauty as well and function.

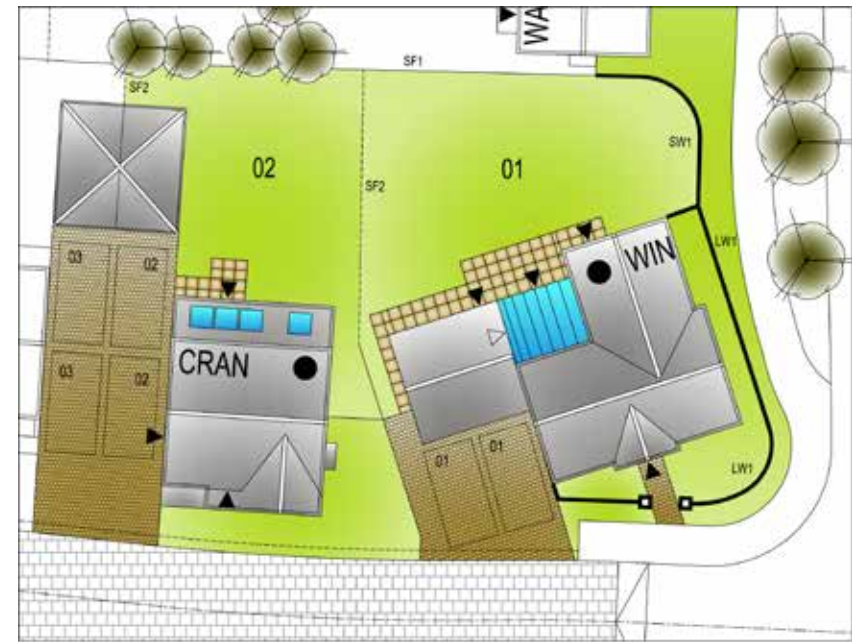
Eco Show Homes

In addition to the energy reduction and water consumption conditions, condition 38 requested details of proposed Eco Show Homes.

Eco Show Homes are to be included within the scheme and these are to be part of the sales complex for the development and are to showcase the possibilities of how the houses can increase their eco credentials. AES looked at this alongside the development sustainability and have concluded a list of potential additions which can be offered as extras to the purchasers in order to increase their homes’ sustainability. These would obviously need to be sorted at before a certain construction stage as some are to be part of the fabric of the building, others can be added at a later date.

To further reduce energy demand and CO₂ emissions, potential options will include:

- Roof insulation – the homes as standard will be provided with 450mm roof insulation. An additional 100mm may be specified, changing the u-value of this thermal element from 0.10W/m²K to 0.08W/m²K
- Flue Gas Heat Recovery – Highly efficient boilers will be fitted to all plots as standard. Adding the option of flue gas heat recovery will improve performance further as shown in Table 15
- Waste Water Heat Recovery – This is a relatively low cost, low maintenance way of reducing energy loss. It retrieves the thermal energy from hot water used in a shower which would otherwise be wasted resulting in a SAP performance improvement of between 7-10% depending on setup.
- Upgraded wall insulation – All plots will have 100mm cavity fully filled with insulation with a thermal conductivity of 0.040W/mK as well as low conductivity aircrete inner leaf blocks. Lower thermal conductivity insulation (0.034W/mK) may be specified, decreasing the U-Value from 0.27 W/m²K to 0.24 W/m²K
- Upgraded floor insulation – having an option of improving the thermal conductivity of the insulation in the ground floors from 0.038W/mK to 0.030W/mK will decrease the U-Value from 0.17 W/m²K to 0.14 W/m²K depending on the perimeter area ratio



Sales Area

Planning Policy Background:

Policy CC/5 requires that where a show home is being provided, measures to enhance the environmental performance of homes should be installed and made available to new home buyers to enhance the specification of their new home. The measures must be offered at a price, including cost of delivery and/or installation that reflects the same profit margin to the developer as other standard buyer's options or extras.

Show home environmentally friendly features provided as standard:

- Morris Homes' building specification along with the addition of Solar PV panels ensures the show homes have an energy efficiency rating of 'A'.
- Energy efficient, Class A rated gas boilers.
- Low energy internal and external LED lighting.
- High performance double glazed windows (u-value 1.5 W/m²K).
- High degree of building air tightness to limit heat loss through air leakage (5m³/h.m² @ 50Pa).
- Water efficient measures including dual flush WCs, low flow taps and showers to limit water use to <105 litres/person/day.
- Smart meters for gas and electricity including energy display devices for the home owners.

Plot 1 - Winstor DG (Opposite)



Plot 2 - Cranleigh (Opposite)



Enhancements currently available to buyers:

- Highly energy efficient home appliances and white goods (minimum A rated).

Potential enhancements to be incorporated into sales specification:

- Rainwater butts
- Compost bins
- Additional PV panels
- Upgrade to 'smart' heating controls
- Provision for secure cycle storage i.e. ground anchors within garages
- Upgrade ventilation system to incorporate heat recovery

A fabric first approach will be targeted for condition 38 with a show home being used to promote sustainable design and construction. These can be optioned by the prospective house buyer.

7.5 The Fulbourn Windmill

The Windmill at Fulbourn stands on an outlier of the Gog Magog Hills 4 miles east of the City of Cambridge. Low chalk hills run to the south of it; northwards the Windmill overlooks the Fens which are at most only a few feet above sea level. The cap of the Windmill rises to 160 feet above sea-level and from it there is an uninterrupted view of the roofs and towers of Ely Cathedral. It has long been an outstanding landmark in the south Cambridgeshire countryside.

It was the enclosure of the parish for the improvement of cultivation that led to the building of the present Windmill. Much of the land in the north of the parish was low-lying and waterlogged and needed draining to convert it into profitable arable land. Fulbourn Fen was a peat fen only 20 feet above sea level over which the Great Wilbraham River spread its waters in times of flood.



Existing Fulbourn Windmill

The Act of Enclosure for Fulbourn was passed in 1806 and the Commissioners completed their work two years later. The drainage of the parish reduced the level of water in the upper reaches of the Great Wilbraham River on which the manorial watermill was situated. The loss of power brought to an end the life of a mill which had first been recorded in Domesday Book.

In 1808 the machinery of the watermill was put up for sale. A new mill was therefore needed and the Enclosure Commissioners allotted one acre on Mill Hill, on which to build a mill and miller's cottage, to John Chaplin, a considerable landowner and farmer. He used copies of Old Moore's Almanack as a diary, entering personal events and business notes in the margins of the calendar. It is a large octagonal smock mill with a brick base and wooden superstructure. Its outline is squat with a shallow conical cap. The fantail, as usual in Cambridgeshire mills, is close against the cap. The mill holds three stones, one of French burr and two of Derbyshire stone. With floors 24 feet in diameter, there is exceptional space for working the mill

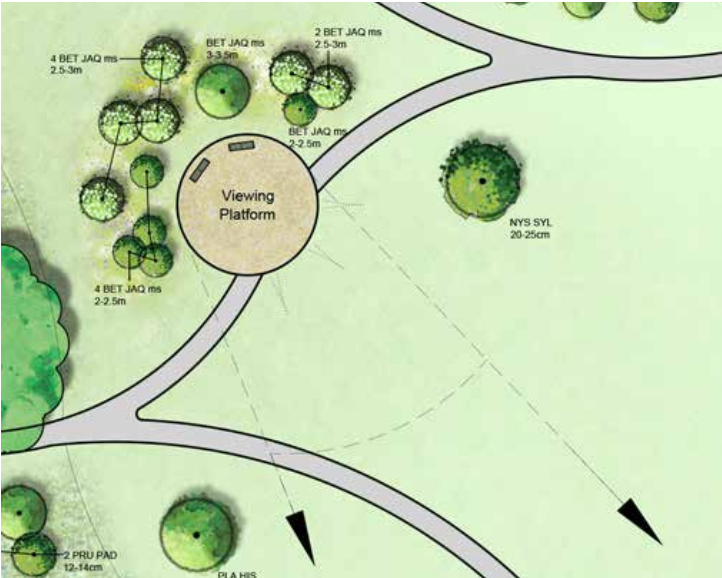
Viewing Areas

Within the brief to the landscape architects, we needed to create new and clear views across the fields to the south to the existing Fulbourn Windmill. Being of historical importance and clearly defined within the Village Design Statement the windmill has current views from the development site which we needed to maintain.

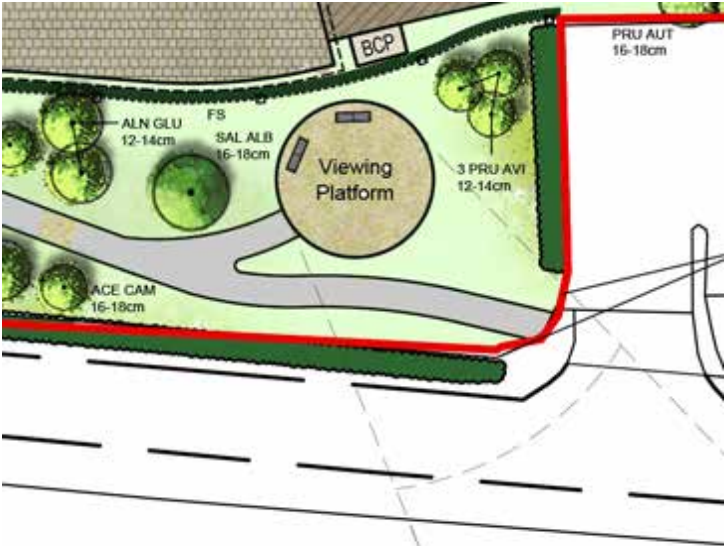
Unfortunately, the existing hospital buildings are predominantly single storey in height with flat roof construction and so you can at present see the top of the windmill from different the elevated parts of the development site, but even no these are few and not all areas have a clear view of the windmill.

The proposed scheme, although levels are being raised slightly to allow drainage the approved strategy the new houses are of 2 storey construction with pitched roofs which makes them considerably taller than the existing hospital buildings. With this comes the difficulty in maintaining views to the windmill, which were sporadic at best when the new development shadows these views.

The landscape architects have therefore designed small areas or platforms which are to be used to view this existing feature and celebrate the historical elements of the area. The story which they are telling is to create a footpath which enters the development adjacent to the existing Steiner School and meanders through the front linear park which borders Fulbourn Old Drift. This footpath eventually land within the proposed parkland area whereby you can take the footpath to the new community building or carry on to the second viewing area which will be a grass mounded and elevated platform surrounded by new landscaping. it will be these areas that will stand out maintaining the heritage and views of the existing windmill.



Windmill Viewing area within the Parkland



Windmill Viewing area adjacent Fulbourn Old Drift



Plan showing the proposed views across the fields to the Fulbourn Windmill



During a recent site visit with the landscape architects the site was walked in order to ascertain the best locations for the viewing areas and this was how they came up with the proposals to add the 2 separate viewing platforms shown.

You get a view of the top of the windmill sails at the first location and them towards the last one but in between the views are obscured by existing trees and hedges.

This was by far the best locational view of the windmill which replicates the area of the main viewing platform within the parkland.

8.0 Summary and Conclusions

- The application is for reserved matters having achieved outline approval in November 2019.
- The application brings into use a previously developed piece of brownfield land.
- The application is for 203 new homes over 2 phases in a range of different sizes to meet the local housing need.
- 40% of the proposed homes will be dedicated for affordable housing.
- Many pre application discussions have been held with the local Planning Authority at South Cambridgeshire Council, all of which were positive and any comments raised have been reflected in the application proposals.
- The local Parish Council have been consulted throughout the pre application stages and have also been very complimentary. They will also be consulted through the planning application phase.
- The proposed materials have been chosen to compliment the local village vernacular.
- The scheme has been landscape led throughout to create a natural development.
- There will be a space dedicated for children’s play centrally located to all the dwellings.
- The scheme contains a central community facility which will be managed by the local parish council.
- The development proposals contain many footpath links through out.

We feel that the application designs proposed are an excellent addition to the village of Fulbourn are reflective of the outline permission and take account of the aspirations of the urban design team at Cambridge Greater Planning and the adopted Village Design Guide.

With this and for the reasons set out above, we strongly request that reserved matters planning permission be granted.

9.0 References

- The Fulbourn Village Design Statement
- The Outline Approved Design and Access Statement
- Building for a Healthy Life
- Google Search
- Google Images
- South Cambridgeshire Website
- The Fulbourn Windmill website www.fulbournwindmill.org.uk