



24-025 Ekin Road, Cambridge

Members Briefing

July 2025



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ERD1-BPTW-XX-XX-DO-A-0214-P02-S3

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1.0 Introduction

1.1 Project Team and Brief

Introduction

The Ekin Road estate in Abbey ward will be developed by Cambridge Investment Partnership (CIP) which is an equal partnership between Cambridge City Council and Hill Investment Partnerships.

CIP is supporting the Council to deliver new affordable homes across the city by developing council-owned land and other sites. The Partnership model allows the joint investment of land, funding and professional expertise in housing and mixed-use development.

CIP is focused on tackling Cambridge's affordable housing shortage, optimising value for the Council whilst promoting excellence in design and place making.

Partnership Objectives:

- To create environmentally and socially sustainable new places to live in Cambridge.
- Improve the use of council assets and those of other public sector bodies in Cambridge to meet the identified housing need across the city.
- Building 2000 new homes by 2030 to shape a thriving, inclusive Cambridge.
- Achieve high environmental standards for new homes with all future developments to be gas-free and designed with sustainable standards and principles (such as fabric first, minimising cold bridging, maximising daylight sunlight and cross ventilation, etc)

Timberworks Development - Cromwell Road



Timberworks Development - Cromwell Road



Ironworks Development - Mill Road



Newbury Farm - Cambridge



134 homes



58% affordable homes



Attractive buildings
Contextual design



Range of unit sizes



Sustainable homes
Low running costs



New play on the way for children



New tree planting and green spaces



Promotes sustainable travel

1.2 Site Location and Context

Neighbourhood Descriptions

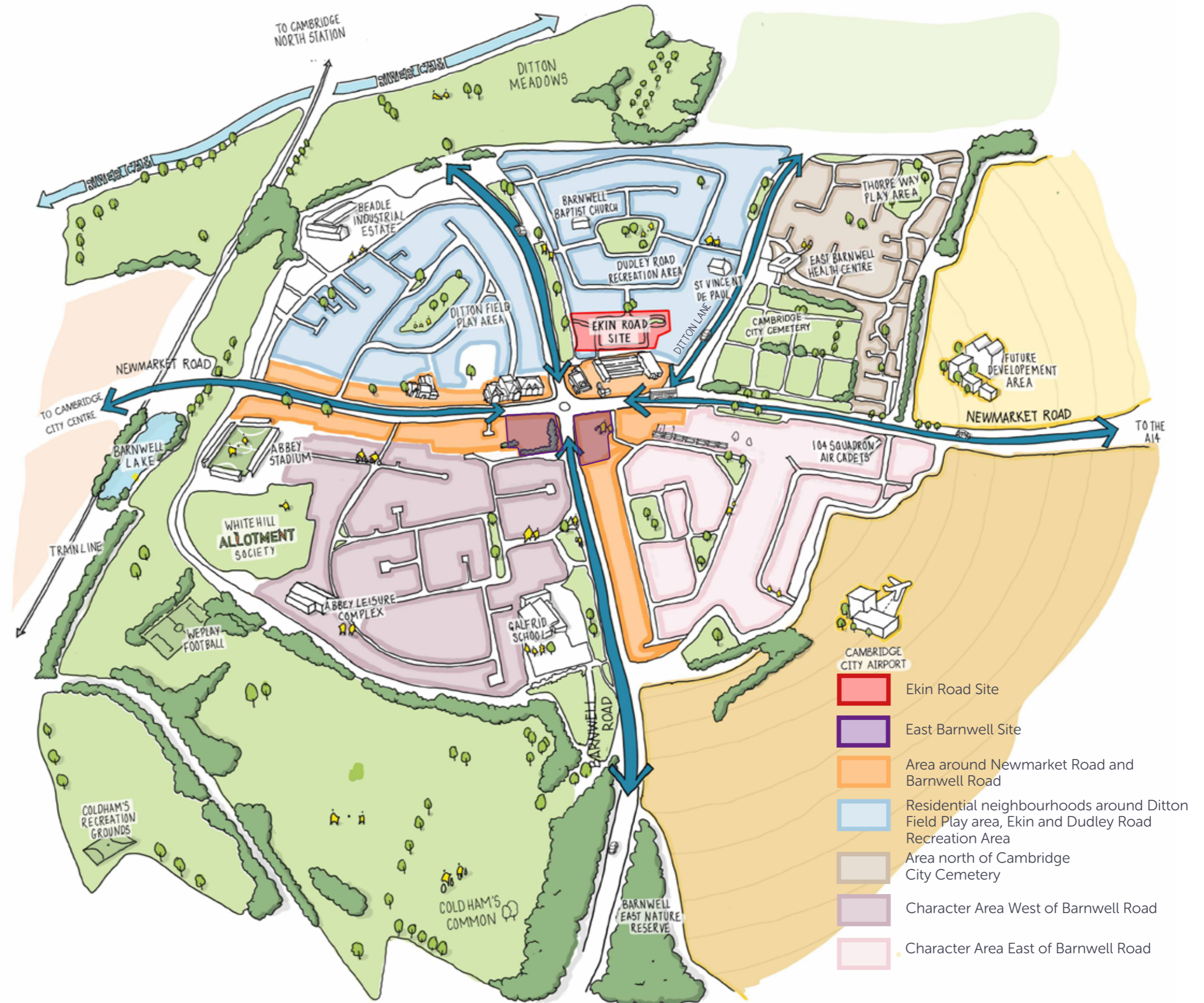
The Ekin Road estate, located in the Abbey ward of the eastern part of Cambridge, was developed in the 1950s and 1960s as part of a post-war programme to deliver affordable housing. The estate comprises a mix of dwelling types, including flats, houses, bungalows, and maisonettes, and has provided stable residential accommodation for over six decades.

The estate forms part of the wider Barnwell area, a mid-20th-century Local Authority housing expansion. This area is bounded by Coldham's Common, Stourbridge Common, and Ditton Meadows to the west, and by Cambridge Airport to the east.

The urban structure of East Barnwell is defined by a clear hierarchy of strategic and local roads that subdivide East Barnwell into distinct areas;

- Newmarket Road forms the primary east-west route, linking the site to Cambridge city centre to the west and Newmarket to the east.
- Wadloes Road runs north-south, terminating at its junction with Newmarket Road, directly adjacent to the site.
- Continuing southward from this intersection is Barnwell Road, which maintains the north-south connection.
- Ditton Lane provides additional access and connectivity.

The accompanying diagram identifies these areas and highlights the principal zones of development under consideration. The spatial structure of these roads has played a significant role in shaping local neighbourhood identity and connectivity.



Electoral Ward Map of Cambridge

1.3 Site Existing

Ekin Road

Site Summary

- Ward: Abbey
- Site area: 2.55ha
- Existing use: Residential
- The Ekin Road development comprises of 122 existing homes, including 98 tenanted properties and 24 leasehold/freehold properties. The site consists of 6 3-storey blocks of flats, 1 2-storey block of flats, 10 bungalows, and 32 houses. Following multiple rounds of consultation and resident feedback, 14 houses located to the south of the site have been confirmed for retention.
- Main roads: Wadloes Road, Ekin Road, Ekin Close

Site Access and Connectivity

- The only vehicle access is from Keynes Road to the north, serving as the main entry for cars, emergency services, and refuse collection
- Well-used pedestrian routes exist via alleyways to the south-east and south-west, with an additional access from Wadloes Road to the north-west leading directly into a parking court
- A main bus route runs along Wadloes Road, providing direct links to key destinations within close proximity to the site.

Existing Dwellings

- The site includes 72 flats within 6 blocks, all occupied by council tenants. Some households are overcrowded, with a need for larger family homes.
- There are 32 two-storey semi-detached and terraced houses. These homes have simple layouts, modest brick façades, shallow-pitched roofs, and minimal architectural detailing. While structurally sound, many fall short of current standards for energy efficiency, insulation, and accessibility.

Urban Form

- The estate has a tight residential grain with misaligned building orientations. Frontages are often unclear, resulting in poor wayfinding, informal access routes, and limited natural surveillance.
- Public open space is limited to a single green verge along Wadloes Road and a small grassed area near the eastern parking zone. Both are poorly maintained and currently unsuitable for play or community use.



Aerial google view of site

Key

- ▶ Vehicular Entry
- ▶ Pedestrian/Cyclist Entry



1.4 Site Constraints

There are a number of constraints on site, which are detailed in the diagram adjacent.

- Existing trees on site, which vary in size and quality, including some Category B trees
- Green verge along Wadloes Road to be retained. The developable area of the site starts to the east
- Access to be retained to Ekin Close at the north east of the site
- Existing pedestrian access to the south east of the site
- Potential flooding - low risk
- Close proximity of adjacent homes to site boundary (such as no.103 Ekin Road by vehicular entrance to site)

Key

- Site boundary
- - - Extent of developable area
- Existing flats
- Existing bungalows
- Existing houses
- Existing green space
- Building frontage
- Main road
- Retain vehicular access
- Main vehicular access to site
- Pedestrian access to site
- High-level fencing
- Noise
- Existing trees
- Existing trees (Category B)
- Potential flood risk
- Residential buildings
- Industrial / commercial buildings



1.5 Site Opportunities

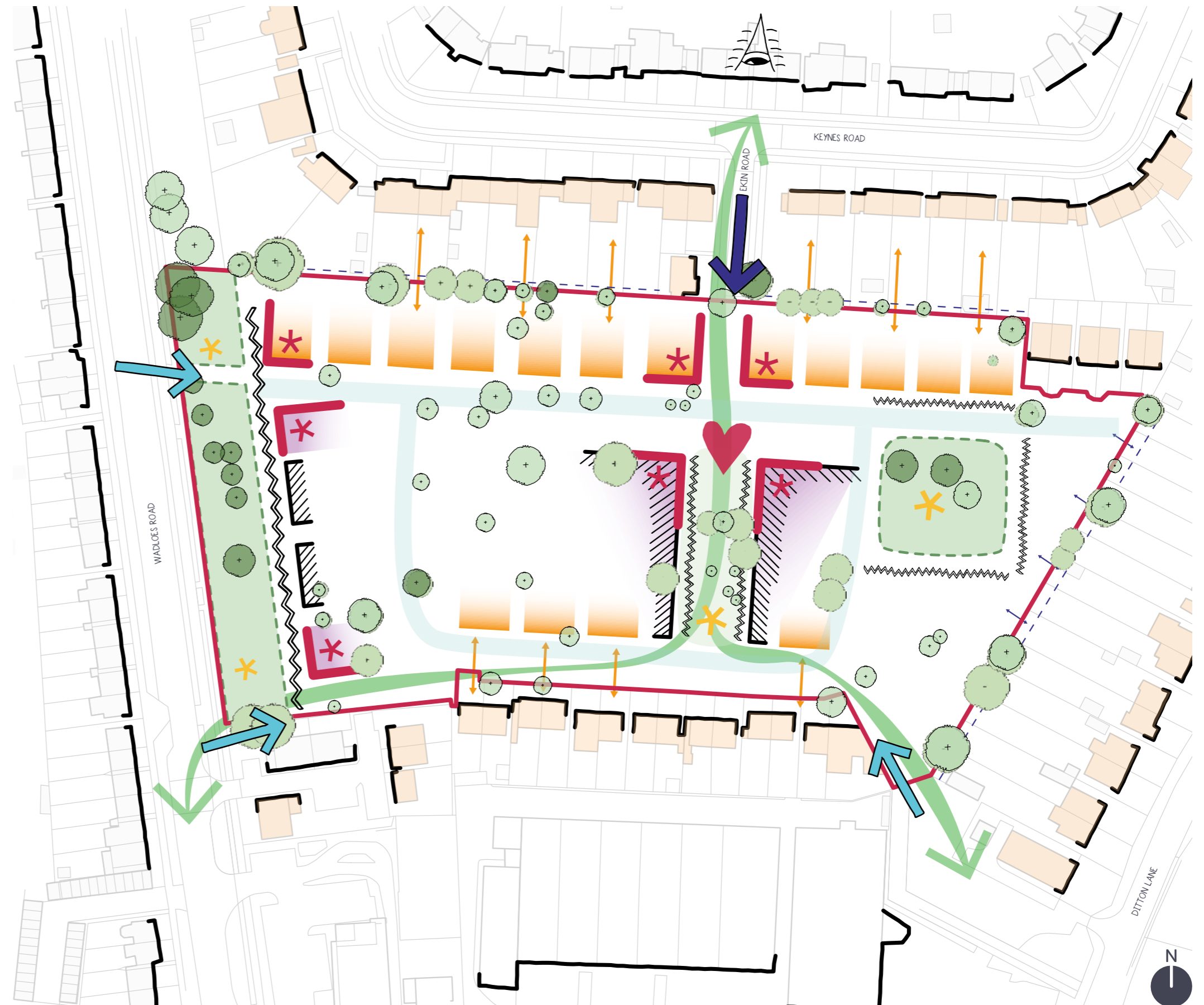
The Ekin Road site presents several key opportunities for enhancement through thoughtful redevelopment.

- Improved pedestrian and cycle connectivity can be achieved with more welcoming entrances and clear routes. Key access points could be marked by gateway buildings to create a stronger sense of arrival.
- To activate main paths and green corridors with front-facing homes, encouraging community interaction.
- The improvement and maintenance of the green verge near Wadloes Road could create more opportunity for play areas, complemented by new green public spaces at the site's centre.
- The residential provision needs to be optimized whilst still keeping in character with the low-scale, house-led residential urban grain

Key

Page 9

- Site boundary
- ➡ Improved vehicle site entrance
- ➡ Improved pedestrian site entrance
- ✳ Gateways into site, marker buildings
- ▨ Potential for frontages
- Existing green space
- ✳ Potential for play area
- ➡ New Pedestrian link, improved access
- Loop road principle to be maintained
- 👁 Overlooking green space
- Existing low-scale residential buildings
- Potential for low-scale residential buildings
- Potential for Flat Blocks
- ♥ Focal Point
- Existing trees
- Existing trees (Category B)

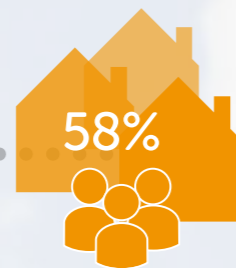


1.6 Executive Summary

Introduction



Number of proposed dwellings



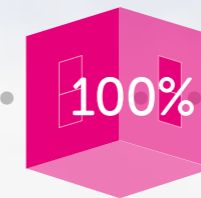
58% Affordable Homes



Proposed Height



A Mix of 1, 2, 3, 4 and 5 Bed Homes



Dual Aspect Homes



Parking Spaces



Maximise number of affordable new homes across the site with a variety of dwelling typology.



5% of Affordable provision is M4(3) homes provided at ground floor for direct level access.



Approx. 57% of the dwellings are family homes including 3, 4 and 5 bedrooms dwellings.



Key existing feature trees are preserved such as the two mature trees on Ekin Square



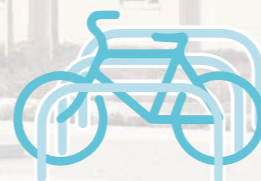
New green links and landscaped recreational spaces are provided on site for all ages. Small play equipment is provided in different places, as well as seating areas.



Car parking is provided by on plot, perpendicular, parallel parking or within a small courtyard.



Waste management & storage has been developed with the waste officer and the transport consultant



Cycle routes have been integrated in the site layout, cycle storage is consistently provided at the front of the dwelling



The scheme will bring additional passive surveillance on all external amenity spaces. Block B has been specifically designed to provide passive surveillance into Forty Lane pathway and improve safety.

2.0 Proposed Site Layout

2.1 Proposed Site Layout

Landscape Masterplan



2.2 Residential Provision

General update



The adjacent site illustrates an overview of the final proposed layout, and is summarized below:

- The proposed site accommodates 134 units- 68 Houses and 66 apartments contained in 3 Flat Blocks and 2 Maisonette Blocks.
- The development provide dwellings of all sizes, from 1 bed flats to 5 bed houses in a tenure blind layout.
- A total of four M4(3) wheelchair-accessible flats are provided at ground floor level across Flat Blocks 1 and 3.
- There are two main green links within the site. The first is located in the southwest at the start of the primary cycling route. The second green link runs through the centre of the site, creating a direct connection between North Ekin Road and South Ekin Road.

| Acommodation Schedule | | | |
|-----------------------|-----------------|-------|---|
| Name | Flat/House Size | Count | % |

| | | | |
|---------------|------|----|-------|
| 1B2P Flat | 1B2P | 20 | 14.9% |
| 1B2P Flat WCH | 1B2P | 2 | 1.5% |
| 2B3P Flat | 2B3P | 10 | 7.5% |
| 2B3P Flat WCH | 2B3P | 1 | 0.7% |
| 2B4P Flat | 2B4P | 7 | 5.2% |
| 2B4P Flat WCH | 2B4P | 1 | 0.7% |
| 2B4P House | 2B4P | 10 | 7.5% |
| 2B4P Mais | 2B4P | 10 | 7.5% |
| 3B5P Flat | 3B5P | 3 | 2.2% |
| 3B5P House | 3B5P | 23 | 17.2% |
| 3B5P Mais | 3B5P | 12 | 9.0% |
| 3B6P House | 3B6P | 28 | 20.9% |
| 4B6P House | 4B6P | 5 | 3.7% |
| 5B8P House | 5B8P | 2 | 1.5% |

Grand total: 134

Key

— Site boundary

1B2P

2B4P

3B5P

3B6P

4B6P

5B7P

P Parking



Proposed Site Layout



2.3 Tenure Strategy

General update

The current layout achieves 58% affordable and 42% private dwellings. The breakdown below shows the tenure split across the scheme.

The proposed tenure of the 134 new homes included 58% of the homes (78) being provided as affordable housing. This exceeded the Local Plan policy requirement to deliver 40% of the homes (54) as affordable homes. 40% homes is the maximum secured by Homes England funding rules through the s106. The additional 18% will remain as council owned affordable homes.

The adjacent site illustrates an overview of the tenure strategy for the site.

- Different tenures are spread evenly across the site to support the creation of balanced and inclusive communities.
- The scheme exceeds the target number of affordable habitable rooms.
- In response to resident feedback, 4-bedroom and 5-bedroom affordable homes have been incorporated into the layout to meet the demand for larger family housing.

| Acommodation Schedule -Affordable Tenure | | | |
|--|-------|-------|-----------------|
| Name | Count | % | Habitable Rooms |
| 1B2P Flat | 14 | 17.9% | 28 |
| 1B2P Flat WCH | 2 | 2.6% | 4 |
| 2B3P Flat | 9 | 11.5% | 27 |
| 2B3P Flat WCH | 1 | 1.3% | 3 |
| 2B4P Flat | 3 | 3.8% | 9 |
| 2B4P Flat WCH | 1 | 1.3% | 3 |
| 2B4P House | 6 | 7.7% | 18 |
| 2B4P Mais | 10 | 12.8% | 40 |
| 3B5P Flat | 3 | 3.8% | 15 |
| 3B5P House | 10 | 12.8% | 40 |
| 3B5P Mais | 12 | 15.4% | 58 |
| 4B6P House | 5 | 6.4% | 25 |
| 5B8P House | 2 | 2.6% | 12 |
| Totals: 78 | | | 282 |

| Acommodation Schedule -Private Tenure | | | |
|---------------------------------------|-------|-------|-----------------|
| Name | Count | % | Habitable Rooms |
| 1B2P Flat | 6 | 10.7% | 12 |
| 2B3P Flat | 1 | 1.8% | 3 |
| 2B4P Flat | 4 | 7.1% | 12 |
| 2B4P House | 4 | 7.1% | 12 |
| 3B5P House | 13 | 23.2% | 52 |
| 3B6P House | 28 | 50.0% | 140 |
| Totals: 56 | | | 231 |

Key

Site boundary

Affordable Tenure

Private Tenure



Proposed Site Layout

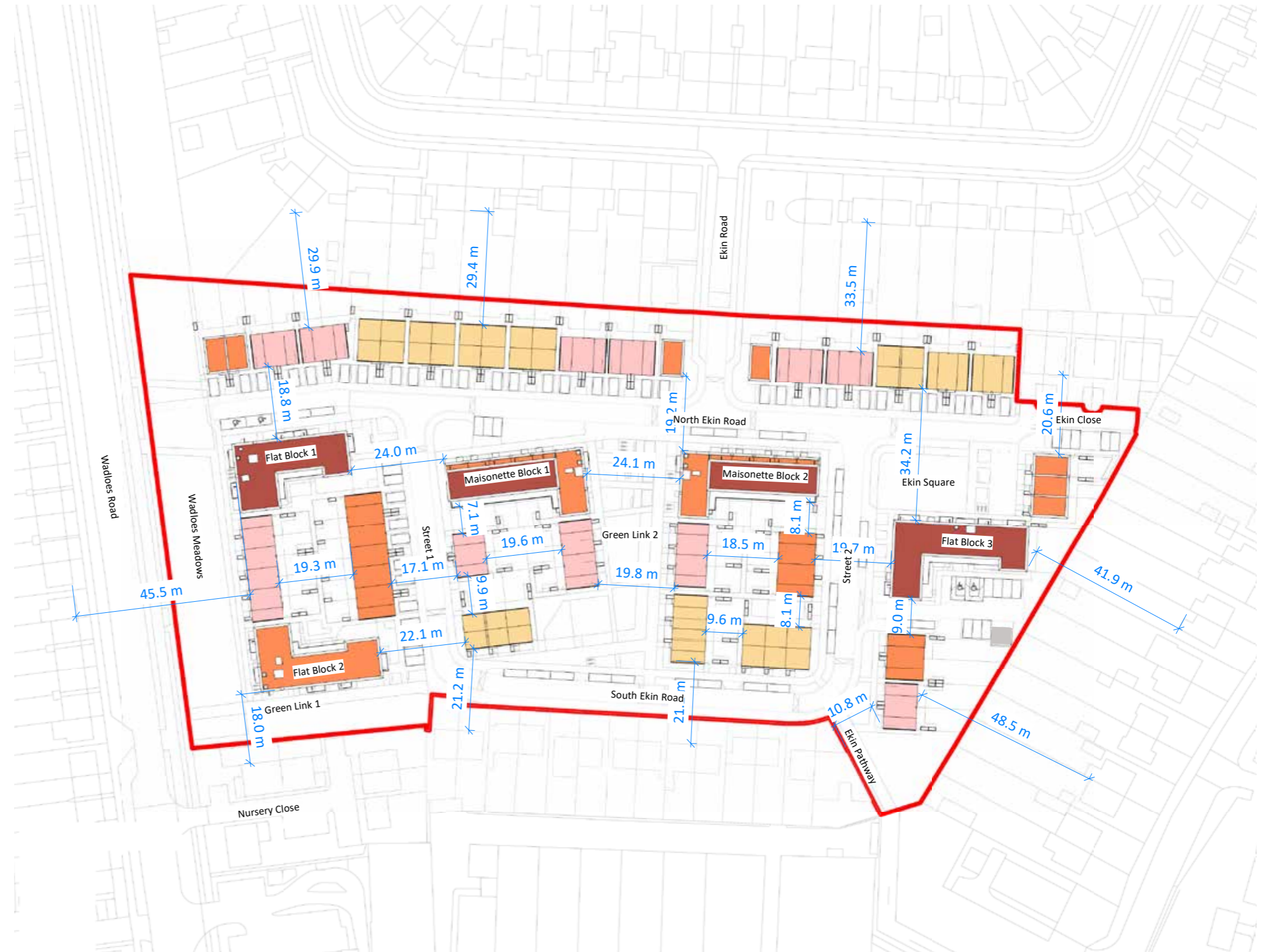


2.4 Height & Separative Distances

Preserving privacy within the development & mitigating impact on surrounding properties

The adjacent site illustrates an overview of the height strategy and important separative distances and is summarized below:

- Back-to-back distances between all terraced housing in the middle of the site have been improved (min. 18m) due to redistributing the building mass.
- The main vista along north Ekin road is developed with a mix of house typologies to add some variation in height and roofscape enriching the street character.
- The buildings along Wadloes Meadows are proposed to be 2.5 and 4 storeys tall due to the bigger offset from the main Wadloes Road. This gives us the opportunity to create strong visual markers pointing the main entrances into the site.
- Homes at corners of the site that have close proximity to the existing surrounding houses are 2 and 2.5 storeys high to better link with the low rise context and prevent loss of privacy.



Proposed Site Layout

Key

- Site boundary
- 1 Storey
- 2 Storey
- 2.5 Storey
- 3 Storey
- 4 Storey



2.5 Massing Strategy

The adjacent diagram illustrates the proposed refined massing, with the buildings rising from 2 to a maximum of 4 storeys:

- 1 The site maintains a predominantly house-led design, with a series of mostly gable and pitched roofs, incorporated into the house designs to reflect an urban character, as well as the local vernacular found along Keynes Road and the remainder of Ekin Road.
- 2 Along Wadloes Road, the scheme presents a more defined and rhythmic roofscape, reinforcing the urban edge of the site. This elevations forms the most public facing aspect of the development and is designed to communicate the house-led nature of the scheme, while integrating with the surrounding streetscape.
- 3 We have identified key locations for specific houses where their prominent positions—such as at corners or near site entrances. These houses will act as gateways that help in wayfinding.
- 4 The dwellings along the Green link 2 slowly reduce in height as we move from the 4 storey maisonettes at the centre of the site, towards south Ekin road and north Ekin road to connect contextually with the low-rise houses on the south.



Proposed 3D Massing

Key

- Site boundary
- Terraced Houses
- Green Link Houses
- Maisonettes
- Flat blocks
- Corner Typology



3.0 Site Strategies

3.1 Car Parking Strategy

Parking provision:

The diagram to the right depicts proposed parking space arrangement. The Council's management arrangements involves allocating parking spaces to tenants based on their needs which is the reason why the parking for affordable tenure is spread between on-street and parking court.

- Total provision for site - 88 spaces
Parking Ratio - 0.657
- Parking provision for Private Tenure - 50 spaces
Private parking ratio: 0.892
- Parking provision for Affordable Tenure - 37 spaces
Parking ratio: 0.474
- Parking provision for Wheelchair Flats - 4 spaces
Parking ratio: 1
- One space is allocated for car club. Car clubs are assumed to replace several car parking spaces which helps with avoiding car-dominated streets.

Electric vehicle charging will also be provided in accordance with the Greater Cambridgeshire Sustainable Design and Construction Supplementary Planning Document (2020) and Building Regulations Approved Document S.



Site Layout

Key

- Site boundary
- On-Plot Parking - 36
- On-Street Parking - 40
- Parking Court - 11
- Car Club - 1
- Disabled Parking - 4



3.2 Cycle Strategy

Promoting sustainable ways of travel

Walking and cycling are actively promoted as the primary and most convenient modes of transport within the development, supporting both sustainable travel choices and healthy lifestyles.

- To support this, cycle storage will be located near the front doors of all houses, making access more convenient than accessing a car. Where space constraints prevent a single storage location, cycle storage will be split between the front and rear gardens of certain dwellings.
- Flats and maisonettes will have secure communal cycle stores, along with designated external parking for visitors. Cycle storage for the ground floor maisonettes will be split between private amenity spaces and communal storage.
- There are 2 spaces provided for cargo bikes in each of the Maisonette Blocks.
- There are total of 434 spaces for cycle parking proposed in the site.



External cycle storage used within the development.



Sheffield stands will be provided in communal cycle stores in the blocks and outside for visitor parking



Site Layout Key

- Site boundary
- External Cycle Storage to houses - 288 spaces
- Communal Cycle Store - 106 spaces
- Visitor Cycle Parking - 40 spaces



Ekin Pathway View



3.3 Refuse Strategy

The Refuse Strategy focuses on efficiently managing waste in compliance with Greater Cambridge Shared Waste Service planning guidance.

Underground 'Iceberg' refuse systems were initially considered for consistency as they will be in operation at East Barnwell, an adjacent site. However, the geometry of the required access via Wadloes Road raised safety concerns for cyclists and pedestrians, leading to the adoption of a traditional refuse system instead.

- The Flat Blocks and Maisonettes will have communal refuse stores where the waste will be collected from, while waste from the houses will be directly collected from the front gardens or designated collection points that residents will drag bins to.
- Swept path analysis of the refuse vehicle will be provided within refuse strategy and transport reports.
- The GCSWS recommends a maximum walking distance of 30 metres to bin collection points. While this has been prioritised in the design, some areas exceed the limit slightly due to restricted road access and site constraints. Where possible waste storage has been placed as close as practical to dwellings, with clear, well-lit, and step-free routes to ensure safe and accessible use. The proposed refuse strategy provides better and more efficient refuse collection compared to existing arrangements at Ekin Road.



Site Layout

Key

| | |
|--|---|
| Collection Point A | Communal bin store |
| Collection Point B | Street Collection |
| Collection Point C | Collection points |
| Collection Point D | External Bin Store |
| Collection Point E | Communal Bin Stores |
| Collection Point F | Travel Path for refuse truck |
| Collection Point G | 10m dragging distance |
| Collection Point H | Path of Travel distance |

3.4 Sustainability Strategy

White Code - Preliminary Note

Proposed Scheme

The proposed scheme being developed contains a mixture of two, three and four bed houses, and apartment blocks. The development at Ekin Road has been carefully designed to ensure sustainability is intrinsic to the dwellings. Following the energy hierarchy and focusing on passive design and a fabric first approach to reduce energy consumption and greenhouse gas emissions.

The Cambridge Sustainable Housing Guide addendum 2024 sets out the ‘Cam Standard’, developed as the classic Passivhaus standard was not flexible enough to deliver requirements for practical sustainability, it is expected the scheme will be required to meet this standard.

Planning Policies

The Sustainable Housing Guide 2021 and 2024 Addendum includes references to the following Cambridge Policies:

Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use. The scheme will meet a minimum 19% carbon reduction on Part L 2013, following the energy hierarchy. Water use will be <110 litres/person/day. There will also be an overheating assessment completed in line with TM69/Part O to tackle climate change adaptation.

The scheme will be modelled against Part L1A 2021, a sample selection of SAPs will be modelled in against SAP10.2.

As we are currently in a transition phase towards the Future Homes Standard in 2025, the development has been designed to ensure it complies with ‘Option 1’ of the FHS consultation, which is the more onerous option proposed.



Low carbon technologies in the form of Air Source Heat Pumps alongside photovoltaic panels are specified to exceed planning policy requirements and future proof the scheme for the Future Homes Standard 2025 which is currently in consultation.

The scheme will achieve around 50% carbon reduction from baseline, exceeding planning requirements.

The site also addresses climate change mitigation, making the best use of site orientation, building form, layout, landscaping and materials to maximise natural light and heat, whilst avoiding internal overheating by providing passive cooling and ventilation where possible.

Be Lean

- The scheme will adopt passive design measures and a fabric first approach with excellent U-values and thermal bridging details.
- It will be calculated to meet the Cam Standard, using PHPP modelling
- Below is a proposed schedule of U-values

| | |
|------------------|-------------------------------|
| Ground floor | 0.10 |
| External walls | 0.15 |
| Roof | 0.11 |
| Thermal bridging | Bespoke calculations |
| Air permeability | 1.00 |
| Lighting | 100% low energy |
| Windows | U-value 0.85 G value 0.45* |
| Doors | U-value 1.4 |
| Ventilation | MVHR |

Be Clean

- There are no district heating networks in proximity to the scheme
- Low carbon technologies including air source heat pumps to be installed, to take advantage of the de-carbonising electricity grid.

The proposal seeks to install the following highly efficient systems for heating and hot water:

- Houses: Air Source Heat Pumps (ASHP) with photovoltaic (PV) panels
 - Apartments: Exhaust air heat pumps with PV panels
- The addition of PV panels for all units will ensure an EPC rating of B is achieved as well as benefit the residents and protect against high bills

Sustainability

- Ekin Road will achieve the requirements of the Greater Cambridge Sustainable Design and Construction SPD, and associated policies
- A sustainability report will be produced to cover the sustainability requirements of the scheme and incorporate the sustainability checklist for applications in Cambridge, drawing on other consultant reports such as ecology, transport and acoustics.



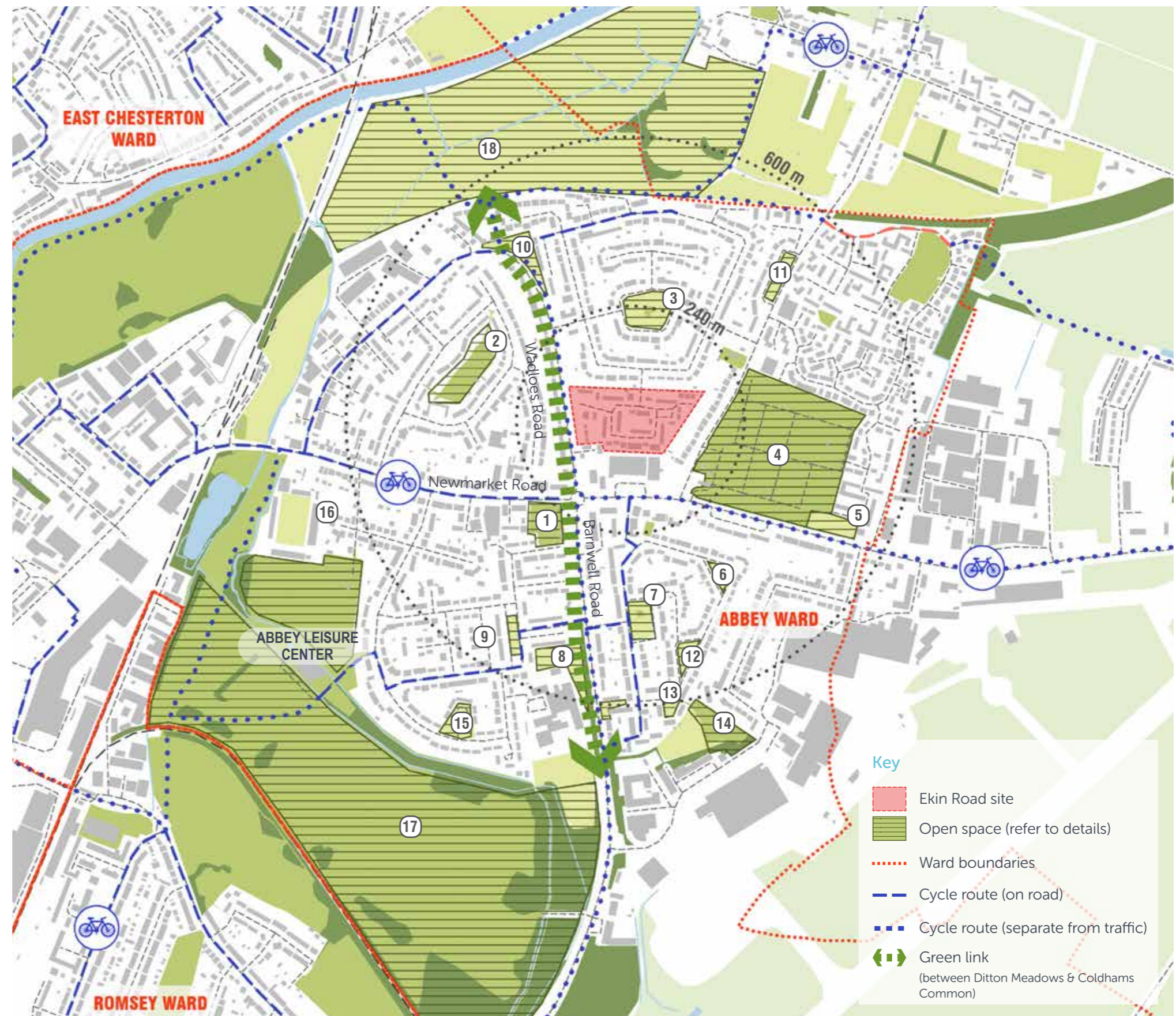
- > An overheating assessment will be completed to ensure compliance with TM59 and Part O, prioritising passive measures to mitigate overheating risk.
- > Water use will be reduced through the specification of low water use sanitaryware to achieve > <110 litres/person/day.
- > • Waste will be minimised through encouraging recycling
- > • The scheme endeavours to prioritise low embodied carbon materials in the build and design
- > as lean as possible to reduce the overall whole life cycle carbon

4.0 Proposed Landscape Design

4.1 Landscape context

The adjacent diagram identifies existing open spaces and play facilities located within easy walking distance of the Ekin Road site. The Cambridge Open Space Strategy (2011) describes Abbey Ward as containing “a good mix of publicly accessible open spaces”.

- ① East Barnwell Local Centre, Phase 1 (started on site in March 2025). Formerly Abbey Bowls Club and Tennis Court.
The East Barnwell Local Centre proposals include a new community open space with equipped play on this site.
- ② Ditton Fields Recreation Ground
Equipped play (all ages), basketball court & open grass areas
- ③ Dudley Road Recreation Ground
Equipped play (all ages) & open grass areas
- ④ Newmarket Road Cemetery (7.82ha)
- ⑤ Jack Warren Green
Equipped play (trim trail), football goal & open grass areas
- ⑥ Peverel Road Amenity Green Space (N)
Grass with scattered trees
- ⑦ Peverel Road Play Area
Equipped play (all ages) & open grass areas
- ⑧ Barnwell Road Amenity Green Space
Grass with scattered trees
- ⑨ Rawlyn Road Amenity Green Space
Grass with scattered trees
- ⑩ Wadloes Road Amenity Green Space
Grass with scattered trees
- ⑪ Ditton Fields Amenity Green Space
Grass with scattered trees
- ⑫ Peverel Road Amenity Green Space (C)
Grass with scattered trees
- ⑬ Peverel Road Amenity Green Space (S)
Grass with scattered trees
- ⑭ Peverel Road Allotments (1.08ha)
- ⑮ Whitehall Close Amenity Green Space
Grass with scattered trees
- ⑯ Margaret Wright Community Orchard (1.08ha)
- ⑰ Coldhams Common (LNR)
Sports pitches, outdoor gym, BMX track & open grass areas
- ⑱ Ditton Meadows
Open grassland & meadow adjacent to the River Cam



LOCAL OPEN SPACE, PLAY & RECREATION PROVISION

4.2 Landscape Strategy

The adjacent diagram outlines the landscape strategy for the site. The strategy has been guided by the following design principles:

- Provide a balanced distribution of well-proportioned green spaces across the site;
- Connect the new homes with green space, providing direct pedestrian access.
- Provide a green outlook from the homes.
- Create spaces for residents to socialise and children to play.
- Deliver significant new tree planting along streets and green links, frame entrances and anchor key views into and through the site;
- Carry biodiversity enhancements through the new streets and green links, and integrate SuDS within the open spaces;
- Create improved pedestrian and cycle connections through the site, with shared 3m wide paths connecting safe on-street routes; and
- Provide clear definition of public and private space, with well designed front gardens (houses) and communal entrances (flat blocks).



LANDSCAPE STRATEGY DIAGRAM

4.3 Open space & play - Proposals



Proposed open space

Area - 0.66ha

Policy 68 of the Cambridge City Council Local Plan requires that all developments contribute to the provision of open space and recreation facilities on site. The type and size of on-site provision is determined through the application of standards set out in Appendix I of the Local Plan (table below).

The expected population for the Ekin Road scheme has been calculated using the approach set out in paragraph 5.61 of the City Council’s Open Space and Recreation Strategy (2011), i.e. the number of people is taken to be the same as the number of bedrooms with the exception of 1 bedroom units which generate 1.5 people each.

The results of applying the stated population calculation methodology and open space and recreation standards to the development are set out in the tables below, along with a summary of the proposed provision. The adjacent diagram illustrates the proposals.

The Abbey Ward contains a good mix of publicly accessible open spaces of various sizes (see above). The proposed provision will complement these existing spaces with improvements to the Wadloes Road verge, two wide green links with lawn areas and play, a landscaped square and a small wildlife focussed glade to the south-east. The proposed provision, at 0.66ha, will more than double the amount of existing open space on the site (0.3ha)



OPEN SPACE & PLAY PROPOSALS

Local Plan open space standards & proposed on-site provision

| Type of open space | Standard per 1000 people | Standard as applied to the proposed development | Proposed provision |
|---------------------------------------|--------------------------|---|--------------------|
| Outdoor Sports Facilities | 1.2ha | 0.4ha | 0.00ha |
| Informal Open Space | 2.2ha | 0.74ha | 0.66ha** |
| Provision for Children and Teenagers* | 0.3ha | 0.10ha | 0.05ha |
| Allotments | 0.4ha | 0.13ha | 0.00ha |

* Provision is not sought for those parts of developments consisting of one bedroom units.
Note: Informal open space provision = sum of areas highlighted green
**In addition to the 0.66ha of publicly accessible informal open space identified in green above, a further 0.06ha of landscaped entrance areas is also proposed.

Expected population calculations

| Unit type | Quantity | Expected population |
|-----------|----------|---------------------|
| 1 bed | 22 | 33 |
| 2 bed | 39 | 78 |
| 3 bed | 66 | 198 |
| 4 bed | 5 | 20 |
| 5 bed | 2 | 10 |
| TOTAL | 134 | 339 |

4.4 Tree strategy

Proposed planting

In addition to accommodating the majority of higher quality existing trees, the layout also provides space for more than 90 new trees, including 13 large species trees and 22 medium species trees.

The selection and layout of the proposed new trees will:

- Deliver tree-lined streets;
- Provide large trees at key locations, which anchor important views;
- Create attractive treed gateways into the site and at the entrances to the green links;
- Maximise canopy volume, whilst creating the conditions for successful ground-level planting;
- Ensure a green outlook from new and existing homes; and
- Contribute to the biodiversity value of the site.

In hard landscaped areas, root cells will be installed to ensure adequate rooting space is provided, where this is not achievable by soft landscape alone.

Tree positions take into account proposed locations of below ground attenuation tanks (blue hatch). Any trees shown above tanks will be small and accommodated in raised planters.

TREES - PROPOSED

| | |
|----------------|----|
| Large species | 13 |
| Medium species | 22 |
| Small species | 62 |

| | |
|-------|-------|
| TOTAL | c. 97 |
|-------|-------|



TREE PLANTING PROPOSAL PLAN

4.5 Ecology & SuDS

The existing habitats on site include urban trees, closely mown amenity grass, shrub planting and lengths of species poor hedgerow.

The diversity of habitats on the site will be enhanced with more than 90 new trees; biodiverse green roofs to flat blocks, maisonettes and some houses (Plots 19, 20 & 30-33); extensive areas of wildflower meadow; flower-rich ornamental planting; and new lengths of native hedgerow. To complement the soft landscape proposals, a range of bat and bird boxes/bricks will be installed. Insect hotels and habitat banks - like the ones already in place along Wadloes Road - will also be included.

In addition to below ground attenuation tanks, landscaped SuDS features will include green roofs, permeable paving and rain gardens. These are identified on the adjacent plan.

The landscape features described above will support urban cooling through shade provision, the reduction of reflected heat and evaporative cooling effects.

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SUDS MEADOW



BIODIVERSE GREEN ROOF



BAT & BIRD BOXES



WILDFLOWER MEADOW



4.6 Paving

The proposed paving palette will provide a high quality finish that supports access for all those living within or passing through the site.

Paving proposals are outlined in the adjacent diagram with details of the proposed materials and example swatches provided below.

For full details of the proposed paving palette, including kerbs and edgings, please refer to the submitted Hardworks Plans (Ref: ERD1-Tep-ZZ-00-DR-L-90101 to 90104).

- Adopted carriageway (125mm kerb)**
Asphalt to adoptable standards
- Adopted (& sections of private) footway**
Heritage asphalt to adoptable standards
- Raised table / Ekin Close (25mm kerb)**
Tegula concrete block to adoptable standards; Grey/buff multi; Herringbone.
- Raised table ramp & visitor cycle parking**
Concrete setts; Silver grey
- Private road/parking (25mm kerb)**
Tegula concrete_block; Grey multi; Herringbone.
- Footway (Green links)**
Tegula concrete block; Grey/buff multi; Stretcher.
- On-street parking (125mm kerb)**
Permeable concrete_block; Grey multi; Stretcher.
- Secondary access paths & driveways**
Permeable concrete block; Light grey; Stretcher.
- Private entrances**
Narrow unit concrete block; Grey multi.
- Communal entrances**
Narrow unit concrete block; Red multi.
- Informal areas of open space**
Self-binding aggregate; Grey/buff.
- Play surface**
Rubber crumb play surface; Natural tones.



PROPOSED PAVING PLAN



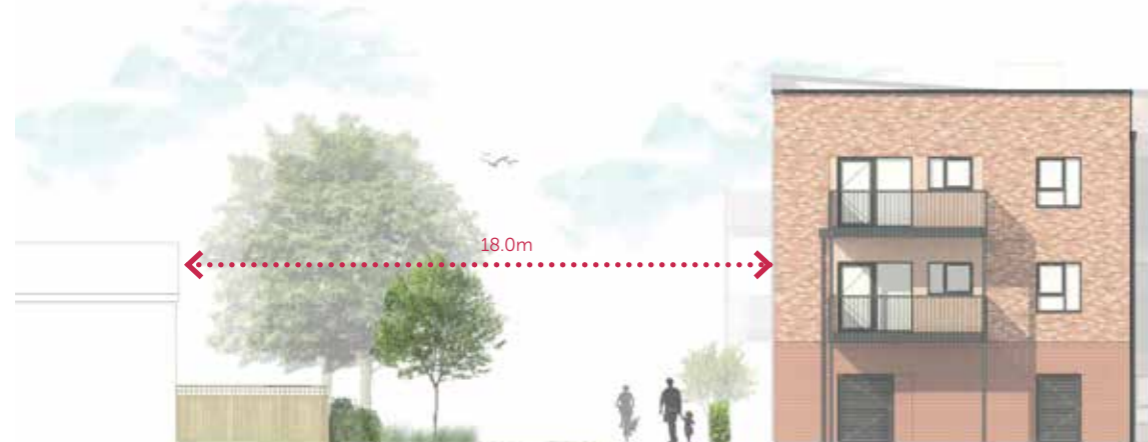
4.7 Wadloes Meadows & Green Link 01



SECTION A-AA: NORTH EGIN ROAD (VIEW WEST)



SECTION B-BB - GREEN LINK 01 (VIEW WEST)

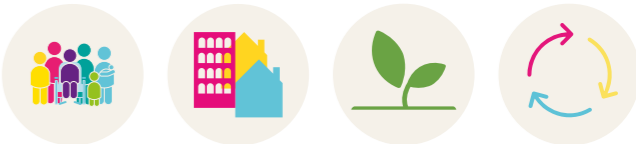


SECTION C-CC: WADLOES ROAD (VIEW SOUTH)

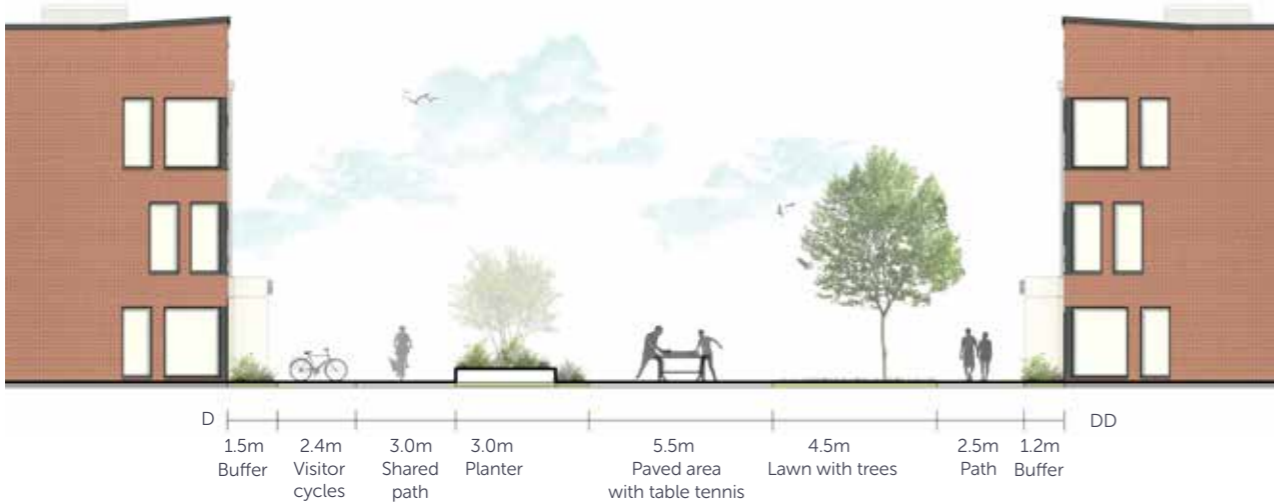


WADLOES MEADOW & GREEN LINK 01 ILLUSTRATIVE PLAN

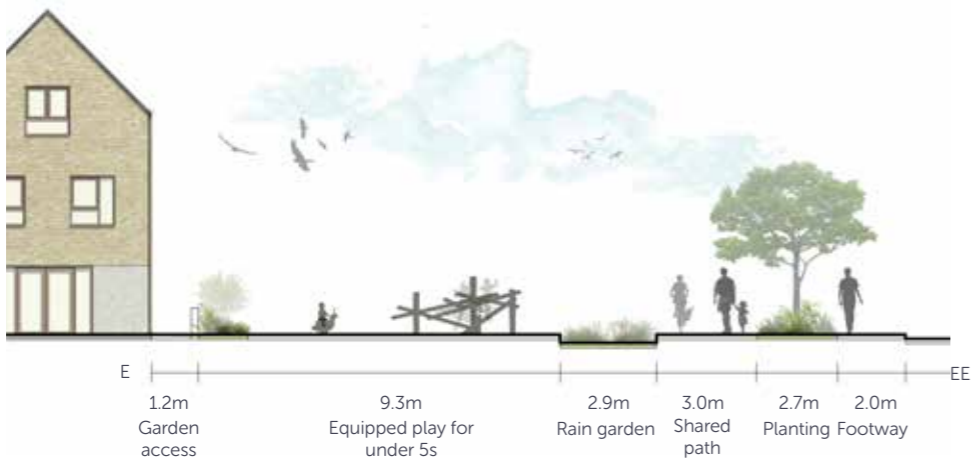
4.8 Green Link 02



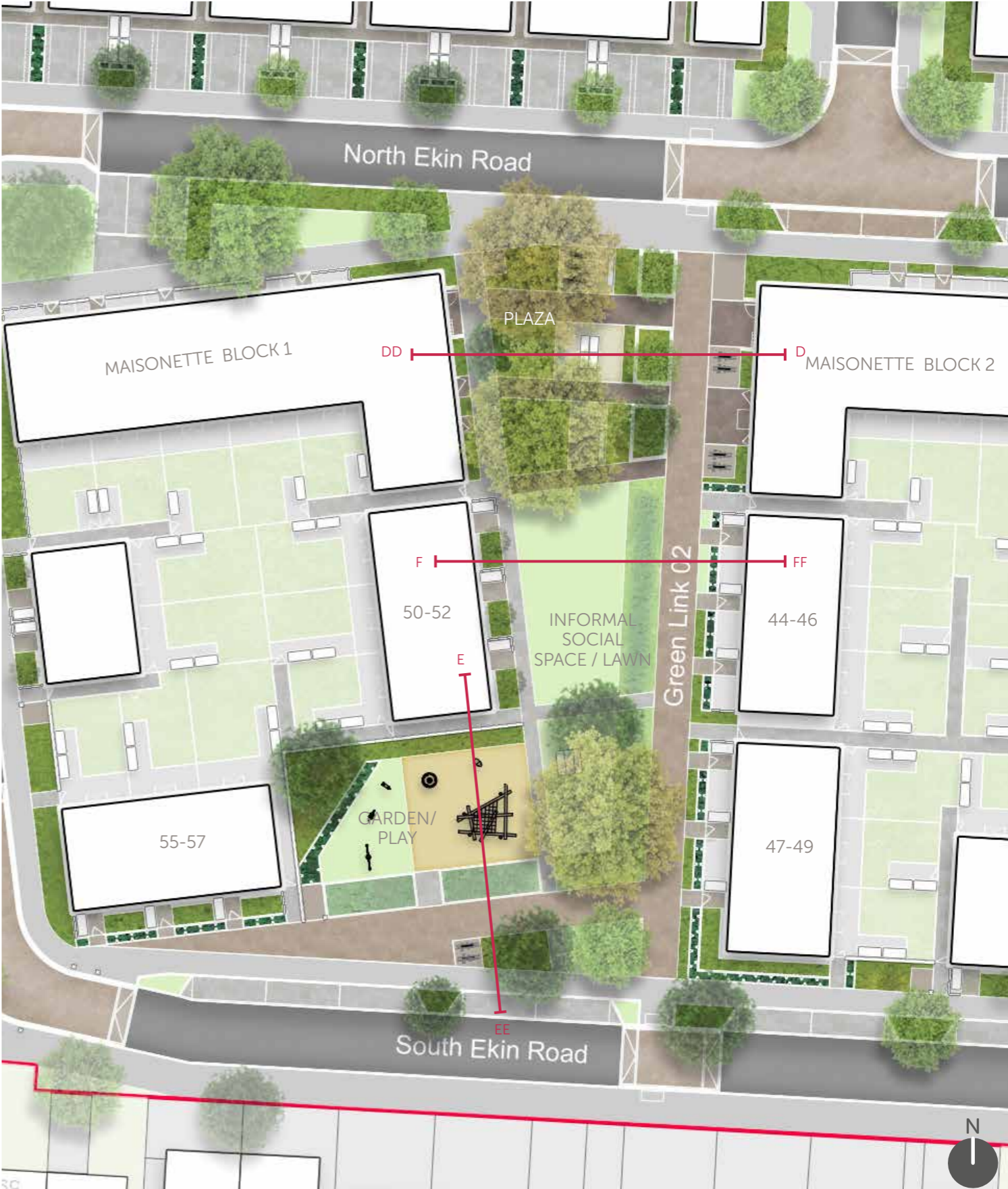
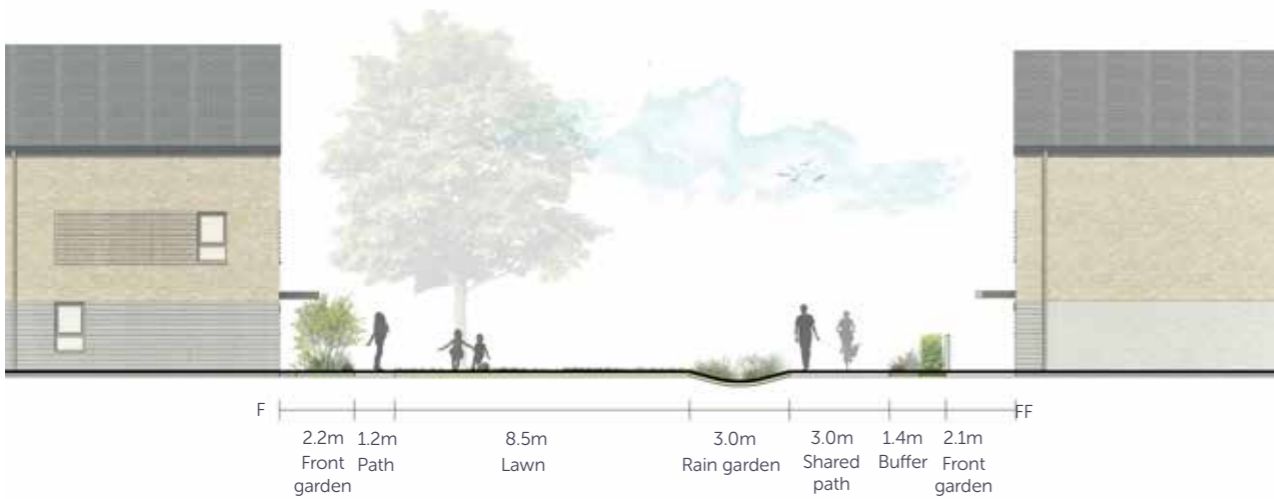
SECTION D-DD: PLAZA (VIEW SOUTH)



SECTION E-EE: GARDEN/PLAY (VIEW EAST)



SECTION F-FF - INFORMAL SOCIAL SPACE (VIEW NORTH)



GREEN LINK 02 ILLUSTRATIVE PLAN

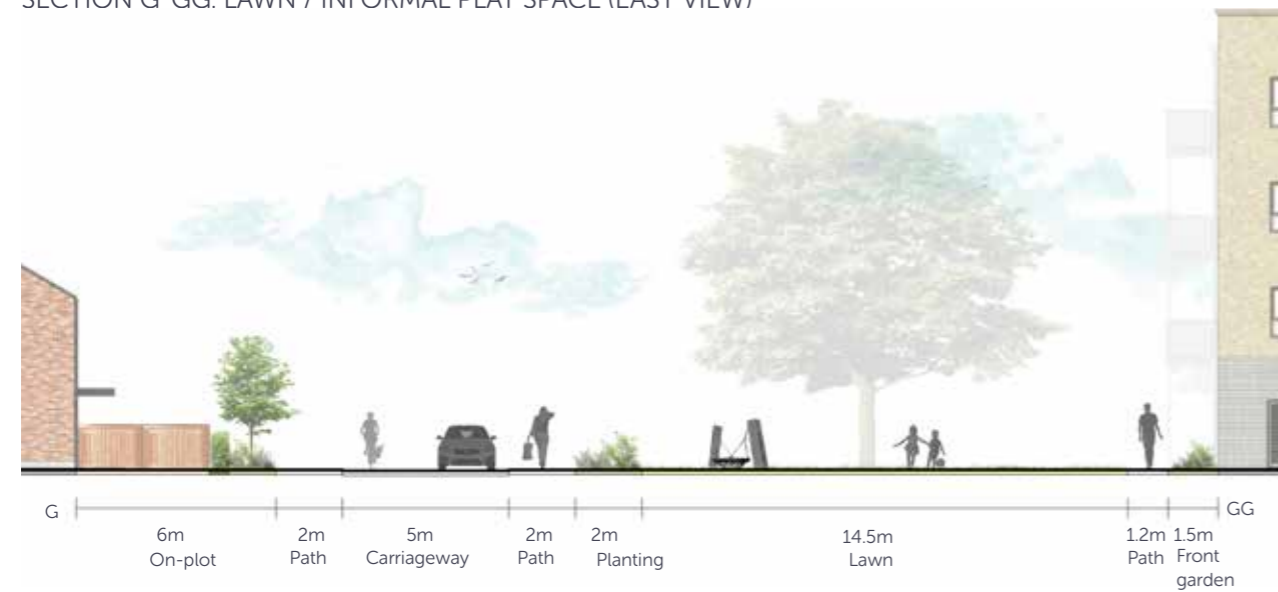


Green Link II View

4.9 Ekin Square



SECTION G-GG: LAWN / INFORMAL PLAY SPACE (EAST VIEW)



SECTION H-HH: PLAZA (EAST VIEW)



SECTION I-II: HOUSE FRONTAGE AND LAWN / INFORMAL PLAY SPACE (NORTH VIEW)



EKIN SQUARE ILLUSTRATIVE PLAN

Ekin Square View



5.0 Proposed Elevations Design

5.1 Design Narrative

Preliminary Material Strategy

The diagrams on this page depict initial context analysis of building characters across the site and its surroundings plus preliminary material strategy for the scheme.

The predominant materials used in East Barnwell are red/brown brick, white render and buff brick. There is a consistent approach along main green open spaces where the main road entrances are framed by red or brown bricked buildings while the majority of the buildings fronting the landscape are either white render or buff brick.

In order to tie our project with the surrounding context, we are proposing similar approach - using light buff bricks along main open spaces. The main gateway buildings in between the landscaped areas would then be in red or red multi brickwork.



1: Dudley Road Recreation Ground



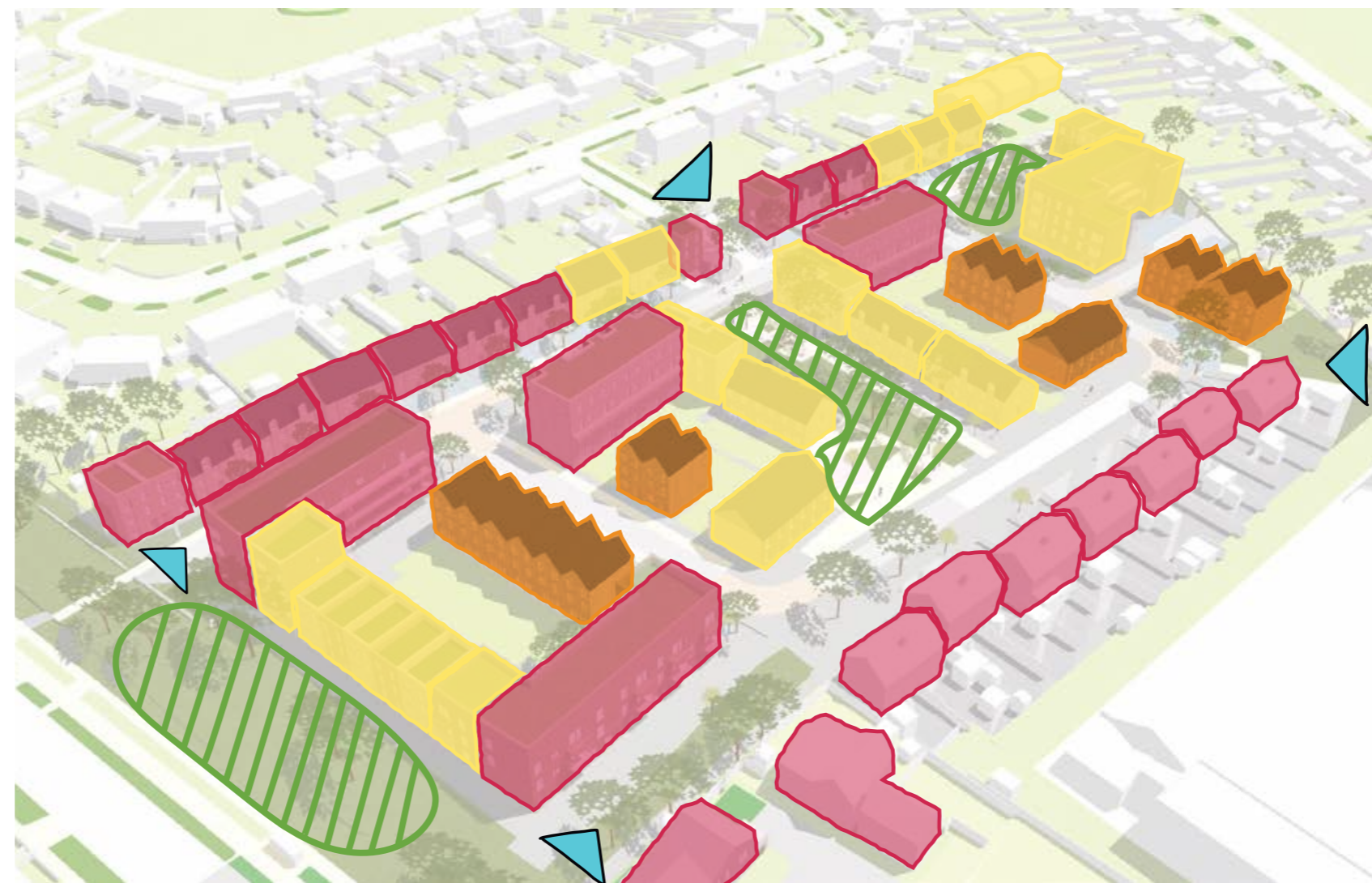
2: Thrope Way Play Area



3: Peverel Road Recreation Ground



Local Green Spaces Map



Aerial View of Proposed Site

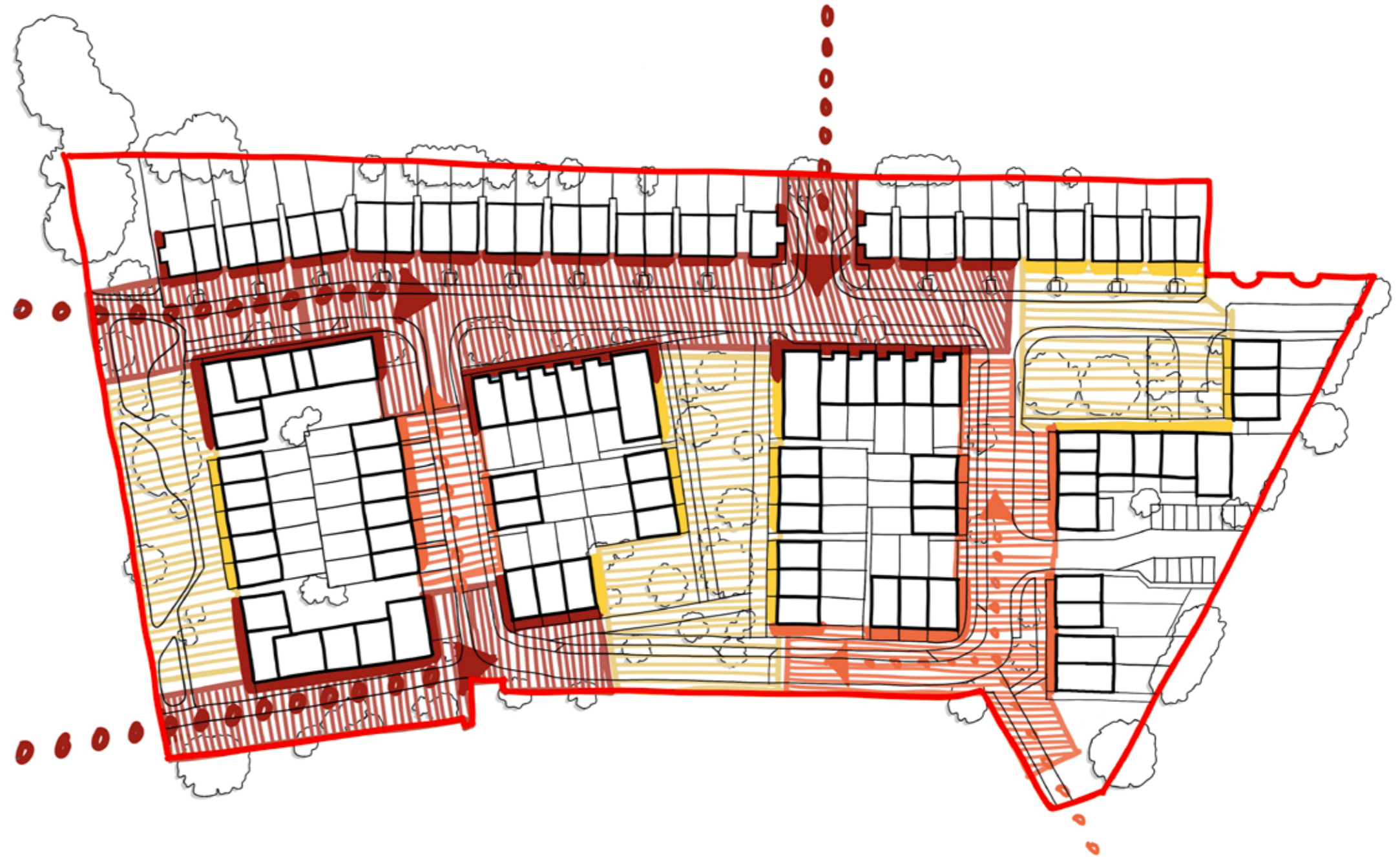
- Key**
- Site boundary
 - Green Open Spaces
 - Red/Brown Brick
 - Buff Brick/White Render
 - Red Multi/Light Red Brick

5.2 Defining Character Areas

Character Principles

The adjacent diagrams illustrates the initial character areas for the site. The whole site is divided into 3 main zones that identify the elements of the space and surfaces that will identify the character and quality of the space:

- **Zone 1: The Urban Edge**
This space is the transitional space that brings the urban character of Wadloes Road and surrounding areas into the centre of the site.
- **Zone 2: The Greenscapes**
The green open spaces that are social gathering points and have softer elements. The spaces encourage safe environments for play and for activities.
- **Zone 3: The Traditional Streets**
Reflects the local quality of traditional residential streets with repetitive elements and colours. These interstitial spaces display a character with steady rhythms and green build outs/pocket spaces to break the street.



Key

- Site boundary
- Zone 1 - The Urban Edge
- Zone 2 - The Greenscapes
- Zone 3 - The Traditional Streetscapes

5.3 The Urban Edge - Principles

The Urban Edge - Flat Block Design

INITIAL PRINCIPLES



- Distinctive base defined by a dynamic line
- Sleek minimalistic base at ground floor, more texture and details at upper floor
- Pointy parapet marking the site entrances
- Residential facades to be ordered with fenestration and balconies
- Communal core facades are more playful with window positioning

BAY STUDY - Materials & Details

Angled parapets to key marker corners at the site entrances

Fluid fenestration positioning on the corner facades

Projecting canopy to communal entrance with signage

Light brick to communal entrance

Multi red brick with more texture (handmade)

Light red balcony grouping

Sleek plain red brick

Light brick surround to private entrances



Flat Block 1 - Wadloes Elevation

PRECEDENTS



Site Key Plan



The Dynamic Line
-Wilkinsons Brook, Dublin
Proctor Matthews Architects



The Contrasting Texture Above
-Hulme living
Mecanoo



A Fluid Arrangement at Key Corners
-The Shea Building
Public47 Architects

MATERIALS

-  PRIMARY MATERIAL (Upper floors)
Mixed Red brick with light mortar
-  SECONDARY MATERIAL (Ground floor and cores)
Red brick with light mortar
-  SECONDARY MATERIAL (Balconies)
Light red brick with light mortar
-  METAL WORK
Anthracite Grey
-  CANOPY
Off-white



Wadloes Road View

7.5 The Urban Edge - Principles

The Urban Edge - Maisonette Block

INITIAL PRINCIPLES



Recessed top storey to reduce sense of height

3-storey townhouse bay concept

50mm vertical recess with light brick

- Subservient top floor allowing the maisonette blocks to establish a more domestic scale
- Lighter material to the top storey
- Distinctive 3-storey townhouse
- Sense of verticality in the main bay design and detailing
- Consistent surround detail to the private entrances through flat blocks and Maisonette blocks
- Consistent design for the cores on the corner with fluid fenestration and angled parapets
- Consistent material palette as the flat blocks part of urban edge

PRECEDENTS

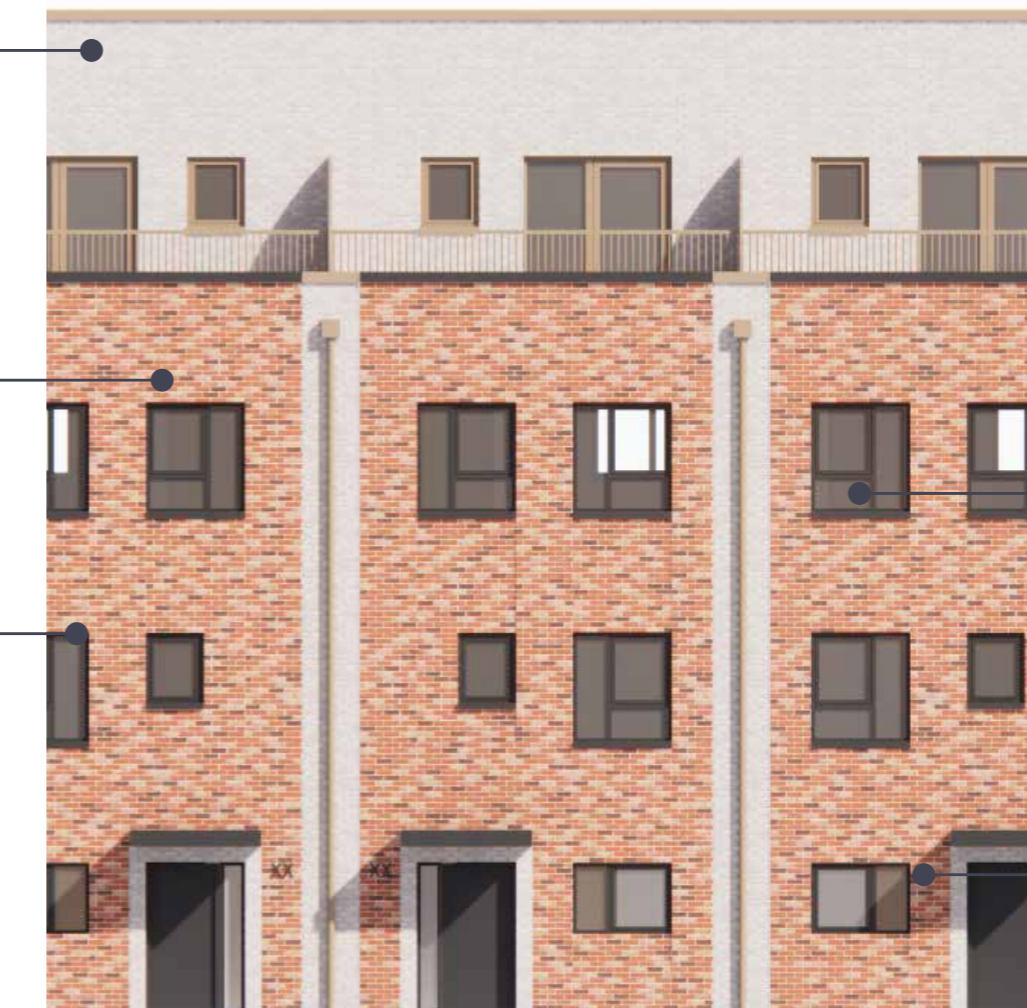


Reduced Scale
-West Green Place
HTA



Lighter Top Storey
-West Green Place
HTA

BAY STUDY - Materials & Details



Multi red brick with light mortar vertical grouping

Light brick surround to private entrances

Maisonette Blocks 1&2 - North Ekin Road Elevation

MATERIALS

- PRIMARY MATERIAL (Main bay)**
Mixed Red brick with light mortar
- SECONDARY MATERIAL (Top Storey)**
Off-white brick with light mortar
- ENTRANCES**
Off-white brick with light mortar
- METAL WORK**
Anthracite Grey and Grey Beige
- CANOPY**
Anthracite Grey

Site Key Plan





North Ekin Road View

5.4 Urban Edge - Sketch View

North Eking Road Looking East



5.5 The Greenscape - Principles

Typical Bay Studies

INITIAL PRINCIPLES



- Monochrome , turned down approach to let the landscape be the dominant element in the Greenscape
- Natural colour bricks
- Continuous base with texture to the ground floor
- Emphasis on horizontally with use of corduroy

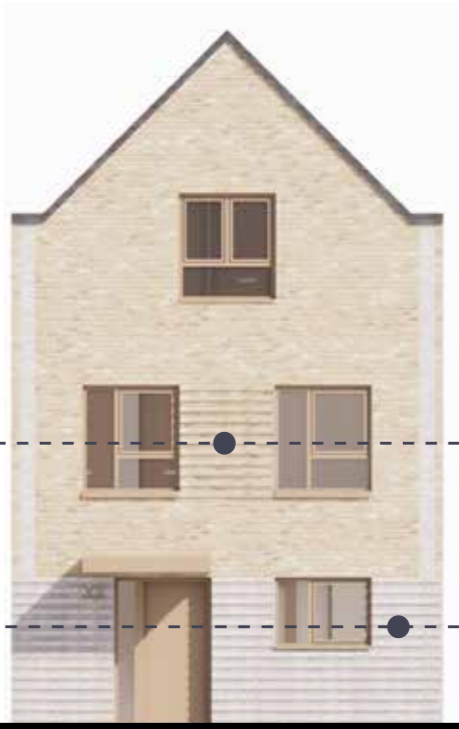
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BAY STUDY - Materials & Details

- Fluid fenestration positioning on the core location
- Corduroy horizontal detail at upper floor as for the houses within the Greenscape
- Recess light brick grouping for all flat blocks balconies
- Projecting canopy to communal entrance with signage
- Light brick to communal entrance



Flat block 3 - Ekin Square



Green Link 2

- Horizontal grouping with corduroy detailing
- Textured ground floor with light buff and corduroy detailing

PRECEDENTS

Site Key Plan



Texture at ground floor
-Silchester housing scheme, London
Haworth Tomkins Architects



Monochrome materiality
-Goldsmith Street, Norwich
Mikhail Riches Architects



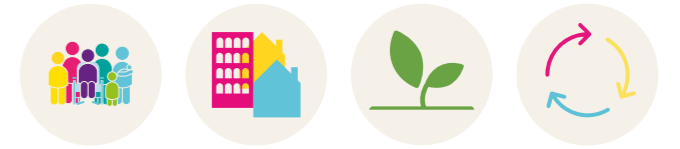
Continuous detailing through
-Rochester Riverside phase 1-2, Rochester
BPTW Architects

MATERIALS

- PRIMARY MATERIAL**
Buff brick with light mortar
- SECONDARY MATERIAL**
Off-white brick with light mortar
- METAL WORK**
Grey Beige
- CANOPIES**
Grey Beige (Houses)
- Off-white (Flat block)

5.6 Greenscape - Sketch View

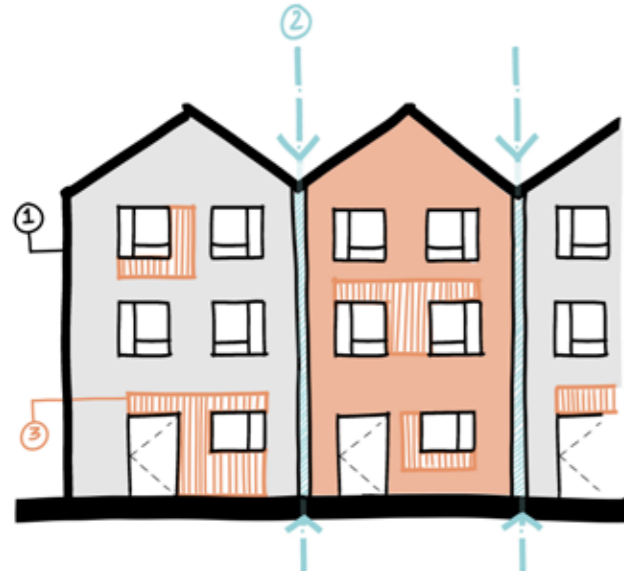
Green Link 2 from South Ekin Road



5.7 Traditional Street - Principles

Typical Bay Studies

INITIAL PRINCIPLES



- Borrowed materials and concepts of the Urban Edge and the Greenscape instead of generating a new palette
- Vertical grouping from the Urban Edge
- Horizontal grouping from the Greenscape
- Alternating colours creates a rhythm along the street
- Each house has a clear outline with the vertical break, in opposition to the continuity proposed in the Greenscape

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BAY STUDY - Materials & Details

Main multi red brick from the Urban Edge

Vertical recessed brick grouping with secondary Urban Edge brick

Vertical break in materials with movement joint, to distinguish each house

Main buff brick from the Greenscape

Horizontal recessed brick grouping with secondary Greenscape brick

Entrance highlight with light brick as per flat block and maisonette blocks



PRECEDENTS

Site Key Plan



Window highlights and grouping
-Marmalade Lane
Mole Architects



Alternating materiality
-St Chad's
Bell Phillips

MATERIALS

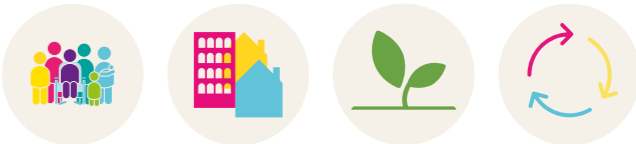
- PRIMARY MATERIALS**
Multi red brick with light mortar
- Buff brick with light mortar
- SECONDARY MATERIAL**
Light red brick with light mortar
- ENTRANCES**
Off-white brick with light mortar
- METAL WORK / CANOPY**
Anthracite Grey

5.8 The Traditional Street - Sketch View



6.0 Conclusion & Next Steps

6.1 Scheme Overview



6.2 Project Timeline

Throughout the design development process, the design team has regularly consulted with Cambridge City Council; the Housing Strategy Team, Community Services Managers, Environmental Health Officer and other statutory bodies such as Cambridge County Council (Highways and Refuse) and Designing Out Crime Officers (for Secured By Design). A summary of the design development timeline can be found in the adjacent diagram.



