Southern residential development area indicative masterplan

Precedents and Case Studies

The following provides examples of housing developments exhibiting good design and place making principles that have similar constraints, site and environmental considerations to the proposed allocation site.

Green corridors

- Green corridors providing walking and cycling routes through the development
- Preservation of existing trees and vegetation

Topography

- An example of bespoke split level housing designed to responds to levels
- Terraced homes follow the contours to reduce cut and fill
- Typologies are designed to respond to corners

Prominent edges and landmarks

- Elevated prospect with views to the countryside
- Sloping topography
- Integrated play
- Housing typologies respond to the context
- Ribbons of landscape through scheme

Green credentials

- Natural landscape setting
- Wetland Areas
- Low density housing

Responding to the landscape and views

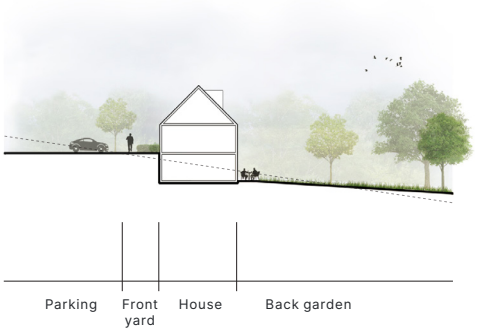
- Sloping topography
- Development nestled within mature landscape
- Variety of typologies respond to topography

Typical Sections

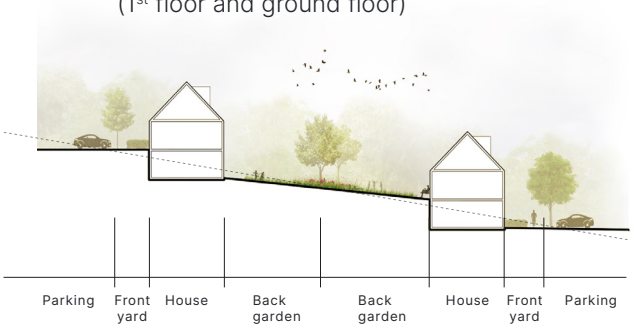
Typology scenarios

The following six sections illustrate the scenarios where different housing typologies will have to be considered due to the extreme change in levels. It is often the case that gardens will be split across two levels and access to the rear garden will be from the first floor, to accommodate for the change in level across the site. Further consideration to these scenarios will have to be considered at detail design stages.

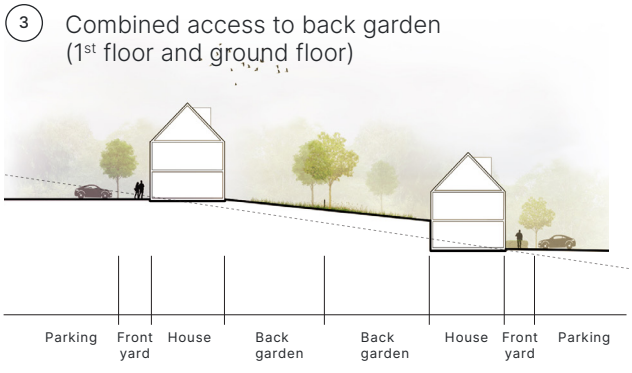
1 Access to street at 1st floor



2 Combined access to street (1st floor and ground floor)



3 Combined access to back garden (1st floor and ground floor)



4 Corner type

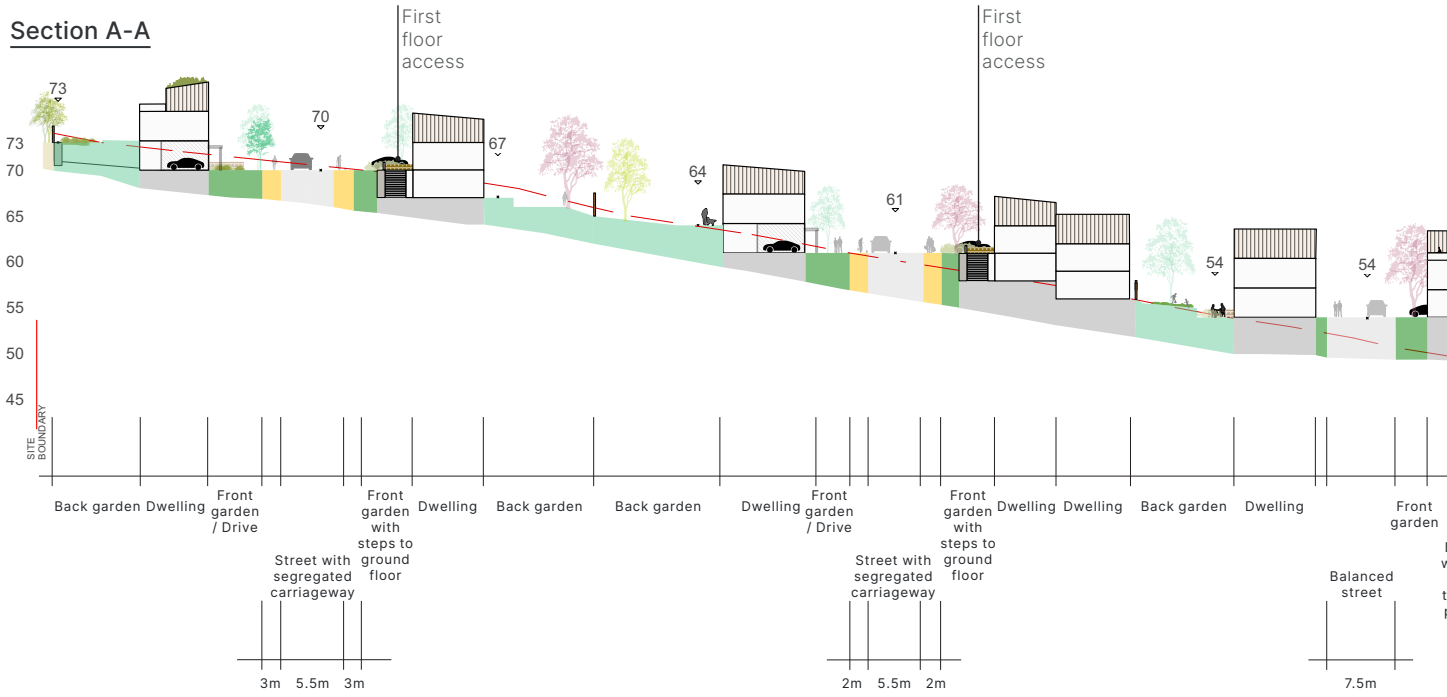
5 Combined access to street (ground floor and 1st floor)

6 Parking accommodates level change

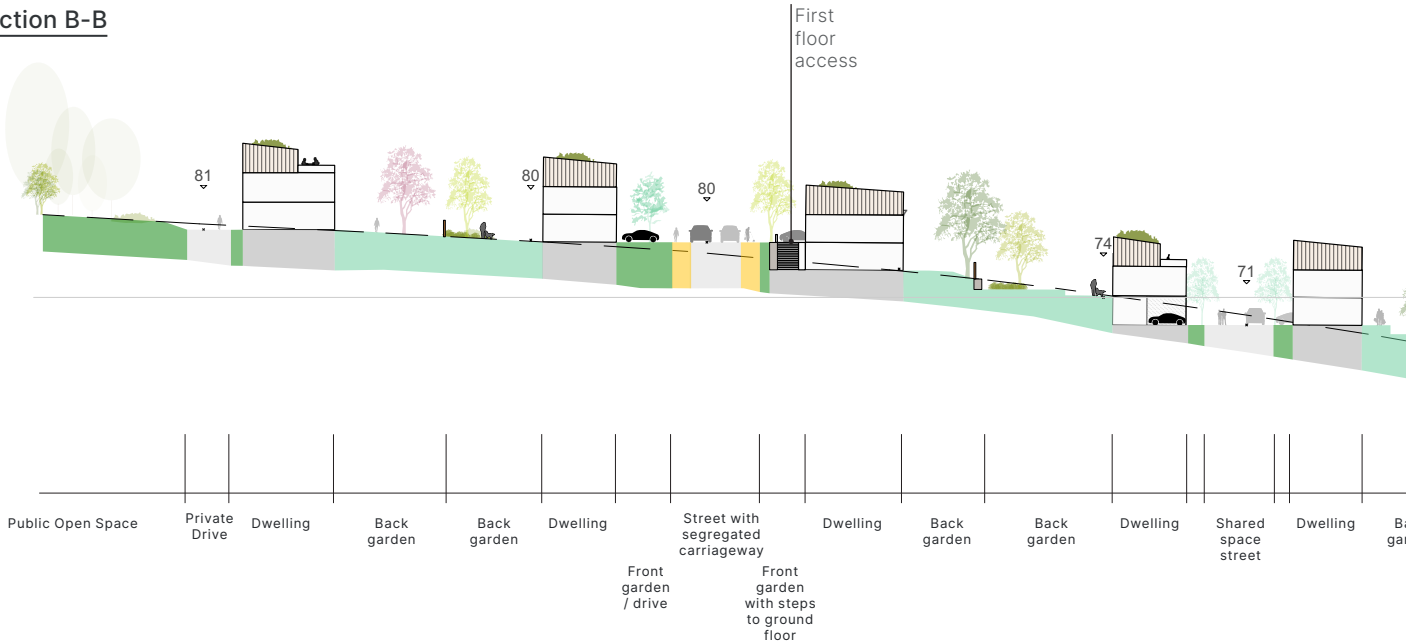
Long sections through proposed development

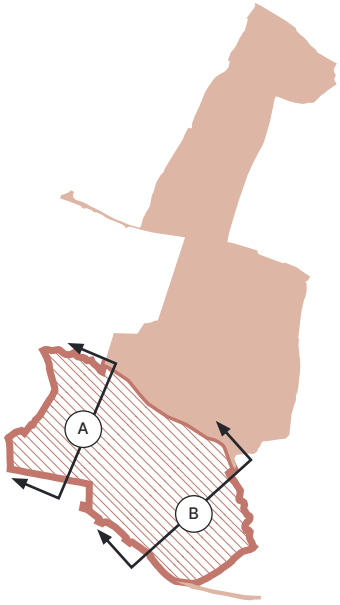
These long sections illustrate the changing levels across different sections of the proposed development. The sections indicate the steeply changing topography and how the landscape and built form can work within the existing valley setting.

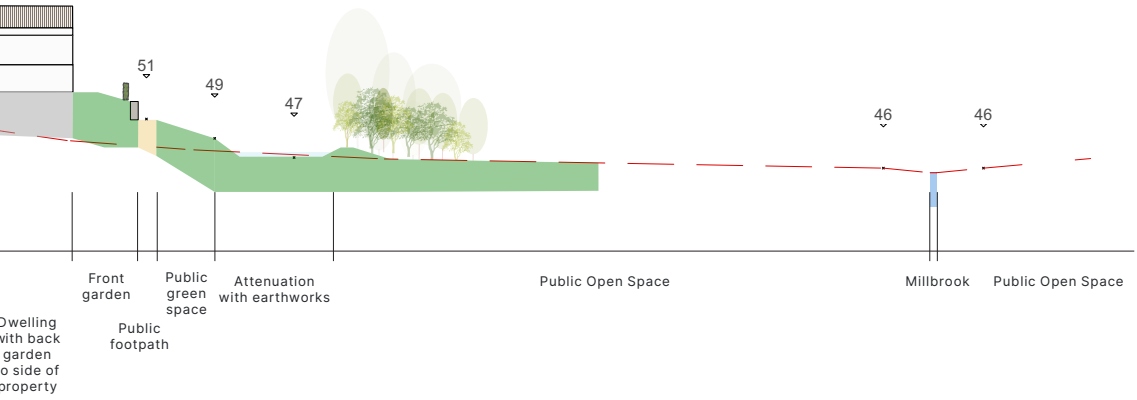
Section A-A

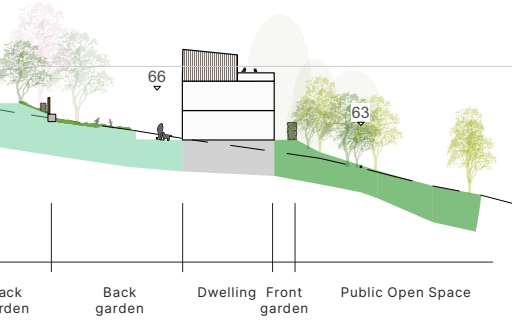


Section B-B




A
B


51
49
47
46
46
Front garden
Public footpath
Public green space
Attenuation with earthworks
Public Open Space
Millbrook
Public Open Space

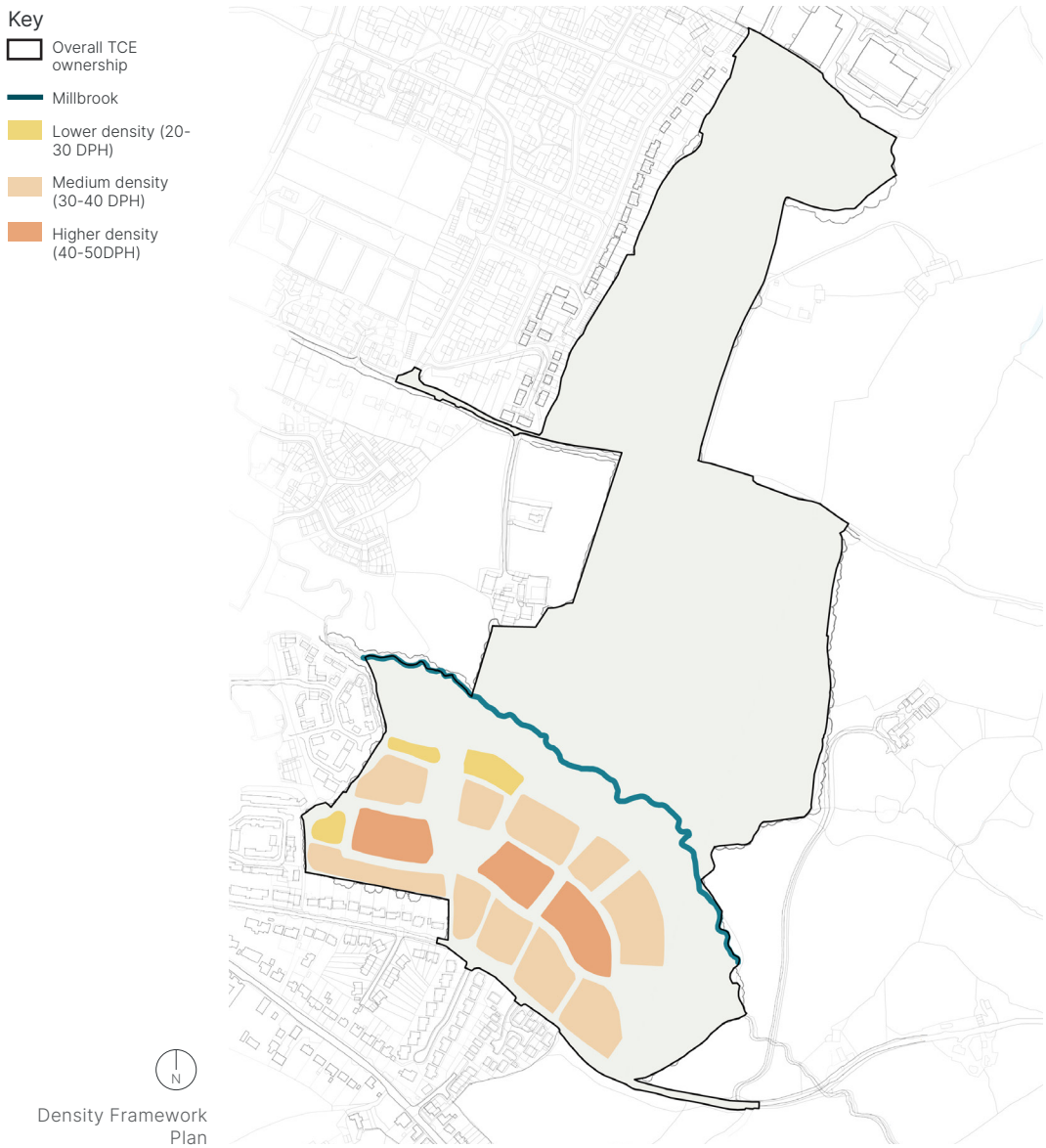

66
63
Back garden
Dwelling
Front garden
Public Open Space

Masterplan Framework

Density Framework

The approach to distributing the density of development across the site is based on an analysis of the surrounding neighbourhoods and site character. The overall number of homes proposed on the site is approximately 225 homes which will be distributed following the principles set out below:

- The denser development (40dph-50dph) will be located within the central part of the site, along the main movement routes. These areas will create efficient and attractive terraced streets based on traditional typologies and enhanced through new tree planting.
- The areas bordering the existing dwellings will be of medium density(30dph-40dph), largely following the character and patterns found in surrounding streets. Development stepping down into the valley will also be of similar density to allow for views and green connections.
- Along the lower parts of the site and in certain other areas of the site, lower densities (20dph-30dph) might be appropriate to create variety in character and respond to the landscape.

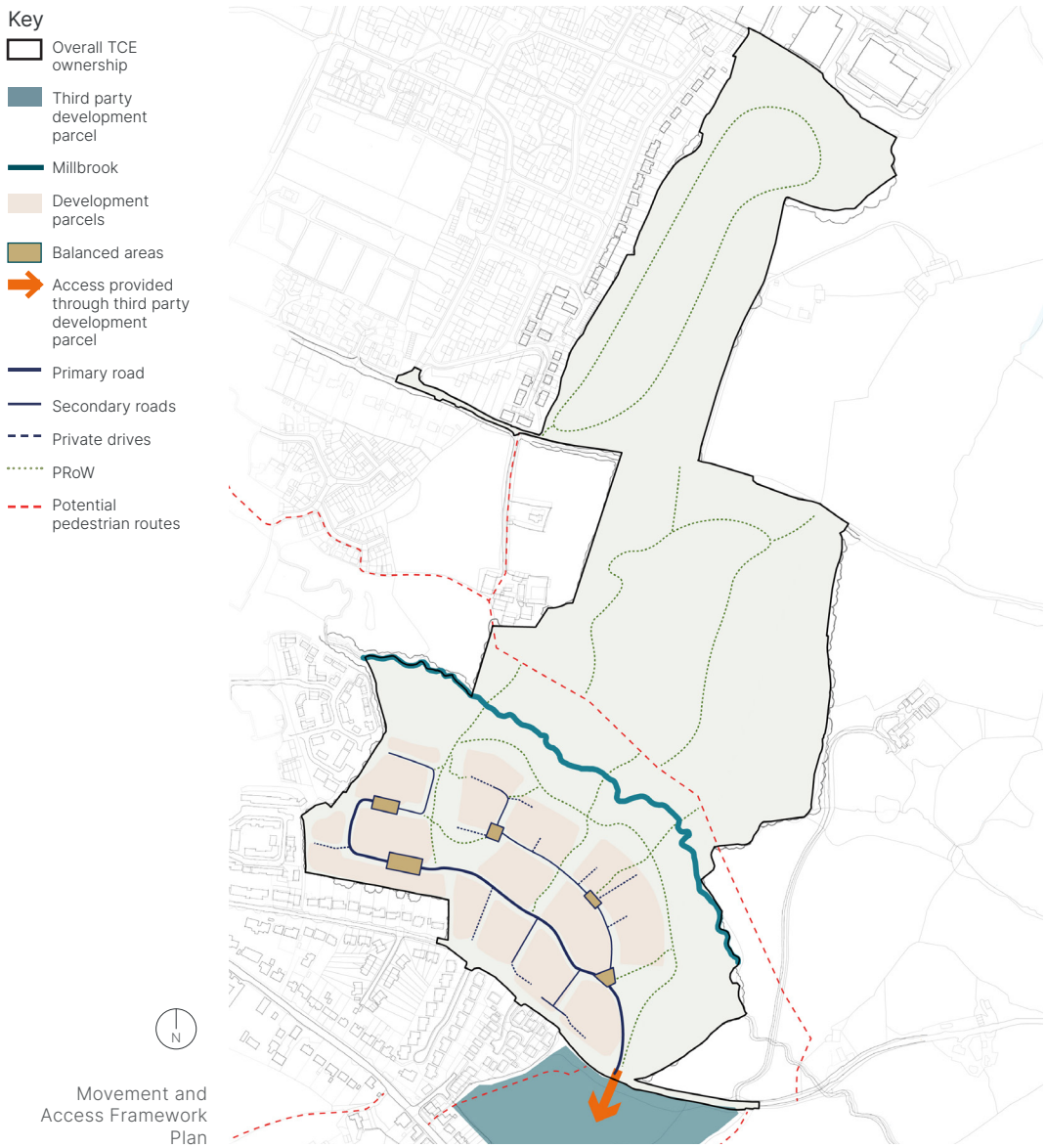


Density Framework Plan

Movement and Access Framework

The illustrative masterplan proposes to provide safe and secure pedestrian movement across the site through the provision of:

- An attractive vehicular and pedestrian access is provided through third party land;
- Attractive and safe pedestrian and cycle links that provide access to the local facilities and amenity;
- Connections to the existing network of Public Rights of Way, pedestrian connections and countryside beyond;
- Green streets and corridors that provide access to the wider landscape and surrounding area;
- Balanced streets and pedestrian/cyclist priority streets to help reduce traffic speed;
- Well connected roads that create a permeable development, avoiding cul-de-sacs and the need for over engineered turning heads.

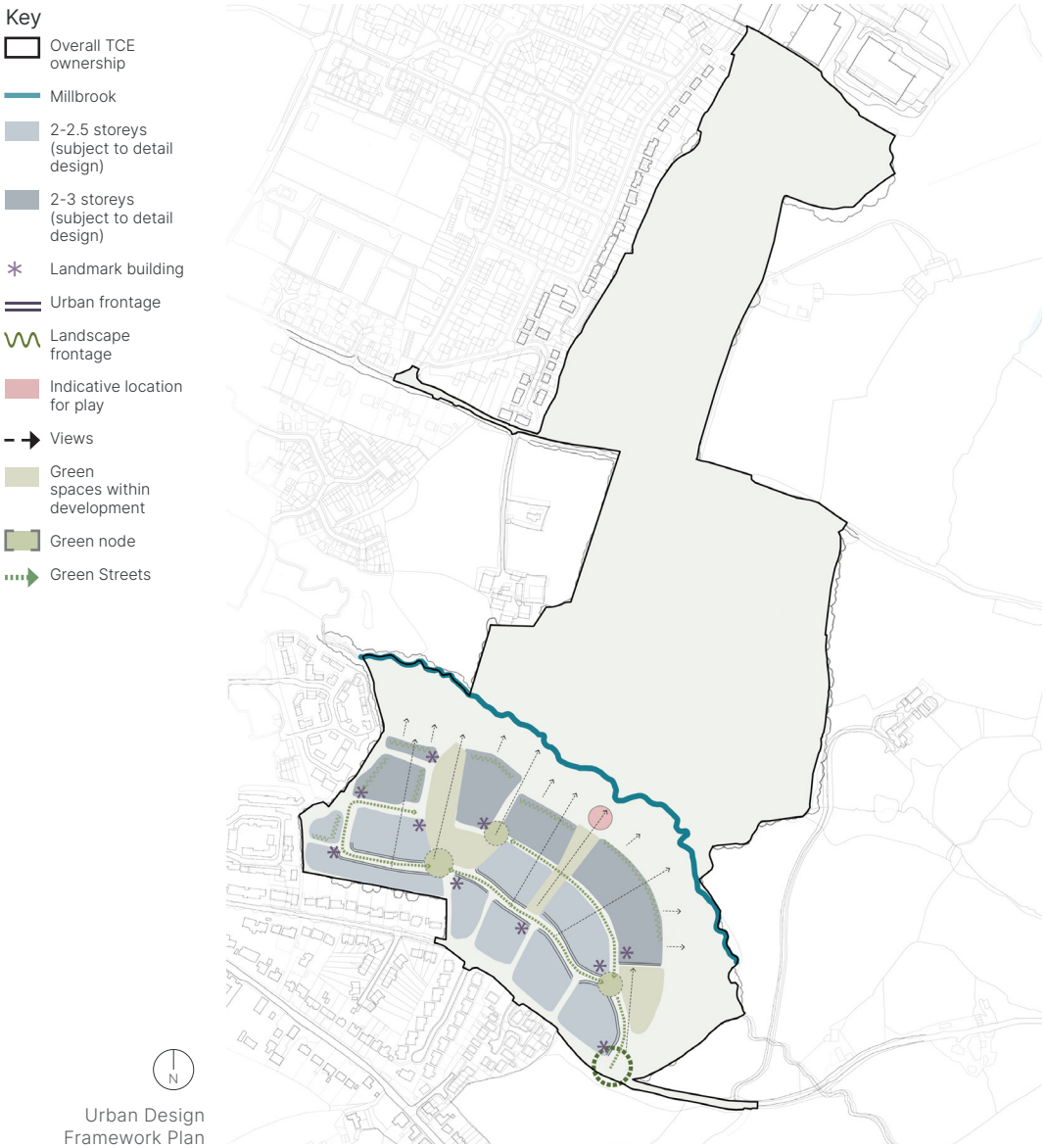


Movement and Access Framework Plan

Urban Design Framework

The masterplan incorporates design principles which can be adopted to make the development legible and easy to understand including:

- A clear gateway and accent feature buildings creating architectural reference points to assist with legibility.
- A clear spatial hierarchy of wider primary routes linking the main site entrance to the development centre, and a network of narrower and more informal lanes served from them.
- Creating sequences of public spaces of varying shape and character to assist with creating distinctiveness and variety.
- Streets designed to create a more balanced environment for pedestrians. Well designed street features to help reduce vehicle speeds in sensitive locations. These will be integrated and will not be add-on physical features such as speed humps or chicanes.
- Building forms vary between the edge and the centre. At the edges, the buildings generally have a softer relationship to their context with a more broken building form, softer landscaping, hedge boundaries and front gardens. In the centre, buildings can form a much stronger sense of enclosure.



Urban Design Framework Plan

Green and Blue Infrastructure Framework

The green and blue infrastructure both within the development parcel and the wider TCE land holding is designed to be multi-functional, providing well in excess of the policy requirement of 1.66ha 'open space'.

The development itself will be nestled into the valley landscape through the creation of green streets and corridors through the use of new and existing tree and hedgerow planting which will act as green movement corridors/routes for both people and wildlife. These landscape strategy principles help create a rural edge and gradual transition to the wider TCE land and countryside.

Community Hub

The Community Hub could include a café, workspace, meeting rooms, interpretation for nature conservation/BNG opportunities within the built form. Including outdoor play close to the hub will further activate the space and Millbrook edge. There is opportunity to include community growing areas (allotments) and a community orchard, for the residents use and to be sold within the hub.

Drainage/Attenuation

As part of the principle of rewilding the Millbrook Valley edge new drainage ponds and swales are to be created to provide attenuation that integrates into the landscape and also provides new habitats, enhancing the site's biodiversity. The attenuation proposals include 3 stage infiltration, incorporating naturally planted areas. Waterside walks and boardwalks across the Millbrook into the wider countryside can be incorporated.

Nutrient Mitigation

TCE has commissioned a preliminary assessment to ascertain the potential of its adjoining land to the north of the proposed allocation to provide mitigation to deliver nutrient neutrality. The assessment, undertaken by Stantec, has demonstrated that if the circa 20ha of land is taken out of agricultural production, the mitigation potential will be sufficient to enable the delivery of all of the development land within the draft allocation. To maximise the benefit of the mitigation land, TCE will consider the inclusion of a SuDS treatment train (bioretention – swale – wetland basin) as part of the development, to reduce the surface water element of the nutrient budget.

Biodiversity Net Gain

The land also has potential to deliver a significant Bio-diversity Net Gain and to provide wider health and wellbeing benefits, such as public access to woodland trails and the creation of community orchards. Other uses the land can provide, include:

- Natural open landscape / grassland
- Community Woodlands
- Community Orchards
- Wildflower areas
- Biodiversity Zones

Open Space Typology	Space type	General landscape features	Potential activities
TCE nutrient mitigation land / public open space (19.82 ha): 1. Amenity Open Space 2. Parks and Recreation Grounds 3. Natural and Semi Natural (accessible)	• Natural open landscape / grassland • Community Woodlands • Community Orchards • Wildflower areas • Biodiversity Zones	• Natural open landscape (wildflower meadow/ semi-natural grassland/ • Retained hedgerows and existing trees of value/ tree planting along key boundaries and development edges to enhance existing habitats and create new habitat zones • Natural water bodies • Recreational pedestrian footpaths • Pedestrian footbridges and boardwalks across the Millbrook	• Informal sports, recreational activities (jogging, football, rounders, cycling) • Children's play and exploration • Relaxing/ contemplating • Recreational walks • Commuting / walking to schools and Town Centre