



05

DESIGN & ACCESS -
INCLUDING DESIGN CODE



5.1 INTRODUCTION

The following section describes the development proposals and follows on logically from the assessment and analysis of the site and its context to explain the application proposals in a structured way.

Coded elements are also incorporated within this section, comprising a Parameters Plan, which identifies the maximum developable area, building heights and densities, and design principles and illustrative material setting out the movement and legibility framework, landscape framework and development character.

5.2 USE AND AMOUNT

The site is approximately 17.98 hectares. Up to 200 residential units are proposed on the site, of which 60 units (or 30% of the total number of dwellings) will be affordable housing in accordance with CRSIP Policy CP8 and BBCDLP Policy 59S. It is considered to be an appropriate use for the site as it is located next to an established residential area and has good access to local facilities and the existing road and footpath network. A new roundabout requiring around 0.92ha to the east of the site will provide access into the site, footways along Graze Hill and Bedford Road and improve the existing Graze Hill/B660 Bedford Road junction.

The site will also provide around 11.60 hectares of proposed green space, to include a Locally Equipped Area for Play (LEAP) within the centre of the development. The green space to the north and east will be more naturalistic in character, forming an extension to the existing country park, and will include footpaths, amenity open space and woodland and parkland tree planting. Sustainable urban drainage (SuDS) will form an integral part of the open space to the south.

The breakdown of open space is as follows (see also **Figure 14**):

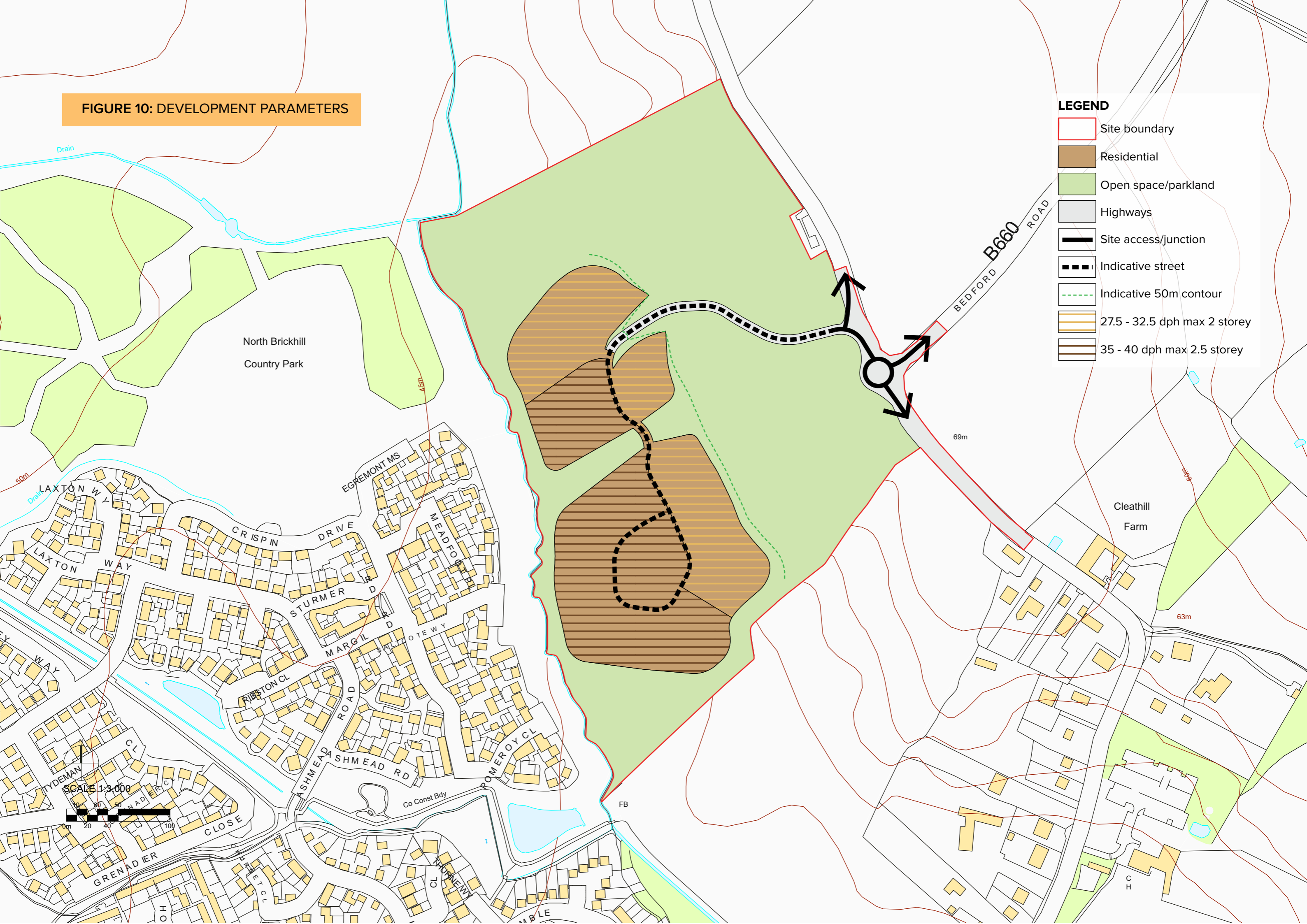
Open Space	Area (ha)
Country Park Extension	9.42
Central Green Corridor	0.44
Edge Green Corridor	1.74

Total	11.60
-------	-------

The arrangement of built development, roads, tree planting, public open space and the children's play area is shown on **Figure 11**.

The net density for the residential development is approximately 37 dwellings per hectare (dph). This is based on a net developable area of 5.46 hectares.

FIGURE 10: DEVELOPMENT PARAMETERS



LEGEND

- Site boundary
- Residential
- Open space/parkland
- Highways
- Site access/junction
- Indicative street
- Indicative 50m contour
- 27.5 - 32.5 dph max 2 storey
- 35 - 40 dph max 2.5 storey

SCALE 1:3,000
0m 20 40 60 80 100

5.3 DEVELOPMENT FRAMEWORK

The design framework has evolved from the identified opportunities and constraints and has been informed by the characteristics of the site and surrounding area. It is illustrated in **Figure 11** and supported by the Layout Principles (section 5.4).

5.4 LAYOUT PRINCIPLES

Although layout is reserved within this application, a set of development principles have been provided to inform subsequent reserved matters applications. Detailed design guidance is also provided within the Council's Design Guide and should also be used to inform future planning applications. A Development Framework (**Figure 11**) and indicative layouts (**Figures 12 and 13**) have been prepared to assist in communicating these principles. However, these do not fix the exact form of development and alternative solutions may be suitable if they deliver the following.

1. Provide a new roundabout at the B660 Bedford Road/Graze Hill junction providing access into the site. A new junction onto Graze Hill from the site access road helps to calm and reduce traffic speeds on this route. New footways will also be provided along Bedford Road, Graze Hill and into the site. This is covered in more detail within the access section (5.10) and the accompanying Transport Assessment.
2. Provide a Country Park expansion to the north and east incorporating blocks and grouping of native woodland/tree planting to complement the existing landscape character, frame views and screen the proposed development.
3. Dwellings are located below the 50m contour and in cutting along the eastern edge to minimise housing on the steeper slopes and reduce visibility of the scheme from the wider landscape and Graze Hill/Bedford Road.
4. Provide two east-west green links along existing and former historic hedgerow corridors, ensuring permeability through the site and facilitating connections to the Country Park and existing settlement edge to the west.
5. Retain and enhance public footpaths along the east, south and west boundaries that interconnect with new pedestrian links throughout the country park extension and development. Connections to the existing footbridge along the western boundary will also be enhanced and a new footpath/cycle link into Woodlands Park to the south will be promoted (subject to third party land agreement) to maximise accessibility to existing facilities and services.
6. Provide a network of footpaths and cycleways throughout the Country Park and green corridors and along desire lines to ensure maximum permeability between the open spaces and development areas.
7. Set development back from the southeastern and western boundaries to provide a naturalistic green edge that incorporates existing vegetation and SuDS. The SuDS will form an integral feature within the landscapes, providing sustainable water attenuation and diverse habitat creation.
8. Existing vegetation along the site boundaries is reinforced where necessary to help development successfully assimilate with its surroundings.
9. Development reduces in density along the green edges to complement the parkland character and help development successfully assimilate with its surroundings.
10. Provide an attractive street into the site, defined by small clusters of parkland tree planting, with housing set back down the slope to minimise the impact of development on the wider landscape.
11. Provide a children's play area (LEAP) within the centre of the development along the green corridor development to maximise accessibility to new and existing residents and encourage social interaction. This location also balances the distribution of play spaces within the wider area (notably Woodlands Park). (As advised by BBC's Environmental Development Officer, Clare Pick during the pre-application consultation.)
12. Retain the existing historic track to provide a pedestrian link through the development and parkland and onto Graze Hill.
13. Frame key views from elevated land within the Country Park and along Graze Hill/Bedford Road with careful design of landscaping and built form.
14. Provide focal buildings at the site entrance, primary pedestrian entrances and to terminate key vistas along primary movement routes.
15. Maximise integration between the developable areas and open space through careful design of earthworks.
16. Locate buildings and movement routes in relation to the site's topography to minimise earthworks and complement the landscape character.
17. Arrange development as a series of perimeter blocks, with buildings positioned to face outwards and positively address the surrounding open spaces, streets and footpaths. Private gardens will be located within the centre of the blocks, enclosed by housing.
18. Provide appropriate separation distances between houses. Where separation distances are tight, use careful positioning of buildings and windows to ensure that the expected level of privacy is maintained.
19. Carefully arrange buildings so that they turn corners positively and provide an appropriate level of surveillance and activity to the adjacent public realm. No blank gable ends should face the street.

FIGURE 11: DEVELOPMENT FRAMEWORK



LEGEND

- Site boundary
- Residential
- Open space/parkland
- Highways
- Equipped children's play
- SuDS
- Existing vegetation
- Woodland planting
- Tree planting
- Primary roads
- Existing bridge
- Proposed bridge
- Public footpath
- Public bridleway
- Proposed footway
- Pedestrian link
- Pedestrian/cycle link
- Retained track
- Potential pedestrian link
- Potential pedestrian/cycle link
- Green link
- Improved bus stop
- Existing bus stop
- 50m contour
- Elevated views

SCALE 1:3,000

0m 20 40 60 80 100

5.5 SCALE OF DEVELOPMENT

Development will mainly be 2 storey housing. This is consistent with the typical height of development seen in the surrounding residential areas (See **Photographs to right**). The actual heights of the different house types may vary to soften the roofline and create focal points within the layout (See **Appearance Section**). Occasional 2.5 storey dwellings could be incorporated within the central development areas on the lower slopes to create focal buildings at key nodal spaces, define primary vistas and entrances and add variation to the roofscape.

Along the northern and eastern residential edges, single and/or one and a half storey dwellings may also be used to help soften the impact of development further and create a more varied roofscape. Housing along these edges will also be lower in density with greater gaps between buildings and/or deeper front gardens to allow space for structural landscaping.



INDICATIVE CROSS SECTION A-A' - NORTHERN RESIDENTIAL BOUNDARY (1:500)



INDICATIVE CROSS SECTION B-B' - EASTERN RESIDENTIAL BOUNDARY (1:500)

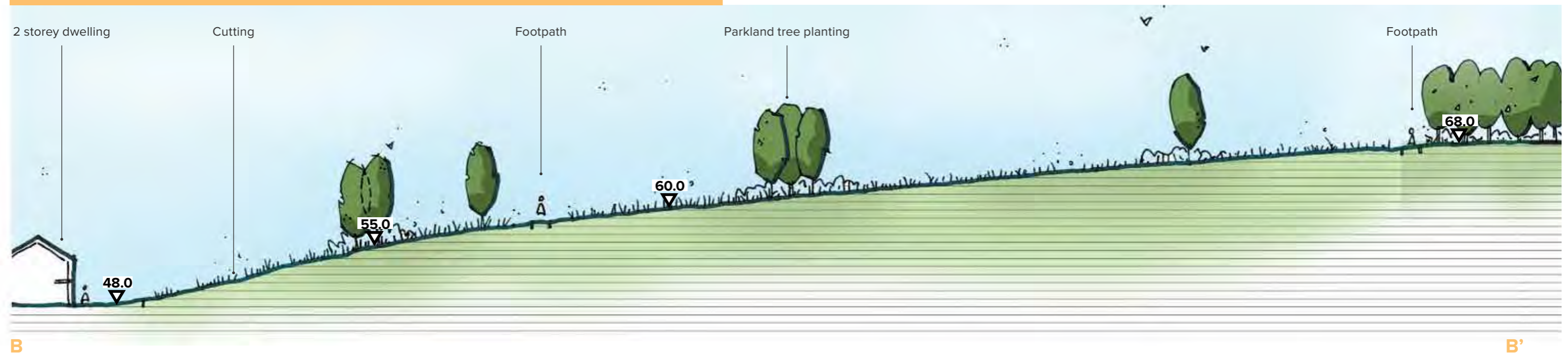


FIGURE 12: INDICATIVE LAYOUT - NORTHERN EDGE



Legend

1. Low density housing fronts onto the Country Park, providing a sympathetic development edge with a range of detached unit types, orientations, set backs and planting within front gardens.
2. Lanes and shared private driveways provide informal access to the properties to minimise the impact on the adjacent open space.
3. A dedicated pedestrian link into the Country Park is provided from the residential area to the north, with carefully designed earthworks to ensure it is accessible for all.
4. Development on the higher slopes is cut into the landscape to minimise the visual impact on the wider landscape and provide suitable gradients to ensure all users can safely and conveniently use the site.
5. The site access road provides an attractive route through the Country Park into the development with at grade crossing points to facilitate pedestrian movement throughout and small clusters of tree planting to complement the parkland character.
6. The 'boulevard' character continues along the primary street providing a sense of formality within the residential area, whilst forming a 'green canopy' to 'break-up' the housing when viewed from the wider landscape.
7. Street trees and/or trees within front gardens create a 'green link' along the route of the former hedgerow corridor with a direct pedestrian link into the open space.
8. Higher density development is situated on the lower ground within the centre of the development.



SCALE 1:1,000

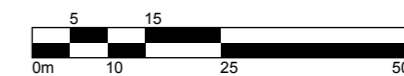
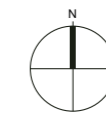


FIGURE 13: INDICATIVE LAYOUT - CENTRAL GREEN CORRIDOR & PRIMARY STREET

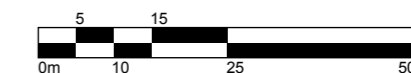


Legend

1. Low density housing fronts onto the Country Park, providing a sympathetic development edge with a range of detached unit types, orientations, set backs and planting within front gardens.
2. Where runs of development are longer and the open space is at grade with the housing edge, lanes provide access to the dwellings maximising permeability between the development and parkland.
3. The existing hedgerow corridor provides a green link through the site connecting the western green corridors, play area and Country Park.
4. A dedicated pedestrian link into the Country Park is provided from the central green corridor, with carefully designed earthworks to ensure it is accessible for all.
5. Development on the higher slopes is cut into the landscape to minimise the visual impact on the wider landscape and provide suitable gradients to ensure all users can safely and conveniently use the site.
6. Development along the primary street is more formal with repeated house types and common set backs.
7. The 'boulevard' character continues along the primary street providing a sense of formality within the residential area, whilst forming a 'green canopy' to 'break-up' the housing when viewed from the wider landscape.
8. A children's play area is located along the green corridor, providing a highly accessible recreational facility close to the residential area and Country Park.



SCALE 1:1,000



5.6 LANDSCAPE PRINCIPLES

Landscape is a reserved matter within the application. However, a number of key principles that relate to the landscape treatment of the proposed development have been identified. These are set out below.

1. Substantial areas of informal parkland to be provided around the north and east of the site as a continuation of the North Brickhill Country Park. The parkland will largely be as meadow grassland with parkland trees, with footpath and cycleway routes which connect onto the local network. Refer to 5.7 and Figure 15 for details.
2. Tree-lined horizon along Graze Hill is retained and reinforced with additional tree planting.
3. Introduction of blocks of woodland to the more open edges of the site.
4. Views to and from the open hillside. The elevated location will provide a vantage position to view over Bedford and the wider landscape to the south, west and north.
5. Green links will be created within the development which retain existing hedgerow and/or are planted with new specimen trees, and will over time combine to help conceal the roofscape.
6. Existing vegetation to boundaries will be retained and supplemented with additional native hedgerow and tree species.
7. Wetland stream corridor with meadow grassland, riparian planting and wetland features.
8. Small groups of trees define the access street into the site to provide a high quality entrance feature and complement the parkland character.
9. Equipped children's play space (LEAP) within the heart of the development.





Elevated vantage position to appreciate the landscape



Natural parkland setting



Woodland matrix tree planting



Specimen parkland tree planting



Natural parkland setting



Species rich meadow grassland



Natural footpath routes



Meandering footpath reaching the upper slopes and Graze Hill

5.7 COUNTRY PARK

As outlined, the Country Park forms an integral part of the Masterplan offering both invaluable leisure opportunities, and ecological benefits.

The concept design proposal seeks to create an informal, natural parkland over which species rich meadow grassland clothes the hillside and lower slopes, with stands and small groups of specimen trees. Species rich meadow grassland is identified as a landscape management guideline within the 'Renhold Clay Farmland' landscape character area¹. As outlined with this report and in the accompanying LVIA, there is no need to cover the hillside with expansive areas of woodland, as development is sensitively located on the lower ground and the hillside contains views from the east. Instead, trees are planted here to provide interest and soften the visual appearance of the proposed roofscape and the wider built up area of Bedford, whilst allowing framed and filtered views over the landscape. The prominent hillside along which Graze Hill follows, provides panoramic views towards Bedford and the countryside to the west and north. The Country Park embraces this and includes a number of locations on the upper reaches of the site to sit, rest and appreciate the landscape.

Informal footpath routes traverse the slopes from the lower development platform level, and are designed to not exceed gradients of 1:20, allowing access for all. The routes cross the parkland and link up with the public rights of way network providing opportunities for wider dog-walking, jogging and leisure walking.

The park also performs an important role in protecting the visual exposure of the proposed development. Woodland tree planting is located along the more exposed edges of the site to the north and south, which will over time close off views from these directions. Tree planting is also proposed alongside Graze Hill which will strengthen the existing tree horizon along this ridge, as experienced from the west and east.

The extensive areas of meadow grassland and native tree planting within the Country Park will result in wildlife improvements across the site. Appropriate low intensive management regimes will be developed in consultation with the The Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire.

¹ Bedford Borough Landscape Character Assessment, 2014

FIGURE 15: COUNTRY PARK



BIODIVERSITY ENHANCEMENT

PARKLAND TREES 

WOODLAND BUFFERS 

MEADOW GRASSLAND 

CONNECTIVITY AND LEISURE

FOOTPATH ROUTES  

VIEWPOINT 

PUBLIC RIGHT OF WAY 

HEALTH AND RECREATION

ACTIVE PLAY 

RAINWATER MANAGEMENT

RAINWATER MANAGEMENT 

LEGEND

-  Site boundary
-  Meadow grassland
-  Native mixed-woodland
-  Specimen tree planting
-  Existing vegetation
-  Proposed footpath
-  Existing public right of way
-  LEAP play area
-  Existing 2m contours

