

6.0 SUSTAINABILITY

SUSTAINABILITY APPROACH

- 6.1.1 Sustainability is a key design aspiration in terms of the physical, economic and social dimensions of the illustrative master plan. The layout of the development, the mix of uses that are proposed, the incorporation of sustainable drainage systems and the enhancement of important natural Site features all form a key part of the master plan design. A connected network of streets, footpaths and cycleways will support sustainable patterns of movement. Provision of local education and community facilities as part of the adjacent wider North West Bicester masterplan will also reduce the need for residents to travel, particularly by car.
- 6.1.2 The North West Bicester SPD (2016) requires new development at North West Bicester to meet the following development requirements in relation to sustainability:
- Development Requirement 2 - To achieve zero carbon emissions; and
 - Development Requirement 3 - To provide additional sustainability, economic or wellbeing benefits (e.g. rainwater harvesting using drainage techniques that increase biodiversity).
- 6.1.3 The development has been designed to accord with the sustainability and energy efficiency aspirations of the Council where deliverable. It is intended that specific building design features should be incorporated to reduce energy demand. These will include both passive measures such as providing passive shading and large south-facing windows, as well as active design measures such as highly efficient boilers, zonal heating controls or high efficiency lighting.
- 6.1.4 Further information is provided in the Sustainability Statement enclosed as part of this application.



7.0 DESIGN GUIDELINES

APPLICATION OF DESIGN GUIDELINES

- 7.1.1 The design guidelines build upon the broad principles set out in earlier parts of this Statement. These guidelines have been influenced by both an analysis of the site and also the wider application of the development principles for the North West Bicester eco-town on adjacent sites.
- 7.1.2 The purpose of design guidelines is to set out clear guidance to designers and developers and to provide a framework within which the District Council will assess Reserved Matters Applications, which will be required to be broadly in accordance with the design guidelines in this Statement.
- 7.1.3 The application of design guidelines on this site will help ensure the town grows and develops cohesively in terms of design quality, sustainability and community.
- 7.1.4 The guidelines focus on securing the basic relationships between buildings and public realm that is necessary to deliver context specific design, provided by the landscape, its history, its relationship with the areas beyond the site and the features that lie within.
- 7.1.5 The guidelines provide precedents for appropriate materials and a colour palette, although does not require a particular architectural style on the basis that this will be addressed by the detailed design and planning processes.
- 7.1.6 Sustainability is a key design and development aspiration in terms of the physical, economic and social dimensions of the development at this site. The layout of this residential development, the incorporation of sustainable drainage systems and the protection of the setting of local heritage assets adjacent to the site all form a key part of the design of the development. A connected network of streets, footpaths and cycleways running through the site will support sustainable patterns of movement. Building in sustainability is an integral part of the development proposals.
- 7.1.7 Guidelines are provided on the following key facets of the development at this site:
- Streets
 - Land Uses
 - Open Space
 - Urban Design
 - Blocks
 - Building Heights
 - Car Parking
 - Boundary Treatment
 - Colour and Material Strategy

STREETS

7.1.8 The disposition of movement routes is based on providing an efficient and integrated movement solution for people travelling by foot, cycle and car, with convenient access to public transport. The street hierarchy sets out the structure of routes of the proposed development and consists of the following types of streets:

- Residential Avenue: a tree-lined street provides the principal movement route through the development.
- Low key access street: these will be designed to accommodate vehicles, pedestrians and cyclists within a shared surface, and will vary in width dependent on location.
- Private drives: in certain locations residential dwellings will have private drives for parking on plot. Private drives will typically be provided in periphery locations with dwellings arranged informally.

7.1.9 The main vehicular access route will be provided via Charlotte Avenue. A new 'leisure' route for pedestrians and cyclists within an attractive landscape setting will be provided in the form of a joint cycleway/footway of at least 4 metres in width, connecting with the adjoining areas of the eco-town.

7.1.10 The street hierarchy is illustrated on Figure 7.1.

Fig 7.1 - Street Hierarchy



Tree-lined Avenue

Building Typologies

Varying building heights of 2½ to 3 storey dwellings both sides of the road to give a sense of enclosure and framing the vista to the church. Dwellings are to be in terraced form to provide a continuous street frontage with a consistent building line.

Set-backs

Dwellings are to be set back 1.5-2m from the back edge of the footpath.

Carriageway

The tree-lined avenue is to have a carriageway width of 5.5m and design speed of 20mph with trees along the carriageway. The carriageway is to be in a finish consistent with the neighbouring sites.

Driveways

No driveway access is allowed over the verge and parking for dwellings facing the verge is to be from the side roads or from the rear.

Footpaths

A footpath width of a minimum of 1.8m is required both sides of the carriageway to be in a finish consistent with neighbouring sites.

Front garden boundary treatments

Generally, brick walls to front boundaries.

Fig 7.2 - Tree-Lined Avenue



Low Key Access Road

Building Typologies

Up to 2 storeys in height for dwellings. Mainly detached or semi-detached with the occasional short terrace of no more than three dwellings to form a broken street frontage linked with garden walls.

Set-backs

Dwelling set-backs generally 2-5m from back edge of the carriageway.

Carriageway

A minimum carriageway width of 4.2m, having a design speed of 15mph. The roads are to be an informal layout with gentle curves forming passing places and areas for informal visitor parking. The carriageway is to be in a finish consistent with the neighbouring sites.

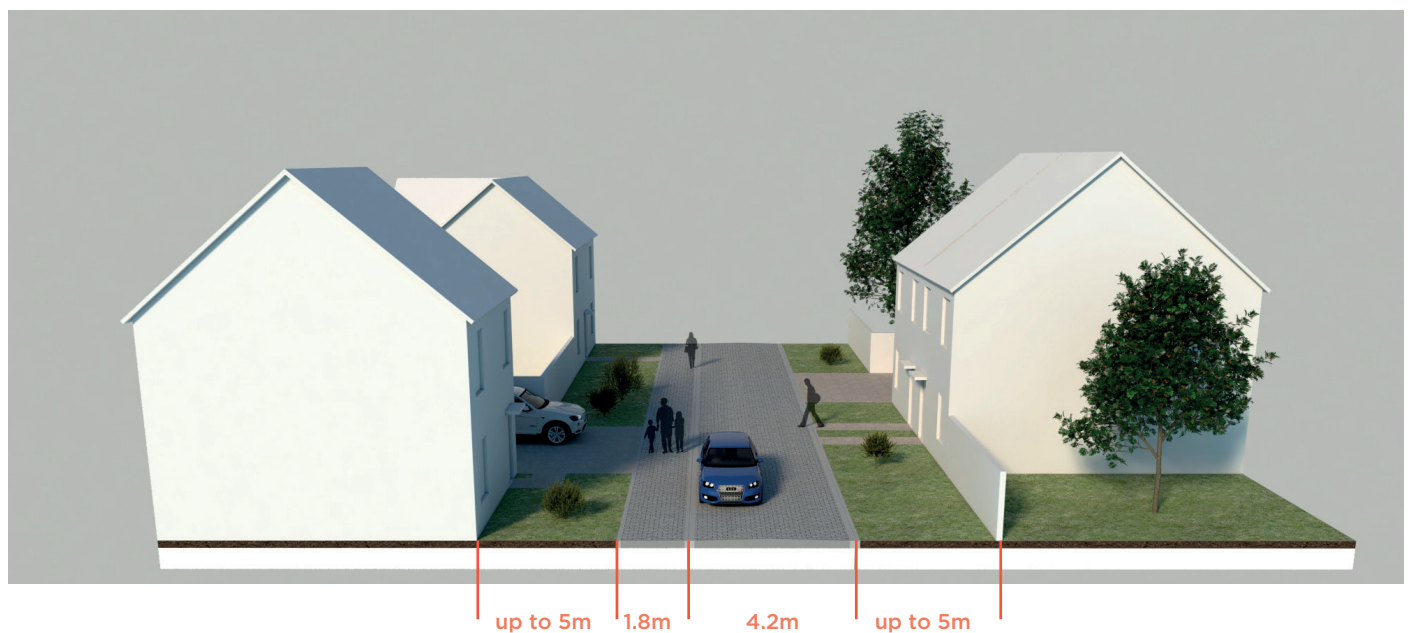
Driveways

Driveway access is to be directly off the carriageway. The maximum width of driveway is to be 6m.

Verges

A 1m wide service strip is to be provided at the edge of the carriageway generally finished in grass. Occasional street trees to be informally arranged. Front garden boundary treatments
Generally clipped hedges set close to the back edge of the carriageway. Garden walls facing the public realm are to be at least 1.5m high brickwork in the same material as the front external wall of the relevant dwelling.

Fig 7.3 - Low Key Access Road



Private Drives

Building Typologies

Up to 2 storey dwellings orientated to face the open space and take advantage of the views towards the Church.

Set-backs

Dwelling set-backs a minimum of 2.5m from the back edge of the carriageway.

Carriageway

A minimum carriageway width of 4.2m, with the private drives served off the turning head of an adopted road. Private drives are to be a maximum length of 40m and serve no more than 5 houses. The layout of the drives is to be informal, with gentle curves that incorporate visitor parking and passing places. The carriageway is to be in a finish consistent with the neighbouring sites.

Driveways

Driveway access is to be directly off the private drive between the detached dwellings. The maximum width of the driveway is to be 6m.

Verges

A minimum 1m wide service strip is to be provided at the edge of the carriageway generally finished in grass. Timber bollards are required to discourage parking on the verges and other open spaces.

Front garden boundary treatments.

Generally, clipped hedges set close to the back edge of the private drive. Garden walls facing the public realm are to be in brick.

Fig 7.4 - Private Drives

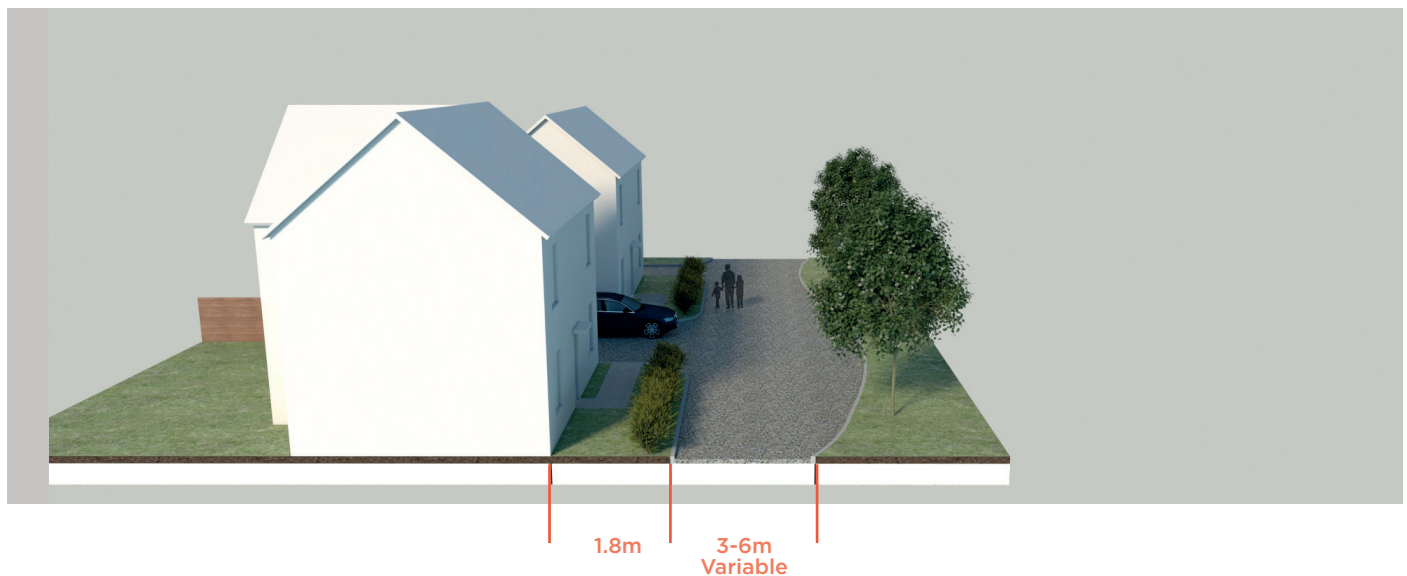
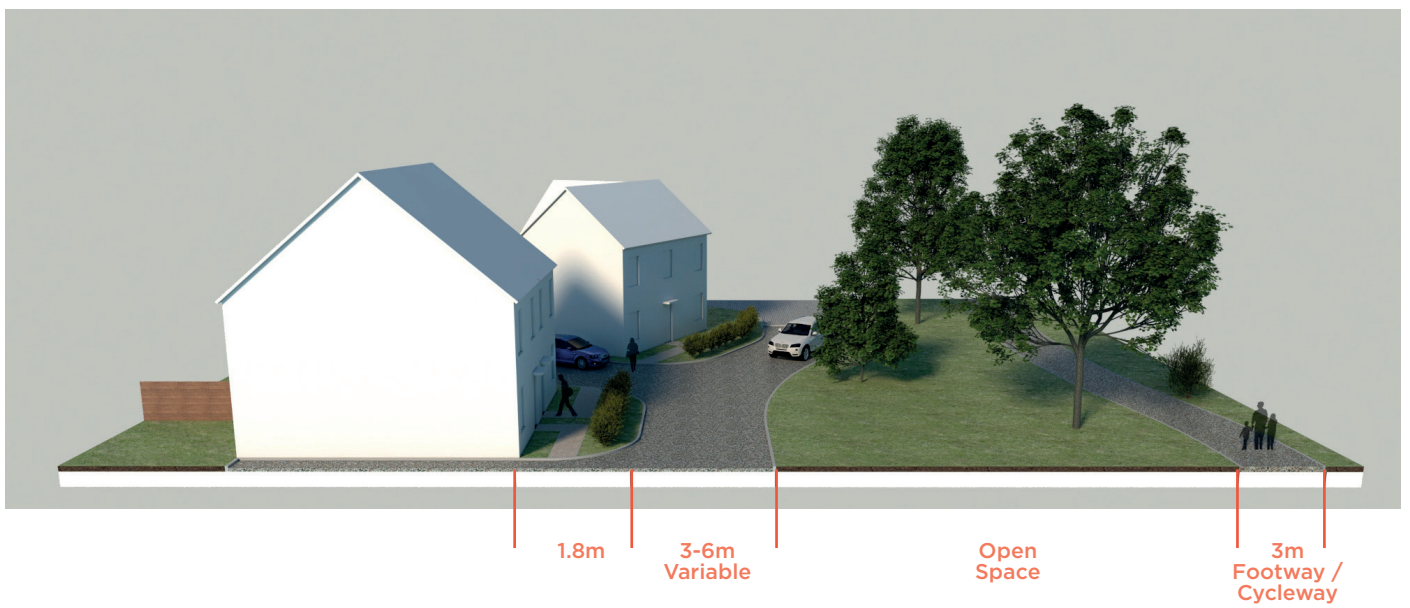


Fig 7.5 - Edge of site overlooking open space



LAND USES

- 7.1.11 Plot SGR 1 will promote a residential development to support the viability of the wider mixed-use development of the North West Bicester eco-town. The residential layout should provide vistas along streets to create visual and functional links with the surrounding green infrastructure and the Church.
- 7.1.12 The land uses for the proposed development are illustrated on the Land Uses Parameter Plan (see Figure 4.1).

OPEN SPACE

- 7.1.13 An area of amenity open space located to the eastern part of the site must incorporate a play area and sustainable drainage and be accessible to all residents.
- 7.1.14 The play area should comprise a LEAP to provide an equipped area of play for children who can go out to play independently. The location of the play area adjacent to the residential area should provide for natural surveillance from adjacent dwellings.
- 7.1.15 A joint cycleway/footway provides a new leisure route for pedestrians and cyclists through the informal green space. This leisure route should connect with the adjoining exemplar site. The indicative location of this route is identified on the Access and Movement Parameter Plan.

- 7.1.16 The landscape should be designed to be productive. Allotments to the northern corner of the site are co-located with a small area of car parking, for use by both users of the allotments and by church parishioners. A community orchard is located to the north-eastern edge of the site in the form of a green corridor adjacent Banbury Road.
- 7.1.17 The south-eastern boundary adjacent to Home Farm will be strengthened by supplementary planting to provide visual screening.
- 7.1.18 An indicative location for an attenuation pond is illustrated in the southern part of the informal green space, to take advantage of the natural drainage points of the site.
- 7.1.19 Due to visual sensitivities associated with the adjacent listed buildings, views of the residential development edge should be softened by hedgerow planting and to help tie the development together with its landscape rather than urban setting. Where landscaping is provided within the highway, appropriate visibility splays must be maintained.
- 7.1.20 The Open Space and Landscaping layout is illustrated at Figure 7.6.