

Chapter 5: Sustainable development

5.0	SUSTAINABLE DEVELOPMENT	
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5.1 ECOHOMES & BREEAM

Developers at Kingsmere will be required to provide homes designed to high sustainability specifications. ***The residential element of the development will achieve 60% Very Good and 40% Good Ecohomes rating as specified in the Section 106 agreement. Affordable housing will achieve Ecohomes standard at least Very Good, equivalent to Code for Sustainable Homes level 3. Developers must identify which plots are Very Good, and which are Good, in Reserved Matters submissions. Developers must demonstrate how they will meet the standards as part of their Reserved Matters submissions.***

Non-residential buildings will be constructed to BREEAM standard of at least Very Good.

The aim at Kingsmere is to achieve a low energy design with a high environmental performance. The assessment method will analyse designs and identify credits across each of the following eight categories:

- Energy
- Transport
- Pollution
- Materials
- Water
- Ecology and land-use
- Health and well-being
- Management

Various sustainable features should be considered for all properties.

The following may be employed:

- Passive ventilation to guard against excessive heat and humidity eg. opening windows
- Passive solar gain by orientation of the dwellings
- Low energy lighting
- Sustainable drainage systems
- Swales to store excess surface water
- Permeable paving and soakaways
- Cycle storage facilities

5.2 IMPLEMENTATION

At Kingsmere the objective is to lower Co2 emissions, and to ensure that the carbon footprint of the project is kept to a minimum.

An information pack will be produced for new residents, giving advice on how to ensure they achieve the optimum from their property with regards to energy consumption, traffic management, and the recycling of waste.

During construction we will also register the development under the Considerate Constructors Scheme (CCS).

Energy

An holistic approach would enable the inclusion of the above measures, whilst average building fabric U values are expected to be better than those in Building Regulations Part L.

Strategies to reduce energy use will be incorporated on site such as:

- Low energy light fittings
- Class 5 boilers in individual dwellings
- Only, A+, A and B rated appliances supplied in dwellings

Transport

In conformity with the Travel Plan Implementation Strategy, approved as part of the outline planning permission, Green Travel Plans will be produced for the site. These will promote walking, cycling and public transport over the use of private cars. Kingsmere is in a highly sustainable location with many community, retail, health, education and employment opportunities within easy reach on foot, by bike or bus.

Bus routes and stops within Kingsmere are shown in figure 3.17 on page 57.

Pollution

Domestic hot water and heating will be generated by high performance gas boilers, which would meet or exceed class 5 emissions under BS EN 297:1994. No materials or products containing HCFCs or CFCs will be used on the scheme. Only products with zero ozone depletion properties would be permitted for inclusion in the scheme.

The surface and foul water drainage strategies are outlined within chapter 3.

Materials

Materials should be carefully selected to achieve the sustainable objectives of the development. Hazardous materials such as asbestos, urea formaldehyde foam and paints with added lead should not be used. Where possible, preservative treatment will be carried out off-site in factory controlled conditions.

Developers will be expected to achieve or exceed Ecohomes or BREEAM targets using traditional materials from the region and sources where economically possible from within a 30-mile radius of the site.

The specification of the building elements and materials during the next stage of design will consider the categories specified in the Green Guide to Housing Specification.

Developers will be required to implement waste reduction techniques. Materials may be recycled with excavated material being separated into sands, gravels, ballast, aggregate and clay for reuse on site.

Water

Developers should provide dual flush WC's and low water use showers. Sustainable drainage systems will ensure surface water is reintroduced immediately back into the groundwater.

Ecology

Developers must have regard to the ecological management and habitat creation strategy, approved pursuant to the section 106 agreement. Kingsmere will be developed in a manner which preserves existing features of ecological value whilst enhancing diversity through the incorporation of new habitats.

Health and well-being

A pre-completion sound testing regime may be used to ensure that Kingsmere meets current building regulation requirements on noise transfer between dwellings. Daylighting is of great importance, and properties will be orientated to maximize this where possible.

Developers, for all parts of the site, will be required to demonstrate how their design solutions have positively engaged with challenging site factors, such as noise, and how their schemes will promote the health and well being of residents or occupiers.

Waste management

Kingsmere will be developed with a Waste Management Strategy which will be in accordance with Site Waste Management Plans which come into force in April 2008. This will drive down waste and starts from the supply chain, through deliveries on site, into waste segregation to ensure that any waste products we have can be recycled where possible.

The waste minimisation strategy should include the following:

- Review design to ensure waste is considered regarding modular sizes etc.
- Use pre-fabricated assemblies where practical
- Re-use materials
- Re-cycle materials
- Waste segregation
- Ensure supply chain is aware of minimal packaging requirements

Secured by design

Particular regard will be given to the need to create a defensible, secure and self-policing development where empty areas are avoided and where buildings, streets and spaces are positively overlooked by residents in adjacent buildings. Public spaces are well defined, used by both pedestrians and vehicles and overlooked by surrounding buildings.

Corner buildings with doors and windows within the gable ends will maintain surveillance to both frontages. Wherever possible housing and other buildings are used to provide a barrier between public space and private back gardens. Footpaths, both public and private, have a clear forward visibility of at least 10 metres

and avoid corners or potential hiding places. The length of all paths to front doors will be minimised and designed to be overlooked by habitable rooms. Light fittings to external areas will be designed to provide adequate and even distribution of lighting levels.

At detailed design stage particular regard will be paid to providing:

- The materials and design of doors, door frames and windows to minimise opportunities to force an entry to the property
- Where upper floor doors and windows are accessible by whatever means, they will comply with the higher security requirements applied to ground floor openings
- Lamp posts to external areas will be unclimbable and any wall mounted fittings out of reach.
- Light fittings will be vandal-resistant.
- ***Consultation with the relevant Architectural Liaison Officer / Crime Prevention Officer must be undertaken and the principles of Secured by Design taken into account in the design of the scheme as outlined above.***
- Developers must demonstrate how they have incorporated Secured by Design principles as part of their Reserved Matters submissions.

Integrated tenure

Kingsmere will be tenure blind with affordable housing forming an integral component of each phase. It is intended that the street scene between affordable and open market housing will blend seamlessly. The elevational treatments and external specifications will be identical to the open market units. Tenure types will be carefully integrated across the scheme to promote a cohesive and balanced community.

Affordable housing areas will be clustered within each phase. Clusters will be of no more than 10 units (where only social rented housing or intermediate rented housing) or 15 units (where shared ownership housing is also provided).

Chapter 6: Delivery & Review

6.0	DELIVERY & REVIEW	
6.1	Phasing	
6.2	Delivery & management	
6.3	Review	

6.1 PHASING

Kingsmere was granted outline planning permission in June 2008 (tbc). Attached to the decision were a number of conditions and a planning obligations agreement. Various triggers are set out in the Section 106 agreement for the provision of strategic road infrastructure, landscaping and open space, and community facilities. The Section 106 also sets out the marketing strategies for the various non-residential uses on the site.

Figure 6.1 shows the progression of the residential element of the development through a logical series of stages.

Figures 6.2 and 6.3 show the phasing of the open space / landscape and highway infrastructure respectively, as determined by the Section 106 agreement. This is mandatory.

Kingsmere is a greenfield site with two existing road frontages and a third perimeter road, which will be built as part of the development. **The first phase of development will be accessed via the new roundabout on Middleton Stoney Road** and comprises the Avenue character area. A second, smaller, access on the same road will enable the first parcel within Pingle Brook character area to be built.

Once these areas are underway **a second front will begin using both the southern and A41 gateways**. This will enable the Primary School to be delivered, and will allow marketing to begin for the employment zone. As part of this second tranche of work the three-armed primary street will be completed creating a connection through the scheme.

The third and fourth phases move eastward through the Urban Village and Pingle Brook character areas. The delivery of the local centre will be governed by demand and the creation of a critical mass of development in Kingsmere. **The community centre will be delivered by the 500th unit.** The final completion of Kingsmere is expected by 2013.

6.2 DELIVERY & MANAGEMENT

Kingsmere will be developed by the lead developer in conjunction with a number of other residential, commercial and specialist developers. Ownership and management will differ between sites and uses but should not be apparent to residents, occupiers or visitors.

The lead developer will provide on site, all:

- **strategic infrastructure;**
- **primary streets;**
- **strategic foul and surface water drainage;**
- **structural landscaping;**
- **informal public open space (excluding LAPs not within open space or structured planting);**
- **greenways and landscaping works to retained public rights of way.**

The school sites will be transferred to the County Council and managed by them as the local education authority.

The Health Village will be developed commercially and could be transferred, in whole or part, to an NHS trust or private health provider.

The employment zone will be divided between the hotel and general employment area. The hotel will be developed for a specific occupier and will be managed by them. The employment space will be developed, owned and managed commercially. The local centre will be developed, owned and managed commercially.

Housing will either be privately owned or owned and managed by a registered social landlord. All public open space, formal sports provision and structural landscaping, including SUDS within open space, throughout Kingsmere will be offered for adoption, management and maintenance to Cherwell District Council.

Highways, including footpaths and SUDS within highways, will be offered for adoption, management and maintenance to Oxfordshire County Council.

Foul sewers will be offered for adoption, management and maintenance to Thames Water. Surface water drainage within the highway areas will be offered for adoption, management and maintenance to Oxfordshire County Council Highways.

Other SUDS and land drainage will be offered for adoption, management and maintenance to Cherwell District Council.

6.3 REVIEW

This Code is sufficiently robust that it could remain unaltered for the life of this project. However, there may be aspects of the Code that require further attention or revision within that period.

There will be an opportunity for the lead developer and / or District Council to request a review of the Code after notification of the 400th occupation. There will be a 28 day period within which each party can make the request. When a request is made the matters to be reviewed must be specified.

If a review occurs it will not cover any aspect of the master plan for which planning approval has been granted, but would focus on matters of detail and interpretation as covered in this document.

The review must be completed within three months of commencement.

Any changes must be agreed between the Council and the lead developer by mutual consent.

Figure 6.1 Phasing Plan.
(Residential and other built form)

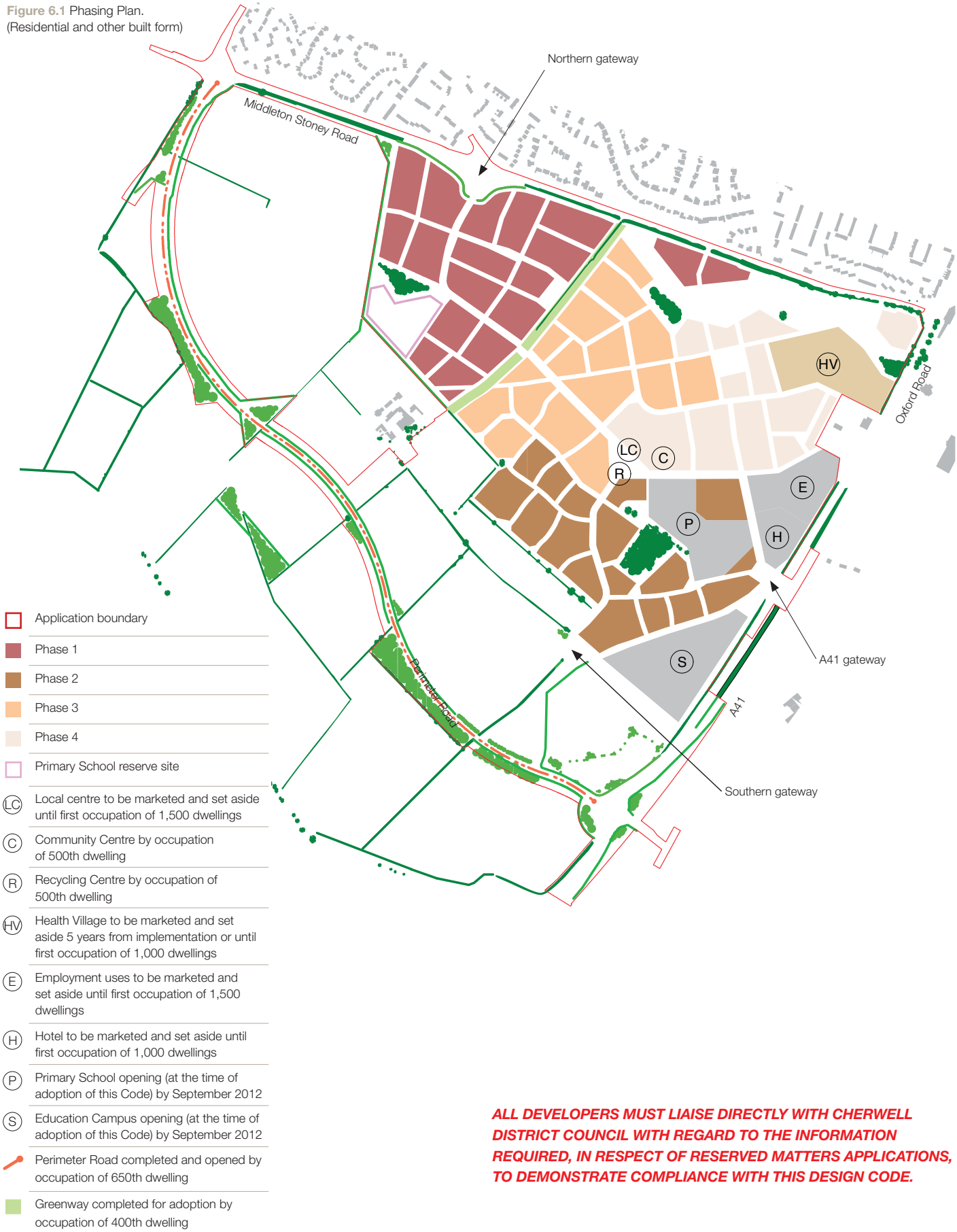


Figure 6.2 Open space and landscape plan.
 (Triggers for open space, play areas,
 structural planting and key highway
 infrastructure)

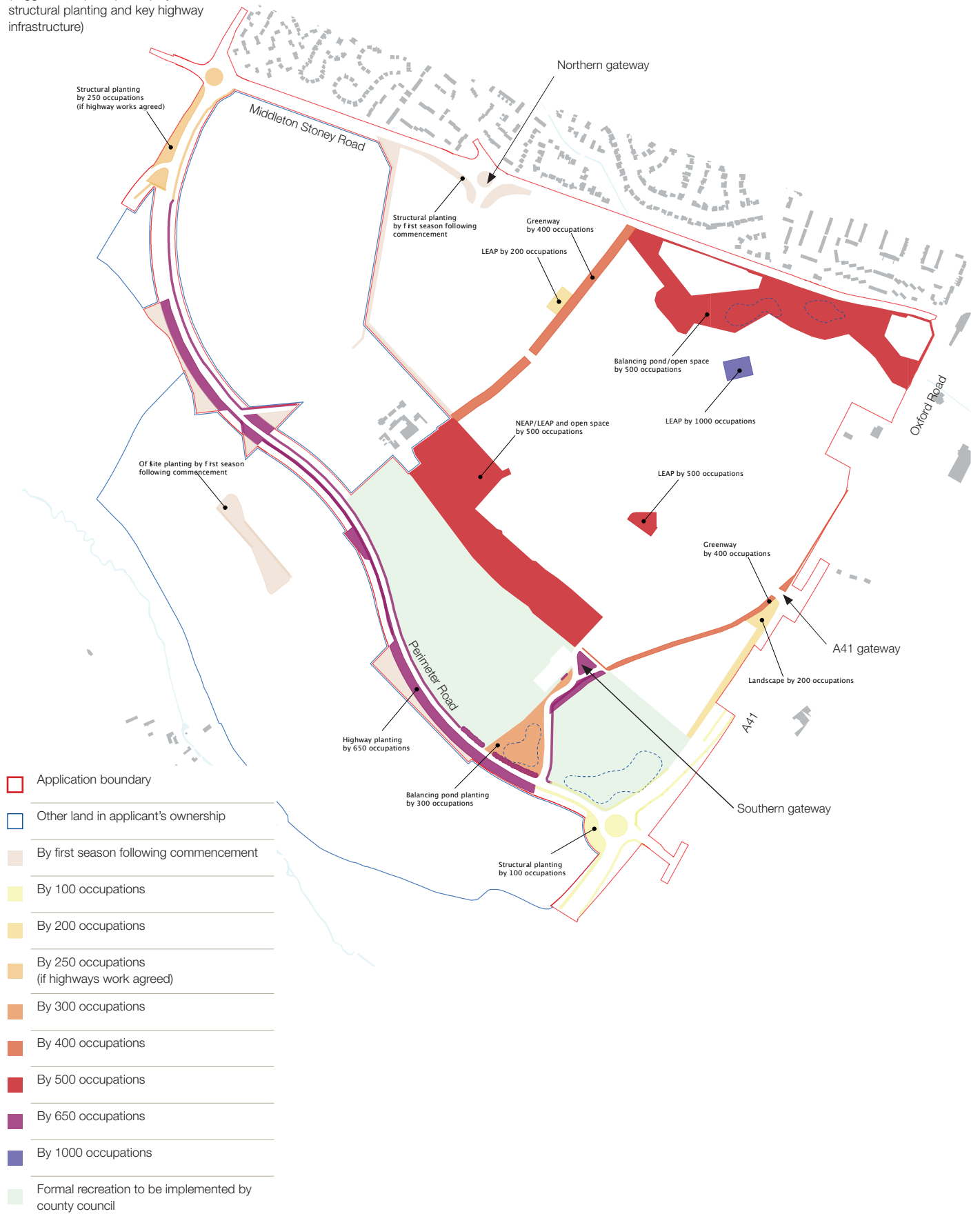


Figure 6.3 Highway plan.

