

Development

Introduction



Bradenham

1. The attractiveness of the Chilterns' landscape is due to its natural, built and cultural environment. It is not a wilderness but countryside adorned by villages, hamlets and scattered buildings. It is surrounded by large towns, though there are few hard urban edges, and is within easy commuting distance of London, all of which increase the pressure for new development. As a result house prices in the Chilterns are amongst the highest in the country and there is a severe shortage of affordable housing.
2. Towns, villages, hamlets and individual buildings all form a vital part of the character of the Chilterns, particularly because of the widespread use of local building materials (bricks, clay tiles and flint) and the locally distinctive architecture. There are also examples of modern interpretations of the local vernacular which sit happily within the AONB. However, new development, both within the AONB and its setting, should conserve and enhance the natural beauty of the area. There may be instances where architect or design panels could be usefully employed.
3. The Chilterns is very accessible due to the number of roads, railway lines and waterways running through it. Major transport routes link the Chilterns to London and other major cities and towns. With the exception of a single road (the modern successor to the Icknield Way) which follows the foot of the escarpment, very few transport links run south west to north east. The network of ancient routes, railways and canals has added

to the cultural heritage of the Chilterns, but more recent works have often had a negative impact on the landscape.

4. The continued pressures for new development, particularly housing, create demand for aggregates and other minerals for construction. Historically, large quantities of chalk were extracted to manufacture cement, but these quarries are now largely redundant. Two relatively small brick-making enterprises survive using local clay.
5. Local communities generate considerable quantities of waste. This should generally be dealt with in close proximity to where it is produced. However, redundant quarries are not suitable for land filling and, other than on a small and local scale, it is unlikely that there will be suitable sites for new energy from waste plants. County councils and unitary authorities are responsible for waste recovery provision, disposal capacity, quarry reclamation and energy from waste and reference should be made to relevant minerals and waste local plans and core strategies when appropriate.

Broad Aims

- **Ensure that development conserves and enhances the special qualities and characteristics of the Chilterns.**
- **Ensure the distinctive character of the built and natural environment of the Chilterns is improved, especially where it is degraded or subject to any negative impacts of development.**
- **Ensure that local authority development plans, as they affect the AONB, are compatible with the purposes of AONB designation.**

Special Qualities

1. The attractiveness of the Chilterns' landscape is partly due to its settlements and buildings.
2. There are many attractive villages such as Ewelme, Turville, Hambleden and Aldbury which are popular places to live in and visit.
3. The Chilterns has a distinctive vernacular architecture based on the use of local brick, clay roof tiles and flint. Despite this, other architectural styles ('Metroland' for example) have also had an important influence
4. There are many notable individual buildings and follies including stately homes, monuments, mausoleums and windmills. They provide interest in the landscape and support the tourist industry.
5. There is a wealth of medieval churches, many built from flint.
6. There is a strong link between the management of the countryside and the character of old and new development. The vernacular architecture, as so often, was based almost entirely on the use of locally available materials. In the Chilterns this included clay to make bricks and roof tiles, timber, chalk for mortar and flints from fields and quarries. All these materials remain available for new development.
7. Many buildings are of historical importance either in their own right or because of the people with which they are connected.
8. The ancient lanes, canals and railways (including significant Brunel bridges) are important parts of the landscape.

Key Issues

1. The Chilterns and surrounding areas are under considerable pressure to accommodate significant numbers of new houses as well as other forms of development.
2. There is continuing pressure to locate large scale developments in the AONB or its setting. Assessment of the impact of these proposals needs to accord with national policy as set out in the National Planning Policy Framework (paragraphs 113, 115 and 116)¹.
3. The retention of open space and the need to try and restrict the scale of new development are key to conserving the natural beauty of the AONB. Equally, the provision of new green infrastructure (GI) may help alleviate some of the pressures from existing development.
4. New development of all types needs to respect vernacular architecture, settlement character and the local landscape. This will require developers to do more than try to use standard designs. The Board has published guidance on design and the use of building materials and encourages the preparation of Landscape and Visual Impact Assessments where appropriate.
5. There is a need for active promotion of environmentally sensitive construction methods and the necessary skills, particularly in the use of locally produced building materials.
6. All new development needs to accord with the highest environmental standards to minimise impact on the environment and help mitigate the causes of climate change. This means maximising energy efficiency and minimising water use (by the inclusion of rainwater harvesting or grey water recycling for example). In order to help avoid flooding and to encourage aquifer recharge sustainable drainage systems should be encouraged.
7. There is a need for the design of new buildings to show adaptation to climate change, for example to ensure buildings remain cool in the summer without using air conditioning.
8. Society must seek ways of reducing its demand for energy (switching off streetlights is one of many) and reduce its dependency upon fossil fuels by switching to renewable energy sources. The options include solar, wood fuel, ground source, hydro and wind, all of which have some potential in the Chilterns. It is the prospect of wind turbines which would be most controversial. It is highly unlikely that large-scale wind turbines would be appropriate because of the relative lack of wind and the visual intrusion, especially along the ridge of the escarpment but also when located outside the AONB within its setting. However, there is scope for installation of smaller domestic-scale turbines in less intrusive locations where there are suitable wind speeds. The use of wood fuel would be the preferred option because of the extent of the woodland resource which is currently under-utilised.
9. There is a need for a better understanding and awareness of what contributes to local distinctiveness, especially amongst those groups who propose, design and approve new development.
10. In some places the attractiveness of the landscape is diminished by degraded sites, unattractive buildings and other structures and their use. The challenge is to remove, screen or mitigate the visual intrusion.
11. There is an increasing need to guide developments and activities which are exempt from normal planning controls in order to ensure that the cumulative impacts of clutter and inappropriately designed buildings do not lead to further problems of urbanisation.

¹ *National Planning Policy Framework (Department for Communities and Local Government, March 2012)*

12. The physical impact of transport infrastructure and its use have major environmental impacts. Any assessment of the environmental damage or benefits needs to be given greater weight. This includes ensuring that the design, use and management of transport infrastructure, including maintenance and small works, do not damage environmental quality. The impacts of new schemes and expansion of existing facilities will need very careful consideration to ensure the conservation and enhancement of the natural beauty of the AONB. Roads should be constructed and surfaced to minimise noise pollution, a particular problem along the motorways (M40, M25 and M1) and trunk roads. The Board and highway authorities have published the Environmental Guidelines for the Management of Highways in the Chilterns² which, amongst many issues, seeks reductions in road side clutter and light pollution.

13. The small number of active and redundant quarries within the AONB and its setting require long term plans to be in place once quarrying has ceased. It will be vital to maintain the environmental qualities they now have (e.g. Chinnor Quarry is a geological SSSI). It is unlikely that landfill would be an acceptable use.

14. The Chilterns is a wealthy area and produces a significant amount of waste per capita. It is unacceptable to send waste out of the area in which it was generated. In future, efforts must concentrate on minimising waste and dealing with it in close proximity to where it is produced. The option of energy from waste will no doubt continue to be investigated. The choice of suitable sites will be contentious. It is unlikely that large scale plants could be accommodated within the Chilterns AONB without unacceptable environmental impacts.

*Horseshoe Hill House
near Wooburn, winner
of the 2012 Chilterns
Buildings Design Awards*



² See www.chilternsaonb.org/board-publications

Policies

D1 The natural beauty of the Chilterns AONB should be conserved and enhanced by encouraging the highest design standards, reinforcing local distinctiveness and respecting the landscape, settlement character and special qualities of the AONB.

The design and location of new development and the extensive use of standardised, suburban designs and non-local materials has in the past resulted in many villages losing some of their special and distinctive character.

There is a need for a greater understanding of the factors that contribute to the visual harmony between built development and the landscape, and to local distinctiveness and the sense of place, so that these qualities can be conserved and enhanced through sensitive and imaginative design, and the character of existing settlements can be positively improved where appropriate.

It is the role of the Local Planning Authorities to firmly apply policies which safeguard the AONB from further detrimental change, while accommodating the small-scale development necessary for the continued economic and social well-being of Chiltern communities.

D2 High standards of development which respect vernacular architectural styles and demonstrate appropriate best practice in the use of traditional materials (flint, brick, roofing materials and timber) should be promoted.

Buildings design guidance can help inform those involved in decision-making as well as helping landowners, developers, designers and local communities to plan for and control change in an appropriate way. The Board has published the Chilterns Buildings Design Guide and Supplementary

Technical Notes on Chilterns building materials³. The Design Guide now addresses additional issues such as climate change, energy and water efficiency, renewable energy, and the development of new agricultural and other rural employment buildings.

When endorsed by the Local Planning Authorities the Design Guide should be taken account of as a significant material consideration in determining planning applications. The Design Guide has also aimed to reduce the impact of some of the works which are 'Permitted Development' and do not require planning permission. If carried out unsympathetically these developments can contribute to the increasing 'suburbanisation' of the countryside.

D3 The sustainable use of local natural resources (timber, clay and flint) for local building purposes should be supported by seeking their use in new developments.

Bricks, tiles and flint are still commonly used in new developments. Local clay is still used for brick making by the remaining local brickworks. The development of other small workings may be possible which would serve a useful purpose by providing a source of locally-made materials for use in the area, ensuring compatibility with the materials traditionally used. Another source of locally produced building materials are the Totternhoe Clunch pits. They are only opened occasionally to provide material for historic building restoration. Although small-scale these activities also provide local employment opportunities.

The Conservation Board actively promotes environmentally sensitive construction methods (primarily the use of locally-produced building materials and lime mortar) through the production and use of its Supplementary Technical Notes on Chilterns building materials – flint, brick and roofing materials (clay tiles in particular).

³ See www.chilternsaonb.org/buildings-design-guidance

When responding to relevant planning applications the Board will seek the use of local building materials because of the positive impacts that their use would have on the landscape and environment. Developments should conserve or enhance the natural beauty of the AONB and planning applications should comply with the Chilterns Buildings Design Guide and Supplementary Technical Notes.

D4 The retention of the local brick-making industry should be supported by seeking the use of locally-made bricks in new developments, consistent with the principles of environmental sustainability and the Chilterns Buildings Design Guide and related Supplementary Technical Notes⁴.

Within the Chilterns there are two remaining brick-makers. They are small in scale and make high quality bricks in traditional ways. The support for the use of such local materials in sensitive ways will not only help to ensure a continued supply of high quality, traditional building materials, but will also help developments to have limited impacts whilst contributing to local distinctiveness. If used locally such building materials will have travelled a limited distance and will emit lower levels of CO₂ in their transport comparative to other materials.

D5 Appropriate development (especially affordable housing) should be encouraged, particularly on previously developed land, if it will improve the economic, social and environmental well-being of the area whilst having regard to the special qualities of the AONB.

Sustainable development involves meeting current needs without compromising the ability of future generations to meet theirs. This entails accommodating change whilst maintaining and, wherever possible, enhancing the quality of the

environment for all. There will also be a need to meet the economic and social needs of the people who live and work in the Chilterns. Improvement of the economic, social and environmental well-being of the area might be achieved through:

- the delivery of affordable housing for local needs (including key workers and those in agriculture);
- improved employment opportunities;
- maintaining the viability of the rural economy;
- addressing the general decline in, and improved access to, key rural services, and
- open space, GI provision and biodiversity enhancements.

D6 Where new housing development is proposed this should only be permitted if its scale, massing and density reflect the local context and have regard to the special qualities of the AONB.

The Board will generally support the provision of smaller residential schemes that lead to the provision of affordable and local needs housing. All housing schemes should be sustainably located and should take particular account of the settlement's and site's contexts and should reflect densities that are prevalent locally. The operation of nationally agreed minimum densities is not always appropriate and in order to deliver wider benefits and the conservation of the special qualities of the AONB it may be better to operate to lower, maximum, density levels.

⁴ See www.chilternsaonb.org/buildings-design-guidance

D7 The retention of agricultural buildings for rural enterprise should be encouraged.

In the past numerous agricultural buildings have become redundant and been converted. In many cases the conversion has been to a residential unit, thus these buildings have been lost from productive use. This has been recognised and it is considered desirable to try and ensure the retention of current agricultural buildings for productive uses, particularly if they are no longer suitable for their current use. Retention of such buildings should help in fostering the economic and social well-being of communities within the AONB. Pressure on this finite resource has increased due to changes in the Permitted Development Rights regime that would allow certain changes to take place without the need for planning permission.

D8 The retention or creation, and long term maintenance, of green infrastructure should be sought when development is proposed in, or adjacent to the AONB.

With significant pressure for housing and employment growth there will be a need to provide green open space (often via developer contributions) in the form of GI (which can take many forms⁵ and have multi-functional benefits for biodiversity, landscape, access and in contributing to sustainable drainage), provided this does not conflict with the purposes of the AONB's designation. In addition, the enhancement or expansion of existing GI resources may help the area cope with pressures from existing development. For new developments that are on the edge of the AONB, there will also be opportunities to improve degraded landscapes and access to the countryside, to improve connectivity of habitats and to try and lessen the impact of development on the setting of the AONB. This may be brought about, if very carefully controlled, through biodiversity offsetting on appropriate sites.

⁵ See glossary

D9 Full account should be taken of the likely impacts of developments on the setting of the AONB.

There is increasing pressure for both large- and small-scale development within the setting of the AONB. Greater appreciation is required of what the likely impacts may be of such development, particularly as the views both out of and back to the AONB are fundamental to the enjoyment of the AONB itself. Similarly, more account needs to be taken of such impacts, and to this end the Board has prepared a position statement on this matter⁶ and encourages the preparation of landscape and visual impact assessments where appropriate.

D10 A reduction in the damaging impacts of utilities and other infrastructure should be sought.

Many telecommunications masts were sited within the AONB in the past resulting in damaging landscape impacts. There has been a slowdown in the roll out of new systems which has meant that there are fewer applications for new masts, though with a desire for more rapid roll out of high speed broadband this may change. Other infrastructure can include overhead electricity lines, associated poles or pylons and ancillary buildings, wind turbines and underground utilities.

A reduction in the damaging impacts may be achieved by the removal of redundant masts, the better design and siting of new masts and other equipment through the application of guidance, the removal of overhead electricity lines and associated poles or pylons, appropriate location and siting of new wind turbines and better landscape treatment of any works associated with any changes to underground utilities.

⁶ See www.chilternsaonb.org/position-statements

D11 Enhancement of the landscape of the AONB should be sought by the removal or mitigation of intrusive developments.

There is a need to ensure that all developments conserve and enhance the natural beauty of the AONB. Actions to improve the quality of the AONB landscape, particularly where it is eroded, should be promoted where possible. This would be particularly valuable in the following contexts:

- around the fringes of urban areas, to soften the often harsh edge of new residential and other developments;
- in locations where it helps to screen or integrate unsightly buildings or structures;
- in strategic locations where it could help to reduce the visibility of intrusive infrastructure, and
- where it would result in the removal or enhancement of unsightly buildings or other eyesores.

Encouragement should also be given to the replacement or improvement of elements which detract from visual harmony, including: domestic features such as inappropriate urban styles of fencing and clutter (such as washing lines and children's play equipment); street and other forms of lighting that lead to light pollution, as well as overhead electricity lines. The cumulative impacts arising from such detracting elements should also be taken account of. Guidance on some of these issues is given in the Chilterns Buildings Design Guide⁷.

D12 Developments should be sought that represent the highest environmental and design standards whilst complementing the character of the AONB.

Developments within the AONB and its setting should achieve the purpose of conserving and enhancing the natural beauty of the AONB, whilst being undertaken to the highest standards. The Board will work with others to promote measures which will help people and buildings to adapt to climate change, subject to the overriding consideration of the need to be compatible with the character of the built and natural environment. Some of the measures that will be considered include: a greater understanding of the embedded energy in any development; the increased use of local building materials; water and energy efficiency; the way that buildings are orientated, and allowing for more comfortable living conditions with increased summer shading.

Flooding is increasingly becoming an issue. In order to try and alleviate this problem, as well as to encourage aquifer recharge, sustainable drainage systems should be incorporated in the design of new development. This may be achieved by requiring the provision of sustainable drainage systems through local plan policies. If well-designed these can also benefit biodiversity. When considering developments in proximity to rivers, local planning authorities should also give due regard to any impacts on the rivers and their riparian ecology.

Various ways of decreasing water usage could be implemented. These include rainwater harvesting, the incorporation of grey water recycling and the installation of water meters in new developments.

⁷ See www.chilternsaonb.org/buildings-design-guidance

D13 The use of renewable energy (particularly wood fuel, solar, hydro-power and ground source heat pumps) should be encouraged in appropriate locations.

There may be pressure for the development of wind power in the Chilterns in the future, and full account should be taken of the potential impacts on the landscape, including the setting of the AONB. Other renewable energy forms that may be developed include solar (hot water and photovoltaics), small-scale hydro schemes and waste from woodland management and timber production. Solar power and ground source heat pumps are more likely to be installed at the domestic-scale and there may be some supply from community based hydro-electric schemes. The use of locally sourced woodfuel from existing woodland could support both domestic-scale and community-based combined heat and power schemes. Encouragement will be given for many of the renewable energy technologies in appropriate locations and in accordance with the Board's Position Statement on Renewable Energy⁸. However, particular care will be needed in order to ensure that the significance of heritage assets is not adversely affected.

D14 The special qualities of the Chilterns should be conserved and enhanced by reducing the noise and other detrimental impacts on tranquillity generated by the development and operation of transport networks and services and other infrastructure.

The tranquillity of the Chilterns AONB is one of the special qualities of the area that attracts many of the tens of thousands of visitors that come each year. This tranquillity is often ruined by the noise and activity associated with the development and operation of some of the numerous transport networks (road, rail and air principally) that run through, near or over the AONB. There are also other infrastructure networks (electricity generation and distribution for example) that cut across the AONB.

Growth in air traffic is continuing and expansion plans for major airports would exacerbate this. Significant numbers of passengers arrive at airports by car and there will therefore need to be much greater provision of public transport in order to allow modal shift. Any proposals to alter flight paths in order to allow more aircraft to fly over the AONB will be strongly opposed and the Board will seek changes to take air traffic away from the AONB.

The detrimental impacts of the networks and other infrastructure can be reduced by various means which may include: using low-noise road surfacing; switching off street lights; providing suitable mitigation measures (appropriate planting or the undergrounding of overhead power lines and removal of poles or pylons for example), and giving greater consideration to the number, direction and height of flight paths associated with airports.

D15 A reduction in the number and frequency of night flights over the AONB and a reconsideration of night flight policies, particularly at Luton Airport, should be sought.

One of the greatest impacts on the tranquillity of the AONB arises from the number and frequency of flights over the area. Many of these occur during the night, though significant impacts also occur at the beginning and end of the night period when people are either trying to go to sleep or close to waking up. Most airports have strictly controlled night flight policies which seek to reduce such impacts on people living close to an airport or below flight paths. However, Luton Airport does not currently have such policies in place and changes will therefore be sought.

⁸ See www.chilternsaonb.org/position-statements

D16 The environmental impacts on the Chilterns (including those arising from through traffic) of quarrying and the operation of landfill sites and other waste management facilities within and adjacent to the AONB should be minimised.

There are few active chalk quarries left within or near the AONB and any landfill operations associated with redundant workings will need to be very closely monitored and managed. Workings for aggregates are generally nearby rather than within the Chilterns AONB. However, deposits in the Thames Valley are known to extend into the AONB. Development pressures will maintain demand for aggregates. The Board will resist proposals for quarrying within the AONB due to the damaging impacts of both extraction and the through traffic associated with transportation.

Of equal concern are the impacts that might arise from the development and operation of other waste management facilities such as energy from waste plants, household waste recycling sites and anaerobic digestion plants.

D17 Whilst conserving and enhancing their biodiversity, geological and archaeological features, the restoration and management of redundant quarries, and their assimilation back into the landscape, should be promoted.

Large chalk quarries had a dramatic impact on the landscape, although only Kensworth in Central Bedfordshire is still active. Any restoration and management plans should ensure that any environmental qualities (including geological or archaeological remains) are maintained, protected and interpreted. In such cases landfill proposals are unlikely to be appropriate. Should landfilling take place in the future in smaller sites, only inert waste should be used and restoration of the site back into the landscape should be achieved using appropriate contouring whilst encouraging biodiversity.

Some quarries may be suitable for the development of both passive and active recreational facilities in conjunction with low-key associated infrastructure (informal car parks, picnic areas and nature trails for example). The development of wildlife habitats, where natural re-vegetation has occurred or wet areas remain, will be encouraged.

D18 The reduction of waste should be promoted by supporting policies which result in re-use, reduction and recycling of waste materials.

In the future there is going to be a greater focus upon 'sustainable waste management.' This will involve moving away from the landfilling of waste. Other methods of waste management may result in demand for sites for waste reduction, waste transfer or energy from waste plants which are likely to prove difficult to accommodate in the AONB. It will be important to ensure that any waste facilities are sensitively sited and located to avoid detrimental impacts on the landscape or settlement character and to avoid disturbance to local amenity.