











Cannock Chase AONB Highway Design Guide

May 2005

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Creative Re-use of Land and Buildings

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References

Conservation within the Highway: Structures of Historic Importance, Staffs CC Development Services Directorate Guidance Note, May2004.

Executive Summary

An important part of the remit of an Area of Outstanding Natural Beauty is to conserve and enhance the natural beauty of the area. High volumes of motor traffic on minor roads, and inappropriately high speeds can detract from the enjoyment of the area, and in the worst cases lead to death and injury to humans and wildlife. The response to increases in accidents, traffic speeds and volumes is usually to introduce more signs, streetlights, kerbs, speed cameras and other paraphernalia in an attempt to modify driver behaviour. However, in sensitive, attractive rural environments, these items are often intrusive and detract from the visual amenity of the landscape. Furthermore, the standardisation of roadside features can create an anonymous streetscape that is devoid of any 'sense of place'. This design guide aims to illustrate the potential to reconcile the duties of the highway authority to create a safe and efficient highway network and the requirement of the AONB to ensure that the natural beauty of the area is conserved in all parts of the AONB including the highways.

The design guide examines some of the key themes that should be taken into consideration when making alterations to the highways and related infrastructure within the Cannock Chase AONB.

The first part of the guidance identifies the key elements of the local area, the landscape and the highway environment that contribute to 'Local distinctiveness', and takes the reader on a 'contextual journey' along some of the key roads within the AONB, passing through the many different landscapes.

The latter part of the guidance looks at individual elements of highway infrastructure and makes recommendations of how best to deal with these in the different circumstances that are common within the AONB.

Technical guidance on the application of road signs and markings, and sources of further information are included as an Appendix.

Key themes that are highlighted in the guidance include:

- The need to develop and promote a common approach to marking the boundaries of the AONB within the highway;
- The need to recognise and promote the individual physical and cultural elements that contribute to the identity
 of parts of the AONB on place name signs within the highway while at the same time promoting a core AONB
 identity as above;
- The need to reduce sign-clutter and avoid duplication and repetition of signs;
- The need to manage verges and other roadside features in a way that is sympathetic to the immediate local environment:
- The need to retain and enhance historic roadside features and views;
- The need to manage motor vehicle access, egress and movement within the AONB by using a clear signage strategy to guide visitors along certain routes to the key visitor attractions, supplemented by information available from the visitor centres;
- The need to reconsider the approach to road safety by removing lines and warning signs on minor roads.

In time, an inventory will be undertaken in order to identify locations where measures are required to improve the roadside environment and to identify exactly what improvements are feasible. A management guide will also be developed to give clear information on how best to develop and maintain the highways in the future.

1. Introduction

Arup and Latham Architects were appointed to produce a design guide for highways within the Cannock Chase Area of Outstanding Natural Beauty (AONB). The purpose of the guidance is to assist the AONB partners in developing appropriate treatments for traffic management within this designated area, and to use the roadside environment to promote public awareness of the AONB. Highways within the AONB are the responsibility of Staffordshire County Council. The County Council, along with the Forestry Commission are also major landowners with responsibilities for managing some of the land adjacent to the highway boundary.

Consultations at both a national¹ and local level² have revealed that there is a great deal of public concern about traffic speeds and volumes within rural areas. However, there is an equal concern that measures to control traffic and to protect walkers, cyclists and equestrians do not create obtrusive or inappropriate urban features within the countryside. There is a desire among the public and the AONB management that roadside features should 'look like they belong' and contribute to the sense of place rather than detract from it.

Some roads within Cannock Chase AONB are used by through traffic, while others are primarily used as access roads for destinations within the AONB. This guidance recognises that the speed and volume of traffic, together with the journey purpose, as well as site specific factors, will influence the design and arrangement of highway infrastructure.

Within the AONB. the Countryside and Rights of Way Act 2000 requires highway authorities to fulfil their duty (as a 'relevant authority') under Section 85 of the Act to conserve and enhance the natural beauty of the area.

Almost all visitors to the area arrive by road, and therefore the roadside environment is important as the initial point of contact between the public and the AONB. Another function of signage within the AONB is therefore to raise public awareness that they are entering a designated area. Concerns have been expressed by some that signposting from external roads may create an unwelcome influx of car-borne visitors and encourage more and longer car journeys. There is however, a desire to offer some consistency in the style of destination signage used within the AONB and at entry points to reinforce the identity of the area.

Subject to funding, further work will be undertaken in the future to develop Guidance for the Management and Maintenance of Roads within the AONB and a Strategy for Implementation of the recommendations within this guidance.

(Footnotes)

- ¹ New Directions in Speed Management: a review of Policy, DETR, 2000
- ² Staffordshire Local Transport Plan









2. Aims of the Guidance

The guidance aims to assist the AONB partners in the following ways:

- By illustrating current practice within the AONB and suggesting improvements;
- By illustrating examples of how similar issues have been tackled elsewhere;
- By offering suggestions about procedures and management issues that may need to be addressed to ensure that the guidelines are applied;
- By offering (as an Appendix) a brief summary of the technical and legal basis of signs and markings and sources of detailed guidance.









3. Landscape Quality

The primary purpose of AONB designation is the conservation of natural beauty, wildlife and cultural heritage, an idea enshrined in the National Parks and Access to the Countryside Act of 1949. This distinguishes them from the wilder more dramatic landscapes of the National Parks where the objectives of outdoor recreation, and the understanding and enjoyment of the public are equally as important.

Cannock Chase was one of the first in the country to be designated as an AONB in 1958. This reflected Cannock Chases' intrinsic beauty of diverse landscape, its social history and its inherent wildlife. This AONB with an area of just 68 square kilometres is the smallest of these designated Areas of Outstanding Natural Beauty and is situated in the northern part of the West Midlands. Within the AONB there are areas recognised by English Nature as Sites of Special Scientific Interest (SSSI) which are designated as important wildlife habitats. In 2001 1237ha of the SSSI was designated a candidate as a Special Area for Conservation (SAC) under the European Habitats Directive.

Every landscape has its own definable character, a distinct, recognisable and consistent pattern of elements in the landscape (i.e. trees, hedges, field systems, buildings, road treatments etc.) that makes one landscape different from another. Shaped by natural and cultural forces over many millions of years, but never more so than in the last 200 years.

The appearance of the environment we have inherited represents the interplay between natural forces and human activity that have collectively contributed to what is known as local distinctiveness. Human activity and human default mean that, to some extent the landscape is always changing as it has done in the past and will continue to do so. Thus, there is a need to understand and document the special qualities that exist within the Cannock Chase AONB so traditions, customs and links to the past are not lost.

The highways are, and have always been fundamental in communications; it therefore makes sense to promote the intrinsic 'sense of place' that exists within Cannock Chase along the hierarchy of routes and tourist destinations. Bespoke signage and street furniture that is specifically designed can reinforce local distinctiveness whilst creating a safe and legible environment for all users.

Cannock Chase is unusual in that although the topography is varied many of the highways cut straight through the land creating long fast roads with open views. This atmosphere is very different compared to The New Forest or The Forest of Dean that where roads wind around hillsides creating a more intimate and confined environment.



Pine trees



Manmade lakes



Brindley Bottom



Old oak on edge of heathland

Along the highways there exists a variety of edge treatments, grass, stone setts, walls, hedges and boundary treatments that in turn reflect the landscape character, for example the coniferous plantations, broadleaf woodlands, cultivated farmland and the open Heathland.

The first part of the Design Guide will bring together both historical and existing research that relates to the character of Cannock Chase. The study will incorporate brief synopses of previous assessments that relate to landscape character both natural and cultural and how they can be used to inform and enhance the 'sense of place' within the Chase. A site survey of the road side environment will be carried out to log existing information on views, flora, fauna and agriculture and other landuses as well as elements of the built environment such as walls, fences, vernacular architecture and street furniture that all contribute to local distinctiveness as viewed from the highway.

This information will suggest emergent themes to be exploited for the appropriate design of signage for greater legibility and safety, street furniture, kiosks, bus shelters and public art, whilst reinforcing the distinct character of Cannock Chase AONB. It must be noted that like many other AONB's Cannock Chase contains a variety of landscape characters and recognising and preserving this diversity is also an essential part of understanding and creating a true sense of place



A513 used for commuting



Old Milestone



10 different signs at Rugeley



Chase Road speed bumps

3. 1 Landscape Character

Cannock Chase contains a diverse range of landscape character areas as defined by the Countryside Agency. A brief description of these characters has been included in the study as they dictate the views one will get from the roadside, the roadside vegetation and suggest suitable themes and treatments for highway signage, furniture and management.

- Open Hills and Heaths. A remote, open landscape with heathlands, semi-natural oak and birch woodlands and conifer woodlands with flat summits, convex slopes and small-incised valleys known locally as slades.
- Heathland large tracts of open heathland with a spacious, wide character and wide expanses of heather and scattered birch and bracken.
- Ancient and semi- Natural Woodland most of this wood land is situated at Brocton Coppice where ancient pollarded oaks form a very special feature of Cannock Chase AONB.
- Forestry land planting began in 1921 by the Forestry Commission in Cannock Chase and is mainly of Corsican and Scots Pine with larch. Beech line some of the Chase Roads and forest rides. A range of landscapes are created by the rotational felling and planting of woodlands.
- Open Hills and Heaths resulting from the conversion of original heathland on less impoverished soils and characterised by the existence of a remnant healthy character.
- Settled Plateau Farmlands an intimate settled landscape around Cannock Wood and Gentleshaw characterised by undulating topography that falls away eastwards towards the River Trent valley. The landscape retains a strongly rural character of clustered farmstead's and roadside cottages despite proximity to urban edge.
- Sandstone Estatelands intensively farmed landscapes of relatively free draining soils supporting mixed farming characterised by large hedged fields and manor farmsteads on gently undulating landform.
- Clay estate lands fragments of larger estates landscapes at Hatherton, Beaudesert and Teddesley. The heavier loamy soils in these areas have favoured pastoral farming in the past but arable farming is now becoming increasingly common.
- Trent Valley north west of the AONB flat alluvial floodplains with willow, alder and poplars along the Rivers Trent and Sow.
- Designed Parklands- Shugborough, Beaudesert, Tixall, Wolseley and Hatherton all fall within Cannock Chase AONB, each a unique product of its original design and evolution overtime.



Open Heathland Cannock Chase Country Park



Arable farmland with distant views



Brindley Heath rotational felling



Mature pine trees

3.2 Landscape Character Areas

Characterisation can be undertaken at a variety of levels, from national down to local, depending on the level of detail required. The result will be the classification and description of the landscape in terms of factors – natural, social and cultural – that define its character. Natural factors include geology, landform, river and drainage system, soils and land cover. Social and cultural factors include land use, settlement patterns, field enclosure and the historic dimension.

One of the key aims of this project is to record, the key social and cultural factors that play a part in defining what makes the landscape of the AONB special.

Cannock Chase is a landscape dominated by its history as a former forest created by William the Conqueror and known as the Kings Forest of Cannock and by the presence at its centre of the South Staffordshire coal field. Cannock Chase lies on a central elevated plateau, it is unenclosed, heavily wooded with a varied often steeply sloping surface. There are long views usually to wooded horizons and strong contrasts of landscape types; for example the wildness of the heathland in juxtaposition with the manicured land of the historic parks and agricultural land. A finer grain study of the landscape character 'Historic Landscape Characterisation' is being undertaken by Staffordshire County Council funded by English Heritage.

The Key Characteristics of the region – as defined by the Countryside Agency- can be summarised as:

- Very Varied landscape with a range of industrial, residential, agricultural and recreational land uses:
- Strongly contrasting settlement pattern with some areas densely populated, others unpopulated and 'Wild'
- Rounded central plateau, dominated by heathland and coniferous woodland;
- Sprawling coal mining settlements.
- Reclaimed and active open cast coal sites and spoil tips from abandoned deep mines.
- Strong rectilinear pattern of parliamentary enclosure in some areas.
- Black country with a mosaic of urban areas, former industrial land and patches of farmland.
- Extensive urban fringe.
- Open arable areas with low hedges.
- Areas of small-hedged fields, scattered farmsteads and smallholdings.
- Historic parks
- Red brick buildings.
- · Industrial Archaeological features.



Hednesford town centre



Abandoned mines



Heathland and coniferous woodland



Small hedged fields

3.2 The Evolution of Cannock Chase AONB

Cannock Chase clearly demonstrates the evolution of a landscape that has been exploited by man for thousands of years. There is evidence of three early bronze age circular burial mounds, built around 2500BC and an Iron Age Hill fort built some 700 BC situated on the highest point of the Chase some 244m above sea level at Castle Ring.

Woodland cover lay mainly within the deer parks like Teddesley, Wolsey, Beaudesert and Haywood which lie towards the edge of the higher ground of the Chase. The Domesday book of 1086 indicates a large area from Stafford to Sutton Coldfield and Brewood to Tutbury was relatively sparsely populated. This was the area that the Norman Kings established as a Royal Forest some time in the late 11th or 12th Century.

Iron working on the Chase probably began in the 13th century encouraged by the presence of ironstone, waterpower and wood to be turned into charcoal.

Glass making arrived in the late 13th and 14th centuries using the Chase's white sand, alkali material extracted from bracken and the abundant supply of wood for fuel.

Cannock Chase itself a plateau of higher ground at the heart of a medieval hunting forest was deforested in the 16th and 17th centuries depriving the iron industry of its charcoal supply, this left the high plateau of Cannock Chase as heathland by about 1650.

Coal mining appeared on the Chase in medieval times, beginning as hollows in valley sides and expanding into horizontal and then vertical shafts. The most extensive period of mining developed after 1850 as the coal had been worked out in the Black Country. Old villages grew into sizeable towns and completely new mining settlements such as Hednesford, were developed. Deep collieries in the 1950's and 1960's became concentrated into two large mines at Rugeley and Littleton. However from the early 1980's the coal mining industry declined due to the contracting coal market, reduced deep mine capacity and the privatisation of British Coal. During the first part of the 20th century while the coal mining industry stagnated Cannock Chase was extensively used for military purposes.

There exists a number of quarries within the AONB the area is reputed to be one of Europes largest single deposits of sand and gravel.

The extensively settled South Staffordshire Coalfield, the Black Country, Birmingham and the Trent, Stour and peak valleys surround this relatively unpopulated area. It began to develop its industrial and urban character early in the industrial revolution and consequently, it contains many sites significant in English and social history. Within the Chase there are 358 monuments, including 70 listed buildings many at Shugborough Hall. There are also 6 scheduled monuments.







4. Local distinctiveness

In this era of globalisation it has become increasingly important to reinforce local distinctiveness so that Cannock Chase retains its inherent characteristics. With the impact of tourism, and the inevitable volume of traffic from commuters, locals and visitors there is now a need to conserve and enhance this valuable public amenity to create a sustainable environment that addresses economic and social needs, whilst allowing a healthy, safe, living/working environment.

The following pages within this report concentrate on recurring themes throughout the AONB that contribute local distinctiveness. These are studied under the headings of colours, stone features, hedges and fences, street furniture, verges and signage.

4.1 Colours

Colours are an important indicator of what makes an area different to that of another. Cannock chase is characterised by the dark green of the pines and the holly, the rusts of the winter bracken and beech. The white trunks of silver birch are a prominent feature within the forested areas and within private gardens, as they are obviously well suited to the ground conditions throughout the AONB. The yellow of the gorse and purple of the heather are the highlight colours in the spring. The rich reddy colours of the soil reflect the redbrick of the built environment and the red tinge of the sandstone used in the walls and the historic stone structures.

Recommendations

The colours purple and green are currently used on the AONB literature, as are the other inherent colours to a lesser extent. It is suggested that a combination of these are included within new signage to reinforce the identity of Cannock Chase . Waymarkers could include a colour code for routes throughout the AONB. For example green routes through the Forestry Commission Land that is of a robust nature. Purple for more sensitive areas and on foot and yellow for a nature walk, are just a few suggestions. Black markers that depict an historical route showing where charcoal burning, iron working and mining took place is yet another possibility.



The green and mauve are already depicted on AONB literature.



Yellow gorse



Pine needles



White birch, beech and winter brackenand the reddish soil.



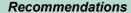
Holly

4.2 Stone Features

The stone walls that are evident throughout the AONB are locally distinctive and represent the underlying geology of the area and are intrinsically linked with the character of the built environment, the stone having been quarried locally. Typically the face is cut and the blocks uniform in size. The capping is deep and laid flush on top of the walling stone.

Kerbs are generally only present alongside footways within the Chase, but are used in some locations to assist drainage, retain earth and vegetation and to define the carriageway edge. Many locations have been fortunate in retaining stone kerbs for example along the A513 and the A34.

In the more rural locations stone setts have been installed along many of the routes adding significantly to the rural character of the roads for example along Penkridge Bank Road, A513 and the Cannock to Rugeley Road. Rugeley Road that leads through Beaudesert Old Park has a similar treatment of square setts adjacent to the highway forming a raised kerb. These were installed by prisoners of war unfortunately these are being replaced periodically with modern concrete kerbs. In some areas they have disappeared under the adjacent verges due to growth and a natural build up of vegetation and green matter, however this is a matter for highway maintenance.



Kerbs and footways are essentially an 'urban' feature and should not normally be introduced into the rural parts of the AONB. Where kerbs are necessary, they should be as low as possible and use 'natural' looking materials such as local stone or textured concrete.

Where parking along a verge is a problem, natural barriers such as large stones or tree trunks can be a less intrusive way to prevent verge-parking than kerbs and bollards.

Improvements to highways can all to often lead to the urbanisation of country roads, the treatment of stone setts should be retained along all roads to retain the rural character, and because of the historical significance of their origins.



Stone walls



Stone setts along Rugeley Road



Three courses of stone blocks, natural stone ker kerb adjacent to the footway.



Kerb at the Forest Centre is out of keeping in this rural location

4.3 Hedges and Fencing

There are a variety of boundary treatments within Cannock Chase AONB. As is apparent from the photographs opposite they range from poorly repaired post and rail fencing with unmanaged hedging and verges to well manicured grass borders and trimmed hedges allowing open views of the surrounding countryside.

This type of white railing pictured below on Stafford Brook Road is seen elsewhere within the AONB and is a fitting treatment for Victorian properties on the edge of the Chase. Estate fencing (iron railings) is also seen on boundaries within the AONB. These railings were erected on many country estates throughout Britain having the strength to contain cattle without visually intruding on the landscaped parkland. What remains today within the AONB is now in a poor state of repair.

If grazing were reinstated to maintain heathland this would require a considerable amount of stock proofing particularly adjacent to highways and the inclusion of cattle grids. The AONB Management Plan highlighted, field boundaries are being replaced by fencing rather than indigenous hedge planting.

Recommendations

Local distinctiveness would be enhanced if estate fencing were reinstated along estate parklands to identify the historic boundaries. Estate fencing is manufactured today, however the first option should always be to repair existing.

Hedgerows should preferably be maintained using traditional methods rather than flailing to improve both the appearance and biodiversity. Cutting should take place at times when nesting birds are not present. Hedgerows should be maintained to allow views across the heathland. The highway authority and AONB should work with local landowners to encourage take up of grants for maintenance of boundary features such as hedgerows. If flailing is to take place, this should be done on an annual basis to reduce the impact.

Roadside shrubs should be coppiced as necessary and the varieties chosen should complement the local landscape, using native species.

If an indigenous flora is to be encouraged any signage within these verges would need to be of sufficient height to accommodate the ultimate growth so that signs are not obscured during the growing season.

Further guidance on the management of roadside environments will be included in the Management and Maintenance Guide.



Poorly maintained post and rail, hedge and verge



Well maintained hedges and verges



Hedges block views of the AONB A46



Victorian railings

4.4 Street Furniture

Bus Stops, litter bins, telephone kiosks, grit bins and utilities

There exists within the AONB a variety of styles of street furniture, much of which is of the standard type from utility ranges within catalogues. These include standard plastic litterbins and bright yellow grit bins. Bus shelters within the Chase are most commonly of the perspex type and intrude on the natural landscape. There is however a timber shelter along the A34 that is more sensitive to its surroundings. Traditional red telephone boxes have been retained in the village locations.

The design and position of other street furniture is not always within the control of the highway authority however Guidance for the Management and Maintenance of roads within the AONB will offer examples to relevant parties on what is desirable and acceptable within the AONB. Planning policy guidance: Listed Buildings and Conservation Areas 1994 (PPG 15, para 1.6 It should also be noted that these issues are covered in the Staffordshire Structure plan policies NC18 & NC19.

The Countryside Agency and other organisations have expressed concerns about light pollution. Modern lighting columns are designed to maximise the illumination of the road surface and minimise extraneous light.

Recommendations

It is suggested that all the partnerships within the AONB agree on a family of street furniture that could promote the identity of Cannock Chase. This could be specifically designed to reflect the local character or be a catalogue range that is fitting of the designation.

Bus stops could double up as information points to orientate the visitor and should be constructed in local materials.

Care should be taken that the specification of lighting equipment should be in keeping with the character of the local environment. No street lighting should be introduced to the rural parts of the AONB unless there is an over-riding recorded safety issue.

Good practice example

Chilterns AONB sources green coloured grit bins for use within the AONB and has also adopted a standardised timber and brick bus shelter design which reflects the local vernacular. Bus shelters in the Yorkshire Dales and Lake District National Parks are also constructed from local materials.



Sinage incorporating the Staffordshire Knot



Unattractive litterbin



Indiscriminate signage



Incidental log seat

4.5 Boundary Definition

Boundary markers are used at some locations to define the AONB, although not all are placed at the boundary. The markers are not consistently placed on every roadside entering the Chase. The posts are relatively small and would be easy to miss in summer when vegetation is at its highest.

Recommendation

It is recommended that a more prominent design is developed and adopted. Boundary markers should be placed at each entry point to the AONB. On roads off the A34 the boundary should be marked a few metres along the side roads rather than on the A34 itself as this will have the greatest visual impact.

Good practice example

Forest of Bowland AONB has undertaken a programme of installing distinctive boundary signs where main roads cross the AONB boundary.

4.6 Cast Iron Mileposts and Milestones

Mileplates or posts are usually of cast iron and give an area an historic and rural atmosphere compared to the latter-day equivalents. In the county of Staffordshire there are 383 remaining milestones although not all are found within Cannock Chase. Some of these have been classified as listed structures.

Recommendations

These traditional markers need to be preserved in a specific way to maintain their unique appearance and to cope with the inherent weather conditions. Staffordshire County Council has produced a document entitled:

CONSERVATION WITHIN THE HIGHWAY: STRUCTURES OF HISTORIC IMPORTANCE MAY 2004 this guidance note offers advice on the restoration and repair of historic structures within the roadside environment.



Existing AONB boundary markers



Precedent AONB markers



Mile stone

4.7 Verges

The verges are an important feature of many roads in the Chase and are of a diverse character dependent on the landscape they fall within e.g. grass, heathland, forestry. The verges are used by wildlife as a habitat and movement corridor, and are used by visitors and residents for walking and horse riding. There are many small car parking areas dotted around the AONB and it is likely that these have been helpful in preventing the erosion of verges by parked vehicles. Footways are generally only present within the towns and villages and alongside the major roads.

A key theme to emerge from this contextual study is the management of the grass verges on many of the roads. These vary in width and abut different landscape types as seen in the photographs opposite. In certain locations there are bulbs planted in the verges especially around village signs. This treatment could be used to reinforce local distinctiveness in the more urban areas for example on the approach into villages perhaps mixed with indigenous plantings of heather and species of gorse.

The grassed ditches as seen along Penkridge Bank and along Rugeley Road prevent parking in these locations whilst retaining a rural character with the simple treatment of stone setts rather than a kerb allowing the roads to drain naturally into the adjacent land.

Recommendations

To reinforce local distinctiveness a management regime could be undertaken to encourage the indigenous flora to colonise these green corridors throughout the Chase. Verges can be a refuge for wildlife if managed correctly linking with other important habitats that can all too often become fragmented with insensitive farming methods and crop rotation.

The 'design speed' of a road determines factors such as sign size and height, and what visibility is required at a given point. Visibility splays may be restricted by growth in verges, by walls or by hedgerows. Many 'safety schemes' or road improvement schemes remove roadside features to improve visibility, leaving a sterile roadside environment that may in turn become a dumping ground for litter. The use of a lower design speed will permit lower visibility splays. Features such as benches for walkers and cyclists may help to make better use of existing wide verges next to junctions and could also incorporate information boards, where these would not interfere with traffic safety.



Grassed ditches along Penkridge Bank



Grass verges adjacent indigenous vegetation



Daffodils planted in verges by signage and bus stop



Footpath along the A460



Natural grass borders adjacent to heathland

4.8 Roundabouts and Central Reservations

Junctions and Orientation

Roundabouts

Roundabouts are usually placed at major junctions on the highway network and these are often historically important meeting places. The major junctions will often be the first point on the wider road network at which destinations within the AONB will be signed. As such they are the first feature which visitors might encounter as part of the 'Chase' experience.

Recommendations

The Pottal Pool roundabout illustrated on the A34, is an important orientation point within Cannock Chase and could with an imaginative approach celebrate part of this areas cultural heritage whilst providing a focal point for one of the major gateways into the AONB. Consideration should be given to placing sculpture and/or planting within major roundabouts to enable them to better fulfil their potential as local landmarks and orientation features within or immediately outside the AONB.

Central reservations could also benefit from a sensitive approach to planting. Species such as beech, oaks, pines, holly, heathers, gorse, and some of the attractive native grasses would deurbanise the highways whilst enhancing local distinctiveness.



Indigenous planting would be more sustainable



The Pottal Roundabout



Signage is overwhelming



Natural grass borders adjacent to heathland

4.9 Deer

The ancient herd of fallow deer introduced in Norman times for hunting purposes are abundant within the AONB and are a major visitor attraction of Cannock Chase. The deer is now symbolised within signage and on the logo of the Cannock Chase AONB Partnership. The down side is that with increased traffic the number of deer fatalities on roads is on the increase. Deer mirrors have been installed along many roads and seem to have an effect in deterring deer from these areas.

Recommendation

The deer is a potent symbol of the identity of the Chase and is also a powerful image that can be used alongside standard road signs in more open locations such as Chase Road to remind drivers to take care and observe the speed limits.



Signage to warn motorists of deer



Deer are synonomous with the Chase and are depicted on signage

4.10 Coat of Arms

The arms were granted on December 3 1975 Original meaning:

The black bars indicate the layers of coal beneath the district, the stags head and the horn are symbols for the name of the district. The three knots are a typical symbol for Staffordshire and also represents the three communities of Cannock, Hednesford and Rugeley. The crest shows an oak for the forests in the district, coming from a green ring which symbolises Castle Ring an historic site. The horse an historical reference to the horse fair in Rugeley. The cross symbolises the Bishops of Litchfield who were land owners. The tiger refers to the Paget family's coat of arms, who owned the iron works within the Chase. Modern themes include a thunderbolt depicting the modern electronic industries.

4.11 German Military Cemetery

The cemetery is situated in Cannock Chase Forest to the north of a track that leads east of Broadhurst Green. The 2.75ha site is enclosed by mid C20 metal fences, that are set at an angle above ha-ha type ditches, thus allowing the landscape within the cemetery to blend seamlessly with that of the surrounding landscape. The German war cemetery has been included in this study as it is a wonderful example of a designed landscape that fully integrates and reflects the inherent characteristics of the surrounding countryside.. A manicured beech hedge echoes the formality of the layout within the cemetery whilst separating this important site from the adjacent landscape at its entrance.

The landscape scheme is both powerful and subtle relying on a simple palette of heather, multi-stemmed silver birch and Scots pines under planted with spring bulbs. Whilst wide grass borders allow access to the graves.

Recommendation

References from the Coat of Arms could be incorporated into proposed signage.

The sensitive approach to planting within the cemetery reinforces local distinctiveness and could also be used on roundabouts, central reservations and adjacent to village signs.



Cannock Chase Coat of Arms



5 Place Names

5.1 Town, village and other place name signs

The towns and villages within and around the Cannock Chase are currently signed using a variety of different styles, either by the County highway authority or the local District Council. The place names are one of the most important navigational aids to visitors and are one of the key opportunities to promote the AONB identity by adopting a common approach.

A key feature identified in the desk top study was how the place names have strong associations with both the cultural heritage and the underlying geology of the area. One way in which to keep these indigenous features alive is to incorporate place names and graphical representations of their origins into way markers at strategic locations. An example is included in Appendix 3.

There are many places with slade in the name for example Badger Slade Wood, Great Horsesnail Slade, Deer Slade and Ripper Slade. Warren Hill, Warren Wood and Parrs Warren possibly date back to when rabbits were introduced to the Chase at the turn of the 16th Century by wealthy land owners. In 1753 incensed by the successive enclosures of common pasture, particularly for the construction of rabbit warrens, commoners and trades people invaded the newly enclosed land and slaughtered 15,000 rabbits, whose rearing had deprived them of their right to graze livestock, cut hay and collect fire wood.

Furnace coppice - interestingly is adjacent to Rising Brook and possibly relates to Iron working on the Chase as far back as the 13th Century. Encouraged by the presence of iron stone, water power (which drove hammers in the furnaces) and wood to be turned into charcoal. There are now few traces left of the industry. It was not unusual for furnaces to move around the Chase as the wood supply ran out.

Stony Brook Pools, Stonepit Green, Flints Corner and Dry Pits all relate to the underlying geology of the area. The pebble beds in Cannock Chase AONB are an important source of ground water with aquifers trapped above the impermeable coal measures. Watery Well, Brook Farm and Cold Well all relate to the water courses within the area. Interesting the traditional is being continued in new developments with names such as Quarry Close.



Existing Village signage at Milford



Cast Iron Finger posts



Rugeley place name with Cannock Chase District Council logo



Speed limit with village name

Recommendation

Prepare and agree a common design for town and village place name signs within the AONB. This might be a common 'base' design with spaces to include the District Council logo and other local identifiers such as coal mines, deer, etc depending on the most important local feature of each town/village.

Implement the signs as part of ongoing maintenance or as part of a 'branding' exercise to highlight the AONB. Include local names on waymarkers to orientate the visitor and to keep the cultural heritage alive.

Good practice example

Village place name signs within the Quantock Hills AONB have been replaced with cast metal signs featuring a plate identifying the AONB. The signs follow the shape of the old Somerset County Council signs that used to be used at the county boundary and are mounted on oak posts.



Existing waymarkers

7.0 Contextual Study of the road side environment7.1 Types of road environment within the AONB

Within the AONB there are four Primary Routes (A34, A460, A513, A51) for motor traffic. Of these the A460 cuts directly through the centre of the AONB, while the others tend towards the edges. However key attractors such as Milford and Wolseley are located along the A513. Time spent travelling along these roads therefore represents a part of the AONB experience for most visitors and residents.

All other roads within the AONB are C class roads. Of these, Penkridge Bank is the most prone to use by commuter traffic and also takes much of the visitor traffic. Other roads within the AONB tend to be used to access specific sites such as Cannock Chase Visitor Centre on Marquis Drive, and the Birches Valley Forest Centre, as well as the various Staffordshire CC car parks throughout the AONB.

The AONB encompasses parts of the outskirts of Rugeley and Cannock, and a number of villages, but the majority of roads within the AONB are rural unlit roads through forest, woodland, heathland or agricultural (mainly pasture) land.

The following contextual study records existing features as seen from the highways and goes on to suggests ways, which the 'sense of place' of the AONB can be enhanced.



Camp Road with open views to one side



Birches Valley Road



The route through Beaudesert Old park



The Brocton to Milford Road

7.2 The Contextual Journey

The contextual study is based on a journey along the major routes through Cannock Chase. The journey started at Cannock a Gateway town on the perimeter of the AONB.

Cannock

Cannock is a thriving town with an increasing population having survived the decline of indigenous industries. The placing of public art that depicts the mining industry on this central roundabout celebrates the towns cultural heritage, creates an orientation point and importantly a 'sense of place'. The adjoining central reservation is landscaped with well tended grass and silver birch reflecting the inherent landscape qualities of the Chase albeit within an urban environment.



Public art on roundabout in Cannock



Milford Common

Milford Common is another important gateway into the AONB and is disected by the A513. As the name suggests this area is a large expanse of common land with a backdrop of broadleaf woodlands. This grassy open space is well used by the public for picnics and dog walking encouraged by plenty of designated parking areas is also a good starting point for further exploration within Cannock Chase. Brocton Coppice is within walking distance and is the last remnant of ancient oak forest that existed before charcoal burning took place on a large scale. An information kiosk is situated on the opposite side of the road from the common providing tourists with route guides and maps when open.

Recommendations

There is currently no significant signage that celebrates or welcomes visitors into this corner of the AONB. To the north of the common there exists green central reservations that echo the landscape of the common, however here is an opportunity to reinforce the identity of Cannock Chase by the inclusion of public art, indigenous planting or innovative signage within this area.

An innovative design for kiosks and bus shelters designed specifically for Cannock Chase based on the local vernacular will create an orientation point for the tourist and could provide additional information in the form of display maps or leaflet dispensers. Timber is the natural choice as there is a ready supply within the area. Imagery from the new signs (to be agreed) could be incorporated into the structure to reinforce local distinctiveness. An overall theme for enhancing local distinctiveness within the Chase could be extended into a 'family' of furniture to include signage, seating, grit and litter bins.



Typical signage within the AONB



Cannock Chase Information Kiosk



Leaving Milford Common travelling east

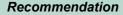


Water tap

The A513

A513 passes through the north of the AONB with Wolseley, Milford and Shugborough key attractors accessed from this road. This fast road sweeps round curves and up gentle hills. Stafford Lodge at the entrance to Shugborough is one of the 70 grade II listed buildings within the AONB and is visible through the trees east of Milford Common signifying an historic landscape. As one leaves Milford Common travelling east the landscape changes to an area of deciduous woodlands, dominated by beech, ash, oak, the white trunks of silver birch a prominent feature in winter.

The land rises steeply to the north with a grass verge and bracken adjacent to the carriageway. On the south side there is sandstone wall some 1.4m high set back from the road by a footway. The walls importantly frame the adjacent landscape and mark the changing scenery from a populated landscape to that of the more natural scenery. The stone walls at Shugborough fall within the Conservation Area and are included in the Park and Gardens Register. Old granite stone setts have been retained adjacent to the tarmacadam roadway and lay-bys. The pathway on the A513 is still retained by cut stone kerbs.



It is important to retain views of significant buildings within Cannock Chase that reinforce the identity of the area, this can be achieved by the appropriate management of adjacent trees and vegetation. The setts and stone kerbs should be preserved as they provide a rural character to the highway.



Stone wall with coping.



Granite setts used as kerbs are still seen throughout the Chase.



Sandstone walling along the A513.



Standard signage on entering Milford Common from the east.

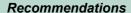


Footpaths and bridle way markers in timber

Camp Road

Camp Road contains diverse road characteristics, these range from steep winding sections where motorists are naturally more cautious to the open top of the heathland, that by the openness and good visibility encourages speeding. There is a clear distinction between the opposite sides of the highway environment, The Cannock Chase Country Park to the east contains much of the open Heathland within the AONB whilst in contrast to the west of Camp Road there lies a large expanse of coniferous forest the tall trees providing enclosure. Deer mirrors have been installed along this stretch of road to deter them crossing although there is reported increase in fatalities. The use of lane markings give this road an urban character that is out of keeping with a relatively low volume of traffic although Camp Road is a major route through the AONB for visitors providing access to two of the key tourist destinations within the AONB.

The Birches Valley Visitor Centre towards the eastern end is a hive of activity especially at weekends when there are many walkers and cyclists accessing this amenity. The two war cemeteries are also accessed off this road. There are numerous car parks within Staffordshire County Council Ownership with access to the many footpaths that lead over this large tract of open heathland with its wild character. These are frequent well used crossing points where rights of way intersect Camp Road.



The Forestry Commission land provides significant recreational opportunities within this area and could benefit from information boards to guide visitors away from sensitive areas and direct them to suitable routes. The most well used car parks could benefit from litter bins and information boards to avoid fly posting on trees, posters often in luminous colours spoil the visual appearance of the landscape and inevitably create litter. If it is the choice not to include litterbins a polite notice ought to be placed to inform people of their responsibility to take litter home with them.

Highway improvements could include the removal of the white highway markings, placing the onus back on the motorist to be more vigilant.



Minor roads



Large tracts of open Heathland



Edge to forestry planting

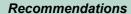


Forest Centre Signage

Chase Road

Chase Road winds through an intimate landscape of cottages at Brocton, past a disused quarry and up onto the higher ground of open heathland. There is an abundance of bracken, gorse and heathers interspersed with scots pine and silver birch. However other dry heathland plants, such as the bilberry and cowberry are also widespread. Cowberry is frequent in some places, whilst bell heather is very localised. The heathlands provide a plant of outstanding interest- the 'Cannock Chase Berry' a rare hybrid between bilberry and cowberry. In the more open areas of heathlands and along the side of pathways soft grasses such as bents, fescues, the purplish silver flowering heads of wavy hair grass, and the tough yellowish mat grass predominate.

Far reaching views can be had from this high point of the surrounding countryside. This landscape will change with the coming seasons as the heathers flower and the bracken greens from the winter copper colour giving an additional characteristic. There are within the heathlands areas that require protection from some of the more rigorous recreational pursuits. Chase Road is not signposted from the main roads and is subject to a 15mph limit enforced with full width humps.



Well designed signage that contains local names to keep cultural traditions alive and colour coded directional pointers can lead visitors to areas that better suit their needs and minimise inappropriate usage of sensitive areas.

Chase Road may be an example of how to treat other minor roads in the AONB. Chase Road does not have any 'destination signs' from main roads, so through traffic is discouraged, and markings have been kept to a minimum. The use of speed humps may not be necessary on other roads unless there are long straight sections through open countryside.



Cannock Chase Country Park



Far reaching views at Brocton Field



Deer are a common site within the Chase



Speed bumps and markers on Chase Road

Pye Green

The cross roads at Pye Green are one of the major gateways in to the AONB from Cannock north, Hednesford and Brindley Heath. Cross roads are a consistent feature throughout the Chase as routes criss cross the landscape.

The BT tower at Pye Green has become synonymous within the AONB and features on the Cannock Chase AONB Partnership logo with a figure of a deer. It is now a characteristic landmark and orientation point and can be seen from many locations.

Recommendation

The BT Tower should be incorporated into local place name signs at Pye Green as one of the local 'features' to assist visitors with orientation.

Penkridge Bank Road

On leaving the strong suburban edge of Rugeley, the landscape gradually changes to a pattern of small rectilinear fields, pony paddocks and evidence of parkland leading into the pine forests. This fast straight road owes its origins to the parliamentary field enclosures of the 17th century. Adjacent to the highway is an edge of stone setts adjacent to grass verges and ditches. A prominent band of broadleaf trees separates the coniferous plantations and the adjacent roadway giving the impression that you are in a broadleaf forest. This is the busiest road across the Chase and is the primary access route to the Visitors Centre and Birches Valley Forest Centre.

Recommendations

A band of broadleaf trees should be planted adjacent to coniferous plantations to encourage biodiversity and provide a continuous wildlife corridor throughout the Chase. These corridors will also provide a visual barrier from the desolate landform that results when the mature plantations of pines are felled as currently witnessed along Birches Valley Road. Ditches in association with grass verges are a good deterrent from indiscriminate parking and could be used in other areas if parking at the roadside ever became an issue.



The BT. tower at Pye Green



Penkridge Bank Road ditches grassed verges and sett kerbs



Penkridge Bank Road the width and visibility encourages speeding



Forest edge

Birches Valley Road

The Forest Centre run by the Forestry Commission is accessed off this road and is one of the major visitor destinations within the AONB. There is a large car park set between tall pines, plus cafe, toilets, education centre and play area. A Sculpture Trail on the Route to Health Walk is an interesting feature.

The Forest Centre is a hive of activity especially at weekends being the starting point for many walks and cycle rides within the surrounding countryside.

Birches Valley road passes through both the forestry plantations and climbs towards the more open areas of Flints Corner. The road becomes more straight and level to the west of Flints Corner. The landscape is in a constant state of change as trees are felled and saplings planted.

Recommendation

There are a number of parking sites along this road which give access to Brindley Heath and the Cannock Chase Country Park. The road is also crossed by many paths and tracks used by walkers, cyclists and equestrians. It is important that the rural character of the road is retained, and that signage directs visitors towards Penkridge Bank and Marquis Drive as the primary access/egress routes.



Birches Valley Road



Felling of the Coniferous Woodlands



Forest clearance at Brindley Bottom



View over the heath from Birches Valley Road



The forest Centre Birches Valley Road

A460

The A460 is the main commuter route through the AONB, this is reflected in its classification as an A road and has a strong urban feel to it. There is a variety of landscape types that this road cuts through providing an interesting journey for the motorist. There is a footpath adjacent to the carriageway and a grass verge and a variety of boundary treatments depending on the adjacent usage.

This road lies in a valley bounded by Rising Brook with a railway to the north. There is an important historical distinction between the northern hills and heaths and the Beaudesert Old Park to the South of the A460, which was enclosed as a deer park in the past. Today this route passes many distinct landscape types, resulting from mans ever changing influence, a disused gravel quarry, a golf course, man made lakes fed by the brook and adjacent flood plains. Coniferous plantations rise upwards to the south and can be seen on the horizon

northwards. On the higher ground arable farming is seen as the road

Recommendations

enters Rugeley.

Within the large lay-by that exists along this stretch of road a welcome point and information board/ bus stop/kiosk could provide information about the various visitor attractions within the AONB to assist the tourist in making the most of their visit. The sign for the AONB Visitor Centre is not very prominent and should be improved and incorporated as a destination alongside the signs to Hednesford from the A460. The verges could be managed in such a way to encourage biodiversity so the indigenous flora and fauna can flourish promoting the intrinsic characteristics of the Chase.



This layby could be tidied up and provide valuable information for the tourist and a welcome point.



Footway adjacent to the A460



Man made lakes fed by Rising Brook



Arable farming on the higher ground as seen from the A460



A clutter of signage on entering Rugeley

Rugeley Road

This area has an historic feel to it as the road leaves Rugeley off the A51. New settlements on the edge of the AONB have kept traditions alive with names such as Quarry Close. The north stretch of Rugeley Road which currently has no speed limit cuts through the south east of the AONB of Beaudesert Old Park. This area has a very different feel to the north of the AONB and is extremely diverse in terms of landscape characterisation. There remains much evidence of the mining that took place in this area with small slag heaps still visible by the roadside and the unnatural landform of remediation works to the south where birches and scrub have colonised this poor quality land. Boggy areas have formed within this impermeable soil, in contrast to the north of the road there are grassed hillsides with remnant parkland on the horizon. This landscape is defined by the Historic Landscape Characterisation as irregular squatter enclosure used today as small holdings and pony paddocks. Travelling southwest the landscape changes to an area of broadleaf and coniferous woodlands with sinuous boundaries. It has been reported that there are a high number of animal fatalities along this stretch of road and also evidence of lorries mounting the narrow grass verges.

Stile Cop Road, Startley Lane and South of Beaudesert Park

Stile Cop road is an example of a local road that has not been treated with centre lines or edge markings. Startley lane and the network of narrow lanes to the south of Beaudesert are very different in character to the wide, straight open roads on the high part of the Chase.



An old Victorian sewage vent



Former colliery land



An original red brick and timber framed thatched cottage



Small holdings with views towards parkland

8 Route Management within the AONB

Strategic A Roads

As identified above there are a number of A class roads that fall within the AONB, including the A34 which forms part of the western boundary. It is suggested that the management of these roads will continue to be primarily as routes for the movement of motor traffic through the area.

Minor Roads with High Volume of Traffic

There are sections of B class road within the built up parts of Hednesford and Rugeley at the margins of the AONB, but the majority of roads within the AONB are C class or unclassified. Penkridge Bank links Rugeley, Penkridge and the A34 and A449 and is the busiest minor road, with a two way 12 hour flow of around 3,500 vehicles.

Minor Access Roads

Other roads within the AONB primarily offer local access to different parts of the area and carry much lower levels of traffic, typically less than 2000 vehicles per day.

Other Rights of Way

The extensive network of bridleways and forest trails is well-used by cyclists and equestrians. Clear signs may be required in some places to indicate that these rights of way are not available to motor vehicles.

Visitor Management

The approach to visitor management within the AONB is to direct people to one of the 5 centres (The Cannock Chase Visitor Centre, the Birches Valley Forest Centre, Shugborough, Cannock Chase Museum, Wildlife Centre) to enable visitors to obtain further information. Signing directed at tourists and day trippers needs to reflect this strategy by guiding visitors to the nearest centre from the A roads around and within the AONB.

Recommendations

The signing strategy should support the existing road hierarchy by signing visitors and through traffic towards the busiest routes (A roads and Penkridge Bank). This will help to preserve the safe and quiet character of the more minor routes that walkers, cyclists and equestrians may wish to use during their visit to the area. With the exception of Penkridge Bank, it is suggested that a design speed of 40 mph is considered as the default 'design speed' for non-primary routes within the AONB where the National Speed limit applies. The 'design speed' is important as it determines the necessity, size and placement of signs and markings. On roads where the speeds and traffic volumes are greatest, the speed limit signs and other warning or regulatory signs will need to be most prominent. More subtle and minimal signing is appropriate on all rural parts of the minor roads except Penkridge Bank. Weight restrictions can be used to help to deter larger vehicles from using minor roads as short cuts, although the needs of businesses operating within the AONB will require consideration. On quieter roads, through-routes can be made less attractive to motorists by introducing gates, or could be designated as 'Quiet Lanes'.



Footway marker



Quiet lane signage

Good Practice Example

The Yorkshire Dales National Park Authority has adopted a road hierarchy and exemptions from standards have been granted in national parks and AONBs to accommodate the local landscape character.

'Quiet Lanes' have been designated on some roads in Norfolk, Kent and North Yorkshire. The idea is that such roads should offer safe conditions for walkers, cyclists and equestrians without the use of intrusive traffic-calming features. To achieve this the roads need to have naturally quite low levels of traffic, and the emphasis of any signing or physical features is on 'raising awareness' of drivers to expect to find people or animals in the road ahead. Results of the early schemes have been mixed, and the idea works best where there is little through traffic and visibility and road widths are restricted. The Quiet Lanes are ideally integrated into the wider rights of way network by linking to existing bridleways and footpaths.

Direction Signs

Single old fashioned 'fingerpost' signs in wood or cast iron were traditionally placed at junctions, often featuring a 'finial' with the grid reference and County Council details. The signs were designed at a time when road users would stop to check directions. Over the years, most of these have been removed from within the AONB and replaced with modern aluminium signs.

Modern direction signs are designed to give advanced warning of a junction, and the colours and type faces used reflect a European convention to standardise signing throughout the EU. Use of advanced signs means that there is typically at least one sign on each arm of a junction, often supplemented by a sign at the junction itself. In addition to this there may be separate 'brown' tourist destination signs, closer to the main junction than the advance direction signs. A simple T junction can therefore end up with at least seven direction signs. There are also usually additional warning signs such as 'Give Way' and 'T junction', and also white lines and other markings on the carriageway.



Traditional finger posts



Combined signage



Brown visitor attraction signage at the Pottal Pool Roundabout

Advance signing has been introduced over the years to assist navigation, and to prevent 'shunt' type accidents as a result of drivers slowing down and manoeuvring at the last minute to read signs placed at junctions. The negative safety aspect of advanced signing is that it contributes to higher speeds by taking away one of the reasons to slow down.

Recommendations

A signs audit should be undertaken to identify opportunities to remove outdated and superfluous signs:

- Use of map-type signs on the approaches to junctions, especially staggered junctions, may help to clarify directions and assist drivers who are unfamiliar with the area as well as fitting several destinations onto one sign.
- Where flag type signs are used, several destinations, including 'brown' tourist destinations, 'scenic drives' and signed cycle routes can be incorporated onto one flag by using coloured panels.
- Height and width restrictions may be incorporated into direction signs to avoid additional separate signs;
- Where new signs are required, can they be added to existing poles?
- Signage should be amalgamated onto single posts as much as possible, and signs mounted as low as is practical for the location.

Where possible, direction signs on all of the minor roads within the AONB should be restricted to a single signpost at the junction. There are few locations away from Penkridge Bank where signs in advance of a junction are strictly necessary, but these must be reviewed on a site by site basis to ensure there is no negative impact on safety. Advanced direction signage is appropriate on the 'A' roads and on the roads used as the primary access routes between 'A' roads and the Cannock Chase Visitor Centre and Forest Visitor Centres.

Direction signs to 'rights of way' and visitor car parks should be standardised throughout the AONB, and where possible should feature the AONB logo. This could be retro-fitted to many existing wooden posts and signs using a simple nail-on plate. Some authorities such as in the Quantock Hills AONB have reinstated traditional style cast iron signs. This might be appropriate for some of the more minor roads and village signs, and would perhaps reflect the industrial heritage of the area.



Central reservation at Milford



A sign audit is required



Too many signs

9.0 Warning signs and road markings9.1 Warning Signs

Triangular warning signs and white road markings are used to help to warn drivers to take care and highlight hazards such as bends, deer, pedestrians in the road, horses etc. One reason why warning signs are introduced is to protect the local highway authority against claims from highway users that there was insufficient warning of a hazard. There is little research into the effectiveness of warning signs in terms of altering driver behaviour, but in general, signage has minimal effect unless combined with physical features on the carriageway such as road narrowings.

Vertical signs have arguably the most visual impact of all roadside features. As with direction signs, warning signs have often been added over the years with little regard for existing signs, consequently there are places where roads are cluttered with signs in close proximity.



Staffordshire County Council should continue to work in close cooperation with the AONB and District Councils to develop a sensitive approach to the future use of warning signs and road markings.

A sign audit should be undertaken to identify the potential to reduce the number of warning signs within the AONB, and to incorporate warning signs and plates onto single posts. 'SLOW' markings on the carriageway may be used as an alternative with lower visual impact in some cases.

Good practice example

Devon County Council and Dartmoor National Park Authority worked together on an Environmental Traffic Signs Audit in the 40mph zones within the Park. This resulted in 40% of signs being removed and a further 30% having further action such as lowering, simplifying or cleaning. The assessment was based on the following strategy: Regulatory signs – all to remain (consider repositioning to reduce environmental impact); Warning signs – all to be removed, regardless of road classification.

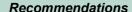


Hazard warning signs at Brocton however no need for three of them.

9.2 Road markings and coloured surfacing

White lines can be used to define the centre lines and edges of the carriageway, and at junctions to mark stop or give way lines. Yellow lines are used to define parking restrictions. Unlike road markings, coloured surfacing has no legal meaning. It can be used at hazard sites to visually reinforce other signs and markings, and may also be anti-skid material to help improve grip at a site where there is a skid hazard such as a junction or sharp bend.

All roads within the AONB currently have a sealed tarmac surface. Minor roads are often surfaced with a top layer of stone chippings. Some locations such as the village of Dent in the Yorkshire Dales National Park have reverted to the original cobbled road surface (which is usually still in situ beneath the tarmac) as a traffic-calming measure and to re-introduce a local feature. This hard wearing form of surfacing has also been reintroduced in towns and cities such as Bristol, Edinburgh and Halifax.



White lines should be used sparingly within the Chase, and the levels of traffic away from the A roads and Penkridge Bank would suggest that there are few locations where Give Way signs and markings are strictly necessary. There is some research evidence to suggest that lane markings lead to increased speeds on rural roads.

Carriageway edge markings should only be used where there is a recorded problem with edge definition leading to injury accidents. Consideration should be given to the removal of 'Give Way' signs and markings at junctions where the daily flow of vehicles is less than 2000 and where the priority is clear. The Traffic Signs Manual Chapter 4 suggests that junction warning signs are unnecessary on minor rural roads or where map-type signs are used on the approaches. Chapter 3 of the Traffic Signs Manual will offer advice on Give Way lines and markings (publication date not known).

If anti-skid material is considered necessary as part of a safety scheme it should be 'buff' coloured in environmentally sensitive areas. Coloured surfacing is not generally appropriate within the AONB. Where the road narrows or at bends, centre lines might be removed to emphasise to drivers that clearance is limited.

Good Practice Example

In Cumbria, no white lines are used at roads and junctions with less than 1000 vehicles per day. Wiltshire CC have been experimenting with the removal of centre lines. Initial results show a decrease in vehicle speeds and accidents although the scheme is still only in its second year.



Coloured road markings



Carriage way edge markings

9.3 Speed Limit Signs

At present there are advisory 40mph speed limits on some parts of the Chase. The limits are marked with non-standard white circular 40mph signs on wooden backing boards. These are placed on either side of the carriageway as 'Gateway' features.

On the main roads the 40mph limits are signed by a variety of conventional signs as shown below.

There is usually a requirement for 40mph speed limits to be signed by 'repeater' signs at regular intervals (See Appendix). Signage may be supplemented by 'roundels' on the carriageway. This may offer the opportunity to reduce the number of repeater signs on a given stretch of road.

The default speed limit in areas where there is streetlighting is 30mph. Signs are normally only placed at the beginning and end of 30mph areas. There is no requirement for repeater signs.



Gateway signage into Milford

Recommendations

- 1. Speed limits must make sense eg. 30mph in village to 40mph to national speed limit no short intervals of national speed limit.
- 2. Repeater signs used at minimal intervals.
- 3. Use common sign combinations and gateways throughout the AONB.







10.0 Conclusions and Recommendations

Cannock Chase has its own definable character and it is important to protect and enhance these distinct and recognisable elements in the landscape that makes this Area of Outstanding Natural Beauty different from another. The highway is most often the visitor's first point of contact with this designated area and the roadside environment needs to promote and reflect the intrinsic character of the area whilst creating a safe and engaging atmosphere.

The study identified consistent roadside themes that give the area local distinctiveness, these include important views and vistas of the many types of landscape and built form on the fringes of Cannock Chase. The roads that cut through the AONB are unusually straight for the varied topography, passing through the open wild character of the heaths in juxtaposition to the cultivated farmland, whilst regimented plantations of pine trees contrast with the remnants of broadleaf woodlands.

Stone kerbs adjacent to the footways and sett kerbs adjacent to grassed verges give the roads their rural character. A variety of boundary treatments adjacent to the roadside include remnants of old estate fencing, post and rail and hedging containing a variety of species. Beech is a popular choice for parklands and residential properties and has been used to great effect around the German War Cemetery. Indigenous species are found adjacent to farmland such as black thorn and hawthorn however a more diverse mix is to be encouraged.

The existing signage within the AONB has over the years become cluttered and uncoordinated. There is now the potential to use the roadside environment to promote the public's awareness of the AONB with a new design for signage to include AONB boundary markers, village names and 40mph speed limit gateways. Themes identified within part 5 of the study can be used to enhance the distinct identity of the Chase and influence a unique design for street furniture.

The roundabouts within the AONB are sited by their very nature at important road junctions there is the opportunity within these areas to promote local distinctiveness with indigenous planting schemes, public art and sensitive use of signage.



Waymakers to include local names and information



Carriage way edge markings could be removed



Roundabouts to be inproved and signage rationalised

10.1 Recommendations

Verges

In the more rural areas grass verges and associated ditches are a prominent feature and need to be managed appropriately to enhance biodiversity and reflect the landscape type they abut.

Boundary Treatments

These reflect the historical aspects of land use and give clues to historic boundaries and should be preserved.

Hedges

Indigenous hedges should be the preferred option for farmland rather than post and rail and managed to promote biodiversity, whilst keeping important views of the AONB open.

Stone Features

The many stonewalls throughout the Chase reflect the underlying geology and one of the indigenous industries, these need to be maintained sensitively using the correct materials and quality workmanship

Street furniture

A consistent design for street furniture needs to be agreed between all stakeholders. Items will include, grit and litter bins, bins for dog waste and bus shelters. Bus shelters could be designed to incorporate maps and leaflet dispensers within, providing a good starting point for further exploration within the Chase.

Signage

Village signs and AONB markers will need to be a prominent feature as they provide an important navigational aid to the motorist and have the opportunity to enhance the intrinsic character of the AONB at important gateways.

Waymarkers

One way in which to keep cultural traditions alive is to incorporate historic place names into way markers at strategic locations.

Flora and Fauna

A band of broadleaf woodland that incorporates an herbaceous layer, a shrub layer and a secondary canopy should be planted adjacent to the pine plantations to create a green corridor for wildlife and protect views within the Chase.

Road types

it is important that their rural character of the C class roads within the Chase is further enhanced with the removal of highway markings and signs where appropriate.

Views and Vistas

The views and vistas of the diverse landscape types that exist are an important feature throughout the Chase and need to be maintained through an appropriate management regime of the road side environment.

Local distinctiveness

Local distinctiveness needs to be preserved and enhanced by promoting those themes that give the area its intrinsic quality. This will include appropriate management of the natural environment and the inclusion of artefacts that celebrate the cultural heritage of the area.



Waymarkers



Gorse



Retain a broadleaf edge to the roadside



Rationalise signage within one post



Stone setts

10.2 Actions

To progress these recommendations it will be necessary to:

- Undertake a sign audit to identify opportunities to modify or remove some existing signage;
- Develop and agree (amongst the County Council, District Councils and AONB) a common approach to the use of signs and markings within the AONB, including the development of some standard treatments for village signs and speed limit gateways.
- Engage and develop partnerships with landowners and utilities companies to ensure their cooperation in the conservation of roadside features.

Appendix 1 Policy Background

Cannock Chase Area of Outstanding Natural Beauty Management Plan 2004 - 2009

AONB status was granted to Cannock Chase in 1958 because of the outstanding local scenery, the history of the area and its wildlife. It covers about 26 square miles of mixed woodland, forestry, heathland, farmland and parkland, with hills, river valleys and the more gentle scenery of the Trent floodplain.

AONBs are primarily designated for their landscape features, but within the Cannock Chase AONB there are a number of historical and ecologically important sites, many of which also have designation as protected sites.

Recreation has always been an important use of the AONB, which lies close to the towns of Cannock, Rugeley and Stafford and is within an hour's drive of most parts of the West Midlands conurbation. The AONB is also used for quarrying, multi purpose forestry and agriculture.

Issues relevant to the highway design guide:

- There are 1.5 million visits per year;
- 70% of visitors are from within a ten-mile radius;
- 81% arrive by car;
- Key destinations are Seven Springs, Cannock Chase (Staffs CC) Visitor Centre; Birches Valley (Forest Enterprise) Visitor Centre, and Milford. Shugborough Hall
- Other key local attractions are Museum of Cannock Chase, and Staffordshire Wildlife Trust at Wolseley Bridge;
- Fragmentation of visitor experience / information is a problem cohesive signage proposals must meet the need for sustainable visitor / tourism access
- Signs need to reflect the importance of Cannock Chase AONB;
- Signs need to be better coordinated;
- Sign audit required to identify need for signage;
- Deer casualties have shown an increase in recent years;

Staffordshire Local Transport Plan

The Staffordshire Local Transport Plan includes a Policy Framework for the Countryside. This recognises the growing tendency for country roads to become busier as a function of 'dormitory' settlement by commuters to urban areas, and also the growing pressure associated with leisure and tourism in the countryside. Of particular relevance is the extract from the West Midlands Regional Transport Strategy that is included in the LTP:

"In rural areas, Development Plan, and Local Transport Plan policies, transport operators and agencies should: Manage rural roads to:

- Control vehicle speeds in sensitive locations;
- Ensure that larger vehicles use the most appropriate route;
- Develop Quiet Lanes, Greenways and the footpath and bridleway network.
- The LTP also refers to the aim of the Countryside and Inland Waterways Policy Framework for Staffordshire:
- To promote sustainable transport in rural areas by encouraging retention of local services, managing both the physical transport infrastructure and the service network, to minimise the impact of traffic and by providing alternative means of travel to the private car.

Policy objectives within the Local Transport Plan that support this aim and are relevant to the AONB Highways Design

Guide include:

- Improving rural roadside bus stops and information;
- Manage demand for parking at popular Country Park sites;
- Minimise the impact of freight movements on local communities;
- Review the road hierarchy and develop appropriate route and speed management strategies for rural roads;
- Improve the Quality of Service for walkers, equestrians and cyclists by introducing five Quiet Roads projects within the plan period;
- Work towards reducing traffic speeds on rural roads, particularly on country lanes and through village communities:
- Raise the priority of vulnerable road users, such as walkers, cyclists and equestrians, on lowly trafficked country lanes
- Introduce measures where suitable to reduce rat running on country lanes;
- Work with Parish Councils, the Chief Constable and local communities to tackle local speeding and rat running;

Protect and enhance the natural and cultural environment of

National Policies and Guidance

We do not intend to reiterate national policies within this document. Government is aware that traffic growth is greater on minor rural roads than in towns and cities (approximately 5% per annum compared to 1-2% UK average)1. Several key government transport and planning policy documents (such as New Directions in Speed Management, and Policy Planning Statements and Guidance Notes 2 – Green Belts; 7 – Sustainable Development in Rural Areas; 9 – Nature Conservation; 13 - Transport and PPG 21 – Tourism) make the general case for interventions to reduce the impact of motorised traffic and at the same time to preserve or strengthen the characteristics of an area.

(Footnotes)

¹ DfT, Traffic in Great Britain, 2003-4.

Appendix 2 Technical Background

Key documents

The key document that sets out the legislative framework for the application of signs and the associated traffic orders is the *Traffic Signs Regulations and General Directions 2002 (TSRGD)*. This document gives the technical guidance on the form and dimensions of signs, lighting requirements, and acceptable combinations of signs and markings. It also references the relevant traffic laws applicable to use of the signs.

An important source of additional information to TSRGD is the *Traffic Signs Manual*, which gives more general information about the layouts associated with the application of the signs.

A summary of the regulations relating to the most common signs used within the AONB is included here to assist the steering group in understanding the options for developing a signs strategy. In all cases it is necessary to refer to the TSRGD as these notes are meant only as a summary of the main points relating to use of each sign.

There are a number of useful documents that cover specific issues relevant to the AONB. *Traffic Advisory Leaflets* are available free of charge by mail or as online pdf files at the Department for Transport website. Useful ones include:

- TAL 3/04 Quiet Lanes. Summarises the experience of developing minor rural road environments suitable for shared use by walkers, cyclists, horse riders and motorised users. Typically, the lanes should have 85%ile traffic speeds of less than 35mph, less than 1000 vehicles a day and road widths of less than 5.0m.
- TAL 2/04 Rural Traffic Calming. Bird Lane in Essex was considered too busy to be a quiet lane and was being used as a rat run. The aims of the scheme were to deter rat running, reduce traffic speeds and encourage use by non-motorised users. This was achieved by introducing deliberate road narrowing (to 3.0m width) with passing places. The narrowings presented the opportunity to introduce footways to the lane. Speeds reduced by about 7mph and traffic volumes decreased by 20%.
- TAL 1/04 Village Speed Limits. This TAL gives specific guidance on introducing 30mph or 40mph limits in villages along Primary Routes. The TAL is helpful in defining a 'village' as 20 or more houses plus any other buildings and a minimum length of 600 metres. The TAL includes some examples of combined village name and speed limit signs.
- *TAL 11/00 Village Traffic Calming*. Reviews the effect of different types of traffic calming measures in reducing accidents in villages.
- TAL 1/00 Traffic Calming in Villages on Major Roads. Looks at schemes on roads with over 8000 vehicles per day and 10% HGV traffic. The TAL is useful for the AONB study as it illustrates a variety of 'gateway' features.

In 2002, the Countryside Agency published *Rural Routes and Networks*. This document offers some general guidance on network planning and the design of roads and roadside features within rural areas.

In 2004 Chilterns AONB produced *Environmental Management of Roads in the Chilterns* which is available on the web at www.oxfordshire.gov.uk/chiltern.

In 2005 the Friends of the Lake District produced 'Rural Roads at Risk – Saving the Character of Country Roads' which covers many of the issues discussed in this guidance and sets out a similar range of recommendations.

Sign Positioning

The *Traffic Signs Manual* covers general issues about positioning. Determination of where to place a sign requires consideration of:

- Its siting along the road relative to the hazard, junction, or other feature to which it applies;
- Its placement in relation to the edge of the carriageway;
- Its height above the road;
- Its orientation.

In general the size of the sign and the distance from the junction etc to which it relates will increase as the typical speeds along the road increase. Another consideration is the mounting height, which should generally be between 900mm and 1500mm to the lower edge of the sign from carriageway height. This ensures that signs are clear of dirt and spray thrown up by passing vehicles. Signs are usually placed at least 450mm from the edge of the carriageway, and this distance is increased on higher speed roads or where there is extreme camber or crossfall.

Speed Limit Signs

Circular Roads 1/93 (Department of Transport 1993) gives guidance for the setting of speed limits and procedures for determining appropriate limits. Traffic Advisory Leaflet 1/95 (TAL 1/95) gives a guide to good practice on the use of speed limit signs.

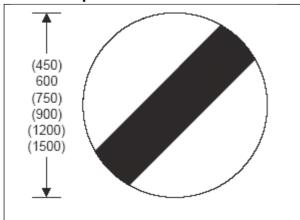
At present the AONB has advisory 40mph signs in place at a number of locations. The speed limits are not enforceable and there are no legal orders to support them and no speed cameras to enforce them.

The current arrangement of the signs is that they are wooden boards that form vertical 'gateway' features at the edges of the road. The size and position of the signs gives them a good visual impact although this is lessened by the fact that they are becoming faded and old.

Recommendation

The existing signs should be replaced with a similar design agreed by the AONB and highway authority. Where mandatory speed limits are introduced, there should be a logical progression between 30mph, 40mph and National Speed limits.

National Speed Limit



Name: National speed

limits apply

Usual diameter: 600mm

(repeater 450mm)

Lighting: Should be lit if placed within 50m of a street light, otherwise

reflective.

Repeater Signs

Where roads are subject to a speed limit other than the National Speed Limit (or where there is streetlighting and the National Speed Limit applies), repeater signs are required at regular intervals along the road. The exceptions to this are 30mph limits in areas with street lights and 20mph 'Zones' where repeaters are not necessary:

- The repeater signs in unlit 30mph areas should normally be no more than 400m apart, with the first repeater no more than 200m from the sign to mark the start/end of the limit.
- The repeater signs in 40mph areas should normally be no more than 500m apart, with the first repeater no more than 250m from the sign to mark the start /endof the limit.
- The repeater signs in 50mph areas should normally be no more than 700m apart, with the first repeater no more than 350m from the sign to mark the start/end of the limit.
- The repeater signs in 60mph areas should normally be no more than 800m apart, with the first repeater no more than 450m from the sign to mark the start/end of the limit.

Signs of 300mm diameter should normally be used in 30mph or 40mph roads, 450mm on single carriageway 50mph, national limit roads and dual carriageways with a 50mph limit.

Direction Signs

The number of direction signs and poles at each location within the AONB should be minimised. All of the A roads within the AONB are designated Primary Routes. Signs on the primary A Roads (A34, A513, A51, A460) will normally require signage that complies with the 'Primary Route' series of signs – white letters on a green background (with white panels with black lettering for non-primary destinations). Most other locations within the AONB will be covered by the black letters on white background signs for non-primary and local destinations. Tourist destinations such as visitor centres, campsites, museums, scenic routes and other attractions may use brown signs and symbols. These do not need to be separate from other direction signs and can be incorporated as a brown panel within standard direction signs.

Backing Boards

To improve conspicuity, where signs are placed in front of shady wooded areas for example, many signs may be placed on rectangular grey or yellow backing boards. However, the Traffic Signs Manual makes the point that with more widespread use, the less effective they become as drivers get used to them. Another option where 'impact' is required would be to use signs of a larger size. This may be a less intrusive option for some locations within the AONB. Chapter 7 of the Traffic Signs Manual offers further guidance and dimensions.

Recommendation

The use of backing boards should be restricted as much as possible to ensure that they have maximum impact when they are deployed.

Sign Posts

The number of sign poles in a location can be visually intrusive, as well as sometimes causing obstruction problems for disabled users, people with pushchairs etc. As well as looking at opportunities to remove superfluous signs, it may also be possible to mount existing and new signs on other items of street furniture such as lamp columns, or on walls or fences within the highway boundary. The Traffic Signs Manual allows for up to three signs (but preferably only two) to be mounted on a single pole provided that none also requires a supplementary plate. Signs may be mounted onto adjacent walls providing that they are not more than 2.0m from the carriageway edge. It may be possible to mount signs on lighting columns in some circumstances.

Warning signs may not be mounted on the same pole as a Stop, Give Way or terminal speed limit sign. In general, triangular warning signs should be placed above other signs when more than one sign is mounted on a pole, and the whole combination of signs should not exceed 4.0m in height.

The standard 'light aircraft grey' coloured highway sign poles can appear incongruous within a rural area. One way to address this problem is to use black or green coloured poles, which may be less conspicuous and less 'urban' in appearance. The Traffic Signs Manual states that posts may be of any single colour. Wooden posts may be used for highway signs but there may be maintenance implications.

Non-highway signs such as signs for public footpaths within the AONB should preferably be wooden, as is already widely adopted practice, ideally using locally grown timber. Most of the Forestry Commission and Staffordshire CC owned car parks and trails within the AONB are signed with wooden signs.

Backing Boards

To improve conspicuity, where signs are placed in front of shady wooded areas for example, many signs may be placed on rectangular grey or yellow backing boards. However, the Traffic Signs Manual makes the point that with more widespread use, the less effective they become as drivers get used to them. Another option where 'impact' is required would be to use signs of a larger size. This may be a less intrusive option for some locations within the AONB. Chapter 7 of the Traffic Signs Manual offers further guidance and dimensions.

Recommendation

The use of backing boards should be restricted as much as possible to ensure that they have maximum impact when they are deployed.

Appendix 3 Design statement for signage

Cannock Chase has a varied cultural history and consists of many different landscape types that collectively make up this small yet significant AONB landscape. One of the biggest threats to this area is the gradual erosion of rural character and local distinctiveness. Innovative signage can play an important role in promoting the AONB and in addition provide information on visitor attractions and advice on destinations to guide tourists to the most appropriate routes. To enhance local distinctiveness within the Chase the new signage will reflect the characteristics of a particular location and in the village name signs. The bespoke signage that has been designed specifically for the Cannock Chase AONB integrates themes discussed within the contextual analysis of the Design Guide for Roads and Highways.

The brief asked for signage that will

- Support the concept of sustainable visitor management and the protection of the visual amenity of the area
- Be used to provide information and also help to create a sense of identity within the AONB, whilst recognising individual needs of landowners.
- Provide a family of signs that have a consistent theme relating to the Chase and also the ability to be adapted to incorporate the information needed at different locations.
- Have themes that can be used in AONB boundary markers, 40mph speed limit gateways and also Village names.

The proposed signage is divided into compartments where text can be interchanged whilst keeping the design consistent throughout the Chase. An image of a deer has been retained as it is synonymous with the AONB and a constant reminder to the motorist to be aware.

Construction.

The detailed oak surround, posts and supports are to be made using traditional construction methods such as pegs, tenon and mortice joints. Oak is an indigenous material to the area and will compliment the natural environment. A stencil can be cut out of the bridge to reflect a different characteristic of each area, this could be a pine tree, an oak leaf or whatever is thought appropriate or meaningful for the site location. Typical speed limit reflective signage can also be accommodated within the sign.

Materials

The signage will be formed out of enamelled metal sheeting and reflective white colourzone. 30% height embedded with concrete foundation.

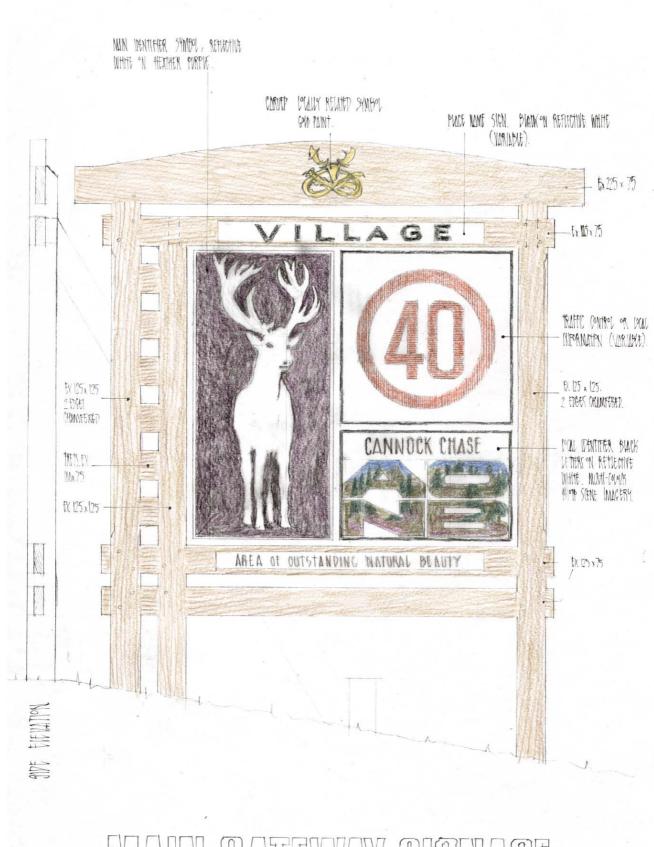
Sizes, heights, location by agreement with planners range 1200-3000height.

The AONB lettering will use a local identifier, black letters on reflective white multi-colour photo-scene imagery. The image of the deer, the main identifier symbol will feature on the larger signs and will be constructed out of reflective white material on a heather coloured background.

Costs

No costings have been obtained for the proposed signage, however it would be appropriate to boost local industry by setting up a working/ training programme to employ local people under the supervision of a skilled craftsperson to produce the signs. Grants can often be obtained for such initatives.

Concept signage



MAIN GATEVAY SIGNAGE

