



The Cannock Chase Special Area of Conservation (SAC), Strategic Access Management & Monitoring Measures Detailed Implementation Plan: Car Parking

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Summary

This plan, commissioned by the Cannock Chase Special Area of Conservation (SAC) Partnership, sets out a means to provide for recreational use in the future at Cannock Chase (across the AONB) without compromising the nature conservation, archaeological, geological and historic interest of the site of the site. The plan is informed by visitor survey work and an evidence base report and is in accordance with the policies set out in the Cannock Chase AONB management plan (2014-2019). This version is a draft document and any part of it may be altered or amended prior to its finalisation.

The majority (88%) of visitors arrive at Cannock Chase by car. Cannock Chase AONB currently has a large number of parking locations, many of which are in a poor condition and are difficult to maintain. There is a particular concentration of parking locations around the SAC and the area is sensitive to high levels of visitor use. The large number of parking locations means visitor use is spread widely and it is hard to engage with visitors. Furthermore, many of the parking locations are small lay-bys where there are litter problems and some of the more secluded car-parks have anti-social behaviour issues.

With increased levels of local housing and a growing local population, recreational use of Cannock Chase will increase, and this brings particular pressures for the SAC. There are a range of different organisations who own and manage Cannock Chase and it is important that there is some consistency across the SAC and a shared understanding of the issues and long-term solutions. This plan sets out a series of measures to ensure Cannock Chase is able to cope with growing (and changing) recreation demands and continues to provide for recreation while ensuring the nature conservation interest is not compromised.

Our recommendations provide a series of suggestions for landowners and other relevant management organisations and cover the following:

Reduction in the number of parking locations:

- Removing small pull-ins and informal lay-bys;
- Closing off some of the parking around Brindley Heath.
- A review of options along Chase Road, to improve car-park management and reduce impacts whilst allowing for sustainable visitor access to continue;

Improvements to formal car-parks:

- Dedicated parking for horse boxes at Punchbowl & Seven Springs.
- All car-parks named and sign-posted;
- All car-parks with clearly defined limits and scrub clearance as required adjacent to parking areas;

- Improvements to parking at Marquis Drive as part of an overall masterplan for this part of Cannock Chase;
- Continued expansion and promotion of Shugborough and Birches Valley;
- Improve and expand car parking capacity at the Museum of Cannock Chase in support of the Museum's planned expansion and improvement of visitor offer.

Provision of additional parking:

• Large new parking area created outside SAC, utilising amphitheatre area.

Opportunities to reduce car-use:

- Better connections to railway stations, particularly for cyclists;
- Aspirations for bus routes to include Birches Valley, Shugborough and Marquis Drive.

Parking charges:

- Charging instigated at selected formal car-parks, either with an single relatively low rate at all times or charging just at weekends/bank holidays;
- Regular review of parking charges.

Monitoring:

- Regular, systematic counts of parked cars across area;
- Response to verge/roadside parking, if new locations start to be come used.

These recommendations will lead to a redistribution of parking locations with fewer locations to park but overall there will be an increase in parking spaces, and these will be better managed and in better condition. New parking charges should result in some income which will be used for the management of Cannock Chase. There are 11 locations where charges are recommended, a further 5 locations already have some kind of charging and this would leave 56 parking locations in and around the AONB where it is possible to park for free (plus a further 22 locations along Chase Road, to be included in the options appraisal). At the 11 locations where parking charges are recommended there are currently around 443 parking spaces (19% of those currently available).

A separate plan, produced to dovetail with this report, addresses site users and access management measures such as path improvements, signage, interpretation etc. The implementation of both plans will need to take place in parallel with a range of ongoing management and other works, undertaken by a range of organisations across different land holdings. Implementation will need to dovetail with many other considerations and priorities, requiring flexibility and buy-in from all involved. A flexible approach to implementation will ensure efficiency and integration with other activities.

As such this plan does not limit relevant organisations from undertaking car park infrastructure improvement and maintenance works which are outside the scope of this plan. However, in these cases, the responsibility to ensure that such works will not themselves result in addition likely harm to Cannock Chase SAC would be the responsibility of organisation undertaking the work. Such works would be unlikely to be supported by a financial contribution from the Cannock Chase SAC Partnership.

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1. Introduction

Overview

1.1 This plan has been commissioned by the Cannock Chase Special Area of Conservation (SAC) Partnership and sets out a means to provide for recreational use at Cannock Chase without compromising the nature conservation, archaeological, geological and historic interest of the site. This version is a draft document and any part of it may be altered or amended prior to its finalisation.

The need for a plan

- 1.2 Cannock Chase AONB is located relatively close to a number of urban settlements including Stafford, Birmingham, Wolverhampton and Walsall. In 2018 there were approximately 406,384 residential properties within a 15km radius of the AONB and potentially around 1 million people¹.
- 1.3 As an AONB, Cannock Chase is designated for its special landscape qualities². Cannock Chase represents the largest area of heathland habitat surviving in the English Midlands. Parts of the AONB are designated as being of national importance for nature conservation (as a Site of Special Scientific Interest, SSSI) and of international importance (SAC). The site also supports a number of Annex I bird species, many of which nest outside the boundaries of the SSSI and SAC. These designations and species interest bring particular responsibilities for public bodies and infer strict legal protection.
- 1.4 Cannock Chase is a popular destination for recreation, with visitors drawn by the landscape, tranquillity and recreational opportunities. The AONB is under the ownership and management of a number of different bodies. Most of the area is owned and managed by Staffordshire County Council (the Country Park which includes the SAC and SSSI), Forestry England (Cannock Chase Forest Estate) and the National Trust (Shugborough Park). Other

¹ Assuming an average occupancy of 2.4 people per dwelling, 406,384 dwellings is equivalent to 975,322 people.

² The special qualities of the SAC are summarised in the AONB Management Plan 2019-2024, page 11.

owners/managers include Staffordshire Wildlife Trust and a number of private landowners.



Figure 1: Cannock Chase is designated as SAC for two heathland habitats: European dry heathland (shown here at Brindley Heath) and also for North Atlantic wet heath with *Erica tetralix*.

1.5 With increased housing development in the wider vicinity and a growing human population, recreational use is predicted to increase (Liley, 2012). Cannock Chase plays an important role in providing expansive greenspace for recreation, drawing people for a range of activities. The recreational use brings a range of economic and social benefits. There is a need to meet recreation demand and provide for recreation while in the long-term ensuring that the issues associated with high levels of recreation do not cause damage or lessen the experience for other users. There are particular nature conservation issues associated with recreation at Cannock Chase and statutory requirements to ensure impacts from increasing recreation use (associated with local development) do not have a detrimental impact. Furthermore, partners share a desire to work together and to have an agreed, strategic approach to the management of access. In terms of mitigation for new development on the SAC, the local authorities surrounding the SAC have been collecting developer contributions from new development in order to fund necessary measures – referred to as Access Management and Monitoring Measures (SAMMM).

1.6 In the absence of any plan, there is the risk that Local Planning Authorities will be unable to mitigate for new residential development and therefore fail to comply with the Habitats Regulations (2017, as amended). In addition, landowners and those responsible for looking after Cannock Chase are likely to increasingly struggle with the issues associated with increasing visitor numbers.

The site user plan and background evidence

- 1.8 Another plan a site user plan has been produced alongside this document and the two strategies complement each other. As most visitors arrive at the site by car, the car-park plan sets out long term measures to manage the entry points where people start their visit. The site user plan focuses on the on-site management of access, for example visitor engagement.
- 1.9 Much of the background and evidence that underpin both strategies is set out in a separate evidence-base report (Panter *et al.* 2018). We also draw on the results of visitor surveys that were conducted during the summer, autumn and winter of 2018. The recommendations within this document are in accordance with the Policies described within the Cannock Chase AONB Management Plan 2014-2019 and will assist with the delivery of Action A10.

2. Scope and context

Geographic scope

2.1 The plan relates to the Area of Outstanding Natural Beauty (AONB), the boundary of which (see Map 1) encompasses the SAC and other key areas of focus. The primary focus of the plan is to provide mitigation for the SAC, and therefore the focus is very much on the SAC, however the whole of the AONB is relevant as few visitors will be aware of the delineation of the SAC on the ground. Visitors come to Cannock Chase and any coherent, strategic approach to recreation management needs to be at the AONB scale.

Timing

2.2 The plan covers a ten-year period post its adoption, with a review 5 years after its adoption, potentially around 2024.

Who the plan is for

2.3 Whilst the production of this plan has been commission by the Cannock Chase SAC partnership, the plan relates to all those organisations responsible for the management of parking.

Key context

Number, distribution and characteristics of the car-parks

2.4 Car-parking locations (i.e. car-parks, lay-bys, gateways or similar) are shown in Map 2. There are around 123 car-parking locations shown on the map and these provide around 2,176 parking spaces. Some of these are just outside the AONB, but provide access to the SAC or are linked to it. In addition there is Chasewater, where there are further 208 spaces³. Many (44%) of the parking locations are formal car-parks and these provide the majority of parking spaces (around 86%). Eight car-parks have more than 50 parking spaces.

Car-park use

-

³ With the inclusion of Chasewater there are 124 locations providing 2384 spaces. These are all monitored by the SAC Partnership

2.5 The majority (88%⁴) of site users arrive at the site by car. Parked cars are counted regularly as part of routine monitoring by the Cannock Chase SAC partnership. These data show the total number of vehicles at any one time can range from 239 – 3,147 vehicles (data from 18 counts undertaken during 2017-2018). The maximum count was on the May Day Bank Holiday. The high volume of the May Day Bank Holiday is well above the estimated capacity of the car-parks, however this count included temporary overflow car-parks at locations such as Shugborough (where normally there are 235 spaces, yet the bank holiday count recorded 872 vehicles at one time). Even at these busy times, in general most parking locations are actually less than half-full, suggesting the overall amount of parking available across Cannock Chase could accommodate many more vehicles.

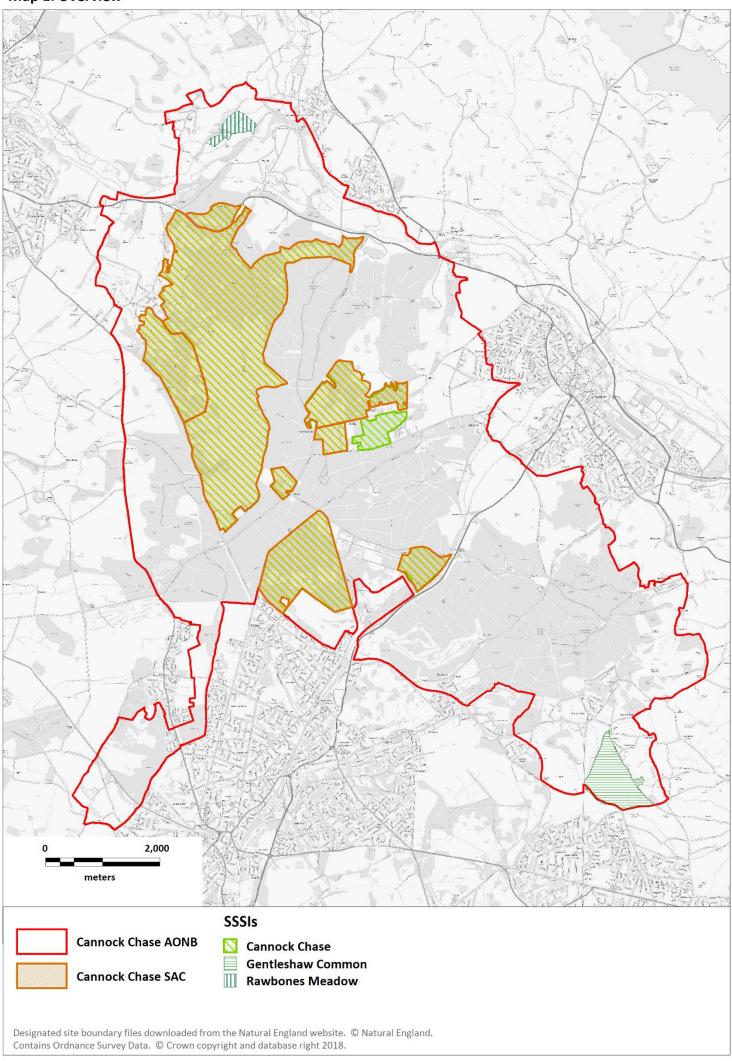
Car-park characteristics

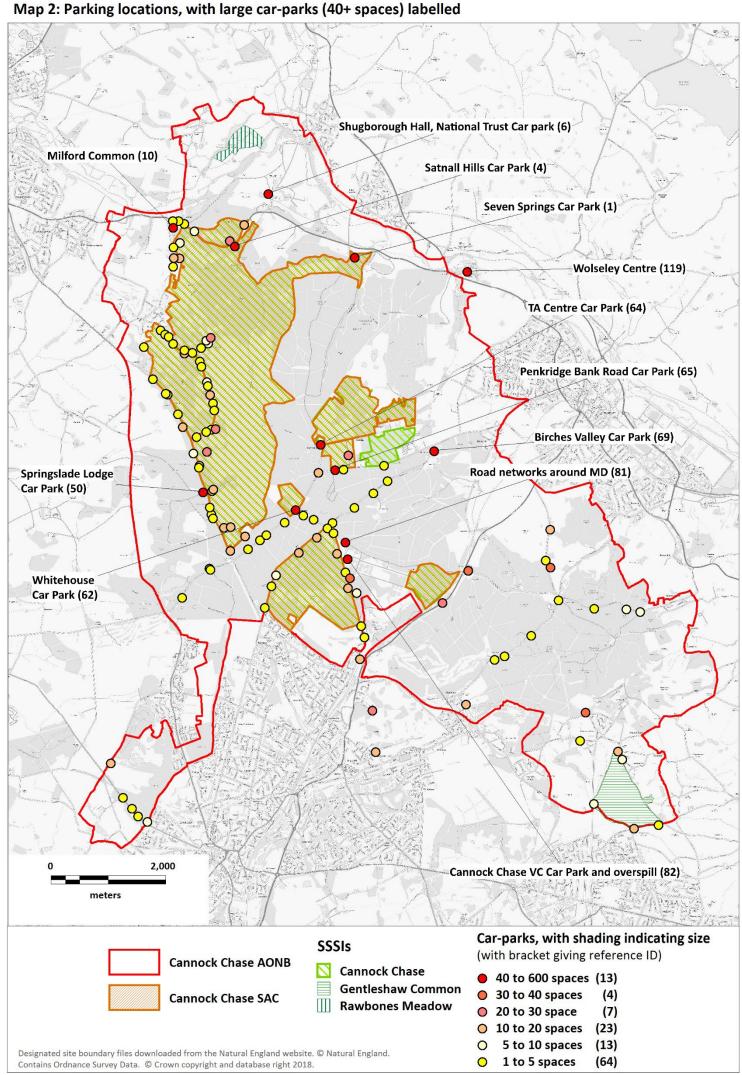
2.6 Within the AONB there are three car-parks where there is a charge to park, these are Birches Valley, Milford Common, Marquis Drive. Facilities, surfacing, ease of access, sightlines and other background are very variable and summarised in the evidence-base report.

6

⁴ Figure taken from 2018 Cannock Chase visitor survey

Map 1: Overview





3. Plan aims and objectives

Aims

3.1 The overarching aim for the plan is to:

Manage the car-parking provision at Cannock Chase to provide for increasing future recreation use without harm to the sensitive nature conservation, landscape and heritage interest.

- 3.2 Secondary aims are to:
 - Facilitate enjoyment of the countryside so that all feel welcome and have the opportunity to participate in recreational activities that enhance the quality of their lives;
 - Ensure recreation use is sustainable and management measures can be delivered in the long term;

Objectives

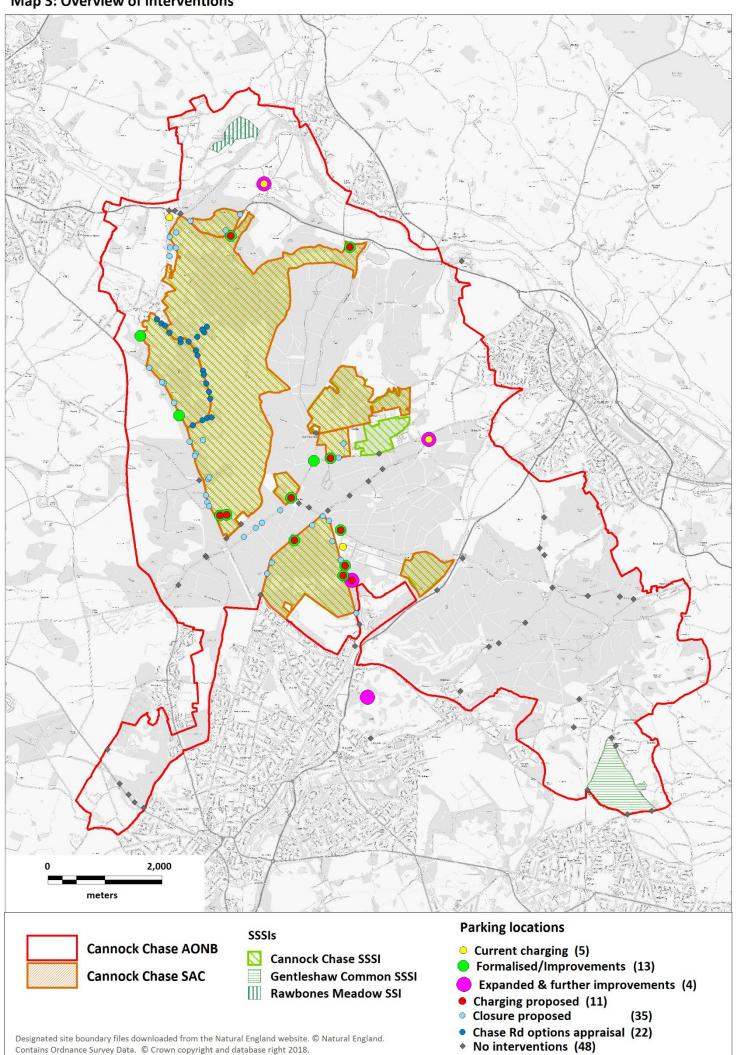
- 3.3 These aims can be achieved through the following objectives, which will:
 - Rationalise parking so that there is increased capacity and parking in the right locations and overall in Cannock Chase, yet there are fewer locations where it is easier to engage with visitors and use can be more easily focussed on key routes;
 - 2. Promote and provide for alternative means to access Cannock Chase;
 - 3. Limit anti-social use associated with car-parks;
 - 4. Monitor levels of use and adapt to any changes.

4. Recommendations

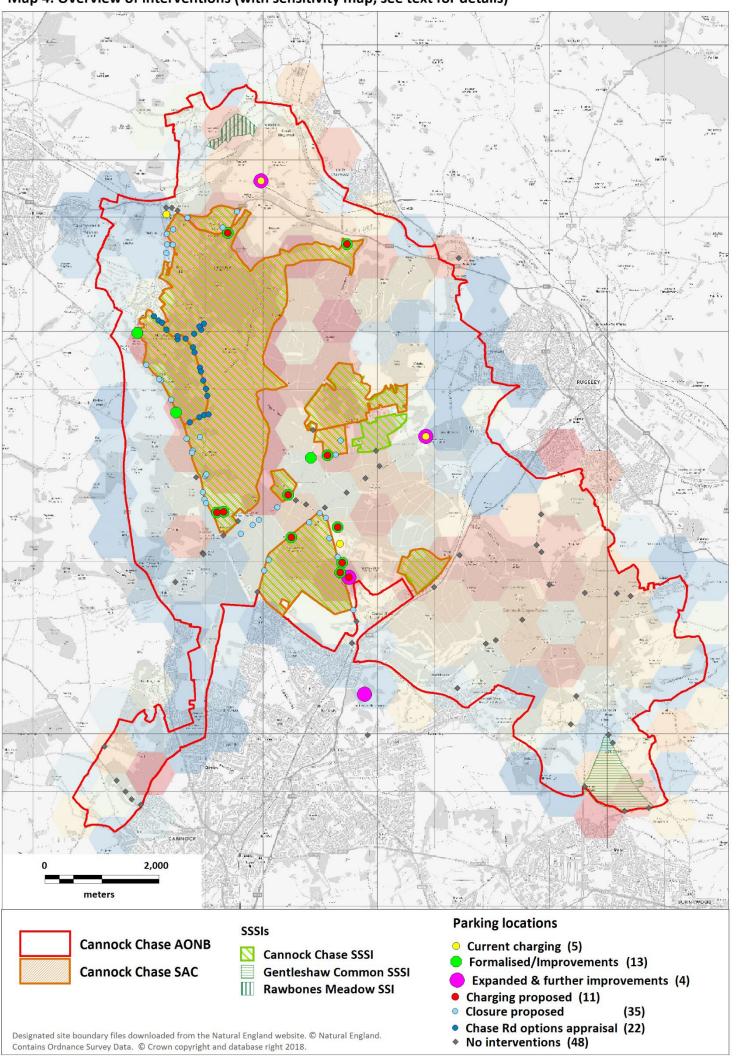
Overview

- 4.1 In this section we set out the detailed recommendations, making a series of suggestions relating to cars and parking. These suggestions cover the following:
 - Reduction in the number of parking locations:
 - Car-park improvements:
 - Provision of additional parking:
 - Opportunities to reduce car-use:
 - Parking charges:
 - Monitoring:
- These measures will result in overall improvements to the visitor facilities, and parking, without detracting from the special qualities of Cannock Chase. An overview of all the different recommendations is provided in Map 3. The map is also repeated in Map 4, where the sensitivity map generated as part of the evidence base is also included. The sensitivity map indicates areas that are sensitive for nature conservation, topographical and heritage reasons, with the blue areas indicating the least sensitive areas and the red indicating the areas of highest sensitivity (for details see the evidence base report, Panter *et al.* 2018). This map is part of the evidence that has informed the measures in this plan.
- 4.3 Interventions are discussed in detail in subsequent sections of the plan. All car-parks are also listed in Appendix 1 which summarises the detailed interventions, car-park by car-park. Appendix 2 includes summary maps for the key zones.

Map 3: Overview of interventions



Map 4: Overview of interventions (with sensitivity map, see text for details)



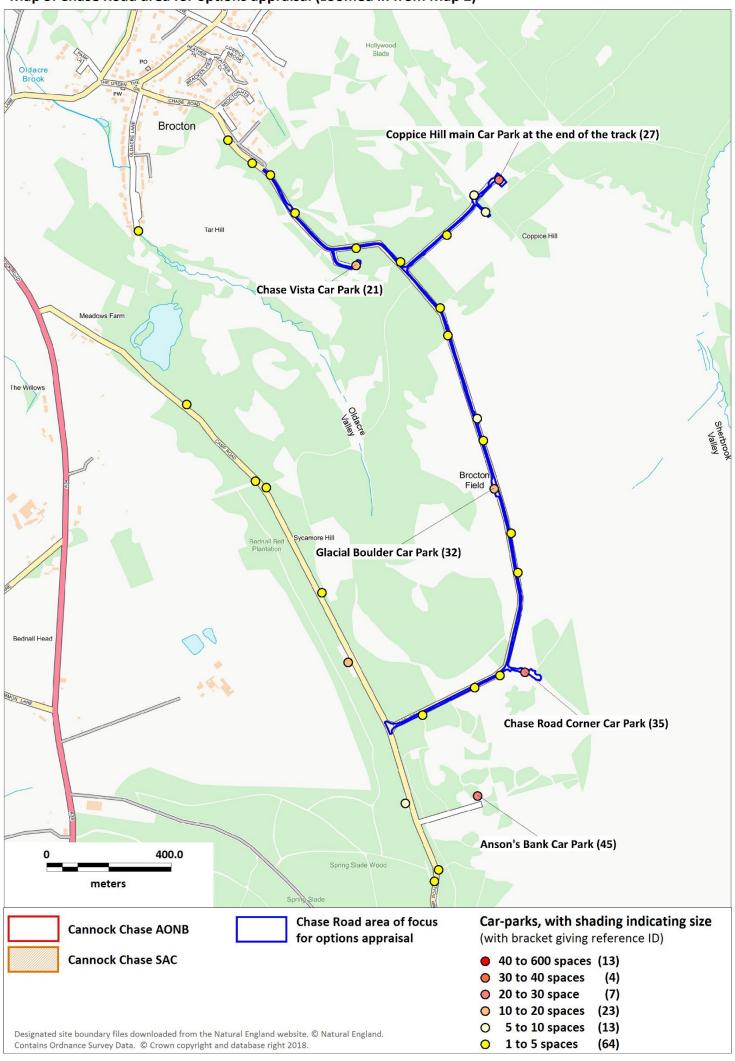
Reduction in the number of parking locations

- 4.4 Rationalising of parking locations can be achieved through the following:
 - Repair and reinstatement of vehicular ditching, earth bunds and bollards alongside roads through the SAC, to prevent verge parking around the SAC;
 - Restricting parking in gateways and other such locations around the SAC;
 - Closing small pull-ins and informal lay-bys (rather than carparks) around the SAC;
 - Closing the main part of Chase Road to cars;
 - Closing off some of the parking around Brindley Heath and a small number of other locations where car-parks are particularly difficult to manage and maintain or where there are multiple carparks in close proximity.
- 4.5 This will have the benefit of reducing the overall number of parking locations with only a very small reduction in the number of car-parks spaces (and considered with car park additions, an overall result net increase in parking spaces. Many of the small pull-ins and laybys have litter issues and the surfacing is in a very poor condition.
- 4.6 Chase Road is a tarmacked bridleway and private road which runs through the Sherbrook Valley and Oldacre Valley portions of Cannock Chase SAC. These areas have been determined to be among the most sensitive areas of Cannock Chase in terms of the habitats present, the species present, the historic environment and the landscape. The current parking layout in this area has led to a dispersed pattern of access, which has led to new a high density of paths and desire lines and considerable habitat fragmentation. Access in this area does seem to be particularly associated with daily visitors (see route maps in 2018 visitor survey). Other issues such as nutrient enrichment from dog waste, anti-social behaviour, and unsustainable maintenance costs are also growing concerns.
- 4.7 Limiting vehicles along Chase Road could create an attractive cycle and walking route for those with limited mobility, while limiting traffic through the SAC and limiting people parking at multiple locations and spreading out onto the main part of the SAC.
- 4.8 The issues surrounding Chase Road need to be subject to further work before detailed recommendations for the future are made. The area of focus is shown in Map 5 with the different parking locations also shown

(using the same shading to indicate the number of spaces as Map 2). A number of different possible options should be reviewed in order to determine the best way to manage car parking in this area to reduce its negative impacts on the SAC and landscape of Cannock Chase, whilst allowing for sustainable visitor access to continue. An options appraisal is required to test different scenarios in more detail. Due to the high level of community interest in this area, once potential options have been determined a full public consultation should be undertaken before the most appropriate option to reduce impact and maintain sustainable access is taken forward.

- 4.9 At Brindley Heath, the changes will focus access at Marquis Drive and reduce the volume of parking spread around the periphery of the SAC heath.
- 4.10 Locations where parking could be restricted are shown in Map 3. 35 locations have been suggested for closure and these have around 210 spaces. All 35 provide access onto the SAC. There are currently around 2384 spaces in total across the AONB, so this would mean a reduction in carparking spaces of around 9% (to 2174). There are a further 22 parking locations along Chase Road (see Map 3), and these will be subject to an options appraisal. These have a further 129 parking spaces (i.e. around 5% of the current total).

Map 5: Chase Road area for options appraisal (zoomed in from Map 2)



Car-park improvements (retained car-parks)

- 4.11 Improvements to car-parks will mean visitors have a wide choice of safer, well maintained locations from which to park which provide for a range of access.
- 4.12 At all the retained parking locations, there should be clear **signposting** with the car-park name at the entrance. This will help create a sense of visitors arriving at a 'destination' and also play an important role in helping visitors with their orientation and way-finding. There are wooden signs currently in place at some locations and such low-key wooden signs work well and minimise any landscape impact. Signage will need to be clear and in a style that reflects the character of the AONB and is not too intrusive from the wider area.
- 4.13 All car-parks should be **clearly delimited** such that over time they do not increase in area or vehicles 'spill' over onto grassland/heathland. This can be achieved through reditching/banking where there are existing ditches/banks or through the provision of low wooden dragon's teeth or other means that are not visually intrusive. It should be clear to visitors how to orient the car when they park and there should be safe space to access parking bays. Where necessary parking bays should be marked, but in most locations the shaping of the car-park should work to make it clear how cars should park, and some car-parks will require some reshaping.
- 4.14 Some car-parks will benefit from **resurfacing or grading** so that all retained, major car-parks are well-surfaced and free of pot holes, ruts etc. Any new surfacing will need to be in keeping with the AONB landscape and setting. Works such as reshaping, resurfacing and edging should be carefully planned in anticipation that parking meters and automated people counters will be required in the future. Meters will need to be easily and safely accessible and the people counters potentially installed on the edge of the car-park on the main path; in both cases the locations should be anticipated to minimise the need for additional work.
- 4.15 Car-parks should be relatively open and scrub regularly cleared around the edges, so the car-parks feel safe and do not feel enclosed. Ideally all parking areas will be clearly visible from the road turning.
- 4.16 Notes on measures proposed at individual car-parks are included in Appendix 1. All works at all car-parks will need to reflect the character of

each car-park and the AONB as whole to avoid any unnecessary urbanisation of the visual landscape.

- 4.17 It will be important to provide a **dedicated area for horse box parking**, this will help those riders who drive to Cannock Chase and also help to focus horse riding use to particular routes. Parking for horse boxes should allow easy turning and manoeuvring for large vehicles/trailers and clearly marked as for horse boxes only. The best locations will be the Punchbowl, where there is already a good turning circle suitable for large vehicles (and most interviewees who were horse riding were encountered in the 2018 visitor survey) and at Seven Springs. There is also potential further south within Cannock Chase, at Startley Lane (Forestry England) where there is an existing area of hard standing.
- 4.18 A range of other improvements will also be necessary at each of the retained car-parks, closely linked to recommendations in the site user plan and also as required by the site owners/managers. We envisage main car-parks will typically feature interpretation and a clear circular route for relevant users. As such, each retained, main car-park will potentially require:
 - Interpretation/orientation panel;
 - Promoted route(s), clearly starting from car-park;
- 4.19 And in addition, other features may be necessary in selected car-parks.

 These will need to be installed sensitively, for example to avoid any feel of increased urbanisation and to not be visually intrusive on the landscape.

 Such features could include:
 - Dog bin(s);
 - Benches/picnic tables;
 - Cycle racks.
- 4.20 Given the costs for emptying and servicing dog bins, these will need to be carefully cited and funding secured in the long-term. Cycle racks will be relevant as part of an effort to reduce car-use and will allow people to cycle to Cannock Chase rather than drive and then walk. With the increasing popularity of e-bikes this may become more realistic in the future.
- 4.21 Some images showing examples of car-parks at other European sites and heathland sites and illustrating the improvements suggested are shown in Figure 2.



















Figure 2: Example images of car-parks and improvements. a) horse box parking on one way route; b) car-park with clear banking to delimit and limit landscape impact, with square shape for easier parking, c) bank used to close off a car-park; d) obvious route originating from a car-park with orientation panel, e) square parking bay with orientation board on main route, f) dragons teeth and banking to restrict vehicle access, g) low key markers to indicate bays; h) use of ditch, bank and dragons teeth to clearly deliminate, i) square bays with banks to edge and also screen vehicles.

Provision of additional parking and visitor centres/hubs

- 4.22 Though the re-shaping of some retained parking locations and the marking of parking bays (see para 4.9) small additions to total car parking capacity across Cannock Chase will be delivered. However, the greatest potential for sustainable increase in parking provision will be at the visitor centres/visitor hubs, where facilities can be provided and visitor engagement can be targeted. There are established visitor centres/hubs at:
 - Birches Valley (Forestry England);
 - Shugborough Hall (National Trust);
 - Wolseley Centre (Staffordshire Wildlife Trust);
 - Marguis Drive (Staffordshire County Council);
 - The Museum of Cannock Chase (Cannock Chase Council);
 - Chasewater Innovation Centre (Chasewater Country Park, Staffordshire County Council)⁵.
- 4.23 These cater for different audiences, and are predominantly outside the SAC or separate from it and therefore in some ways ideal to provide a focus for promotion and expansion. Marquis Drive is slightly different in that it does offer direct access to the SAC (at Brindley Heath) however the visitor route data from the recent survey show that most visitors at Marquis Drive do not go onto the SAC.
- 4.24 Of all the visitor centre/hubs, the car parking at Marquis Drive suffers the most from existing over-capacity issues, a problem which will only be compounded as visitor pressure increases in the future. A masterplan for Marquis Drive is necessary to redesign the facilities to allow it to be redeveloped in-line with changing visitor demands as well as to secure its own economic sustainably. This masterplan would also need to consider how car-parking provision could be improved, increased and better incorporated into this site. This would extend to considering the car parks numbered 79-90 within Table 5. Further information relating to the Marquis Drive masterplan process can be found in the Plan for Site User Infrastructure, Education and Engagement.

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⁵ Note this is outside the AONB



Figure 3: Current roadside parking at Marquis Drive

- Alongside Marquis Drive, Birches Valley and The Museum of Cannock Chase should also be the focus for **special projects**, whereby major upgrades and changes are foreseen. These projects require further planning and design work, and where work will result in deflecting access away from the SAC, they may provide mitigation and warrant consideration for funding from the SAC partnership. Forestry England has also identified land south of the A460 as an area for more detailed consideration and additional access infrastructure. This is away from the SAC and could therefore also act, in part, as mitigation. These special projects are considered in more detail within the site user plan.
- Shugborough, Wolseley Centre, are **the other major visitor hubs** and these **should continue to expand** in line with the relevant organisation's aspirations and relevant specific sensitivities at each location. These sites are destinations in their own right and lie outside the SAC, so growth at these locations may reduce pressure elsewhere within the SAC. In order to facilitate growth at Shugborough, which has significant historic sensitivity, it will probably be necessary to relocate the existing car park at some point (within the boundary of the site), to a location where increasing capacity would have less of an impact on the historic landscape. Any such relocation would be compatible with the aims of this plan and would maintain the current model of parking only being for those accessing the pay for entry site.

- 4.27 Where possible future expansion is known at visitor hubs and this would assist with the mitigation of increasing visitor impacts to Cannock Chase SAC this information has been included in Appendix 1.
- 4.28 Consideration of provision of electric car-charging could be included in the expansion/facilities at the visitor centres/hubs as a way of promoting the use of more sustainable transport options.
- 4.29 All physical improvements to car-parks and visitor hubs will need to be sensitive to the landscape character so as to deliver the statutory requirement to protect and enhance the natural beauty of the AONB.

Opportunities to reduce car-use

- 4.30 The recommendations above will improve parking facilities, focus parking so that it is less scattered, and concentrate visitor use in fewer locations where there can be more engagement and facilities provided. Alongside these measures, there are opportunities to reduce car-use.
- 4.31 Currently options to access Cannock Chase by public transport are very limited and anyone wishing to reach any of the main centres by public transport must walk at least part of the route. A hopper bus has been tried in the past, which provided pick-up and drop-off at various points around the Chase. This was not continued due to lack of use. A public bus service that provided access to key locations within the Chase as part of a standard route should be a long-term aspiration and would also allow people to undertake walking routes that allow them to start and finish at different locations. Aspirations for such a route would include Birches Valley, Shugborough and Marguis Drive, and could therefore be promoted by the relevant bodies managing those sites. While such a route may not necessarily be cost effective at present, opportunities to establish or promote such a route may occur in the future. With the expansion of the key visitor centres/hubs, the masterplan work at Marquis Drive and the rationalisation of the parking network, public transport options are likely to become more viable.
- 4.32 Better links to Hednesford and Rugeley Stations for cyclists will make Cannock Chase easier to access for cyclists wishing to travel by public transport. Currently the Chase Heritage Trail does provide a route that runs close to Hednesford and Rugeley Railway Stations, however there is currently no direct link/signposts to allow cyclists to easily access the trail from the railway stations. There may be opportunities in the future to provide better links from the railway stations and reduce the volume of car-visitors. Recent

- visitor survey data showed 92% of cyclists were using a car to travel to Cannock Chase, including from many towns and cities on the rail line (e.g. Stoke-on-Trent, Uttoxeter, Burton Upon Trent, Lincoln, Solihull, Coventry).
- 4.33 Cycle racks could be installed at selected car-parks where not already present (see also para 4.20), providing opportunities for those who wish to travel by bicycle and then walk. Racks will help encourage those who wish to use bikes as a means of transport to reach the site (instead of a car) and this group of visitors may change over time with the growing popularity of e-bikes.

Parking charges

- 4.34 Following the rationalising of car-parks set out above, there would be around 28 parking locations that provide immediate access to the SAC (i.e. are close to the SAC boundary or within it) and a further 22 locations at Chase Road that will be included in the options appraisal.
- 4.35 Parking charging on the SAC, where there is no existing charging, would ensure visitors were contributing towards visitor management measures within the SAC and other elements within this and the site-user plan. It is anticipated that the revenues gathered from the parking charges will only be a contribution towards the upkeep and management measures necessary, however they will also play an important role in helping to instil in visitors a sense that the locations are cared for, actively managed and checked. Parking charges may also deter anti-social behaviour. Messaging should clearly indicate that parking charges are instigated to help fund looking after Cannock Chase and providing for visitors. It is anticipated that the charging will ensure visitors are more likely to make a conscious choice in where they go and in paying to visit selecting the SAC in the awareness that it is somewhere 'special'.
- 4.36 Locations where parking charges could be instigated are shown in Map 3. There are 11 locations where charges are recommended, a further 5 locations already have some kind of charging and this would leave 56 parking locations in and around the AONB where it is possible to park for free (plus a further 22 locations along Chase Road, to be included in the options appraisal). At the 11 locations where parking charges are recommended there are currently around 443 parking spaces (19% of those currently available).

Table 1: Summary of proposed changes to parking, including locations where closure proposed and locations where charging proposed, for parking locations within AONB only. Table gives number (%) of parking locations and the combined capacity. Note capacity estimates are approximate.

	All	
	Number	Capacity
All parking locations	124 (100)	2384 (100)
Chase Road (subject to options appraisal)		129 (5)
Closure proposed	35 (28)	210 (9)
Charges proposed	11 (9)	443 (19)
Existing charges	5 (4)	1082 (45)
No closure/new charging	51 (41)	520 (22)

- 4.37 Where parking charges are newly implemented it would be ideal if the amount charged and timings for when charging was applied were consistent, as marked differences between organisations will risk visitors becoming confused and/or access being focussed on the cheaper locations.
- 4.38 Parking meters can be solar powered and potentially set up to take card payments or visitors pay by phone or mobile apps. This should mean little or no cash needs to be held in the machines. Options for season tickets/annual tickets should be promoted to allow the option for regular visitors to avoid having to use the machines.
- Where there is existing parking charges or a system in place, for example at Birches Valley or Shugborough, the current parking charge regime could continue. At Shugborough, people are only permitted to park in the car-park if they are using the pay for entry property (either as paying visitors or National Trust members). At such locations charging is long established and in line with the relevant organisations' national policy. At Marquis Drive, parking charges should be reviewed as part of the masterplanning, however it would seem sensible to ensure the parking charges at the roadsides around Marquis Drive (on the triangle) were the same as the visitor centre.
- 4.40 Enforcement of parking could be done externally, by the warden team or by site owners/managers. Duties will need to include spotting any cars parked in dangerous locations (e.g. blocking gates) or areas where parking is discouraged and leaving polite notices on the windscreens and where such issues occur repeatedly, measures (bollards, ditching etc) will be needed to be implemented. Increased warden/ranger presence will be essential around the time of the implementation of the parking charges and car-park

improvements to allow face-face communication with visitors and explanations for the changes.

4.41 If parking machines are vandalised, then the location should be reviewed and potentially access restricted after dark. Some car-parks such as Seven Springs and Coppice Hill are accessed down tracks where one-way dragon's teeth/directional enforcers can be put in place such that it is straightforward to limit access at dusk (and if cars are already parked, they can leave while no other cars can enter). This measure is suggested only if the issues arise, as there is extra cost implication.

Monitoring

- 4.42 Monitoring is a key component of the plan. Monitoring is necessary to:
 - Pick up verge/roadside parking, ensuring that this can be quickly stopped through reactive measures such as double yellow lines, bollards, ditches, or notes to go on car windscreens;
 - Quickly pick-up any instances of vandalism or anti-social behaviour so that these can be quickly stopped through increased wardening and surveillance;
 - Pick up changes in use at weekends and weekdays as a result of the instigation of charges, to inform any future changes in charging;
 - Record how much revenue is being generated by the parking charges and the extent to which people are avoiding paying, allowing rapid responses where payment is avoided.
- 4.43 Monitoring should include:
 - Regular counts of parked vehicles across the AONB. These are currently undertaken (see Panter et al. 2018), but may need some supplementary counts undertaken in the year after changes are instigated;
 - Checks of compliance with the parking fees;
 - Regular review of the income generated, by parking location;
 - Automated counters at a selection of car-parks to record visitor footfall along main routes (see site user plan).
- 4.44 All monitoring data will need to be carefully collated and coordinated to ensure it provides AONB wide coverage and can be easily interrogated to inform and direct management. It will be important to be able to cross-reference visitor data to ecological data (site condition, species surveys etc.) and it will be necessary to review the sensitivity map at regular intervals to incorporate any changes in species distribution or new species using the site.

5. Implementation and Delivery

- 5.1 The plan sets out a series of measures that will both increase the total number of parking spaces on Cannock Chase with a re-distribution away from the most sensitive areas. Car-parks will be improved and better managed, leading to a greater sense for visitors that they are visiting an important and well-cared for site. In the long-term these measures will mean the site is more robust and better able to cope with ever-increasing recreation use that is focussed around cars.
- 5.2 Some of the measures proposed will however be contentious, particularly the introduction of parking charges at new locations and the closure of some parking locations. These changes will require careful communication. It will be necessary to utilise the skills and organisational expertise of the National Trust, Forestry England, Staffordshire County Council and other stakeholders. It will be important to work closely with local communities and partnerships, and communication will need to be carefully planned. Communication will need to be achieved through increased ranger/warden time, face-to-face contact at existing centres, polite notices, the use of social media etc.
- 5.3 The measures proposed in this plan will require Habitats Regulations
 Assessment (HRA). Such an assessment will be straightforward if
 undertaken for the complete package of measures, as overall there is a net
 benefit to the SAC in reducing the spread of visitors, a reduction in parking
 spaces around the SAC and providing the potential for better engagement
 with visitors.
- 5.4 Detailed works at individual car-parks will need to respond to the sensitivity of the landscape and seek to minimise any landscape, wildlife, heritage or visual impacts. This will be particularly important with respect to the signs at the entrances to the car-parks, the parking meters, the works around the perimeter of the car-parks and the measures used to close-off car-parks. All these measures will need to be sensitively implemented, using appropriate materials and with awareness of the landscape issues.
- 5.5 This plan dovetails with a site user plan which sets out measures relating to on-site access management. The site user plan has been produced in parallel with this document and sets out measures relating to routes, paths, signage, interpretation etc. A key element within that plan is that each carpark will have a clearly defined route or route options and that these will be

tailored to different user groups, allowing different car-parks to become a focus for different types of visitor. This will ensure that over time access is appropriate for each location.

- It is also important to consider the wider context within which this plan and the site user plan need to be implemented. There are a range of ongoing management and other works that will be taking place in parallel, undertaken by a range of organisations across different land holdings. For example, work is required to manage the SAC into favourable condition, there is the general operation of the sites, wider context of the AONB management plan and the wider visitor / tourism context. Implementation will need to dovetail with many other considerations and priorities and will require flexibility and buy-in from all involved.
- 5.7 The tasks in these plans will need to be integrated into wider site management and all site owners will have their own procedures that need to be followed and messages that also need to be given to visitors, many of which relate to other critical aspects of SAC management. A flexible approach to implementation will ensure it is efficient and integrated with other activities, such as the ability to draw down funds from the SAC Partnership to implement the works independently to fit works with other initiatives. This flexibility will need to include how works are achieved, by whom, the time frames involved and the order of activity since the sites also need to be able to operate and remain financially viable, or wider impacts on the management and future of the SAC could result. The plans therefore set out a broad approach and some co-ordination, while ensuring inherent flexibility. Part of that flexibility will lie in the ability for different models for the delivery of works (see Appendix 4 for details).
- As such, this plan does not limit relevant organisations from undertaking car park infrastructure improvement or maintenance works which are not recognised within the document. However, in these cases, the responsibility to ensure that such works will not themselves result in addition likely harm to Cannock Chase SAC would be the responsibility of organisation undertaking the work. Furthermore, such works are unlikely to be supported by a financial contribution from the Cannock Chase SAC Partnership.

Scheduling works

- 5.9 The works set out essentially set out a series of steps that potentially should follow a prescribed order, with some additional measures (such as the masterplanning for the Marquis Drive area) that are special projects.
- 5.10 The order is summarised in Figure 4. Essentially, the network of existing vehicular ditching, earth bunds and wooden bollards adjacent to the roads that run along the edge of the SAC should first be repaired and reinstated, as in many places they have become dilapidated and infilled. The key car-parks to be retained will need improvements and relevant infrastructure prior to their promotion, with the promotion aimed at directing particular user groups to particular car-parks and interaction with users to explain the changes and divert users from the car-parks to be closed. The various locations where closure is proposed can then be closed off. These various steps can take place over a number of years and do not have to happen across all parking locations at once, or as discrete steps. For example, improvements to car-parks could take place incrementally at different parking locations as budgets allow. Some informal lay-bys and parking on gateways could be closed off easily without major works and these could be done at any time. The special projects, relating to work at Birches Valley, the Museum of Cannock Chase, Forestry England land south of the A460 and Marguis Drive (described in detail within the site user plan) are flexible in timing and will need to be commissioned in line with the relevant organisation's plans. We have included them at stage 2 in the sequence. The options appraisal for Chase Road will determine what happens there and then further works will proceed as per the sequence shown.
- 5.11 Figure 4 also shows a rolling programme of maintenance and monitoring that will be on-going and ensure the selected car-parks are well-maintained, actively managed, checked and levels of use are known. The final step in the progression will be the instigation of car-park charges. Ideally this would happen simultaneously across all relevant car-parks, however there may be a need for the process to be accelerated in some areas.

- 1 Improvements to car-parks to be retained
- Rationalise shape
- •Delineate parking
- •Repairs and reinstatement of ditching, bunds and bollards
- Improvements to surfacing
- Parking for horse boxes

- 2 Associated selected car-parks
- •Sign at entrance to
- Interpretation/ orientation panel
- •Preferred/ promoted
- Dog bins as required
- Bike racks

Drive

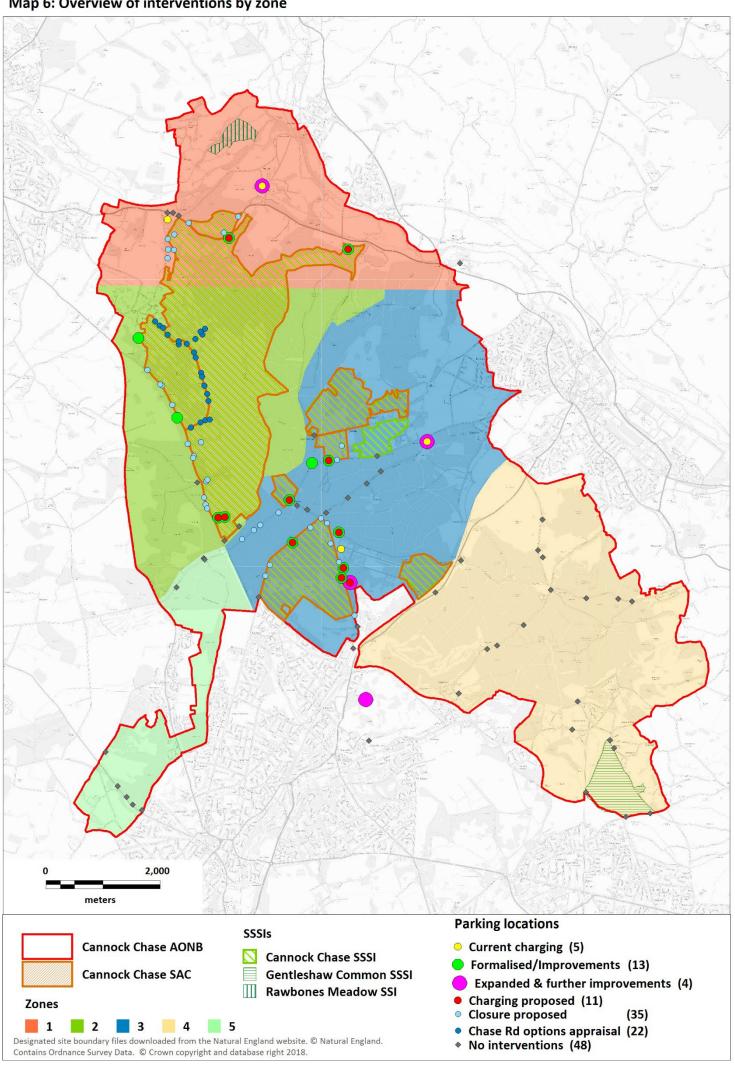
- Special projects at Birches Valley, Museum of Cannock Chase, Forestry England Land South of A460 and Marquis
- 3 Promotion of selected car-parks and awareness raising
- •General promotion and dialogue with users re changes
- On-line promotion Printed material as
- relevant
- •Face-face contact (warden team)
- 4 Closure of selected car-parks
- Banks, ditching or dragon's teeth
- 5 Introduction of parking charges
- Simultaneous across
- Enforcement necessary

Monitoring and maintenance as rolling programme

Figure 4: Stepwise progression of works set out in plan, showing the general steps described.

- 5.12 It will be necessary to break the work down and spread the work over a number of years, due to the scale of Cannock Chase, the different organisations involved, and the cost of works proposed.
- 5.13 In Map 5, we split Cannock Chase into 5 zones that broadly represent areas with different ownership, nature conservation importance and access patterns within the AONB. These zones provide a potential means to plan future work and broadly represent discrete units, for example including similar car-parks where visitors might be deflected or use as alternatives. Zones 1-3 are the main areas relating to the SAC. Zone 1 includes Shugborough and the northern part of the Chase. Zone 2 is the core part of the SAC and encompasses Chase Road. Zone 3 includes the southern parts of the SAC and both Marquis Drive and Birches Valley, i.e. the core area for mountain biking.

Map 6: Overview of interventions by zone



5.15 The works are broken down by zone in Table 2. It can be seen that Zone 2 has the largest number of parking locations and a high proportion (138 out of 42) are suggested for closure, plus there are an additional 22 car-parks within the zone that are along Chase Road and will be subject to review through the options appraisal.

Table 2: Summary of works by zone. Numbers relate to parking locations. * totals in the zone 2 row do not include Chase Road, which will be subject to options appraisal.

Zone	Closure suggested	Charging suggested	Car-parks currently charging	Formalisation/ improvements suggested	Car- parks to expand	Total car-parks in zone
Outside AONB	0	0	1	0	1	4
1	8	2	2	2	1	15
2*	13	2	0	4	0	42
3	14	7	2	7	2	35
4	0	0	0	0	0	20
5	0	0	0	0	0	8
Total	35	11	5	13	4	124

Implementation plan

5.16 Based on the sequence summarised in Figure 4, here we summarise how the works could be implemented.

Steps 1-3: Improvements to car-parks to be retained, new infrastructure and promotion

- 5.17 Parking locations where improvements/works are required are summarised in Table 3. These include some locations where charging is not proposed in the long term and the works is simply to contain or limit existing parking, for example at location 63, the Rifle Range Corner and pull-ins. Many of the locations are large car-parks with some more major works required. Also listed are some of the areas around Marquis Drive, and any works here will need to wait on the masterplan. The parking locations are grouped by zone in the table and suggestions for works are outlined.
- 5.18 The options appraisal for Chase Road and the special projects relating to Birches Valley, Museum of Cannock of Chase and the Forestry England land south of the A460 will also potentially add additional car-parks and works that are not included in Table 3.

Table 3: Parking locations to be retained where improvements and infrastructure required. Pale grey shading indicates locations where works are relatively low key and the locations are not ones where charging will be implemented in the longer term.

Zone	ID	Car-park	Notes
1	1	Seven Springs Car Park	Potential for directional enforcers to be installed allowing access to carpark to be restricted at roadside after dark while any cars present can still leave.
1	4	Punchbowl Car Park	Flatter area clearly marked out with dedicated area for horse boxes, and parking as a whole clearly deliminated and more formalised (e.g. log edging or similar) to preserve grass. With two entrances entry and exit could be made one-way, allowing vehicles to enter from west and exit at eastern entrance, ensuring no need for horse boxes to turn.
2	16	Brocton Nature Reserve Car Park	Modification to limit area to three clearly defined parking spaces, with no encroachment onto SAC. Potentially use of wooden dragon teeth and logs to mark spaces. Also clear turning area. Relatively minor works.
2	39	Bednall Belt Car Park	Large lay-by on opposite side of road to SAC. Double entrance so will work as place for coaches (e.g. school visits) to park. Area between parking and main road kept as open grass so that parking area not secluded from road.
2	54	Aspens Car Park pull in as you enter	Some existing dragon's teeth but these replaced/upgraded to ensure car-park clearly deliminated.
2	55	Aspens main Car Park	Existing bank and ditch upgraded/improved to deliminate clearly.
3	62	Whitehouse Car Park	Wooden dragon teeth or edging used to ensure edges clearly defined and resurfacing required.
3	63	Rifle Range Corner and pull ins	Clear edging necessary and parking limited to small number of vehicles. Track edging clearly defined (dragon's teeth?) to limit trackside parking
3	65	Penkridge Bank Road Car Park	Edging tidied up with ditch and bank to ensure clear delimitation
3	75	Brindley Bottom Car Park	Ditching/low bank to deliminate and better surfacing required.
3	81	Parking on both sides on road networks around MD	Covered by masterplanning for Marquis Drive; potentially to become one way with herringbone parking.
3	85	Nine Gate Car Park	Some formalising of edges/trackside required.
3	86	Duffields Car Park	Important to ensure capacity fixed and therefore a limit to number of visitors to the SAC area.

- 5.19 Following improvements to each of the above car-parks, it will be possible to also install the other relevant access infrastructure (at all the above apart from those shaded grey), which are set out within the site user plan. The main car-parks will each require a clear circular route(s), way-marked that start from the car-park. Interpretation/orientation panels will be necessary.
- 5.20 Once the marked routes and other features are in place, the car-parks can be promoted, including through face-face contact with the warden team to ensure they draw visitors and use starts to become focussed at the promoted car-parks.

Step 4: Car-park closures

5.21 Car-parks for closure are predominantly in zones 1, 2 and 3, and there may be further car-parks added from the 22 that lie along Chase Road. Any works along Chase Road will be subject to an options appraisal, but the other closures could be phased and take place zone by zone. In particular some of the smaller lay-bys and informal locations are unlikely to require major, costly work or have too much of an impact on visitors.

Step 5: Car-park charging

The charging will ideally be introduced simultaneously, once all the steps set out above have been completed. Locations for parking meters and any associated infrastructure will need to be anticipated in the previous steps, such that the installation of the necessary machines does not require any major changes to the car-parks (such as reshaping). The special projects and the options appraisal at Chase Road may take some time to complete and until completed it is difficult to be sure of the scale of works and timing at each. As such it may be necessary for the charging to be implemented in a standard way across all other parts of Cannock Chase.

Other elements

- 5.23 In addition, there are the special projects to enhance access from the railway stations for cycling. This is a discrete work area which is not dependent on other steps in the plan, and as such can be phased as opportunity and budget allows.
- 5.24 Monitoring would take place simultaneously across all parking locations as part of the on-going programme and is also not dependent on particular steps or other measures in the plan.

Approximate budget

- 5.25 The costs for works at each individual car-park have not been assessed in detail. Costs at each location will vary depending on the current condition, drainage, car-park size and shape and the works required. Partner organisations will have different preferred approaches and requirements for signage, interpretation etc.
- 5.26 Nonetheless, it is possible to approximately budget for costs, based on generic costs and these are summarised in Appendix 3. We have suggested typical costs per car-park for resurfacing and other measures (including road

signage, interpretation panel, etc.). Using these costs and scaling up using the car-park totals in Table 2, would suggest an overall budget of:

- £153,000 to close car-parks;
- £382,850 for initial costs to improve the car-parks to be retained;
- £35,245 for annual maintenance of the car-parks.
- 5.27 These costs are intended as a guide only and have been calculated by assuming a standard cost per car-park. We have assumed a single interpretation panel, single finger post and single automated counter at each main car-park where improvements are suggested.
- 5.28 There will of course be economies of scale and certain elements may well have reduced costs. For example, the closure of Chase Road will achieve the closure of numerous individual parking locations and this may well be less than the budget estimated by applying the standard cost to each car-park. We have also not included the costs for implementing the car-park charging (e.g. ticket machines, enforcement) nor attempted to estimate the revenue these might generate.
- 5.29 Costs are broken down by section in Table 4.

Table 4: Guide budgets per zone for car-park closures and improvements. These are generated by applying generic standardised cost estimates per car-park (Appendix 3) to the totals per zone (which are given in Table 2 above). Note the totals in the table do not include any of the car-parks along Chase Road, nor any of the special projects.

Zone	Cost to close car-parks	Initial one-off costs for improvements to car-parks	Annual cost to maintain improved car-parks
Outside AONB	£0	£0	£0
1	£24,000	£40,300	£3,710
2	£39,000	£80,600	£7,420
3	£42,000	£141,050	£12,985
4	£0	£0	£0
5	£0	£0	£0
Total	£105,000	£261,950	£24,115

5.30 Appendix 4 (flow chart provided by the SAC partnership) and Appendix 5 (SAMMM funding allocations) set out how the funding currently available to the SAC partnership could be allocated to support the delivery of mitigation works within both this plan and the site user plan. Funding has been allocated chronologically with items in the first phases of plans being provided for first until all current funding was exhausted. The flow chart

- indicates how stakeholders can apply for funding for measures within the plan or even measures that fall outside it.
- A large number of works within both plans currently have no funding allocated to them as they will either occur in later phases or the work item/project represents potential mitigation works not currently included with the SAMMM of the Cannock Chase SAC Partnership. To what extent these items may receive future funding is a matter for a future evidence-base review by the SAC Partnership.

6. References

Liley, D. (2012) Cannock Chase SAC Visitor Report. Unpublished Report, Footprint Ecology.

Panter, C., Underhill-Day J., D., Weitowitz, D. & Liley, D. (2018) *Evidence Base to Inform a Car-Park Strategy and Site Users Strategy for Cannock Chase*. Unpublished, Footprint Ecology / Stafford Borough Council.

Appendix 1: Parking locations

All individual parking locations are listed here and recommendations for each are listed in terms of closure, charging and notes provide more detailed commentary of interventions that are recommended.

The following interventions are not included in the table as they are relevant to all carparks:

- Signage at entrance with name of car-park
- Clear demarcation around edge, with banking, low posts or similar as appropriate to ensure no 'spill-over' onto adjacent heath or grassland
- Gravel/chipping surfacing maintained as necessary.

Table 5: Individual car-parks. ID column relates to numbering used by Cannock Chase partnership. Brighter green shaded rows are formal car-parks.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
									Potential for directional enforcers to be installed allowing access
1	1	Seven Springs Car Park	50		✓		✓		to car-park to be restricted at roadside after dark while any cars present can still leave.
2	1	Coldman's Slade Car Park	13	✓					Isolated car-park to north of SAC with difficult road access. Closed at roadside (earth bank) and allowed to re-naturalise.
3	1	Satnall Hills	22	✓					Isolated car-park to north of SAC. Close off at road side and allow to re-naturalise.
4	1	Punchbowl Car Park	46		1		✓		Car-park a looped track with parking on grass and slope. Flatter area clearly marked out with dedicated area for horse boxes, and parking as a whole clearly deliminated and more formalised (e.g. log edging or similar) to preserve grass. With two entrances entry and exit should be made one-way, allowing vehicles to enter from west and exit at eastern entrance, ensuring no need for horse boxes to turn.
5	1	Pull in before main Shugborough entrance	9	✓					Informal lay-by where stone wall ends, on north side of road. Surface in very poor condition and difficult curb. Close off with boulders or earth bank and allow to re-naturalise.
6	1	Shugborough Hall, National Trust Car park	235			✓		✓	Main NT car-park. Car-park for house/gardens and non- members pay to enter. Car-parking provision here to increase to 450 formal spaces and a further 350 overflow spaces.
7	1	Holdiford Road pull in	2						
8	1	Lay-by 1 on A513 Milford Common	3						
9	1	Lay-by 2 on A513 Milford Common	3						

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
10	1	Milford Common	47			✓			Tarmac car-park with existing charging. No changes but overtime parking charges could be aligned with other locations for consistency.
11	1	Sister Dora Car Park	9	✓					Closed off with gate/vehicle barrier after care-home
12	1	The Cutting Car Park	12	✓					Car-park set well back from road. Long and thin. Closed at roadside and allowed to re-naturalise.
13	1	The Cutting Car Park 2	4	✓					Small parking area close to road. If use low over time may not warrant parking charges and could close as other parking nearby.
14	1	Car park opposite Brocton Lodge (Golf Green)	12	✓					Suggested for closure (at roadside). If not closed, then parking area would need to be clearly deliminated, with ditch/wooden edging and shaped modified from tear-drop to more rectangular to make manoeuvring easier.
15	1	Broc Hill Way Car Park	3	✓					Parking area accessed on track to houses, straight forward to close off at car-park entrance with low bank. Track should be clearly signed as private and edging clear (dragon's teeth) to ensure parking restricted away from houses.
16	2	Brocton Nature Reserve Car Park	3				√		Small parking area at end of Oldacre Lane. Not promoted or easy to find and likely used by very local people. Modification to limit area to three clearly defined parking spaces, with no encroachment onto SAC. Potentially use of wooden dragon teeth and logs to mark spaces. Also clear turning area.
17	2	Pull in on Chase Road before the first speed hump	3	✓					Any works subject to Chase Road options appraisal.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
18	2	Pull in on Chase Road after the first speed hump	1	✓					Any works subject to Chase Road options appraisal.
19	2	Pull in on Chase Road after the first speed hump	1	✓					Any works subject to Chase Road options appraisal.
20	2	Entrance to Brocton quarry	2	✓					Any works subject to Chase Road options appraisal.
21	2	Chase Vista Car Park	13		✓		✓		Any works subject to Chase Road options appraisal.
22	2	Pull in after Chase Vista Car Park	2	✓					Any works subject to Chase Road options appraisal.
23	2	Pull in just before Coppice Hill left turn	1	✓					Any works subject to Chase Road options appraisal.
24	2	Coppice Hill pull in	4		✓		✓		Any works subject to Chase Road options appraisal.
25	2	Freda's Grave Car Park	8		✓		✓		Any works subject to Chase Road options appraisal.
26	2	Pull in on route to Coppice Hill main Car Park	6		✓		✓		Any works subject to Chase Road options appraisal.
27	2	Coppice Hill main Car Park at the end of the track	28		✓		✓		Any works subject to Chase Road options appraisal.
28	2	Pull in Freda's Grave footpath, Chase Road	2	✓					Any works subject to Chase Road options appraisal.
29	2	Pull in after Freda's Grave, Chase Road	1	✓					Any works subject to Chase Road options appraisal.
30	2	Pull in Dry Pits, Chase Road	9	✓					Any works subject to Chase Road options appraisal.
31	2	Pull in after speed hump, Chase Road	2	✓					Any works subject to Chase Road options appraisal.
32	2	Glacial Boulder Car Park	18	✓					Any works subject to Chase Road options appraisal.
33	2	Pull in 20 yards after Glacial Boulder	2	✓					Any works subject to Chase Road options appraisal.
34	2	Pull in 50 yards after Glacial Boulder	1	✓					Any works subject to Chase Road options appraisal.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
35	2	Chase Road Corner Car Park	20	✓					Any works subject to Chase Road options appraisal.
36	2	Pull in after Chase Road Corner Car Park	2	✓					Any works subject to Chase Road options appraisal.
37	2	2nd Pull in after Chase Road Corner Car Park	1	✓					Any works subject to Chase Road options appraisal.
38	2	3rd Pull in after Chase Road Corner Car Park	2	✓					Any works subject to Chase Road options appraisal.
39	2	Bednall Belt Car Park	17				✓		Large lay-by on opposite side of road to SAC. Double entrance so will work as place for coaches (e.g. school visits) to park. Area between parking and main road kept as open grass so that parking area not secluded from road.
40	2	Pull in 1 after Bednall Belt Car Park	2	✓					Small square shaped pull-in. Closed off with low earth bank along side of road and parking area allowed to re-naturalise.
41	2	Pull in 2 after Bednall Belt Car Park	2	✓					Small square shaped pull-in. Closed off with low earth bank along side of road and parking area allowed to re-naturalise.
42	2	Pull in 3 after Bednall Belt Car Park	2	✓					Closed off with low earth bank along side of road and parking area allowed to re-naturalise.
43	2	Pull in 4 after Bednall Belt Car Park	2	✓					Relatively long lay-by, potentially best closed off with wooden dragon's teeth, which may also be necessary on opposite side of road
44	2	Pull in before Anson's Bank Car Park	8	✓					Large lay-by on opposite side of road to SAC. Area between parking and main road kept as open grass so that parking area not secluded from road. Potential to close if monitoring data shows heavy use, prolonged use as awkward and potentially dangerous to cross road.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
45	2	Anson's Bank Car Park	20	✓					Set well back from road and subject to anti-social behaviour. Car-park to be closed, and implications considered as part of options appraisal for Chase Road.
46	2	First pull in past Anson's Bank Car Park	2	✓					Closed off with low bank and allowed to grow over.
47	2	2nd pull in past Anson's Bank Car Park	1	✓					Very small tarmaced layby on opposite side of road to SAC.
48	2	Katyn Pull in entering Car Park	1	✓					Close off with dragon's teeth
49	2	Katyn Car Park Car Park	12		√				Car-park already with dragon's teeth and clearly marked. Tarmac access road and memorial in car-park. If over time use low, could close -off at roadside.
50	2	Springslade Lodge Car Park	41						Parking by tea rooms. Already well laid out with ditch and bank.
51	2	Pull in after Springslade Lodge	1	✓					Closed off with dragon's teeth and allowed to re-naturalise. Dragon's teeth may well need to extend either side byond current layby
52	2	Pull in 2 after Springslade Lodge	2	✓					Closed off with dragon's teeth and allowed to re-naturalise. Dragon's teeth may well need to extend either side byond current layby
53	2	Quarry back entrance Pottal Pool, Badger Slade Wood	2	✓					Existing no parking sign on gate. Entrance narrowed to reduce options to park without obstructing gateway.
54	2	Aspens Car Park pull in as you enter	13		✓		✓		Some existing dragon's teeth but these replaced/upgraded to ensure car-park clearly deliminated.
55	2	Aspens main Car Park	18		✓		✓		Existing bank and ditch upgraded/improved to deliminate clearly.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
56	2	Commonwealth Cemeteries Car Park	15						Car-park for those visiting the cemeteries, particular kind of use and already maintained differently to others with very different feel.
57	2	German War Cemeteries	10						Car-park for those visiting the cemeteries, particular kind of use and already maintained differently to others with very different feel.
58	3	1st pull in on Penkridge Bank Road	2	✓					Closed off with low earth bank or dragon's teeth and allowed to re-naturalise.
59	3	2nd pull in on Penkridge Bank Road	1	✓					Closed off with low earth bank or dragon's teeth and allowed to re-naturalise.
60	3	3rd pull in on Penkridge Bank Road, FC gate	1	✓					May be necessary to retain gated access, in which case dragon's teeth used to ensure no possible to park without obstructing gateway.
61	3	4th pull in on Penkridge Bank Road	2	✓					Closed off with low earth bank or dragon's teeth and allowed to re-naturalise.
62	3	Whitehouse Car Park	58		√		✓		Large car-park with four large parking bays separated by thin grassy strips. Wooden dragon teeth or edging used to ensure edges clearly defined and resurfacing required.
63	3	Rifle Range Corner and pull ins	10						Pull in at start of track. Clear edging necessary and parking limited to small number of vehicles. Track edging clearly defined (dragon's teeth?) to limit trackside parking
64	3	TA Centre Car Park	40						Signage required at entrance to ensure visitors aware car-park for TA centre users only
65	3	Penkridge Bank Road Car Park	62		✓		✓		Edging tidied up with ditch and bank to ensure clear delimitation

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
66	3	Pull in between Kingsley Wood Rd & Penkridge Bank Rd	22	✓					Parking along whole trackside restricted using dragon's teeth. Track not maintained.
67	3	Pull in after Penkridge Bank Car Park	1	✓					Close off with an earth bank/dragon's teeth and allow to renaturalise
68	3	Pull in after Penkridge Bank Car Park	2						Outside SAC so not suggested for closure, but plenty of litter and poorly maintained. Could be closed off with dragon's teeth or low bank.
69	3	Birches Valley Car Park	510			✓		√	Main FC car-park. Existing charging and well maintained. In addition to the 510 capacity there are 2000 event overflow spaces. Improvements to include a new road entrance and increase of 200 formal parking spaces and event overflow by 2000 spaces.
70	3	Pull in before Birches Valley, FC barrier	1						Outside SAC, existing banking could be modified to restrict parking further.
71	3	Pull in before Birches Valley, FC barrier 2	0						Very limited parking
72	3	Pull in before Birches Valley, FC barrier	2						Circular parking area around start of track/gateway. Potential to restrict but outside SAC
73	3	Pull in before Birches Valley, FC barrier 4 before Marquis	2						Existing no parking sign on gate.
74	3	Flints Field Car Park	13	✓					Close off at roadside with bank.
75	3	Brindley Bottom Car Park	17		✓		✓		Ditching/low bank to deliminate and better surfacing required.
76	3	Brindley Village Car Park	7	✓					Close off at roadside with bank.

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
77	3	Pull in after Brindley Village Car Park	2	✓					Closed off with low earth bank or dragon's teeth and allowed to re-naturalise.
78	3	Pull in before Tower Garage, opp water tower	2						Parking for water tower so retained
79	3	Pull in 1 just after turn into Marquis Drive	1	✓					Closed off with dragon's teeth and allowed to re-naturalise.
80	3	Pull in 2 just after turn into Marquis Drive	1	✓					Closed off with low earth bank or dragon's teeth and allowed to re-naturalise.
81	3	Parking on both sides on road networks around MD	120		✓		✓		Covered by masterplanning for Marquis Drive; potentially to become one way with herringbone parking.
82	3	Cannock Chase VC Car Park and overspill	82			✓			Covered by masterplanning for Marquis Drive.
83	3	Campfield Car Park	12	√					Closed off with low bank alongside road and car-park allowed to re-naturalise. Plenty of nearby parking at Marquis Drive where set back further from SAC and with better facilities to engage with visitors.
84	3	Pull in after Campfield Car Park	2	✓					Closed off with dragon's teeth. Thin layby and plenty of parking nearby at Marquis Drive.
85	3	Nine Gate Car Park	39		✓		✓		Set back from SAC. Some formalising of edges/trackside required. Covered by masterplanning for Marquis Drive.
86	3	Duffields Car Park	12		✓		√		Retained as small car-park, with charging. Important to ensure capacity fixed and therefore limit to number of visitors to the SAC area.
87	3	Fives Valley Car Park / Amphitheatre Car Park	8		√			✓	Covered by masterplanning for Marquis Drive.

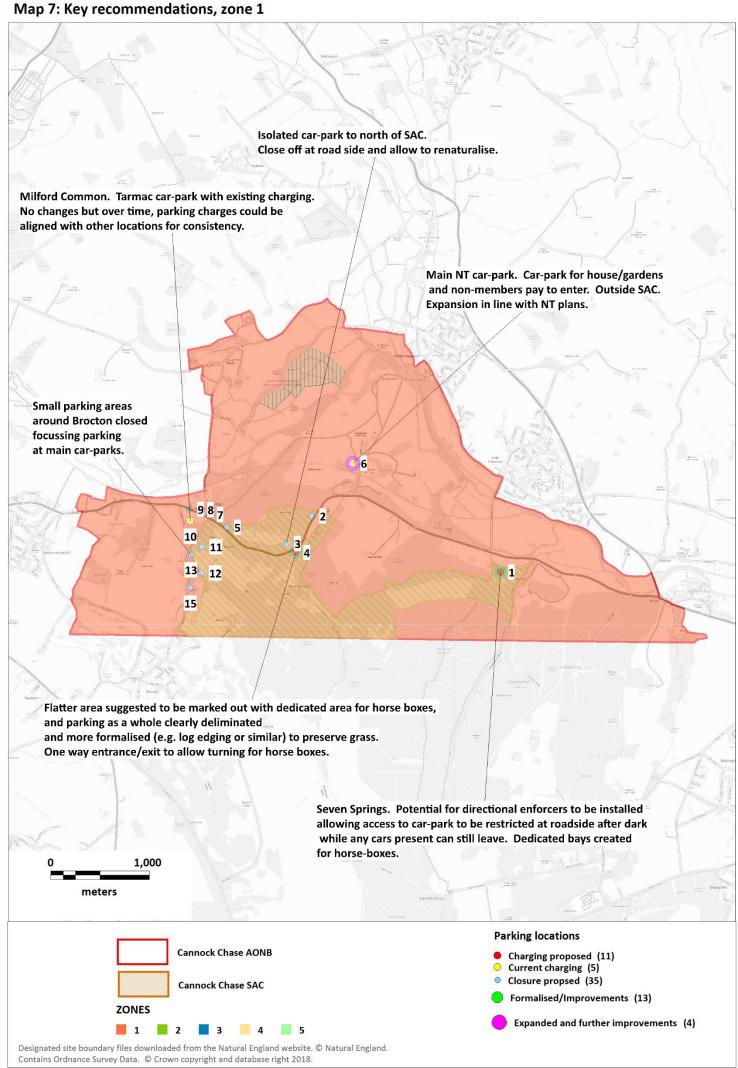
ld	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
88	3	Pull in after AONB brown signs	2	✓					Close off with low earth bank or dragon's teeth and allow to grow over. By corner of SAC. Could be included in masterplanning for Marquis Drive
89	3	Pull in by fishing ponds before Brindley Village signs	4						Small informal layby next to pond. No changes
90	3	Brindley Heath Car Park	11						Covered by masterplanning for Marquis Drive.
91	0	Museum of Cannock Chase Car Parks	25					✓	Scale of car park expansion proposed in Museum of Cannock Chase Feasibility study 2019: total on 101 Car Parking spaces, 4 coach spaces + overflow spaces
92	0	Hednesford Hills Nature Reserve, Reservoir Road	10						
93	4	Hazelslade LNR Car Park	10						
94	4	Nunswell Pull In (previously car park)	1						
95	4	Castle Ring Car Park	30						
96	4	Gentleshaw Common pull in opposite church	13						
97	4	Gentleshaw Common pull in opposite pub	6						
98	4	Gentleshaw Common pull in's on Chorley Road before bridge	12						
99	4	Gentleshaw Common main Car Park	8						
100	4	1st barrier before Beaudesert, Rugley Road	3						Any measures here potentially included as part of the special project relating to Forestry England land south of the A460.

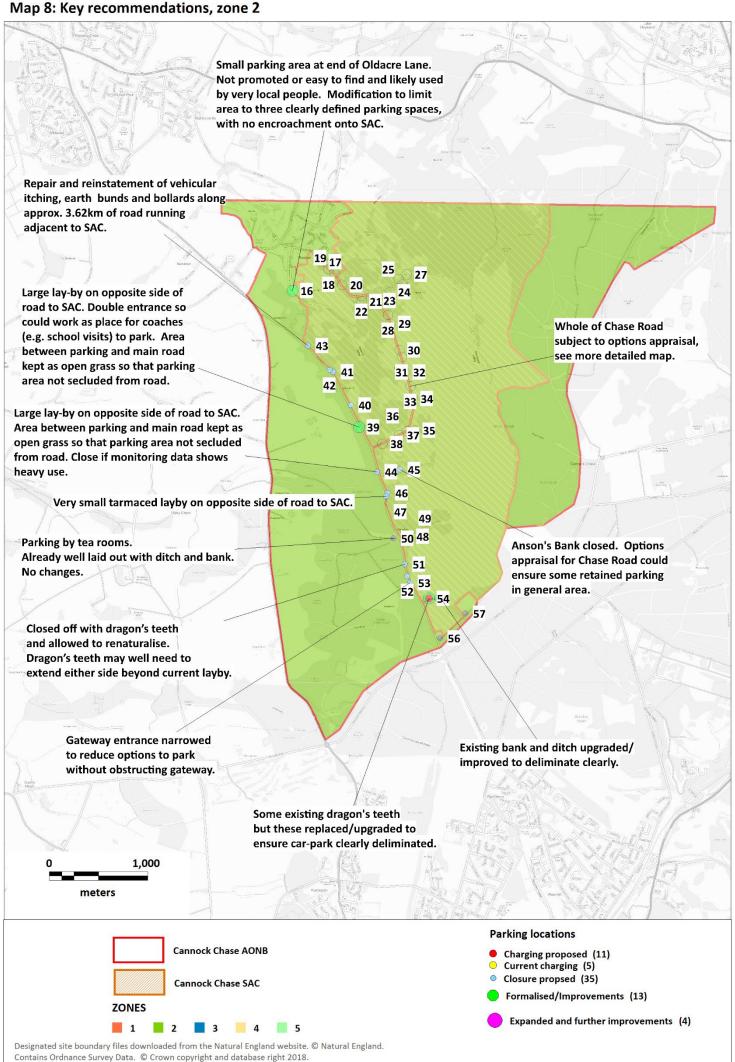
Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
101	4	2nd barrier before Beaudesert, Rugley Road	2						Any measures here potentially included as part of the special project relating to Forestry England land south of the A460.
102	4	Beaudesert Old Park Car Park and pull in opposite	4						Any measures here potentially included as part of the special project relating to Forestry England land south of the A460.
103	4	3rd barrier before junction RHS, Rugley Road	4						
104	4	Pull in top of hill Startley Lane	8						
105	4	Pull in at FC Barrier Longdon	5						
106	4	Stile Cop Car Park	35						Well outside SAC and therefore not relevant to include parking charges, however important to ensure managed in the future and retained to draw access. Works here may need reviewing in line with the special project relating to Forestry England land south of the A460.
107	4	Pull in after Stile Cop	4						
108	4	Flaxley Green Car Park	11						
109	4	Moors Gorse Car Park	30						Well used by mountain bikers and free to park currently. Use is outside SAC so little impact from use here. Could potentially be considered for closure in the long term, but would be dependent on masterplanning work at Marquis Drive and other special projects.
110	4	Large lay by after Moors Gorse	24						Any measures here potentially included as part of the special project relating to Forestry England land south of the A460.
111	5	Shoal Hill Car Park 1 opposite Tavern, Shirewood	8						

Id	Zone	Car-park name	Estimated capacity	Closure proposed	Charging proposed	Charging currently	Formalisation + Improvements	Expansion	Detailed measures/notes relating to any changes proposed
112	5	Shoal Hill Pull in 1 after Tavern, B5102	1						
113	5	Shoal Hill Pull in Car Park 2, B5102	4						
114	5	Shoal Hill Pull in 2, B5102	2						
115	5	Main Shoal Hill Car Park, Cocksparrow Lane	16						
116	3	Whitehouse to Marquis Drive pull in	3						
117	3	Whitehouse to Marquis Drive pull in	3						
118	0	Chasewater, South Shore Car park	208			✓			
990	0	Wolseley Centre	60						
991	4	unnamed	2						
994	4	unnamed	2						
995	5	unnamed	2						
992	5	unnamed	2						
993	5	unnamed	2						

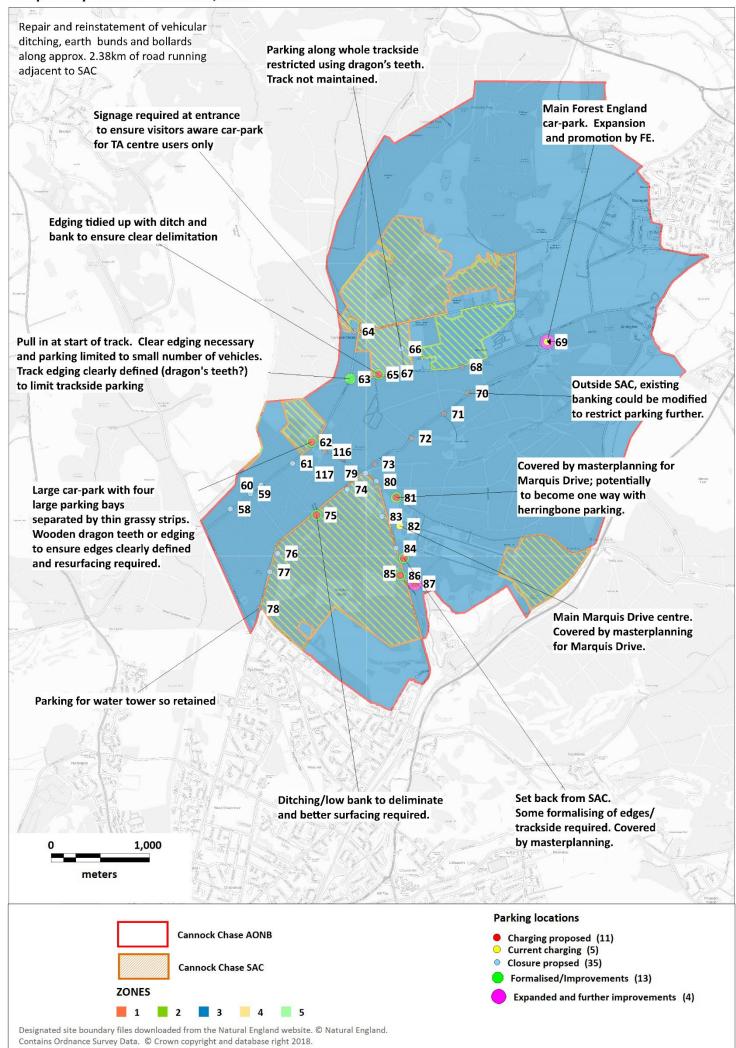
Appendix 2: Maps for key zones

This appendix includes maps summarising the key recommendations for each zone. Maps have been generated for zones 1-3 only.





Map 9: Key recommendations, zone 3



Appendix 3: Summary of approximate costs per carpark

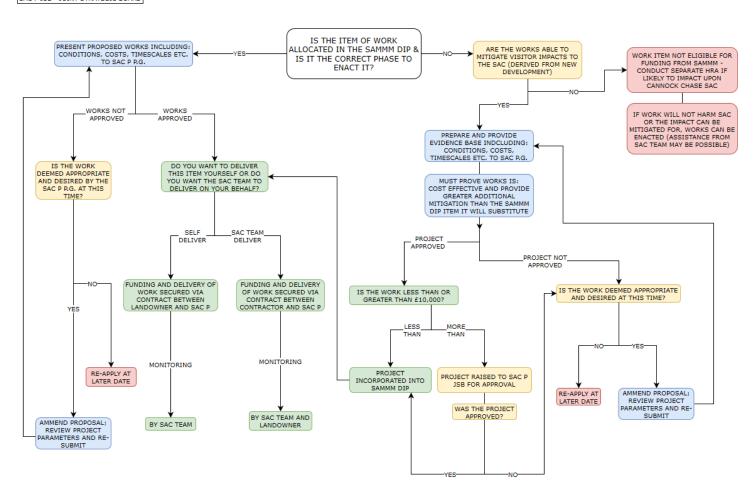
These are approximate, generic costs, based on examples from other locations. They are provided as a guide only and allow an approximate overall budget cost to be determined. Note certain elements of works that are set out within the site user plan but relate to car-parking are shown. No attempt is made to estimate the likely revenue from charging, nor are costs for parking meters included in the table.

	Unit	Cost
Initial costs: car-park improvements/expansion		
Surface improvements and edging to car-park	per car-park	£12,000
Tree removal, thinning and clearance	per car-park	£2,000
Dog bin	per bin	£550
Road signage	per sign	£1,500
Visitor counter	per counter	£1,200
Interpretation panels	per panel	£2,000
Fingerposts	per post	£300
Hardwood bench	per bench	£600
TOTAL PER CAR-PARK		£20,150
Annual costs: car-park improvements/expansion		
Emptying dog bins	per bin	£400.00
Visitor counter servicing	per counter	£200.00
Waste disposal	per car-park	£200.00
ANNUAL COST PER CAR-PARK		£800.00
Capital Replacement: car-park improvements/expansion		
Car-park surface and edging	per car-park	£5,000
Dog bin	per bin	£550
Road signage (at entrance to car-park)	per sign	£1,500
Visitor counter	per counter	£1,200
Interpretation panels	per panel	£2,000
Fingerposts	per post	£300
Hardwood bench	per bench	£600
TOTAL REPLACEMENT COSTS		£10,550
ANNUAL COST ASSUMING REPLACEMENT EVERY 10 YEARS		£1,055.00
Initial cost: car-park closure		
Earth bank or dragon's teeth to close car-park	per location	£3,000
COST PER CAR-PARK		£3,000

Appendix 4: Flow chart summarising application process for funding from SAC partnership (produced by the SAC team)

SAC P P.G. - PROJECT GROUP SAC P JSB - JOINT STRATEGIC BOARD

APPLICATION FOR FUNDING FROM SAC PARTNERSHIP: PROCESS



Appendix 5: SAMM funding allocation (provided by the SAC partnership)

Chronological order. Phase of works	Item of Works	Included in which SAMMM DIP	Zone of works	Cost to implement SAMMM DIP item	Currently amount from 2016 SAMMM budget allocated	Amount remaining to be funded
Commence in Phase 1 and ongoing throughout	Resources/events for Engagement Key Stages 1-2 (2020-2040)	Site User Infrastructure, Education and Engagement	N/A	(£6,000 per annum) £120,000	£20,805	£99,195
Commence in Phase 1 and ongoing throughout	Resources/events for Engagement Key Stages 3-4 (2020-2040)	Site User Infrastructure, Education and Engagement	N/A	(£6,000 per annum) £120,000	£20,805	£99,195
Commence in Phase 1 and ongoing throughout	Resources/events for Engagement with key visitor groups (2020-2040)	Site User Infrastructure, Education and Engagement	N/A	(£3,000 per annum) £60,000	£30,000	£30,000
Commence in Phase 1 and ongoing throughout	One-off cost Creation of Learning Hub at Wolseley Centre	Site User Infrastructure, Education and Engagement	1	£34,000	£34,000	£0
Commence in Phase 1 and ongoing throughout	Creation of Central Website and hosting until 2040	Site User Infrastructure, Education and Engagement	N/A	£45,000	£34,500	£10,500
Phase 1	Re-instatement of vehicular ditching, bollards etc. around SAC	Car Parking	2	(3.62km @ £15 per m) £54,300	£54,300	£0

Chronological order. Phase of works	Item of Works	Included in which SAMMM DIP	Zone of works	Cost to implement SAMMM DIP item	Currently amount from 2016 SAMMM budget allocated	Amount remaining to be funded
Phase 1	Re-instatement of vehicular ditching, bollards etc. around SAC	Car Parking	3	(2.38km @ £15 per m) £35,700	£35,700	£0
Phase 1	One-off Cost for improvements to Car Parks	Car Parking	1	£40,300	£40,300	£0
Phase 1	One-off Cost for improvements to Car Parks	Car Parking	2	£201,500	£201,500	£0
Phase 1	One-off Cost for improvements to Car Parks	Car Parking	3	£181,050	£181,050	£0
Phase 1	Special Project, Forestry England Visitor/mountain bike centre south of A460	Site User Infrastructure, Education and Engagement	5	£25,000	£0	£25,000
Phase 1	Special Project, Museum of Cannock Chase, Community Hub	Site User Infrastructure, Education and Engagement	N/A	£25,000	£0	£25,000
Phase 2 and 3	CC SAC Team Admin Assistant (part-time, 2020-2040)	Site User Infrastructure, Education and Engagement	N/A	(£21,000 per annum) £420,000	£0	£420,000
Phase 2 and 3	CC SAC SAMMM Delivery Officer (2020-2030)	Site User Infrastructure, Education and Engagement	N/A	(£40,000 per annum) £400,000	£0	£400,000
Phase 2 and 3	CC SAC SAMMM Implementation and Monitoring Assistant (x2) (2020-2040)	Site User Infrastructure, Education and Engagement	N/A	(£70,000 per annum) £1,400,000	£0	£1,400,000

Chronological order. Phase of works	Item of Works	Included in which SAMMM DIP	Zone of works	Cost to implement SAMMM DIP item	Currently amount from 2016 SAMMM budget allocated	Amount remaining to be funded
Phase 2 and 3	Circular routes created at each main Car Park: path works	Site User Infrastructure, Education and Engagement	1	£60,000	£60,000	£0
Phase 2 and 3	Circular routes created at each main Car Park: path works	Site User Infrastructure, Education and Engagement	2	£120,000	£120,000	£0
Phase 2 and 3	Circular routes created at each main Car Park: path works	Site User Infrastructure, Education and Engagement	3	£90,000	£90,000	£0
Phase 2 and 3	Circular routes created at each main Car Park: way-markers	Site User Infrastructure, Education and Engagement	1,2,3	£18,750	£18,750	£0
Phase 2 and 3	Circular routes created at each main Car Park: finger posts	Site User Infrastructure, Education and Engagement	1,2,3	£30,300	£30,300	£0
Phase 2 and 3	Orientation panel in each main car-park showing main promoted routes	Site User Infrastructure, Education and Engagement	1,2,3	£22,000	£22,000	£0
Phase 3	Special Project Marquis Drive Masterplan	Site User Infrastructure, Education and Engagement	3	£25,000	£0	£25,000
Phase 4	Close Car Parks	Car Parking	1	£24,000	£0	£24,000

Chronological order. Phase of works	Item of Works	Included in which SAMMM DIP	Zone of works	Cost to implement SAMMM DIP item	Currently amount from 2016 SAMMM budget allocated	Amount remaining to be funded
Phase 4	Close Car Parks	Car Parking	2	£84,000	£0	£84,000
Phase 4	Close Car Parks	Car Parking	3	£42,000	£0	£42,000
Phase 4	Special Project Chase Rd	Car Parking	2	£25,000	£0	£25,000
Phase 4	Material (temporary signs etc.) to close damaging habitat fragmentation desire lines	Site User Infrastructure, Education and Engagement	1,2,3	£10,000	£0	£10,000
Phase 4	New road signs to replace existing ones	Site User Infrastructure, Education and Engagement	N/A	£75,000	£0	£75,000
Phase 5	Installation of Car Park Charging Machines	Car Parking	1	£10,000	£0	£10,000
Phase 5	Installation of Car Park Charging Machines	Car Parking	2	£25,000	£0	£25,000
Phase 5	Installation of Car Park Charging Machines	Car Parking	3	£35,000	£0	£35,000
Ongoing as needed	Cost to maintain improved car- parks 2020-2040	Car Parking	1	£74,200	£34,868	£39,332
Ongoing as needed	Cost to maintain improved car- parks 2020-2040	Car Parking	2	£371,000	£34,868	£336,132
Ongoing as needed	Cost to maintain improved car- parks 2020-2040	Car Parking	3	£259,700	£34,868	£224,832
Ongoing as needed	Circular routes created at each main Car Park: way-markers, replacement after 10 years	Site User Infrastructure, Education and Engagement	1,2,3	£18,750	£0	£18,750

Chronological order. Phase of works	Item of Works	Included in which SAMMM DIP	Zone of works	Cost to implement SAMMM DIP item	Currently amount from 2016 SAMMM budget allocated	Amount remaining to be funded
Ongoing as needed	Circular routes created at each main Car Park: finger posts, replacement after 10 years	Site User Infrastructure, Education and Engagement	1,2,3	£30,300	£0	£30,300
Ongoing as needed	Orientation panel in each main car-park showing main promoted routes, replacement after 10 years	Site User Infrastructure, Education and Engagement	1,2,3	£22,000	£0	£22,000
Total				£4,593,850	£1,098,614	£3,495,236