

# Habitats Regulations Assessment: Ashchurch Rural NDP

Screening Report

Ashchurch Rural Parish Council

December 2020

## Quality Information

<u>Prepared by</u>	<u>Checked by</u>	<u>Verified by</u>	<u>Approved by</u>
George Wilkinson Graduate Ecologist	Dr James Riley Technical Director	Max Wade Technical Director	Dr James Riley Technical Director

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## Prepared for:

Ashchurch Rural Parish Council

## Prepared by:

AECOM Limited  
Midpoint, Alençon Link  
Basingstoke  
Hampshire RG21 7PP  
United Kingdom

T: +44(0)1256 310200  
aecom.com

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# 1. Introduction

## Scope of Project

- 1.1 AECOM was appointed by Locality on behalf of Ashchurch Rural Parish Council (ARPC) to undertake a Habitats Regulations Assessment (HRA) for the Ashchurch Rural Neighbourhood Development Plan 2020-2031 Regulation 14 Draft (hereafter 'the ARNDP'). This HRA has been undertaken to inform the planning group and local councils of the potential effects of policies and development allocated within the ARNDP on European sites and how any potential effects are being addressed in the ARNDP.
- 1.2 The Tewkesbury Borough Plan (submitted in 2020) was subject to initial HRA Screening in 2015<sup>1</sup> and detailed HRA Screening and Appropriate Assessment in 2019<sup>2</sup>. This identified the risk of likely significant effects from housing allocations within the borough on European sites, with possible impact pathways including air quality and recreational pressure, potentially affecting Dixton Wood Special Area of Conservation (SAC) and Bredon Hill SAC.
- 1.3 Consultation with Natural England and Gloucestershire County Council<sup>3</sup> has identified the need for HRA screening of the ARNDP; particularly in relation to 'Policy S1: Site allocation at Fiddington' for a new development comprising up to 850 new dwellings, a primary school, local centre and supporting infrastructure/utilities. This development has already been granted planning permission. Other policies and development allocated within the ARNDP were also subject to HRA screening.
- 1.4 The objective of this HRA is to identify if Policy S1: Site allocation at Fiddington and/or other policies and allocations within the ARNDP have the potential to cause an adverse effect on the integrity of Natura 2000 or European Designated Sites, either in isolation or in combination with other plans and projects, and to determine whether site-specific or policy mitigation measures are required.

## Legislation

- 1.5 The need for HRA is set out within the Conservation of Habitats & Species Regulations 2017 (as amended) and concerns the protection of European sites. European sites (also called Natura 2000 sites) include Special Areas of Conservation (SAC), Special Protection Areas (SPA) and proposed/candidate sites for these designations. It is also Government policy for sites designated under the Convention on Wetlands of International Importance (Ramsar sites) to be treated as having equivalent status to Natura 2000 sites.
- 1.6 The HRA process applies the precautionary principle to protected areas. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

### Box 1: The legislative basis for HRA

#### **Conservation of Habitats and Species Regulations 2017 (as amended)**

With specific reference to Neighbourhood Plans, Regulation 106(1) states that:

*"A qualifying body which submits a proposal for a neighbourhood development plan must provide such information as the competent authority [the Local Planning Authority] may reasonably require for the purpose of the assessment under regulation 105... [which sets out the formal process for determination of 'likely significant effects' and the appropriate assessment]."*

- 1.7 It is therefore important to note that this report has two purposes:

<sup>1</sup> Available at: <https://www.tewkesbury.gov.uk/local-plan#tewkesbury-borough-plan> (accessed 04/12/20).

<sup>2</sup> Available at: <https://www.tewkesbury.gov.uk/tewkesbury-borough-plan-examination-library#core-documents> (accessed 21/12/20).

<sup>3</sup> Stated within the *Screening Statement for the Ashchurch Rural Neighbourhood Plan 20 October 2020* (p8).

- To assist the Qualifying Body (ARPC) in preparing their plan by recommending (where necessary) any adjustments required to protect European sites, thus making it more likely their plan will be deemed compliant with the Conservation of Habitats and Species Regulations 2017 (as amended); and
  - On behalf of the Qualifying Body, to assist the Local Planning Authority to discharge their duty under Regulation 105 (in their role as 'plan-making authority' within the meaning of that regulation) and Regulation 106 (in their role as 'competent authority').
- 1.8 As 'competent authority', the legal responsibility for ensuring that a decision of 'likely significant effects' is made, for ensuring an 'appropriate assessment' (where required) is undertaken, and for ensuring Natural England are consulted, falls on the Local Planning Authority. However, they are entitled to request from the Qualifying Body the necessary information on which to base their judgment and that is a key purpose of this report.
- 1.9 Over the years, 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Habitats Regulations, from screening through to identification of IROPI. This has arisen in order to distinguish the overall process from the individual stage of "Appropriate Assessment". Throughout this report the term HRA is used for the overall process and restricts the use of Appropriate Assessment to the specific stage of that name.

## 2. Methodology

### Introduction

- 2.1 Figure 1 below outlines the stages of HRA according to current Ministry of Housing, Communities and Local Government guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the Plan until no significant adverse effects remain.

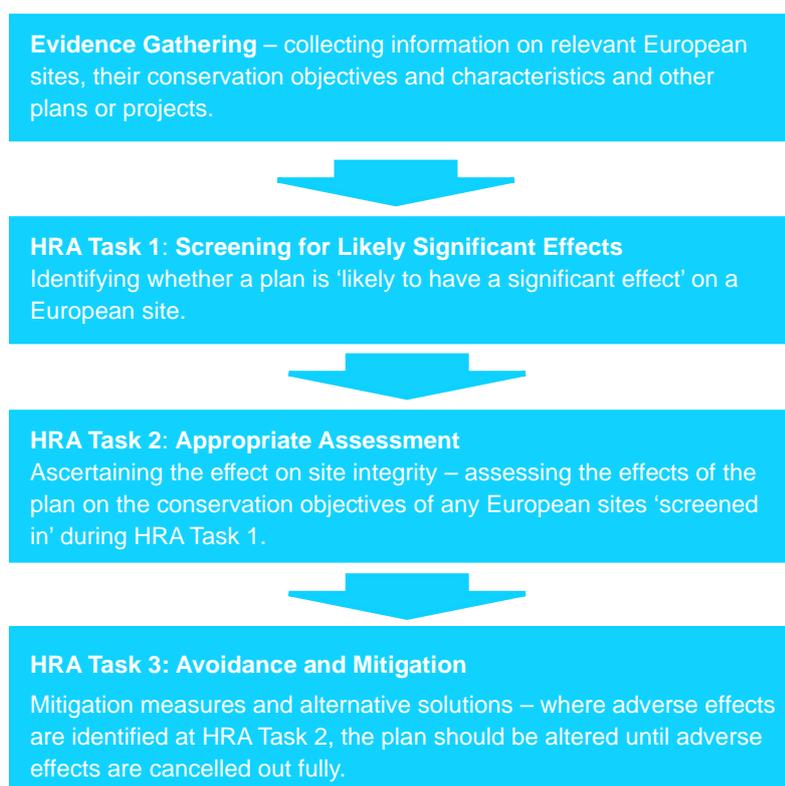


Figure 1. Four Stage Approach to Habitats Regulations Assessment (GOV.UK, 2019)

### HRA Task 1: Test of Likely Significant Effects (LSE)

- 2.2 Following evidence gathering, the first stage of any HRA is a Likely Significant Effect (LSE) test; essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

*"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"*

- 2.3 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report.

### HRA Task 2: Appropriate Assessment (AA)

- 2.4 Where it is determined that a conclusion of 'no likely significant effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment rather than determination of likely significant effects.

- 2.5 During July 2019 the Ministry of Housing, Communities and Local Government published guidance for Appropriate Assessment<sup>4</sup>. Paragraph: 001 Reference ID: 65-001-20190722 explains: *'Where the potential for likely significant effects cannot be excluded, a competent authority must make an appropriate assessment of the implications of the plan or project for that site, in view of the site's conservation objectives. The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured'*.
- 2.6 As this analysis follows on from the screening process, there is a clear implication that the analysis will be more detailed than undertaken at the Screening stage and one of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment takes any policies or allocations that could not be dismissed following the high-level screening analysis and analyses the potential for an effect in more detail, with a view to concluding whether there would be an adverse effect on integrity (in other words, disruption of the coherent structure and function of the European site(s)).
- 2.7 A decision by the European Court of Justice<sup>5</sup> concluded that measures intended to avoid or reduce the harmful effects of a proposed project on a European site may no longer be taken into account by competent authorities at the Likely Significant Effects or 'screening' stage of HRA. The UK is no longer part of the European Union. However, as a precaution, it is assumed for the purposes of this HRA that EU case law regarding Habitat Regulations Assessment will still be considered informative jurisprudence by the UK courts. That ruling has therefore been considered in producing this HRA.
- 2.8 Also, in 2018 the Holohan ruling<sup>6</sup> was handed down by the European Court of Justice. Among other provisions, paragraph 39 of the ruling states that *'As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area'* [emphasis added]. This has been taken into account in the HRA process.

## HRA Task 3: Avoidance and Mitigation

- 2.9 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Neighbourhood Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.10 In evaluating significance, AECOM has relied on professional judgement and the 2019 Tewkesbury Borough Plan HRA Screening and Appropriate Assessment report regarding development impacts on the European sites considered within this assessment.
- 2.11 When discussing 'mitigation' for a Neighbourhood Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Development Plan document is a high-level policy document. A Neighbourhood Plan is a lower level constituent of a Local Development Plan.

## Confirming Other Plans and Projects That May Act 'In Combination'

- 2.12 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

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<sup>4</sup><https://www.gov.uk/guidance/appropriate-assessment#what-are-the-implications-of-the-people-over-wind-judgment-for-habitats-regulations-assessments> (accessed: 07/01/2020).

<sup>5</sup> People Over Wind and Sweetman v Coillte Teoranta (C-3.23/17).

<sup>6</sup> Case C-461/17.

- 2.13 In considering the potential for combined regional housing development to impact on European sites the primary consideration is the impact of visitor numbers – i.e. recreational pressure and urbanisation.
- 2.14 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in-combination assessment is therefore of greatest relevance when the plan or policy would otherwise be screened out because its individual contribution is inconsequential.
- 2.15 Plans and projects that may act in combination with development within the ARDNP are as follows:
- Tewkesbury Borough Plan (submitted, May 2020)<sup>7</sup>; and
  - South Worcestershire Development Plan (Adopted 2016)<sup>8</sup>.

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<sup>7</sup> Available at: <https://www.tewkesbury.gov.uk/local-plan#tewkesbury-borough-plan> (accessed 04/12/2020).

<sup>8</sup> Available at: <https://www.wychavon.gov.uk/south-worcestershire-development-plan/swdp-2016> (accessed 04/12/2020).

## 3. Internationally Designated Sites

- 3.1 Two European sites have been identified as being relevant to this HRA: Dixton Wood SAC (located approximately 2.3km east of the Parish) and Bredon Hill SAC (located approximately 3.5km north of the Parish). The features, vulnerabilities and conservation objectives for these European sites are summarised below.
- 3.2 Two other European sites, Severn Estuary SAC, SPA and Ramsar, and Cotswolds Beechwoods SAC, are located approximately 12.4km south-west and 15.5km south of the Parish respectively, and are located approximately 14.3km south-west and 17.0km south of Policy S1: Site allocation at Fiddington respectively. Considering these distances, which exceed the known buffers within which recreational impacts on these European sites should be considered (7.7km for Severn Estuary SAC, SPA and Ramsar; 15.4km for Cotswolds Beechwoods SAC)<sup>9</sup>, these European sites are not discussed further within this HRA.

### Dixton Wood SAC

#### Introduction

- 3.3 Dixton Wood contains woodland on steep slopes surrounded by grassland, situated in the foothills of the Cotswold Scarp. Woodland represents an atypical ash (*Fraxinus excelsior*), field maple (*Acer campestre*) and dog's mercury (*Mercurialis perennis*) community, with lush but impoverished ground flora and an unusual structure due to historic management as wood pasture, which has resulted in large low ash pollards with a range of deadwood types. Supports a rich assemblage of saproxylic (i.e. dependent on dead or decaying wood) beetle species including violet click beetle (*Limoniscus violaceus*). Hawthorn (*Crataegus monogyna*) hedges and flowering bramble (*Rubus fruticosus* agg.) provide important nectar sources for a variety of fauna<sup>10</sup>.

#### Reasons for Designation

- 3.4 Annex II species that are a primary reason for selection of this site:
- Violet click beetle: Dixton Wood supports an important population of this species, which is dependent on the abundant deadwood (ash and beech). The species is only known from three UK sites.

#### Current Threats and Pressures

- 3.5 According to the Natural England's Site Improvement Plan for the site, Dixton Wood SAC currently faces the following threats/pressures and required management actions of potential relevance to the HRA<sup>11</sup>:
- Changes in species distributions: specifically for violet click beetle, for which further surveys are required to understand its habitat requirements and inform site management; and
  - Forestry and woodland management: particularly to ensure the continued succession of veteran tree cohorts to ensure suitable habitat for violet click beetle persists.
- 3.6 Habitats within Dixton Wood SAC are potentially sensitive to nitrogen deposition, nitrogen oxide (NO<sub>x</sub>) levels and acidification. However, this is not specified as a threat/pressure within the Site Improvement Plan for the site, and the Air Pollution Information System (APIS) states on the Site Relevant Critical Load page for this SAC that there is "no expected negative impact on the species [violet click beetle] due to impacts on the species' broad habitat" as a result of increased acidity, NH<sub>3</sub> and NO<sub>x</sub> levels or nitrogen deposition<sup>12</sup>. Further information on this impact pathway in relation to Dixton Wood SAC is provided in Chapter 4.

<sup>9</sup> Stroud District Council Local Plan Draft HRA (2019), [Available at: <https://www.stroud.gov.uk/media/1120908/stroud-local-plan-hra-for-draft-plan-consultation-291119.pdf> - accessed 21/12/2020].

<sup>10</sup> English Nature. (2005) EC Directive 93/43 on the Conservation of Natural Habitats and Wild Flora and Fauna. Citation for Special Area of Conservation (SAC). Dixton Wood UK0300135. [Available at: <http://publications.naturalengland.org.uk/publication/5431957534015488> - accessed 02/12/2020].

<sup>11</sup> Natural England. (2015) Site Improvement Plan: Dixton Wood. [Available at: <http://publications.naturalengland.org.uk/publication/5468132676206592> - accessed 02/12/2020].

<sup>12</sup> See <http://www.apis.ac.uk/src/select-a-feature?site=UK0030135&SiteType=SAC&submit=Next>. (accessed 21/12/20).

## Conservation Objectives

- 3.7 The conservation objectives for the site are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring<sup>13</sup>:
- The extent and distribution of the habitats of the qualifying features;
  - The structure and function of the habitats of the qualifying features;
  - The supporting processes on which the habitats of the qualifying features rely;
  - The populations of the qualifying features; and
  - The distributions of the qualifying features within the site.

## Bredon Hill SAC

### Introduction

- 3.8 Bredon Hill is an outlier of the Cotswold Hills historically used for sheep pasture. The site contains scarp with numerous open-grown trees which have been incorporated into pasture-woodlands and parklands (first established in 1275). Supports one of the best saproxylic invertebrate assemblages in the UK due to the availability of ancient trees: particularly ash, as well as pedunculate oak (*Quercus robur*), beech (*Fagus sylvatica*) and field maple. Nectar sources, such as hawthorn in hedgerows and scrub, and thistles (*Cirsium* spp.) in grasslands, are important feeding and mating sites for the adults of saproxylic insects. Violet click beetle has been found at two separate sites on the hill<sup>14</sup>.

### Reasons for Designation

- 3.9 Annex II species that are a primary reason for selection of this site:
- Violet click beetle: Bredon Hill is (along with the aforementioned Dixton Wood SAC) one of three UK sites known to support this species, which is dependent on the abundant deadwood (ash and beech).

### Current Threats and Pressures

- 3.10 According the Natural England's Site Improvement Plan for the site, Dixton Wood SAC currently faces the following threats/pressures and required management actions<sup>15</sup>:
- Forestry and woodland management: particularly to secure the continued succession of veteran tree cohorts to ensure suitable habitat for violet click beetle persists; and
  - Air pollution: atmospheric nitrogen deposition exceeds the site relevant critical load. Woodland habitats within the site are considered to be sensitive to nitrogen deposition.
- 3.11 Habitats within Bredon Hill SAC are known to be sensitive to changing air quality, as acknowledged within the SIP for the site. However, the Site Relevant Critical Load page for this SAC on APIS states that there is "no expected negative impact on the species [violet click beetle] due to impacts on the species' broad habitat" as a result of increased acidity, NH<sub>3</sub> and NO<sub>x</sub> levels or nitrogen deposition<sup>16</sup>. Further information on this impact pathway in relation to Bredon Hill SAC is provided in Chapter 4.

<sup>13</sup> Natural England. (2018) European Site Conservation Objectives for Dixton Wood Special Area of Conservation: site code UK0030135. [Available at: <http://publications.naturalengland.org.uk/publication/5431957534015488> - accessed 02/12/2020].

<sup>14</sup> English Nature. (2005) EC Directive 93/43 on the Conservation of Natural Habitats and Wild Flora and Fauna. Citation for Special Area of Conservation (SAC). Bredon Hill UK0012587. [Available at: <http://publications.naturalengland.org.uk/publication/5415467531370496> - accessed 03/12/2020].

<sup>15</sup> Natural England. (2015) Site Improvement Plan: Bredon Hill. [Available at <http://publications.naturalengland.org.uk/publication/6073334638837760> - accessed 02/12/2020].

<sup>16</sup> See <http://www.apis.ac.uk/src/select-a-feature?site=UK0012587&SiteType=SAC&submit=Next>. (accessed 21/12/20).

## Conservation Objectives

3.12 The conservation objectives for the site are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring<sup>17</sup>:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The populations of the qualifying features; and
- The distributions of the qualifying features within the site.

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<sup>17</sup> Natural England. (2018) European Site Conservation Objectives for Bredon Hill Special Area of Conservation: site code UK0012587. [Available at: <http://publications.naturalengland.org.uk/publication/5415467531370496> - accessed 03/12/2020].

## 4. Test of Likely Significant Effects

4.1 Ashchurch is a rural parish towards the north of the borough of Tewkesbury, predominantly comprising open farmland. The parish has a population of 816 residents living in 441 dwellings spread between nine rural settlements (as of March 2018; according to the ARNDP).

### Scope of the Test of Likely Significant Effects

4.2 Two European sites have been identified as requiring consideration within this HRA (see Chapter 3): Dixon Wood SAC (approximately 2.3km east of the Parish) and Bredon Hill SAC (approximately 3.5km north of the Parish). Based upon Natural England's Site Improvement Plans and the 2019 HRA of the Tewkesbury Borough Plan, there are two impact pathways that require analysis regarding policies and development allocated within the ARNDP and said European Sites. These impact pathways are:

- Air quality; and
- Recreational pressure.

4.3 Context on these impact pathways is provided in **Error! Reference source not found.** below.

**Table 1 Description of potential impact pathways from new development near to Dixon Wood SAC and Bredon Hill SAC**

Impact pathway	Description
Air quality	<p>Increased development within the Parish will lead to a greater number of vehicles within the Parish. As such, increased air pollution could arise relative to a situation of no growth. Pollutants from vehicles may be carried directly by wind currents and deposited within European Sites, or pollutants may become soluble and be taken-up during evaporation and deposited within European sites as precipitation.</p> <p>There are two measures of primary relevance regarding air quality impacts from vehicle exhausts. The first is the concentration of oxides of nitrogen (known as NO<sub>x</sub>) in the atmosphere. In extreme cases NO<sub>x</sub> can be directly toxic to vegetation, but its main importance is as a source of nitrogen which is deposited on adjacent habitats. The guideline atmospheric concentration (the 'Critical Level') advocated by Government for the protection of vegetation is 30 micrograms per cubic metre (µgm<sup>-3</sup>), above which growth effects on vegetation occur.</p> <p>The second important metric is a measure of the rate of the resulting nitrogen deposition. The addition of nitrogen is a form of fertilization, which can have a negative effect on woodlands and other habitats over time by encouraging more competitive plant species that can force out the less competitive species that are characteristic of the existing habitat. Unlike NO<sub>x</sub> in atmosphere, the nitrogen deposition rate below which we are confident effects would not arise is different for each habitat. This rate (known as the 'Critical Load') is provided on the APIS website.</p> <p>Another route of effect is through nitrogen acidification, in which soil pH can become too acidic for specialised plant communities to thrive, leading to decreased species richness<sup>18</sup>. Acidification tends to be more of an issue for acid substrates, which have poor buffering capacity (i.e. heathland), than neutral or calcareous substrates.</p> <p><b>Guidance from the Institute of Air Quality Management and Highways England both set an impact zone of 200m from the roadside for potential significant air quality effects to vegetation from road traffic. In addition, the Department for Transport reported in the National Travel Survey (2018) that the average trip undertaken by car is 10.6km<sup>19</sup>.</b></p>
Recreational pressure	<p>Increased development within the Parish could lead to higher numbers of visitors to nearby European sites, potentially resulting in increased recreational pressure. Different European sites are subject to different</p>

<sup>18</sup> Maskell, L.C., Smart, S.M., Bullock, J.M., Thompson, K.E.N. and Stevens, C.J., (2010). Nitrogen deposition causes widespread loss of species richness in British habitats. *Global Change Biology*, 16(2), pp.671-679.

<sup>19</sup> GOV.UK. (2019) *Average number of trips made and distance travelled*. [Available at: <https://www.gov.uk/government/statistical-data-sets/nts01-average-number-of-trips-made-and-distance-travelled> - accessed 13/03/2020].

types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex. HRAs of Plans tend to focus on recreational sources of disturbance as a result of new residents.

Impacts on woodland habitats from increased recreational pressure include increased soil erosion, compaction of tree root zones, nutrient enrichment from dog faeces (due to increased use by dog-walkers) and removal of dead wood.

Removal of dead wood is known to be an issue at other woodland European sites such as Burnham Beeches SAC, at which dead wood is removed by recreational users and in the interests of health and safety/tidiness, reducing the suitability of habitat for saproxylic invertebrate species.

**Recreational pressure is widely considered to be of concern where development is proposed within c.5-6km of inland terrestrial European sites** (supported by various surveys, including surveys of Burnham Beeches SAC, Folkestone to Etchinghill Escarpment SAC and Epping Forest SAC). With the exception of major regional sites (e.g. The New Forest SAC/SPA), these surveys indicate that approximately 75% of regular visitors to inland European sites live within 5-6km of those sites.

It should be emphasised that recreational use is not inevitably a problem. Many European sites contain nature reserves managed for conservation and public appreciation of nature. At these sites, access is encouraged and resources are available to ensure that recreational use is managed appropriately.

## Results of the Test of Likely Significant Effects

### Air Quality

- 4.4 As stated in Table 1 above, Institute of Air Quality Management and Highways England guidance set an impact zone of 200m from the roadside for potential significant air quality effects to vegetation from road traffic.
- 4.5 Policy S1: Site allocation at Fiddington includes provision for up to 850 new dwellings, a primary school, local centre, supporting infrastructure/utilities and open space. This allocation would therefore result in increased vehicle use of roads accessing the allocation and connecting the allocation to nearby employment centres and services. Policy S1 states that new access to the A46 (along the northern boundary of the allocation site) and at Fiddington Lane (towards the east of the allocation site) will be provided within the development. Neither of these roads extend within 200m of Dixon Wood SAC or Bredon Hill SAC; the nearest of these roads to either European site is the A46 which extends approximately 2.0km north of Dixon Wood SAC at its nearest point.
- 4.6 Policy S1 could also lead to increased vehicle traffic on the M5 (in the vicinity of Junction 9), which runs parallel to the western boundary of the allocation site. The M5 is approximately 2.4km west of Bredon Hill SAC at its nearest point, and considering the scale of the development, any contribution to vehicle use of the M5 would be relatively small.
- 4.7 Policy H1: Housing in rural areas also includes provision for small quantities of housing within the Parish south of the A46 (at the settlements of Claydon, Fiddington, Pamington and Walton Cardiff). In view of the small scale of such development, and the distance between these settlements and Dixon Wood SAC and Bredon Hill SAC, there is no scope for increased vehicle traffic within 200m of either European site as a result of development within Policy H1.
- 4.8 The only roads within 200m of Dixon Wood SAC and Bredon Hill SAC are minor roads which are highly unlikely to be subject to a significant increase in vehicle use as a result of development within the ARNDP.
- 4.9 In addition, the ARNDP includes policies to minimise vehicle use and encourage travel by walking, cycling and public transport (e.g. within Policies T1, T2 and C1). Implementation of these policies would minimise the potential for negative changes in air quality as a result of the ARNDP.
- 4.10 As outlined in Chapter 3, whilst the habitats within Dixon Wood SAC and Bredon Hill SAC are sensitive to air quality impacts, the SACs are both designated for a species (violet click beetle) primarily dependant on a plentiful supply of dead wood. As such, for both sites APIS states that there is “*no expected negative impact on species [violet click beetle] due to impacts on the species’ broad habitat*” as a result of increased

acidity, NH<sub>3</sub> and NO<sub>x</sub> levels. This is because, the supply of sufficient dead wood would not be materially affected by nitrogen deposition. As per APIS '*nitrogen deposition is not believed to have a direct, major effect on tree growth in the UK*<sup>20</sup> and thus the cycle of tree growth and death should continue, as should a continued supply of dead wood. Most of the effects of nitrogen deposition on woodlands are on features other than tree growth, such as ground flora diversity/structure, fungi and lichen populations.

4.11 Finally, as Policy S1: Site allocation at Fiddington has already been granted planning permission, impacts on European sites from this development have evidently been deemed acceptable by Tewkesbury Borough Council, the competent authority.

4.12

4.13 In summary, there is not considered to be any scope for air quality impacts on Dixton Wood SAC or Bredon Hill SAC as a result of the ARNDP, either in isolation or in combination with other development. Likely significant effects on European sites from air quality can therefore be screened out at this stage. No Appropriate Assessment is required.

## Recreational Pressure

4.14 New development within the Parish could lead to increased visitor numbers to nearby European sites, resulting in increased recreational pressure. Background information on the issue of recreational pressure is provided in Table 1 above. In summary, pathways through which increased recreational pressure could impact the habitats and species that are integral to Dixton Wood SAC and Bredon Hill SAC are through increased soil erosion, compaction of tree root zones, nutrient enrichment from dog faeces, and removal of dead wood. The latter is the impact pathway most likely to affect the violet click beetle.

4.15 Policy S1: Site allocation at Fiddington includes provision for up to 850 new dwellings approximately 5.1km west of Dixton Wood SAC and 5.5km south of Bredon Hill SAC.

4.16 Policy H1 also includes provision for small quantities of additional housing within the Parish, at the settlements of Claydon, Fiddington, Pamington and Walton Cardiff. Three of these settlements are within 6km of Dixton Wood SAC and one of these settlements is within 6km of Bredon Hill SAC.

4.17 However, Policy S1 includes provision for new open space, landscaping, play areas and recreational facilities. Whilst the extent of this has not been specified, this would be likely to reduce the number of visitors to Dixton Wood SAC and Bredon Hill SAC given the distance separating the allocation from the two SACs. The ARNDP also includes policies (e.g. T2) to ensure the quality of walking and cycling infrastructure, which would be likely to improve the availability of walking and cycling routes within the Parish and increase connectivity to local greenspaces; this would also be likely to reduce the quantity of people travelling from development within the Parish to visit Dixton Wood SAC and Bredon Hill SAC. Moreover, the parish is well beyond easy casual walking distance (usually defined as within c 1km) from either SAC meaning that any residents of the new development in the parish who did visit the SACs for recreation would need to drive. The number of visitors to either SAC at any one time who live beyond walking distance will be inherently controlled by the very limited parking available at either site.

4.18 Whilst Dixton Wood SAC and Bredon Hill SAC are potentially vulnerable to the effects on increased recreational pressure, it should be noted that recreational pressure has not specifically been identified by Natural England as a current threat/vulnerability to either site, and neither site has been identified as currently experiencing sufficient recreational use so as to adversely affect the features for which the European sites are designated.

4.19 Considering this, as well as the distance between new housing within Policies S1 and H1 and these European sites, impacts from ARNDP development alone on any European sites are considered to be highly unlikely.

4.20 Regarding 'in combination' impacts on European sites due to increased recreational pressure, the Tewkesbury Borough Plan and the South Worcestershire Development Plan include provision housing which could potentially result in increased recreational use of Dixton Wood SAC and Bredon Hill SAC. Preferred options within these plans and their distances to these European sites are summarised in Table

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<sup>20</sup> source: <http://www.apis.ac.uk/node/965>

**2Error! Reference source not found.** below. Details of these options (including the types of housing and provision of greenspace) are provided in the Plan documents.

**Table 2 Summary of new housing near to Dixon Wood SAC and Bredon Hill SAC that could contribute to cumulative impacts with ARNDP development**

Plan document	Allocation/policy	Max. new dwellings	Distance from Dixon Wood SAC	Distance from Bredon Hill SAC
Tewkesbury Borough Plan <sup>21</sup>	A Land at Odessa Farm, Tewkesbury	100	7.7km W	8.6km SW
	B Land adjacent to John Moore Primary School, Wheatpieces	30	7.1km W	8.1km SW
	C Former MAFF Site, Tewkesbury	40	7.5km W	6.8km SW
	A Land adjacent Breaker's Yard, Bishop's Cleave	26	3.3km SW	9.9km S
	B Land at Homelands Farm, Bishop's Cleave	35	2.8km SW	9.9km S
	A Land off Harvey's Lane, Winchcombe	45	4.4km SE	12.2km SE
	B Land off Delavale Road, Winchcombe	75	4.4km SE	12.0km SE
	A Land at junction of A38/A4019, Coombe Hill	50	9.6km SW	12.4km S
	B Land adjacent to the Swan PH, Coombe Hill	26	9.7km SW	12.4km S
	A Land to the north of Malleson Road (GNDP 2/1), Gotherington	6	2.7km SW	8.6km S
	B Land to the south of Malleson road (GNDP 2/2), Gotherington	50	2.5km SW	8.8km S
	C Land to the north of Gretton Road (GNDP 2/3), Gotherington	-	1.6km SW	8.9km S
	A Land at Bell House Farm, Maisemore	15	19.4km SW	21.5km SW
	B Land to the south of Recotry Farm, Maisemore	28	19.3km SW	21.6km SW
	A Land at Wainlode Lane, Norton	22	14.2km SW	16.8km SW
	A Land at corner of Badgeworth Lane and A46, Shurdington	50	14.4km SW	20.4km S
	B Land north of Leckhampton lane, Shurdington	20	13.2km SW	19.7km S
	C Garage site at Harrison Road, Shurdington	-	13.8km SW	20.0km S
	D Land to south of Badgeworth Lane, Shurdington	110	14.4km SW	20.5km S
	A Land at B4077, Toddington	33	6.3km E	11.5km SE
B Land adjacent to Pheasant Public House, Toddington	25	6.8km E	11.9km SW	
A Land adjacent Oxbutts Caravan Park, Woodmancote	60	3.1km SW	10.6km S	
A Land at corner of Bishops Walk and School Lane, Forthampton	10	11.9km W	10.3km SW	
South Worcestershire Development Plan <sup>22</sup>	SWDP46/1-6: six allocations at the town of Pershore	82	Approximately 13.5km north at the nearest point	Approximately 4km north at the nearest point

4.21 Table 3**Error! Reference source not found.** indicates that neighbouring development plans allocate up to 297 new dwellings within 6km of Dixon Wood SAC, and up to 82 dwellings within 6km of Bredon Hill SAC. Site-specific development principles and/or neighbourhood plan policies covering many of these allocations include provision for open space which will provide opportunities for recreational users, reducing recreational pressure on European sites as a result of new development.

<sup>21</sup> Detailed in the *Preferred Options consultation*: Available at <https://www.tewkesbury.gov.uk/local-plan> (accessed 07/12/2020).

<sup>22</sup> Available at: <https://www.wychavon.gov.uk/south-worcestershire-development-plan/swdp-2016> (accessed 04/12/2020).

- 4.22 Considering this, and the quantity of new housing and its proximity to these European sites, recreational pressure impacts on Dixton Wood SAC or Bredon Hill SAC as a result of ARNDP development/policies in combination with other Plans are considered to be highly unlikely.
- 4.23 As Policy S1: site allocation at Fiddington has already been granted planning permission, impacts on European sites from this development have evidently been deemed acceptable by Tewkesbury Borough Council.
- 4.24 In summary, there is not considered to be any scope for recreational impacts on Dixton Wood SAC or Bredon Hill SAC as a result of the ARNDP, either in isolation or in combination with other development. Likely significant effects on European sites from increased recreational pressure can therefore be screened out at this stage. No Appropriate Assessment is required.

## Summary

- 4.25 A summary of screening of policies within the ARNDP with the potential for likely significant effects on European sites, either in isolation or in combination with other ARNDP policies and other Plans, is detailed in Table 3 below. Full details of each policy are provided in the ARNDP.
- 4.26 In Table 3 below, green shading in the 'Screening outcome' column indicates that the ARNDP policy has been determined not to lead to a likely significant effect on any European sites. Orange shading indicates that one or more likely significant effects on European sites cannot be screened out at this stage of HRA, in which case further examination is therefore required. Figure 2 indicates the locations of relevant allocations and European sites.

**Table 3 Screening assessment (test of likely significant effects) of relevant ARNDP policies**

Policy	Summary of policy	Screening outcome
<b>S1 Site allocation at Fiddington</b>	Allocates land at Fiddington for a development comprising up to 850 new dwellings, a primary school, local centre, supporting infrastructure/utilities, open space and landscaping.	This allocation has already been granted planning permission. Dixton Wood SAC and Bredon Hill SAC are recognised by APIS as being subject to “no expected negative impact on species [violet click beetle] due to impacts on the species’ broad habitat” as a result of increased acidity, NH <sub>3</sub> and NO <sub>x</sub> levels. Moreover, this development has already received planning consent from Tewkesbury Council. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>T1 Modal shift for major development proposals</b>	States that proposals for ‘major’ development (as defined in the NPPF) will be supported where they demonstrate measures to encourage a shift away from car-based travel to walking, cycling and public transport.	This is a positive policy which would reduce the potential for air quality impacts on European sites as a result of ARNDP development (e.g. S1 Fiddington). <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>T2 Walking and cycling infrastructure standards</b>	Aims to ensure the quality of walking and cycling infrastructure within the Parish.	This is a positive policy with respect to potential air quality impacts on European sites as a result of ARNDP development. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>T3 Road safety for walking and cycling</b>	Aims to ensure that developments do not increase conflict between motorised traffic and walkers/cyclists and avoid obstruction of public rights of way.	This is a development management policy with no potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>E1 Employment and traffic</b>	States that B-class employment uses should be located with access to trunk roads so that they avoid adding traffic to minor roads.	This is a development management policy with no potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>E2 Modification of existing B class development</b>	States that extensions or modifications to existing B-class development must be of a scale, type and character that is commensurate with surrounding development.	This is a development management policy with no potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>C1 Community Infrastructure</b>	States that major developments should consider the community infrastructure development principles detailed in the ARNDP, encourage access by walking/cycling, and avoid the loss of existing community infrastructure.	This is a development management policy which includes provision for avoiding increased vehicle use. No potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>C2 Broadband</b>	States that major development proposals will be expected to provide high speed broadband.	This is a development management policy with no potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>E1 Protection of the intrinsic value of the countryside</b>	States that, with the exception of development allocated within the ARNDP (e.g. S1 Fiddington), development will only be allowed south of the A46 and outside the developed area of existing settlements where the intrinsic value of the countryside will not be impacted.	This is a development management policy that seeks to reduce environmental impacts. There is no potential for likely significant effects on European sites. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>
<b>H1 Housing in rural areas</b>	Outlines housing requirements in relation to development other than that already allocated within the ARNDP (e.g. S1 Fiddington); specifically development south of the A46 and within existing settlements (Claydon, Fiddington, Pamington, Walton Cardiff). Development is understood to be small in scale and limited to these existing settlements.	New housing allocated by this policy is understood to be of very small scale. Considering this, and in view of the distance between these settlements and the European sites, there is not considered to be any potential for likely significant effects in isolation or in combination with other development. <b>No potential for likely significant effect. Screened out (no Appropriate Assessment required).</b>

Approximate distances between these existing settlements and potentially relevant European sites are given below:

- Claydon: 3.9km west of Dixton Wood SAC, 7.0km south of Bredon Hill SAC;
- Fiddington: 5.1km west of Dixton Wood SAC, 7.6km south of Bredon Hill SAC;
- Pamington: 3.4km west of Dixton Wood SAC, 5.1km south of Bredon Hill SAC; and
- Walton Cardiff: 6.5km west of Dixton Wood SAC, 7.0km south of Bredon Hill SAC.

**H2 Design of housing in the countryside and Claydon, Fiddington, Pamington and Walton Cardiff**

States that proposals for new residential dwellings at Claydon, Fiddington, Pamington and Walton Cardiff (as described for Policy H1 above) should conform with the neighbouring built character.

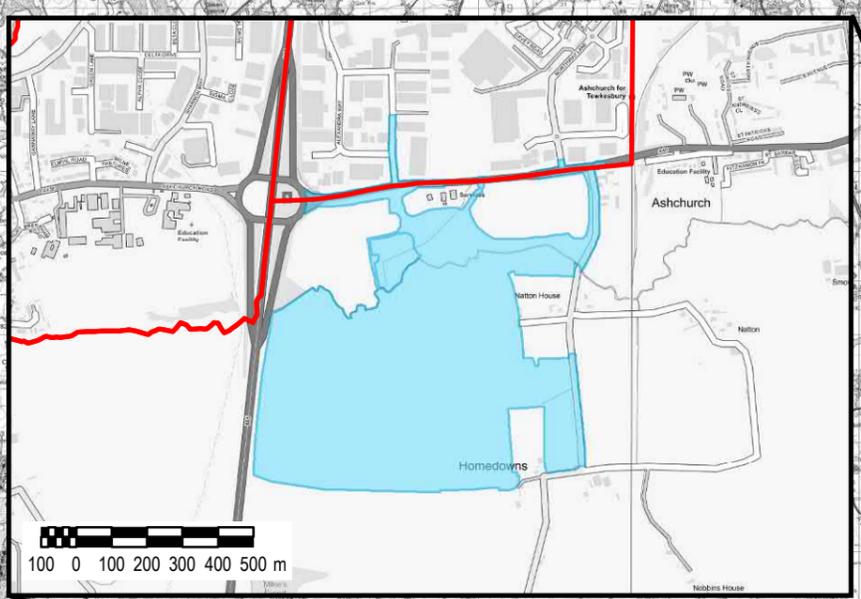
This is a development management policy with no potential for likely significant effects on European sites.  
**No potential for likely significant effect. Screened out (no Appropriate Assessment required).**

## Figure 2. Map of ARNDP housing allocations and European sites

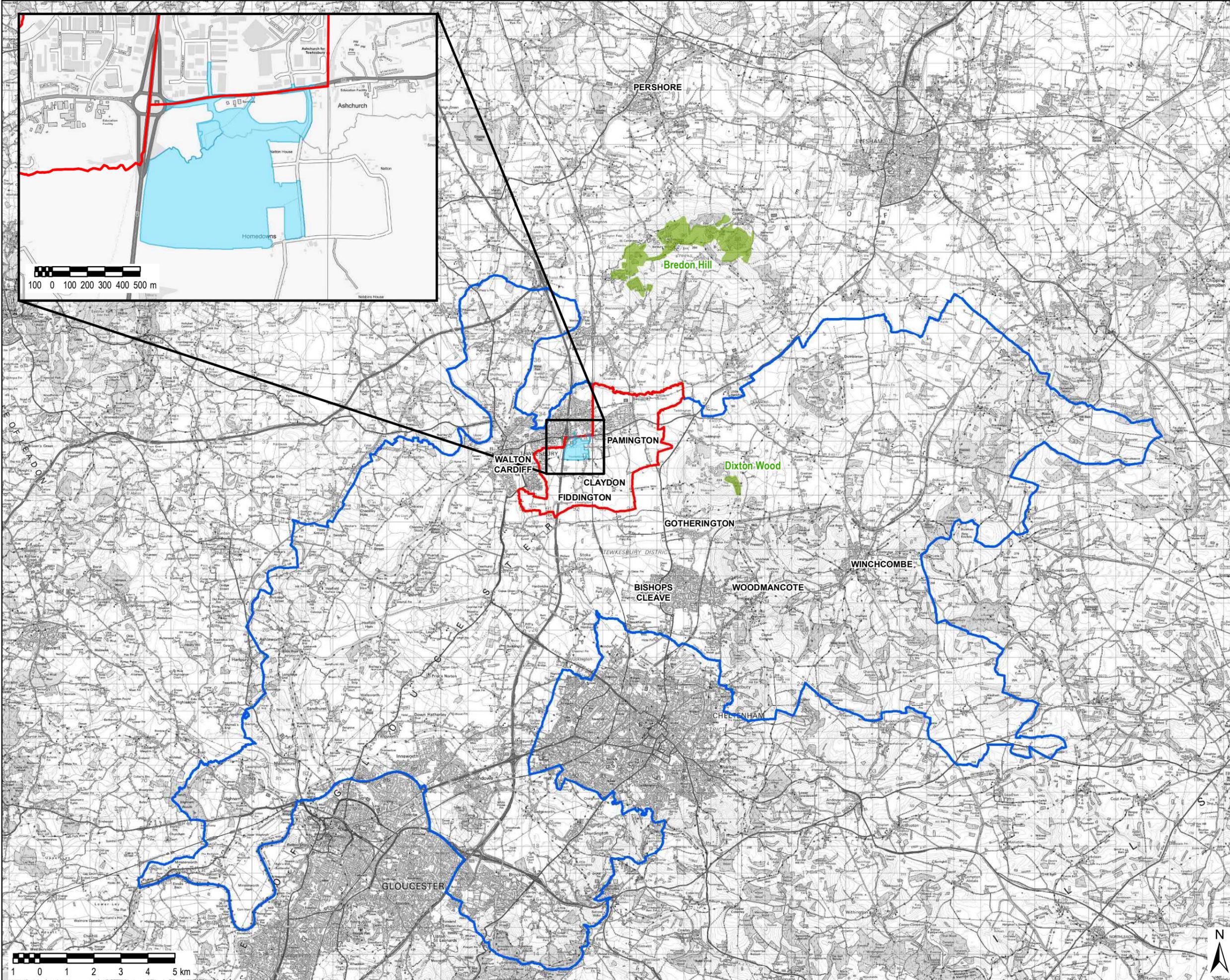
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**LEGEND**

- Ashchurch Neighbourhood Plan Area
- Tewkesbury Borough
- Policy S1: Site allocation at Fiddington
- Special Area of Conservation (SAC)



File Name: \\UKBAS\IP\PL\W014-400 - Information Systems\60571087 - Maps\Ashchurch Rural NDP\Figure 2 - Map of ARNDP housing allocations and European sites.mxd



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Purpose of Issue **DRAFT**

Client **ASHCHURCH RURAL PARISH NEIGHBOURHOOD DEVELOPMENT PLAN**

Project Title **ASHCHURCH RURAL NDP HRA**

Drawing Title **MAP OF ARNDP HOUSING ALLOCATIONS AND EUROPEAN SITES**

Drawn AW	Checked CN	Approved GW	Date 21/12/2020
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AECOM  
 South House  
 Alencon Link, Basingstoke  
 Hampshire, RG21 7PP  
 Telephone (01256) 310200  
 Fax (01256) 310201  
 www.aecom.com



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## 5. Conclusions

- 5.1 All potential impact pathways could be screened out during the test of likely significant effects. As such, there is no potential for likely significant effects on any European sites as a result of ARNDP policies and allocations. No Appropriate Assessment was required. There is no need for the ARNDP to include further policy and/or mitigation requirements to avoid impacts on the integrity of any European sites.