KWS Policy Assessment

Project: Land Adjacent to Oakhurst Rise, Cheltenham

Technical Briefing Note TN11: Assessment of Compliance with Joint Core Strategy Policy SD9 (2ii & 5) should the Site be Designated a KWS

Date: 17 August 2020

1 Introduction

1.1 Aspect Ecology has been appointed by William Morrison (Cheltenham) Ltd. to advise on ecological matters relating to the site at Land Adjacent to Oakhurst Rise, Cheltenham. The site is proposed for residential development and associated landscape enhancements.

1.2 It has recently been suggested by the Charlton Kings Friends (CKF) that the site could qualify as a Key[1] Wildlife Site (KWS) on the basis of the site's grassland interest, when assessed against the Gloucestershire KWS Selection Criteria[2], which have been developed by the Gloucestershire Wildlife Sites Partnership. In particular, CKF suggest that the minimum number of grassland indicators (20) required for designation are present, although no formal survey report has been submitted to support this claim.

2 Background

2.1 In order to further investigate the suggestion that the site could qualify as a KWS, Aspect Ecology has undertaken a further formal botanical survey of the site, carried out by an experienced botanist. The results of this work are set out in Aspect Ecology's Technical Briefing Note TN09 entitled 'Results of Botanical and NVC Survey' 05 August 2020 (see Appendix 1 - copy within TN08). It combines 2019 survey data and records that the sward is herb poor (5 – 10% cover) and grass dominated and records some 12 KWS indicator species, a shortfall of 8 species to the minimum required. The survey also notes that the number of species recorded per quadrat is lower than the averages for the described NVC communities, illustrating that the identified areas of grassland are relatively poor examples of their type.

2.2 Against this background, Aspect Ecology has provided a critique of the suggestion that the site could qualify as a KWS within correspondence to Gloucestershire Wildlife Trust (who administer the KWS site selection process) dated 07 August 2020 (see Appendix 2). In summary, this finds:

"the species identified by CKF do not appear to arise from a formal survey and hence there is no record of how the data has been collected, when they were collected, by what method, by who, their qualifications and botanical experience or where the species lie or their frequency. Accordingly, there can only be low confidence in the data. The count of 21 species includes four species which are likely closely associated with the hedgerows, trees and boundary vegetation rather than within the core grassland areas. Accordingly, these should be discounted from the list such that number of relevant KWS grassland species is reduced to 17. Grassland KWSs should be special and recognisable to the public, typically because they are "full of flowers". The grassland at Oakhurst Rise does not support the above characteristics due to the low frequency and constancy of herbs in the sward (typically 5 – 10%). Accordingly, if the grassland were to be designated as a KWS, any Wildlife Trust members visiting would likely be disappointed by what they found, as the grassland does not possess these special features, it being rather ordinary in nature. The prospects for restoration of the grassland are low while similarly conservation management is not secured. As such, the grassland interests remain at risk of being lost. Accordingly, it is our view that the grassland falls short of possessing the necessary ecological interest required for qualification as a KWS designation".

2.3 This correspondence was accompanied by Aspect Ecology's Technical Briefing Note TN08 entitled 'Assessment of the Site Against Gloucestershire Local Wildlife Site Criteria' (see Appendix 1) which carries out a formal assessment of the site's interest features against the KWS selection criteria. This concludes:

"detailed botanical survey work coupled with a review of the General Criteria finds that that site is not of elevated value. Accordingly, in our opinion it does not meet the required criteria for designation as a KWS. Indeed, should it be designated it would serve to de-value the series as a whole through the inclusion of a non-key site".

2.4 This information has been submitted to Gloucestershire Wildlife Trust who responded in correspondence dated 07 August 2020, received 10 August 2020, (see Appendix 3) which sets out:

"As it stands at the moment, the proposed site is of borderline LWS quality and the LWS process requires it to be examined by the LWS selection panel to determine whether it should be adopted as a LWS or not".

2.5 The correspondence goes on to set out:

"The panel may be unable to convene before the planning application goes to committee. The site lies within a gap in grassland ecological network connectivity. Enhancement to grassland

[1] Renamed Local Wildlife Sites in January 2019

[2] See Gloucestershire Key Wildlife Sites Handbook. GCER. 2015.

habitat within this area would benefit the ecological network and with appropriate management the quality of the grassland on this site could be enhanced within a relatively short time. Irrespective of the LWS selection panel decision, it is Gloucestershire Wildlife Trusts view that any development on this site should provide a strong commitment to biodiversity net gain and a strong management and maintenance plan for both the grassland and veteran tree features on the site".

3 Policy Assessment - Overview

3.1 Given the KWS Panel will be unlikely to convene before the proposals are heard at Committee, it is relevant to examine how the site should be treated in the event it were to be designated as a KWS (notwithstanding that in Aspect Ecology's opinion, the site is not of the required quality for designation).

3.2 Reference to the Joint Core Strategy (JCS), a coordinated strategic development plan between Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council, finds that Policy SD9:Biodiversity and Geodiversity contains the relevant tests to be applied. These lie at SD9(2ii) and SD9(5) which address locally designated sites, with other parts of the policy either not of relevance or relevant to all sites regardless of their status.

3.3 It is pertinent to note that neither SD9(2ii) or SD9(5) represent a bar to development, but rather both permit development proposals to be permitted within KWS designations if specific policy tests are met.

3.4 A review of these tests is set out below, along with an assessment of the scheme's compliance or otherwise with these tests.

4 Policy Assessment – application of the tests of SD9(2ii)

4.1 JCS Policy SD9(2ii) states:

"This[1] will be achieved by:

2ii Conserving and enhancing biodiversity and geodiversity on internationally, nationally and locally designated sites, and other assets of demonstrable value where these make a contribution to the wider network, thus ensuring that new development both within and surrounding such sites has no unacceptable adverse impacts"

4.2 Hence, two relevant policy tests to KWS designations are present, namely:

- Do the proposals conserve and enhance the biodiversity of the site? and;
- Ensure that new development both within and surrounding such sites has no unacceptable adverse impacts?

4.3 These are examined in turn below.

[1] SD9(1) *"The biodiversity and geological resource of the JCS area will be protected and enhanced in order to establish and reinforce ecological networks that are resilient to current and future pressures. Improved community access will be encouraged so far as is compatible with the conservation of special features and interests"*

Do the proposals conserve and enhance the biodiversity of the site?

4.4 The biodiversity value of the site is documented within Aspect Ecology's Ecological Appraisal report (May 2020) which also includes an assessment of the effects of the proposals on the biodiversity assets present. These can be summarised as:

- **Veteran trees/mature trees and hedgerows**: These have been identified as ecologically important features, given their demonstrable value to biodiversity. Accordingly, these features have been sensitively incorporated within the scheme. All veteran trees are retained, and harm mitigated through a sensitively designed scheme and appropriate arboricultural practices. The mature trees and mature hedgerows are largely retained under the proposals, with any unavoidable loss of a very small number of mature trees and small hedgerow sections compensated through the creation of a diverse native wooded belt and substantial native hedgerow creation, the latter resulting in a ~397% net gain [2] for hedgerows at the site. Accordingly, the biodiversity interests of these features is conserved and enhanced under the proposals.
- **Grassland**: This is assessed below under the review of policy SD9(5), with a net beneficial outcome, following mitigation, achieved under the proposals.
- **Other habitats:** These include an ephemeral pond, tall ruderal, and scrub. They make a relatively limited contribution to the overall biodiversity of the site, as they are small in extent, and/or in poor condition and lacking appropriate management, and therefore their loss to proposals would be of minor-negligible ecological significance. In any case, tall ruderal vegetation would be expected to re-establish naturally post-development, whilst new diverse native shrub planting will compensate for the loss of small areas of scrub. The scheme also incorporates a replacement pond with a design based on ecological principles with large draw down zones and two pools of standing water, providing an enhanced aquatic habitat more attractive to amphibians and Grass Snake than the existing feature. Accordingly, 'other habitats' are fully mitigated and compensated under the proposals.

4.5 In conclusion, a review of the proposals finds that, following mitigation and compensation, the proposals conserve the biodiversity features of the site.

Do the proposals ensure that new development both within and surrounding such sites has no unacceptable adverse impacts?

4.6 The review above concludes that the ecological features of the site are conserved and enhanced and accordingly, significant harm to biodiversity is appropriately avoided, mitigated or compensated. Consequently, the proposed new development would have no unacceptable adverse impact on biodiversity.

Conclusion

4.7 A review of the policy tests of SD9(2ii) finds that these are fully satisfied by the proposals.

[2] Technical Note TN10: Biodiversity Impact Assessment Using DEFRA Biodiversity Metric 2.0 Calculation Tool (August 2020)

5 Policy Assessment – application of the tests of Policy SD9(5)

5.1 Policy SD9(5) states:

"Development within locally-designated sites will not be permitted where it would have an adverse impact on the registered interest features or criteria for which the site was listed, and harm cannot be avoided or satisfactorily mitigated".

5.2 Hence, two relevant policy tests to KWS designations are present, namely:

- Is there an adverse impact on the registered interest features or criteria for which the site was listed? and;
- Can any harm be avoided or satisfactorily mitigated?

5.3 These are examined in turn below.

Is there an adverse impact on the registered interest features or criteria for which the site was listed?

5.4 The site has been suggested for KWS designation on the premise it may meet at least one of the general criteria set out within Part 2 of the Gloucestershire Key Wildlife Sites Handbook[5], and the grassland habitat criteria. Specifically sub-category H5.2 which requires an area of seminatural grassland larger than 0.5ha to support one or more of the NVC grassland community types listed and supports 20 or more species from a list of species occurring on grassland of high conservation concern in Gloucestershire.

5.5 The grassland interest of the site is the focus of the suggestion for KWS designation and in Policy SD9(5) terms is the 'registered interest feature'. Hence, to address the policy test, it is necessary to assess the effect of the proposals on the grassland within the site.

5.6 There is approximately 3.38ha of grassland on the site at present. Under the proposals some ~1.9ha will be retained, representing 56% of the current extent. At the present time, the grassland is of relatively low conservation value with the claimed KWS indicators species present at a very low frequency such that they cannot be readily re-recorded, while some are in fact associated with the adjacent hedgerows and boundary scrub and trees such that they should, in our opinion, not in fact be included in the grassland species list. Accordingly, the herb cover (which is what confers the grassland its botanical and in turn associated biodiversity interest) is at an extremely low value, typically 5 to 10%. This is contrasted to grasslands of high conservation interest which have herb cover values of 50% plus.

5.7 Accordingly, if the grassland were to be designated as a KWS, any Wildlife Trust members visiting would likely be disappointed by what they found, as the grassland does not possess these special features, it being rather ordinary in nature. This reflects the fact that MG1 (the technical classification of the grassland community present) is a common grassland type, with the grassland on the site representing a species poor example of its type.

5.8 No protection is afforded to the site currently or to designated KWSs and accordingly there is a risk that a change in management could result in the loss of any grassland interest currently present. For example, this could include application of herbicide, fertilizer, re-seeding or other inappropriate management. Accordingly, the future of such sites is not secure, which is a key consideration for planning.

5.9 Notwithstanding the above points, the reduction in the grassland area under the proposals, without mitigation, would lead to an adverse impact on the registered interest feature for which the site could be designated. Accordingly, it is necessary to examine the second part of the policy test.

Can any harm be avoided or satisfactorily mitigated?

5.10 Some ~1.9ha of grassland will be retained which will continue to exceed the minimum area KWS size threshold of 0.5ha.

5.11 As set out above, the grassland is currently of limited conservation interest, primarily due to its low herb cover in the sward, and accordingly the losses proposed should be viewed in this context i.e. it is not a significant loss of a high conservation resource. Rather, it is a partial loss of a grassland of currently relatively low conservation interest.

5.12 Accordingly, the nature of the grassland interest is such that it is fully capable of being satisfactorily mitigated. Specific mitigation in relation to grassland is proposed under the scheme. This can be summarised as follows:

- **Secure future**: The future of the grassland will be secured and protected such that the current risk that its interest would be lost through inappropriate management e.g. application of herbicide, fertilizer or re-seeding, would be removed;

[5] GCER (July 2015) Gloucestershire Key Wildlife Sites Handbook Part 2 v4.5 Final

- **Restoration**: Positive work would be carried out to restore the grassland interest to that of a meadow of high conservation value e.g. NVC type MG5, which would include over 20 KWS indicator species. The detail of how this would be achieved would be the subject of a specific method statement, but could include the scarification of the sward to expose the underlying seedbank and soil and the import of green hay from a suitable local donor meadow if one is available or alternatively the spreading of an appropriate native wildflower seed mix with a large Yellow Rattle component to reduce the vigour of coarse grasses;
- **Conservation management**: Favourable grassland conservation management which is essential to retain the biodiversity interest of grasslands would be secured under the proposals which would be prescribed within a formal management plan. This would then be actioned to ensure the management of the grassland is optimal to maintain the restored botanical interest;
- **Long term funding**: Funding to manage the meadow would be secured under the proposals. This would most likely arise via a service charge on properties such that an assured source of funding for conservation management of the grassland would be available for the life of the development.

5.13 Hence, the proposals trade a larger area of relatively low conservation interest grassland for a smaller area of a significantly higher quality grassland. Importantly, not only would the botanical interest of this retained grassland be significantly enhanced, but of particular note is that the attendant faunal biodiversity would also significantly benefit. In this regard the resulting pollen and nectar sources would be considerably increased with the consequence that invertebrate interests would also increase significantly, including highly visible groups such as butterflies and moths. The grassland would be patrolled by dragonflies from the proposed pond while small mammals, reptiles, amphibians, birds and bats would be attracted to the restored grassland.

5.14 Such grassland would be of high conservation interest and accordingly the registered interest feature would be enhanced over the currently situation.

5.15 Moreover, this interest would also be secured under the proposals from potential adverse land use changes. Similarly, the biodiversity interests can only be maintained by the application of appropriate conservation management. This would also be secured under the proposals as would long term funding. These measures, which cannot be appropriately captured by a metric, should be afforded very significant weight and result in a net beneficial outcome for the grassland interest feature.

Conclusion

5.16 It can be concluded from the above review that effects on the 'registered interest feature' [grassland] would be satisfactorily mitigated under the proposals and as such the policy tests under SD9(5) would be met in the event that the site were to be designated as a KWS.

6 Consultation with County Ecologist

6.1 The potential of the site to be designated a KWS has recently been considered by the County Ecologist in correspondence dated 12 August 2020 (see Appendix 4) which was issued following a specific site visit to consider this matter undertaken on 6 August 2020.

6.2 Within this correspondence, the County Ecologist makes a number of points, of which 3, 4 and 7 are particularly pertinent:

"3. In my opinion there is no convincing case for the meadow to be designated a new Local Wildlife Site. The meadow is poor quality MG1 grassland (Mesotrophic Grassland Type 1 of the National Vegetation Classification) and of low conservation value.
4. A Local Wildlife Site designation does not preclude appropriate development and the Wildlife Trust letter reflects this point. The development provides an opportunity to secure the long-term conservation and enhancement of local biodiversity. A large area of the site would become better managed and provide an improved educational resource for the adjoining school
7. The development if consented would be compliant with JCS policy SD9. The development provides appropriate mitigation for some unavoidable effects but importantly positively conserves and enhances biodiversity overall which are relevant to the location".

6.3 Accordingly, the County Ecologist is also in agreement that, in the event the site was to be designated a KWS, that the tests in policy SD9 would still be met.

7 Summary and Conclusion

7.1 Aspect Ecology has undertaken an assessment to determine whether the proposals would be compliant with Joint Core Strategy Policy SD9, specifically parts 2(ii) and 5, should the site be designated as a Key Wildlife Site. It is noteworthy, that even if designated a KWS, these policies do not present a bar to development, but rather require that specific tests are met by any proposals. This note has assessed those tests.

7.2 In this regard, the scheme sensitively incorporates biodiversity features of demonstrable value e.g. veteran trees, and where losses of habitats within the site are unavoidable e.g. some hedgerows, these are satisfactorily mitigated. In respect of grassland matters, some 56% of the existing resource would be retained. The grassland at present is of relatively low botanical value and accordingly of reduced ecological function, such that in Aspect Ecology's opinion it does not merit KWS designation. Under the proposals the retained grassland would be significantly enhanced and its botanical interest would be greatly increased, which in turn would provide enhanced resources for its attendant faunal biodiversity. Furthermore, its future would be secured and the risk removed that its interest could be lost through inappropriate management. Its enhanced biodiversity value would be maintained through the application of a specific conservation management plan with funding secured for the long term. Accordingly, a net beneficial outcome would arise for the grassland interest present.

7.3 The County Ecologist is in agreement with this assessment, informed by a specific site visit carried out to assess the potential of the site to qualify as a KWS. Similarly, the proposals align with the views of Gloucestershire Wildlife Trust that:

"any development on this site should provide a strong commitment to biodiversity net gain and a strong management and maintenance plan for both the grassland and veteran tree features on the site".

7.4 Accordingly, following the above assessment, the proposals are considered to accord with Joint Core Strategy Policies SD9 (2ii) and SD9 (5).

Appendices:

Appendix 1: Technical Briefing Note TN08 entitled 'Assessment of the Site Against Gloucestershire Local Wildlife Site Criteria' including Aspect Ecology's Technical Briefing Note TN09 entitled 'Results of Botanical and NVC Survey' 05 August 2020

Appendix 2: Correspondence from Aspect Ecology to Gloucestershire Wildlife Trust dated 07 August 2020

Appendix 3: Correspondence from Gloucestershire Wildlife Trust dated 07 August 2020

Appendix 4: Correspondence from the County Ecologist dated 12 August 2020

Appendix 1:

Technical Briefing Note TN08 entitled ‘Assessment of the Site Against Gloucestershire Local Wildlife Site Criteria’ including Aspect Ecology’s Technical Briefing Note TN09 entitled ‘Results of Botanical and NVC Survey’ 05 August 2020

aspect ecology KWS

Assessment

Project: Land Adjacent to Oakhurst Rise, Cheltenham

Technical Briefing Note TN08: Assessment of the Site Against Gloucestershire Local Wildlife Site Criteria

Date: 07 August 2020

1. Executive Summary

1.1 Aspect Ecology has carried out a review of the above site in relation to the Gloucestershire Key Wildlife Site (KWS) Selection Criteria, which have been developed by the Gloucestershire Wildlife Sites Partnership.

1.2 In order to potentially qualify as a KWS on the basis of grassland habitat, a site must meet at least one of nine General Criteria, such as diversity or value for learning. In addition, any site must be subject to detailed botanical survey work to identify the plant communities present (using the National Vegetation Classification NVC methodology) and identify the presence of any species listed as occurring on grasslands of high conservation concern in Gloucestershire. The site must fit one of the listed plant communities AND have above a threshold of the listed species of conservation concern in order to potentially qualify as a KWS.

1.3 A review of the site against the General Criteria has been carried out below, which finds that the site does not meet any of the listed criteria. This is largely due to the small size and suburban nature of the site (being surrounded on three sides by housing and on the fourth side by a school), a lack of historic management, a lack of public access and a lack of species diversity.

1.4 The site has been subject to detailed botanical survey work by an experienced botanist in August 2020, which finds the site is considered to have the closest affinity to NVC community MG1a, which is a grass-dominant, species-poor community typical of fields subject to infrequent management. Correspondingly, the site therefore must contain at least 20 of the listed species of conservation concern. The survey identified 12 species which therefore falls well short of the threshold of 20.

1.5 In summary, detailed botanical survey work coupled with a review of the General Criteria finds that that site is not of elevated value. Accordingly, in our opinion it does not meet the required criteria for designation as a KWS. Indeed, should it be designated it would serve to de-value the series as a whole through the inclusion of a non-key site.

2. Introduction

2.1 It is understood that the land adjacent to Oakhurst Rise, Cheltenham has been put forward by Charlton Kings Friends (CKF) as a potential Gloucestershire Key Wildlife Site (KWS), on the basis of its grassland habitat. This is set out in correspondence from Bioscan dated 29 July 2020.

2.2 Aspect Ecology has been commissioned to carry out a review of the potential of the site to qualify as a KWS. This review is set out below.

3. Process of Designation

3.1 The methodology for selection of KWS is set out in Part 1 of the Gloucestershire Key Wildlife Sites Handbook[3], and is summarised below.

Gloucestershire Wildlife Sites Partnership

3.2 During 1976-1977, the Gloucestershire Wildlife Trust conducted a habitat survey of the county. As part of this work, approximately 300 sites were surveyed which were identified as being of ecological significance within Gloucestershire and formed the first Key Wildlife Sites. The Gloucestershire Wildlife Sites Partnership was set up in January 2010 to oversee the Key Wildlife Sites system.

Site Selection Panel

3.3 From within the Wildlife Sites Partnership, the handbook stated in 2015 that a panel would be appointed to apply the LWS selection criteria and decide whether a candidate site should be designated as an LWS. As stated in section 1.10 of the handbook: "*The operation of the Site Selection Panel is heavily dependent on the carrying out of regular KWS surveys, both of potential new sites and existing KWS*."

[3] 1 GCER (July 2015) Gloucestershire Key Wildlife Sites Handbook Part 1 v4.5 Final

Site Survey

3.4 Section 1.11 of the handbook gives guidance in relation to surveys, such as acquiring landowner permission to access the site for survey. In this regard it states: "*If no permission is forthcoming, either through inability to contact the landowner or through refusal, then surveyors will not trespass on land in order to acquire data*".

3.5 A key element in identifying a KWS is the carrying out of a detailed and robust site survey. No specific guidance is given in the handbook in relation to the requirements for experience and expertise of the surveyors, however in relation to habitats it states "*Habitat survey for KWSs is based upon an extensive survey with site and habitat descriptions, a habitat map and species list…. Full National Vegetation Classification survey information may also be collected and used on occasions*." Given the key importance of obtaining accurate high quality survey data in informing the KWS site selection process, survey data should therefore be collected by reputable surveyors or organisations.

3.6 The criteria for a grassland KWS (as described further below) state that sites may only qualify where the grassland is identified as a particular plant community type using the National Vegetation Classification (NVC) system AND supports a threshold number of particular species from a given list. Carrying out NVC surveys requires a high level of knowledge and expertise, and

therefore it would be expected that a suitably robust survey would be carried out by environmental professionals with many years' experience of carrying out botanical surveys and using the NVC technique. Therefore, whilst surveys carried out by amateurs may be helpful in highlighting the potential of a site to be a KWS, should not be relied upon as an evidence base for site selection and therefore caution should be attached to any such records.

3.7 On completion of the survey, a report is written by the surveyor and sent to the Site Selection Panel to evaluate each site against the selection criteria, who will call in additional technical expertise where required. If the site meets the thresholds within the selection criteria it is put forward for selection as a proposed KWS.

3.8 Any site which is not approved would be recorded for a review at a later date, for example borderline KWS or sites with inadequate survey information (i.e. survey data has not been collected by a suitably experienced surveyor or reputable organisation).

Ratification and Notification of Landowners

3.9 Following the above, the potential KWS goes through a formal ratification process and the site is added to the KWS register.

4. Site Selection Criteria

General Criteria

4.1 Part 2 of the Gloucestershire Key Wildlife Sites Handbook lays outs the site selection criteria for KWS[4]. As set out in section 2.5 of the document, all sites should fulfil at least one of the criteria in the Checklist of General Key Wildlife Site Criteria (set out in section 2.1 of the handbook part 2) which include:

- Size or Extent;
- Diversity;
- Naturalness and Typicalness;
- Rare or Exceptional Feature;
- Fragility;
- Recorded History or Cultural Associations;
- Wildlife Corridors and Other Connected Habitats; • Value for Appreciation of Nature; and
- Value for Learning.

4.2 Section 2.5 states that some habitat selection thresholds depend on lists of indicator plant species, however it is important to note that the Site Selection Panel will **NOT** select a just because it fulfils the minimum threshold of species, the site must also fulfil **at least one** of the General Criteria. It also states that: "*Sites which only support habitats with features that do not meet the minimum thresholds will not be selected as KWS, unless other factors – such as value for learning or nature appreciation – are particularly well represented*".

Grassland Habitat Criteria

[4] GCER (July 2015) Gloucestershire Key Wildlife Sites Handbook Part 2 v4.5 Final

4.3 Within the grassland section of the handbook (section H5 starting on page 25), there are three sub-categories:

- **H5.1.** This includes all grasslands larger than 0.5 ha which are identified as one or more of the NVC types in Table H5a (which includes community types CG3, CG4, CG5, U4, U5, MG4 and MG5) **AND** which support **15** or more species from Table H5c (which comprises a list of species occurring on grasslands of high conservation concern in Gloucestershire). **These are high priority grassland types**.

- **H5.2.** This includes areas of semi-natural grassland larger than 0.5 ha which are identified as one or more of the NVC types in Table H5b (which includes community types CG7, CG10, U1, MG1, MG6, MG9, MG10, MG11, MG12 and MG13) **AND** which support **20** or more species from Table H5c.

- **H5.3** – All semi-natural grasslands below 0.5ha which fit the description for H5.1 or H5.2 where they occur in connection with other qualifying habitats, either as a mosaic or as an adjacent patch.

4.4 Table H5c sets out a list of species occurring on grassland of high conservation concern in Gloucestershire, however no indication is given in relation to the abundance at which these species might occur in the sward. It therefore takes the simplistic view that if the species is present in the sward, that it counts towards the threshold number, even if only a single specimen is present. Therefore, a grassland with extremely low frequency of the listed species may still meet the threshold, despite it being of poor quality in all other respects (e.g. being dominated by common coarse grass species with very low coverage of herbs). This constraint is overcome to a certain extent by the grassland needing to meet the threshold number of species AND fit with one of the listed NVC plan communities AND at least one of the General Criteria, but again fitting to these NVC communities does not imply that the grassland sward is species-rich, or of high ecological value.

5. Review of the Site Against the Selection Criteria

5.1 A review of the site against the LWS selection criteria has been carried out below in relation to the grassland habitat criteria and the general criteria.

Grassland Criteria

5.2 In order to determine whether the site meets the thresholds for a KWS under the grassland habitat criteria, an NVC survey was carried out of the site in August 2020. The survey was carried out by a an experienced botanist with over 12 years' experience in carrying out botanical and NVC surveys (the surveyors CV is provided with the full survey report in Annex 5487/1). In addition to the NVC survey, a transect was walked across the entire site to identify and record a representative list of field-layer vascular plant species within the site, along with any of the species listed in Table H5c of the KWS Handbook. The abundance of each species was estimated according to the DAFOR scale. The full results of the survey are set out in Annex 5487/1 and summarised below.

5.3 Three main areas of homogenous grassland vegetation were identified within the site:

- Area A: False Oat-grass *Arrhenatherum elatius* dominant vegetation, which comprises the vast majority of the site;
- Area B: Tor-grass *Brachypodium pinnatum* dominant vegetation, which forms small stands mainly in the north of the site;
- Area C: Yorkshire-fog *Holcus lanatus* dominant grassland, which occupies a small part of the western portion of the site.

5.4 Analysis of the survey data finds that the majority of the site (Area A) is considered to have the closest affinity to NVC community MG1a, which is a grass-dominant, species-poor community typical of fields subject to infrequent management. Small areas of the grassland (Area B) are considered to represent an intermediate between MG1a and CG4c, based on the localised dominance of Tor-grass, but lack many of the calcareous species typically associated with CG4. A small part of the western portion of the site (Area C) is considered to represent a transition between MG1 and MG9, with a somewhat greater forb cover, but remains species-poor.

5.5 In all cases, the average number of species recorded per quadrat is lower than the averages for the described NVC communities, suggesting that the areas are relatively poor examples of their type.

5.6 Forb cover in the quadrats is very low at typically 5 – 10%. This reflects the habitat as a whole which is grass dominated at a cover which greatly exceeds the description of MG1(26a) in the UK Habitat Classification Field Key as "vegetation with over 50% grass cover".

5.7 A total of 12 species of local interest, according to the KWS selection criteria, were recorded within the site, which therefore falls well short of the 20 required for selection. It is understood, that records of additional KWS species are present, although these were not collected as part of systematic surveys of the site. While some early species may be present which would not have been recorded during the current survey, the absence of others being re-recorded during the current survey reflects the very small number of individuals of such species which may be present. Given that they cannot be readily re-recorded, as they are represented at such a low frequency in the sward (and they are not rare species), it follows that they contribute little to nothing to the conservation interest of the grassland. Accordingly, these species would not be expected to be recorded during snapshot surveys carried out for KWS selection. Rather, the criteria thresholds reflect numbers of indicator species which would be expected to be able to be readily recorded during KWS surveys.

General Criteria

5.8 A review has been carried out of the site against the General Criteria set out in Part 2 of the KWS selection criteria handbook. This is summarised below and set out in full in Annex 5487/2.

- **Size or Extent** – does not meet the criteria as it is small in size and does not contain any exceptional or large species populations.
- **Diversity** – does not meet the criteria as survey work has confirmed the site is not diverse beyond the context of the site itself.

- **Naturalness and Typicalness** – does not meet the criteria as it located in a suburban location and survey work has confirmed it does not contain a notable vegetation structure, notable habitats beyond the context of the site itself, a notable mosaic of habitats or support significant populations of notable species.
- **Rare or Exceptional Feature** – survey work has confirmed no rare or exceptional features are present;
- **Fragility** - survey work has confirmed the habitats within the site are not of importance beyond the context of the site i.e. below the county context, and therefore the criteria is not applicable to the site.
- **Recorded History or Cultural Associations** – not applicable as the site has not been subject to historic/long-term/traditional management practices.
- **Wildlife Corridors and Other Connected Habitats** – does not meet the criteria due to enclosure of the site by houses on three sides and a school on one side.
- **Value for Appreciation of Nature** – does not meet the criteria as there is no public access to the site and views into the site from the surrounding dwellings would be distant and obscured by trees.
- **Value for Learning** – the adjacent school does have access to the field although at the present time, little use of the grassland is made for educational purposes. Given the currently herb poor nature of the sward, it is considered that this would not be a resource the school would turn to for grassland botanical studies.

5.9 Based on the review carried out, the site does not meet any of the General Criteria.

6. Summary

6.1 A review has been carried out to determine whether the site may meet the identified criteria to qualify as a KWS. The review has been informed by survey work carried out at the site including habitat survey, botanical survey and faunal surveys.

6.2 In order to potentially qualify as a KWS, a site must meet at least one of the General Criteria set out in Part 2 of the KWS Handbook, AND, in relation to grassland sites, confirm to one of the listed NVC communities AND contain a number of listed species above a particular threshold (from a list of species occurring on grassland of highest conservation concern is Gloucestershire). Where sites may qualify on the basis of these criteria, the site is put forward to the Gloucestershire Wildlife Sites Partnership Site Selection Panel for consideration as a KWS.

6.3 The review finds that the site does not meet any of the nine General Criteria, whilst detailed botanical survey work carried out in August 2020 finds that the majority of the site is considered to have the closest affinity to NVC community MG1a, which is a grass-dominant, species-poor community typical of fields subject to infrequent management. Only 12 listed notable species were recorded and therefore the site falls well short of meeting the threshold of 20 species for MG1 grasslands. The botanical survey has been carried out by an experienced botanist with a detailed report presented. As set out in the KWS handbook Part 1 at paragraphs, 3.5 and 3.6, surveys not carried out by suitable experienced professionals should be considered to be unreliable, whilst as stated in paragraph 3.4, data acquired under trespass should be disregarded.

6.4 In conclusion, detailed botanical survey work, coupled with a review of the General Criteria finds that the site, in our opinion, does not meet the required criteria for designation as a KWS. Indeed, should it be designated it would serve to de-value the series as a whole through the inclusion of a non-key site.

Annexes:

- 5487/1 Results of August 2020 Botanical Survey Work and CV of Ecologist carrying out botanical survey work
- 5487/2 Review of the site against the General Criteria for KWS site selection

Annex 5487/1 Results of August 2020 Botanical Survey Work

aspect ecology Botanical Survey 2020

Project: Oakhurst Rise, Cheltenham

Technical Briefing Note TN09: Results of Botanical and NVC Survey

Date: 05 August 2020

Background

1. Aspect Ecology Ltd has been appointed by William Morrison to carry out a botanical and vegetation classification survey of the site at Oakhurst Rise, Cheltenham. The site is proposed for residential development and associated landscape enhancements.

Method

NVC survey

2. The National Vegetation Classification (NVC) survey was carried out using the methodology outlined in the NVC Users' Handbook (Rodwell 2006) on 1st August 2020. Firstly, a familiarisation exercise was undertaken to identify areas of homogenous vegetation. This exercise identified that one plant community dominated the site, but two other somewhat distinct communities were present at much smaller extents. Therefore, each of these three communities was sampled using quadrats.

3. There is no definitive number of quadrats required in NVC survey, although it is customary to take five quadrats from each homogenous stand of vegetation (Rodwell 2006). As the dominant

community covered a large area, ten quadrats were taken across the site, while five quadrats were taken from each of the two smaller-sized communities. Therefore, 20 quadrats were recorded in total. The quadrats were placed in areas considered to be representative of the community.

4. Each quadrat measured 2x2 m, which is the size 'almost always' used for the original NVC sampling of mesotrophic grassland (Rodwell 1992). Within each quadrat, the percentage cover of all plant species was recorded, with Domin scores of 1-3 used where cover was less than 4%. Bryophytes were included in the NVC survey, but none were noted in the quadrats. The height of the grassland sward was recorded along with a 10-figure grid reference using a GPS smartphone app, which gave an accuracy of 7 m. The NVC survey was undertaken by an ecologist with over ten years of botanical survey experience, including of grassland communities and NVC surveys throughout the UK (see Appendix 1).
5. The quadrat data was analysed and interpreted using a combination of experience and the keys and community descriptions in Rodwell (1992). The data was also analysed using the Modular Analysis of Vegetation Information System software (MAVIS version 1.04). MAVIS results were interpreted with caution and used only as an aid to identification[5]. The NVC quadrat data is presented at Appendix 2.

Botanical survey

6. In addition to the quadrat data, a transect was walked across the entire site comprising a series of parallel lines spaced 10 m apart, to record a representative list of field-layer vascular plant species within the site. The abundance of each species was estimated according to the DAFOR scale. Notes

[5] The limitations of NVC analysis software are described in the NVC Users' Handbook (Rodwell 2006), for example, "*they are no substitute for the experience of the ecologist and should never be used alone to provide identifications. Like written keys, they are simply a guide to negotiating a way around a complex classificatory landscape and to understanding variation that, in reality, is extremely complex*." (p.48)

on the distribution of each species were made where appropriate, including for those species included in Table 5Hc of the Key Wildlife Site (KWS) selection criteria. Additional species recorded from a survey by Aspect Ecology in July 2019 were added to the list where appropriate.

The species list is provided at Appendix 3.

Constraints

7. The species lists are not intended to be exhaustive but rather provide a representative list of the botanical composition of the grassland. Nevertheless, the survey covered the entire site in detail. The survey was undertaken towards the end of the optimal period of grassland botanical survey work, and as such species which appear early in the season may not have been visible. However, the species lists are bolstered by an additional survey undertaken in July 2019, which allowed recording of early species such as Pignut *Conopodium majus*.

Results and Interpretation

Overview

8. The majority of the site supported a tall, coarse grassland sward with little evidence of management in this growing season, aside of grazing by Roe Deer and a group of alpacas, which appear to be usually contained within an enclosure in the south of the site but given occasional access to the wider site. Grazing pressure was generally very low, although parts of the south of the site, near the alpaca enclosure, were more moderately grazed. The alpaca enclosure itself was noted to be very heavily grazed, with patches of bare ground throughout.

9. Three main areas of homogenous grassland vegetation were identified within the site:

    a. Area A: False Oat-grass *Arrhenatherum elatius* dominant vegetation, which comprises the vast majority of the site;

b. Area B: Tor-grass *Brachypodium pinnatum* dominant vegetation, which forms small stands mainly in the north of the site;

c. Area C: Yorkshire-fog *Holcus lanatus* dominant grassland, which occupies a small part of the western field.

10. In addition, small patches of Tufted Hair-grass *Deschampsia cespitosa* dominant vegetation were recorded, particularly in small hollows in the northern part of the western field, and along parts of the southern site margin. This vegetation was insufficient in extent to record quadrats, but is likely to represent the MG9 NVC community.

11. Each of the three main vegetation types is described in the following sections, followed by a discussion of the KWS selection criteria.

False Oat-grass vegetation (Area A)

12. Area A occupies the vast majority of the site, and therefore ten quadrats were taken to investigate any variability in this vegetation type across the site. The area was characterised by a dominance of False Oat-grass, which was recorded in all ten quadrats with a frequency of 35% to 95%. Other constant species included Creeping Bent *Agrostis stolonifera* and Red Fescue *Festuca rubra*, which formed a mat of vegetation below the taller grasses, and were recorded in nine and eight of the ten quadrats respectively. Yorkshire-fog and Common Sorrel *Rumex acetosa* were recorded in all ten quadrats.

13. Forb species were notably infrequent in the quadrats, generally occupying 5% to 10% of the coverage. Aside of Common Sorrel, the only species which occurred frequently were Meadow Vetchling *Lathyrus pratensis* and Bird's-foot Trefoil *Lotus corniculatus*, recorded in six and two of the ten quadrats, respectively.

14. Based on surveyor experience and following the keys in Rodwell (1992), this area is considered to have the closest affinity to MG1a *Arrhenatherum elatius* grassland, *Festuca rubra* sub-community. This is a grass-dominated community characterised by abundant False Oat-grass over Red Fescue.

15. Analysis of the quadrat data using the MAVIS software identified MG9 *Holcus lanatusDeschampsia cespitosa* as the best matching community for this area (Table 1). Based on experience, MG9 is often returned where Yorkshire-fog is constant, but in this case is not considered to closely match the vegetation on site due to the scarcity of Tufted Hair-grass, which is very characteristic of MG9. The next highest matching sub-communities were MG1c and MG1a.

MG1c is a damper community characterised by constant Meadowsweet *FIlipendula ulmaria*, which was not recorded during the survey. Nevertheless, a similar score was returned for MG1a. The average number of species per quadrat was 9 (Table 1 and Appendix 2), compared to the average of 12 for the described sub-community (Rodwell 1992).

Tor-grass vegetation (Area B)

16. Area B occupies several small stands across the site, mostly occupying patches of 25 to 100 m[6], although two slightly larger areas were noted around quadrats 1 and 7. This vegetation is similar in structure and community composition to Area A, except that Tor-grass replaces False Oat-grass as the dominant species. Tor-grass was recorded in all five quadrats, with a frequency of between 70% and 80%, while False Oat-grass dropped in frequency with a maximum coverage of 20%. As in Area A, Creeping Bent and Red Fescue occupied the ground layer below the taller grasses, and were recorded in all five quadrats. Sweet Vernal-grass *Anthoxanthum odoratum* and Yorkshirefog were also recorded in all five quadrats. Forb species were similar to those recorded in Area A, including constant Common Sorrel with more occasional Meadow Vetchling and Bird's-foot Trefoil.

17. Due to the prevalence of Tor-grass, this area has some affinity to the CG4 *Brachypodium pinnatum* community, particularly the *Holcus lanatus* sub-community (CG4c), which is a more mesotrophic example of this calcareous community. However, the area lacks some characteristic species of the

[6] '*stands of vegetation intermediate in composition and structure between two (or more) NVC plant communities are commonly encountered in the field*' (Rodwell 2006)

community such as Sheep's Fescue *Festuca ovina*, possibly due to its small size which limits opportunities for colonisation by more calcareous species. Instead, False Oat-grass remains prevalent, recorded in four of the five quadrats, while Red Fescue was constant. These two species are more characteristic of MG1a. Therefore, the area is considered to represent an intermediate between MG1a and CG4c. Intermediates are commonly encountered in NVC survey[2].

18. The MAVIS software provided unclear results for this area, with maritime cliff communities scoring highest, followed by MG9b and MG1e (Table 1), indicating the mesotrophic nature of the grassland. The species richness of quadrats averaged 9.6 (Table 1), compared to an average of 16 for CG4c (Rodwell 1992).

Yorkshire-fog vegetation (Area C)

19. Area C was recorded in one patch in the centre of the western field, and is characterised by a slightly shorter sward height with a reduced frequency of False Oat-grass compared to Area A. Yorkshire-fog was recorded as the dominant grass, with Sweet Vernal-grass and Creeping Bent also recorded in all five quadrats. The forb cover was somewhat higher in these quadrats, up to 15%, mostly attributable to Meadow Vetchling.

20. The area has some affinities with both the MG1a and MG9 communities. MG9 scored highly in the MAVIS analysis (Table 1), while the keys in Rodwell (1992) led to MG1a. Tufted Hair-grass, which is characteristic of MG9, was not recorded in any of the quadrats but was noted elsewhere. The MG4 *Alopecurus pratensis-Sanguisorba officinalis* community also scored highly, and although there are some affinities with this community, the area lacks the species richness and herbaceous cover typically associated with MG4, with an average of nine species per quadrat (Table 1). This area is therefore considered to represent an intermediate between MG1a and MG9.

Table 1. Summary of NVC survey results. NVC keys refer to Rodwell (1992). The MAVIS software output only includes grassland communities.

Area	Community considered to have closest affinity	Outcome of NVC keys	MAVIS output	Species richness (mean average and range)
A	MG1a	MG1a	MG9b: 56.6% MG9: 53.3% MG1c: 50.0% MG1a: 49.6% MG4c: 47.2%	9 (7-11)
B	MG1a / CG4c intermediate	MG1a or CG4c	MG9b: 44.3% MG1e: 43.5% MG12a: 41.2%	9.6 (8-13)
C	MG1a / MG9 intermediate	MG1a	MG9: 52.6% MG4c: 51.3% MG9b: 50.4% MG9a: 45.8% MG1c: 45.8%	9 (7-11)

Conclusion

21. The majority of the site (Area A) is considered to have the closest affinity to MG1a, which is a grass-dominant, species-poor community typical of fields subject to infrequent management. Small areas of the grassland (Area B) are considered to represent an intermediate between MG1a and CG4c, based on the localised dominance of Tor-grass, but lack many of the calcareous species typically associated with CG4. A small part of the western field (Area C) is considered to represent a transition between MG1 and MG9, with a somewhat greater forb cover, but remains speciespoor. In all cases, the sward is seen to be grass dominated (mostly 90 – 95% with a low herb cover 5 – 10%) while the average number of species recorded per quadrat is lower than the averages for the described NVC communities, suggesting that the areas are relatively poor examples of the communities.

References

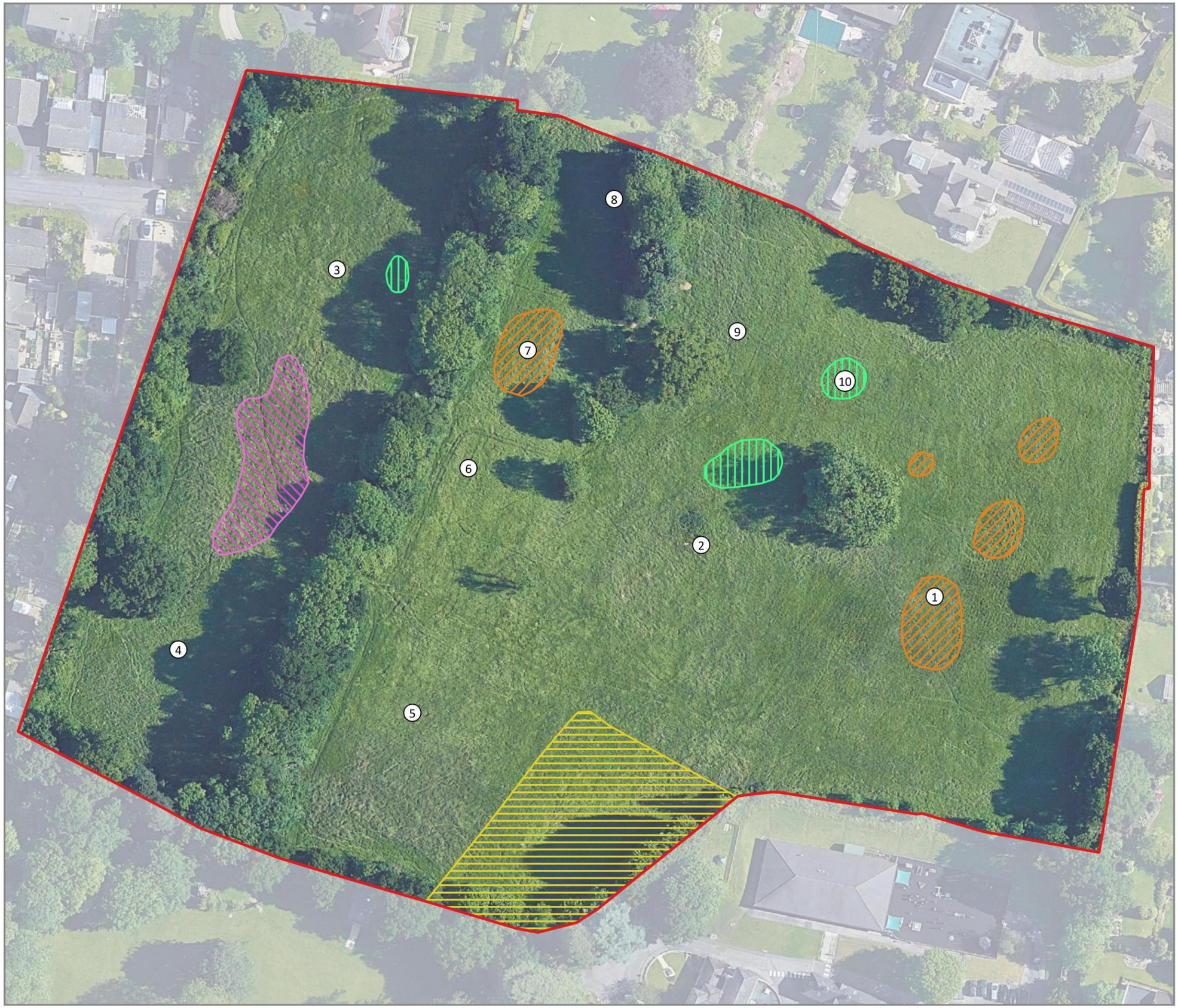
Rodwell JS (ed.) (1992) *British Plant Communities Volume 3: Grasslands and Montane Communities.* Cambridge University Press, Cambridge.

Rodwell JS (2006) *National Vegetation Classification: Users' Handbook.* Joint Nature Conservation

Committee, Peterborough.

Plan 5487/NVC:

NVC communities and quadrat distribution



Key:

- Site Boundary
- Area A (False Oat-grass dominant: MG1a)
- Area B (Tor grass dominant: intermediate between MG1a and CG4c)
- Area C (Yorkshire-fog dominant: intermediate between MG1a and MG9)
- Alpaca enclosure
- (1) Quadrat location

0 10 20 30 40 m

aspect ecology

Aspect Ecology Limited - West Court - Hardwick Business Park
Noral Way - Banbury - Oxfordshire - OX16 2AF
01295 279721 - info@aspect-ecology.com - www.aspect-ecology.com

Oakhurst Rise, Cheltanham	PROJECT
NVC communities and quadrat distribution	TITLE
5487/NVC	DRAWING NO.
-	REV
July 2020	DATE

Appendix 5487/1:

CV of botanist: Tom Staton

aspect ecology

Tom Staton

Principal Ecologist

Personal Profile

Tom is an Ecologist with over 12 years of experience and a MSc in Biological Recording, with an expert knowledge of the UK's habitats, flora and fauna. He has extensive experience in carrying out ecological survey work, designing and leading surveys, report writing, designing and delivering mitigation, project management, staff management and liaison with clients and stakeholders on a wide variety of projects. Tom holds Natural England licenses for bats, Dormouse, Great Crested Newt and Smooth Snake. Tom specialises in botanical survey and assessment and has excellent plant identification skills and an expert knowledge of UK habitat classification and assessment, including use of the National Vegetation Classification (NVC) survey.

- Specialist in carrying out botanical survey work in all UK habitats, with particular expertise in grassland, woodland, and Open Mosaic Habitats on previously developed land.

Qualifications / Accreditations

- Full Member of the Chartered Institute for Ecology and Environmental Management (MCIEEM)

Key Skills and Expertise

- Extensive experience of carrying more detailed and specialist botanical survey and habitat classification, such as NVC surveys.
- Excellent plant identification skills and essential associated knowledge, such as indicator species for specific soil types, management regimes and Priority Habitats.
- Regularly analyses survey data to assess and classify habitat types (e.g. by use of MAVIS) in order to produce high quality survey reports and

  detailed Management Plans across a range of habitats including grassland.

Professional Memberships

- PhD in Agro-ecology (in progress), Reading University
- MSc Biological Recording (Distinction)
- BSc (Hons) Biology with placement (First Class)
- CS38 – Tree Climbing and Aerial Rescue

Years of Technical Experience

12 years

Project Profiles

- **Echoraise Quarry, Kent**: Carried out NVC surveys of woodland and grassland in order to classify the habitat types present within a former quarry in order to inform a plan for its restoration following additional sand and gravel extraction works. Produced a survey report, 5 year Restoration Plan appropriate to the habitats identified, and a 20 year Management Plan.
- **Thames Enterprise Park, Thurrock**: Carried out detailed surveys of areas of Open Mosaic Habitat in order to determine areas of greater and lesser value habitat. Designed a bespoke mitigation package to ensure an overall net gain in OMH across the 200ha development site.

- **Holland Road, Hurst Green**: Carried out NVC surveys of a series of grassland fields in order to classify the grassland community types present and determine their ecological value in order to inform a potential allocation of the site in the Local Plan.
- **Sheffield Motorway Service Area**: Carried out NVC surveys of woodland and grassland to inform the layout for a proposed new motorway service area.
- **Snod Coppice, nr Shrewsbury:** Undertook detailed survey work and prepared an ES chapter for proposed poultry sheds affecting ancient woodland. Tom led a detailed survey of the woodland, including the mapping of ancient woodland plant indicator species (1a), to inform the scheme design in consultation with the design team.

- **Thames Oilport, Thurrock:** Carried out botanical surveys of grassland, and classified and evaluated different areas of OMH in order to inform proposals to bring a disused diesel tank bund back into use. That habitats were located at a coastal location and adjacent to a SSSI and SAC and so a survey for notable/rare species was also carried out.
- **The Grove Hotel, Chandlers Cross:** Carried out a botanical survey of the ground flora of an ancient woodland to inform an assessment of feasibility to install glamping units within the woodland. The survey involved identifying and mapping ancient woodland vascular plants (as defined in the list published for the south of England) to allow any variation in the ecological quality of the woodland to be mapped to a high level of precision, to inform design constraints.
- **Little Preston, Aylesford:** Carried out a botanical survey of the ground flora of a woodland mapped as ancient adjacent to a quarry to inform an assessment of feasibility of development. The survey involved identifying and mapping ancient woodland indicator species, which, coupled with an assessment of the tree canopy was used to determine whether the mapped woodland was indeed ancient.

Appendix 5487/2:

NVC quadrat data

Appendix 2. NVC quadrat data. Numbers for each species refer to percentage cover (which can exceed 100% due to vegetation layering). Community reference letters refer to the descriptions in the text and are colour-coded.

Quadrats		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Community reference		B	A	A	A	A	A	B	A	A	B	A	B	A	B	A	C	C	C	C	C
OS grid reference		SO96604 21578	SO96552 21590	SO96448 21656	SO96412 21567	SO96462 21556	SO96483 21607	SO96493 21632	SO96525 21680	SO96545 21643	SO96577 21637	SO96601 21632	SO96609 21603	SO96576 21559	SO96547 21605	SO96413 21609	SO96430 21621	SO96425 21618	SO96422 21604	SO96430 21595	SO96426 21596
Maximum sward height (cm)		70	80	80	70	80	80	70	80	80	70	90	80	90	70	80	60	60	70	60	60
Grass % cover		90	90	95	95	95	95	90	95	95	90	95	80	95	90	95	90	85	90	85	90
Forb % cover		10	10	5	5	5	5	10	5	5	10	5	20	5	10	5	10	15	10	15	10
Species	Vernacular																				
Agrostis stolonifera	Creeping Bent	10	25	30	40	40	40	15	30	40	15		10	10	25	10	30	30	30	20	10
Alopecurus pratensis	Meadow Foxtail		5	5			20					5		1		2			1		
Anthoxanthum odoratum	Sweet Vernal-grass	5	10	10	5	20	30	20	15	5	5		10		5		30	10	10	20	10
Arrhenatherum elatius	False Oat-grass	20	80	70	50	40	35	10	50	80	20	90	10	95		60			10	5	
Brachypodium pinnatum	Tor-grass	70	5					85			80		80	5	80						
Dactylis glomerata	Cock's-foot		5	1					1			5	5			2		1			1
Festuca rubra	Red Fescue	5		20		20	15	10	20	20	5	30	20	20	10	20	10	10	10		
Galium verum	Lady's Bedstraw		5										20								
Geranium dissectum	Cut-leaved Cranesbill																				1
Helictotrichon pratense	Meadow Oat-grass					1															
Heracleum sphondylium	Hogweed					1					1	1	1	1	2				2		1
Holcus lanatus	Yorkshire-fog	10	5	30	40	30	20	10	40	20	5	15	5	5	10	40	60	70	80	70	70
Lathyrus pratensis	Meadow Vetchling	10	5	5	5	1	2				1	1	1			1	15	20	10	2	10
Lolium perenne	Perennial Rye-grass																1			5	1
Lotus corniculatus	Bird's-foot Trefoil				15	2		10			5		5		10					15	
Lotus pedunculatus	Greater Bird's-foot Trefoil						5														
Phleum pratense	Timothy																				5
Plantago lanceolata	Ribwort Plantain		1						1				1	1							
Potentilla cf. x mixta	Hybrid Cinquefoil																		1		
Quercus robur	Pedunculate Oak (seedling)									1											
Ranunculus acris	Meadow Buttercup				5				1							1	1		1		
Rumex acetosa	Common Sorrel	2	15	2	2	5	2	5	2	5	5	5	2	5	2	2		1	1	1	1
Rumex conglomeratus	Clustered Dock																				1
Veronica chamaedrys	Germander Speedwell							1													
Vicia sepium	Bush Vetch								2											5	
Total number of species		8	11	9	8	10	9	9	10	7	10	8	13	9	8	9	7	7	11	9	11

Appendix 5487/3:

Grassland species list

Appendix 3. List of field layer plant species recorded within the site. Species included in Table H5c of the Key Wildlife Site selection criteria are marked in bold. Abundance values refer to the DAFOR scale, where D = dominant, A = abundant, F = frequent, O = occasional, R = rare, and a preceding 'L' refers to localised abundance.

Species	**Vernacular**	**Abundance**	**Comments**
Grasses, sedges and rushes			
Agrostis stolonifera	Creeping Bent	A	
Alopecurus pratensis	Meadow Foxtail	O	
Anthoxanthum odoratum	Sweet Vernal-grass	F	
Arrhenatherum elatius	False Oat-grass	D	
Brachypodium pinnatum	Tor-grass	LA	
Brachypodium sylvaticum	Wood False-brome	O	Recorded under tree cover
Bromus erectus	Upright Brome	R	
Calamagrostis epigejos	Wood Small-Reed	R	
Carex pendula	Pendulous Sedge	R	Single specimen noted adjacent to garden along the northern boundary, possible garden escape
Dactylis glomerata	Cock's-foot	O	
Deschampsia cespitosa	Tufted Hair-grass	O	
Festuca arundinacea	Tall Fescue	O	Only recorded in 2019
Festuca rubra	Red Fescue	F	
Helictotrichon pratense	**Meadow Oat-grass**	**R**	**Recorded in quadrat 5 at SO96462 21556, but could be under-recorded**
Holcus lanatus	Yorkshire-fog	F-A	
Hordeum secalinum	Meadow Barley	R	
Juncus conglomeratus	Compact Rush	R	
Lolium perenne	Perennial Rye-grass	O	
Luzula campestris	**Field Woodrush**	**R**	**Single specimen noted at SO96460 21550, could be more frequent earlier in the season**
Phleum pratense	Timothy	O	
Poa annua	Annual Meadow-grass	O	Only recorded in 2019
Poa pratensis	Smooth Meadow-grass	O	
Poa trivialis	Rough Meadow-grass	O	
Broadleaved herbs and other species			
Alliaria petiolata	Garlic Mustard	O	Recorded under or near tree cover
Arum maculatum	Lords-and-Ladies	R	
Bellis perennis	Daisy	O	Only recorded in 2019
Centaurea nigra	**Common Knapweed**	**R-O**	**Several small patches recorded near the in-field Oak tree in the eastern part of the site**
Circaea lutetiana	Enchanter's Nightshade	R	Only recorded under trees in the south-east corner of the site
Cirsium arvense	Creeping Thistle	O-LA	
Cirsium vulgare	Spear Thistle	R	
Conopodium majus	**Pignut**	**F**	**Only recorded in 2019 (spring species)**
Dryopteris filix-mas	Male Fern	R	Under an Oak along the northern boundary
Epilobium hirsutum	Great Willowherb	R	Single specimen noted adjacent to garden

Epilobium parviflorum	Hoary Willowherb	R	Under the in-field Oak in the eastern part of the site
Euphorbia peplus	Petty Spurge	R	Recorded on disturbed ground in proximity to the tree belt
Galium aparine	Cleavers	R	Mainly recorded at field margins
Galium verum	**Lady's Bedstraw**	**O-LF**	**Mainly to the north and east of the in-field Oak tree, in the eastern part of the site**
Geranium dissectum	Cut-leaved Cranesbill	O	
Geranium molle	Dove's-foot Cranesbill	R	
Geranium robertianum	Herb-Robert	R	Recorded under or near tree cover

Geum urbanum	Wood Avens	O	Mainly under tree cover
Glechoma hederacea	Ground-ivy	R	Recorded under or near tree cover
Hedera helix	Ivy	LF	Recorded under or near tree cover
Heracleum sphondylium	Hogweed	O	
Hieracium agg.	Hawkweed	R	Recorded near the tree belt
Hypochaeris radicata	**Common Cat's-ear**	**O**	**Recorded in the northern part of the site, near field edges**
Iris foetidissima	Stinking Iris	R	Single specimen noted under trees in the south-east corner of the site
Lapsana communis	Nipplewort	R	
Lathyrus pratensis	**Meadow Vetchling**	**F**	**Almost ubiquitous across the site, but mostly at low frequency in the sward**
Leucanthemum vulgare	**Oxeye Daisy**	**R**	**Only recorded in 2019**
Linaria purpurea	Purple Toadflax	R	One specimen recorded along eastern margin
Lotus corniculatus	**Bird's-foot Trefoil**	**O-F**	**Recorded sporadically throughout the site**
Lotus pedunculatus	**Greater Bird's-foot Trefoil**	**O**	**Recorded in damper areas at SO96490 21611, SO96566 21540, and along eastern part of the southern site margin. Notably less frequent than *Lotus corniculatus* .**
Malva moschata	Musk-mallow	R	Single specimen noted in proximity to the eastern boundary
Medicago lupulina	Black Medick	R	
Papaver somniferum	Opium Poppy	R	In the tree belt, towards the southern boundary
Plantago lanceolata	Ribwort Plantain	O	
Polygonum aviculare	Common Knotgrass	R	
Potentilla cf. x *mixta*	Hybrid Cinquefoil	O	Provisional identification based on vegetative characteristics. Mixture of 3 and 5 leaflets.
Quercus robur	Pedunculate Oak (seedling)	R	
Ranunculus acris	Meadow Buttercup	O	
Ranunculus bulbosus	**Bulbous Buttercup**	**R**	**Single specimen noted at SO96485 21601. Could be under-recorded to some extent, but much less frequent than other *Ranunculus* species recorded.**
Ranunculus repens	Creeping Buttercup	O	

Rubus fruticosus agg.	Bramble	LF	Around tree cover with minor encroachment into the fields
Rumex acetosa	Common Sorrel	F	
Rumex conglomeratus	Clustered Dock	O	
Rumex obtusifolius	Broadleaved Dock	R	
Sonchus asper	Prickly Sow-thistle	R	One specimen recorded along eastern margin
Stachys sylvatica	Hedge Woundwort	R	Recorded near tree cover
Tanacetum parthenium	Feverfew	R	In the tree belt, towards the southern boundary
Taraxacum agg.	Dandelion	R	
Tragopogon pratensis	**Goat's-beard**	**R**	**Recorded in two locations: SO96621 21610 and SO96574 21571**
Trifolium pratense	Red Clover	R	
Trifolium repens	White Clover	R	
Urtica dioica	Common Nettle	O	Mainly recorded at field margins
Veronica chamaedrys	Germander Speedwell	R	
Vicia hirsuta	Hairy Tare	R	Only recorded in 2019
Vicia sativa	Common Vetch	O	Only recorded in 2019
Vicia sepium	Bush Vetch	O	
Vicia tetrasperma	Smooth Tare	R	Only recorded in 2019

Annex 5487/2 Review of the Site Against the General Criteria

1005487 TN08 Review of KWS Criteria

General Criteria Category	Criteria Checklist (from KWS handbook Part 2)	Review of Site against the criteria
Size or Extent	*a. The site is an exceptionally large area of an important natural or seminatural habitat e.g. the largest in the county, or the largest within a distinct region of the county* *b. The site supports an exceptionally large and/or thriving population of an important species (as defined in the Species Criteria)* *c. The site supports a high proportion of the total area of an important habitat or the total numbers of an important species in the county and/or in a wider national or international context*	The site is small in size at approx. 3.9ha and is set in a suburban environment surrounded by residential properties and a school. It therefore does not comprise an exceptionally large area (such as the largest in the county or distinct region of the county), whilst survey work has also confirmed it does not comprise important natural or semi-natural habitat. The survey work carried out at the site has included a full suite of botanical and faunal surveys and these have not recorded any "large or thriving populations of important species", and would therefore not meet the criteria under point b. Correspondingly, the site would therefore also not qualify under point c. Accordingly, the site is not considered to meet the criteria to qualify under this general category.
Diversity	*a. The site contains many of the typical species and assemblages - including stages of succession, subtypes and variations - for which a habitat type is considered important* *b. The site contains the majority of species typical of the habitat as it is found in the county in its most favourable condition* *c. The site contains a range of semi-natural habitats in close proximity* *d. A range of successional stages of habitat development are present on the site* *e. The habitats present exhibit a wide range of natural structural diversity*	The site comprises a semi-improved grassland field partially separated by a hedgerow with trees. A hedgerow with trees is present on the western boundary and a small number of isolated hedgerows are present on the other boundaries. Small areas of scrub are present and a pond is present on the northern boundary of the site. Survey work has confirmed the grassland is not notable or diverse, either in terms of its species richness or structural diversity (such as having a variety of different sward lengths, tussocky areas etc.). Accordingly, the site is not considered to meet the criteria to qualify under this general category.

Naturalness and Typicalness	*a. Compared with other examples in the county, the habitat present is notable for its lack of human disturbance, introduced plant or animal species, mechanical damage, litter, agricultural spray drift or other factors which could adversely affect the vegetation structure and/or species composition of the community*	The site is located in a suburban location and survey work has confirmed it does not contain a notable vegetation structure, notable habitats beyond the context of the site itself, a notable mosaic of habitats or support significant populations of notable species. The KWS Handbook notes that in relation to this category, site protection is more likely to be considered a priority if the habitats involved are considered to be unusually pristine examples, exceptionally diverse, a recognised locally distinctive type, or impossible to

	b. The site is an excellent representative of a habitat or species population that forms a distinctive element of Gloucestershire's biodiversity *c. The site represents an excellent example of a mosaic of associated habitats typical of Gloucestershire, e.g. floodplain grazing marsh, traditional orchards, species-rich hedgerows*	restore once degraded or lost. None of these points would be applicable to the habitats recorded within the site during the survey work. Accordingly, the site is not considered to meet the criteria to qualify under this general category.
Rare or Exceptional Feature	*a. The habitats and/or species present are rare, either in an international, national or county context* *b. The site is the only example of a particular habitat sub-type or variation that cannot be protected elsewhere in the county* *c. the scientific interest of the site is dependent on a rare or unique combination of site-related factors such as geology, aspect, soil type, microclimate, hydrology or altitude Consequently, if the site was damaged or destroyed, the habitat and species communities present would be irreplaceable to the county d. the site supports habitats or species which are on the very edge of their natural range*	Survey work has confirmed that none of these points would be applicable to the site.
Fragility	*a. The habitats and/or species present are fragile or vulnerable to loss, damage or exploitation, either in an international, national or county context*	Survey work has confirmed the habitats within the site are not of importance beyond the context of the site i.e. below the county context, and therefore the fragility criteria is not applicable to the site.

Recorded or History Cultural Associations	*a. The nature conservation interest of the site is dependent on a rare or unique combination of historical factors such as long-term land use and management patterns* *b. the habitats and species present have become established over a very long period of time and consequently represent a limited resource in the county, as they could not be replaced or substituted* *c. The site is a particularly good example of the positive influence of longestablished cultural practice on biodiversity* *d. the site in question has exceptional potential for education and/or public appreciation of nature due to its longstanding recorded history*	It is not considered any of these points are of relevance to the site, as it has not been subject to historic/long-term/traditional management practices.

Wildlife Corridors and Other Connected Habitat	*a. The site forms part of an important, larger ecological unit which would be reduced in value as a whole if the site was damaged or destroyed* *b. The site forms a vital part of a sequence of habitats all of which are required in order to conserve a key population of an important species (e.g. semi-aquatic invertebrates)* *c. The site contributes significantly to a landscape-scale "corridor" of habitat(s) to enable species to adapt/move in response to climate change*	The site is located in a suburban setting and is surrounded on three sides by residential development. It therefore does not contribute to any form of wider landscape corridor, or function as part of a larger ecological unit. The north-south hedgerows with trees within the site form the northern portion of longer linear features which extend off-site to the south and run through the school. Beyond the school to the south is further residential development, and therefore even when taken together, these linear features do not connect with the wider landscape and are therefore isolated in nature. Accordingly, the site is not considered to meet the criteria to qualify under this general category.

Value for Appreciation of Nature	*a. Three or more of the following factors apply:* *- The site is adjacent to, or overlooked by, a residential area* *- There are well-used footpaths/cycleways/bridleways providing access to the site (official or permissive)* *- The site and its features of interest are accessible to people who are physically disabled* *- There is space to park at, or within easy walking distance of, the site* *- There is a local 'friends' type group concerned with beneficial conservation management on the site* *- The site is used by community groups* *b. There is a well-established history of community involvement with positive nature conservation management of the site*	The site is surrounded on three sides by residential properties, with the site beyond the rear gardens and therefore some distance from the houses. There may be some views of the site from residential properties, albeit these may be distant and/or obscured by trees. The site does not meet any other criteria in point a, or for point b. There are no Public Rights of Way (PRoW) running around or through the site and therefore it is not accessible to the public at all. Accordingly, the site is not considered to meet the criteria to qualify under this general category.
Value for Learning	*a. The site provides the best or only Gloucestershire example of a situation where a threatened or declining habitat or species of high nature conservation interest for which there is a research need may effectively be studied* *b. The site has one or more features of nature conservation importance that would not ordinarily qualify for KWS or SSSI selection, but which are known to be declining or having to adapt due to factors which cannot be prevented, and for which research over the medium or long term is crucial for the success of conservation efforts elsewhere*	Based on the survey work carried out, no features are present within the site which could be regarded as having any research need / need for further study which might benefit other habitats or features in the County. The southern boundary of the site is located adjacent to St Edward's Preparatory School. The school does have access to the field although at the present time, little use of the grassland is made for educational purposes. Given the currently herb poor nature of the sward, it is considered that this would not be a resource the school would turn to for grassland botanical studies.
	c. The site is exceptionally well-placed to offer educational opportunities either by its proximity to a school or other place of learning, or its easy accessibility for study of the species and habitats present without causing unacceptable damage or disturbance	Accordingly, the site is considered unlikely to meet the criteria to qualify under this general category.

Appendix 2:

Correspondence from Aspect Ecology to Gloucestershire Wildlife Trust dated 07 August 2020

Our ref: 1005487/011.let.GWT.jh

Aspect Ecology Ltd
West Court
Hardwick Business Park
Noral Way
Banbury
Oxfordshire
OX16 2AF

T: 01295 279721
E: info@aspect-ecology.com
W: www.aspect-ecology.com

07 August 2020

Dr Juliet Hynes
Nature Recovery Network Coordinator
Gloucestershire Wildlife Trust
Conservation Centre
Robinswood Hill Country Park

Reservoir Road
Gloucester
GL4 6SX

Sent By E-Mail Only

Dear Juliet,

LAND OFF OAKHURST RISE, CHELTENHAM: CONSIDERATION OF GRASSLAND FOR KWS DESIGNATION

Thank you for taking the time to meet to review the grassland on site. I set out below a summary of some of the comments I raised during our meeting which may be a helpful record to assist in drafting your response to the KWS application.

Criteria

The criteria for grassland selection are unusual in that they do not relate the required species number for designation to an area. For example, it is normal to express species thresholds in terms of their cover per m2 (unless dealing with rare species). This is how the NVC works in selecting community types for example, as does the new UK Habitat Classification system. Accordingly, when assessing a potential KWS, it is necessary to apply this parameter via observation. Herb rich meadows, in terms of frequency and constancy of a range of indicator herb species in the sward, are typically of elevated value, while those which are herb poor are not. I would refer you to Appendix 2 of Aspect Ecology's Botanical Survey 2020 (copy enclosed within Technical Note TN08) of the grassland at the site, which records typical grass cover values of mostly 90 – 95% and a typical herb cover of 5 – 10%. The survey also notes that the number of species recorded per quadrat is lower than the averages for the described NVC communities, illustrating that the identified areas of grassland are relatively poor examples of their type.

Data collection

Aspect Ecology has provided a report of a systematic survey of the site which records species occurrence and presents the results in a standard manner using recognised techniques and analysis e.g. NVC and DAFOR. Accordingly, there can be high confidence attached to the data.

No such survey report has been presented by Charlton Kings Friends (CKF/FOCK) / Bioscan, but rather only a table of species on the KWS selection list at Table H5c of the Part 2 KWS criteria are put forward. There is no record of how the data have been collected, when they were collected, by what method,

by who (by professional ecologists or members of the public), their qualifications and botanical experience or where the species lie on the site or their frequency. Accordingly, there can only be low confidence attached to the data.

KWS Species count

CKF report that 21 species have been recorded on the site. Of these species it is pertinent to make the following observations. Bluebell, Primrose and Barren Strawberry are likely closely associated with the hedgerows and marginal woody vegetation at the site rather than the grassland. The BSBI online Atlas of the British Flora[7] describes them as follows:

No.	Species	BSBI account of species ecology
1	Bluebell	A bulbous perennial herb occurring, sometimes abundantly, in a wide variety of deciduous woodlands, in hedgerows, on shady banks and, especially in western and upland areas, in meadows, under Pteridium and on cliffs. It also occurs as a naturalised garden escape. It is sensitive to long-term grazing. Generally lowland, but reaching 685 m on Craig-yr-Ysfa (Caerns.).
2	Barren Strawberry	A perennial herb of relatively infertile, dry but not droughted soils in open woods, woodland margins, scrub, grassy hedge banks and rock crevices; also occasionally in meadows and on walls. In the lowlands it is usually found in partially shaded sites but it extends into open habitats in upland areas. 0-790 m (Helvellyn, Cumberland).
3	Primrose	An evergreen, or sometimes aestivating, perennial herb typical of sites shaded from hot sun, found in woodland, on N.-facing banks, in hedgerows, coastal slopes and shaded montane cliffs. Reproduction is by seed, which is usually dispersed by ants. 0-850 m (Mt Brandon, S. Kerry).

This is also likely to be the case, albeit potentially to a lesser extent, for Common Dog Violet. The BSBI online Atlas of the British Flora describes it as follows:

No.	Species	BSBI account of species ecology
4	Common Dog Violet	This perennial herb occurs in a wide range of habitats, including open deciduous woodland, hedge banks and road verges, meadows, heaths, moorland, mountain grassland, rocky slopes and cliff ledges; it can become a serious weed in gardens. It avoids wet areas but is generally indifferent to soil type, shunning only the most acidic habitats. 0-1020 m (Stuchd an Lochain, Mid Perth).

We would also note that the Aspect Ecology survey recorded the presence of Hybrid Cinquefoil and there is the possibility that the identification of Barren Strawberry could be confused with Hybrid Cinquefoil as they are superficially similar. This could also be the case with Yellow Oat Grass (present

[7] https://www.brc.ac.uk/plantatlas/

on the CKF list) and Meadow Oat Grass (recorded by Aspect Ecology), albeit these are more readily distinguished.

Accordingly, taking into account the above observations, the CKF list of 21 species should be reduced to 17 in number.

Moreover, Aspect Ecology's Botanical Survey 2020 (copy enclosed within Technical Note TN08) recorded only 12 KWS species as present, and while some early flowering species may have been

missed, it is concluded that should other species be present in the sward, they are represented at such a low frequency that they cannot be readily re-recorded and accordingly contribute little to nothing to the conservation interest of the grassland.

KWSs are Special

The purpose of designating Wildlife Sites is to capture habitats which are special in terms of their ecological quality. If this were not the case, low value habitats could be designated. Special meadows typically are those with a high herb content, which the public would describe as "full of flowers". In turn these provide rich pollen and nectar sources which support a range of invertebrates, with butterflies being a particularly charismatic group which the public enjoy.

The grassland at Oakhurst Rise does not support the above characteristics due to the low frequency and constancy of herbs in the sward (typically 5 – 10% - see Appendix 2 of Aspect Ecology's enclosed Botanical Survey 2020 survey within TN08). Accordingly, if the grassland were to be designated as a KWS, any Wildlife Trust members visiting would likely be disappointed by what they found, as the grassland does not possess these special features, it being rather ordinary in nature. This reflects the fact that MG1 is a common grassland type, with the grassland on the site representing a species poor example of its type. To designate such sites would de-value the KWS network.

In this regard, the grassland does not represent 'Priority habitat – lowland meadow' or 'unimproved grassland' as stated on the 'Gloucestershire Key Wildlife Site Assessment Sheet' submitted by CKF / Bioscan, as Priority habitat lowland meadow requires the presence of an MG5 NVC community.

Qualification as a KWS

From the above review finds, it is our view that the grassland falls short of possessing the necessary ecological interest required for qualification for KWS designation. It therefore should not be designated, as to do so would de-value the series.

Protection

No protection is afforded to KWSs and accordingly there is a risk that a change in management could result in the loss of any interest present. For example, this could include application of herbicide, fertilizer, re-seeding or other inappropriate management. Accordingly, the future of such sites is not secure, which is a key consideration for planning.

Restorability

Restoration of any grassland is possible towards a community type of increased botanical interest. However, in most cases, including at Oakhurst Rise, there is no realistic mechanism that will come forward to enable this, save for a development proposal. In addition, while the grassland may in the past have been of increased botanical interest, this has been lost a considerable time ago and the seed bank may no longer be present or viable to enable restoration, without intervention e.g. importation of seed. Soil sampling on site around trees has shown the activated zones with increased levels of desirable soil fungi, bacteria and nematodes are limited to the areas beneath tree canopies and do not extend into the grassland, which appears to also be suffering from compaction issues.

Management

At the present time, positive conservation management is not secured and inappropriate management may occur e.g. cutting of the grass and the leaving of the arisings in place. There is no realistic prospect of securing beneficial conservation management, save via a development proposal.

Development proposals

The development proposals represent an opportunity to secure the future of the grassland interest. While an area will be lost to the proposals, a substantial area (~1.9ha) will retained and enhanced. In particular the development will:

- **Secure future**: The future of the grassland will be secured and protected such that the risk that its interest would be lost through inappropriate management e.g. application of herbicide, fertilizer or re-seeding would be removed;
- **Restoration**: Positive work would be carried out to restore the grassland interest to that of a meadow of high conservation value e.g. MG5. The detail of how this would be achieved would be the subject of a specific method statement, but could include the scarification of the sward to expose the underlying seedbank and soil and the import of green hay from a suitable local donor meadow if one is available or alternatively the spreading of an appropriate native wildflower seed mix with a large Yellow Rattle component to reduce the vigour of coarse grasses;
- **Conservation management**: Favourable grassland conservation management would be secured under the proposals which would be prescribed within a formal management plan. This would then be actioned to ensure the management of the grassland is optimal to maintain the restored botanical interest;
- **Long term funding**: Funding to manage the meadow would be secured under the proposals. This would most likely arise via a service charge on properties such that an assured source of funding for conservation management of the grassland would be available for the life of the development.

The resulting meadow would be herb rich and full of colour such that local residents and Wildlife Trust members would value it. The resulting pollen and nectar sources would be considerably increased with the consequence that invertebrate interests would also increase significantly, including highly visible groups such as butterflies and moths. The grassland would be patrolled by dragonflies from the proposed pond while small mammals, reptiles, amphibians, birds and bats would be attracted to the restored meadow.

At the present time, little use of the grassland is made for educational purposes by the adjacent school. However, under the proposals, much of the enhanced grassland will remain leased to the school

allowing them full access to it in the future. The botanical and faunal interests will be much more readily visible which would provide an accessible resource for nature studies / biology classes.

Elsewhere in the development, faunal enhancements will also be introduced such as in the form of the installation of enhancements targeted to specific species groups including bat boxes, bird boxes, and buried log piles; the creation of a dedicated organic material composting area in the vicinity of the new pond to provide an area suitable for Grass Snake egg laying; a proposed pond will hold water providing constant habitat for aquatic species and incorporate shallow drawn down zones, which are areas of high biodiversity potential due to seasonal changes in water level.

Summary and Conclusion

The species identified by CKF do not appear to arise from a formal survey and hence there is no record of how the data has been collected, when they were collected, by what method, by who, their qualifications and botanical experience or where the species lie or their frequency. Accordingly, there can only be low confidence in the data. The count of 21 species includes four species which are likely closely associated with the hedgerows, trees and boundary vegetation rather than within the core grassland areas. Accordingly, these should be discounted from the list such that number of relevant KWS grassland species is reduced to 17. Grassland KWSs should be special and recognisable to the public, typically because they are “full of flowers”. The grassland at Oakhurst Rise does not support the above characteristics due to the low frequency and constancy of herbs in the sward (typically 5 – 10%). Accordingly, if the grassland were to be designated as a KWS, any Wildlife Trust members visiting would likely be disappointed by what they found, as the grassland does not possess these special features, it being rather ordinary in nature. The prospects for restoration of the grassland are low while similarly conservation management is not secured. As such, the grassland interests remain at risk of being lost. Accordingly, it is our view that the grassland falls short of possessing the necessary ecological interest required for qualification as a KWS designation

Nonetheless, the development proposals present an opportunity to secure the future of a substantial proportion of the grassland. This would be restored and conservation management secured for the long term. The grassland would be recognisable as special in nature by any visiting Wildlife Trust members, with the majority of the grassland secured for use by the school. Its elevated interest would mean that its botanics would be readily identifiable and accessible as a resource for nature studies / biology classes. Measures to enhance faunal interests would also be brought forward under the proposals further adding to the accessible diversity of species.

I trust the above comments are of assistance and we look forward to hearing from you.

Yours sincerely

Alistair Baxter
Director

cc. Gary Kennison (Principal Ecologist, Gloucestershire County Council)

Encl. Technical Briefing Note TN08: Assessment of the Site Against Gloucestershire Local Wildlife Site Criteria

Appendix 3:

Correspondence from Gloucestershire Wildlife Trust dated 07 August 2020

Gloucestershire Wildlife Trust
Robinswood Hill Country Park
Reservoir Road
Gloucester
GL4 6SX

info@gloucestershirewildlifetrust.co.uk
www.gloucestershirewildlifetrust.co.uk
Telephone: 01452 383333

Registered charity number: 232580
Registered in England number: 708575

By email to:
Emma Pickernell, Cheltenham BC

Gary Kennison, Gloucestershire CC

Alistair Baxter, Aspect Ecology

07 Aug 2020

Proposed Local Wildlife Site at St Edwards Prep School, Charlton Kings (Site under planning application 20/00683/OUT)

Dear Sir/Madam

Regarding the proposal for Local Wildlife Site status on land at St Edwards Prep School, Charlton Kings (Site under planning application 20/00683/OUT).

In order to achieve the goal of a balanced and useful Local Sites system, the Gloucestershire Wildlife Sites Partnership uses minimum habitat and species thresholds that fit the unique biodiversity of the county into a wider context, and a set of general criteria based on the DEFRA-recommended version of the Ratcliffe criteria.

The proposed site does meet the criteria set out in the Key Wildlife Sites (now referred to as Local Wildlife Sites [LWS]) handbook (2015), being greater than 0.5 ha (site is approximately 3.5 ha), confirmed as MG1 grassland habitat by NVC survey carried out by Aspect Ecology in July 2019 and Aug 2020 and by Bioscan in July 2019 and recording, through combination of all of the above surveys 22 species from the grassland list. However, MG1 can cover a wide range of grassland condition, from very high grass cover and few herbs through to much lower grass density and significant herb cover. As it stands at the moment, the proposed site is of borderline LWS quality and the LWS process requires it to be examined by the LWS selection panel to determine whether it should be adopted as a LWS or not. The panel may be unable to convene before the planning application goes to committee.

The site lies within a gap in grassland ecological network connectivity. Enhancement to grassland habitat within this area would benefit the ecological network and with appropriate management the quality of the grassland on this site could be enhanced within a relatively short time. Irrespective of the LWS selection panel decision, it is Gloucestershire Wildlife Trusts view that any development on this site should provide a strong commitment to biodiversity net gain and a strong management and maintenance plan for both the grassland and veteran tree features on the site.

Kind regards

Dr Juliet Hynes

Gloucestershire Nature Recovery Network Coordinator

Appendix 4:

Correspondence from the County Ecologist dated 12 August 2020

Gloucestershire COUNTY COUNCIL

Memo

www.gloucestershire.gov.uk

To: Emma Pickernell
Senior Planning Officer, Place and Growth

From: Gary Kennison
Principal Ecologist

Date: 12/08/2020
Ref: 20(057)

Fax: No: N/A Tel No: 01452 425679
email: gary.kennison@gloucestershire.gov.uk

20/00683/OUT
Outline application for 43 dwellings including access, layout and scale, with all other matters reserved for future consideration, Land Adjacent To Oakhurst Rise, Cheltenham, Gloucestershire GL52 6JU Grid Ref (approx.) 396492 221592

New Ecological Information

You have asked me to comment on new ecological information recently received by the Local Planning Authority in connection with application 20/00683/OUT. The new information is as follows:

- *Bioscan letter to you dated 29/07/2020*
- *Bioscan prepared 'Gloucestershire Key* Wildlife Site Assessment Sheet'*
- *Aspect Ecology 'Botanical Survey 2020, Technical Briefing Note TN09: Results of Botanical and NVC Survey' dated 05/08/2020*
- *Aspect Ecology letter to you dated 10/08/2020*
- *Gloucestershire Wildlife Trust letter to you, Aspect Ecology and myself dated 07/08/2020*

These documents are of a technical nature and I have considered these in detail. I have also had the opportunity to visit the site on 06/08/2020. I am familiar with Defra's draft Biodiversity Net Gain metric 2.0 and its use in a number of recent planning matters. I also have experience of the selection process for Local Wildlife Sites (I was a member of the Selection Panel when it was last active under the formerly named 'Key' Wildlife Site system).

I have come to the following conclusions.

1. The site was much as I had expected it to be and my advice to you in my memo dated 01/06/2020 does not require revising.
2. After reading all the recent submissions and visiting the site I am inclined to agree more with Aspect Ecology's assessments and assertions than those of Bioscan. Defra's Biodiversity Net Gain Metric 2.0 is not the finished product and has a number of short comings. The metric is only a rough guide and is no substitute for full assessment by professional ecologists. Unfortunately Bioscan's use of the metric includes some errors and their conclusions undervalue the merits of allowing the development.
3. In my opinion there is no convincing case for the meadow to be designated a new Local Wildlife Site. The meadow is poor quality MG1 grassland (Mesotrophic Grassland Type 1 of the National Vegetation Classification) and of low conservation value.
4. A Local Wildlife Site designation does not preclude appropriate development and the Wildlife Trust letter reflects this point. The development provides an opportunity to secure the long-term conservation and enhancement of local biodiversity. A large area of the site would become better managed and provide an improved educational resource for the adjoining school.

5. Compared to previous development schemes for this site (17/00710/OUT & 18/02171/OUT) there will be fewer units and greater retention of habitats and features. There is to be extensive tree/shrub planting, additional new habitat features and improved meadow management. Overall a biodiversity net gain can be secured with appropriate conditions and planning obligations in place as I have previously advised.
6. The development if consented would be compliant with NPPF paragraphs 8, 170, 175 or 180. The proposal avoids significant harm to biodiversity and protects veteran trees. It makes effective use of the land and also provides a mechanism to secure a better more resilient future for biodiversity. Biodiversity improvements have been designed into and around the development. Given policy HD4 of the newly adopted plan [see below], the type and scale of the development appears to me to be appropriate for the location
7. The development if consented would be compliant with JCS policy SD9. The development provides appropriate mitigation for some unavoidable effects but importantly positively conserves and enhances biodiversity overall which are relevant to the location.
8. The development if consented would be compliant with policy HD4 in the recently adopted Cheltenham Local Plan. The development provides for long-term protection of mature trees and hedgerows on site, better commuting corridors and foraging areas for bats, and is an opportunity to enhance biodiversity overall.

*Renamed Local Wildlife Sites in January 2019