Land between Church Way and Meadow Lane, Iffley

Ecological Impact Assessment

February 2023

INTERIM DRAFT PENDING OUTSTANDING INFORMATION FROM APPLICANT

COMMISSIONED BY
Friends of Iffley Village

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Bioscan Report No.
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1 INTRODUCTION

1.1 Background to this report

1.1.1 Bioscan (UK) Ltd was instructed by Friends of Iffley Village (FOIV) to undertake a review of ecological information relating to an area of land on the edge of Iffley Village, Oxford, and latterly to respond to ecological material submitted with a planning application to develop the same site.

1.1.2 The site comprises three fields and a small area of intervening woodland. The two northern fields are subject to an allocation for residential development in the Oxford Local Development Plan 2016-2036 which was adopted in 2019. The site was sold in 2020 by the former owner (Donnington Hospital Trust) to a subsidiary company of Oxford City Council called Oxford City Housing Land (OCHL) (name latterly changed to OxPlace) and development is now being pursued by means of a planning application (ref: 22/03078/FUL).

1.1.3 The local community has long had concerns about the legitimacy of the process by which the development allocation came to be adopted, particularly in view of apparent failures in the community consultation process. Past Council decisions have consistently concluded that the site was not suited to development, in large part due to recognition of the inevitability of harm to the designated Iffley Conservation Area (Appendix 1 and Appendix 2). In respect of biodiversity matters, the community has also noted that pre-allocation surveys carried out by the Council in 2017, putatively to determine whether the site was suitable for allocation, were extremely cursory, involving only brief notes taken via a remote view over the gate from adjoining land (Appendix 3). This level of survey effort falls far short of accepted industry standards for robust ecological surveys and impact assessments. The consequences of this in terms of omission and error have been highlighted by subsequent survey work by both the applicant and Bioscan, as discussed in this report.

1.1.4 A very large number of Oxford residents (and others beyond Oxford) oppose the development of the site[1]. Concerns include impact on the designated Iffley Conservation Area, on landscape and heritage generally, the site's poor sustainability credentials, the poor design of the scheme, drainage/flooding concerns and traffic issues (including conflict with well-used routes for non-motorised recreation) as well as loss of biodiversity. In response to the prospect of a planning application for development, Friends of Iffley Village (FOIV) determined that its official position on the development would be one of opposition, and early in 2021 they commissioned Bioscan to undertake ecological surveys to ensure they had an independent understanding of the value of the site, such that appropriate weight could be attached to that in the processes of responding to public consultations on the proposed development and ultimately in the determination of any planning application.

[1] One petition to save the fields garnered in excess of 60,000 signatures. Celebrities such as Chris Packham and Philip Pullman have endorsed the campaign to prevent development of the site.

1.2 Site context and overview description

1.2.1 The site considered in this report is located at the edge of Iffley Village and sits within the Iffley Conservation Area (Figure 1 and Figure 2). The parts of the site subject to Local Plan development allocation SP42 (coloured red on Figure 1) comprise two small pasture fields in the north which together extend to around 0.99ha. The study site also includes adjacent 'blue' land to the south also owned by the applicant and in part identified for development-related interventions, making up an additional c.0.75ha[2]. The SP42 allocated site is known colloquially as the 'Horse Fields' and the field to the south that sits outside the allocation is known as 'Memorial Field'. Wedged between the Horse Fields and Memorial Field is a smaller area of land that comprises young plantation woodland. Cumulatively these contiguous land parcels extend to around 1.74ha.

1.2.2 The site sits to the south of Meadow Lane and west of Church Way in Iffley. It occupies a gentle west facing slope descending from around 63m in the east (at the boundary with Church Way) to around 56m at the western boundary, which is demarcated by a shallow historic drainage ditch at the edge of the flood plain of the Thames. The Horse Fields were, as their name suggests, in use until recently for horse grazing, and a built shelter/stable and an area of former manège (now overgrown) occupy the north-western corner of the site. Memorial Field, in the south, has not recently been grazed, though it may have been used for hay cropping in the past and has been intermittently mown more recently. The intervening woodland area is essentially unmanaged.

1.2.3 The site is bordered to the north and east by existing low-density built-up areas of Iffley Village, including a number of historic (and listed) buildings. To the south are large garden plots associated with historic dwellings fronting onto Church Way. To the west the site abuts the Thames floodplain, the adjoining part of which is an expansive area of open land known as 'Oriel Field', which has in the past been used for shallow landfill. In a westerly direction beyond these floodplain fields, at a distance of around 150m, is the River Thames, on the opposite bank of which, at around 210m distance, is Iffley Meadows Site of Special Scientific Interest (SSSI) a nationally important floodplain meadow grassland.

1.2.4 Historic mapping evidence suggests the field pattern of the site has remained in more or less its present configuration for centuries, albeit some built development has been and gone within the last few hundred years within the upper part of Memorial Field, outside the development allocation. The vestiges of this are visible today in the microtopography of this field and in remnant walls from former buildings in the north-eastern corner of Memorial Field. The lower (western) part of Memorial Field has historically been used as an orchard. There is no evidence that any of the fields have been ploughed at any time over the last two centuries, and possibly beyond.

[2] There is some uncertainty about the extent of the applicant's landholdings on the western edge of the site and whether these have been fully disclosed through inclusion in the 'blue edged' land indicated on the application drawings. The suggestion from the plans is that the adjacent ditch to the west is in third party ownership. Clarification on this is being sought.

1.2.5 Such small field units at the edges of historic settlements, often today grazed by horses, are frequently the repositories of survivals of biodiverse pasture grasslands largely lost from the surrounding countryside due to 20th Century agricultural intensification. A particular focus of the original commission was therefore to survey and document the botanical composition of the grasslands and assess these in the context of relevant local criteria.

1.3 Purpose, structure and status of this report

1.3.1 During the course of the initial phase of commission in 2021, Bioscan conducted a desk-top data review and carried out a number of field visits to collect targeted data on key aspects of the site's baseline ecological resource. An interim report, presenting the results of these exercises, was issued to FOIV in February 2022 to assist with informing theirs and others' responses to pre-application consultations by the developers (OCHL/OxPlace) and in anticipation of an imminent planning application, which was suggested by OCHL/OCC to be expected in Spring 2022.

1.3.2 In the event, planning application 22/03078/FUL was not submitted by OxPlace until December 2022. It was validated by OCC on 28th December 2022 and the application documentation became available for public view from 5th January 2023.

1.3.3 This revised and updated February 2023 report responds to the application material as follows:

- **Chapters 2, 3 and 4** set out the methodology and results of Bioscan's independent desk and field surveys of the site's baseline ecological interest.

- **Chapter 5** reviews the adequacy and results of the Ecological Impact Assessment (EcIA) (and supporting reports), Biodiversity Net Gain (BNG) assessment and Arboricultural Impact Assessment (AIA) submitted by the applicant, having regard to the minimum requirements of relevant industry standards and/or planning practice guidance[3].

- **Chapter 6** comprises an independent evaluation of the ecological interest of the site, having regard to both Bioscan's and the applicant's combined datasets and applying relevant criteria. (This includes – critically - relevant local wildlife site selection criteria that appear to have been overlooked in the applicant's submission).

- **Chapter 7** provides an independent Ecological Impact Assessment of the potential impacts of the development proposals on ecological resources, following the guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM 2019[4]) and in accordance with BS 42020:2013[5] and with

[3] Other consultants appointed by FOFI or Friends of Iffley Village (FOIV) are providing equivalent reviews of the submissions on traffic, heritage, landscape and hydrology, and of the application's compliance with planning policy.
[4] CIEEM (2018 – updated September 2019) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
[5] British Standards Institute (2013): Biodiversity — Code of practice for planning and development. BS 42020:2013

reference, where appropriate, to other elements of the submission material such as drawings, drainage design, landscaping and so on.

- **Chapter 8** sets out whether, in light of the identified impacts, the application proposals can be considered to be compliant with relevant national and local planning policy on biodiversity conservation.

- Finally, **Chapter 9** provides an overall summary and conclusions.

1.3.4 It will be noted that the independent investigations carried out by Bioscan and discussed at Chapters 2, 3 and 4 of this report are not equivalent to the level of survey effort required to be met by development applicants. This is for the following reasons; a) it is not the role of third parties to replicate the survey standards required to be applied to inform planning determinations, nor to bridge the gap between application submissions and relevant standards; b) there were no formal access permissions in place for such work and; c) the work was carried out under significant budget restrictions due to FOIV having limited resources. The surveys were therefore tailored to assist with providing an independent and resource-efficient assessment of the baseline value of the site and its key ecological attributes, in order to inform FOIV's and others' pre-application consultation responses, identify where the applicant might be expected to focus survey effort and to permit an independent review of the standard of the applicant's submission material as and when that was made public[6]. As the surveys carried out by Bioscan do not purport to meet relevant industry standards for survey effort, consequently they cannot be appropriated as a means to remedy the significant deficiencies we have identified in the application material.

[6] It should be noted that repeated offers from FOIV to share baseline data in advance of the planning submission were made to OCHL/OxPlace during 2022 - which could have established a common ground position on the site's baseline value - but all were rejected.

2 METHODOLOGY

2.1 Bioscan Desktop Study: Sources

2.1.1 Upon instruction, Bioscan were provided with a report that had been commissioned in 2020 from consultants Naturebureau[7] comprising an 'initial biodiversity assessment'. This presented a desk-based assessment of the likely biodiversity interest of the site based on the following:

- Visual inspection of aerial and remotely sensed images available on Google Earth dating back to 1 January 1945, with the most recent image from 4 September 2020.
- Interrogation of the MAGIC[8] website of geographic information about rural, urban, coastal and marine environments across Great Britain.
- Interrogation of the National Biodiversity Network (NBN) Atlas[9] which combines multiple sources of information about UK species and habitats, with the ability to interrogate, combine, and analyse these data in a single location; it currently holds in excess of 235 million species occurrence records.
- Inspection of the Environment Agency flood risk map[10]
- Interviews and correspondence with local residents living close to the site.
- Examination of available and relevant local planning and strategy documents

2.1.2 Naturebureau also visited the site on 16 October 2020 and viewed it from the edges along Church Way and Meadow Lane, and from the garden of no.66 Church Way which is sandwiched between the south-eastern part of the Horse Fields and the north-eastern part of Memorial Field.

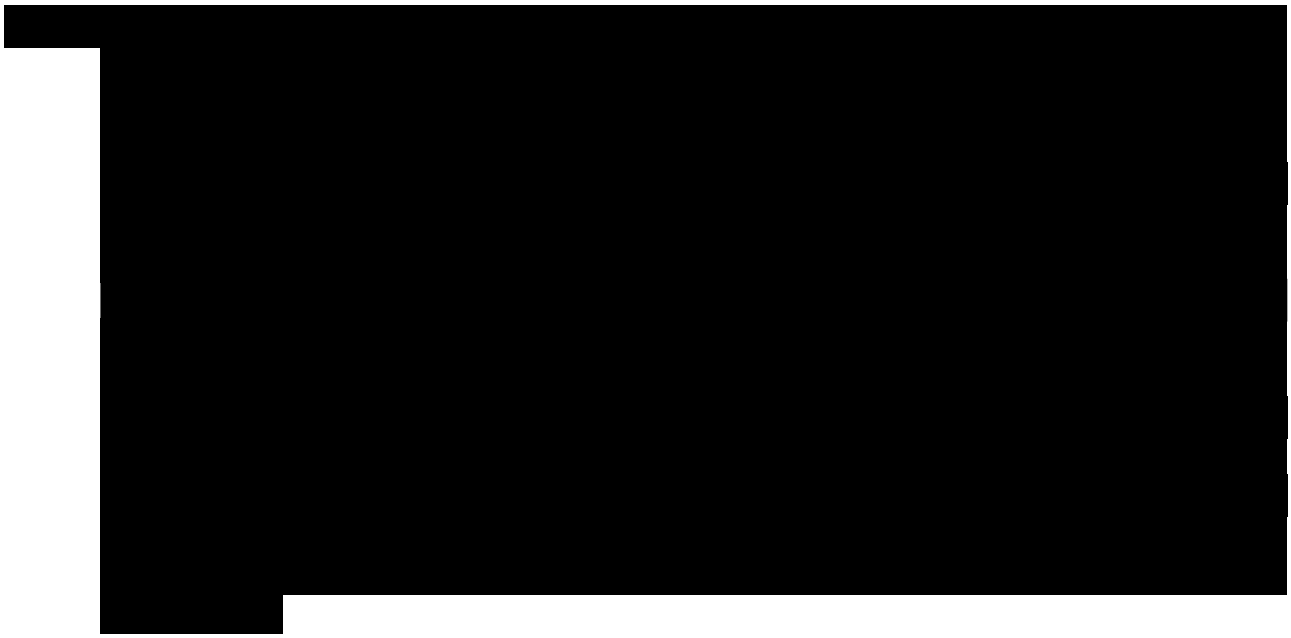
2.1.3 In the preparation of this report, Bioscan have periodically re-consulted the same Google Earth, MAGIC and NBN Atlas sources listed above, and have also undertaken studies of historic mapping information (as provided by the National Library of Scotland search facility[11]) and a review of the Oxford City Council planning files for ecological information submitted in support of developments local to the site. The various other sources consulted in the production of this assessment are documented as footnotes in the subsequent chapters of this report.

[7] Wood, K. and Goriup, P. (2020) *Iffley Village Fields: Initial Biodiversity Assessment*. Report by Naturebureau Ltd
[8] www.magic.gov.uk The Magic website is managed by Natural England under the direction of a Steering Group comprising Defra, Historic England, Natural England, Environment Agency, Forestry Commission and the Marine Management Organisation.
[9] https://nbnatlas.org/
[10] https://flood-map-for-planning.service.gov.uk/
[11] https://maps.nls.uk/

2.2 Bioscan Field Surveys 2021

2.2.1 Bioscan carried out a number of visits to the application site over several dates between January and September 2021. As previously emphasised, the survey programme conducted was not systematic or comprehensive and would not be sufficient to provide industry-standard support to a planning application (and should not be appropriated for any such purpose) but was targeted to make best use of limited resources in terms of access, time and fees in order to assemble a good understanding of the key ecological issues that would need to be addressed in any application for development. The main surveys were as follows:

1st survey - [redacted] otter and water vole surveys – 7th January 2021



2nd survey – bird survey and extended Phase 1/UKHab Habitat and Botanical Survey – 20th April 2021

2.2.3 The site was visited at dawn on 20th Apil 2021 and a bird survey conducted according to standard methodology[12]. This involved walking all parts of the site and recording all registrations of bird species heard or seen, with behavioural notes made to assist in determining breeding status on the site via territory mapping technique.

2.2.4 Following on from this, a habitat and botanical survey equivalent to extended Phase 1 and UKHab level was also undertaken on the same date. The Phase 1 habitat survey approach[13] provides an inventory of the basic habitats present, and targets areas of greater interest which can then be subject to more detailed examination at the time or (where appropriate) identified for further survey. Such additional detail was collected in the form of representative lists of plant species compiled for each habitat (an 'extended' Phase 1

[12] After Bibby et al (2000) *Bird Census Techniques (2md ed).* Elsevier

[13] Nature Conservancy Council (1990) *'A Handbook for Phase 1 Habitat Survey'* (updated JNCC 2016)

survey). The standard Phase 1 habitat descriptions were adapted in cases where giving a habitat an alternative category and description was considered to provide additional ecological information and/or facilitate compatibility with other assessment systems such as UKHab and the NVC (see below). Subsequent surveys of and visits to the site continuing through to September 2021 and during 2022 allowed augmentation of botanical data and iterative refinement of habitat mapping, helping to build up a good understanding of the site's habitat types, value and botanical composition.

2.2.5 The existence and extent of any Habitats of Principal Importance further to Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (also known as 'Priority' habitats) was recorded as part of these surveys. This involved consideration of grassland community assemblages up to NVC/Phase 2 level - i.e. against the community classifications set out in the National Vegetation Classification[14] or other relevant qualifying criteria[15] to determine if they met the threshold for such habitat types. Habitat quality and condition was also recorded by reference to the UKHab classification system[16] to facilitate determination of net biodiversity change in the event of development, via use of the most up-to-date biodiversity net gain (BNG) metric[17]. Hedgerows were further assessed for their potential to meet the criteria of an 'Important' hedgerow as defined by the Hedgerows Regulations 1997[18].

3rd survey – botany, reptiles, bats – 16th May

2.2.6 Targeted additional botanical surveys and searches of suitable habitat and extant refugia for reptile species were undertaken on 16th May 2021. On this date, the former stable/horse shelter structure in the north-western part of the site was inspected by a licensed bat worker for any evidence of bat roosting and a static Anabat Express bat detector was also installed in a location between the 'Horse Fields' and 'Memorial Field' and left to record until 8th June. Incidental observations of birds on this date and ad hoc recording of the invertebrate groups Orthoptera, Syrphidae and Lepidoptera was also carried out.

4th survey – breeding birds, botany, reptiles, ad hoc invertebrate records - 8th June

2.2.7 A second breeding birds survey was conducted on 8th June in conjunction with further reptile checks, botanical recording and ad hoc surveys of Orthoptera, Syrphidae and Lepidoptera. Repeat searches of the western boundary ditch for signs of water vole or

[14] Rodwell, J (ed) (1990-2000) British Plant Communities Volumes 1-5. Cambridge

[15] e.g. UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008. (Updated Dec 2011).

[16] https://ukhab.org/

[17] Metric 3.0 as at http://publications.naturalengland.org.uk/publication/6049804846366720

[18] This involved assessing the number of woody species (listed on Schedule 3 of the Hedgerow Regulations 1997) in a sample 30m stretch of hedgerow (for hedgerows between 100m and 200m in length two 30m stretches of hedgerow are surveyed and an average taken, and for hedgerows in excess of 200m in length three 30m stretches of hedgerow are surveyed and an average taken). Relevant features along each hedgerow were recorded, such as ditches, banks, standard trees (at least one per 50m hedgerow length), lack of gaps, parallel hedgerows, multiple connections with other hedgerows / woodlands / ponds, and woodland ground flora (listed on Schedule 2 of the Hedgerow Regulations 1997, with at least 3 species required).

otter were also undertaken on this date and the static bat detector deployed on the site since 16th May was collected.

2.3 Analysis of results

2.3.1 The botanical survey results were analysed in the context of relevant classification systems such as the NVC, including via the use of established keys and programs to assess goodness of fit of the vegetation to particular community types. The outcome from this process was then considered against relevant evaluation criteria, in particular the selection criteria for Oxford City Wildlife Sites (Appendix 5).

2.3.2 The bird survey results were analysed to arrive at estimates of the number of territories of individual species and the breeding status of all birds recorded on the site. Determination of breeding status referred to the following evidence categories[19] and the highest category observed over the three visits was used to inform the breeding status assessment for each species.

Non-breeding:
- Flying over
- Feeding on the site only (likely to be breeding off-site)

Possible breeder:
- Species observed in suitable nesting habitat
- Singing male in suitable nesting habitat

Probable breeder:
- Pair present in suitable nesting habitat
- Territory present between survey visits
- Courtship/ displaying
- Visiting probable nest
- Agitated behaviour from a parent bird
- Nest building

Confirmed breeding:
- Recently fledged young in suitable nesting habitat
- Adults entering or leaving a nest site
- Adult carrying a faecal sac or food
- Nest with eggs
- Nest with young

2.3.3 The Anabat Express bat detector installed on the site on 16th May and retrieved on the morning of 8th June was positioned to provide a sample set of data on the use of the site by bat species. The detector was programmed to switch on every night just before dusk and to run continuously until just after dawn. It collected data for a total of 23 nights.

2.3.4 Table 1 below sets out the date, timing and environmental conditions on each of the dates sampled by the static (automated) bat detector:

[19] Derived from the methodology of the UK Breeding Bird Atlas 2007-11 – Balmer, D., Gillings, S., Caffrey, B., Swann, B., Downie, I., Fuller, R., (2013) *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. BTO

Date	Weather conditions
16/05/2021	9-12°C[20] (average – xx°C[21]), no heavy rain or sustained strong winds[22]
17/05/2021	5-13°C (average – xx°C), no heavy rain or sustained strong winds
18/05/2021	9-°C (average – xx°C), no heavy rain or sustained strong winds
19/05/2021	6-°C (average – xx°C), no heavy rain or sustained strong winds
20/05/2021	11-°C (average – xx°C), no heavy rain or sustained strong winds
21/05/2021	9-°C (average – xx°C), no heavy rain or sustained strong winds
22/05/2021	3-°C (average – xx°C), no heavy rain or sustained strong winds
23/05/2021	6-°C (average – xx°C), no heavy rain or sustained strong winds
24/05/2021	6-°C (average – xx°C), no heavy rain or sustained strong winds
25/05/2021	5-°C (average – xx°C), no heavy rain or sustained strong winds
26/05/2021	5-13°C (average – 8°C), no heavy rain or sustained strong winds
27/05/2021	8-16°C (average – 11°C), no heavy rain or sustained strong winds
28/05/2021	13-14°C (average – 14°C), no heavy rain or sustained strong winds
29/05/2021	6-18°C (average – 11°C), no heavy rain or sustained strong winds
30/05/2021	7-17°C (average – 11°C), no heavy rain or sustained strong winds
31/05/2021	9-20°C (average – 13°c), no heavy rain or sustained strong winds
01/06/2021	9-21°C (average – 14°C), no heavy rain or sustained strong winds
02/06/2021	17-21°C (average – 20°C), no heavy rain or sustained strong winds
03/06/2021	11-17°C (average – 13°C), no heavy rain or sustained strong winds
04/06/2021	8-17°C (average – 11°C), no heavy rain or sustained strong winds
05/06/2021	13-18°C (average – 14°C), no heavy rain or sustained strong winds
06/06/2021	15-20°C (average – 17°C), no heavy rain or sustained strong winds
07/06/2021	10-19°C (average – 14°C), no heavy rain or sustained strong winds

Table 1: Dates, timings and weather for automated bat surveys

2.3.5 Analysis of the recordings from the static detector was undertaken at the Bioscan offices using the propriety software 'Analook'. The Anabat system records in 15 second segments when sound (bats or otherwise) triggers the detector. For example, if one bat is detected for two seconds one sound file is created; if four bats are recorded continuously for 15 seconds again one sound file is created. Identifying and labelling bat calls within recording segments was undertaken with the aid of published species call parameters[23], as well as Bioscan's in-house library of calls. The label(s) for each sound file were then tallied to produce the file count for each transect. It should be noted that registration or call tallies derived from Anabat recordings may not precisely reflect the number of bats present – for example simple tallies of sound files will over-estimate bat numbers, and while distinguishing numbers of bats from recordings is possible (and was done) when one or two bats are present, it becomes impossible where high levels of constant activity have been recorded.

[20] Minimum and maximum temperature recorded from internal temperature logger of Anabat express per night. Temperature readings taken every five minutes when the express is active.
[21] Mean average of temperature recordings from internal temperature logger of Anabat express per night.
[22] Historic weather data from: https://www.timeanddate.com/weather/uk/oxford/historic?month=5&year=2021
[23] J Russ, (2012). British Bat Calls: A Guide to Species Identification. Pelagic Publishing.

2.3.6 Detailed analysis was undertaken for a subset of the 23 nights of data, whereby all bat registrations were identified and tallied for five consecutive nights (26th to 30th May inclusive). The remaining 18 nights of data were also reviewed more rapidly to identify any species not captured in the five days subject to more in-depth analysis

2.3.7 After manual species identification the data from the automated detector surveys[24] were submitted to the online tool, EcoBat[25]. EcoBat compares the submitted data to a national database to give a numerical indication (percentile) of the relative importance of the site in terms of bat activity levels. In this instance the EcoBat database was stratified by time period and distance, whereby submitted data were compared only to records within 30 days of the survey date and within 100km of the survey radius (reference range[26]).

2.3.8 While there are no set boundaries between defined levels of activity, EcoBat does provided suggestions for cut-off levels (Table 2). The activity level categories used in this report correspond to those provided by EcoBat.

Activity category	Percentile cut-off levels
Low	0-20th
Low to moderate	21st-40th
Moderate	41st-60th
Moderate to high	61st-80th
High	81st-100th

Table 2: EcoBat activity level boundaries

[24] With the exception of social calls, unidentified bats and queried bat calls as the EcoBat pro-forma does not accept these classifications

[25] Ecobat.org.uk

[26] EcoBat recommends a reference range > 200 is required in order to be confident in relative activity level assessments

3 REVIEW OF PRE-EXISTING DATA AND THE BACKGROUND TO THE SITE ALLOCATION

3.1 Nature Conservation Designations and Strategic Initiatives

3.1.1 The site has no statutory or non-statutory nature conservation designation. The nearest statutory site is Iffley Meadows Site of Special Scientific Interest (SSSI), the nearest boundary of which is around 210m distant, on the opposite side of the Thames[27]. The site falls within the impact consultation zone for this SSSI such that for major types of development Natural England would be expected to be consulted. As the network discharge point for *foul* sewage from the development is some distance downstream, the main potential impact vector to the Iffley Meadows SSSI would be via polluted *surface* water discharge to the Thames, and thence (in flood conditions) to the SSSI and/or increased or changed flood incidence more generally. This applies to both the construction and operational phase of the proposed development.

3.1.2 Best practice approaches with respect to surface and foul water drainage design and attenuation would be expected to be able to limit the scope for impacts on the statutory site via these routes. However (and as discussed later in this report) the surface water drainage design submitted for approval is substantially less than best practice in nature, and therefore risks remain. It would be expected that Natural England would be consulted on any development application this proximal to the SSSI as a matter of good planning practice, and Bioscan considers that their attention should be drawn to this issue by the Local Planning Authority.

3.1.3 Similarly, in the context that the proposed development also has the potential to exacerbate exceedances of optimum nutrient levels in the Thames (i.e. those required for the attainment of Good Ecological Status under the Water Framework Directive), it would be appropriate that Natural England would be consulted on the matter of nutrient neutrality more generally. The proposed development engages with this issue as a consequence of it adding further pressure on local sewage treatment capacity which is already exceeded[28] and potentially increasing the incidence of discharges of untreated or insufficiently treated effluent into the Thames. There are consequently grounds to consult Natural England in respect of potential nutrient impacts to downstream SSSI that have features potentially susceptible to cumulative effects from this source, such as Culham Brake SSSI and the Little Wittenham SSSI and SAC.

3.1.4 In terms of the site itself, the Oxford Local Plan 2036 Proposals Map allocates the two northern fields (the Horse Fields) under Policy SP42 (Figure 1). The full text and policy wording around Policy SP42 in the Local Plan is reproduced at Appendix 4 and discussed

[27] The applicants cite the SSSI as 300m from the application site, but on any view this is incorrect.

[28] See submission on the application by Windrush Against Sewage Pollution (WASP) which states that Oxford STW is operating at a Flow to Full Treatment (FFT) figure in excess of that prescribed by the EA and that even following completion of proposed upgrade works by March 2025, the works will rapidly be once again failing to meet its required FFT with further upgrade in future Asset Management Plan (AMP) cycles unlikely. WASP state "The consequence of the failure to meet the required FFT figures is all too clear: Oxford STW discharged raw sewage into the Northfield Brook for a total of 4,895 hours (204 days) during 2018-2022"

further in Chapter 8. By contrast, the adjoining land to the west, including Oriel Field, is identified on the Proposals Map as forming part of both the Oxford Green Belt and forming part of the Oxford City Green and Blue Infrastructure Network (Figure 1). This land is protected from development under various policies and it is somewhat incongruous that this adjoining land, which has been subject to landfill in the past, is identified for its value in terms of social, environmental and related economic functions but the contiguous undeveloped pastoral land within the site, which has no legacy of such negative interventions, is not. Review of how the site has been considered in Green Infrastructure studies carried out by Oxford City Council since 2017 reveals a vacillating position and a lack of supporting evidence for judgments made, particularly in relation to its biodiversity value[29].

3.1.5 The adjoining land of Oriel Field also falls within the 'Thames and Cherwell at Oxford' Conservation Target Area (CTA) identified by the Thames Valley Environmental Records Centre (Appendix 6). In common with its parallel identification as part of the Oxford City Green and Blue Infrastructure Network, this is recognised as an area for active biodiversity enhancement (not development) in the adopted Local Plan. This specifically includes restoration of Lowland Meadow grassland habitats, which include unimproved pasture. The legacy of landfill and factors such as current intense use by dog walkers significantly militate against the delivery of such objectives on Oriel Field. By contrast, and as discussed in later sections of this report, the Horse Fields and Memorial Field can be viewed as relict and recoverable representations of Lowland Meadow habitat. Indeed, this appears to have been recognised in the Council's Green Infrastructure update of 2022 which identifies the site as part of Habitat Network Enhancement Zone 1, defined by Natural England as "*land connecting existing patches of primary and associated habitats which is likely to be suitable for creation of the primary habitat. Factors affecting suitability include: proximity to primary habitat, land use (urban/rural), soil type, slope and proximity to coast. Action in this zone to expand and join up existing habitat patches and improve the connections between them can be targeted here*".

3.1.6 The Biodiversity Action Plan (2015 – 2020)[30] produced by Oxford City Council recognises the major threat to Oxford's biodiversity caused by inappropriate development that results in the loss of high value habitats and species. It also recognises the benefits that biodiversity brings for well-being, placemaking and quality of life, highlighting the role of biodiversity in:

- *"Contributing to making Oxford a beautiful and inspiring city, encouraging people and businesses to locate in and visit Oxford, thus boosting the city's economy.*
- *Providing space in both rural and urban areas where people can exercise and be inspired by nature, gaining mental and physical refreshment with positive benefits for health and well-being; in turn people are more likely to take pride in, and care for their local area.*

[29] See Alison Farmer Associates '*Land off Meadow Lane, Iffley, Oxford. Application ref: 22/03078/FUL: Response to Landscape and Visual Appraisal*'. Final Report February 2023.
[30] https://www.oxford.gov.uk/downloads/download/618/biodiversity_action_plan

- *The work needed to maintain and enhance biodiversity supports employment, and encourages people to volunteer and gain associated health benefits.*
- *Green spaces and trees within urban areas help to reduce temperatures on hot days and nights, and reduce levels of air pollution.*
- *Attenuating the flow of water resulting in a reduced risk of flooding, and buffering waterways to reduce the inflow of nutrients, pesticides and silt into rivers, thus reducing the costs of water purification.*
- *Providing a habitat for insects that pollinate crops in farms, gardens and allotments.*
- *Long-term storage of carbon in soil and vegetation in order to reduce the speed of climate change".*

3.1.7 Bioscan have produced a separate 'ecosystem services assessment[31]' which assesses the change in the value of such services before and after development, using standard methodologies. This has been submitted for the Council's consideration separately.

3.1.8 The Oxford BAP also refers to the Council's adopted Green Spaces Strategy which:

"…sets out the Council's commitment to protect and enhance biodiversity in our parks and open spaces:

- *To ensure the protection of internationally, nationally and locally important sites of biodiversity interest (Special Areas of Conservation, Sites of Special Scientific Interest, Local Wildlife Sites and Sites of Local Importance for Nature Conservation32).*
- *To encourage delivery of the conservation objectives of the Conservation Target Areas within the City33.*
- *To identify areas to create new habitats, enlarge existing ones, improve the management of sites so that they may become designated and joined up in line with the Lawton review.*
- *To ensure wildlife corridors are protected, enhanced or created.*
- *Protection of important and prosaic species in all sites."*

3.1.9 In the context of the above, the allocation of the northern fields and their concomitant deletion or exclusion from the adjoining Oxford City Green and Blue Infrastructure Network and the 'Thames and Cherwell at Oxford' Conservation Target Area (CTA) appears incongruous with the general and logical thrust of the City Council's objectives and stated planning policies. The available evidence strongly suggests that forward planning decisions about the site's ecological value (and related value in terms of matters such as ecosystem

[31] Bioscan report E2059R2
[32] Now called Oxford City Wildlife Sites
[33] Only of lower relevance due to the omission of the site from the mapped CTA.

services) have been made reactively and in something of a knowledge vacuum, and the decisions leading to the site being omitted from due consideration for its biodiversity value owe more to the historic absence of public access to the site than to any rigorously applied scientific or data-based assessment process.

3.1.10 Further investigation reveals that lack of public access is equally likely to be implicated in the allocation of the site for development through the Local Plan process. As discussed earlier, in the course of that process, the site was only briefly and cursorily surveyed (by an unknown surveyor, possibly a volunteer) from *outside its boundaries* and that this scant information was the sole basis of decisions by the Council as to its suitability or otherwise for development.

3.1.11 The report of that survey is contained within a wider report on surveys of multiple sites conducted on behalf of Oxford City Council in October 2017[34]. It is notable that the report is heavily caveated due to the timing and access limitations the surveyor encountered. In particular, the report opens by stating:

> "*The timing of these sites* [sic] *visits is sub-optimal for recording botanical species interest, with some sites being grazed or recently cut. The following target notes indicate the general habitat type (Phase 1 categories) present on each site but further surveys are likely to be required to fully assess sites, especially where some diversity is indicated. There are many species that are less likely to be recorded at this time of year and additional survey is highly likely to result in additional species being recorded*" (emphasis added).

3.1.12 Furthermore, the specific notes for the proposed allocation site off Meadow Lane at Iffley indicate that survey at this location was further compromised by limited access:

> "*Land at Meadow lane, Iffley (24/10/2017): The site was only seen from the site edge along Church Way and meadow Lane. The site could not be fully assessed but areas seen appear to comprise rough grassland (semi-improved neutral grassland) with areas of tall herb. Parts of the site could not be seen*" (emphasis added).

3.1.13 Not surprisingly, the target notes for the site (Appendix 3) are correspondingly sparse and reflective of these limitations. These limitations were, quite correctly, emphasised by the surveyor. In consequence, and as discussed in later chapters of this report, a very large number of species relevant to determining the biodiversity value of the site, including many very obvious species, were omitted.

3.1.14 In correspondence around this issue, the City Council have stated that:

> "*A further survey was carried out for several sites, but not for this site because the initial indications were that there was unlikely to be a level of biodiversity that could not be mitigated for. The intention of the biodiversity work to inform the Local Plan*

[34] https://www.oxford.gov.uk/downloads/file/5753/grs12_-_phase_1_botanical_survey_target_notes_for_additional_oxford_city_sites

was to check there was unlikely to be a level of biodiversity interest that would prevent development" (emphasis added)[35]

3.1.15 The sequence of events that led to the allocation of the site therefore appears to have been affected by i) failure to recognise the site's logical inclusion within delimitations of the Green and Blue infrastructure network and Conservation Target Area, ii) reliance on sub-standard (and in any event less than industry standard) assessments of whether the site was suitable for development in terms of its biodiversity interest, compounded by iii) mistaken assumptions that the survey work was robust, despite the heavy caveats the surveyor themselves sought to apply to it.

3.1.16 This represents a failure of the forward planning process on its own terms, but the true seriousness of this failure is underlined by the results of Bioscan's field surveys as set out in this report, and further emphasised by some of the surveys submitted by the applicant itself. The applicant now acknowledges that this is a site of County (i.e. Oxfordshire-level) importance for invertebrates, with good quality semi-improved grassland capable of restoration to Priority habitat (in-line with the objectives of the relevant CTA and Habitat Network Enhancement Zone 1) and, furthermore, host to a number of protected, rare and high-profile species. For this reason and others, the site comfortably meets the criteria for designation as an Oxford City Wildlife Site, as is demonstrated in later sections of this report. In short, this was not a site that, had the forward planning process been functioning properly, should have been allocated for development having regard to incumbent local policy.

3.1.17 It is also of relevance that the site has been promoted for development at least twice previously by the Donnington Hospital Trust, including through previous Local Plan processes. On each occasion the Council rejected it on environmental and conservation area grounds, going as far as to present evidence to the Local Plan Inquiry in 1994 that it was not suited to development (Appendix 1), and then rejecting it at options stage in 2011 (Appendix 2). In the context that the policy presumptions and overwhelming importance of tackling the joint climate and biodiversity crises have become more robust in the time since 2011, this rather exposes that the allocation of the site in the current development plan is a retrograde step, largely based on misinformation and consultation failures.

3.2 Species data

3.2.1 Naturebureau undertook extraction analyses from the National Biodiversity Network dataset for notable animal species records within a 3 km radius of the site. This analysis confirmed records of the species in Table 3 below that are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017, [redacted] or which are considered a species of 'Principal Importance' under the Natural Environment and Rural Communities Act (2006), which confers a 'duty of responsibility' for their protection on public bodies:

[35] E-mail from Sarah Harrison to Rachel Falconer (FOIV) dated 14 October 2020.

Species	Date of observation(s)
Slow worm	2019, 2016, 1990
Grass snake	2019, 2018, 2017 (x5), 2007
Hedgehog	130 records (latest 2020)
[redacted]	
Common pipistrelle	2018 (x2), 2013
Soprano pipistrelle	2013
Great crested newt	2017

Table 3: Protected species records with 3km as extracted from NBN database by Naturebureau

3.2.2 From the Magic.gov website, Naturebureau also extracted 11 records of licenses issued by Natural England for works affecting protected species within 3 km of the site, including seven records of licences relating to the following bat species: common pipistrelle, soprano pipistrelle, brown long–eared bat and Daubenton's bat. The nearest of these licences was for a site 2km distant however. They also flagged the possibility of brown hairstreak butterfly being present on the site, a species that Bioscan can confirm is present within the Oxford conurbation.

3.2.3 Naturebureau also noted that local residents reported a range of species using the site, including [redacted] deer, hares, rabbits, grass snakes, newts, toads, foxes, bats and water voles as well as a range of birds.

3.2.4 Review by Bioscan of the Oxford City Council planning files for proposed or consented developments in close proximity to the site has revealed a number of additional records of notable species relevant to the site. In particular, bat surveys carried out at the nearby Court Place pursuant to application reference 21/01288/FUL (around 350m to the south) found the rare species barbastelle in June 2020. Bioscan note that the applicant has undertaken no such review and therefore failed to identify the likely presence of this rare species in its desk survey. It compounded this error by then undertaking no active bat survey work at all. We return to this significant omission later.

3.2.5 No formal data request was made to Thames Valley Environmental Records Centre (TVERC) by Bioscan for the purposes of writing this report. This was because it was anticipated that the applicant would do so as part of their data collection and impact assessment processes, and the results of such a chargeable data search are indeed duly presented within the submitted EcIA, which is reviewed at Chapter 5 of this report.

3.2.6 On receipt of the application, Bioscan did however commission TVERC to undertake a search of contextual records for the list of scarce and rare invertebrate surveys found on the site during the applicant's invertebrate survey. The results of this review are discussed in Chapter 6 of this report.

4 BIOSCAN FIELD SURVEY RESULTS

4.1 Habitat types

4.1.1 Bioscan noted and mapped the following main habitat types on the site:

- Neutral Grassland
- Hedgerows
- Tall ruderal and scrub matrix (former menage)
- Mixed Plantation Woodland
- Tree-lined ditch
- Walls
- Non-woodland trees
- Recently disturbed ground
- Introduced shrub

4.1.2 Each habitat is mapped on Figure 2 and the botanical make-up and structural characteristics of each habitat type are described in the following sections. Species of note, including grassland 'indicator' species of higher quality[36], are highlighted in bold.

4.2 Habitat descriptions

Neutral grassland (Phase 1: semi-improved neutral grassland; UKHab: g3a5/g3c; NVC: MG5/MG6 intergrade; Metric 3.0: Other Neutral Grassland (non-Priority))

4.2.1 This is the dominant habitat type on the site, occupying all three fields except in the former manège area, where it transitions to tall ruderal habitat.

4.2.2 The northern two fields (the Horse Fields) display a different community composition to the southern field (Memorial Field) due largely to a different management history, with the former grazed by horses until 2020. The sward in these fields is quite rich in rosette-forming or otherwise grazing-tolerant species such as cat's-ear *Hypochaeris radicata*, yarrow *Achillea millefolium*, daisy *Bellis perennis* and ribwort plantain *Plantago lanceolata,* but it also contains a suite of species indicative of grasslands that have escaped wholesale agricultural 'improvement' via fertilisers or reseeding. These are identified in **bold** in the descriptions below. They include **knapweed *Centaurea nigra*** (including the rayed 'meadow' form), **meadow vetchling *Lathyrus pratensis*, cuckooflower *Cardamine pratensis*, lesser stitchwort *Stellaria graminea*, spiked sedge *Carex spicata,* greater bird's-foot trefoil *Lotus pedunculatus*** and **ox-eye daisy *Leucanthemum vulgare***. **Common spotted orchid *Dactylorhiza fuchsii*** is also present in the central field and **bulbous buttercup *Ranunculus bulbosus*** and **yellow oat grass *Trisetum flavescens*** occur more locally. Other frequent to abundant species include rough meadow grass *Poa trivialis*, Yorkshire fog *Holcus lanatus*, perennial rye-grass *Lolium perenne*, sweet vernal grass

[36] The Grassland Database: VEGAN Version 4.0 - Supplement to the Version 3.0 Manual (ENRR113)

Anthoxanthum odoratum, cocksfoot *Dactylis glomerata*, red fescue *Festuca rubra*, red clover *Trifolium pratense*, meadow buttercup *Ranunculus acris*, dandelion *Taraxacum agg.,* ragwort *Jacobaea vulgaris*, common sorrel *Rumex acetosa*, round-leaved cranesbill *Geranium rotundifolium*, beaked hawk's-beard *Crepis vesicaria,* creeping buttercup *Ranunculus repens*, dove's-foot cranesbill *Geranium molle,* soft brome *Bromus hordaceus*, false oat-grass *Arrhenatherum elatius*, crested dog's-tail *Cynosurus cristatus*, meadow foxtail *Alopecurus pratensis*, perforate St. John's wort *Hypericum perforatum*, field bindweed *Convolvulus arvensis*, common mouse-ear *Cerastium fontanum*, broad-leaved dock *Rumex obtusifolius*, creeping thistle *Cirsium arvense*, black medick *Medicago lupulina*, curled dock *Rumex* crispus and goat's-beard *Tragopogon pratensis*. In the narrow middle field there is also a stand of tansy *Tanacetum vulgare* at the margins of an area which has grown out over the last two seasons but which remains essentially neutral grassland.

4.2.3 The southern field (Memorial Field) has a broadly similar but slightly poorer species complement, and a somewhat different structure and composition reflective of a different historic and recent management history. This has included historic disturbance from the removal of buildings in the eastern (upper) part of the field and also potentially from the grubbing out of a former orchard in the lower part of the field. This field also does not appear to have been horse grazed in recent years (or at least to the same intensity) and the species complement suggests past hay cropping. Lastly, there is a faint flush-line in the central part of the field creating localised seasonal waterlogging.

4.2.4 The sward of Memorial Field is dominated by meadow foxtail, cocksfoot, soft brome, false oat and rough meadow grass, with species such as sweet vernal grass, Yorkshire fog, perennial rye and red fescue more localised and occasional. The indicator species **spiked sedge** again occurs, with false fox sedge *Carex otrubae* appearing in the sward near to the western edge. The herb diversity is probably lower overall than in the northern fields, but meadow buttercup is common along with frequent cut-leaved cranesbill *Geranium dissectum*, red clover, creeping thistle and common vetch *Vicia sativa.* Patches of increased diversity occur and here **knapweed** can become locally frequent, along with **lesser stitchwort, cuckooflower, bulbous buttercup, field woodrush *Luzula campestris***, meadow fescue *Festuca pratensis* and tall fescue *Festuca arundinacea*. In the localised damper areas, **greater bird's-foot trefoil,** hard rush *Juncus inflexus*, field horsetail *Equisetum arvense* and hairy sedge *Carex hirta* and even common reed *Phragmites australis* appear. Other notable species in this field include occasional **cowslip *Primula veris*** and **wood false brome *Brachypodium sylvaticum***.

Hedgerows (Phase 1: hedgerows; UKHab: h2a & h2b; NVC: W24/W21/W22; Metric 3.0: Hedgerow)

4.2.5 The hedgerows on the site (as opposed to tree belts, ornamental planting at property boundaries and the woody vegetation lining the ditch along the western boundary, which are dealt with elsewhere) are identified and numbered by the letter prefix 'H' on Figure 2 and are described here.

4.2.6 **Hedgerow H1** borders Meadow Lane at the northern site boundary. It is a somewhat outgrown and leggy feature with an associated post and wire fence, and a section of tall grass and ruderal verge on the Meadow Lane side. Woody species are dominated by hawthorn *Crataegus monogyna* and elder *Sambucus nigra*, with a little dog rose *Rosa canina* and both cherry plum/bullace *Prunus cerasifera* and damson *Prunus domestica* with interplanted specimens of dogwood *Cornus sanguinea*, hornbeam *Carpinus betulus* and crack willow *Salix fragilis* and one common lime *Tilia x europaea* at the far western end. Ground flora species include ivy *Hedera helix*, stinging nettle *Urtica dioica*, hogweed *Heracleum sphondylium*, hedge garlic *Alliaria petiolata*, white bryony *Bryonia dioica*, cleavers *Galium aparine*, rough meadow grass, cocksfoot, false oat, bramble *Rubus fruticosus agg.*, hedgerow cranesbill, annual meadow grass *Poa annua*, ground ivy *Glechoma hederacea*, wood dock *Rumex sanguineus*, lords and ladies *Arum maculatum*, cow parsley *Anthriscus sylvestris,* dandelion and ragwort. Garden throw-outs occur, including daffodil *Narcissus sp.*, greater periwinkle *Vinca major*, honesty *Lunaria annua* and green alkanet *Pentaglottis sempervirens*. At the western end the ground is damper and here creeping buttercup, great willowherb *Epilobium hirsutum*, hedge woundwort *Stachys sylvatica* and pendulous sedge *Carex pendula* occur.

4.2.7 **Hedgerow H2** separates the two northern fields. It is a relict and now sparse and gappy feature (in part due to partial removal in late 2020/early 2021 by OCHL contractors)[37] with a large central gap. The dominant species are hawthorn, elder and bramble, with ivy, stinging nettle and rough meadow grass beneath.

4.2.8 **Hedgerow H3** is comprises two short lengths of trimmed, hawthorn dominated hedgerow either side of the gate onto Church Way from the central field, and set a metre or so back from the boundary wall. The hedgerow is festooned with hop *Humulus lupulus* and has ivy beneath, with a little hedge garlic, rough meadow grass and stinging nettle. In the narrow strip between the hedgerow and the wall are some quite tall self-set ash and oak, with buddleia *Buddleja davidii* and traveller's joy *Clematis vitalba* and other ruderal species.

4.2.9 The other boundaries on the site are either discussed elsewhere (e.g. under 'tree-lined ditch' or 'walls' below) or are property boundaries (mapped separately on Figure 2) which contain a mixture of ornamental and native species but do not qualify as hedgerows in the sense imparted by the 'Priority' habitat definitions or under the Hedgerows Regulations 2007. They do however include a number of significant trees – in particular the north-eastern boundary to the central field which is part demarcated by a close board fence but which also includes large pedunculate oak trees, hawthorn, holly *Ilex aquifolium* and a large (though recently fallen) crack willow. Shade tolerant species associated with this boundary include stinking iris *Iris foetidissima*, stinging nettle, lords and ladies, bramble and green alkanet.

[37] This partial removal was undertaken absent any known Hedgerow Removal notice.

Tall ruderal and scrub matrix (former manège) (Phase 1: tall ruderal and scrub; UKHab: c1 or u1a; NVC: OV21-23)

4.2.10 The former manège area is dominated by tall stands of stinging nettle and thickets of bramble, punctuated by a few open grown shrubs or semi-mature trees and with localised open patches where abandoned refuse has suppressed the growth of low tangles of bramble. The shrubs and small trees include hawthorn, goat willow *Salix caprea,* elder, buddleia, semi-mature walnut *Juglas regia* and a rose cultivar (putatively *multiflora*). Other species noted in this area include field forget me not *Myosotis arvensis,* hedge mustard *Sisymbrium officinale*, ground elder *Aegopodium podagraria*, spear thistle *Cirsium vulgare*, creeping thistle, red campion *Silene dioica*, lungwort *Pulmonaria sp.*, hedge bindweed *Calystegia sepium*, shepherd's purse *Capsella bursa-pastoris,* hedge bedstraw *Galium mollugo,* dame's violet *Hesperis matronalis*, common cornsalad *Valerianella locusta*, cleavers, germander speedwell *Veronica chamaedrys*, lesser celandine *Ficaria verna*, daffodil, annual meadow grass, smooth sow-thistle *Sonchus oleraceus*, hogweed, tansy and mats of the moss *Kindbergia praelonga*.

4.2.11 A similar but much smaller area of disturbed ground, ruderals and rank grassland occurs around the livestock shelter in the north-western corner of the site. Broad-leaved dock and spear thistle are prominent here, amongst rank grassland dominated by false oat and couch *Elytrigia repens* and occluding patches of largely bare ground with greater plantain *Plantago major*, greater burdock *Arctium lappa*, knotgrass *Polygonum aviculare,* lesser swine cress *Coronopus didymus* and hedge mustard. This is area is mapped as species-poor semi-improved grassland on Figure 2.

Mixed Plantation Woodland (Phase 1: mixed plantation woodland, UKHab: w1h5; NVC: W8, metric 3.0: other mixed woodland)

4.2.12 The narrow land parcel sandwiched between and fenced off from the Horse Fields to the north and Memorial Field subsumes two former field boundaries at its outer edge which are now defined by lines of mature trees, but also has continuous canopy cover between these formed of younger (but now also mature) trees, including conifer specimens, all planted during the last seventy years.

4.2.13 The boundary trees include large ash *Fraxinus excelsior*, beech *Fagus sylvatica*, pedunculate oak *Quercus robur* and horse chestnut *Aesculus hippocastanum* with the central part of the block comprising younger holly, hawthorn, yew *Taxus baccata*, hazel *Corylus avellana*, plum *Prunus domestica*, apple *Malus domestica*, sycamore *Acer pseudoplatanus*, elder, lilac *Syringa vulgaris* and silver fir *Abies alba.* The woodland has an open structure, with little or no understorey, with sparse grassland or sparsely vegetated ground beneath, except in the far west where there is one more grassy glade. A mixture of grassland species, shade-tolerant species and planted bulbs or garden throw-outs is present, including herb Robert G*eranium robertianum*, wood avens *Geum urbanum*, nipplewort *Lapsana communis*, wood dock, hedge garlic, lemon balm *Melissa officinalis*, ground ivy, wood false brome, rough meadow grass, annual meadow grass, lesser celandine, ivy-leaved speedwell *Veronica hederifolia*, creeping cinquefoil *Potentilla*

reptans, prickly sow thistle *Sonchus asper*, common field speedwell *Veronica persica*, pendulous sedge, daffodil, *Polyanthus* sp. and hybrid bluebell *Hyacinthoides x massartiana.*

Tree-lined ditch (Phase 1: ditch & woodland; UKHab f2d & w1d5; NVC: W1/W2/W6; Metric 3.0: ditches/wet woodland)

4.2.14 The western boundary of the site comprises a shallow and seasonally dry ditch feature overshaded by a strip 10-30m wide of mature willow-dominated scrub and woodland. The canopy is locally dominated by crack willow, with grey *S. cinerea* and goat willow more localised, and some hawthorn, osier *Salix viminalis*, hazel, elm *Ulmus procera*, hybrid black poplar *Populus nigra* agg. elder, ash and dog rose. Midland hawthorn *Crataegus laevigata* is also present as well as cherry plum *Prunus cerasifera* and dogwood. Where the shade is light, a false oat dominated grassland with abundant stinging nettle and occasional angelica *Angelica sylvestris* occurs up to the channel edges, but where dense shade is cast, and also within the channel, the vegetation is sparse. A suite of shade-tolerant woodland and wetland plants can be found, including gypsywort *Lycopus europaeus*, wavy bittercress *Cardamine flexuosa*, fool's watercress *Apium nodiflorum,* hard rush, lords and ladies, creeping buttercup, wood dock, watercress *Rorippa nasturtium-aquaticum*, brooklime *Veronica beccabunga,* floating sweet grass *Glyceria fluitans*, bittersweet *Solanum dulcumara* and very locally yellow flag *Iris pseudacorus*. Pendulous sedge and false fox sedge are present along with a little **wood sedge *Carex sylvatica*** and **remote sedge *Carex remota*** reflecting the antiquity of this feature. The fallen trees support the moss *Orthotrichum diaphanum*.

Old stone walls (Phase 1: wall; UKHab: u1e; NVC: various 'OV' communities; Metric 3.0: built linear features)

4.2.15 Stone walls of some significant antiquity border two sides of Memorial Field in the southern part of the site, and also the frontage to Church Way at the eastern edge of the Horse Fields allocation site. They are constructed mostly of rubble limestone with lime mortar and therefore provide an established and largely undisturbed ecological niche that is rare (in the local area of East Oxford) outside the historic village. A broad range of species were noted to be associated with these features, including male fern *Dryopteris filix-mas*, hedge garlic, green alkanet, ivy-leaved toadflax *Cymbalaria muralis*, ivy, red valerian *Centranthus ruber*, herb Robert, nipplewort, wood avens, bramble, Yorkshire fog, hedge bindweed, honeysuckle *Lonicera periclymenum*, long-headed poppy *Papaver dubium*, Mexican fleabane *Erigeron karvinskianus,* black horehound *Ballota nigra*, ragwort, wall lettuce *Mycelis muralis*, feverfew *Tanacetum parviflora*, ivy-leaved speedwell, wall speedwell *Veronica arvensis*, dandelion, hedge mustard, bulbous buttercup, creeping buttercup, red fescue and cocksfoot. Of note is the presence of wall rue *Asplenium ruta muraria* and rustyback fern *Ceterach officinarum*. The mosses and lichens would be worthy of further study, the moss flora was noted to contain *Homalothecium lutescens*, *Brachythecium rutabulum*, *Hypnum cuppressiforme, Ceratodon purpureus Barbula unguiculata* and *Rhytidiadelphus* cf *loreus*. Small trees of plum and seedlings of hawthorn and ash were noted in association with these features.

Non woodland trees

4.2.16 A group of free-standing open grown trees is present within Memorial Field. This comprises two large mature lime and a downy birch. Other open grown trees on the site associated with property boundaries, subsumed into the plantation woodland or present as younger specimens in the former manège area, are discussed in the relevant paragraphs above.

Recently disturbed ground.

4.2.17 Areas of recently disturbed ground are present in the central field as a result of the activities of contractors undertaking partial site clearance and knotweed removal in January 2021. These comprise areas of tipped and compressed rubble used for a temporary site compound in one of the more diverse areas of grassland in the central field. A second locus of disturbance is a pile of brush and spoil from part removal of hedgerow H2 by contractors (absent any Hedgerow Removal Notice [redacted].

Introduced shrub

4.2.18 This includes two small stands of Japanese knotweed *Reynoutria japonica* present on the site, in the north-eastern part of the central Horse Field, adjoining the site boundary and hedgerow H2. These are mapped on Figure 2. Both stands appear relatively stable.

4.3 Fauna

Bats

4.3.1 Detailed analysis was undertaken for a subset of the 23 nights of data collected by the static recorder placed on the site between 16th May and 8th June 2021. For this subset, all bat registrations were identified and tallied for five consecutive nights (26th to 30th May 2021 inclusive). The results of this exercise are detailed in Table 4 below:

Table 4. Breakdown of results from automated detector survey (subset 26th – 30th May 2021)

Species	No. of registrations	%
Common Pipistrelle	686	78.4
Soprano Pipistrelle	127	14.5
Pipistrellus sp. (common/soprano)[38]	5	0.6
Pipistrellus sp. (common/Nathusius's)[39]	3	0.3
Noctule	21	2.4

[38] Where Pipistrelle calls were at approximately 50kHz these have been noted as Pipistrelle sp. Both common and soprano pipistrelle can produce calls at or around 50kHz and as such it is not possible to directly attribute a call of this frequency to either species.

[39] Where Pipistrelle calls were at approximately 40-41kHz these have been noted as Pipistrelle sp. Both common and Nathusius' pipistrelle can produce calls at or around 40-41kHz and as such it is not possible to directly attribute a call of this frequency to either species.

Species	No. of registrations	%
Nyctalus sp.[40]	1	0.1
Nyctalus/Eptesicus sp.[41]	4	0.5
Myotis sp.[42]	8	0.9
Daubenton's bat	3	0.3
Natterer's bat	1	0.1
Unidentified bat[43]	16	1.8
Total number of files	875	

4.3.2 The results confirm that the site was used by at least five species on these dates, with common pipistrelle not surprisingly the most frequently recorded in a pattern of registrations that suggests significant use was made of the area around the detector location for foraging. The relative frequency of soprano pipistrelle, noctule and Daubenton's registrations is also consistent with Bioscan's experience of bat use of the nearby River Thames corridor and its adjoining floodplain grasslands.

4.3.3 The remaining 18 nights of data were reviewed in less detail, mainly by means of a rapid pass through to identify any species not captured in the five days subject to more in-depth analysis. This revealed a limited number of registrations of two nationally rare species: barbastelle and Nathusius' pipistrelle. A total of seven registrations were identified as barbastelle on the 1st and 6th of June 2021. A total of two registrations were attributed to Nathusius' pipistrelle on the 17th of May and the 2nd of June 2021.

4.3.4 As discussed earlier, a review of ecological information submitted for recently local planning applications unearthed that barbastelle was recorded at the nearby Court Place site in bat surveys by consultants Lockhart Garrett during 2020. There are very few records of this nationally rare species in Oxford and therefore the apparent regular presence of this species in Iffley is of conservation significance. The presence of the scarce Nathusius' pipistrelle is also of note, albeit perhaps less surprising due to the site's proximity to the Thames where there are known to have been a number of recent records.

4.3.5 Incidentally to the above, an observation of a single bat with the characteristics of a pipistrelle was made shortly after dawn on the 8th June. It was noted to be in commuting flight across the site and heading towards properties on Meadow Lane where there may be a roost. It was subsequently noted that a bat box is positioned on the gable end of Lucas Remy Place (on Meadow Lane) and one possibility is that the bat was returning to

[40] Calls where it was not possible to identify which noctule species (common noctule or Leisler's) was present with absolute certainty.

[41] Calls where it was not possible to identify which 'big bat' species (common noctule, Leisler's or serotine) was present with absolute certainty.

[42] The use of the slope function in Analook is used to aid in the identification of Myotis species (Myotis calls are generally difficult to attribute to a specific species); however, where slope is ambiguous these have been noted as Myotis sp. The Myotis species below (Daubenton's bat, Natterer's bat) are probable identifications.

[43] For a small number of bat calls it was not possible to identify to the genus or species level due to poor quality recording and/or the presence of an atypical call.

this. This suggests that as well as evidently providing a local foraging resource of value, the site (and perhaps most particularly the ditch along the western boundary) is likely an important commuting feature linking local bat roosts in the northern part of Iffley Village to the high-quality foraging habitats along the Thames.

4.3.6 Supporting this possibility is the result of further analysis of the dataset focusing on species-specific emergence time ranges with the recorded times of bat passes from the static detector deployed on the site. Very early or very late registrations relative to sunset/sunrise can provide an indication of possible roosts in the vicinity of the static detector.

4.3.7 Early detection was most pronounced for common pipistrelle, with several passes in the first fifteen minutes after sunset (see Image 1 overleaf). Similarly, two soprano pipistrelle passes were detected 15-20 minutes after sunset, with a further four before 30 minutes after sunset. A single Daubenton's bat pass was also noted 35-40 minutes after sunset, which is early for this species. The occasional detections of bats shortly after sunset here could indicated the likely presence of bat roosts in the vicinity of the detector. These could either be in mature trees within the site or within houses or other structures in adjoining or nearby parts of Iffley Village.

4.3.8 Inspections of the single structure on the site (a former horse shelter construction of corrugated and timber sheeting and timber frame) found no evidence of past or present bat roosting. Sparrow terrace boxes inside the structure also appeared long-disused. There are however a number of trees on the site capable of supporting bat roosts.

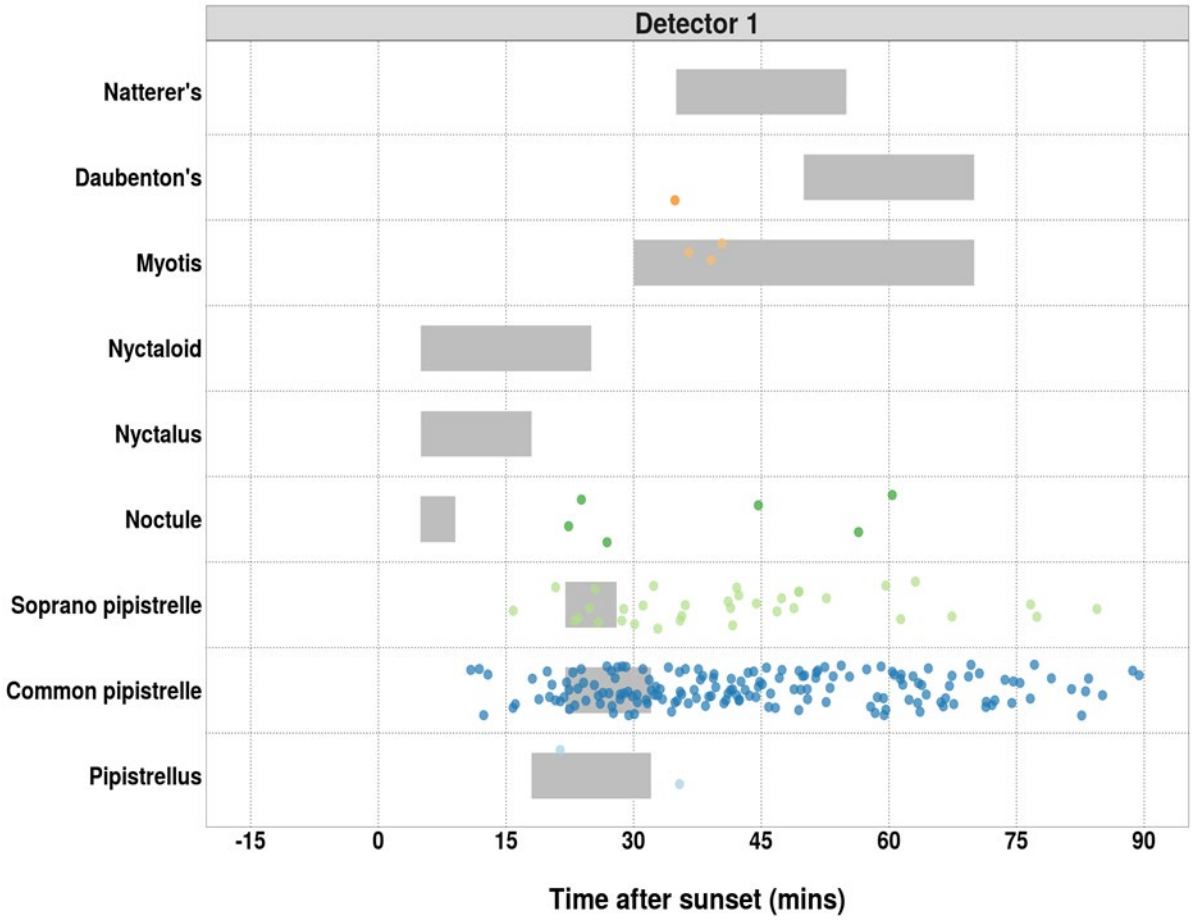


Image 1: First detection times by bat species

X axis represents 15 minutes before to 90 minutes after sunset. Species-specific normal emergence time ranges[44] are shown as grey bars. Bat passes (dots) overlapping species-specific grey bars, or occurring earlier than this time range, may potentially indicate the presence of a nearby roost.

Reptiles

4.3.9 Common lizard *Zootoca vivipara* and grass snake *Natrix helvetica* were confirmed as using the site on 16th May and 8th June. These are Species of Principal Importance further to the NERC Act 2006 and are protected under the Wildlife and Countryside Act 1981. On both dates, individuals of these species were found to be using existing refugia (dumped corrugated sheets and other refuse) in the former manège area.

[redacted]

[44] After Russ, J (2012)

[redacted]

Water vole and otter

4.3.11 An old otter spraint was found on a lateral branch of a collapsed overhanging tree in the ditch at the western boundary of the site in January 2021. Otters are now resident on the adjacent section of the Thames and it is possible that the ditch is visited by otters in high water conditions, or potentially for opportunistic foraging (e.g. when ground-nesting breeding birds or breeding frogs might be present) or in exploration for holt or lying up sites. The ditch was comprehensively surveyed for any signs of lying up sites or holts during 2021 and no signs of more frequent or permanent occupation were found. However, the ditch may perform an important function as a secluded lying-up area at times where water levels or disturbance levels are high on the nearby river.

4.3.12 No signs of water vole were noted during any of the surveys carried out. The species has a permanent presence relatively close by (c.5-600m), on sections of the Weirs Mill Stream adjoining and to the west of the Iffley Meadows SSSI, but the ditch on the site is too seasonal and shaded to offer good habitat for this species.

Breeding birds

4.3.13 Table 5 below lists the bird species recorded on the site during the course of the visits in 2021 with detail on their conservation significance (e.g. Red and Amber Listed[45] species and Species of Principal Importance[46]) and (for those species adjudged to have bred on the site in 2021), the number of territories assessed as present.

Common Name	Conservation status	No. of territories / status 2021 (P=present)
Blackbird		3-4
Blackcap		2
Black headed gull	Amber	Over site only
Blue Tit		4-5
Bullfinch	Amber	1
Buzzard		Over site only
Canada goose		Over site only
Carrion Crow		1
Chaffinch		1

[45] Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747

[46] Further to S40-41 of the Natural Environment and Rural Communities Act 2006

Common Name	Conservation status	No. of territories / status 2021 (P=present)
Chiffchaff		1-2
Collared dove		2-3 (adj houses and gardens, but uses site)
Common tern	Amber	Over site only
Cormorant		Over site only
Cuckoo	SPI/Red	P (likely transient although could parasitise the on-site dunnock territories)
Dunnock	SPI/Amber	3
Feral pigeon		Over site only
Garden warbler		1 (just off-site)
Goldfinch		2
Goldcrest		P
Great Spotted Woodpecker		1
Great Tit		3
Green Woodpecker		1
Greenfinch	Red	P
Grey Heron		P
Grey wagtail	Amber	Over site only
Greylag Goose	Amber	Over site only
Herring gull	Red	Over site only
House martin	Red	Over site only
House sparrow	SPI/Red	Several pairs in adj houses and gardens also using site
Jackdaw		P
Jay		P
Kestrel	Amber	Over site only
Lesser black backed gull	Amber	Over site only
Lesser whitethroat		P
Linnet	SPI/Red	Over site only
Long-tailed Tit		1
Magpie		P
Mallard	Amber	1
Meadow pipit	Amber	Over site only (may nest on Oriel Field)
Mistle thrush	Red	P
Moorhen	Amber	1
Nuthatch		P
Pheasant		P
Pied wagtail		Over site only
Red Kite	Sch1	Over site only
Robin		3

Common Name	Conservation status	No. of territories / status 2021 (P=present)
Rook	Amber	Over site only
Song Thrush	SPI/Red	1
Sparrowhawk	Amber	Over site only
Starling	SPI/Red	Over site only
Stock Dove	Amber	Over site only
Swallow		Over site only
Swift	Red	Over site only
Tawny owl	Amber	P
Treecreeper		P
Whitethroat	Amber	1
Woodpigeon	Amber	3
Wren	Amber	6

Table 5: Breeding birds survey results 2021

4.3.14 Overall, and given its small size, the site supports rather a good assemblage of breeding birds for Oxford, including several, such as whitethroat and lesser whitethroat, that tend to only be found in association with larger undeveloped areas within conurbations.

Invertebrates

4.3.15 The invertebrate biomass generated by the grassland habitats was notably high on the summer visits and this is likely to support many of the insectivorous species associated with the site, such as bats and birds. Ad hoc observations during 2021 and 2022 confirmed the following species on the site: Odonata (dragonflies): *Coanagrion puella, Enallagma cyathigerum, Anax imperator* and *Calopteryx splendens,* Orthoptera (grasshoppers and crickets): *Metrioptera roeselii, Conocephalum discolor, Chorthippus brunneus, Chorthippus parallelus,* Syrphidae (hoverflies): *Chrysotoxom bicinctum, Volucella pellucens, Meliscaeva auricollis, Melanogaster sp., Episyrphus balteatus, Eupeodes sp., Xanthogramma pedissequum s.l, Merodon equestris, Sphaerophoria sp.* Lepidoptera (butterflies and moths): brimstone, orange tip, large white, green veined white, small white, marbled white, small tortoiseshell, peacock, red admiral, speckled wood, ringlet, meadow brown, small heath, small skipper and common carpet.

4.3.16 Bioscan advised FOIV in February 2022 that "*Further* [invertebrate] *survey would be strongly recommended, particularly of Hymenoptera and Coleoptera*". In this regard the applicant's surveys for invertebrates, which establish the site as of "county importance" (with scarce species of Hymenoptera and Coleoptera duly found), are welcomed. These results are reviewed in Chapter 5 of this report.

Other fauna

4.3.17 Roe deer were noted on every visit and muntjac, fox, rabbit, mole, field vole, woodmouse, common shrew, brown rat and grey squirrel were all noted. The ability of the site to support roe deer shows the importance of its continuity with the adjoining Thames-side habitats and Oriel Field.

5 CRITICAL REVIEW OF APPLICANT'S ECOLOGY REPORTS

5.1 A. The Ecological Impact Assessment report (EcIA), Bat Survey Letter Report, Reptile Survey Report, Invertebrate Survey Report [redacted].

5.1.1 OxPlace submitted an Ecological Impact Assessment, comprising an EcIA report together with supporting reports on bats, [redacted] reptiles and invertebrates, with the planning application submission. The reports were produced by The Environment Partnership (TEP), albeit in some cases (e.g. invertebrates) specialist subcontractors were evidently used. Cumulatively, the reports set out the results of both a desk-top survey exercise for the site and they also detail the methodologies followed and results obtained in respect of TEPs field surveys during 2021 and 2022, which included habitats and flora, amphibians, [redacted] invertebrates and reptiles. The reports also describe much more restricted work on bats (tree roost searches only) and only incidental observations in respect of birds.

5.1.2 The adequacy of this cumulative EcIA information, in terms of whether it achieves fair representation of the ecological resources on the site (and the implications for robust decision-making where it doesn't), is discussed in this section. In summary, there are a number of significant deficiencies in the scope and effort of the surveys, and these result in significant omissions which undermine the conclusions of the applicant's EcIA. These matters are discussed below.

Habitat and botanical surveys - grasslands

5.1.3 In terms of methodological approach, an appropriate level of effort on field-data collection would appear to have been applied by TEP to the detailed botanical surveys of the neutral grasslands on the site, although the quadrat results and Tablefit outputs are not supplied with the EcIA as they should have been (these have been requested from OCC and are still awaited). Despite reasonable effort however, the results from the grassland surveys are noted to be infected by a number of significant omissions and errors, calling into question the expertise applied.

5.1.4 This may be due in part to the fact that TEP used Farm Environment Plan (FEP) criteria to assess whether the grasslands qualify as Lowland Meadow BAP (Priority) habitat. This is less than thorough given that this method is designed for non-experts and largely limits consideration to grasses and sedges. Therefore, whilst Bioscan do not disagree with the overall classification of the grassland habitats on the site as 'good quality semi-improved grassland' (or 'other neutral grassland, good condition' in BNG parlance), use of this restricted technique appears to have contributed to omissions and errors that have particular significance in assessing whether the site's grasslands are of sufficient value to qualify for protective designation under applicable local criteria. This is a relevant and important evaluation exercise that TEP have omitted to do.

5.1.5 In particular, the TEP surveys recorded only a restricted number of the axiophytic or 'indicator' species – i.e. vascular plant species associated with higher quality lowland neutral grassland – that are known from Bioscan's surveys to be present. The number of

such species is integral to determining whether the grassland meets the threshold for relevant local non-statutory designation – in particular as a Local Wildlife Site or an Oxford City Wildlife Site (OCWS). Bioscan recorded a much higher number of such species. By way of illustration, Table 6 below effects a comparison between the grassland indicator species Bioscan recorded on the site in 2021[47] and those found by TEP.

Table 6 – grassland indicator species found by Bioscan versus TEP

Indicator Species	Common name	Bioscan	TEP
Centaurea nigra	Knapweed	Yes	Yes
Lathyrus pratensis	Meadow vetchling	Yes	Yes
Cardamine pratensis	Cuckooflower	Yes	No
Stellaria graminea	Lesser stitchwort	Yes	Yes
Carex spicata	Spiked sedge	Yes	No
Lotus pedunculatus	Greater bird's-foot trefoil	Yes	No
Leucanthemum vulgare	Ox-eye daisy	Yes	No
Dactylorhiza fuchsii	Common spotted orchid	Yes	No
Ranunculus bulbosus	Bulbous buttercup	Yes	No
Trisetum flavescens	Yellow oat grass	Yes	Yes
Lotus corniculatus	Bird's-foot trefoil	Yes	Yes
Luzula campestre	Field wood rush	Yes	No
Primula veris	Cowslip	Yes	No
Leontodon hispidus	Rough hawkbit	No	Yes
TOTAL	**14**	**13**	**6**

[47] After Rowell, TA and Robertson HJ (1994) The Grassland Database: VEGAN Version 4.0. Supplement to the Version 3.0. Manual English Nature Research Reports 113; and: Robertson, H.J. & Jefferson, R.G. 2000. Monitoring the condition of lowland grassland SSSIs: 1. English Nature's rapid assessment. English Nature Research Report 315. English Nature, Peterborough

5.1.6 In summary, of a total of thirteen indicator species of higher quality neutral grassland found on the site to date by Bioscan, the TEP surveys have recorded just five[48].

5.1.7 Concern that this low total may reflect application of either insufficient effort or expertise is compounded by the fact that a number of the grassland species stated to have been recorded by TEP are, to say the least, surprising in this location. They include the North American species *Hordeum brachyantherum* (unknown in the wild in the UK[49]), the arable plant rye brome *Bromus secalinus* and the grass of damp acid soils, velvet bent *Agrostis canina*. While the possibility has been considered that these are transcription errors, (e.g. arising from someone without ecological expertise writing up a surveyor's field notes), one would expect these to have been picked up in review or quality assurance procedures. The evidence that these are, rather more worryingly, basic surveyor errors mounts when other identification problems with TEPs results (as described below) are considered.

Habitat and botanical surveys – other habitats

5.1.8 As discussed above, although reasonable *effort* appears to have been applied to the botanical surveys of the grasslands (notwithstanding the concerns over the level of *expertise* applied), the same cannot be said for other habitats on the site.

5.1.9 Surveys of the wet ditch and associated woody vegetation at the western edge of the site appear to have been no more than cursory and, again, are error strewn. For example, at para 3.48 of the TEP report, the North American species water parsley *Oenanthe sarmentosa*[50] is listed as present along with bogbean *Menyanthes trifoliata*[51] in the ditch. Western hemlock *Tsuga heterophylla*[52] is listed for the adjoining scrub. The list of other species making up the overshading linear strip of scrub and wet woodland is cursory, and omits various species of note such as alder, hybrid willows and Midland hawthorn. No consideration at all is given as to whether this habitat qualifies as the S41 Priority habitat 'Wet Woodland', which on several counts it does[53].

5.1.10 The reason given for this 'light touch' treatment of an integral part of the site's biodiversity resource, is "*Given that the brook is located outside the site boundary, as assessment of its importance as an ecological feature has not been provided*" (TEP EcIA para 3.49).

5.1.11 This statement is of concern for a number of reasons. Firstly, Bioscan understand that during the public consultation procedures and in direct correspondence with local

[48] TEP recorded one indicator species that could realistically be present but which was not recorded by Bioscan – rough hawkbit. If present this would further elevate the value of the grassland resource, but because of the problems TEP have had with correct identification of plant species, as discussed in this chapter, we have elected to treat the record with caution.

[49] After Stace, C (2019): New Flora of the British Isles (4th Edition) C&M.

[50] Also unknown in the UK after Stace (2019)

[51] Typically a species of acid pools in the wild, although also planted as an ornamental. However, it is not present on this site.

[52] Clearly a misidentification of silver fir, one specimen of which is present at the same location.

[53] As assessed against the criteria in BRIG (ed. Ant Maddock) 2008 - UK Biodiversity Action Plan; Priority Habitat Descriptions: Wet Woodland.

residents, the applicants have at various times confirmed that they own the land covering the brook. Indeed, this is assumed to be the case as otherwise the proposed construction of outfalls into it, sewage connections beneath it, and other works alluded to in the application material such as clearance and dredging, would involve land outside the applicant's control. We suggest this matter needs urgent clarification.

5.1.12 In any event, the exclusion of the ditch from thorough survey is, quite simply, a failure of adequate survey coverage and assessment. This ditch will receive the surface water drainage from the site, requiring (at minimum) direct impacts from the construction of an outfall and very likely other interventions to ensure it can function as a carrier for such drainage, including clearance of woody debris (potentially whole trees), as well as dredging and even re-profiling. The failure to establish a robust baseline for and/or assess these impacts is a significant omission in the applicant's EcIA.

5.1.13 The EcIA also includes no surveys or assessment whatsoever of the old stone walls on the site. As discussed in Chapters 2-4 of this report, these provide habitat for a range of higher and lower plant species of some note, and may have associated value for certain invertebrate taxa (such as Hymenoptera). Technical review by other specialists (consultants Velocity) determines that there is a very high probability or near certainty that these features will be part removed by access improvements in respect of the proposed vehicle and foot exits onto Church Way[54]. The failure to establish a baseline for and or consider these impacts is a further omission from the EcIA.

5.1.14 Similar omissions arise in respect of the plantation woodland between the Horse Fields and Memorial Field (which is excluded "*due to being located outside the site boundary*") and in respect of Memorial Field itself, notwithstanding that various plans and statements within the application material show significant direct impacts to both of these areas (including from significant excavation associated with protected species measures). It is also the fact that indirect impacts on these areas and features from lighting, recreation, garden waste dumping and other typical sources associated with residential development will inevitably arise. These have not been assessed.

5.1.15 In short, the habitat and botanical surveys are deficient due to being limited in coverage (largely disregarding parts of the site outside the redline boundary, notwithstanding 'zone of influence' considerations and the certainty of impacts to these areas) and due to being infected by identification and misclassification errors. The EcIA assumes a more restricted zone of influence from the proposals than any realistic appreciation of the likely effects and thereby does not permit a sufficiently thorough and representative appreciation of the likely significant impacts on biodiversity from the development proposals. Consequently, the applicant's EcIA does not form a robust basis for decision making and is not complaint with applicable CIEEM guidance.

[54] The application material is somewhat ambiguous on this point, but the review of the transport statement determines that it is highly likely that walls will need to be removed to create minimum standard sight-lines at the Church Way entrance, and various plans show surfaced paths through Memorial Field, but no detail as to how they would exit onto Church Way.

Amphibian surveys

5.1.16 In stark contrast to the habitat and botanical survey work, Bioscan are broadly content that the survey methodology, effort and results in respect of amphibians is representative of the baseline conditions on the site.

Badgers

[redacted]

Bats

5.1.18 On any analysis, the baseline survey work conducted by TEP on bats (as set out in the EcIA and in the separate 'bat survey letter report') is far short of both industry good practice standards, and planning practice guidance. Such surveys that have been carried out have merely focused on assessing whether roosts are present in mature trees on the site. There is no major objection[56] to the methods and results for this element, but it is only half of the process of establishing a reliable baseline for assessing impacts on these protected species. The major omission here is that the applicant has collected no data on the site's value for foraging and commuting by active bats, despite acknowledging that "*There is*

[55] https://www.gov.uk/guidance/badgers-advice-for-making-planning-decisions#assess-the-effect-of-development-on-badgers

[56] Albeit the removal of the bat box present within the derelict horse shelter as part of the *survey* process is at best questionable practice in advance of a planning permission being obtained.

potential for foraging and commuting bats to utilise the site. Foraging and commuting bats have been taken forward as an important ecological feature at the site level" (TEP EcIA para 3.80). The subsequent impact assessment furthermore appears predicated on an erroneous assumption, made in the absence of the necessary survey data, that only three species might be present (se e.g. para 4.26 of the TEP EcIA)

5.1.19 Planning Circular 06/2005[57] remains part of the lexicon of established planning practice guidance and it states, at paragraph 99 that;

> *"99. It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted. In appropriate circumstances the permission may also impose a condition preventing the development from proceeding without the prior acquisition of a licence under the procedure set out in section C below."*

5.1.20 As no attempt has been made by the applicant to collect survey data to determine how local bat populations use the site, and the species involved, the EcIA has not only failed to assess the type, level and significance of impacts on a range of bat species (i.e. 'how they may be affected by the development' per Circular 06/2005), but has also failed to record that the bat assemblage using the site includes nationally rare barbastelle and Nathusius' pipistrelle bats (as set out at para 4.1.21 to 4.1.28 of this report), and is therefore of elevated value.

5.1.21 The industry standard for establishing a baseline for assessment of development impacts on bats is the BCT publication: Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition. This sets out a stepwise approach to assessing the need for and then designing the appropriate measure of survey to inform development applications, having regard to the planning practice requirements set out in Circular 06/2005 and arising from case law. The applicant's EcIA fails to comply with these guidelines.

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57 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

Birds

5.1.22 The applicant's EcIA states that "*A number of birds were observed during the survey in June 2021, including robin Erithacus rubecula, song thrush Turdus philomelos and woodpigeon Columba palumbus. Song thrush was recorded singing from a tree in a neighbouring garden. Cuckoo Cuculus canorus calling was also heard during the survey, but may have been calling from adjacent habitat*" (TEP EcIA para 3.82). It thus presents three (3) species in comparison to the 54 listed at Table 4 of this report.

5.1.23 Despite acknowledging the presence of declining, Red Listed and S41 species (song thrush and cuckoo), no thought appears to have been given to further work to ensure the site's breeding bird assemblage (which in fact includes at least ten species with a similarly elevated conservation status) was properly documented as part of the EcIA process. In consequence, the assessment of impacts on this species group is deficient, and largely assumes that the limited benefits that might accrue for commensal and essentially urban species (via gardens and nestboxes), outweigh the displacement from the site of the more rural and locally scarce components of the avifauna, including species such as whitethroat and cuckoo. This is a flawed approach to assessment and a flawed assumption. This matter is discussed further in Chapter 7.

Hedgehog

5.1.24 Given that there is not (yet) any standard best practice survey requirement for determining hedgehog presence/absence on a proposed development site prior to determination, the approach taken by the applicant to assessment for this species (i.e. to assume presence on a precautionary basis) is defensible. The assessment of impacts on this species is discussed at Chapter 7.

Invertebrates

5.1.25 In stark contrast with most other areas of the applicant's EcIA, the invertebrate surveys undertaken by the applicant are of good standard, thoroughness and taxonomic coverage. Bioscan notes that the authors of the invertebrate survey report determine the site to be of county (i.e. Oxfordshire) importance and yet the authors of the applicant's overarching EcIA have, without explanation, demoted its value as a receptor to 'District' level importance (i.e. Oxford City). This appears to be an unjustified suppression of independent expert opinion on the site's value and requires explanation.

5.1.26 For an independent view of the context of these records, Bioscan sought from TVERC the accumulated records in the county and the city for the species of higher conservation importance (S41, Red Data Book (Nationally rare), nationally scarce) found by TEPs subcontractors. The data returned was as follows:

Species	Common Name	Designated cons. status	Total TVERC Records	
			Oxford	Oxon
Hypera meles	A Beetle	Nationally scarce (Nationally Notable A)	3	13
Ocypus fuscatus	A Beetle	Nationally scarce (Nationally Notable B)	0	4
Acinia corniculata	A True Fly	RDB1	4	11
Blaesoxipha plumicornis	A True Fly	Near threatened/ Nationally Notable	0	33
Coenosia atra	A True Fly	Nationally Scarce	1	7
Eustalomyia vittipes	A True Fly	Nationally Scarce	0	7
Fannia gotlandica	A True Fly	Nationally Scarce	0	11
Geomyza subnigra	A True Fly	Nationally Scarce	2	5
Pherbellia griseola	A True Fly	Nationally Scarce	0	4
Lasius brunneus	Brown Tree Ant	Nationally scarce (Nationally Notable A)	8	74
Cerceris quinquefasciata	Five-banded Weevil-wasp	Rare / S41	0	24
Lasioglossum pauxillum	Lobe-spurred Furrow Bee	Nationally scarce (Nationally Notable A)	5	175
Synanthedon myopaeformis	Red-belted Clearwing	Nationally scarce (Nationally Notable B)	7	18
Andrena labiata	Red-girdled Mining Bee	Nationally scarce (Nationally Notable A)	1	9
Beris clavipes	Scarce Orange Legionnaire	Nationally Notable	5	16
Lasioglossum malachurum	Sharp-collared Furrow Bee	Nationally scarce (Nationally Notable B)	9	146
Hylaeus cornutus	Spined Hylaeus (bee)	Nationally scarce (Nationally Notable A)	0	6
Sphecodes crassus	Swollen-thighed Blood Bee	Nationally scarce (Nationally Notable B)	0	33

Species	Common Name	Designated cons. status	Total TVERC Records	
			Oxford	Oxon
Eupithecia millefoliata	Yarrow Pug (moth)	Nationally scarce (Nationally Notable B)	0	5

5.1.27 The table above clarifies that for nine of the recorded species, there are no other records within the City of Oxford, and for eight species there are less than ten records in total for the entire county of Oxfordshire. The assessment that the site is of County importance appears by far the more robust of the two put forward by the applicant on that basis. The assessment of impacts on invertebrates is returned to in Chapter 7.

Otter and water vole

5.1.28 Bioscan found evidence of transient otter use of the ditch at the western edge of the site by means of old spraint in January 2021. While there are signs that insufficient survey effort was applied by the applicant to determining the regularity of use of the ditch/brook by this species, Bioscan are (on the basis of their own visits and local information) broadly content with the assessment that the site is "of local importance for otter" and that water vole is likely absent except on an extremely occasional and transient basis. The assessment of impacts on otter is returned to in Chapter 7.

Reptiles

5.1.29 While elements of the applicant's survey method and effort appear broadly compliant with good practice standards for technique and effort, there are some issues with transparency, including in particular the absence of timings given for survey visits. It is thus unclear whether the reptile survey, which failed to record grass snake (recorded by Bioscan on 16th May 2021), is robust in terms of determining only very low numbers of common lizard and no grass snake. Bioscan would accept, however than anything higher than 'low' populations of either species (and of slow worm, which may also be present) are unlikely.

5.2 B. The Arboricultural Impact Assessment Report

5.2.1 The Arboricultural Impact Assessment (AIA) report submitted by TEP also suffers from errors, omissions and misrepresentation of the baseline position.

5.2.2 In the first instance, the AIA conveys a misleading impression of much more modest tree removal than the reality. In large part this is due to 'lumping' trees into groups, and then assessing impacts on the 'group' in singular terms, rather than quantitatively in reflection of the number of trees affected. The statement in the Executive Summary that "*8 individual trees; tree groups comprising approximately 0.0554 ha; and 10m of hedgerow would be removed*" is therefore highly likely to mislead decision makers and the general public. Bioscan conducted an independent review of the tree survey underpinning the AIA

in January 2023 and determined that tree loss was more likely to be in excess of 50 specimens with diameter at breast height greater than 150mm. If the indicated minimum sight-lines for the proposed Meadow lane access are imposed onto the tree survey plan, it is also immediately evident that significantly in excess of 10m of this hedgerow would be lost, even disregarding that the internal hedgerow G7 within the site would be removed and this has not been accounted for at all, despite it being recognised as a hedge in the tree schedule. There are also a number of omissions of impacted trees and some species misidentifications.

5.2.3 The AIA also fails to take a realistic or holistic view of likely impacts and the efficacy of mitigation. For example:

- The AIA suggests only 10m of hedgerow G9 will be removed, but this contradicts the acknowledgement in parts of the AIA (e.g. para 3.13) that there will be effective loss of 'Group G9' (i.e. the hedge along the site's boundary with Meadow Lane). The 'retained hawthorn' are likely to be too sparse and staggered for effective laying and the near-certain reality for this feature will be that it will not be able to be retained in any meaningful form, taking account of losses to access, the need to maintain sightlines and the likely impacts on any replanted feature during the operational phase from car-parking, uncontrolled cutting back by residents and other factors. The AIA thus fails the requirements of BS 5837 to '*present a reasonable account of the prospects for tree retention in accordance with BS 5837*'.

- The AIA offers a prediction that new and replacement planting, once mature, will result in a "*net gain of tree canopy cover of approximately 0.055 ha (+3%) 25 years post development and a larger gain by the time new trees are mature*". This calculation takes no account of the maturation of existing stock over that same time period and is therefore fundamentally flawed. There are a large number of young and semi-mature trees on the site at present. The AIA assumes these will not expand their canopies as they mature, while replacement planting will. This is nonsensical.

- The AIA appears to have been similarly limited in scope to the EcIA, failing to document tree cover and/or impacts in the western boundary ditch, despite the clear supposition of the application that this will be subject to impacts, including likely tree loss.

- Some of the pruning recommendations appear very likely to lead to the death of the affected tree. For example, the canopy of tree T8 is correctly identified on the tree schedule as "one-sided", with the remaining growth oversailing the site. The tree works plan indicates that this tree will be pruned on the development side which would be likely to remove most of the remaining canopy.

- The limitations of tree quality assessments under BS 5837 are not acknowledged, explained or discussed. The suggestion that tree quality categorisations based on amenity and visual value, and matters such as likely future longevity, translate to an evaluation of the quality of the same trees in ecological terms, is flawed. A disproportionate number of high ecological value trees – for example those with cavities for bats and hole nesting birds, or significant standing deadwood suitable for saprophytic invertebrates – will fall into the lowest 'U' and 'C' categories of the BS 5837 approach. This is not acknowledged or discussed, even though it is entirely relevant to the application of the national and local policies cited at 2.19-2.25.

- The numerical figures presented in Table 4 of the AIA are readily challengeable, and shown to be inaccurate on any sensible reading of the application drawings.

- The AIA makes no distinction between the predominantly native baseline tree stock on the site and the future position which will see the introduction of a significant quantum of non-native species. Statements such as "*The planting scheme includes a greater range of species than would be removed and therefore would enhance biodiversity in this respect*" are therefore baseless and readily contradicted by the evidence of the site's baseline condition and the future situation having regard to the applicant's landscape scheme. Such statements also take no account of the lag-time for new stock to mature (as against maturation of existing established stock), and includes no assessment of the risk of introduction of pathogens via diseased nursery stock and the use of non-natives in the planting scheme.

- Th statement that "*The distribution and connectivity of tree cover would be improved by the proposed development and planting scheme*" is also without foundation. The internal dividing hedgerow G7 will be lost, the Meadow Lane hedgerow G9 fragmented and decimated, and the western boundary group G11 denuded by interventions to construction and improve surface water drainage.

- Much of the 'new hedgerow' proposed will be highly restricted, regularly box-cut features that near no resemblance to the mature features that will be lost. There is no qualitative assessment of the change in hedgerow provision – the value of a hedgerow is more than simply its linear length. The suggestion that decimation of the mature, up to 6m high and 9m wide Hedgerow G9, and its partial replacement with a new planted box cut 1mx1.5m feature will create "*a better quality visual screen along the front of the site*" is frankly absurd.

- Independent review of the tree-survey underpinning the AIA has found omissions and identification errors. For example, two large hawthorn that will need to be removed for

the pedestrian access off Meadow Lane are not included or documented in the tree survey and their losses have not been accounted for.

5.2.4 In summary, the AIA (in common with the EcIA) is infected with omissions and errors that significantly undermine the robustness and accuracy of its conclusions. It seeks to conceal the numerical magnitude of tree loss by reference to 'groups' and takes a wildly optimistic view of the impacts on the Meadow Lane hedge from the proposed development.

5.2.5 The default reference to 'tree groups' is misleading and suggests a lack of thoroughness. Trees in groups are not of less value than stand-alone trees. Including losses from hedgerows, Bioscan calculate in excess of 50 trees (stem/trunk dbh >150mm) would be removed by the proposals. This does not account for additional tree losses anticipated to be necessary to allow for drainage related works to the western ditch. The proposed tree planting would not even match this number numerically, despite the claims of net gain.

5.2.6 In contrast to the claims made in the AIA, the development will therefore give rise to a net loss of tree and hedgerow cover. The assessment of change and mitigation/compensation is flawed as it assumes existing tree cover will not mature and expand its canopy, while calculating a future canopy cover from new planted specimens at maturity. This is a skewed and unreliable comparison, and the failure to make an equitable comparison undermines the conclusions presented about % canopy cover. It is also the case that some of the net gain in tree canopy cover that is cited will come at the expense of losses of good quality semi-improved grassland, exacerbating biodiversity harm.

5.3 C. The Biodiversity Net Gain Assessment Report

5.3.1 Comprehensive review of the applicant's BNG report, including the extent to which it follows and adheres to relevant good practice guidance. has been prevented by the applicant failing to provide its Metric 3.1 calculations. These have been requested (including, it is understood, by the Council's ecologist), but have not yet been forthcoming.

5.3.2 In light of this, provisional comments to make on this report are as follows:

- The applicant's baseline is infected by habitat classification errors -in particular an inflated expanse of low distinctiveness tall ruderal habitat is contended.
- The applicant acknowledges that the proposed development cannot achieve net gain, either on-site, or even by appropriating the adjoining Memorial Field. The development will therefore result in net loss of biodiversity locally. This fails one of the central thrusts of the site allocation policy.
- The applicant's BNG calculation outputs also flag a trading error, due to the losses of higher distinctiveness grassland habitats.

- The applicant does no more than allude to an off-site compensation scheme, yet to be defined, at an unknown location, and at significant cost to the taxpayer. It has defaulted to this last resort option without recourse to the mitigation hierarchy in order to determine whether the development can be located on an alternative site with less biodiversity impact, or re-designed to reduce the net losses of biodiversity. This is a failure to comply with one of the central tenets of sustainable development – the policy implications of which are discussed in Chapter 7.

- Further comments on the applicant's BNG assessment will be made on receipt of the awaited Excel calculations, noting that in the interests of transparency, these should have been submitted with the application, and that the failure to do so is itself another example of non- compliance with good practice standards.

6 INDEPENDENT EVALUATION OF THE BASELINE ECOLOGICAL VALUE OF THE SITE

6.1 Terms of reference, methodology and criteria

6.1.1 To arrive at an independent determination of the baseline ecological value of the site, and thus the relevant weight to be attached to the impacts from development in terms of assessing compliance with applicable statute and policies, the baseline information set out in the preceding sections (notwithstanding its lack of completeness) is combined, and then compared against relevant standardised criteria, as discussed below.

6.1.2 The current guidance for Ecological Impact Assessment issued by the Chartered Institute for Ecology and Environmental Management (CIEEM 2019) recognises that professional judgement and a certain level of subjectivity is unavoidable when apportioning value to ecological assets. However, the process is informed and to some degree standardised by reference to factors such as formal national and local conservation status, legal protection and other frameworks that help ensure consistency.

6.1.3 Sites already possessing statutory or non-statutory nature conservation designations will have been subjected to some form of evaluation process in the past, and their importance defined at a geographical scale (e.g. international, national, local). For these, evaluation will generally reaffirm their qualifying attributes, or in some cases may identify where designation may no longer be appropriate. However, **it is not the case that where such designations are not already in place, it can be assumed that a site does not qualify for such designation. This is a major flaw in the applicant's approach to its evaluation of the baseline ecological importance of the site.**

6.1.4 Factors such as extent, naturalness, rarity, fragility and diversity are all relevant to the determination of ecological value, and for the evaluation of sites and habitat features outside already-designated sites, these and other criteria as described by Ratcliffe (1977), may be applied. Ratcliffe's criteria are integral to the procedure for selecting both Sites of Special Scientific Interest and many non-statutory designation systems in the UK (including those applicable in Oxfordshire), and they therefore remain an accepted standard for site evaluation.

6.1.5 In this particular instance, the ecological attributes of the site have also been assessed by reference to the criteria for the selection of Oxford City Wildlife Sites, as devised by the Thames Valley Environmental Records Centre (TVERC) and as underpins the sites afforded that status and the associated policy protections in the Local Plan.

6.1.6 In applying these criteria, attention may be drawn to the relative scarcity or abundance of features within the survey area and in the wider geographical context. Some criteria are, however, absolute and not relative to scale. Ancient woodland, for example, is a fragile and high value habitat irrespective of whether it is being considered in an international or local context. Similarly, the value of an otherwise poor habitat may be elevated if it is central to the survival of a rare species.

6.1.7 Where evaluation is important for the purposes of informing decisions related to land-use planning and development control, the above approach needs to be supplemented by consideration of whether individual species are subject to legal protection[58], or whether habitats or species are present which have been identified as 'priorities' for biodiversity conservation in the UK[59]. Planning authorities have a statutory duty[60] to have regard to priority species and habitats and to further biodiversity objectives and the presence of such resources may therefore be material to the determination of development control decisions, as is the presence of protected species and the extent to which they may be affected by development (ODPM Circular 06/2005).

6.1.8 Finally, it is relevant to draw attention to and factor in any presence of species not necessarily subject to special legal protection or identified by Government as a priority for biodiversity conservation, but which nonetheless have an 'unfavourable' conservation status as defined by the Red Data Book system[61] or the Red and Amber lists for birds[62], or which are otherwise known to be rare or scarce in a local or regional context.

6.1.9 Scales of comparison varying from international to the context of the local area may be used to define the measure of importance (or value) attached to individual features. The definition of geographic terms can vary, but in this evaluation the following geographic frame of reference is used:

- International;
- UK;
- National (i.e. England/NI/Scotland/Wales);
- Regional (e.g. relevant Natural Area or area covered by a regional records' centre)
- County (or Metropolitan - e.g. in London);
- District (or Unitary Authority, City, or Borough);
- Local or Parish; and
- within site or zone of influence (the latter of which might be the project site or a larger area) only

6.2 Evaluation

6.2.1 The site is not subject to any statutory or non-statutory nature conservation designation, however assessment against the selection criteria for Oxford City Wildlife Sites indicates that it meets the qualifying criteria for that designation.

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58 Principal legislation being the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Some animals are protected under separate legislation (e.g. the Protection of Badgers Act 1992).

59 As published by the Secretary of State further to their duties under Section 41 of the Natural Environment and Rural Communities Act 2006

60 Section 40 of the Natural Environment and Rural Communities Act 2006.

61 Following the British Red Data books published by the JNCC/RSNC, the Red List reviews for various taxa and the Nationally Notable (Nationally Scarce) categorisations recognised by the JNCC.

62 Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, 708–746..

6.2.2 The criteria and the explanations around them are attached in full at Appendix 5. The critical qualifying threshold is as set out below, with emphasis added:

"*Sites should be selected where they meet* [By reference to the following table]:–

- *Criteria 1. A and at least one of the following - Criteria 1 C, D, E, F; Criteria 2 B, C, D, or E; or*
- *Criteria 1. B; or*
- *Criteria 2. A and at least one of the other Criteria 2 features (B, C, or D*)"

1	Wildlife value criteria
A	**Naturalness** (S41 Priority habitat or remnant; Other natural feature of significant importance for the City)
B	**Rarity** (species, habitat or other wildlife feature)
C	**Size** (extent of habitat or species population size)
D	**Diversity** (Of species and/or habitat types)
E	**Connectivity** (in semi-natural habitat between wildlife site and/or identified as important species corridors
F	**Fragility** (as defined by Appendix 3 of the Guidance)

6.2.3 Further comment on how the site performs against each of these criteria is provided below:

6.2.4 Naturalness: Under this criterion, the OCWS selection guidelines state that "*Sites with remnant elements of priority habitat or more transitional communities can also be considered for inclusion, especially where there is current management for nature conservation and good prospects for improvement of the habitat condition in the future. Examples would include lowland meadow or lowland calcareous grassland that is transitional to rougher grassland communities due to lack of or inconsistent management*".

6.2.5 It is assessed that the site qualifies under this criterion. The 'good quality semi-improved grasslands' (as acknowledged by the applicant) are clearly derived from MG5-type communities and are readily capable of being restored to this condition with a suitable management regime (see also under 'Fragility' below). There is, furthermore, a paucity of other opportunities for such restoration locally –for example Oriel Field suffers from enriched, imported and compacted soils due to past landfilling activity.

6.2.6 Rarity**:** Under this criterion, the selection guidelines suggest that qualifying species include "*NERC Act (S41) Species of Principal Importance*". Even on the limited data obtained to

date, the site supports several of these including common lizard, grass snake, cuckoo, dunnock, song thrush, five-banded digger wasp and it is furthermore used by others such as otter and the rare barbastelle bat. The site's invertebrate assemblage includes one Red Data Book species, other nationally rare species and a suite of nationally scarce species, for nine of which there are no other records within the City. This is an exceptional assemblage at the City level and notable at County level, and is indeed acknowledged by the applicant to render the site of 'county importance' for invertebrates.

6.2.7 The small Size of the site is likely to disqualify it from inclusion under that criterion, albeit it represents a continuation of a larger expanse of similar and contiguous habitats to the west. The 0.3ha threshold for 'wet woodland' is certainly approached by the strip of damp scrub-woodland along the western boundary however.

6.2.8 For higher fauna and flora, the habitat and species Diversity of the site is good but perhaps not exceptional. However, the invertebrate species diversity certainly meets the threshold of 'significant interest' under this criterion, even taking into account recorder effort. Further survey for bats and for other taxonomic groups (such as grassland fungi) may yield additional interest.

6.2.9 Under Connectivity, the site clearly offers an extension to the adjoining floodplain habitats, and the western boundary in particularly is an important corridor for species associated with the Thames (e.g. otter) and also likely to be important to bats commuting to and from the Thames from roosts to the north and east of the site (and potentially within it). The site sits at the junction of three acknowledged and recognised wildlife corridors in Oxford.

6.2.10 Lastly, the site clearly qualifies under the definitions for Fragility given in Table 3 of the guidelines, as reproduced below:

Table 3. Habitat fragility. This table is an extract from TVERC & BMERC 2017

Habitat	How easy is habitat to create?	Fragile?
Grassland (neutral and calcareous)	Neutral and calcareous grasslands are difficult to create. Disturbed soils (e.g. ploughed) take a long time to rebuild structure. Fertile soils can also take a long time to become nutrient poor through management. Newly created grasslands are often species poor for long periods. Many recreated grasslands never recover species found in undisturbed grasslands.	YES

6.2.11 The site qualifies under this criterion due to the presence of long-established neutral grassland on soils which have evidently not been ploughed for centuries (if at all) and which retains a suite of species indicative of fairly low fertility conditions and an absence of modern agricultural 'improvement'. While there is some evidence of suppression effects on the site's botanical diversity arising from past episodes of overgrazing and/or inappropriate management (or management neglect), these do not militate against recovery and do not place the site's grasslands outside the scope of the description in the table above.

6.2.12 On the basis of all of the above, the site is adjudged to comfortably qualify for City Wildlife Site status under Criteria 1A and 1B with further support lent by qualifying attributes

against Criteria 1E & 1F, and somewhat less so by 1D. It thus qualifies for the specific protection afforded to such sites under adopted Local Plan policy G2. It is noted that the wording of this policy appears, quite logically and correctly, to acknowledge that where hitherto unrecognised but significant biodiversity resources are present on a site, the relevant and proportionate level of protection should be applied regardless of whether the site already has a designation or not. Any alternative approach seeking to only protect sites subject to designation would fail the biodiversity duty enshrined within the NERC Act 2006 and strengthened under the Environment Act 2021.

6.2.13 That the site's significant biodiversity interest was unrecognised previously in considering the site for allocation through the Local Plan process, seems in large part due to failures in survey protocols, which saw the site surveyed only from a distance at a sub-optimal time of year (Appendix 3), and a failure of decision-makers to recognise the limitations arising, despite their being clearly flagged by the surveyor. In contrast, the surveys conducted by Bioscan in 2021, and the applicant's own surveys in 2021 and 2022, though far from comprehensive, and short of the level required for robust decision-making, confirm that the site contains a locally significant grassland resource (due to a number of unimproved indicator species that signpost origins close to the MG5 Lowland Meadow priority habitat community, perhaps as recently as a few decades ago) and an invertebrate assemblage of county importance. In respect of the grassland, the species assemblage indicates that the soil structure and fertility has not been irreversibly damaged by modern agricultural fertilisers and ploughing, pointing to the possibility of simple and relatively rapid restoration to that habitat type by a relatively simple change in management. The grassland interest, along with the interest of the adjacent wet woodland in particular, also supports the site's high invertebrate value. The obligation to take the opportunities this site provides for biodiversity enhancement is as set out in the duty on public bodies to further biodiversity conservation, as set out in the NERC Act, and as locally indicated by the Oxfordshire Biodiversity Action Plan and related conservation targets. This site would also lend itself to delivery of these objectives via developer funding from other sites under the nascent mandatory biodiversity net gain regime set out in the Environment Act 2021. In this context, the suggestion from the applicant that the net loss of biodiversity arising from development of this site would be acceptable is wholly misplaced.

[redacted]

6.2.15 The same attributes wholly militate against the suitability of this site for development, notwithstanding the fact of its development allocation[63]. The remaining sections of this

[63] There are parallels with other well-known failures of forward planning such as at Lodge Hill in Kent where a large redundant military site was allocated for development by Medway Council without any ecological investigations being

document consider the potential for, and the magnitude and significance of, any impacts that would arise from the development of the site, were that to be permitted, along with discussion as to the policy compliance of a scheme that, as is no longer disputed even by the applicant (and nor could it be), will deliver net loss of biodiversity locally.

undertaken. The battle to save it caused the collapse of Medway Council's housing strategy and the related failure of two Local Plans. The site is now a SSSI.

7 IMPACT ASSESSMENT

7.1 Sources of Impact

7.1.1 An assessment of the impacts from the proposed development on the biodiversity resources documented in the preceding sections is given here. It should be noted that this is an incomplete assessment pending further information on (*inter alia*) matters such as bat use of the site, on which the applicant has failed to provide an adequate level of baseline understanding to inform determination, by reference to Circular 06/2005.

7.1.2 Identification of impacts has been arrived at by reference to the various drawings submitted by the applicant, and in particular:

- TEP dwg no. 8854.01.002 (General Arrangement Plan);
- TEP dwg no. 8854.01.001 (Illustrative Landscape Masterplan);
- TEP dwg nos. 88654.01.201 and 202 (Planting Plan sheets 1 & 2);
- ADP dwg no.s ADP-XX-XX-DR-A-1300 and 1301 (existing and future site sections);
- Ridge dwg no. 5015346/0501/P02 (surface water drainage plan);
- TEP dwg nos. D8854.03.001, 002 B & 003 B (arboricultural baseline and impacts plans) and the accompanying tree schedule;
- Various drawings scattered through the application submission material showing various proposals for delivery of footpaths, wildlife mitigation features and landscape planting within Memorial Field;
- TEP drawing numbers: G8854.01D.01 & 02 relating to protected species constraints and mitigation (compensation) proposals;
- TEP dwg no.s G8854.011B, 012B and 013C (within the BNG assessment) showing the applicant's depiction of the baseline position and future position in the context of BNG assessment;
- WLC dwg WLC619-1300-001 R5 showing the indicative lighting strategy;
- Ridge dwg no.s 5015346/RDG/XX/XX/XX/C/0001 & 0002 showing proposed visibility splays at the Meadow Lane and Church Way entrances to the proposed development.

7.2 Likely significant impacts on biodiversity resources

7.2.1 A bullet point list of the principal impacts on biodiversity resources arising from the proposed development is given below:

- Direct, permanent loss of >90% of the good quality semi-improved grassland within the application site to the development footprint and associated cut and fill. This is grassland that has relict MG5 flora and thus presents itself as a rare opportunity for restoration, consistent with the objectives of the adjacent Conservation Target Area;

- Likely direct loss of the remaining 5-10% of this grassland within the application site due to the requirements for working and laydown areas during construction. The applicant claims some of this loss may be rendered temporary by re-establishment of grassland post-development but such areas are also intended to be used for informal open space, will be subject to a suite of urban pressures and will not be capable of being managed in a manner commensurate with maintenance or recovery of any substantive biodiversity value.

- Further direct losses of good quality semi-improved grassland resource in the adjoining Memorial Field to footpaths and ground disturbance/excavation associated with (nebulously defined) wildlife mitigation and compensation proposals. This is despite the applicant's assertions that Memorial Field would form no part of the development.

- Secondary indirect losses of good quality semi-improved grassland in Memorial Field to shading from the proposed scrub planting and likely deterioration due to cessation of appropriate management, arising out of conflict with use as de facto open space for the development.

- Direct loss of Priority hedgerow habitat along the Meadow Lane frontage in order to form pedestrian and vehicle accesses and associated sight-lines.

- Indirect additional loss and/or degradation of the retained fragments of hedgerow along Meadow Lane frontage due to requirements to maintain sightlines and near-certain future unsanctioned interventions from residents to maintain views. The applicant suggests the hedgerow will benefit from being 'laid' but in fact the staggered alignment of the hedgerow militates against retention in this way, the age of the constituent trees and shrubs means that laying is unlikely to be successful and it is near-certain that removal and replanting will result. The laid hedge is shown on the applicant's plans as a feature no more than 1.5m wide compared to its current canopy spread of between 5 and 9.5 metres. In order to maintain sightlines, the short lengths that remain or are replanted will likely need to be regularly trimmed to around 1m in height. In short despite the applicant's claims of retention, the future hedge will bear no resemblance to the existing feature and will perform very little ecological/biodiversity or landscape/screening function.

- Additional direct Priority hedgerow loss within the site is portrayed by the applicant as loss of scrub. In particular, the remnant internal hedgerow that divides the application site into northern and southern fields will be lost. This hedgerow was damaged by partial clearance by contractors working for the applicant/City Council in January 2021 (actions undertaken in breach of applicable legislation), but it remains a hedgerow feature and is restorable to good condition.

- Additional direct losses of free-standing trees and scrub, including from the defined belt along the ditch along the site's western boundary which, at least in part, meets the description of Priority wet woodland habitat.

- Likely loss of stone wall (and related habitats) along the Church Way frontage due to access-related constraints (this is not acknowledged by the applicant).

- Likely direct and indirect impacts to the boundary ditch along the site's western boundary due to the need to create a surface water drainage outfall, and potential (realistically, likely) need to remove woody debris from the ditch and potentially dredge or re-profile it to ensure appropriate conveyance function and for flood risk reasons. These interventions, and the proximity of the new development, will likely compromise the attraction of this feature to species such as otter, and may impact on its value as a bat commuting and foraging feature.

- [redacted]

- Loss of a large main badger sett and loss of perhaps 80% of the core foraging area for an established social group of badgers that (due to the presence of a leucistic individual) has local cultural as well as intrinsic biodiversity interest, over and above their status as protected species. The applicant's mitigation and compensation proposals for badgers are tokenistic and subject to technical flaws in relation to the siting of the proposed replacement artificial sett. They are so unlikely to be successful that it is considered they may not be licensable in their present form.

- Loss/displacement of a locally significant breeding bird community, including a suite of declining species identified as priorities for biodiversity conservation nationally. The

applicant's suggestion that nestboxes will compensate for the wholesale displacement from the application site of species such as cuckoo, whitethroat and lesser whitethroat is absurd.

- Unknown and unquantified impacts on bats, including the rare species barbastelle and Nathusius' pipistrelle, due to loss of foraging area and impact on commuting routes. The lighting strategy addresses street lighting only and does not consider whether dark corridors around the site margins can be maintained in the face of light spill from windows and from future residents installing outdoor/security lighting. The applicant has not established the baseline position as regards bat use of the site via surveys and the intrinsic value of the site for foraging is thus unknown. The applicant has thus failed to meet the minimum industry standards and planning practice guidance in respect of informing decision makers on impacts to bats.

- Displacement from the site – either directly from habitat loss, or indirectly from the introduction of human activity, lighting, noise and related urbanisation, of a suite of other fauna including grass snake, otter, common lizard as well as species such as roe deer, [redacted] and fox which have low conservation status but, through glimpsed encounters and/or the knowledge that they are present, provide ecosystem services that extend beyond the confines of the site and add value to the adjoining quiet route and Oriel Field open space. Without the sanctuary that the site provides for such fauna, they are likely to be lost from the area entirely.

- And finally, loss of a site that comfortably meets the criteria for designation as an Oxford City Wildlife Site (OCWS) and thus qualifies for policy protection under the Local Plan, even without regard to the biodiversity duty incumbent on the Council and as recently strengthened by the Environment Act 2021.

7.2.2 The above impacts are adjudged to be significant negative at least at District level, and at county level in respect of invertebrates even without sight of the additional survey information that remains to be provided by the applicant in relation to bat use of the site, including by the rare species barbastelle and Nathusius' pipistrelle.

7.3 Avoidance, mitigation and compensation

7.3.1 The 'mitigation hierarchy' is an established tenet of sustainable development and reference to it is enshrined in national planning policy and practice guidance. In respect of biodiversity, it requires that where significant harms are identified, the avoidance of those harms (e.g. by siting the development on another site, or re-designing it to avoid such harms) is given thorough consideration. In respect of public bodies subject to the duty to protect biodiversity enshrined in the NERC Act 2006 (and strengthened ion the Environment Act 2021) that obligation is given additional statutory force.

7.3.2 Notwithstanding the above, no evidence has been presented within the application of how **avoidance** has been considered at any point in the design process. Rather, the assumption appears to have been worked to that because the site is allocated, no impacts that emerge from the baseline survey and impact assessment processes are capable of triggering that requirement. This is prejudicial to infirmed and sustainable decision making and a failure to comply with both the mitigation hierarchy and the biodiversity duty, neither of which are subject to such qualifications.

[redacted]

7.3.4 Overall, we can find no evidence of any attempt to avoid significant biodiversity impacts through revisions to the design or consideration of alternative sites. Given the fundamental errors and weaknesses now exposed in the site allocation process, as illuminated earlier in this report, this represents a doubling down on earlier failures. We do not believe this represents good planning and (as discussed in Chapter 8) it flies in the face of the spirit and the letter of what the NPPF sets out as sustainable development.

7.3.5 In terms of **mitigation**, there is very little proposed beyond standard construction practice such as tree protection fencing and nebulous reference to adherence to a CEMP (the detail of which is not provided). The applicant erroneously describes as 'mitigation' a number of measures which actually fall into the description 'compensation' – i.e. they seek to compensate for allowed impacts and effects, rather than first seek to reduce the magnitude and extent of them.

7.3.6 As regards true mitigation, there is one area where arguably a more than minimum-standard approach has been taken. This is in respect of design of the lighting scheme for the site and its potential to impact on bats. Some (welcome) consideration has been given to minimising light spill on outer boundary features assumed as likely to be of value for bats. However, the robustness of this information, the prospects for it to be successful, and the weight that can be attached to it are infected by a number of flaws and omissions, as follows.

7.3.7 In the first instance, the mitigation has been designed in a knowledge vacuum. The applicant's failure to carry out bat survey work sufficient to determine how bats (including rare species) use the site, means that the lighting design is founded on unevidenced assumptions. For example, there is an unevidenced assumption that the belt of wet woodland and associated vegetation along the site's western boundary is of higher importance for bat foraging and commuting than other tree/hedgerow and grassland interfaces within the site, some of which will be wholly lost.

7.3.8 Secondly, the lighting assessment and scheme design restricts its considerations to street lighting. This may be the only element that the applicant feels it can (or wants to) control through design but it is patently not the only element that has the potential to generate impacts. No consideration has been given to the impact of light spill from the windows of the proposed properties, despite these being sources of light impact in many cases far closer to and/or directly facing the features acknowledged as worthy of protection from light spill.

7.3.9 Finally, no consideration has been given to the impacts (and any scope to control them) in respect of future occupants installing exterior and/or security lighting – including within gardens backing directly on to features the applicant acknowledges may have (as yet undetermined) value for local bat populations. Factors such as these have clear potential to wholly nullify any achievements secured from restricting spillage from the street lighting design.

7.3.10 In terms of **compensation**, this is placed at the bottom of the mitigation hierarchy for good reason. It is a "last resort" option in the event that avoidance and mitigation is demonstrably unworkable and where the need for and benefits of the development in a particular location are seen as overriding.

7.3.11 Most of what the applicant sets out as 'mitigation' in response to the significant impacts it itself acknowledges (due to habitat loss and damage, wholesale displacement from the site of protected species, displacement or loss of a county important invertebrate fauna and locally significant bird fauna and a suite of other impacts), is in fact compensation.

7.3.12 The applicant acknowledges that the habitat losses on the site cannot be compensated within the application site, nor even through appropriating Memorial Field for interventions (and thus reneging on its commitment to leave the field untouched and continue its current management). It acknowledges that this net loss of biodiversity will mean that the proposals fall short of compliance with both national and local planning policy. Instead of looking to avoidance and mitigation to improve this position, the applicant seeks to resort to offsetting. Paying upwards of £100,000 to deliver habitats elsewhere. No detail is provided on where, or what habitats. No comment is provided on whether these recreated habitats elsewhere might have any prospect of providing alternative habitat for the rare bats and invertebrates displaced from the site, nor the declining bird species that will not use the future development, nor the other protected and non-protected fauna that will be displaced.

7.3.13 In the absence of such detail, the default position is that the residual impact of the proposals, after mitigation, remains **a significant harmful effect on and net loss of biodiversity, significant at least at City-wide (District) level, and in respect of invertebrates, resonating at County level.** The policy implications of this are discussed in Chapter 8.

8 EXTENT TO WHICH PROPOSALS COMPLY WITH PLANNING POLICY

8.1 National Policy

8.1.1 The National Planning Policy Framework (NPPF) sets out national policy on nature conservation and biodiversity in the context of development planning and decision making, at Chapter 16 paragraphs 174 to 188.

8.1.2 **Paragraph 174** states:

> *"174. Planning policies and decisions should contribute to and enhance the natural and local environment by:*
>
> *(a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
>
> *(b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
>
> *(c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
>
> *(d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
>
> *(e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
>
> *(f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

8.1.3 In respect of **NPPF para 174(a)**, the site meets the threshold, in terms of biological interest, for designation and policy protection as an Oxford City Wildlife Site. The only reason it does not already benefit from such a designation is due to deficiencies in the forward planning process that saw it allocated for development without proper investigations into its suitability. Whilst 174(a) suggests that the protection afforded to sites of biodiversity value should be applied "*in a manner commensurate with their statutory status or identified quality in the development plan*", this of course presupposes that the forward planning process is robust enough to have identified such sites prior to their being considered for development. That is demonstrably not the case in this instance, where ecological surveys in 2017 in preparation for the Local Plan were cursory and conducted

without even setting foot on the site. The body of ecological information that has since come to light in relation to this site brings into sharp focus how unreliable such surveys, and their conclusions were, notwithstanding the caveats the surveyors themselves sought to apply, and which appear to have subsequently been disregarded. 174(a) should therefore be applied as if the site was duly designated as an OCWS. To do otherwise would be to dispense with evidence-based decision making and to seek to make evidence subordinate to reliance on errors and deficiencies.

8.1.4 In respect of **NPPF para 174(b)**, the planning system in England is somewhat bereft of clear guidance on how to apply due weight to matters such as the 'benefits of ecosystem services'. In Wales, the provision of Ecosystem Services Assessments (ESAs) as a means to inform planning decisions is increasingly commonplace. It is noted that the applicant has not engaged with this matter and therefore FOIV have commissioned an Ecosystem Services Assessment from Bioscan, which is the subject of a separate document. It concludes that the impacts on ecosystem services provided by this greenfield site, including to adjoining areas such as the Quiet Route, will be major adverse, and therefore the failure of the applicant to even recognise such attributes is inherently in conflict with paragraph 174(b) of the NPPF.

8.1.5 174(c) concerns the coast and is not relevant here. **NPPF para 174(d)** requires plan-making and decision making to minimise impacts on and provide net gains for biodiversity. By the applicant's own admission, the proposals will result in a net loss of biodiversity, measured via application of Metric 3.1, even including appropriation of the adjoining Memorial Field despite hat being outside the development red line. The Metric 3.1 trading rules will also not be met. The applicant has chosen not to respond to this failure of compliance by recourse to the mitigation hierarchy. It has not considered alternative sites nor alternative configurations to avoid or minimise impacts. It has not even considered the mitigating effect that might be achievable by reducing the number of units proposed from 32 to the minimum stipulated in the site allocation policy (29). This is an absolute failure of compliance as the applicant is clearly placing maximisation of development above the need to have regard to the mitigation hierarchy and lessen the negative effects it acknowledges will arise. Rather, it seeks to leapfrog the hierarchy to the last resort option of off-site compensation – with no detail provided as to where, in what form or when such compensation will be delivered, obviating the ability for decision-makers to assess its adequacy and relevance to the impacts. The net negative impacts on biodiversity and the failure to accord with the mitigation hierarchy fail all relevant tests at national level. They also fail one of the key tenets of the site allocation policy at local level (see below).

8.1.6 In relation to **NPPF para 174 (e)**, this is of most relevance in respect of water quality. The independent hydrological report produced by Water Resource Associates has determined that there are major deficiencies in the flood risk assessment, in the design of the surface water drainage scheme and in the absence of consideration of the implications of foul water, given local sewage capacity exceedances and the major local problem of frequent untreated sewage discharges into the Thames. These concerns have significant implications for the local and wider receiving environment, including the nearby Iffley Meadows SSSI, and the poor designs and absence of detail on drainage matters falls

substantially short of providing requisite assurances that local water quality will not be degraded as a direct or indirect consequence of this development. Furthermore, the applicant appears to have failed to take into consideration physical impacts on the adjoining ditch and associated habitat (including for protected species) from construction and installation of surface water outfalls and foul drainage connections, and from related works that the applicant alludes to, including tree removal, dredging and reprofiling of the channel.

8.1.7 **NPPF para 174(f)** is considered to be engaged in the context that adjoining land at Oriel Field may be subject to contamination, and the applicant has provided insufficient detail on its proposals for the adjacent ditch and for the construction of the connection to the main sewer network, to be able to rule out impacts from mobilisation of contaminants from the historic landfill there.

8.1.8 **NPPF para 175** states:

> *"175. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries".*

8.1.9 The site was allocated in clear contravention of this policy direction and guidance. Grossly inadequate effort was applied to determining whether the site was of 'least environmental or amenity value', as has since been exposed by the applicant's own studies in support of the application, even without regard to the independent studies by ourselves and others. The same can also be said of the omission of the site from the identification and mapping of green infrastructure and site's qualifying for designation as part of the last plan-making process.

8.1.10 Paragraphs 176-178 are not relevant to the site and local context as they concern land within national parks. **NPPF para 179** states:

> *"179. To protect and enhance biodiversity and geodiversity, plans should:*
>
> *(a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity ; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation ; and*
>
> *(b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

8.1.11 Once again, this policy was failed at the Plan-making stage. Grossly inadequate effort was applied to determining the site's biodiversity value prior to allocation and no regard appears to have been had at all as to whether it should be identified, mapped and/or designated for its biodiversity interest, nor included as a logical extension and integral part of the adjoining green infrastructure. Consequently, the plan-making process failed to identify that the site was a prime candidate for 'restoration of priority habitats', for the 'protection and recovery of priority species (grass snake, bats, priority birds including cuckoo and others including priority species of invertebrate'. In correspondence around this issue, the Council have suggested that they satisfied themselves that development of the site was achievable whilst securing measurable net gains for biodiversity, but the applicant has subsequently been forced to accept in the application submission that it cannot and now seeks to offset the significant on-site biodiversity losses, without providing any detail as to what is proposed by way of offset. The application submission has merely confirmed and clarified the extent of the errors made at Plan-making stage.

8.1.12 **NPPF para 180** is the key determinative policy guiding decision-making on planning applications. It states:

> *"180. When determining planning applications, local planning authorities should apply the following principles:*
>
> *(a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
>
> *(b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
>
> *(c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
>
> *(d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."*

8.1.13 **NPPF para 180 (a)** concerns the aforementioned 'mitigation hierarchy'. The applicant has singularly failed to engage with this, clearly working on the assumption that because the land benefits from a (flawed) Local Plan allocation, it does not need to engage with 'avoidance, mitigation or compensation'. This presumption is not a sustainable approach to land-use planning. When it became apparent during the course of the applicant's studies that the site was far more constrained by environmental and other factors than had been allowed for in the Local Plan process, the obligation to engage with the mitigation hierarchy bit. However, this was very evidently not done. Consequently, the applicant, notwithstanding its acceptance of net harms in relation to biodiversity and other matters, has not given any consideration to alternative sites, nor to reducing the intensity of development (even to the level allowed for under SP42 which requires delivery of a minimum 29 units). Instead, the applicant has defaulted to the last resort - compensation - in nearly all cases where harms have been identified. Most particularly in the references to unspecified offsite biodiversity mitigation which cannot be measured, quantified, assessed or otherwise weighed in the balance. **The clear compunction of para 180(a) in this context is refusal of planning permission.**

8.1.14 **Para 180(b)** concerns Sites of Special Scientific Interest. As recognised in the LP site allocation Policy SP42, the site is proximal to and has the potential to affect the Iffley Meadows SSSI. Most particularly, this is via impacts to surface water quality, including in the ditch adjoining the site which is proposed to take surface water discharge, and which itself discharges into the Thames a short distance away, at a location opposite and partly upstream of the SSSI. As discussed above, the deficiencies of the applicant's hydrological assessment and in particular its surface water drainage design, which includes barely any genuine SuDS components and instead relies on underground storage and the bare minimum of pollution control (a two-stage separator) prior to discharge to this ditch, means that no confidence can be had that the SSSI will be protected from impacts arising from the site. This is particularly so in 'first flush' high rainfall and flash flooding events when the system can be expected to be overwhelmed, the two-stage separator to be rendered dysfunctional and when high water conditions are likely to lead to Thames water being deposited onto the flood plain meadows of the SSSI. There are also concerns about the inability of local sewage infrastructure to cope with the waste water from the additional 160 or so residents, exacerbating the problem of regular untreated sewage discharges into the Thames, with potential consequences for downstream SSSI. Despite these concerns and deficiencies, and the statutory obligations on the applicant, as a public authority, to conserve SSSIs, these matters have been given scant or no consideration. There is no cumulative impact assessment at all, despite the proximal developments of Iffley Mead and the (under construction) Court Place development both having the potential to act in-combination and magnify such effects.

8.1.15 **Para 180(c)** concerns 'irreplaceable' habitats which include ancient lowland meadow grassland communities. The site does not contain grasslands meeting that definition at present, but there are clear indications, as explored earlier in this report, that the grassland has origins in MG5 type communities and is recoverable to those, by virtue of a

lack of soil disturbance, excess fertility and the presence of a residual suite of species associated with such habitat.

8.1.16 **180(d)** concerns the ability of developments to secure net gains, where sited on low value sites and where opportunities for enhancement exist. The proposed development will, by the applicant's own admission, deliver net loss of biodiversity both on and around the site.

8.1.17 Paragraphs 181 and 182 concern 'habitats' sites, being sites originally designated pursuant to the European habitats and birds directives (and their implementing domestic legislation), as well as Ramsar Sites. These paragraphs are not directly relevant to this application.

8.2 Local Policy

8.2.1 As has been discussed, the northern fields of the site represent site allocation SP.42 – 'Land at Meadow Lane' in the adopted Oxford Local Plan 2036. The supporting wording at 9.202 of the Local Plan states:

> *" A biodiversity survey has found that the site does not meet the criteria for an Oxford City Wildlife Site. However, the biodiversity value of the site and impact of development understood* [sic]*, avoided and mitigated or compensated for."*

8.2.2 As discussed in previous sections of this report, the 'biodiversity survey' referred to comprised a remote view of the site from outside its boundaries. On any level this is insufficient to provide a robust assessment of nature conservation interest and value, still less to determine qualification or otherwise against City Wildlife Site criteria. In all the correspondence there has been between local residents and the Council over the failures that led to allocation, there has never been any evidence presented of a detailed assessment against the Oxford City Wildlife Site criteria of the kind presented in this report, and which would support the above statement. The first part of the above statement is therefore wrong on the facts, and has shown to be wrong by the results of the surveys carried out by the applicant, pursuant to the second part of the statement – as incomplete as they are. It is a clear illustration of failure in the forward planning process.

8.2.3 The main wording of **Policy SP42**, at page 193 of the Local Plan, is as follows:

> *"Planning permission will be granted for residential development at Land at Meadow Lane. The minimum number of homes to be delivered is 29. Other complementary uses will be considered on their merits.*
>
> *A biodiversity survey will be expected to assess the biodiversity value of the site and it should be demonstrated how harm will be avoided, mitigated or compensated.*
>
> *Development should be designed to ensure that there is no adverse impact on the Iffley Meadows SSSI. To minimise impact upon the Iffley*

Meadows SSSI, development proposals will be expected to incorporate Sustainable Urban Drainage Systems and may be required to be accompanied by a groundwater study.

A planning application must be accompanied by a site-specific flood risk assessment and development should incorporate any mitigation measures."

8.2.4 The biodiversity survey required by the Policy has concluded that there will be net harm to biodiversity from the proposed development. The applicant has provided no evidence to show how the mitigation hierarchy has been engaged with the avoid or mitigate that harm in line with national policy. Instead, there is immediate recourse to compensation, albeit the nature, location, timescale, extent and detail of such compensation is not provided – merely reference to paying sums of money towards delivery of habitats somewhere else in Oxfordshire. Absent the detail of such provision, neither the Council nor the public are in any position to assess whether it is adequate to counteract the significant adverse losses of biodiversity from the site and Iffley locality, nor to assess the relevance of the compensation to the City Council's own objectives for biodiversity within the city limits. As things stand, therefore, the requirements of Local Plan Policy SP42 cannot be said to have been met in respect of compliance with the biodiversity provisions within it.

8.2.5 Notwithstanding the fact of the site allocation, it is also necessary for the proposed development to be compliant with national policy see above) and at local level with the development plan as a whole. In this context, the relevant local policies in terms of biodiversity conservation, and Oxford City Council's commitments towards it, are as follows:

8.2.6 **Policy G1** relates to protection of the City's Green and Blue Infrastructure Network. The supporting text to the policy recognises the value of green spaces not only for the maintenance and conservation of the City's wildlife and biodiversity resources, but also for the social, economic and environmental regulation services they provide. The supporting text also recognises, at 5.4 on page 73, that the mapped Green and Blue Infrastructure shown on the Local Plan Proposals Map, and arising out of the Oxford Green Infrastructure Study, may not encompass all sites that are important to the network. Specifically, it states (emphasis added):

"Some open spaces have a specialist function that is protected, which might be biodiversity, Green Belt, allotments or open air sports. <u>These sites might be in or outside of the Green and Blue Infrastructure Network</u>. Policies G2, G3, G4, and G5 set out specific considerations in relation to these sites. Any open space shown on the Policies Map as protected by Policy G1, G2, G4 or G5 is considered to have public value and to meet the definition of open space set out in the Glossary."

8.2.7 The main wording of Policy G1 itself is as follows:

*"**Policy G1**: Protection of Green and Blue Infrastructure Network*

Green and open spaces and waterways of the Green and Blue Infrastructure Network are protected for their social, environmental and economic functions and are defined on the Policies Map.

Planning permission will not be granted for development that would result in harm to the Green and Blue Infrastructure network, except where it is in accordance with policies G2- G8.

Any loss of water-based recreation facilities, support services for boat users or other facilities that enable the enjoyment of the blue infrastructure network, must be replaced by a facility in another equally accessible and suitable location."

8.2.8 The site is contiguous with and forms a logical extension to the mapped areas of Green Infrastructure adjoining it to the west, including Oriel Field, the Thames corridor and Iffley Meadows SSSI beyond. It complements and enhances the social, economic, biodiversity and well-being attributes of the mapped areas, for example in providing a refuge for larger fauna such as [redacted] and deer that are otherwise constrained by the open access and heavy dog-walking use of Oriel Field. Glimpses of such wildlife offer clear well-being benefits to users of both Oriel Field and the Meadow Lane pedestrian route, but in biodiversity terms the site undeniably adds to the carrying capacity of the network for a whole range of species, and logically should be considered as part of the recognised network.

8.2.9 **Local Plan Policy G2** is more specifically focused on biodiversity and geodiversity. The preamble to the main policy wording recognises that the designated sites identified on the Local Plan proposals map are not a static entity, stating:

"This list of sites will be reviewed and maintained throughout the Local Plan period. There are also undesignated sites that support nationally or internationally protected species, Red Data Book species or habitats and species of principal importance (listed under S41 of the Natural Environmental and Rural Communities Act, 2006).".

8.2.10 The natural and logical trigger for review is the emergence of information indicating that a site of is sufficient value to merit one of the designations referred to. In this context, and notwithstanding the site allocation, the Council is under a compunction – consistent with its duties under the NERC Act – to have regard to biodiversity in the exercise of its functions. This duty is strengthened under the Environment Act 2021. Faced with clear evidence that the site merits designation, a review process should be triggered. The alternative, to infer that 'the opportunity for designation has passed', is ecologically nonsensical and arguably fails the duty. In any event, the site should be treated in policy

compliance terms as if designated, not disregarded due to the failures that have hitherto left its value unrecognised.

8.2.11 In this context, the site sits more comfortably within the text at 5.6 of the Local Plan, and not 5.7 where sites with lower levels of biodiversity value are discussed as less of a constraint, subject to appropriate avoidance, mitigation and compensation. As discussed earlier, the applicant has failed to engage properly with the mitigation hierarchy in any event.

8.2.12 Following on from this, the main policy wording of Policy G2 states, with emphasis added:

> *"**Policy G2**: Protection of biodiversity and geo-diversity*
>
> *Development that results in a net loss of sites and species of ecological value will not be permitted.*
>
> *Sites and species important for biodiversity and geodiversity will be protected.*
>
> *Planning permission will not be granted for any development that would have an adverse impact on sites of national or international importance (the SAC and SSSIs), and development will not be permitted on these sites, save where related to and required for the maintenance or enhancement of the site's importance for biodiversity or geodiversity.*
>
> *Development proposed on land immediately adjacent to the SSSIs should be designed with a buffer to avoid disturbance to the SSSIs during the construction period.*
>
> *On sites of local importance for wildlife, including Local Wildlife Sites, Local Geological Sites and Oxford City Wildlife Sites, on sites that have a biodiversity network function, and where there are species and habitats of importance for biodiversity that do not meet criteria for individual protection, development will only be permitted in exceptional circumstances whereby:*
>
> *a) there is an exceptional need for the new development and the need cannot be met by development on an alternative site with less biodiversity interest; and*
>
> *b) adequate onsite mitigation measures to achieve a net gain of biodiversity are proposed; and*
>
> *c) where this is shown not to be feasible then compensation measures will be required, secured by a planning obligation.*
>
> *Compensation and mitigation measures must offset the loss and achieve an overall net gain for biodiversity. For all major developments proposed on greenfield sites or brownfield sites that have become vegetated, this should be measured through use*

of a recognised biodiversity calculator. To demonstrate an overall net gain for biodiversity, the biodiversity calculator should demonstrate an improvement of 5% or more from the existing situation. Offsetting measures are likely to include identification of appropriate off- site locations/projects for improvement, which should be within the relevant Conservation Target Area if appropriate, or within the locality of the site. When assessing whether a site is suitable for compensation, consideration will be given to the access, enjoyment and connection to nature that the biodiversity site to be lost has brought to a locality. A management and monitoring plan might be required for larger sites. The calculation should be applied to the whole site."

8.2.13 The application proposals fail to comply with Policy G2 on numerous levels, as follows:

8.2.14 Firstly, the development will on the applicant's own Metric-based assessment, result in net loss of biodiversity.

8.2.15 The policy requires that the mitigation hierarchy be engaged to explore alternative sites, designs, configurations to avoid such net loss. There is no evidence presented with the application that this has been done.

8.2.16 The applicant's on-site mitigation and compensation appears cursory, and predicated on the basis that the development design is fixed and not for changing. Despite Policy SP42 requiring a minimum of 29 units, the applicant proposes 32. This elevation of development intensity can only exacerbate the net loss BNG figure, and yet there is no consideration of 'avoidance' or 'mitigation' via reducing the development density. This is a failure of compliance with both Policy G2 and indeed national policy.

8.2.17 Rather than considering a more sensitive design or alternative location, the applicant recourses to the 'last resort' option, leapfrogging the sequential steps of the mitigation hierarchy. The applicant suggests that the net loss of biodiversity will be offset elsewhere, but has provided no detail on where, how, what or when, still less met the policy requirement. Even where such an approach is allowed for on sites of lower biodiversity interest under Policy G2, the policy requires that "*appropriate off- site locations/projects for improvement*" are identified and that these "*should be within the relevant Conservation Target Area if appropriate, or within the locality of the site*". The applicant has provided no information on these matters.

8.2.18 The policy also requires that, when assessing whether a site is suitable for compensation "consideration will be given to the access, enjoyment and connection to nature that the biodiversity site to be lost has brought to a locality. A management and monitoring plan might be required for larger sites. The [BNG] calculation should be applied to the whole site." Again, the applicant has failed to provide the requisite information and thus no met the stated terms of the policy. Nor has it provided adequate reassurances that Iffley Meadows SSSI will be protected from surface water pollution impacts, nor has it demonstrated that the need for the development is 'exceptional'.

8.2.19 The remaining Local Plan policies of particular relevance to biodiversity matters include Policy G7: Protection of existing Green Infrastructure Features and Policy G8: New and enhanced Green and Blue Infrastructure Network Features.

8.2.20 The preamble to Policy G7 states "Green infrastructure features include hedgerows and trees" and sets out the expectation that in order to comply with the policy, new developments should incorporate such features wherever possible. The policy wording is as follows:

> *"**Policy G7**: Protection of existing Green Infrastructure features*
>
> *Planning permission will not be granted for development that results in the loss of green infrastructure features such as hedgerows, trees or woodland where this would have a significant adverse impact upon public amenity or ecological interest. It must be demonstrated that their retention is not feasible and that their loss will be mitigated.*
>
> *Planning permission will not be granted for development resulting in the loss or deterioration of ancient woodland or ancient or veteran trees except in wholly exceptional circumstances. Planning permission will not be granted for development resulting in the loss of other trees, except in the following circumstances:*
>
> *a) it can be demonstrated that retention of the trees is not feasible; and*
>
> *b) where tree retention is not feasible, any loss of tree canopy cover should be mitigated by the planting of new trees or introduction of additional tree cover (with consideration to the predicted future tree canopy on the site following development); and*
>
> *c) where loss of trees cannot be mitigated by tree planting onsite then it should be demonstrated that alternative proposals for new Green Infrastructure will mitigate the loss of trees, such as green roofs or walls."*

8.2.21 The application proposals involve the wholesale removal of an internal field boundary hedge, the partial removal (and almost certain replacement and future degradation and loss) of another (along Meadow Lane) and the loss of >50 trees (defined as tree specimens with a trunk diameter >150mm at breast height). As has been discussed, the applicant has not engaged with the mitigation hierarchy to avoid or minimise these losses, but instead has defaulted to compensation in the form of new and in large part non-native planting of suburban street trees. The AIA does provide an assessment of canopy change but this is rendered wholly unreliable by the failure to account for future canopy development and expansion of existing stock; it merely compares the position >25 years after the proposed

planting with the position now, with no account given to the position in >25 years absent the development. The AIA is also deficient in a number of other respects and fails to adequately assess impacts on the retained GI. The application proposals therefore fail to comply with this policy in a number of respects.

8.2.22 Finally, in terms of biodiversity policy, Local Plan Policy G8 concerns 'New and enhanced Green and Blue Infrastructure Network Features'. This policy applies where residential development that is otherwise policy compliant, provides an opportunity to provide or enhance existing open space and green and blue infrastructure features, either within developments sites or beyond. Included in such enhancements are the delivery of biodiversity enhancements within the Conservation Target Areas (CTAs) such as the Thames and Cherwell at Oxford CTA adjoining the site.

8.2.23 The policy states (emphasis added):

> *"**Policy G8**: New and enhanced Green and Blue Infrastructure Network Features*
>
> *Development proposals affecting existing Green Infrastructure features should demonstrate how these have been incorporated within the design of the new development where appropriate. This applies to protected and unprotected Green Infrastructure features, such as hedgerows, trees and small public green spaces.*
>
> *All proposals requiring a Design and Access Statement should demonstrate how new or improved green or blue infrastructure features will be incorporated, which should contribute to the following, except where not relevant:*
>
> *i. public access*
> *ii. health and wellbeing, considering opportunities for food growing, recreation and play*
> *iii. biodiversity*
> *iv. creating linkages with the wider Green Infrastructure Network (and the countryside)*
> *v. climate change (including flood risk and sustainable drainage)*
> *vi. character/sense of place*
> *vii. SuDS*
> *viii. connectivity of walking and cycling routes*
>
> *Proposals for green or brown roofs and walls will be supported. All major developments that include flat or gently sloping roofs should incorporate green or brown roofs where feasible, which should be designed to be low maintenance, or if they are not a maintenance plan should be provided.*

For residential sites of 1.5 hectares and above, new public open space of 10% of the area covered by residential development is required. For mixed-use sites, the area of residential use should be used for that calculation, and 10% of that space used as public open space. Where appropriate, applicants will be expected to enter into a legal agreement to ensure that the new public space is properly maintained, by means of a financial contribution to the City Council.

Planning permission will only be granted for developments that affect, or are likely to increase the use of Public Rights of Way if, by planning condition or planning obligation, they safeguard and improve or add to the Public Rights of Way network.

Planning permission will be granted for new water-based recreation facilities or extensions to existing facilities except where they would create unacceptable adverse environmental impacts or effects, or have an adverse effect on the environmental quality of Oxford's waterways and their surroundings."

8.2.24 The first part of the policy replicates G7, and the policy compliance failures related to that are discussed above. In terms of new provision (as opposed to protecting existing), the application proposes no biodiversity enhancements and will in fact deliver net loss. Such new planting as is proposed is mitigation and compensation, shown to be inadequate to comply with the policy by reference to the applicant's Metric 3.1 outputs. The applicant's proposed surface water drainage scheme is largely dependent on underground tanks and pipes and provides no substantive SuDS features. As confirmed in the independent heritage and landscape assessments, the development design is bland and incongruous with the local vernacular and historic character. The application damages the integrity and utility and public enjoyment) of the adjoining Quiet Route of Meadow Lane via hedgerow removal, loss of wildlife and related experience and via the introduction of traffic and overspill parking. And finally the green roof provision is cursory and will make no substantive biodiversity contribution. The application proposals provide scant open space within the development, which will have the effect of encouraging use of the adjoining Memorial Field for informal recreation, generating pressures to maintain it in a 'tidy' (e.g. regularly mown) condition, thereby working against any future management for biodiversity or protected species mitigation. Various plans within the application show footpath links to Memorial Field, which suggests that such *de facto* use is part of the development design.

8.3 Conclusions on planning policy compliance

8.3.1 Notwithstanding the base fact of the site's allocation, which is conclusively shown by subsequent studies to have been a failure of due process and diligence, the proposals fail to comply with a suite of both local development plan policies and national policy as set out in the NPPF. They do not even comply with the site-specific policy SP42.

9 OVERALL CONCLUSIONS

9.1.1 The information now available on the biodiversity interest of this site confirms that its allocation for development in the Oxford Local Plan 2036 was a failure of the forward planning process, and of compliance with NPPF paras 174-178.

9.1.2 The 'biodiversity surveys' referenced in the preamble to the Local Plan site allocation policy SP42 were extraordinarily cursory, yet (despite caveats issued by the surveyor themselves) were appropriated in support of the site allocation and the conclusion that the site did not merit protection for its biodiversity interest.

9.1.3 Subsequent and more thorough survey work carried out by ourselves and by the applicant has merely highlight the level of that failure. In direct contradiction to what is suggested in the adopted policy, the site comfortably qualifies for designation as an Oxford City Wildlife Site, meriting policy protection in line with Oxford City Council's commitments and statutory duties towards biodiversity conservation.

9.1.4 Notwithstanding that the applicant's ecological and arboricultural survey work helps to confirm the deficiencies of the Council's pre-allocation surveys, it falls short of minimum industry standards in a number of respects, and does not provide a robust platform for decision-making. Parts of the site that will be subject to impact were not even surveyed or considered, bat activity surveys were not carried out (missing two rare species - barbastelle and Nathusius' pipistrelle), the botanical surveys missed important indicator species and include a number of gross misidentifications. No bird surveys were done. The reptile survey only picked up common lizard and not grass snake which is also present. Otter use of the adjoining ditch was not picked up.

9.1.5 Bioscan's independent surveys determined that the site is dominated by good quality semi-improved grassland with a significant number of indicators suggesting relict MG5 (Lowland Meadow) grassland - and a site capable of being restored to that habitat category and condition. This would complement the green infrastructure of which the site is a logical part, and would further the targets of the adjacent Conservation Target Area. In contrast, the applicant (whilst accepting the good quality semi-improved grassland classification) failed to record a number of important constituent species, and has consequently undervalued the site.

9.1.6 The applicant's invertebrate surveys are the one element of the submission material that is of good quality. These conclude that the site is of County (i.e. Oxfordshire) importance, with a range of nationally rare and nationally scarce species, including a number for which there are no other records in the city, and very few in Oxon.

9.1.7 The applicant has withheld its BNG calculations - these have been requested in order that they can be independently assessed, but in any event, the applicant accepts that it cannot deliver net gain on the site, nor even if it includes the adjacent Memorial Field (which it had hitherto promised to leave uninfluenced by the development and which is outside the application redline). It instead seeks to 'offset' the biodiversity loss by a financial

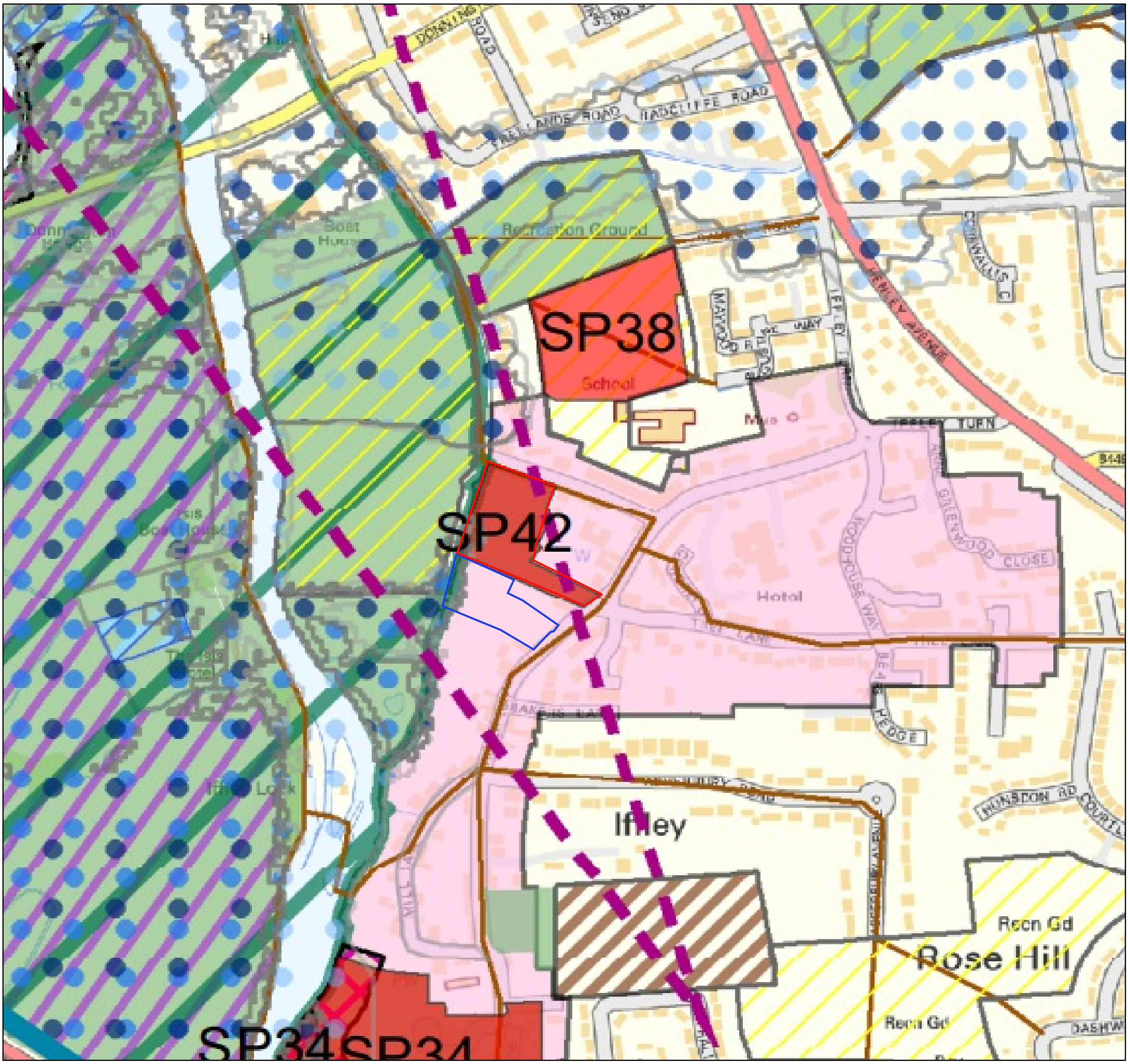
contribution towards habitat creation 'somewhere else, sometime'. This is a failure of good practice and offends one of the key stipulations of the site-specific Policy SP42, as well as Local Plan policy G2.

9.1.8 The applicant's design poses risks to water quality in the Thames, both from foul and surface water. The applicant proposes to discharge surface water from a drainage network devoid of significant SuDS features into the adjacent ditch, which comprises a ribbon of wet woodland habitat. No consideration is given to the impact on this ditch from the construction of outfalls, foul sewage connections and from the dredging and tree removal which will be inevitable, and which the applicant tacitly acknowledges may need to happen.

[redacted]

9.1.10 The application proposals fail a broad suite of national and local planning policies, on almost every level of engagement. This is no more than a function of a flawed forward planning process that has seen the site allocated on scant information. Notwithstanding that the site allocation is a matter of fact, the development proposals have to comply with the development plan, and with national policy, read as a whole. On this measure, the application proposals fail almost every applicable test and the clear conclusion is that planning permission should be refused.

Figures and Appendices



Title
Site Location and Local Plan policy context

Project	Client
Iffley	Friends of the Fields

Drawing No.	Revision	Project No.
Figure 1	-	E2059

Drawn	Checked	Date
RB	DW	February 2023

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Key

- Study area
- Ownership boundary
- SI — Semi-improved neutral grassland
- pSI — Poor semi-improved neutral grassland
- Non-native shrub
- Plantation woodland
- Wet woodland
- Tall ruderal
- S — Disturbed ground/spoil
- Built structure
- Significant non-woodland trees and shrubs
- Priority native hedgerow
- Non-priority hedgerow
- Fence
- Wall
- Wet ditch

Title
Habitat map

Project	Client
Iffley	Friends of the Fields

Drawing No.	Revision	Project No.
Figure 2	-	E2059

Drawn	Checked	Date
RB	DW	February 2023

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APPENDIX 1

Oxford Local Plan 1991-2001
Public Inquiry, March/April 1994

OXFORD CITY COUNCIL

DONNINGTON HOSPITAL TRUST **CITY P13**
Objections D267/003 and D267/004

SUMMARY

INTRODUCTION

1. This evidence relates to objections submitted by Donnington Hospital Trust in relation to the site shown in Document CITY P13/3. The Local Plan Proposals Map designates the site as Special Open Space (EN5) and the land between 60 and 68 Church Way is included in the pink notation (HO3). There is an overlap between EN5 and HO3.

2. The Trustees seek to exclude the site from EN5 and include it within HO3 so it can be used for unspecified charitable housing purposes.

ENVIRONMENTAL PROTECTION

3. The Local Plan includes various types of environmental policies which reflect different viewpoints and different scales; from the global to the local environment, and from its aesthetic to its physical aspects. In drafting the Local Plan, one of the aims was to adopt a more refined approach to the protection of open spaces in order that the underlying purposes of such protection should be more apparent and the policies themselves more robust as a consequence.

4. Policy EN5 is in accordance with Structure Plan policy CO9 and similar policies can be found in other Local Plans which firmly establishes its basis in planning. The Council has also recognised the need to identify special local qualities of Oxford's natural heritage and has afforded these areas the protection they merit.

5. The site and its relationship between the edge of the built up area of Iffley to its landscape setting of fields of rough grassland around the River Thames and views beyond of Boars Hill and Magdalen Tower can be better appreciated in the photographs in Document CITY P13/4, P13/5 and P13/6 rather than in words.

PLANNING & SITE HISTORY

6. In June 1984, at the Oxford Local Plan Inquiry, the overlap of the pink notation (HO4) and the Green Belt (CO1-2) was highlighted by Mr. Walker in his proof of evidence in response to objections made by Friends of Iffley. Also, another proposed amendment which was also

accepted, removed the pink notation (HO5) from the land between 68 and 78 Church Way. However, the pink notation continued to overlap the Structural Open Space (CO6) which replaced the Green Belt policy following the Inspector's report on the Local Plan Inquiry (see Document CITY P13/10).

CONSERVATION CONTROLS

7. The fact that the site is included within Iffley Conservation Area does not mean that no other policies are required. This argument would mean for example that a Green Belt and a conservation area should not overlap which is clearly nonsensical. These policies serve different purposes and they both can apply. The use of conservation area controls to protect settings has come under legal challenge and therefore, cannot be relied upon. If the Council wants to preserve an open space then it should say so in the Local Plan as EN5 does instead of leaving areas to be judged on merit which may lead to uncertainty.

HOUSING CONSIDERATIONS

8. Policy HO3 would be an inappropriate designation here since its purpose is to define existing residential areas not to propose extensions to them. This site would further contribute to the provision over the Structure Plan figure and as a consequence there is an objection on this count from the Department of the Environment. Also, PPG3 -Housing in paragraph 2 states, "a balance has to be struck between the need for development and the interests of conservation. There can be no question of sacrificing the green spaces which all towns and cities need for recreation and amenity."

9. There will always be strong development pressures within Oxford, therefore the Council is particularly concerned about the cumulative effects of infilling which could give rise to town cramming if all sites are not carefully considered and controlled.

CONCLUSION

10. The Donnington Hospital Trust has no doubt in the past made valuable charitable contributions to Iffley which were welcomed by the local community. The changes the Trustees now seek I believe would be unwelcome to the people living in Iffley as both the Friends of Iffley and the Preservation Trust support the Special Open Space designation for the site.

11. This site has been correctly shown on the Local Plan Proposals Map as Special Open Space (EN5) which protects this special local relationship of the edge of the built up area and its landscape setting. The site ideally should remain in its present state.

12. I do recommend two Proposed Changes to the Inquiry:

    a) 3019 - delete the pink notation on the Local Plan Proposals Map from 78 Church Way to 30 Mill Lane;

    b) 3020 - leave the pink along Church Way from numbers 50 to 68 and instead alter the boundary of EN5, so it no longer overlaps the pink but runs along the southern edge of 68 Church Way along the rear gardens to Meadow Lane.

DHT's plans for its Church Way land April 1994 p 1 & 2

APPENDIX 2

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OXFORD CITY COUNCIL

SITES AND HOUSING

Development Plan Document

Preferred Options

Consultation document

May 2011

Appendix 4

Sites rejected before or at the Pre-Options consultation

A city wide map showing the location of the sites is at the end of Appendix 4.

Site ID	Site name	How site identified	Site area (ha)	**Reason(s) for rejection** (rejected before Pre-Options consultation unless stated)
99	Land at Church Way	Call for sites	0.57	Development on the site would have a detrimental effect on the conservation area, as well as difficulties in creating a suitable access. The Iffley Conservation Area Assessment notes that the site is important because of the long views it allows out of the conservation area and across the fields to the Thames and beyond. The Landscape Character Appraisal of Oxford (2002) notes the importance of the low density development playing an important part in the character of the area. Development of this site would also result in the urbanisation of the view from the river to Iffley and would be counter to the linear nature of the village. Potential access is off Church Way, although the proximity of the roundabout opposite the Tree Hotel and the location on an inside bend mean it would be difficult to create a safe access.
100	Land at Meadow Lane	Call for sites	0.98	Development on the site would have a detrimental effect on the conservation area, as well as difficulties in creating a suitable access. The draft Iffley Conservation Area Appraisal describes this site as 'one of the important remaining open spaces within the village, a field once the village cricket and football field, now grazed by animals, again reinforcing the rural nature of the settlement.' The Landscape Character Appraisal of Oxford (2002) notes the importance of the low density development playing an important part in the character of the area. Development of the site would be harmful views and to the rural character and linear nature of the village. Potential access is off Meadow Lane or Church Way. Access would be straight onto a roundabout. Meadow Lane is a private road and there could also be difficulties providing an adequate sight line.

APPENDIX 3

Phase 1 Botanical Survey Target Notes for additional Oxford City sites – October 2017

These surveys were carried out on 23-24/10/2017 as requested by Oxford City Council. The timing of these sites visits is sub-optimal for recording botanical species interest, with some sites being grazed or recently cut. The following target notes indicate the general habitat type (Phase 1 categories) present on each site but further surveys are likely to be required to fully assess sites, especially where some diversity is indicated. There are many species that are less likely to be recorded at this time of year and additional survey is highly likely to result in additional species being recorded.

Map 1. Dunstan Park and Ruskin Fields

Dunstan Park and Ruskin fields

Dunstan Park (23/10/2017)

Dunstan Park is a small area of parkland. It has open areas of short mown amenity grassland with planted trees and small broadleaved woodland. It includes a tufa-depositing stream with previous records for important invertebrate species.

Target Note 1. Parkland with improved amenity grassland (short mown) with planted broadleaved trees. The grassland includes perennial rye grass, cock's-foot, Yorkshire fog, rough meadow-grass, creeping bent and red fescue with broadleaved herbs including creeping buttercup, white clover, red clover, broadleaved dock, curled dock, ribwort plantain, common mouse-ear and dandelion. Trees include Norway maple, horse chestnut, silver birch, wild cherry and sycamore.

Map 5. Land at Meadow lane, Iffley

Land at Meadow Lane

Land at Meadow lane, Iffley (24/10/2017)

The site was only seen from the site edge along Church Way and meadow Lane. The site could not be fully assessed but areas seen appear to comprise rough grassland (semi-improved neutral grassland) with areas of tall herb. Parts of the site could not be seen.

Target note 1. Semi-improved neutral grassland. The sward dominated by rough grasses with abundant false oat-grass. There is also Yorkshire fog, red fescue and cock's-foot with red clover, creeping buttercup, smooth hawk's-beard and ribwort plantain. There are some small patches of common reed. Tall herbs include locally abundant hogweed with nettle, dock species and garlic mustard. Marginal areas include wood avens, bramble, ivy and hawthorn. Trees include common lime.

Target note 2. Semi-improved neutral grassland with tall herb. The grassland appear similar to that described for TN1 with locally dominant hogweed and some areas of bramble. There are some English oak trees at the site edge.

Target note 3. Improved grassland. This part of the site is horse grazed. It was short-grazed at the time of the visit and few species could be identified. The hedge at the edge of the field includes elder and hawthorn with nettle, bramble, cleavers and ivy.

Grassland at TN1

Grassland at TN2

Pasture at TN3

APPENDIX 4

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OXFORD CITY COUNCIL

Oxford Local Plan 2036

ADOPTED 8th June 2020

Building a world-class city for everyone

Land at Meadow Lane

Site area:	0.989 hectares/2.443 acres
Ward:	Iffley Fields
Landowner:	Donnington Health Trust
Current use:	Grassland/pony paddock
Flood Zone:	FZ3b

9.201 The site comprises land used for horse grazing, with some trees and shrubs. The site sits within the Iffley village envelope and has potential for some sensitive housing infill. Any development proposals would be expected to conserve and enhance the unique characteristics of the Iffley Conservation Area in order to comply with the requirements of Policies DH2 and DH3. The building line should be followed on the frontage and the semi-rural frontage on Church Way should be retained, as well as the stone wall boundary and trees, particularly at Church Way. Development should be relatively low- density and two-storey with front and rear gardens and stone-walled boundaries. The impact of development on views through the riverside edge landscape of the Cherwell meadows to the west, and views back to Iffley from the west should be considered.

9.202 Access to the site can be achieved from Church Way or Meadow Lane. There is an existing field gate access to the site from Church Way. A biodiversity survey has found that the site does not meet the criteria for an Oxford City Wildlife Site. However, the biodiversity value of the site and impact of development understood, avoided and mitigated or compensated for.

9.203 Residential development at this site in Flood Zone 3a has been justified through the sequential test. A Level 2 Strategic Flood Risk Assessment was carried out for this site to examine part b) of the Exception Test (which relates to whether the development is safe). The Level 2 SFRA considered the proposed development was appropriate and additional mitigation and/or analysis may be required to demonstrate compliance with the Exception Test at the planning application stage. This is to be undertaken through a site-specific FRA supporting the planning application. The site specific flood risk assessment must demonstrate how the development will be safe otherwise planning permission will not be granted.

9.204 Given the existing pressures in the Gas Network and the increases that the new development proposed would create, upgrades to the network may be required. As such early discussion with the Gas Network is recommended to ensure that the timely delivery of infrastructure takes place to support development.

Policy SP42: Land at Meadow Lane

Planning permission will be granted for residential development at Land at Meadow Lane. The minimum number of homes to be delivered is 29. Other complementary uses will be considered on their merits.

A biodiversity survey will be expected to assess the biodiversity value of the site and it should be demonstrated how harm will be avoided, mitigated or compensated.

Development should be designed to ensure that there is no adverse impact on the Iffley Meadows SSSI. To minimise impact upon the Iffley Meadows SSSI, development proposals will be expected to incorporate Sustainable Urban Drainage Systems and may be required to be accompanied by a groundwater study.

A planning application must be accompanied by a site-specific flood risk assessment and development should incorporate any mitigation measures.

Lincoln College Sports Ground, Bartlemas Close

Site area:	2.34 hectares/5.78 acres
Ward:	Cowley Marsh
Landowner:	Lincoln College
Current use:	Private sports pitch
Flood Zone:	FZ1

9.205 The site is currently private open air sports facilities for Lincoln College who consider it surplus to requirements as they plan to share the pitch of Jesus College to the north. The site has limited access to outside groups on an ad hoc basis. The site lies off the north-eastern side of Cowley Road to the north east of a suburban housing block that sits between Bartlemas Close, Belvedere Road, Kenilworth Avenue and Barracks Lane.

9.206 Residential development would be an appropriate use on this site. The loss of the majority of the sports facility is considered justified because of the need for and benefits of new housing. Sports provision must be retained unless an alternative provision is made or contributions are made to improving a local facility such that its capacity increase replaces what is lost. If an alternative site is found then 10% of the site will be required for new public open space which should be sited to make existing residents feel welcome to use it.

9.207 Any development should be designed with buildings of form, massing (roof profiles) height and façade materials that allow the built forms to recede in the backdrop to views from and across Bartlemas. In addition, landscape design would need to be a fundamental consideration at the

APPENDIX 5

Oxford City Wildlife Sites

Selection criteria

Version 1 March 2017

***Oxford City logo**

Thames Valley
Environmental Records Centre

Background

There are currently several different levels of designation for sites of importance to wildlife with differing degrees of protection through UK and European wildlife and planning law. These include sites of European importance (Special Areas of Conservation and Special Protection Areas), sites of national importance (such as Sites of Special Scientific Interest (SSSI)) and sites of county importance (such as Local Wildlife Sites (LWS)). At a more local level some areas also identify sites that are of significance for wildlife at a district, parish or city level.

In Oxford City, Sites of Local Importance for Nature Conservation (SLINC) were identified to highlight the most import wildlife sites that lacked other designations. Sites currently listed as SLINCs have been included based on knowledge of local experts and information from local groups. Some sites originally included as SLINCs (following surveys in 2008-10 and consideration by the LWS selection panel) have now been accepted as LWS. The information used for selection of SLINCs is now, in many cases, out of date and the value of some sites may have changed.

The inclusion of sites thought to be of City importance has so far been based on local expertise and knowledge but there is currently a lack of written guidelines detailing the criteria used for selecting such sites. Re-assessment based on clearly defined criteria is desirable to ensure the sites included accurately represent the key wildlife sites in Oxford City that are not otherwise designated. This report provides recommendations for criteria which could be used for selection of wildlife sites of value at the City level.

What are Oxford City Wildlife Sites?

Oxford City Wildlife Sites are sites that have significant value for wildlife for the City. These sites are one tier below LWS in status, i.e. their interest is not considered sufficient to be of county importance but are worthy of recognition at the City level. In many cases, with appropriate management Oxford City Wildlife Sites may attain LWS quality in the future.

Sites currently included as SLINCs include:

- Denotified Local Wildlife Sites retaining some nature conservation interest due to the presence of NERC S41 Habitat and Species of principle importance (priority habitat and species) (but fail to meet the standard required for selection as LWS).
- Sites that have been surveyed for Local Wildlife Site status that were rejected but have nature conservation interest that can be considered valuable at the City level due to the presence of priority habitats and species.
- Nature reserves which have no other status.
- Other sites that have been previously surveyed which have nature conservation interest of that can be considered valuable at the City level due to the presence of NERC S41 Habitat and Species of principle importance (priority habitat and species).
- Potentially valuable wildlife corridors including railway cuttings and watercourses (including streams and canals).
- Lakes with bird interest
- Other community sites with significant management for nature conservation.

Selection Criteria

The following criteria are based on the 'Ratcliffe approach' which was drawn up in 1977 as a guide for the selection of biological SSSIs published by the Nature Conservancy Council (since succeeded as Natural England). This approach is widely accepted and used for the wildlife site selection at different levels of geographic importance including LWS in Oxfordshire. The criteria developed by Ratcliffe have been modified to ensure that sites of local (not just national) importance will be selected.

Within Oxfordshire, LWS are identified through criteria based primarily on the presence of good quality examples of NERC S41 Habitat of principle importance (priority habitat) and/or a significant population of rare or otherwise notable species/species assemblage for the County. The full selection criteria and further details on the survey and designation process are available on the TVERC website - http://www.tverc.org/cms/content/local-wildlife-sites (BMERC and TVERC 2017) It is proposed that criteria for the selection of Oxford City Wildlife sites are based on similar natural features but with threshold levels of wildlife interest set at a level more appropriate to recognising significance at the City level and structured to allow selection of a wider range of sites that have high local importance for public engagement and education.

Wildlife value criteria

1A. Naturalness

Priority habitat

This criterion identifies sites that include habitat similar to original natural habitats (i.e. similar to NERC S41 habitats) and have features associated with habitat continuity. Sites meeting this criterion will include a range of the species typically associated with the relevant NVC communities (for the priority habitat concerned) and have features associated with habitat continuity (such as species that are sensitive to disturbance or poor management). A list of the priority habitats recorded in Oxford City is included in Table 1.

Sites with remnant elements of priority habitat or more transitional communities can also be considered for inclusion, especially where there is current management for nature conservation and good prospects for improvement of the habitat condition in the future. Examples would include lowland meadow or lowland calcareous grassland that is transitional to rougher grassland communities due to lack of or inconsistent management.

The quality of the habitat should be taken into account and, for some habitat types, not all sites with priority habitat would be selected. Poorer examples of some habitats will be deemed to fail to meet this criterion in cases where their low diversity means that they are not of City significance. For example, this may include areas of habitat such as floodplain grazing marsh (that is improved grassland and lacks significant bird interest), lowland mixed deciduous woodland (that lacks diversity and species indicating habitat longevity), lowland wood pasture and parkland (that lacks significant veteran tree interest) and species-poor hedgerows.

TVERC & BMERC (2017) provides guidance on the plant community types typically found in Oxfordshire that relate to priority habitat and lists of the typical species. This includes reference to the relevant NVC plant communities (Rodwell (1991-5)).

Ancient and Veteran trees
Whilst not included as a Priority habitat (NERC S41 habitat) in their own right, veteran trees form important wildlife habitat. Veteran trees are often found within priority habitat such as lowland mixed deciduous woodland, wood pasture and parkland or traditional orchard but can occur in other habitats. Veteran trees found outside priority habitat can be considered in their own right under this criterion.

Hedgerows
All hedgerows composed of 80% or more native species form Priority habitat (NERC S41). Only those that are particularly species-rich examples and/or form important green corridors will meet this criterion. Hedgerows that support rare species should be considered under criterion 1B.

1B. Rarity

This criterion identifies sites that include:

- a habitat considered rare in Oxford City; or
- a population or assemblage of species deemed of significance at the City level.

Rare species
Species considered should include:

- NERC Act (S41) Species of Principal Importance
- The Wildlife and Countryside Act 1981 (Schedule 1 and 8)
- Nationally rare or scarce species
- National red list species
- Oxfordshire Rare Plants Register Species and other species identified as rare at the county level
- Other uncommon species identified as having particular significance for the City

Some context can be found in the species sections of TVERC and BMERC 2009/2017 which indicates the level of interest deemed significant for Oxfordshire for many species. Sites that come close to meeting the LWS species criteria (but fall just below the required level of interest) will, in most cases, meet this criterion. Guidance from local experts should be sought (where required) to establish the local significance for particular rare species. Assessing species assemblages or populations will usually require quantitative data from repeat surveys.

There should be evidence that more mobile rare species are resident/breeding on the site or that it has features regularly used by that species (such as important feeding ground or roost) rather than a casual visit on a single occasion.

Rare habitats
The following habitats are considered rare in Oxford City:

- Lowland fens (valley head spring fens rather than floodplain fens)
- Wet woodland
- Traditional Orchard

1C. Size

This criterion recognises sites that include areas of habitat or species populations that are of particular significance for the City due to their size. Sites meeting this criterion will hold a substantial amount of the City resource for a habitat types or notable species population. For blocks of particular habitat, suggested threshold areas are provided in Table 2.

For some habitats, it is more appropriate to assess this criterion in terms of the size of species populations they support rather than acreage. For example, flood plain grazing marsh and standing water would usually be considered for the size of the bird populations they support.

Where several different habitats are present, the overall size of the site should be considered along with the extent of each individual habitat type.

Assessing the significant of a population of priority (or otherwise notable) species may require the guidance of local experts and advice should be sort where required.

1D. Diversity

Diversity is considered in terms of both habitat and species diversity.

Habitat diversity
Sites with a range of several different habitats and/or high structural diversity will meet this criterion.

Species diversity
Sites with species-rich habitat will meet this criterion. The numbers of species recorded that are typical of the priority habitats present and the range of plants indicative of habitat longevity found on the site can be useful in assessing this criterion (but should be considered with reference to their abundance and the wider diversity of species present).

Where significant interest for other species groups has been recorded (e.g. birds or invertebrates), the numbers of species recorded (by taxonomic group) can also be useful indicator of diversity but should be considered in the context of the amount of recorder effort.

Historic records should be considered separated from species recorded in recent years to allow assessment of the current level of diversity.

Where high diversity has been recorded historically for a particular species group, but no recent survey data is available, additional survey may be needed.

1E. Connectivity

To meet this criterion, a site does not have to connect with exactly the same habitat, although similar habitats should be near enough for species to move between them. Site that are within Conservation Target Areas and those that provide linking habitat between other designated wildlife sites or nature reserves would meet this criteria.

The length, as well as the area, of a site should be taken into account. A long thin site may be small in area but have high importance for wildlife e.g. a river corridor, green lane or species-rich hedgerow which links other sites of semi-natural habitats but is also important in its own right. The distance between similar habitats should lie within 500 metres to provide connectivity across

the landscape; this could be increased up to 1 km if connected by hedgerows or other semi-natural linear features.

1F. Fragility

Sites will be eligible for selection if they contain a habitat that is vulnerable to loss, damage and or degradation and could not easily be recreated. Examples of loss or damage would be sites where the habitat is vulnerable to degradation to poor condition through lack or inappropriate management and sites with habitat dependant on low nutrient condition that are being enriched by agricultural spray drift/runoff or dog fouling.

Some habitats are more easily re-creatable than others. Table 3 is an extract from BMERC & TVERC 2017 that provides information on which habitats should be considered fragile.

Species interest can also meet this be fragile. Populations that are vulnerable to pollution, inappropriate management and/or disturbance will meet this criterion if they would be unlikely to recolonise/difficult to reintroduce.

2A. Naturalness (Access to nature & education value criteria)

This criterion identifies sites with semi-natural habitat that fails to meet criteria 1A but includes features that are of significant value for public engagement with nature. Sites considered here will include semi-natural habitat and be managed for wildlife conservation aims.

In order to meet this criterion, sites will have value under one or more of the Wildlife criteria (1C, 1D and 1E).

Sites meeting this criterion are likely to include community woodlands and other community sites managed for nature conservation which have no other status.

2.B Value for appreciation of nature

Sites will be eligible for selection under this criterion if they are freely accessible to the public, offer engagement opportunities/events, are easily visible from a public right of way (with opportunities to see and engage with the wildlife features of interest found on the site) and/or add significantly to the natural aesthetics of the local area.

This criterion differs from the following 'value for learning' criterion (2.C) because people may appreciate the site for its natural feel or aesthetic value, rather than gaining knowledge about the environment.

2.C Value for learning

Sites will meet this criterion where there is current, regular use by local groups or educational establishments to educate people about nature. Examples of events meeting this criterion include Forest School site visits, fungus forays or guided walks by local groups or nature organisations that include passing on knowledge about the natural world.

2.D Recorded history and cultural associations

Sites will meet this criterion where there are records of long-term biological recording or known historical/cultural significance. Sites with regular recording and longstanding records collected from the site over at least ten years will meet this criterion. For example, this may include records produced by local and national recording schemes and societies (e.g. Butterfly Conservation transects, British Trust for Ornithology, BSBI quadrats). In some cases, they may be the location where important discoveries were made. These discoveries can add to the conservation value of a site. They can also provide an insight into historic land use and management of the site, including habitat change.

Sites with current cultural associations such as a site with an active 'friends of' or conservation group will qualify under this criterion. Inclusion of the site on the ancient woodland inventory will also qualify the site under this criterion.

Criteria structure

Sites should be selected where they meet:–

- Criteria 1. A and at least one of the following - Criteria 1 C, D, E, F; Criteria 2 B, C, D, or E; or
- Criteria 1. B; or
- Criteria 2. A and at least one of the other Criteria 2 features (B, C, or D)

1	Wildlife value criteria	Criteria met (Y/N)
A	Naturalness (S41 Priority habitat or remnant; Other natural feature of significant importance for the City)	
B	Rarity (species, habitat or other wildlife feature)	
C	Size (extent of habitat or species population size)	
D	Diversity (Of species and/or habitat types)	
E	Connectivity (in semi-natural habitat between wildlife site and/or identified as important species corridors	
F	Fragility	

2	Access to nature & education value criteria	Criteria met (Y/N)
A	Semi-natural habitat (including non-priority habitat) and managed for wildlife conservation objectives. To meet this criteria sites will also have value under one or more of the Wildlife criteria (1C, 1D and 1E)	
B	Public access and significant opportunities for	

	engagement with nature	
C	Significant value for learning	
D	Strong cultural associations/historic significance	

Boundaries

Usually whole management units should be included in the site boundary (e.g. whole fields or woodland blocks) that are defined both on the ground and on maps. It may be acceptable to include smaller areas in some circumstances but the location and extent of the site should be clearly defined on mapping and easily discernible in the field. Site would usually be at least 0.1 ha.

Exclusions

Residential gardens and buildings will not be included.

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TVERC & BMERC (2017) Berkshire, Buckinghamshire and Oxfordshire LWS selection criteria (Draft only at time of production)

Appendix

Table 1. Priority habitats (NERC Act S41 Habitats of Principle Importance) recorded in Oxford City

Coastal and Floodplain Grazing Marsh
Eutrophic standing water
Hedgerows
Lowland calcareous grassland
Lowland fens
Lowland meadow
Lowland mixed deciduous woodland
Lowland wood pasture and parkland
Ponds
Reedbeds
Rivers
Traditional Orchards
Wet woodland
Urban greenspace

Table 2. Suggested Size Thresholds; primarily based on TVERC habitat mapping 2016

Habitat	Suggested Threshold	Comment
Coastal and Floodplain Grazing Marsh	n/a	Bird population size supported by the site is likely to be more important for assessing this habitat
Lowland calcareous grassland	n/a	None mapped but known to be present in the City (i.e. Lye Valley and Cowley Marsh LWS)
Lowland meadow	6.7ha	3% of city resource
Lowland fen	0.4ha	3% of city resource
Reedbed	0.1ha	5% of city resource
Lowland mixed deciduous woodland	0.7ha	5% of city resource
Lowland wood pasture and parkland	n/a	Only one area mapped
Eutrophic standing water	n/a	Bird population size supported by the site is likely to be more important for assessing this habitat
Wet woodland	0.3ha	5% of City resource
Traditional orchards	0.35ha	5% of City resource
Open Mosaic habitat on Previously Developed Land	0.25ha	None currently mapped on TVERC habitats layer but ADAS/DEFRA 2010 guidelines suggest sites should be at least 0.25ha for this habitat

Table 3. Habitat fragility. This table is an extract from TVERC & BMERC 2017

Habitat	How easy is habitat to create?	Fragile?
Grassland (neutral and calcareous)	Neutral and calcareous grasslands are difficult to create. Disturbed soils (e.g. ploughed) take a long time to rebuild structure. Fertile soils can also take a long time to become nutrient poor through management. Newly created grasslands are often species poor for long periods. Many recreated grasslands never recover species found in undisturbed grasslands.	YES
Grassland (acid)	Acid grassland is possibly more robust and easier to recreate. Some invertebrate species might not colonise new acid grassland immediately.	NO
Lowland heathland	Heathland can be difficult to create, but degraded habitat can be restored by scrub removal. Heathland creation on former forestry sites is very successful, but recreated sites are not as diverse as old heathland. Some typical heathland species (e.g. birds and adders) are susceptible to disturbance.	YES
Standing waters (Eutrophic)	Eutrophic standing waters are easy to create, and tend to be better early on, declining after that without suitable management. Disturbance can impact on the site's interest for birds.	NO
Standing waters (other)	Other types of standing water are harder to create as they depend on specific water chemistry and quality. Species assemblages are vulnerable to pollution and invasive species.	YES
Ponds	Ponds are susceptible to damage but easy to re-create. They are easily damaged by pollution.	NO
Lowland fens (spring fed and valley mires)	Lowland fens are hard to create as they depend on the right hydrological and geological conditions being present. Peat deposits also take long periods to accumulate.	YES
Lowland fens (single species dominant)	Single-species dominant fens are easier to recreate, but susceptible to invasive species and hydrological change	NO
Floodplain grazing marsh	This habitat can be easily recreated. The species interest may be fragile. Ground-nesting and wintering birds are susceptible to disturbance. Summer flooding and fertiliser application are potential threats to floodplain meadows.	NO
Reedbeds	Reedbeds are easily created. Disturbance can be a problem on smaller sites. Species interest (e.g. birds) can be fragile as they are vulnerable to disturbance.	NO
Rivers	Rivers in general are very hard to create as their presence relies on the right geological, geomorphological and hydrological conditions to be present. Chalk streams are particularly hard to create as achieving the right water quality is very hard.	YES
Woodland	Woodland is difficult to recreate as it takes a long time to develop the structure and function of priority habitat. The niches relied on by habitat specialists (e.g. saproxylic species) also require long time periods to create. It is impossible to recreate ancient woodlands over human timescales once they are lost. It is relatively easy to restore woodland.	YES
Wood-pasture and parkland	Habitat quality relies on veteran trees, which are very hard to create (cf ancient woodland). The non-tree component can be relatively easy to create.	YES
Traditional orchards	Orchard habitat quality relies on old or veteran trees which are very hard to create (see wood-pasture). Species such as noble chafer rely on old trees and therefore are fragile.	YES
Open mosaic habitats on previously developed land	This habitat is ephemeral and easy to recreate, but dependent on specific features of the site, such as soil/ground disturbance.	NO

Appendix 2. Oxford City Wildlife Site selection form

1.Wildlife Value Criteria		
Criterion	**Description of site attributes that relate to this criterion**	**Criterion met**
1A. Naturalness (principally for habitats)		Y/N
1B. Rare or exceptional features (principally for species)		Y/N
1C. Size or extent of features (habitat or population)		Y/N
1D. Diversity (numbers of species or habitats)		Y/N
1E. Connectivity within the landscape		Y/N
1F. Fragility		Y/N

2. Access to nature & education value criteria		
2A. Naturalness (Semi-natural habitat including non-priority habitat)		Y/N
2B. Value for appreciation of nature		Y/N
2C. Value for learning		Y/N
2D. Recorded history and cultural associations		Y/N
Does the site qualify for selection?	Sites should be selected where they meet - • Criteria 1A and at least one of - 1C, 1D, 1E, 1F, 2B, 2C, or 2D; or • Criteria 1B; or • Criteria 2A and at least one of 2B, 2C, or 2D **YES/NO**	
Comments		

Appendix 3. Guidance notes for completing the selection panel form

1.Wildlife Value Criteria	
Criterion	**Evidence of site attribution relating to criterion – What should be included**
1A. Naturalness	Include detail of any priority habitats (listed in Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006)) and any remnant/transitional examples of these habitats found on the site. Describe of the quality of the habitat (including numbers of the species typical recorded and any available data on their abundance). Details of any other natural features considered of City importance (such as particularly valuable veteran trees) should be included.
1B. Rare or exceptional features	List any of the rare habitats that are recorded on the site. List any of the rare species recorded on the site including: • NERC Act (S41) Species of Principal Importance • The Wildlife and Countryside Act 1981 (Schedule 1 and 8) • Nationally rare or scarce species • National red list species • Oxfordshire Rare Plants Register Species • Other uncommon species identified as having particular significance for the City Comments from local experts should be included (where required) to clarify the local significance for particular rare species. Include any other features that the site has which are considered rare or exceptional
1C. Size or extent of features	Estimates for the area covered by any priority habitats found on site should be included here and assessed based on the thresholds provided in Table 1. Where a large species population has been recorded, information on numbers found should be provided. Guidance from local experts should be sought (where required) to establish if the population size of a particular species is of City significance.
1D. Diversity	The numbers of plant species recorded that are typical of any priority habitat present should be provided. They should be considered in reference to their abundance and the wider diversity of species found. Where significant interest for other species groups has been recorded (e.g. birds or invertebrates) a summary of species recorded should be provided. Total numbers of species recorded can also be useful indicator of diversity but must be considered in the context of recorder effort. Historic records should be separated from species recorded in recent years to more accurately illustrate the current level of diversity. A list of the habitat types recorded should be included where a range of different habitats are found. Where a site includes both species-rich and less rich areas (within a single management block), this should be acknowledged descriptions.

1E. Connectivity within the landscape	If the site is in a Conservation Target Area, this should be stated. Provide a brief description of the surrounding landscape including information on any other designated wildlife sites and other areas of semi-natural habitat that the site connects to or is in close proximity to. Where available include any evidence that the site provides habitat within a wider network of sites that is used by a meta-population of notable species
1F. Fragility	List any sensitive species populations or habitats that are vulnerable to loss and would be difficult to recreate. This does not include at risk from new development.

2. Access to nature & education value criteria	
2A. Naturalness (Semi-natural habitat including non-priority habitat)	Semi-natural habitat (including non-priority habitat) and a management plan with wildlife conservation objectives and/or owner sympathetic to managing the site for wildlife. Sites meeting this criterion will also usually have value under one or more of the Wildlife criteria (1C, 1D and 1E). To be an Oxford City Wildlife Site, there must be something of value to wildlife to access, engage with or learn about.
2B. Value for appreciation of nature	Good levels of public access and significant opportunities for engagement with nature, or greatly increases the aesthetic of the area Include details about any areas of the site that have open access, public rights of way or permissive paths. Descriptions should be provided to clarify if the wildlife feature(s) for which the site is being considered are easily accessible to the public. Sites that are only open to the public for limited time periods (e.g. open days or guided walks) can be considered as long as no compulsory charge is made for access.
2C. Value for learning	Current use by local groups, schools or other education organisations. Proximity to education centres. Examples of recent visits (within the last 3 years) and the types of activities carried out should be provided.
2D. Recorded history and cultural associations	Strong cultural associations or historic significance and/or recognised as important to the local community. Recorded historic use of the site (provide reference to relevant documents/other sources) Details of surveying or monitoring carried out on the site. Details of any cultural associations

APPENDIX 6

Thames and Cherwell at Oxford CTA (Conservation Target Area)

Riverside land along the Thames and Cherwell at Oxford. Extends from Kennington in the south to Botley in the West and as far the A40 at Marston in the east.

Joint Character Area: Thames and Avon Vales, Midvale Ridge – this area is characteristic of the former.

Landscape Types: River Meadowlands though two pits are classed as Lowland Village Farmland.

Geology: Alluvium

Topography: Flat riverside land

Area of CTA: 660 hectares

Biodiversity:

- Lowland Meadows: This is the main habitat in the area. There are species rich meadows at Iffley and Marston which are SSSIs. Magdalen Meadow, St Hilda's College Meadow and Lower Farm Meadow are Local Wildlife Sites.
- Wet grassland/fen/swamp/reedbed. Parts of Iffley Meadows are wet grassland and there is also fen and swamp habitat here. A number of the meadows along the Cherwell and Thames have wet grassland habitat and there some areas of swamp, including Longbridges Nature Park and Burnt Mill Meadows. Long Meadow supports swamp habitat and there is a reed bed at Fiddler's Island. There is a rich fen flush at Almonds Farm Field.

Access: Riverside paths including the Thames Path. There is a nature reserve at Iffley and nature parks at Botley, Longbridges and Astons Eyot and The Kidneys.

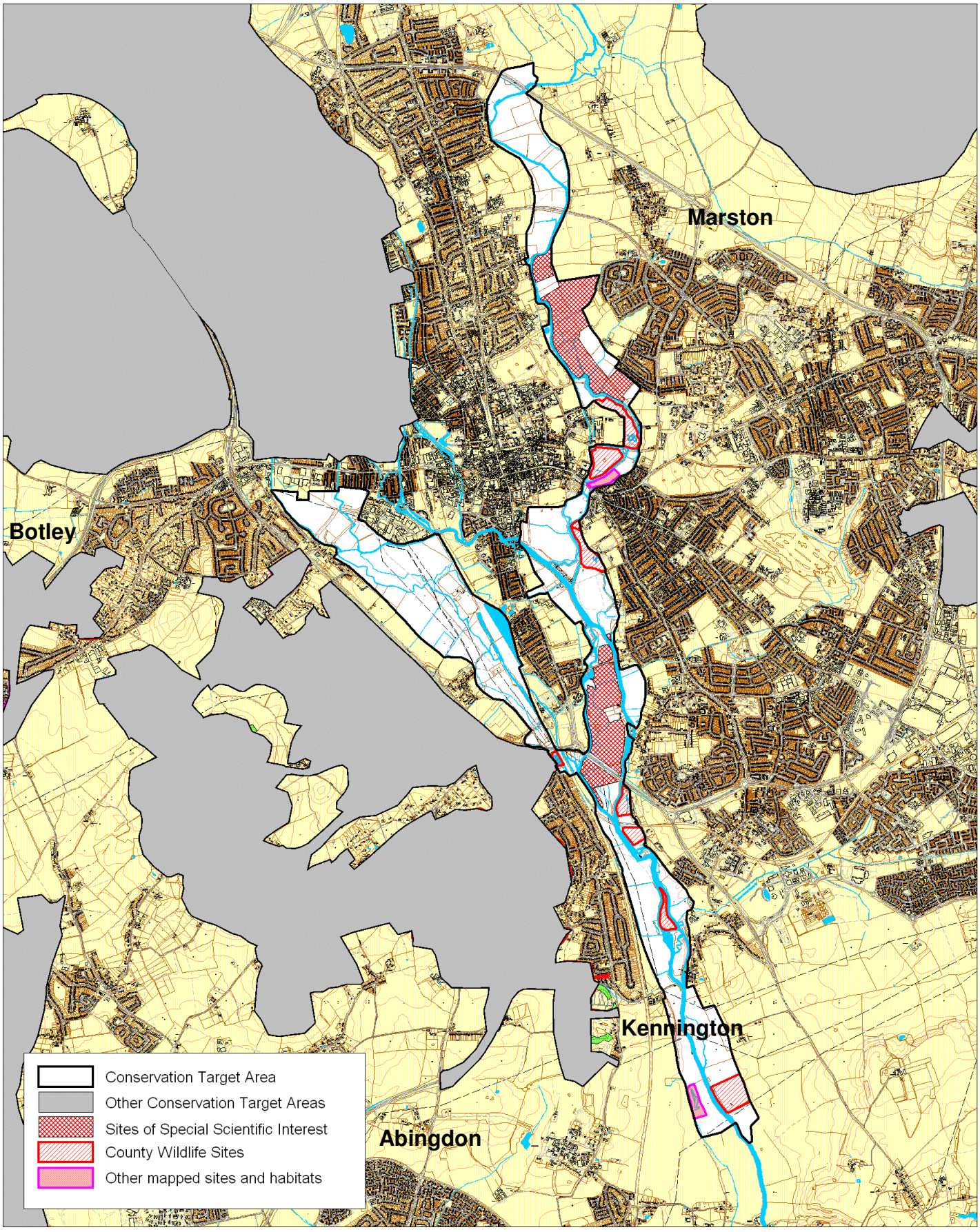
Archaeology:

Oxfordshire Biodiversity Action Plan Targets associated with this CTA:

1. Lowland meadow (and floodplain grazing marsh) – management[1], restoration and creation.
2. Fen (and swamp) – management, restoration and creation.
3. Reedbed – management and creation.
4. River – management and restoration (including resource protection).

[1] "Management" implies both maintaining the quantity, and maintaining and improving the quality of existing BAP habitat and incorporates the following target definitions: "Maintaining extent" and "Achieving Condition".

Thames and Cherwell at Oxford Conservation Target Area



Scale 1:50000

Area of BAP habitat present in CTA (from TVERC BAP Habitat GIS layer 5/2010) **and 2015 BAP Habitat Targets for this CTA**

Thames and Cherwell at Oxford CTA	**Lowland Calcareous Grassland**	**Lowland Dry Acid Grassland**	**Lowland Meadows**	**Coastal and Floodplain Grazing Marsh**	**Eutrophic Standing Waters**	**Lowland Fens**	**Reedbeds**	**Lowland Beech and Yew Woodland**	**Lowland Mixed Deciduous Woodland**	**Wet Woodland**	**Wood - Pasture and Parkland**	**Traditional Orchards**
Area of BAP Habitat in CTA (ha)			58.4	180.8	7.7	21.5			23.9	5.9		0.1
% of CTA area			8.8	27.4	1.2	3.3			3.6	0.9		0.0
% of county resource			5.4	3.7	0.8	18.4			0.5	4.3		0.0
2015 BAP targets (hectares)	**Lowland Calcareous Grassland**	**Lowland Dry Acid Grassland**	**Lowland Meadows**	**Coastal and Floodplain Grazing Marsh**	**Eutrophic Standing Waters – No targets for 2015**	**Lowland Fens**	**Reedbeds**	**Native Woodland**			**Wood - Pasture and Parkland Targets not divided by CTA**	**Traditional Orchards - No targets for 2015**
Maintenance (to be determined)	-	-	-	-	-	-	-	-			-	-
Achieving Condition (to be determined)	-	-	-	-	-	-	-	-			-	-
Restoration			5		-	3	-				-	-
Creation			3		-	-					-	-

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