



**24 Turnbridge Close, Lower Earley, Reading,
Berkshire RG6 4UZ**

**Ecological Impact Assessment
& Biodiversity Net Gain Assessment**

April 2026

on behalf of Ms N Pursell

Disclaimer

This report is issued to the client for their sole use and for the intended purpose as stated in the agreement between the client and Windrush Ecology Ltd. This report may not be relied upon by any other party without the express written consent of Windrush Ecology Ltd.

Windrush Ecology Ltd has exercised due care in preparing this report. It has not independently verified information provided by others, and no warranty is made in relation to the content of this report and Windrush Ecology Ltd assumes no liability for any loss resulting from errors, omissions or misinterpretation made by others.

Any recommendation, opinion or finding stated in this report is based on the circumstances and facts as they existed at the time that Windrush Ecology Ltd performed the work. The content of this report has been provided in accordance with the provisions of the CIEEM Code of Conduct.

Nothing in this report constitutes legal opinion.

Client	Ms N Pursell <i>care of</i> Bonney Architecture Ltd
Job name	24 Turnbridge Close, Lower Earley, Reading, Berkshire, RG6 4UZ
Survey date(s)	1 st April 2026
Report date	13 th April 2026
Report title	Ecological Impact Assessment & Biodiversity Net Gain Assessment
Reference	W6825_rep_24 Turnbridge Close_EcIA_13-04-26

	Signed	Name	Position	Date
Prepared by		Reuben Hayden <i>MSc ACIEEM</i>	Senior Ecologist	13/04/2026
Reviewed by		Edward Bodsworth <i>MA (Cantab) PhD MCIEEM</i>	Director	13/04/2026

Report Contents

1	Executive Summary	1
2	Introduction	3
2.1	Site Description & Context	3
2.2	Proposed Works	3
2.3	Aims of Study	3
2.4	Biodiversity Statement	4
2.4.1	Exemptions	4
2.4.2	Pre-development Biodiversity Value of On-site Habitats	4
2.4.3	Date the On-site Pre-development Biodiversity Value was Calculated ..	4
2.4.4	Version of the Biodiversity Metric	4
2.4.5	Version of the Biodiversity Metric Publication Date	4
2.4.6	Supporting Documentation	4
2.4.7	Loss of On-site Habitats	4
2.4.8	Phased Development	5
2.4.9	Irreplaceable Habitats	5
3	Methodology	5
3.1	Desk Study	5
3.2	Field Surveys	5
3.2.1	Personnel	5
3.2.2	Extended UKHab Habitat Survey	5
3.2.3	Daytime Bat Walkover & Preliminary Roost Assessment (PRA)	7
3.3	Ecological Impact Assessment	9
3.3.1	Determining Important Ecological Features & Value	9
3.3.2	Characterising Ecological Impacts	10
3.3.3	Determining Ecologically Significant Effects	10
3.4	Biodiversity Net Gain Assessment	10
3.5	Limitations on Survey Data	11
4	Results & Evaluation	11
4.1	Ecological Context	11
4.1.1	Sites of Nature Conservation Importance	11
4.1.2	Species Records	13
4.2	Habitats	14
4.2.1	Developed Land; Sealed Surface (Buildings)	14
4.2.2	Vegetated Garden	14
4.2.3	Non-native and Ornamental Hedgerow	14
4.3	Species	15
4.3.1	Plants	15
4.3.2	Invertebrates	15
4.3.3	Amphibians	16
4.3.4	Reptiles	16
4.3.5	Birds	16
4.3.6	Bats	17
4.3.7	Other Mammals	17
4.3.8	Invasive Species	18
5	Discussion	18
5.1	Relevant Legislation & Policy Guidance	18
5.1.1	Nesting Birds	18
5.1.2	The Natural Environment and Rural Communities Act 2006	18
5.1.3	The National Planning Policy Framework (NPPF)	18
5.1.4	Special Protection Areas	20

5.1.5	Wokingham Borough Local Development Framework, Adopted Core Strategy Development Plan Document, January 2010.....	21
5.1.6	Environment Act 2021.....	21
5.2	Potential Impacts.....	21
5.2.1	Sites of Nature Conservation Importance.....	21
5.2.2	Habitats.....	22
5.2.3	Biodiversity Net Gain Assessment	22
5.2.4	Species.....	24
6	Recommendations	25
6.1	Further Surveys.....	25
6.2	Habitats	25
6.2.1	Retention & Protection	25
6.2.2	Creation & Enhancement.....	26
6.3	Species	26
6.3.1	Birds	26
6.3.2	Bats	26
6.3.3	Badgers & Hedgehogs	28
6.3.4	Invertebrates.....	29
7	References.....	30
8	Appendix 1. Photographs	31
9	Appendix 2. Site Location Plans	32
10	Appendix 3. Proposal Plan	33
11	Appendix 4. UKHab Plan.....	34
12	Appendix 5. Proposal Habitat Plan & Habitat Change Plan	35
13	Appendix 6. Species for Landscape and Ornamental Planting.....	37
14	Appendix 7. Statutory Biodiversity Metric.....	39

1 Executive Summary

Site Details	24 Turnbridge Close, referred to as the 'site' within this report, is located to the west of Turnbridge Close within the suburb of Lower Earley in Berkshire RG6 4UZ. The approximate Ordnance Survey grid reference for the centre of the site is SU 748 699.
Proposals	The proposals include the erection of a single dwelling with associated garden, driveway and parking areas.
Methodology	An Extended UKHab habitat survey, Daytime Walkover Survey & Preliminary Roost Assessment were undertaken on 1st April 2026. A Biodiversity Impact Assessment was conducted to calculate the potential impact of the proposed development (using the Statutory Biodiversity Metric), and to assess biodiversity net gain.
Results	- The site comprises an area of vegetated garden (modified grassland), non-native and ornamental hedgerow and developed land; sealed surface - other developed land. There are two wooden sheds and a single metal storage container (developed land; sealed surface – buildings) within the western area of the site. - The proposed development is considered to fall under the exemption criteria of 'self-build and custom build applications' and Statutory Biodiversity Net Gain (defined by the Environment Act 2021) is not considered applicable. - All habitats are of ecological value at a negligible or site ecological value. - The non-native and ornamental hedgerow offers nesting opportunities for breeding birds. - The site provides potential foraging habitats for hedgehogs.
Impact Assessment	- The proposals will result in the loss of an area of vegetated garden. This habitat is considered to be of ecological value within the context of the site only and habitat loss is unlikely to result in significant ecological impacts beyond the site level. - New external lighting has the potential to adversely affect bat behaviour. - Although there are no predicted direct impacts on badgers or hedgehogs, there is potential for building activity to inadvertently create habitats that these species could use. - Based on the proposal plans and using the Statutory Biodiversity Metric, the result of the calculation is as follows:

	• -0.02 Habitat Units, -45.98% decrease • -0.00 Hedgerow Units, -0.00% decrease
Recommendations	Recommendations are made with regard to the protection of retained hedgerow. Careful work practices are recommended to protect badgers and hedgehogs. Recommendations are made with regard to native landscape/garden and hedgerow planting and species-specific enhancement including bird/bat boxes and bee bricks. Recommendations are made with biodiversity off-setting to secure a net gain for biodiversity and satisfy the Environment Act 2021.

2 Introduction

2.1 Site Description & Context

24 Turnbridge Close, referred to as the 'site' within this report, is located to the west of Turnbridge Close within the suburb of Lower Earley in Berkshire RG6 4UZ. The approximate Ordnance Survey grid reference for the centre of the site is SU 748 699.

The site is roughly D-shaped in plan and is situated at a road junction. It comprises an area of vegetated garden (modified grassland), non-native and ornamental hedgerow and developed land; sealed surface - other developed land. There are two wooden sheds and a single metal storage container (developed land; sealed surface – buildings) within the western area of the site.

The site is surrounded in all directions by residential development. To the north, the site is bounded by Turnbridge Close and residential dwellings with associated gardens. To the east and south lie further residential properties and associated gardens. To the west, the site is bounded by a road with residential development beyond.

The wider landscape is predominantly urban in character. However, the River Loddon lies approximately 970m to the south-east, likely providing high quality habitat for local wildlife such as bats, small mammals, birds, invertebrates and wetland plants.

Photographs of the site are presented in Appendix 1. Appendix 2 illustrates the location of the site and provides an aerial photograph of the site within the surrounding landscape.

2.2 Proposed Works

The proposals include the erection of a detached dwelling with associated garden, driveway and parking areas.

A proposal plan is presented in Appendix 3.

2.3 Aims of Study

The aims of this study are to describe and evaluate the habitats present within the site and to assess the potential for the site to support protected and notable species. The habitats are evaluated, and the report discusses the potential impacts of the proposed development on the ecology of the site and protected/notable species (Ecological Impact Assessment). Recommendations are made for appropriate mitigation & compensation measures in light of the impact assessment.

A further aim of this study is to assess and quantify the biodiversity value of the site and to assess and calculate the impacts of the proposed development on the site's biodiversity value, given as a net loss, no net change or gain in biodiversity units, in line with the National Planning Policy Framework (NPPF) and Environment Act 2021.

This report aims to:

- Establish the total number of baseline biodiversity units for the site prior to the development taking place;
- Establish the total number of biodiversity units which will be created, retained and/or enhanced under landscape and ecological mitigation proposals for the site of; and
- Determine whether the proposed development scheme will result in a net loss, no net loss or a net gain for biodiversity (Biodiversity Net Gain Assessment).

2.4 Biodiversity Statement

2.4.1 Exemptions

The proposals are not exempt from the requirement for Biodiversity Net Gain.

The planning application is therefore subject to Statutory Biodiversity Net Gain as defined under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

The proposals must deliver a Biodiversity Net Gain of at least +10%.

2.4.2 Pre-development Biodiversity Value of On-site Habitats

The pre-development biodiversity value of the site is as follows:

- 0.05 Habitat Units
- 0.02 Hedgerow Units

Watercourse Units are not applicable to this site.

2.4.3 Date the On-site Pre-development Biodiversity Value was Calculated

Date of application.

The baseline survey was undertaken on 1st April 2026.

2.4.4 Version of the Biodiversity Metric

Statutory Biodiversity Metric Version 1.0.4.

2.4.5 Version of the Biodiversity Metric Publication Date

3rd July 2025.

2.4.6 Supporting Documentation

- I. Biodiversity Metric calculation – provided in Excel format as Appendix 7 to this report. Results are as follows:
 - **-0.02 Habitat Units, -45.98% decrease**
 - **-0.00 Hedgerow Units, -0.00% decrease**
- II. Onsite irreplaceable habitats – not applicable
- III. Onsite habitats existing on the date of the application for planning permission

Table 1. UKHab habitats existing on the date of the application for planning permission.

Primary Code	Secondary Code	Description
u1b5	-	Developed land; sealed surface – buildings
u1b6	828	Developed land; sealed surface – other developed land, vegetated garden
h2b	-	Non-native and ornamental hedgerow

2.4.7 Loss of On-site Habitats

There has been no loss of on-site habitats prior to the submission of the planning application.

Does the pre-development biodiversity value and date used above factor in the loss of any onsite habitat because of activities carried out before the submission of this application? – not applicable.

2.4.8 *Phased Development*

The development is not phased.

2.4.9 *Irreplaceable Habitats*

There are no irreplaceable habitats within the site.

3 **Methodology**

3.1 **Desk Study**

The Thames Valley Environmental Records Centre (TVERC) was contacted in April 2026 to gather records that it holds for protected and notable species, and non-statutory sites of nature conservation importance from within a 1km radius of the site.

The Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk) website was searched for information regarding internationally protected sites (e.g. Special Areas of Conservation) within 5km of the survey area and statutory sites of nature conservation importance (e.g. Sites of Special Scientific Interest) within a 1km radius of the site. Other Internet resources interrogated as part of the desk study include:

- Bing Maps - www.bing.com/maps
- Google Earth - www.earth.google.co.uk
- Google maps - www.google.co.uk/maps

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 was also consulted to gather information pertaining to priority habitats and species for conservation action at the national and local level.

Aerial photography interpretation is used to place the site into an ecological context and to provide information on the nature of the habitats beyond the site boundary. The information gathered is used to provide a baseline to the habitat assessment.

3.2 **Field Surveys**

3.2.1 *Personnel*

The field surveys were undertaken by Reuben Hayden *MSc ACIEEM* on 1st April 2026.

Reuben Hayden *MSc ACIEEM* is a Senior Ecologist of Windrush Ecology Ltd. Mr Hayden has an undergraduate degree in Wildlife Ecology & Conservation Science from the University of West of England and a master's degree in Species Identification & Survey Skills from the University of Reading and has been working as a professional ecological consultant since 2019.

Mr Hayden holds licences from Natural England to survey for bats and great crested newts within all counties of England (Level 2 2025-84936-SCI-CL18 & CL08-Level 1 2021-54013-CLS-CLS, respectively) and has over 6 years of experience in undertaking bat surveys.

3.2.2 *Extended UKHab Habitat Survey*

An Extended UKHab habitat survey was undertaken to determine the type and overall status of habitats within the site.

The MAGIC website and Google Earth Pro satellite imagery were also used to determine whether there are known or possible locations for rare and/or habitats of high nature conservation importance.

Field survey maps were prepared in QGIS and printed off for use in the field. Survey sheets were printed at a scale relevant to the scope and extent of the survey. They are between 1:10,000 and 1:200 scale.

The UKHab system comprises a five-level Primary Habitat Hierarchy and a list of Secondary Codes, the latter is divided into Essential codes and Additional Codes. It is mandatory that each recorded habitat parcel (which can be a point, line or polygon using geospatial vector data terminology) is allocated a single Primary Habitat Code and to record the presence of all Essential Secondary Code features associated with that habitat parcel. Additional Secondary Codes can also be associated with habitat parcels, where it is relevant to the whole parcel. The UKHab system recommends that up to six Secondary Codes can be allocated to a single habitat parcel.

The UKHab system includes all habitat types identified in the UK, irrespective of scale and geographic range, including all habitats listed under Section 41 of the NERC Act 2006 and all Habitats Directive Annex 1 habitats recorded in the UK. Where possible, synonyms for UKHab habitats in other major habitat classifications are provided in the definitions.

The UK Habitat Classification Version 2.0 has been used (UKHab Ltd, 2023), with the use of Level 3 to 5 Primary Habitats and Secondary Codes. Primary Habitats and Secondary Codes follow the UKHab definitions listed in the aforementioned document. The Secondary Codes selected are appropriate to the site and habitats recorded.

Target notes were also prepared on features of particular ecological interest, and an assessment was made of the site's potential to support protected and notable species (such as species listed under Section 41 of the NERC Act 2006) as well as invasive species (listed on Schedule 9 of the Wildlife & Countryside Act 1981).

3.2.2.1 Summarised UKHab Metadata

In line with the UKHab User Manual, Table 2 details the Survey Metadata associated with the UKHab survey.

Table 2. Survey Metadata associated with the UKHab survey.

Metadata Heading	Site Information
Scope and purpose of the survey	Baseline habitat survey to inform EcIA
Area surveyed	0.033ha
Edition of UKHab used	Version 2.0
The Minimum Mapping Unit	Fine scale - 25m ² and 5m length
The Level of UKHab Primary Hierarchy used	Levels 3 to 5
Additional attributes recorded	Habitat condition and habitat management information where relevant
Map projection and units	Ordnance Survey National Grid reference system (OSGB)
Year of survey	2026

Metadata Heading	Site Information
Organisation and individual undertaking the survey	Windrush Ecology Ltd, Reuben Hayden MSc ACIEEM
References for any existing datasets that have been used	TVERC, The MAGIC website

3.2.2.2 Weather Conditions

The weather on the 1st April 2026 was mild (11°C) and dry with high cloud cover (70%) and a light breeze (Beaufort Scale 2).

3.2.3 Daytime Bat Walkover & Preliminary Roost Assessment (PRA)

A Daytime Bat Walkover and Preliminary Bat Roost Assessment (PRA) of the buildings within the site were undertaken.

A detailed internal and external survey of the buildings was undertaken using a 1 million candle-power torch and close-focusing binoculars in order to look for bats and/or evidence of bats and to assess the potential of the building to support roosting bats.

The buildings were inspected for evidence of bats including, bat droppings, urine stains, feeding remains (such as moth wings) and characteristic fur staining around access points.

Notes were made on the relative freshness, shape and size of bat droppings and the location and quantity of any feeding remains. 'Clean' gaps and crevices within the structure of the building were looked for as this can indicate where bats may have gained access to the interior spaces and the fabric of the walls.

The bat survey was undertaken according to best practice guidelines published by the Bat Conservation Trust (Collins, 2023) and the Bat Worker's Manual (Joint Nature Conservation Committee, 2012).

The study also takes into account the structure and ecological context of the building, including the following factors which may increase the likelihood of roosting bats being present:

- Age of the building (pre-20th Century or early 20th Century construction)
- Nature of construction; traditional brick, stone or timber construction
- Large and complicated roof void with unobstructed flying spaces
- Large (>20 cm) roof timbers with mortice/tenon joints, cracks and holes
- Entrances and gaps for bats to fly and crawl through
- Poorly maintained fabric providing ready access points for bats into roofs, walls; but at the same time not being too draughty and cool.
- Roof warmed by the sun, south-facing roofs in particular
- Weatherboarding and/or hanging tiles with gaps
- Undisturbed roof voids
- Buildings and built structures in proximity to each other providing a variety of roosting opportunities throughout the year
- Buildings or built structures close to good foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting.

The following criteria are used for as guidelines for assessing the potential suitability of buildings for bats (Collins, 2023), see Table 3.

Table 3. Criteria for the assessment of buildings for roosting bats (Collins, 2023).

Suitability	Description of Roosting Habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after the presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitats. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
^a Negligible is defined as ‘so small or unimportant as to be not worth considering, insignificant’. This category may be used where there are places that a bat could roost or forage (due to one attribute), but it is unlikely that they actually would (due to another attribute). ^b For example, in terms of temperature, humidity, height above ground level, light levels or level of disturbance. ^c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.	

Confirmed presence of roosting bats is where evidence indicates that a building or other structure is used by bats, this includes:

- bats seen roosting or observed flying from a roost or freely in the habitat;
- droppings, carcasses, feeding remains etc. found and/or
- bats heard ‘chattering’ inside a roost on a warm day or at dusk.

Where the possibility that bats are present cannot be eliminated or evidence of bats is found during the building inspection survey, then further surveys (such as winter hibernation, presence/absence and/or roost characterisation) are likely to be necessary if impacts on the roosting habitat (or the bats using it) are predicted.

In addition to the bat survey, the buildings were checked for evidence of nesting birds including old birds' nests, bird droppings, feathers and eggs. Specific observations were made with regard to species such as the barn owl, swallow and house martin; species that are often associated with buildings.

3.3 Ecological Impact Assessment

The ecological appraisal of the proposed development is undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* version 1.3 (CIEEM, 2018).

The following principles underpin Ecological Impact Assessments EcIA:

- **Avoidance:** seek options that avoid harm to ecological features (for example, by locating on an alternative site).
- **Mitigation:** negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- **Compensation:** where there are significant residual negative ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- **Enhancement:** seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

3.3.1 Determining Important Ecological Features & Value

The CIEEM guidelines recognise one of the key challenges in Ecological Impact Assessment (EcIA) is to decide which ecological features (habitats, species, ecosystem and their functions/processes) are important and should be subject to detailed assessment. Such ecological features are those that are considered to be important and potentially affected by the project. It is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable.

However, efforts should still be made to safeguard biodiversity in its entirety, as emphasised by the Convention on Biological Diversity and developed in the EU Biodiversity Strategy 2020. The EU Strategy and national policy documents emphasise the need to achieve no net loss of biodiversity and enhancement of biodiversity.

The EcIA should demonstrate how a proposal will comply with statutory requirements and policy objectives for biodiversity.

The importance of an ecological feature should be considered within a defined geographical context. In this report, habitats are assigned to a value relating to their geographic frame of reference, using the following scale:

- International
- UK
- National (England)
- Regional (South East)
- County (Berkshire)
- District (Wokingham Borough Council)
- Local or parish (Lower Earley)
- Immediate zone of influence of the site (Site)
- Negligible

Regarding protected and notable species, an assessment of habitat suitability and potential presence of species has been undertaken given the results of the desk study and field surveys.

3.3.2 *Characterising Ecological Impacts*

When describing ecological impacts and effects, reference should be made to the following characteristics as required:

- Positive or negative
- Extent
- Magnitude
- Duration
- Frequency and timing
- Reversibility

The assessment only needs to describe those characteristics relevant to understanding the ecological effect of the impacts and determining its significance.

3.3.3 *Determining Ecologically Significant Effects*

The CIEEM guidelines define an 'ecologically significant effect' as an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Significant effects should be qualified with reference to an appropriate geographic scale. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important.

Significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution). A significant effect is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project.

Regarding protected and notable species, an assessment of habitat suitability and potential presence of species has been undertaken given the results of the desk study and field surveys.

3.4 **Biodiversity Net Gain Assessment**

A Biodiversity Net Gain assessment was conducted using the Statutory Biodiversity Metric, published by Department for Environment, Food & Rural Affairs (July, 2025), to calculate the impact of the proposed development on the ecological value of the site. The calculation ascertains whether the proposals are likely to achieve a net gain in biodiversity, calculated as biodiversity (habitat, hedgerow and watercourse) units and percentage biodiversity (habitat, hedgerow and watercourse) units.

To effectively assess the impact of the proposals the habitats within the site were classified according to the habitat types given in the UKHab classification system (UKHab Ltd, 2023). Habitats were assessed for their condition and strategic significance according to the criteria given within the Statutory Biodiversity Metric User Guide and The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology (Version 1.0.4) (Department for Environment, Food & Rural Affairs, 2025) through onsite visits and the interrogation of internet resources including MAGIC (www.magic.gov.uk) and Google Earth (www.earth.google.co.uk).

The areas of given habitats in both their current state and the proposed development were mapped using on site data, satellite imagery and QGIS software, with the resulting areas inputted into the Statutory Biodiversity Metric alongside strategic significance classifiers.

A site visit was undertaken by a suitably qualified ecologist to determine the habitats present on site, their location, size, condition and connectivity. This survey was conducted by Jan-Piet Stuursma on 21st February 2026.

The principles of biodiversity net gain as set out in the Biodiversity Net Gain Good Practice Guidelines (CIEEM, IEMA & CIRIA, 2019) have been considered throughout this process as listed below:

- **Principle 1.** Apply the Mitigation Hierarchy
- **Principle 2.** Avoid losing biodiversity that cannot be offset by gains elsewhere
- **Principle 3.** Be inclusive and equitable
- **Principle 4.** Address risks
- **Principle 5.** Make a measurable Net Gain contribution
- **Principle 6.** Achieve the best outcomes for biodiversity
- **Principle 7.** Be additional
- **Principle 8.** Create a Net Gain legacy
- **Principle 9.** Optimise sustainability
- **Principle 10.** Be transparent

3.5 Limitations on Survey Data

There were no limitations on the survey data and all areas of the site could be accessed safely and thoroughly.

As with any survey undertaken on a certain date, the data presented within this report provide information at a particular point in time and present a 'snap-shot' of the ecological status of the site. Ecosystems and species behaviour/activity are dynamic and can change over time.

Whilst this report presents a characterisation and evaluation of habitat and species status at the time of the study, it should not be taken as an exhaustive representation of the ecological status of the site either at present or into the future.

4 Results & Evaluation

4.1 Ecological Context

4.1.1 Sites of Nature Conservation Importance

4.1.1.1 Statutory Sites

There are no sites of international nature conservation, such as Special Areas of Conservation (SAC), located within a 5km radius of the site. The closest site of international nature conservation importance is Thames Basin Heaths SPA, which is located approximately 6.7km south of the site.

The Thames Basin Heaths SPA is a network of heathland sites which are designated for their ability to provide a habitat for the internationally important bird species. Under the Conservation of Habitats and Species 2017 (as amended), commonly referred to as the Habitats Regulations, any competent authority has a duty to ensure that all the activities they regulate will have no adverse effect on the integrity of the SPA. The Regulations require the Council to assess the possible effects of the various proposals, including planning applications, on the SPA. No plan or project which may affect the SPA can be undertaken unless it can be shown that there will be no adverse impact on the integrity of the site, either alone or in-combination with other plans or projects.

There are no sites of national nature conservation importance, such as Sites of Special Scientific Interest (SSSI) located within a 1km radius of the site.

There is one site of district to county nature conservation importance, such as Local Nature Reserves (LNR) located within a 1km radius of the site; namely Maiden Erlegh Park LNR.

Maiden Erlegh Park LNR is located approximately 995m north of the site. The habitats at Maiden Erlegh Lakes include lowland mixed deciduous woodland, ancient semi natural woodland and eutrophic open water.

The site is located within the SSSI's Impact Risk Zone (IRZ) which includes the following categories:

- **Infrastructure:** Airports, helipads and other aviation proposals.
- **Air Pollution:** Livestock & poultry units with a floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500 tonnes.
- **Combustion:** General combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

4.1.1.2 Non-statutory Sites

There are 7 non-statutory designated sites within a 1km radius of the site.

The site is not located within a Conservation Target Area (CTA) or Biodiversity Opportunity Area (BOA).

For a brief summary of the non-statutory sites refer to Table 4 below.

Table 4. Summary of non-statutory sites within a 1km radius of the site.

Designation	Name	Distance from Site (m)	Description
Berkshire Local Wildlife Sites (LWS)	River Loddon (part)	975 SE	A seventeen kilometre stretch of the River Loddon running from Swallowfield to its confluence with the River Thames near Wargrave. This section of the river has a diversity of features such as adjacent marsh, islands, inlets, riffles, river cliffs and extensive and varied channel vegetation. This includes the uncommon Loddon Pondweed <i>Potamogeton nodosus</i> . Water vole and a variety of dragonflies and damselflies are also found along its length.
	St John's Copse	770 SW	This small woodland is a neglected, mixed coppice under oak standards interplanted with Douglas fir, which in places forms the dominant tree in the canopy. There is also ash and more alder to the north. It is situated in the valley of the River Loddon on fairly dry loam soil though there are low lying areas within the wood that have impeded drainage.
	Rushy Mead	700 S	Rushy Mead contains some wet woodland with areas dominated by alder and willows especially in the north-west of the site. Some poplars have been planted on the site. The drier areas have some mixed Hazel, Ash and Field Maple coppice and areas of Hawthorn, Blackthorn and Dogwood scrub. There are also some old Oak and Ash standards. Wetland plants include Water Mint,

Designation	Name	Distance from Site (m)	Description
			Meadowsweet, Yellow Iris, Common Comfrey, Common Marsh-bedstraw, and pond sedges. Ragged-Robin and Purple Loosestrife were present in the past. This was expanded to include similar woodland to the north in the 2023 survey.
	Redhatch Copse	935 NW	This site is a small area of varied ancient woodland. Parts of the site are dominated by ash with hazel coppice and elder. Birch dominates other areas in the site and there are wet flushy areas with alder and ash. Sycamore is invading in places. Bramble and bluebell are dominant on the ground. Species associated with long established woodland that have been recorded here include opposite-leaved golden-saxifrage, which is abundant in the wet areas, hairy wood-sedge, yellow pimpernel, wood spurge, wood melick and wood sorrel. Wetland species are found in the wetter areas including marsh marigold and water mint.
	Maiden Erlegh Woods	955 N	The site consists of ancient and semi-natural woodland, with a stream flowing through part and a couple of associated marshy areas. Most of the site lies within the Maiden Erlegh Park Local Nature Reserve which extends to the west to include a lake and seeded grassland which are not included in the Local Wildlife Site.
	Rushey Way Pond	700 NE	Rushey Way Pond (also known as Marefield Pond) is a small site in an urban area which consists of a pond surrounded by dense scrub. It is surrounded by housing at the east, north and western boundaries, with a native hedgerow at the southern boundary beyond which lies a roadside verge and a road. It is managed by Earley Town Council. The site was originally notified for its amphibian population which includes great crested newt, palmate newt and common toad. During the 2021 surveys, great crested newt and common toad were not re-found, but a strong smooth newt and invertebrate population was identified to be using the pond.
Biodiversity Opportunity Area (BOA)	Loddon Valley (South)	270m W	Oxfordshire Biodiversity Action Plan Targets associated with this CTA: 1. Lowland meadow (and floodplain grazing marsh) – management, restoration and creation. 2. Fen (and swamp) – management, restoration and creation. 3. Reedbed – management and creation. 4. River – management and restoration (including resource protection).

4.1.2 Species Records

A summary of the species data search results from TVERC can be found in Section 4.3.

4.2 Habitats

A habitat plan is presented in Appendix 4. The UKHab codes for the habitats within the site are presented within Table 5.

Table 5. UKHab habitat codes for the site.

Primary Code	Additional Codes	Description
u1b5	-	Developed land; sealed surface – buildings
u1b6	828	Developed land; sealed surface – other developed land, vegetated garden
h2b	-	Non-native and ornamental hedgerow

4.2.1 Developed Land; Sealed Surface (Buildings)

Within the site there are three buildings; a metal storage container and two wooden sheds.

Developed land; sealed surface (buildings) is of **negligible** ecological value.

4.2.1.1 Metal Storage Container

Along the northern boundary, there is a metal storage container.

4.2.1.2 Wooden Sheds

Within the western area of the site, there are two wooden shed buildings comprising single layer wooden panel walls and sloped roofs of bitumen felt.

4.2.2 Vegetated Garden

The majority of the site comprises an area of vegetated garden located to the north of 24 Turnbridge Close.

4.2.2.1 Modified Grassland (lawn)

The majority of the vegetated garden comprises modified grassland that is formally managed as a lawn to a sward height of between 3-5cm. The modified grassland is dominated by grass species including perennial rye *Lolium perenne* and annual meadow grass *Poa annua*.

Herbaceous species include dandelion *Taraxacum officinale* agg., white clover *Trifolium repens*, ribwort plantain *Plantago lanceolata*, cat's-ear *Hypochaeris radicata*, daisy *Bellis perennis*, dove's-foot crane's-bill *Geranium molle*, yarrow *Achillea millefolium*, groundsel *Senecio vulgaris*, selfheal *Prunella vulgaris* and mouse-ear chickweed *Cerastium fontanum*.

The modified grassland is considered to be of **site** ecological value.

4.2.3 Non-native and Ornamental Hedgerow

Along the northern boundary of the site there is a non-native and ornamental hedgerow which comprises solely of Leyland cypress *Cupressus × leylandii*. The hedgerow has an approximate height of 1.5m, width of 1m and appears to be frequently trimmed.

Given that the hedgerow is comprised of entirely non-native species, it is not considered to meet the criteria for a hedgerow of 'principal importance' as listed within Section 41 of the NERC Act 2006.

The hedgerow is not considered an 'important' hedgerow under the ecological criteria of the Hedgerows Regulations 1997.

The non-native and ornamental hedgerow is considered to be of **negligible** ecological value.

4.3 Species

The following sections provide a summary of the species data search results from TVERC and refers to the most pertinent species, given the nature of the habitats present within the site and the immediate locality. This summary only includes records from 1996 onwards.

4.3.1 Plants

There are a number of plant records within a 1km radius of the site, dating from 2006 to 2023. See Table 6 for the records.

Table 6. Records of plants within 1km of the site.

Common Name	Scientific Name
Bluebell	<i>Hyacinthoides non-scripta</i>
Cornflower	<i>Centaurea cyanus</i>
Crosswort	<i>Cruciata laevipes</i>
Field Scabious	<i>Knautia arvensis</i>
Grape-hyacinth	<i>Muscari neglectum</i>
Ragged Robin	<i>Silene flos-cuculi</i>
Touch-me-not Balsam	<i>Impatiens noli-tangere</i>

The records are located between 700m to 940m north east and 755m to 865m south of the site. Collectively, the plant records pertain mostly to habitats such as rough grassland and woodland.

No rare or scarce plants were noted within the site.

4.3.2 Invertebrates

There are a number of invertebrate records within a 1km radius of the site, dating from 1998 to 2023. See Table 7 for the pertinent records.

Table 7. Records of pertinent invertebrates within 1km of the site.

Common Name	Scientific Name
Buff Ermine	<i>Spilosoma lutea</i>
Garden Tiger	<i>Arctia caja</i>
Ghost Moth	<i>Hepialus humuli</i>
Knot Grass	<i>Acronicta rumicis</i>
Mottled Rustic	<i>Caradrina morpheus</i>
Small Square-spot	<i>Diarsia rubi</i>
Stag beetle	<i>Lucanus cervus</i>
White Ermine	<i>Spilosoma lubricipeda</i>

The records are scattered throughout the 1km search area with the majority of records pertaining to stag beetle. Collectively, the invertebrate records pertain mostly to habitats such as gardens, rough grassland and woodland.

The vegetated habitats within the site are likely to support a common and widespread assemblage of invertebrate species that are typical of gardens.

4.3.3 Amphibians

The Records Centre holds records of common frog *Rana temporaria*, common toad *Bufo bufo* and smooth newt *Lissotriton vulgaris* within a 1km radius of the site, dating from 2009 to 2021. All of the records are located further than 500m from the site.

There are no ponds or standing open waterbodies within the site that amphibians could use for breeding. A study of Ordnance Survey maps, indicates the lack of standing waterbodies within a 500m radius of the site. The site is located within a 'Green Impact Risk Zone', as defined by NatureSpace, meaning that there is moderate habitat suitability – great crested newts may be present.

The distribution of amphibians during their terrestrial phase is largely dictated by availability of suitable breeding habitat, with all native species requiring an aquatic environment within which to breed. It is believed that great crested newts can disperse up to 500m from a breeding pond, however the majority of individuals will typically be found within 250m. Research by Creswell and Whitworth (2004) found that the majority of great crested newts are found within approximately 50m of a breeding pond, given sufficient suitable habitat in close proximity, and they also found a significant drop-off in newt capture rates beyond 100m of a pond.

The habitats within the site are considered entirely unsuitable for sheltering amphibians, due to the maintained short sward height of grassland and lack of shelter/cover at the lower sections of hedgerow. There are no hibernacula features within the site.

Given this discussion, amphibians including great crested newts are considered likely absent within the local area and within the site.

4.3.4 Reptiles

The Records Centre holds two records of grass snake *Natrix Helvetica* within a 1km radius of the site, dating from 2014. The records are all located ~930m north of the site.

As discussed above with regard to amphibians, the habitats within the site are considered entirely unsuitable for sheltering reptiles, due to the maintained short sward height of grassland and lack of shelter/cover at the lower sections of hedgerow. There are no hibernacula features within the site.

Given this discussion and that the habitats surrounding the site are dominated by dwellings and gardens (unlikely to support sufficient prey), reptiles are considered likely to be absent within the local area and within the site.

4.3.5 Birds

There are a number of bird records within a 1km radius of the site, dating from 2000 to 2024. See Table 8 for the pertinent records.

Table 8. Records of pertinent birds within 1km of the site.

Common Name	Scientific Name
Bullfinch	<i>Pyrrhula pyrrhula</i>
Dunnock	<i>Prunella modularis</i>
Fieldfare	<i>Turdus pilaris</i>
House Martin	<i>Delichon urbicum</i>
House Sparrow	<i>Passer domesticus</i>
Redwing	<i>Turdus iliacus</i>
Song Thrush	<i>Turdus philomelos</i>
Starling	<i>Sturnus vulgaris</i>
Swift	<i>Apus apus</i>

Common Name	Scientific Name
Woodpigeon	<i>Columba palumbus</i>
Wren	<i>Troglodytes troglodytes</i>

The records are scattered throughout the local area with the closest records being approximately 130m west, pertaining to swift. Collectively the bird records pertain mostly to habitats such as woodland, open grassland, arable land and gardens.

The non-native and ornamental hedgerow may offer potential nest sites for breeding birds typically found in gardens. This may include species of 'principal importance' as listed within Section 41 of the NERC Act 2006, such as house sparrow.

The site is considered to be unsuitable for ground-nesting species, including skylark and grey partridge and these species were not recorded during the initial survey.

4.3.6 Bats

There are a number of records of bats within a 1km radius of the site, dating from 2002 to 2019. The records include brown long-eared bat *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, Daubenton's bat *Myotis daubentonii*, soprano pipistrelle *Pipistrellus pygmaeus* and noctule *Nyctalus noctula*. The records are scattered throughout the local area with the closest records being approximately 115m south-west, pertaining to noctule which was flying over.

Bats such as brown long-eared bat and pipistrelles regularly roost within buildings, while noctules almost exclusively roost within trees and Daubenton's bat typically roost in humid, more or less underground sites near water such as tunnels or bridges.

4.3.6.1 Bats & Buildings

No bats or evidence of bats were found during the survey.

All buildings are assessed as having '**negligible**' potential suitability to roosting bats (Collins, 2023) and no potential roost features were noted within any of the buildings. All the buildings are of very simple construction and provide no obvious ways that bats could access the fabric or structure of the buildings.

4.3.6.2 Bats & Habitats

The site as a whole is considered to offer very limited foraging and commuting opportunities for bats, with only the non-native and ornamental hedgerow providing potential commuting routes. The hedgerow is not connected to any significant habitat corridors outside of the site and is unlikely to provide a key resource for local populations.

Overall, it is considered the site offers '**negligible**' suitability for foraging and commuting bats (Collins, 2023). There are no obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.

4.3.7 Other Mammals

The Records Centre holds records for badger *Meles meles* and west European hedgehog *Erinaceus europaeus*, dating from 2004 to 2024. The records are scattered throughout the local area with the closest record being 45m south of the site, pertaining to hedgehog. The majority of records pertain to hedgehog.

No evidence of badgers was recorded during the survey. No badger setts, faeces, dung pits or diggings were noted.

The vegetated habitats within the site could provide habitat for commuting and foraging hedgehogs *Erinaceus europaeus*, a species of 'principal importance' under Section 41 of the NERC Act 2006.

4.3.8 Invasive Species

The Records Centre holds records of orange balsam *Impatiens capensis* and rhododendron *Rhododendron ponticum* from the 1km search radius, dating from 2003 to 2006.

No non-native invasive species were noted within the site.

5 Discussion

5.1 Relevant Legislation & Policy Guidance

5.1.1 Nesting Birds

Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.

5.1.2 The Natural Environment and Rural Communities Act 2006

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on the Secretary of State to publish, review and revise lists of living organisms and types of habitat in England that are of principal importance for the purpose of conserving English biodiversity.

It also requires the Secretary of State to take, and promote the taking of, steps to further the conservation of the listed organisms and habitats. This is important in the context of planning decisions as the National Planning Policy Framework affords planning policy protection to the habitats of species listed by virtue of Section 41.

There are no habitats listed within Section 41 of the NERC Act 2006 that are considered to be relevant to the site.

Species listed within Section 41 of the NERC Act 2006 that are considered to be potentially relevant to the site include:

- Bird species, such as house sparrow (non-native and ornamental hedgerow may provide potential nesting habitat)
- Hedgehog (vegetated habitats provide potential foraging habitat)

5.1.3 The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was revised on 12th December 2024 and sets out the government's planning policies for England and how these are expected to be applied. This revised framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018, updated in February 2022, revised in July 2021, updated in September 2023 and revised in December 2023.

The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:

- 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);

- 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;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- 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
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

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.

To protect and enhance biodiversity and geodiversity, plans should:

- 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
- 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.

When determining planning applications, local planning authorities should apply the following principles:

- 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;
- 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;
- 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
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements 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.

The following should be given the same protection as habitats sites:

- Potential Special Protection Areas and possible Special Areas of Conservation;
- Listed or proposed Ramsar sites; and
- Sites identified, or required, as compensatory measures for adverse effects on a habitats site, (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitat's site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

5.1.4 *Special Protection Areas*

Special Protection Areas (SPAs) are sites of European importance and have been created under the European Wild Birds Directive. In the UK, they form part of a larger European network called Natura 2000.

The European Union meets its obligations for bird species under the Bern Convention and Bonn Convention and more generally by means of Directive 2009/147/EC (Birds Directive) on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended). The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievement are at the discretion of each Member State (in the UK delivery is via several different statutes).

The main provisions of the Directive include:

- The maintenance of the populations of all wild bird species across their natural range (Article 2) with the encouragement of various activities to that end (Article 3).
- The identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance (Article 4).
- The establishment of a general scheme of protection for all wild birds (Article 5).
- Restrictions on the sale and keeping of wild birds (Article 6).
- Specification of the conditions under which hunting and falconry can be undertaken (Article 7).
- Prohibition of large-scale non-selective means of bird killing (Article 8).
- Procedures under which Member States may derogate from the provisions of Articles 5-8 (Article 9) that is, the conditions under which permission may be given for otherwise prohibited activities.
- Encouragement of certain forms of relevant research (Article 10 and Annex V).
- Requirements to ensure that introduction of non-native birds do not threaten other biodiversity (Article 11).

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Species and Habitats Regulations 2017.

5.1.5 *Wokingham Borough Local Development Framework, Adopted Core Strategy Development Plan Document, January 2010*

5.1.5.1 *CP7 – Biodiversity*

Sites designated as of importance for nature conservation at an international or national level will be conserved and enhanced and inappropriate development will be resisted. The degree of protection given will be appropriate to the status of the site in terms of its international or national importance.

Development:

- A) Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or
- B) Which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly, or
- C) That compromises the implementation of the national, regional, county and local biodiversity action plans will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and:
 - i) Mitigation measures can be put in place to prevent damaging impacts; or
 - ii) Appropriate compensation measures to offset the scale and kind of losses are provided.

5.1.6 *Environment Act 2021*

On 15th October 2019, the government introduced a new Bill to Parliament; The Environment Bill. This Bill was given Royal Assent on 9th November 2021 thereby passing the Environment Act 2021. This legislation will help ensure that England maintains and improves its environmental protection.

The Act details a legal requirement for all developments to ensure that a minimum of 10% net gain in Biodiversity is delivered. The Environment Act 2021 will help deliver the government's commitment to halt species decline by 2030.

Under the statutory framework for biodiversity net gain, subject to some exceptions, every grant of planning permission is deemed to have been granted subject to the condition that the biodiversity gain objective is met ("the biodiversity gain condition"). This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the on-site habitat. This increase can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits.

The biodiversity gain condition is a pre-commencement condition: once planning permission has been granted, a Biodiversity Gain Plan must be submitted and approved by the planning authority before commencement of the development. There are exemptions which disapply the condition from certain planning permissions, as well as special modifications for planning permissions for phased development and the treatment of irreplaceable habitats.

5.2 **Potential Impacts**

5.2.1 *Sites of Nature Conservation Importance*

There are no foreseeable direct or indirect impacts on sites of nature conservation importance as a result of the proposals.

From the calculations undertaken as part of this study, the site is located approximately 6.7km north of the Thames Basin Heaths SPA. Natural England has identified that recreational pressure,

especially dog-walking, will be the predominant significant adverse impact on the bird species for which the SPA is designated. It has been identified that an adverse impact on the integrity of the SPA is likely to result from any residential planning applications within 5km from the SPA which result in a net increase in housing, and therefore an increase in population.

Given that the site is located further than 5km from the SPA, no direct or indirect impacts are predicted.

The proposed development does not fall within the SSSI impact zone categories outlined in Section 4.1.1.1. Given this, the Local Planning Authority (LPA) are not required to consult Natural England on likely risks.

5.2.2 Habitats

The proposals will result in the loss of an area of vegetated garden. This habitat is considered to be of ecological value within the context of the site only and habitat loss is unlikely to result in significant ecological impacts beyond the site level.

Recommendations are made for native landscape planting, to provide compensation and enhancement.

5.2.3 Biodiversity Net Gain Assessment

The Biodiversity Net Gain Assessment and calculation is presented below. The calculation is based off the UKHab Plan in Appendix 4 and the Proposed Habitat Plan & Habitat Change Plan in Appendix 5. See Appendix 7 for the biodiversity calculation.

5.2.3.1 Habitat Status Before Development

Table 9 presents the areas/lengths of each baseline habitat, prior to development.

Table 9. On-site habitat areas/lengths prior to development.

Habitat UKHab	Total Area (ha)/total length (km)
Developed land; sealed surface	0.0104
Vegetated garden	0.0231
Non-native and ornamental hedgerow	0.017

5.2.3.2 Habitat Condition Assessment

Habitat condition was assessed according to the criteria developed by DEFRA (2025), using the results of the UKHab Survey.

The condition assessments for on-site habitats are presented in Table 10.

Table 10. On-site habitat condition assessment.

Habitat	Condition Assessment	Justification
Developed land; sealed surface	N/A - Other	Within the Metric, developed land; sealed surface is fixed at a N/A – other condition assessment.
Vegetated garden	Condition Assessment N/A	Within the Metric, vegetated garden is fixed at condition assessment N/A .

Habitat	Condition Assessment	Justification
Non-native and ornamental hedgerow	Poor	Within the Metric, non-native and ornamental hedgerow is fixed at a poor condition.

5.2.3.3 Habitat Strategic Significance

Strategic significance is the local significance of the habitat based on its location and habitat type. Strategic significance has been determined in accordance with the descriptions set out in the BNG Statutory Metric User Guide (Defra, 2025).

Following the publication of the first Local Nature Recovery Strategy, and in anticipation of more to follow, the approach to strategic significance has been updated. All habitats are recorded as "Low" strategic significance in the preliminary baseline assessment, replacing the previous approach which used a screening dataset incorporating protected areas, existing published plans and strategies, UK Biodiversity Action Plan priority habitat and habitat network data.

Within the Local Nature Recovery Strategy (LNRS) for Berkshire, there are no target actions that are applicable to the post development habitats. Therefore, all post-development habitats are inputted as being 'area/compensation not in local strategy/no local strategy' and are of low strategic significance.

5.2.3.4 Habitat Status After Development

The proposed habitat areas/lengths after development are presented in Table 11.

Table 11. On-site habitat areas/lengths after development.

Habitat	Retained Area (ha)/Length (km)	Enhanced (NA)	New Area (ha)/Length (km)
Developed land; sealed surface	0.0066	-	0.0143
Vegetated garden	0.0091	-	0.0035
Non-native and ornamental hedgerow	0.017	-	-

5.2.3.5 Habitat Condition Assessment

The condition assessments for on-site habitats post-development are presented in Table 12.

Table 12. On-site expected habitat condition assessment post-development.

Habitat	Condition Assessment	Justification
Developed land; sealed surface	N/A - Other	Within the Metric, developed land; sealed surface is fixed at a N/A – other condition assessment.
Vegetated garden	Condition Assessment N/A	Within the Metric, vegetated garden is fixed at condition assessment N/A .
Non-native and ornamental hedgerow	Poor	Within the Metric, non-native and ornamental hedgerow is fixed at a poor condition.

5.2.3.6 Results

The result of the calculation predicts a net loss in biodiversity:

- **-0.02 Habitat Units, -45.98% decrease**
- **-0.00 Hedgerow Units, -0.00% decrease**

The Trading Rules are **not satisfied**.

There are no watercourse habitats within the site and such these habitats are not considered relevant to the biodiversity net gain calculation.

Given the above, the proposals deliver a net loss in habitat biodiversity. The biodiversity net gain calculation is based on habitat (botanical) value alone and does not take into account any species-specific ecological enhancement such as bird boxes and bat boxes. Such measures are likely to help reduce biodiversity loss from the existing situation.

Based on current proposal plans, achieving biodiversity net gain within the site is not considered possible and using biodiversity off-setting is considered the most appropriate method of securing a net gain for biodiversity.

To achieve a 10% biodiversity net gain and satisfy the Environment Act 2021, the purchase of Biodiversity Units through a Biodiversity Offsetting Scheme (such as provided by the Environment Bank) for **0.03** Habitat Units is considered appropriate.

5.2.4 Species

5.2.4.1 Plants

There are no foreseeable impacts on rare plants.

5.2.4.2 Invertebrates

The proposed works are unlikely to have any significant impact on rare or uncommon invertebrates.

5.2.4.3 Amphibians

There are no foreseeable impacts on amphibians or their aquatic or terrestrial habitats.

5.2.4.4 Reptiles

There are no foreseeable impacts on reptiles or their habitats.

5.2.4.5 Birds

The non-native and ornamental hedgerow will be retained, and such there are no foreseeable impacts on nesting birds.

5.2.4.6 Bats

With the retention and protection of the non-native and ornamental hedgerow during construction, it is considered the development will not result in a loss of foraging, roosting or commuting habitat for bats.

External lighting can have an impact on bats by affecting their activity and behaviour. Certain species of bat have been shown to be attracted to mercury vapour lamps which emit light over a very broad-spectrum including UV light to which insects are particularly sensitive. Insects can be attracted in large numbers to mercury lamps and so can bats of the genera *Nyctalus* and *Pipistrellus*, including noctules *N. noctula* and common pipistrelles *P. pipistrellus* (Rydell and Racey,

1993). Lighting has shown to have an opposite effect on certain other species, such as the lesser horseshoe bat *Rhinolophus hipposideros*, which have been shown to avoid areas of artificial light (Stone *et al.* 2009).

New external lighting with the site could therefore have an adverse effect on foraging or commuting bats, partially foraging and dispersal behaviour along the site boundaries. Although disturbance by lighting is unlikely to result in significant impacts under the legal protection afforded to bats (and thus will not require a Bat Licence), lighting may result in a change in bat activity which is not desirable.

5.2.4.7 Other Mammals

Although there are no predicted direct impacts on badgers or hedgehogs, there is potential for building activity to inadvertently create habitats that this species could use. Without mitigation measures, there is a possibility that these species are at risk of injury and trapping due to inadvertent pitfall hazards.

Proposals are not predicted to result in a significant loss of foraging or sheltering habitat for this species, given the habitats that are present within the wider local area.

5.2.4.8 Other Species

There are no foreseeable impacts on other protected/notable species.

6 Recommendations

6.1 Further Surveys

No further surveys for other species are considered necessary.

6.2 Habitats

6.2.1 Retention & Protection

6.2.1.1 Protection of Existing Habitats

During the construction phase, retained hedgerows will be protected in accordance with British Standard 5837:2012, with the establishment of appropriate root protection zones.

6.2.1.2 Developed Land; Sealed Surface

The retained developed land; sealed surface has a pre-assigned condition assessment of **N/A - other**. Given this, there are no formal establishment or management prescriptions to maintain the habitat at this condition assessment.

6.2.1.3 Vegetated Garden

The retained vegetated garden has a pre-assigned condition assessment of **condition assessment N/A**. Given this, there are no formal establishment or management prescriptions to maintain the habitat at this condition assessment.

6.2.1.4 Non-native and Ornamental Hedgerow

The retained non-native and ornamental hedgerow has a pre-assigned condition assessment of **poor**. Given this, there are no formal establishment or management prescriptions to maintain the habitat at this condition assessment.

6.2.2 Creation & Enhancement

6.2.2.1 Vegetated Garden, Developed Land; Sealed Surface (creation)

It is recommended that any new areas of garden planting are designed, planted and managed to maximise their value to wildlife. One key element of this would be the species used within the planting, which should comprise native species where possible, as well as ornamental plants of known value to wildlife. The key will be to provide a variety of flowers and fruits throughout the year in order to provide food for insects and birds, as well as providing potential nest sites through the planting of trees and shrubs.

Garden planting should aim to provide ground cover for animals such as hedgehogs and invertebrates, and so low-growing ground cover should be encouraged. Native species such as bugle, ivy and periwinkle could be used for this purpose, or ornamental species such as lady's mantle, elephant's ears or perennial geraniums may also be suitable for formal areas of ornamental planting. A diversity of structure should also be encouraged through the planting of small trees, with shrubs and herbaceous plants below. Appendix 6 provides a list of plant species that are considered suitable for 'wildlife-friendly' garden planting.

The proposed vegetated garden and developed land; sealed surface have a pre-assigned condition assessment of **condition assessment N/A** or **N/A - other**. Given this, there are no formal establishment or management prescriptions to maintain the habitats at these condition assessments.

6.3 Species

6.3.1 Birds

6.3.1.1 Bird Box Enhancement

The erection of bird nesting boxes is recommended in order to provide suitable nest sites for species within the local area, as nest boxes can be excellent substitutes for the nesting potential of trees. Over 60 species are known to adopt nest boxes including blue tits, great tits, starlings, robins and sparrows. The location and nature of the nest box depends on the species it is designed for; boxes for tits, sparrows or starlings should be fixed two to four metres up a tree or a wall; open-fronted boxes for robins and wrens need to be low down, below 2m, and well-hidden in vegetation. Unless there are trees or buildings which shade the box during the day, boxes should be faced between north and east, thus avoiding strong sunlight and the wettest winds.

On new buildings, the integration of bird boxes is particularly recommended as species such as the house sparrow will readily adopt such features as nest sites, with new integrated nesting features securing a biodiversity enhancement in the long term.

Recommended integrated boxes are:

- Vivara Pro WoodStone House Sparrow Nest Box
- Vivara Pro Build in Woodstone® Half Open Nest Box

6.3.2 Bats

6.3.2.1 Bat Box Enhancement

The erection, or integration, of bat boxes on new buildings is recommended as an enhancement measure, and to provide gain for biodiversity under the NPPF.

Bat brick (sometimes also referred to as 'bat tubes') features can be obtained prefabricated and integrated directly into the fabric of the exterior walls of a building. The bricks/tubes have an external entrance slot which leads to an internal cavity for roosting (e.g. the Vivara Pro Build-in Woodstone Bat Tube). The brick/tube can be concealed behind external cladding, brickwork, stonework or render.

For example, bat bricks/ bat tubes can easily be installed into traditional or modern buildings with external wooden weatherboarding; the brick/tube being concealed behind the overlapping wooden boards with access via a gap under a lifted board which leads to the entrance slot of the brick/tube. Bats can fit through very small gaps and so a crevice of 2-2.5cm should be sufficient to allow access to the slot of the bat brick/tube.

Alternatively, conventional bat boxes could be installed; these could be traditional wooden boxes, or longer lasting woodcrete boxes specifically designed for buildings and houses (e.g. the Beaumaris Woodstone Bat Box). If these boxes are adopted, it is recommended that they are installed as high as possible on the exterior walls, just under the eaves. South-facing façades should be favoured.

6.3.2.2 External Lighting

It is recommended that external lighting is avoided within the site, unless it is necessary for reasons of security and safety. **In particular, lighting should be avoided around any new bat roosting features and the retained non-native and ornamental hedgerow.**

The key in the first instance is to maintain or reduce existing light levels, and reduce blue content to protect the bat species present; this is in line with the mitigation hierarchy where impacts are avoided in the first instance by being planned out (Bat Conservation Trust, 2023).

If lighting is required, it should be kept at low level and at low intensity (Bat Conservation Trust, 2023 and Emery, 2008).

Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on key habitats and features:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt

- Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand
- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

6.3.3 *Badgers & Hedgehogs*

Badgers and hedgehogs passing through the site during the construction phase of development are at risk of injury and trapping due to inadvertent pitfall hazards. This is particularly the case when foundations are being excavated. It is therefore recommended that no ground works take place outside of daylight hours and at night any pits on site are appropriately covered over/fenced off, or that a ramp is put in place via which these species can escape.

6.3.3.1 *Maintenance of Commuting Routes*

Hedgehogs may be present within the local area and garden habitats could be used by foraging hedgehogs. It is recommended that any garden fences or walls erected within the development (that could act as a barrier to hedgehog movement) are made permeable for hedgehogs. This can be achieved by cutting or leaving a 13cm-by-13cm hole within the fence or wall; this is sufficient for any hedgehog to pass through, and this is too small for nearly all pets (see Figure 1).



Figure 1. An example of a hole cut within a fence, creating a 'hedgehog highway'.

6.3.4 Invertebrates

It is recommended that bee bricks (see Figure 2) are integrated into any new buildings. The solitary bees that use bee bricks are industrious and safe around children and pets. The bee brick provides a habitat that has become harder to find in modern gardens.

If adopted, the bee bricks should be positioned in a warm sunny spot, south facing, with no vegetation in front of the fascia. The bee bricks should be installed at least 1m from the ground (there is no upward limit). It is helpful to have bare soil nearby, and food sources such as flowers.



Figure 2. Bee Brick. Source: www.nhbs.com.

7 References

- Bat Conservation Trust, 2023. *Bats and artificial lighting at night*. The Bat Conservation Trust, London.
- Collins, J., 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London.
- CIEEM. 2018. *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Cresswell W. and Whitworth R., 2004. *An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt Triturus cristatus*. English Nature Research Report 576. English Nature, Peterborough.
- Defra, 2025. *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. July 2025 (v1.0.2)*. Defra.
- Defra, 2025. *The Statutory Biodiversity Metric User Guide*. Defra. First published: February 2024 Last updated: July 2025.
- Emery, M., 2008. *Effect of Street Lighting on Bats*. Urbis Lighting Ltd., Anglia.
- Joint Nature Conservation Committee, 2012. *Bat Worker's Manual*. Joint Nature Conservation Committee, Peterborough, UK.
- Reason, P.F. and Wray, S., 2023. *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.
- Rydell J. & Racey, P. A. 1995. *Streetlamps and the feeding ecology of insectivorous bats*. Recent Advances in Bat Biology Zool. Soc Lond Symposium abstracts.
- Stone, E.L., Jones, G., & Harris, S. 2009. *Street lighting disturbs commuting bats*. Current Biology 19:1-5.
- UKHab Ltd, 2023. *UK Habitat Classification Version 2.0* (<https://www.UKHab.org>).

8 Appendix 1. Photographs



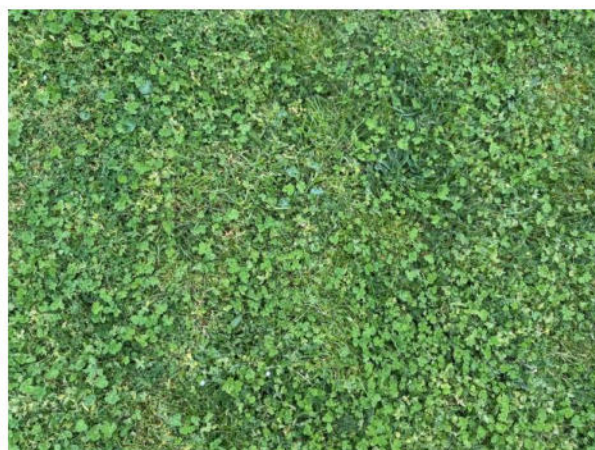
Photograph 1. The northern boundary, showing the non-native and ornamental hedgerow.



Photograph 2. A view of the site from the east.



Photograph 3. A view of the western area of the site, from the east.

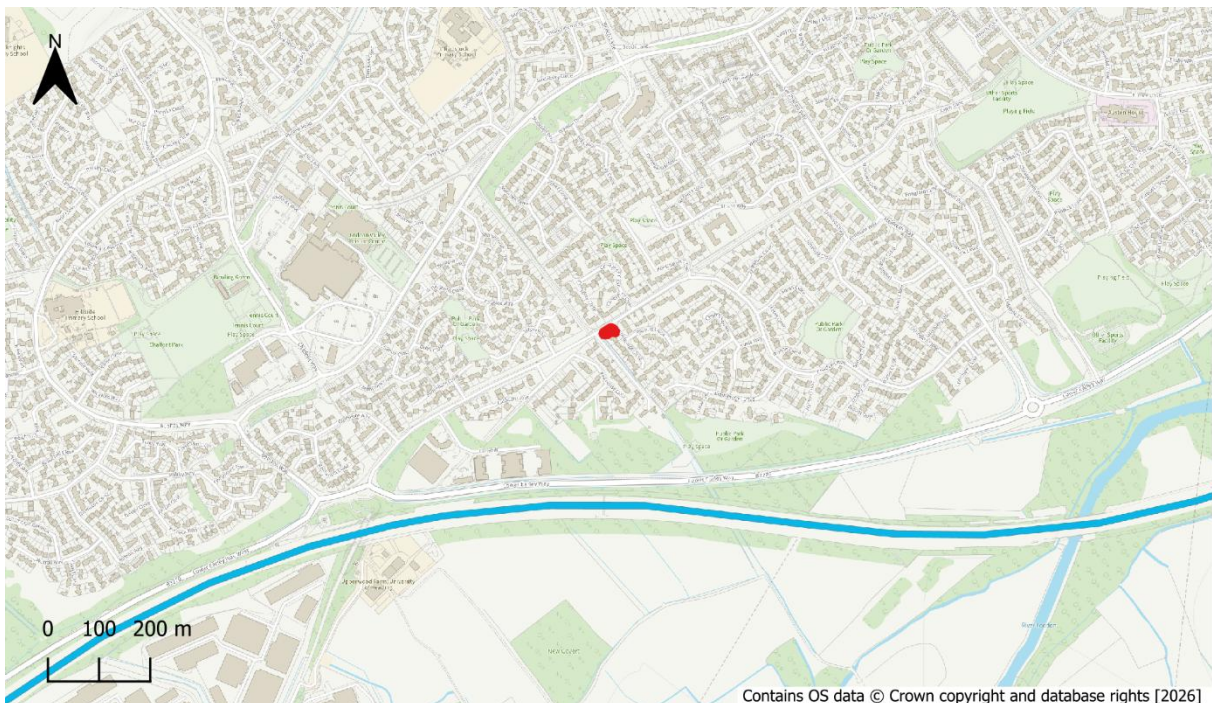


Photograph 4. Detail of the modified grassland within the vegetated garden.

9 Appendix 2. Site Location Plans



Aerial photograph showing the location of the site (outlined in red). Source: *Google Satellite*

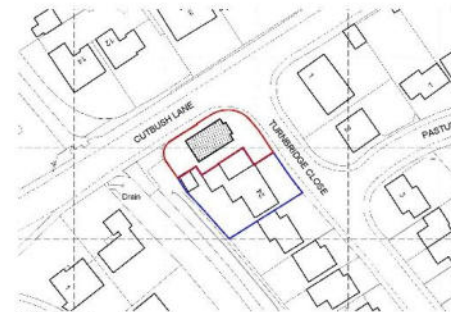


Ordnance Survey map showing the location of the site (outlined in red) within the local area. Source: *OSM Standard*

10 Appendix 3. Proposal Plan



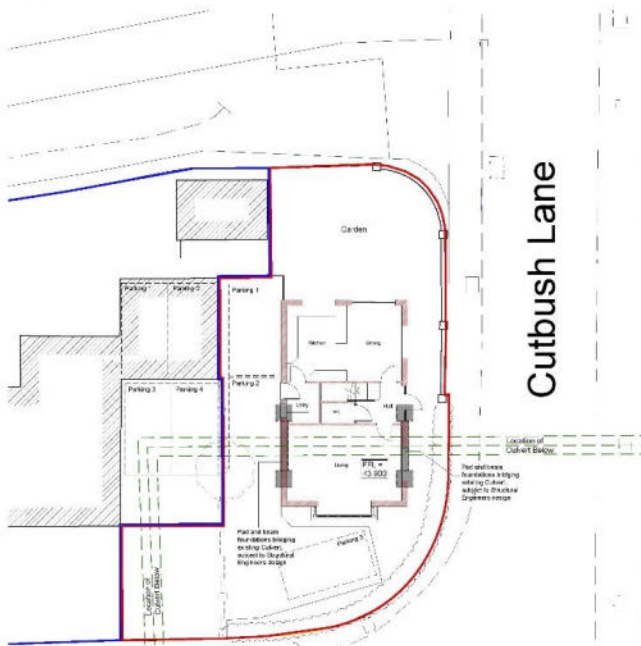
Typical Indicative Elevation (Scale 1:100)



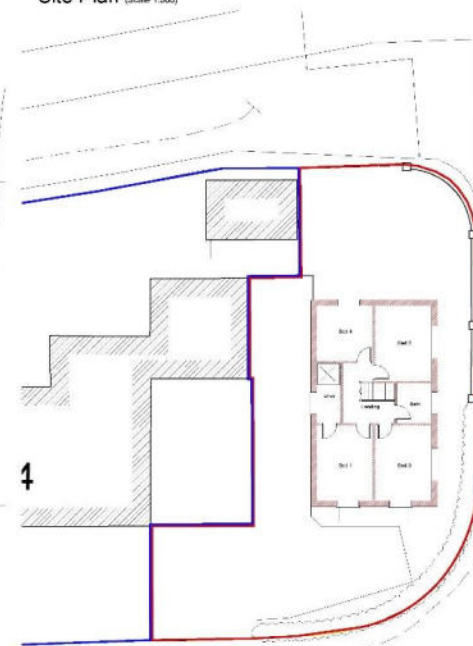
Site Plan (Scale 1:500)



Location Plan (Scale 1:1250)



Ground Floor Plan (Scale 1:100)



First Floor Plan (Scale 1:100)

Cutbush Lane

Client Services	20/05/20
Design	20/05/20

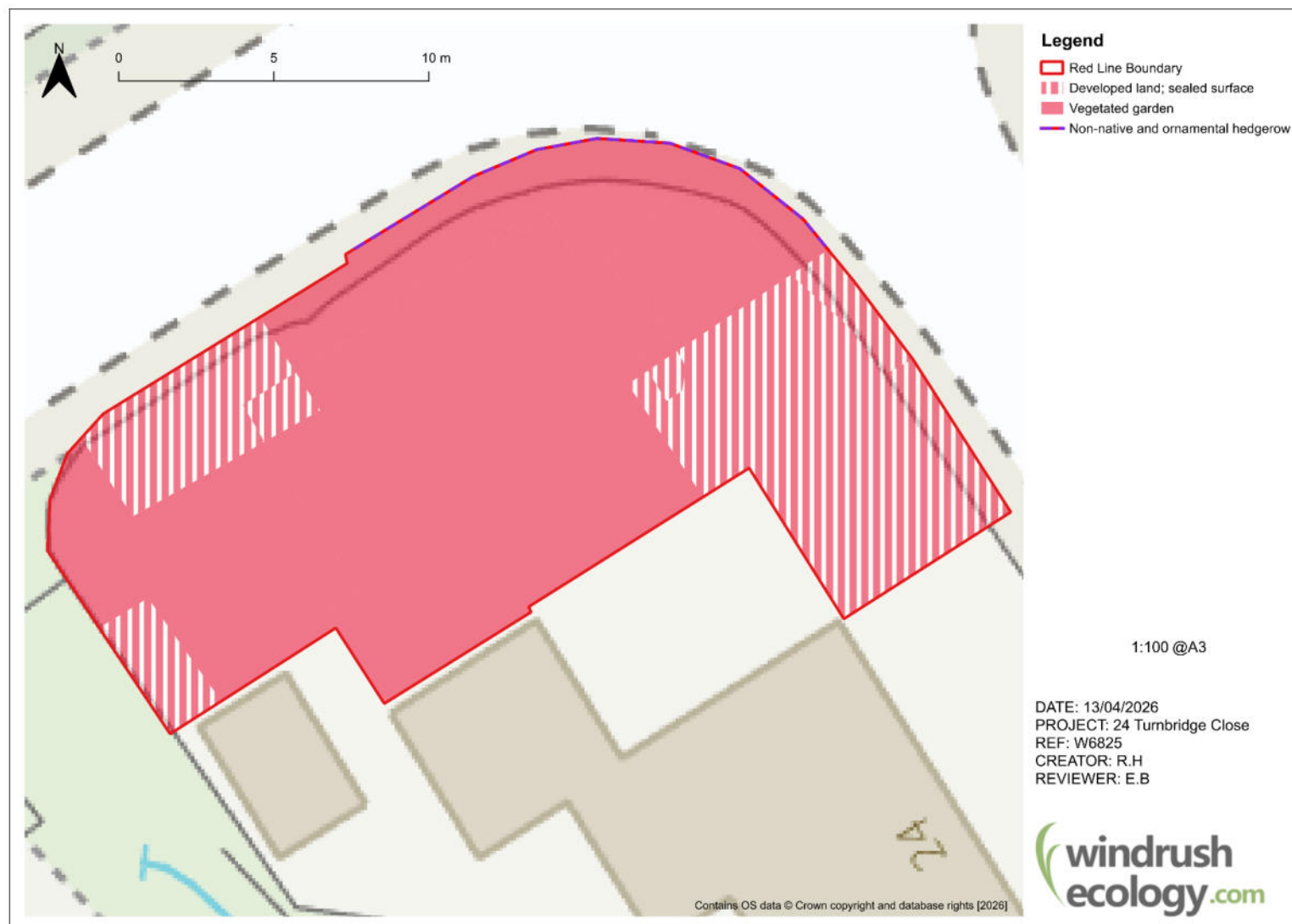
Tony Day Architecture Ltd
Planning • Design • Architecture
www.tonydayarchitecture.co.uk

Client: Mr D O'Connor
Address: 24 Turnbridge Close, Lower Earley
Postcode: BT38 4LZ

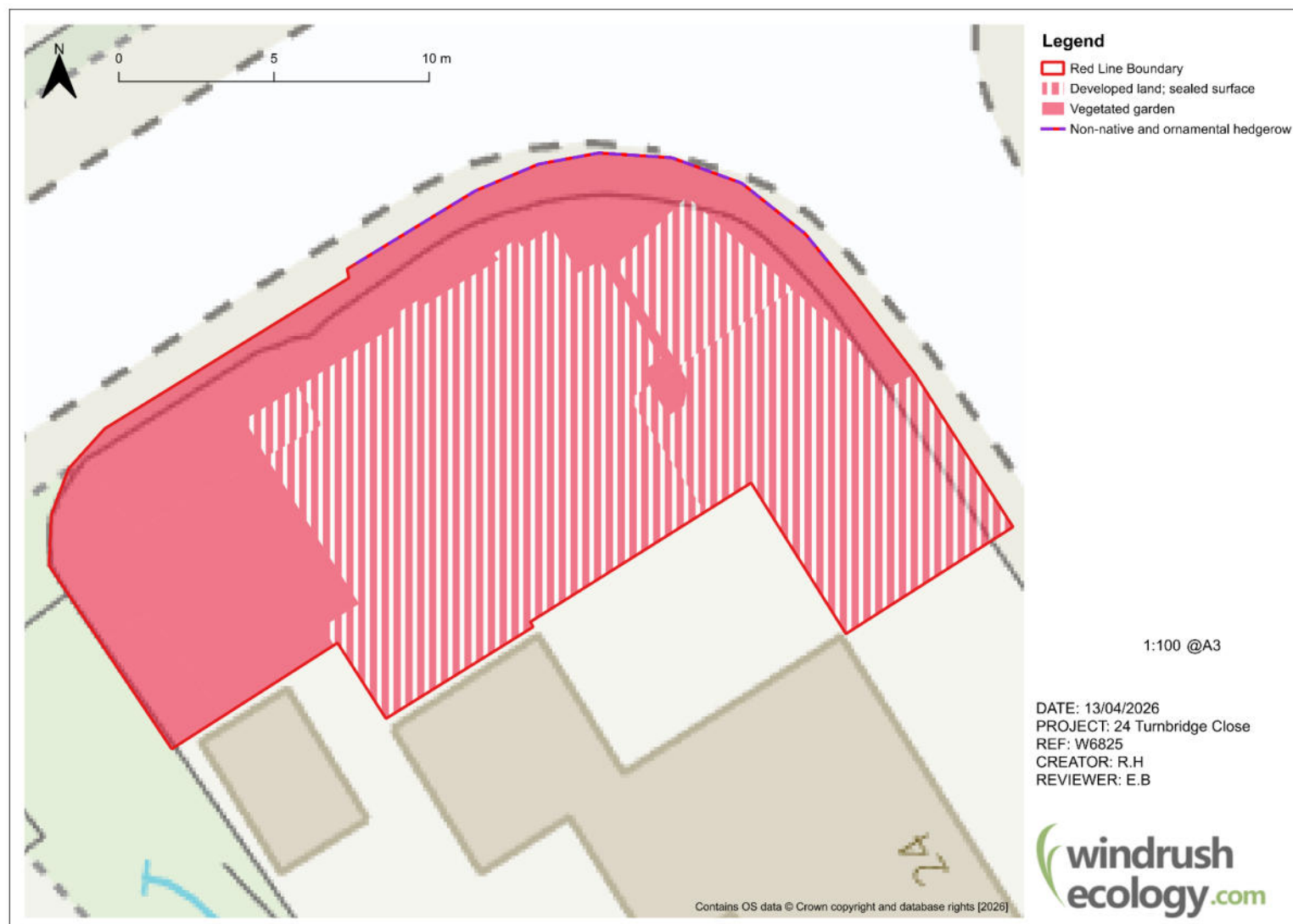
Project: FEASIBILITY SCHEME

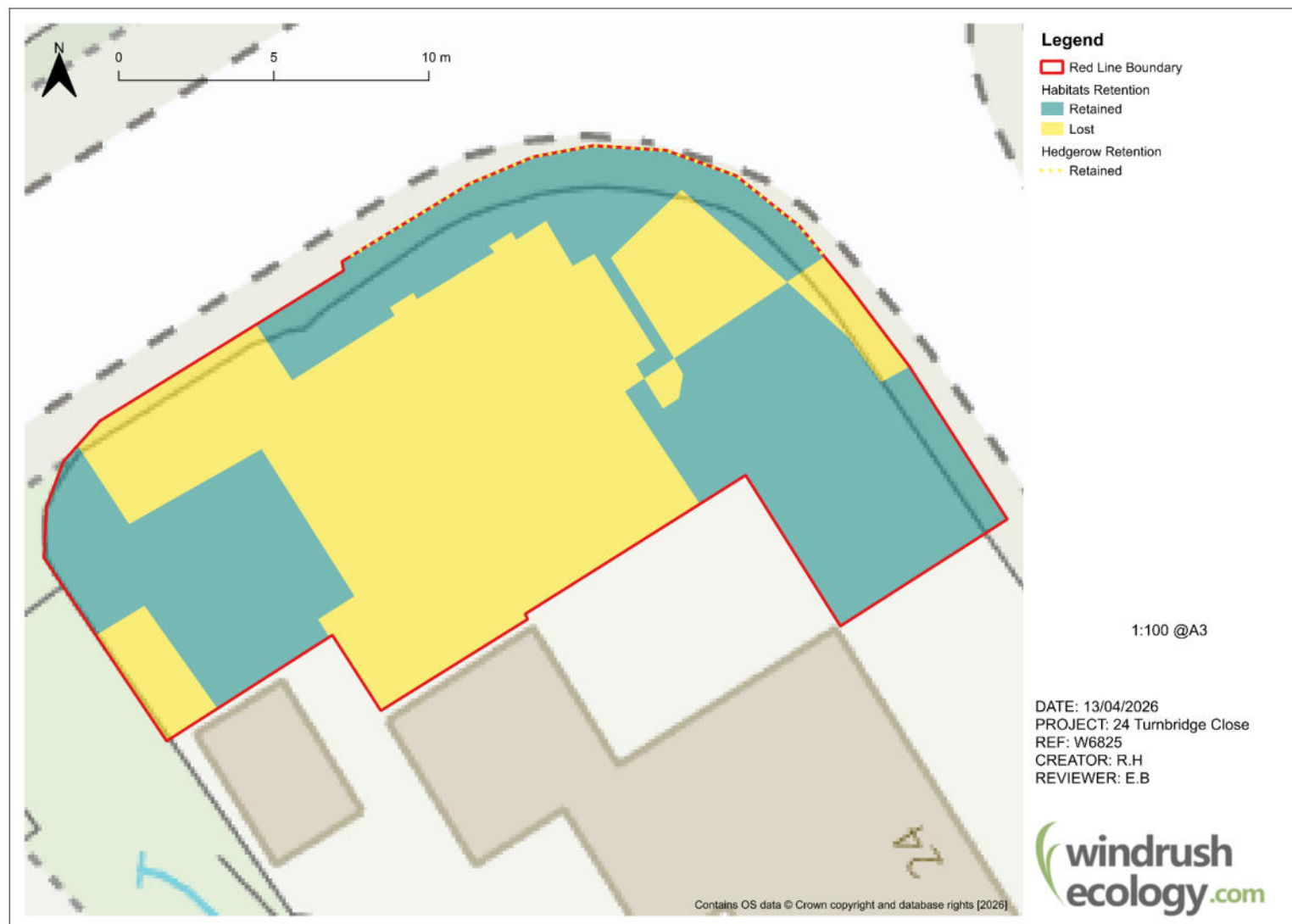
Date: 20/05/20
Drawing No: 3753/100
Sheet: A

11 Appendix 4. UKHab Plan



12 Appendix 5. Proposal Habitat Plan & Habitat Change Plan





13 Appendix 6. Species for Landscape and Ornamental Planting

Common Name	Botanical Name
Trees	
Field maple*	<i>Acer campestre</i>
Beech*	<i>Fagus sylvatica</i>
Hornbeam*	<i>Carpinus betulus</i>
Willow*	<i>Salix</i> sp.
Silver birch*	<i>Betula pendula</i>
Rowan*	<i>Sorbus aucuparia</i>
Whitebeam*	<i>Sorbus aria</i>
Alder*	<i>Alnus glutinosa</i>
Wild cherry*	<i>Prunus avium</i>
Flowering cherry	<i>Prunus</i> sp.
Flowering pear	<i>Pyrus calleryana</i>
Crab apple*	<i>Malus sylvestris</i>
Fruiting apple	<i>Malus</i> sp.
English oak*	<i>Quercus robur</i>
Small-leaved lime*	<i>Tilia cordata</i>
Shrubs	
Holly*	<i>Ilex aquifolium</i>
Hazel*	<i>Corylus avellana</i>
Wayfaring tree*	<i>Viburnum lantana</i>
Wild service tree*	<i>Sorbus torminalis</i>
Buckthorn*	<i>Rhamnus cathartica</i>
Guelder rose*	<i>Viburnum opulus</i>
Hawthorn*	<i>Crataegus monogyna</i>
Hebe	<i>Hebe</i> sp.
Rosemary	<i>Rosmarinus</i>
Ceanothus	<i>Ceanothus</i> sp.
Weigela	<i>Weigela</i> sp.
Dog rose	<i>Rosa canina</i>
Dogwood*	<i>Cornus sanguinea/alba</i>
Rose (single flowered varieties)	<i>Rosa</i> sp.
Wild privet*	<i>Ligustrum vulgare</i>
Garden privet	<i>Ligustrum ovalifolium</i>
Lilac	<i>Syringa vulgaris</i>
Escallonia	<i>Escallonia</i> sp.
Lavender	<i>Lavandula</i> sp.
Flowering currant	<i>Ribes</i> sp.
Honeysuckle*	<i>Lonicera periclymenum</i>
Mexican orange blossom	<i>Choisya</i> sp.
Spiraea	<i>Spiraea</i> sp.
Amelanchier	<i>Amelanchier lamarckii/canadensis</i>
Cotoneaster	<i>Cotoneaster</i> sp.
Yew*	<i>Taxus baccata</i>
Broom	<i>Cytisus</i> sp.

Common Name	Botanical Name
Rose of Sharon	<i>Hypericum calycinum</i>
Firethorn	<i>Pyracantha</i> sp.
Butterfly bush	<i>Buddleia davidii</i>
Clematis	<i>Clematis</i> sp.
Perennials	
Elephant's ears	<i>Bergenia cordifolia</i>
Sage	<i>Salvia</i> sp.
Lamb's ears	<i>Stachys byzantia</i>
Periwinkle*	<i>Vinca major</i> & <i>Vinca minor</i>
Ivy*	<i>Hedera helix</i>
Bugle*	<i>Ajuga reptans</i>
Lady's mantle	<i>Alchemilla mollis</i>
Geraniums	<i>Geranium</i> sp.
Globe thistle	<i>Echinops ritro</i>
Monk's hood	<i>Aconitum</i> sp.
Yarrow*	<i>Achillea millefolium</i>
Teasel*	<i>Dipsacus fullonum</i>
Oriental poppy	<i>Papaver orientalis</i>
Michaelmas daisy	<i>Aster</i> sp.
Bear's breeches	<i>Acanthus spinosus</i>
Montbretia	<i>Crocsmia</i> sp.
Purple coneflower	<i>Echinacea purpurea</i>
Ornamental onion	<i>Allium</i> sp.
Catmint	<i>Nepeta</i> sp.
Verbena	<i>Verbena</i> sp., <i>Verbena bonariensis</i>
Marjoram	<i>Origanum majorana</i>
Thyme	<i>Thymus</i> sp.
Crocus	<i>Crocus</i> sp.
Daffodil	<i>Narcissus</i> sp.
Snowdrop	<i>Galanthus nivalis</i>
Winter aconite	<i>Eranthis</i> sp.
Bluebell*	<i>Hyacinthoides non-scripta</i>
Primrose*	<i>Primula veris</i>
Forget-me-not*	<i>Myosotis</i> sp.
Grape hyacinth	<i>Muscari botryoides</i>
Hollyhock	<i>Althaea rosea</i>
Lenten rose	<i>Helleborus orientalis</i>
Foxglove*	<i>Digitalis purpurea</i>
Greater knapweed*	<i>Centaurea scabiosa</i>
Great mullein*	<i>Verbascum thapsus</i>
Toadflax*	<i>Linaria vulgaris</i>
Meadow crane's-bill*	<i>Geranium pratense</i>
*indicates native species	

14 Appendix 7. Statutory Biodiversity Metric

Please refer to separate Excel document.