



Health and Wellbeing Hub, Graven Hill, Bicester

Ecological Impact Assessment

March 2021

Waterman Infrastructure & Environment Limited

Merchants House, Wapping Road, Bristol, BS1 4RW
www.watermangroup.com



Client Name: Apollo Capital Projects Development Ltd
Document Reference: WIE16470-100-R-9-2-1-EcIA
Project Number: WIE16470-100

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
Final	March 2021	Simon Dowell Senior Ecologist	Lee Mantle Associate Director	Lee Mantle Associate Director

Comments

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Contents

1. Introduction	1
Proposed Development	1
Site History / Previous Surveys	1
Objectives of this EclA	1
2. Methodology	3
Scope of the Assessment	3
Zone of Influence and Important Ecological Features	3
Ecological Data Search	4
‘Extended’ Phase 1 Habitat Survey	4
Invasive Plant Species Assessment	4
Preliminary Roost Assessment	5
Constraints and Limitations	7
3. Results	8
Ecological Data Search	8
Statutory Sites	8
Non-Statutory Sites	8
Ancient Woodland	8
Protected, BAP and Other Notable Species	8
‘Extended’ Phase 1 Habitat Survey	10
Protected, BAP and other Notable Fauna and Flora	11
4. Assessment of Important Ecological Features	14
5. Environmental Measures and Residual Effects	16
Important Ecological Features	16
Habitats	16
Protected and Notable Fauna	17
Birds	17
Invertebrates	17
6. Conclusions	18
National Planning Policy	2
National Planning Policy Framework, 2019	2
Local Planning Policy	3
The Cherwell Local Plan 2011 – 2031 (Part 1)	3
Biodiversity Action Plans	4
Guidance	5
Legislation	6

Figures

Figure 1: Habitat Features Plan (Ref. WIE16470-100_GR_PEA_1A))

Tables

Table 1:	Geographical Scale of Important Ecological Feature Categories	3
Table 2:	Legally Protected Species	4
Table 3:	Adapted Tree Assessment Guidelines	5
Table 4:	Summary of Ecological Data Search Records of Non-statutory Designated Sites within 1km of the Site.....	8
Table 5:	Summary of Ecological Data Search records of flora and fauna within 1km of the Site	8
Table 6:	Ecological Features Scoped out of the Assessment	14

Appendices

A. Planning Policy and Summarised Legislation

1. Introduction

- 1.1. Waterman Infrastructure & Environment Ltd (Waterman) was commissioned by Apollo Capital Projects Development Ltd (hereafter referred to as the 'Applicant') to carry out an Ecological Impact Assessment (EclA) at an area of land known as the Health and Wellbeing Hub, located at Graven Hill, Bicester, Oxfordshire (hereafter referred to as the 'Site').
- 1.2. The Site is approximately 1 hectare (ha) in area, centred on Ordnance Survey Grid Reference SP 58885 21239. The Site once comprised the Rodney House Complex which has been subject to demolition works in 2016 (two single storey buildings) and 2020 (a boiler tower). As such, the Site now comprises a disused area of hardstanding surrounded by unmanaged areas of tall ruderal vegetation, dense scrub and scattered trees.

Proposed Development

- 1.3. The proposed development consists of the current site being turned in to a health hub with a three-storey building with associated carparking proposed. The proposed landscaping will include a sensory garden as well as planting of native trees and hedgerows.

Site History / Previous Surveys

- 1.4. Previous ecological surveys were undertaken by AMEC Ltd (formally Entec) in 2010 and 2011 to inform the Outline Planning Application for the wider MoD Graven Hill site. The findings of these surveys can be found in AMEC's Baseline Biodiversity Report¹.
- 1.5. In addition, Waterman undertook ecological surveys (including; badger *Meles meles*, bat, dormouse *Muscardinus avellanarius*, great crested newt (GCN) *Triturus cristatus*, reptile, invertebrate and breeding birds) between 2014 and 2016 at LTA1 (which included the Site) of the Graven Hill site to support a Reserved Matters Application and to allow the partial discharge of planning conditions, including ecology planning conditions 73, 74 and 75. The findings of these surveys can be found in Waterman's Protected Species Report².
- 1.6. The Site was subject to a GCN translocation exercise in 2016 as part of a Natural England (NE) European Protected Species Mitigation (EPSM) Licence for LTA1 (licence no. 2016-20166-EPS-MIT). An amphibian barrier fencing remains present at the Site to ensure the site remains free of these species.
- 1.7. A building (known as Rodney House Boiler Tower) was present on Site at the time of the 'Extended' Phase 1 Habitat survey as part of this EclA. This building has since been demolished under a demolition consent, following surveys for bat and barn owl by Waterman in 2020³ on behalf of Graven Hill Village Development Company Ltd (Appendix A). As such, no reference to this building is made within this EclA report.

Objectives of this EclA

- 1.8. This EclA presents the methods and results of an ecological data search, 'Extended' Phase 1 Habitat Survey, common invasive plant species survey and a Preliminary Roost Assessment (PRA) for roosting bats at the trees present on Site,

¹ AMEC Environment & Infrastructure UK Limited (September 2011) Defence Infrastructure Organisation: Future Defence storage and Distribution Programme-Redevelopment of MOD Bicester- Baseline Biodiversity Report (Appendix to BIC/OPA/DOC10)

² EED13983-102_R_1_2_4_SD – (2015) Waterman Infrastructure & Environment

³ WIE11386-161-BN-2-1-1-ECO (2020) Waterman Infrastructure & Environment

- 1.9. Based on the findings of the surveys detailed above, this EcIA provides an assessment of any Important Ecological Features (IEFs) present within the Zone of Influence (Zol) and assesses any potential significant effects that the Development may have on any such features identified. Environmental measures would be incorporated into the Development to provide mitigation, compensation and/or enhancement, as required.
- 1.10. The purpose of this EcIA is to:
- Identify all IEFs present within the identified Zol and describe any resulting constraints to, or significant ecological effects from, the Development.
 - Set out the environmental measures in line with the Mitigation Hierarchy to ensure compliance with nature conservation legislation and planning policy (**Appendix A**) and to address any potential significant ecological effects.
 - To identify how the environmental measures will be secured; and
 - To provide an assessment of the significance of any residual effects.

2. Methodology

Scope of the Assessment

- 2.1. The scope of this EclA is based on current guidelines⁴. Consideration is applied to identifying IEFs within the Zol, as detailed below. Where IEFs are identified, they will be subject to evaluation.

Zone of Influence and Important Ecological Features

- 2.2. The Zol is the area(s) over which ecological features may be impacted by the biophysical changes caused by the proposed Development. Based on the scale and nature of the Development, it has been assessed that the Zol arising from these works is unlikely to be greater than 1km from the Site.
- 2.3. The 'Extended' Phase 1 Habitat survey area comprised primarily the Site. However, adjacent land has been viewed where possible and reference has been made to existing LTA1 ecological data where relevant.
- 2.4. As referenced in industry guidance, IEFs that are anticipated to be affected by the Development have been identified and subject to assessment. In this report, designated sites, habitats and species that fall into the categories in **Table 1** and **Table 2** have been identified as being ecologically important and/or legally protected/controlled and form the scope of data gathering during the data search and Site surveys.

Table 1: Geographical Scale of Important Ecological Feature Categories

Geographical Level of Importance	Category
International	Statutory designated sites: Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites (including candidate SACs and proposed SACs, SPAs and Ramsar sites)
National	Statutory designated sites: Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR). Ancient Woodland. Habitats and species of principal importance for the conservation of biodiversity as listed on Schedule 41 of the NERC Act, 2006, including ecologically important hedgerows under the Hedgerows Regulations 1997; and Red List (using IUCN criteria ⁵) and nationally rare or scarce species and Birds of Conservation Concern (Red List ⁶).
County	Local Nature Reserves (LNR); and Non-statutory designated wildlife sites: known as Local Wildlife Sites (LWS), Biodiversity Opportunity Areas (BOAs) and Woodland Trust Reserve (WTR) in Oxfordshire; and Local Biodiversity Action Plan (LBAP) habitats and species.

⁴ CIEEM (2018): 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.' Chartered Institute of Ecology and Environmental Management, Winchester

⁵ <http://www.iucnredlist.org/technical-documents/categories-and-criteria>

⁶ https://www.rspb.org.uk/birds-and-wildlife/bird-and-wildlife-guides/bird-guide/status_explained.aspx

Table 2: Legally Protected Species

Legislation (Summarised in Appendix A)
Species included on Schedules II and V of The Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.
Species included on Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended), excluding species that are only protected in relation to their sale (Section 9[5] and 13[2]); and
Badgers, which are protected under the Protection of Badgers Act 1992.

Ecological Data Search

- 2.5. The aim of the ecological data search is to collate existing ecological records for the Site and adjacent areas. Obtaining existing records is an important part of the evaluation process, as it provides additional information that may not be apparent during a site survey.
- 2.6. An ecological data search was undertaken in July 2020, all records of protected species, and/or other notable fauna and flora within 1km of the Site were requested from Thames Valley Environmental Records Centre (TVERC)⁷.
- 2.7. Records of important statutory and non-statutory designated sites as referred to in **Table 1**, for their nature conservation value within 1km of the Site were also requested from TVERC and searched for in 2020 on the Multi-Agency Geographic Information for the Countryside (MAGIC)⁸.
- 2.8. In addition, Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI) listed under Section 41 (S41) of the Natural Environment and Rural Communities Act 2006 (NERC), as well as Habitat Action Plans (HAPs) and Species Action Plans (SAPs) listed under the Cherwell BAP were reviewed for the habitats and species of importance, to assign an ecological context to the Site.
- 2.9. Within this report, designated sites located within 1km of the Site (the ZoI) have been included in **Table 5**. **Table 6** however lists species records within 1km of the Site due to some records only having a 4-figure grid reference.

'Extended' Phase 1 Habitat Survey

- 2.10. An 'Extended' Phase 1 Habitat Survey of the Site was undertaken on 29th July 2020 using the Joint Nature Conservancy Council (JNCC, 2010)⁹ standard 'Phase 1' survey technique. The Phase 1 Habitat Survey methodology was 'Extended' by undertaking an assessment of the Site to support protected and notable faunal species. All habitat types within the Site were mapped (**Figure 1**) with target notes where appropriate. The survey of the Site was conducted under conditions deemed appropriate for survey.

Invasive Plant Species Assessment

- 2.11. The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats, including aquatic habitats. The 'Extended' Phase 1 Habitat Survey checked for the presence of common

⁷ TVERC (July 2020) Biodiversity Report: Health and Wellbeing Hub, Graven Hill (ref: TVERC/20/284)

⁸ MAGIC. [online] Available at: <http://magic.defra.gov.uk/> [Accessed June 2020].

⁹ JNCC. (2010). *Handbook for Phase 1 Habitat Survey*. Nature Conservancy Council

invasive species including Japanese knotweed *Reynoutria japonica*, giant knotweed *Reynoutria sachalinensis*, hybrid knotweed *Reynoutria baldschuanica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*, however an exhaustive search for all Schedule 9 species has not been completed as part of this assessment.

Preliminary Roost Assessment

- 2.12. As part of the PRA, a ground-based tree assessment for bats was undertaken at the Site during the 'Extended' Phase 1 Habitat Survey. The survey was led by an experienced ecologist who holds a Natural England Class 4 Licence (2015-11638-CLS-CLS) for all bat species and counties of England. The survey was based on current best practice guidelines¹⁰.
- 2.13. An assessment of each tree present on Site was made in terms of its suitability to support roosting bats. The survey consisted of a visual inspection (including the use of binoculars and a torch where required) of the exterior of the trees for evidence of bat use (e.g. droppings, scratch marks, staining and sightings). A number of factors were considered, including, presence of features suitable for use by roosting bats, proximity to foraging habitats or cover and potential for disturbance. Notes were made relating to relevant characteristics of features providing potential access points and roosting opportunities for bats, and each tree was classified in accordance with **Table 3**.

Table 3: Adapted Tree Assessment Guidelines

Assigned Bat Roosting Potential	Description
Known or confirmed roost	Evidence of roosting bats within the tree.
High	A tree with one or more Potential Roosting Feature (PRFs) 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 habitat.
Moderate	A tree with one or more PRFs 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).
Low	A tree of sufficient size and age which could contain PRFs but none were seen from the ground inspection or very small numbers of features seen with limited roosting potential.
Negligible	Negligible features, trees unlikely to be used by roosting bats.

IEF Assessment

- 2.14. Data gathered as part of this EclA has been used to identify IEFs (i.e. designated sites, habitats and species as listed in **Tables 1** and **2**) that are anticipated to be affected by the Development within the Zol (up to 1km from the Site).
- 2.15. However, not all the IEFs within the Zol have the potential to be significantly affected by the Development, or the legislation pertaining to them to be contravened. Therefore, where features are unlikely to be affected by the Development, or where any effects that impact IEFs are unlikely

¹⁰ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

to be significant, for the reasons¹¹ listed below, such features have been scoped out of the assessment:

- No pathway of effect has been identified, for example the feature is sufficient distance from the Site or there is the presence of a barrier between its location and the Site¹²; or
- The feature is of insufficient biodiversity conservation value within the Zol, due to its quality, extent or population size¹³.

2.16. For all remaining features scoped into the assessment, the pathway of effect (e.g., habitat loss, lighting, noise etc.) and potential impact of this on the feature have been identified.

IEF Impact Assessment

- 2.17. The value of each specific IEF has been assigned a geographic frame of reference, i.e. international and European value being the most important, followed by national, regional, metropolitan/county/vice-county, district, borough, local value and 'Site'. The Zol for each IEF has been reassessed (from that used to collect the ecological data search information) based on the information collated from all assessments completed.
- 2.18. Value judgements are based on various characteristics that can be used to identify IEFs. These include site designations (such as SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, 'quality' can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.
- 2.19. Value judgements are also based on the Ecologist's academic and professional qualifications, in addition to experience of undertaking similar assessments.
- 2.20. The assessment of the potential effects of the Proposed Development are assessed within the Zol. Effects can be positive or negative. Negative effects can include:
- direct loss of habitats;
 - fragmentation and isolation of habitats; and
 - disturbance to habitats and species.
- 2.21. Negative and positive effects on nature conservation features have been characterised based on predicted changes as a result of the Proposed Development. In order to characterise the effects on each feature, the assessment takes account of the following parameters:
- extent;
 - duration;
 - timing;
 - frequency; and
 - reversibility

¹¹ Positive or negative effects on ecological features that have the potential to influence a planning decision are considered to be significant

¹² Whilst the Zol of potential effects arising from the development is up to 1km from the Site, the ecological Zol (within which the feature could be affected) for each feature may vary and for some features may be much less, e.g. great crested newts generally move up to a maximum of 500m from a breeding pond and movement can be restricted by barriers such as busy roads and fast flowing rivers.

¹³ E.g. whilst a Priority Species such as skylark *Alauda arvensis* or house sparrow *Passer domesticus* is of National importance (Table 2), the impact of development on individual or a small population of such a species, which are generally commonly found, is unlikely to be assessed as significant.

Constraints and Limitations

- 2.22. All plants were identified through their floristic (where possible) and vegetative characteristics.
- 2.23. All other contractors, designers and the client should be aware of the following: The design recommendations within this report are assessed to be the most effective ecological solution at this stage of the project. No other pre-construction information has been provided, obtained or referred to during the preparation of this report (including, but not limited to, services information, geotechnical reports and ordnance reports). In deciding whether and how to progress with this project, it will be incumbent upon the client, designers and contractors to obtain and refer to relevant pre-construction and maintenance information, as required by the Construction (Design and Management) Regulations to ensure compliance. Waterman can assist with the development and co-ordination of this design to support effective risk management on this project upon request

3. Results

Ecological Data Search

Statutory Sites

- 3.1. The Site is not located within any statutory designated sites, and none are located within 1km of the Site.

Non-Statutory Sites

- 3.2. The Site is not located within any non-statutory designated sites. However, one non-statutory site is located within 1km of the Site as detailed in **Table 4**.

Table 4: Summary of Ecological Data Search Records of Non-statutory Designated Sites within 1km of the Site

Site Name	Designation	Distance and Direction from Site (km)	Description
Graven Hill	Local Wildlife Site (LWS)	0.65 south	Predominantly ash coppice with oak standards and much hazel and willow coppice and includes areas of ancient woodland.

Ancient Woodland

- 3.3. No ancient woodland is present on Site; however, Graven Hill wood is a designated ancient woodland site, located approximately 0.65km from the Site.

Protected, BAP and Other Notable Species

- 3.4. Records of legally protected or otherwise notable species of flora and fauna within 1km of the Site were provided by TVERC. A summary of the most significant results of relevance to the Site are provided in **Table 5**.
- 3.5. Full results can be obtained from the data providers but cannot be presented in this report as a result of copyright. Distances provided in **Table 5** below are approximated.

Table 5: Summary of Ecological Data Search records of flora and fauna within 1km of the Site

Species	Category of Importance*	Number of Records	Date Range of Records	Approximate location of records relevant to the study area (km)
Amphibians				
Great crested newt <i>Triturus cristatus</i>	Hab Regs, WCA & SoPI	50	2011-2018	Within site boundary
Common frog <i>Rana temporaria</i>	SoPI	1	2017	0.82km north
Terrestrial Mammals (excluding bats)				

Species	Category of Importance*	Number of Records	Date Range of Records	Approximate location of records relevant to the study area (km)
Badger <i>Meles meles</i>	PBA	2	2004-2007	0.35km south east
European hedgehog <i>Erinaceus europaeus</i>	SoPI	3	2014 - 2019	0.39km north east
Bats				
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Hab regs, WCA & SoPI	1	2009	0.49km north west
Birds				
Barn owl <i>Tyto alba</i>	WCA	4	1993-2005	Within 1km
Cuckoo <i>Cuculus canorus</i>	Red list	18	1994 - 2015	Within 1km
Herring gull <i>Larus argentatus</i>	SoPI & RedList	3	2013 - 2015	Within 1km
Song thrush <i>Turdus philomelos</i>	SoPI RedList	2	2013 – 2015	Within 1km
Starling <i>Sturnus vulgaris</i>	SoPI RedList	9	1995 – 2015	Within 1km
House sparrow <i>Passer domesticus</i>	SoPI RedList	3	2004 – 2016	0.93km north east
Linnet <i>Linaria cannabina</i>	SoPI, RedList	10	1992 – 2015	Within 1km
Peregrine falcon <i>Falco peregrinus</i>	WCA	13	2003 - 2015	Within 1km
Bullfinch <i>Pyrrhula pyrrhula</i>	SoPI	7	2014 - 2015	Within 1km
Red kite <i>Milvus milvus</i>	WCA	109	1985 - 2015	Within 1km
Invertebrates				
Black hairstreak <i>Satyrrium pruni</i>	SoPI	1	2008	0.42km south
Brown hairstreak <i>Thecla betulae</i>	SoPI	1	2011	0.66km north east
Grizzled skipper <i>Pyrgus malvae</i>	SoPI	1	2002	0.66km south

Species	Category of Importance*	Number of Records	Date Range of Records	Approximate location of records relevant to the study area (km)
Large heath <i>Coenonympha tullia</i>	SoPI	4	2009 only	0.67km north east
Flora				
Bluebell <i>Hyacinthoides non-scripta</i>	WCA	3	1987 - 2011	0.71km south

Hab Regs - The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

WCA - The Wildlife and Countryside Act 1981 (as amended)

SoPI – Species of Principal Importance under Section 41 The Natural Environment and Rural Communities Act 2006

LBAP - Oxfordshire Biodiversity Action Plan

Red – Red list criteria (Bird of Conservation Concern)

‘Extended’ Phase 1 Habitat Survey

Habitats

- 3.6. The following habitat types, described in more detail below, were identified on or directly adjacent to the Site during the ‘Extended’ Phase 1 Habitat Survey:
- Bare ground.
 - Ditches.
 - Hardstanding.
 - Semi-improved grassland.
 - Scattered trees.
 - Scrub.
 - Tall ruderal vegetation; and
 - Standing water.
- 3.7. The habitat descriptions given below should be read in conjunction with **Figure 1** which includes target notes and the photographs presented in **Appendix B**.

Bare ground

- 3.1. A large patch of bare ground is present at the centre of the Site following the demolition of prefabricated buildings in 2016.

Ditches

- 3.2. Three surface water drainage ditches are situated off-Site, adjacent to the Site boundary. The ditches are assumed to be seasonally wet. They are all approximately c.1m wide and are colonised by either scrub and/or tall ruderal vegetation (see habitat descriptions below).
- 3.3. Whilst standing water is listed as a HoPI under S41, the drainage ditches on the Site have not been inventoried or designated as a HoPI.

Hardstanding

- 3.4. Hardstanding which provided vehicular and pedestrian access to the Rodney Road Complex (now demolished) is present on Site. The hardstanding has cracks colonised by pioneer species. A rubble pile also remains (see **Figure 1**) on hardstanding within the north-east of the Site following the recent demolition of Rodney Boiler Tower.

Semi-improved grassland

- 3.5. Semi-improved grassland was recorded off-Site, adjacent to the eastern Site boundary. Species recorded include Yorkshire fog *Holcus lanatus*, false oatgrass *Arrhenatherum elatius*, common bent *Agrostis capillaris*, ragwort *Jacobaea vulgaris*, thistle *Cirsium* sp., rosebay willowherb *Chamerion angustifolium*, germander sp. *Teucrium* sp., self-heal *Prunella vulgaris* and creeping cinquefoil *Potentilla reptans*.

Scattered trees

- 3.6. A number of scattered trees were recorded throughout the Site during the 'Extended' Phase 1 Habitat Survey, along with a tree line along the northern Site boundary (see **Plate 1, Appendix B**). Species recorded include Scots pine *Pinus sylvestris*, Norway spruce *Picea abies*, pear *Pyrus communis*, goat willow *Salix caprea*, ash *Fraxinus excelsior*, hawthorn *Crataegus monogyna*, wild cherry *Prunus avium*, small-leaved lime *Tilia cordata*, English oak *Quercus robur* and silver birch *Betula pendula*.

Scrub

- 3.7. A large proportion of the Site is covered in dense self-colonising scrub. Species recorded include elder *Sambucus nigra* saplings, bramble *Rubus fruticosus*, rose *Rosa* sp. and ash saplings.

Tall ruderal

- 3.8. Tall ruderal vegetation was recorded in the majority of the eastern half of the Site around the area of hardstanding (see **Plate 2, Appendix B**). Within this habitat an ephemeral and pioneer community along with some grasses were also recorded. Species within this habitat include rosebay willowherb, teasel *Dipsacus fullonum*, willowherb sp., bulbous buttercup *Ranunculus bulbosus*, broad-leaved dock *Rumex obtusifolius*, thistles, greater plantain *Plantago major*, creeping bent *Agrostis stolonifera*, common nettle *Urtica dioica*, borage *Borago officinalis*, weld *Reseda luteola*, ragwort, scentless mayweed *Tripleurospermum inodorum*, hairy sedge *Carex hirta*, St John's-wort *Hypericum perforatum*, self-heal *Prunella vulgaris*, creeping cinquefoil *Potentilla reptans*, oxeye daisy *Leucanthemum vulgare*, tufted hair grass *Deschampsia cespitosa*, ground ivy *Glechoma hederacea* and vetch sp. *Vicia sativa*.

Standing water

- 3.9. A small area of standing water was present within the tall ruderal habitat (see **Figure 1, Target Note 2**) at the time of the survey. Aquatic flora including brooklime *Veronica beccabunga*, floating sweet-grass *Glyceria fluitans*, bulrush *Typha latifolia*, soft rush *Juncus effusus* and hard rush *Juncus inflexus* were recorded, indicating this area may be permanently wet.

Protected, BAP and other Notable Fauna and Flora

- 3.10. As a result of the 'Extended' Phase 1 Habitat Survey and a review of the ecological data search an assessment is made below on the potential of the Site to support:

- Amphibians;
- Badger;
- Bats;
- Breeding birds;
- Invertebrates; and
- Reptiles
- Common invasive plant species.

3.11. The fauna descriptions provided below should be read in conjunction with **Figure 1** which includes target notes and the photographs (Plates) presented in **Appendix C**. The Site is not considered suitable to support any other notable or protected flora and fauna.

Amphibians

- 3.12. The ecological data search returned numerous records of amphibians with records of great crested newt (GCN), smooth newt, palmate newt and common frog (refer to **Table 5**).
- 3.13. Historical survey work for GCN was undertaken on the wider site by Waterman² and AMEC¹ as detailed within the introduction section of the EclA. These surveys have confirmed the presence of GCN extensively across the wider site.

The Site and immediately adjacent habitats including the drainage ditches, standing water and scrub are considered to provide suitable aquatic and terrestrial habitat for amphibians including GCN. However, any GCN population or other amphibians if found within the Site were trapped and translocated to receptor areas off Site in 2016 as part of the LTA1 Natural England European Protected Species Licence EPSL (2016-20166-EPS-MIT-1). Amphibian exclusion fencing erected along the perimeter of LTA1 (including the Site) to prevent amphibians migrating back into LTA1 and the Site remains present and under constant monitoring. As such, the Site is considered to be free of amphibians including GCN. The waterbodies on Site were therefore not assessed for their suitability to support GCN.

Badger

- 3.15. No evidence of badger was recorded on Site during the 'Extended' Phase 1 Habitat Survey. The Site offers some foraging habitat in the form of scrub, although there are not considered to be any sett building opportunities.

Bats

- 3.16. The ecological data search returned a single record of common pipistrelle, recorded 0.49km north east of the Site (refer to **Table 5**). Numerous surveys for the Graven Hill Development also returned records of brown long eared *Plecotus auritus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, leisler's *Nyctalus leisleri*, natterers *Myotis nattereri* and serotine *Eptesicus serotinus* bats. It is considered that all of these species could utilise habitats within the Site for foraging and commuting only.

- 3.17. A PRA of the trees present on Site was carried out during the 'Extended' Phase 1 habitat survey. All trees on Site were considered to be of negligible value to roosting bats due to a lack of suitable features.
- 3.18. The habitats recorded on Site such as trees and scrub provide foraging and commuting features for bats, but the Site offers limited value for roosting bats as no buildings are now present onsite and trees within the red lined boundary have negligible bat roosting features.

Breeding birds

- 3.19. The ecological data search returned numerous records for notable and protected bird species, most notably barn owl within 1km of the Site (refer to **Table 5**).
- 3.20. During the 'Extended' Phase 1 Habitat Survey, several birds were recorded on Site including blackbird *Turdus merula*, wood pigeon *Columba palumbus*, house sparrow and goldfinch *Carduelis carduelis*.
- 3.21. The habitats present on Site including scrub and trees offers nesting and foraging opportunities for common breeding birds only.

Invertebrates

- 3.22. The ecological data search returned numerous records for a diverse number of invertebrate species with the closest being for the black hairstreak, 0.42km south of the Site (refer to **Table 5**).
- 3.23. The matrix of habitats present on Site offer suitable habitat for common and notable invertebrate species. However, given the limited size of the habitats of value to invertebrates on Site, it is considered that they would not support any significant or notable invertebrate populations.

Reptiles

- 3.24. The ecological data search returned no records of reptiles, however historical survey work of the wider Graven Hill development site by Waterman² and AMEC¹ (formally Entec) between 2010 and 2016 confirmed the presence of common lizard *Zootoca vivipara*, slow worm *Anguis fragilis* and grass snake *Natrix natrix*. A single common lizard was recorded within the boundary of the Site in 2014.
- 3.25. Whilst suitable habitat for reptiles in the form of scrub and tall ruderal vegetation is present on Site, the amphibian exclusion fencing surrounding the Site prevents the migration of reptiles on to the Site from surrounding areas following the NE EPSM GCN trapping and translocation exercise. As such, reptiles are considered to be likely absent from the Site.

Common invasive plant species

- 3.26. The ecological data search returned small numbers of four species of invasive flora within 1km of the Site, species include Japanese knotweed, water fern, least duckweed and Nuttall's waterweed. No records from the data search were returned within the Site and during the 'Extended' Phase 1 Habitat Survey no signs of common invasive plant species were recorded within the Site or adjacent habitats.

4. Assessment of Important Ecological Features

- 4.1. All ecological features identified through the EcIA have been scoped out of further assessment because the population or area likely to be affected by the Development is of insufficient size or diversity to be of ecological value, no potential effect pathway between the Development and these features has been identified, and/or contravention of the legislation relating to the feature is unlikely to occur. The rationale for scoping out features is provided in **Table 6** below.

Table 6: Ecological Features Scoped out of the Assessment

Ecological Feature	Rationale
Designated Sites (statutory, non-statutory and ancient woodland)	No pathway of direct effect given distance from Site. Indirect effects also unlikely to occur based on scale of proposed works, nature of development and intervening habitats present.
	No significant effects anticipated from the Proposed Development.
Habitats	Habitat types on Site are both nationally and locally common.
	No significant impacts are anticipated as a result of Development.
Amphibians	Given the historic translocation effort carried out, and the barriers to commuting (amphibian fencing) being present the species is assessed to be absent from the Site
	No significant impacts are anticipated as a result of Development.
Bats (roosting)	No buildings are present on Site and no trees within the Site have roosting potential. Trees off-Site to the east are currently being used as a mitigation area for bats as part of the Graven Hill Development. Bat boxes are currently located within some of the trees in this area and although no direct impacts are anticipated for this development, indirect impacts such as light spill should be considered and limited where possible.
	No significant effects anticipated as a result of the Development.
Bats (commuting and foraging)	The Site contains suitable foraging habitat which would be lost in part as a result of the Development.
	Given suitable foraging and commuting habitat is widespread within the local area, no significant impacts are anticipated as a result of Development.
Badger	Habitats on Site are considered suitable to support badger; however no evidence was recorded on Site.
	No significant impacts are anticipated as a result of Development.
Birds	Based on survey results, usage of the Site is likely to be limited to nesting and feeding of common species only.
	No significant impacts are anticipated as a result of Development.

Ecological Feature	Rationale
Invertebrates	Any population(s) present on Site are likely to be of insufficient size or diversity to be of significant ecological value. No significant impacts are anticipated as a result of Development.
Reptiles	Given the historic translocation effort carried out, and the barriers to commuting (amphibian fencing) being present the species is assessed to be absent from the Site. No significant impacts are anticipated as a result of Development.
Common Invasive Plant Species	None identified on Site. No significant impacts are anticipated as a result of Development.

5. Environmental Measures and Residual Effects

Important Ecological Features

- 5.1. Although all ecological features have been scoped out of the assessment (**Table 6**), mitigation measures to ensure the Development meets legal compliance are still required, along with good practice environmental measures. These measures are set out below, together with ecological enhancement measures that the Development would provide to ensure a net biodiversity gain in line with planning policy requirements.

Construction Environmental Management Plan

- 5.2. A Construction Environmental Management Plan (CEMP) would be provided for the Site preparation and construction phase of the Development. The CEMP will provide a framework within which to monitor, avoid and / or minimise likely impacts to potential ecological receptors adjacent to the Site arising from the works, as far as reasonably practicable.
- 5.3. In summary, the CEMP would include the following procedures and measures:
- the Contractor will ensure that all those working on the site are aware of their obligations in relation to ecological legislation;
 - the use of British Standards Best Practice Guidelines to reduce disturbance resulting from noise, surface run-off and vibration during construction works;
 - careful siting and appropriate bunding of storage facilities for fuel and hazardous materials;
 - delivery of oils and fuels to be supervised at all times;
 - dust build up and mud deposits should be avoided and stockpiled material to be covered or stored within a contained area to enable run-off to be treated; and
 - use of drip trays when filling smaller containers from tanks or drums to avoid spillage entering the ground or drainage systems.

Habitats

- 5.4. No habitats have been assessed to be an IEF and as such, mitigation and compensation measures are not required.
- 5.5. Nonetheless, mitigation in the form of protection measures will be adhered to during the construction phase of the Development for retained habitats. These measures would ensure legal compliance and that good practice is adopted. The measures would be documented within the CEMP detailed above and include;
- The protection of retained trees (see the Arboricultural Report submitted with the application for further detail); and
 - Timing constraints associated with Site clearance works for nesting birds.
- 5.6. Where new landscaping is to be undertaken as part of the Development proposals, horticultural practice would include the use of peat-free composts, mulches and soil conditioners. The use of pesticides (herbicides, insecticides, fungicides and slug pellets) is discouraged to prevent fatal effects on the food chain particularly invertebrates, birds and/or mammals. Any pesticides used would be non-residual.

Protected and Notable Fauna

Bats

- 5.7. Mitigation in the form of a sensitive lighting strategy would be implemented to prevent light spill on to the bat boxes within the Graven Hill mitigation area to the east of the Site. Light spill on to all boundary habitats would be limited where possible.
- 5.8. Opportunities to enhance the Site for bats include the provision of bat boxes within the Development. The location and design of bat habitats would be decided through consultation between the project ecologist and architect. A total of four bat boxes (Schwegler 3FN or similar) to be installed on retained trees within or adjacent to the Site would be sufficient for the bat species foraging in the local area.
- 5.9. The use of native plant species or plants of value to wildlife as stated above would also provide additional foraging habitat for bats.

Birds

- 5.10. The scrub and scattered trees on Site offer foraging and nesting opportunities for common bird species.
- 5.11. All breeding birds receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Therefore, the removal of any trees and scrub on Site would be undertaken outside of the nesting bird season (breeding season being March – August inclusive) where possible. However, if such works cannot be undertaken outside the breeding bird season an ecologist would inspect any valuable habitat due to be cleared. An experienced ecologist would be deployed to carry out an inspection no more than 24 hours prior to the clearance. If an occupied nest is detected, then a buffer zone would be created around the nest, and clearance of this area delayed until the young have fledged.
- 5.12. Opportunities to enhance the Site for birds include the provision of bird boxes within the Development. The final location and design of the bird boxes would be decided through consultation between the project ecologist and architect. A total of four bird boxes (Schwegler 2M or similar) to be installed on retained trees within or adjacent to the Site would be sufficient for the species currently located within the Site.
- 5.13. The use of native plant species as stated above would provide additional foraging habitat for local bird species. Furthermore, the planting of berry bearing shrubs within the landscaping scheme would be of benefit to bird species and is likely to attract more birds to the Site. Such species could include rowan *Sorbus acuparia*, whitebeam *Sorbus aria*, species of cherry *Prunus sp*, and even non-native berry-bearing species such as *Pyracantha*.

Invertebrates









- 5.14. The Site is considered to provide limited opportunities for notable or protected terrestrial invertebrate species, and therefore no specific mitigation measures are considered to be required. Enhancement of the Site for invertebrates would come in the form of bug hotels and native landscape planting.

6. Conclusions



- 6.1. The Site is of limited value to protected and / or notable species, providing nesting opportunities for breeding birds and foraging habitat for invertebrates and in turn bats. No IEFs are currently present on Site and no further surveys for notable and / or protected species are required.
- 6.2. To ensure legal compliance and ensure good practice measures are adopted during the construction phase of the Development, Mitigation has been provided within this report with regards to the Site preparation and construction phases of the Development. Enhancement measures have also been made within this report to inform the emerging scheme design.
- 6.3. It should be noted that this EclA is relevant to the legislation detailed in Section 2 and **Appendix A** at the time of writing. If there are any changes to legislation prior to the Development being completed, the advice within this EclA may require amending / updating in line with any legislative updates.
- 6.4. If there is a significant period (most LPAs consider this period to be to 18 months) between this EclA and the Development commencing, the ecological value of the Site may change, and the Site should therefore be subject to update surveys.

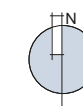
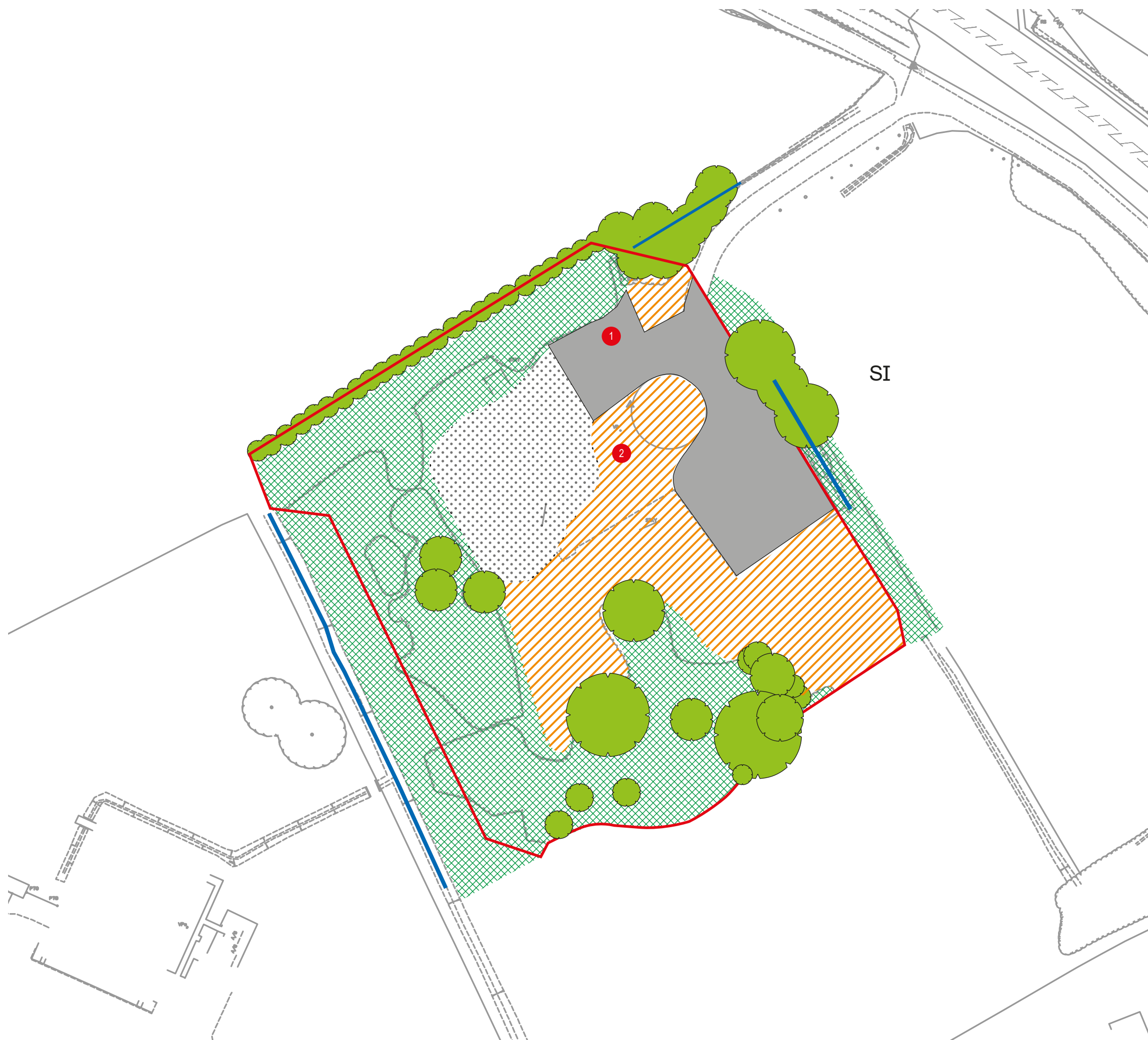
Figures

Figure 1: Habitat Features Plan (Ref. WIE16470-100_GR_PEA_1A)

-  Site Boundary
-  Hardstanding
-  Tall Ruderal
-  Dense Scrub
-  Bare Ground
-  Trees
-  Semi-Improved Grassland
-  Ditch

Target Notes

-  Rubble Pile Following Demolition of Building
-  Standing Water with Aquatic Flora



Project Details

WIE16470-100: Health Hub

Figure Title

Figure 1: Habitat Features Plan

Figure Ref

WIE16470-100_GR_PEA_1A

Date

September 2020

File Location

\\s-incs\wie\projects\wie16470\100\graphics\pea\issued figures

www.watermangroup.com

APPENDICES

A. Planning Policy and Summarised Legislation

National Planning Policy

National Planning Policy Framework, 2019

The National Planning Policy Framework¹ (NPPF) was published in 2019. Section 15 (outlined below) of the NPPF, 'Conserving and Enhancing the Natural Environment', replaces Section 11 of the previous NPPF 2012 revision¹. However, Government Circular 06/2005¹ - Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within the Planning System, remains valid and is referenced within the NPPF.

The NPPF encourages the planning system to contribute to and enhance the natural and local environment. This should be achieved 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”.*

The NPPF also stipulates that Local Planning Authorities (LPAs), when determining planning applications, should apply the following principles:

- *“If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an al*
- *ternative 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 encouraged, especially where this can secure measurable net gains for biodiversity.”*

National Planning Practice Guidance, 2019

The Government's Planning Practice Guidance (PPG) is intended to provide guidance to local planning authorities and developers on the implementation of the planning policies set out within the NPPF. The guidance of most relevance to ecology and biodiversity is the Natural Environment Chapter, which explains key issues in implementing policy to protect biodiversity, including local requirements.

Local Planning Policy

The Cherwell Local Plan 2011 – 2031 (Part 1)

The Adopted Cherwell Local Plan 2011-2031 (Part 1)¹⁴ contains strategic planning policies for development and the use of land. It forms part of the statutory Development Plan for Cherwell to which regard must be given in the determination of planning applications.

The Plan was formally adopted by the Council on 20 July 2015 with the re-adoption of previous policies on 19 December 2016. The following policies are relevant to this assessment

- Policy Bicester 2: Graven Hill
 - *Development Area: 241 hectares*
 - Development Description: This predominantly brownfield site to the south of Bicester is proposed for a mixed use development of 2,100 dwellings, significant employment land providing for high quality job opportunities, associated services, facilities and other infrastructure including the potential for the incorporation of a rail freight interchange.
 - Inter alia “Development that respects the landscape setting and that demonstrates enhancement, restoration or creation of wildlife corridors, and that respects the relationship between the woodland and open areas of Graven Hill and the development through the creation of ‘green fingers’ leading into the development area.
 - Biodiversity protection and enhancement measures should be implemented in any future development. Protected species surveys for bats and great crested newts will be required, and sufficient mitigation measures agreed prior to planning permission being granted
 - Preservation and enhancement of protected habitats and species on site and creation and management of new habitats to achieve an overall net gain in biodiversity
 - An Ecological and Landscape Management Plan to be provided to manage the woodland and other habitats onsite”
- **Policy ESD 10:** Protection and enhancement of Biodiversity and the Natural Environment

¹⁴ Cherwell District Council North Oxfordshire (2016) Part 1 Adopted 20 July 2015 (incorporating policy Bicester 13 re0adopted on 19 December 2016)

Appendices

Health and Wellbeing Hub, Graven Hill, Bicester

WIE16470-100

WIE16470-100-R-9-2-1-EcIA

- Inter alia “Protection and enhancement of biodiversity and the natural environment will be achieved by the following:
- In considering proposals for development, a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources;
- Development which would result in damage to or loss of a site of biodiversity or geological value of regional or local importance including habitats of species of principal importance for biodiversity will not be permitted unless the benefits of the development clearly outweigh the harm it would cause to the site, and the loss be mitigated to achieve a net gain in biodiversity/geodiversity;
- Development proposals will be expected to incorporate features to encourage biodiversity, and retain and where possible enhance existing features of nature conservation value within the site. Existing ecological networks should be identified and maintained to avoid habitat fragmentation, and ecological corridors should form an essential component of green infrastructure provision in association with new development to ensure habitat connectivity;
- Relevant habitat and species surveys and associated reports will be required to accompany planning applications which may affect a site, habitat or species of known or potential ecological value;
- Planning conditions/obligations will be used to secure net gains in biodiversity by helping to deliver Biodiversity Action Plan targets and/or meeting the aims of Conservation Target Areas. Developments for which these are the principal aims will be viewed favourably; and
- A monitoring and management plan will be required for biodiversity features on site to ensure their long term suitable management.

Biodiversity Action Plans

UK Post-2010 Biodiversity Framework

The Environment Departments of all four governments in the UK work together through the Four Countries Biodiversity Group. Together they have agreed, and Ministers have signed, a framework of priorities for UK-level work for the Convention on Biological Diversity. Published on 17 July 2012, the 'UK Post-2010 Biodiversity Framework'¹⁵ covers the period from 2011 to 2020. This now supersedes the UK Biodiversity Action Plan (UK BAP)¹⁶. However, many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species. The lists of priority species and habitats agreed under UK BAP still form the basis of much biodiversity work in the countries.

Although the UK Post-2010 Biodiversity Framework does not confer any statutory legal protection, in practice many of the species listed already receive statutory legal protection under UK and / or European legislation. In addition, the majority of Priority national (English) BAP habitats and species are now those listed as Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI) in England listed under Section 41 (S41) of the NERC Act 2006. For the purpose of this report, habitats and species listed under S41 of the NERC Act are referred to as having superseded the UK BAP. All public bodies have a legal obligation or 'biodiversity duty' under Section 40 of the NERC Act 2006 to conserve biodiversity by having particular regard to those species and habitats listed under S41.

¹⁵ JNCC and DEFRA (on behalf of the Four Countries' Biodiversity Group). (2012). *UK Post-2010 Biodiversity Framework*.

¹⁶ HMSO. (1994) *Biodiversity The UK Action Plan*.

Appendices

Based on the results of the EcIA, the following SoPIs listed under S41 are considered to be of potential value on and/or immediately adjacent to the Site:

- Amphibians (including GCN; SoPI),
- Bats (all species; SoPI), and
- Reptiles (all species; SoPI).

No HoPI are considered to be of potential value on and/or immediately adjacent to the Site.

Local Biodiversity Action Plan

As part of the action plan process, Local Biodiversity Action Plans (LBAPs) have been produced by most Councils in the UK. The Site is covered by the Oxfordshire LBAP¹⁷. The Oxfordshire LBAP is hosted by Oxfordshire Nature Conservation Forum (ONCF). BAP habitat targets are primarily delivered through a network of Conservation Target Areas (CTAs). CTAs identify the most important areas for wildlife where targeted conservation work will have the greatest benefits. The Site does not fall within any CTAs.

Guidance

Biodiversity 2020: A strategy for England's wildlife and ecosystem services

In October 2010, over 190 countries signed an historic global agreement in Nagoya, Japan to take urgent and effective action to halt the alarming global declines in biodiversity. This agreement recognised just how important it is to look after the natural world. It established a new global vision for biodiversity, including a set of strategic goals and targets to drive action. England's response to this agreement was the publication of '*Biodiversity 2020: A strategy for England's wildlife and ecosystem services*'¹⁸. The mission for this strategy is:

"to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people."

BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development

The UK commitment to halt overall loss of biodiversity by 2020 in line with the European Biodiversity Strategy and UN Aichi targets¹⁹, is passed down to local authorities to implement, mainly through planning policy. To assist organizations affected by these commitments, BSI has published BS 42020 which offers a coherent methodology for biodiversity management.

This British Standard sets out to assist those concerned with ecological issues as they arise through the planning process in matters relating to permitted development and activities involved in the management of land outside the scope of land use planning, which could have site-specific ecological implications.

The standard has been produced with input from a number of organisations including the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Association of Local Government Ecologists (ALGE) and provides:

¹⁷ Oxfordshire Local Biodiversity Action Plan (LBAP) www.oxfordshire.gov.uk

¹⁸ Defra. (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*.

¹⁹ <https://www.cbd.int/sp/targets/>

Appendices

- Guidance on how to produce clear and concise ecological information to accompany planning applications;
- recommendations on professional ethics, conduct, competence and judgement to give confidence that proposals for biodiversity conservation, and consequent decisions/actions taken, are sound and appropriate; and
- direction on effective decision-making in biodiversity management a framework to demonstrate how biodiversity has been managed during the development process to minimize impact.

Legislation

Specific habitats and species receive legal protection in England under various pieces of legislation, including:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019²⁰;
- The Wildlife and Countryside Act (WCA) 1981 (as amended)²¹;
- The Natural Environment and Rural Communities Act 2006²²;
- The Hedgerows Regulations 1997²³;
- The Protection of Badgers Act 1992²⁴; and
- Wild Mammals (Protection) Act 1996²⁵

Further details of legislation in respect of legally protected and notable flora and fauna of relevance to the Site are provided below.

Amphibians

Common species of amphibian (smooth newt *Lissotriton vulgaris*, palmate newt *L. helveticus*, common frog *Rana temporaria* and common toad *Bufo bufo*) are partially protected by the WCA 1981. This prohibits the trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy) of these species.

Great crested newts are protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the WCA 1981 (as amended). In summary, taken together, it is an offence to deliberately, intentionally or recklessly:

- Kill, injure or capture a great crested newt;
- Disturb great crested newts in such a way as to be likely significant to affect:
 - (i) the ability of any significant group of great crested newts to survive, breed, or rear / nurture their young; or
 - (ii) the local distribution of great crested newts;
- Damage or destroy any breeding or resting place used by great crested newts; or
- Obstruct access to any place used by great crested newts for shelter or protection and disturbing great crested newts while occupying such as place.

²⁰ HMSO (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

²¹ HMSO (1981) 'Wildlife and Countryside Act 1981 (as amended)'

²² ODPM (2006) 'Natural Environment and Rural Communities Act (2006)'

²³ ODPM (1997) 'The Hedgerow Regulations'

²⁴ ODPM (1992) 'The Protection of Badgers Act'

²⁵ HMSO. (1996). Wild Mammals (*Protection*) Act.

Appendices

Bats

In summary, all UK bat species are protected by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and by the WCA 1981 (as amended). Taken together it is an offence to deliberately, intentionally or recklessly:

- Kill, injure or capture a bat;
- Disturb bats in such a way as to be likely significant to affect
 - (i) the ability of any significant group of bats to survive, breed, or rear / nurture their young; or
 - (ii) the local distribution of that species;
- Damage or destroy any breeding or resting place used by bats; or
- Obstruct access to any place used by bats for shelter or protection and disturbing bats while occupying such as place.

Birds

The level of protection afforded to birds under the law varies from species to species. A few game and pest species may lawfully be hunted and killed, usually under licence, whilst the rarest species are listed on Schedule 1 of the WCA 1981 and are protected by special penalties for offences.

All of the native bird species of Britain are additionally covered by the European Union (EU) Directive on the Conservation of Wild Birds 2009²⁶ ('The Birds Directive'). The Birds Directive applies to all wild birds, their eggs, nests and habitats, and provides for the protection, management and control of all species of birds naturally occurring within each member state of the European Union. It requires the UK to take measures to ensure the preservation of sufficient diversity of habitats to maintain populations of all wild birds at ecologically and scientifically sustainable levels. The requirements of the Birds Directive are implemented in the UK primarily through the WCA 1981 (as amended) and Conservation of Habitats and Species Regulations 2019.

Statutory protection is given to all nesting birds in the UK under the WCA 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird, take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for species listed on Schedule 1 of the WCA 1981 (as amended), it is an offence to intentionally or recklessly disturb birds while they are nest building, or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

In addition to statutory protection, the bird species of Britain are also subject to various conservation designations intended to indicate their rarity, population status and conservation priority. These do not have statutory force but may be instrumental in determining local, regional and national planning and development policy. The main categories of designation comprise the British Trust for Ornithology (BTO) 'Species Alert' lists, the Royal Society for the Protection of Birds (RSPB) 'Birds of Conservation Concern' lists and species listed under Section 41 of the NERC Act 2006 and local Biodiversity Action Plans (BAPs).

The BTO Conservation Alert System lists of 'Birds of Conservation Concern' include a 'Red List' for birds of high conservation concern and an 'Amber List' for birds of medium conservation concern. Red List species are those that are globally threatened and Amber List species are those with an unfavourable conservation status in Europe, according to the International Union for Conservation

²⁶ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

Appendices

of Nature (IUCN) criteria²⁷. An updated list of 'Red' and 'Amber List' species was published in 2009 (Eaton et al., 2009)²⁸.

Reptiles

All native British reptiles are protected in accordance with the WCA 1981 (as amended). There are two levels of protection afforded to reptiles through the WCA 1981 (as amended); these result from different parts of the Act applying to the different species.

In summary, common species of reptile such as common lizard *Zootoca vivipara*, slow worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are partially protected under the WCA 1981 (as amended); this prohibits the intentional killing and injuring and trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy). It is not an offence under the WCA 1981 (as amended) to disturb or possess these species.

Invertebrates

The majority of invertebrate species are not legally protected. However, a total of seventy-two terrestrial and aquatic invertebrate species are protected under the WCA 1981 (as amended). Certain species of invertebrate are also protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

²⁷ IUCN (2000): 'The revised Categories and Criteria (IUCN Red List Categories and Criteria version 3.1)'.

²⁸ Eaton et al (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.

Appendices

B. Plates



Plate 1 – Scattered trees on Site.



Plate 2 – Tall ruderal habitat and scattered trees on Site.

Appendices

UK and Ireland Office Locations

