Upper Acre, One Horton Heath

Ecological Impact Assessment

Final

1793/Version V3.0

Client: Eastleigh Borough Council (One Horton Heath Team)

Date: 9 February 2026

Copyright © 2026 Johns Associates Limited

DOCUMENT CONTROL

Report prepared for:

Eastleigh Borough Council (One Horton Heath Team)

Main contributors:

Tessa Pepler BSc (Hons) MSc MCIEEM

Principal Ecologist

Reviewed by:

Liz Johns BSc (Hons) MSc CEnv MCIEEM MRSB

Director

Issued by:

Tessa Pepler BSc (Hons) MSc MCIEEM

Principal Ecologist

Green Tree House, 11 St. Margaret's Street, Bradford on Avon, Wiltshire, BA15 1DA
T: 01225 723652 | E: info@johnsassociates.co.uk | W: www.johnsassociates.co.uk

Copyright © 2026 Johns Associates Limited

DOCUMENT REVISIONS

Version	Details	Date
Draft V1.0	Draft EcIA issued to client for comment	28 November 2025
Final V2.0	Final EcIA issued to client for submission	2 December 2025

Third party disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Johns Associates at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. Johns Associates excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

Copyright © 2026 Johns Associates Limited

TABLE OF CONTENTS

1 INTRODUCTION 3
1.1 Background 3
1.2 Summary of Proposals 3
1.3 Site Location and Context 3
1.4 Purpose of this Report 6
2 LEGISLATION, PLANNING POLICY & TECHNICAL GUIDANCE 8
2.1 Legislative Context 8
2.2 Policy Context 9
2.2.1 National 9
2.2.2 Local – Eastleigh Borough Council 10
2.2.3 Biodiversity Supplementary Planning Document, EBC, December 2009 13
2.2.4 Tree Strategy 2022 – 2030, EBC, March 2022 13
2.2.5 Local Biodiversity Action Plans 13
2.2.6 Local Nature Recovery Strategy 13
2.3 Technical Guidance 13
3 METHODOLOGY 15
3.1 Scope of the Assessment 15
3.1.1 Consultation 15
3.1.2 Zone of Influence and Features of Interest 15
3.2 Desk Study 18
3.3 Data Search 18
3.4 Field Survey 18
3.4.1 UKHab Survey 19
3.4.2 Statutory BNG Assessment 21
3.4.3 Phase 2 Species Surveys 21
3.5 Assessment Methodology 22
3.5.1 Prediction of Effects 22
3.5.2 Significance Evaluation Methodology 23
3.6 Limitations, Constraints and Assumptions 25
4 BASELINE ECOLOGICAL CONDITIONS 26
4.1 Desk Study 26
4.1.1 Statutory Designated Sites 26
4.1.2 Non-statutory Designated Sites 27
4.1.3 Priority Species 29
4.1.4 Priority Habitats 30
4.1.5 European Protected Species Licences 30
4.1.6 Great Crested Newt (GCN) Pond Surveys 2017 – 2019 31
4.2 Field Surveys 32
4.2.1 Habitats 32
4.2.2 Off-Site Habitats within the ZoI 38
4.3 Potential Ecological Receptors and Significant Effects 45
5 INTREGATED AND EMBEDDED ENVIRONMENTAL MEASURES 51
6 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES 58
6.1 Inter-Related Effects 58
6.2 Assessment of Residual Effects: River Itchen SAC & SSSI 59
6.2.1 Pollution Incidents to River Itchen SSSI and from Construction 59
6.2.2 Nutrient Neutrality and River Itchen SSSI and SAC 59

Copyright © 2026 Johns Associates Limited

6.3 Assessment of Residual Effects: Solent and Southampton Water SPA and Solent Maritime SAC 60
6.3.3 Pollution Incidents European Sites from Construction 60
6.3.4 Nutrient Neutrality and European Sites 60
6.3.5 Recreational Disturbance to European Sites 60
6.4 Assessment of Residual Effects: New Forest SPA, SAC, Ramsar 61
6.4.6 Recreational Disturbance to New Forest SPA, SCA & Ramsar 61
6.5 Assessment of Residual Effects: Hedgerows 61
6.5.1 Habitat Loss of Hedgerows from Construction 61
6.5.2 Damage/Harm to Hedgerows from Construction 62
6.5.3 Pollution Incidents to Hedgerows from Construction 62
6.5.4 Habitat Management and Monitoring of Hedgerows during Occupation 62
6.5.5 Recreational Disturbance of Hedgerows during Occupation 63
6.6 Assessment of Residual Effects: Watercourse 63
6.6.6 Pollution Incidents to Watercourse during Construction 63
6.6.7 Damage/Harm to Watercourse from Construction 63
6.6.8 Habitat Enhancement from Construction 64
6.7 Assessment of Residual Effects: Hazel Dormouse 64
6.7.1 Habitat Loss to Hazel Dormouse from Construction 64
6.7.2 Harm to Hazel Dormouse from Construction 65
6.7.3 Disturbance to Hazel Dormouse (from Noise and Vibration) from Construction 65
6.7.4 Disturbance to Hazel Dormouse (from Light Pollution) during Occupation 66
6.7.5 Harm to Hazel Dormouse during Occupation 66
6.7.6 Recreational Disturbance to Hazel Dormouse during Occupation 66
6.7.7 Habitat Management and Monitoring for Hazel Dormouse during Occupation 66
6.8 Assessment of Residual Effects: Bats 67
6.8.1 Habitat Loss to Bats from Construction 67
6.8.2 Harm to Bats from Construction 68
6.8.3 Disturbance to Bats (from Light Pollution) during Occupation 68
6.8.4 Recreational Disturbance to Bats during Operation 68
6.8.5 Habitat Management and Monitoring for Bats during Occupation 69
6.9 Assessment of Residual Effects: Reptiles and Amphibians 69
6.9.1 Habitat Loss to Reptiles and Amphibians from Construction 69
6.9.2 Harm to Reptiles and Amphibians from Construction 69
6.9.3 Recreational Disturbance to Reptiles and Amphibians during Occupation 70
6.9.4 Habitat Management to Reptiles and Amphibians during Occupation 70
6.10 Assessment of Residual Effects: BREEDING BIRDS 70
6.10.5 Habitat Loss for Breeding Birds from Construction 70
6.10.6 Harm to Breeding Birds from Construction 71
6.10.7 Disturbance to Breeding Birds (from Noise and Vibration) from Construction 71
6.10.8 Recreational Disturbance to Breeding Birds during Occupation 71
6.10.9 Habitat Management to Breeding Birds during Occupation 72
6.11 Assessment of Residual Effects: Hedgehog 72
6.11.1 Habitat Loss for Hedgehog from Construction 72
6.11.2 Harm to Hedgehog from Construction 72
6.11.3 Habitat Management for Hedgehog during Occupation 73
6.11.4 Recreational Disturbance to Hedgehog during Occupation 73
6.12 Assessment of Residual Effects: Invertebrates 73
6.12.1 Habitat Loss for Invertebrates from Construction 73
6.12.2 Damage/Harm to Invertebrates from Construction 74
6.12.3 Habitat Management for Invertebrates during Occupation 74
6.13 Climate Change 74
7 CUMULATIVE EFFECTS 76
8 COMPENSATION 77

Copyright © 2026 Johns Associates Limited

9 ENHANCEMENT 78
10 MONITORING 79
11 CONCLUSIONS 81
12 REFERENCES 82
APPENDIX A DORMOUSE SURVEY TECHNICAL NOTE
APPENDIX B BAT SURVEY TECHNICAL NOTE
APPENDIX C REPTILE SURVEY TECHNICAL NOTE

Copyright © 2026 Johns Associates Limited

SUMMARY

Purpose of the Report	This Ecological Impact Assessment (EcIA) report presents the current ecological baseline at Upper Acre Reserved Matters Application (RMA) Site, which was included within the Outline Planning Permission (OPP) which was granted in October 2025 (LPA ref no. O/20/89498). The report provides a complete assessment of the potential effects of the proposed scheme on those ecological features (including legally protected species) associated with the Site. It provides a description of elements of the ecological baseline, presents a scope of the assessment, defines integrated and embedded ecological mitigation and enhancement measures before considering the potential effects of the proposed development. It also outlines recommendations for future monitoring and management measures and the mechanisms by which these will be secured.
Description of the Scheme	Submission of Reserved Matters relating to Layout, Scale, Appearance, and Landscaping pursuant to Condition 4 (RM Requirements) of Outline Planning Permission O/20/89498 for the erection of 424 dwellings within Phase 10 (The Upper Acre), with associated public open space, landscaping, and cycle and vehicular parking, to include details relevant to the following Outline Planning Permission conditions: • Condition 16 (Arb Assessment) • Condition 25 (Refuse) • Condition 31 (Higher Access Standards) • Condition 45 (Noise Assessments) • Condition 58 (Flood Mitigation) • Condition 59 (Foul Drainage) • Condition 61 (SUDs) • Condition 64 (EMMP) • Condition 67 (Landscaping) • Condition 71 (BNG) • Condition 76 (Nutrient Neutrality)
Methods	The following surveys have been conducted at the Site to provide an updated baseline: • An extended UKHab survey and Biodiversity Net Gain (BNG) habitat condition assessment was conducted on 29 September 2025. • A Statutory BNG Metric assessment to confirm the net gain achievable by the development proposals on 1 December 2025. • Reptile presence/absence surveys from 16 September to 10 October 2025. • Dormouse surveys on The Folds, The Holme and The Homestal from July to October 2025. • Bat static surveys from August to October 2025. • Badger survey 29 September 2025 • Ground level Tree Assessment (GLTA) for roosting bats 29 September 2025.
Key Impacts and Mitigation Measures	The key impacts are: loss of habitat, light disturbance, construction disturbance and potential pollution incidents. A Construction Environmental Management Plan, an Ecology Mitigation and Management Plan (EMMP) and a Habitat Management and Monitoring Plan (HMMP) will be produced which will outline protection measures for protected and notable species that are supported within the Site including dormouse, roosting bats, common reptiles and amphibians. A European Protected Species Licence application will be made to Natural England (NE) for dormouse. The Green Infrastructure (GI) parcels within the OPP site boundary, in addition to strategic planting and strengthening along the Site boundary habitats provide connectivity to minimise fragmentation and isolation of habitats and species as a result of the development.
Conclusions	Minor non-significant effects are predicted as a result of the development. The Outline site wide OPP planning application was submitted before BNG became a statutory requirement. Therefore, each RMA development parcel planning application has a target of providing a BNG. The BNG losses in each parcel will be offset with the Green Infrastructure (GI) BNG units gained from enhancement of the GI parcels (north, central and south GI). Each RM development BNG will be tracked within an overall OPP BNG tracker to monitor the BNG gain/loss.

Copyright © 2026 Johns Associates Limited

Data Valid Until	October 2026

Copyright © 2026 Johns Associates Limited

1 INTRODUCTION

1.1 BACKGROUND

Johns Associates Ltd was commissioned by the One Horton Heath Team at Eastleigh Borough Council to undertake an EcIA and Statutory Biodiversity Net Gain (BNG) assessment of the proposed Upper Acre site at One Horton Heath, Eastleigh, in support of a planning application. The site is located at post code SO50 7FD (central Ordnance Survey (OS) grid reference SU 49040 16669) and is hereafter referred to as the 'Site'.

This EcIA was compiled by Tessa Pepler BSc (Hons) MSc MCIEEM and Ellie Brine BSc (Hons) ACIEEM and reviewed by Liz Johns BSc (Hons) MSc CEnv MCIEEM MRSB, Director at Johs Associates with 30 years' experience as an ecologist in both the public and private sectors.

1.2 SUMMARY OF PROPOSALS

The Upper Acre, One Horton Heath (OHH), is a Reserved Matters Application (RMA) for the wider OPA development proposal. The Upper Acre parcel was included within the Outline Planning Permission (OPP) which was granted in October 2025 (LPA ref no. O/20/89498).

Submission of Reserved Matters relating to Layout, Scale, Appearance, and Landscaping pursuant to Condition 4 (RM Requirements) of Outline Planning Permission O/20/89498 for the erection of 424 dwellings within Phase 10 (The Upper Acre), with associated public open space, landscaping, and cycle and vehicular parking, to include details relevant to the following Outline Planning Permission conditions:

- Condition 16 (Arb Assessment)
- Condition 25 (Refuse)
- Condition 31 (Higher Access Standards)
- Condition 45 (Noise Assessments)
- Condition 58 (Flood Mitigation)
- Condition 59 (Foul Drainage)
- Condition 61 (SUDs)
- Condition 64 (EMMP)
- Condition 67 (Landscaping)
- Condition 71 (BNG)
- Condition 76 (Nutrient Neutrality)

1.3 SITE LOCATION AND CONTEXT

The Site is located to the west of the village of Horton Heath in Hampshire and measures approximately 10.45 ha. A solar farm is located adjacent to the western boundary, Burnetts Lane is located along the majority of the eastern boundary with residential properties adjacent to the north east. Lower Acre residential development which is under

Copyright © 2026 Johns Associates Limited

construction is located to the south of the Site with an area of SUDs ponds between the southern boundary of the Site and Lower Acre. Further modified grassland is located adjacent to the northern boundary.

The wider landscape consists of a matrix of agricultural fields, hedgerows, woodlands, bodies of water and urban settlements. A plan showing the location and context of the Site is provided as Figure 1.

Copyright © 2026 Johns Associates Limited

Figure 1: Site Location and Context

JOHNS ASSOCIATES

Site Boundary

CLIENT Eastleigh Borough Council

PROJECT Upper Acre, OHH - EcIA, BNG & P2 Surveys

TITLE Site Location Plan

SCALE @ A3	CREATED BY	CHECKED BY
1:3,500	AE	KN
REFERENCE	**REVISION**	**DATE ISSUED**
1793-001		3/10/2025

This drawing is subject to copyright and is not to be reproduced, retained nor disclosed to any unauthorized person either wholly or in part without the consent of Johns Associates. Do not scale from this drawing.

Copyright © 2026 Johns Associates Limited

1.4 PURPOSE OF THIS REPORT

The EcIA methodology used has been adapted from the Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (Version 1.3, CIEEM, September 2024). The findings of this EcIA will inform Eastleigh Borough Council of the ecological baseline, embedded mitigation measures, residual ecological effects and proposed enhancement measures when determining the planning RM application for the site.

Updated 2025 surveys and assessments have been conducted at the Upper Acrea Site in 2025 and have included:

- Reptile surveys
- Bat activity surveys
- Ground Level Tree Assessment (GLTA)
- Badger survey
- Extended UKHab habitat Survey
- Biodiversity Net Gain (BNG) habitat condition assessment
- Statutory BNG Assessment

Documents that have been produced for the wider OPP OHH Site and RMA development parcels have also informed this assessment and include:

- The EMMS for the OPA (Johns September 2024).
- GCN licence ref 2022-62944-EPS-MIT ('Chalcroft Farm GCN licence').
- One Horton Heath GCN Masterplan Document Updated 17 July 2023, Johns Associates
- Bat licence 2021-5226-EPS-MIT 1 Chalcroft Farm - Common pipistrelle, soprano pipistrelle and brown long-eared bat days roosts.
- Bat licence 2022-62958-EPS-MIT-1 Chalcroft Farm – Brown long-eared maternity roost and maternity satellite roost, brown long-eared day roosts, common pipistrelle day roosts and soprano pipistrelle day roosts.
- Upper Acre Habitat Regulations Assessment (Shadow Appropriate Assessment), Johns Associates, November 2025.
- The Folds, The Holme and The Homestal Dormouse Survey Technical Note, Johns Associates Ltd, November 2025.
- Upper Acre Reptile Survey Technical Note, Johns Associates Ltd, November 2025.
- Bat Mitigation Strategy (Johns Associates, 2019).

The purpose of this EcIA report is:

- To present an ecological baseline for the site.
- To identify and describe all potentially significant ecological effects associated with the proposed development.
- To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.
- To identify how mitigation measures will/could be secured.

Copyright © 2026 Johns Associates Limited

- To provide an assessment of the significance of any residual effects.
- To identify appropriate enhancement measures.
- To set out the requirements for post-construction monitoring.

Copyright © 2026 Johns Associates Limited

2 LEGISLATION, PLANNING POLICY & TECHNICAL GUIDANCE

2.1 LEGISLATIVE CONTEXT

Many species of animal and plant receive some degree of legal protection. For the purposes of this report, legal protection refers to: species included on Annex II of the Habitats Directive 1992 (Council of European Communitites, 22/07/1992), Schedules 2 and 5 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (UK Government, 2019) and Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) (UK Government, 1981), excluding species that are only protected in relation to their sale (see Section 9[5] and 13[2]) reflecting the fact that the proposed development does not include any proposals relating to the sale of species.

Legal offences associated with species listed on Schedule 2 of the Conservation of Habitats and Species Regulations and Schedule 5 of the Wildlife and Countryside Act in England and Wales include *inter alia*:

- Deliberate capture, injury or killing of animals or taking or destroying their eggs
- Deliberately disturb animals in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young
- Intentional or reckless disturbance of an animal in its place of shelter or protection
- Damaging or destroying a resting place or breeding site
- Intentionally or recklessly obstructing access to a place of shelter or protection; and
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead animal or any part of an animal.

Relevant species listed on these Schedules that are potentially associated with this Site include bats, common reptiles, great crested newt *Triturus cristatus* and dormouse *Muscardinus avellanarius*. All species of bat, dormouse and great crested newt receive full protection from all legal offences listed above. Common reptile species receive partial protection under the Wildlife and Countryside Act in that they are protected from killing and injury only.

All species of wild bird are protected under the Wildlife and Countryside Act (1981) (as amended) from killing or injury. In addition, it is an offence to take or damage/destroy their eggs and to damage or destroy a nest whilst it is in use. Species listed on Schedule 1 (such as barn owl) receive additional protection in that it is illegal to disturb birds or their young whilst occupying, or near to, an active nest.

Badgers *Meles meles* are protected under the Protection of Badgers Act 1992 (UK Government, 1992), which makes it an offence to wilfully kill, injure or take (or attempt to kill, injure or take) a badger; or to disturb badgers whilst occupying their setts.

A number of wild plants, habitats and animals (including reptiles, hedgehog and most species of bat) are also included within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (UK Government, 2006) which lists flora, fauna and habitats considered by the Secretary of State to be of principal importance for conserving biodiversity. The publication of the "England Biodiversity List" satisfies the requirements of Section 41 of the NERC Act 2006 for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires public bodies, including local planning authorities, to have regard for the conservation of biodiversity in England, when carrying out their normal functions.

Relevant habitats listed within Section 41 that are potentially associated with the development proposals include deciduous woodland (Quobleigh Wood) located to the north of the red line boundary.

Copyright © 2026 Johns Associates Limited

Certain invasive non-native species of plant are listed on Schedule 9 Part 2 of the Wildlife and Countryside Act 1981 (as amended). Under Section 14 of the Act, it is illegal to plant or otherwise cause to grow in the wild any species listed on Schedule 9. Species listed include Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandulifera* and variegated yellow archangel *Lamiastrum galeobdolon* subsp. *Argentatum*.

2.2 POLICY CONTEXT

2.2.1 National

There are numerous national and local planning policies associated with flora and fauna (also referred to as biodiversity) that need to be addressed as part of the planning process. The Government has issued its National Planning Policy Framework (NPPF) in December 2024, (with limited amendments in February 2025) which requires impacts to biodiversity to be minimised. Paragraph 194 of the NPPF applies the same protection to Ramsar sites as that conferred by the Habitats Regulations to SACs and SPAs, it also applies the same protection to sites identified or required as compensatory measures for adverse effects on habitat sites.

To protect and enhance biodiversity plans should:

- 192a) 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;

- 192b) 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.

The NPPF requires development to apply the following principles (Paragraph 193):

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons70 and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Planning authorities should follow key principles to ensure that the potential impacts of planning decisions on biodiversity conservation are considered. Circular 06/05: Biodiversity and Geological Conservation provides guidance on the application of the law relating to planning and nature conservation and complements the NPPF.

Copyright © 2026 Johns Associates Limited

The Natural Environment White Paper

"The Natural Choice: Securing the Value of Nature" outlines the Governments approach and vision for nature in the UK including protecting and improving our natural environment, growing a green economy and reconnecting people and nature.

Biodiversity 2020

A strategy for England's wildlife and ecosystem services, are the country level strategies for England and builds on the natural Environment White Paper. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. The proprieties for action include a more integrated large-scale approach to conservation, putting people at the heart of biodiversity policy, reducing environmental pressure and improving knowledge.

2.2.2 Local – Eastleigh Borough Council

As well as national policy, there is relevant biodiversity policy contained within the Eastleigh Borough Local Plan 2016-2036, adopted in April 2022.

POLICY DM11: Nature Conservation

1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:

    a. protect, conserve and enhance all:

        i. international, national and local nature conservation designations; and

        ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character.

    b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);

    c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and

    d. contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).

2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

Copyright © 2026 Johns Associates Limited

3. The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:

    a. implementing:

        i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and

        ii. the interim and any future New Forest Recreation Mitigation Strategy if required;

        iii. or alternative agreed site-specific measures to address recreational disturbance;

    b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;

    c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and

    d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

4. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:

    a. there are no alternative solutions;

    b. the adverse effects are unavoidable;

    c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;

    d. there is an overall biodiversity net gain; and

    e. if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.

5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on **priority habitats, protected priority species, or on the local ecological network** unless it can be demonstrated that:

    a. there are no alternative solutions;

    b. the adverse effects are unavoidable;

    c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;

    d. there is an overall biodiversity net gain; and

Copyright © 2026 Johns Associates Limited

e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.

6. Development will not be permitted if it results in the loss or deterioration of **irreplaceable habitats** (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.

7. **Buffers** free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.

8. Development will not be permitted unless it can be demonstrated that:

   a. there have been thorough habitat and species **surveys**;

   b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and

   c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.

Strategic Policy S9, Green Infrastructure

1. Through new development and other initiatives and the Borough Council will seek to achieve the provision, retention and/or enhancement of the following forms of multi-functional green infrastructure, including provision of:

   a. landscape scale strategic links across the Borough boundary, to and between the Borough's settlements, the countryside, the coast, and the major areas of open space including the country parks (see strategic policy S12);

   b. interlinked publicly accessible open space through new and existing development including for example formal sports facilities and informal amenity spaces and cemeteries (see policies DM32-DM34, Chapter 5 and detailed proposals in Chapter 6);

   c. green infrastructure incorporated into all new development with multifunctional spaces connected by primary, secondary and tertiary green links;

   d. interconnected urban green infrastructure within the fine grain of existing and new development including green, cycle ways, paths and linkages between community facilities and open spaces to link community facilities;

   e. green stepping stones such as street trees, green roofs and walls, pocket parks and urban copses (see policy DM1, Chapter 5);

   f. connected habitats linking the network of designated sites and existing priority habitats, taking account of the Hampshire ecological network map (see policy DM11, Chapter 5);

   g. incorporation of historic buildings and landscapes, including historic parks and gardens within the wider Green Infrastructure to protect their setting (see policy DM12, Chapter 5); and

   h. opportunities for local food growing including allotments, community orchards and farms (see policies DM32 to DM34, Chapter 5 and detailed proposals in Chapter 6).

Copyright © 2026 Johns Associates Limited

2.2.3 Biodiversity Supplementary Planning Document, EBC, December 2009

The Biodiversity SPD is intended to provide additional guidance on the legal and policy basis for the saved nature conservation policies within the adopted Eastleigh Borough Local Plan Review (2001-2011), and on the interpretation of these policies. It forms part of the statutory Local Development Framework for Eastleigh Borough To provide additional guidance supplementary to the South East Plan, and the Council's Local Development Framework.

2.2.4 Tree Strategy 2022 – 2030, EBC, March 2022

The purpose of this strategy is to provide an over-arching framework to support the Council's detailed operational policy and technical documents relating to trees, achieve the Council's target to plant 160,000 more trees in the borough by 2030 and provide a basis to develop further actions. The two key principles are to preserve and increase the number of trees in the borough.

2.2.5 Local Biodiversity Action Plans

EBC has a Biodiversity Strategy 2024 – 2034 – Securing our Natural Environment which outlines Priority Areas for Nature Recovery.

2.2.6 Local Nature Recovery Strategy

The Local Nature Recovery Strategy for Hampshire is currently in consultation and is due to be published in December 2025.

2.3 TECHNICAL GUIDANCE

There are a number of technical guidance documents that have been used to define the adopted approach to undertaking EcIA. These include methods for characterising the ecological baseline and the appropriate interpretation of data, as well as the specific approach to be adopted for the EcIA. Technical guidance of relevance is listed in Table 2-1.

Table 2-1: Technical guidance adopted for assessing the impacts on Biodiversity

Guidance reference	Usage
Bat Conservation Trust: Bat Surveys for Professional Ecologists, Good Practice Guidelines. 4th Edition, 27 March 2023	Provides standard good practice guidelines for conducting bat surveys including ecological considerations, timings, preliminary roost assessments, emergence and re-entry surveys, bat activity, licensing, data analysis and interpretation and reporting.
British Standards Institute (BSI): BS 42020:2013 Biodiversity – Code of practice for planning and development	Provides recommendations on topics such as professional practice, proportionality, pre-application discussions, ecological surveys, adequacy of ecological information, reporting and monitoring.
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, September 2024)	Provides technical guidance for assessing the potential ecological impacts of a development. EcIA is a process of identifying, quantifying and evaluating potential effects of development- related or other proposed actions on habitats, species and ecosystems. EcIA can be used for the appraisal

Copyright © 2026 Johns Associates Limited

Guidance reference	Usage
	of projects of any scale including the ecological component of EIA. When undertaken as part of an EIA, EcIA is subject to the relevant EIA Regulations. Includes guidance on scoping; establishing the baseline; identifying important ecological features; assessing potential impacts; incorporating measures to avoid, reduce and compensate ecological impacts and the provision of ecological enhancements. Guidance on the consideration of the legal and policy framework throughout the EcIA process is also included.
Froglife, 2015 Surveying for Reptiles	Provides tips, techniques and skills to inform reptile survey.
Froglife Advice Sheet 10, Reptile Survey, November 1999	Provides standard guidance for surveying reptiles including survey timing, recording data, classifying population size, recording signs of reptiles and recording habitat data.
Hazel Dormouse Conservation Handbook: The Mammal Society, 2025	Provides standard good practice guidelines for actions involving dormice including surveys and outlines dormouse ecology.
Hazel Dormouse Mitigation Handbook: The Mammal Society, 2025	Provides standard good practice guidelines for actions involving dormice including surveys, design and implementation of mitigation measures, preparation of license applications and post-development monitoring.
Surveying Badgers, The Mammal Society, 1989	Provides standard guidance for surveying badgers including survey timing, recording sett data, classifying setts, recording signs of badgers and recording habitat data.
UK Government	Provides standing advice on assessing impacts on a range of protected species, including bats, great crested newts (GCN), badgers, otters, water voles, dormouse, reptiles, wild birds, protected plants, invertebrates and ancient woodland. Includes guidance on survey effort, methods, assessing impacts and mitigation. Incorporates current Natural England (NE) guidance.
The UK Habitat Classification, Version 2.0, 2023	Provides updated guidance to the UK Habitat Classification (UKHab), which is a unified and comprehensive habitat classification system for all terrestrial, freshwater and coastal habitats in the UK. It has been developed to improve habitat categorisation, recording and geospatial analysis for land use and habitat survey and assessment.

Copyright © 2026 Johns Associates Limited

3 METHODOLOGY

This ecological assessment includes habitats and species that are identified as being of importance either locally, regionally, nationally or internationally. The scope has been identified during the desk study and through consultation with relevant organisations. A phased approach to site surveys has also focused the assessment on those habitats and species that are potentially sensitive to the proposed scheme.

3.1 SCOPE OF THE ASSESSMENT

3.1.1 Consultation

Consultation with the EBC Ecology Team has occurred throughout June to October 2025 to discuss the findings of the surveys conducted at the wider OPP Site and recommendations for the RMA parcels, including Upper Acre.

3.1.2 Zone of Influence and Features of Interest

The zone of influence has been extended to include adjoining habitats to the Site including habitats to the north and south within the application, the solar farm to the west and Burnetts Lane to the east.

Data from a desk study and field surveys was used to determine the current ecological baseline for the Site in terms of the priority habitats and species, legally protected and notable species and statutory and non-statutory designated sites located within the likely Zone of Influence (ZoI) of the proposals. In line with the current CIEEM guidelines, these are the sites, habitats and species that are of sufficient importance that effects upon them could be significant (see Box 3.1 and 3.2).

The data has been used to enable a full assessment of the likely impacts of the proposed activities on designated sites, habitats and species of conservation interest both on Site, in immediately adjacent areas and within the wider local area.

Copyright © 2026 Johns Associates Limited

Box 3.1: Designated Biodiversity Sites

Statutory Biodiversity Sites

Internationally Important Sites:

Collectively referred to in this EcIA as European sites – whilst recognising that Ramsar sites are designated at a global level.

- Special Areas of Conservation (SAC) and Candidate/ potential SAC
- Special Protection Areas (SPA) and potential SPA
- Ramsar sites
- Sites identified or required as compensatory measures for adverse effects on other European sites.

Nationally Important Sites:

- Sites of Special Scientific Interest (SSSI)
- National Nature Reserves (NNR)

Locally Important Sites:

- Local Nature Reserves (LNR): Statutory sites that are of importance for recreation and education as well as biodiversity. Of borough/district-level importance for biodiversity (although it may be of greater socio-economic value).

Non-statutory Biodiversity Sites

Sites of county importance: Non-statutory biodiversity sites in Hampshire are called Sites of Importance for Nature Conservation (SINC).

Priority Habitats and Species

In this EcIA (and following the CIEEM guidance), the geographic level at which a species/habitat has been identified as a priority for biodiversity conservation is referred to as its level of 'species/habitat importance'.

- International importance: populations of species or areas of habitat for which European sites are designated
- International importance: populations of birds meeting the threshold for European importance (1% of the relevant international population)
- National importance: priority habitats and species of principal importance (HPI and SPI) for the conservation of biological diversity in England
- National importance: species listed as being of conservation concern in the relevant UK Red Data Book (RDB) or the Birds of Conservation Concern (BoCC) Red List
- National importance: Nationally Rare and Nationally Scarce species, which are species recorded from, 1-15 and 16-100 hectads (10x10km squares of the national grid) respectively
- National importance: populations of birds comprising at least 1% of the relevant British breeding/ wintering population (where data is available)
- Borough/district importance: habitats and species listed in the Local BAP

Notes to Box 3.1:

- SACs are designated under Article 4(4) of Directive 92/43/EEC.
- Candidate SACs are designated under Article 4.1 of Directive 92/43/EEC.

Copyright © 2026 Johns Associates Limited

- SCIs are sites that have been nominated or submitted by Member States and entered onto the list of sites compiled by the European Commission that form (along with SACs and SPAs) the Natura 2000 network. SCIs are subject to the provisions of Article 6(2) of Directive 92/43/EEC. SCIs are afforded full protection by law under the Conservation of Habitats and Species Regulations 2017 (regulation 8(1)(b)).
- SPAs are classified pursuant to the requirements of Directive2009/147/EC (Article 4). As European Sites, they are provided with full protection by law under the Conservation of Habitats and Species Regulations 2017.
- Government policy in England (NPPF) is that any such compensatory land or water must itself be protected as if it were a fully classified SPA or a fully designated SAC.
- Some SSSIs also wholly or partially fall within a European Site boundary.
- The JNCC prepared guidelines to assist in the selection of SPAs (The Birds Directive: Selection guidelines for Special Protection Areas). Stage 1 of the two-stage process identifies those areas used regularly by 1% or more of the Great Britain (or in Northern Ireland, the all-Ireland) population of a species listed in Annex I of the Birds Directive in any season. The JNCC undertakes reviews of the SPA network and populations of its qualification species at roughly decadal intervals with the last (third) review published in 2016.
- Habitats and Species of Principle Importance (HPI and SPI).
- Natural England (2018). UK BAP priority species and habitats, [online]. Available at: http://naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/prioritylist.aspx

Box 3.2 Legally protected and controlled species

Legal Protection

Many species of animal and plant receive some degree of legal protection. For the purposes of this document, legal protection refers to:

- Species included in Schedules 1, 5 and 8 of the WCA (as amended), excluding:
    - Species that are only protected in relation to their sale (see Section 9(5) and 13(2) of the WCA 1981), given that the Proposed Development does not include any proposals relating to the sale of species; and
    - Species that are listed in Schedule 1 of the WCA 1981 that are likely to breed on or near the site (given that this schedule is only applicable whilst birds are breeding).
- Species included in Schedules 2 and 5 of the Habitats Regulations 2017.
- Badgers, which are protected under the Protection of Badgers Act 1992.
- Hedgerows, some of which are protected under The Hedgerows Regulations 1997.

Legal Control

Schedule 9 of the WCA 1981 lists species of animal that it is an offence to release or allow to escape into the wild and species of plant that it is an offence to plant or otherwise cause to grow in the wild.

Copyright © 2026 Johns Associates Limited

3.2 DESK STUDY

The desk study collates existing ecological records for priority habitats and species, controlled and legally protected species within the likely Zone of Influence (ZoI) of the proposed development site. In line with the current CIEEM guidelines, these are the sites, habitats and species that are of sufficient importance that effects upon them could be significant (see Box 3.1 and Box 3.2).

An ecological desk study collating all relevant open-source information relating to the Site and its surrounding area was undertaken by Johns Associates Ltd on 5 September 2025. The data was used to inform the scope of subsequent Site surveys and an assessment of the likely effects of the development proposals on legally protected and/or notable species that may be present at the Site. The Multi Agency Geographic Information for the Countryside (MAGIC) website was used to conduct the following desk study searches:

- Records and citations to a 2 km radius for national statutory designated wildlife sites including Sites of Special Scientific Interest (SSSI), Local Nature Reserves (LNR) and National Nature Reserves (NNRs)
- Records and citations to a 15 km radius of international statutory designated wildlife sites including Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar Sites.
- Records and citations to a 10 km radius of SACs designated for supporting species of bat.
- Records of European Protected Species (EPS) Licenses to a 2 km for e.g. bats, dormice *Muscardinus avellanarius* and great crested newts (GCN) *Triturus cristatus*.
- Records to a 1 km radius of pond surveys conducted by Natural England from 2017 to 2019 for GCN.
- Records of potential waterbodies within a 500 m radius of the Site.
- Records within a 250 m radius of Priority Habitats listed under Section 41 of the Natural Environment and Rural Communities Act (NERC) Act 2006

Google Maps aerial images were used to assess habitats at a landscape level (www.maps.google.com) in proximity to the Site.

3.3 DATA SEARCH

A data search was conducted through Hampshire Biodiversity Information Centre (HBIC) on 5 September 2025 to identify the presence of non-statutory wildlife sites and legally protected and/or notable species records within 2 km of the Site.

3.4 FIELD SURVEY

An extended UKHab survey and BNG habitat condition assessments of the Site were undertaken on 29 September 2025 by experienced ecologist Tessa Pepler BSc (Hons) MSc MCIEEM from Johns Associates Ltd. The weather was 29 °C, wind 0, cloud 3/8 and dry. This survey was completed in accordance with Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity - Code of practice for planning and development (British Standards Institute, 2013).

Copyright © 2026 Johns Associates Limited

3.4.1 UKHab Survey

The on-Site and off-Site (where accessible) habitats were classified following the UK Habitat Classification (UKHab) Version 2.0 guidelines (UKHab Ltd, 2023), which provides a more detailed interpretation of baseline habitat survey data than previous habitat classifications systems, such as Phase 1 Habitat Assessments. The professional edition of UKHab "UK Habitat Classification – Professional Edition1" (UKHab-P) was used which includes Priority Habitat Types, all Annex 1 Habitats and the habitats listed in EUNIS.

The classification of primary habitats is hierarchical with five levels with a list of Secondary Codes; the latter is sub-divided into Essential codes and Additional codes. It is mandator that each recorded habitat parcel is allocated 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. Up to six Secondary Codes can be allocated to a single habitat.

UKHab v2.0 has a total of 268 Secondary Codes, sub-divided into 15 major groupings. Secondary codes are added to habitat parcels to:

- Confirm the identity of habitat mosaic and complexes.
- Add information about habitat origin and modifications.
- Add information on environmental context, management and land use in a consistent manner.

Essential Secondary Codes are identified as 2-digit numbers (10 – 90). Additional Secondary Codes (100 – 853) are 3-digit numbers and cover features including land management, land use (incorporating green infrastructure), environmental qualifiers, species features and hydrological regime descriptors. The UK Habitat Classification v2.0 Secondary Code Groupings are provided in Table 3-1.

Table 3-1: The UK Habitat Classification v2.0 Secondary Code Groupings

UKHab v2.0 Secondary Code Grouping	Description	UKHab v2.0 Codes
Secondary Essentials – Grasslands and Heathland	Habitat mosaic types and complexes that occur in the grassland, heathlands, hedgerows and scrub habitat	10 – 19
Secondary Essentials – Woodlands and Trees	Habitat complexes, origins and mosaic types that principally occur in woods associated with trees	25 – 34
Secondary Essentials – Freshwater	Habitat complexes and origins that principally occur in freshwater habitats	40 – 51
Secondary Essentials – Wetlands	Habitat complexes and environmental qualifiers that principally occur in wetlands	55 – 57
Secondary Essentials – All habitats	Habitat descriptors that can occur on any habitat	60 – 63
Secondary Essentials – Coast	Habitat complexes that principally occur on the coast	70 – 77
Secondary Essentials – Built environment	Habitat complexes, mosaics, land uses and green infrastructure principally associated with the built environment	80 – 90
Additional Secondary Codes – Grasslands and Heathlands	Habitat management, land use, environmental qualifier and species features principally associated with grassland, heathlands, hedgerows and scrub habitat	100 – 131
Additional Secondary Codes – Woodlands and Trees	Habitat management, land use, environmental qualifiers and species features principally associated with woods and trees	200 – 217

Copyright © 2026 Johns Associates Limited

UKHab v2.0 Secondary Code Grouping	Description	UKHab v2.0 Codes
Additional Secondary Codes – Freshwater	Habitat management, land use, environmental qualifiers and species features principally associated with freshwater habitats	300 – 323
Additional Secondary Codes – Wetlands	Hydrological regime, habitat management and species features principally associated with wetlands	400 – 425
Additional Secondary Codes – All habitats	Additional habitat descriptors that can occur on any habitat	500 – 532
Additional Secondary Codes – Farming	Habitat management and land uses principally associated with farmlands	600 – 618
Additional Secondary Codes – Coast	Land use and environmental qualifiers principally associated with coastal areas	700 – 703
Additional Secondary Codes – Built environment	Land use and green infrastructure descriptors principally associated with the built environment	800 – 853

Where appropriate, maps were supplemented with target notes which provided specific information on habitats present that were too limited in extent to map at the scale at which data is presented, or the presence of species and habitats of ecological interest.

An annotated habitat map together with descriptions of the recorded habitat types was produced, which was subsequently digitised using ArcGIS software. The survey also included identification of any non-native invasive plant species. Flora taxonomy follows the nomenclature detailed in New Flora of the British Isles (4th Edition) (Stace, 2019). Flora, where appropriate, are given a descriptive score of abundance using the DAFOR scale, as follows:

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional
- R – Rare
- L – Locally (to be used as a prefix for any of the above)
- V – Very (to be used as a prefix for any of the above)

ArcGIS Symbology

At the time of production, a complete symbology for all habitats in the UK Habitat Classification Professional Edition (UKHab-P) was not available. The UK Habitat Classification Basic Edition (UKHab-B) symbology has therefore been used, and where necessary to add in habitats not included in UKHab-B we have designed our own hatching system within the Level 2 colours for those habitats – following the guidance provided in the UK Habitat Classification Basic Edition: Suggested Symbology for Maps document (UKHab, 2020).

Minimum Mapping Units

UKHab guidance indicated that UKHab has 3 Minimal Mapping Units (MMU's): ·

Copyright © 2026 Johns Associates Limited

- 25 m^2 and 5 m length for urban and small-scale development projects, fine scale mapping of designated sites
- 400 m^2 and 20 m length for landscape scale surveys
- 2500 m^2 for larger unenclosed upland habitats.

Large scale, simple habitats or feasibility surveys should use a larger MMU. For this project, given the size of the site and the scale of the map the 25 m^2 and 5 m length MMU has been applied. This will allow all habitats to be clearly visible on the map whilst enabling enough fine detail to remain to clearly show all habitats present.

3.4.2 Statutory BNG Assessment

The full methodology for the Statutory BNG assessment is provided in the separate BNG Report.

3.4.3 Phase 2 Species Surveys

The survey was 'extended' to assess the suitability of the Site and immediately adjacent habitats to support legally protected and/or notable species, including (but not limited to) plants, badger *Meles meles*, bats, hazel dormouse *Muscardinus avellanarius*, amphibians, reptiles and breeding birds. This included recording visible signs of species presence and/or features that may indicate likely presence. Hedgerows/corridors were assessed for likely value for dormice, trees on Site were assessed for their suitability for roosting bats and waterbodies/ watercourses assessed for suitability for great crested newt, otter and water vole. A search for Invasive Non-Native Species e.g. Japanese knotweed *Reynoutria japonica* was also conducted within the Site and immediately adjacent areas.

The full survey methodologies for the following species are outlined within the Technical Note Survey Reports Appended to this report: Dormouse (Appendix A), Bat Surveys (Appendix B), Reptiles (Appendix C) and Shadow Appropriate Assessment (provided separately to this report).

<u>Otter Survey</u>

An otter survey was conducted on 29 September 2025 by experienced ecologist Tessa Pepler BSc (Hons) MSc MCIEEM from Johns Associates Ltd. The weather was 29 °C, wind 0, cloud 3/8 and dry. The survey was conducted from the banks of the watercourse. Visual observation of much of the watercourse was impeded by the thick scrub which was growing within and along it

The features of the habitat were recorded, and the area was carefully searched for signs of otters. Habitat features recorded include flow velocity, presence of pollution, amount of cover and level of disturbance.

Signs of otters such as spraints, holts, couches, footprints and feeding remains were searched for throughout the area, looking particularly in areas that otters are likely to use, such as prominent features such as large tree stumps/rocks by the water or for holts and under lifted root plates or exposed tree roots.

<u>Water Vole Survey</u>

A water vole survey was completed by experienced ecologist Tessa Pepler BSc (Hons) MSc MCIEEM from Johns Associates Ltd. The weather was 29 °C, wind 0, cloud 3/8 and dry. The update survey was completed following survey methods described at www.gov.uk and/or in the Water Vole Conservation Handbook (Strachan, 2011).

The survey was undertaken on foot from the banks. The watercourse was surveyed for signs of water vole (including burrows, runs, footprints, droppings/latrines, feeding lawns/remains, direct observation and hearing a characteristic 'plop' of animals entering the water) to establish presence/ likely absence of water voles at each site.

Copyright © 2026 Johns Associates Limited

Bats – Foraging and Commuting Habitat

The overall suitability of the Site and adjacent habitats for foraging and commuting bats was assessed to determine its importance within the wider local context, particularly with refence to the location of known roosts obtained through the Desk Study. The assessment was conducted using the criteria described in Table 3-2.

Table 3-2: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement (Collins, 2023)

Suitability	Commuting and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
Negligible[a]	No obvious habitat features on site likely to be used as flightpaths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flightpaths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flightpaths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flightpaths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

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 bay could roost or forage (due to one attribute) but it unlikely that they actually would (due to another attribute).

b. For example, in terms of temperature, humidity, height above ground level, light levels or levels 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, Jansen, Boonman, Schillemans, & Limpens, 2016) (Jansen, Korsten, Schillemans, Boonman, & Limpens, 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.

3.5 ASSESSMENT METHODOLOGY

3.5.1 Prediction of Effects

The method for the prediction of effects is based on the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines (September 2024); these guidelines are widely regarded by the ecology profession as the 'industry standard'.

Copyright © 2026 Johns Associates Limited

The assessment is based upon the results of the desk study and field surveys, relevant published information (on potential biodiversity receptors' status, distribution, sensitivity to environmental changes and ecology), and professional knowledge of ecological processes and functions.

The effects on each scoped-in receptor have been assessed against the predicted future baseline conditions for that receptor: the future baseline has been defined using information about the likely future use and management of the area in the absence of the proposed development, known population trends (where available) and any other proposed developments (consented or otherwise) that may act cumulatively with the proposed development to affect biodiversity receptors.

Throughout the assessment process, identified potential likely significant effects were used to inform the requirements for additional baseline data collection and the identification of ecological avoidance and mitigation measures that are incorporated into the Proposed Development design (in order to avoid or reduce adverse effects or to deliver required enhancements as necessary for receptors where legislation has been derogated). The results of the assessment, as set out later in this EcIA, reflect the final proposed scheme design (i.e. incorporating the embedded ecological measures, which include construction methodology and design) as well as location specific embedded ecological measures.

The spatial extent of the assessment of each potential likely significant effect reflects the area occupied by the receptor that is being assessed and the ZoI associated with the environmental changes that are likely to affect the receptor. Thus, if part of a designated biodiversity site was located within the ecological ZoI relating to a particular ecological change, an assessment was made of the effects on the site as a whole. A similar approach was taken for areas of notable habitat. For species that occur within an ecological ZoI that relates to a change that could significantly affect that species, an assessment was carried out on the total area that is used by the affected individuals or population of the species (e.g. for foraging).

Where appropriate for each receptor, the assessment deals in an integrated way, with the effects of all phases of the development being considered. The level of magnitude of change is subsequently concluded.

3.5.2 Significance Evaluation Methodology

The assessment has been informed by the specific details of all proposed development works and embedded ecological mitigation. The evaluation of effects on receptors is considered following the methodology presented below, and in the context of the scheme description. Integrated and embedded ecological measures consist of those described in Section 5.

Using information about the way in which sites/habitats/species are likely to be affected by the Proposed Development, each change (from the baseline situation) that is assessed has been assigned a level of 'magnitude', based on the definitions set out in Table 3-3.

Table 3-3: Guidelines for the Assessment of Change Magnitude

Magnitude of Change	Criteria and Resultant Effect
Major	The change permanently (or over the long-term) negatively affects the conservation status of a habitat/species, reducing the ability to sustain the habitat or the population level of the species within a given geographic area. Relative to the wider habitat resource/species population, a large area of habitat or large proportion of the wider species population is affected. For designated sites, integrity is compromised. There may be a decrease in the level of biodiversity conservation value of the receptor.
Moderate	The change permanently (or over the long-term) negatively affects the conservation status of a habitat/species reducing the ability to sustain the habitat or the population level of the

Copyright © 2026 Johns Associates Limited

	species within a given geographic area. Relative to the wider habitat resource/species population, a small-medium area of habitat or small-medium proportion of the wider species population is affected. There may be a decrease in the level of biodiversity conservation value of the receptor. Although there may be some effects on individuals or parts of a habitat area or designated site, the quality or extent of sites and habitats, or the size of species populations would experience little or no reduction. Any changes are likely to be within the range of natural variability and there would be no short-term or long-term change to the conservation status of habitat/species receptors or the integrity of designated sites.
Minor	The quality or extent of designated sites or habitats or the sizes of species' populations, experience some small-scale reduction. These changes are likely to be within the range of natural variability and there is not expected to be any permanent change in the conservation status of the species/habitat or integrity of the designated site. The change is unlikely to modify the evaluation of the receptor in terms of its biodiversity conservation value
Minor/Neutral	A change to the level of which is so low, it is not discernible on designated sites or habitats or the sizes of species' populations, or changes that balance each other out over the lifespan of a project.
Will not occur	The effect will not occur due to an absence of an environmental pathway to the sensitive receptor.

The criteria in Table 3-3 refer to the terms 'integrity' and 'conservation status'. For habitat areas and species, an effect is assessed as being significant if the favourable conservation status of a receptor would be changed by the Proposed Development. Conservation status is defined by the CIEEM guidelines as follows:

- For habitats –the sum of the influences acting on the habitat and its typical species, that may affect its long-term distribution, structure and functions as well as the long-term survival of its typical species within a given geographical area; and
- For species -the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within a given geographical area.

Negative Effects

A negative effect is considered to be significant if the favourable conservation status of a receptor is compromised by the Proposed Development.

A similar procedure has been used for designated sites that are affected by the development, except that the focus is on the effects on the integrity of each site, defined by the CIEEM guidelines as:

"...the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified."

The assessment of effects on integrity draws upon the assessment of effects on the conservation status of the features for which the site has been designated.

The decision as to whether the favourable conservation status has been compromised is made using informed judgement based on the findings of the assessment of how the resource would be affected.

Positive Effects

Copyright © 2026 Johns Associates Limited

A positive effect is assessed as being significant if development activities are predicted to cause:

- An improvement in the condition of a habitat/species population from unfavourable to unfavourable recovering or favourable (noting that condition data are only available for SSSIs, but that professional judgement has been used to apply the same principle to habitats/species elsewhere); or

- Partial or total restoration of a site's favourable condition.

If a species population, habitat or site is already in favourable condition, it is still possible for there to be a significant positive effect. There is, however, no simple formula for determining when such effects are significant and decisions about significance therefore have to be made on a case-by-case basis using professional judgement.

3.6 LIMITATIONS, CONSTRAINTS AND ASSUMPTIONS

The findings of this report are valid at the time of the final Site visit conducted on 29 September 2025. Should there be delays to the project timetable and/or implementation of the proposed development, updated desk study and/or survey work may be required. In this instance, advice should be sought to ensure the data, recommendations and conclusions set out in this report remain valid.

It has been assumed that the development proposals are as described in this document and that all proposed mitigation, enhancement and management measures will be implemented in full.

This EcIA has been produced by Johns Associates Ltd using data gathered from baseline surveys carried out in 2025, supported by contemporary records centre data. The assessment based upon this data presented in this report is considered to be robust and no significant limitations to the survey methodologies have been encountered.

<u>Great Crested Newt (GCN)</u>

There are known populations of GCN in proximity to the Site at Chalcroft Farm and Quobleigh Wood. These populations have been mitigated and compensated for through the Outline OPP application under the mitigation licences 2022-62944-EPS-MIT and 2020-44604-EPS-MIT-4 and in agreement with NE through the One Horton Heath GCN Masterplan Document Updated 17 July 2023, Johns Associates and as a result are scoped out of this EcIA. The avoidance and mitigation measures for reptiles and dormouse outlined within this report will also protect and avoid harm to amphibian species.

Copyright © 2026 Johns Associates Limited

4 BASELINE ECOLOGICAL CONDITIONS

The Upper Acre ecological baseline provided within this Section. Where ecological information from the wider OHH site area is relevant to Upper Acre, it has also been included.

4.1 DESK STUDY

4.1.1 Statutory Designated Sites

There are two nationally important statutory Sites within 2 km of the Site: The River Itchen Site of Special Scientific Interest (SSSI) is located 1.7 km to the west of the Site. The SSSI river is a sub-type 1 chalk river dominated throughout by aquatic *Ranunculus* spp. with presence of southern damselfly *Coenagrion mercurial*, bullhead *Cottus gobio*, otter *Lutra lutra*, white clawed crayfish *Austropotamobius pallipes*, and brook lamprey *Lampetra planeri*. Moorgreen Meadows SSSI is located 1.67 km west of the Site is designated for the presence of neutral meadows and alder wood flanking a small tribituary of the River Hamble on the Bracklesham Beds of the Hampshire Basin. The SSSI is of exceptional scientific importance for its population of marsh orchids *Dactylorhiza*.

There are a further five European designated Sites within 10km of Upper Acre:

- River Itchen Special Area of Conservation (SAC) – 1.7 km to the west of the Site at its closest point. This European site is a chalk river designated for its habitats, and the fish, mammal and invertebrate species it supports.
- Solent and Southampton Water Special Protection Area – 4.5 km southeast of the Site at its closest point. This European site is designated for its estuarine bird species.
- Solent Maritime Special Area of Conservation – 4.5 km southeast of the Site at its closest point, designated for its estuarine habitat and associated vegetation.
- Solent and Southampton Water Ramsar site – located 4.5 km southeast of the Application Site at its closest point and designated for its wetland habitats.
- Emer Bog SAC – 9.95 km northwest of Upper Acre at its closest point, designated for its transition mires and quaking bogs.

Additionally, this report considers the European sites associated with the New Forest:

- New Forest SPA – 12.91 km southwest of the Site across Southampton Water. This site is designated for five key bird species it supports.
- New Forest SAC – 12.91 km southwest of the Site at its closest point, designated for its waterbodies, heathland, beech and oak woodland, depressions on peat substrates, damselflies and stag beetles.
- New Forest Ramsar site – 12.91 km southwest of the Site, designated for its wetland sites.

Copyright © 2026 Johns Associates Limited

4.1.2 Non-statutory Designated Sites

A total of 32 non-statutory Sites of Importance for Nature Conservation (SINCs) were identified within 2 km of the Site. These are described in Table 4-1.

Table 4-1: Non-Statutory Designated Sites within 2km

SINC Name	SINC Criteria	Distance from Site
Round Copse, West End	1A – Ancient semi-natural woodlands	212 m south
Scoreys Copse Meadow	2B – Semi-improved grassland which retain a significant element of unimproved grassland	376 m east
Scorey's Copse	1A – Ancient semi-natural woodlands	387 m east
Chalcroft Distribution Park	1B – Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland.	404 m southwest
Field North of Hearts Row, West End	5B – Fens, flushes, seepages, springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent)	467 m west
Treeline Break, West End	1A/1Cii – Ancient semi-natural woodlands/Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	488 m west
Hearts Copse	1A – Ancient semi-natural woodlands	507 m west
Scorey's Copse Rush Pasture	2B – Semi-improved grasslands which retain a significant element of unimproved grassland 5B – Fens, flushes, seepages springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent)	521 m east
Wyvern Technology College Meadow	2A – Agriculturally unimproved grasslands which are not of recent origin	875 m north
Snakemoor Farm Meadow	2B – Semi-improved grassland which retain a significant element of unimproved grassland	925 m east
Quobleigh Pond & Woods	1A/1Cii - Ancient semi-natural woodlands/Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	956 m north
Allington Lane Pond	5B- Fens, flushes, seepages, springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent) 6A - Supports great crested newt	1.03 km west
Ponds & Meadow adjacent to Wyvern Technology College	6A – water shrew *Neomys fodiens*, slender tufted sedge *Carex acuta*, marsh seedbox *Ludwigia palustris*, shining pondweed *Potamogeton lucens*, otter *Lutra lutra* and harvest mouse *Micromys minutus*	1.04 km north
Alder Strip	1A – Ancient semi-natural woodland 1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.09 km southeast
Home Covert, West End	1A – Ancient semi-natural woodland	1.11 km southwest
Copse by Oaklands House	1A/1Cii – Ancient semi-natural woodland/Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.17 km southwest
Meadow adjacent to Home Covert	2B – Semi-improved grassland which retain a significant element of unimproved grassland	1.21 km southwest
Winslowe House Meadow	2A - Agriculturally unimproved grasslands which are not of recent origin	1.34 km southwest
Hog Wood & Gravel Pits	1A – Ancient semi-natural woodland	1.41 km west

Copyright © 2026 Johns Associates Limited

SINC Name	SINC Criteria	Distance from Site
	1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species. 5A – Areas of open freshwater 6A – great crested newt	
Botley Golf Course Wood	1A – Ancient semi-natural woodland 1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.46 km southeast
Hogwood Lane Drove	1A – Ancient semi-natural woodland	1.55 km west
Hogwood Lane Meadow	2B – Semi-improved grasslands which retain a significant element of unimproved grassland 5B – Fens, flushes, seepages springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent)	1.57 west
Ford Lake Woodland	1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland 1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.58 km southeast
Durley Copse	1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland	1.61 km northeast
Moorgreen Woodlands	1A – Ancient semi-natural woodland 1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.65 km south
Bushy Copse, West End	1A – Ancient semi-natural woodland	1.68 km southwest
Itchen Valley Country Park	2B - Semi-improved grasslands which retain a significant element of unimproved grassland 5A – Areas of open freshwater 5B - Fens, flushes, seepages springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent) 6A – water shrew *Neomys fodiens*, slender tufted sedge *Carex acuta*, marsh seedbox *Ludwigia palustris*, shining pondweed *Potamogeton lucens*, otter *Lutra lutra* and harvest mouse *Micromys minutus*	1.71 km west
Parker's Copse/Fir Plantation/Greenwood	1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland	1.79 km northeast
Ford Lake Meadow	1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland 2B - Semi-improved grasslands which retain a significant element of unimproved grassland 5B - Fens, flushes, seepages springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent)	1.83 km southeast
West Horton Farm Woods	1Cii - Wet woodlands such as alder or willow woods and birch bog woods with support a good diversity of woodland and/or marsh/swamp/mire species.	1.84 km northwest

Copyright © 2026 Johns Associates Limited

SINC Name	SINC Criteria	Distance from Site
	5B - Fens, flushes, seepages springs and inundation grasslands of floodplains that support a flora and fauna of less- improved wet conditions (seasonal or permanent) 6A – water shrew *Neomys fodiens*, slender tufted sedge *Carex acuta*, marsh seedbox *Ludwigia palustris*, shining pondweed *Potamogeton lucens*, otter *Lutra lutra* and harvest mouse *Micromys minutus*	
Withybed Covert/Ridgeway Copse	1A – Ancient semi-natural woodlands	1.85 km southwest
Knowlehill Copse	1A – Ancient semi-natural woodlands	1.86 km north

4.1.3 Priority Species

HBIC provided records of notable and legally protected species for the area extending 2 km from the Site dating from the last 10 years. Results are summarised in Table 4-2.

Table 4-2: Summary of HBIC Protected Species Data

Species/Groups	Details
Plants	There were seven records of mousetail *Myosurus minimus* identified within the Site boundary (to a precision of 100 m) between 2000 and 2016. This plant is listed as vulnerable on the red list. There were 27 records of plants from within 2 km of the Site from 2015 onwards. The following IUCN Red Data Book species were recorded: box *Buxus sempervirens*, oak-leaved goosefoot *Oxybasis glauca*, lesser spearwort *Ranunculus flammmula* and *Ranunculus flammula subsp. flammula*.
Amphibians	Records of amphibians included 120 records of great crested newt (GCN), the nearest of which to the Site was recorded 206 m away in 2015. In addition to the GCN records, from 2015 onwards there were five records of common toad *Bufo bufo*.
Badger	There were 16 records of badger from within 2 km of the Site between 1988 and 2019, the closest of which to the Site was recorded 374 m away in 2009.
Bats	There were 372 records of bats from within 2 km of the Site from 2015 onwards, comprising the following species: barbastelle *Barbastella batbastellus*, serotine *Eptesicus serotinus*, Myotis bat species *Myotis sp.*, Daubenton's *Myotis daubentonii*, Whiskered bat *Myotis mystacinus*, natterer's *Myotis nattereri*, Leisler's bat *Nyctalus leisleri*, noctule *Nyctalus noctula*, Nathusius's pipistrelle *Pipistrellus nathusii*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipstrellus pygmaeus* and brown long-eared *Plecotus auritus*. The closest record to the Site was a recording of three common pipistrelles caught via harp trapping in 2020, approximately 94 m from the Site. There were 38 roost records from within 2 km of the Site from 2015 onwards. The closest roosts to the Site were two records of brown long-eared maternity roosts at the same location 103 m from the Site, in 2023 and 2024.
Birds	There were 3217 records of birds from within 2 km of the Site from 2015 onwards. Of these records, the following species have been recorded on Site: greenfinch *Chloris chloris*, herring gull *Larus argentatus* and lesser black-backed gull *Larus fuscus*. Additionally, redwing *Turdus iliacus*, starling *Sturnus vulgaris*, firecrest *Regulus ignicapiilla* and hobby *Falco subbuteo* have been recorded on or near the Site to a 1 km precision.
Dormouse	The data search returned three records of dormouse from within 2 km of the Site between 1995 and 2020. The closest record to the Site was recorded in 2020, 287m from the Site
Reptiles	There were 23 records of reptiles from within 2 km of the Site from 2015 onwards, including 19 records of slow worms *Anguis fragilis*, three records of grass snake *Natrix helvetica* and one record of a common lizard *Zootoca vivipara*. The closest record to the Site was a grass snake recorded 1.04 km from the Site in 2021.
Other mammals	There were 40 records of hedgehog *Erinaceus europaeus* from within 2 km of the Site from 2015 onwards, the closest of which was recorded 365m from the Site in 2020. The data search also returned one record of otter *Lutra lutra* from within 2km of the Site, recorded 1 km away in 2022.

Copyright © 2026 Johns Associates Limited

Invertebrates	There were 447 records of invertebrates from within 2 km of the Site from 2015 onwards. This included 73 records of stag beetle *Lucanus cervus* , the nearest of which was recorded 438 m away in 2021. Other notable species recorded within 2 km of the Site listed under the IUCN Red list included alder leaf beetle *Agelastic alni*, beaded chestnut *Agrochola lychnidis*, mouse moth *Amphipyra tragopoginis*, sallow *Cirrhia icteritia*, dingy mocha *Cyclophora pendularia*, larch pug *Eupothecia lariciata*, white admiral *Limenitis Camilla*, true lover's knot *Lycophotia porphyria*, lackey *Malacosoma neustria*, pale brindled beauty *Phigalia pilosaria*, early moth *Theria primaria*, dark-barred twin-spot carpet *Xanthorhoe ferrugata*, southern damselfly *Coenagrion mercurial* and common darter *Sympetrum striolatum*. The closest notable invertebrate record to the Site was *Oedemera femoralis*, a nationally scarce species, recorded 192 m away in 2015.

4.1.4 Priority Habitats

Several Habitats of Principal Importance (as listed on Section 41 of the NERC Act 2006), have been recorded within 2km of the Site, including: deciduous woodland, pond, and floodplain grazing marsh. The floodplain grazing marsh is located in the south of the Site. Deciduous woodland is located 250 m north of the Site. The pond is located 193m to the east of the Site.

4.1.5 European Protected Species Licences

Nineteen European Protected Species (EPS) licenses issued by Natural England were identified within 2 km of the site, for great crested newt, brown long-eared *Plecotus auritus*, common pipistrelle *Pipstrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*. Futher licences are known for the Site which John's Associates hold or are aware of and these are also included in Table 4-3 which provides a summary of the EPSL within 2 km of the Site.

Table 4-3: Granted EPS Licenses within 2 km of the Site

Case reference	Date	Distance/Direction from the site	Species included	Reason
2019-39527EPS-MIT	27/02/2019 – 22/02/2024	Approximately 187 m to the west at Chalcroft Farm – OHH licence	Bat (Brown long-eared, common pipistrelle, natterers)	Affects breeding, destroy breeding place, destroy resting place
2020-44604-EPS-MIT-1	01/05/2020 – 31/07/2028	Allington Lane 1.04 km to the north west – OHH licence	Amphibian (Great crested newt)	Destroy resting and damage resting place
2020-44604-EPS-MIT-2,	22/10/2020 - 31/07/2028			
2020-44604-EPS-MIT-3	04/02/2021 – 31/07/2028			
2020-46989-EPS-MIT	01/05/2020 – 29/04/2022			
2020-46989-EPS-MIT-1	04/02/2021 – 29/04/2022			
EPSM2009-903	17/06/2009 – 30/09/2009	Chalcroft Farm, 187 m to the west – OHH licence	Amphibian (Great crested newt)	Destroy resting place
2023-64802-EPS-MIT	21/04/2023 – 31/12/2027	Chalcroft Farm, 187 m to the west – OHH licence	Amphibian (Great crested newt)	Injure/kill
2021-52226-EPS-MIT-1		Foxholes Farm,	Bat (common pipistrelle	Destroy resting place

Copyright © 2026 Johns Associates Limited

Case reference	Date	Distance/Direction from the site	Species included	Reason
		Calcroft Farm, Northern building cluster – OHH licence	mating roost & day roost, BLE day roosts, Natterer's day roost, BLE maternity roost, BLE satellite roost, soprano pipistrelle day roost	
2021-52226-EPS-MIT-2		Victoria House (now demolished) 752 m to the north west – OHH licence	Bat (brown long-eared (satellite roost), whiskered, Soprano pipistrelle, common pipistrelle (all day roosts)).	Destroy breeding place
2019-40025-EPS-MIT	25/04/2019 – 01/07/2026	Approximately 1.1 km to the north of Quobleigh Woods – OHH licence	Amphibian (great crested newt)	Destroy resting and damage resting place
2019-39954-EPS-MIT	20/03/2019 – 31/12/2024	Approximately 1.1 km to the north – Fair oak Lodge, Allington Lane – OHH licence	Bat (common pipistrelle, soprano pipistrelle)	Destroy resting place
2015-16719-EPS-MIT	02/11/2015 – 31/10/2020	Approximately 1.4 km to the west	Bat (Common pipistrelle)	Destroy resting place
2015-14282-EPS-MIT	20/08/2015 – 30/04/2016	Approximately 1.4 km to the west	Amphibian (Great crested newt)	Destroy resting place
2015-14282-EPS-MIT-1	22/04/2016 – 31/07/2019	Approximately 1.4 km to the west	Amphibian (Great crested newt)	Destroy resting place and damage resting place
2018-36779-EPS-MIT	01/09/2018 – 30/09/2019	Approximately 1.1km to the east	Bat (Common pipistrelle)	Destroy resting place
2016-22386-EPS-MIT	11/04/2016 – 30/04/2020	Approximately 1.24 km to the south-west	Bat (brown long-eared, common pipistrelle, soprano pipistrelle)	Destroy resting place
2020-48450-EPS-MIT	01/08/2020 – 31/12/2026	Approximately 1.27 km to the north	Bat (Soprano pipistrelle)	Destroy resting place
2018-35734-EPS-MIT	16/08/2018 – 31/12/2025	Approximately 1.27 km to the north	Amphibian (Great crested newt	Damage resting place and destroy resting place
2018-35734-EPS-MIT-1	01/11/2018 – 31/12/2025			
2018-35734-EPS-MIT-2	11/07/2019 – 31/12/2025			
2014-1914-EPS-MIT	02/04/2015 – 31/03/2020	Approximately 2 km to the north-east	Bat (Common pipistrelle, soprano pipistrelle)	Destroy resting place

4.1.6 Great Crested Newt (GCN) Pond Surveys 2017 – 2019

Class licence returns for surveys of GCN have been recorded at five locations within 1 km of the Site which are all licence returns from the OPP OHH NE Mitigation Licence, held by Johns Associates Ltd. GCN are present within the compensation ponds created to the northwest of the Site at Allington Lane, to the north of the Site within Quobleigh

Copyright © 2026 Johns Associates Limited

Woods located approximately 847 m to the north of the Site at the closest point and within the pond at Chalcroft Farm located 157 m to the west of the Site, which was also surveyed from 2017 to 2019 by NE to inform the District Level Licensing scheme and was found to have GCN present.

4.2 FIELD SURVEYS

4.2.1 Habitats

The Existing UKHab Plan (Figure 2) and the baseline BNG habitat condition sheets (Appendix C of the separate BNG Report) should be referred to throughout this section.

<u>Holcus-Juncus Neutral Grassland g3c8</u>

Area 1 (Plate 1) comprised a 35m wide strip in the southwest of the Site of holcus-juncus neutral grassland. Species composition evidenced a seasonally wet nature due to presence of species such as tufted hair-grass *Deschampsia cespitosa* and figwort *Scrophularia nodosa*. Undermanagement had resulted in the area tending to rank species. Table 4-4 provides the species recorded in 1m^2 and Plate 2 provides the quadrat photograph. Table 4-5 provides the species recorded in the wider field.

Plate 1: Area 1 g3c8 grassland

Plate 2: Area 1 1m^2

Table 4-4: Area 1 Species per m^2

Species	Common Name	DAFOR
Holcus lanatus	Yorkshire fog	F
Ranunculus repens	Creeping buttercup	F
Deschampsia cespitosa	Tufted hair-grass	O

Table 4-5: Area 1 General Species

Species	Common Name
Holcus lanatus	Yorkshire fog
Ranunculus repens	Creeping buttercup
Deschampsia cespitosa	Tufted hair-grass
Carex hirta	Hairy sedge
Juncus effusus	Soft rush
Equisetum palustre	Marsh horsetail
Rumex crispus	Curled dock

Copyright © 2026 Johns Associates Limited

Poa trivialis	Rough meadow grass
Phleum pratense	Timothy
Urtica dioica	Common nettle
Arrhenatherum elatius	False oat grass
Cirsium vulgare	Spear thistle
Scrophularia nodosa	Figwort
Agrostis stolonifera	Creeping bent

Other Neutral Grassland g3c

Area 3 (Plate 3) comprised a bund at the southwest of the Site around the construction soil storage area. Due to the recent creation of the bund, many of the species present were ruderal (e.g. scentless mayweed *Tripleurospermum inodorum* and knotgrass *Polygonum aviculare* agg.). The Schedule 8 species jersey cudweed *Laphangium luteoalbum* (Plate 4) was present, likely as a result of soil movement from off Site. Table 4-6 provides the species recorded in 1m^2 and Plate 5 provides the quadrat photograph. Table 4-7 provides the species recorded in the wider field.

Plate 3: Area 3 g3c grassland (on left)

Plate 4: Jersey Cudweed

Plate 5: Area 3 Species per m^2

Copyright © 2026 Johns Associates Limited

Table 4-6: Area 3 Species per m^2

Species	Common Name	DAFOR
Trifolium repens	White clover	F
Agrostis stolonifera	Creeping bent	F
Holcus lanatus	Yorkshire fog	O
Festuca rubra	Red fescue	O
Lolium perenne	Perennial rye-grass	O
Erigeron sumatrensis	Guernsey fleabane	O
Leucanthemum vulgare	Oxeye daisy	R
Ranunculus repens	Creeping buttercup	R

Table 4-7: Area 3 General Species

Species	Common Name
Trifolium repens	White clover
Agrostis stolonifera	Creeping bent
Holcus lanatus	Yorkshire fog
Festuca rubra	Red fescue
Lolium perenne	Perennial rye-grass
Erigeron sumatrensis	Guernsey fleabane
Leucanthemum vulgare	Oxeye daisy
Ranunculus repens	Creeping buttercup
Cirsium vulgare	Spear thistle
Rumex obtusifolius	Broad-leaved dock
Plantago major	Broadleaved plantain
Tripleurospermum inodorum	Scentless mayweed
Stellaria gaminea	Lesser stitchwort
Polygonum aviculare agg.	Knotgrass
Dactylis glomerata	Cock's foot
Cirsium arvense	Creeping thistle
Taraxacum officinale agg.	Dandelion
Trifolium pratense	Red clover
Laphangium luteoalbum	Jersey cudweed
Erigeron canadensis	Canadian fleabane

Modified Grassland g4

Area 2 (Plate 6) comprised a narrow strip of modified grassland between H1 and the bund (Area 3) at the southwest of the Site with a limited species composition. Other than the species listed in Table 4-8, only broadleaved dock *Rumex obtusifolius* and cock's foot *Dactylis glomerata* were present in the wider sward area. Table 4-8 provides the species recorded in $1m^2$.

Copyright © 2026 Johns Associates Limited

Plate 6: Area 2 g4 grassland

Table 4-8: Area 2 Species per m^2

Species	Common Name	DAFOR
Lolium perenne	Perennial rye-grass	A
Agrostis stolonifera	Creeping bent	A
Ranunculus repens	Creeping buttercup	O

Area 4 comprised a length of track to the west of the Site that had been used by agricultural vehicles. The species composition was the same as Area 2, however due to vehicular movements there was a higher presence of bare ground and soil ruts/compaction.

Area 5 (Plate 7) comprised the main field of which was dominated by perennial ryegrass *Lolium perenne*. Mowing was undertaken irregularly, and the sward was species poor with species indicative of nutrient enrichment such as creeping buttercup *Ranunculus repens* and broadleaved dock present. Table 4-9 provides the species recorded in 1m^2 and Plate 8 provides the quadrat photograph. Table 4-10 provides the species recorded in the wider field.

Plate 7: Area 5 g4 grassland (main field)

Plate 8: Area 5 Species per m^2

Table 4-9: Area 5 Species per m^2

Species	Common Name	DAFOR
Lolium perenne	Perennial rye-grass	A
Agrostis stolonifera	Creeping bent	O

Copyright © 2026 Johns Associates Limited

Holcus lanatus	Yorkshire fog	O
Ranunculus repens	Creeping buttercup	R
Taraxacum officinale agg.	Dandelion	R

Table 4-10: Area 5 General Species

Species	Common Name
Lolium perenne	Perennial rye-grass
Agrostis stolonifera	Creeping bent
Holcus lanatus	Yorkshire fog
Ranunculus repens	Creeping buttercup
Taraxacum officinale agg.	Dandelion
Rumex obtusifolius	Broadleaved dock
Festuca rubra	Red fescue
Phleum pratense	Timothy
Ranunculus acris	Meadow buttercup
Rumex acetosa	Common sorrel

Other Rivers and Streams r2b

Areas 4a to 4b ran north to southwest through the Site. See River Condition Assessment Summary Report (Adam Ellis, 2024) for full description of condition and MoRPH Survey results (BNG Report Appendix B). At the time of survey the stream was wet but had very little water present. Reach 4a was predominantly herbaceous species with hard rush *Juncus inflexus* dominant. Reach 4b was dominated by bramble scrub vegetation with only one area where water was visible. The water was shallow with a high turbidity. A full species list is located in Table 4-11.

Plate 9: Area 4a of stream mid-seacton

Plate 10: Area 4a of stream mid-seacton

Copyright © 2026 Johns Associates Limited

Plate 11: Area 4b of sream to west

Plate 12: Stream bed showing low silty water level

Table 4-11: Areas 4a to 4b General Species

Species	Common Name
Species composition Area 4a	
Juncus inflexus	Hard rush
Urtica dioica	Common nettle
Rumex crispus	Curled dock
Salix cinerea	Grey willow (saplings)
Cirsium arvense	Creeping thistle
Agrostis stolonifera	Creeping bent
Lotus pendunculus	Greater birds-foot-trefoil
Heracleum sphondylium	Hogweed
Rubus fruiticosus agg.	Bramble
Jacobaea vulgaris	Ragwort
Epilobium ciliatum	American willowherb
Calystegia sepium	Hedge bindweed
Equisetum palustre	Marsh horsetail
Dactylis glomorata	Cock's foot
Species composition Area 4b	
Rubus fruiticosus agg	Bramble
Rosa canina agg.	Dog rose
Ulex europaeus	Gorse
Crataegus monogynq	Hawthorn
Cirsium arvense	Creeping thistle
Sonchus asper	Prickly sow thistle
Lolium perenne	Perennial rye-grass
Amaranthus sp.	Red amaranth
Festuca rubra	Red fescue

Appendix B of the BNG Report provides the full MoRPH survey results. The watercourse was River Type was Type H; straight sinuous, with no bedrock present (A6), silt was the coarsest bed material present (A7) and clay was the average alluvial bed material size class (A8). Due to the Shape Score results being 0.81 for sub-reach 4a and 0.58 for

Copyright © 2026 Johns Associates Limited

sub-reach 4b, and based upon the geomorphology of the sub-reaches of the watercourse it is considered that these reach sections have been over deepened and the BNG score is therefore reduced from moderate to **fairly poor BNG condition** for sub-reach **4a** and from fairly poor to **poor BNG condition** for sub-reach **4b**.

Other Native Hedgerow h2a6

Hedgerow H1 was located to the southwest of the Site running east to west. A ditch ran through the middle alongside the length of the hedgerow. There were anthills and undisturbed vegetation present and an absence of species indicative of nutrient enrichment. Species present included hawthorn *Crataegus monogyna* (A), blackthorn *Prunus spinosa* (F), dog rose *Rosa canina* (O), oak *Quercus robur* (R) and bramble.

Hedgerow H2 was located along the western boundary of the Site. Species present included blackthorn (D), dog rose (R), field maple *Acer campestre*, ash *Fraxinus excelsior* and hawthorn (R).

Species-rich Native Hedgerows h2a5

Hedgerow H3 was a small length located at the northeast of the Site. Species present include blackthorn (A), dog rose (R), hawthorn (R), oak (R), hornbeam *Carpinus betulus* (R) and grey willow *Salix cinerea* (R).

Hedgerow H4 was located to the east of the Site, traversing Burnetts Lane. It comprised blackthorn, hawthorn, oak, sycamore *Acer psuedoplatynus*, bramble, field maple *Acer campestre*, grey willow and domestic plum *Prunus domestica*.

Individual Trees

T2 was a semi-mature ash and was located to the north of hedgerow H4 in the northeastern corner of the Site. The tree had no damage and no ecological niches present.

4.2.2 Off-Site Habitats within the ZoI

SUDS

There is an area comprising SUDS ponds off-site to the south of the Site. Bullrush was dominant and water was present at the time of survey. Mallard ducks were recorded and duck weed *Lemna minor* was recorded on the surface of the water contained within the SUDS pond. Plant species recorded included soft rush *Juncus effusus*, common fleabane *Pulicaria dysenterica*, branched bur-read *Sparganium erectum*, prickly sow thistle *Sonchus asper*, cocks foot *Dactylis glomerata*, scentless mayweed, broad-leaved dock *Rumex obtusifolius*, marsh thistle *Cirsium palustre*, red clover *Trifolium pratense*, creeping buttercup, Yorkshire fog *Holcus lanatus*, Timothy *Phleum pratense*, creeping bent *Agrostis stolonifera* and perennial ryegrass.

The grassland surrounding the SUDs was tending to ruderal with a thatch layer building up. The grassland was varied in composition and species included creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, willow herb *Epilobium* sp., creeping thistle was starting to become dominant, tall fescue *Schedonorus arundinaceus*, common sorrel *Rumex acetosa* and false oat grass *Arrhenatherum elatius*.

Individual Rural Trees

Five trees were present within the gardens of the properties located adjacent to the northeastern corner of the Site.

Table 4-12: Off-Site Tree Numbers and Description

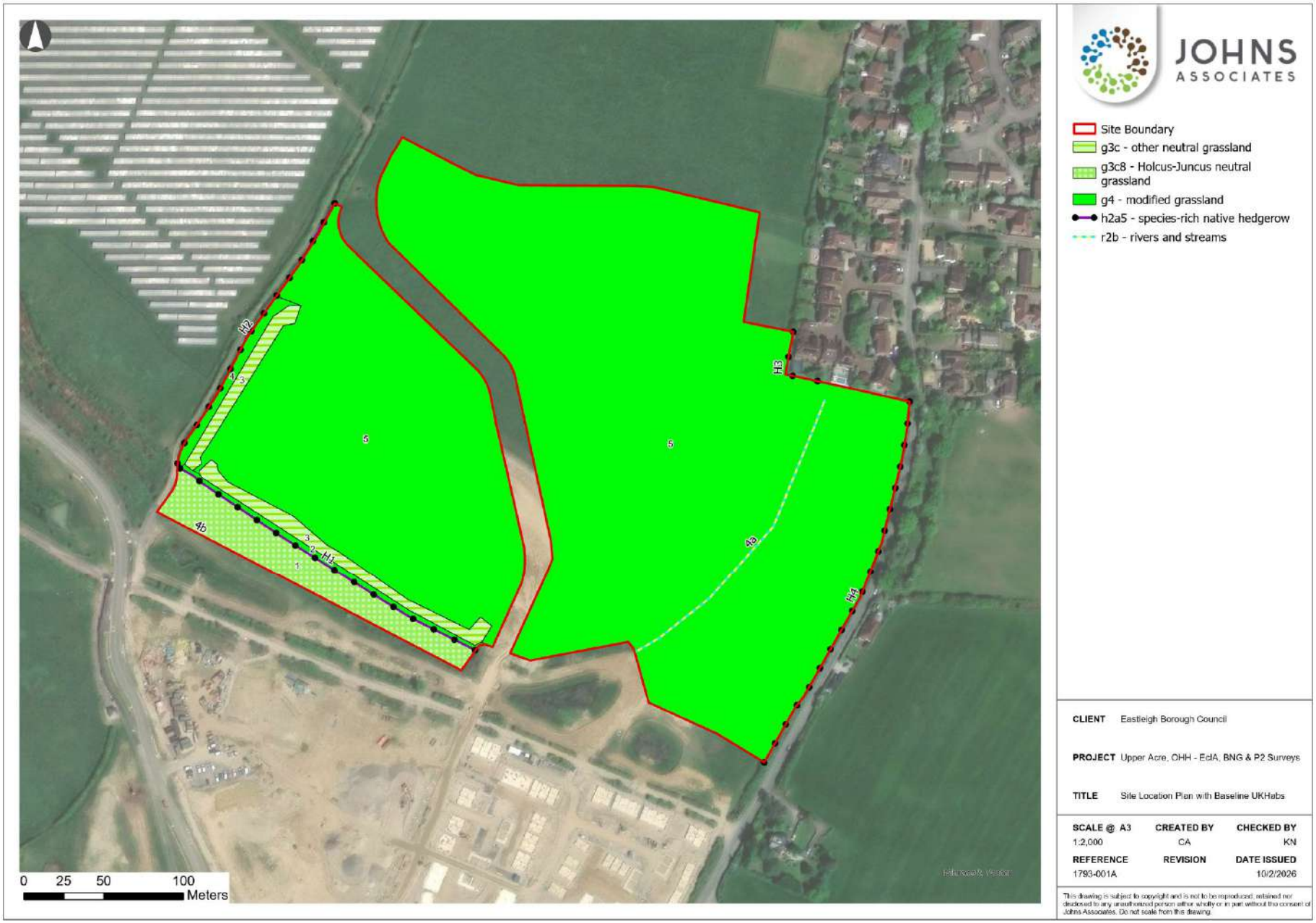
Tree Number	Species	Common Name	Description Notes
T1	*Quercus robur*	Oak	No ecological niches, no damage

Copyright © 2026 Johns Associates Limited

T3	*Salix caprea*	Goat willow	Ecological niches – raised bark, no damage, some limbs are dead – not in good health.
T4	*Salix x chrysocoma*	Weeping willow	No damage, no ecological niches.
T5	*Salix caprea*	Goat Willow	No damage, no ecological niches.
T6	*Prunus domestica*	Plum	Young, no damage, no ecological niches.

Copyright © 2026 Johns Associates Limited

Figure 2: Baseline UKHab Habitat Plan



Copyright © 2026 Johns Associates Limited

Dormouse

Appendix A provides the full survey results of dormouse surveys conducted at the Folds and The Holme and Homestal RMAs within a Dormouse Survey Technical Note. One live dormouse and three dormouse nests were previously identified in 2020 during surveys conducted by Johns Associates Ltd in Foxwalks Wood, the woodland located 13 m to the south of the Site. A current Natural England (NE) Mitigation Licence is held by Johns Associates Ltd for the Secondary Road application (The Avenue Road) to cover the loss of woodland habitat within Foxwalks Wood to facilitate construction of the road, which is runs through the eastern section.

Hazel dormouse was confirmed to be present during 2025 footprint tunnel surveys conducted at The Folds and The Upper Acre RM application sites to the south of Quobleigh Wood and within the line of trees and scrub which extends south from Quobleigh Wood along the eastern boundary of The Homestal. It can therefore be assumed that dormouse is present within all hedgerows within the Site, as all are connected to woodlands and treelines that support dormouse.

Three dormouse nests and one live dormouse were recorded in nest boxes associated with the Avenue Road development within Foxwalks Woods on 1 December 2025.

Otter

No evidence of otter field signs was recorded along the watercourse. No log piles or tree root cavities were present along the watercourse that could provide potential holt habitat. An otter was recorded by a camera trap set up by the EBC on-site ecologist within Quobleigh Woods on 9 November 2025 at W3W drift.fully.enjoyable; to the north east of Quobleigh Pond. The watercourse within the Site had very little water present within in it during the survey and therefore would not have provided otter foraging habitat due to the lack of prey e.g. fish present.

Bats Foraging and Commuting Habitat

The Site provides high suitability foraging and commuting habitat for bats. Appendix B provides the full static survey results and R Analysis Report(which presents the statistical analysis of the results).

Bat Roosts in Wider OPP OHH Area

A barbastelle *Barbastella barbastellus* mating roost was recorded in a line of trees located between The Folds and The Homestal in October 2025, however very few barbastelle bat passes were recorded within the Upper Acre Site. Eleven bat species have been confirmed within the OPP site during the course of various surveys including: barbastelle, serotine *Eptesicus serotinus*, brown long-eared *Plecotus auritus*, Natterer's *Myotis nattereri*, Daubenton's *Myotis daubentonii*, Whiskered *Myotis mystacinus*, nathusius pipistrelle *Pipistrellus nathusii*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*.

Roosts of the following species are confirmed at the wider OPP OHH site:

- Serotine – 1 x likely maternity roost: Fir Tree Farmhouse
- Brown long-eared – 1 x maternity roost, 1 x satellite maternity roost, 1 x day roosts: Fir Tree Farmhouse, Fir Tree Bat House (compensation roost), Bat Box VH17
- Whiskered – Minimum 1 x day roost: Fir Tree Bat House (compensation roost)
- Common pipistrelle – Multiple day roosts: Fir Tree Farmhouse, Fir Tree Bat House (compensation roost)

Copyright © 2026 Johns Associates Limited

- Soprano pipistrelle - Multiple day roosts: Fir Tree Farmhouse, Fir Tree Bat House (compensation roost), 1 x mating roost: Bat Box VH21

- Barbastelle bat – Mating roost in the treeline that separates The Folds and The Homestal to the south of Quobleigh Woods.

- Noctule mating roost in a tree in proximity to Pond Cottage Pond, Chalcroft Farm

- Chalcroft Farm Roosts – Common pipistrelle day roost – 5 bats, soprano pipistrelle bat day roost – 2 bats, 5 brown long-eared bat day roosts – 6 bats, 1 brown long-eared bat maternity roost – 26 bats, 1 brown long-eared bat day roost – 5 bats, 3 brown long-eared eared bat day roosts – 5 bats, 11 common pipistrelle bat day ross – 14 bats, 1 soprano pipistrelle bat day roost – 1 bat.

- Foxholes Farm roosts - Common pipistrelle mating roost – 6 bats, 4 common pipistrelle day roots – 5 bats, 2 brown long-eared day roosts – 2 bats, 1 Natterer's day roost – 1 bat.

- Bat box tree roosts: CB6 Natterer's day roost (1 bat) and soprano pipistrelle day roost (2 bats), CA17 soprano pipistrelle day roost (2 bats), common pipistrelle day roost (1 bat), CB3 noctule mating roost.

A NE licenced compensation bat roost is present in a building at Fir Tree House located 770 m to the north west of the Site. The building supports a brown long eared bat maternity roost, common pipistrelle and possible whiskered bat day roosts. A serotine bat maternity roost and brown long eared maternity roost are supported within the roof void of Fir Tree House and common and soprano pipistrelle bat day roosts are present under roof tiles of Fir Tree House.

Bat boxes are present in Quobleigh Wood and within the tree line around Fir Tree House. The Fir Tree House tree boxes were confirmed in 2025 licence monitoring surveys for the compensation of Victoria House EPSL to support a brown long-eared bat day roost (1 bat) and a soprano bat transitional day roost (4 bats).

<u>On-Site Bat Ground Level Tree Assessment (GLTA)</u>

The ash tree (T2) within hedgerow H4 (Plate 13), to the north, had no suitability for roosting bats (Plate 13). Out of the five off-site trees, T1 an oak had one PRF which would require further assessment to confirm whether it is suitable for individual or higher numbers of bats (Plates 14 and 15). The PRF was located on an eastern limb and faced south at a height of approximately 2 m.

Copyright © 2026 Johns Associates Limited

Plate 13: T2 – Ash

Plate 14: T1 – Oak (off-site in garden)

Plate 15: PRF on T1 – oak

Water Vole

No evidence of water vole were present within the watercourse e.g. burrows, runs, lawns, feeding remains and droppings. The habitat was suboptimal for the species with a high volume of scrub and low botanical diversity/suitable vegetation available to support a population.

Reptiles

Copyright © 2026 Johns Associates Limited

Appendix C provides the full reptile survey results. Suitable reptile habitat has been identified within and immediately adjacent to the Site, comprising predominantly grassland of varying type and quality, scrub along the stream, with boundary hedgerows. Reptiles may utilise the scrub, hedgerows and tree lines for foraging and hibernating and the more open grassland areas adjacent for basking and foraging. Less suitable habitats included areas towards the centre of the main field where refugia were not present.

One juvenile slow worm was recorded towards the north of the eastern hedgerow along Burnetts Lane on 26 September 2025. There is a low population of slow worm present within the Site.

A good population of slow worm *Anguis fragilis*, a low population of common lizard *Zootoca vivipara* and a low population of grass snake *Natrix helvetica* had been previously recorded in surveys conducted by Johns Associates in 2018 and 2020 within the wider OPP site.

Previous surveys undertaken by Ecologica Associates Ltd in 2014 recorded six grass snake, five common lizard and 76 slow worms in total over the survey period. The repeat survey in 2015 recorded one common lizard and 27 records of slow worm in total. All records are associated with field boundaries, with most of the records associated with the northern-most boundary of the Site. The totals provided are the total reptiles across all surveys and not the peak adult counts.

Two common lizards were recorded on 1 October 2025 during the UKHab survey within the Quobleigh Breach parcel of land to the west of the Site.

Nesting Birds

The hedgerows are suitable to support nesting birds. The modified and other neutral grassland areas were suitable to support ground nesting birds.

There were 25 bird species recorded within the OPP boundary during surveys conducted by Johns Associates in 2020. The following notable species were recorded within the wider site:

- Barn Owl *Tytus alba* (Breeding)
- Skylark *Alauda arvensis* (non-breeding)
- House Sparrow *Passer domesticus* (Breeding)
- Song Thrush *Turdus philomelos* (Breeding)
- Linnet *Carduelis Cannabina* (possible breeding)
- Starling *Sturnus Vulgaris* (Breeding)
- Mistle Thrush *Turdus viscivorus* (probable breeding - off site)

Barn owl was recorded within a tree box within parkland to the south of Chalcroft Farm and could forage within the Site. There is no nesting habitat within the Site for barn owl.

Badger

No evidence of badger was found during the badger survey. Mammal runs were recorded within the vegetation at the Site.

Other Mammals

Copyright © 2026 Johns Associates Limited

The Site provides suitable habitat to support hedgehog, although no direct evidence of presence of this species was recorded. The Site is disturbed by dog walkers and walkers, and it is unlikely to support brown hare *Lepus europaeus*; none have been recorded during any site visits by Johns Associates Ltd over the past 5 years at the Site.

Invertebrates

A large number of stag beetle records exist within 2 km of the Site. Nine butterfly species were recorded during the surveys at the wider OPP Site in 2025 and included meadow brown *Maniola jurtina*, small heath *Coenonympha pamphilus*, comma *Polygonia c-album*, peacock *Aglais io*, marbled white *Melanargia galathea*, large white *Pieris brassicae*, blue, species unknown, small white *Pieris rapae*, gatekeeper *Pyronia tithonus*, small tortoiseshell *Aglais urticae* or painted lady *Vanessa cardui*. Emperor dragonflies *Anax imperator* were also recorded.

4.3 POTENTIAL ECOLOGICAL RECEPTORS AND SIGNIFICANT EFFECTS

Table 4-13 summarises information regarding the ecological receptors that have been identified through the scoping process as having the potential to be significantly affected by the proposed development and the legislation that could be contravened as a result of the proposals without implemented mitigation and the potential effects that need to be assessed.

Additionally, Table 4-13 summarises the details of receptor habitats and species that have been scoped out of further assessment due to non-presence or no potential impacts predicted as a result of the proposals.

Table 4-13: Scoping Results of Potential Ecological Receptors and Legislation.

Potential Receptor	Important/ Valued and/or Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
Statutory Designated Wildlife Sites: River Itchen SSSI and SAC	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of Principal Importance	Discharge of soil/sediment from construction activities into the receiving watercourse and into the River Itchen. Accidental pollutants from construction activities e.g. hydrocarbons discharged into adjacent watercourse and into the River Itchen. Modification of on-site hydrological regime or change in flood regime resulting in a change in flow characterisation and/or water quality entering the River Itchen. **Scoped into the assessment.**
Statutory Designated Wildlife Sites: Solent and Southampton Water Special Protection Area	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of	Discharge of soil/sediment from construction activities into the adjacent receiving watercourse and into the SPA. Accidental pollutants from construction activities e.g. hydrocarbons discharge into adjacent receiving watercourse and into the

Copyright © 2026 Johns Associates Limited

Potential Receptor	Important/ Valued and/or Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
		Principal Importance	SPA. Recreational disturbance from increased public access during occupation of the new dwellings. **Scoped into the assessment.**
Statutory Designated Wildlife Sites: Solent Maritime Special Area of Conservation	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of Principal Importance	Discharge of soil/sediment from construction activities into the adjacent receiving watercourse and into the SAC. Accidental pollutants from construction activities e.g. hydrocarbons discharge into adjacent receiving watercourse and into the SAC. Recreational disturbance from increased public access during occupation of the new dwellings. **Scoped into the assessment.**
Statutory Designated Wildlife Sites: Solent and Southampton Water Ramsar	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of Principal Importance	There are no predicted effects to the Ramsar site and no source/receptor pathways exist **Scoped out of the assessment.**
Statutory Designated Wildlife Sites: Emer Bog SAC	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of Principal Importance	Emer Bog SAC is located 9.95 km from The Upper Acre site, in a different surface water catchment. The surface water catchment of Emer Bog is restricted to a zone of about 500 m around the SAC. The Waste Water Treatment Works (WWTS) associated with the proposals for The Upper Acre does not discharge near this SAC. The SAC is at minimum 15km from OHH by road and involves driving through the centre of Eastleigh. A visitor survey in 2011 found that the SAC has few (albeit well-used) parking spaces, which controls the number of visitors; and that it is only used by visitors from a local catchment, with no

Copyright © 2026 Johns Associates Limited

Potential Receptor	Important/ and/or Valued Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
			visitors from Eastleigh Borough. The SAC is small (37ha) compared with other nearer recreational areas (e.g. Itchen Country Park at 178ha). It is considered more likely that residents at The Upper Acre will go to other, nearer, larger recreational facilities than to this SAC. Emer Bog SAC is located more than 400m from an A road, and so unlikely to be significantly affected by anything other than very significant increases in traffic. The SAC is at a minimum 15km from OHH by road and it is necessary to drive through the centre of Eastleigh to reach it from the Site. As such, it is considered unlikely that additional traffic movements from the development will affect air quality at Emer Bog SAC. Scoped out of the assessment.
Statutory Designated Wildlife Sites: New Forest SPA, SAC & Ramsar	Biodiversity conservation value Legal status	International importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 NERC Act 2006 S.41 Habitats and Species of Principal Importance	Potential for an increase in air pollution as a result of additional traffic movements. Recreational disturbance from increased public access during occupation of the new dwellings. Scoped into the assessment.
Non-statutory Designated Sites:	Biodiversity conservation value Legal obligation for conservation of NERC Habitats.	County importance NERC Act 2006 S.41 Habitats of Principal Importance	SINCs are located between 202 m and 1.82 km from the Site. These sites are considered to be at a sufficient distance whereby significant effects are unlikely and/or source receptor pathways do not exist. Scoped out of assessment.
Hedgerows	Biodiversity conservation value.	Local importance NERC Act 2006 S.41 Habitat of Principal Importance (species rich hedgerows only)	Accidental damage to retained hedgerows through un-authorised access by machinery/plant leading to damage to root protection areas during the construction phase leading to loss or degradation of this habitat. Accidental release of pollutants from construction activities e.g. dust and

Copyright © 2026 Johns Associates Limited

Potential Receptor	Important/ Valued and/or Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
			hydrocarbons and discharge into soil. Fragmentation of hedgerow H1 as a result of habitat loss to facilitate the creation of a footpath. Recreational disturbance from increased public access during occupation. Scoped into the assessment.
Watercourse	Biodiversity conservation value.	Local importance	Discharge of soil/sediment from construction activities into the watercourse. Accidental pollutants from construction activities e.g. hydrocarbons discharged into watercourse. Enhancement of the watercourse through removal of overdeepening (raising the bed), removal of scrub and shading and planting marginal and aquatic habitat. Scoped into the assessment.
Dormouse	Biodiversity conservation value Legal status	District importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Wildlife & Countryside Act 1981 NERC Act 2002 S.41 Species of Principal Importance	Fragmentation and isolation of dormouse population as a result of the creation of footpaths through hedgerow H1. Risk of harm to dormouse or their resting place or breeding site offences being committed from the removal of a small section of hedgerow H1. Recreational disturbance from increased public access during occupation and potential mortality caused by domestic cats. Scoped into the assessment.
Bats	Biodiversity conservation value Legal status	District importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Wildlife & Countryside	The Site provides high quality foraging and commuting habitat for bats. Loss and interruption of flightiness and light disturbance could affect foraging and commuting bats, in particular maternity roosts and bat roosts in proximity to the Site.

Copyright © 2026 Johns Associates Limited

Potential Receptor	Important/ Valued and/or Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
		Act 1981 NERC Act 2006 S.41 Species of Principal Importance	Risk of disturbance to bats and/or accidental damage to potential resting/ breeding places (Tree 1) leading to offences being committed as a result of construction activities. **Scoped into the assessment.**
Otter	Biodiversity conservation value Legal status	Local importance Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Wildlife & Countryside Act 1981 NERC Act 2006 S.41 Species of Principal Importance	No evidence of this species present within the Site. Habitat sub-optimal for holts and foraging. **Scoped out of the assessment.**
Water Vole	Biodiversity conservation value Legal status	Local importance Wildlife & Countryside Act 1981 NERC Act 2006 S.41 Species of Principal Importance	No evidence of this species present within the Site. Habitat sub-optimal to support a population. **Scoped out of the assessment.**
Common Reptiles and Amphibians	Biodiversity conservation value Legal status	Local Importance Wildlife & Countryside Act 1981	The Site supports low populations of slow worm, common lizard and grass snake. Common toads are present in the wider OPP Site. Risk of killing/injury offences being committed as a result of construction activities. Permanent habitat loss for reptiles and amphibians. Disturbance from increased public access during occupation. **Scoped into the assessment.**
Nesting birds	Biodiversity conservation value Legal status	Local Importance (BoCC Red List Species) Wildlife & Countryside Act 1981 NERC Act 2006 S.41	The hedgerow habitat provides suitable nesting habitat for scrub nesting species. Longer areas of grassland provide opportunities for foraging and ground nesting species. Risk of offences being committed from abandonment of active nests due to

Copyright © 2026 Johns Associates Limited

Potential Receptor	Important/ Valued and/or Legally Protected?	Relevant Criteria (from Box 3.1) and Legislation (from Box 3.2)	Potentially Significant Effects/ Legal Contravention and Causal Changes
		Species of Principal Importance	disturbance caused by vehicle movements/the operation of machinery. Risk of offences being committed as a result of the direct loss of nests/adults/ young/eggs as a result of the removal of a small 5 m section of hedgerow H1 or accidental damage to hedgerows during construction phase and the movement of machinery/ plant. Permanent loss of foraging and nesting habitat for birds. Recreational disturbance from increased public access during occupation. Scoped into the assessment.
Badger	Legal status	Local Importance Protection of Badgers Act 1992	No setts within or in proximity to the Site. Scoped out of the assessment
Hedgehog	Biodiversity conservation value Legal status	Local Importance NERC Act 2006 S.41 Species of Principal Importance	The removal of 5 m of hedgerow H1 for a footpath could result in harm to hedgehogs. Loss of habitat. Risk of harm to commuting hedgehogs during the construction works as a result of falling into open excavations/trenches or direct injury. Scoped into the assessment
Brown hare	Biodiversity conservation value Legal status	Local Importance NERC Act 2006 S.41 Species of Principal Importance	Brown hares have not been encountered during any site visits over the last five years. The Site is disturbed by dog walkers. Scoped out of the assessment.
Invertebrates	Biodiversity conservation value Legal status	Local Importance NERC Act 2006 S.41 Species of Principal Importance	Invertebrate species will be negatively affected through the loss of grassland at the Site. Scoped into the assessment

Copyright © 2026 Johns Associates Limited

5 INTREGATED AND EMBEDDED ENVIRONMENTAL MEASURES

A range of environmental measures have been integrated and embedded into the development proposals as outlined in this Section. The design process for the proposed development has included consideration of the ecological constraints and has incorporated measures to reduce the potential for adverse ecological effects in accordance with the 'mitigation hierarchy' and relevant planning policy. The measures identified and adopted include those that are inherent to the proposed development and can be expected to be applied as part of the construction environmental best practice a result of legislative requirements. Figure 3 provides the post-development UKHab Plan.

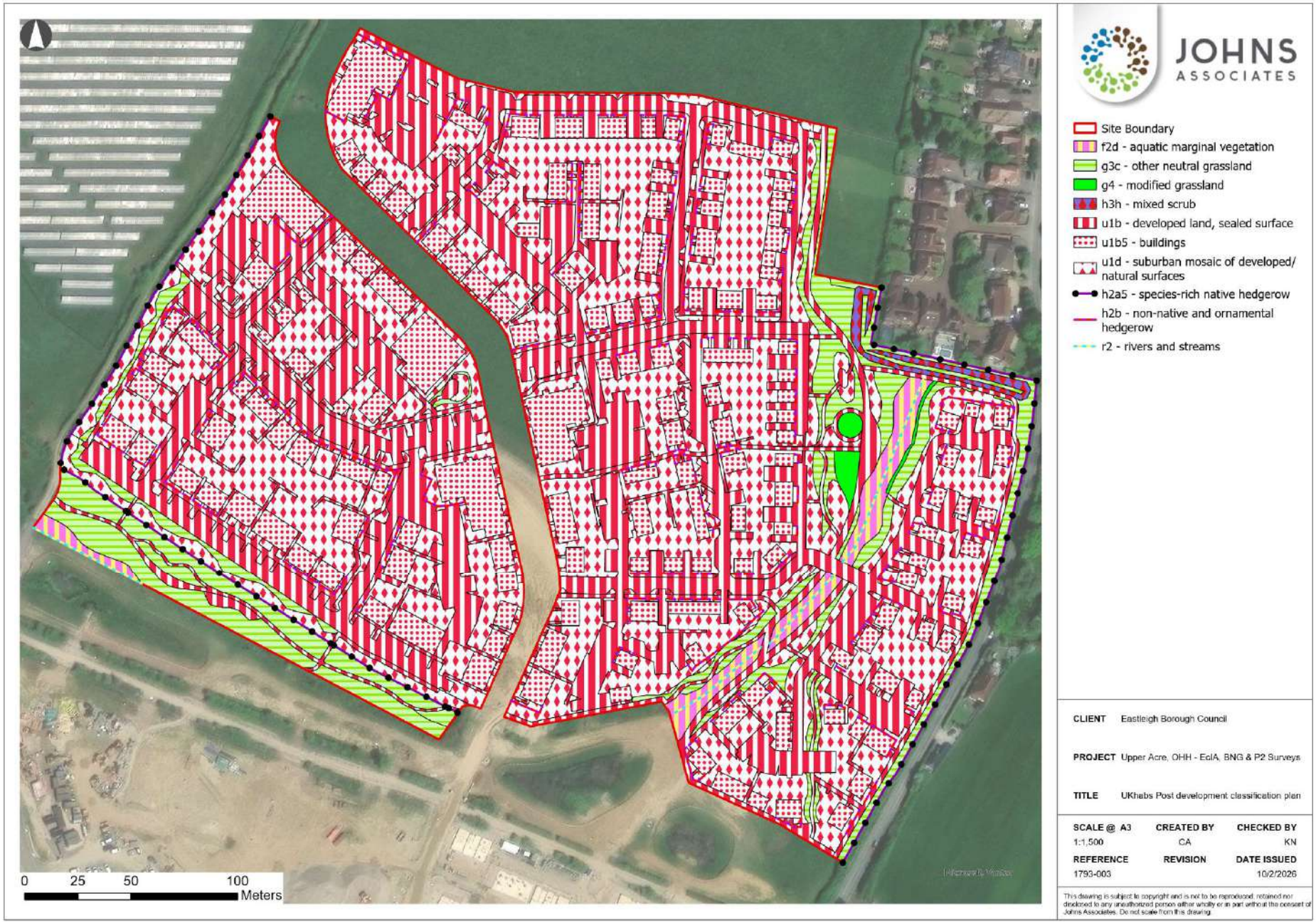
The development design and impact avoidance measures will be adopted during the construction and operation phases of the proposed development. Table 5-1 outlines how these embedded measures will influence the biodiversity assessment. A Construction Environmental Management Plan (CEMP) will be submitted separately and is a requirement of Planning Condition 12 of the OPP.

An Ecological Mitigation and Monitoring Plan (EMMP) will be produced separately as a requirement of Planning Condition 64 of the OPP. The EMMP will provide details of avoidance, mitigation, compensation and enhancement measures for Upper Acre.

A Habitat Management and Monitoring Plan (HMMP) will be provided via condition and will set out the full details of all appropriate measures for the delivery/aftercare/monitoring and long-term management habitats on Site.

Copyright © 2026 Johns Associates Limited

Figure 3: Post-Development UKHab Habitat Plan



Copyright © 2026 Johns Associates Limited

Table 5-1 Summary of Integrated and Embedded Biodiversity Mitigation and Enhancement Measures

Receptor	Changes and Effects	Integrated/Embedded Measures and Influence on Assessment
Statutory Designated Wildlife Sites: River Itchen SSSI and SAC via the watercourse on Site.	Discharge of soil/sediment from construction activities into River Itchen SAC. Accidental pollutants from construction activities into River Itchen SAC. Modification of on-site hydrological regime or change in flood regime resulting in a change in flow characterisation and water quality entering the River Itchen. Change in nitrates and phosphates entering the watercourse.	1. Preparation of a CEMP through Condition to avoid and minimise all potential construction related pollution (water quality) and water quantity effects using best practice tried and tested industry methods (such as the NetRegs Guidance for Pollution Prevention Documents[i] and Ciria Control of water pollution from construction sites). Guidance for consultants and contractors (C532)[ii]) and a monitoring program. Installation of site demarcation fencing to prevent accidental access/ damage. 2. Ecological toolbox talk and supervision of certain tasks by Ecological Clerk of Works (ECoW). 3. One Horton Heath does not need to provide mitigation measures beyond the Upper Acre Drainage and Flood Risk strategy and SUDS discussed at Section 5.2 of the HRA Report, as Southern Water is providing mitigation measures for water abstraction over its entire area. There will be no significant changes to surface water entering the River Itchen as a result of the development proposals at Upper Acre. 4. Temporary offsetting nutrient losses from land changes during the pre-2030 phase, SUDs system designed to promote deposition of fine sediment and promote settling and binding of sediment in vegetated areas, offsetting through purchase of 9.44 kg/ yr P nutrient credits, minimising impermeable areas, silt traps.
Statutory Designated Wildlife Sites: Solent and Southampton Water SPA, Solent Maritime SAC	Discharge of soil/sediment from construction activities into the Solent and Southampton Water SPA and/or Solent Maritime SAC. Accidental pollutants from construction activities into the Solent and Southampton Water SPA and/or Solent Maritime SAC. An increase in recreational disturbance and habitat degradation.	Construction Measures: 1, 2 and 4 5. The OPP will incorporate on-site recreational provisions including a network of foot and cycle routes and public open space to reduce impacts from recreational disturbance. The applicant has committed to making a proportional financial contribution to SANGs at Stoke Farm if required. If this does not fully compensate for recreational disturbance, a payment to the Bird Aware Scheme will be made.
Statutory Designated Wildlife Sites: New Forest SPA, SAC & Ramsar	An increase in recreational disturbance and habitat degradation.	Construction Measures: 1, 2 4 and 5

Copyright © 2026 Johns Associates Limited

		6. Natural England has accepted that the provision of Alternative Natural Recreational Greenspace (ANRG) at One Horton Heath can be included as mitigation for the New Forest Protected sites, provided it is of a suitable design and quality. Additional funding (if required) to be secured via a Section 106 Agreement.
Hedgerows	Loss/ degradation of hedgerow habitat. Accidental damage to retained hedgerows adjacent to the Site from construction activities including from dust generation, spillages of contaminants into the soil, vehicle movements within root protection zones, or rubbish/waste deposition. Potential for dust arising from the Site during the construction phase to settle on vegetation within the hedgerows, thereby reducing the vigour of plants due to reduced photosynthesis/ smothering which in turn may lead to a reduction in the favourable conservation status of the vegetative features of interest associated with the hedgerow habitats. Habitat fragmentation from creation of a footpath through hedgerow H1. Additional recreational pressure from residents on the habitats and species present within the hedgerows, including potential changes in plant communities arising from the effects of nutrient enrichment of soils as a result of dog faeces.	Construction: Measures 1 and 2 7. Installation of site demarcation/tree protection fencing around retained hedgerow and tree habitats in accordance with BS5837:2012 to prevent accidental access and use of signage as necessary. 8. A 10-30m construction buffer around hedgerows. 9. A Homeowner pack will be produced for each new dwelling, to include information on responsible use of the wildlife area on-Site for amenity purposes. Dwellings with artificial bat boxes/tiles within their properties should also receive information concerning these features. Dog waste bins will be provided within the development. 10. Enhancement of the retained hedgerows through planting along the hedgerow lengths to increase species diversity and plug gaps. 11. Additional planting around footpath that cuts through hedgerow H1. 12. Preparation of a Habitat Management and Monitoring Plan (HMMP) through Condition to introduce a long-term programme of high quality and appropriate management of all retained, enhanced and created habitats to increase habitat diversity, quality and ecological value. All works to be supervised where necessary by a suitably qualified ecologist and carried out by appropriate ecological contractors. 13. Hedgerows will be managed at suitable times of the year (avoiding impacts to roosting bats in trees, nesting birds and dormice) and enhanced through supplementary planting.

Copyright © 2026 Johns Associates Limited

		14. New hedgerows to be created and existing hedgerows to be enhanced through additional species planting with species beneficial to dormouse to enhanced to be species rich. Trees to be allowed through management avoidance to enhance to hedgerows with trees. 15. Light spill avoidance on hedgerows to <0.5 Lux along a 5-10 m buffer. Operation: 16. HMMP will be implemented during operation to manage the retained, enhanced and created habitats within the Site. Habitats will be monitored, and the results will feed into updated HMMP specifications.
Watercourse	Discharge of soil/sediment from construction activities into the watercourse. Accidental pollutants from construction activities e.g. hydrocarbons discharged into watercourse. Enhancement of the watercourse.	Construction: Measures 1 to 4, 17. Protection of watercourse with a barrier to prevent accidental access and use of signage as necessary. 18. Watercourse bed to be raised with gravel and pebble sized inert substrate and clay capped. Scrub will be removed which will also reduce shading. A marginal and aquatic habitat buffer will be created, maintained and managed.
Hazel Dormouse	Fragmentation and isolation of dormouse population as a result of the creation of a footpath through hedgerow H1. Harm to dormouse, or their resting places or breeding sites from the removal of a 5 m section of hedgerow H1. Additional recreational pressure from residents on the habitats present within the hedgerows, including increased predation from domestic cats. Increased negative effects from lighting from street lights, external housing lights and footpath lighting resulting in habitat loss/ degradation for dormouse once the dwellings are occupied.	Construction: Measures 1, 2, 7 to 15 19. Production of an Ecology Mitigation and Management Plan (EMMP) which will provide non-licensable mitigation strategy for the protection of dormouse and protected and notable species. A phased approach to development co-ordinating all OPP RM applications. 20. One phase directional cut of 5 m section of hedgerow H1 to be removed in autumn or spring or two-phase cut in winter to 0.5 m and completed in spring under supervision of a dormouse licenced ecologist. 21. Enhancement of the habitats within the GI parcels to increase species diversity, vegetation structure and connectivity and remove INNS. This will be included within a GI parcel HMMP and will be of benefit to protected and notable species which are supported at the Site.

Copyright © 2026 Johns Associates Limited

		Operation: Measure 16
Bats	Loss of foraging and commuting habitat. Loss and interruption of flight lines through severance by new road and footpath, with particular respect to the compensation maternity and bat roosts within Fir Tree House and maternity roosts in proximity to the Site. Habitat loss resulting in isolation and fragmentation of foraging and commuting habitats by increase in street lighting, external housing lights and footpath lighting for light sensitive bats and in particular the brown long-eared bat roost at Fir Tree House and barbastelle species. Additional recreational pressure from residents on the habitats present within the hedgerows. Predation risk from domestic cats.	Construction: Measures 1, 2, 7 to 17, 19 22. Provision of artificial bat boxes mounted on trees within woodland in the wider OPP to provide additional enhanced roosting habitat. 23. Provision of one crevice features on a SW aspect of every suitable residential building that faces boundary vegetation comprising either a gap in mortar under tiles on roof or a specific built in bat roosting feature. Operation: Measure 16
Reptiles	Low populations of slow worm, grass snake and common lizard in wider OPP area. Loss of shelter and foraging habitat from removal of other neutral/modified grassland. Accidental injury/killing of individuals during vegetation clearance, and the movement of soil. Additional recreational pressure from residents on the habitats present within the hedgerows and retained/created grassland.	Construction: Measures 1, 2, 7 to 19 24. A Reptile Method Statement will be produced for the Site and included within the EMMP to outline measures to protect reptiles at the Site with the details of a vegetation manipulation/clearance strategy. 25. Two reptile hibernacula, basking areas, habitat piles, and scrapes to be created within suitable boundary habitats or adjoining OPP habitats, locations to be outlined within the Reptile Mitigation Strategy in the EMMP. Operation: Measure 16
Breeding Birds	Disturbance, damage or destruction to active nests, adult birds, young and/or eggs associated with vegetation removal/disturbance. Loss of grassland which provides foraging and/or ground nesting habitat for birds. Small loss of 5 m of hedgerow H1. Additional recreational pressure from residents on the habitats present within the hedgerows and grassland. Threat of predation from domestic cats.	Construction: Measures 1, 2, 7 to 19 26. Avoidance of potential effects on actively nesting birds, young, eggs and nests through the avoidance of vegetation clearance between March to August inclusive, or through the use of a suitably qualified ecologist who has confirmed no nesting activity present within 48 hours of clearance occurring between March and August inclusive. 27: Each new suitable residential building facing the boundary habitats to have

Copyright © 2026 Johns Associates Limited

		provision of one built-in bird nesting feature. Operation: Measure 16
Hedgehog	Accidental injury/killing though movement of soil, falling into open trenches/excavations. Loss of shelter and foraging habitat from the removal of a small 5 m length of hedgerow and grassland removal. Displacement of hedgehog and population fragmentation from increased lighting. Barriers to dispersal for hedgehog including walls/fencing around gardens and in public areas. Additional pressure from residents on the habitats available to this species.	Construction: Measures 1, 2, 7 to 19 28. Planks left in construction trenches and holes overnight, or open holes covered. 29. Access holes for hedgehog to be included in all fences around gardens and public areas. Operation: Measure 16
Invertebrates	Loss of invertebrate habitat from loss of modified grassland, sparsely vegetated land, other neutral grassland and hedgerow.	Construction: Measure 1, 2, 7 to 19 30. 5No. Invertebrate and bee boxes to be installed within the Site within hedgerows. Dead wood to be retained on Site in suitable locations. 31. Periodic scrapes, soil/gravel mounds and bee banks will be created within the GI parcel grassland habitats. Dead wood piles will be created in GI parcel treelines, woodland and grassland habitats. Operation: Measure 17

Copyright © 2026 Johns Associates Limited

6 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

Based on the assessment methodology set out in Section 3, Table 4-13 presents those receptors that have been identified (through the scoping process) as having the potential to be significantly affected by the proposed development (due to their biodiversity conservation value and/or for which legislation could be contravened). Table 5-1 identifies the potential changes and effects that need to be assessed for each of these receptors.

In broad terms, the changes and effects that may occur as a result of the proposals and which may give rise to significant effects on those ecological receptors scoped into this assessment have been identified as:

- Habitat loss/degradation as a result of construction.
- Pollution incidents occurring during construction including dust generation and accidental spillages (e.g. hydrocarbons).
- Damage/harm to flora and fauna during construction activities from machinery/plant or as a result of un-authorised access into valued areas of habitat to be retained.
- Disturbance (from noise, vibration and visual) to surrounding habitats and associated species during construction.
- Habitat enhancement and creation prior to or during the construction phase.
- Light disturbance on retained and created habitats for nocturnal wildlife during occupation.
- Damage/harm to flora and fauna during occupation of the new dwellings including recreational disturbance.
- Habitat management and/or monitoring during the occupation phase.

The following sections present the assessment of effects on each of the receptors that have been scoped into this EcIA, taking the embedded mitigation measures into account for both the construction and occupation phases of the development. Where significant residual effects remain, Section 8 presents the additional compensation measures (if required) that will be implemented in order to further reduce these residual effects until they are considered to be not significant (or are as low as is reasonably practicable).

6.1 INTER-RELATED EFFECTS

There are two types of inter-related effect:

- Combined effects: when individual effects of the proposed development combine to create a cumulative effect; and
- Interactive effects: consideration of interactions between different effects in relation to a specific receptor.

Combined effects normally occur when different activities associated with a project act upon the same environmental receptor (e.g. the additive effect of physical disturbance from construction activities upon nesting birds may occur at the same time as transport related noise and lighting, that may act upon the same receptor(s) during the construction phase). In determining such effects, consideration would be given to the sensitivity of the receptor and the magnitude of environmental change. This is considered directly within the assessments included in this EcIA and, as such, is not reported separately.

Copyright © 2026 Johns Associates Limited

Interactive effects are assessed in relation to a specific receptor where the effect could be caused by the interactions of different types of effect from project activities even if individually these are insignificant (e.g. the interaction of noise disturbance on bats).

The assessment of effects on biodiversity receptors has the potential to be exacerbated by climate change, and this has been incorporated into the approach to integrated and embedded mitigation as set out in this EcIA.

6.2 ASSESSMENT OF RESIDUAL EFFECTS: RIVER ITCHEN SAC & SSSI

A Shadow Appropriate Assessment (AA) Report has been produced for the Site to assess the potential impacts on The River Itchen SSSI and SAC. A summary/conclusion of the AA findings is provided below.

6.2.1 Pollution Incidents to River Itchen SSSI and from Construction

Production and implementation of a detailed Construction Environmental Management Plan (CEMP) (measure 1) for the construction phase, including (but not limited to):

- Clear construction site demarcation to ensure minimal footprint of temporary/permanent development;
- General best practice pollution prevention and response measures;
- Careful access and construction routing;
- Phasing and timing schedule;
- A comprehensive suite of measures to avoid sediment transport and deposition at source, (e.g. locations of stockpiles away from watercourses; grassing/sheeting of longer-term spoil heaps; methodologies for the transportation of materials and the cleaning of machinery, and control measures for the suppression of construction dust; the installation of temporary SuDS features as appropriate), combined with additional interception measures (e.g. erection of silt barrier fencing, settlement lagoons) and the provision of other control measures e.g. Siltbuster or equivalent to prevent sediment discharge in extreme weather;
- Ecological toolbox talk and supervision of certain tasks by Ecological Clerk of Works (ECoW) (measure 2).
- Suppression of construction dust and litter;
- CEMP management responsibilities, duties, monitoring, reporting etc.

6.2.2 Nutrient Neutrality and River Itchen SSSI and SAC

As part of the proposals, the following mitigation measures (measure 4) in turn are proposed to deliver nutrient neutrality in The Upper Acre development site:

- Temporary offsetting nutrient losses from land changes associated with land within the Applicant's control during the pre-2030 phase;
- Removal of nutrients from local watercourses through the potential construction of on-Site wetlands; and
- Off-setting through a purchase of nutrient credits from EBC.

Consequently, the impacts of the proposals will be fully mitigated and will ensure that they do not detrimentally affect local biodiversity or the conservation status of the River Itchen SAC or downstream European Designated Sites.

Copyright © 2026 Johns Associates Limited

6.3 ASSESSMENT OF RESIDUAL EFFECTS: SOLENT AND SOUTHAMPTON WATER SPA AND SOLENT MARITIME SAC

A Shadow Appropriate Assessment (AA) Report has been produced for the Site to assess the potential impacts upon the Solent and Southampton Water SPA and Solent Maritime SAC. A summary/conclusion of the AA findings is provided below.

6.3.3 Pollution Incidents European Sites from Construction

Additional mitigation measures are proposed to deal with any residual, post-avoidance impacts on the integrity of the Solent and Southampton Water SPA and Solent Maritime SAC. The measures relevant to The Upper Acre Site (measures 1-4) include:

- Construction measures to minimise the likelihood of silt and pollutants reaching the 'main river', e.g. locations of stockpiles away from watercourses, grassing/sheeting of longer-term spoil heaps;
- Professionally designed and extensive SuDS system including permeable surfaces, vegetated swales, and basins to include sediment forebays at the inlets and outlets, and functional wetland vegetation (as required) to promote the deposition of fine sediment and promote settling and binding of sediment in vegetated areas.
- Rigorous programme of water quality monitoring (e.g. turbidity, suspended solids, conductivity, pH, nitrates, phosphates) during construction and operation, at each SuDS and leaving the site, to confirm the efficacy of the system in capturing fine sediment and capturing nitrates in particular. A management intervention mechanism will enable removal of sediment from settlement areas and improvement in the system if required, to ensure no net emissions of fine sediment.

6.3.4 Nutrient Neutrality and European Sites

As part of the proposals, the following mitigation measures in turn are proposed to deliver nutrient neutrality in The Upper Acre development site (measure 4):

- Temporary offsetting nutrient losses from land changes associated with land within the Applicant's control during the pre-2030 phase;
- Removal of nutrients from local watercourses through the potential construction of on-Site wetlands; and
- Off-setting through a purchase of nutrient credits from EBC.

Consequently, the impacts of the proposals will be fully mitigated and will ensure that they do not detrimentally affect local biodiversity or the conservation status of the Solent and Southampton Water SPA and Solent Maritime SAC.

It is concluded that no likely significant effects associated with a deterioration in water quality in the Solent Maritime SAC/Solent and Southampton Water SPA as a result of The Upper Acre development will occur.

6.3.5 Recreational Disturbance to European Sites

The high-quality green infrastructure at One Horton Heath, characterised by woodland, grassland and wetlands, together with the connected wider Public Right of Way Network provides an extensive resource for walking, exercising dogs and other recreational activities that will be available and of value to the new residents of The Upper

Copyright © 2026 Johns Associates Limited

Acre (measure 5). These on-site facilities will contribute to limiting the number and frequency of visits to the Solent and Southampton Water SPA and Solent Maritime SAC, thereby reducing the magnitude of any disturbance to features of interest that are sensitive to recreational disturbance. The applicant has committed to making a proportional financial contribution to EBC projects to provide Suitable Alternative Natural Greenspace (SANG). Through the provision of SANGs within the Borough both existing and future residents will be encouraged away from the New Forest and Solent sites thereby reducing and mitigating impacts associated with recreational disturbance.

Subject to the outcome of final negotiations with Natural England, any residual recreational pressure will be fully mitigated through the provision of an appropriate payment to the Solent Bird Aware scheme.

6.4 ASSESSMENT OF RESIDUAL EFFECTS: NEW FOREST SPA, SAC, RAMSAR

A Shadow Appropriate Assessment (AA) Report has been produced for the Site to assess the potential impacts from recreational disturbance to The Upper Acre development upon the New Forest SPA, SAC and Ramsar. A summary/conclusion of the AA findings is provided below.

6.4.6 Recreational Disturbance to New Forest SPA, SCA & Ramsar

The One Horton Heath team will look to confirm a package of mitigation against the 8ha per 1000-person standard. This would be on a 'commercially expedient' basis so as to not undermine the EBC Interim Mitigation Strategy which remains the current adopted policy approach (measure 6).

The extent of on-site recreational mitigation can only be comprehensively quantified once the Reserved Matters application for Green Infrastructure has been submitted. It is expected that the level of mitigation provided through on-site mitigation will increase as there is additional land within and adjacent to the site that can be utilized (measure 5). It is expected that the level of mitigation provided via the on-site land within the wider OHH site will increase in due course. Correspondingly, the requirement for a supplemental payment will reduce, or potentially fall away altogether.

Consequently, the impacts of the proposals will be fully mitigated and will ensure that they do not detrimentally affect the conservation status of the New Forest SPA and SAC.

6.5 ASSESSMENT OF RESIDUAL EFFECTS: HEDGEROWS

There are four hedgerows within the Site (H1 to H4).

6.5.1 Habitat Loss of Hedgerows from Construction

The proposed development will result in the loss of a small central 5 m section of hedgerow H1 for the creation of a footpath.

Compensation hedgerow habitat will be planted (measure 15) in the north eastern corner of the Site. The retained hedgerows which will continue to provide connectivity for wildlife and additional diverse species planting will plug any small gaps present and enhance the hedgerow H1 and H2 and will enhance H2 to make it species rich (measures 11 and 12).

A Habitat Management and Monitoring Plan (HMMP) will be produced for the Site (measure 13) which will outline the planting schedule and timing/actions/responsibilities for creation of the habitat. Planting works will be timed to avoid disturbance/harm to roosting bats, dormouse reptiles and nesting birds.

Copyright © 2026 Johns Associates Limited

The enhancement of native hedgerows to be species rich, increased condition of hedgerows and creation of a new hedgerow will result in a 71.49% hedgerow BNG on hedgerows. There is a predicted **minor positive non-significant effect** as a result of habitat loss of hedgerows within the Site.

6.5.2 Damage/Harm to Hedgerows from Construction

There is the potential for accidental damage to the hedgerows adjacent to the boundaries of the Site through compaction of soil around scrub/tree roots to occur as a result of vehicle movements, direct damage from machinery/plant and accumulation of rubbish/waste.

The installation of site demarcation fencing to prevent accidental access will protect the hedgerow habitat from damage by vehicle movements and plant/machinery, with signage to be used as appropriate. The implementation of embedded mitigation measures 1, 2, 7 and 8 provided in Table 5.1 will ensure these potential effects are avoided or minimised. The production of a CEMP will minimise the potential construction related effects through the implementation of standard industry working methods. Trees adjacent to the Site will be protected through the use of appropriate root protection fencing. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks being supervised by an Ecological Clerk of Works (ECoW).

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction damage/harm incidents to the retained hedgerow habitat.

6.5.3 Pollution Incidents to Hedgerows from Construction

There is the potential for accidental pollution to occur during the construction phase of the proposals through the accidental release of pollutants/silt/soils into the adjoining habitats from a spillage of pollutants such as hydrocarbons from site machinery/vehicles onto soil. This could result in contamination of the soil or siltation of the hedgerows and as such there is the potential that it could cause damage to vegetation, animals or birds by direct contact with the contaminant (especially fuels), or as a result of contaminants being absorbed through roots, leading to chronic or acute effects.

There is the potential for dust generation as a result of soil movements and construction traffic and dust could become deposited on the hedgerow habitats.

The implementation of embedded mitigation measure 1 (preparation of CEMP) will avoid or minimise potential construction related effects through the implementation of standard industry methods. The establishment of bunded storage compounds for fuels (or self-bunded tanks) and soils located away from hedgerows will ensure that no accidental discharge will reach the habitats. Mandatory ecological toolbox talks prior to works commencing on Site and the supervision of key tasks with the potential to affect these on-Site habitats by an ECoW (measure 2) will minimise the potential for negative effects to the hedgerow habitats along the boundaries of the Site.

Although the likelihood or frequency of accidental pollution risks are low, a one-off event could be acute to retained hedgerow habitats. However, with the implemented avoidance measure of locating fuel and soil in a compound at a distance from the retained boundary vegetation and the additional mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction pollution incidents to the retained hedgerow habitats.

6.5.4 Habitat Management and Monitoring of Hedgerows during Occupation

A Habitat Management and Monitoring Plan (HMMP) will be produced for the Site (measure 16) which will outline the planting schedule and timing actions/responsibilities for the management and monitoring of the hedgerow

Copyright © 2026 Johns Associates Limited

habitats. Management works will be timed to avoid disturbance/harm to nesting birds, reptiles and dormouse. Management and monitoring of the hedgerow habitats maintain the 71.49% hedgerow BNG will result in a **minor non-significant positive effect** to the hedgerow habitats within the Site.

6.5.5 Recreational Disturbance of Hedgerows during Occupation

A Homeowner pack (measure 9) will be produced for each new dwelling, to include information on the importance of hedgerow habitats and species they support and responsible amenity use by new residents to preserve their value i.e. keeping dogs on leads, picking up dog waste, using the bins provided and keeping to footpaths); responsible use of the habitats on-Site for amenity purposes. Dog waste bins will be provided on Site to ensure hedgerow habitats are protected from the potential effects of nutrient enrichment of soils.

With the mitigation measures in place it is considered that there is **a minor non- significant negative** effect predicted as a result of recreational disturbance to the hedgerow habitats.

6.6 ASSESSMENT OF RESIDUAL EFFECTS: WATERCOURSE

The watercourse bisects the Site and comprises sub-reaches 4a and 4b.

6.6.6 Pollution Incidents to Watercourse during Construction

Mitigation measures are proposed to avoid Pollution Incidents to the watercourse within the Upper Acre Site and measures 1-4 include:

- Construction measures to minimise the likelihood of silt and pollutants reaching the watercourse e.g. locations of stockpiles away from watercourses, grassing/sheeting of longer-term spoil heaps;
- Professionally designed and extensive SuDS system including permeable surfaces, vegetated swales, and basins to include sediment forebays at the inlets and outlets, and functional wetland vegetation (as required) to promote the deposition of fine sediment and promote settling and binding of sediment in vegetated areas.
- Rigorous programme of water quality monitoring (e.g. turbidity, suspended solids, conductivity, pH, nitrates, phosphates) during construction and operation, at each SuDS and leaving the site, to confirm the efficacy of the system in capturing fine sediment and capturing nitrates in particular. A management intervention mechanism will enable removal of sediment from settlement areas and improvement in the system if required, to ensure no net emissions of fine sediment.

6.6.7 Damage/Harm to Watercourse from Construction

The watercourse may historically be a ditch; however the LiDAR and flow assessment has informed the characterisation of 'watercourse' in the MoRPH survey and assessment. As a result of the characteristics being more akin to a ditch, the OPP planning condition number 60 relating to a 10 m watercourse buffer is not considered to apply in this instance.

There is the potential for accidental damage to the watercourse to occur as a result of vehicle movements, direct damage from machinery/plant and accumulation of rubbish/waste.

The installation of site demarcation fencing to prevent accidental access will protect the watercourse habitat from damage by vehicle movements and plant/machinery, with signage to be used as appropriate. The implementation of embedded mitigation measures provided in Table 5.1 will ensure these potential effects are avoided or minimised.

Copyright © 2026 Johns Associates Limited

The production of a CEMP will minimise the potential construction related effects through the implementation of standard industry working methods. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks being supervised by an Ecological Clerk of Works (ECoW).

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction damage/harm incidents to the retained watercourse habitat.

6.6.8 Habitat Enhancement from Construction

The thick bramble scrub will be cleared from the watercourse which will have the additional benefit of reducing shading. The landscape plan includes marginal and aquatic planting along the banks of the watercourse which will enhance the habitat. A full Cartographer post-development scenario has not been conducted to inform the BNG assessment. Should a further assessment of the enhanced habitats be conducted, a higher BNG may be gained. Additional gains could be achieved through installing deadwood and leaky dams.

6.7 ASSESSMENT OF RESIDUAL EFFECTS: HAZEL DORMOUSE

A population of dormouse was recorded in Foxwalks Wood in and 2020 and 2025. The presence of dormouse has been recorded in footprint tube surveys conducted in 2025, within Quobleigh Woods and the treeline between The Folds and The Homestal RMAs. The hedgerows within The Upper Acre Site are connected to Quobleigh Woods and Foxwalks Wood habitats and as a result dormouse must be assumed to be present within suitable hedgerows within the Site.

6.7.1 Habitat Loss to Hazel Dormouse from Construction

The proposed development will result in the loss of a small 5 m area of hedgerow H1 for a footpath.

Compensation hedgerow habitat will be planted. Enhancement of the retained hedgerows H1 and H2 at the Site will provide additional connectivity for dormouse and will plug any small gaps present within the habitats. A diverse range of woody species favoured by dormouse to provide a year-round food source will be included within the planting schedule.

A Phased European Protected Species Licence (EPSL) application to Natural England (NE) for the wider OPP site will be made which will show the overall strategy for dormouse within the OPP site.

A non-licensable Method Statement will be produced for The Upper Acre EMMP, which will tie into the Phased OPP NE EPSL. It is not considered that a mitigation licence for Upper Acre is proportional to the very small loss in hedgerow habitat and the avoidance measures below implemented.

The EMMP will outline mitigation measures for dormouse which will include: Prior to clearance of the 5 m length of hedgerow H1, vegetation will be inspected by a licenced dormouse surveyor (or approved ecologist under the EPS licence). Where it is not practical to check vegetation, a two-stage process of vegetation removal will be implemented with the vegetation cut back during the winter when dormouse are hibernating (November to March). The lower parts of vegetation will be retained at 0.5 m in height to avoid dormouse hibernation nests that may be present at ground level (measure 20). Care will be taken to ensure that suitable conditions (in terms of temperature and humidity) are maintained at ground level to ensure that any hibernation nests present remain viable. The lower parts and roots of vegetation will then be cleared in the following spring, when dormouse is active.

Should the vegetation be cleared during the Autumn (mid-September to October) or Spring (late April to May) when dormice are active and it is practicable to check the vegetation, then a two-phase cut will not be required and a

Copyright © 2026 Johns Associates Limited

directional cut under the direct supervision of a licenced dormouse surveyor will be implemented (measure 20). The surveyor will need to inspect the vegetation for summer nests immediately prior to the vegetation being removed. Clearance of suitable habitat will be phased so as to limit potential impacts to this species.

Additional scrub and tree planting will be included around the section of hedgerow H1 to be removed to facilitate the footpath to strengthen connectivity as much as possible around the break. Branches of trees will be encouraged to grow and arch over the footpath to retain arboreal connectivity for dormouse. The retained hedgerows will be enhanced to increase species diversity and plug gaps. The woodland, scrub and hedgerow habitat within the GI parcels will be additionally enhanced to support dormouse.

With the embedded measures to ensure the strengthening of the retained hedgerows, additional planting around breaks in hedgerow H1, enhancement of GI dormouse habitat and supervision conducted by a dormouse licenced ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of habitat loss for dormouse.

6.7.2 Harm to Hazel Dormouse from Construction

There is the potential for harm to dormouse inhabiting the retained hedgerows located within the Site as a result of injury/mortality from the movement of machinery/plant.

The installation of Site demarcation fencing to prevent accidental access will protect dormouse using hedgerow habitat from harm caused by plant/machinery movements, with signage to be used as appropriate. The implementation of embedded mitigation measures 1,2, 7 and 8 provided in Table 5.1 will ensure these potential effects are avoided or minimised. The production of a CEMP will minimise the potential construction related effects through the implementation of standard industry working methods. The hedgerows will be protected through the use of appropriate root protection fencing. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks relevant to dormouse being supervised by an experienced and licenced Ecological Clerk of Works (ECoW).

With the mitigation measures including a CEMP in place and regular inspections conducted by a dormouse licenced ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction harm to dormouse.

6.7.3 Disturbance to Hazel Dormouse (from Noise and Vibration) from Construction

Disturbance to dormouse may occur as a result of noise and vibration from the construction works at the Site. Dormouse can become acclimatised to regular low levels of noise disturbance and are more affected by irregular and loud noise. The dormouse population that likely inhabit the hedgerows at the Site may become temporarily displaced by the construction works to retained suitable habitats outside of the Site boundary including Quobleigh Woods and Foxwalks Woods.

An EMMP will be produced which will outline the measures within the phased OPP NE licence that will take account of the timing of each phase of the OPP development. Works in certain areas of the RMA parcels will be carefully timed so that effects of noise on dormouse are minimised throughout the phasing of the development construction works.

With a phased approach implemented for the construction works avoiding significant construction works being located in proximity to both the eastern and western boundaries of the Site at the same time, and timing of the construction works in phases within the wider OPP site works, there is a predicted **minor non-significant negative** effect to dormouse as a result of construction noise and vibration disturbance.

Copyright © 2026 Johns Associates Limited

6.7.4 Disturbance to Hazel Dormouse (from Light Pollution) during Occupation

Hazel dormice are nocturnal and as a result an increase in light spill onto boundary hedgerows could negatively affect the species and deter them from using the linear habitats along the Site boundaries.

A lighting strategy will be produced for the Site which will minimise levels of lighting and use uni-directional lights, PIR timers, cowls etc to reduce light spill onto the hedgerow habitats within the Site to a minimum. The lighting strategy will need to demonstrate that the development meets lux levels to <0.5 Lux along a minimum 5 – 10 m buffer along the linear habitats along the boundaries. Lighting along the footpath that cuts through H1 along the southern boundary will use recessed ground lights spaced so that the widest distance between lights is located where the path traverses through the hedgerow and thus retaining a dark corridor.

A Homeowner pack will be produced for each new dwelling, to include information on the effects of lighting to nocturnal species including dormouse and will provide specification for external lighting to homes that are low-spill, unidirectional to avoid boundary habitats, PIR timers, LED and warm light.

The implementation of a carefully planned and implemented lighting strategy, a homeowner pack with lighting specifications, supported by a thorough lighting assessment will ensure that light spill onto the eastern and western linear boundary habitats is avoided or minimised. There is a predicted **minor non-significant negative** effect to dormouse as a result of operational light disturbance once The Upper Acre development is occupied.

6.7.5 Harm to Hazel Dormouse during Occupation

An increase in predation from cats as a result of an increased number of residential dwellings, could negatively affect the dormouse population.

Homeowner packs (measure 9) will be issued to all new homeowners outlining the presence of dormouse and informing them of the impact of cats on dormouse to try and dissuade a significant increase in cat ownership at the Site. Hedgerows will be enhanced to make them wider and bramble will be encouraged within the buffer zone, which will provide an additional buffer of protection to linear habitats from cat predation.

With the increased buffer to provide safe nesting sites, there is a predicted **minor non-significant negative** effect to dormouse as a result of harm during occupation of the new dwellings.

6.7.6 Recreational Disturbance to Hazel Dormouse during Occupation

A Homeowner pack will be produced for each new dwelling, to include information on dormouse including their ecology and responsible amenity use by new residents to preserve the population i.e. keeping dogs on leads and keeping to footpaths and responsible use of the woodlands for amenity purposes. Predation of dormouse by cats will be highlighted.

With the mitigation measures in place it is considered that there is **a minor non-significant negative** effect predicted as a result of recreational disturbance to dormouse.

6.7.7 Habitat Management and Monitoring for Hazel Dormouse during Occupation

The on-going management of the hedgerows in accordance with the proposed HMMP by Condition (measure 16), in addition to the GI parcels within the wider OPP site will result in maintaining the habitats and connectivity in a favourable condition to support dormouse at the Site.

Copyright © 2026 Johns Associates Limited

As part of the NE Mitigation Licence that will be required for the OPP OHH Site, the dormouse population will be monitored. Following standard current guidance outlined in the Hazel Dormouse Mitigation Handbook (The Mammal Society, March 2025) for <2ha of habitat affected/large scale housing developments, the Site will be monitored from the commencement of the construction work for ten years (measure 22). A minimum of 50 dormouse boxes per woodland area as per the methodology provided by the Peoples Trust for Endangered Species (PTES) within the Guidelines will be installed for this purpose.

A total of 50 boxes will be installed high in trees (to avoid disturbance by the public and cats) using ladders within Foxwalks Woods which will be monitored twice per year in May/June and September/October for ten years.

The monitoring will commence in 2026 prior to the commencement of construction works in order to provide a baseline set of data. Should the monitoring show a decrease in the breeding population, this will trigger additional on-site habitat management and/or off-site compensation that may be required to stabilise the population. The monitoring will result in a **minor positive non-significant** effect to dormouse as a result of management and monitoring during operation.

6.8 ASSESSMENT OF RESIDUAL EFFECTS: BATS

The Site has a high suitability for foraging and commuting bats. An off-site tree had a potential PRF. Static, radio tracking and trapping surveys conducted in 2020 by Johns Associates Ltd and updated static surveys conducted on The Folds, The Upper Acre RMA Sites in 2025, have been used to inform this assessment.

6.8.1 Habitat Loss to Bats from Construction

The proposed development will result in the loss of a small 5 m area of hedgerow H1 for a footpath. Compensation hedgerow habitat will be planted. The retained hedgerows H1 and H2 will be enhanced which will provide additional connectivity for foraging and commuting bats and will plug any small gaps present within the habitats. A diverse range of woody species to increase invertebrate prey for foraging bats will be included within the planning schedule.

Additional scrub and tree planting will be included around the section of hedgerow to be removed to facilitate the footpath through H1 to strengthen connectivity as much as possible around the break. Branches of trees will be encouraged to grow and arch over the footpath in H1 to retain arboreal connectivity for commuting bats. The woodland, scrub and hedgerow habitat within the GI parcels will be additionally enhanced to support bats including increasing species diversity, plugging gaps and increasing structural diversity.

Tree T1 which is located within a garden off-site but adjacent to the Site, is located at such a distance from any buildings that is not deemed that there will be any significant impact any bats that may potentially use the PRF (assuming it has suitability for roosting bats).

The installation of site demarcation fencing to prevent accidental access will protect the tree from damage by vehicle movements and plant/machinery, with signage to be used as appropriate. The implementation of embedded mitigation measures 1, 2, 7 and 8 provided in Table 5.1 will ensure these potential effects are avoided or minimised. The production of a CEMP will minimise the potential construction related effects through the implementation of standard industry working methods. Trees adjacent to the Site will be protected through the use of appropriate root protection fencing. Ecological toolbox talks will be mandatory for all construction personnel.

Provision of a minimum of 10 No. artificial bat boxes will be mounted on retained mature trees within woodland in the wider OPP to provide additional enhanced roosting habitat. One crevice feature will be provided in a SW aspect of suitable residential buildings that border the boundary habitats at the Site, comprising either a gaps in mortar,

Copyright © 2026 Johns Associates Limited

under tiles on roofs or through a specific integrated bat roosting feature to enhance the Site for light tolerant bat species.

The grassland, SUDs ponds, woodland, scrub, other neutral grassland and hedgerow habitat within the GI parcels will be additionally enhanced to provide ongoing foraging and commuting habitat for bats.

With the implemented strengthening of the retained hedgerows, additional planting around the break in hedgerow H1 and other measures to be implemented within the GI parcels it is considered that there will be **a minor non-significant negative** effect predicted as a result of habitat loss for bats.

6.8.2 Harm to Bats from Construction

The installation of site demarcation fencing to prevent accidental access will protect Tree 2 with suitability for roosting bats from harm by plant/machinery, with signage to be used as appropriate. The implementation of embedded mitigation measures 1,2, 7 and 8 provided in Table 5.1 will ensure that these potential effects are avoided or minimised. The production of a CEMP will minimise the potential for construction related effects to occur through the implementation of standard industry working methods. Trees adjacent to the Site will be protected through the use of appropriate root protection fencing. Ecological toolbox talks will be mandatory for all construction personnel.

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction harm to roosting bats.

6.8.3 Disturbance to Bats (from Light Pollution) during Occupation

Bats are nocturnal and as a result an increase in light spill onto boundary hedgerows could negatively affect the foraging and commuting behaviour of bats and could affect tree roosts deterring bats from using the linear habitats along the southern, western and eastern boundaries respectively, which could result in the loss of entire hedgerows for bats.

A lighting strategy will be produced for the Site which will minimise levels of lighting and use uni-directional lights, PIR timers, cowls etc. to reduce light spill to the hedgerow habitats within the Site to a minimum. The lighting strategy will include <0.5 Lux along a minimum 5 -10 m buffer along the linear habitats along the Site boundaries (measure 16). Lighting along the footpath that cuts through H1 along the southern boundary will use recessed ground lights spaced so that the widest distance between lights is located where it crosses the hedgerow.

A Homeowner pack will be produced for each new dwelling, to include information on the effects of lighting to nocturnal species including bats and will provide specification for external lighting to homes that are low-spill, unidirectional to avoid boundary habitats, PIR timers, LED and warm light.

The implementation of a carefully planned lighting strategy and a homeowner pack with lighting specifications, supported by a thorough lighting assessment will avoid light spill onto the linear boundary habitats and on any trees with high suitability for roosting bats and/or maternity roosts. There is a predicted **minor non-significant negative** effect to bats as a result of light disturbance during occupation of the new dwellings.

6.8.4 Recreational Disturbance to Bats during Operation

A Homeowner pack will be produced for each new dwelling, to include information on bats including their ecology and responsible amenity use by new residents to preserve the population i.e. keeping to footpaths and responsible use of the woodlands for amenity purposes.

Copyright © 2026 Johns Associates Limited

With the mitigation measures in place, it is considered that there is **a minor non-significant negative** effect predicted as a result of recreational disturbance to dormouse.

6.8.5 Habitat Management and Monitoring for Bats during Occupation

The on-going management of the other neutral grassland, SUDs ponds, mixed scrub and hedgerows in accordance with the proposed HMMP by Condition (measure 17), in addition to the GI parcels within the wider OPP site (measure 21) will ensure that the habitats and their connectivity is maintained in a favourable condition to support bats at the Site.

It is considered that there is a **minor non-significant positive effect** to bats predicted as a result of habitat management during operation within the Site.

6.9 ASSESSMENT OF RESIDUAL EFFECTS: REPTILES AND AMPHIBIANS

A low population of slow worm inhabit the Site. Low populations of common lizard and grass snake have been recorded in the wider OPP OHH site.

6.9.1 Habitat Loss to Reptiles and Amphibians from Construction

To compensate for the habitat loss within the Site, two reptile hibernacula will be created within suitable boundary habitats or adjoining OPP habitats, at locations to be outlined within the Reptile Mitigation Strategy within the EMMP. Basking areas and habitat piles will be created around the boundary habitats. Other neutral grassland will be created around the perimeter of the Site which will provide foraging habitat and connectivity. The GI parcels at the Site will provide enhanced reptile habitat for hibernation, shelter and foraging including woodland, SUDs ponds, other neutral grassland and mixed scrub.

It is considered that there is a **minor non-significant negative** as a result of habitat loss for reptiles.

6.9.2 Harm to Reptiles and Amphibians from Construction

A Reptile Method Statement will be produced for the Site within the EMMP to outline measures to protect reptiles at the Site and the details of a vegetation manipulation/clearance programme to avoid harm to reptiles.

The majority of the Site boundaries will be protected and retained during the construction works. All contractors will receive a site-specific reptile awareness Toolbox Talk (measure 2) prior to works commencing, covering identification, legal protection, and procedures to follow if reptiles are encountered.

Vegetation including hedgerow and other neutral grassland will be removed: this will be conducted when reptiles are active (April to mid-October) and will be cleared in two stages using the following approach:

- Phased vegetation clearance and hand search approach.
- First Cut: Reduce vegetation to approximately 15 cm in height, working systematically towards retained habitat or the receptor area, encouraging reptiles to move away.
- Second Cut: Reduce vegetation to ground level (≤5 cm) after an interval of at least 48 hours.
- Any reptiles captured during the works will be moved to the retained and protected habitat along the boundary habitats.

Copyright © 2026 Johns Associates Limited

- Clearance will take place in suitable weather conditions (dry, mild, overcast, and outside extreme heat or cold).

An ECoW will be present during all clearance of suitable habitat to carry out fingertip searches, ensure reptiles are moved safely, and to stop works if reptiles are encountered in significant numbers.

It is considered that there is a **minor non-significant negative** as a result of harm to reptiles.

6.9.3 Recreational Disturbance to Reptiles and Amphibians during Occupation

A Homeowner pack (measure 9) will be produced for each new dwelling, to include information on reptiles including their ecology and responsible amenity use by new residents to preserve the population i.e. keeping dogs on leads and keeping to footpaths and responsible use of the woodlands for amenity purposes. Predation of reptiles by cats will be highlighted.

With the mitigation measures in place it is considered that there is **a minor non-significant negative** effect predicted as a result of recreational disturbance to reptiles.

6.9.4 Habitat Management to Reptiles and Amphibians during Occupation

The on-going management of the other neutral grassland, scrub and hedgerows in accordance with the proposed HMMP by Condition (measure 17), in addition to the GI parcels within the wider OPP site (measure 21) will result in maintaining the habitats in a favourable condition to support reptile species. By implementing the above measures, impacts to slow worm will be minimised, legal compliance will be ensured, and the ecological value of the Site and immediately adjacent areas for reptiles will be maintained in the long term.

It is considered that there is a **minor non-significant positive** effect predicted as a result of habitat management from operation to reptiles within the Site.

6.10 ASSESSMENT OF RESIDUAL EFFECTS: BREEDING BIRDS

There were 25 bird species recorded within the OPP boundary during surveys conducted by Johns Associates in 2020, including six notable/protected species. Consideration of how construction of the development proposals could affect breeding birds is set out below.

6.10.5 Habitat Loss for Breeding Birds from Construction

The proposed development will result in the loss of 5 m of hedgerow, modified grassland and other neutral grassland habitat within the Site which supports populations of breeding birds.

There is the potential for accidental damage to the retained hedgerows through compaction of soil around scrub/tree roots to occur as a result of vehicle movements, direct damage from machinery/plant and accumulation of rubbish/waste.

The installation of site demarcation fencing to prevent accidental access will protect the hedgerow habitat from damage by vehicle movements and plant/machinery, with signage to be used as appropriate. The implementation of embedded mitigation measures 1, 2, 7 and 8 provided in Table 5.1 will ensure these potential effects are avoided or minimised. The production of a CEMP will minimise the potential construction related effects through the implementation of standard industry working methods. Trees adjacent to the Site will be protected through the use of appropriate root protection fencing. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks being supervised by an Ecological Clerk of Works (ECoW).

Copyright © 2026 Johns Associates Limited

Areas of other neutral grassland habitat, SUDs, mixed scrub and hedgerow habitat will be provided within the Site. The compensation habitat will maintain some nesting, shelter and foraging habitat for breeding birds. Suitable residential buildings that border the boundary habitats will have a built-in bird nesting feature. The GI parcels at the Site will provide enhanced woodland, other neutral grassland, SUDs ponds and mixed scrub providing additional habitat for nesting, shelter and foraging.

It is considered that there is a **minor non-significant negative** effect predicted as a result of a loss of foraging, shelter and breeding habitat for breeding birds as a result of construction within the Site.

6.10.6 Harm to Breeding Birds from Construction

Construction phase impacts on birds relate to the potential disturbance to foraging and active nests and breeding birds/eggs and young. A 5 m section of hedgerow H1 will be removed as part of the proposals. The implementation of mitigation measures 1, 2, 7 and 8 will avoid or minimise potential effects to breeding birds during the construction phase of the proposed development.

The production and implementation of a CEMP (mitigation measure 1) will minimise potential construction related effects through the use of standard industry working methods. Potential effects to birds, their nests, eggs and/or young will be avoided through the implementation of mitigation measure 29. Vegetation clearance will occur outside the bird nesting season, (March to August inclusive). Where this is not possible, a suitably qualified ecologist will confirm no nesting activity is present within 48 hours of clearance by undertaking a careful search of the area of vegetation to be removed.

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there will be **a minor non-significant negative** effect predicted as a result of construction damage/harm incidents to breeding birds within the Site.

6.10.7 Disturbance to Breeding Birds (from Noise and Vibration) from Construction

Disturbance to breeding birds may occur as a result of noise and vibration from the construction works at the Site. Birds can become acclimatised to regular low levels of noise disturbance and are more affected by irregular and loud noise/vibration. Breeding birds at the Site may become temporarily displaced by the construction works to retained habitats outside of the Site including within Quobleigh Woods and Foxwalks Woods.

An EMMP will be produced to outline the timing of each phase of the OPP development and will aim to time works in certain areas of the RM parcels carefully so that areas of undisturbed habitat remains present throughout the phased development construction works. This strategy will also apply to the linear protected and retained habitats bordering the Site.

With a phased approach implemented for the construction works avoiding significant construction works being located in proximity to more than one Site boundary at the same time, there is a predicted **minor non-significant negative** effect to breeding birds as a result of construction noise and vibration disturbance.

6.10.8 Recreational Disturbance to Breeding Birds during Occupation

A Homeowner pack will be produced for each new dwelling (measure 9), to include information on breeding birds including their ecology and responsible amenity use by new residents to preserve the population i.e. keeping dogs on leads and keeping to footpaths and responsible use of the woodlands for amenity purposes.

With the mitigation measures in place it is considered that there is **a minor non-significant negative** effect predicted as a result of recreational disturbance to breeding birds.

Copyright © 2026 Johns Associates Limited

6.10.9 Habitat Management to Breeding Birds during Occupation

The on-going management of the on-site other neutral grassland, SUDs, mixed scrub, hedgerow and individual tree habitats and the GI habitats including other neutral grassland, mixed scrub, SUDs and woodland in accordance with the HMMPs by Condition, will result in maintaining the available habitats in a favourable condition for breeding bird species, however the proposed new development will create an increase in disturbance to the nesting habitat within the Site. It is considered that there is a **minor non-significant positive** effect predicted as a result of habitat management during occupation to breeding birds within the Site.

6.11 ASSESSMENT OF RESIDUAL EFFECTS: HEDGEHOG

Hedgehogs are likely to be present within the boundary habitats at the Site and may forage within the grassland areas.

6.11.1 Habitat Loss for Hedgehog from Construction

The proposed development will result in the loss of a 5 m section of hedgerow and grassland habitat within the Site which is likely to support hedgehog.

Provision of compensation shelter and foraging habitat, including other neutral grassland, hedgerow and mixed scrub habitat will be created which will provide suitable compensation hedgehog habitat following the construction works. The GI parcels at the Site will provide enhanced woodland, other neutral grassland, SUDs ponds and mixed scrub habitat for shelter and foraging.

Hedgehog access holes will be installed into closed panel fences and brick walls to allow hedgehogs to access garden and public areas.

It is considered that there is a **minor non-significant negative** effect predicted as a result of a loss of foraging and shelter habitat for hedgehog from construction within the Site.

6.11.2 Harm to Hedgehog from Construction

There is the potential for accidental damage to retained hedgerow habitat to occur as a result of construction activities including vehicle movements within root protection zones and direct damage from machinery/plant which could harm/kill hedgehog. There is also a potential risk of accidental injury/killing hedgehog though soil movement and vegetation clearance. The implementation of embedded mitigation measures 1, 2, 7 and 8 will ensure these potential effects are avoided or minimised.

The production of a CEMP (measure 1) will minimise the potential construction related effects through the implementation of standard industry working methods. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks being supervised by an ECoW (measure 2). The installation of Site demarcation fencing to prevent accidental access will protect boundary habitats from damage by vehicle movements and plant/machinery, with signage to be used as appropriate (measures 7 and 8). Access planks will be provided within open trenches and holes overnight to allow for hedgehog to escape should they fall in overnight.

A Method Statement for reptiles within the EMMP will also protect hedgehog during pre-commencement works and the construction phase of the development. A phased directional reduction in vegetation height and extent (first cut to 15cm and then to ground level), will be implemented with arisings being removed from Site and not left in compost piles. Grassland will be maintained with a short sward height until construction works commence. A precautionary hand search followed by destructive search will be completed prior to the installation works commencing. The

Copyright © 2026 Johns Associates Limited

working area will be maintained in a condition unsuitable for hedgehog during all construction works (including introduction of potential refugia by construction materials).

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction damage/harm incidents to hedgehog within the Site.

6.11.3 Habitat Management for Hedgehog during Occupation

There is the potential for on-Site habitats used by hedgehog to become degraded over time through a lack of appropriate management. The production and implementation of a HMMP (mitigation measure 16) will introduce a long-term programme of appropriate management of all retained and created habitats within the Site and within the GI parcels, which will increase their ecological quality and function. All works will be supervised where necessary by a suitably qualified ecologist and carried out by appropriate ecological contractors.

Hedgehog access holes will be made in all closed panel fences and walls around gardens and public spaces to allow hedgehogs to move freely within the Site. The Homeowners packs will provide information regarding hedgehog ecology and will outline maintenance of the access holes.

It is considered that there is **a minor non-significant positive** effect predicted as a result of foraging and shelter habitat management and enhancement for hedgehog from operation within the Site.

6.11.4 Recreational Disturbance to Hedgehog during Occupation

A Homeowner pack will be produced for each new dwelling, to include information on hedgehog including their ecology and responsible amenity use by new residents to preserve the population i.e. keeping dogs on leads and keeping to footpaths and responsible use of the woodlands for amenity purposes.

With the mitigation measures in place, it is considered that there is **a minor non-significant negative** effect predicted as a result of recreational disturbance to hedgehog.

6.12 ASSESSMENT OF RESIDUAL EFFECTS: INVERTEBRATES

Potential effects associated with the proposed development on the invertebrate assemblage could occur as a result of the development.

6.12.1 Habitat Loss for Invertebrates from Construction

The proposed development will result in the loss of 5 m hedgerow, other neutral and modified grassland at the Site which has suitability to support a range of invertebrates. Nine species of butterfly were recorded within the Site.

On-Site the development includes creation of other neutral grassland, SUDs, mixed scrub and a hedgerow. Mitigation measure 28 includes 5No. invertebrate boxes to be installed within the perimeter vegetation of the Site and dead wood piles will be created in the boundary habitats.

Within the GI parcels periodic scrapes will be created within the grassland to allow the maintenance of bare ground and early-successional stage vegetation, extending its value to invertebrates in the longer term. Bee banks will be created for many thermophilic ground-nesting invertebrate species including solitary bees, solitary wasps, beetles and spiders and are best created in open, south-facing situations. Compacted soil and gravel will be shaped into a mound with various slopes, hollows and angles that may be utilised and favoured by different species. Vertical or

Copyright © 2026 Johns Associates Limited

very steep banks often take much longer to vegetate due to the greater heat stress they experience and may require less maintenance. Dead wood piles will be created in treelines, woodland and grassland areas.

With the mitigation measures above implemented, it is considered that there is a **minor non-significant negative** effect predicted as a result of a loss of habitat for invertebrates from construction within the Site.

6.12.2 Damage/Harm to Invertebrates from Construction

There is the potential for accidental damage to retained grassland and hedgerow habitat to occur as a result of construction activities including vehicle movements within root protection zones and direct damage from machinery/plant which could cause a further loss in invertebrate habitat and a loss in species diversity of invertebrates. The implementation of embedded mitigation measures 1, 2, 7 and 8 will ensure these potential effects are avoided or minimised.

The production of a CEMP (measure 1) will minimise the potential construction related effects through the implementation of standard industry working methods. The installation of Site demarcation fencing to prevent accidental access will protect boundary habitats from damage by vehicle movements and plant/machinery, with signage to be used as appropriate. Ecological toolbox talks will be mandatory for all construction personnel, with certain tasks being supervised by an ECoW (measure 2).

With the mitigation measures including a CEMP in place and regular inspections conducted by an ECoW it is considered that there is **a minor non-significant negative** effect predicted as a result of construction damage/harm incidents to invertebrate habitats within the Site.

6.12.3 Habitat Management for Invertebrates during Occupation

There is the potential for on-Site habitats which support invertebrates to become degraded over time through a lack of appropriate management. The production and implementation of a HMMP (measure 16) will introduce a long-term programme of appropriate management of all retained, enhanced and newly-created habitats and habtat features within the Site, and within the GI parcels which will increase their ecological quality and function. All works will be supervised where necessary by a suitably qualified ecologist and carried out by appropriate ecological contractors.

It is considered that there is **a minor non-significant positive** effect predicted as a result of habitat management and enhancement for invertebrate species from operation within the Site.

6.13 CLIMATE CHANGE

Greenhouse gas (GHG) emissions contribute to climate change, which could affect the designated features of local sites, habitats and species considered in this EcIA. For example: climate change may lead to grassland management changes resulting in the loss of foraging habitat for bats and/or badgers. Climate change may also lead to, for example, changes in the distribution of bats due to other areas within the UK and abroad becoming more suitable for the species, leading to decline in local populations.

The Climate Change Adaptation Manual – Evidence to Support Nature Conservation in a Changing Climate produced by Natural England (2020) supports practical and pragmatic decision making and guides reasonable judgement on the potential effects of climate change on the key habitats associated with the application site. The habitats that characterise the application site: for example, amenity grassland, woodland and hedgerows are of low relative vulnerability to climate change.

Copyright © 2026 Johns Associates Limited

Climate change and its implications for biodiversity has been incorporated into the design of embedded ecological mitigation and enhancement habitats to reduce the risk of impact on legally protected and other species. Selection of measures that are based on habitats that are known to be more resilient to climate change and provide extended ecological functionality for a wide range of species have been selected.

This has largely been achieved through the creation of additional areas of replacement habitat that are considered to have a low level of sensitivity to climate change (subject to appropriate management). These measures are associated with the provision of hedgerow planting, enhancement of existing hedgerows, areas of other neutral grassland, and SUDs which will be managed and enhanced with an objective to support native wildlife. A Habitat Management and Monitoring Plan (HMMP) will be produced to guide appropriate long-term care of these and existing habitats.

As a result, no further biodiversity mitigation for climate change as part of the proposed development is required beyond that included in the embedded mitigation and enhancements set out above, including management and monitoring beyond that identified. It is considered that the proposed development will be of benefit to biodiversity in providing a significant area of land that will be ecologically improved which will be of benefit at a local and regional strategic landscape scale.

Copyright © 2026 Johns Associates Limited

7 CUMULATIVE EFFECTS

The Upper Acre RM Site has been assessed in combination with other RM OPP development parcels at the Site and the cumulative effects of the developments through both the construction and occupation phases are significant when considered in combination.

The OPP GI parcels are unlikely to be of sufficient size to accommodate the full loss of habitats within the OHH OPP development area and further habitats outside of the OPP boundary will be required for inclusion within the GI parcels. It is likely that a wider off-site area of Quobleigh Woods and Ponds SINC will be required to be included in addition to further off-site parcels of land within the ownership of EBC.

Copyright © 2026 Johns Associates Limited

8 COMPENSATION

The additional off-site compensation land will need to be secured via formal agreement with EBC at a later stage in the OPP development timeline, following submission of subsequent RM applications. The requirement for the inclusion of additional compensation and enhancement land will be informed by the OPP BNG tracker. The off-site habitats will be enhanced to provide habitat that is suitable to support breeding birds, bats, dormouse, reptiles and invertebrates.

Copyright © 2026 Johns Associates Limited

9 ENHANCEMENT

An HMMP and an EMMP will be produced through planning condition which will outline habitat enhancement measures and protected species enhancement measures for the GI parcels within the OPP. The northern and central GI parcels will be used to provide habitat enhancement to offset the losses within The Upper Acre RM application area.

Copyright © 2026 Johns Associates Limited

10 MONITORING

Table 10-1 summarises the ecological/environmental measures embedded within the proposed development and the means by which they will be implemented, i.e. they will be secured through planning conditions.

Table 10-1 Summary of Environmental Measures to be Implemented

Environmental measure	Responsibility for implementation	Compliance mechanism
Production and implementation of a Construction Ecological Management Plan (CEMP)	Developer/Contractor/Project Ecologist	Planning condition
Production of an Ecological Mitigation and Management Plan (EMMP) to include dormouse, reptile and bat monitoring plan.	Developer/Contractor/Project Ecologist	Planning Application
Production and implementation of a Habitat Management and Management Plan (HMMP) for Upper Acre and the GI parcels.	Developer/Project Ecologist	Planning condition
Ecological tool box talk and register of attendance for all persons working within the construction area	Developer/Contractor/Project Ecologist	Planning condition
Suitably Qualified Ecologist/Ecological Clerk of Works/Ecological Contractors to manage, monitor and implement all ecological aspects of the development.	Developer/Contractor/Project Ecologist	Planning condition
Retention and protection of all habitats and trees (apart from those specifically identified as being removed as part of the detailed development design) with suitable offsets and barriers	Developer/Contractor/Project Ecologist	Planning condition
Use of dust suppression techniques	Developer/Contractor	Planning condition
Use of pollution control and response methods during construction and operation	Developer/Contractor/Operator	Planning condition
Implementation of all on site landscape/habitat measures in accordance with CEMP/HMMP and the Integrated/Embedded Mitigation and Enhancement Plan submitted with the Planning Application.	Developer/Project Ecologist/ Contractor/Operator	Planning Condition
Implementation of a programme of robust ecological monitoring, reporting and intervention to ensure all integrated and embedded mitigation and enhancement measures are successful in the short and long term.	Operator/Project Ecologist	Planning condition

Periodic UKHab condition assessment surveys to monitor and inform the successful delivery and management of the habitat creation and Biodiversity Net Gain will be undertaken following completion of the proposed works in years 1, 3, 5, 10, 15, 20, 25 and 30.

Copyright © 2026 Johns Associates Limited

Habitat areas and conditions will be monitored during the site visits and prescriptions for amendments to management of the site will be provided to EBC to maximise the ecological benefits of ecological management actions for habitats at the Site and the fauna that they may support.

Copyright © 2026 Johns Associates Limited

11 CONCLUSIONS

Considering the detailed ecological baseline, the integrated and embedded ecological mitigation and enhancement measures and the assessment of likely significant effects as set out in Section 6 of this EcIA; it is considered reasonable to conclude that no negative significant residual effects will occur to important biodiversity receptors, including legally protected species and designated sites, from either the construction or occupation phases of the proposed development.

There will be a cumulative effect with the other RM applications within the OPP OHH Outline application area. This has been considered through a strategic approach to mitigation and compensation measures for the proposed OPP application, with a Strategic EMMP in place. A phased dormouse licence application will be submitted for the OPP site with a non-licenced method statement for The Upper Acre Site due to the minimal loss in hedgerow habitat (5 m). Harm to dormouse will be avoided through measures implemented and outlined within the EMMP.

Use of the Statutory Biodiversity Metric has demonstrated that the proposals will deliver a **loss of -15.92%** Biodiversity Net Gain (BNG) (-4.09 units) for habitats, a **71.59%** BNG (4.19 units) for hedgerows and a loss of **67.88%** BNG (1.31 units) for watercourses. The BNG for this application will be incorporated into an overall OPP BNG Tracker document which will offset the losses in BNG within the Site with BNG from enhancement of the GI parcels within the wider OPP. Agreement will be sought with the Ecology Team at EBC, that the Trading Rules do not have to be met overall, due to the BNG not being a statutory requirement.

Copyright © 2026 Johns Associates Limited

12 REFERENCES

British Standards Institution, (2013). *BS42020 Biodiversity – A code of practice for planning and development.* Available at:

https://www.n-somerset.gov.uk/sites/default/files/2022-06/I6%20-%20biodiversity%20-%20code%20of%20practice%20for%20planning%20and%20development%20%282013%29%20BS%20420202013.pdf

Chartered Institute of Ecology and Environmental Management (CIEEM) (Version 1.3, September 2024). Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater, Coastal and Marine.

Collins, J. (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th edition. Bat Conservation Trust, London.

Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

MAGIC Map https://magic.defra.gov.uk/MagicMap.aspx

Mammal Society (2025) Hazel Dormouse Conservation Handbook. Third Edition. Ian White, Robert Wolton, Simone Bullion.

Mammal Society (2025) Hazel Dormouse Mitigation Handbook. David Wells, Paul Channin & Leonardo Gubert.

NARRS, Reptile Habitat Guide. [Online] Available at: http://narrs.org.uk/documents/Reptile_habitat_guide.pdf

Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

Stace, C., (2019). *New Flora of the British Isles.* 4th Edition. Cambridge University Press, Cambridge, UK.

Surveying Badgers, The Mammal Society, 1989

The Statutory Biodiversity Metric User Guide, February 2024.

UK Government, 2015. Reptiles: surveys and mitigation for development projects.[Online] Available at: https://www.gov.uk/guidance/reptiles-protection-surveys-and-licences

The UK Habitat Classification Habitat Definitions Version 2.0, July 2023

UK Government, (2021). *Environment Act 2021.* Available at:

https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

UK Government, (2019). *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.* Available at: https://www.legislation.gov.uk/uksi/2019/579/contents/made

UK Government, (2006). *Natural Environment and Rural Communities Act 2006.* Available at:

Copyright © 2026 Johns Associates Limited

https://www.legislation.gov.uk/ukpga/2006/16/contents

UK Government (1990) *Town and Country Planning Act 1990*. Available at:

https://www.legislation.gov.uk/ukpga/1990/8/contents

UK Government, (1981). *Wildlife and Countryside Act 1981 (as amended)*. Available at:

https://www.legislation.gov.uk/ukpga/1981/69

Copyright © 2026 Johns Associates Limited

APPENDIX A DORMOUSE SURVEY TECHNICAL NOTE

Copyright © 2026 Johns Associates Limited

APPENDIX B BAT SURVEY TECHNICAL NOTE

Copyright © 2026 Johns Associates Limited

APPENDIX C REPTILE SURVEY TECHNICAL NOTE

Copyright © 2026 Johns Associates Limited

Copyright © 2026 Johns Associates Limited