

INNISFREE, EASTLEIGH

Preliminary Ecological Appraisal Report

July 2024



Report Control Sheet

Project Name: Innisfree, Allington Lane, Eastleigh
Project Reference: CW20-1868
Report Title: Preliminary Ecological Appraisal Report
Report Reference: CW20-1868 RPT 001
Printing Instructions: Print at A4 Portrait, Double Sided.

Rev	Date	Description	Prepared	Reviewed	Approved
/	03/07/2024	Draft report sent to Client for comment.	AT	OC	OC
//	10/07/2024	Final Report sent to Client.	AT	OC	OC

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EXECUTIVE SUMMARY

Site Address	Innisfree, Allington Lane, Eastleigh SO50 7DE
Grid Reference	SU 47618 16636
Approximate Site Area	0.08ha
Current Site Use	Currently the site comprises a gravel surface with touring caravans present.
Designated Sites within Zone of Influence	A total of two Sites of Special Scientific Interest were located within 5km of the site boundary. • River Itchen SSSI – Located approximately 0.9km northwest from the site boundary. • Moorgreen Meadows SSSI – located approximately 1.9km southeast from the site boundary
Notable Habitat Features	No notable habitats were present on site.
Notable Species Applicable to the Assessment	• Bats (foraging and commuting) • Breeding birds, • Common amphibians • Badger • Hedgehog
Mitigation Recommendations	• Lighting Mitigation for bats • Nesting bird check if removal of tree or hedgerow required. • Reasonable avoidance measures for amphibians, bats, birds, and hedgehog
Recommended Further Surveys and Assessment	No further surveys are deemed necessary to inform the proposed planning application.
Recommended Ecological Enhancements	• Bat and bird boxes could be placed on new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised. • The inclusion of 'hedgehog highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls. The National Planning Policy Framework (2021) highlights the requirement for planning policies and decisions to conserve and enhance the natural environment. The proposed development provides the opportunity to enhance the site and ecological enhancements have been recommended.

CONTENTS

1	INTRODUCTION.....	4
1.1.	SCOPE & PURPOSE	4
1.2.	LOCATION	4
1.3.	OBJECTIVES	4
2	METHODOLOGY	5
2.1.	DESK STUDY	5
2.2.	VEGETATION AND HABITAT ASSESSMENT	5
2.3.	FAUNA ASSESSMENT	5
2.4.	PRELIMINARY ROOST ASSESSMENT AND BAT ACTIVITY ASSESSMENT	5
2.5.	HABITAT SUITABILITY INDEX (GREAT CRESTED NEWT)	6
2.6.	SURVEY LIMITATIONS	7
2.7.	PROPORTIONALITY	7
3	SURVEY RESULTS.....	8
3.1.	SITE CONTEXT	8
3.2.	DESIGNATED SITES.....	8
3.3.	PRIORITY HABITATS	9
3.4.	HABITATS	9
	ARTIFICIAL UNVEGETATED UNSEALED SURFACE.....	9
	TALL FORBS.....	10
	HEDGEROWS	10
	BUILDINGS	10
6.5.	SPECIES	10
	FLORA	10
	INVERTEBRATES.....	10
	AMPHIBIANS.....	10
	REPTILES	11
	BIRDS	11
	BATS	11
	BADGER	13
	HAZEL DORMOUSE	13
	OTHER TERRESTRIAL MAMMALS.....	14
	NON-NATIVE INVASIVE SPECIES	14
	SPECIES DISCOUNTED FROM ASSESSMENT	14
4	MITIGATION RECOMMENDATIONS	15
7.1.	DESIGNATED SITES	15
7.2.	HABITATS	15
	SCATTERED TREES AND HEDGEROWS	15
7.3.	SPECIES	15
	AMPHIBIANS.....	15
	BREEDING BIRDS.....	15
	BATS	15
	BADGERS	16
	TERRESTRIAL MAMMALS.....	16
5	FURTHER SURVEYS AND CONCLUSION	18
8.1.	FURTHER SURVEYS.....	18
8.2.	CONCLUSION	18
6	BIBLIOGRAPHY	19

1 INTRODUCTION

1.1. SCOPE & PURPOSE

1.1.1. Collington Winter Environmental Ltd was commissioned by ET Planning to undertake a Preliminary Ecological Appraisal (PEA) at Innisfree, Allington Lane, Fair Oak, Eastleigh, SO50 7DE. This report has been prepared to inform an outline planning application for a development, including a static caravan, access road and amenity space.

1.1.2. The author of this report is Andrew Taylor MSc, Ecological Project Manager and has been overseen by Olivia Collington BSc (Hons), MEnvSc, CEnv Director at Collington Winter Environmental Ltd. Olivia is highly experienced managing schemes and has produced many ecological reports to inform planning management plans.

1.2. LOCATION

1.2.1. Please refer to Figure 1.1 for the site location. The site is located within a predominantly rural area approximately 2.5km southwest from the village of Fair Oak. (Grid reference: SU 47618 16636)

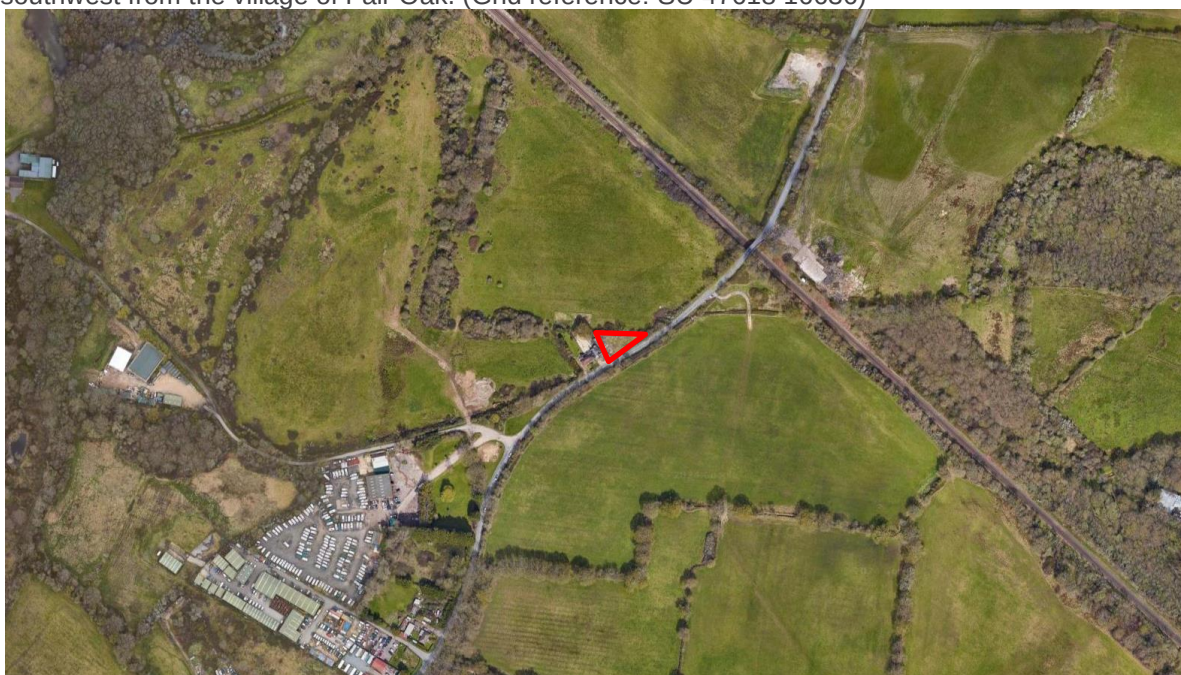


Figure 1.1 Site Location

1.3. OBJECTIVES

1.3.1. The objectives of the Preliminary Ecological Appraisal are as follows:

- Identify the major habitats present
- Ascertain the presence or potential presence of any legally protected or notable species or habitats
- Identify any mitigation or further survey required and opportunities for strategic wildlife enhancements and long-term management.

2 METHODOLOGY

2.1. DESK STUDY

2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:

- Obtaining local records of notable species and locally designated sites within 1 km of the site from Hampshire Biodiversity Information Centre (HBIC), obtained on 03/06/2024.
- Review of Magic.gov.uk website for details of any designated sites, notable habitats and presence of European Protected Species Licences.
- Review of aerial and OS maps for habitat information, as well as determining locations of potential waterbodies to be considered in the assessment.
- Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
- On site consultation with the landowner which provided valuable information regarding historic land use and known species and habitats present within the site.

2.1.2. Please note, a lack of records for a species does not confirm absence. Instead, local surveys may not have been undertaken or records not submitted to HBIC.

2.2. VEGETATION AND HABITAT ASSESSMENT

2.2.1. An Ecological Appraisal of the site was undertaken by Andrew Taylor. The survey was undertaken on the 10th June 2024. The weather was partly cloudy (4/8 oktas), with no precipitation, wind speed 1 and 12°C.

2.2.2. The walkover survey was undertaken broadly in line with standard UK HAB Methodology, Version 2 (2023). The assessment is undertaken with consideration of methodology as per "Preliminary Ecological Appraisal" (CIEEM, 2018).

2.2.3. A UK HAB Plan has been produced and is presented in the Appendix of this report. Standard methodology has been used, though adjustments have been made based on judgement to demonstrate habitats in a clearer manner, or where standard guidance does not fit the conditions found on site.

2.3. FAUNA ASSESSMENT

2.3.1. A search for signs of protected and notable species of fauna was undertaken during the site walkover. This included both field signs of species, as well as potential for species to be present based on habitat availability.

2.3.2. The searches broadly included the following:

- Assessment of waterbodies on site and within 250m of the site boundary, and terrestrial habitats for suitability to support notable amphibians.
- Searches for field signs of, and habitat suitability for bats.
- Suitability of habitats to support reptiles, and searches for incidental field signs.
- Searches for field signs of badger (*Meles meles*), including setts, mammal paths, snuffle holes, badger hair and latrines to indicate activity.
- Searches of watercourses for signs of water vole (*Arvicola amphibius*), white-clawed crayfish (*Austropotamobius pallipes*) and otter (*Lutra lutra*), and assessment of habitat availability for the species.
- Assessment of the suitability of habitats to support notable birds and recording any field sightings of birds during the walkover.
- Assessment of the site's ability to support notable invertebrates and flora.
- Searches for non-native invasive species.

2.4. PRELIMINARY ROOST ASSESSMENT AND BAT ACTIVITY ASSESSMENT

2.4.1. A Preliminary Bat Roost Assessment (PRA) and Ground Level Tree Assessment (GLTA) of the site was undertaken by Andrew Taylor and overseen by Katie Bird who holds a Class 2 Bat Survey Licence from Natural England (Reference 2020-48950-CLS-CLS).

2.4.2. The survey was undertaken following guidance set out in Collins (2023). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.4.3. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins 2023).

2.4.4. The GLTA and Potential flightpaths and foraging habitats were assessed as per categories listed in Table 4.1, 4.2 and 6.2, demonstrated below (Collins 2023).

2.4.5. If negative impacts on bat activity is suspected, further surveys may be required. Negative impacts anticipated on bats flights paths and foraging habitats may include:

- Modification of light paths or foraging habitats either physically or through disturbance such as light spill/noise
- Severance of flight paths (fragmentation)
- Loss of Foraging habitats

Table 4.1. 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.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	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*	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ³ and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ³).	Habitat that could be used by small numbers of bats as flight-paths 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	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ³ and surrounding habitat but unlikely to support a roost of high conservation status (with respect to most type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths 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	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ³ and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths 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.

Assessment Criteria for Bat Roosting Potential

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

2.5. HABITAT SUITABILITY INDEX (GREAT CRESTED NEWT)

2.5.1. No ponds were present on site or within 250m of the boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist), ponds beyond this distance were not assessed due to limited connectivity (English Nature, 2001).

2.6. SURVEY LIMITATIONS

- 2.6.1. This survey does not constitute a full botanical survey. Key species for each habitat type have been identified to give a broad representation of habitats present within the site.
- 2.6.2. It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the natural environment. This survey does not constitute a full botanical survey. Plant species may have been under-recorded, unidentifiable or not visible due to a number of factors including the time of year the survey was carried out.
- 2.6.3. The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. This is based on the suitability of the habitat, known distribution of the species in the local area (provided by data searches) and any direct evidence within the survey area.
- 2.6.4. The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited within this document.

2.7. PROPORTIONALITY

- 2.7.1. Collington Winter Environmental Ltd provide recommendations in line with the British Standard for Biodiversity (BS42020). Within BS42020, proportionality is encouraged for both ecologists and Local Authority Decision Makers and Consultees. Please refer to the below extract from Section 5.5 of BS42020.

“The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.”

NOTE 1 This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England [41].

NOTE 2 The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.”

3 SURVEY RESULTS

3.1. SITE CONTEXT

3.1.1. The site is located within a predominately rural area, approximately 2.5km southwest of the village of Fair Oak. The site is predominantly surrounded by agricultural land. Hedgerows and treelines associated with the agricultural land provide commuting and foraging value for local fauna. A railway line is located approximately 150m northeast of the site boundary. Whilst the River Itchen is located approximately 1.2km northwest from the site. The railway line and river will provide value for local fauna and flora.

3.2. DESIGNATED SITES

3.2.1. The following Sites of Special Scientific Interest (SSSI) were found within 5km of the site boundary according to Magic.gov.uk;

- River Itchen SSSI and Special Area of Conservation (SAC) – located approximately 0.9km northwest from the site boundary. This site is notified for classic chalk stream and river, fen meadow, flood pasture and swamp habitats, particularly formations of in-channel vegetation dominated by water crowfoot (*Ranunculus spp*) riparian vegetation communities (including wet woodlands) and side channels, runnels and ditches associated with the main river and former water meadows. The site is also notified for significant populations of the nationally-rare southern damselfly (*Coenagrion mercuriale*) and assemblages of nationally-rare and scarce freshwater and riparian invertebrates, including the white-clawed crayfish (*Austropotamobius pallipes*). This site is notified for otter (*Lutra lutra*), water vole (*Arvicola terrestris*), freshwater fishes including bullhead (*Cottius gobbo*), brook lamprey (*Lampetra planeri*) and Atlantic salmon (*Salmo salar*), and the assemblage of breeding birds.
- Moorgreen Meadows SSSI – located approximately 1.9km southeast from the site boundary. It is designated for its neutral meadows and alder (*Alnus*) wood flanking a small tributary of the River Hamble on the Bracklesham Beds of the Hampshire Basin

3.2.2. The Following Local Nature Reserves (LNR) were found within 5km of the site boundary;

- Wildern LNR – located approximately 3.5km south from the site boundary. The site is essentially a Wetland habitat featuring a mosaic of ponds, two flooded meadows, woodlands and a valley mire all linked by the streams which flow through the site.
- Netley Common LNR – located approximately 4.8km south from the site boundary. The site is designated as it is the last remaining piece of open heathland within Southampton, including grassland with islands of scrub and gorse, surrounded by a mixed woodland fringe.
- Heathland is particularly rare and remnant fragments of heathland are of national biodiversity importance and are host to a variety of wildlife.

3.2.3. The following Non-Statutory Sites were returned in the data search and located within 1km of the site boundary.

- Hogwood Lane Drove Site of Importance for Nature Conservation (SINC) – Located approximately 0.5km west from the site boundary.
- Hog Wood & Gravel Pits SINC - Located approximately 0.5km west from the site boundary.
- Hogwood Lane Meadow SINC - Located approximately 0.5km west from the site boundary.
- Allington Lane Pond SINC – Located approximately 0.5km north from the site boundary.
- Itchen Valley Country Park SINC - Located approximately 0.6km west from the site boundary.
- Copse by Oaklands House SINC – Located approximately 0.6km south from the site boundary.
- Hearts Copse SINC – Located approximately 0.6km east from the site boundary.
- Winslowe House Meadow SINC – Located approximately 0.7km south from the site boundary.
- Chalcroft Distribution Park SINC – Located approximately 0.7km east from the site boundary.
- Bushy Copse, West End SINC – Located approximately 0.8km southwest from the site boundary.
- Meadow adjacent to Home Covert SINC – Located approximately 0.8km south from the site boundary.
- Home Covert, West End SINC – Located approximately 0.8km south from the site boundary.
- Withybed Covert/Ridgeway Copse SINC – Located approximately 0.9km southwest from the site boundary.
- Field North of Hearts Row, West End SINC – Located approximately 0.9km northeast from the site boundary.

3.2.4. The site falls within the Impact Risk Zone of the River Itchen SSSI, located approximately 0.9km northwest from the site boundary.

TALL FORBS

3.4.3. The eastern aspect of the site was left unmanaged and comprised a rubble pile which had become dominated by tall forbs. Species included bramble (*Rubus fruticosus* agg.) creeping buttercup (*Ranunculus repens*) curled dock (*Rumex crispus*) fleabane (*Erigeron* sp.) blackthorn (*Prunus spinosa*) scarlet pimpernel (*Lysimachia arvensis*) cocks foot (*Dactylis glomerata*) bracken (*Pteridium aquilinum*) common comfrey (*Symphytum officinale*).

HEDGEROWS

3.4.4. A native hedgerow was present to the north of the site and was of similar composition and management for its entire length. The hedgerow was dominated by hawthorn (*Crataegus monogyna*) with oak (*Quercus* sp), hazel (*Corylus avellana*) and bramble. The ground flora comprised common nettle, common cleavers (*Galium aparine*) and common ivy.

INDIVIDUAL TREES

3.4.5. A large oak tree was located to the northern aspect of the site.

BUILDINGS

3.4.6. One building was present within the site. Please refer to Section 3.5 for details of the building.

6.5. SPECIES

FLORA

3.5.1. The data search returned multiple records of notable vascular plants within the local area which included records of stinking chamomile (*Anthemis cotula*), lesser spearwort (*Ranunculus flammula*) and butchers broom (*Ruscus aculeatus*).

3.5.2. The majority of the site comprised artificial unvegetated unsealed surface with limited floristic diversity. It is anticipated that the managed habitats are unlikely to support any notable plant species. Tall forbs were also present on site containing only common and widespread species.

INVERTEBRATES

3.5.3. The data search returned a total of 189 records of notable invertebrates within the local area, including the site. Species included (not limited to); cinnabar (*Tyria jacobaeae*), small phoenix (*Ecliptopera silaceata*), white ermine (*Spilosoma lubricipeda*), grey dagger (*Acronicta psi*), and small heath (*Coenonympha pamphilus*).

3.5.4. The majority of the site comprised artificial unvegetated unsealed surface. Limited flowering species were observed across the site. The tall forbs and boundary hedgerow will provide some foraging value for invertebrates.

3.5.5. Overall, notable invertebrates may utilise the site for foraging but are not thought to utilise the site in significant numbers.

AMPHIBIANS

3.5.6. The data search returned five records of great crested newt (*Triturus cristatus*). Common amphibian species such as smooth newt (*Lissotriton vulgaris*), palmate newt (*Lissotriton helveticus*) and common frog (*Rana temporaria*) were also recorded.

3.5.7. The following EPSLs for great crested newt were located within 5km from the site boundary, based of Magic.gov.uk:

Case reference of granted application	Species on the licence*	Distance from site (KM)	Licence Start Date	Licence End Date	impact on a breeding site?	allow damage of breeding site?	allow damage of a resting place?	allow destruction of breeding site?	allow destruction of a resting place?
2015-14283-EPS-MIT	GCN	0.5	20/08/2015	30/04/2016	N	N	Y	N	N
2015-14283-EPS-MIT-1	GCN	0.5	22/04/2016	31/07/2019	N	N	Y	N	Y
2019-40025-EPS-MIT	GCN	1.3	25/04/2019	01/07/2026	N	N	Y	N	Y
2020-44604-EPS-MIT-1	GCN	1.3	01/05/2020	31/07/2028	N	N	Y	N	Y
2020-44604-EPS-MIT-2	GCN	1.3	22/10/2020	31/07/2028	N	N	Y	N	Y
2020-44604-EPS-MIT-3	GCN	1.3	04/02/2021	31/07/2028	N	N	Y	N	Y
2020-46989-EPS-MIT	GCN	1.3	01/05/2020	29/04/2022	N	N	Y	N	Y
2020-46989-EPS-MIT-1	GCN	1.3	04/02/2021	29/04/2022	N	N	Y	N	Y
2018-35734-EPS-MIT	GCN	1.9	16/08/2018	31/12/2025	N	N	Y	N	Y
2018-35734-EPS-MIT-1	GCN	1.9	01/11/2018	31/12/2025	N	N	Y	N	Y
EPSM2009-903	GCN	1.9	17/06/2009	30/09/2009	N			N	Y
2018-35734-EPS-MIT-2	GCN	1.9	11/07/2019	31/12/2025	N	N	Y	N	Y
2020-49429-EPS-MIT	GCN	2.7	23/10/2020	31/12/2023	N	N	Y	N	Y

3.5.8. No ponds were located onsite or within 250 m of the site boundary. As great crested newts' upper dispersal limit is generally considered to be up to 250 m from a waterbody (though occurrence of greater distances does exist), great crested newts are not anticipated to be present on site (English Nature, 2001).

3.5.9. The site comprised a hedgerows and treelines which provide suitable foraging resources and cover for common amphibians such as common toads (*Bufo bufo*).

3.5.10. The presence of great crested newts within the site is reasonably discounted, though common amphibians may occur on site.

REPTILES

3.5.11. The data search returned six records of reptile species within the local area. Species included grass snake (*Natrix Helvetica*) and slow worm (*Anguis fragilis*).

3.5.12. The site provides limited value for reptiles, given the majority of the site comprised artificial unvegetated unsealed surface, which lack the structure and habitat quality to support the species group.

3.5.13. Reptiles are not anticipated to be on site and are not considered further.

BIRDS

3.5.14. A total of 696 records of birds were returned during the 1 km data search. Records relevant to the site included (not limited to); lapwing (*Vanellus vanellus*) yellowhammer (*Emberiza citrinella*), green sandpiper (*Tringa ochropus*), whimbrel (*Numenius phaeopus*) tree sparrow (*Passer montanus*), and mistle thrush (*Turdus viscivorus*).

3.5.15. The site provides a range of potential breeding habitats for a variety of birds in association with the hedgerow along the northern boundary.

3.5.16. Ground nesting birds are not anticipated to be on site due to the sites use for recreational purposes.

BATS

3.5.17. A total of 92 records of bats were returned within 1 km of the site boundary, all of which related to activity and do not include roost. Species included soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*), brown long-eared bat (*Plecotus auritus*), noctule bat (*Nyctallus noctula*), natterer's bat (*Myotis nattereri*) whiskered bat (*Myotis mystacinus*), daubentons bat (*myotis daubentonii*) and serotine bat (*Eptesicus serotinus*)

3.5.18. The following EPSL were located within 5km from the site boundary based on consultation with magic.gov.uk:

Case reference of granted application	Species on the licence*	Distance from site (KM)	Licence Start Date	Licence End Date	Does the Licence				
					impact on a breeding site?	allow damage of breeding site?	allow damage of a resting place?	allow destruction of breeding site?	allow destruction of a resting place?
2015-16719-EPS-MIT	C-PIP	0.5	02/11/2015	31/10/2020	N	N	N	N	Y
2016-22386-EPS-MIT	BLE C-PIP S-PIP	1	11/04/2016	30/04/2020	N	N	N	N	Y
2019-39527-EPS-MIT	BLE C-PIP NATT	1.5	27/02/2019	22/02/2024	Y	N	N	Y	Y
2019-39954-EPS-MIT	C-PIP S-PIP	1.6	20/03/2019	31/12/2024	N	N	N	N	Y
2019-42509-EPS-MIT	C-PIP SER	1.6	05/09/2019	04/09/2029	N	N	N	N	Y
2020-48450-EPS-MIT	S-PIP	1.7	01/08/2020	31/12/2026	N	N	N	N	Y
2016-22944-EPS-MIT	BLE C-PIP	2.1	17/05/2016	17/05/2026	N	N	Y	N	Y
2018-36779-EPS-MIT	C-PIP	2.7	01/09/2018	30/09/2019	N	N	N	N	Y
2018-38568-EPS-MIT	C-PIP	3	11/01/2019	31/01/2020	N	N	N	N	Y
2014-5470-EPS-MIT	BLE C-PIP S-PIP	3.1	19/02/2015	29/02/2020	N	N	N	N	Y
2014-5470-EPS-MIT-1	BLE C-PIP S-PIP	3.1	30/09/2016	28/02/2021	N	N	N	N	Y
2019-43199-EPS-MIT	C-PIP	3.2	29/10/2019	30/03/2025	N	N	N	N	Y
2019-43153-EPS-MIT	BLE C-PIP	3.3	29/10/2019	28/10/2024	Y	Y	Y	N	N
2014-1914-EPS-MIT	C-PIP S-PIP	3.5	02/04/2015	31/03/2020	N	N	N	N	Y
2018-37589-EPS-MIT	C-PIP	3.5	04/10/2018	31/12/2020	N	N	N	N	Y
2018-37589-EPS-MIT-1	C-PIP	3.5	03/05/2019	31/12/2021	N	N	N	N	Y
2018-37589-EPS-MIT-2	C-PIP	3.5	20/04/2020	31/12/2021	N	N	N	N	Y
2020-47981-EPS-MIT	C-PIP S-PIP	3.5	06/07/2020	30/09/2026	N	N	N	N	Y
EPSM2012-4025	C-PIP;S-PIP;BLE	3.5	23/04/2012	31/12/2014	N			N	Y
2015-13185-EPS-MIT	BLE C-PIP S-PIP	3.6	04/08/2015	03/08/2020	N	N	N	N	Y
EPSM2013-5805	C-PIP	3.6	25/04/2013	01/04/2015	N			N	Y
2020-49807-EPS-MIT	BLE C-PIP	3.8	25/10/2020	31/07/2026	N	N	Y	N	N
2016-23119-EPS-MIT	C-PIP	3.9	20/05/2016	20/05/2021	N	N	N	N	Y
EPSM2009-1058	C-PIP	4.7	13/11/2009	31/08/2011	N			N	Y
EPSM2010-2222	C-PIP	4.7	01/10/2010	30/09/2011	Y			Y	N
2016-21961-EPS-MIT	BLE C-PIP	4.8	10/03/2016	09/03/2021	N	N	N	N	Y
2016-21961-EPS-MIT-1	BLE C-PIP	4.8	29/07/2019	29/07/2024	N	N	N	N	Y
EPSM2013-5897	C-PIP	4.8	12/06/2013	31/08/2014	N			N	Y
2014-148-EPS-MIT	C-PIP	4.9	02/05/2014	31/12/2014	N	N	N	N	Y
2015-7650-EPS-MIT	BLE C-PIP S-PIP	4.9	27/04/2015	30/04/2020	N	N	Y	N	Y
2015-9288-EPS-MIT	C-PIP	5	29/04/2015	22/04/2020	N	N	N	N	Y

Species on the licence*	Species name	Latin
C-PIP	Common pipistrelle	<i>Pipistrellus pipistrellus</i>
S-PIP	Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>

BLE	Brown long-eared bat	<i>Plecotus auritus</i>
NATT	Natterer's bat	<i>Myotis nattereri</i>

3.5.19. The buildings were subject to a PRA and are detailed in Table 3.1

Table 3.1 PRA Summary

Building Ref	Description	Photograph
Building 1	A single storey shed was located on site. this was utilised for storage. The building consisted of timber walls and a timber roof. the building was well sealed with no PRFs identified externally. The building was assessed as providing 'None' Bat roosting suitability.	

3.5.20. Trees on site were assessed for bat roosting potential. All trees were found to provide 'None' bat roosting potential due to the lack of suitable PRFs for roosting bats.

3.5.21. The habitats on site were assessed as having low value for foraging and commuting bats.

BADGER

3.5.22. A total of one record of badgers (*Meles meles*) were returned during the data search and their location is to remain confidential.

3.5.23. No signs of badger presence were recorded within the site or the surrounding 30 m during the site visit. The site does not provide suitable sett building conditions. However, badgers may utilise the adjacent farmland for sett building. Badgers are anticipated to be within the area and may use the site for commuting purposes.

HAZEL DORMOUSE

3.5.24. A total of one record for hazel dormouse was returned within 1km of the site.

3.5.25. The following EPSLs of dormouse were located within 5km of the site boundary based on consultation with magic.gov.uk.

Case reference of granted application	Species on the licence*	Licence Start Date	Licence End Date	impact on a breeding site?	Does the Licence			
					allow damage of breeding site?	allow damage of a resting place?	allow destruction of breeding site?	allow destruction of a resting place?
2018-34419-EPS-MIT	Hazel or common dormouse	30/05/2018	01/12/2023	Y	Y	Y	Y	Y
EPSM2011-3364	Dormouse	14/09/2011	31/12/2013	Y			Y	Y
EPSM2012-4209	Dormouse	19/11/2013	31/10/2017	Y			Y	Y
2014-4497-EPS-MIT	Dormouse	21/10/2014	31/12/2017	Y	Y	Y	Y	Y
2014-4497-EPS-MIT-1	Hazel or common dormouse	08/09/2016	31/12/2017	Y	Y	Y	Y	Y
2014-6322-EPS-MIT-1	Hazel or common	03/03/2016	31/01/2021	N	N	Y	N	Y

	dormouse							
2014-6322-EPS-MIT	Dormouse	20/01/2015	31/01/2020	N	N	Y	N	Y
2014-636-EPS-MIT	Dormouse	15/05/2014	31/10/2017	Y	Y	Y	Y	Y

3.5.26. All EPSLs were located over 3 km from the site boundary, with the closest EPSL being EPSM2011-3364 located 3.1km west from the site boundary.

3.5.27. No signs of hazel dormouse were identified within the site, however a full survey for the species was not undertaken. The site has limited value for the species with the only habitat of value being the boundary hedgerow. The site is well connected to the wider landscape through hedgerows, treelines and woodland blocks. The presence of hazel dormouse within the local area is unknown.

OTHER TERRESTRIAL MAMMALS

3.5.28. A total of one record of west European hedgehog (*Erinaceus europaeus*) was located within the 1km search area. Given the habitats present within the site including the hedgerow, it is anticipated that hedgehog could be present within the site.

3.5.29. A total of three records of brown hare (*Lepus europaeus*) were recorded within 1 km of the site. The site is anticipated to have limited value for the species due to the majority of the site consisting of artificial unvegetated unsealed surface. Adjacent farmland will be of value for brown hare within the local area.

NON-NATIVE INVASIVE SPECIES

3.5.30. Multiple records of non-native invasive flora species were located within the 1 km search area. Species includes Japanese knotweed (*Fallopia japonica* and rhododendron (*Rhododendron ponticum*).

3.5.31. No non-native invasive species were observed during the survey.

SPECIES DISCOUNTED FROM ASSESSMENT

3.5.32. Water vole (*Arvicola amphibius*), otter (*Lutra lutra*), beaver (*Castor fiber*) and white-clawed crayfish (*Austropotamobius pallipes*) have been discounted from assessment as no aquatic habitats are located on site or within proximity. The closest aquatic habitat is located approximately 900m northwest of the site boundary, relating to the River Itchen. The river is sufficiently separated from the site by anthropogenic barriers as such no negative impacts would occur on aquatic species during the proposed development.

3.5.33. Red squirrel (*Sciurus vulgaris*) has been discounted from the assessment. Red squirrel populations are limited to small areas of northern England and are not known to be present in the Southampton and Eastleigh area; with no previous records returned in the data search. It is anticipated that high abundances of grey squirrel are present within this region (Shuttleworth/RSST n.d.). This species will displace red squirrel through competition as well as cause increased red squirrel mortality through the spread of squirrel pox (The Mammal Society, 2020).

4 MITIGATION RECOMMENDATIONS

7.1. DESIGNATED SITES

- 4.1.1. The site is located within the impact risk zone for The River Itchen SSSI. It is anticipated that the designated site is a sufficient distance away and the development is small enough, as such that no impacts as a result of development are anticipated.
- 4.1.2. Numerous non-statutory LWSs are located within 1 km of the site boundary. Current proposals include the development of one static caravan with space for a touring caravan. This will not significantly increase the number of visitors to the nearby sites.

7.2. HABITATS

TREELINES AND HEDGEROWS

- 4.2.1. The current development proposals include the retention of the northern boundary hedgerow vegetation as well as new planting proposed along the southeastern boundary of the site. The retained boundary should be appropriately protected through the works.
- 4.2.2. The fencing will be in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations.

7.3. SPECIES

AMPHIBIANS

- 4.2.3. Great crested newts were deemed unlikely to be present on site and no further consideration for the species is required. However, there is a possibility that common amphibians such as common toad may be present on site.
- 4.2.4. It is recommended that consideration of amphibian presence during habitat management is considered. Any debris is to be cleared by hand, and any common amphibians located moved carefully, by hand, to outside of the impacted area.

BREEDING BIRDS

- 4.2.5. Any vegetation management should be undertaken outside of the breeding bird season (March to September, inclusive). If this is not possible, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to removal. If nesting activity is observed, the nest(s) should be left in situ until the young have fledged. A suitable buffer will be maintained and determined by the ecologist.

BATS

- 4.2.6. The habitats on site provide limited value for commuting bats, however habitats of higher potential value for commuting and foraging bats are located within the local area and include treelines connecting to further habitat. It is recommended that proposals retain the hedgerow located to the northwest aspect of the site. Proposed landscaping comprising the inclusion of grassland and new tree planting post development should also retain the offsite habitats value for foraging and commuting bats.
- 4.2.7. Slow-flying species such as brown long-eared, which are known to be in the local area, are sensitive to lighting and may be impacted by the proposed development, should no mitigation for lighting be considered.
- 4.2.8. Any proposed lighting/existing lighting should follow the guidance outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting at Night" (2023).

4.2.9. An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating habitats of value.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
- Column heights of lighting can be considered to minimise light spill.

BADGERS

4.2.10. No badger setts were identified during the survey; however, they may be within the local area. The following Precautionary Working Methods will be adhered to during the construction phase to ensure that no badgers are impacted by the proposed development (Badger Trust, 2023):

- A pre-commencement of work badger survey should be conducted by a suitably qualified ecologist to ensure the current badger situation is known and that the recommendations are correct.
- All site personnel should be fully briefed concerning the method statement, the presence of badgers, the mitigation measures to be followed, the relevant legislation, the penalties imposed and who to contact should they need to.
- Trees and shrubs should be felled so that they fall away from the direction of a sett and outside exclusion zones.
- Ensure excavations or trenches left overnight are covered or have an escape route such as a shallow gradient at one or both ends.
- Ensure excavations or trenches are inspected each morning and evening to ensure no badgers have become trapped.
- Open pipework with a diameter of more than 120mm should be properly covered or capped at the end of the working day to prevent badgers from entering and becoming trapped.
- During the work, the storage of any chemicals should be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.
- The storage of topsoil or other “soft” building materials within the site should be given careful consideration. Badgers will readily adopt such mounds and dig setts which would then be afforded the same protection as established setts. To avoid the adoption of such mounds, they should be subject to daily inspections before work commences or alternative measures put in place, such as being fenced off for higher-risk areas.
- Litter, tools and potentially dangerous materials on site should be cleared at the end of the working day. Care should be taken that there are no sharp metal objects or pointed protrusions on the ground which could seriously injure a badger due to their poor eyesight.
- Ensure no dogs are brought to the work site.
- Security lighting should be kept to a minimum and away from setts to avoid disturbance to any badgers on site.
- Fires should be lit only in secure compounds away from areas of badger activity and should be fully extinguished at the end of the working day.
- Badger paths must not be blocked to ensure access to foraging areas is maintained.

4.2.11. Adherence to these measures should be confirmed to planners at regular intervals by the project ecologist.

TERRESTRIAL MAMMALS

4.2.12. European Hedgehog are anticipated to be present within the site and are a Species of Principal Importance. During habitat management, any areas of dense vegetation should first be carefully hand searched to check for the species. If identified during management, should be relocated carefully by hand to a location away from the working area. If any injured either species are located they should be taken to a local vets.

Hazel Dormouse

- 4.2.13. The habitat of value for hazel dormouse (northern boundary) is proposed for full retention and protection through works and therefore no impacts on the species are anticipated, should they be present in the local area. Should any hedgerow require removal, further survey or mitigation would be required.

5 FURTHER SURVEYS AND CONCLUSION

5.1. FURTHER SURVEYS

6.1.1.No further surveys are deemed necessary to inform the proposed planning application.

6.2. CONCLUSION

6.3.1.The site was found to predominantly comprised artificial unvegetated unsealed surface and tall forbs. The habitats are anticipated to provide limited value for local notable flora and fauna. Habitats with the highest value included the hedgerow and individual tree to the north aspect of the site. The site was found to have value or potential value for bats, birds, amphibians and terrestrial mammals.

6.3.2.The proposed development provides the opportunity to improve the sites value for biodiversity. Specific enhancement recommendations for the site include the following:

- Bat and bird boxes could be placed on new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by a suitably qualified ecologist once the layout is finalised.
- The inclusion of 'hedgehog highways' to facilitate movement across the site. This includes holes of 13 x 13cm at the bases of fence panels, leaving a sufficient gap beneath gates and/or leaving brick spaces at the bases of brick walls.

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Description	Photographs
Artificial Unvegetated Unsealed Surface	
Tall Forbs	
Native Hedgerow	
Individual Tree	

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