



EXTENDED PHASE 1 ECOLOGICAL ASSESSMENT

BUSHY LEASE – FITZWYGRAM WAY TO PARK HOUSE FARM WAY

DRAFT REPORT

July 2025

Report conditions

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Executive Summary

- This Extended Phase 1 Ecological Assessment has been prepared to support a planning application for the replacement and extension of a mixed-use path, providing a connection between the housing to the south and the road network to the northwest.
- An extended phase 1 ecological assessment of the application site was undertaken on the 26th of June 2025 by Chris Lycett of Phillips Ecology.
- The survey area comprised a linear corridor along an existing narrow footpath, following the course of the Hermitage Stream within the defined red line boundary, including its immediate surroundings and a small extension to the northeast.
- A data search extended to a 2km radius for statutory designated sites and 1km radius for priority habitats and protected species.
- No statutory designated sites were identified within a 2 km search radius; however, five ancient woodlands and two priority habitats were recorded either adjacent to or in close proximity to the site.
- The application site comprises a range of habitats that transition from south to north. At the southern end, near the estate, habitats are characterised by low-diversity grassland and scattered scrub. Toward the northern extent, the site develops into a relatively species-rich woodland, primarily dominated by oak *Quercus* spp. and ash *Fraxinus excelsior*, with localised stands of alder *Alnus glutinosa* and willow *Salix* spp. where the stream creates transitional wet woodland areas. The woodland supports a well-developed ground flora and midstorey, with the presence of several ancient woodland indicator species.
- No evidence of protected species was recorded, however, the woodland offers a range of habitats for bats, dormice and potentially reptiles in some of the more open or edge habitats.
- No further survey work is considered necessary.
- With the implementation of precautionary construction avoidance measures, impacts on designated sites and other protected species will be avoided.
- Information regarding the length of time the findings of this report are valid for can be found in Section 11.

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1. Introduction

1.1 Report purpose

This extended phase 1 ecological assessment report has been prepared in order to support a planning application on land at the Bushy Lease, centred at SU69948 08639

1.2 Description of proposal

The proposal involves upgrading an existing footpath by widening it to form a multi-use link, enhancing connectivity across the wider landscape. This will include a minor extension to the northwest, incorporating a new bridge crossing over the Hermitage Stream. Additionally, a small area to the northeast is included within the scheme, comprising an existing footpath and an adjacent area of hardstanding.

1.3 Report context

Phillips Ecology have been instructed by the applicant to carry out ecological survey work at the site.

1.4 Scope of assessment

An extended phase 1 ecological assessment was carried out on the 26th June 2025. The survey consisted of a field survey and desktop study in order to identify notable or protected sites, habitats or species potentially affected by the proposal under consideration.

1.5 Survey area

The survey area comprised a long linear corridor following the Hermitage Stream to the west, as defined by the red line boundary, along with an additional area to the northeast. Immediate surrounding habitats were also assessed where relevant. A desk study was undertaken with a 2 km search radius for statutory designated sites and a 1 km radius for priority habitats and records of protected species.

1.6 Survey conditions

Weather during the survey is described as dry, clear, still, and 27°C. The weather conditions did not hinder the ecologist's ability to carry out the survey effectively.

1.7 Limitations

Limitations which are specific to each phase of the assessment are provided in the relevant sections, below.

2. Data search

2.1 Methodology

A desk-based assessment was undertaken by Phillips Ecology on the 3rd July 2025 using the Multi-Agency Geographic Information for the Countryside (MAGIC). The MAGIC database was consulted for records of statutory designated sites within a 2km radius and priority habitats and protected species within a 1km radius.

2.2 Limitations

The data search results are bound by the following statement contained within MAGICs general disclaimer: *“The materials contained on this website are of a general, informational, nature. We have used reasonable endeavours to ensure the accuracy and completeness of the contents of the pages on this site but the information does not constitute advice and must not be relied on as such”.*

2.3 Results

2.3.1 Statutory designated sites

The data search revealed that no statutory designated sites are located within a 2km radius of the application site. No Special Protection Areas (SPA) or Sites of Special Scientific Interest (SSSI) are located within the 2 km search radius. However, several highly designated sites lie approximately 3 km to the south, including Chichester and Langstone Harbour SPA, Solent Maritime Special Area of Conservation (SAC), and associated SSSI units.

The northern section of the proposed footpath runs directly through an area designated as a Site of Importance for Nature Conservation (SINC). Additionally, the Havant Local Plan identifies several other SINC's within the local area. These are outlined in the table below.

Table 1: Details of SINC's within a 1km radius of the site

Site Name	Approx. distance and direction from the site	Reason for designation
Neville's Parke Areas 2 & 3 SINC	0m	2A - Agriculturally unimproved grasslands which are not of recent origin
Bushy Lease SINC	2m W	1A - Ancient Semi-natural Woodlands
Neville's Park Areas 4-10 SINC	0km, W & S	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 which Support a Good Diversity of Woodland and/or Marsh/Swamp/Mire Species 2A/- Agriculturally unimproved grasslands which are not of recent origin

<i>Site Name</i>	<i>Approx. distance and direction from the site</i>	<i>Reason for designation</i>
		2B - Semi-improved grasslands which retain a significant element of unimproved grassland
Cherry Tree Row SINC	100 N	1A - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland
Neville's Park West Wood SINC	470m SW	1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland
Hulbert Road Meadow SINC	890 m SW	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)
Meadow Adjacent to Johnston's Copse SINC	730m SW	1A - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland 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) 6A - Sites which support one or more Hampshire Notable Species
Johnston's Coppice SINC	990m SW	1A - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland 1B - Other woodland where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland 6A - Sites which support one or more Hampshire Notable Species

2.3.2 Ancient Woodlands

Five blocks of ancient woodland were located within a 1km radius of the application site.

Table 2 Ancient woodlands within 1km of the application site

Woodland Name	Approx. distance and direction from the site	Reason for designation
Unnamed Woodland	260m W	This 5.7 ha site is designated for its ancient and semi-natural woodland.
Unnamed Woodland	900m SW	This 6.8ha site is designated for its ancient and semi-natural woodland.
Bushy Lease	10m W	This 2.87ha site is designated for its ancient and semi natural woodland
Unnamed Woodland	236m S	This 1.2ha site is designated for its ancient and semi-natural woodland.
Unnamed Woodland	263m S	This 0.13ha site is designated for its ancient and semi-natural woodland.

2.3.3 Priority habitats

The data search revealed three priority habitats within a 1km radius of the site, these are listed below, with the closest location and direction in brackets.

- Good quality semi-improved grassland (25m, E and 75m W).
- Deciduous woodland (0m, N).

2.3.4 Protected species

The data search revealed records of protected species relating to European Protected Species (EPS) Mitigation licence or EPS survey licence return within a 1km radius of the site. These were related to dormice, and occurred 150m to the north of the site, as part of a licence connected to the wider woodland area.

The licences were issued in 2019 and 2020, therefore it is likely that dormice are present on site.

3. Habitats

3.1 Methodology

A field survey was carried out on the 26th June 2025 by Chris Lycett of Phillips Ecology. During the survey, all broad habitat types were identified and a list of characteristic plant species within each habitat type was compiled. These habitats are described below in accordance with UK Habs habitat terminology.

3.2 Limitations

No limitations to the survey were identified.

3.3 Existing records

The data search revealed two priority habitats within a 1km radius of the site, one of these, lowland deciduous woodland, was identified as being present on the site as well as several further blocks within the 1km radius. Some sections of the woodland are designated as ancient woodland.

The other habitat, good quality semi-improved grassland, was located approximately 25m and 75m from the site.

3.4 Results

The site forms part of a wider area of public amenity land, incorporating extensive grassland and woodland habitats. Within the red line boundary, habitat quality varies along its north–south axis. The southern section is predominantly comprised of species-poor grassland interspersed with scrub, while the northern section supports high-quality deciduous woodland typical of the local area. This woodland includes a number of veteran trees and features several ancient woodland indicator species.

The proposed development involves upgrading an existing track to accommodate both pedestrian and cycle use, increasing its width from approximately 1 m to 2 m along its entire length.

The following UK Habs habitat types were recorded within the survey site.

3.4.1 Mixed scrub (h2h)

Large sections of the southern part of the site, particularly along the stream edge, support well-developed scrub habitat. The dominant species is blackthorn *Prunus spinosa*, with notable stands of a plum species, most likely *Prunus domestica*. A mix of native woody species occurs throughout, either interspersed within the blackthorn stands or forming discrete patches, including hawthorn *Crataegus monogyna*, bramble *Rubus fruticosus*, and hazel *Corylus avellana*. Together, these create a structurally and botanically diverse scrub community. Dogwood *Cornus sanguinea* is also widespread, forming extensive thickets, particularly along boundaries adjacent to residential properties.

The scrub is generally tall and leggy, often overhanging the footpath, with occasional standard ash *Fraxinus excelsior* trees scattered sparsely throughout. Despite the

presence of some taller specimens, the overall structure remains characteristic of scrub rather than woodland.

In the additional parcel of land to the northeast, scrub is denser and dominated by bramble, blackthorn, and willow species, including goat willow *Salix caprea* and white willow *Salix alba*. This vegetation forms a thick perimeter around the square section of hardstanding.

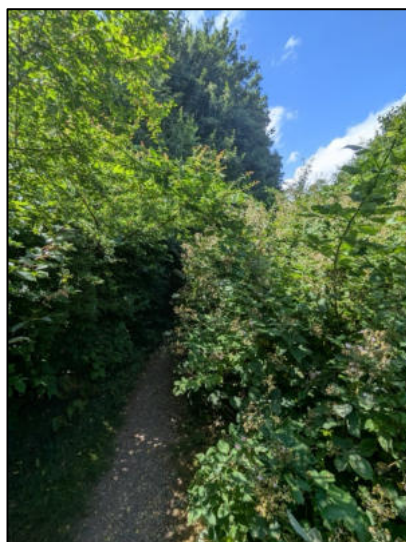


Figure 1: Application site dense scrub at the southern end of the site.

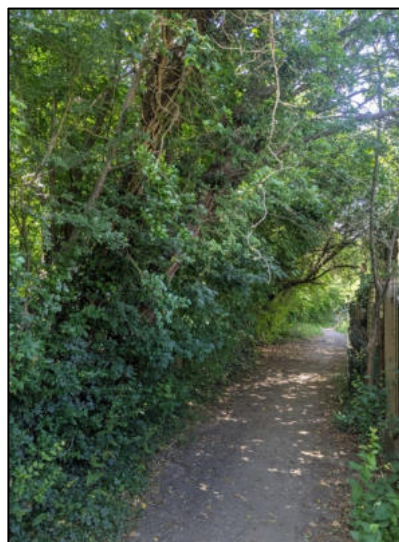


Figure 2: Large sections of leggy scrub.

3.4.2 Modified grassland (g4)

In the central section of the site, there is a large section of grassland which is incorporated into a wider amenity area with several paths. This section is species poor, dominated by rye *Lolium perenne*, creeping buttercup *Ranunculus repens*, cocksfoot *Dactylis glomerata*, timothy *Phleum pratense*, and Yorkshire fog *Holcus lanatus*. The sward structure varies across the site, with denser, longer sections interspersed with shorter areas, particularly around well-trodden paths where trampling has suppressed growth. A lack of management has resulted in the build-up of a thatch layer, creating favourable conditions for dominant species to outcompete others, thereby reducing overall plant species diversity..

Some smaller sections of grassland are present along the path to the south. These were species poor, with some sections containing cranesbill *Geranium pratense*, common nettle *Urtica dioica* and dock *Rumex obtusifolius*. The entrance to the footpath consisted of small sections of repeatedly mown grass, typical of roadside verges. This grassland was in significantly poorer condition than the rest of the grassland.



Fig 3: Small section of grassland to the south of the site, containing nettles, docks and cranesbill.



Fig 4: Showing the larger open grassland.

3.4.3 Lowland deciduous woodland (w1f)

The northern section of the site consists of denser woodland. There are sections that have been opened up due to works around the power lines, but a large section of closed canopy woodland covers the area. It is predominantly dominated by oak *Quercus robur* and ash *Fraxinus excelsior*, which is typical for the area. However, there were sections of willow and alder dominated woodland around the stream, where the substrate lays wetter. The structure is good across the woodland, with some veteran oak trees scattered throughout, but concentrated in the northern section. There is a substantial mid layer, consisting of holly *Ilex aquifolium*, field maple *Acer campestre*, hawthorn *Crataegus monogyna*, and hazel *Corylus avellana*, providing good structure. Hazel stands have been coppiced in the past and produced good stools. Species such as honeysuckle could be found in some of the mid story, providing extra structural diversity and species composition.

The field layer varies throughout but is generally typical of a good woodland assemblage, with key ancient woodland indicators present, such as dog's mercury *Mercurialis perennis*, bluebell *Hyacinthoides non-scripta*, ramsons *Allium ursinum*, and butcher's broom *Ruscus aculeatus*. Species composition varies across the woodland, with some areas dominated by denser and less favourable vegetation, such as bracken *Pteridium aquilinum*. However, the majority of the site supports a good representation of typical woodland flora.

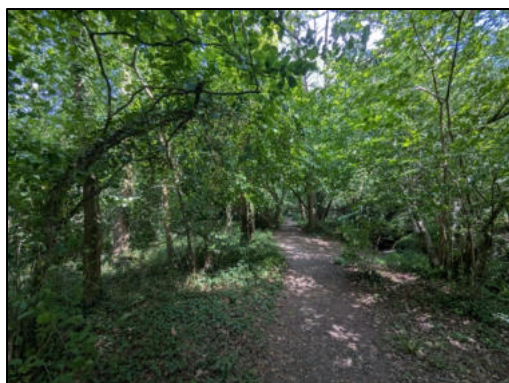


Fig. 5: woodland bordering the path within the application site.

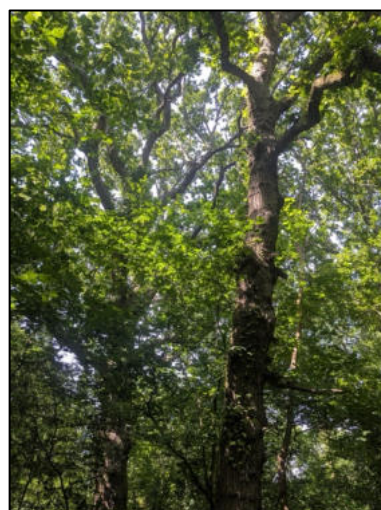


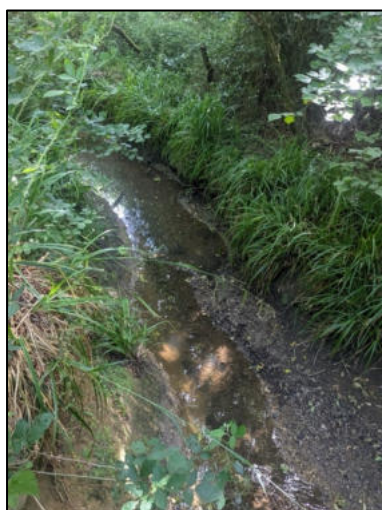
Fig. 6: mature standards within the woodland.

3.4.4 Water course

The Hermitage Stream runs along the western boundary of the site, with a section forming the northern edge where a new bridge is proposed as part of the extension. The stream is in poor ecological condition, with a high level of public access evident throughout.

In the lower section, the channel has been canalised, with concrete banks and base, while the northern part still meanders naturally. However, over time this area has developed steep, eroded sides. Vegetation on the banks is generally sparse, particularly where the stream runs through shaded woodland and scrub. Where light levels increase, some bank vegetation is present but largely dominated by species such as pendulous sedge *Carex pendula*.

The stream bed itself is poor in quality, with no in-channel vegetation observed at any point during the survey. Moving upstream, the substrate becomes increasingly gravelly, but heavy silt deposits and patches of algal growth persist along much of the channel.



Figs. 7 and 8: natural and canalised sections of the Hermitage Stream.

3.5 Assessment

The application site comprises two distinct habitat areas. The southern section, along with the additional parcel, supports low-grade, species-poor grassland interspersed with scrub, offering limited botanical value. In contrast, the northern section consists of well-established woodland with good structural complexity and a diverse range of native plant species.

4. Protected and notable species assessment

The scope of works, data search and habitat assessment have informed the scope of the protected and notable species assessment. On this basis, the protected and priority species that have been considered further within this report are detailed below. No habitat for Great crested newt was found in the proximity of the site and so have been excluded.

- Bats.
- Badger *Meles meles*.
- Hedgehog *Erinaceus europaeus*.
- Reptiles.
- Breeding birds.
- Hazel dormouse *Muscardinus avellanarius*
- Otter *Lutra lutra*
- Water vole *Arvicola amphibus*
- White-clawed crayfish *Austropotamobius pallipes*

The surveyed site has been assessed for its potential to support the above-named protected species/species groups based upon the criteria in Table 3.

Table 3: Protected species grading criteria

<i>Grading criteria</i>	<i>Justification</i>
<i>Negligible</i>	Site is entirely unsuitable for species. Presence of species highly unlikely.
<i>Low</i>	Minimal suitable habitat present or, if present, highly degraded/fragmented. Minimal linkage to suitable habitat beyond site. Presence of species unlikely.
<i>Moderate</i>	Presence of some suitable habitat features for species. Surveyed site within/close to known range or known occurrence but factors such as isolation/fragmentation may reduce potential. Presence of species is more likely than not.
<i>High</i>	Presence of optimal habitat features for species. Surveyed site within known range/close to known occurrence. Excellent connectivity to optimal habitat. No justification for discounting presence of species.
<i>Confirmed presence</i>	Species confirmed on site through direct sighting, presence of field signs (e.g. scat, hair, prints, nest, eggs, habitation etc.) or through desk-based assessment.

5. Bats

5.1 Methodology

An assessment was made of the site's suitability to support foraging and commuting bats in accordance with the Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).

5.2 Assessment methodology

The site's suitability for supporting commuting and foraging bats will be assessed against the guidelines within Table 4 which have been adapted from the BCT Good Practice Guidelines.

Table 4: Suitability assessment guidelines

<i>Suitability</i>	<i>Description of Foraging/Commuting Habitats</i>
<i>Negligible</i>	Negligible habitat features on site likely to be used by commuting or foraging bats.
<i>Low</i>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitats.</p> <p>Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not parkland situation) or a patch of scrub.</p>
<i>Moderate</i>	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such tree, scrub, grassland or water.</p>
<i>High</i>	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of tree and woodland edge.</p> <p>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.</p> <p>Site is close to and connected to known roosts.</p>

5.3 Limitations

No limitations to the survey were identified.

5.4 Existing records

The data search did not reveal any bat records relating to EPSM licences or EPS licence returns, within the 1km search radius.

5.5 Results

5.5.1 *Tree assessment relevant to bats and their roosts*

The woodland in the northern section contains several mature trees with characteristics such as cracks, splits, and loose bark, all of which have the potential to support roosting bats.

5.5.2 *Foraging potential*

The site is considered to offer high foraging potential for bats due to the presence of diverse habitat features such as the stream corridor and mature woodland. In addition, the woodland is well connected to the wider landscape through continuous links with surrounding woodland blocks, enhancing its ecological value and function as part of a broader foraging network.

5.6 Assessment

Based on the criteria set out in Table 3, the application site is assessed as having high suitability for bat foraging. This is primarily due to its strong connectivity with the surrounding landscape and the presence of a range of habitats within the application site including the stream corridor and woodland. In addition, the adjacent woodland offers high potential for roosting, making it highly likely that bats are using both the site and its immediate surroundings for foraging and roosting.

6. Badgers

6.1 Methodology

The survey involved a detailed investigation of the site to identify evidence of badger residence, foraging or territorial activity. This includes badger setts, latrine sites, dung piles, well-used trails, prints and hairs. Emphasis was placed on locating badger setts, paths and signs of territorial activity such as dung piles and latrines.

6.2 Limitations

No limitations to the badger survey were identified.

6.3 Existing data

Phillips Ecology is not aware of any existing information for badgers at the site.

6.4 Results

No evidence of badger activity was recorded during the survey; however, the ground conditions on site are considered suitable for badger sett creation. It is therefore possible that badgers may commute through the site or forage within it and the surrounding landscape, even if no setts are currently present.

6.5 Assessment

When assessed against the criteria in Table 3, badgers are considered to be absent from the site as a resident, but could potentially pass by or through it, when foraging, and therefore the site is assessed as providing medium suitability.

7. Hedgehog

7.1 Methodology

The site was assessed for its suitability to support hedgehogs based on the presence of favoured habitats such as woodland edges, hedgerows, grassland and suburban habitats.

Hedgehogs are most abundant within gardens, parks and amenity land close to or within human settlements. They are generally scarce in areas of coniferous woodland, marshes and moorland, probably because of a lack of suitable sites and materials for the construction of winter nests (Morris, 2006). Any evidence of hedgehog activity such as prints or droppings would be recorded.

7.2 Limitations

Low detections rates are associated with evidence of hedgehog activity; therefore, absence of evidence does not confirm the absence of hedgehogs. For this reason, the assessment of the likely presence/absence of hedgehogs has largely been informed by the species' local distribution and the habitats within the site and local area.

7.3 Existing records

Phillips Ecology is not aware of any existing information for hedgehogs at the site.

7.4 Results

The site provides suitable habitat for hedgehogs to shelter or rest, particularly within areas of dense vegetation. In addition, the presence of foraging habitat, such as amenity grassland and adjacent gardens to the east, along with surrounding woodland, means that hedgehogs may pass through the site while foraging within the wider landscape.

No evidence of hedgehog activity was recorded during the survey.

7.5 Assessment

When assessed against the criteria in Table 3, the site is assessed as providing low suitability, for foraging individuals only.

8. Reptiles

8.1 Methodology

An assessment was made of the site's suitability to support reptile populations. Key habitat features include tussocky/patchy grassland, scrub edge, linear watercourses, ponds, compost heaps, brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated/fragmented habitats even within urban areas.

8.2 Limitations

Limitations were not encountered during the course of the survey.

8.3 Existing records

No existing records are available for the site.

8.4 Results

Small patches of suitable reptile habitat were noted along sections of the path; however, the majority of the site is too heavily shaded to support a sustained reptile population. The more suitable areas tended to occur beneath the power lines, where periodic clearance has created more open conditions. These areas are limited in extent and likely to fluctuate in suitability from year to year.

Small sections of the grassland area could potentially support more mobile reptiles such as common lizard *Zootoca vivipara* or Slow worm *Anguis fragilis*, however, overall suitability is significantly reduced due to a high level of disturbance associated with the adjacent footpath.

During the survey no evidence of common/widespread reptile species was recorded.

8.5 Assessment

When assessed against the criteria set out in Table 3, the majority of the site was considered unsuitable for reptiles, and therefore was considered to provide negligible suitability. However, small and isolated areas, particularly beneath the power lines where vegetation clearance has occurred, were assessed as providing low suitability for more mobile reptile species.

9. Breeding birds

9.1 Methodology

An assessment was made of the site's suitability to support breeding bird species. Nesting birds will utilise a broad range of habitats, including built structures, trees, scrub, isolated shrubs, dense herbaceous vegetation (terrestrial and aquatic) and open grassland. All bird species and evidence of breeding activity (active or inactive) observed on site were recorded.

9.2 Limitations

No limitations were identified during the survey.

9.3 Existing data

Phillips Ecology is not aware of any existing data for the site.

9.4 Results

There was extensive breeding bird habitat throughout the site, especially to the south where the proposed route will pass through areas of scrub. The scrub, though leggy in many places, still provides suitable nesting opportunities for a range of species that were present on site, such as blackbird *Turdus merula*, blackcap *Sylvia atricapilla*, chiffchaff *Phylloscopus collybita*, wren *Troglodytes troglodytes*, and robin *Erithacus rubecula*.

The woodland to the north also offered a range of nesting opportunities, such as dense understory and holes within trees. A range of woodland bird species were recorded and it is highly likely that common species such as wren and robin would be present.

During the site visit, a number of species were recorded, such as blackcap, blackbird, wren, great tit *Parus major* and chiffchaff.

9.5 **Assessment**

When assessed against the criteria detailed in Table 3, the site is considered to provide high suitability for breeding birds within the scrub and woodland

10. Dormice

10.1 **Methodology**

An assessment was made of the suitability of habitat on site to support hazel dormice. Key habitats are woodland, scrub and hedgerows, particularly where these offer dense vegetation within which to nest/hibernate and key resources such as hazel nuts, fruiting/nectar-rich plants (e.g. hawthorn, bramble) to provide a continuum of food resources throughout the active season and honeysuckle *Lonicera periclymenum* (for nesting material). Landscape-scale habitat linkages such as hedgerows are fundamental for dormouse presence where small scale or sub-optimal habitats are recorded within a site.

10.2 **Limitations**

Limitations were not encountered during the course of the survey.

10.3 **Results**

The woodland at the northern end of the site is considered to provide suitable habitat for hazel dormice, supported by two existing records identified within connected woodland immediately to the north. The habitat includes extensive stands of coppiced hazel, along with other key food and nesting species such as honeysuckle. The woodland also benefits from a well-developed canopy and a diverse mix of tree species, offering a continuous supply of food and cover throughout the year.

In addition, the scrub habitat at the southern end of the site remains well connected to the woodland and offers further suitable conditions for dormice, contributing to a wider network of accessible optimal and sub-optimal habitat across the site.

10.4 **Assessment**

Much of the site comprises suitable habitat for hazel dormice. Several records are present in the surrounding area, and given the site's extensive habitat connectivity, it is considered likely that dormice are present on site.

11. Otter and water vole

11.1 **Methodology**

An assessment was made of the site's suitability to support otter and water vole. For water vole, this comprised an assessment of bank side topography (i.e. dry areas above water level for burrowing), herbaceous vegetation (to provide food and cover) and the presence of water (as a means of escape from predators). Water courses generally require all three of the above habitat features in relatively close proximity to each other to support water vole burrows. The watercourse was also assessed for its suitability to support otter breeding or resting places. Particular attention was given to examinations of typical otter sprainting sites such as in-channel and bankside logs and rocks, as well as searches of bankside mud to identify tracks.

11.2 **Limitations**

No limitations to the survey were identified.

11.3 **Existing records**

Phillips Ecology is not aware of previous records of otter and water vole within area and along the Hermitage stream.

11.4 **Results**

With regard to both species, the riverbanks are either heavily modified or heavily shaded, resulting in a lack of suitable bankside and in-channel vegetation. This, combined with a high level of human disturbance, suggests that the site is unsuitable for residence by either water vole or otter.

No evidence of either species was recorded during the survey.

12. White-clawed crayfish

12.1 **Methodology**

An assessment involves a slow methodical walk along the accessible parts of the watercourse whilst making a visual investigation of the bed and banks looking for any evidence of crayfish activity, such as holes within the side banks, and suitable refuge locations, on the stream bed.

13.2 **Limitations**

No limitations were incurred.

13.3 **Existing records**

Phillips Ecology is not aware of records of the species on the Hermitage stream

13.4 **Results**

No evidence of white-clawed crayfish or other crayfish species nor suitable refugia that could support the species were recorded during the survey. The heavily modified nature of the riverbanks did not provide any suitable locations for burrowing, and the gravel substrate in the riverbed consisted of small pebbles and appeared to lack any large refugia that would provide shelter for crayfish, except very young individuals.

13.5 **Assessment**

When assessed against the criteria in Table 3 the watercourse was considered to be unsuitable for crayfish other than in a transient nature.

13. Discussion and Assessment of Impacts

13.1 Overview

The proposals are for the replacement of the current path, with a wider multi use path, adding a small extension onto the northern section. Impacts will be assessed against these proposals.

13.2 31.2 Relevant legislation and policy

Circular 06/2005 identifies that Applicants should not be required to provide information on protected species unless there is a reasonable likelihood that they will be present and affected by the proposed development. The site is considered to support habitats with suitability and potential for protected species and these may be affected by the proposed development. Therefore, the proposal triggers 'reasonable likelihood' under the Circular.

The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations) may apply should protected species be confirmed on site.

In the case that a European protected species is found to be present and impacted by the proposal, the local planning authority will be required to engage with the Habitat Regulations. Permission will be granted unless:

- a) the development is likely to result in a breach of the Habitats Regulations, and
- b) is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law (under licence).

When considering whether Natural England would not be unlikely to grant a licence for the identified impact, the local planning authority must consider the three tests which are set out in the Habitat Regulations:

1. the consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment' (Regulation 53(2)(e));
2. there must be 'no satisfactory alternative' (Regulation 53(9)(a)); and
3. the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

Natural England will grant a licence if the development proposal is able to meet the three tests.

13.3 Designated sites

There are no statutory designated sites within a 2 km search radius. However, several highly designated sites are located approximately 3 km to the south. The proposed works are not expected to result in any direct or indirect impacts on these sites. In fact, planned enhancements to the site are anticipated to increase its recreational value and support wider mitigation objectives by encouraging use of this area as an alternative to more sensitive locations.

Additionally, the creation of an improved pathway through the site is expected to provide a clearly defined route for visitors, which may help reduce trampling and diffuse pressure on the surrounding habitats.

The proposed development will result in direct impacts to a Site of Importance for Nature Conservation (SINC) (see Table 1), primarily due to the loss of habitat within the designated area and the potential for increased recreational pressure.

Direct Loss of Habitat:

The widening of the existing path and the addition of a new section will lead to the removal of habitat within the SINC, specifically lowland deciduous woodland. Although the SINC is designated for its grassland interest (see Table 1), the development will still result in a measurable loss of SINC area. This impact must therefore be appropriately mitigated through habitat creation and enhancement measures within the wider SINC.

As outlined below, the formalisation of the path could also reduce damaging footfall across more sensitive parts of the SINC by consolidating usage along a defined route. This may help limit the spread of informal desire lines and prevent wider damage to habitats within the SINC.

Recreational Impacts:

The proposed footpath largely follows the alignment of an existing informal route. While a short section deviates from designated pathways, it corresponds with established desire lines, including one that directly matches the proposed alignment. As such, the development is unlikely to result in a significant increase in recreational pressure on the SINC.

On the contrary, formalising the route may help consolidate foot traffic and reduce the proliferation of informal paths, thereby minimising habitat fragmentation and trampling. Given the existing pattern of use, the proposal is not expected to increase overall footfall. Furthermore, during wetter months, the improved surfacing of the new path may reduce ground erosion and disturbance by encouraging users to remain on the defined route.

13.4 Habitats

The proposed expansion of the footpath largely follows the existing path alignment, with most of the works falling within the current footprint. However, some loss of habitat will occur along the path edges, and the extension will cut through a section of woodland, albeit along an existing informal track. Within this woodland section, some impact to

ground flora is anticipated, as a varied plant community has established along the path margins due to increased light availability from breaks in the canopy.

In the southern portion of the site, the works will primarily affect areas of scrub and modified grassland, both of which are of relatively low ecological value. The overall effect here will be negligible.

Two bridge crossings are proposed at the north-western end of the site, one over the main stream and another over a swale. Both structures are designed as clear-span bridges, ensuring that no piers or supports are placed within the watercourses. The swale is seasonally wet and holds water intermittently throughout the year.

The design minimises physical disturbance to the stream channel and adjacent riparian zone beneath each bridge. The stream section in this area is of relatively low ecological value, being heavily shaded and lacking in significant riparian vegetation. Nevertheless, the introduction of a formal crossing point may inadvertently increase public access to the stream itself, particularly from dog walkers, which could lead to erosion of the banks and degradation of the habitat.

To mitigate this potential impact, it is recommended that fencing is installed along both banks for a distance of approximately 100 metres either side of the bridge. This would help discourage direct access to the stream.

13.5 **Bats**

The site is considered to provide high suitability for roosting and foraging bats, due to its connectivity to the wider landscape and presence of highly suitable habitats for foraging, such as the stream corridor. As the plans widen the existing path and have a limited impact on the surrounding habitats, the proposed works are of a scale that would not be expected to impact foraging and commuting bats. In addition, no loss of trees that could support roosting bats are anticipated.

13.6 **Badgers**

Badgers are considered to be absent from the site in terms of setts, however it is likely that badgers are present within the wider area, especially the woodland, and could pass through the site when foraging. Potential impacts to badgers are primarily associated with the construction phase, particularly if deep excavations are left uncovered overnight, posing a risk of entrapment..

13.7 **Hedgehog**

No evidence of hedgehogs (*Erinaceus europaeus*) was recorded during the survey; however, the site as a whole provides suitable habitat for foraging. Potential impacts to hedgehogs are primarily associated with the construction phase, particularly if deep excavations are left uncovered overnight, posing a risk of entrapment. Additionally, vegetation clearance and storage could present a hazard if piles of cut vegetation are left undisturbed for extended periods, as these may be used for shelter or resting by hedgehogs.

13.8 Reptiles

Small sections of the site support suitable reptile habitat, particularly where woodland has been partially cleared or along the edges of grassland areas. However, these areas are fragmented and subject to frequent disturbance, significantly reducing their value. Potential impacts to reptiles could arise from vegetation clearance, excavation works, or vehicle movements across the site. Given the limited extent and degraded condition of these habitats, the site is considered to offer low suitability for reptiles, and the likelihood of their presence is considered low.

13.9 Breeding birds

Suitable breeding bird habitat can be found along much of the site, predominantly within the woodland and scrub.

Impacts on nesting birds will be associated with the removal of any suitable bird nesting habitat if carried out during the breeding bird season. This is generally seen as extending from March to the end of August, although may extend longer depending on local conditions.

13.10 Hazel Dormice

Suitable habitat for hazel dormice is present throughout the proposed development area. The main impacts are likely to result from vegetation removal, particularly in the northern section where the path extension passes through a woodland area. There is potential for direct impacts to dormice if the route necessitates the removal of significant stands of hazel or other structurally suitable vegetation.

13.11 Otter and Water Vole

The application site itself is considered unsuitable for supporting otter and water vole, except on an occasional basis as individuals disperse or forage through the site. The proposals involve works to the footpath, the majority of which is not on the banks of the stream and therefore depending on the working methods employed should have little impact on the stream.

To ensure this, a Construction Environmental Management Plan (CEMP) will be required to outline specific measures to protect the stream corridor and avoid disturbance to any transient wildlife, including otters and water voles, during the construction phase

13.12 White-clawed crayfish

The application site is considered unsuitable for the species, and it is considered unlikely that it would be present on the section of the Hermitage stream where the works will be carried out, therefore impacts are not anticipated

14. Requirement for further surveys

Further surveys are required where there is a reasonable likelihood that a protected species will be present and impacted by the proposed development. An assessment into the requirement for further surveys is presented below, however in summary, no further surveys are considered necessary.

It is important that planning decisions are informed by the most up-to-date ecological survey information. As a result, there is a limited time frame that phase 1 and phase 2 surveys are valid before becoming outdated. This time frame can vary depending on any changes to the proposed project plans, but it is generally considered that phase 1 ecological surveys are valid for a period of 18 months (CIEEM, 2019). Where projects run for a longer period than 18 months, there may be the requirement to carry out further ecological surveys to ensure planning authorities have the most up-to-date survey information in order that they can make well informed, evidence-based decisions.

14.1 Designated Sites

No further surveys are considered necessary in respect of designated sites.

14.2 Habitats

No further surveys are considered necessary for understanding impacts on the habitats on the site.

14.3 Bats

No further surveys are recommended with regard to roosting, foraging or commuting bats.

14.4 Badger

No further surveys are required with regard to badgers. However, precautionary mitigation measures, as outlined in Section 15, may be necessary if deep excavations are required for the new structures and are to be left open overnight.

14.5 Hedgehog

No further surveys are required with regard to hedgehogs. However, precautionary mitigation measures, as outlined in Section 15, may be necessary if deep excavations are required for the new structures and are to be left open overnight.

14.6 Reptiles

No further surveys are considered necessary for reptiles.

14.7 Breeding birds

Subject to the precautionary mitigation measures set out in Section 15, no further surveys are considered necessary in respect of breeding birds.

14.8 Hazel Dormice

A survey may not be required, depending on the extent of vegetation removal necessary along the proposed route, particularly in the northern extension. Given the presence of local records of dormice, it is assumed that the species will occur on site. Given the small scale of habitat removal proposed (i.e. trimming back of woody vegetation), works can proceed under a precautionary method statement, provided that suitable avoidance and mitigation measures are implemented from the outset.

14.9 Otter and water vole

No further surveys are considered necessary.

14.10 White – Clawed crayfish

No further surveys are considered necessary.

15. Mitigation recommendations

15.1 Introduction

The overarching aim of the ecological survey and assessment work carried out at the site is to inform the planning proposals in order to demonstrate how the development can proceed whilst avoiding or mitigating impacts on ecological receptors. The 'mitigation hierarchy' is an accepted approach which guides this process. The first consideration should always be to design a scheme that avoids the identified impact. Where this is not possible the next step should be to mitigate any impacts that cannot be avoided. The third, which should be used as a last resort, is compensation: this should only be used to offset any unavoidable impacts.

15.2 Designated sites

No statutory designated sites are anticipated to be directly affected by the proposed works. However, the development does intersect with a SINC, specifically, Neville's Park Areas 2 and 3. This will result in a loss of existing habitat within the SINC boundary and therefore requires appropriate mitigation.

Mitigation should focus on delivering habitat compensation either through targeted habitat creation or through the enhancement of retained areas within the SINC. Suitable enhancement measures may include woodland management techniques such as selective thinning or coppicing to increase structural diversity, or improved grassland management to promote floristic diversity and habitat quality.

To secure and implement these enhancements effectively, a Landscape and Ecological Management Plan (LEMP) will be required. The LEMP should outline the long-term management objectives, specific enhancement measures, and the mechanisms for monitoring and adaptive management to ensure biodiversity gains are delivered and sustained over time.

Given the sensitivity of the site, any potential adverse effects on the SINC must be carefully monitored throughout the construction phase. It is therefore recommended that a Construction Environmental Management Plan (CEMP) be prepared. This document should outline protocols for minimising ecological harm and include specific measures covering the following key areas:

- Vegetation protection and avoidance zones
- Timing of works to avoid sensitive periods
- Pollution prevention and runoff control
- Site access and machinery movement restrictions
- Ecological watching brief or toolbox talks where necessary

This approach will help ensure that biodiversity interests within the SINC are protected and that impacts are appropriately mitigated and managed throughout the construction and operational phases of the development.

15.3 Habitats

Hermitage Stream

Construction Phase

In order to ensure that adverse effects on the Hermitage Stream are avoided, the following measures are proposed during the construction phase of the development:

- The key factor is safeguarding against water pollution during the construction phase will be the diligence of the site manager and operatives. Therefore, the site manager and all site operatives should be made aware of the presence and location of the Hermitage Stream and should understand the requirement to ensure that construction works do not encroach towards the watercourse. All pollution prevention measures will be in line with the requirements set out within the Environment Agency's General Guide to Prevention of Pollution (PPG 1), works and maintenance in or near water (PPG5) and maintenance of structures over water (PPG23) and Control of water pollution from construction sites CIRIA 5321.
- Any site compound set out for the storage of equipment, materials or machinery and cutting or mixing materials associated with the demolition/construction works should be located as far from the water course as possible and not within 15m of the watercourse. All stockpiles of loose material should be covered to prevent run-off during periods of rain or wind dispersal of dust.
- Heras fencing or equivalent with dust sheeting to provide an adequate visual and dust boundary between the site and watercourse must be erected between the bridge construction zone and watercourse prior to commencement of construction activities.
- If possible, store fuel and oils off site. If this is not possible then a proprietary bunded storage facility of the smallest practicable size located as far from the watercourse as possible and in all cases at least 15m from the stream.
- If possible, undertake refuelling off site. If this is not possible refuelling should take place as far from the watercourse as possible on an impermeable surface. In practice this is likely to comprise a hardstand portion of the driveway.
- A spill kit must be maintained on site.
- Any construction lighting must be directed away from the watercourse at all times.
- Riparian zones adjacent to the watercourses in the scheme footprint shall be protected and vegetation retained.

Operational Phase

To reduce long-term disturbance and degradation of the Hermitage Stream and its riparian zone, the following mitigation measures are recommended during the operational phase of the development:

- **Streamside Fencing:** Install low-level, small-gauge fencing along both banks of the stream for a distance of approximately 100 metres either side of the new bridge crossing. This will discourage access to the water by dogs and pedestrians, reducing trampling, bank erosion, and potential pollution from faeces or litter.
- **Interpretation Signage:** Erect discreet but informative signage at access points near the bridge to educate the public about the sensitivity of the watercourse and its ecological importance. Signage should encourage users to remain on the formal path and avoid disturbing adjacent habitats.
- **Dog Waste Bins:** Install additional dog waste bins at both approaches to the bridge crossing to reduce dog fouling within the riparian zone. These bins should be emptied regularly as part of ongoing site maintenance.
- **Monitoring and Maintenance:** The fencing and signage should be periodically inspected and maintained to ensure they remain effective. Path edges adjacent to the stream should be monitored for signs of erosion or encroachment and remediated as needed.

Habitats

The mitigation measures proposed in section 15.2 will deliver appropriate mitigation for all remaining habitats within the application site during the construction and operational phases of the development.

Biodiversity Metric Calculations have been carried out in order to provide measurable outcomes which demonstrate that the project will deliver quantifiable benefits to biodiversity compared to the baseline situation.

15.4 Badger and Hedgehog

In order to avoid harm to hedgehogs during the construction works the following precautionary measures will be employed:

- Any accumulations of brash, including those already existing, will be dismantled by hand in a sensitive and careful manner.
- No bonfires will be made or lit on site.
- All trenches will be left covered at night. They must be checked in the morning, and any trapped animals allowed to escape, before they are filled in.

15.5 **Breeding birds**

Care should be taken that the development does not disturb breeding birds. The bird nesting season is taken to be March to August inclusive. Any removal of suitable nest habitat will either need to be undertaken outside of this period or else checked by an experienced ecologist to ensure that no nesting birds are present within 24 hours of its proposed removal. If occupied nests are present then the nest must not be removed, and clearance can only recommence once the nest becomes unoccupied of its own accord.

15.6 **Hazel Dormice**

The following measures are to be implemented in relation to the trimming back of vegetation within the site. Should more substantial clearance be required, such as the felling of trees or woody vegetation, then a European Protected Species Mitigation (EPSM) licence may be necessary, in accordance with Section 13.2:

- The clearance works should take place between November to March to avoid both impacts to breeding birds and reduce the likelihood that dormice will still be nesting above ground. The habitats do not support any suitable hibernation opportunities.
- The woody vegetation subject to trimming back must be visually inspected by a suitably experienced ecologist before removal to ensure no dormouse nests are present.
- The clearance should be completed by hand in a sensitive manner to minimise the chance of disturbing/killing dormice.

16. Enhancements

The delivery of biodiversity enhancement on development sites is promoted by the National Planning Policy Framework (NPPF) and Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006.

Where opportunities exist it is best practice to provide enhancement features which encourage greater biodiversity within development sites in accordance with the NPPF and Local Planning Authority's responsibilities under the NERC Act.

Enhancement measures should aim to reflect and strengthen the existing ecological characteristics of the site and its surrounding landscape, offering additional habitat for species already known to occur locally.

- Where vegetation is removed from the sides of the path, this should be replaced with suitable species. In the woodland this should assist in creating species rich rides along the edges of the path. In the grassland areas this should diversify the structure of the grassland, with the addition of species such as yellow rattle, which will help suppress aggressive grass species.
- In the woodland, the edges should be graded so as to help produce a more structured ride. This means coppicing suitable species such as hazel and willow (in accordance with sections 15.5 and 15.6). These could also be laid, to promote sections of dense scrub.
- Improvement of the scrub structure should be made in the southern section, either coppicing or laying the leggy sections to develop a dense, low scrub section that would be more suitable for breeding birds as well as forming a dense barrier to more sensitive sections such as the stream.
- In woodland areas lacking natural cavities or veteran trees, install a variety of bird and bat boxes to increase nesting and roosting opportunities. Boxes should be positioned at appropriate heights and orientations to optimise their use by target species.
- Where path construction results in surplus soil, form small, south-facing bunds in sunny, open areas. These features can provide valuable nesting habitat for invertebrates such as mining bees *Andrena* spp. and digger wasps *Sphecidae* spp..
- Where wider works are needed for enhancement of the SINC, it is recommended that further woodland enhancement occurs, with targeted thinning to help promote structure and field layer development as well coppiced rotation of the midstory, especially within the hazel stands.

17. Conclusion

The extended Phase 1 Ecological Assessment has evaluated the presence of protected species and the potential impacts associated with the proposed development. Overall, the scheme has a relatively small footprint, with much of the proposed route aligning with the existing path network.

The woodland area to the north of the site, however, represents the most ecologically sensitive section, particularly given the confirmed presence of dormice. As such, a precautionary approach will be essential in this area to mitigate any potential adverse impacts.

There is also clear potential for habitat enhancement throughout the site. This should focus on improving the structure and diversity of the existing vegetation, with opportunities to replace any habitat loss with a more species-rich plant community.

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Appendix 1 – Site proposals

Bushy Lease - Proposed Habitat



Key

- Red Line Boundary
- Habitats**
- Artificial unvegetated, unsealed surface
- Bioswale
- Developed land; sealed surface
- Lowland mixed deciduous woodland
- Mixed scrub
- Modified grassland
- Other neutral grassland
- Watercourse footprint
- Tall forbs

Contains Google imagery
Scale 1:4000



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