



Ecological Appraisal

**Land at 67, Park Lane
Knebworth
Hertfordshire
SG3 6PW**

August 2025

For and on behalf of:
East Herts Gospel
Hall Trust
The Bungalow
Ermine Street
Colliers End
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Date of Report

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Declaration

This report has been produced endeavouring to follow the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct and ecological information has been provided in accordance with British Standards BS 42020 2013-Biodiversity-Code of practice for planning and development.

Whilst every effort has been taken to ensure this report accurately identifies potential ecological constraints to development or the likely presence or absence of species and the spatial and temporal use of the site by such species, it must only be viewed as a snap shot in time and reflects the ecological status of the site at the time of survey.

No liability can be assumed for ecological changes that may or may not occur on the surveyed site after the production of this report. The author of this report must be consulted as to the current applicability of the report if there are any seasonal delays in the use of this report.

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Executive Summary	1
1.0 Introduction	3
1.1 Background	3
2.0 Planning Policy and Legislation	5
2.1 Relevant National and Local Planning Policies	5
2.2 Local Plan Policies	6
2.3 Legislation.....	6
3.0 Methodology	8
3.1 Field Survey	8
3.2 Scoping for Protected & Priority Species	8
3.3 Site Assessment Limitations	8
3.4 Survey Limitations	9
3.5 The Statutory Biodiversity Metric	10
3.6 Desk Study.....	10
3.7 Determining Biodiversity Significance	11
4.0 Resulting Baseline Ecological Conditions & Preliminary Evaluation	13
4.1 Designated Sites of Nature Conservation Importance	13
4.2 Habitats.....	13
4.3 Protected and Priority Species.....	15
4.4 Results of Statutory Biodiversity Metric On-Site Baseline Calculations	18
5.0 Ecological Evaluation, Redevelopment Constraints and Conclusion	19
5.2 Further Surveys.....	19
5.3 Biodiversity Net Gain.....	20
5.4 Ecological Enhancements for Species	21
6.0 References.....	22
7.0 Appendix 1	23
7.1 Habitat Map	23
8.0 Appendix 2	24
8.1 Botanical Species Table	24
9.0 Appendix 3.....	25
9.1 Biodiversity Net Gain Headline Results	25

Executive Summary

This report details the results of an Ecological Appraisal (EA) in support of a planning application being prepared for a small application site - the private garden of number 67, Park Lane, Knebworth, in Hertfordshire. The proposals include the construction of a new Community Hall with an associated driveway, areas of parking, wildflower planting and new tree planting.

This EA has been conducted by a Suitably Qualified Ecologist, according to the general guidance of the Chartered Institute of Ecology and Environmental Management (CIEEM), with no access constraints. The application site has been assessed for its ecological value and the habitats present have been classified using the UKHab system. It must be acknowledged that some of the application site showed evidence of vegetation and tree clearance when surveyed and, as such, a number of habitats have been assumed to have been present and assessed based on anecdotal evidence from the owner of 67, Park Lane, Knebworth and aerial photography.

The application site is the garden of number 67, Park Lane, Knebworth. It has been reported to have been comprised of a number of small individual trees, within a vegetated garden. The vegetated garden on site is considered to be common geographically and of no higher value than Site level. It is not considered to be a protected or Priority Habitat and, as such, the development of the site is not predicted to have a significant adverse effect on important habitats, at this time.

Most of the small individual trees have been cleared and, of the remaining small trees, less than half were considered to be of some, very limited nesting bird potential, but of no value to roosting bats. However, as the current proposals show no trees are to be removed, the development of the site is not considered likely to impact upon nesting bird species, at this time.

With regard to other important species, the application site is only considered to potentially support transient hedgehogs (*Erinaceus europaeus*) and polecat (*Mustela putorius*), passing through the site. Measures will therefore need to be taken during construction to avoid the risk of injury to this Species of Principal Importance. This will be achieved by ensuring all open trenches and/or pits are

either covered at night or a mammal ladder provided and installed each night, to allow mammal species to escape, should they fall in. Other than these Priority Species, the proposed development is not predicted to have a significant adverse effect on protected and/or Priority Species or Habitats, at this time.

The Statutory Biodiversity Metric has calculated the application site's baseline to be worth 1.35 Habitat Units (HUs). The proposed site layout has been provided and calculations of the proposed site layout result in a Biodiversity Net Loss of -12.84% in Habitat Units. The planting of a new length of native hedgerow, measuring approximately 19m will result in a Biodiversity Net Gain of +100% in Hedgerow Units.

The development needs to achieve a minimum of +10% increase in Habitat Units and the deficit in Habitat Units (0.31) will be addressed – likely by the purchasing of credits from a supplier.

1.0 Introduction

1.1 Background

- 1.1.1 A planning application is being prepared for the development of a site which comprises the garden of number 67, Park Lane, Knebworth, in Hertfordshire. Proposals are for the construction of a new Community Hall with an associated driveway, parking areas and a garden.
- 1.1.2 The purpose of this EA is to detail the results of an initial ecological appraisal of the application site with the aim of identifying potential biodiversity constraints that may affect the development, inform mitigation measures and establish the potential need for further species surveys considered necessary under UK legislation and both national and local planning policies. Specifically, these constraints typically involve the provision of Biodiversity Net Gain (BNG) and the protection and enhancement of protected and Priority Species and Habitats.
- 1.1.3 This ecological study has been commissioned by East Herts Gospel Hall Trust, based in Ware, Hertfordshire. The site with which this study is concerned is referred to throughout the report as the application site. The aerial photo below illustrates the indicative extent of the application site and shows it in its geographical context, within its landscape surroundings.



Plate 1: Aerial photo with indicative application site boundary

- 1.1.4 The report's author is Keith Seaman who holds a Bachelor of Science Degree in Environmental Studies; Agri-Ecosystem Management, a Diploma and Certificate of Higher Education in Ecology and Conservation. His professional qualifications include membership of the Royal Society of Biology (RSB) registered as a Chartered Biologist and professional grade membership of The Chartered Institute of Ecology and Environmental Management (CIEEM). Keith Seaman also holds Natural England Class and Mitigation licences for all species of bat, badger (*Meles meles*), great crested newt (*Triturus cristatus*), otter (*Lutra lutra*), barn owl (*Tyto alba*) and dormouse (*Muscardinus avellanarius*).
- 1.1.5 Keith Seaman has been an academically qualified Ecologist since 1995 and a professionally qualified Ecologist since 2004 and since then has gained considerable experience working in both the public and private sectors carrying out Ecological Impact Assessments as well as protected species appraisals and developing mitigation strategies.

2.0 Planning Policy and Legislation

2.1 Relevant National and Local Planning Policies

National Planning Policy Framework

2.1.1 The National Planning Policy Framework (NPPF) superseded Planning Policy Statement 9 (PPS9) in March 2012. The NPPF 2024 states that 'planning policies and decisions should contribute to and enhance the natural and local environment by', in part;

- 'Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.'

It also states that 'when determining planning applications, local planning authorities should apply the following principles';

- 'If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused
- Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains

for biodiversity or enhance public access to nature where this is appropriate.'

2.2 Local Plan Policies

2.2.1 The North Herts Local Plan 2011 - 2033 was adopted in November 2022 and is the current local level policy affecting the area in which the application site is located. The following policies may, in part, be of relevance to this study;

'Policy SP12: Green infrastructure, landscape and biodiversity

We will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhanced. We will:

- a) Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;*
- b) Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;*
- c) Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:*
 - *Internationally designated sites*
 - *Nationally designated sites*
 - *Locally designated sites;*
 - *Non-designated sites that include important habitats and species*
- d) Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity; and*
- e) Protect other open spaces and support provision of new and improved open space.'*

2.3 Legislation

The Conservation of Habitats & Species Regulations 2017

2.3.1 The Conservation of Habitats and Species Regulations 2017 in the UK implement the EC Habitats Directive in the UK. These regulations mainly deal with the protection of sites that are important for nature conservation in a European context (eg Special Areas of Protection [SACs] and Special Protection Areas [SPAs]). The legislation also gives protection to certain species of flora and fauna.

- 2.3.2 The Regulations makes it an offence to deliberately capture, kill or disturb wild animals and it is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act (WCA)

- 2.3.3 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CROW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive).

Natural Environment & Rural Communities Act (NERC)

- 2.3.4 The NERC Act of 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations. Section 41 of the Act identifies species and habitats considered Priority for conservation.

3.0 Methodology

3.1 Field Survey

- 3.1.1 This report has been produced following the *Guidelines for Preliminary Ecological Appraisal* 2017 (Chartered Institute of Ecology and Environmental Management). Habitats have been described based on the methodology from the UK Habitat Classification (Ref. 4). In some circumstances habitat descriptions and mapping may have been adapted to suit non-standard site-specific conditions.

3.2 Scoping for Protected & Priority Species

- 3.2.1 The habitat survey has been extended to include a scope of the application site's habitats as to their likely importance or potential to support protected or Priority Species and Habitats, as identified under the following legislation; the Habitats & Species Regulations 2017, the Wildlife & Countryside Act (as amended) 1981, the Protection of Badgers Act 1992, the Hedgerow Regulations 1997, International Union for Conservation of Nature (IUCN) Birds of Conservation Concern (BoCC) Red and Amber Lists and the Natural Environment & Rural Communities (NERC) Act 2006.
- 3.2.2 Some species and species groups have been scoped out of this EA because of the lack of biological records, limitations in geographical distribution and the absence of species-specific suitable habitat and connectivity within or adjacent to the application site. Only those protected and/or Priority Species and species groups deemed likely to be present on site or affected by the proposals have been included in this EA.
- 3.2.3 The EA was carried out on the 18th June 2025, by Mr Keith Seaman BSc., Principal Ecologist and Ms Jasmine Stephenson BSc., Assistant Ecologist with ELMAW Consulting Ltd. Weather conditions on the day were suitable for surveying – warm, dry and with a light breeze. There were no restrictions to access.

3.3 Site Assessment Limitations

- 3.3.1 At the time of the assessment, the majority of the application site was found to have been previously cleared of most of its small individual trees. Therefore, a desk study, discussions with the applicant and the examination of recent and historical aerial imagery have been used to assess the presence of habitat,

before clearance. The baseline BNG for the site has accounted for this in its calculations and habitats have been determined and condition-scored based on guidance published in the *Statutory Biodiversity Metric User Guide* July 2024. This states the following;

'Accounting for degraded sites

If a habitat has been cleared, destroyed or degraded previously and you should use an earlier baseline, you must:

- *use the pre-degradation habitat type as the site's baseline*
- *evidence how this habitat type and condition has been determined in the user comments*
- *record the habitat as lost within the biodiversity metric tool*
- *account for the time between the habitat loss and compensation using the 'delay in starting habitat creation or enhancement' function*

You can use data records, imagery and historic field surveys to determine pre-degradation habitat types. Use a precautionary approach when assigning condition scores. For example, assign a higher condition score in the absence of contrary evidence.'

3.4 Survey Limitations

3.4.1 At the time of the survey it is clear that a number of the application site's small trees had been felled and cleared and, as such, it is possible that some species that may have been present may not be accounted for due to the absence of evidence. Whilst some plant species listed in this report are considered to be very typical of the type of remnant habitats seen, it is not possible to give a fair account of all the species that may have been present. As such, habitat types and species have been classified and acknowledged based on remnants of cleared habitats and areas of similar habitats within the locality of the site. This report is not designed or required to present a complete inventory of flora/fauna.

3.4.2 As to the reliability of the assessment for protected and Priority Species, it must be further acknowledged that this EA is based on the presence or previous presence of suitable habitat, available local biological records, geographical distribution and habitat connectivity to support such important species and not on qualitative species-specific surveys. Where the potential for protected and Priority Species has been identified, further species-specific surveys may be considered necessary to be confident of either a positive or negative conclusion as to the presence of protected species on site. Where a European

Protected Species Mitigation (EPSM) licence is required, species survey data of the current season and year of the application is required by Natural England.

- 3.4.3 The Chartered Institute of Ecology and Environmental Management (CIEEM) advises that where mobile species such as reptiles and bats are concerned, this report is likely to be out of date within 12 - 18 months and will need updating.
- 3.4.4 The study specifically addresses the issues of potential development constraints affecting protected and Priority Species and Habitats. Recommendations for mitigation and compensation of impacts on ecology may need to be re-addressed and/or re-assessed should site development plans change.

3.5 The Statutory Biodiversity Metric

- 3.5.1 The Statutory Biodiversity Metric uses habitat as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity value. This value is then adjusted, depending on the condition and location of the habitat, to calculate 'biodiversity units' for the specific project or development. The Statutory Biodiversity Metric incorporates separate calculations for linear habitats that require a different method of measurement such as hedgerows and lines of trees, rivers and streams, if present.
- 3.5.2 The Statutory Biodiversity Metric can be used to measure both on-site and off-site biodiversity changes for a development and can be used to measure the change in biodiversity achieved by different land management interventions. The Metric also accounts for some of the risks associated whenever new habitat is created or existing habitat is enhanced. The Metric calculates the change in biodiversity resulting from a development by subtracting the number of pre-intervention or 'baseline' biodiversity units (ie those originally existing on-site) from the number of post-intervention units (ie those projected to be provided after the development or change in land management).

3.6 Desk Study

- 3.6.1 Available biological records of protected and Priority Species and Habitats from a radius of 2km, hereby known as the Zone of Influence (Zoi) around the application site have been sourced from the Hertfordshire Environmental Records Centre (HERC) on the 20th May 2025. The results of the data search request were received on the 20th May 2025. In addition, all international sites

of nature conservation importance within a 10km Zol, nationally important sites within a 5km Zol and local sites within a 2km Zol of the application site have been sourced.

- 3.6.2 Only species records from the last ten years have been included as it is considered that records older than this are not sufficiently recent to be materially relevant to this study.
- 3.6.3 Google earth aerial photographs and DEFRA's Magic Map Application images have been examined of the application site and surrounding landscape as have the relevant Ordnance Survey Explorer Maps at a 1:25,000 scale.

3.7 **Determining Biodiversity Significance**

- 3.7.1 The Institute of Ecology and Environmental Management (IEEM) in 2016 identified various ecological features and resources which are likely to be important in terms of biodiversity. These are likely to include habitats, species and species groups and ecological communities and are determined on the basis of a number of factors which includes size, rarity, conservation status and geographical distribution. Assigning a biodiversity value on a geographical scale is based on the above principles and geographical value is assigned to international, national/regional, county, district, parish/neighbourhood and site level only.

3.7.2 Geographical Range of Reference

Value Category	Site or Ecological Feature
International	All internationally important Sites or candidate/proposed Sites. Regularly occurring, nationally significant population of protected or internationally important species. A viable area of habitat type listed in Annex 1 of The Habitats Directive or smaller areas of such habitat which are essential to maintain the viability of a larger whole
National/ Regional	SSSIs and other nationally designated Sites. A viable area of a priority habitat identified in the UKBAP or an area of such habitat which are essential to maintain the viability of a larger area Regularly occurring, regionally or nationally significant population of European Protected Species or habitats Regularly occurring, locally significant population of a regionally or nationally important species.
County	County designated Sites (CWS) Other Sites with BAP priority habitats or species of appreciable value not included in the above. Regularly occurring, locally significant population of a County important species. Local Nature Reserves and other viable areas of key habitat identified in the County or LBAP.

District	Area of habitat identified in a District/Borough BAP and other natural or semi-natural Sites of significant biodiversity. Regularly occurring, locally significant population of a District/Borough important species during a critical stage of its life cycle.
Parish/Neighbourhood	Areas of habitat considered to appreciably enrich the local habitat resource within approximately 2km of the application site, parish or neighbourhood.
Site level only	Sites with limited biodiversity, providing some biodiversity enrichment at project site only.

- 3.7.3 The valuation, levels of geographical importance and significance have been determined following the guidance of the CIEEM in the *Ecological Impact Assessment in the UK 2018* (updated 2019) and the *Handbook of Biodiversity Methods. Survey, Evaluation and Monitoring 2005* and have been tabulated and appended to this report.
- 3.7.4 The baseline conditions of the application site have been determined for the year 2025.

4.0 Resulting Baseline Ecological Conditions & Preliminary Evaluation

4.1 Designated Sites of Nature Conservation Importance

- 4.1.1 There are no international sites of nature conservation importance within a 10km Zol of the application site. There is a single national site of nature conservation importance within a 5km Zol; Knebworth Woods, designated a Site of Special Scientific Importance (SSSI) and located approximately 1.9km to the north-west of the site and separated from the application site by the A1M motorway.
- 4.1.2 There is a single Local Nature Reserve (LNR) within a 2km Zol of the application site – Mardley Heath LNR, located approximately 1.5km to the south of the application site. Additionally, there are ten Local Wildlife Sites (LWSs) within a 2km Zol, the closest of which is Park Wood/Home Wood (ref: 29/036). This site is located approximately 350m to the west of the application site, separated from the application site by the A1M motorway.

4.2 Habitats

- 4.2.1 It has been concluded that, based on communications with the application site's owner, aerial imagery, remnant vegetation and neighbouring land, that the application site forms the private garden of number 67, Park Lane, Knebworth.
- 4.2.2 Excluding the small area of urban Developed land; sealed surface in the north-eastern corner of the site, the vegetative habitats identified on site include:
- Individual Trees – Urban Trees
 - 828 Vegetated Garden

Individual Trees – Urban Trees

- 4.2.3 The condition assessment scores for each tree (medium, large and extra-large sizes), along with their size, species and eligible criteria under the BNG metric have been tabulated below:

Tree no.	Species	Size	Condition	Criteria passed
T13	<i>Leylandii</i> sp.	Medium	Moderate	B, D, F

- 4.2.4 The single extra-large removed cedar of which the stump remains, as it has been removed, under the conditions of BNG, has to be condition-assessed as

being in good condition and assumed to have passed five of the six criteria (B to F).

- 4.2.5 Some of the remaining small trees within the application site (not included in the BNG calculations), specifically trees T13 to T19, are considered to provide some limited value to local wildlife, primarily nesting birds. These are considered to offer slightly better opportunities than those in the northern half of the site, due to their denser crowns, although they are still considered to only offer very low value, based on their young age class and the presence of better nesting opportunities within the immediate vicinity.
- 4.2.6 As such, the collective value of the trees within the application site is considered to be of Site level value only - they do not stand in isolation within the wider environment and their young age classes restrict their value to wildlife.

828 Vegetated Garden

- 4.2.7 The application site is the cleared rear garden of number 67, Park Lane, Knebworth - currently supporting an area of remaining unmanaged overgrown lawn and maintained amenity shrubs between the site and the neighbouring residential property. Prominent species within the remaining garden include perennial rye grass (*Lolium perenne*), cock's-foot (*Dactylis glomerata*) and yarrow (*Achillia millefolium*). A representative species list is appended to this report. Other areas of the site showing evidence of recent clearing are comprised of developing ruderal vegetation on bare soil, including species such as spear thistle (*Cirsium vulgare*), broad-leaved dock (*Rumex obtusifolius*) and white clover (*Trifolium repens*). This type of vegetation is very commonly found colonising cleared or heavily disturbed ground. It is very common throughout the UK and is not considered a protected or a NERC Priority Habitat. The developing ruderal vegetation within the garden is not considered developed enough to be of high value to wildlife but may offer some limited value to invertebrate species.
- 4.2.8 Due to the typical use and management of vegetated gardens (lawns), they typically support stress-tolerant plant species characteristic of these conditions, which are very common habitats throughout the UK. Whilst the area of remaining vegetated garden is not currently subject to regular management practices, the species identified within the lawn are considered typical of

residential garden flora. This habitat is not considered to be a protected or Priority Habitat. Due to the lack of management of the lawn, this habitat is considered to offer some limited value to wildlife, primarily invertebrates and small mammals, though its value is restricted by its size. As such, the vegetated garden is considered to be of Site value only. Vegetated garden is not subject to a BNG condition assessment.



Plate 3: Area of the unmanaged vegetated garden

4.3 Protected and Priority Species

Plants

- 4.3.1 There are two species of protected plant recorded within a 2km Zol of the application site within the past ten years – bluebell (*Hyacinthoides non-scripta*) and cornflower (*Centaurea cyanus*). These records are only to four-digit grid references, so exact locations cannot be ascertained.
- 4.3.2 Of these species, only bluebell – a woodland plant – may have been found within the application site, though this is considered unlikely based on the young age class of the remaining and felled trees, as bluebells are typically associated with ancient woodlands and or assart/ghost hedgerows. There was no evidence of bluebells found within the application site and, as such, the site is unlikely to be of value to this protected species at this time. In addition, the botanical survey of the site found no other evidence of protected or priority species of plant.

Invertebrates

- 4.3.3 There are seven species of moth and five species of butterfly recorded within a 2km Zol of the application site, within the last ten years. Whilst the site's developing ruderal vegetation may offer some limited feeding value to invertebrate species, the size of the habitat and lack of density of vegetation

growth (due to the removal of the former planted trees) means it is unlikely to offer value to large assemblages of important invertebrates at this time. When the application site was managed wholly as a vegetated garden, it is likely to have been of some likely moderate value to invertebrates, but not thought likely to be of high value to important assemblages of invertebrates, based on its small size, location and likely composition of the vegetation within the garden.

Amphibians

4.3.4 There is a single Priority Species of amphibian – common toad (*Bufo bufo*) – within the 2km Zol of the application site, recorded within the last ten years. All records are from the opposite side of the A1M motorway to the application site.

4.3.5 There are no ponds within the application site and the closest pond appears to be located approximately 260m to the south of the application site. The application site is not within the typical 250m dispersal distance of great crested newts from their natal ponds, nor is there habitat connectivity to ponds within 500m. As such, the application site is not considered to be of value to protected or Priority Species of amphibian, at this time.

Reptiles

4.3.6 There are two species of reptile – grass snake (*Natrix natrix*) and slow worm (*Anguis fragilis*) – recorded within 2km Zol of the application site, within the last ten years. The closest record of slow worm is from approximately 100m east of the application site.

4.3.7 The habitats within the application site do not, in their current early developing state, provide appropriate sheltering habitat for either slow worm or grass snake, although the presence of transient reptiles such as grass snakes within the site at any time should not be discounted. As such, the application site is unlikely to be of importance to reptile species at this time.

Birds

4.3.8 There are 67 specially protected and/or Priority Species of bird recorded within a 2km Zol of the application site, within the last ten years. Of these species only a small number, such as song thrush (*Turdus philomelos*), would potentially be found within the application site, though nesting opportunities are restricted to

some of the remaining cherry or leylandii trees. As nesting opportunities are so limited, the application site is considered to be of minimal value to nesting birds, at this time.

Bats

- 4.3.9 There are ten species of bat recorded within a 2km Zol of the application site within the last ten years; common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus*), Nathusius's pipistrelle (*P. nathusii*), brown long-eared (*Plecotus auritus*), barbastelle (*Barbastella barbastellus*), Natterer's (*Myotis nattereri*), Daubenton's (*M. daubentonii*), noctule (*Nyctalus noctula*), Leisler's (*N. leisleri*) and serotine (*Eptesicus serotinus*).
- 4.3.10 There is no suitable bat roosting habitat within the application site, and, based on the age of the planted trees that have now been cleared these were unlikely to have been important to roosting bats. The surrounding hedgerows and trees are likely to offer higher quality habitat to feeding and foraging bats, however, the application site itself is considered to be of negligible value to bats, at this time.

Other Important Mammals

- 4.3.11 Records of hedgehog, badger and polecat have been recorded within the 2km Zol of the application site, within the last ten years.
- 4.3.12 Hedgehogs are recorded in multiple places in Knebworth. Whilst the application site lacks appropriate sheltering habitats for hedgehogs, the linear boundary features (fencing) and connection to neighbouring gardens, which hedgehogs are known to exploit, would suggest that hedgehogs are likely to travel through the application site. As such, the potential for hedgehog presence within the application site cannot be discounted, but currently is thought not to be of high value at this time.
- 4.3.13 The two records of polecat are both from over 1km from the application site. Whilst it is not possible to discount the occasional transient polecat travelling through the site, the lack of appropriate sheltering habitat and size of the application site with regard to polecat prey species (rats and rabbits) availability suggest it is unlikely that the site is of value to polecat at this time.

- 4.3.14 The closest record of badger is located approximately 250m to the south-west of the application site, on the opposite side of the A1M motorway. No evidence of badger (snuffling, latrines) was identified during the site survey and the application site is not considered suitable for potential setts. As such, the application site is not considered important to badgers at this time.

4.4 *Results of Statutory Biodiversity Metric On-Site Baseline Calculations*

On-Site Habitat Baseline

Habitat	Area (ha)	Habitat Condition	Habitat Units
Developed land, sealed surface	0.001	N/A-other	0.00
Vegetated garden	0.149	Condition assessment N/A	0.30
Total	0.15		
Urban tree	0.0163 (0.0163 retained)	Moderate	0.13 (0.13 retained)
Urban tree	0.0765	Good	0.92
Total			1.35

On-Site Hedge Baseline

- 4.4.1 There are currently no hedgerows present on site.

5.0 Ecological Evaluation, Redevelopment Constraints and Conclusion

- 5.1.1 The application site is not designated as a site of nature conservation importance, neither is it a recorded site for supporting protected or Priority Species or Habitats. There is no habitat connection from the application site to international, national or local sites of nature conservation importance and, as such, the proposed development of the application site considering its small size is not considered likely to have a significant adverse impact on important sites.
- 5.1.2 The application site, situated in Knebworth, Hertfordshire, comprises the private garden of number 67, Park Lane, Knebworth. The vegetated garden habitat now present is considered common locally and of at most Site level value, and not considered geographically important. As such, the proposed development is not predicted to have a significant adverse effect on protected and Priority Habitats at this time.
- 5.1.3 Whilst some of the individual trees – primarily those in the southern half of the site – may offer some very limited nesting bird potential, their value to wildlife is restricted due to their age class. However, the current proposals show that none of these trees are due to be removed as a result of the redevelopment; as such, nesting bird species are not predicted to be impacted upon at this time.
- 5.1.4 It is considered likely that hedgehogs and/or polecats may move throughout the site; as such, measures will therefore need to be taken during construction to avoid the risk of injury to these mammals, particularly hedgehogs and possibly badgers travelling through the site. This will be achieved by ensuring all open trenches and/or pits are either covered at night or a mammal ladder - provided and installed each night, to allow mammal species to escape, should they fall in. Other than these protected species, the proposed development is not predicted to have a significant adverse effect on protected and/or Priority Species, at this time.

5.2 Further Surveys

- 5.2.1 Further species-specific surveys are not recommended at this time.

5.3 Biodiversity Net Gain

- 5.3.1 The National Planning Policy Framework (NPPF) 2023 requires local planning authorities, when determining planning applications, to contribute to and enhance the natural and local environment by; (among other things); "minimising impacts on and providing net gains for biodiversity...."

On-site Habitat Creation

On-site Habitat Creation	Area (ha)	Habitat Condition	Habitat Units
Developed land, sealed surface	0.0529	N/A - other	0.00
Other neutral grassland	0.097	Good	0.82
Urban tree	0.0814	Poor	0.23
Total	0.15		1.05

- 5.3.2 The redevelopment will result in the construction of a new Community Hall, associated parking, access driveway, wildflower planting and new tree planting. The site, post-development (including the retention of the medium-sized tree on site), will be worth 1.17 Habitat Units, resulting in a -12.84% biodiversity net loss.

On-Site Hedge Creation

Site Hedge Creation	Length (km)	Habitat Condition	Habitat Units
Native hedgerow	0.019	Poor	0.04
Total	0.019		0.04

- 5.3.3 A length of new native hedgerow comprising wildlife-beneficial species and measuring approximately 19m in total will be planted throughout the application site, as part of the soft landscaping proposals. This new hedging will be worth 0.04 Hedgerow Units and will achieve an +100.0% biodiversity net gain in hedgerow habitats where none exist at present.
- 5.3.1 The proposed biodiversity net gain measures discussed above are specific to this particular project and will form part of the design scheme for the application site. Their inclusion will ensure compliance with the NPPF and local planning policies. Should the design of the scheme change before being finalised, these measures may need to be reviewed.

- 5.3.2 In order to achieve the minimum +10% BNG the deficit of 0.31 Habitat Units will need to be made up by the purchase of BNG credits.

5.4 Ecological Enhancements for Species

Bird Boxes

- 5.4.1 It is recommended that two nest boxes for different species of bird should be erected – on retained trees, out of the reach of domestic cats. Siting can be advised by the Ecologist.

Bats

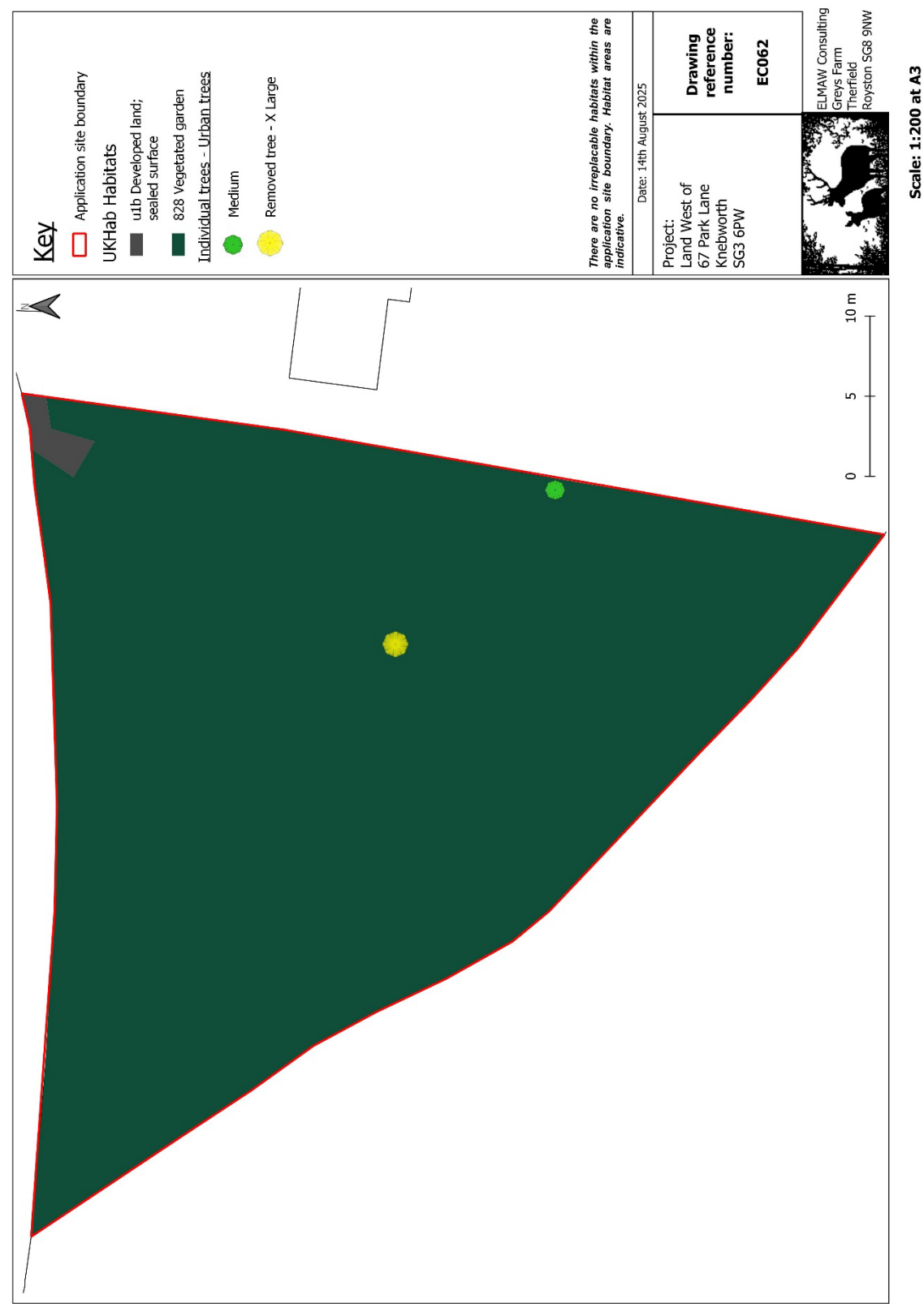
- 5.4.2 A cavity bat roosting tube will be installed – on the south-eastern gable end of the new Community Hall.
- 5.4.3 The ecological enhancements (and precautionary mitigation measures) detailed above are likely to be secured by an appropriate planning condition. This will ensure compliance with local and national policies.

6.0 References

- Ref. 1 Chartered Institute of Ecology and Environmental Management. 2017 *Guidelines for Preliminary Ecological Appraisal*
- Ref. 2 Chartered Institute of Ecology and Environmental Management. 2017 *Guidelines for Ecological Report Writing*
- Ref. 3 Joint Nature Conservation Committee. 2010. *Handbook for Phase 1 Habitat Survey* Revised re-print
- Ref. 4 UK Habitat Working Group (2018). *UK Habitat Classification*
- Ref. 5 Bat Conservation Trust. 2023 *Bat Surveys for Professional Ecologists Good Practice Guidelines 4th Edition*, Bat Conservation Trust, London
- Ref. 6 Sewell D, Griffiths RA, Beebee TJC, Foster J and Wilkinson JW 2013 *Survey Protocols for the British Herpetofauna Version 1.0*
- Ref. 7 Rose F 2006 *The Wildflower Key* Fredrick Warne & Co.
- Ref. 8 Hubbard CE, 1992 *Grasses 3rd Edition* Penguin Books
- Ref. 9 CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates* Chartered Institute of Ecology and Environmental Management, Winchester, UK.

7.0 Appendix 1

7.1 Habitat Map



8.0 Appendix 2

8.1 Botanical Species Table

UKHab Habitat type	Species recorded
Individual trees	• Beech (<i>Fagus sylvatica</i>) • Cedar (<i>Cedrus</i> sp.) • Cherry (<i>Prunus</i> sp.) • Silver birch (<i>Betula pendula</i>)
828 Vegetated garden	• Bramble (<i>Rubus fruticosus</i> agg.) • Broad-leaved dock (<i>Rumex obtusifolius</i>) • Cocks foot (<i>Dactylis glomerata</i>) • Common bent (<i>Agrostis capillaris</i>) • Common cleavers (<i>Galium aparine</i>) • Common ivy (<i>Hedera helix</i>) • Creeping buttercup (<i>Ranunculus repens</i>) • Daisy (<i>Bellis perennis</i>) • Dog violet (<i>Viola riviniana</i>) • Field bindweed (<i>Convolvulus arvensis</i>) • Garlic mustard (<i>Alliaria petiolate</i>) • Ground ivy (<i>Glechoma hederacea</i>) • Groundsel (<i>Senecio vulgaris</i>) • Hedge woundwort (<i>Stacys sylvatica</i>) • Herb Robert (<i>Geranium robertianum</i>) • Hogweed (<i>Heracleum sphondylium</i>) • Lesser stitchwort (<i>Stellaria graninea</i>) • Nipplewort (<i>Lapsana communis</i>) • Ragwort (<i>Senecio jacobaea</i>) • Sow thistle (<i>Sonchus oleraceus</i>) • Spear thistle (<i>Cirsium vulgare</i>) • Sterile brome (<i>Bromus sterilis</i>) • Timothy grass (<i>Phleum pratense</i>) • Wood avens (<i>Geum urbanum</i>) • Yellow oat grass (<i>Trisetum flavescens</i>) • Cock's foot • Common bent • Common knapweed (<i>Centaurea nigra</i>) • Common nettle • Lesser stitchwort • Perennial rye grass (<i>Lolium perenne</i>) • Ragwort • Red fescue (<i>Festuca rubra</i>) • Selfheal (<i>Prunella vulgaris</i>) • Timothy grass • White clover (<i>Trifolium repens</i>) • Yarrow (<i>Achillia millefolium</i>)

9.0 Appendix 3

9.1 Biodiversity Net Gain Headline Results

On-site baseline	Habitat units	1.35		
	Hedgerow units	0.00		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	1.17		
	Hedgerow units	0.04		
	Watercourse units	0.00		
On-site net change (units & percentage)	Habitat units	-0.17		
	Hedgerow units	0.04		
	Watercourse units	0.00		
Off-site baseline	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.17		
	Hedgerow units	0.04		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		
FINAL RESULTS				
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.17		
	Hedgerow units	0.04		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-12.84%		
	Hedgerow units	N/A		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	1.35	1.48	0.31
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00