Preliminary Ecological Appraisal (PEA) Report

M Scott Properties Ltd Ms T Sutton Ms T Good Mr W Hughes Mr J Hughes Land to the West of Watling Street, Park Street, St Albans

21-0662
2
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REVISION HISTORY

Rev	Description of change	Date	Initials
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DISCLAIMER

It should be noted that the information above provides details of the Site's current ecological situation. In the event that the proposed development does not commence within 12 months of the date of this report, further advice should be sought from a suitably qualified ecologist as to whether the information provided requires updating in light of changing ecological conditions.



TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY
2.	INTRODUCTION
3.	METHODOLOGY9
4.	LEGISLATION AND PLANNING POLICY OVERVIEW14
5.	DESK STUDY RESULTS
6.	PHASE 1 HABITAT SURVEY RESULTS 20
7.	EVALUATION OF ECOLOGICAL CONTEXT 25
8.	HABITAT EVALUATION
9.	FAUNAL EVALUATION
10.	RECOMMENDATIONS, FURTHER SURVEYS AND ENHANCEMENTS
11.	REFERENCES AND BIBLIOGRAPHY
12.	APPENDICES



1. EXECUTIVE SUMMARY

- 1.1 Lockhart Garratt Ltd was commissioned by M Scott Properties Ltd to carry out a Preliminary Ecological Appraisal (PEA) Survey including desk study for Watling Street, Park Street, St Albans Albans in respect of a proposed residential development on land to the west of Watling Street, Park Street, St Albans.
- 1.2 The site itself is not subject to any statutory or non-statutory designation. There are two statutory designations within 2km of the Site, and eight non-statutory designations, the closest being Ver Valley Meadows LWS located approximately 0.2km to the east of the Site. A range of protected mammal and bird species were identified within 2km of the Site by the desk study.
- 1.3 The PEA survey was undertaken on 29th July 2021. The habitat within the Site consisted of arable, with tall ruderal, broadleaved semi-natural woodland and scattered trees immediately adjacent to the Site boundaries.
- 1.4 Recommendations, in this context, are as follows:
 - Clearance and construction works should be scheduled outside of the main bird breeding season (March to August inclusive). If in the event works need to proceed within this period, then specialist advise from a suitably qualified ecologist should be sought.
 - Any landscape planting should incorporate native species, including those species known to provide foraging opportunities for breeding birds and nectar sources for invertebrates.



2. INTRODUCTION

Terms of Instruction

2.1 Lockhart Garratt Ltd has been commissioned by M Scott Properties Ltd to undertake an ecological assessment of land to the west of Watling Street, Park Street, St. Albans in respect of a proposed residential development on land to the west of Watling Street, Park Street, St. Albans.

Aim of the study

2.2 The purpose of this report is to provide an assessment of ecological features present within the Site, to identify any ecological constraints and provide appropriate mitigation, compensation and avoidance measures to ensure no net loss in biodiversity as a result of the proposals.

Documents Provided

- 2.3 At the time of survey, no fixed development plan was available. A redline boundary plan was provided.
 - 21-0697 Park Street TCP v1 AN 190821 Overview

Site Description

- 2.4 The site is located to the west of Watling Street and Park Street to the south of the city of St. Albans at grid reference: TL 14555, 04483 (hereafter referred to as "the Site"). The assessment covered the whole of the Site, which is approximately 4.30ha in area.
- 2.5 At the time of the assessment the Site mostly comprised arable with adjacent habitats as tall ruderal, scattered trees and broadleaved woodland.
- 2.6 The Site was bounded by Watling Street and residential housing and associated gardens to the east, north and south. To the western boundary were areas of rough grassland and scrub with scattered trees and arable farmland beyond. Further to the north of the Site was the A414 North Orbital Road, subject to a high volume of traffic during busy periods.
- 2.7 The Site location plan is provided below at **Figure 1** and a survey boundary plan is provided below at **Figure 2**.





Figure 2: Survey Boundary Plan

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Proposed Development

2.8 There were no fixed development plans available at the time of survey, however recommendations within this report have been considered with the assumption that the Site will be redeveloped to include a number of residential housing units with associated gardens and public roads (hereafter referred to as the "Proposed Development").



3. METHODOLOGY

3.1 The methodology for the ecological assessment was split into three main areas: a desk study, habitat survey and faunal survey. These are discussed in more detail below.

Desk Study

- 3.2 Existing ecological information on the Site and surrounding area was requested from the Herts Environmental Records Centre (HERC). The purpose of the desk study was to collect baseline information to identify statutory and non-statutory designated sites, legally protected species and species of conservation concern within a 2km radius of the Site in line with CIEEM Guidelines for Preliminary Ecological Appraisal (2017). Full information can be provided on request.
- 3.3 A review of online resources, including the Multi Agency Geographic Information for the Countryside (MAGIC) database was also undertaken to establish the ecological context for the Site (accessed 30th July 2021). The MAGIC website was also reviewed to identify any designated sites of European Importance within 2km of the Site.
- 3.4 In addition, Ordnance Survey and aerial mapping was reviewed to identify any ponds within 500m of the Site.

Phase 1 Habitat Survey

- 3.5 A Phase 1 habitat survey was undertaken by Alison Saunders on 29th July 2021 in order to ascertain the general ecological value of the Site and to determine the need for further assessment.
- 3.6 The Phase 1 habitat survey was undertaken in accordance with standard methodology (JNCC, 2010¹). The Phase 1 methodology involves the classification of habitat types based on vegetation present. The Site was classified into areas of similar botanical community types, with a representative species list provided for each habitat type identified. In addition invasive weeds were also searched for during the Phase 1 habitat survey, as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 3.7 The information is presented in accordance with the standard Phase 1 habitat survey format with habitat descriptions and a habitat map, provided at **Appendix 1**. In addition, target notes providing supplementary information, for example relating to species, habitat composition, structure and management are also presented on the habitat map.
- 3.8 All of the species that occur within each habitat type would not necessarily be detectable during survey work carried out at any given time of year. The botanical work was undertaken within the optimal survey period, therefore it is considered that a robust assessment was undertaken.

Faunal Surveys

3.9 General faunal activity was recorded during the PEA field survey, including mammals and birds observed or heard. Specific attention was also paid to the potential presence of any protected, rare or notable species, as described below.

¹ Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit.



Badger Appraisal

- 3.10 During the walkover survey conducted on 29th July 2021 any incidental signs of current badger Meles meles activity were recorded within the Site and within 30m of the Site where access could be obtained. The survey method was based on a standard approach as in 'The history, distribution, status and habitat requirements of the Badger in Britain, (Cresswell, P. 1990)'.
- 3.11 The appraisal involved a systematic search of the survey area for all signs of badger activity including badger setts, worn pathways in vegetation and/or across field boundaries, footprints, hairs, dung pits/latrines, bedding and evidence of foraging activity including snuffle holes. Particular attention was paid to habitats of suitable topography or supporting suitable vegetation for sett-building as well as to those features particularly favoured by badgers including hedgerows, areas of dense scrub, woodland, ditches and banks.
- 3.12 Any holes of an identified sett were examined closely and the number of active and inactive entrances and evidence of its usage were recorded. Where possible, setts identified during the survey were categorised using nationally recognised sett classification as described below:
 - Main sett: These are large setts comprising a number of well-used, active holes with conspicuous spoil heaps. They are well established with worn paths to and from the sett and between entrances. Main setts are breeding setts and are normally in continuous use throughout the year, with only one main sett per social group of badgers;
 - Annexe sett: Where present they occur in close association with the main sett (normally less than 150m away) and are linked to them by clear, well-worn paths. Annexe setts arise for the purposes of rear cubs should a second litter be born, and have several entrances (though not all in use at the same time);
 - Subsidiary sett: These setts usually consist of three to five entrances which are not in continuous use. They are usually more than 50m away and may not have well-used paths connecting them to other setts; and
 - Outlier sett: These typically comprise one to three holes with small spoil heaps indicating that they are not very extensive underground. They are used sporadically and are thought to serve multiple functions, including allowing efficient and safe travel to important parts of their home range.

Bats

Tree Assessment

- 3.13 A preliminary ground-based assessment of all suitable trees located on or immediately adjacent to the study area was undertaken to determine their potential to support roosting bats (for details on the location of trees with bat roost potential refer to highlighted trees on the habitat map in **Appendix 1**).
- 3.14 All suitable features such as cracks and splits in limbs, hollows and cavities, natural holes, woodpecker holes, loose bark and dense ivy were assessed using binoculars and high powered torches where appropriate. Evidence of bat roost themselves, including droppings, feeding remains and urine staining were also searched for during the assessment.



- 3.15 Where no direct or indirect evidence of roosting bats were confirmed, trees were categorised as being of high, moderate, low or negligible suitability to support roosting bats based on the type and number of suitable bat features present, in accordance with best practice guidance, Bat Conservation Trust (2016) Bat Surveys: Good Practice Guidelines 3rd Edition.
 - High suitability one or more potential roosting features present within a structure, with enough suitable surrounding commuting and foraging habitat, which is large enough to be able to shelter a large number of bats on a regular basis. These include maternity and hibernation roosts.
 - Moderate suitability one or more potential roosting features present within a structure that is likely to shelter a number of bats, but unlikely to support a roost of conservation status.
 - Low suitability one or more potential roost features present within a structure yet is not surrounded by suitable commuting and foraging habitat and does not provide enough protection and space to shelter a large number of bats. This also includes trees with no visible potential roost features but is of adequate age and structure to offer limited roosting potential.
 - Negligible suitability whereby no evidence of bats was observed and no suitable features for bats are supported, such that their presence is considered negligible.

Principles of Ecological Evaluation

- 3.16 The evaluation of ecological features and an assessment of likely impacts should be based on available resources and the professional judgement of the ecologist concerned. Ecological value of features should be undertaken in accordance with the approach outlined in the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018).
- 3.17 A five-point evaluation scale has been applied to assist with the identification of key features of ecological significance in relation to the proposed development. This is an arbitrary scale based upon characteristics of ecological importance as listed in CIEEM (2018), which experience has shown is effective at this level of assessment.
- 3.18 The value of an ecological feature is determined within a defined geographical frame of reference as detailed in **Table 1**:

Value	Importance	Species	Habitat
Very High	International	A regularly occurring population of an internationally important species, which is threatened or rare in the UK, where the population is a critical part of a wider population or where a species is at a critical phase in its life cycle at this scale.	An internationally designated site including SAC, SPA, Ramsar, or one proposed for designation. Sites supporting areas of priority habitats which are scarce at an international level of where it is needed to maintain the viability of a larger area at that level.

Table 1: Classification of the value of ecological features and resources



Value	Importance	Species	Habitat
High	National	A regularly occurring population / number of a nationally important species which is threatened, or rare, where the population is a critical part of wider population or where a species is at a critical phase in its life cycle at this scale. A regularly occurring population of a nationally important species on the edge of its natural range. A species assemblage of national significance.	A nationally designated site ie SSSI, or one that meets the published criteria. Sites supporting areas of priority habitats which are scarce at a national level or where it is needed to maintain the viability of a larger area at that level.
Medium	Regional / County	A regularly occurring locally significant population of a species listed as being nationally scarce or a county Red Data book or BAP on account of its rarity. A regularly occurring, locally significant number of a regionally / county important species or where the population is a critical part of a wider population or where a species is at a critical phase in its life cycle at this scale. A species assemblage of regional or county significance.	Sites supporting a viable area of a priority habitat which is scarce at a regionally or county level or where is needed to maintain the viability of a larger area. A County designated site or one that meets published criteria. Local Nature Reserves, Local Wildlife Sites / potential Local Wildlife Sites at that level.
Low	Local	A population of a species that is listed in a district BAP because of its rarity in the locality and a species assemblage of local or district significance. A regularly occurring, locally significant number of district importance or where the population is a critical phase in its life cycle at this scale.	Sites / features that are scarce within the local area or district. Areas of habitat considered enriching appreciably the habitat resource within the context of the locality or which buffer those of a more important nature.
Site	Site Only	Species, which are not protected or rare in the local area and are not at a critical phase in its life cycle at this scale.	Habitats of very low importance and rarity but of ecological importance within the Site.

- 3.19 Ecological features may also be deemed to be of negligible value if they are deemed to be of very low ecological importance and / or rarity.
- 3.20 Ecological features may be defined as:
 - Statutorily protected (Natura 2000, national Nature Reserves, Sites of Special Scientific Interest and Local Nature Reserves) or locally designated sites (local Wildlife Sites or Sites of Importance to Nature Conservation);



- Sites and features of biodiversity value not designated in this way such as ancient woodland; or
- Species of biodiversity value or other significance, including those protected and controlled by law.



4. LEGISLATION AND PLANNING POLICY OVERVIEW

4.1 A summary of the legislative and planning context which has been used to inform this ecological assessment is provided below.

Legislation

- 4.2 A number of tiers of legislation protect wildlife and habitats within England and Wales, the highest of which being European legislation. A summary of relevant legislation is provided below:
 - The Wildlife and Countryside Act 1981 (as amended).
 - The Natural Environment and Rural Communities Act 2006 (NERC).
 - The Conservation of Habitats and Species Regulations 2017.

Policy

4.3 The planning policy framework that relates to nature conservation in St Albans is provided at two levels; nationally through the National Planning Policy Framework (NPPF) and locally through policies in the City and District of St. Albans District Local Plan 1994 (correct at time of writing). In 2007, following updated national guidance a number of policies from the local plan have now been deleted, however those saved policies not removed will remain in effect until such time as the new Local Plan is adopted.

Local Policy – City and District of St Albans District Local Plan 1994 (2020 Update)

4.4 POLICY 106 Nature Conservation

"The Council will take account of ecological factors when considering planning applications and will refuse proposals which could adversely affect:

(i) Sites of Special Scientific Interest

- Bricket Wood Common SSSI.
- Moor Mill Quarry
- (ii) Nature Reserves
- Marshalls Heath, Wheathampstead
- Broad Colney Lakes, London Colney

(iii) other sites of wildlife, geological or

(iv) any site supporting species protected by the Wildlife and Countryside Act 1981; geomorphological importance;

(v) the natural regime of either surface or ground waters in river valleys and their wetlands.

If planning permission is granted for development which could affect a site of conservation interest, it will normally be subject to conditions aimed at protecting the special features of the site. The Council will also seek a Section 106 Agreement to ensure the appropriate management of the site."



Biodiversity Action Plan (BAP) and 2006 NERC Act Habitats and Species of Principal Importance

- 4.5 In 2007, the UK Biodiversity Action Plan (the UK BAP) Partnership published an updated list of priority UK species and habitats covering terrestrial, freshwater and marine biodiversity to focus conservation action for species and habitats in the UK. The UK Post-2010 Biodiversity Framework succeeds the UK BAP. The Framework continues the conservation work initiated by the UK BAP following the establishment of the Convention on Biological Diversity in 1992.
- 4.6 The purpose of the Framework is to set a broad structure for conservation across the UK until 2020. In summary:
 - To set out a shared vision and priorities for UK-wide activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute;
 - To identify priorities at a UK scale which will help deliver biodiversity targets and the EU Biodiversity Strategy;
 - To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK; and
 - To streamline governance arrangements for UK-wide activities.
- 4.7 The habitats and species are identified as Habitats and Species of Principal Importance for the conservation of biological diversity in England under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. The NERC Act and NPPF make these species had habitats a material consideration in the planning process.
- 4.8 The Hertfordshire Local Biodiversity Action Plan (LBAP) produced in 2006, lists a number of priority species or habitats of particular relevance to this Site, namely farmland, Natterer's bat *Myotis nattereri*, tree sparrow *Passer montanus*, song thrush *Turdus philomelos*, great pignut *Bunium bulbocastanum* and cornflower *Centaurea cyanus*. The presence of these species and / or habitats within the Site is considered within this report.
- 4.9 The LBAP contains objectives and targets for the species and habitats identified above. They should be considered in regard to the Proposed Development in order to identify opportunities for avoidance, mitigation and enhancement.



5. DESK STUDY RESULTS

5.1 The full information collected during the desk study from the HERC is summarised below with a full version available upon request.

Sites of Nature Conservation Interest

- 5.2 The Site itself is not subject to any statutory or non-statutory nature conservation designation.
- 5.3 The records search identified two statutory protected sites and eight non-statutory sites within 2km of the Site, as summarised in **Table 2**:

Table 2:	Summary	of Ecology	Designations
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Designated	Designation	Proximity	Description	
Site Name		to Project		
Moor Mill Quarry and Moor Mill Quarry West (SSSI)	SSSI/ LWS	0.91 km south SSSI unit 1.6km south	A substantial area of relatively overgrown grassland with scattered areas of scrubland, on a former gravel extraction site. The site appears to have had little to no recent management carried out, and so the far south- west corner is inaccessible due to a dense bramble <i>Rubus fruticosus agg.</i> Barrier. Moor Mill Quarry West SSSI is within the wider LWS Site.	
Watercress Wildlife Site	LNR	1.62km north	The former site of watercress beds and allotments, bound by the River Ver.	
Ver Valley Meadows	LWS	0.2km east	A series of old mainly unimproved meadows along the valley of the River Ver supporting predominantly neutral grassland but with more acid communities on areas of higher ground.	
St Julians Wood	LWS/ ASNW	0.55km north west	Ancient semi-natural pedunculate oak <i>Quercus robur</i> /Hornbeam <i>Carpinus betulus</i> coppice-with-standards woodland with Beech <i>Fagus sylvatica</i> , Ash <i>Fraxinus</i> <i>excelsior</i> and Holly <i>Ilex aquifolium</i> together with Wild Cherry <i>Prunus avium</i> , Field Maple <i>Acer campestre</i> and occasional Sycamore <i>Acer pseudoplatanus</i> . The ground flora supports a number of woodland indicators including bluebell <i>Hyacinthoides non-scripta</i> and Dog's Mercury <i>Mercurialis perennis</i> .	
Former Radlett Aerodrome	LWS	0.57km south east	Unimproved, neutral to acidic grassland. The best acidic areas occur as a mosaic with coarser more neutral grassland.	
Chalkdell Wood (St Julian's)	LWS	0.62km south east	Part ancient woodland part old secondary wood with a semi-natural canopy and varied structure and field	



Designated Site Name	Designation	Proximity to Project	Description
			evidence suggesting an ancient origin; shown on Bryant's map (1822)
Former Radlett Quarry	LWS	0.68km south east	Extensive former gravel quarry supporting re-seeded grassland, lagoons, pools and ponds; the larger water bodies being near the northern edge of the site. The site is particularly important for birds, mainly waterfowl and wetland species, including many breeding species.
Frogmore Gravel Pit	LWS	0.7km south	Former gravel workings supporting a mosaic of habitats including rough grassland, a reach of the River Ver, flooded gravel pit lakes, permanent and temporary pools and dry to wet secondary broadleaved woodland and scrub.
How Wood	LWS	0.85km south west	Remnant of ancient semi-natural pedunculate oak / Hornbeam coppiced woodland. A large pond within in the north-west supports surrounding swampy vegetation.
Birch Wood	LWS	0.93km south west	Ancient semi-natural woodland of pedunculate oak and hornbeam coppice with wild cherry and silver birch.
Key: SSSI: Site of S LNR: Local Na LWS: Local W ASNW: Ancie PARW: Ancie	pecial Scientific Iture Reserve Vildlife Site nt Semi-natural nt Replanted W	: Interest Woodland 'oodland	

Protected Species

- 5.4 Below provides a summary of protected species which have been recorded within 2km of the Site. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.
- 5.5 Records of amphibians, badgers, bats, birds and reptiles were recorded within 2km of the Site. No notable protected species were recorded within the Site.

Amphibians

5.6 Ten records of GCN were received for within 2km of the Site. The closest record, dated 1991, is located approximately 1.3km south west of the Site. Common Toad *Bufo bufo* was also recorded within 2km of the Site. No records of amphibians were received for within the Site.

Badgers

5.7 22 records of badgers were received for within 2km of the Site. The closest record, dated 2015, is located approximately 0.7km north-west of the Site a dead individual was found along the A414. No records of badgers were received for within the Site.



Bats

5.8 Seven species of bat along with some unidentified species of bat have been recorded within 2km of the Site, namely common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, serotine *Eptesicus serotinus*, Daubenton's bat *Myotis daubentonii*, leisler's bat *Nyctalus leisleri*, noctule *Nyctalus noctule* and brown long-eared bat *Plecotus auritus*. Common pipistrelle was recorded on the Site, this record was from 1997 and the bat was recorded in flight.

Birds

- 5.9 142 species of protected or notable birds were recorded for within 2km of the Site. The majority of records related to the Frogmore Gravel Pits LWS. No records of protected or notable bird species were received for within the Site.
- 5.10 **Table 3** summarises the species of birds recorded within 2km, with particular relevance to the species which may utilise the habitats available at the Site.

Table 3: Bird Species Recorded within 2km of the Site

Species / Group	No. of Records	Closest record	Most Recent record	Legislation / Conservation Status	
Barn owl	10	1.07km	2018	CRoW, WCA 1i	
Tyto Alba		south		,	
Cuckoo	64	0.86km	2018	BOCC Red	
Cuculus canorus	04	south west	2010	Bocc Red	
Dunnock	260	0.54km	2010	CRoW, WCA 1i,	
Prunella modularis	500	north east	2018	BoCC_Amber	
Grey Partridge	12	Within 2km	2010	NERCS 41 BOCC Bod	
Perdix perdix	12		2010	NERC 3.41, BOCC_Red	
House Sparrow	102	0.47km	2018	NEPC S 41 BOCC Bod	
Passer Domesticus	102	west	2010	NERC 3.41, BOCC Red	
Linnet	02	1.03km	2018	NERCS 11 BOCC Rod	
Linaria Cannabina	92	west	2010	NERC 3.41, BOCC_Red	
Skylark	102	1.03km	2010	WCA 1i, NERC S.41,	
Alauda arvensis	105	west	2018	BoCC_Red	
Song Thrush	224	0.73km	2010	Bacc Bad LBAD	
Turdus philomelos	234	south	2018		
Yellowhammer	21	1.02km	2019	Bacc Bad	
Emberiza citrinella	21	west	2018		

Key:

NERC S.41: Natural Environment and Rural communities Act 2006, Section 41; habitats and species of principle importance in England.

BoCC Red: Birds of Conservation Concern Red.

BoCC Amber: Birds of Conservation Concern Amber.

BDIR1: Birds Directive, 2009.

Crow: Countryside Rights of Way Act, 2000:Protection of certain birds and animals amended)

WCA 1i: Wildlife and Countryside Act (1981) (as amended); Birds protected by special penalties at all times, species specific.

LBAP: Local biodiversity Action Plan



Reptiles

5.11 Three species of reptiles have been recorded within 2km of the Site, namely common lizard *Zootoca vivipara* grass snake *Natrix helvetica* and slow worm *Anguis fragilis*. The closest record, dated 1996, relates to a sighting of grass snake approximately 0.7km south of the Site at Frogmore Gravel Pit LWS.

Other Species

- 5.12 A record of cornflower has been recorded at Park Street in 1992, no accurate grid reference was given for this record.
- 5.13 25 records of West European hedgehog *Erinaceus europaeus* were returned for with 2km of the Site, the closest record was 0.59km north west of the Site during 2003.



6. PHASE 1 HABITAT SURVEY RESULTS

6.1 The phase 1 habitat survey was conducted on 29th July in good weather conditions (10% cloud cover, Beaufort Scale 2, 15°C).

Field Survey Limitations

6.2 There were limitations to the survey.

Habitat Descriptions

- 6.3 The full Phase 1 habitat survey map detailing the location of the above habitats and other features of ecological interest with Target Notes (TN) is presented at **Appendix 1**. The habitat descriptions below should be read in conjunction with this plan and any associated Target Notes.
- 6.4 Habitats identified during the Phase 1 habitat survey are detailed below in alphabetical order (not in order of ecological importance):
 - Arable

Adjacent habitats

- Broadleaved Woodland
- Scattered trees
- Tall ruderal

Arable

- 6.5 The majority of the Site consisted of arable farmland, which at the time of survey was laid to wheat crops. There were very few other plant species growing within the wheat crop, with the exception of occasional individual common nettle *Urtica dioica* surviving. Adjacent to the arable crop was tall ruderal habitat described below, there were no grassland margins.
- 6.6 This habitat was of site only ecological value.



Figure 3: Arable habitat



Adjacent Habitats

Broadleaved Woodland

6.7 Adjacent to the south east corner, south western boundary and north western boundary of the Site were small areas of broadleaved woodland. Species present included; sycamore Acer pseudoplatanus, wych elm Ulmus glabra, damson Prunus domestica, hawthorn Crataegus monogyna, elder Sambuca nigra, hazel Corylus avellana and dogwood Cornus sanguinea with an understory of ivy Hedera helix.



6.8 This habitat was of moderate ecological value.

Figure 4: Small area of broadleaved woodland to the south eastern corner of the Site

Scattered Trees

- 6.9 Scattered Trees were located at the boundaries of the Site, species present included, oak *Quercus robur*, field maple *Acer campestre*, scots pine *Pinus sylvestris* and sycamore. A number of the trees present contained features suitable for roosting bats, further details of these trees are presented in **Table 3**.
- 6.10 Overall the scattered trees were of medium ecological value.



Table 3: Description of Trees surveyed Within the Site

Tree No.	Description	Potential Suitability for Roosting Bats
T1	Standing deadwood located beyond the western boundary of the Site, approximately 8m in height. This tree contained a woodpecker hole at the top to the eastern aspect leading to a possible cavity with clear access suitable for bats and nesting birds.	Low
T2	Mature oak <i>Quercus robur</i> tree located to the eastern boundary. This tree was partially ivy clad, some of which had been subject to historical cutting at the base leading to some dead ivy attached to the main trunk of the tree, leading to some suitable roosting opportunities for bats. This tree was standing at approximately 10m in height, with branches overhanging the Site boundary. This tree was of sufficient age and size to contain further suitable roosting features not visible from the ground as the tree was in full leaf at the time of survey.	Low



Tree No.	Description	Potential Suitability for Roosting Bats
T3	Mature oak tree located to the eastern boundary of the Site. Multi branched with a wide spreading canopy, branches reached over the Site boundary. This tree was of sufficient age and size to contain suitable roosting features, but none were visible from the ground as the tree was in full leaf.	Low

Tall Ruderal

- 6.11 Tall ruderal habitat was located adjacent to the southern and eastern boundaries of the Site.
- 6.12 Species present within this habitat included grass species with predominantly common nettle, hemlock *Conium maculatum* and ragwort *Jacobaea vulgaris* with creeping thistle *Cirsium arvense* and burdock *Arctium minus*.
- 6.13 This habitat was of low ecological value.

Evidence of Protected Species and Other Faunal Interest.

6.14 Within the centre of the Site was an area of waste materials in a pile. A small area of spoil was visible leading under the waste materials, this is likely to have been excavated by a mammal such as fox *Vulpes vulpes* or badger. A number of white-tailed bumble bee *Bombus lucorum* pupae cases had been excavated and bees were flying in and out of the excavated hole. The excavated hole was at approximately 60 cm in depth from the surface and was partially blocked by waste materials and plastic, therefore not considered to be an active badger sett at the time of survey.





Figure 8: Mammal excavation under waste pile



7. EVALUATION OF ECOLOGICAL CONTEXT

The Site

7.1 The Site was surrounded by Watling Street and residential housing and associated gardens to the east, north and south of the Site. To the western boundary were areas of rough grassland and scrub with scattered trees and arable farmland beyond. To the north of the Site was the A414, North Orbital Road, which is subject to a high volume of traffic during busy periods.

Statutory Sites

- 7.2 The Site itself is not subject to any nature conservation designation.
- 7.3 The nearest designated nature conservation site is Moor Mill Quarry West SSSI located approximately 1.6km south of the Site. The site is designated due to its botanical interest. Given the distance and the habitats present it is considered unlikely that there will be any negative impacts on the designated site as a result of the Proposed Development.
- 7.4 Impact Risk Zones (IRZs) are a tool developed by Natural England to provide an initial assessment of the potential risks to SSSIs. The Site falls within one IRZ for the Moor Mill Quarry West SSSI, however the IRZ does not apply to residential developments and as such further advice need not be sought.

Non-statutory Sites

7.5 The nearest non-statutory designated nature conservation site is Ver Valley Meadows LWS located approximately 0.2km east of the Site. The site is designated due to its botanical interest as it contains unimproved meadows. Given the distance and the habitats present it is considered unlikely that there will be any negative impacts on the designated site as a result of the Proposed Development.



8. HABITAT EVALUATION

- 8.1 Arable habitat was the only habitat present on the Site. Adjacent habitats include tall ruderal, scattered trees and broadleaved woodland. The Site is approximately 3.929ha in total area.
- 8.2 No habitats were found to be of local, regional or national ecological value.
- 8.3 The Proposed Development will lead to the loss of all of the arable farmland. The Arable farmland was found to be of site only ecological value.
- 8.4 Boundary features such as scattered trees and broadleaved woodland were found to be of medium ecological value, due to their capacity to offer shelter and foraging habitat for many species such as nesting birds, foraging and roosting bats, and shelter for amphibians, small mammals and reptiles.
- 8.5 The scattered trees T2 and T3 were located outside of the Site boundary along Watling Street, these two trees were found to have low suitability for roosting bats. As such this habitat should be retained.
- 8.6 The scattered trees beyond the western boundary are likely to be outside the ownership boundary for this report, however the Tree Constraints Plan does afford root protection zones which cross the Site boundary for the protection of these trees. This will also serve to protect this habitat for wildlife.



9. FAUNAL EVALUATION

- 9.1 The desk study located a variety of protected species records for the local area.
- 9.2 The Site has been assessed on the suitability of the habitats to support such protected species and the likelihood of those species being present. **Table 5** provides a summary account of protected species within the Site and local area.
- 9.3 In the absence of mitigation and further assessment the impacts on each species have been assessed using the following scale:

Table 4:	Impact	Levels	and	Criteria

Classification	Criteria
Negative (Significant)	Likely to create a significant effect, including loss, or long-term irreversible damage on the integrity / status of a valued ecological feature
Negative (non-significant)	Likely to create a negative effect without causing long-term or irreversible damage on the integrity / status of a valued ecological feature
Neutral	Effects are either absent or such that no overall net change to the ecological feature occurs.
Positive (non-significant)	Likely to create a beneficial effect on an ecological feature, or providing a new (lower value) ecological feature, without improving its conservation status markedly
Positive (significant)	Activity is likely to create a significant beneficial effect, including long- term enhancement and favourable condition of an existing valued ecological feature, or creation of a new valued ecological feature.



Table 5: Summary of Protected Species Associated with the Site

Species	Recorded in Desk Study	Evidence on Site	Potential on Site to Support Presence	Description of likely Impact on Species	Likely Impact
Amphibians	Yes – Ten records of GCN were received for within 2km of the Site. The closest record was located approximately 1.3km south west.	None	Yes – there is some limited potential for terrestrial and overwintering amphibians within the ruderal vegetation, woodland boundaries and within the ground vegetation at the base of the scattered trees.	The ruderal habitat will be removed for the Proposed Development. Scattered trees and woodland boundaries will be retained.	Negative (non- significant)
Badgers	Yes – there were 22 records of badgers with the closest being 0.7km north west of the Site.	Possible badger excavation within the centre of the Site.	Yes –The adjacent woodland and tree lines would be suitable for badger; they may utilise the arable habitat for foraging.	Foraging habitat will be lost.	Negative (non-significant)
Bats	Yes – several common species including soprano and common pipistrelle, Brown-long eared bat and Daubenton's bat. Two less common species Leisler's bat and Noctule bat have also been recorded within 2km.	None	Yes – trees – three trees T1-T3 adjacent to the Site possess features suitable for roosting bats. Lines of trees and woodland boundaries to the Site provide some foraging and commuting habitat for bats.	The scattered trees T2 and T3 and boundary habitats will be retained for the Proposed Development. It is possible that T1 may need to be felled.	Negative (non-significant)
Birds	Yes – a large number of farmland and garden birds.	Yes – an assemblage of common bird species	Yes – there is potential for birds to be utilising the arable, woodland boundaries and scattered trees for foraging and nesting.	The scattered trees T2 and T3 and boundary habitats will be retained for the Proposed Development. It is possible that T1 may need to be felled.	Negative (non-significant)
Reptiles	Yes – Three species of reptile recorded within 2km of the Site.	None	Yes – there is some limited potential for terrestrial and overwintering reptiles within the ruderal vegetation, woodland boundaries and within the ground vegetation at the base of the scattered trees.	The ruderal habitat will be removed for the Proposed Development. Scattered trees and woodland boundaries will be retained.	Negative (non-significant)



Species	Recorded in Desk Study	Evidence on Site	Potential on Site to Support Presence	Description of likely Impact on Species	Likely Impact
Other faunal interest (e.g. hedgehog)	Yes- Hedgehog has been recorded, with the closest record at 0.59km north west of the Site.	None	Yes – there is potential for hedgehogs within ruderal vegetation, woodland boundaries and within the ground vegetation at the base of the scattered trees.	The ruderal habitat will be removed for the Proposed Development. Scattered trees and woodland boundaries will be retained.	Negative (non-significant)



10. RECOMMENDATIONS, FURTHER SURVEYS AND ENHANCEMENTS

Overview

- 10.1 Recommendations have been provided within this report that will safeguard the existing ecological interest features within the Site. Wherever possible, measures to enhance ecological and biodiversity value have also been set out.
- 10.2 Based on the survey undertaken to date and the recommendations for further surveys, the presence and potential presence of protected species has been given due regard.
- 10.3 In conclusion, implementation of the measures provided within this report enable the proposals to accord with national and local planning policy for nature conservation.

Designated Sites

10.4 Due to the distance between the Site and designated nature conservation sites in the local area it is considered unlikely that there will be any significant adverse effects on these sites as a result of the works. Therefore, no recommendations in relation to the designated sites are made.

Habitats

- 10.5 Arable habitat was the only habitat present on Site. The Proposed Development will lead to the loss of all of the arable habitat, this was of site only ecological value.
- 10.6 The adjacent habitats include tall ruderal, scattered trees and broadleaved woodland.
- 10.7 The scattered trees and broadleaved woodland at the Site boundaries offer shelter and foraging habitat for many species such as nesting birds, foraging bats, and shelter for amphibians, small mammals and reptiles. These features should be retained wherever possible.
- 10.8 The majority of the adjacent woodland and scattered trees will be protected by the root protection areas as detailed within the Tree Constraints Plan (Ref: 21-0697, Lockhart Garratt 2021). Further to this, a grassland buffer zone should be integrated into the landscaping plan from the boundary woodland within the south east corner of the Site and trees T2 and T3. This should be marked out on Site with HERAS fencing, preventing any construction works in this area. In order to allow a dark zone for nocturnal species such as commuting and foraging bats, external lighting on buildings should be directed away from this buffer zone. This grassland buffer should be planted with a native tussock grass and wildflower seed mixture and cut once per year during the late summer and arisings removed to encourage diversity of plant species.
- 10.9 T1 beyond the western boundary is standing deadwood and is likely to become unsafe in the future, however this tree has some low suitability for roosting bats, it is recommended that this tree be soft felled by a suitably qualified tree surgeon should felling be necessary.
- 10.10 In order to increase the biodiversity value of the Site as part of the Proposed Development any landscape planting should incorporate native species, including those species known to provide foraging opportunities for breeding birds and nectar sources for invertebrates. More naturalised habitats should be considered as part of any landscaping scheme as opposed to heavily managed habitats such as regularly cut amenity grassland or single species hedgerows.



Species

Amphibians

10.11 Overall the Site was of low value to amphibians, with only small areas of potentially suitable terrestrial habitat present. Recommendations provided in respect of amphibians will also act to safeguard any reptiles which may use the Site on occasion. Should any great crested newt be encountered, works must stop immediately and a member of the Lockhart Garratt ecology team contacted for advice.

Amphibian and Reptile Phased Vegetation clearance

- 10.12 It is recommended that the amphibian and Reptile method statement given below is implemented to safeguard any common amphibians which may use the Site on occasion:
 - Suitable refugia present within the proposed works area including rubble and log piles is to be searched and removed by the hand.
 - Any amphibians or reptiles captured as part of this will be relocated to an area of habitat away from the construction area.
 - Any areas of longer vegetation including the tall ruderal to be lost will be strimmed initially to a height of 150mm.
 - After a 5 day period this area is then to be strimmed to a height of 50mm before being soil stripped.

Badger

10.13 There was evidence of mammal activity present within the Site in the form of excavated soil close to the waste pile. This was not considered to be an active badger sett at the time of survey however, badgers readily establish new setts, therefore should any evidence of badger activity be found prior to construction, a member of the Lockhart Garratt ecology team contacted for advice.

Mammal Safeguards

- 10.14 General construction safeguards should also be implemented as a precaution, which will also act to safeguard other mammals, such as fox, badger and deer:
 - All contractors and Site personnel will be briefed on the potential presence of mammals such as badger within the Site.
 - Any trenches or deep pits within the Site are to be left open overnight will be provided with a means of escape should an animal enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.
 - Any trenches will be inspected each morning to ensure no animals have become trapped overnight.
 - Food and litter should not be left within the working area overnight.
 - Should badger be encountered during the works or a new sett found, the Ecologist should be contacted for advice.



Mammal Safeguards

- 10.15 General construction safeguards should also be implemented as a precaution, which will also act to safeguard other mammals, such as fox or badger:
 - All contractors and Site personnel will be briefed on the potential presence of mammals such as badger within the Site.
 - Any trenches or deep pits within the Site are to be left open overnight will be provided with a means of escape should an animal enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.
 - Any trenches will be inspected each morning to ensure no animals have become trapped overnight.
 - Food and litter should not be left within the working area overnight.
 - Should badger be encountered during the works or a new sett found, an ecologist should be contacted for advice.

Bats

- 10.16 The Site offers potential roosting and foraging opportunities for bats, with some trees immediately adjacent to the Site boundary possessing features suitable for roosting bats. It is recommended that as much of this habitat is retained where practicable, maintaining foraging and commuting features for bats and other species, along with the maintenance of connectivity between the Site and surrounding, wider landscape.
- 10.17 In the event that either of the two oak trees (T2 and T3) are to be removed for the Proposed Development, further detailed inspection or survey work for bats will be required. This is required due to poor visibility of potential roosting features present at the time of survey.
- 10.18 Where other boundary habitats need to be removed, for example to facilitate access into the Proposed Development, enhancement of remaining lines of trees with native planting and the planting of new hedgerows is recommended as a tool to offset this loss in biodiversity. Furthermore, the following recommendations are made:
 - Night working should be avoided where possible, lighting used during the construction phase must be directed away from the trees around the boundaries of the Site.
 - Construction practices should follow best practice in terms of dust and noise and control.
 - Any exterior lighting installed on the new buildings should be directed away from the retained trees/woodland

Nesting Birds

10.19 As the scattered trees, arable and tall ruderal habitats may potentially offer breeding opportunities for birds' works affecting these habitats should take place outside the bird breeding season (March to August inclusive). If in the event works need to proceed within this period then specialist advice from a suitably qualified ecologist should be sought.



Reptiles

- 10.20 The Site offers some suitable habitat for reptiles through the presence of tall ruderal, boundary woodlands and vegetation at ground level of the scattered trees.
- 10.21 Recommendations provided in respect of amphibians (phased vegetation clearance) will also act to safeguard any reptiles, which may use the Site on occasion.

Enhancements

- 10.22 The Proposed Development should seek to provide enhancement opportunities for species using the Site. This could include the following measures:
 - Creation of hedgerows across the Site with native species;
 - Enhancement of grassland areas through planting of wildflower areas and appropriate mowing regimes / establishment of tussocky grassland margins;
 - Planting of nectar, fruit and nut producing species;
 - Provision of birds and bat boxes and/or integrated features within buildings;
 - Provision of suitable gaps in fence lines to allow the movement of species such as hedgehog;
 - Creation of log piles and hibernaculum suitable for reptiles and amphibians.

General

10.23 If in the unlikely event any protected species (e.g. amphibians, badgers, bats, reptiles, or nesting birds) are encountered as part of the works, then all works must stop, with advice sought immediately from Lockhart Garratt (01536 408840).



11. REFERENCES AND BIBLIOGRAPHY

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12. APPENDICES



Appendix 1: PEA Habitat Plan

Ref: 21-0851



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AERIAL SURVEYING

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DIGITAL MAPPING & GRAPHIC DESIGN

DIGITAL REPRESENTATION AND GIS ANALYSIS | GRAPHIC DESIGN

ECOLOGY

HABITAT & SPECIES SURVEYS AND LICENSING | HABITAT CREATION, RESTORATION AND MANAGEMENT STAKEHOLDER ENGAGEMENT | ECOLOGICAL IMPACT ASSESSMENT

FORESTRY & WOODLAND MANAGEMENT

FORESTRY MANAGEMENT ADVICE | OPERATIONAL MANAGEMENT | TIMBER SALES | GRANT APPLICATIONS NEW WOODLAND DESIGN | CARBON | WOODLAND EVALUATION

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MINERALS & WASTE RESTORATION

PLANNING RATIONALISATION & STAKEHOLDER LIAISON | LAND SURVEY & MANAGEMENT PLANNING COST ENGINEERED LANDSCAPE & HABITAT DESIGN | IMPLEMENTATION MANAGEMENT & CLERK OF WORKS RESTORATION & AFTERCARE MANAGEMENT PLAN (RAMP) | SOIL SURVEY & ADVICE