



PRELIMINARY ECOLOGICAL APPRAISAL WARK CRESCENT



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TABLE OF CONTENTS

A.	SUMMARY.....	5
B.	INTRODUCTION.....	7
B.1	BACKGROUND TO DEVELOPMENT	7
B.2	CURRENT DEVELOPMENT INFORMATION	7
B.3	PLANNING POLICY AND LEGISLATIVE CONTEXT	9
B.3.1	PLANNING POLICY.....	9
B.3.2	PROTECTED SPECIES LEGISLATION.....	9
B.3.3	PROTECTED SITE LEGISLATION.....	9
B.3.4	PRIORITY SPECIES	10
B.4	PERSONNEL	10
B.5	SCOPE OF STUDY.....	10
B.6	OBJECTIVES OF STUDY.....	10
C.	SURVEY AREA AND METHODOLOGY.....	11
C.1	SURVEY AREA.....	11
C.2	DESKTOP STUDY METHODOLOGY.....	12
C.3	PRELIMINARY FIELD STUDY METHODOLOGY	12
C.3.1	PHASE 1 HABITAT SURVEY.....	12
C.3.2	PRELIMINARY PROTECTED AND PRIORITY SPECIES APPRAISAL	12
C.3.3	ENVIRONMENTAL CONDITIONS	13
C.3.4	SURVEY CONSTRAINTS	13
D.	RESULTS.....	14
D.1	DESKTOP STUDY	14
D.1.1	PRE-EXISTING INFORMATION	14
D.2	FIELD SURVEY.....	15
D.2.1	HABITATS	15
D.2.2	TARGET NOTES	16
D.2.3	SPECIES.....	17
E.	SITE ASSESSMENT	19
E.1	HABITATS.....	20
E.2	NOTABLE SPECIES.....	20
E.3	LIMITATIONS.....	20
F.	IMPACT ASSESSMENT	20
F.1	DIRECT DEVELOPMENT IMPACTS	20
F.2	INDIRECT IMPACTS.....	ERROR! BOOKMARK NOT DEFINED.
G.	RECOMMENDATIONS	21
G.1	FURTHER SURVEY	21
G.2	AVOIDANCE AND MITIGATION STRATEGY	21
G.2.1	TIMING OF WORKS.....	21
G.2.2	WORKING METHODS AND BEST PRACTICE.....	21
G.2.3	HABITAT ENHANCEMENT.....	21
APPENDIX 1.	STATUTORILY AND NON-STATUTORILY DESIGNATED SITES	22



TABLE OF FIGURES AND TABLES

FIGURE 1 – SITE LOCATION.....	7
FIGURE 2 – DEVELOPMENT PROPOSALS (PROVIDED BY CEAD LIMITED)	8
TABLE 1 – SUMMARISED SPECIES LEGISLATION	9
FIGURE 3 – AERIAL PHOTOGRAPH OF THE SITE ILLUSTRATING ITS EXTENT WITH A RED LINE BOUNDARY	11
FIGURE 4 – AERIAL PHOTOGRAPH CENTRED ON THE SITE WITH A 500M RADIUS ILLUSTRATING THE SETTING AND THE HABITATS IT SUPPORTS.....	11
TABLE 2 – SURVEY CONDITIONS	13
FIGURE 5 – HABITAT MAP	15
TABLE 3 - ECOLOGICAL IMPACT ASSESSMENT VALUATION	19

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A. SUMMARY

E3 Ecology Ltd was commissioned by CEAD Limited to undertake a Preliminary Ecological Appraisal (PEA) of Wark Crescent, Jarrow in 2015. The proposed development comprises the construction of an apartment block with four residential units.

Consultation with the Multi Agency Geographic Information for the Countryside (MAGIC) website indicated that there are three local nature reserves located within 2km of the site; Primrose (LNR) 1.2km north, Station Burn (LNR) 1.3km east and Pelaw Quarry Pond (LNR) 1.7km west. No impacts on these designations as a result of the proposed development is anticipated.

PEA indicated that the development area is dominated by hard standing often used by local residents as car parking, with two shipping containers present at the time of survey. A small area of amenity grassland and scrub is located to the west of the site and a single young Italian alder is growing to the north. Mature hedgerow grows adjacent to the eastern boundary and overhangs into the site in places. Outside of the development boundary there is a belt of plantation amenity woodland growing adjacent to the metro line which runs along the south of the site. Overall, the site is considered to be of low ecological value.

The lack of good foraging habitats or roosting opportunities is likely to limit the use of the site by bats. Bats may be present within the local area, the mostly frequently recorded species being common pipistrelle, which will most likely use the woodland to the south as a feeding resource and commuting route. However taking into consideration the habitats present, the value of the site to bats is assessed as being low.

The site is of low value to bird species offering only poor quality nesting and foraging opportunities. Abundant better quality foraging and nesting habitat will be found in the surrounding urban gardens, including the adjacent hedgerow, and the habitat located to the south.

Whilst badger may be present within the local area, the site lacks sett creation opportunities or good quality foraging habitat and as such the species is unlikely to make use of the land within the development boundary. Hedgehog which is a Priority Species, is likely to be present within the area and may occasionally forage on site.

Red squirrel, otter, water vole, white-clawed crayfish, reptiles, great crested newts and Priority Species invertebrates are all considered to be absent from the site due to the lack of suitable habitat it provides.

Potential impacts of the development are:

- Loss of habitats of low ecological value.
- Low risk of harm to nesting birds should vegetation clearance be undertaken during the bird nesting season (March to August inclusive). This includes the removal of overhanging hedgerow from adjacent gardens.
- Low risk of harm to mammals including Priority Species such as hedgehog, should they be present on site during construction works.
- Risk of damage to roots of trees and hedgerows growing adjacent to the site.

Key mitigation measures include:

- Vegetation clearance/tree felling will be undertaken outside of the bird nesting season (March to August inclusive) unless a checking survey by a suitably qualified ornithologist confirms the absence of active nests.
- Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.
- The roots and crowns of retained trees will be protected throughout the development through the provision of adequate construction exclusion zones in accordance with the guidance given by ¹BS5837:2012.
- External lighting that may reduce bat use of the surrounding areas will be avoided. High intensity security lights will be avoided as far as practical and will be low level (2m) and low lumen. Where security lights are required, these will be of minimum practicable brightness, be set on a short timer and will be motion sensitive only to larger objects.
- The landscape planting will be designed to enhance structural diversity, and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

The local planning authority are likely to require the means of delivery of the mitigation to be identified. It is recommended that mitigation and enhancement proposals are incorporated into the master-planning documents.

If you are assessing this report for a local planning authority and have any difficulties interpreting plans and figures from a scanned version of the report, E3 Ecology Ltd would be happy to email a PDF copy to you. Please contact us on 01434 230982.

¹ BS5837:2012. 'Trees in relation to design, demolition and construction – Recommendations'.

B. INTRODUCTION

E3 Ecology Ltd was commissioned by CEAD Limited to undertake a preliminary ecological appraisal of Wark Crescent, Jarrow.

B.1 BACKGROUND TO DEVELOPMENT

The site is located in Hedworth, Jarrow at an approximate central grid reference of NZ 32894 62690. The site location is illustrated below in Figure 1.



FIGURE 1 – SITE LOCATION
(Reproduced from the ordnance survey map under licence 2015)

B.2 CURRENT DEVELOPMENT INFORMATION

It is proposed to develop the site into an apartment block with four residential units. Current plans are illustrated in figure 2, below:



FIGURE 2 – DEVELOPMENT PROPOSALS (PROVIDED BY CEAD LIMITED 2015)



B.3 PLANNING POLICY AND LEGISLATIVE CONTEXT

B.3.1 PLANNING POLICY

The National Planning Policy Framework (NPPF) states the following:

- Plan policies and planning decisions should be based upon up-to-date information about the natural environment (Paragraph 158 and 165).
- Plan policies should promote the preservation, restoration and recreation of priority habitats, ecological networks and the recovery of priority species (Paragraph 117).
- Local planning authorities should set out a strategic approach in their Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure. (Paragraph 114).
- When determining planning applications in accordance with the Local Plan and the presumption in favour of sustainable development local planning authorities should aim to conserve and enhance biodiversity by applying a number of principles, including if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. (Paragraph 118).

As of October 1 2006, public authorities have a duty to conserve biodiversity under the Natural Environment and Rural Communities (NERC) Act 2006.

B.3.2 PROTECTED SPECIES LEGISLATION

The following protected species may be present on a site such as this:

TABLE 1 – SUMMARISED SPECIES LEGISLATION		
SPECIES	RELEVANT LEGISLATION	LEVEL OF PROTECTION
Bats (All species)	<ul style="list-style-type: none"> • Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as European protected species under Conservation of Habitats and Species Regulations 2010 • Bats are also protected by the Wild Mammals (Protection) Act 1996 	<p>The WCA (1981) and Habitat Regulations (2010) make it an offence to:</p> <ul style="list-style-type: none"> • Intentionally kill, injure, or take any species of bat • Intentionally or recklessly disturb bats • Intentionally or recklessly damage destroy or obstruct access to bat roosts
Birds	<ul style="list-style-type: none"> • Protection under the Wildlife and Countryside Act (1981) as amended with the exception of some species listed in Schedule 2 of the Act 	<p>The WCA (1981) makes it an offence to (with exceptions for certain species):</p> <ul style="list-style-type: none"> • Intentionally kill, injure or take any wild bird • Intentionally take, damage or destroy nests in use or being built (including ground nesting birds) • Intentionally take, damage or destroy eggs • Species listed on Schedule 1 of the WCA or their dependant young are afforded additional protection from disturbance whilst they are at their nests
<p><i>Under the Countryside and Rights of Way Act 2000 (CROW Act) the offence in section 9(4) of the Wildlife and Countryside Act 1981 of damaging a place of shelter or disturbing those species given full protection under the act is extended to cover reckless damage or disturbance.</i></p>		

B.3.3 PROTECTED SITE LEGISLATION

Details of the legislation surrounding protected sites are provided in the appendices.

B.3.4 PRIORITY SPECIES

Although not afforded any legal protection, national priority species, as listed in Section 41 of the NERC Act (2006), and local and regional priority species, as detailed within the relevant biodiversity action plans, are material considerations in the planning process and as such have been assessed accordingly within this report.

B.4 **PERSONNEL**

Survey work and reporting was undertaken by:

- Darryl Birch BSc TechArborA
- Hannah Norman BSc MSc GradCIEEM

The project was checked by:

- Emma Barnes BSc MSc ACIEEM

Details of experience and qualifications are available at www.e3ecology.co.uk.

B.5 **SCOPE OF STUDY**

The scope of the study in terms of the survey area, zone of influence and the desk study area is based on professional judgement and on the sites characteristics, the surrounding area and the nature of the proposed development. The scope of the survey is based on the information provided regarding the development proposals prior to the completion of this appraisal.

For this site the whole site area as well as a 50m buffer around the periphery of the red line boundary was appraised where access was available. A 2km buffer from the site was used for the data search.

B.6 **OBJECTIVES OF STUDY**

To determine the presence or otherwise of habitats and species of conservation value, the extent to which they may be affected by the proposed development, and the additional work that may be required to complete a full ecological impact assessment and to design suitable mitigation and/or compensation.

C. SURVEY AREA AND METHODOLOGY

C.1 SURVEY AREA

Figure 3 illustrates the site boundary whilst, to provide context, Figure 4 illustrates the broad habitats present on site and within an approximate 500m buffer zone.



**FIGURE 3 – AERIAL PHOTOGRAPH OF THE SITE
ILLUSTRATING ITS EXTENT WITH A RED LINE BOUNDARY
(Reproduced under licence from Google Earth Pro. 2015)**



**FIGURE 4 – AERIAL PHOTOGRAPH CENTRED ON THE SITE
WITH A 500M RADIUS ILLUSTRATING THE SETTING AND THE
HABITATS IT SUPPORTS
(Reproduced under licence from Google Earth Pro. 2015)**

C.2 DESKTOP STUDY METHODOLOGY

Initially, the site was assessed from aerial photographs and 1:25000 Ordnance Survey maps. Following this, the Multi Agency Geographic Information for the Countryside (MAGIC) website² was checked for any notable sites.

C.3 PRELIMINARY FIELD STUDY METHODOLOGY

C.3.1 PHASE 1 HABITAT SURVEY

C.3.1.1 SURVEY METHODS

The field survey of the proposed site was conducted using the methodology of the Joint Nature Conservation Committee's Phase 1 Habitat Survey, as outlined in their habitat-mapping manual³. Each parcel of land was assessed by a trained surveyor and classified as one of approximately ninety habitat types. These were then mapped and the habitat information supplemented by dominant and indicator species codes and target notes where appropriate. Where areas within the study area do not fall into the Phase 1 Habitat Survey classification, alternative methods of classification have been used.

C.3.1.2 SURVEY EQUIPMENT

- Digital Camera
- Binoculars

C.3.2 PRELIMINARY PROTECTED AND PRIORITY SPECIES APPRAISAL

C.3.2.1 SURVEY METHODS

Where there is a risk of legally protected species and/or otherwise notable species⁴ being present, an initial appraisal was completed to inform the proposals. This appraisal included the following key elements:

- Structures and trees were assessed for the risk of supporting roosting bats.
- Wetlands, where present, were reviewed for their potential use by great crested newt, otter and water voles,
- If present, any trackways regularly used by badger were noted and any badger sett usage assessed by the presence of freshly dug earth or bedding at the entrance.
- The risk of reptiles using the site was assessed based on the habitats present.
- Likely use of the site by birds was assessed from the species seen during the survey, and the habitats present.
- Potential use by otherwise notable species was determined based on the broad habitat types present on site, any recent records obtained through the desk study and the geographical distribution of the species. Where specific habitat requirements for notable species have been recorded on site these have been noted, and used as part of this appraisal. The species groups assessed are limited to birds, freshwater fish, amphibians, reptiles, terrestrial mammals, butterflies and dragonflies.

Where it is considered likely that there is a significant risk of protected or otherwise notable species being affected or where habitats are of particularly high value additional specialist

² Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)

³ Handbook for Phase 1 habitat survey, A Technique For Environmental Audit, JNCC, 2010

⁴ To include national priority species as listed in Section 41 of the NERC Act (2006) and local or regional priority species as listed within the relevant Biodiversity Action Plan



survey work has been recommended. Further survey work may also be recommended where development proposals have the potential to effect statutorily designated sites in the vicinity.

Survey was undertaken by Darryl Birch BSc TechArborA, on the 21st September 2015.

C.3.3 ENVIRONMENTAL CONDITIONS

The table below details the environmental conditions during the preliminary ecological appraisal.

TABLE 2 – SURVEY CONDITIONS				
DATE	TEMPERATURE	CLOUD COVER	PRECIPITATION	WIND CONDITIONS
21/9/15	12.5°C	100%	Heavy Rain	0

C.3.4 SURVEY CONSTRAINTS

Survey was carried out under sub-optimal conditions for observing invertebrates, birds and terrestrial mammals. However habitats within the site are limited and are unlikely to support a broad range of species, therefore the results of the survey combined with experience and professional judgement are considered to be a robust assessment of the site's ecological value.

D. RESULTS

D.1 DESKTOP STUDY

D.1.1 PRE-EXISTING INFORMATION

ORDNANCE SURVEY MAPPING AND AERIAL PHOTOGRAPHY

Figures 1 (A1) and 4 (C1) show that the general land use in the surrounding area is predominantly urban development. The metro line with associated plantation amenity woodland runs along the south of the site and the Calfclose Burn, approximately 200m east, acts as a wildlife corridor through the local area.

The most recent aerial photograph of the site (Figure 3, C1,) indicates that habitats on site are dominated by hardstanding. Historic imagery suggests that a small structure was present within the corner of the site in 2002 but was demolished some time before 2005.

MULTI AGENCY GEOGRAPHIC INFORMATION FOR THE COUNTRYSIDE WEBSITE (WWW.MAGIC.GOV.UK)

A search of the MAGIC website identified three local nature reserves within 2km of the site:

- Primrose (LNR) 1.2km north
- Station Burn (LNR) 1.3km east
- Pelaw Quarry Pond (LNR) 1.7km west

Given the distance, location of these designations and nature of development it is considered that no impacts will occur on these sites.

D.2 FIELD SURVEY

D.2.1 HABITATS

The habitats present within the survey area are illustrated within the figure below.



FIGURE 5 – HABITAT MAP
(Reproduced from Google Earth Pro under licence)

HARD STANDING

The majority of the site is dominated by hard standing, used by local residents for parking.

SITE BOUNDARIES

Close boarded fencing marks the boundary of the site to the east and north with a low stone wall marking the north west boundary. A young self-seeded Italian alder (*Alnus cordata*), is growing in the north of the site.



AMENITY GRASSLAND

A small area of amenity grassland is located to the west of the proposed development. The sward is well managed and comprises the following species; red fescue (*Festuca rubra*), perennial rye grass (*Lolium perenne*), dandelion (*Taraxacum officinale* agg.), creeping buttercup (*Ranunculus repens*), ribwort plantain (*Plantago lanceolata*), daisy (*Bellis perennis*) and white clover (*Trifolium repens*).



HEDGEROW

There is 4m high mature hedgerow comprising cypress (*Cupressocyparis* spp), buddleia (*Buddleja* sp.), fuchsia (*Fuchsia* sp.), laurel (*Lauraceae* sp.) and ivy (*Hedera helix*), on the eastern border which has grown through the fencing in places onto the site.



BROADLEAF WOODLAND

Approximately 20m south, and separated from the site by a road and stretch of amenity grassland, there is an early mature broadleaf plantation woodland growing adjacent to the metro line. This includes the following species: crack willow (*Salix fragilis*), sycamore (*Acer pseudoplatanus*), beech (*Fagus sylvatica*), Norway maple (*Acer platanoides*), white poplar (*Populus alba*), Italian maple (*Acer opalus*), Italian alder, rowan (*Sorbus acuparia*), English oak (*Quercus robur*), green alder (*Alnus viridis*), grey poplar (*Populus x canescens*), black pine (*Pinus nigra*) and silver birch (*Betula pendula*).



D.2.2 TARGET NOTES

TARGET NOTE 1

To north of the amenity grassland is a small patch of scrub supporting the following species; dog rose (*Rosa canina*), bent grass (*Argrostis* sp.), bramble (*Rubus fruticosus*), perennial rye grass, red fescue, nettle (*Urtica dioica*) and rosebay willowherb (*Chamerion angustifolium*).



TARGET NOTE 2

Two shipping containers were located within the northern section of the site at the time of the survey.



D.2.3 SPECIES

BATS

There are no structures present within the site capable of supporting roosting bats. The metro line and plantation woodland located to the south, are likely to be used by commuting and foraging bats as a link through the area, however the site itself lacks good foraging habitat and its use by bat species will be limited.

OTTER

There are no watercourses present on site, the nearest being the Calfclose Burn, located approximately 200m east, and separated by urban development. Similarly the Monkton Burn is located 340m west separated by a busy dual carriageway. The site lacks any habitats suitable for foraging and it is considered that otter are absent from the development area.

GREAT CRESTED NEWT

Habitat suitable for supporting great crested newts is limited to the small area of scrub in the north western corner however there are no ponds or areas of standing water present on site or known within 500m and it is considered that this species is absent.

BIRDS

The limited vegetation on site will provide a poor quality nesting resource to birds. Foraging opportunities will be limited to the small area of amenity grassland and scrub in the western corner which may be used occasionally by low numbers of urban bird species that will be common in the local area. Better quality foraging and nesting habitat for these species will be found in the adjacent hedgerow as well as in surrounding urban gardens and the habitats to the south.

BADGER

The site lacks any sett creation opportunities for badger. The woodland and embankment along the metro line could provide suitable habitat and this species may be present in the local area. However, the lack of foraging opportunities on site and relatively high disturbance from surrounding urban residents limits the likelihood that badger would use the site.

WATER VOLE

Due to the lack of suitable habitats and distance from local watercourses, it is considered that water vole are absent from the development area.

REPTILES

The site lacks the mosaic of habitats required by this species and they are considered unlikely to be present on site or within the local area.



RED SQUIRREL

The site lacks the mature conifer woodland habitat required by this species and they are unlikely to be present.

WHITE-CLAWED CRAYFISH

No watercourses are present within the development area and as such there are no habitats suitable for white-clawed crayfish.

INVERTEBRATES

No larval food plants for priority invertebrate species were recorded during the survey.

PRIORITY AND LOCAL BAP SPECIES

It is likely that hedgehog, a Priority Species hedgehog, will be present within the local area and may occasionally forage within the site.

E. SITE ASSESSMENT

The value and significance of the habitats and species found was assessed against the following criteria developed from the Guidelines for Ecological Impact Assessment produced by the Chartered Institute of Ecology and Environmental Management⁵.

TABLE 3 - ECOLOGICAL IMPACT ASSESSMENT VALUATION	
LEVEL OF VALUE	EXAMPLES
International	<ul style="list-style-type: none"> • An internationally designated site or candidate site. • A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. • Any regularly occurring, nationally significant population/number of any internationally important species.
National	<ul style="list-style-type: none"> • A nationally designated site. • A viable area of a priority habitat or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring population of a nationally important species, which is threatened or rare in the region or county. • A regularly occurring regionally or county significant population/number of any nationally important species. • A feature identified as of critical importance within Section 41 of the NERC Act (2006)
Regional	<ul style="list-style-type: none"> • Viable areas of key habitat identified in the Regional Biodiversity Action Plan or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • A regularly occurring, locally significant number of a regionally important species.
County	<ul style="list-style-type: none"> • County designated sites. • A viable area of a habitat type identified in the county Biodiversity Action Plan. • Any regularly occurring, locally significant population of a species which is listed in a county "red data book" or Biodiversity Action Plan on account of its rarity or localisation within the county. • A regularly occurring, locally significant number of a species important in a county context.
District	<ul style="list-style-type: none"> • Areas of habitat identified in a district level Biodiversity Action Plan. • Sites designated at a district level. • Sites/features that are scarce within the district or which appreciably enrich the district habitat resource. • A population of a species that is listed in a district Biodiversity Action Plan because of its rarity in the locality.
Parish	<ul style="list-style-type: none"> • Area of habitat considered to appreciably enrich the habitat resource within the context of the parish. • Local Nature Reserves.
Local	<ul style="list-style-type: none"> • Habitats and species that contribute to local biodiversity, could only be replicated in the medium term, but are common in the local area. • Loss of such habitats would ideally be mitigated if local biodiversity is to be conserved and enhanced.
Low	<ul style="list-style-type: none"> • Habitats of poor to moderate diversity such as established conifer plantations, species poor hedgerows and un-intensively managed grassland that may support a range of local Biodiversity Action Plan species but which are unexceptional, common to the local area and whose loss can generally be readily mitigated.

⁵ Institute for Ecology and Environmental Management (2006) Guidelines for Ecological Impact Assessment in the United Kingdom (Version 7 July 2006). <http://www.ieem.org.uk/ecia/index.html>.

E.1 HABITATS

The site predominantly comprises approximately 135m² of hardstanding with a small area of amenity grassland and scrub and a single young self-seeded Italian alder growing in the north of the site. Overall the site is considered to be of low ecological value.

E.2 NOTABLE SPECIES

The lack of good foraging habitats or roosting opportunities is likely to limit the use of the site by bats. Bats may be present within the local area, the mostly likely species being common pipistrelle, and will use the woodland to the south as a feeding resource and commuting route. The value of the site to bats therefore, is considered to be low.

The site will offer only poor quality nesting and foraging opportunities to birds. Abundant and better quality foraging and nesting habitat for this species is present within the surrounding area. This includes the adjacent hedgerow which will provide nesting habitat for urban and garden bird species. The site itself is considered to be of low value to birds.

Whilst badger may be present within the local area, the site lacks sett creation opportunities or good quality foraging habitat and therefore is of low value to this species.

Hedgehog which is a Priority species, is likely to be present within the area and may occasionally forage on site however the lack of vegetation is likely to limit use. The site is considered of low value to this species.

Red squirrel, otter, water vole, white clawed crayfish, reptiles, great crested newts and priority invertebrates are all considered to be absent from the site due to the lack of suitable habitat it provides.

E.3 LIMITATIONS

The site is open access. Survey was carried out under sub-optimal conditions for observing invertebrates, birds and terrestrial mammals. However habitats within the site are limited and are unlikely to support a broad range of species, therefore the results of the survey combined with experience and professional judgement are considered to be a robust assessment of the site's ecological value.

F. IMPACT ASSESSMENT

The likely effects of the proposed development, without appropriate targeted mitigation and/or compensation, are:

F.1 DIRECT DEVELOPMENT IMPACTS

- Loss of habitats of low ecological value.
- Low risk of harm to nesting birds should vegetation clearance be undertaken during the bird nesting season (March to August inclusive). This includes the removal of overhanging hedgerow from adjacent gardens.
- Low risk of harm to mammals including hedgehog which is a priority species, should they be present on site during construction works.
- Risk of damage to roots of trees and hedgerows growing within and adjacent to the site.

G. RECOMMENDATIONS

The recommendations below have been based upon survey effort to date. Where additional survey work is recommended to inform the mitigation and compensation strategy, this is detailed in Section G.1.

The recommended strategy aims to avoid significant negative impacts initially. Where it is not possible to avoid such impacts, mitigation measures will be designed that aim to reduce the impacts to a level that is not deemed significant. Should avoidance and mitigation not be sufficient to reduce the impacts to such a level, a compensation strategy will be proposed to address the negative impact.

G.1 FURTHER SURVEY

No further work is required.

G.2 AVOIDANCE AND MITIGATION STRATEGY

G.2.1 TIMING OF WORKS

- Vegetation clearance/tree felling will be undertaken outside of the bird nesting season (March to August inclusive) unless a checking survey by a suitably qualified ornithologist confirms the absence of active nests.

G.2.2 WORKING METHODS AND BEST PRACTICE

- Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.
- The roots and crowns of retained trees will be protected throughout the development through the provision of adequate construction exclusion zones in accordance with the guidance given by BS5837:2012.

G.2.3 HABITAT ENHANCEMENT

- External lighting that may reduce bat use of the surrounding areas will be avoided. High intensity security lights will be avoided as far as practical and will be low level (2m) and low lumen. Where security lights are required, these will be of minimum practicable brightness, be set on a short timer and will be motion sensitive only to larger objects.
- The landscape planting will be designed to enhance structural diversity, and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.

APPENDIX 1. STATUTORILY AND NON-STATUTORILY DESIGNATED SITES

A1.i Statutorily Designated Sites

Ramsar Sites

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention recognizes wetlands as important ecosystems and includes a range of wetland types from marsh to both fresh and salt water habitats. The wetlands can also include additional areas adjacent to the main water-bodies such as river banks or coastal areas where appropriate.

Special Protection Areas (SPAs)

SPAs are classified by the UK Government under the EC Birds Directive and comprise areas which are important for both rare and migratory birds.

Special Areas of Conservation

SACs are designated under the EC Habitats Directive and are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the Conservation of Habitats and Species Regulations 2010 (as amended) unless they are offshore.

Sites of Special Scientific Interest

SSSIs are designated as sites which are examples of important flora, fauna, or geological or physiographical features. They are notified under the Wildlife and Countryside Act 1981 with improved provisions introduced by the Countryside and Rights of Way Act 2000.

National Nature Reserves (NNRs)

NNRs are designated by Natural England under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 and support important ecosystems which are managed for conservation. They may also provide important opportunities for recreation and scientific study.

Country Parks

Country Parks are statutorily designated and managed by local authorities in England and Wales under the Countryside Act 1968. They do not necessarily have any nature conservation importance, but provide opportunities for recreation and leisure near urban areas.

A1.ii Non-Statutorily Designated Sites

Local Nature Reserves (LNRs)

LNRs are designated under the National Parks and Access to the Countryside Act 1949 by local authorities in consultation with Natural England. They are managed for nature conservation and used as a recreational and educational resource.

Non-Governmental Organisation Property

These are sites of biodiversity importance which are managed as reserves by a range of NGOs. Examples include sites owned by the RSPB, the Woodland Trust and the Wildlife Trusts.

Local Wildlife Sites (LWSs)

These are sites defined within the local plans under the Town and Country Planning system and are material considerations of any planning application determination. They are designated by the local authority although criteria for designation can vary between authorities.