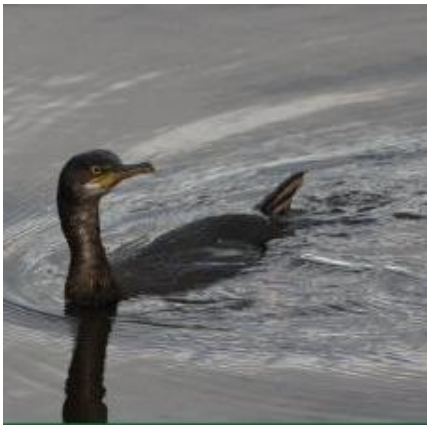






Ecological Impact Assessment

St George the Martyr Church,

East Boldon,

NE36 0SW

21 High Green
Great Ayton
North Yorkshire
TS9 6BJ
T 01642 724800
F 01642 722005
M 07572 396517
E enquiries@ecosurv.co.uk

Prepared by

Harriet Davis BA (Hons)

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Disclaimer

This report is presented to Mario Minchella Architects in respect of the proposed development at St George the Martyr Church, East Boldon and may not be used or relied on by any other person or by the client in relation to any other matters not covered specifically by the scope of this report. Notwithstanding anything to the contrary contained in the report, Ecosurv Ltd is obliged to exercise reasonable skill, care, and diligence in the performance of the services required by Mario Minchella Architects and Ecosurv Ltd shall not be liable except to the extent that it has failed to exercise reasonable skill, care and diligence, and this report shall be read and construed accordingly.

This report has been prepared by Ecosurv Ltd. No individual is personally liable in connection with the preparation of this report. By receiving this report and acting on it, the client or any other person accepts that no individual is personally liable whether in contract, tort, for breach of statutory duty or otherwise.

Quality Assurance

All ecologists employed on this project by Ecosurv Ltd are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow the Institute's code of practice when undertaking ecological surveys and associated work, or were supervised by such a member.

All assessment is based upon, and accurate to, the information made available to Ecosurv Ltd prior to the completion of this report. Any alterations to this information at a later date will reduce the accuracy of this report, to which Ecosurv Ltd cannot be held accountable.

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1 EXECUTIVE SUMMARY

Ecosurv Ltd were instructed by Mario Minchella Architects to undertake an Ecological Impact Assessment (EcIA) for the proposed development at St George the Martyr Church, East Boldon. The survey work and preparation of this report has been undertaken by Harriet Davis BA (Hons). The report has been written in accordance with the CIEEM Guidelines on Ecological report writing (CIEEM, 2017) and BS 42020:2013 (BSI, 2013).

This EcIA has been produced in accordance with the CIEEM Guidelines for Ecological Impact Assessment the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018). To inform this report on potential ecological impacts regarding the proposed site, previous information has been used, this includes; a site visit undertaken in June 2024, together with biological records provided by the Environmental Records Information Centre North East (ERIC).

The site is centred on Grid Reference NZ365896122 and can be accessed by Front Street. The habitat on site comprised of a small area of woodland situated adjacent to the church building. The proposals are for the construction of no-dig pathways and a community garden. Wildflower planting and wildlife habitat improvement areas are also proposed. This will require the clearance of the existing woodland ground flora and non-native shrub species. The small woodland is located within an urban area and is enclosed by housing. Agricultural fields are located beyond the adjacent housing on the southern and northern boundaries of the village. Boldon Flats Nature Reserve is located approximately 1km east of the woodland.

This assessment has considered the potential effects upon protected species arising from the proposed development. Mitigation measures have been proposed to ensure that impacts are avoided or minimised.

Through careful consideration of the potential impacts, it is concluded that the proposed development complies with current planning policy and that the legal implications arising from the recreational development in respect of habitats and species have been addressed.

2 INTRODUCTION

Ecosurv Ltd were instructed by Mario Minchello Architects to undertake an Ecological Impact Assessment (EcIA) for the proposed development at St George the Martyr Church, East Boldon. The survey work and preparation of this report has been undertaken by Harriet Davis BA (Hons). The EcIA has been produced in accordance with the CIEEM Guidelines on Ecological report writing (CIEEM, 2017) and BS 42020:2013 (BSI, 2013).

To inform this report on potential ecological impacts regarding the proposed extension of the site, various sources of previous information have been used, this includes; a site visit undertaken in June 2024, together with biological records provided by the Environmental Records Information Centre North East (ERIC).

This EcIA has been produced in accordance with the CIEEM Guidelines for Ecological Impact Assessment the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018).

The site is centred on Grid Reference NZ365896122 and can be accessed by Front Street. The habitat on site comprised of a small area of woodland situated adjacent to the church building.

The proposals are for the construction of no-dig pathways and a community garden. Wildflower planting and wildlife habitat improvement areas are also proposed. This will require the clearance of the existing woodland ground flora and non-native shrub species. This will require the clearance of the existing woodland ground flora and non-native shrub species. The small woodland is located within an urban area and is enclosed by housing. Agricultural fields are located beyond the adjacent housing on the southern and northern boundaries of the village. Boldon Flats Nature Reserve is located approximately 1km east of the woodland.

2.1 Location

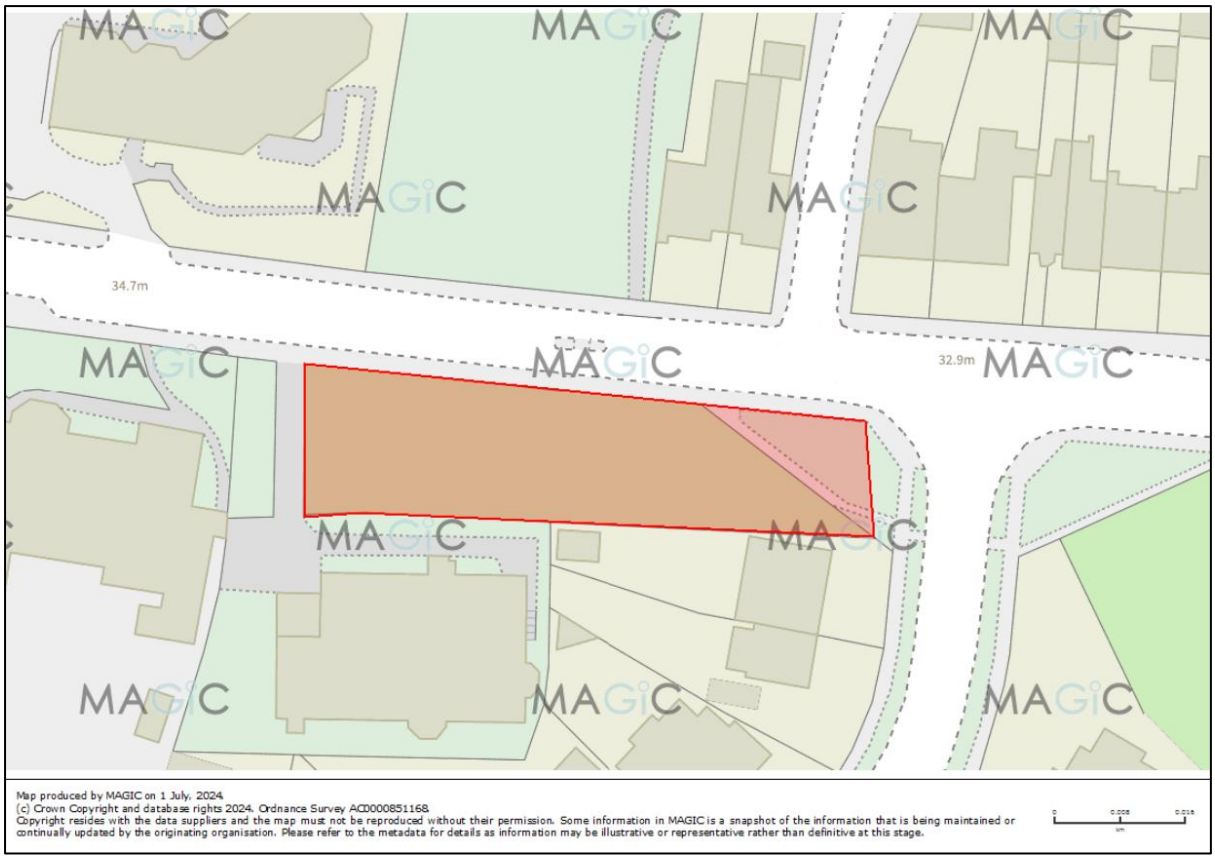


Figure 1. Site location plan. Red line shows the area proposed for development.

(© Crown Copyright and MAGIC database rights 2024 Ordnance Survey 100022861).

3 LEGISLATION

3.1 Summary of legislation

This section summarises the legislation, which is relevant, in ecological terms, to this assessment, i.e. legislation relevant to species present or potentially present within the survey area is included here along with legislation relevant to protected sites in the vicinity.

- Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way (CROW) Act 2000;
- The Protection of Badgers Act (1992);
- Wild Mammals (Protection) Act 1996;
- The Conservation of Habitats and Species Regulations 2010(as amended);
- Environment Act 1995;
- Natural Environment and Rural Communities (NERC) Act 2006.

The most significant legislation governing the protection of British wildlife is the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017. The Wildlife and Countryside Act, as amended mainly by the Countryside Rights of Way Act, protects animal species listed in Schedule 5 and plant species in Schedule 8 of the Act from being killed, injured, and used for trade. The provisions of this act further protect certain species, such as great crested newts and bats from being disturbed or taken from the wild, as well as protecting elements of their habitats. The Act also specifies that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. The provisions of this act complement those of the Wildlife and Countryside Act. Species to which these provisions apply are the European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

The following EC Directives and international conventions are applied by some of the above UK Acts and Regulations:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and wild fauna and flora (as amended);
- Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (as amended);
- Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) (1979) (as amended);
- Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention) (1979) (as amended);
- Agreement on the Conservation of Bats in Europe (1999) (as amended).

3.2 National Planning Policy

The National Planning Policy Framework (NPPF) published in 2012 and revised in December 2023 states that policy should contribute to and enhance the natural and local environments by:

- Protecting and enhancing valued landscapes, geological conservation interests and soils;
- Recognise the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including economic and other benefits of best and most versatile agricultural land, and trees and woodland;
- Maintaining the character of the undeveloped coast, while improving public access where appropriate;
- Minimising impacts on and providing net gains for biodiversity, included by establishing coherent ecological networks that are more resilient to current and future pressures.
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF also states that planning for biodiversity should be done at a landscape scale across local authority boundaries, identifying components of the local ecological network including nationally and locally important sites for biodiversity and wildlife corridors and stepping stones that connect them.

Of particular significance with the revised NPPF 2023 requires opportunities to incorporate biodiversity improvements in and around development, rather than simply making it optional.

186. When determining planning applications, local planning authorities should apply the following principles:

a) 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;

b) 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;

c) 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

d) 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.

Further details on the legislation protecting species of British wildlife and habitats relevant to this assessment can be found in section 9.1 of this report.

4 METHODS

4.1 Overview

EcIA is a process of identifying, quantifying, and evaluating potential effects of development-related or other proposed actions on habitats, species, and ecosystems. The findings of an assessment assist the competent authorities understand ecological issues when determining applications for consent.

The overall aims of the EcIA are to:

- Determine the importance of ecological features affected, through survey and/or research and with reference to available contextual information;
- Assess impacts potentially affecting important features;
- Characterise the impacts, e.g. extent, magnitude, duration, reversibility, timing, and frequency;
- Identify cumulative impacts;
- Identify significant effects of impacts in the absence of any mitigation.

The EcIA has used a number of data sources, including a desktop study and site visits and supporting information, which are summarised in the table below.

Table 1. Summary of Survey Effort Undertaken to inform the EcIA.

Report/ Survey	Surveyors	Date of Completion
Site Visit and Report	Harriet Davis	June 2024

The preparation of this report has been conducted by Harriet Davis BA (Hons).

All survey and assessment work has been completed in line with official guidelines produced by Natural England and the Chartered Institute for Ecology and Environmental Management, and British Standard document BS 42020: 2013 '*Biodiversity – Code of practice for planning and development.*'

4.2 Limitations

Desk study limitations

Species specific groups were not contacted for their detailed records within the survey area. However, the combination of data obtained primarily from the local environmental records centre was felt to be sufficient to achieve the objectives of the report.

4.3 Survey Area

The site is centred on Grid Reference NZ365896122 and can be accessed by Front Street (Figure 1). The assessment focused on the application site, as well as all habitats in the immediate surrounding area (where access was available).



Figure 2. Satellite Image of the surveyed area. Application site boundary is shown by the red line.

(Image taken from Google Earth Pro: ©2024 Map Data Google 2024)

4.4 Desktop Study

The desktop study collected publicly available information regarding the biodiversity of the area, including the habitat structure of the site and wider landscape, as well as the presence of any statutory or non-statutory designated sites, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource. Biological records within 2km of the site were also requested from the Environmental Records Information Centre (ERIC) North East, which included records of protected and notable species and any nearby non-statutory designated sites not available through MAGIC.

4.5 Field survey

The field survey followed the CIEEM GPEA document (CIEEM, 2013) and BS 42020:2013 document (BSI, 2013). Field surveys have been carried out by Harriet Davis BA (Hons) in June 2024. The survey area included the site and extended into areas which were deemed to be a potential receptor of ecological impact due to the proposed development.

Habitats found on the site were identified using the standard Phase 1 Habitat Survey methodology (JNCC 2010) with target notes made to describe features of interest.

In addition to mapping habitat types and dominant flora, the potential for the survey area to support any legally protected faunal species and/or faunal species of nature conservation importance, e.g. BAP priority species, was assessed. Detailed surveys were not undertaken; rather the potential for the survey area to support each species/species group was assessed.

Features that would likely support protected species, holes in trees, drainage ditches, ponds, embankments etc. were all examined for the possible presence of species known to utilise these features, in accordance with the methodologies outlined in section 4.6. In addition, field signs or sightings of such species were recorded as seen.

Key features identified during the survey are summarised in the form of Target Notes. Nomenclature for plant species names is taken from Stace (1991) and the Botanical Society of the British Isles (BSBI) plant checklist (2007).

4.6 Protected Species Surveys

Badgers: An assessment of the site and surrounding habitats (where access was available), with particular focus on any areas of dense vegetation, was carried out in order to identify any evidence of badgers, including:

- the presence of any setts
- well-used runs/tracks
- supplementary evidence, such as hairs or prints
- badgers themselves

Bats: A Daytime Bat Walkover (DBW) of the proposed development site was carried out to observe, assess and record any habitats suitable for bats to roost, commute and forage both on site and in the surrounding area (where access was available) to determine the suitability of the site for bats and further survey requirement in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2023).

Evidence of roosting bats can include: bat droppings; staining around access points; small scratches around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

The bat risk assessment was completed using binoculars and a powerful torch. An endoscope was also available to check any small gaps/cracks for evidence of bats.

An external inspection of the structures on site was carried out, focussing on features that may provide roosting opportunities or access points to roosting features internally, such as the roof and ridge tiles. An internal inspection was also carried out, with any roof spaces present checked for any evidence of bats.

The structures were then categorised based on their suitability and potential for roosting bats, which was evaluated in accordance with the BCT guidelines detailed in Table 1 and criteria outlined in the Bat Mitigation Guidelines;

Table 2. Guidelines for assessing the potential suitability of structures

Potential Suitability	Description	
	Roosting habitats in structures	**Potential flight-paths and foraging habitats**
None	No Habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of year, (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate shelter/insect populations available to foraging bats).

Negligible*	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roof sites do not provide enough space, shelter, protection, appropriate conditions and or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	Habitat that could be used by small numbers of bats as flight path, such as gappy hedgerow or unvegetated stream. But isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used in small numbers. The foraging bats, such as a lone Tree (not in a Parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats do due to their size, shelter, production, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, production, conditions, and surrounding habitat. These structures have the potential to support high conservation status routes, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

In addition, a Ground Level Tree Assessment (GLTA) of any trees on site was caried out. This involves a detailed inspection of the exterior if the tree from the ground to look for features that bats could use for roosting (PRFs) to determine the suitability of the site for bats and further survey requirement in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2023). PRF types that can be exploited by bats include, but not exclusively; woodpecker holes, knot holes, wounds, cankers, forks, lifting bark, cracks, fluting and ivy.

The trees were then categorised based on their suitability and potential for roosting bats, which was evaluated in accordance with the BCT guidelines detailed in Table 3 and criteria outlined in the Bat Mitigation Guidelines,

Table 3. Guidelines for assessing the potential suitability of trees

Suitability	**Roosting habitats in Trees**	
None	Either no PRFs in the tree of highly unlikely to be any.	
FAR	Further assessment required to establish if PRFs are present in the tree by means of an elevated search to inspect PRFs either by climbing of the use of equipment such as ladders, MEWPS or scaffolding towers.	
PRF	A tree with at least one PRF present	
	PRF-I	PRF-M
	PRF is only suitable for individual bats of very small numbers of bats either due to size of lack of suitable surrounding habitats.	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Further survey effort to determine the presence/likely absence of bats and/or mitigation is site specific and should be carried out in accordance with the BCT Bat Survey Guidelines, however the following can be used a general guide:

Table 4. Guidelines for further survey effort

Suitability	**Further Survey Effort**	**Timing**
Low roost suitability	One dusk emergence survey	May to August. Note: The discovery of a roosting bat during this single bat activity survey will require further survey effort.
PRF-1	No further surveys required.	
Moderate roost suitability	Two separate dusk emergence surveys.	May to September with at least one of the surveys between May and August. Surveys should be at least three weeks apart, preferably more.

		Note: The discovery of a roosting bat during this single bat activity survey will require further survey effort.
High roost suitability or PRF-M	Three separate dusk emergence surveys.	May to September with at least two of the surveys between May and August. Surveys should be at least three weeks apart, preferably more.

Great Crested Newts: The habitats on site were assessed in regard to their suitability to support GCN. Potential refugia (such as logs, stones, discarded building materials etc.) present were also checked for the presence of GCN.

Any ponds on-site or within 500m of the site boundaries (where access was available) were assessed for their habitat suitability for GCN, utilising the modified Great Crested Newt Habitat Suitability Index (ARG UK 2010; Oldham et al. 2000). The Habitat Suitability Index (I) is used to evaluate the suitability of ponds to support GCN. It is a numerical index between 0 and 1, where 0 indicates completely unsuitable habitat and 1 represents optimal habitat. The HSI score is then utilised to define the suitability of the pond on a categorical scale as shown in table 5 below. This system provides an indication as to the suitability of ponds to support GCN but is not precise enough to conclude that a pond with a high score will definitely support GCN, whilst those with a low score will definitely not.

Table 5: HSI Scoring Categories

H S I Score	Pond Suitability
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

Breeding Birds: The survey was completed during the bird nesting season, additionally the habitats on site were also assessed in regard to their suitability for nesting birds, including the identification of any existing disused nests.

Reptiles: The site was assessed in regard to its suitability to support reptiles, which is largely based on an assessment of the habitats present on site and whether they afford sufficient opportunities to support basking, foraging and sheltering. Any refugia present was also checked for the presence of reptiles or evidence of reptiles, such as sloughs (shed skins).

Other Wildlife: In accordance with good practice, the site was checked for the presence of any other protected/notable species, with particular regard to any other species highlighted in the desktop study.

Invasive Species: The site was also surveyed for the presence of any invasive, non-native flora or fauna.

4.7 Zone of Influence

The potential impact of a development is not always limited to the boundaries of the site concerned. The development may also have the potential to impact on ecologically valuable sites, habitats, or species beyond the site boundaries. The area over which a development may impact ecologically valuable receptors is known as the Zone of Influence (ZoI).

The ZoI is determined by the source/type of impact, a potential pathway for that impact and the location and sensitivity of the ecologically valuable receptor beyond the boundary. For the majority of (unmitigated) impacts identified as part of the Proposed Development, the ZoI is generally considered to be the application site and immediately adjacent areas.

In ecological terms, the ZoI can also vary considerably depending upon the species potentially affected by the Proposed Development. For example, some species may be confined to a specific location whilst others, such as birds and bats are more mobile and can occupy larger territories or home ranges. The ZoI is likely to be influenced by the presence of dispersal barriers, such as roads and hardstanding, which either stop or reduce the likelihood of animals crossing it. As a consequence, this could isolate areas with potentially suitable habitat within the application site due to fragmentation.

The ZoI for species or species groups was determined by research and the professional judgement of the ecologist. For example, common lizards (Zootoca vivipara) have restricted mobility and generally occupy smaller home ranges (up to 700m) (Langton and Beckett, 1995). The ZoI for each species or species group is identified in the relevant section from Section 6.3 onwards.

4.8 Assessment methodology Biodiversity value

The CIEEM Guidelines

These guidelines provide a framework criterion for determining the value and importance of each potential ecological receptor found within the survey area.

Various characteristics can be used to identify important biodiversity features (sites, habitats, and species) that are likely to represent potentially significant constraints to the development project. These include a feature's:

- Rarity at various geographical scales;
- Threat status and vulnerability at various geographical scales;
- Diversity and/or its synergistic associations;
- Population size, and;
- Location in relation to its' known geographical distribution and range at various geographical scales.

The characteristics listed above help define a features' conservation status which can then be used to help determine its biodiversity value. CIEEM (2006) provides further information on how the relative value and importance of a receptor can be determined and states that its biodiversity value should be measured against published selection criteria where available.

It is also useful to distinguish between the biodiversity value of a receptor and its legal status. Features of high biodiversity value may not necessarily attract legal protection and vice versa. For example, a viable area of ancient woodland is likely to be considered of high biodiversity value even if it does not receive any formal statutory designations.

In the evaluation of biodiversity value, reference is also made to HA, UK and Local BAPs, inclusion on national or county Red Data Books, and to conservation status (such as nationally notable/scarce, etc.). However, the inclusion within a BAP reflects the fact that the population of the species/habitat concerned is in a sub-optimal state (and hence that conservation action is required) and does not necessarily imply any specific level of value. Despite this, priority BAP species/habitats may represent a significant ecological constraint if their presence triggers planning guidance implications (as outlined above).

In accordance with CIEEM (2006), each biodiversity feature should be assessed as valuable, or potentially valuable, based on the following geographic frame of reference (some examples of ecological receptors that may be potentially valuable at each geographical scale are provided below):

- International e.g. biodiversity feature that warrant designation of an area as a SPA, SAC, or Ramsar site;
- National (i.e. UK), e.g. biodiversity feature that warrants designation of an area as a SSSI;
- Regional, e.g. biodiversity features valuable at a regional level e.g. North East England;
- County, e.g. biodiversity features valuable at a county (i.e. South Tyneside) level;
- District, e.g. biodiversity features of value at the district (i.e. Boldon) level;
- Parish, e.g. biodiversity features of value at the parish (i.e. within ~5km) level;
- Local, e.g. biodiversity features of value in a local (i.e. parish or within ~5km of the scheme extent) context;
- Site, e.g. biodiversity features of value within the immediate survey area of the scheme only;

Table 6. Determination of significance

Scale	Species	Habitat
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, i.e. SAC, SPA, Ramsar, or one proposed for designation. Sites supporting areas of priority habitats which are scarce at an international level or where it is needed to maintain the viability of a larger area at that level.
National	A regularly occurring population/number of a nationally important species which is threatened or rare, 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 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, i.e. 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.

Regional	A regularly occurring, locally significant population of a species listed as being nationally scarce. A regularly occurring, locally significant number of a regionally 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 significance.	Sites supporting a viable area of a priority habitat which is scarce at a regional level or where it is needed to maintain the viability of a larger area at that level.
County	Any regularly occurring, locally significant population of a species which is listed in a county Red Data Book or BAP on account of its rarity. A regularly occurring, locally significant number of a 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 county significance.	A County designated site or one that meets published criteria. Sites supporting a viable area of a priority habitat which is scarce at a county level or where it is needed to maintain the viability of a larger area. Local Nature Reserves, Local Wildlife Sites/potential Local Wildlife Sites.
District	A population of a species that is listed in a district BAP because of its rarity in the locality. A species assemblage of district significance. A regularly occurring, locally significant number of district importance 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.	Sites/features that are scarce within the district. Areas of Semi Natural Ancient Woodland, for example.
Parish	Populations or species assemblages considered to enhance the ecological resource within the context of the Parish, e.g. a breeding bird assemblage.	Areas of habitat considered to appreciably enrich the habitat resource within the context of the Parish, or which buffer those of a more important nature.
Local	Species that contribute to local biodiversity but are not exceptional in the context of the parish.	Habitats that contribute to local biodiversity but are not exceptional in the context of the parish
Site	Populations or species assemblages insufficient to be considered in the wider context. Those which are unexceptional and common to local area.	Habitats or areas of habitat insufficient to be considered in the wider context. Those which are unexceptional and common to the local area.

4.9 Impact Assessment

In the assessment of significance of impact, consideration has been given both to the magnitude of impact and to the sensitivity of the receiving environment or species. The sensitivity of a feature was determined with reference to its level of importance although other elements have been taken into account, where appropriate. Methods of impact prediction used indirect measurements, correlations, expert opinion, and information from previous developments. Impacts include those that are predicted to be direct, indirect, temporary, permanent, cumulative, reversible or irreversible.

The magnitude of an impacts has been assessed for each element of the proposal. A definition of the magnitude impacts is presented in Table 7 and includes positive impact criteria in accordance with CIEEM guidance. The magnitude of each impact was assessed independently of its value or statutory status.

Table 7. Magnitude of Impact

Magnitude	Criteria
High Negative	The change is likely to permanently, adversely affect the integrity of an ecological receptor, in terms of the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/ or the population levels of species of interest.
Medium Negative	The change is not likely to permanently, adversely affect the integrity of an ecological receptor, but the effect is likely to be substantial in terms of its ecological structure and function and may be significant in terms of its ecological objectives. Likely to result in changes in the localised or temporary distribution of species assemblage or populations but not affect the population status at a regional scale or permanently.
Low Negative	The change may adversely affect the ecological receptor, but there will probably be no permanent effect on its integrity and/or key attributes and is unlikely to be significant in terms of its ecological objectives. Impacts are unlikely to result in changes to the species assemblage or populations, but core species more vulnerable to future impacts.
Negligible	The change may slightly adversely affect the receptor, but will have no permanent effect on the integrity of the receptor or its key attributes. There are no predicted measurable changes to the species assemblage or population and the effect is unlikely to result in an increased vulnerability of the receptor to future impacts
Positive	The change is likely to benefit the ecological receptor and/or enhance the biodiversity resource of the receptor.
High Positive	The change is likely to restore an ecological receptor to favourable conservation status, contribute to meeting BAP objectives (local and national) and/or create a feature that is of recognisable value for biodiversity.

The significance of an impact was determined according to the matrix of importance and magnitude as illustrated in Table 8.

Table 8. Significance of Impacts.

Magnitude/ Importance	High Negative	Medium Negative	Low Negative	Negligible	Positive	High Positive
International	Major	Major	Moderate	Negligible	Moderate	Major
National	Major	Major	Moderate	Negligible	Moderate	Major
Regional	Major	Moderate	Minor	Negligible	Minor	Moderate
County/ District	Moderate	Moderate	Minor	Negligible	Minor	Moderate
Parish/ Local	Minor	Minor	Minor	Negligible	Minor	Minor
Site	Minor	Negligible	Negligible	Negligible	Negligible	Negligible

The level of significance of impacts predicted on ecological receptors is an important factor in influencing the decision-making process and determining the necessity and/or extent of mitigation measures. Impacts can be beneficial or adverse, either improving or decreasing the ecological status health or viability of a species, population or habitat. In general, an adverse impact significance greater than or equal to Moderate would require specific mitigation to be undertaken to ameliorate the impact to acceptable levels.

5 DESKTOP STUDY

5.1 Desktop Study

5.1.1 Statutory Protected Sites

There are 5 statutory sites within 2km. These include Boldon Pasture (SSSI), West Meadow Farm (SSSI), Fulwell Quary (SSSI and LNR) and Tilesheds (LNR). These consist of grassland, meadows and wet land.

Table 9. **Summary of Statutory Sites**

Name	Features	Distance	Impact
Sites of Special Scientific Interest (SSSI's)			
FULWELL QUARRY	A designated SSSI due to its rare Magnesium Limestone geology. The site has large areas of wildflower meadows and grasslands, and which supports a large butterfly population. The site covers an area of 6.2ha.	1.9km Southeast	Negligible
WEST MEADOW FARM	An area which covers 3.1ha and consists of neutral low-lying grassland. Areas of scrubland also encroach on the site.	1.2km Northwest	Negligible
BOLDON PASTURE	An area which covers 3.5ha and is neutral low-lying grassland used for agricultural grazing.	1.7km East	Negligible
Local Nature Reserves (LNR's)			
FULWELL QUARY	The site has large areas of wildflower meadows and grasslands and which supports a large butterfly population. The site covers an area of 6.2ha.	1.9km Northeast	Negligible
TILESHEDS	An area of 1.3ha previously used for clay tile works, now a large area of wetland with large populations of animals and wildflowers.	1km North	Negligible

Due to the location, limited footprint of the development and lack of connectivity between the site and surrounding statutory protected sites, it is considered that none of the sites will be significantly impacted.

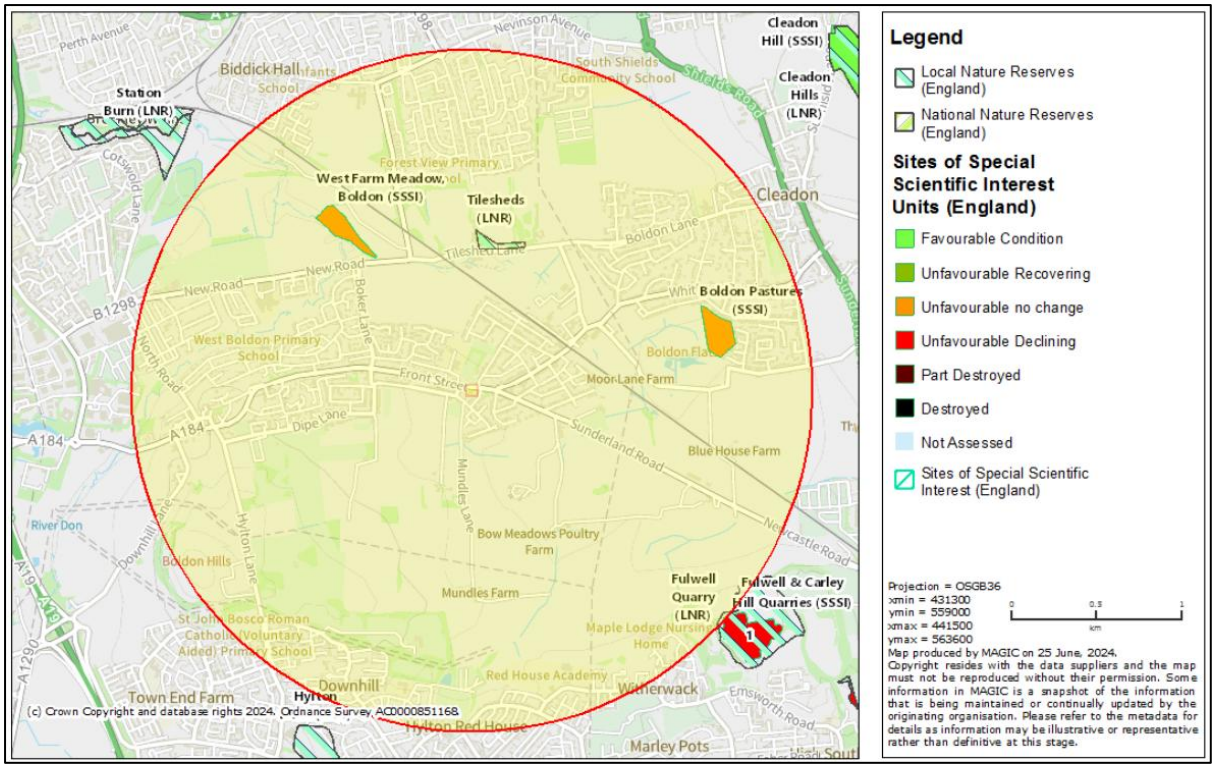


Figure 3. Location of site in relation to surrounding statutory protected sites

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5.1.2 Non-statutory sites

14 Local Wildlife Site (LWS) were identified within 2km of the proposed development site. The sites ranged from meadows to plantations and riverbanks. The closest site is Boldon Flats which features low-lying pastures and meadows which flood annually. Due to the distance from the development these LWS's are unlikely to be significantly impacted.

Due to the limited footprint of the proposed development and distance from the development these sites, it is unlikely the development will result in any significant impacts.

Table 10. Summary of Surrounding Non-statutory sites

Name	Features	Distance	Impact
Sunderland Local Wildlife Sites			
Fulwell Meadows	A large area of wildflower meadows located in Fulwell Quarry.	2km Southeast	Negligible
Downhill Meadows	An area of wildflower meadows with a large population of rare flowering plants.	1.9km Southwest	Negligible
South Tyneside Local Wildlife Sites			

Black Plantation	An area that covers 13.8ha and comprises of semi-mature birch, scattered with oak and other broadleaved trees.	900m Southwest	Negligible
Boldon Flats	An area of low lying pasture which is subject to seasonal flooding. The grassland is considered to be neutral.	700m Northeast	Negligible
Downhill Old Quarry	The former quarry base and paddock has a range of species-rich grassland types grading from Magnesian limestone grassland communities through to more neutral grasslands.	2km Southwest	Negligible
Turner's Hill	A small area of grassland located within Boldon Golf Course. The hill is extremely species rich.	1.2km Southwest	Negligible
Cotsman Gardens	An area which covers 4.1ha and comprises species-rich neutral grassland with some characteristics of northern dale hay meadow.	1.8km North northeast	Negligible
Tileshed/Tileshed Burn	An area of wetland with ditches and hedgerows.	800m North	Negligible
Low House Corpse	A 0.8ha area of broadleaved plantation with tall herbs in the understorey.	1.1km East	Negligible
River Don – North Road	The site consists of a section of the River Don between North Road and Newcastle Road. In this stretch the Don has mostly unmodified riverbank with features such as meanders, eroding earth cliffs, riffles and pools, and dead wood.	1.4km West	Negligible
River Don – West Boldon	This is a linear site and covers the banks of the River Don as it flows through West Boldon between North Road and New Road. The Don here has mostly unmodified riverbank with features such as meanders, eroding earth cliffs, riffles and pools, and dead wood.	1.9km West	Negligible
Newton Garths	This area comprises of several heavily grazed by horses.	1.9km Northwest	Negligible
Boldon Colliery former Railway Line	A length of disused railway embankment, formerly part of the North Eastern Railway Boldon and Newton Garths Branch, which dates from at least 1855 (OS First edition). Situated to the north and east of Colliery Wood	1.7km Northwest	Negligible

	it supports unimproved neutral grassland, mature scrub, scattered trees and wet ditch communities.		
South Tyneside LGS			
Downhill Old Quarry	The former quarry base and paddock has a range of species-rich grassland types grading from Magnesian limestone grassland communities through to more neutral grasslands.	1.9km Southwest	Negligible

Due to the limited footprint of the proposed development and distance from the development these sites, it is unlikely the development will result in any significant impacts.

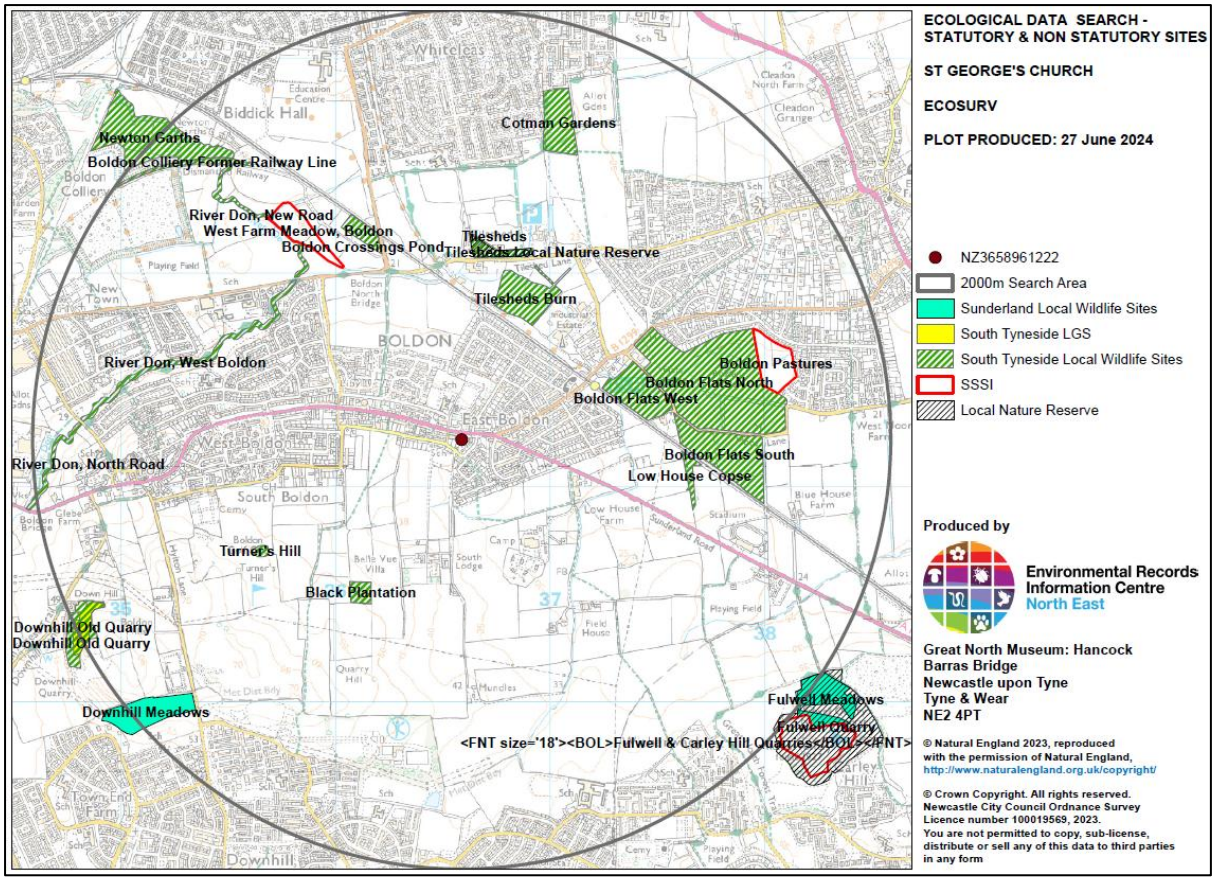


Figure 4. Location of site in relation to surrounding non-statutory sites

(© Environmental Records Information Centre North East).

5.1.3 Priority Habitats

There are no priority habitats on or adjacent to the site. The priority habitats found in a 2km radius if the site comprise of many grasslands, woodlands and no main habitats but additional habitats. The location of Priority Habitats is shown on the map in figure 5.

Due to the footprint of the development and its proximity to surrounding priority habitat, it is unlikely that there will be any significant impacts to surrounding Priority Habitats.

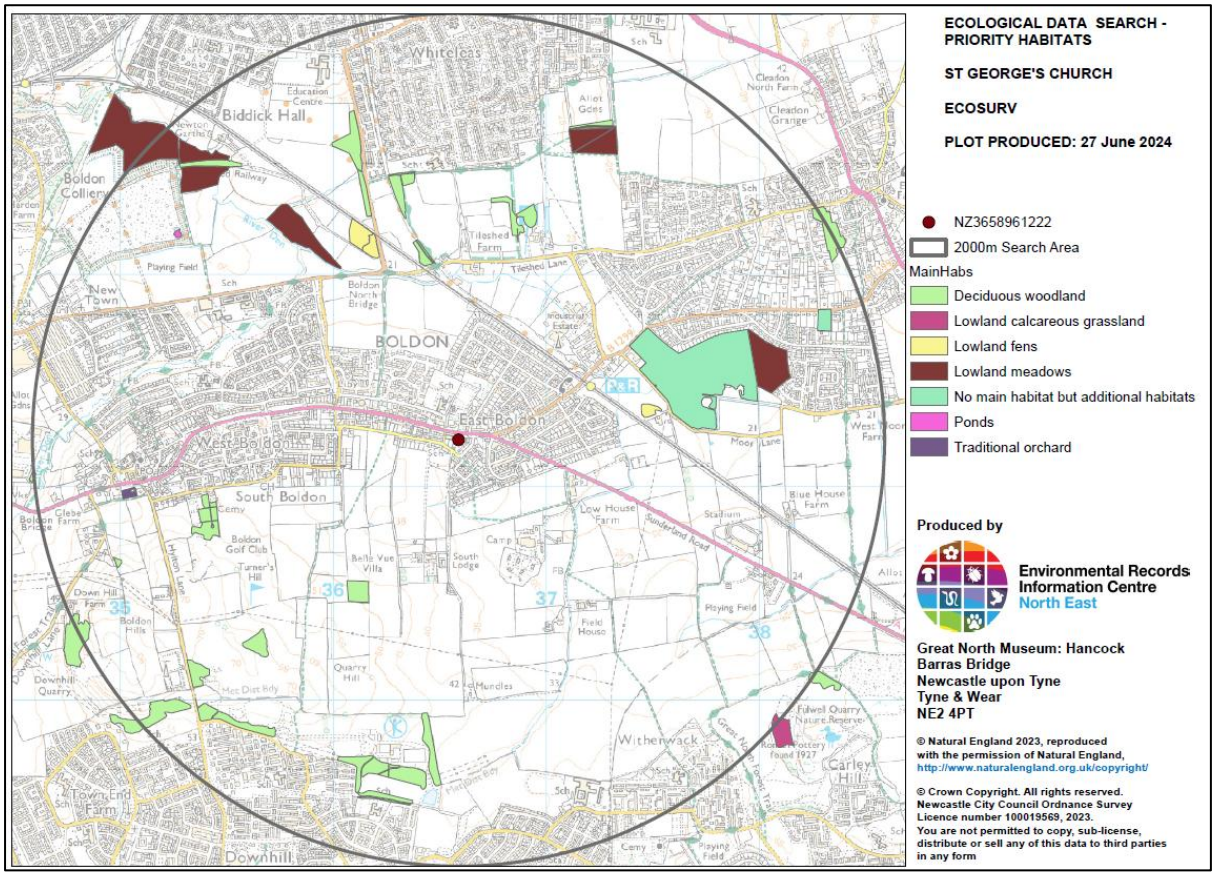


Figure 5. Map of Priority Habitat within 2km of the Proposed Development

(© Environmental Records and Information Centre North East).

5.1.4 Biological Records

Biological records were obtained from the Environmental Records Information Centre North East for a 2km radius surrounding the application site. A total of 10040 records were obtained, which can be separated into the following groups: 33 amphibian records (common toad, common frog, smooth newt, great crested newt); 9281 bird records (197 species); 3 conifer record; 1 fish record (1 species); 109 flowering plant records (43 species); 267 insect records (25 species); 3 reptile records; 292 terrestrial mammal records (21 species).The significance of individual species records in the context of the current proposals is discussed in section 5.3. A full list of received records is available on request with the permission of the records centre, excluding records of sensitive species.

6 BASELINE SITE ASSESSMENT

6.1 On-site Habitats and Ecological Features.

The proposed development site is a small area of other broadleaved woodland.

The characteristics and ecological value of each habitat is described in table 11 below. The extent and locations of these habitats and ecological features is also outlined on the phase 1 habitat map (Figure 4).

Table 11. **Summary of habitats present on and adjacent to site.**

Habitat	Description
Other broadleaved woodland	Dominant canopy species within the woodland are ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus.* Other tree species present include horse chestnut *Aesculus hippocastanum,* oak *Quercus robur,* common laburnum *Laburnum anagyroides* and Rowan *Sorbus aucuparia.* Understorey species present included elder *Sambucus nigra*, holly *Ilex aquifolium,* guelder rose *Viburnum opulus* and wych elm *Ulmus glabra.* The ground flora within the woodland consisted of bramble *Rubus fruticosus,* broad-leaf dock *Rumex obtusifolius*, creeping buttercup *Ranunculus repens,* cleavers *Galium aparine,* cow parsley *Anthriscus sylvestris,* dandelion *Taraxacum officinale,* forget-me-not *Myosotis sylvatica*, ivy *Hedera sp.,* nettle *Urtica dioica,* large-leaved avens *Geum macrophyllum,* poppy *Papaver somniferum,* spear thistle *Cirsium vulgare,* rose *Rosa rubiginosa,* ragwort *Jacobaea vulgaris* and wood spurge *Euphorbia amygdaloides.* The nettle, dock, cow parsley and cleavers are the dominant species.
Hardstanding	A tarmac footpath is located along the boundaries of the woodland.
Buildings	St George the Martyr Church is located directly adjacent to the south of the site.

6.2 Off-site Habitat and Ecological Features

The site is an urban area in the centre of the high street of East Boldon. The village is bordered by agricultural fields to the north and south. Boldon Flats SSSI is located approximately 1km to the east of the site which has a series of streams, and a medium sized pond located at the centre of the park. A stream is located approximately 300m south of the site which runs through the agricultural fields.



Figure 6. Phase One Habitat Survey Map

Table 12. List of Target Notes for Phase One Habitat Map

Target Note	Description
1	Hibernacula
2	Wooden Hibernacula
3	Bird Box

6.3 Protected Species

6.3.1 Badgers

The woodland is surrounded by a residential estate and is on the main high street of East Boldon. The woodland is small in extent and offers limited opportunities for sett creation foraging and commuting. No evidence of badgers was identified during the site survey, the likelihood for a badger to utilise the area for foraging or commuting is very limited. Overall, it is considered that badgers are unlikely to be significantly impacted by the proposed development.

6.3.2 Bats

The woodland provides some suitable foraging and commuting opportunities for bats within the local area, however, due to the presence of lighting in the area, these habitats cannot be considered to be optimal. The trees were assessed at the time of the survey for any existing Potential roosting Features (PRFs) however, all of the trees

were assessed to have 'NONE' bat roost suitability. The proposed development will not affect the mature trees within the woodland as all trees are to be retained. The proposals are therefore unlikely to significantly impact roosting, foraging or commuting bats. Measures to avoid any impacts from light spill and to enhance the suitability of the woodland for roosting bats are included within the proposals.

6.3.3 Great Crested Newts

3 records of GCN in the area were identified in the data search, however, these records were all over 40 years old. The distance of these records from site varies from 1500m, 1100 and 980m away from site. There are no ponds within 500m of the site. The likelihood of Great Crested Newts being within the area is low. The site offered some suitable habitats for GCN in the hibernaculum found on site created by leaves and branches., Due to the lack of appropriate habitats in the surrounding area and lack of ponds, it is very unlikely any GCN are present on site. Overall, it is considered unlikely that GCN will be negatively impacted by the proposed works.

6.3.4 Nesting Birds

The woodland on site provides suitable nesting bird habitats. During the time of the survey, a large rookery was observed in the top canopy of the treeline which anecdotally, returns each year. Wrens and robins were seen in the ground flora of the woodland carrying nesting material indicating the presence of nests within the woodland. The proposals will involve Removal of non-native species within the understorey and the existing ground flora. In the absence of appropriate mitigation nesting birds are likely to be impacted by the proposed development.

6.3.5 Reptiles:

Some suitable habitat for reptiles was identified in the hibernaculum at the south boundary of the site. However, no reptiles were found during the survey. Only 3 records of reptiles were identified within the data search, the most recent being from 2012, these being between 878m and 532m away from site. The site lacks suitable connectivity to suitable reptile habitat within the wider environment. Overall, it is considered unlikely that reptiles will be impacted by the proposed development.

6.3.6 Other notable species:

The woodland provides suitable habitats and refugia for hedgehogs. Contractors should be vigilant when clearing the site and when moving vehicles over the site, if a hedgehog is identified care should be taken to protect it from harm and an ecologist should be consulted.

6.4 Invasive Species

No invasive species – including non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) – were recorded within the site extent at the time of the site survey, or within habitats adjacent to the site.

6.5 Summary of Baseline Ecological Value

6.5.1 Habitats

The habitats on site have been assessed in regard to their context within the locality and the application site against a geographical evaluation exercise outlined within CIEEM guidance on impact assessments.

Table 13 below summarises the value assigned to the habitats present on and adjacent to the site.

Table 13. Baseline habitat evaluation

Habitat	Summary	Evaluation
Other broadleaved woodland	Considered to appreciably enrich the habitat resource within the context of the Parish	Parish
Hard Landscaping (off-site)	Unexceptional and common to local area.	Site

6.5.2 Species

The species/ species suitability on site has been assessed in regard to their context within the locality and the application site against a geographical evaluation exercise outlined within CIEEM guidance on impact assessments.

Table 14 below summarises the ecological value assigned to protected/ notable species on site.

Table 14. Baseline Species Evaluation

Species	Summary	Evaluation
Badger	Site provides little opportunity for sett creation and negligible opportunities for foraging and commuting due to the presence of roads.	Site
Bats	Woodland provides foraging and commuting opportunities for bats within the local area.	Local
Birds	The woodland provides suitable habitats for nesting birds.	Local
Hedgehog	Adjacent habitats provide opportunities for shelter and foraging, hedgehog may forage and commute over the site.	Local

7 IMPACT ASSESSMENT

7.1 Overview of Development

The proposals are for the construction of no-dig pathways and a community garden. Wildflower planting and wildlife habitat improvement areas are also proposed. This will require the clearance of the existing woodland ground flora and non-native shrub species

7.2 Potential Impacts

Potential impacts are characterised in terms of their direction, permanence, certainty, and reversibility. An assessment is also made of the likely significance of the impact prior to mitigation, and the significance of the residual impact, i.e., after all agreed mitigation is implemented.

Upon review of the proposed plans the following habitats and species of ecological significance have been identified as follows;

Table 15. Impact Assessment

Habitat/ Species	Impacts	Magnitude in the absence of mitigation	Significance
Mixed deciduous woodland	Loss of ground flora during time of development.	Low Negative	Minor
Badger	Negligible impacts.	Negligible	Negligible
Bats	Commuting: Increased lighting levels creating potential barrier effects and indirect disturbance.	Medium Negative	Minor
	Increased foraging: Some bat species actively forage at lights due to the higher numbers of insects (particularly moths) attracted to streetlights, in particular low wavelength light 'the vacuum effect' (Eisenbeis 2006; van Langevelde et al. 2011). Whilst *pipistrellus spp*. and *Nyctalus spp* may benefit from the foraging opportunities created under this effect, it creates competitive disadvantages with species that do not forage in lit areas. Foraging resource within darker areas is potentially reduced as invertebrates attracted to artificial lighting.		
Breeding Birds	Removal of the ground flora will remove breeding bird habitat which will take some time to replace.	Medium Negative	Minor

Hedgehogs	Potential for injuring and killing of hedgehogs during construction.	High Negative	Minor

7.3 Cumulative Impacts

There are no significant impacts in the surrounding area and there are no proposed works in the area which would impact the surrounding environment.

8 MITIGATION

8.1 Overview

This section of the EcIA considers appropriate mitigation measures which are required to avoid or reduce impacts on the identified valued ecological receptors. Recommendations for mitigation have been based upon industry guidance and consideration of likely effectiveness, practicality, whilst not significantly affecting the feasibility of the proposals.

Table 16. Mitigation Measures

Habitat/ Species	Impact prior to mitigation	Mitigation	Residual Impact
Other broadleaved woodland	Minor	No dig methodology used for installing the woodland pathways to avoid impacting the root protection areas of trees. Bat and bird boxes to be installed throughout the woodland. Appropriate seed mixes used to improve the ground flora composition. Non-native shrub species removed. Additional understorey planting to be undertaken. Some native scrub to be planted in the western boundary of the site.	Negligible
Badger	Negligible	To reduce the impact to badgers other wildlife that may use the site, it is recommended that any trenches or voids are dug and filled within the same working day. Should this not be possible, an adequate means of escape should be provided and/ or the trench should be securely covered overnight.	Negligible
Bats	Negligible	Low level Lighting Strategy. (See section 8.2.1) Bat boxes to be installed within the woodland.	Negligible
Breeding Birds	Medium Negative	Any vegetation clearance should be timed to occur outside the bird breeding season (March – August inclusive) to avoid impacting any actively breeding birds. Alternatively, if vegetation must be removed within the breeding bird season, a competent ecologist should undertake a breeding bird risk assessment to check for any active birds' nests. If an active nest is discovered, a suitable buffer zone must be implemented in which no vegetation removal may occur until the end of the breeding bird season or the nest can be confirmed as no longer active. Bird boxes to be installed through the woodland.	Negligible
Hedgehogs	Minor	Site clearance should be carried out in a precautionary manner in relation to hedgehogs. Any hedgehogs encountered during the works allowed to move off of their own accord. If this is not feasible, they should be carefully moved to a safe location by gloved hand. If clearance works are being carried out during	Negligible

		hedgehog hibernation season (defined as November to March), any structures suitable for hedgehog hibernation such as vegetation piles should be checked for hibernating hedgehogs. If a hibernating hedgehog is present, a suitable exclusion zone should be put around the hedgehog, with no works occurring in this area until the hedgehog has moved off of its own accord. If this is not feasible, the hedgehog will be carefully translocated to suitable off-site habitat by a suitably qualified ecologist under appropriate weather conditions. New nesting material and supplementary food safe for hedgehog consumption will be provided at the translocation site. Hedgehog boxes will also be installed throughout the woodland.	

8.2 Detailed Mitigation Measures

8.2.1 Lighting Strategy

A sensitive lighting scheme should be implemented during and after construction to avoid indirect disturbance to foraging and commuting bats, birds and mammals that may be using the peripheries of the site, and should include the following elements:

- Lighting within the site should comply with the latest guidelines https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/
- Sensitive positioning of lighting to avoid unnecessary spill onto retained woodland, artificial bat boxes, as well as any habitat enhancement features to be incorporated into the development (see below);
- Angle of lighting: avoidance of direct lighting and light spill onto areas of habitat that are of importance as commuting pathways and/or foraging areas;
- Type of lighting: studies have shown that light sources emitting higher amounts of UV light have a greater impact to wildlife. Use of narrow-spectrum bulbs that avoid white and blue wavelengths are likely to reduce the number of species impacted by the lighting;
- Reduce the height of lighting columns to avoid unnecessary light spill.

Lighting within the development site should be downward facing, tree lines and hedgerows should be free from artificial illumination during the hours of darkness. Where roosts are incorporated within the fabric of built structures these should also be located in areas free from artificial illumination.

8.3 Assessment of Residual Impacts

The habitat enhancements proposed under the proposals are likely to create sufficient compensatory habitat proportionate to the existing value of the site, particularly in the long term once established.

The proposed development will provide a communal garden. The proposals are therefore likely to result in increased presence of humans/dogs to this localised area leading to minor recreational impacts arising from increased site occupation presence of dogs.

All reasonable measures to minimise the impacts of projected light spill on Habitats of Principle Importance, and associate fauna should be implemented, as far as is reasonably practicable in regard to maintaining the viability of the proposals.

As such residual impacts are considered to be of negligible significance.

9 CONCLUSIONS

An assessment of the significance of the possible ecological impacts that would result from the proposed development has been undertaken using guidelines produced by the Institute of Ecology and Environmental Management (CIEEM, 2018).

The proposed development aims to enhance the woodlands understorey and ground flora. Some short-term impacts to nesting birds may occur as part of the proposals. The plans are to replace, enhance and replenish the understorey and ground flora of the woodland. Bird boxes will also be installed on retained trees to provide compensatory nesting habitat. Removal of vegetation should be undertaken outside the bird breeding season to avoid impacting any active nest sites.

The proposals are for the construction of no-dig

pathways and a community garden. Wildflower planting and wildlife habitat improvement areas are also proposed. This will require the clearance of the existing woodland ground flora and non-native shrub species. The small woodland is located within an urban area and is enclosed by housing.

The assessment has considered the potential effects upon protected species arising from the proposed residential development. The potential for impacts to occur on badger, great crested newt, breeding birds, bats, and other notable species have been considered. Mitigation measures have been proposed to ensure that impacts are avoided or minimised and that where possible enhanced habitats for these species will be delivered by the development of the site.

The proposed landscape and enhancement plans should aim to incorporate native wildflowers, and native shrubs to enhance the biodiversity of the site post development.

Bat, bird and hedgehog boxes are to be installed within the boundary to enhance biodiversity of the site.

Through careful consideration of the potential impacts, it is concluded that the proposed development complies with current planning policy and that the legal implications arising from the residential development in respect of habitats and species have been addressed.

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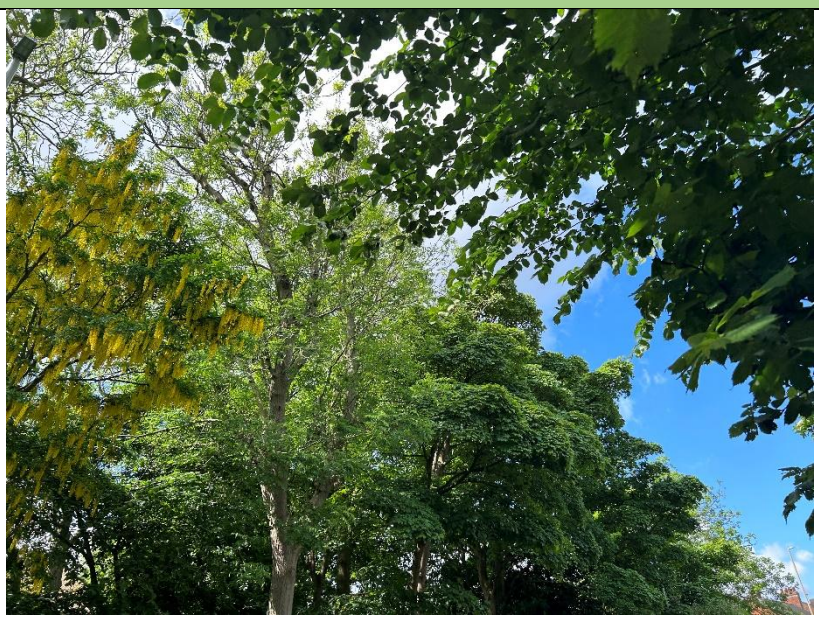
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11 SITE IMAGES

No.	Description	Image
1.	View of the canopy from northern elevation	
2.	Northern section of woodland	

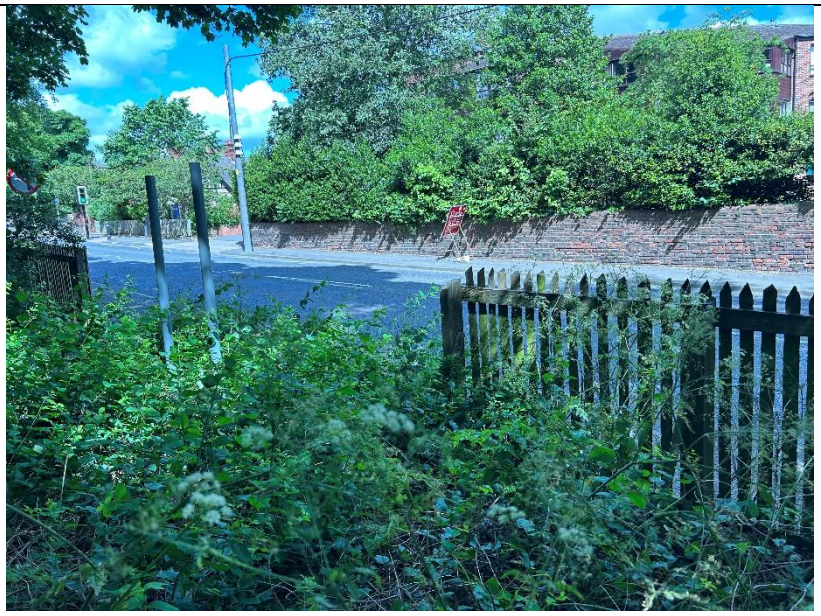
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3.	Overhead Electricity Cable	
4.	Woodland from northern boundary	

5.	Bramble and ivy to woodland floor	
6.	Bird box mounted in the understorey	

7.	Gate and fence at the south of the site	
8.	Electricity pole within the woodland	

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9.	Fence gap in the north of the site	
10.	Fence and woodland from southern elevation	

11.	Artificial hibernacula	
12.	Hibernacula	

12 APPENDIX

12.1 Additional Information for the Legislation of Protected Habitats and Species

Species Legislation

European protected species (EPS)

These animals are fully protected through inclusion within Schedule II of The Conservation of Habitats and Species Regulations 2010(as amended).

This legislation makes it an offence to deliberately capture, kill or disturb an EPS. For the purposes of this legislation disturbance has been defined by the European Commission (EC) and Natural England as that likely to significantly affect: i) the ability of a significant group of an EPS to survive, breed, rear or nurture their young or ii) the local distribution or abundance of the species (EC, 2007, Natural England, 2007). Further detail on what constitutes significant disturbance and significant groups in relation to most EPS can be obtained from these guidance documents.

It is also an offence under the Habitats Regulations 1994 (as amended) to damage or destroy and/or obstruct access to a breeding site or resting place of these species; please note the former is a strict liability offence. This legislation applies to all life stages of an EPS, including eggs. Former defences relating to actions being the incidental result of a lawful operation or taking place within a dwelling house no longer apply to offences under the Habitats Regulation 1994 for EPS.

EPS potentially present in the survey area:

- All bats within England and Wales.
- Great Crested Newt.

Bats

The primary legislative protection for bats is under the Habitats Regulations 1994 through designation as an EPS (see above). However, bats are also partially protected in England and Wales through their inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly disturb a bat whilst it is using a place of rest or shelter. This applies to individuals, but is subject to a number of defences including

if the disturbance was the 'incidental result of a lawful operation that could not reasonably have been avoided'. The legislation applies to all life stages.

Great crested newt

The primary legislative protection for GCNs is under the Habitats Regulations 1994 through designation as an EPS (see above). However, the GCN is also partially protected in England and Wales through its inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this legislation, it is an offence to intentionally or recklessly disturb a GCN whilst it is using a place of rest or shelter. This applies to individuals, but is subject to some defences including if the disturbance was the 'incidental result of a lawful operation that could not reasonably have been avoided'. The legislation applies to all life stages.

Breeding birds

All wild birds in England and Wales are protected under Section 1 of the Wildlife and Countryside Act, 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird, or take, damage or destroy the nest (whilst being built or in use) or its eggs. Species listed on Schedule 1 of The Act, e.g. kingfisher *Alcedo atthis*, receive further protection which makes it an offence to intentionally or recklessly disturb these species while building a nest, or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird. Further enhanced statutory protection is provided for bird species included on Annexe 1 of the Wild Birds Directive.

Badger

Badgers receive protection under the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981 (as amended), under Schedule 6, Section 11. Under this legislation badgers receive protection from killing or taking by certain methods. It is also an offence to wilfully kill, injure, take or attempt to kill, injure or take a badger or interfere with a badger sett by damaging a sett or any part thereof. It is also an offence to wilfully destroy a sett, obstruct access to a sett or disturb a badger while occupying a sett. The 1992 Act defines a badger sett as "any structure or place, which displays signs indicating current use by a badger".

Penalties for offences can be severe with fines of up to £5000, plus six months imprisonment for each illegal interference, badger death or injury. It is recognised however that there exists a range of certain legitimate activities which need to be conducted in spite of badger presence.

Other wildlife protection/control

The main legislation dealing with species protection/control at the national level is the Wildlife and Countryside Act 1981 (as amended). Plants listed under Schedule 8 and animals under Schedule 5 of the Act receive varying levels of protection. There are also measures to control the spread of non-native species contained in Schedule 9. Other relevant legislation may include the Protection of Badgers Act 1992 and the Wild Mammals (protection) Act 1996. Details of the protection/control afforded to the following species/groups considered of relevance to the survey area are given below.

Invasive plant species

Heracleum mantegazzianum giant hogweed, Fallopia japonica Japanese Knotweed and Impatiens glandulifera Indian Balsam are listed in Schedule 9, Part II of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to plant these species or otherwise cause them to grow in the wild. Any material containing Japanese knotweed or giant hogweed is also identified as 'controlled waste' under the Environment Protection Act 1990 and must be disposed of properly at landfill.

Rare and/or protected plants

Some plants are listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally pick, uproot, destroy or trade in these plants. Other plants appear on national red data lists, or are considered nationally, regionally or locally scarce, though these classifications do not confer any legal protection.

In England and Wales the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010 (as amended) offer legal protection to certain invertebrate species. Under the aforementioned legislation, 17 invertebrate species in Britain have European protection and 45 species in England and Wales are fully protected at a national level.

Other Mammals

All non-domesticated mammal species including common species, such as rabbit Oryctolagus cuniculus and deer, receive protection under the Wild Mammals (Protection) Act 1996. This act protects wild mammals from certain cruel acts and makes it an offence to intentionally inflict unnecessary suffering on wild mammals.

Habitat Legislation Statutory Protected Sites & Features

Ramsar sites

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. Originally intended to protect sites of importance, especially as waterfowl habitat, the Convention has broadened its scope over the years to cover all aspects of wetland conservation and wise use, recognising wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. They generally receive legal protection under the Wildlife and Countryside Act 1981 (as amended) as most UK Ramsar sites are also designated as SSSIs (see below). The majority are also SPAs (see below). Planning Policy Statement (PPS) 9 (see Section 2.3) also recommends that all Ramsar sites receive similar protection from development as Natura 2000 sites.

Special Areas of Conservation (SAC)

SACs receive full protection under the EC Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). SACs are areas that have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II of the Directive. SACs, together with Special Protection Areas (SPAs), form the Natura 2000 network. Natura 2000 sites are protected under The Conservation of Habitats and Species Regulations 2010(as amended) and any development likely to have significant impacts upon such a site will have to be assessed for its implications on the site's conservation status, an obligation under the aforementioned Regulations.

Special Protection Areas (SPAs)

SPAs receive full protection under the EC Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds). SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union. SPAs, together with SACs, form the Natura 2000 network. Natura 2000 sites are protected under The Conservation of Habitats and Species Regulations 2010(as amended) and any development likely to have significant impacts upon such a site will have to be assessed for its implications on the site's conservation status, an obligation under the aforementioned Regulations.

Sites of Special Scientific Interest (SSSIs)

SSSIs provide full statutory protection for the best examples of the UK's flora, fauna, geological, or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs are now notified under the Wildlife and Countryside Act 1981 (as amended). Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000. They are designated in England by Natural England who have powers to prevent damaging operations within and around the site. There is an obligation upon land owners and relevant authorities to notify Natural England if any activity they undertake may impact upon the conservation status of a SSSI.

National Nature Reserves (NNRs)

NNRs are fully protected from damaging operations within and around them under the National Parks and Access to the Countryside Act 1949 (as amended) and the Wildlife and Countryside Act 1981 (as amended). NNRs contain examples of nationally important natural and semi-natural terrestrial and coastal ecosystems in Great Britain.

Local Nature Reserves (LNRs)

LNRs are designated under the National Parks and Access to the Countryside Act 1949 (as amended) as areas of geological or wildlife interest of special local interest. They are normally owned and managed by local authorities, though increasingly local wildlife trusts are taking over this role. They can be protected from damaging operations within or around them through local bylaws or the policies of the local development framework.

Local Wildlife Sites (LWS) / Sites of Importance for Nature Conservation (SINC's)

SINCs/LWSs are identified by local planning authorities (in this case Durham County Council) on account of their value for wildlife. These receive a measure of protection through local planning policies.

Important hedgerows

The Hedgerows Regulations 1997 seek to protect 'important' hedgerows in the countryside by controlling their removal through a system of notification to the relevant local planning authority.

Tree Preservation Orders (TPOs)

TPOs give some measure of protection to individual trees, groups or trees or even entire woodlands that are considered by the Local Planning Authority (LPA) to be of value. They are protected under the Town and Country Planning Act 1990 and the Town and Country Planning (Trees) Regulations 1999. Trees subject to a TPO are protected from deliberate damage, and an application to the LPA would be necessary to remove any such tree.

12.2 Proposed Development Plan



Figure 7. Proposed Site Plan

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12.3 Example Bat and Bird Boxes

Habibat Tree/Wall Mounted Nest Boxes





Habibat Wall/Tree Mounted Bat Boxes

017 External Access Box



Triple Chambered Access Box



Ground mounted hedgehog box



12.4 Bat, bird and hedgehog box proposed locations

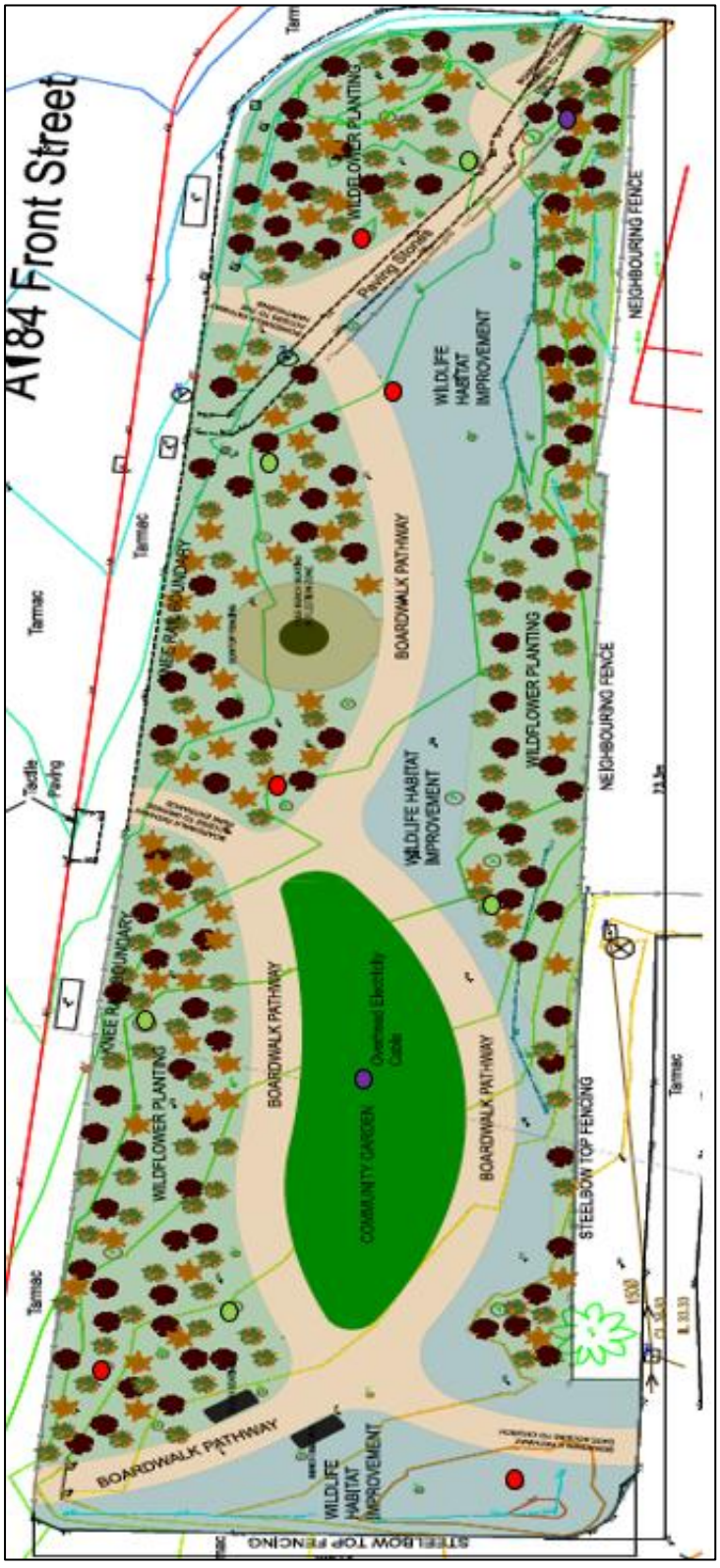


Figure 8. Proposed Species Enhancements

Red dots represent bat boxes; Green dots represent bird boxes; Purple dots represent hedgehog boxes

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