

# **Extended Phase 1 Habitat Survey & Baseline Ecological Impact Assessment**

No1. Industrial Estate, Consett

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## Executive Summary

1. A baseline ecological survey and an ecological impact assessment were carried out in respect of two adjacent parcels of land (Site A & Site B) situated within the No.1 Industrial Estate, Werdohl Way, Consett where proposals are to construct three new industrial buildings and refurbish an existing industrial building
2. The vegetated margins of the sites are likely to be used by a small number of relatively common breeding bird species but they are highly unlikely to be used by ground nesting birds due to level of disturbance from adjacent site usage and lack of optimal habitat
3. Bats are likely to use the mature vegetation situated along the respective site boundaries, especially on the adjacent wooded site to the east of Site B and the stands of trees to the east of Site A for both foraging and commuting purposes but there is very little potential for roosting on site and overall, the site is of limited use to bats due to the general lack of suitable habitat and level of disturbance. There are no buildings on site suitable for roosting or that will be affected by proposals though some of the larger trees in Site A, in particular the group of tall semi-mature poplar and willow, have some potential for roosting though no conclusive signs of activity were found
4. There are no water bodies suitable for use by great crested newts or common toad on either site and little or no optimal habitat occurs and none will be affected. There are no historic records for either of these species within 500m of the site boundaries so the presence of amphibians and any adverse impact is highly unlikely
5. The two sites where the development footprints are to be located comprise respectively: a mosaic of species-poor rank grassland intermixed with tall-ruderal ruderal vegetation and occasional patches of scrub, some blocks of ornamental shrubs, and several stands of semi-mature trees (Site A); and, an extensive area of species-poor modified (amenity) grassland, some clumps of ornamental shrubs, and a line of semi-mature ornamental trees (Site B). The habitats of greatest relative importance are the stands of trees on Site A, comprising mainly poplar, alder and willow. However, despite including native species and the height of the poplar and willow, these areas comprise trees that are relatively young and are of plantation origin with poorly-developed, species-poor ground flora. Otherwise, there are no habitats or vegetation communities of significant importance on site or that are likely to be adversely affected by proposals
6. It is reasonable to conclude that, with adequate mitigation in respect of breeding birds and bats, despite the initial net loss of biodiversity in respect of Biodiversity Net Gain (BNG) due to the loss of vegetation, there will be no significant adverse impact resulting from proposals to develop the site

## Contextual Statement

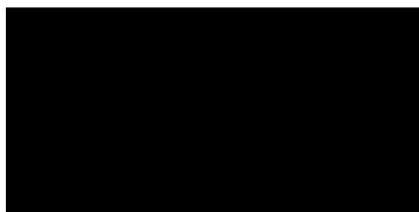
This report ***must be read in conjunction with the documentation and drawings prepared and submitted to the Local Planning Authority in respect of current development proposals at the site shown in Figures 10 & 11 of this report.*** The author of this report will accept no responsibility for any misunderstanding resulting from a failure to consult all relevant planning documentation or through any lack of information where responsibility for the provision of such is beyond the control of Cameron S Crook.

This report is not intended as a natural history text or scientific paper. Rather, its purpose is to inform the site owner, developer and local planning authority in accordance with current local and national planning guidance, in as clear and succinct a manner as possible. To that end, all survey and assessment works carried out in respect of current proposals are proportionate to the site and situation, and only the minimum level of information necessary has been provided. Detailed information on the respective life cycles of protected species such as the bat, badger or great crested newt, or detailed descriptions of sundry ecological scenarios that have no relevance to the site or development in question have therefore been omitted.

This report provides no planning or legal advice and no attempt has been made to interpret any respective planning or environmental laws that may apply to this case. Any such interpretation must be obtained from an appropriately qualified Planning Consultant, Planning Officer or Lawyer.

All survey works detailed within the methodology section below have been either carried out personally by the author or by appropriately qualified, licenced and/or experienced surveyors working under the direct supervision of the author. The author of this report takes full responsibility for the quality of data collected and any subsequent interpretation. Raw survey data and names of individual surveyors may be provided for *bone fide* reasons, upon request, but only where this is strictly necessary and does not otherwise conflict with client, landowner or surveyor confidentiality and privacy, in accordance with the General Data Protection Regulations 2018 (GDPR).

This report may not be used for any purpose other than in support of the current planning application at the site shown in *Figures 10 & 11* without the prior written permission of Cameron S Crook. Copyright of this report and the intellectual property rights of all data herein shall remain with Cameron S Crook and may not be used or stored in any database without prior written permission.



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10<sup>th</sup> October 2023

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## 1.0 Introduction

- 1.1 A baseline ecological survey, site appraisal and impact assessment were carried out in respect of two parcels of land and an existing building proposed for development at land off Werohl Way, Consett, with the following aims:
1. To establish the likely presence or absence of protected or otherwise important species and evaluate the overall nature conservation status of the sites
  2. To assess the likely impact of proposed works to develop the sites upon any protected or otherwise important species that may occur on or adjacent to the area of land concerned, and the integrity of nature conservation interest of any other sites of ecological or nature conservation importance within the vicinity
  3. To provide outline mitigation and habitat aftercare proposals, as appropriate
- 1.2 The term *site* or *sites* will be used in this report to refer to the areas of land proposed for development as shown on the site location plan (see *Figure 1* below) unless otherwise indicated within the text.

**Figure 1** Site Location Plan (within red line boundaries)





## 2.0 Methodology

### *Desktop Survey*

2.1 Prior to undertaking any site survey works, a data search was carried out to check for any protected or other important species or habitats occurring within or closely adjacent to the site boundaries. Data sources include the following:

- .. ERIC
- .. NBN Gateway
- .. MAGIC

2.2 Any *significant* results are provided within the relevant sections below.

### *General Ecological and Botanical Survey*

2.3 This comprised an Extended Phase 1 Habitat Survey carried out on the 13<sup>th</sup> September 2023 with any evidence of birds, amphibians, reptiles, mammals and invertebrates noted during the respective surveys. The survey methodology for the Extended Phase 1 Habitat Survey comprised a modified version of that described in NCC (1990) and IEA (1995) and where appropriate, with particular respect to the Phase 2 Habitat Survey, incorporating the methodology outlined in Rodwell (1991, 1992, 1995 & 2000) for determination of National Vegetation Classification plant communities. Habitats were also evaluated using the UKHab classification system, cross-referenced to standard Phase 1 Habitats and mapped in accordance with Natural England's Biodiversity Metric 4.0 guidance (Natural England 2023).

2.4 The Phase 1 Habitat survey was supplemented by a full vascular plant species survey using the 'walkabout method' as described in Kirkby (1988) and a generalized assessment of the site for suitability of habitat for animals, in particular protected species such as badger, water vole, bats, breeding birds (including barn owls) and great crested newts, in accordance with the *CIEEM Guidelines for Preliminary Ecological Assessments*.

### 3.0 Existing Situation

#### 3.1 General Site Description

- 3.1.1 The sites comprise two areas of land situated off Werdohl Way, Consett within an existing industrial estate. Site A comprises an area of vacant land dominated by rank grassland and tall-ruderal vegetation (*other neutral grassland*) along with several stands of trees, a margin of closely-mown amenity (*modified*) grassland and stands of ornamental shrubs. The trees comprise mainly poplar, willow and alder but despite the height of the poplar and willow are relatively young and of plantation origin. Site B comprises an extensive area of species-poor amenity (*modified*) grassland with a line of semi-mature ornamental trees along the southern margin and ornamental shrub beds to the east. To the north is a large industrial unit along with associated hard standing and car parking areas. There are no waterbodies, large mature trees, or significant areas of semi-natural vegetation apart from occasional patches or short perennial and ephemeral vegetation at the site margins and a sparse covering of any otherwise bare ground.

**Figure 2** The two areas proposed for development is situated within the red line boundaries with existing habitats colour-coded as per UKHab (2023) and Natural England (2023) recommendations. A larger version of this map is provided within the appendix



- 3.1.2 Beyond the sites' boundaries are other buildings and associated infrastructure of the industrial estate, the only link to other habitat being via a linear block of broadleaved woodland to the east of Site B, which will not be affected by proposals. Otherwise, both sites are effectively isolated in habitat terms. The existing site layout and location of the principal habitat features are shown on the habitat map of *Figure 2* above. These are described further in the table of Target Notes below. A larger version of the habitat map is provided within the appendix.

**Table 1** Phase 1 Habitat Target Notes, labelled TN1-TN12 in Figure 2 above

Target Note	Details of the main site and habitat features and dominant vegetation types
<b>Site A</b>	
TN1	A group relatively young but tall trees comprising mainly poplar and willow plus alder. There is little or no ground flora though the density of trees effectively forms woodland conditions
TN2	A strip of closely mown, species-poor modified grassland and a stand of low-growing ornamental shrubs
TN3	An extensive stand of ornamental shrubs. Limited ecological value in habitat terms but provides suitable habitat for small nesting birds
TN4	A semi-mature alder with a stand of dense scrub at the base
TN5	A sapling willow with dense scrub at the base
TN6	A tall group of relatively young trees of plantation origin comprising mainly poplar, willow and alder. Poorly-developed ground flora. Despite the height of the willow and poplar trees, they have limited value for bat roosting due to the narrowness of the stems and density of branching
TN7	A narrow strip of closely-mown, species-poor modified grassland
TN8	A dense clump of mainly alder with occasional ash. The ground flora is moderately well developed but comprises mainly grassland or ruderal species due to the relative recency of the habitat. Some of the substrate is wet due to poor drainage. Moderate ecological value overall but mainly due to its potential for use by other species such as nesting birds and cover for small mammals
TN9	An extensive area of disturbed ground that has developed a dense cover of mostly species-poor rank neutral grassland with a high proportion of tall-ruderal species, principally thistles, docks and willow-herbs and some extensive stands of tufted hair-grass. Moderate ecological value in botanical terms but otherwise of limited value due to limited species and structural diversity
<b>Site B</b>	
TN10	A small, semi-mature rowan, in poor condition
TN11	A semi-mature ash
TN12	A line of semi-mature ornamental trees, both native and non-native including hornbeam, whitebeam and Norway maple. Limited ecological value but may be used by nesting and foraging birds
TN13	An extensive area of species-poor, closely-mown modified grassland. Very limited ecological value
TN14	A stand of low-growing ornamental shrubs comprising mainly cotoneaster, potentilla and berberis. Very limited ecological value
TN15	A dense stand of ornamental shrubs comprising mainly dogwood and elder. Limited ecological value but suitable for nesting and foraging birds and cover for small mammals including hedgehog



**Figure 3** Site A as viewed from the southeast, the strip of mown grassland and ornamental shrubs visible in the foreground, the rank grassland, tall ruderal vegetation and patches of scrub to the rear



**Figure 4** The dense groups of semi-mature but tall trees along the eastern boundary of Site A



### 3.2 Habitats and Flora

3.2.1 A summary of habitats and vegetation communities is provided in *Table 2*, each of the principle habitats being described in more detail within the paragraphs that follow.

**Table 2** Habitats and Vegetation Communities recorded on site

NCC/RSNC <sup>1</sup> Habitat (UK Habitat <sup>3</sup> )	NVC <sup>2</sup> Communities
Woodland (Broadleaved) (Other Broadleaved Woodland)	W6 <i>Alnus glutinosa-Urtica dioica</i> woodland
Scrub: dense continuous Scrub: scattered (Mixed Scrub; Bramble Scrub; Hawthorn Scrub)	W21 <i>Crataegus monogyna-Hedera helix</i> scrub W24 <i>Rubus fruticosus-Holcus lanatus</i> underscrub community
Grassland: neutral (Other Neutral Grassland)	MG1 <i>Arrhenatherum elatius</i> grassland MG10 <i>Holcus lanatus-Juncus effusus</i> rush pasture OV23 <i>Lolium perenne-Dactylis glomeratus</i> community
Amenity Grassland (Modified Grassland)	MG7 <i>Lolium perenne</i> leys and related grasslands
Tall herb and fern: tall ruderal (Other Neutral Grassland; Ruderal/Ephemeral;)	OV24 <i>Urtica dioica-Galium aparine</i> community OV25 <i>Urtica dioica-Cirsium arvense</i> community OV26 <i>Epilobium hirsutum</i> community OV28 <i>Agrostis stolonifera-Ranunculus repens</i> community
Cultivated/disturbed land: ephemeral/short perennial* (Ruderal/Ephemeral; Sparse Vegetation)	OV21 <i>Poa annua-Plantago major</i> community OV22 <i>Poa annua-Taraxacum officinale</i> community OV28 <i>Agrostis stolonifera-Ranunculus repens</i> community
<sup>1</sup> Nature Conservancy Council and Royal Society for Nature Conservation habitat classification (NCC, 1990) <sup>2</sup> National Vegetation Classification communities (Rodwell, 1991) <sup>3</sup> UK Habitats (UKHab 2023) NB There are several overlaps between Phase 1 Habitat and UK Habitat designations	



### Woodland

- 3.2.2 The woodland on Site A comprises three stands of relatively young trees of plantation origin though there is some regeneration. The dominant species are alder, willow and poplar, the latter two species being relatively tall for their age. Whilst technically woodland due to the density of vegetation, the habitat has a very poorly developed ground flora with only the clump of alder to the northeast having any such vegetation of note though this comprises mainly grassland and ruderal species rather than true woodland flora. The other two clumps of trees have very little vegetation at their bases due to weed control carried out during ground maintenance operations.

**Figure 5** The clump of alder to the north east of Site A (TN8). The ash visible to the rear right is beyond the site boundaries and will not be affected by proposals



### Grassland

- 3.2.3 This is the dominant habitat in both Site A and Site B. Within Site A, the grassland comprises mainly rank, species-poor neutral grassland dominated by tall-grassland species such as false oat-grass, cock's-foot, and in the wetter (more poorly drained areas) tufted hair-grass. Otherwise, the habitat is dominated by tall-ruderal vegetation such as docks, thistles and great willow-herb along with rushes. At the site margins, where the grassland is less rank, the dominant species are red fescue, creeping bent and annual meadow grass, along with ruderal species such as groundsel, dandelion, bird's-foot trefoil, clover, thyme-leaved speedwell, and creeping buttercup. The strips of grassland along the margins of Site A to the south and east adjacent to the road and almost the entire area of Site B beyond the existing building and hardstanding, comprise species-poor amenity grassland dominated by perennial rye-grass. Overall, the grassland habitat has limited ecological value.



**Figure 6** Site B as viewed from the southeast, the dominant area of modified grassland clearly visible, the eastern end of the line of semi-mature trees to the left, low-growing shrubs to the right



**Figure 7** A detailed view of the rank grassland and tall-ruderal vegetation within Site A, part of the clump of alder to the right





### *Tall Ruderal Vegetation*

- 3.2.4 This habitat occurs within Site A only within the area of disturbed ground towards the centre of this parcel of land, where grassland species are less dominant. Species include principally thistles, docks and great willow-herb and little else.

**Figure 8** A detailed view of the tall-ruderal vegetation within Site A, the stand of alder to the rear



### *Ephemeral and short perennial*

- 3.2.5 This habitat accounts for marginal parts of both sites but is relatively sparse in Site B, more developed in Site A with occasional patches of higher density vegetation. Species include creeping buttercup, mouse-ear, chickweed, groundsel, lanceolate plantain, broad-leaved plantain, dandelion, daisy, red clover, creeping bent, annual meadow-grass, common vetch, tufted vetch and hairy tare. In the more compacted, poorly drained areas, rushes such as hard rush and articulated rush become more prominent. However, despite the number of species recorded, all are common and widespread, typical of disturbed ground, and the habitat overall has very limited ecological value.
- 3.2.6 The habitats and vegetation communities (where determinable) recorded during the Phase 1 Habitat Survey either on or closely bordering the site are summarized within *Table 2* above.

### *Significance – Habitats and Vegetation*

- 3.2.7 All the habitats and vegetation communities recorded within or closely adjacent to the site boundaries are relatively common and widespread throughout County Durham and Great Britain. There are no hedgerows that qualify as *Important Hedgerows* in respect of the Hedgerow Regulations and no UK Priority Habitats either on or adjacent to the respective site boundaries (see Appendix).
- 3.2.8 All plant species recorded are common and widespread or early colonists, typical of disturbed or cultivated ground. No uncommon or otherwise important species were recorded or are considered likely to occur.



### *Designated Sites*

- 3.2.6 There are no statutory nature conservation sites (e.g. SSSIs) or local wildlife sites within, closely adjacent to the site boundaries or that will be otherwise affected, the nearest such statutory sites located in excess of 4km (see Appendix).

## **3.3 Fauna**

### *Mammals (Badgers)*

- 3.3.1 *Habitat Suitability:* There is virtually no habitat suitable for use by badgers on either site or close enough to the site boundaries to be affected though badgers if they occur in the area could feasibly forage in the grassland areas and could potentially establish setts in the area of woodland to the east of Site B.

- 3.3.2 *Presence/Absence:* An inspection of all suitable habitat to a distance of at least 30m from the proposed development site boundaries (where accessible) revealed no conclusive signs of badger activity. There are no records of badger activity within 500m of the site boundaries and this combined with the lack of any firm evidence on site suggests that neither Site A or Site B are of significant importance to this protected species though its later presence cannot be totally ruled out.

### *Mammals (Bats)*

- 3.3.3 *Habitat Suitability:* There are no buildings or mature trees on site or close enough to be affected by proposals that are suitable for use by bats for roosting. The sites overall are likely to be of limited importance to bats due to the lack of optimal habitat and level of disturbance from current site usage, not least the 24-hour security lighting. The wooded vegetation off-site to the east has moderate potential for foraging and commuting but will not be affected by proposals.

**Figure 9** The only building on site, a large industrial unit with negligible potential for bat roosting



- 3.3.4 The only trees on site with any potential for bat roosting are the larger willow and poplar along the eastern boundary of Site A. However, despite their height, these trees have limited potential for roosting due to their relatively narrow stems and lack of obvious cavities or other niches such as deeply-fissured bark high enough above ground level to allow gliding during emergence. This would also be impeded by the density of branches around any potential roosting niches. For those reasons, the trees on site only qualify as no greater than *Category 2* in respect of the Bat Conservation Trust (BCT) evaluation criteria (BCT 2016).
- 3.3.5 There is only one building on site (Site B) comprising a large warehouse with roof and walls constructed of formed-steel, supported on a steel frame with a brick base (*Figure 9*). There are no internal voids suitable for roosting and no other suitable roosting niches. In respect of the BCT evaluation criteria, the building has negligible potential for roosting bats.
- 3.3.6 *Roosting*: There is very limited potential for bat roosting anywhere on site so no roosting is reasonably likely. No signs of roosting bats such as droppings, staining around potential access points or feeding remains, were found within any of the trees (which were inspected using binoculars and an FLIR scope) nor within the building. There are no historic records of roosting bats on or near the site boundaries. It is therefore reasonable to assume that bats do not currently roost on site.
- 3.3.7 *Foraging and Commuting*: No night-time survey was carried out but it is expected that the only part of the site suitable for use by bats is alongside the mature vegetation within the adjacent the respective site boundaries such as the wooded area to the east of Site B or the clumps of trees to the east of Site A, though the extent of this is likely to be limited due to the exposed and disturbed nature of the remainder of the site.

#### *Mammals (general)*

- 3.3.8 *Habitat Suitability*: No specific survey for mammals in general was carried out but there is potential for use by several common, widespread species such as red fox, rabbit, house mouse, wood mouse, field vole, bank vole and brown rat, in the more densely vegetated parts of the site, but overall, the potential for use by mammals is extremely limited.
- 3.3.9 *Presence/Absence*: At the time of survey there was some evidence of rabbit activity across the wider site but mainly along the site margins where the vegetation is well developed. There were also feeding remains and droppings indicating the recent presence of red fox at various points across the site though mainly to the east of Site B. There were no signs of hedgehog and no historic records for this species on or close to the site boundaries and the nearest historic records of this species is in excess of 600m to the southeast of the site boundaries. However, it is possible that this wide-ranging species may occur in suitable habitat nearer to the site so its later presence cannot be totally ruled out.
- 3.3.10 There is no habitat suitable for aquatic mammals such as water vole or otter. There are historic records of red squirrel within the wider area, the nearest record some 300m to the west, but none within close proximity to the site boundaries and no optimal habitat will be affected. No other mammal species were recorded due to the limited scope of the survey though the presence of other common species such as field and bank vole and possibly shrews is quite likely.

#### *Birds*

- 3.3.11 *Habitat Suitability*: Overall, the main part of the site is dominated by relatively sparse ruderal habitat providing virtually no potential for breeding birds, the only exception being the denser areas of trees and shrubs. However, despite the presence of suitable breeding habitat in the mature vegetation, the potential for bird breeding is

relatively low due to the overall lack of structural habitat diversity and level of disturbance from adjacent site usage.

- 3.3.12 *Species Recorded/Potential Breeding:* Table 3 below lists the birds recorded during the survey and provides an indication of those species that may possibly breed on site (within the cypress tree to the northeast).

**Table 3** Birds recorded within the general vicinity of the site and their breeding potential within or closely adjacent to the site boundaries

Species Name	Common Name	Breeding Status
<i>Erithacus rubecula</i>	Robin	PoBr
<i>Parus caeruleus</i>	Blue Tit	PoBr
<i>Parus major</i>	Great Tit	PoBr
<i>Pica pica</i>	Magpie	PoBr
<i>Prunella modularis</i>	Dunnock	PoBr
<i>Troglodytes troglodytes</i>	Wren	PoBr
<i>Turdus merula</i>	Blackbird	PoBr
Key to Breeding Qualifiers: PoBr – Possibly Breeding		

- 3.3.13 Except for dunnock, all species recorded or considered likely to breed within or close to the development site boundaries are those that are relatively common and widespread in both urban and rural areas. No WCA Schedule 1 species such as barn owl were recorded or are reasonably expected to breed on site though there are historic records of this species some 650m to the northwest.
- 3.3.14 Regarding dunnock, which is listed as Species and of Principal Importance for Conservation, which was recorded in the shrub beds to the east, breeding on site could not be confirmed. Measures must nevertheless be taken to ensure that there is no impact during the breeding season and no net loss of breeding potential.

*Amphibians (particularly great crested newts and common toad)*

- 3.3.15 *Habitat Suitability:* There are no ponds on site and none within 250m of the site boundaries, where there is direct habitat linkage.
- 3.3.16 *Presence/Absence:* The presence of great crested newts and common toad is highly improbable due to the absence of suitable habitat on the site proposed for development, the presence of a material barriers to dispersal such as existing buildings, roads, footpaths, hard landscaping, and other suboptimal habitat between the site and the nearest ponds. The nearest historic record of great crested newts is located in excess of 600m to the southeast.

*Significance of Fauna*

- 3.3.17 A small number of birds that are protected in general terms during the breeding season, may potentially use the stands of trees and dense areas of scrub and ornamental shrubs on each of the sites for breeding and there is potential for breeding within the mature vegetation situated within the adjacent wooded site to the east of Site B. A small number of other common species may also be expected to breed to a small extent though this does not include any WCA Schedule 1 species such as barn owl.
- 3.3.18 One of the bird species recorded that may possibly breed (though currently unconfirmed on site), dunnock, is listed as *Species of Principal Importance for*

*Conservation* and is therefore a *UK Priority Species*. Consequently, any site works that may affect potential breeding sites such as removal of or pruning of overhanging trees and shrubs located in the adjacent site, should avoid the breeding season (mid-February to August inclusive) and any unavoidable loss of breeding habitat should be compensated for by the provision of proprietary breeding boxes sited in appropriate locations on completion of site works.

- 3.3.19 There is virtually no potential for bats roosting on site. Bats are however likely to commute and forage along the existing mature vegetation situated within the adjacent site to the east, so this must be taken into consideration as far as development proposals are concerned. Whilst the trees are generally suboptimal in terms of roosting potential, as the later presence of roosting bats cannot be totally ruled out, a precautionary approach is advised.
- 3.3.20 There are no ponds or other extant water bodies within 250m of the site boundaries, where there is direct habitat linkage, so no impact upon great crested newts, other protected or otherwise important amphibian species, or aquatic mammals such as water vole or otter, is considered likely. Similarly, there is no optimal habitat suitable for red squirrel.
- 3.3.21 No other protected species or species of ecological importance occur on site or are likely to be affected by proposals.

## 4.0 Potential Impacts & Mitigation

### 4.1 Likely Impact

- 4.1.1 The likely impact of the proposed site works is evaluated against the criteria laid out in the table below which is based on NATA (New Approach to Appraisal) as described in Byron H. (2000). This evaluation is based on the assumption that no mitigation works will be implemented.

**Table 4. Impact Assessment Matrix**

Impact Magnitude	Nature Conservation Importance				
	<i>Negligible</i>	<i>Local</i>	<i>County</i>	<i>National</i>	<i>European</i>
<b>Beneficial Effect</b>	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
<b>Nil Effect</b>	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
<b>Minor (short term or reversible effects)</b>	Non Significant	Non Significant	Slight	Moderate	Moderate
<b>Moderate (deterioration of feature)</b>	Non Significant	Slight	Moderate	Severe	Severe
<b>High (loss of feature)</b>	Non Significant	Slight	Moderate	Severe	Severe

- 4.1.2 The evaluation criteria for nature conservation importance are as follows:

#### **European**

*Habitats* which are listed in Annexe 1 of the Habitats Directive and are included as candidate or proposed Special Areas of Conservation (cSAC, pSAC)

*Species* which are listed under Schedule 2 of the Habitats Directive and form a population which would qualify the site for consideration as a Special Protection Area (SPA) or Special Area of Conservation

#### **National**

*Habitats* that meet the criteria for designation of, or occur within, a Site of Special Scientific Interest (SSSI)

*Species* that are protected under national wildlife legislation such as the Wildlife & Countryside act, are listed in a national Red Data Book, or that are part of a population or assemblage of species that would meet the criteria for the site being designated a site of Special Scientific Interest (SSSI)

#### **County**

*Habitats* which are rare or uncommon in the County would meet the criteria for inclusion or are included within a second-tier nature conservation site (SINC), or are Habitats of Principal Importance for Conservation

*Species* which are rare or uncommon within the County, form part of a population or assemblage of species which would meet the criteria for inclusion or are included as part of a Site of Importance for Nature Conservation (SINC) or are Species of Principal Importance for Conservation



**Local**

*Habitats* that are uncommon or threatened within the Consett area

*Species* that are uncommon or threatened within the Consett area

**Negligible**

*Habitats* or *Species* that fit into none of the above categories

**4.2 Likely Impact of the Development and Outline Mitigation**

4.2.1 The current ecological impacts resulting from the proposed development works in respect of the site shown in *Figures 10 & 11*, based on the criteria outlined above whilst considering the mitigation required to negate any impacts, are summarized within the following respective tables.

**Figure 10** Site A proposed site layout (see submitted drawings for full details)

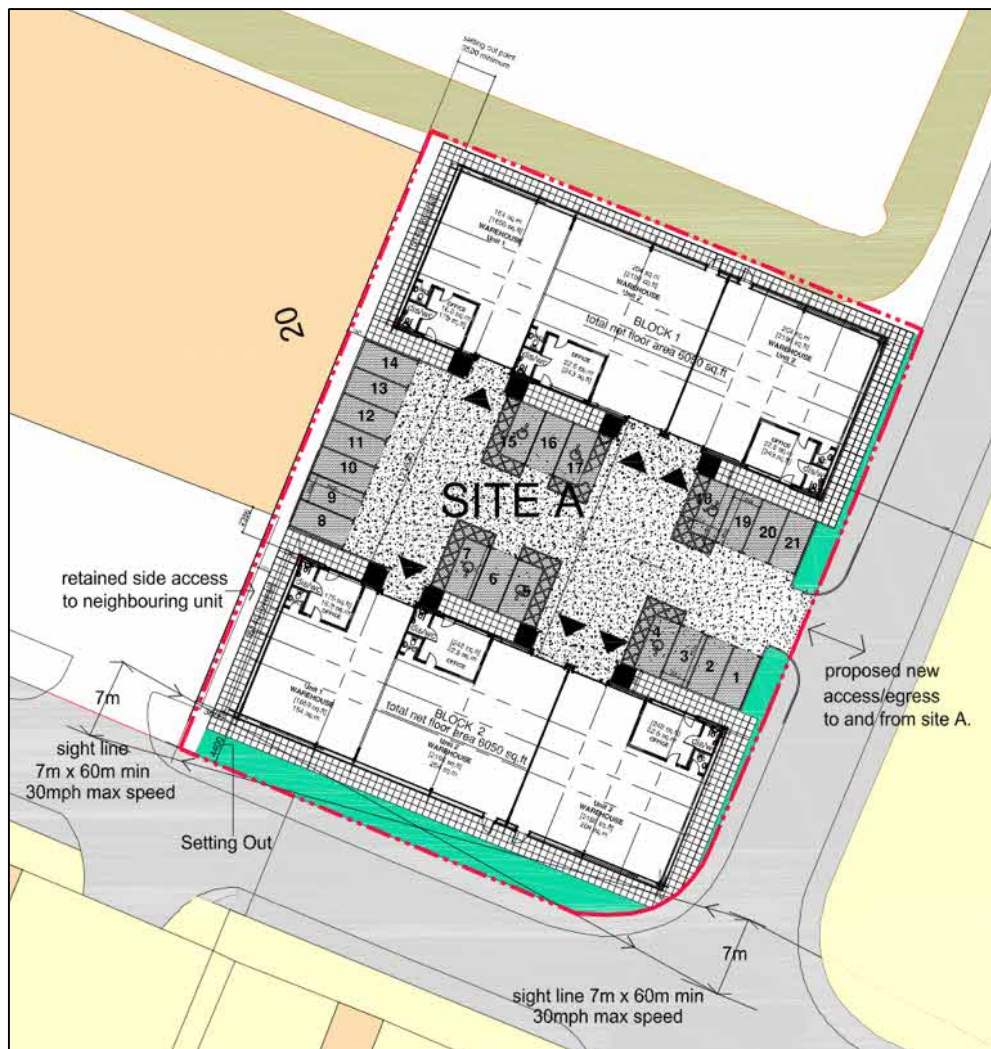
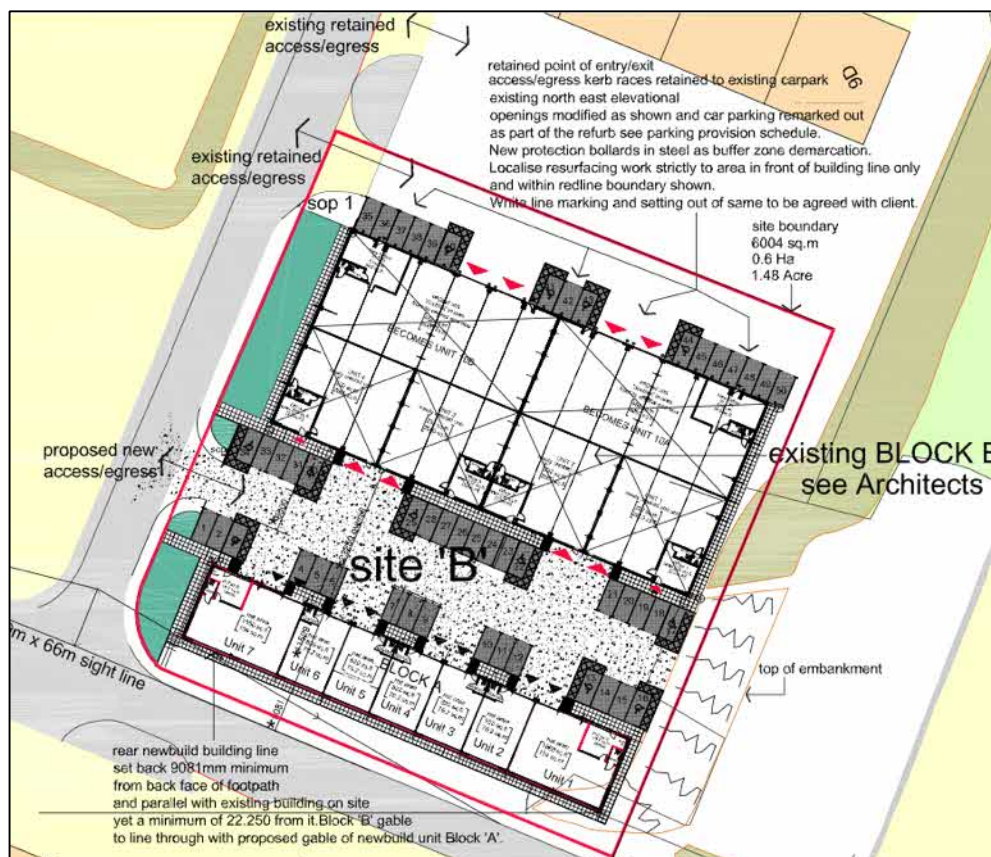


Figure 11 Site B proposed site layout (see submitted drawings for full details)



#### 4.2.2 Badgers

Details	Likely Impacts	Required Mitigation and Residual Impact
No badger setts or other signs were found on either site and the habitat is generally suboptimal	No significant impact likely	No specific mitigation required. Resurvey if works have not commenced within six months of the date of this report
Nature Conservation Importance: <b>National</b>	Impact Magnitude: <b>Nil Effect</b>  Overall Impact: (Nil effect: National) <b>Non Significant</b>	Residual Impact: <b>Non Significant</b>

## 4.2.3 Bats

Details	Likely Impacts	Required Mitigation and Residual Impact
<p>Bats may be expected to forage and commute alongside the areas of mature shrubs, trees and scrub situated along the respective site margins but due to the predominance and poor-quality habitat (amenity grassland and hard standing) and general lack of connectivity to other optimal habitat, the two sites are not considered to be of particular importance to bats. There are no buildings on site suitable for roosting that will be affected by proposals, the existing building on Site B being suboptimal. There are several trees with roosting potential but these too are suboptimal and the likelihood of any bats roosting is relatively low none were found to have any signs of roosting</p>	<p>There will be a reduction in the extent of foraging habitat though the sites are expected to be of limited importance to bats in general due to their relative isolation in habitat terms, level of disturbance from the adjacent major roads, adjacent industrial units and the overall level of noise and lighting which mean that only common species are likely to be affected</p>	<p>Retain existing flight-lines such as marginal lines of mature scrub and consolidate existing habitat by replacement planting of native trees and shrubs to improve wildlife corridors, where possible. To reduce any chances of disturbance to foraging bats, there should be no lighting within 10m of any retained mature vegetation unless this has a low UV component and/or the light beam can be directed away from any suitable habitat (any retained trees and mature shrubs along the site margins) using baffles as required. The provision of bat boxes will improve the sites' potential for roosting and any retained and newly implemented landscaping will eventually provide alternative foraging habitat. Whilst the trees proposed for removal situated to the east of Site A have some albeit relatively low potential for roosting, should removal take place during the active season (April-October dependent upon prevailing weather conditions), a precautionary night-time emergence survey should be carried out no more than five days immediately prior to works taking place</p>
<p>Nature Conservation Importance: <b>European</b></p>	<p>Impact Magnitude: <b>Minor</b></p> <p>Overall Impact: (Minor: European) <b>Moderate</b></p>	<p>Residual Impact: <b>Non-significant</b></p>

## 4.2.4 Breeding Birds

Details	Likely Impacts	Required Mitigation and Residual Impact
The site has very limited potential for nesting birds though the existing trees to the east of Site A and the adjacent mature vegetation to the east of Site B, as well as some of the more mature areas of scrub and ornamental shrubs, are suitable for a moderate diversity of species. There is no potential for ground nesting birds due to the level of disturbance and lack of suitable habitat	Removal of the existing trees or other mature vegetation, including that overhanging from adjacent sites, during the breeding season (February-August) may result in disturbance to breeding birds and loss of breeding habitat	No mature vegetation to be removed or cut back during the bird breeding season (February to August inclusive) until or unless checked for breeding birds by an ecologist. Loss of roosting and breeding sites to be compensated for by the siting of proprietary nesting boxes, where possible and appropriate landscaping
Nature Conservation Importance: <b>National</b>	Impact Magnitude: <b>Minor</b>  Overall Impact: (Minor: National) <b>Moderate</b>	Residual Impact: <b>Non Significant</b>

## 4.2.5 Great Crested Newts and Common Toad

Details	Likely Impacts	Required Mitigation and Residual Impact
There are no ponds within 250m of the site boundaries where there is direct habitat linkage	No impact reasonably likely due to the lack of suitable habitat on site and lack of connectivity between the nearest pond and the site	Based on current survey data, no specific mitigation is required
Nature Conservation Importance: <b>European</b>	Impact Magnitude: <b>Nil Effect</b>  Overall Impact: (Nil Effect: European) <b>Non Significant</b>	Residual Impact: <b>Non Significant</b>

## 4.2.6 Reptiles

Details	Likely Impacts	Required Mitigation and Residual Impact
There is no optimal habitat on site, none will be affected and there are no recent records of reptiles within 1km	No impact reasonably likely	Based on current survey data, no specific mitigation is required
Nature Conservation Importance: <b>European</b>	Impact Magnitude: <b>Nil Effect</b>  Overall Impact: (Nil Effect: National) <b>Non Significant</b>	Residual Impact: <b>Non Significant</b>

## 4.2.7 Botany/Vegetation Communities/Habitats

Details	Likely Impacts	Required Mitigation and Residual Impact
Virtually all vegetation will be lost, but there is no vegetation of significant ecological importance on site or that will be otherwise affected	No impact likely	No specific mitigation required. There will however be a net loss of biodiversity in respect of BNG which should be compensated for as much as possible by an appropriate landscaping scheme
Nature Conservation Importance: <b>Negligible</b>	Impact Magnitude: <b>High</b>  Overall Impact: (High: Negligible) <b>Non Significant</b>	Residual Impact: <b>Non Significant</b>



## 5.0 Summary Conclusion

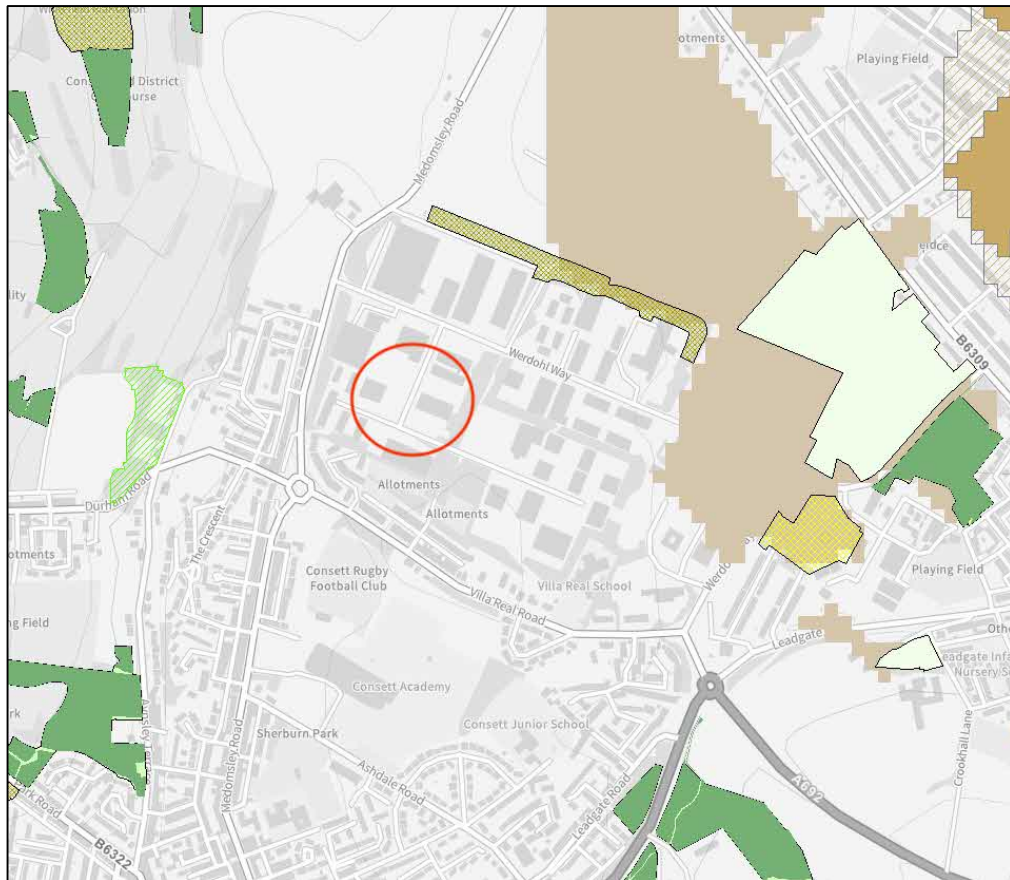
- 5.1 There was no evidence of any specifically protected or otherwise important species occurring *within the development footprint* and no important habitats were identified that will be adversely affected.
- 5.2 A small number of breeding birds occur in the wider area and may occur on site, one of the species recorded, dunnock, being a *Species of Principal Importance for Conservation* and all breeding birds are protected in general terms during the breeding season. Consequently, any required removal of the tree, mature shrubs, dense scrub or any vegetation overhanging from the adjacent site, may result in an initial but relatively minor loss of breeding habitat.
- 5.3 There is virtually no potential for bat roosting on site. However, there is potential for foraging and commuting by bats along the adjacent mature vegetation to the east. To avoid any adverse impact, the site must therefore be designed to avoid or minimise light-spillage on any mature vegetation adjacent to the site boundaries. Otherwise, proposals to develop the site will have minimal impact upon bats and their roosts.
- 5.4 There is no optimal habitat suitable for red squirrel on or close to the site boundaries so no adverse impact is likely.
- 5.5 There are no extant water bodies on site and no ponds within 250m where there is direct habitat linkage. There will therefore be no likely impact upon important amphibians such as great crested newts and common toad, or aquatic mammals such as water vole.
- 5.6 There is no optimal habitat for reptiles and no recent records of this group of species in the near vicinity. No adverse impact is therefore likely.
- 5.7 No other protected or otherwise important species or habitats were recorded and none are considered likely to be affected.
- 5.8 Whilst virtually all vegetation will be lost, there are no *UK Priority Habitats* on site and no protected, rare or otherwise important plants that will be affected, the majority comprising common, widespread species and habitats that are typical of disturbed or cultivated ground.

## 6.0 References

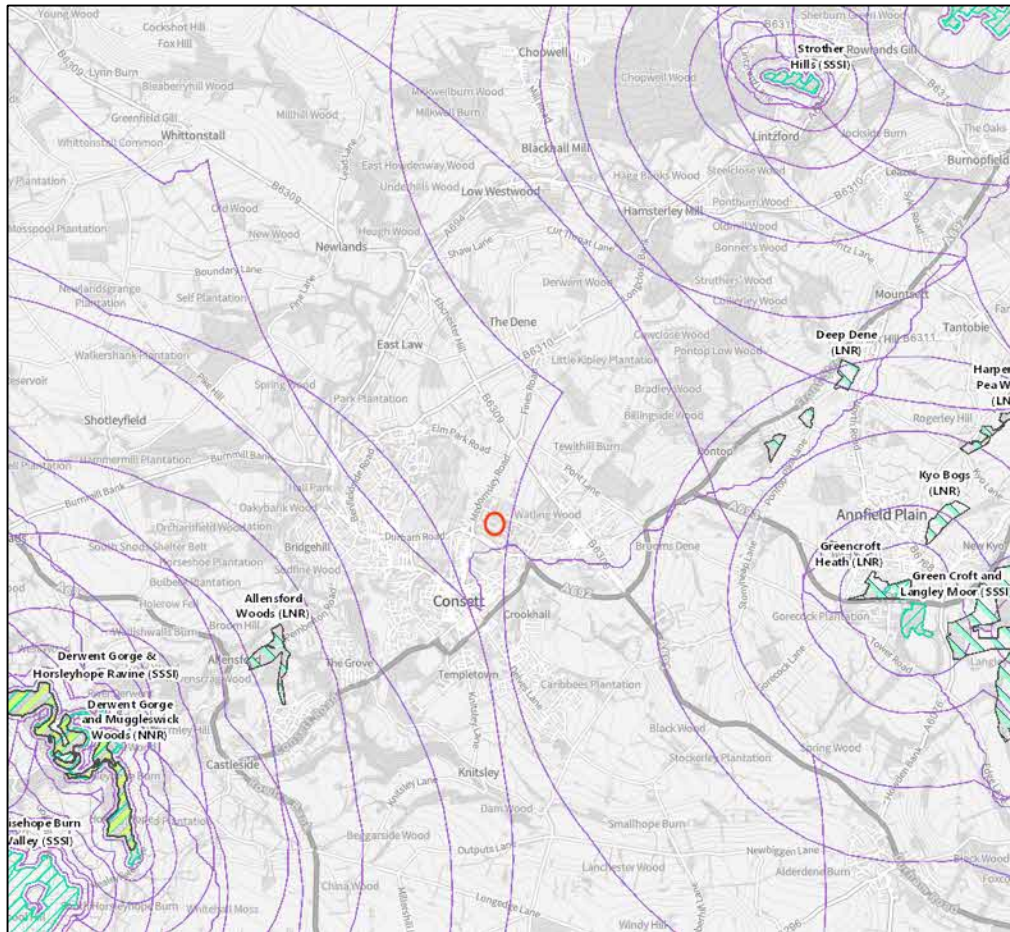
- BCT (2016). *Bat Surveys: Good Practice Guidelines*. 3<sup>rd</sup> Edition. Bat Conservation Trust, London.
- Byron H. (2000). *Biodiversity and Environmental Impact Assessment: A good practice guide for road schemes*. RSPB, WWF-UK, English Nature and The Wildlife Trusts, Sandy.
- British Government (1992). *Protection of Badgers Act 1992*. HMSO.
- British Government (1994). *Conservation (Natural Habitats, &c.) Regulations 1994*. Statutory Instrument 1994 No 2716 Wildlife, Countryside. HMSO
- British Government (1981). *Wildlife and Countryside Act 1981 with Amendments*. HMSO
- Harris, S., Cresswell, P. and Jefferies, D.J. (1989). *Surveying Badgers*. The Mammal Society.
- IEA (1995). *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment. E & FN Spon.
- Kirkby, K.J. (1988). *A Woodland Survey Handbook*. Research and Survey in Nature Conservation No. 11. NCC, Peterborough.
- Natural England (2023). *The Biodiversity Metric 4.0: User Guide*. Natural England Joint Publication JP039.
- NCC (1990). *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*. Nature Conservancy Council.
- Rodwell, J. (1991). *British Plant Communities: Vol 1, Woodlands and Scrub*. Cambridge University Press.
- Rodwell, J. (1992). *British Plant Communities: Vol 3, Grasslands and Montane Communities*. Cambridge University Press.
- Rodwell, J. (1995). *British Plant Communities: Vol 4, Aquatic Communities and Tall-Herb Fens*. Cambridge University Press.
- Rodwell, J. (2000). *British Plant Communities: Vol 5, Maritime Communities and Vegetation of Open Habitats*. Cambridge University Press.
- UKHab (2023). *UK Habitat Classification – Habitat Definitions V2.0*. UK Habitat Classification Working Group

## 7.0 Appendix

### 7.1 Priority Habitats (Source: MAGIC Map)



### 7.2 Statutory Sites (Source: MAGIC Map)





7.3 Habitat Map

