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Ecological Impact Assessment of:
Land to north of Seaside Lane
Easington
Peterlee
Durham
SR8 3TW

Prepared for:
Blake Hopkinson Architecture & Design

On behalf of:
Snowdon Coaches
Seaside Lane
Easington
Peterlee
Durham
SR8 3TW

Report Ref: BH_SeasideLn_EcIA1.1

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APPENDICES

1.0 EXECUTIVE SUMMARY

1.0.1 Dendra Consulting Ltd was commissioned by Blake Hopkinson Architecture & Design, on behalf of Snowdon Coaches, to undertake an Ecological Impact Assessment of a parcel of land of approximately 1.78 ha in size, to the north of Seaside Lane in Easington, County Durham. The survey was requested in order to support a planning application for the development of the land for residential housing. A site walkover survey was conducted on 26th August 2021.

1.0.2 No impacts on locally or nationally designated nature conservation sites are predicted, however the site sits within 6 km of four sites within the National Site Network (formerly 'European Sites'). A strategy of avoidance and mitigation measures has been devised by Durham County Council to allow housing development between 0.4-6.0 km of such sites. Provided the applicant commits to the required contribution per net dwelling, it is anticipated that adverse effects on European Sites as a result of increased recreational pressure can be avoided/mitigated.

1.0.3 The site consists of a working coach yard, with workshop and office space, with a field of grazing pasture to the north. Only one priority habitat was noted; native hawthorn hedgerows span the northern and western field boundaries. These hedgerows are to be retained under the proposals and therefore no impacts on priority habitats are anticipated.

1.0.4 Overall the site holds low suitability for protected and priority species, and a great crested newt risk assessment and bat survey of potential roosting features suggests the site is highly unlikely to support such species. However, in the absence of avoidance and mitigation measures, the proposals to develop the site for residential use may result in the following potential impacts:

- Destruction of an active birds' nest.

- Spread of a controlled invasive plant, listed under Schedule 9 Part ii of the Wildlife and Countryside Act 1981 (montbretia).
- Severance of a bat commuting route, and disturbance of commuting bats, through light spillage.
- Fragmentation and/or loss of hedgehog habitat.
- Loss of a short (34m approx.) line of native trees of moderate quality, and a short (20m approx.) line of non-native trees of poor quality.
- Loss of approximately 1.49 ha of common and widespread habitats of low ecological value.

1.0.5 Proposed avoidance and mitigation measures include working methods, to avoid nesting birds and eradicate controlled invasive plants, an ecologically sensitive lighting scheme, and the incorporation of hedgehog highways. Compensatory measures include the planting of a new hedgerow in place of tree lines.

1.0.6 Biodiversity offsetting calculations using the Defra Biodiversity Metric 3.0, indicate that in order for the site to be developed to the extent proposed, landscaping of the site cannot accommodate sufficient areas of compensatory habitat within the site boundary to achieve a net gain (a loss of -4.77 habitat units, equating to -79.61%, is anticipated). As the loss of biodiversity as a result of the proposals cannot be adequately compensated for on-site, off-site compensatory measures will be required for area habitats. In terms of linear habitats, the recommended hedgerow planting would result in the anticipated delivery of a net gain of +81.98%, and therefore sufficient gain of linear habitats will be achieved on site.

2.0 INTRODUCTION

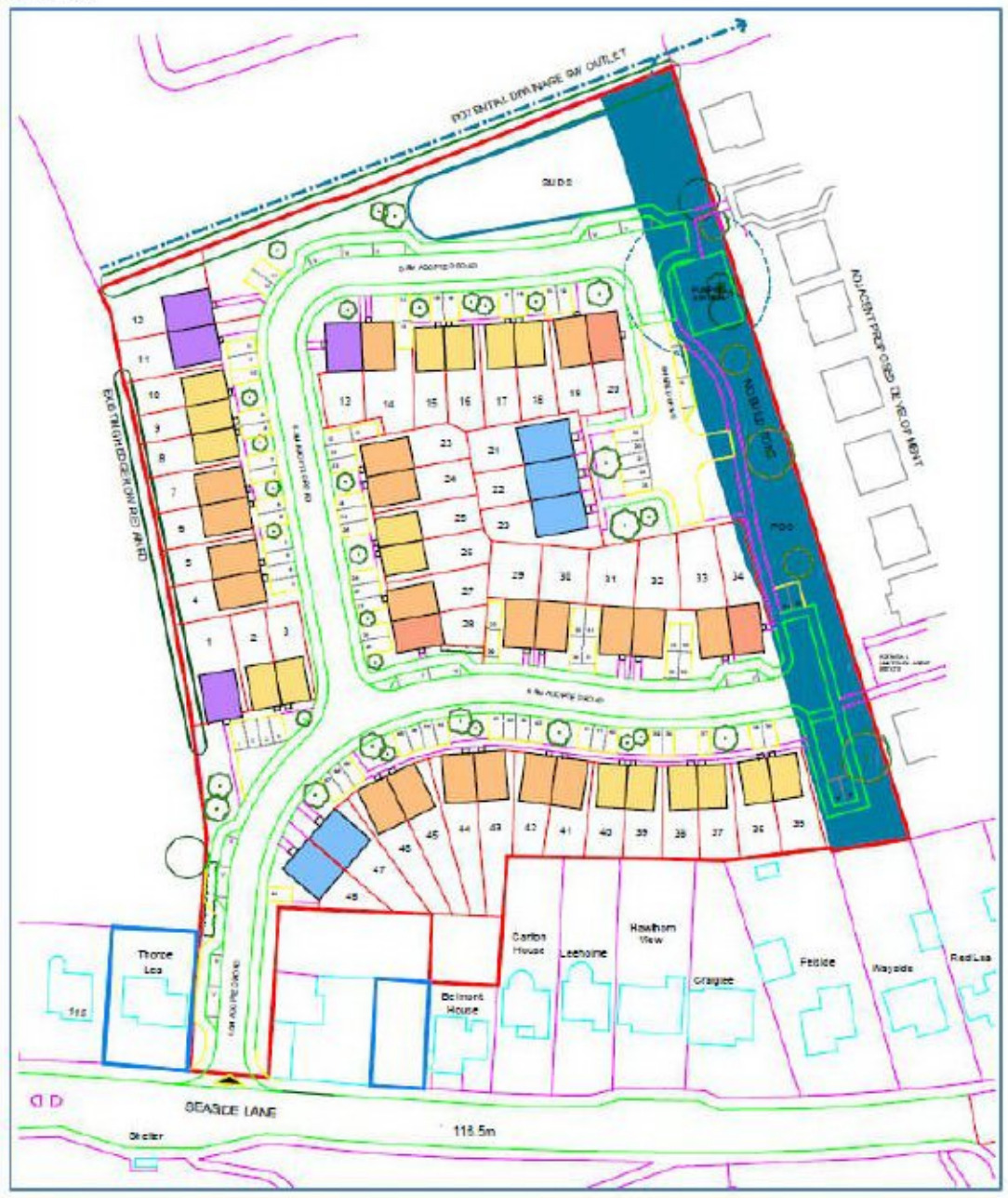
2.1 Background & Scope

2.1.1 Blake Hopkinson Architecture & Design, on behalf of Snowdon Coaches, to undertake an Ecological Impact Assessment of a parcel of land of approximately 1.78 ha in size, to the north of Seaside Lane in Easington, County Durham. The survey was requested in order to support an outline planning application for the development of the land for residential housing, as per Section 2.2, below. This report seeks to identify baseline conditions at the site and thereby assess potential impacts of the proposals on priority habitats, protected and priority species and statutory and non-statutory sites within the zone of influence. Through the mitigation hierarchy, a recommended mitigation and compensation strategy has been devised, to deliver ecological enhancement at the site, demonstrated through Biodiversity Net Gain calculations.

2.2 Details of Proposals

2.2.1 It is proposed to demolish a workshop/office building and a single, detached dwelling, and redevelop the site for residential use, with associated access and parking. The potential impacts of the proposals outlined in this report have been assessed against Proposed Site Plan RES854-BHA-ST-XX-DR-A-1200_Rev P04, dated 08/01/2021, and shown in Figure 1 below. The plan identifies 48 units, from bungalows to four-bed homes.

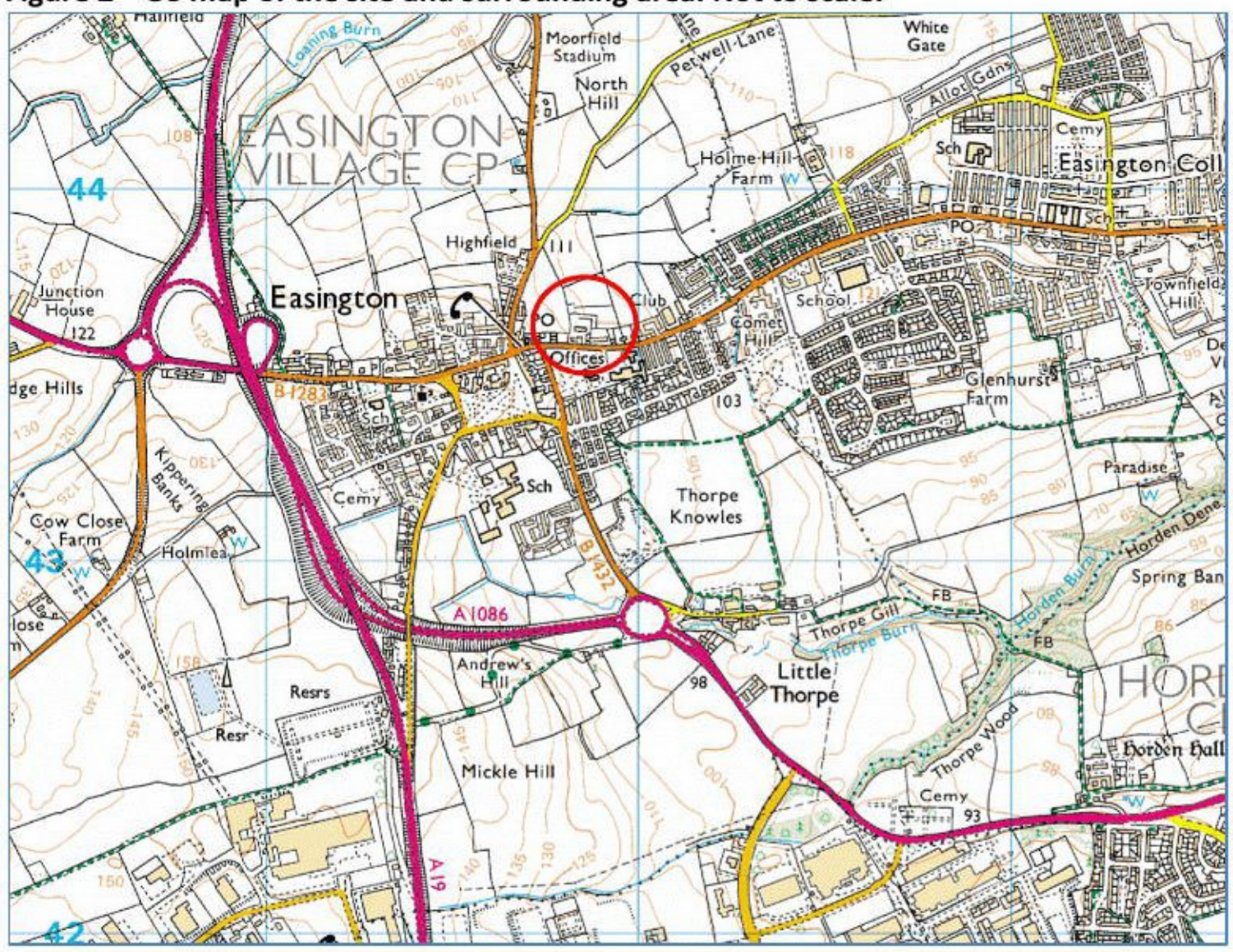
Figure 1 – Proposed site plan against which potential impacts have been assessed. Not to scale.



2.3 Site Location and Setting

2.3.1 The site is located on the B1283 Seaside Lane, which runs through the centre of the town of Easington, in County Durham. The OS National Grid reference for the centre of the site is NZ 41873 43694. The site is accessed from the B1283 to the south and is bordered to the north by allotment gardens. Former pasture immediately to the east is currently being developed for residential housing, whilst pasture to the west separates the site from the B1432, which passes north to south alongside further residential dwellings. Beyond the town boundary, land use is predominantly mixed agricultural, interspersed with coastal denes. Horden Dene is located approximately 1.1km to the south-east, whilst Hawthorn Dene can be found approximately 1.3km to the north. Both of these features contain ancient semi-natural woodland of high ecological value, with Hawthorn Dene being a Site of Special Scientific Interest (SSSI). Figure 2 shows the site location and surrounding area.

Figure 2 – OS map of the site and surrounding area. Not to scale.



3.0 METHODOLOGY AND LEGISLATION

3.1 Supporting Data

3.1.1 The Environmental Records Information Centre (ERIC) North East was contacted for information regarding protected species and nature conservation sites within 2 km of the proposed development site. Google Earth and the Multi Agency Geographic Information for the Countryside (MAGIC) website were accessed to study aerial imagery of the site and the surrounding area and to access further habitat and species information, respectively.

3.2 Field Survey Methodology, Timing and Personnel

3.2.1 Surveys were undertaken by Frances Mudd, an experienced ecologist and full member of the Chartered Institute of Ecology and Environmental Management, who holds a Natural England Level 2 Bat Survey Class Licence (WML-CL18) and a Level 1 Great Crested Newt Survey Class Licence (WML-CL08).

3.2.2 *Habitat Classification Survey & Protected/Priority Species Risk Assessment*

A site walkover survey was conducted on 26th August 2021, and habitat types identified and mapped in accordance with the UK Habitat Classification survey methodology (UKHab, 2020). The walkover field survey was carried out both across the site and, where necessary, over surrounding land, in order to establish broad habitat types and features of ecological interest that would provide potential for, or display evidence of, protected or priority species. A list of species noted during the visit is provided as Appendix 1. The information was then mapped onto the UK Habitat Classification Plan in Appendix 2, and used to determine the need for more detailed surveys. Weather conditions during the survey were dry, cloudy and warm, with a moderate breeze. During the site walkover survey a check for controlled invasive plant species listed under Schedule 9 (part ii) of the Wildlife and Countryside Act 1981 (as amended) was made. A repeat visit to the site was

made on 6th September 2021 in order to carry out a bat risk assessment of the residential property on Seaside Lane. Weather conditions during this survey were as per Figure 3.

3.2.3 *Great Crested Newt Risk Assessment*

A Habitat Suitability Index (HSI) assessment was conducted of standing water bodies within 500m of the development site to assess the suitability of such water bodies for great crested newt. HSI assessments were carried out following the methodology set out by Oldham et al. (2000). The HSI assessment is a mathematical calculation, which attributes a numerical value to various habitat features and predicts the likelihood of great crested newt being present in a particular pond. The data is represented as a probability (between 0 and 1), with 0 being 'GCN presence highly unlikely' and 1 being 'GCN presence highly likely'.

3.2.4 *Bat Roost Survey*

Trees and buildings within the site and/or with the potential to be affected by the development were assessed in terms of their potential to support bat species, adhering to guidance issued by the Bat Conservation Trust (Collins 2016). Trees were inspected from ground level using binoculars for the presence of any potential bat roosting features, such as cracks, splits (for example where hazard beams occur), cavities, hollows, loose or flaking bark, included bark, knot, rot or woodpecker holes, whilst an internal and external inspection of each building was undertaken. Each feature was attributed a risk level, and where necessary, further survey work, in the form of nocturnal activity survey(s), was undertaken. Each nocturnal activity survey was conducted by an experienced lead surveyor holding a Natural England Level 2 Class Licence to survey bats of all species for scientific and/or educational purposes (WML-CL18). The lead surveyor was accompanied by additional surveyors with previous experience of carrying out such surveys. Personnel and weather conditions during the surveys are summarised in Figure 3. Bat flight plan(s) are provided in Appendix 3.

Figure 3 – Weather conditions and personnel during nocturnal activity surveys.

Date	Weather Conditions					Surveyors and Licence numbers (Lead surveyor in bold)
	Precipitation	Cloud cover (%)	Wind (Beaufort)	Start temp (°C)	End temp (°C)	
06/09/21 (Dusk)	None	80-100	1	18.8	16.7	**Fran Mudd 2015-11519-CLS-CLS** Shaun Morrison 2015-12715-CLS-CLS Margaret Gourlay-unlicensed surveyor

3.3 Legislation

3.3.1 This assessment focuses on those species afforded full protection under the Conservation of Habitats and Species Regulations 2019, the Wildlife and Countryside Act 1981 (as amended) and the Protection of Badgers Act 1992. Also included within this assessment are those species considered to be of local and/or national importance through their designation as a local Biodiversity Action Plan (BAP) species or via their listing within Section 41 of the Natural Environment and Rural Communities Act 2006. A very brief summary of the protection that the current legislation provides is as follows:

3.3.2 The Conservation of Habitats and Species Regulations 2019 make it illegal to:

- Deliberately capture, injure or kill a European Protected Species (EPS).
- Deliberately disturb an EPS.[*]
- Damage or destroy a resting place used by an EPS.

[*]Disturbance of includes in particular any disturbance which is likely to:

- Impair their ability to survive, breed, reproduce, rear or nurture their young, hibernate or migrate.
- Affect significantly the local distribution or abundance of the species to which they belong.

3.3.3 The Wildlife and Countryside Act 1981 makes it illegal to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built.

- Intentionally take or destroy the egg of any wild bird.
- Intentionally capture, kill or injure any animals listed on Schedule 5 of the Act (e.g. bats, great crested newts).
- Damage, destroy or obstruct any structure or place used for shelter by animals listed on Schedule 5 of the Act.
- Disturb animals listed on Schedule 5 of the Act when occupying a place used for shelter.
- Plant or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9 of the Act (e.g. Japanese knotweed, giant hogweed).

3.3.4 The Protection of Badgers Act 1992 makes it illegal to:

- Kill, injure or take a badger.
- Cruelly ill-treat a badger.
- Interfere with a badger sett.

3.3.5 Under the Natural Environment and Rural Communities (NERC) Act (2006), all local authorities have a statutory obligation to conserve and enhance biodiversity when exercising their functions, including planning and development decisions. As such, this assessment also considers those priority species listed under Section 41 of the Act.

3.4 Limitations

3.4.1 The site walkover survey was undertaken within the optimal survey period of late April to September (inclusive) by a competent and experienced surveyor. Weather conditions were fine and dry, but windy, and bird sightings were low. A repeat visit to the site was made during optimal conditions and further sightings were added, to overcome this limitation.

3.4.2 A single nocturnal bat activity survey was undertaken marginally outside of the main bat activity season of May to August, however weather conditions

remained mild and dry, and good levels of bat activity were noted. The surveyed building does not hold potential for maternity of hibernation use and is most likely to be occupied by individual or small numbers of occasionally roosting bats. This is most likely to occur in April-early May and mid-August-September. The survey was undertaken during this period, in optimal survey conditions.

4.0 SITE SURVEY AND ASSESSMENT

4.1 Protected and Priority Species Records (Desk Study)

4.1.1 Consultation data received from ERIC NE (01/09/2021) revealed a number of protected species within 2 km of the development site. The closest records of each protected species are shown in Figure 2, below (historical records pre-dating 2000, e.g. red squirrel, have been omitted as such records are no longer considered relevant).

Figure 2 - Closest protected species records as provided by ERIC NE.

Species	Grid ref.	Approx. distance from site and direction	Additional Comments
Slow worm	NZ4143	0.1 km SE	2007
Quail	NZ4144	0.3-1.3 km N	-
Great crested newt	NZ424436	0.5 km SE	2013
Merlin	NZ4243	0.6-1.2 km S	-
Red kite	NZ4142	0.6-1.8 km SW	-
Bat - common pipistrelle	NZ420428	0.8 km S	Flight
Snow bunting	NZ4343	Within 1 km SE	-
Redwing	NZ4343	Within 1 km SE	-
Common crossbill	NZ4143	Within 1.1 km SW	-
Mediterranean gull	NZ4042	>1.1 km SW	-
Barn owl	NZ4343	1.2 km E	Roost
European otter	NZ415449	1.2 km N	2010
Marsh harrier	NZ4245	>1.3 km N	-
Peregrine	NZ4245	>1.3 km N	-
Brambling	NZ4345	>1.6 km NE	-
Common Scoter	NZ4345	>1.6 km NE	-
Bee-eater	NZ4345	>1.6 km NE	-
Whimbrel	NZ4345	>1.6 km NE	-
Honey buzzard	NZ4345	>1.6 km NE	-
Fieldfare	NZ4345	>1.6 km NE	-
Purple sandpiper	NZ4345	>1.6 km NE	-
Eurasian badger	-	Within 2 km	3 records

4.1.2 In addition to those species above afforded legal protection, Figure 3 outlines those species recorded by ERIC NE (correct as of 01/09/2021) within a 2 km radius which are listed in the Natural Environment and Rural Communities (NERC) Act (2006) and/or the Durham Biodiversity Action Plan.

Figure 3 – Records of NERC and local BAP priority species recorded within 2 km search area.

Species	NERC	Local BAP
Common toad	✓	
Skylark	✓	
Swift		✓
Nightjar	✓	✓
Linnet	✓	✓
Cuckoo	✓	
House martin		✓
Corn bunting		✓
Yellowhammer	✓	✓
Reed Bunting	✓	✓
Kestrel		✓
Fulmar		✓
Snipe		✓
Swallow		✓
Grasshopper warbler	✓	✓
Grey wagtail		✓
Yellow wagtail		✓
Spotted flycatcher	✓	✓
Curlew	✓	✓
House Sparrow	✓	✓
Tree sparrow	✓	✓
Grey Partridge	✓	✓
Cormorant		✓
Willow warbler		✓
Willow tit		✓
Marsh tit		✓
Kittiwake		✓
Woodcock		✓
Starling	✓	✓
Shelduck		✓
Redshank		✓
Song Thrush	✓	✓
Ring ouzel	✓	✓
Mistle thrush		✓
Lapwing	✓	✓
Small heath	✓	
Wall	✓	
Dingy skipper	✓	✓
Dot moth	✓	
Hedgehog	✓	
Brown Hare	✓	✓
Harvest mouse	✓	✓

4.2 Statutory and Non-Statutory Nature Conservation Sites (Desk Study)

4.2.1 There are no statutory or non-statutory nature conservation sites within the site boundary. Designated sites within 2 km of the proposed development site are listed in Figure 4 below.

Figure 4 – Designated wildlife sites within 2 km.

Site	Status *	Approx. distance from site and direction
Horden Dene	LWS	0.8 km SE
Hawthorn Bridge Pumping Station	LWS	1.0 km N
Hawthorn Dene	SSSI	1.4 km NE
Easington	LNR	1.7 km NE

* SSSI - Site of Special Scientific Interest
LWS - Local Wildlife Site
LNR – Local Nature Reserve

4.3 Field Walkover Survey

4.3.1 The site consists of a working coach yard, with workshop and office space, with a field of grazing pasture to the north. Six habitat types were identified under the UK Habitat Classification definitions. These are:

- Other neutral grassland (g3c)
- Hedgerow (priority habitat) (h2a)
- Line of trees (w1g6)
- Bramble scrub (h3d)
- Other broadleaved woodland types (w1g7)
- Buildings (u1b5)
- Artificial unvegetated, unsealed surface (u1c)
- Suburban/mosaic of developed/natural surface (u1d)

4.3.2 <u>Other neutral grassland (g3c 10 77)</u>

The majority of the site comprises a field of poor, semi-improved, neutral grassland (Photographs 1 and 2). The field has been previously grazed by horses, but is now neglected. Red fescue (*Festuca rubra*), Yorkshire fog (*Holcus lanatus*) and perennial ryegrass (*Lolium perenne*) are frequent in the sward, whilst a selection of common forbs are occasionally to rarely found. These include red clover (*Trifolium pratense*), dandelion (*Taraxacum*

officinale agg.), broad-leaved dock (*Rumex obtusifolius*) and creeping buttercup (*Ranunculus repens*). Previous use and land management would indicate a degree of agricultural improvement, however the cessation of intensive grazing has resulted in slightly increased levels of species diversity. Meadow cranesbill (*Geranium pratense*), lady's mantle (*Alchemilla vulgaris* agg.) and autumn hawkbit (*Scorzoneroides autumnalis*) were present in places, although overall the field is considered to be species poor, with localised patches of nettle (*Urtica dioica*) and field horsetail (*Equisetum arvense*). A small number of self-seeded hawthorn (*Crataegus monogyna*) shrubs are scattered throughout the field.

4.3.3 Hedgerow (priority habitat) (h2a 47 80)

The field is bounded to the north and west by native hedgerows (Photographs 3 and 4), totalling approximately 210m in length. Although predominantly stocked with hawthorn shrubs, the hedgerows are occasionally punctuated by elder (*Sambucus nigra*). The hedgerows do not appear to receive management, so have become dense, tall and wide, with bramble and tall ruderal vegetation, such as great willowherb (*Epilobium hirsutum*) and hedge/cow parsley (*Torilis arvensis/Anthriscus sylvestris*), to the base. Although species poor, the hedgerows are in good condition, failing only one attribute: the quantity of undesirable perennial vegetation (nettles) beneath.

4.3.4 Line of trees (w1g6)

Two short lines of broadleaved trees have been planted to the south of the agricultural field: a line of semi-mature sycamore trees (Photograph 5) of approximately 20m in length, and a line of rowan trees (Photograph 6) of approximately 34m in length. The line of rowan trees appears to have been managed in a similar manner to a hedgerow in the past, but is now neglected. The lines of rowan and sycamore trees were assessed as being of moderate and poor condition respectively.

4.3.5 Bramble scrub (h3d)

Dense bramble (*Rubus fruticosus* agg.*)* scrub merges with, and grows adjacent to, the hedgerows, and beneath the line of sycamore trees (Photographs 3-5). Bramble scrub to the north-western corner of the site, as well as along the northern boundary, appears to have been recently cleared (Photograph 7), and the resulting bare ground has become encroached by nettles. Bramble scrub here is now restricted to the perimeter of the site.

4.3.6 Other broadleaved woodland types (w1g7 38 48)

A small copse of semi-mature sycamore (*Acer pseudoplatanus*) trees grows to the south of the site, alongside the line of rowan trees (Photographs 6 and 8). The trees are closely planted and, with the exception of ivy (*Hedera helix*), vegetation beneath is shaded out (Photograph 9). Non-native woodlands dominated by a single species of the same age class are considered of poor condition in accordance with woodland condition assessment criteria (the stand scores 21/39 points under the condition assessment for Biodiversity Metric 3.0).

4.3.7 Buildings (u1b5)

A large garage/workshop and office building sits towards the south-western corner of the site (Photograph 10), whilst a residential dwelling is located adjacent to the current access road on Seaside Lane (Photograph 11).

4.3.8 Artificial unvegetated, unsealed surface (u1c 89 111)

An access track leads into the site from the south, whilst the workshop is surrounded by an unsealed yard (Photograph 10).

4.3.9 Suburban/mosaic of developed/natural surface (u1d 231)

The residential property to the south-western corner of the site is surrounded by a small garden, consisting of a mixture of hard standing and ornamental flower beds (Photograph 11).

4.4 Controlled Invasive Species

4.4.1 An area of recently cleared bramble to the south of the site was found to contain montbretia (*Crocosmia x crocosmiiflora*) (Photograph 12, and location shown in Appendix 2). This species is listed under Schedule 9 of the Wildlife and Countryside Act 1981, and as such it is an offence under Section 14(2)(a) of The Act to plant or otherwise allow this species to grow in the wild. It is not an offence for montbretia to be growing on the land, however allowing this plant to spread, including through inappropriate disposal, would constitute an offence. Recommendations for the control of this species are provided in Section 6 of this report.

Photograph 1 – Field of poor semi-improved neutral grassland (looking east across the site).

Photograph 2 – Field of poor semi-improved neutral grassland (looking south across the site).

Photograph 3 – Mature hawthorn hedgerow to western site boundary.

Photograph 4 – Mature but overgrown hawthorn hedgerow to northern site boundary.

Photograph 5 – Line of trees running east-west along edge of working coach yard, and bramble scrub.

Photograph 6 – Line of rowan trees running north-south, with copse of sycamore behind.

Photograph 7 – North-western corner of site, looking south. Example of recently cleared bramble scrub.

Photograph 8 – Copse of sycamore trees and adjacent line of rowan trees.

Photograph 9 – Structure of small copse of woodland to south of site.

Photograph 10 – Coachworks and office building, surrounded by unsealed yard.

Photograph 11 – Residential dwelling on Seaside Lane.

Photograph 12 – Montbretia plants in recently cleared bramble patch towards southern site boundary.

5.0 IMPACT ASSESSMENT

5.1 Statutory and Non-Statutory Nature Conservation Sites

5.1.1 Four designated nature conservation sites can be found within 2 km of the proposed development site; the closest of which being Horden Dene, a locally designated site (LWS), 800m to the south-east, whilst the nationally designated Hawthorn Dene SSSI is located 1.4 km to the north-east at its closest point. The proposed development site sits within a suburban environment and is geographically separated from all designated sites by roads, urban development and an extensive buffer of agricultural land, making direct impacts extremely unlikely. Indirect impacts, for example by increased recreational pressure of those sites with public access, were considered, however the increased footfall generated by 48 dwellings is likely to be insignificant. Such impacts, should they occur, would be most keenly felt at the closer Horden Dene LWS, however the dene itself is steep-sided, which limits public access beyond the existing footpaths. No significant adverse effects on designated sites which fall within 2 km of the proposed site are anticipated.

5.1.2 Within the wider landscape, the proposed site falls within 6 km of the following sites within the National Site Network (formerly 'European Sites'):

- Durham Coast SAC – 2.1 km to the east,
- Castle Eden Dene – 3.4 km to the south,
- Northumbria Coast SPA & Ramsar – 5.8 km to the north-east.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2019 (The Habitats Regulations), the Local Authority (as a Competent Authority) has a duty to ensure that all the activities it regulates have no significant adverse effect on the integrity of European Protected Sites, either alone or in combination with other plans and projects. Durham County Council has carried out initial screening (in conjunction with Natural England) in compliance with the Habitats Regulations for all housing allocations in the county (Durham County Council, undated). The screening allows

development to proceed, provided certain mitigation measures are taken. The strategy recommends a planning contribution per net new dwelling for those housing sites located between 0.4 km and 6 km of the boundary of coastal European sites, which are not allocated as part of the County Durham Plan. The contribution will fund the following avoidance and mitigation measures:

- Provision of alternate greenspaces to reduce the number of visits to the coast on a daily/weekly basis, with particular reference to high risk users as identified in the HRA of the County Durham Plan (2018), thereby reducing the levels of recreational disturbance predicted;
- A series of mitigation measures on the coast to manage visitors, and prevent disturbance levels at the point of impact;
- The implementation of a monitoring strategy to understand the impacts of the mitigation and avoidance strategy, and enable amendments to improve it where deemed necessary.

Provided that the avoidance and mitigation strategy above is adopted by the developer, and the contribution is secured via a Section 106 Agreement, unilateral undertaking or otherwise, it is anticipated that adverse effects on European Sites as a result of increased recreational pressure can be avoided/mitigated.

5.2 Priority Habitats

5.2.1 Much of the site contains species poor semi-improved grassland of low conservation value. Only one priority habitat type was noted; native hedgerows span approximately 210m of the western and northern boundaries. Paragraph 174(b) of the National Planning Policy Framework (NPPF) states that plans should "*promote the conservation, restoration and enhancement of priority habitats…and identify and pursue opportunities for securing measurable net gains for biodiversity.*" In accordance with this statement, it is proposed to retain the hedgerow to the perimeter of the site. The hedgerows should not be incorporated into residential gardens, but

should be located outside of the fenced boundary of the property. Provided a suitable buffer is employed during the construction and operational phases of the project, so as the hedgerow shrubs (and their root system) are conserved and protected from damage, for example via compaction by site traffic, no adverse effects on priority habitats are anticipated.

5.3 Protected and Priority Species

5.3.1 From the results of the site walkover survey, the habitats present both on site and within the locality, the protected species records provided by the local records centre and the known current distribution of species across the UK, it is considered that the site provides only limited opportunities for protected and priority species. There are no watercourses within or immediately adjacent to the site, and therefore impacts on riparian species such as otter (*Lutra lutra)* and water vole (*Arvicola terrestris)* are highly unlikely. Habitats within the site are considered unsuitable for reptile species and it is unlikely such species would occur. No habitats of use to specialist invertebrates were noted, and no significant areas of larval food plants associated with such species were found, and therefore it is highly unlikely the proposals would impact on such species. However, those protected and priority species for which the site is deemed potentially suitable are given further consideration below.

5.3.2 Badger (*Meles meles)*

[redacted] No setts or field signs relating to this species, such as trails, prints, latrines or snuffle marks were noted during either of the site walkover surveys. The site is unlikely to be used by badgers and impacts on this species are considered to be negligible as a result of the proposals.

5.3.3 Bats (*Chiroptera spp.)*

5.3.4 *Roosting Potential*

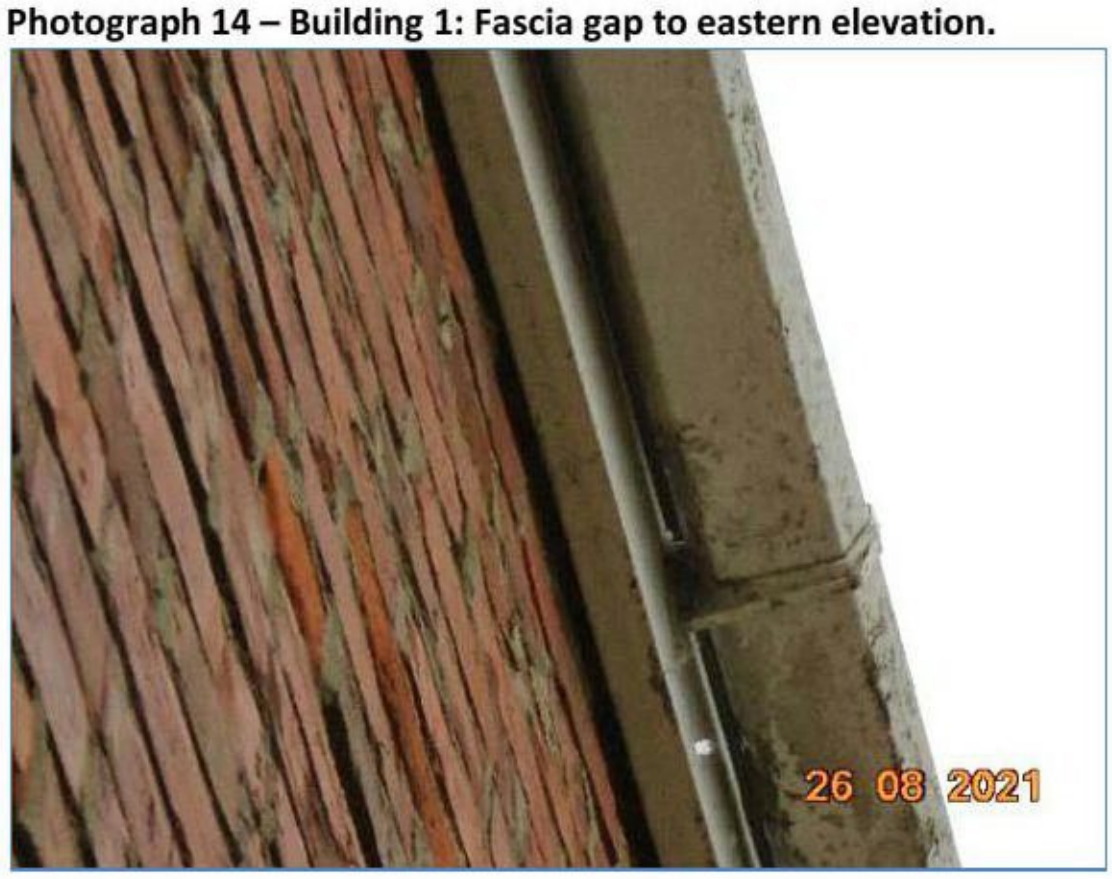
Trees within the site present no features with the potential to contain roosting bats, and each was classified as having negligible potential to contain roosting bats (Collins, 2016). Two buildings are present within the site, both of which are to be demolished under the proposals:

Building 1: Workshop and office (Photograph 9) – A large, two -storey, brick building with pitched, slate roof is located towards the south of the site. Brickwork is in good condition, with no cracks or crevices, and uPVC windows and door frames seal tightly to the walls, providing no potential access by bats. However, small mortar gaps were noted at the ridge of the structure (Photograph 13), and fascia gaps were noted to the east and west elevations (Photograph 14). A small number of lifted slates are present to both the north and south elevations (Photograph 15). Internally, the ceiling is vaulted throughout, and the roof is lined with timber sarking (Photographs 16 and 17). The sarking is well maintained and does not allow for inspection behind. No evidence of use by bats, such as droppings, urine or fur-oil staining, scratch marks, feeding remains, audible squeaking or live/dead bats was noted during either the internal or external inspection. The building is considered unsuitable for maternity or hibernation use, but could be occupied occasionally by low numbers of crevice-dwelling bats, and therefore is of 'low risk'.

Building 2: Residential dwelling (Photograph 11) – A detached two-storey brick dwelling, with pitched slate roof is located at the south-western entrance to the site. The building is very well maintained, and has been recently (within the past 3 years) renovated, including the replacement of the roof covering. As such, no potential bat access gaps were noted in association with the roof (Photograph 18), with barge boards to the freshly rendered gables also sealing tightly (Photograph 19). Hanging tiles are present between bay windows to the front (south elevation) of the property, however these are neatly arranged, and no suitable bat roosting features were noted. Overhanging eaves appear sealed to the exterior, and from the interior, the wall can be seen to meet the underside of the timber boards (Photographs 20 and 21), providing no potential access by bats. The roof void itself is open and uncluttered, and lined with a modern, breathable membrane (Photograph 22). Timbers are cobwebbed and no evidence of use by roosting bats was noted, either internally or externally. The building is considered to be of negligible risk of supporting roosting bats.

Photograph 13 – Building 1: Typical ridge gaps.

Photograph 14 – Building 1: Fascia gap to eastern elevation.



Photograph 15 – Building 1: Typical slate gaps.

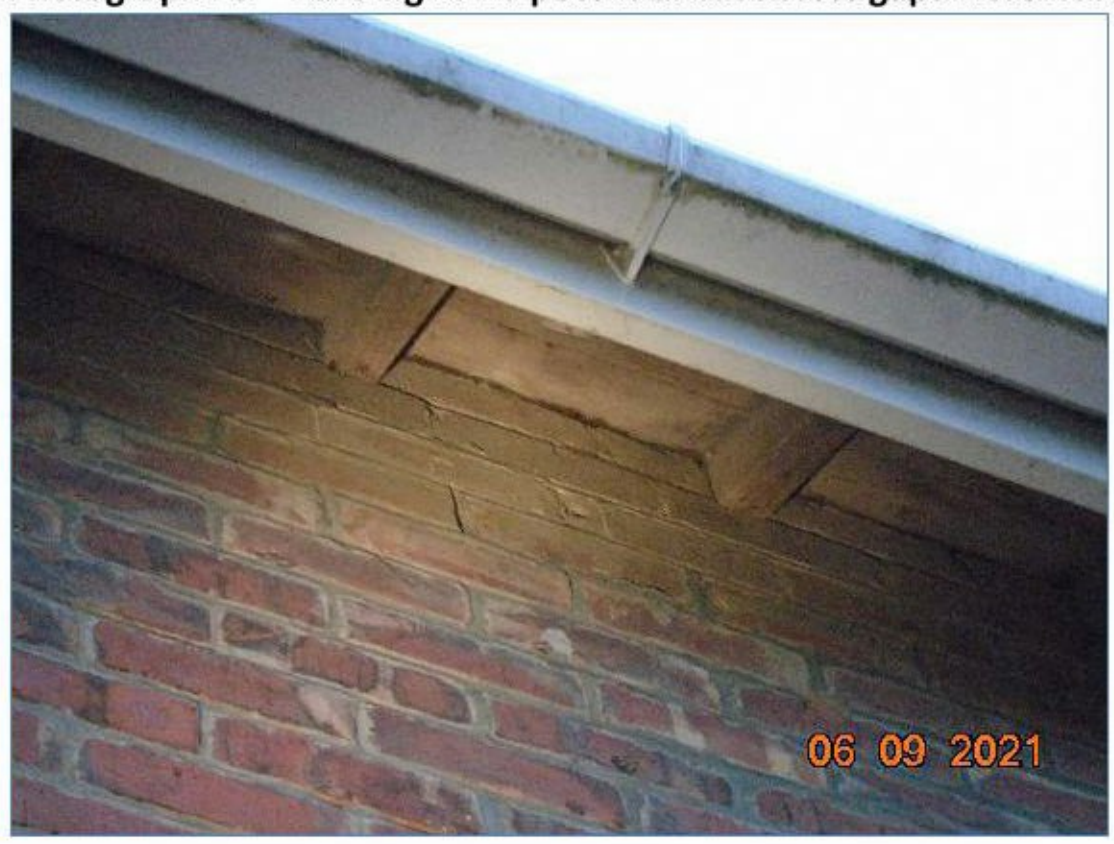
Photograph 16 – Building 1: Internal construction of eastern half of building.

Photograph 17 – Building 1: Internal construction of western half of building.

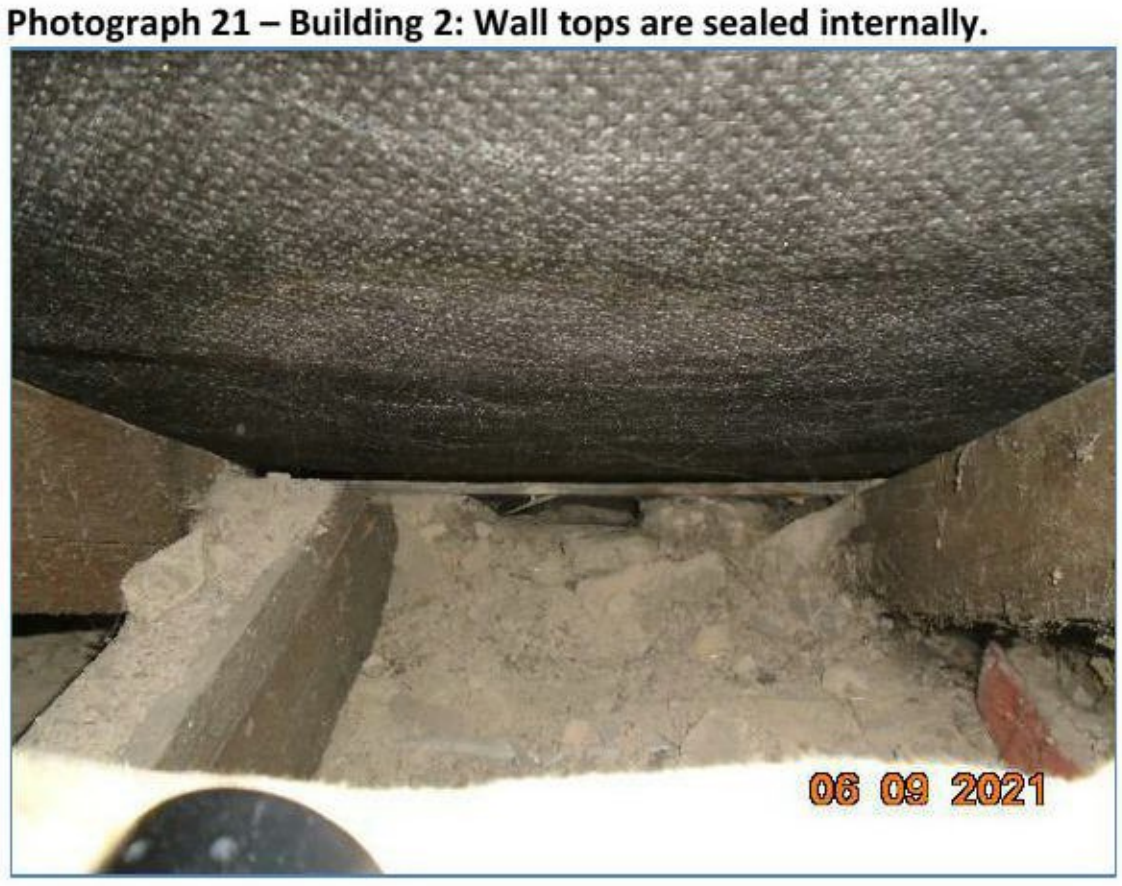
Photograph 18 – Building 2: Roof covering provides no potential bat access gaps.

Photograph 19 – Building 2: Barge boards seal tightly to both gables.

Photograph 20 – Building 2: No potential bat access gaps were noted at the eaves.



Photograph 21 – Building 2: Wall tops are sealed internally.



Photograph 22 – Building 2: Open and uncluttered roof void.

5.3.5 In accordance with current best practice guidelines, it was recommended that a single nocturnal activity survey be undertaken on the building identified as holding low potential to contain roosting bats (workshop/office). No further survey work was recommended for the building identified as holding negligible potential to contain roosting bats (residential dwelling).

5.3.6 Nocturnal Activity (Dusk) Survey – 6th September 2021

[redacted] and across the site. Brief bouts of foraging activity were noted along the eastern edge of the sycamore trees and within the adjacent residential garden. In addition to common pipistrelles, [redacted] No bats were seen to emerge from the building at any point during the survey. The result of the nocturnal bat activity survey is summarised in Figure 5, and a bat flight plan is provided as Appendix 3.

Figure 5 – Nocturnal survey results.

Date	Number of Surveyors	Sunset or Sunrise time	Start time	End time	[redacted]	Emergence/ Re-entry
06/09/2021	3	19:46	19:30	20:46	[redacted]	None

5.3.7 As a result of the nocturnal activity survey, it is concluded that bats are unlikely to roost within the buildings on site, and therefore no impacts on roosting bat are anticipated as a result of the proposals.

5.3.8 *Commuting/Foraging Habitat*

The site is well-lit and located within a suburban area, but extends northwards into farmland. Coastal denes of ancient semi-natural woodland would provide areas of high value bat foraging habitat, however these are located over 1 km from the site, and closer, more preferable roosting opportunities for bats are known within the vicinity of these denes. The site and immediate surroundings are considered to provide only low value commuting and foraging habitat for bats; the central area of the site is of negligible use to bat species, however the hedgerows have the potential to be used by small numbers of commuting bats, and nocturnal survey work has shown the line of rowan trees on site to be of use to small numbers of commuting common pipistrelles. Hedgerows are to be retained to the site boundaries, however the line of rowan trees is to be removed, and will require compensating for. The development should also be mindful of light spillage across boundary features, which may affect light-averse species such as bats. Further recommendations are provided in Section 6.5, to maintain commuting links across the site and avoid disturbance of commuting bats.

5.3.9 Birds (*Aves spp.*)

Common bird species such as wren (*Troglodytes troglodytes*), blackbird (*Turdus merula*) and a family party of long-tailed tits (*Aegithalos caudatus*) were seen and/or heard during the site walkover surveys, largely associated with native hedgerow to the northern and western perimeter of the site. ERIC NE provided several records of rare and threatened birds within 2 km of the site (see Figures 2 and 3), however these are largely located within woodland habitat, particularly Hawthorn Dene, 1.4 km to the north-east. The dense and wide hedgerows running along the northern and western boundaries of the site provide suitable habitat for farmland bird species, however the site extends from the town, with human disturbance to the south from the long-standing working coachworks. Fields to the east are currently being developed for housing, with high levels of disturbance by construction traffic, followed by ongoing disturbance by future residents. The bird species present

are likely to be more common in nature and less affected by human intrusion. Hedgerows to the perimeter of the site are to remain, and the development of the central area of the site for residential use is unlikely to have significant effects on these species. However, vegetation within the site, including trees, shrubs, bramble patches, rough vegetation and tussocky grassland, have the potential to be used by common species of nesting birds. All wild birds within the UK, regardless of their conservation status, are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended), making it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy the nest of such a bird (whilst being built or in use) or its eggs. Working methods should be adopted to avoid the destruction of active nests during any vegetation clearance and suitable working methods are provided in Section 6.3.

5.3.10 Brown Hare (*Lepus europaeus*)

Four records of brown hare were provided by ERIC NE within 2 km of the site, the most recent of which is dated 2006, and each of which is located over 1 km from the site. It is possible low numbers of brown hare can be found within the agricultural fields to the north of the proposed site, however the site itself is located within a more urban environment, and has in the recent past been horse grazed pasture, which does not offer suitable cover for this species. Given the low number of recent local records, and the sub-optimal habitats within the site, it is considered that brown hare do not pose a constraint to the development of the site.

5.3.11 Great Crested Newt (*Triturus cristatus)*

ERIC NE provided one record of great crested newt (GCN), relating to a sighting of an individual approximately 0.5 km to the east in 2013, however Ordnance Survey and aerial mapping show no known standing water bodies at the given grid reference. Assuming a precautionary approach, whereby a small pond could be present within a woodland or residential garden, this record is separated from the proposed development site by urban

development, particularly the B1283, a busy road which would create a significant barrier to the dispersal of amphibians towards the proposed development site.

5.3.12 There are no ponds within the site boundary, however Ordnance Survey maps show a garden pond is present 360m to the north-west. From the roadside, it can be seen that the pond is a concrete lined, steep-sided ornamental pond, with no emergent vegetation. The pond is surrounded by close-cut amenity grassland. A Habitat Suitability Index (HSI) of the pond shows the water feature to have 'poor' potential to contain GCN (Figure 6), and this figure does not take into consideration a lack of potential egress from the pond by wildlife, due to its steep concrete sides. The pond is located beyond the B1432 Sunderland Road, which would present a barrier to the dispersal of newts, in the unlikely event they could utilise the pond, and there are no further ponds within 1 km, and as such it is unlikely the surrounding area supports a metapopulation of great crested newts. It is therefore considered highly unlikely great crested newts would be found within the site, or would be affected by the proposals.

Figure 6 – Results of HSI assessment.

HSI methodology SI criteria		Pond 1 SI score
Factor 1 - Location		1.00
Factor 2 - Pond area		0.40
Factor 3 - Permanence		0.90
Factor 4 - Water quality		0.33
Factor 5 - Shade		1.00
Factor 6 - Fowl		1.00
Factor 7 - Fish		0.67
Factor 8 - Pond count		0.10
Factor 9 - Terrestrial		0.33
Factor 10 - Macrophytes		0.30
(SI_1 x SI_2... x SI_{10})		0.00078800
HSI score		**0.49**
Habitat Assessment Categories		
<0.5	Poor	✓
0.5 - 0.59	Below average	
0.6 - 0.69	Average	
0.7 - 0.79	Good	
>0.8	Excellent	

5.3.10 Hedgehog (*Erinaceus europaeus*)

Hedgehog are a priority species for conservation, both locally and nationally. Due to the timing of the survey visit, no hedgehog were noted on site, however 20 records of hedgehog were provided by ERIC NE within 2 km of the site. Although the closest of these is located 450m to the south, several records relate to road casualties on the B1283 which passes to the south of the site. The site itself contains hedgerows and bramble scrub, and a small area of woodland habitat, which are suitable for use by hedgehog. As a result, it is possible hedgehog may reside within and/or pass through the site. The hedgerows are to be retained and the proposals involve the development of the site for housing. Hedgehogs have become habituated to residential gardens, which provide suitable foraging habitat for this species, however hedgehogs range widely, and mitigation measures will be required to ensure the gardens of the properties remain available to hedgehogs post-construction.

6.0 RECOMMENDATIONS AND MITIGATION

6.1 Summary of Potential Impacts

6.1.1 In the absence of avoidance and mitigation measures, the proposals to develop the site for residential use may result in the following potential impacts:

- Destruction of an active birds' nest.
- Spread of a controlled invasive plant, listed under Schedule 9 Part ii of the Wildlife and Countryside Act 1981.
- Severance of a bat commuting route and disturbance of commuting bats, through light spillage.
- Fragmentation and/or loss of hedgehog habitat.
- Loss of a short (34m approx.) line of native trees of moderate quality, and a short (20m approx.) line of non-native trees of poor quality.
- Loss of approximately 1.49 ha of common and widespread habitats of low ecological value.

6.2 Recommended Further Survey Work

6.2.1 Further survey work for roosting bats has already been carried out. No further survey work of the site or surrounding area is deemed necessary.

6.3 NPPF and Mitigation Hierarchy

6.3.1 The National Planning Policy Framework is a statutory planning policy document focussing on land use development and protection. Chapter 15 of the NPPF sets out the national policy for conserving and enhancing the natural environment. Minimising impacts on biodiversity as well as providing net gains in biodiversity are key principles, and planning applications may not be supported if significant harm cannot be avoided, mitigated or compensated for.

6.3.2 The mitigation hierarchy is a set of prioritised steps to alleviate environmental harm as far as possible through avoidance and mitigation of detrimental impacts. As a last resort, compensatory measures are proposed where unavoidable residual impacts remain, following avoidance and mitigation measures. Avoidance, mitigation, and where necessary, compensation measures for potential impacts are outlined below.

6.4 Avoidance

6.4.1 *Controlled Invasive Plants*

An area of recently cleared bramble to the south of the site was found to contain montbretia (see Appendix 2 for location). To avoid the spread of this species, it is recommended that the plant is eradicated through one of the following means:

1. Mechanical control: Plants can be physically removed by digging, but it is essential that all plant material and corms are removed. If corms are broken up or accidentally left, new plants will grow, potentially in greater numbers. Excavated material should be removed from site to licensed landfill as controlled waste, or dealt with on site via deep burial.
2. Chemical control: Plants can be treated with herbicide whilst actively growing, however a number of treatments may be required, and this may be a lengthy process.

6.4.2 *Nesting Birds*

All clearance of vegetation (including the cutting of long grass) should be undertaken outside of the bird nesting season of March to August inclusive, to avoid the destruction of an active nest. If it is considered necessary to undertake the works during the bird nesting season, the site will require an inspection by a suitably qualified ecologist immediately prior to commencement to declare the site free of active nests. If active nests are found the works will not be allowed to proceed. This could impose a significant constraint on the project timetable, and therefore the primary

recommendation is that site clearance is undertaken outside of the nesting season.

6.5 Mitigation

6.5.1 *Lighting*

Habitats to the south of the site already experience high levels of artificial lighting, however lighting of the wider site should be mindful of the effects of general increases in artificial lighting on wildlife, and specifically light spillage across linear and boundary features such as hedgerows. No artificial lighting is to be directed towards, or fall across the hedgerows to the northern and western boundaries, or to the line of newly planted trees to the eastern site boundary (see 6.6.2). Lighting of the wider site should uphold best practice guidelines with respect to ecological sensitivity. These include:

- Institute of Lighting Professionals (2018) - *Guidance Note 08/18: Bats and Artificial Lighting in the UK.*
- The Institute of Lighting Engineers (2011) - *Guidance Notes for the Reduction of Obtrusive Light.*

6.5.2 *Hedgehogs*

- During Construction: The site should be maintained in a safe manner for ground-dwelling animals, with hazards such as open holes, pits, ditches, ponds and drains covered or fitted with ramps (scaffolding board or similar) to allow for escape. Netting should be kept off the ground to avoid entanglement and any slack netting tied up. Rubbish should be kept contained in a designated area to avoid animals becoming trapped in litter. Netting of hedgerows, e.g. to protect against nesting birds, is strictly prohibited, to avoid the trapping of hedgehogs.
- Features of the Build: In order to ensure the site remains available to hedgehogs post-construction, access between gardens is critical. Dividing fences should contain suitably sized holes (13cm x 13cm/5" x 5") at the base, to allow the continued movement of hedgehogs through the development. A variety of fencing suppliers stock specific hedgehog-

friendly fencing, however where the fence does not naturally contain gaps, and the openings must be cut, signage, such as that in Figure 7, should be displayed at each hedgehog hole, to ensure the hole does not become blocked or obstructed by any new residents who are unaware of the purpose of the hole. 'Hedgehog Highway' signs are available at discount prices when purchased in bulk (50+) from *People's Trust for Endangered Species (*contact *hedgehog@ptes.org* for a quotation).

- After the Build: Details of the hedgehog friendly initiatives incorporated into the development, and the benefits of wildlife friendly gardens, should be included in the homeowner's welcome pack, to raise awareness and dissuade homeowners from reversing the features. Pre-prepared 'Top Tips' leaflets can be requested along with the hedgehog highways signage, and inserted into homeowner packs.

Figure 7 – Example signage to prevent blocking of hedgehog mitigation holes.

(Photograph taken from https://www.britishhedgehogs.org.uk/shop/product/hedgehog-highway-sign/)

6.6 Compensation

6.6.1 Impacts on biodiversity have been avoided wherever possible, as above. However, the loss of habitats cannot be avoided or mitigated if the proposals are to go ahead, and therefore these can only be offset through compensatory measures.

6.6.2 *Loss of Linear Habitats*

Hedgerows to the northern and western boundaries are to be retained. A suitable buffer should be employed during the construction and operational phases of the project, so as the hedgerow shrubs (and their root system) are protected from damage, for example via compaction by site traffic. Two lines of trees within the site would be difficult to retain within the proposals, and are to be removed. Planting will be required to compensate not only for the trees themselves, but for the ecological functionality they exhibit in terms of commuting bats. It is proposed to plant a native species-rich hedgerow, with trees, along the eastern boundary of the site, of approximately 150m in length, as shown in Appendix 4. The planting will follow that recommended for the 'East Durham Limestone Plateau Character Area', consisting of:

- 60% hawthorn (*Crataegus monogyna*),
- 20-25% blackthorn (*Prunus spinosa*),
- 10-15% hazel (*Corylus avellana*), and
- 5% field maple, holly, crab apple, dog rose and wild privet (*Acer campestre, Ilex aquifolium, Malus sylvestris, Rosa canina* and *Ligustrum vulgare*).

Hedgerow trees would ordinarily consist of ash (*Fraxinus excelsior*) and common oak (*Quercus robur*), however due to the current implications of ash dieback (*Hymenoscyphus fraxineus)* disease, ash is not considered a sustainable planting choice and is unlikely to survive in the long term. Rowan may be used as an alternative. Larger tree species such as oak should only be planted where a suitable stand-off distance (minimum 15m) can be applied, to prevent tree/building conflicts in the future.

6.6.3 *Loss of Area Habitats – Grassland and Bramble Scrub*

Under the current proposals, it is not possible to accommodate sufficient areas of compensatory habitat within the site boundary. To compensate for the loss of approximately 1.49 ha of common and widespread habitats of low ecological value, off-site measures will be required.

6.7 Enhancement

6.7.1 To provide increased opportunities for roosting bats within the site, an integrated bat box will be incorporated into one in every 10 properties. Detailed instructions for the type and siting of these boxes will be provided at the full application stage.

7.0 BIODIVERSITY NET GAIN

7.1 Biodiversity Offsetting Calculations

7.1.1 Projects should seek an overall Biodiversity Net Gain, in order to meet the emerging Environment Bill, which seeks to mandate a 10% biodiversity net gain (BNG), with a view to leaving the natural environment in a measurably better state following development. The above compensation scheme has been assessed using the Defra Biodiversity Metric 3.0 (July 2021) (The Metric), which provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. The biodiversity value of the site before and after development was measured, to thereby determine the potential loss or gain of biodiversity. Baseline biodiversity calculations are based on the habitats shown in Appendix 2, whilst post-development biodiversity calculations are based on the habitats shown in Appendix 4.

7.2 Biodiversity Baseline

7.2.1 Calculations using The Metric indicate an existing on-site area baseline Biodiversity Units (BU) of 5.99 and linear BU of 1.42. The majority of the linear habitats are to be retained, however the remainder of the site is to be cleared. In the absence of additional compensation measures, a loss of 5.99 area BU (-100.00%) and a loss of 0.16 linear BU (-11.27%) is anticipated (Figure 9).

Figure 9a – Baseline Biodiversity Units (area habitats).

UK Habitat Classification	Area (ha)	Condition	Baseline Units	Area Retained (ha)	Units lost
Other neutral grassland	1.34	Poor	5.36	-	5.36
Bramble scrub	0.13	Poor	0.52	-	0.52
Other woodland; broadleaved	0.02	Poor	0.08	-	0.08
Developed land; sealed surface	0.05	N/A	0.00	-	0.00
Artificial, unvegetated, unsealed surface	0.22	N/A	0.00	0.02	0.00
Vegetated garden	0.01	Poor	0.02	-	0.02
Urban trees	0.0018	Poor	0.01	-	0.01
Totals	**1.77**		**5.96**	**0.02**	**5.99**

Figure 9b– Baseline Biodiversity Units (linear habitats).

UK Habitat Classification	Length (km)	Condition	Baseline Units	Length Retained (km)	Units lost
Native hedgerow	0.21	Good	1.26	0.21	0.00
Line of trees	0.02	Poor	0.04	-	0.04
Line of trees	0.03	Moderate	0.12	-	0.12
Totals	**0.26**		**1.42**		**0.16**

7.3 Post-Development Biodiversity

7.3.1 A summary of the on-site post development biodiversity offsetting calculations is provided below (Figure 10), whilst full calculations can be found within the supplied Excel calculator (*Biodiversity Metric 3.0 Seaside Lane Easington).* Post-development biodiversity values have been calculated based on the habitats indicated in Appendix 4, and in accordance with the following assumptions:

- Existing hedgerows are to be fully retained and are **not** incorporated into residential gardens.
- No trees are planted over the area marked as 'species-rich grassland'.
- At least 15 amenity trees of native origin will be planted across the amenity grassland. Within the BNG calculations, it is assumed these will reach no more than 30cm DBH within the initial 30-year period, i.e. small trees.

- Areas to the front and rear of each property are considered residential gardens; it is assumed that 50% will remain vegetated once purchased, whilst 50% will become unvegetated.

It should be noted that the BNG calculations are quantitative, and do not take into consideration qualitative features, such as the incorporation of hedgehog highways and integrated bat boxes, and these would add some additional biodiversity value to the resulting BNG figures shown below.

Figure 10 – Summary of On-Site Biodiversity Offsetting Figures.

Net project biodiversity units (including all on-site & off-site habitat retention/creation)		
	Habitat units	-4.77
	Hedgerow units	1.16
	River units	0.00
Total project biodiversity % change (including all On-site & Off-site Habitat Creation + Retained Habitats)		
	Habitat units	-79.61%
	Hedgerow units	81.98%
	River units	0.00%

Combined habitat retention and enhancement			
	Habitats	Hedgerows	Rivers
Total area / length	1.77	0.26	0.00
Total units	5.99	1.42	0.00
Area / length retained	0.02	0.21	0.00
Units Retained	0.00	1.26	0.00
Area / length proposed for enhancement	0.00	0.00	0.00
Baseline units proposed for enhancement	0.00	0.00	0.00
Area / length lost	1.75	0.05	0.00
Units lost	5.99	0.16	0.00

7.3.2 In order for the site to be developed to the extent proposed, it is not possible to retain the current habitats, and biodiversity calculations show the proposed landscaping of the site cannot accommodate sufficient areas of compensatory habitat within the site boundary (a loss of -4.77 habitat units, equating to -79.61%, is anticipated). The loss of biodiversity as a result of the proposals cannot be adequately compensated for on-site and therefore off-site compensatory measures will be required for area habitats. In terms of linear habitats, the recommended hedgerow planting would result in the

anticipated delivery of a net gain of +81.98%, and therefore sufficient gain of linear habitats will be achieved on site.

8.0 REFERENCES

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APPENDIX 1 – SPECIES LIST

Common Name	Scientific Name	Abundance (DAFOR)*
MODIFIED GRASSLAND		
Sycamore	*Acer pseudoplatanus*	R
Lady's mantle	*Alchemilla vulgaris agg.*	R
False oat-grass	*Arrhenatherum elatius*	R
Buddleia	*Buddleia davidii*	R
Common mouse-ear	*Cerastium fontanum*	R
Rosebay willowherb	*Chamaenerion angustifolium*	R
Creeping thistle	*Cirsium arvense*	A
Marsh thistle	*Cirsium palustre*	R
Spear thistle	*Cirsium vulgare*	R
Hawthorn	*Crataegus monogyna*	R
Cocksfoot	*Dactylis glomerata*	O
Field horsetail	*Equisetum arvense*	LA
Beech	*Fagus sylvatica*	R
Red fescue	*Festuca rubra*	F
Meadow cranesbill	*Geranium pratense*	R
Common hogweed	*Heracleum sphondylium*	R
Yorkshire fog	*Holcus lanatus*	F
Red dead-nettle	*Lamium purpureum*	R
Perennial ryegrass	*Lolium perenne*	F
Timothy	*Phleum pratense*	R
Ribwort plantain	*Plantago lanceolata*	A
Selfheal	*Prunella vulgaris*	R
Creeping buttercup	*Ranunculus repens*	O
Dog rose	*Rosa canina*	R
Bramble	*Rubus fruticosus agg.*	R
Common sorrel	*Rumex acetosa*	R
Broad-leaved dock	*Rumex obtusifolius*	O
Elder	*Sambucus nigra*	R
Autumn hawkbit	*Scorzoneroides autumnalis*	R
Ragwort	*Senecio jacobaea*	R
Common dandelion	*Taraxacum officinale agg.*	O
Red clover	*Trifolium pratense*	R
White clover	*Trifolium repens*	A
Common nettle	*Urtica dioica*	LA
Germander speedwell	*Veronica chamaedrys*	R
Vetch	*Vicia sp.*	R
HEDGEROW/BRAMBLE SCRUB		
Creeping bent	*Agrostis stolonifera*	
Cow/hedge parsley	*Anthriscus sylvestris/Torilis japonica*	
False oat-grass	*Arrhenatherum elatius*	
Rosebay willowherb	*Chamaenerion angustifolium*	
Spear thistle	*Cirsium vulgare*	
Hawthorn	*Crataegus monogyna*	

Common Name	Scientific Name	Abundance (DAFOR)*
Great willowherb	*Epilobium hirsutum*	
Red fescue	*Festuca rubra*	
Cleavers	*Galium aparine*	
Meadow cranesbill	*Geranium pratense*	
Ivy	*Hedera helix*	
White dead-nettle	*Lamium album*	
Meadow grass	*Poa sp.*	
Bramble	*Rubus fruticosus agg.*	
Common sorrel	*Rumex acetosa*	
Elder	*Sambucus nigra*	
Ragwort	*Senecio jacobaea*	
Common dandelion	*Taraxacum officinale agg.*	
Common nettle	*Urtica dioica*	
LINE OF TREES		
Sycamore	*Acer pseudoplatanus*	
Rowan	*Sorbus aucuparia*	

* Plant abundance at time of survey. D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare. L=Locally.

Common Name	Scientific Name	Taxon Group
Long-tailed tit	*Aegithalos caudatus*	Bird
Woodpigeon	*Columba palumbus*	Bird
Jackdaw	*Corvus monedula*	Bird
Magpie	*Pica pica*	Bird
Wren	*Troglodytes troglodytes*	Bird
Blackbird	*Turdus merula*	Bird

Appendix 2: UK Habitat Classification Plan (26/08/2021)

Legend

- Site Boundary
- Artificial unvegetated, unsealed surface (u1c)
- Bramble scrub (h3d)
- Building (u1b5)
- Other broadleaved woodland types (w1g7)
- Other neutral grassland (g3c)
- Suburban/mosaic of developed/ natural surface (u1d)
- Hedgerow (priority habitat) (h2a)
- Line of trees (w1g6)
- Scattered trees (non-native)
- Area containing controlled invasive plant (montbretia)

Project Details:
Land to north of Seaside Lane
Easington
Peterlee
Durham
SR8 3TW

Prepared for:
Blake Hopkinson Architecture & Design

On behalf of:
Snowdon Coaches

Report Ref: BH_SeasideLn_EcIA1.1

Date: 8th September 2021

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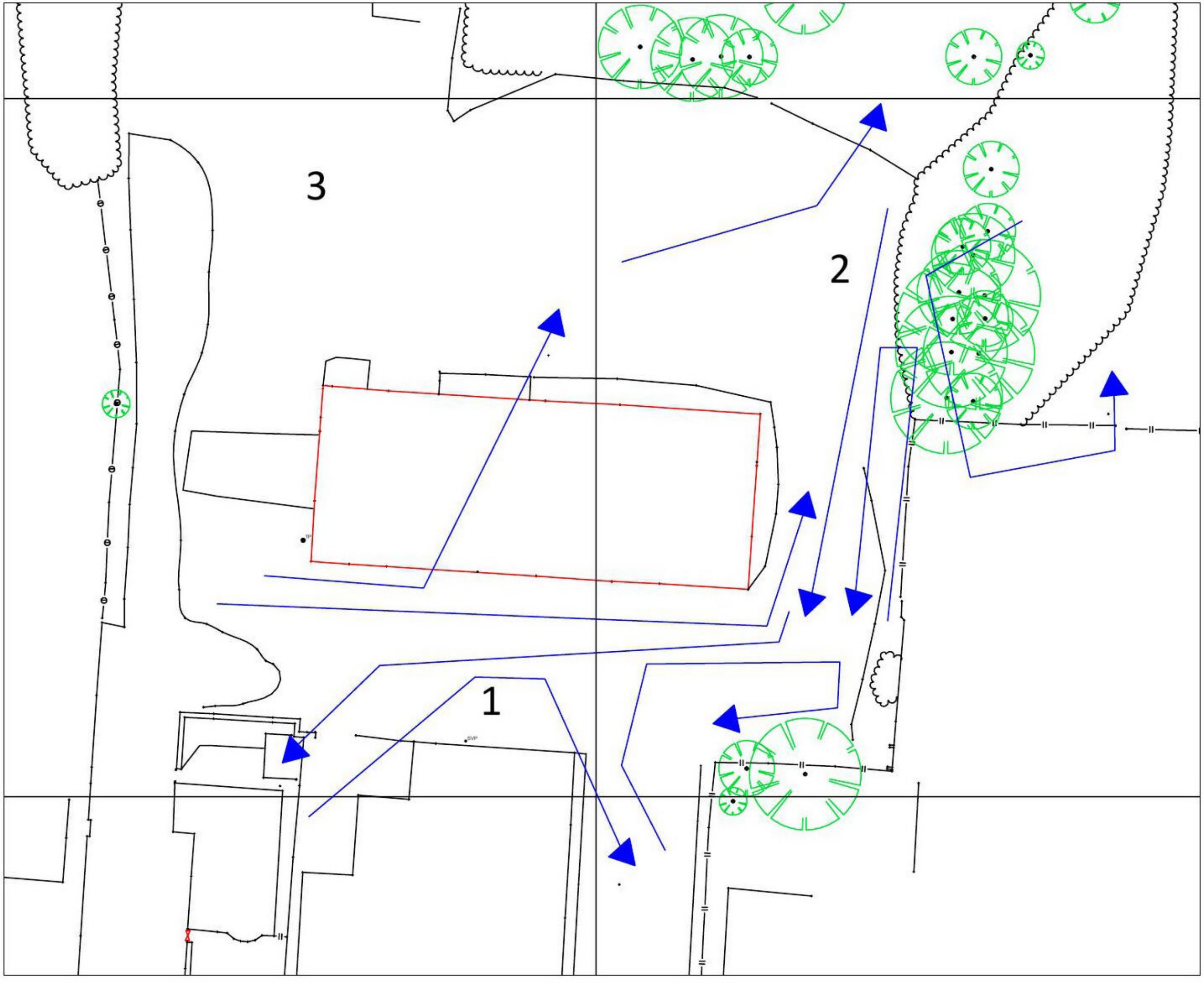

Appendix 3
Bat Activity Plan
06/09/2021

Key

Surveyor location 1

Flight lines

Foraging areas

Surveyed building

N

Ecological Impact Assessment of:
Land to north of Seaside Lane
Easington
Peterlee

Prepared for:
Blake Hopkinson Architecture & Design

On behalf of:
Snowdon Coaches
Seaside Lane
Easington

Report Ref: BH_SeasideLn_EclA1.1

Date: 7th September 2021

Scale: Not to scale

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Appendix 4: Proposed Site/ Compensation Plan

Legend

- Site Boundary
- Artificial unvegetated, unsealed surface
- Introduced shrub
- Amenity grassland overplanted with >15 no. native trees
- SUDS
- Residential garden
- Species-rich grassland (wetland/ pond edge mix)
- Existing hedgerow
- Proposed native hedgerow with trees

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