



Salisbury Square

Ecological Assessment

Prepared on behalf of Gascoyne Estates

November 2021

**Salisbury Square
Ecology 7689
Version 01**

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1.0 Executive Summary

- 1.1 The Client is proposing the redevelopment of the current site and demolition of a block of flats and commercial units on the site.
- 1.2 The ecological assessment consisted of 1) a desk study of existing ecological data in relation to the site, and 2) an ecological assessment of the land within the application site.
- 1.3 The ecological assessment survey included a daytime inspection of the on-site vegetation for the presence or likely absence of protected or notable species and to assess the ecological value of the habitats present.
- 1.4 The site consists of hardstanding and buildings, the hardstanding forms a car park and walkways around a central square. This square is formed of amenity grassland with scattered trees. Hedgerows are present within the car park section of the site. The habitats present are of low ecological value.
- 1.5 The building due for demolition was assessed as having low bat potential for bats and an emergence survey was conducted in September 2021. No bats were recorded emerging from the building with low levels of bat activity recorded during the survey. Bat roosts are not considered to be present on the site.
- 1.6 The areas of scattered trees, scrub and small hedgerows provide some foraging and nesting opportunities for common bird species. It is recommended that any vegetation clearance should avoid the bird nesting season (1st March – 31st August), unless prior inspection has been carried out by an ecologist and records that nesting birds are not present.
- 1.7 The development provides opportunities to enhance the ecological value of the site. Suggestions for ecological enhancements which include native species planting, a pond and bat and bird boxes have been provided.

2.0 Introduction

Project Background

- 2.1 Pro Vision Ecology were commissioned in September 2021 to carry out an ecological appraisal of the site at Salisbury Square. For the site location refer to **Appendix A**. This report will contribute to a forthcoming application to be submitted by the Client to Welwyn Hatfield Borough Council.
- 2.2 This report describes the current ecological baseline of the site based on the findings of the ecological assessment.
- 2.3 Due to project timelines and resources a separate consultancy, Eco-scope Ecological Solutions, completed the bat survey work for the project. These surveys are summarised in this report for completeness.

Brief

- 2.4 To carry out an ecological assessment of the land within the site boundaries, to inform the Client of the ecological implications of their proposals and to assess the impacts and provide mitigation where required.

Relevant Legislation and Planning Policy

- 2.5 The key legislative provisions of relevance to this report with respect to the development proposals and their potential effects on ecological features are listed below:
 - The Conservation of Habitats and Species Regulations 2017 (as amended)
 - The Wildlife and Countryside Act 1981 (as amended)
 - The Countryside and Rights of Way (CRoW) Act 2000
 - The Natural Environment and Rural Communities (NERC) Act 2006
- 2.6 The UK Biodiversity Action Plan (BAP) was the Governments response to the 1992 Convention on Biodiversity (The Rio Convention), with the aim of halting the loss of biodiversity in the UK. The new UK post-2010 Biodiversity Framework replaced the previous BAP and is the government's response to the new strategic plan on the United Nations Convention on Biological Diversity (CBD). Although the UK post-2010 Biodiversity Framework supersedes the UK BAP, the UK BAP lists of priority species and habitats still remain an important reference source for identifying habitats and species of principal importance within the UK. Within England, Section 41 of the NERC Act (2006) lists species and habitats of principal importance for the conservation of biodiversity.
- 2.7 The Government has set out its policies for the protection and enhancement of biodiversity through the planning system in the National Planning Policy Framework policy 15 (NPPF, 2021).
- 2.8 The application site is located within Welwyn Hatfield District. The Welwyn Hatfield District Plant includes policy R11 related to Biodiversity, which states:

Policy R11- Biodiversity and Development

All new development will be required to demonstrate how it would contribute positively to the biodiversity of the site by;

- (i) The retention and enhancement of the natural features of the site;*
- (ii) The promotion of natural areas and wildlife corridors where appropriate as part of the design;*
- (iii) The translocation of habitats where necessary, where it can be demonstrated that the habitat or species concerned cannot be successfully accommodated within the development;*
- (iv) The use of locally native species in planting in accordance with Policy D8 Landscaping;*
- (v) Helping meet priorities/targets set out in the Local Biodiversity Action Plan.*

3.0 Methodologies

Desk Study

- 3.1 The desk study methodology is based upon guidelines set out by the Chartered Institute of Environmental and Ecological Management (CIEEM, 2017). A data-gathering exercise was undertaken to obtain any available information relating to statutory nature conservation sites and priority habitats and bat species (**Table 1**).

Table 1: Summary of information sources used for the Desk Study

Organisation / Source	Information Sought
Herts Environmental Records Centre (HERC)	Records of the presence of key protected and notable species and non-statutory wildlife sites within two kilometres of the site.
MAGIC	Locations of and citations for all national statutory wildlife sites, including SSSI, within two kilometres and all international sites including SAC, SPA or Ramsar sites within five kilometres of the site. Records of EPSM licences and class licence returns within two kilometres.
Ordnance Survey Maps	Large scale habitat information and identification of off-site habitats which may require consideration (such as ponds) within 500m.

Ecological Assessment

Habitats

- 3.2 A site visit was carried out on 7th October 2021. The survey was carried out by experienced ecologist Louisa Jones in clear weather conditions, still, dry and an ambient temperature of 16°C. The survey employed techniques based on standard Phase I Habitat Survey methods (CIEEM, 2016). Habitat types on site were identified according to standard habitat definitions (JNCC, 2010) and mapped at an appropriate scale.
- 3.3 The collection of botanical information focused on the dominant and/or key indicator species for each habitat, to allow allocation of habitats to the standard Phase I habitat types and where relevant to identify any BAP habitats which are present on site. Any habitats identified as having potentially high botanical value will be subject to further botanical surveys, if deemed necessary.

Protected species

3.4 The Ecological Assessment included an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly. Indicative survey methods for protected species are outlined below.

Badgers (Meles meles)

3.5 Any area that could be used for foraging by badgers or could potentially contain a badger sett was surveyed and any signs noted including:

- Evidence of active or disused setts;
- Evidence of potential badger diggings;
- Latrines / dung pits;
- Evidence of badger foraging ('snuffle holes');
- Footprints; and
- Badger hairs.

Bats

Phase 1

3.6 Bats use trees as potential roost sites and trees on the site were inspected from the ground and an assessment made for the potential of the tree to support bats. Features which may support bats include holes and crevices, ivy covering and peeling bark. The assessment for roosting potential in trees is based on BCT guidelines (Collins, 2016) shown below in **Tables 2**.

Table 2: Potential of trees to support bat roosts

Potential	Criteria
Negligible	Negligible features on the tree
Low	A tree of sufficient size and age but features present have limited roosting potential
Medium	A tree with one or more potential roost features that may be used by bats due to their size, shelter, protection, condition and habitats present. Unlikely to support a roost of high conservation value.
High	A tree with one or more potential roost sites that are suitable for use by a large number of bats.

- 3.7 Bats use features in the landscape to navigate and also habitats may provide key foraging locations. Foraging and commuting habitat was assessed based on based on BCT guidelines (Collins, 2016) shown in **Table 3** below.

Table 3: Assessment of foraging/commuting habitat

Potential	Criteria
Negligible	Negligible features on site likely to be used by bats
Low	Suitable but isolated habitat that could be used by small numbers of bats.
Medium	Habitat that is well connected to the wider landscape and could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape and may be used by significant numbers of bats including annex II species.

Emergence/re-entry

- 3.8 An emergence survey was carried out by Eco-scope Ecological Solutions on the 15th September 2021 on a brick built structure comprising of a row of commercial shop units on the ground floor and residential flats on the upper floor at the Northern end of Salisbury Square. Four surveyors completed the survey using handheld and static bat monitoring equipment alongside infra-red camera equipment. Surveyors were stationed on each corner of the building.

Constraints

- 3.9 The emergence survey was completed out of peak survey season in September, however, the warm weather continued through early September and average temperatures during the week of the survey were 16°C with overnight temperatures of 12°C. These were still suitable weather conditions and bats were recorded during the survey and were active in the area.

Birds

- 3.10 Any habitat features, for example, scrub and trees, which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Dormice (Muscardinus avellanarius)

- 3.11 The suitability of the habitat was assessed for dormice. Any small mammal feeding signs were checked and assessed, including:
- Examination of hazel nuts; and
 - Evidence of nest building.

Great Crested Newts (Triturus cristatus)

- 3.12 Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts was assessed. If present, areas of standing water present on-site were assessed in accordance with current Habitat Suitability Index (HSI) assessment guidance (Oldham *et al.*, 2000) for their potential to support breeding newts.

Reptiles

- 3.13 Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

Invertebrates

- 3.14 Habitat features were assessed for the potential to support legally protected species of invertebrates.

Invasive species

- 3.15 During the survey any invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were noted.

4.0 Results and Analysis

Designated sites

Statutory Designated Sites

- 4.1 The data search revealed no international designated sites within five kilometres of the site but revealed three nationally designated sites within two kilometres of the site boundary. These are listed below.
- **Howe Dell Local Nature Reserve (LNR):** An urban fringe site, 3.9 hectares in area with a stream running through from north to south. Lined with woodland comprised of hornbeam (*Carpinus betulus*), oak (*Quercus spp.*) and beech (*Fagus sylvatica*). Lies 0.6 kilometres south of the site.
 - **Oxley's Wood LNR:** Urban fringe woodland site with species such as oak, ash, elm, willow and poplar. Contains a pond in the northern, wetter part. Lies 1.4 kilometres south of the site.
 - **Stanborough Reedmarsh LNR:** Urban fringe site with wet woodland comprised of willow species, a riverbank and reed marsh. An important site for reed and sedge warblers, water voles and other water birds. Lies 1.8 kilometres north of the site.
- 4.2 Due to the scale of the works and the distance from these designated sites there will be no impacts from the proposals.

Non-Statutory Designated Sites

- 4.3 The data search revealed the presence of 10 non-statutory designated sites within two kilometres of land at Salisbury Square:
- **Home Park, Hatfield Estate:** Located within 0.1 kilometres east of the site, 130 hectares in area. An old parkland consisting of ancient pedunculate Oak (*Quercus robur*) pollards, acid grassland with areas of old and more recent broadleaf, mixed and conifer plantation, and ancient semi-natural woodland remnants.
 - **Coombe Wood (Hatfield Park):** Located 0.8 kilometres south-east of the site and 21 hectares in area. An old parkland with acid grassland replanted with areas of mixed and conifer species, mostly pedunculate oak, Scot's pine (*Pinus sylvestris*) and Corsican pine (*Pinus nigra spp. laricio*). Remnants of ancient semi-natural woodland and wood pasture are present with pollarded hornbeam (*Carpinus betulus*) and old pollarded pedunculate oak.
 - **Millward's Park:** Located one kilometre south of the site and 150 hectares in area. Plantation woodland on former heath ancient woodland/parkland habitat consisting of mainly conifers. Halfway Oak Pond supports acid marsh species around its margins, including water-violet (*Hottonia palustris*) and marsh pennywort (*Hydrocotyle vulgaris*) and has a diverse invertebrate community.
 - **Grassland Strip near Butterfield Cottage:** Located adjacent to Oxleys Wood, 1.3 kilometres south of the site. A species-rich, partly wet, unimproved neutral and acid grassland drained by several ditches.
 - **Woodhall Farm Meadows:** Located 1.4 kilometres north of the site. A site within the floodplain of the River Lea, supporting a variety of habitats including marsh grassland,

old, unimproved wet acidic grassland and aquatic habitats that support a diverse range of plant communities.

- **Wood south of Woodhall Farm:** Located 1.5 kilometres north of the site, adjacent to Woodhall Farm Meadows. The site supports wet semi-natural broadleaved wood and carr and tall herb fen/swamp.
- **Creswick Plantation:** Located 1.7 kilometres north of the site. An old semi-natural broadleaf woodland divided by Mill Green Lane. The south-west section includes areas of swamp vegetation along the streams, the north-east section was recently replanted with ash (*Fraxinus excelsior*) and oak.
- **Green Street (near Woodside):** Located just within two kilometres south-east of the site. An old green lane bordered by species-rich woody hedgerows and blocks of woodland supporting ancient woodland indicators.
- **Howe Dell School and Hatfield Park:** Two sets of buildings with environs important for protected species. Located 0.3 kilometres south-east and 0.6 kilometres south-west of the site respectively.

- 4.4 The development is in close proximity to Home Park but is separated from this area by urban development which will prevent any impacts during construction and act as a barrier. Due to the scale of the works and the distance from these designated sites there will be no impacts from the proposals.

Ecological Assessment

- 4.5 The results of the Ecological Assessment are presented below. A habitat survey map is shown in **Appendix B**. The map illustrates the location and extent of the sites surveyed, along with additional notable features.

Habitats

- 4.6 The site at Salisbury Square is located in the eastern side of Hatfield. The site is mostly comprised of hardstanding and buildings with a small patch of amenity grassland and trees in a central courtyard. The habitats present are described in greater detail below.

Hardstanding

- 4.7 The north area of the site is comprised of car parks and a pub (**Fig. 1 & 2**). The lower half of the site is a courtyard surrounded by buildings with a square of trees and amenity grassland located in the middle, also surrounded by hardstanding paths.



Figures 1 and 2: Images of the hardstanding forming a car park and walkways

Amenity grassland

- 4.8 The southern courtyard contains two sections of amenity grassland which was maintained short sward and raised by brick elevations (**Fig. 3 & 4**). Grassland consisted of red fescue (*Festuca rubra*), yarrow (*Achillea millefolium*), creeping cinquefoil (*Potentilla reptans*), daisy (*Bellis perennis*), clover (*Trifolium spp.*), cat's ear (*Hypochaeris radicata*), ribwort and greater plantain (*Plantago lanceolata* and *P. major*), creeping buttercup (*Ranunculus repens*), creeping thistle (*Cirsium arvense*) and dandelion (*Taraxacum spp.*).



Figures 3 and 4: Amenity grassland on the west and east sides of the courtyard respectively

Buildings

- 4.9 Buildings on the site comprise of a pub to the north of the site, and a block comprising flats and commercial shops which is a modern building which is partially empty and run-down (**Fig. 5 & 6**). The pub will be unaffected by the development and the block of flats will be demolished.



Figures 5 and 6: Central block of flat and commercial units due to be demolished and unimpacted pub

Scattered trees

- 4.10 Trees scattered across the courtyard on the edges of the amenity grassland consist of yew (*Taxus baccata*), silver birch (*Betula pendula*), plane trees (*Platanus* spp.) and Leyland Cypress (*Cupressus × leylandii*) (**Fig. 7**).



Figure 7: Scattered trees along edge of amenity grassland

Scrub

- 4.11 The eastern edge of the central amenity grassland has introduced ornamental shrubs including box spp. (*Buxus*), rose spp. (*Rosa*) and *Crocus* spp. (**Fig. 8**). They also compose the introduced scrub area down the eastern alleyway (**Fig. 9**).



Figures 8 and 9: Introduced shrubs by amenity grassland and down the eastern alleyway respectively

Hedgerows

- 4.12 There are four strips of species poor intact hedges within the car park with scattered trees species including sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*). One of the hedges has more natural species, consisting mostly of hazel (*Corylus avellana*) with ivy (*Hedera helix*) and more scattered ash trees.

Protected and/or notable species

Badgers

- 4.13 The HERC data search returned 40 records for badger within two kilometres of the site between 1970 and 2019.
- 4.14 No badger setts were identified on site. Site is too built up for badgers to use for habitats and foraging. Badgers are considered absent from the site and no further action is necessary.

Bats

- 4.15 The HERC data search returned 454 records within two kilometres of the site for the following bat species between 2010 and 2018:

- Noctule (*Nyctalus noctula*)
- Leisler's (*Nyctalus leisleri*)
- Serotine (*Eptesicus serotinus*)
- Daubenton's (*Myotis daubentonii*)
- Natterer's (*Myotis nattereri*)
- Whiskered/Brandt's bat (*Myotis myotis/ brandtii*)
- Myotis species (*Myotis spp.*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)

- Nathusius' pipistrelle (*Pipistrellus nathusii*)
 - Pipistrelle species (*Pipistrellus* spp.)
 - Long-eared species (*Plecotus* spp.)
 - Brown long-eared (*Plecotus auritus*)
 - Western barbastelle (*Barbastella barbastellus*)
 - Unidentified bat species (*Chiroptera* spp.)
- 4.16 The DEFRA run website, MAGIC, was searched for a list of granted European Protected Species (EPS) licences. Two granted EPS licences in respect of bats within two kilometres of the site have been granted for common pipistrelle, soprano pipistrelle and brown long-eared. The two licences included destruction of resting places.
- 4.17 The site mostly consists of well-lit buildings and a car park. There are scattered trees which are disconnected from any possible commuting and foraging paths. These trees were inspected for potential roost sites and the trunks were intact with no visible cavities present. The trees are considered to have negligible potential to support bat roosts.
- 4.18 Bat surveys and building assessments were carried out on the central building on the site. This row of commercial and residential flats will be demolished as part of the development. An external assessment was made for the potential to support bat roosts. The buildings were largely intact with close fitting tiles and soffits. There is a single gap on an area of hanging tiles on one section of the building. Due to the presence of a gap in a hanging tile and the surrounding urban context the building was deemed to have low bat potential.
- 4.19 During the emergence survey no bats emerged from the building. Bat activity was very low with only a few common pipistrelles observed commuting from the east side of the building and foraging around trees in the square. The building is therefore not considered to support a bat roost and roosts will not be impacted by the works.
- 4.20 Enhancements can be made to the site to improve bat habitats and recommendations have been provided in **Section 5.0**.

Birds

- 4.21 HERC provided records for the following RSPB red list bird species of conservation concern that may be present on the site: lesser redpoll (*Acanthis cabaret*), skylark (*Alauda arvensis*), tree pipit (*Anthus trivialis*), pochard (*Aythya farina*), lesser spotted woodpecker (*Dryobates minor*), nightingale (*Luscinia megarhynchos*), grey wagtail (*Motacilla cinerea*), house sparrow (*Passer domesticus*), starling (*Sturnus vulgaris*), redwing (*Turdus iliacus*), fieldfare (*Turdus pilaris*), song thrush (*Turdus philomelos*) and mistle thrush (*Turdus viscivorus*).
- 4.22 In addition to these records the following Schedule 1 and/or Annex I species were returned: peregrine (*Falco peregrinus*), hobby (*Falco subuteo*), red kite (*Milvus milvus*), black redstart (*Phoenicurus ochruros*), common firecrest (*Regulus ignicapilla*) and western barn owl (*Tyto alba*).
- 4.23 The habitats within the site provide suitable breeding and foraging areas for local bird populations. The scattered trees have potential for nesting birds, any required vegetation clearance or building demolition has the potential to impact nesting birds and further recommendations have been provided in **Section 5.0**.

Dormouse

- 4.24 The HERC data search returned one record for a dormouse within two kilometres of the site dated 1975. The DEFRA run website, MAGIC, was searched for a list of granted European Protected Species (EPS) licences. There were no records of a granted EPS licence within two kilometres of the site.
- 4.25 No evidence of dormice was recorded during the survey and the habitat on site is unsuitable for dormice with no connection to any suitable dormice habitat. Dormice are considered absent from the site and no further action is needed.

Hedgehogs

- 4.26 The HERC data search revealed 13 records of hedgehogs from 1998 to 2019 within two kilometres from the site.
- 4.27 There were no signs of hedgehogs on site. Enhancements can be made to the site to promote hedgehog habitat; further recommendations have been provided in **Section 5.0**.

Great crested newts

- 4.28 The HERC data search returned 18 records of great crested newt presence within two kilometres of the site. The DEFRA run website, MAGIC, was searched for a list of granted European Protected Species (EPS) licences. There was one record of a granted EPS licence within two kilometres of the site.
- 4.29 No evidence of amphibian presence was recorded during the survey. The site is built up and contains no suitable aquatic or terrestrial habitat for great crested newts.
- 4.30 Great crested newts are therefore considered absent from the area. In the unlikely event that a great crested newt is encountered all works should stop until advice has been gained from a suitably qualified ecologist.

Reptiles

- 4.31 The HERC data search returned 14 records of reptiles within two kilometres of the site between 2006 and 2015, these were for grass snakes (*Natrix natrix*) and slow worm (*Anguis fragilis*).
- 4.32 The habitats on the site comprise areas of hardstanding and short amenity grassland. These are not suitable for reptiles and the surrounding habitats are also of a similar nature and provide no suitable areas for reptiles.
- 4.33 The habitats present are considered unsuitable for any reptile species, these species are therefore not considered present on the site and no further action is necessary.

5.0 Impacts and Mitigation

Impacts and Required Mitigation for the Proposed Development

Bats

- 5.1 A sensitive lighting design will be included to reduce any light spill on key features, such as any new planted areas. In line with current guidelines, on-site lighting will be agreed with the LPA and is recommended to include the following:
- Not exceed 1lux on boundary features and lighting will be hooded or cowled to avoid light spill on these features (ILP, 2018).
 - Any necessary lighting within the development will utilise security timers where possible and be LED lighting of a warm white spectrum (<2700 Kelvin) which will feature peak wavelengths higher than 550 nm.
 - Only lighting with an upward light ratio of 0% will be used
- 5.2 The site can provide enhancement measures for bats with the inclusion of native planting within the landscape design of the scheme. This will provide habitat for invertebrates which will then provide foraging resources for the local bat populations.
- 5.3 Construction of any new dwellings or buildings can include bat bricks on their elevations to provide roosting opportunities. These will need to be situated in dark areas of the site.

Nesting birds

- 5.4 The hedgerows and scattered trees have the potential to be used by nesting birds. It is an offence under the Wildlife and Countryside Act 1981 (as amended) to take, damage or destroy the nest of any wild bird while that nest is in use (further details relating to current legislation are described in **Appendix C**). To avoid contravention of protected species legislation, any clearance of scrub vegetation must be scheduled to avoid peak bird nesting season (1st March to 31st August, although this will vary between species and local conditions), unless inspection by an ecologist concludes that there are no nesting birds present immediately prior to the commencement of works.
- 5.5 If the presence of nesting birds is confirmed, any works which may disturb them will be delayed until the young birds have fledged the nest of their own accord.

Hedgehogs

- 5.6 Hedgehogs are listed as a UK 'Priority Species' under S41 of the NERC Act (2006). Any planted wooded areas will provide habitat suitable for foraging for this species.
- 5.7 The Ministry of Housing, Communities and Local Government Guidance on the Natural Environment (2019) states that developments should provide safe routes for hedgehogs between different areas of habitat as a measure to secure biodiversity net gain. Boundaries between properties should therefore be permeable to hedgehogs, with the use of 13x13 centimetres ground level access holes. Specific hedgehog holes can be built into gravel boards, and gates can have a gap height of 13 centimetres to ensure permeability.

Enhancement Measures

Biodiversity Enhancement

- 5.8 In accordance with the Natural Planning Policy Framework (NPPF, 2019), paragraph 174, development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity. To provide biodiversity enhancements the following measures can be included within the final development design:
- Native planting should be included within the landscape planting with species such as hawthorn (*Crataegus monogyna*), spindle (*Euonymus europaeus*), blackthorn (*Prunus spinosa*), beech, hazel and holly (*Ilex aquifolium*), a list of native species to plant is shown in **Appendix D**. These species will provide additional foraging through the seasons for local birds and mammals.
 - New dwellings should be designed to include an integrated bat brick or bat tiles, these should be placed in buildings along the boundaries or facing any public open space. These measures will enhance roosting opportunities for bats on site. Suggested designs are shown in **Appendix E**.
 - Integral swift bricks can be incorporated under the eaves of the new buildings to provide potential nesting habitat for swifts. These will also be readily used by house sparrows. Four bird boxes which suit a variety of species should be installed on retained mature trees on site to enhance nesting opportunities for birds. Suggested designs are shown in **Appendix E**.

6.0 References and Bibliography

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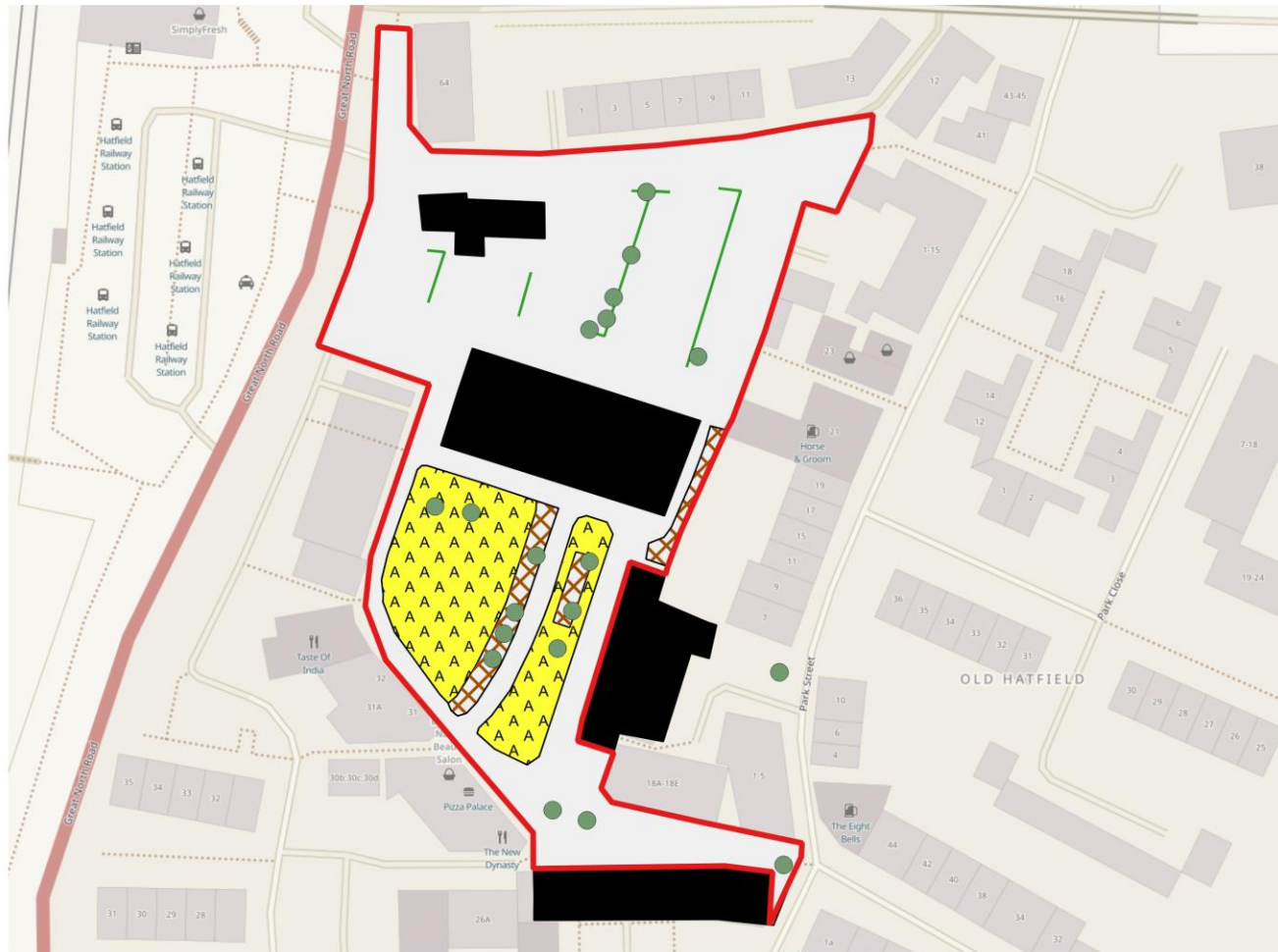
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Appendices

Appendix A: Site Location (○)

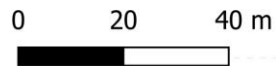


Appendix B: Habitat Map



Legend

- Tree
- Species poor intact hedge
- ▲ Amenity grassland
- ▣ Introduced shrub
- Buildings
- Hard Standing
- ▭ Boundary



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CLIENT:
Gascoyne Estates

PROJECT:
Salisbury Square

DRAWING:
Phase 1 habitat map

DATE:
18/10/21

SCALE: 1:1800
SIZE: A4
JOB NO: 7689
DWG NO: V1
REV:



www.pro-vision.co.uk

Appendix C: Relevant Legislation

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (AS AMENDED)

The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) transpose Habitats Directive into UK legislation. The Habitats Regulations provide for the designation and protection of European Sites and European Protected Species. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which form part of the Natura 2000 network of protected areas across Europe.

European Protected Species (EPS) are those listed under Schedule 2 of the Habitats Regulations and include dormouse, great crested newt, otter and all species of bat. The regulations prohibit the deliberate capture, killing or disturbance of any EPS; it is also an offence to damage or destroy a breeding site or resting place of any of these species. In order to carry out a lawful operation (e.g. development work which has full planning permission) that may result in an offence under the Habitats Regulations, it is necessary to obtain a licence from Natural England. EPS Licences will only be granted after Natural England has been satisfied that there are no satisfactory alternative and that there will not be any adverse impacts on the favourable conservation status of the species. This has recently been amended by the Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licencing requirements and protected areas after Brexit.

WILDLIFE AND COUNTRYSIDE ACT 1981

The Wildlife and Countryside Act 1981 is the principal piece of legislative protection of wildlife in Great Britain. Various amendments have occurred since the original enactment. The Wildlife and Countryside Act contains both habitat and species protection. Certain bird, animal and plant species are afforded protection under Schedules 1, 5 and 8 of the Act. Measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) are also included within the Act.

COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

The Countryside and Rights of Way (CROW) Act 2000 adds to the protection afforded in the WCA to SSSI's and other important sites for nature conservation. In addition, under the Act it became a criminal offence to "recklessly disturb" Schedule 1 nesting birds and species protected under Schedule 5 of the Wildlife and Countryside Act. It also enabled heavier penalties on the conviction of wildlife offences.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006

The Natural Environment and Rural Communities (NERC) Act 2006 improved wildlife protection by amending the WCA. The main function of the NERC Act was to raise the profile of biodiversity amongst public authorities. Section 40 (S40 of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions.

Appendix D: Native Species Planting List

Common Name	Latin Name
Trees	
Beech	<i>Fagus sylvatica</i>
Crab apple	<i>Malus sylvestris</i>
Hazel	<i>Corylus avellana</i>
Holly	<i>Ilex aquifolium</i>
Oak	<i>Quercus robur</i>
Rowan	<i>Sorbus aucuparia</i>
Shrubs	
Wild privet	<i>Ligustrum vulgare</i>
Dogrose	<i>Rosa canina</i>
Dogwood	<i>Cornus sanguinea</i>
Hawthorn	<i>Crataegus monogyna</i>
Blackthorn	<i>Prunus spinosa</i>
Plug planting and Seeds	
Bugle	<i>Ajuga reptans</i>
Butcher's Broom	<i>Ruscus aculeatus</i>
Common Dog Violet	<i>Viola riviniana</i>
Devil's-bit Scabious	<i>Succisa pratensis</i>
English Bluebell	<i>Hyacinthoides non-scripta</i>
Foxglove	<i>Digitalis purpurea</i>
Ground Ivy	<i>Glechoma hederacea</i>
Herb Robert	<i>Geranium robertianum</i>
Ox-eye Daisy	<i>Leucanthemum vulgare</i>
Red Campion	<i>Silene dioica</i>
Stinking Hellebore	<i>Helleborus foetidus</i>
Wild Daffodil	<i>Narcissus pseudonarcissus</i>

Appendix E: Ecological Enhancement Designs

Swift brick

This box has a crescent shaped hole to one side of the box, allowing swifts access but restricting use by starlings. Inside, a rough floor makes it easier for the birds to move around. The centre of the floor has a raised nest cup to assist the birds' nest building. The ideal internal depth of a swift box is 140 mm, however if cavity width is limited, boxes can be manufactured with a reduced depth (minimum 100 mm).



Bat brick

These bat boxes are best positioned in sunlit clusters, at a height of 3-6 metres and ideally facing a variety of aspects as bats will move around a building as the seasons change. The box is self-cleaning thanks to an internal tilt board at the base; this works by diverting droppings out of the entrance hole. The back of each box is lined with wood; in front of this sits a removable untreated sawn timber baffle board which divides the main area into two, giving extra roosting space.



