



Reilly Developments Ltd

Cherry Court, Salterns Lane, Bursledon

Ecological Appraisal and Bat Roost Assessment

September 2023

FPCR Environment and Design Ltd

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1.0 EXECUTIVE SUMMARY

- 1.1 Cherry Court is a two-storey house with a large garden adjacent to the River Hamble in Bursledon, Southampton. The owner is proposing to demolish the existing building and replace it with a new residential property of the same footprint, but an increased volume of 25%.
- 1.2 The proposals will result in no loss of habitats other than the building which may support roosting bats and nesting birds and therefore all other protected species were scoped out after initial assessment. A desktop study is still included but limited to protected sites and bats.
- 1.3 A licensed bat ecologist from FPCR (Adam Day Class licence registration number: 2015-14892-CLS-CLS) carried out an internal and external inspection of the building on 2nd June 2023.
- 1.4 The building was deemed to have negligible bat roosting potential, and no evidence of roosting bats was found. No nesting birds were observed.
- 1.5 This proposal does not qualify for assessment within Biodiversity Net Gain policy within this local authority.
- 1.6 The occupancy rate of the new building will still be for a single family and therefore assessment for impacts on protected sites from potential increased recreational activity or an increased nitrogen budget are not relevant to this application.
- 1.7 A summary of the findings of all of the surveys is contained within this report with recommendations and advice to be followed whilst undertaking the proposed works.

2.0 INTRODUCTION

- 2.1 The following report has been prepared by FPCR Environment & Design Ltd. on behalf of Reilly Developments Ltd and provides the results of a Preliminary Bat Roost Assessment undertaken at a house named Cherry Court, Salterns Lane, Southampton, SO31 8DH (Central OS Grid Ref: SU SU 48470 09034) herein referred to as 'the site'. This report details the findings of the desktop study, Preliminary Roost Assessment and site walkover and nocturnal bat surveys.

Site location and Context

- 2.2 The site is located in the small Village of Bursledon and consists of a large house and garden. The site is surrounded by residential houses with large gardens. The surrounding landscape is a mix of suburban and rural fields and woodland, with the River Hamble estuary approximately 230m south east from the site.

Development Proposals

- 2.3 The proposal is to demolish the existing house, to replace it with a new residential property of the same footprint, but with an increased volume. There will be no impact on any of the surrounding habitats which are garden shrubs and a large lawn.

3.0 AIMS AND OBJECTIVES

- 3.1 The aim of the bat surveys is to establish the presence or absence, and if possible / appropriate a population estimation of bat species utilising the buildings on site and to determine if the proposed application is likely to adversely affect these species. Suitable mitigation will be outlined, where appropriate, to minimise impact on these species to a level considered acceptable by the local planning authority.
- 3.2 The buildings potential to support building nesting bird species such as house sparrow, house martin and swifts was also assessed.
- 3.3 The objectives were to:
- Survey the site / suitable habitats using recommended survey guidelines where appropriate for bats and nesting birds
 - Use the results and desk study data to determine the likely presence, or otherwise, of bat / bird species, and if possible / appropriate estimate population size.
 - Determine the likelihood of the proposed application affecting bat species.
 - Produce a Bat Survey Report that presents the results gathered and details appropriate mitigation and / or enhancements to reduce any potential impact from the proposed application on bat species to an acceptable level.

4.0 LEGISLATION AND PLANNING POLICY

- 4.1 Detail on the relevant national policy and legislation for ecology in relation to development sites are provided Appendix A. The national policy and legislation most relevant here are:
- The Conservation of Habitats and Species Regulations (“The Habitats Regulations”) (Amendment) 2021 in relation to the European Protected Species (EPS) great crested newt, (GCN), bats (all species) and dormouse; and European protected sites i.e., Special Areas of Conservation (SAC), Special Protection Areas (SPAs) and Internationally protected “Ramsar Sites” (collectively known as the “National Site Network”). Annex II bat species of particular relevance in relation to SACs designated for bats.
 - The Wildlife and Countryside Act 1981 (WCA) (as amended) in relation to all wild birds (including Schedule 1 species), other animals (notably Schedule 5 species), flora (those listed in Schedules 8 and 9) and Sites of Special Scientific Interest (SSSI);

5.0 METHODOLOGY

Desk study

- 5.1 In order to compile existing baseline information, relevant ecological information was requested from both statutory and non-statutory nature conservation organisations including:
- Multi Agency Geographic Information for the Countryside (MAGIC); and
 - Hampshire Biodiversity Information Centre
- 5.2 Further inspection of colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk) was also undertaken in order to provide

additional context and identify any features of potential importance for nature conservation in the wider countryside.

5.3 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:

- European Protected Sites - 10km search around the site for sites of International Importance (e.g. SACs, SPAs and Ramsar sites).
- Nationally Protected Sites - 2km search around the site for sites of National Importance (e.g. SSSIs). Sites of importance outside of the 2km range may also be highlighted if a potential impact is perceived.
- Non-statutory Designated Sites - 2km search around the site.
- All bat species– 2km search around the Survey Area.

Field survey

Bats

Building assessments

- 5.4 An initial external/internal building assessment was carried out on the buildings on 2nd June 2023 by Licensed bat worker Adam Day FPCR (CL18: 2015-14892-CLS-CLS). The assessment was completed following the guidance provided in chapter 4 of the Bat Surveys for Professional Ecologists, Good Practice Guidelines¹.
- 5.5 The exteriors of the buildings were visually assessed for potential access points and evidence of bat activity. Features such as small gaps under barge/soffit/fascia boards, raised or missing ridge tiles and gaps at gable ends, which have potential to be used as access points, were sought. Evidence that bats actively used potential access points includes staining within gaps and bat droppings or urine staining under gaps, a note being made wherever these were present. Indicators that potential access points had not recently been used included the presence of cobwebs and general detritus within the access.
- 5.6 The interior of the buildings, including roof voids, where present, were also visually assessed for evidence of bat activity and/or for the potential to be used by bats using high-powered torches. An inspection of accessible cavities using an endoscope was completed to identify current, or previous evidence of use, such as the physical presence of bats or bat droppings. Evidence of a roost was determined as the presence of a dead or live bat(s), concentrated piles or scattered droppings, food remains, such as insect wing fragments, as well as scratch marks and/or staining.
- 5.7 The evidence from the roost inspection was used to determine any potential further survey work that may be required and to classify the type of roost, if any, that the building supports. These are:
- *Maternity roost* - where young are born and raised until they're independent, this has the highest conservation status
 - *Hibernation roost* - where bats are found during winter
 - *Mating roost* - where males and females gather during the autumn

¹ Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

- *Feeding roost* - where bats rest at night between feeding sessions
- *Transitional or swarming site* - where bats may be present in spring or autumn; and
- *Summer roost* - used by males and non-breeding females.

5.8 In addition, potential roosts were categorised according to their likely suitability for supporting bats. These were classified according to the habitats present within the building features and were used to inform the extent of any further survey effort (see *Table 1*). Buildings for which potential roost features were classified as negligible received no further survey.

Table 1: Building bat roost habitat classifications

Roost Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Nesting birds

5.9 The building was also searched and assessed for the presence of or evidence of nesting bird species that utilise buildings such as house sparrow *Passer domesticus* and house martins *Delichon urbicum*. This included searching for evidence of old external nest cups or nests in the roof void during the initial walkover and further review during the nocturnal bat surveys which were in the peak nesting period for birds.

Limitations and assumptions

5.10 There were no limitations to the surveys.

6.0 RESULTS

Desk study

Statutory designated sites

6.1 The following Table 3 identifies all statutory designated sites within 10km of the site.

Table 2: Statutory sites

Site Name	Site Reference	Proximity to site (approximate)	Details of designation criteria
Manor Farm (LNR)	1475820	1.9km Northeast	This site is an urban fringe LNR, with an abundance of wildlife including roe deer, curlews, skylark and an array of wildflowers, insects and reptiles.
Upper Hamble Estuary and Woods (SSSI)	1000619	1.92km Northeast	This site comprises the uppermost section of the estuary of the River Hamble and its flanking zones of saltmarsh, reedswamp and ancient semi-natural woodland. The estuary penetrates the Tertiary strata of the Hampshire Basin and within the SSSI, London Clay, valley gravels, Bagshot Sands and Bracklesham Beds are successively exposed, proceeding up-river, each of which supports woodlands of differing types.
Lincegrove and Hackett's Marshes (SSSI)	1000644	0.09km Southeast	This site is notified for its mature saltmarsh found on the west bank of the river Hamble estuary,
Holly Hill Woodland Park (LNR)	1467447	1.4km South	This site is an urban LNR. It has a mix of native woodland species, some of which is ancient semi-natural woodland as well as a Victorian landscaped gardens with lakes, islands, waterfalls, many exotic trees and flowers to an area of hazel and alder coppice with large oak trees teeming with wildlife.
Hook with Warsash (LNR)	1008963	1.4km South	This is an urban fringe LNR with habitats such as cresses, reedbed, coastal grazing marsh, scrub, saltmarsh, inter-tidal mud, stable shingle ridge and woodland.
Solent Maritime (SAC)	UK0030059	4.12km Southwest	This site is designated as an SAC due to the presence of annex I habitats including estuaries, spartina swards and Atlantic salt meadows.

Site Name	Site Reference	Proximity to site (approximate)	Details of designation criteria
New Forest (RAMSAR, SAC)	UK11047, UK0012557	7.1km Southwest	This site is designated for its array of Annex I habitats and the presence of southern damselfly and stag beetle.
Solent & Southampton Water (RAMSAR, SPA)	UK11063, UK9011061	0.26km Southwest	This site comprises of estuary and adjacent coastal habitat.
River Itchen (SAC)	UK0012599	7.7km North	This site is designated for the presence of a sub-type 1 chalk river and the presence of southern damselfly and bullhead.
Hackett's Marsh (SSSI)	1009285	0.21km South	This site is an urban fringe LNR with a particular importance for a wide range of insects. It forms an important feeding area and high-water roost for waders, wildfowl and herons. This site is of high landscape quality.

6.2 No statutory protected sites designated for bats are present within 5km of the Site.

Protected Rare and Otherwise Notable Species

6.3 All bat species are listed as defined in Paragraph 5.3 are presented below in Table 4 and figure 2.

Table 3: Species records

Species	Protection	Approximate Distance from Site (m)
Bats		
Serotine Bat <i>Eptesicus serotinus</i>	Sch5	Multiple records, nearest 167m, West
Great Crested Newt <i>Triturus cristatus</i>	Sch5	Three records, nearest 181m, East
Black Tailed Godwit <i>Limosa limosa</i>	Sch1, Red, S41	Multiple records, nearest 531m, East
Greenshank <i>Tringa nebularia</i>	Amber, Sch1	Multiple records, nearest 531m, East
Kingfisher <i>Alcedo atthis</i>	Sch1	Multiple records, nearest 531m, East
Barn owl <i>Tyto alba</i>	Sch1	Single record, 2014m Northwest
Bearded Tit <i>Panurus biarmicus</i>	Sch1	Single record, 1138m South
Brambling <i>Fringilla montifringilla</i>	Sch1	Single record, 1844m Southwest
Crossbill <i>Loxia curvirostra</i>	Sch1	Multiple records, nearest 1643m Southwest
Fieldfare <i>Turdus pilaris</i>	Sch1, Red	Two records, nearest 897m Southwest

Species	Protection	Approximate Distance from Site (m)
Firecrest <i>Regulus ignicapillus</i>	Sch1	Multiple records, nearest 472m West
Hobby <i>Falco subbuteo</i>	Sch1	Single record, 1796m Northeast
Osprey <i>Pandion haliaetus</i>	Sch1, Amber	Single record, 571m Northeast
Red kite <i>Milvus milvus</i>	Sch1	Multiple records, 483m West
Slow-worm <i>Anguis fragilis</i>	Sch5	Two records, nearest 1253m East
Whimbrel <i>Numenius phaeopus</i>	Sch1, Red	Single record, 1796m Northeast
Key: Sch1 – Wildlife and Countryside Act 1981 Schedule 1 Species, Ann1 – Birds Directive Annex 1 Species, Red – BoCC Red Species, Sch8 – Wildlife and Countryside Act 1981 Schedule 8 Species, Sch5 – Wildlife and Countryside Act 1981 Schedule 5 Species, S41 – NERC S41 Species, Ann2 – Habitats Directive Schedule 2 Species, Badger Act – Protection of Badgers Act 1992		

Field survey - Bats

Building Roost Assessment

- 6.4 The house was a new style two story building with a single storey garage on the southwest corner. The house is gable ended with a pitched roof and constructed of blockwork, which is rendered over the entirety of the building. The house is approximately 30-50 years old.
- 6.5 The roof is constructed of a timber frame, covered with concrete tiles and lined with bituminous roofing felt. Barge boards and soffits are present and constructed of uPVC and plywood. The garage has a flat roof covered with roofing felt. Two chimneys are present and lead flashing is used to waterproof the base of these into the roof. A roof void is present for the length of the building.
- 6.6 Overall, the building is in good condition, including the roof. There are no gaps in the roof structure, under the eaves, or in the walls of the building itself. Overall, the building has negligible potential to support roosting bats.
- 6.7 No bats or nesting birds were recorded during the internal inspection.

7.0 DISCUSSION

- 7.1 The proposed works at Cherry Court will include demolishing the existing building and building a new residential property with the same footprint. No other habitat will be lost and the only potential direct impacts would be on roosting bats or nesting birds.
- 7.2 No evidence of roosting bats or nesting birds was found during the building inspection or later in the nocturnal surveys. Therefore, roosting bats and nesting birds do not provide a constraint to the proposed works on this site.
- 7.3 The proposals do not result in a net increase in dwellings at the site and the proposed building will have the same footprint as the existing. It is therefore likely that the proposals are exempt from mandatory 10% net gain through paragraph 9.37 of policy NE2 of the Fareham Adopted Local Plan. Providing measurable net gain in biodiversity is a requirement of the NPPF and therefore the following enhancements will be provided.

- Two swift bricks/boxes will be integrated or installed on the new building.
 - Five bat boxes (Schwegler 2fn or similar) will be installed on mature trees within the garden of the property.
 - Two bee blocks will be installed onto the south facing aspect of the new dwelling.
- 7.4 As per BNG, the replacement of the building with the same building type also exempts it from consideration of impacts on protected sites from increased recreational pressure and water quality effects as considered in policies NE3 and NE4 of the adopted local plan. There is no net increase in dwelling numbers or overnight accommodation and therefore there are no likely impacts from water quality issues on the relevant statutory protected sites which would require mitigation.
- 7.5 The proposals are within 230m of the Solent and Southampton Water Special Protection Area (SPA). This site is designated for its assemblage of internationally important wintering bird species and breeding tern species (breeding species not relevant to this assessment as not near this site) Impacts on these features can include increased recreational disturbance and impacts from increased noise levels arising from construction.
- 7.6 Policy NE3 in regard to recreational impacts reads as follows-
- “Policy NE3: Recreational Disturbance on the Solent Special Protection Areas (SPAs) Planning permission for proposals resulting in a net increase in residential units will be permitted where a financial contribution is made towards the Solent Recreation Mitigation Strategy.”*
- 7.7 The proposals do not result in a net increase in residential units and are unlikely to lead to increased recreational disturbance. No financial contributions are required.
- 7.8 The proposed works will include an operational phase of approximately 9 months. In that period the original building will be demolished, the site cleared of rubble and then the new building will be constructed. This will require loud machinery and operations with typical construction noise likely to peak between 80-90dB as per HSE guidance. Noise levels will more typically be lower than this for extended periods.
- 7.9 The Waterbird Mitigation Toolkit provides information on disturbance effects from a range of activities on a range of commonly encountered waterbirds (geese, ducks, and waders) of estuaries and coastal habitats, including qualifying species in the SPA citation (black-tailed godwit *Limosa limosa islandica*, dark-bellied brent goose *Branta bernicla bernicla*, ringed plover *Charadrius hiaticula*, and teal *Anas crecca*). The Toolkit considers various stimuli for their expected level of impact, with third parties on the bank considered a high impact stimulus, regular and irregular noises as moderate impacts, and activity behind the flood bank as low impact. Visual disturbance is typically expected to trigger a flight response for most species on approach to within 100-150m, increasing to up to 250m for particularly sensitive species, such as redshank and curlew. Sudden noises of >60dB at the bird, and persistent noise of 60-72dB are expected to cause disturbance for most waterbirds.
- 7.10 The proposals are 230m from the SPA habitats and screened significantly by dense trees along the railway track that runs along the bottom of the site and another band of mature trees along the rivers edge. Any visual disturbance from construction activities is unlikely.

- 7.11 Noise levels diminish significantly with distance from the source². This is further impacted by structures and vegetation between the source and receptor. The peak construction noise level of 90dB would diminish to 26.4dB in the absence of any structures or vegetation between the site and SPA, but the presence of dense vegetation makes it likely that levels would be even lower than this. At these low noise levels, there will be no impacts on the qualifying species of the SPA site.
- 7.12 The proposals will have no impacts on the nearby statutory sites during the construction or operational phases.

² [https://noisetools.net/barriercalculator?source=\[1.5,500,90\]&receiver=\[1.5,230\]&barrier=\[1.2,115\]&display=2](https://noisetools.net/barriercalculator?source=[1.5,500,90]&receiver=[1.5,230]&barrier=[1.2,115]&display=2)

8.0 PHOTOS



Photo 1- Front (western) aspect of house



Photo 2- Rear (eastern) aspect of house

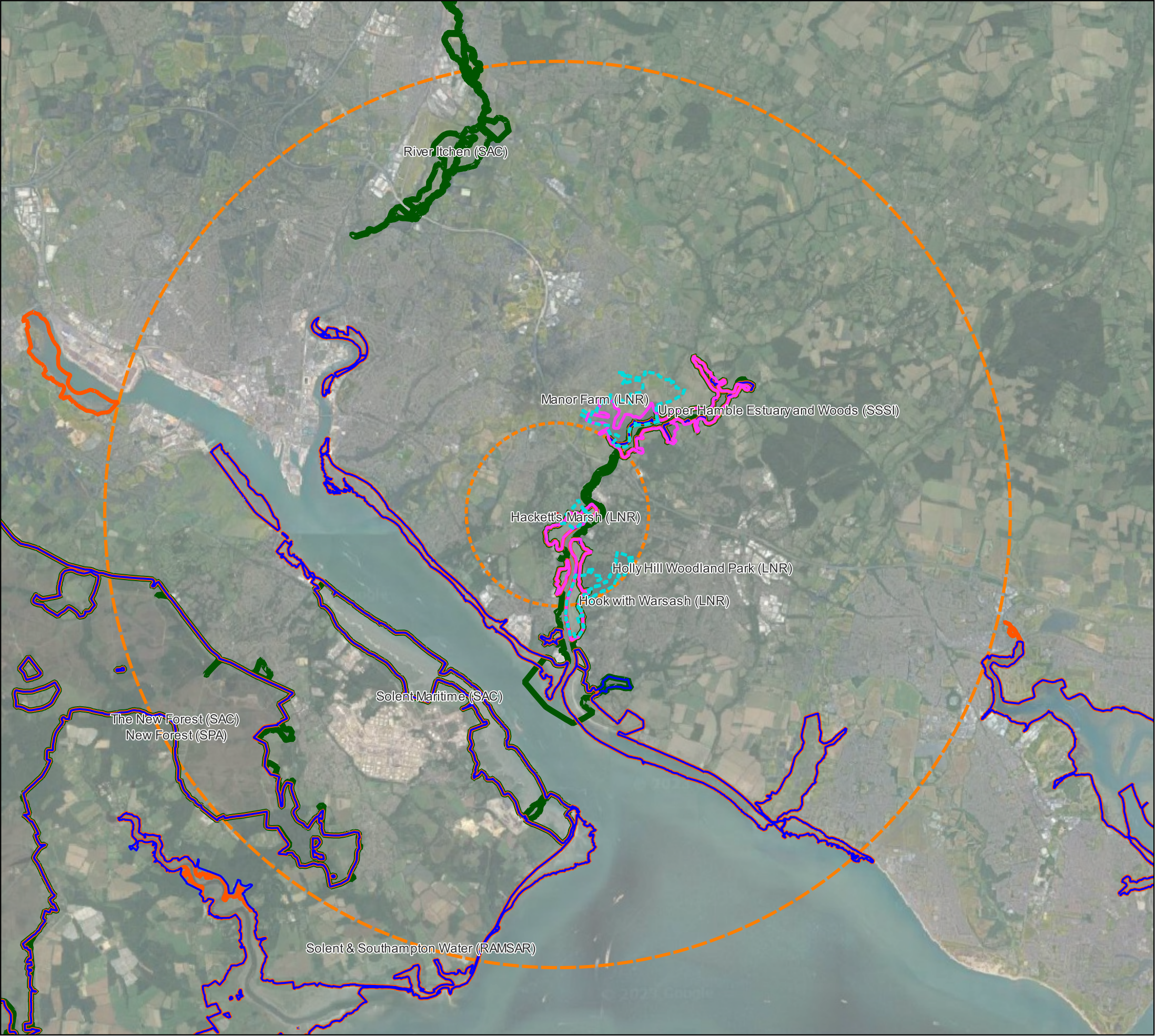


Photo 3- Close up of eaves showing tight structure



Photo 4 – View of garden showing significant visual and noise screening from River Hamble and SPA

FIGURES



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Key

- Site Boundary
- 2km Buffer
- 10km Buffer
- Local Nature Reserves (LNR)
- Sites of Special Scientific Interest (SSSI)
- RAMSAR
- Special Protected Areas (SPA)
- Special Areas of Conseravtion (SAC)



client

Reilly Development

project

Cherry Grove,
Salterns Lane

drawing title

Site Location and Statutory Designated Sites
Plan

scale @ A3

1:88000

drawing / figure number

Figure 4

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Key

Cherry Grove Site Boundary

SINCs

2km Buffer CG

Ancient Woodland Plantation

Ancient Woodland

Barn Owl

Bearded Tit

Black-tailed Godwit

Brambling

Crossbill

Fieldfare

Firecrest

Great Crested Newt

Greenshank

Hobby

Kingfisher

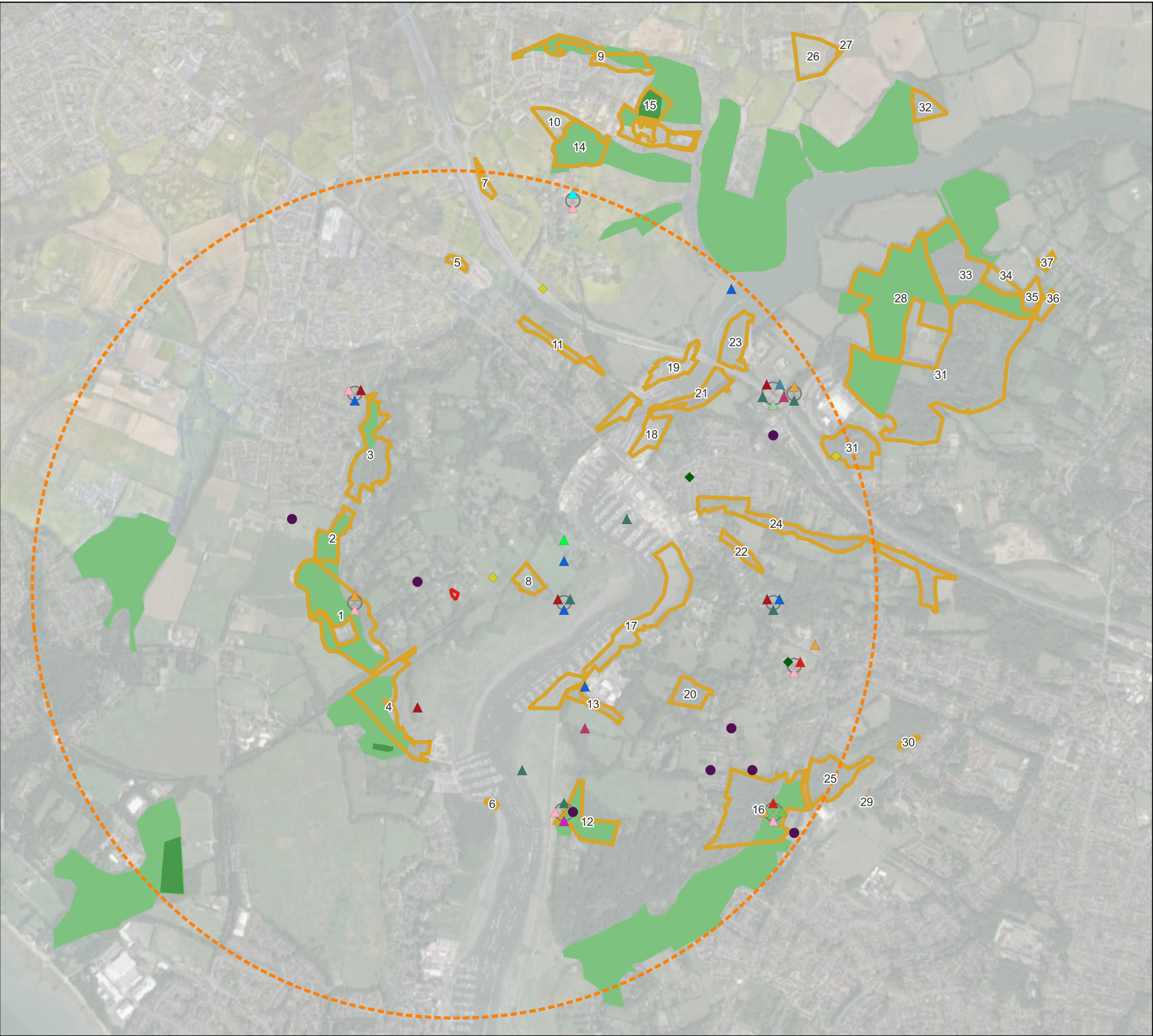
Osprey

Red Kite

Serotine

Slow-worm

Whimbrel



APPENDICES

APPENDIX A – NATURE CONSERVATION LEGISLATION

The Environment Act 2021

The Act 2021 came into force on 9th November 2021. Of relevance is the requirement for all developments subject to the Town and Country Planning Act to provide an at least 10% biodiversity net gain (BNG), as calculated using a Biodiversity Metric and a Biodiversity Gain Plan, with habitat used for net gain to be secured for a minimum of 30 years. Delivery of BNG may be on site, off-site or undertaken using statutory biodiversity credits. The requirement for BNG does not over-ride the need to apply the mitigation hierarchy (avoidance, mitigation and compensation) when considering biodiversity assets and their loss and does not change existing environmental and wildlife legal protection.

Whilst the Act mandates a 10% BNG delivery and for this to be a condition of planning permissions (Part 6 section 98 and Schedule 14 part 1), section 147 (3) states that this will only come into force once the secondary legislation is in place to support this requirement. Therefore, there is a transition period (the length of which is not defined but anticipated as being around 2 years) until the mandated 10% is required under law.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Regulations ensure that the habitat and species protection and standards derived from EU law as per “The Habitat Regulations” Amendment will continue to apply after Brexit.

The Conservation of Habitats and Species Regulations (“The Habitats Regulations”) (Amendment) 2017

European Protected Sites

The Habitats Regulations ratifies into UK law the “Habitats Directive” (92/43/EEC) and the “Birds Directive” (79/409/EEC). It places a duty on the Secretary of State to propose a list of sites which are important for species listed in Annex I and II of the Habitats Directive respectively to the European Commission. Once the Commission and EU Member States have agreed that the sites submitted are worthy of designation, they are identified as Sites of Community Importance (SCIs). The EU Member States must then designate these sites as Special Areas of Conservation (SACs) within six years.

The Regulations require the compilation and maintenance of a register of European sites to include SACs as well as Special Protection Areas (SPAs) designated for birds and sites designated as internationally important wetlands under the Ramsar Convention known as “Ramsar Sites”. These three designations form a collective Europe wide network of internationally protected sites known as Natura 2000. All European sites are also designated under UK law as Sites of Special Scientific Interest (SSSIs; please see below).

Habitats Regulation Assessment

There is a requirement under EU law that Member States’ take measures to reach and maintain European Protected Sites’ at Favourable Conservation Status (FCS). An Appropriate Assessment is required for plans or projects that may potentially damage a European Protected Site. This is based on an assessment against a given European Protected Site’s Conservation Objectives. The process is commonly known as a Habitats Regulations Assessment (HRA).

The HRA must be conducted by, or on behalf of, the Competent Authority. The HRA process assesses plans or projects alone or in combination. It involves a four stage approach as follows:

- Stage One: Screening - also known as the Test of Likely Significant Effect (TOLSE). If the Competent Authority cannot screen out a *likely significant effect*, an Appropriate Assessment is required.
- Stage Two: Appropriate Assessment - the Competent Authority will only agree to plans or projects that will not affect the *integrity* of a European site also known as the “Integrity Test”.
- Stage Three: Alternative Solutions - assesses any alternative solutions of a potentially damaging plan or project that failed the Integrity Test, and if it is determined there are no alternative solutions, the project cannot be agreed to and it will either need to be changed or refused.
- Stage Four: The final stage may allow a plan or project to proceed if after failing stage three if it is for Imperative Reasons of Overriding Public Interest, and only if suitable compensatory measures are secured.

Any plan or project that may have a potentially damaging effect on a transient species or the habitat on which it relies (for example bats or birds), that is both a Qualifying Features of a European Protected Site and considered *functionally linked* with a European Protected Site, are required under law to be considered as part of any HRA process.

European Protected Species

The Habitats Regulations includes a list of animals and plant species taken from the Annex IV of the Habitats Directive that have a natural range which includes any area in Great Britain. These are collectively known as European Protected Species (EPS). The regulations make it an offence to deliberately capture, kill, disturb, take or destroy eggs of, or damage or destroy a breeding or resting place of animals listed in Schedule 2 of the Regulations, and to pick, collect, cut, uproot or destroy wild plants listed in Schedule 5 of the Regulations. All listed EPS are shown in Table 1 below. The Regulations also protect these species alive or dead and parts thereof from various forms of possession and trade.

Table 1: The Habitats Regulations Schedule 2 and Schedule 5 species

Schedule 2 – European Protected Animal Species		Schedule 5 – European Protected Plant Species	
Common name	Scientific name	Common name	Scientific name
Horseshoe bats – all species	<i>Rhinolophidae</i>	Shore dock	<i>Rumex rupestris</i>
Bats – all species	<i>Vespertilionidae</i>	Killarney fern	<i>Trichomanes speciosum</i>
Large blue butterfly	<i>Maculinea arion</i>	Early gentian	<i>Gentianella anglica</i>
Wild cat	<i>Felis silvestris</i>	Lady's-slipper	<i>Cypripedium calceolus</i>
Dolphins, porpoises & whales - all species	<i>Cetacea</i>	Creeping marshwort	<i>Apium repens</i>
Hazel dormouse	<i>Muscardinus avellanarius</i>	Slender naiad	<i>Najas flexilis</i>

Schedule 2 – European Protected Animal Species		Schedule 5 – European Protected Plant Species	
Pool frog	<i>Rana lessonae</i>	Fen orchid	<i>Liparis loeselii</i>
Sand lizard	<i>Lacerta agilis</i>	Floating-leaved water plantain	<i>Luronium natans</i>
Fisher's estuarine moth	<i>Gortyna borelii lunata</i>	Yellow marsh saxifrage	<i>Saxifraga hirculus</i>
Great crested newt	<i>Triturus cristatus</i>		
Otter	<i>Lutra lutra</i>		
Lesser Whirlpool Ram's-horn snail	<i>Anisus vorticulus</i>		
Smooth snake	<i>Coronella austriaca</i>		
Sturgeon	<i>Acipenser sturio</i>		
Natterjack toad	<i>Bufo calamita</i>		
Marine turtles	<i>Caretta caretta</i> <i>Chelonia mydas</i> <i>Lepidochelys kempii</i> <i>Eretmochelys imbricata</i> <i>Dermochelys coriacea</i>		

These actions may be made lawful in certain circumstances through the granting of licences by the appropriate authority (Natural England). Licences must only be granted after the appropriate authority is satisfied that no satisfactory alternatives are available. In most circumstances, licences are only applied for and granted following full planning permission.

In determining whether or not to grant a licence Natural England must apply the requirements of The Conservation of Habitats and Species Regulations 2012 (amendment) and, in particular, the three derogation tests:

- Test 1: A licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.
- Test 2: The appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”.
- Test 3: The appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (WCA) (as amended) is the principal legislation providing protection for wildlife in the UK. It prescribes legislation for wild birds, other animals, wild plants and non-native species. In addition, it provides for the designation of Sites of Special Scientific Interest (SSSI) in England.

Wild birds

The WCA as amended by Schedule 12 of the Countryside and Rights of Way Act 2000 makes it an offence (with exception to species listed in Schedule 2) to intentionally or recklessly:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006); or
- take or destroy an egg of any wild bird.

For birds listed on Schedule 1 of the WCA, protection extends to offences relating to the intentional or reckless disturbance of these birds while at their nests or their dependent young.

Other animals

The WCA (as amended) makes it an offence to (subject to exceptions) intentionally or recklessly kill, injure or take wild animals listed on Schedule 5 of the Act. For some species, the protection extends to interference with places used for shelter or protection, or disturbing animals occupying or obstructing access to such places. These species are regarded as “fully protected” and as well as the EPS species listed above include the mammal species water vole *Arvicola terrestris*, pine marten *Martes martes* and red squirrel *Sciurus vulgaris* as well as selected others from a range of species groups including, fish, butterflies, hemipteran bugs, beetles, crickets, dragonflies, moths, spiders, crustaceans, sea-mats, molluscs, Annelid worms and sea anemones (and allies).

There are seven species on Schedule 5 of the Act that not fully protected but are still protected against killing and injuring these include the common reptile species slow worm *Anguis fragilis*, viviparous lizard *Lacerta vivipara*, grass snake *Natrix natrix* and adder *Vipera berus*.

The Act prohibits certain methods of killing, injuring, or taking wild animals, and numerous species are protected against sale only as well as other variations for example Atlantic stream (white-clawed) crayfish *Austropotamobius pallipes* are protected against taking and sale.

Vascular plants, bryophytes, lichens and fungi

With regards to native flora the Act makes it an offence to (subject to exceptions) intentionally or recklessly pick, uproot or destroy any wild plant listed in Schedule 8. Similarly, the Act prevents the sale, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Non-native species

The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 in England and Wales.

Sites of Special Scientific Interest

The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs). These sites can be identified for their flora, fauna, geological or physiological interest. In England, the power to confirm an SSSI lies with Natural England.

Laws protecting areas designated as SSSIs are described in Sections 28 to 33 of Part 2 of the Wildlife and Countryside Act 1981 (as amended). SSSIs are the principle statutory designation of sites in the UK and offences are enforced through Natural England. Offences include the following:

SSSI owners and occupiers

- carrying out, causing or allowing operations likely to damage an SSSI without Natural England consent.
- failing to keep to a management notice.
- failing to let us know about a change in ownership or occupation of land in an SSSI.

Public bodies

- carrying out or authorising operations likely to damage an SSSI without meeting the requirements to notify Natural England.
- failing to minimise any damage to an SSSI and if there is any damage, failing to restore it to its former state so far as is reasonably practical and possible.

Any person

- intentionally or recklessly damaging, destroying or disturbing any of the habitats or features of an SSSI.
- intentionally or recklessly damaging, destroying, obscuring or taking down a site notice put up on land within an SSSI.
- preventing a Natural England officer lawfully accessing an SSSI.

Protection of Badgers Act 1992

Badgers and their setts are protected under the Protection of Badgers Act 1992. This act is based on the need to protect badgers from persecution by baiting and deliberate harm or injury.

The act makes it an offence to:

- intentionally capture, kill or injure a badger;
- damage, destroy or block access to their setts;
- disturb badgers in setts;
- treat a badger cruelly;
- deliberately send or intentionally allow a dog into a sett; and
- bait or dig for badgers.

A sett is defined as:

“Any structure or place that displays signs indicating current use by a badger”.

Natural Environmental and Rural Communities (NERC) Act 2006

Section 40 of the NERC Act 2006 imposes a duty on every public authority to conserve biodiversity in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

Section 41 (S41) of the NERC Act 2006 requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) has been drawn up in consultation with Natural England and draws upon the UK BAP List of Priority Species and Habitats. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006.

National Planning Policy Framework (NPPF) (2019)

The National Planning Policy Framework (NPPF) sets out the Government's planning policy for England. As such, the NPPF must be a material consideration for local authorities when

considering planning decisions. The following points highlight those policies/statements which particularly relate to ecology/biodiversity and the planning system.

Policy 15 – Conserving and enhancing the natural environment

170. The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures

171. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

172. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks. Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

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

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Area of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Local Nature Reserves

Local Nature Reserve (LNR) is a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006, by principal local authorities.

Local authorities have the powers to acquire, declare and manage LNRs. Parish and town councils can declare LNRs providing power is given by the district or county council. LNRs may or may not have other statutory designations such as SSSI status. LNRs must be controlled by the local authority through ownership, lease or agreement with the owner. The main aim must be to care for the natural features which make the site special. LNRs are of local, but not necessarily national, importance.

LNRs are usually owned by local authorities, with management often passed onto other organisations such as County Wildlife Trusts etc. They often have good public access and facilities. There is no legal necessity to manage an LNR to any set standard but management agreements and plans often exist. Protection of LNRs is usually provided through local planning policy and through local bylaws.

Non-Statutory Protected Local Sites

Non-statutory Designated Sites are sites designated by local authorities which fall outside the statutory criteria for designation. They are policy protected and included in the National Planning Policy Framework (NPPF) as “Local Sites”. Local Planning Authorities should set criteria based policies against which proposals for developments on or affecting protected wildlife sites should be judged. Non-statutory sites are given various names including County Wildlife Sites (CWS), Sites of Importance for Nature Conservation (SINC) and Local Wildlife Sites (LWS). To this end Ancient Woodland Inventory (AWI) sites are also considered non-statutory sites.

Hedgerows

Hedgerows are designated as Habitats of Principal Importance under the NERC Act 2006. The National Planning Policy Framework (NPPF) emphasises the preservation, restoration and re-creation of priority habitats and ecological networks. Hedgerows are important components of ecological networks linking other important habitats and designated sites.

Hedgerows also receive statutory protection under the Hedgerow Regulations 1997 made under Section 97 of the Environment Act 1995, which came into force in 1997. The regulations introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Birds of Conservation Concern (BoCC)

The Birds of Conservation Concern (BoCC) is jointly prepared by the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The report classifies birds according to the extent that they are known to be declining. The classifications are split into groups, Red, Amber and Green, with species classified as Red being those with the greatest declines. The criteria for classifications are presented in *Table 2*.

Table 2: BoCC species classification criteria

Red List Criteria	Amber List Criteria	Green List Criteria
Global Conservation Status - Species listed by BirdLife International as being Globally Threatened using IUCN criteria.	European Conservation status - Categorised as a Species of European Conservation Concern.	All regularly occurring species that do not qualify under any of the red or amber criteria are green listed.
Historical Decline - A severe decline in the UK between 1800 and 1995, without substantial recent recovery.	Historical Decline – Recovery - Red listed for Historical Decline in a previous review but with substantial recent recovery (more than doubled in the last 25 years).	Includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.
Breeding Population Decline - Severe decline in the UK breeding population size, of more than 50%, over 25 years or the entire period used for assessments since the first BoCC review, starting in 1969 (“longer-term”).	Breeding Population Decline - As for red list criteria and, but with moderate decline (by more than 25% but less than 50%).	
Non-breeding Population Decline - Severe decline in the UK non-breeding population size, of more than 50%, over 25 years or the longer-term.	Non-breeding Population Decline - As for red list criteria and, but with moderate decline (by more than 25% but less than 50%).	
Breeding Range Decline - Severe decline in the UK range, of more than 50%, as measured by number of 10 km squares occupied by breeding birds, over 25 years or the longer-term.	Breeding Range Decline - As for red list criteria and, but with moderate decline (by more than 25% but less than 50%).	
	Rarity - UK breeding population of less than 300 pairs, or non-breeding population of less than 900 individuals.	
	Localisation - At least 50% of the UK breeding or non-breeding population found in 10 or fewer sites.	
	International Importance - At least 20% of the European breeding or non-breeding population found in the UK.	