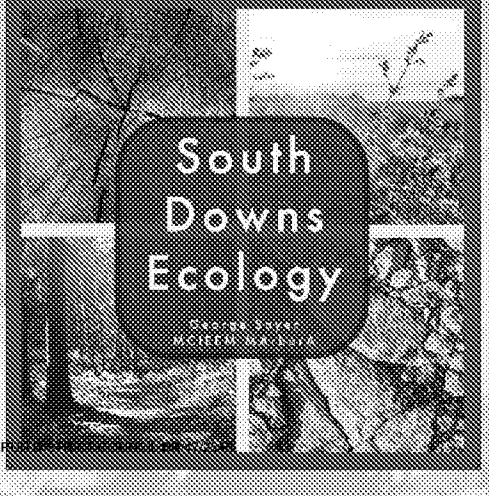
Ecological Impact Assessment

10-12 Nelson Road, Bognor Regis



Ecological Impact Assessment

Quality Assurance:

Document reference	G460.NelsonRoad.EcIA.v1
Site	10-12 Nelson Road, Bognor Regis, PO21 2RY
Client	Ms J Steventon
Author	Alex Rosenfeld – Assistant Ecologist
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Report conditions	The methods and recommendations in this report are based on the following: • CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017) • CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018) Surveys have been carried out following the guidance sources set out in CIEEM's Good Practice Guidance for Habitats and Species (CIEEM, 2021), which include: • CIEEM Guidelines for Preliminary Ecological Appraisal, Second Edition (CIEEM, 2017) • CIEEM Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. Second Edition (CIEEM, 2017) • Bat Conservation Trust (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (BCT, 2023)

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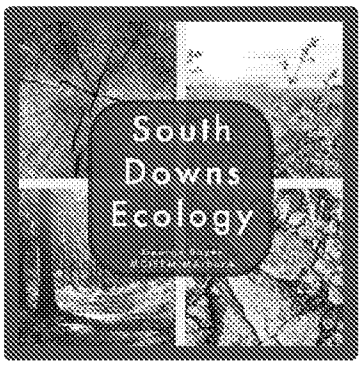

Summary

Ms J Steventon has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals at the land at 10-12 Nelson Road, Bognor Regis, PO21 2RY (*SZ92499923, hereafter referred to as 'the site'*).

A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment was carried out on the 10th February 2025 by George Sayer (*BSc (Hons)* Environmental *Sciences, PgDip Endangered Species Recovery, MArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist*).

The proposal area consists of a house with areas of hardstanding driveway and patio, vegetated garden and flowerbed, vacant land and trees. A shed and garage were also present.

The proposals are for the demolition of the existing shed, garage and lean-to conservatory and link extension, to enable construction of a new dwelling and new rear extension to the existing dwelling.

The proposals are not anticipated to have any significant impact upon ecology; the buildings to be affected by works are considered to offer 'negligible' bat roost suitability. The main dwelling roof is unaffected by works. The proposals stand a 'low' chance of disturbing commuting or foraging bats due to the urban nature of the site with little vegetation of value onsite.

No further surveys are currently recommended at the site for these proposals. Should proposals alter to include effects to the main house, further investigation of the house's roof space shall be required.

The proposals are not considered to have any other negative impact upon habitats or protected species. The proposals would therefore accord with the relevant Arun District Council's relevant planning policies, the NPPF (2024) and relevant legislation.

1.0 Introduction

1.1 Ms J Steventon has commissioned a Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of proposals at the existing site, 10-12 Nelson Road, Bognor Regis, PO21 2RY (*SZ92499923,* hereafter referred to as 'the site').

1.2 A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment were carried out on the 10th February 2025 by George Sayer (BSc (Hons) Environmental Sciences, PgDip Endangered Species Recovery, MArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist).

1.3 The following ecological impact assessment report has been drafted by Alex Rosenfeld, assistant ecologist and completed by George Sayer. The purpose of the assessment has been to identify whether any potential impacts upon protected species, habitats or designated sites might occur, and to propose mitigation or avoidance measures where necessary.

1.4 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

1.5 The proposal area consists of a house (B1) with areas of hardstanding driveway and patio, vegetated garden and flowerbed, vacant land and trees. A garage (B2) and shed (B3) were also noted. The site is bound to the south by Nelson Road. Domestic dwellings line the other boundaries.

1.6 The immediate surrounding area is urban in the form of Bognor Regis. Small pockets of greenspace are noted such as the football pitch and recreation ground 0.2km north and West Park 0.5km southwest.

1.7 No ponds were noted onsite. No ponds were noted within a 500.0m radius. A single drainage ditch lies 0.4km west.

Proposals

1.8 The proposals are for demolition of the existing shed, garage, lean-to conservatory and link extension, to enable construction of a new dwelling to the west of the plot, to become No.12 Nelson Road, and a new single-storey rear extension to the existing dwelling. This would require the removal of areas of developed land, vacant land, modified grassland garden, several small trees and shrubs. It is understood the proposals are to be carried out as a self/custom build.

2.0 Scope of Assessment

1. *Categorise habitats present on the site;*
2. *Identify habitat which may have potential for protected species;*
3. *Identify whether any signs of protected species are present on-site;*
4. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
5. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
6. *Provide recommendations as to how the site and proposals could be enhanced with regards to protected species and habitats.*

2.1 This appraisal and assessment is deemed to be relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

3.1 The National Planning Policy Framework (NPPF) was updated in December 2024 and sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'

3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

3.3 The site is within the Arun District; the proposals should be assessed against the Arun District Local Plan 2011-2031. Local Planning Policy relevant to this site include Policies ENV SP1 (*Biodiversity)*, W SP1 (*Flooding and Drainage)*, ENV DM1 (*Designated Sites of Biodiversity and Geological Importance*), ENV DM3 (*Biodiversity Opportunity Areas),* ENV DM4 (*Protection of Trees),* ENV DM5 (*Development and Biodiversity*) AND GI SP1 *(Green Infrastructure and development)* of the Arun Local Plan 2011 – 2031 (adopted 2018).

3.1 *The Arun District adopted Plan (adopted 2018) Policy H SP2 states development must:*

Protect, conserve or enhance the natural environment, landscapes and biodiversity;

3.2 *Policy ENV SP1 states:*

Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites.

3.3 *Policy W SP1 states development will be supported when it:*

Takes account of flood risk and promotes the incorporation of appropriate mitigation measures into new development, particularly Sustainable Drainage Systems that reduces the creation and flow of surface water and improves water quality;

3.4 *Policy ENV DM1 Designated Sites of biodiversity or geological importance states:*

a. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Development on wildlife sites with the highest value will only be permitted exceptionally where the following can be demonstrated:

i. There is no alternative solution (which shall be adequately demonstrated by the developer).

ii. There are reasons of public health or public safety or Adoption Arun Local Plan 2011-2031 (July 2018) Arun District Council 209 17 Natural Environment

iii. There are benefits of primary importance to the environment or iv. There are imperative reasons of overriding public interest. Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.

b. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to;

i. The European, National or Local status and designation of the site;

ii. The nature and quality of the site's features, including its rarity value; iii. The extent of any adverse impacts on the notified features of interest; iv. The need for compensatory measures in order to re-create remaining features of habitats on or off the site. c. Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.

3.5 *Policy ENV DM3 Biodiversity Opportunity Areas states that development shall:*

a. Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones

b. Be designed in order to minimise disturbance to habitats

Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA.

3.6 *Policy ENV DM4 Protection of trees states that:*

Development will be permitted where it can be demonstrated that trees protected by a Tree Preservation Order(s), (TPO) identified as Ancient Woodland, in a Conservation Area or contributing to local amenity, will not be damaged or destroyed now and as they reach maturity, unless development:

a. Would result in the removal of one or more trees in the interests of good arboricultural practice. This shall be demonstrated by the developer following the advice of a suitably qualified person which shall be guided by BS 5837 (2012). Details of any advice received having regard to BS 5837 (2012) shall be submitted, in writing, as part of a planning application; or

b. Would enhance the survival and growth prospects of other protected trees;

c. The benefits of the proposed development in a particular location outweigh the loss of trees or woodland, especially ancient woodland.

Where planning permission is granted in any of the above instances, conditions shall be used to ensure that, for any trees which are removed as part of a development, at least an equivalent number of a similar species and age (where practical) are planted on the proposed development site. Sufficient space for replacement trees to mature without causing future nuisance or damage shall be provided. The planting of new trees shall form an integral part of the design of any development scheme. Proper provision must be made for the protection and management of trees or areas of woodland on-site when undertaking development. A management plan shall be provided as part of a planning application in accordance with BS 5837 (2012) in order to ensure that trees are adequately protected during development and appropriately maintained in the future. Conditions for the continued protection of trees on sites shall be included in any planning permission given. Where there are existing trees on or adjacent to a development site, developers shall be required to provide:

d. Land and tree surveys

e. A tree constraints plan

f. An arboricultural impact assessment to include a tree protection plan and arboricultural method statement

These will ensure that development is planned to take a comprehensive view of tree issues at an early stage in the design process and that development works do not have a negative impact on existing trees.

3.7 *Policy ENV DM5 Development and biodiversity states that:*

Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement. Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person. All developments shall have regard to Natural England's standing advice for protected species.

3.8 *Policy GI SP1 Green Infrastructure and development states:*

The existing Green Infrastructure Network, as shown on the Green Network Maps for each parish and town, must be considered at an early stage of the design process for all major development proposals.

All major development must be designed to protect and enhance existing Green Infrastructure assets, and the connections between them, in order to ensure a joined up Green Infrastructure Network. The Green Infrastructure Network must be protected from light pollution to ensure that areas defined by their tranquillity are protected from the negative effects of light in development.

Where compatible with nature conservation objectives, development proposals must identify opportunities to connect existing Green Infrastructure assets with the coast, the South Downs National Park or to the District's inland villages. Opportunities to enhance the network should take account of the multiple functions of Green Infrastructure assets and should be based upon those opportunities set out in the supporting text.

Legislation

3.9 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA includes:

- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1981 (as amended);
- The Natural Environment and Rural Communities (NERC) Act 2006;
- The Wild Mammals (Protection) Act 1996;
- The Environment Act 2021.

3.10 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

3.11 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

3.12 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.

3.13 In England, Biodiversity Net Gain (BNG) is mandatory from 12 February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10%. There are a number of exemptions. This site is considered to be exempt as a self-build proposal.

4.0 Methodology

Desktop Study

4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all international statutory designated sites (Ramsar, SAC, SPA) within 12.0 km of the site; national statutory designated sites (SSSI, NNR, LNR) within 2.0 km of the site; and non-statutory designated sites (SNCI) and priority habitats within 1.0 km of the site. Any sites of relevance to the proposals are summarized below and their significance considered in the context of the development proposals. A search was also carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland. Given the overall scale and nature of the site and the proposals, a full data search from SxBRC was not considered appropriate. This is in accordance with CIEEM current guidance for such projects (CIEEM 2023).

Site Visit

4.2 A site visit was conducted on 10th February 2025 during suitable conditions (5°C with no rain, light wind and 90% cloud cover). Habitats were recorded according to the UK-Hab Classification System as described within the UK Habitats Manual V2.01 (UKHab Ltd 2023). All habitats present on-site were recorded on a UKHab map (Figure No. 01 – Site Habitat Plan).

4.3 During the survey any constraints with regard to protected species were considered; the site was considered for its potential for protected species even when signs of these species were not noted at the time of survey.

4.4 The building was assessed by an experienced, licenced bat surveyor (*George Sayer 2018-34434-CLS)* for its potential to hold roosting bats; roof voids were assessed where relevant, and access points identified using high power torch; endoscope and binoculars as appropriate. Any evidence of bats such as grease marks, bat droppings, urine splashes were noted. The bat roost assessment was conducted following the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines Fourth Edition (2023).

4.5 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within the Survey Guidelines and all reasonable effort has been made to identify evidence of protected species.

Ecological Impact Assessment

4.6 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2024). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

4.7 Each ecological feature within the site has been considered within a defined Geographic context such as:

- International and European;
- National;
- Regional;
- County;
- District;
- Local;
- Site Level;
- Negligible.

4.8 Based upon CIEEM guidance, value was determined with reference to the following factors:

- Its inclusion as a Designated Site or other protected area;
- The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
- The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
- The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
- The sites social and economic value.

4.9 Specifically in the case of bats, the impact assessment has been conducted in accordance with the recently published Bat Mitigation Guidelines (Reason and Wray 2023) to which detailed reference has been made.

5.0 Baseline Ecological Conditions and Protected Species Assessment

Desktop Study

Designated Sites and Habitats within 12.0km

5.1 The following information is included so that the site can be considered within the ecological context of the surrounding area, guiding decisions related to habitat change and protected species; these sites are not necessarily representative of the habitat on or surrounding the site and may not be influenced by the proposals.

Table 1: Statutory Protected Designated Sites

Site Name	***Reason for designation***	***Distance from site***
Bognor Reef SSSI	*This site comprises a long stretch of foreshore of great geological interest and an extensive area of vegetated shingle, a habitat type which is rare in Britain. At the western end is a small area of old sand dune with an interesting flora including a specially protected species listed on Schedule 8 of the Wildlife and Countryside Act 1981.*	*0.62km S*
Pagham Harbour RAMSAR, SSSI, LNR	*This site comprises an extensive central area of salt-marsh and tidal mudflats with surrounding habitats including shingle, open water, reed swamp and wet permanent grassland.Pagham Harbour is of national importance for wintering wildfowl and waders and also for breeding birds both within the Harbour and the surrounding grazing pasture. The site supports nationally important communities of plants and invertebrates*	*4.7km W*
Pagham Harbour SPA	*Designated for supporting internationally important wintering populations of:* *Brent Goose Branta bernicla* *Common Tern Sterna Hirundo* *Little Tern Sterna albifornes* *Ruff Philomachus pugnax*	*4.7km W*
Chichester and Langstone Harbours SPA	*Designated for supporting internationally important numbers of:* *Brent Goose Branta bernicla* *Common Tern Sterna Hirundo* *Little Tern Sterna albifornes* *Wigeon Anus penelope* *Pin Tail Anus acuta* *Shoveler Anus clypeata* *Teal Anas crecca* *Turnstone Arenaria interpres* *Sanderling Calidris alba* *Dunlin Calidris alpina* *Ringed plover Charadrius hiaticula* *Bar Tailed Godwit Limosa lapponica* *Red-breasted merganser Megus serrator* *Curlew Numenius Arquata* *Grey Plover Pluvialis squatarola* *Sandwich Tern Sterna sandvicensis* *Shelduck Tadorna tadorna* *Redshank Tringa totanus*	*9.3km NW*

Solent Maritime SAC	*The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area.* *Solent Maritime is the only site for smooth cord-grass Spartina alterniflora in the UK and is one of only two sites where significant amounts of small cord-grass S. maritima are found. It is also one of the few remaining sites for Townsend's cord-grass S. x townsendii and holds extensive areas of common cord-grass Spartina anglica, all four taxa thus occurring here in close proximity.* *The Solent contains the second-largest aggregation of Atlantic salt meadows in south and south-west England. Solent Maritime is a composite site composed of a large number of separate areas of saltmarsh.*	*9.3km NW*

5.2 The site lies outside the nutrient impact zones for the local designated sites. The site lies within 5.0 km of Pagham Harbour and therefore will be required to pay a contribution of £950 per new unit to contribute towards strategic access management measures in accordance with the Local Plan policy ENV DM2.

5.3 No SNCIs are located within 1.0km of the site.

Habitats

Desk Study

5.4 UK Priority Habitats within 1.0 km of the site are limited to Deciduous Woodland. No Priority Habitats are present in close proximity to the site.

Site Assessment

5.5 The proposal area consists of a house with areas of hardstanding driveway and patio, vegetated garden and flowerbed, vacant land and trees. These habitats of **low value** which are discussed further below.

U1b5 - Building

5.6 B1, the main house, is of pebble dashed render construction, the house has a pitched roof of clay tiles. The house is in a reasonably good state of repair. There is a glass and uPVC lean-to conservatory to the western aspect which attaches onto the wall.

5.7 B2, the garage, is a rendered brick block structure with steel beam supports. The roof is of clay tiles and corrugated metal. The garage attaches to the dwelling via a small flat felt roofed link.

5.8 B3, the shed, is a single skin, timber structure with timber cladding and felt roof.

5.9 These buildings and structures offer **negligible ecological value** in the broader sense. Their potential for protected species is discussed in Section 6.0.

U1f 82 Vacant land

5.10 In the northwest of the site is an area of vacant land which once held a greenhouse, paths and compost pile. Species noted include bramble *Rubus fruiticosus agg.,* wood avens *Geum urbanum and* cocksfoot *dactylis glomrata.* This habitat is suitable for invertebrates but is very limited in scale, and provides **site ecological value.**

U1d 847 32 – Vegetated garden with introduced shrubs and scattered trees

5.11 The grass garden areas in the front and back of the site are formed of well-tended lawn. Species include perennial ryegrass *Lolium perenne* with small areas of dandelion *Taraxacum sp.* and daisy *Bellis perennis.* Flowerbeds are found in the front and back gardens with scattered shrubs including species such as Japanese laurel *Aucuba japonica* and tea plant *Camellia japonica.*

5.12 A small rockery is present to the front of the garden and dwelling. This is largely bare earth with a small number of *Cycalmen sp.* and a hart's-tongue fern *Asplenium scolopendrium* present.

5.13 Across the site are a number of small trees including apple *Malus sp.*, holly *Ilex aquifolium* and ash *Fraxinus excelsior.* A large bay laurel *Laurus nobilis* is present to the north-east. These habitats provide **site ecological value.**

U1b6 - Developed land; sealed surface

5.14 In the front garden is a tarmac driveway and brick pathway. A flagstone pathway was also noted. Overall, this habitat is of **negligible ecological value.**

6.0 Protected Species Assessment

Bats

Desk Study

6.1 No European Protected Species Mitigation Licences (EPSML) for bats exist within a 2.0km radius of the site.

6.2 Records common and soprano pipistrelle *Pipistrellus Pipistrellus and Pipistrellus pygmaeus* and noctule *Nyctalus noctula* have been found within a 2.0km radius of the site.

Site Assessment

6.3 B1 is a modern, pebble dashed render building with clay roof tiles. The soffits and facias are of plastic. Externally B1 displays a small number of gaps under roof tiles. The hanging tiles on the southern aspect also display several gaps. As B1 is not be affected by works no internal roof void investigation took place, but the building is likely to offer low bat roost suitability.

6.4 The lean-to conservatory is a glass and uPVC construction with no value for bats; the lead flashings are sealed tight to the wall and the structure is transparent and offers no crevice or void features.

6.5 B2 is a rendered brick and block garage with shallow-pitched corrugated metal covering the majority of the roof, and a small, steep, clay tiled roof with timber sarking beneath at the front. Externally, B2 displays a small number of gaps to roof tiles; these were inspected at-height from a ladder, and no evidence of bats could be found within. A small clock-tower is present to the roof apex; there is a gap in the louvres of this but the gap leads directly into an open void of the tower, which was inspected and found to be devoid of bats or evidence thereof.

6.6 Internally, B2 shows no evidence of bats. The high volume of light entering the building from a number of windows, and its regular use significantly reduces its value for bats. The building is linked to the main dwelling by a small section of flat felt roof. This was likewise tightly sealed and devoid of evidence of bats.

6.7 Whilst a small number of potential roost features exist in the tiles, given the urban location, lack of significant local vegetation, small scale of the roof and lack of evidence of bats, the building is highly unlikely to support bats.

6.8 B3 is a single skin timber shed. No gaps exist along the edge of the roofing felt. Gaps in the weatherboarding lead straight into the shed. No evidence of bats was found within.

6.9 Overall, B1 is of **low** bat roost suitability, but to be unaffected by works. B2 is of limited value to roosting bats, but due to the site location, it is deemed to be of **negligible** bat roost suitability. B3 is considered to be of **negligible** bat roost suitability.

6.10 The site and back gardens in the surrounding may provide some foraging and commuting value, with several fairly mature trees and shrbs. The site is in an urban location with significant nighttime lighting and limited other vegetation. Overall, the site offers **low value** for foraging and commuting bats.

Birds

Desk Study

6.11 Numerous nesting bird species are present in the local area, including a number of hedgerow and garden species such as blackbird *Turdus merula* and dunnock *Prunella modularis*.

Site Assessment

6.12 No previous nesting attempts were noted in any of the buildings, which are generally too well-sealed to allow bird ingress. The shrubs and trees in the garden may provide opportunities for nesting and limited opportunities for foraging. Overall, the site is of **low value** to nesting birds.

Reptiles and Amphibians

Desktop Study

6.13 Records of widespread reptiles exist within a 2.0 km radius of the site, including slow worm *Anguis fragilis*, common lizard *Vivipara zootica* and grass snake *Natrix helvetica*.

Site Assessment

6.14 The majority of the site is of no value to reptiles due to the dominance of well-tended grass and shrubs, bare and developed land. The vacant land and compost heap remnant offer some very limited opportunities for reptiles to use the site; whilst their presence can't be ruled out, the habitats would not support more than individuals and could not support a sustained population. Overall, the site is of **negligible - low value** for reptiles.

Other

6.15 No evidence of any other protected species such as rare plants was recorded. There is low potential for hedgehogs *Erinaceus europaeus* to forage and hibernate in the shrubs and vacant land. The site is considered to be of **negligible value** to badgers *Meles meles* due to the nature of the site and location. The site is of **negligible value** to Great Crested Newt *Triturus cristatus* due to lack of surrounding ponds and location of site. The homeowner stated foxes use the garden for commuting.

6.16 No impacts upon other protected species are considered likely and have not been assessed further.

7.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

7.1 The site is within the Impact Risk Zone of Bognor Reef SSSI. Due to the nature of proposals, no impacts are foreseen upon this designated site.

7.2 The site lies outside the nutrient impact zones for the local designated sites. The site lies within 5.0 km of Pagham Harbour and therefore will be required to pay a contribution of £950 per new unit to contribute towards strategic access management measures in accordance with the Local Plan policy ENV DM2.

7.3 No impacts upon any national or local designated sites are predicted.

Avoidance, Mitigation and Compensation

7.4 None required.

Residual Impacts

7.5 The impacts will be negligible.

Habitats

Potential Impacts

7.6 The proposals will primarily impact small lawn areas, vacant land, shrubs and trees. Impacts are of **minor magnitude** at **site level.**

7.7 Presuming that the site proceeds as a self/custom build, the proposals would be exempt from Mandatory Biodiversity Net Gain.

Avoidance, Mitigation and Compensation

7.8 All construction must be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. No chemicals or fuels shall be stored on open or soft ground. Any materials will be stored on existing developed land, on pallets or in bulk bags to minimise damage to grassland.

7.9 Trees and hedges to be retained must be protected in accordance with British Standard 5837:2012. Any trees lost shall be replaced with new native specimens.

7.10 The proposals do not need to demonstrate Mandatory Biodiversity Net Gain. Should the proposal alter from being a self/custom build, then BNG of 10% would need to be demonstrated.

Residual Impacts

7.11 Once mitigation is considered, the impacts will be negligible.

Bats

Potential Impacts

7.12 The buildings to be affected by works are classified as offering **negligible** bat roost suitability. It is considered highly unlikely that works would disturb a bat roost. Should plans change to include the main house, considered to be of **low** bat roost suitability, then a more detailed inspection of the internal roof space will be required to assess the full impacts upon bats as well as potentially, dusk emergence surveys.

7.13 No significant impacts upon foraging or commuting bats are anticipated, given the quantum of works and the location of the site.

Avoidance, Mitigation and Compensation

7.14 Works shall be designed to minimise disturbance of any bats which might use the surroundings. Any external lighting must strictly accord with the BCT/ILP Guidance Note 08/23. Construction phase lighting shall not be used.

Residual Impacts

7.15 The overall impact of the scheme will be negligible.

Nesting Birds

Potential Impacts

7.16 It is considered likely that birds will nest within the trees and potentially within shrubs during the breeding season (March – August inclusive). In the absence of mitigation, a bird nest could be destroyed or disturbed during the course of works. This would be an offence under the Wildlife and Countryside Act (1981).

Avoidance, Mitigation and Compensation

7.17 Any vegetation removal will aim to avoid the bird nesting season (*March-August inclusive).* If this is not possible then a final check for nesting birds must be undertaken within 48 hours of disturbing works commencing.

7.18 During the course of works, if a bird's nest is suspected to be active near to works, all operations will cease and a Suitably Qualified Ecologist contacted for advice. Should an active nest be identified or found, a 5.0m buffer zone will be set up around the nest, in which no works will occur until the nest has fledged.

Residual Impacts

7.19 The overall impact of the scheme will be negligible.

Reptiles and Amphibians

Potential Impacts

7.20 The risk of injury or death to reptiles and amphibians is highly unlikely due to the nature and location of the site. In the highly unlikely event, a reptile is discovered, all works should cease and a Suitably Qualified Ecologist contacted for advice.

Avoidance, Mitigation and Compensation

7.21 Manual clearance of the vacant land shall be undertaken with due care; the remaining compost heap shall be dismantled, checking for reptiles, amphibians and small mammals which would be relocated in another corner of the garden, such as the south-east where a log pile already exists.

Residual Impacts

7.22 The overall impact of the scheme will be negligible.

Hedgehog

Potential Impacts

7.23 In the absence of mitigation, there is potential for hedgehog or other mammals to fall into excavations or become trapped in footings.

Avoidance, Mitigation and Compensation

7.24 During construction, all trenches and footings will be covered at night and when the site is unattended, or fitted with a shallow angle, rough timber ramp to allow trapped mammals to escape.

Residual Impacts

7.25 The overall impact of the scheme will be negligible.

8.0 Ecological Enhancements

8.1 The proposals as they stand are exempt from Mandatory Biodiversity Net Gain. In accordance with Local and National Policy, the proposals must still demonstrate a measurable net gain. most beneficial enhancements which have been agreed are:

- Installation of new bat roost features to the building, in the form of 1no. crevice or cavity bat box, to be installed on the southern or western elevation, where it can receive sunlight;
- Installation of bird nesting features to the building in the form of an integrated bird box and swift box, to the northern elevations (swift boxes must have a clear run of 5.0 m beneath them so would be best suited to an apex);
- Installation of an insect feature to the building or garden, either a bug hotel or a log pile;
- Planting of fruit and nut producing trees and shrubs such as cherries *Prunus spp.*, Crab apple *Malus sylvestris,* whitebeams *Sorbus sp.* and guelder rose *Viburnum opulus* within the garden to increase foraging provisions for birds.
- Planting of night flowering plants to increase foraging provisions for bats.

9.0 Conclusions

9.1 The proposal area consists of a house with areas of hardstanding driveway and patio, shed and garage, vegetated garden and flowerbed, vacant land and trees.

9.2 The proposals are not anticipated to have any significant impact upon ecology; the lean-to conservatory, garage and shed which would be impacted all offer **negligible** bat roost suitability. The proposals stand a **negligible** chance of disturbing bats or their roosts, or foraging and commuting habitats providing very basic mitigation measures listed in this report are followed. The main house roof is likely to offer **low** bat roost suitability but is to be unaffected by works.

9.3 Very minor potential for impacts to hedgehogs, reptiles and nesting birds exists and would be avoided using basic precautions.

9.4 No impacts upon statutory sites, priority habitats or other species are anticipated.

9.5 The site is exempt from Mandatory Biodiversity Net Gain.

9.6 When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon habitats or protected species in accordance with planning policy and once enhancements are considered, would result in a minor net gain. The proposals would therefore accord with the relevant local and national planning policies and the relevant legislation.

10.0 References

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11.0 Appendix A - Site Photos

Photo 1 – View of main house (B1) from the west, showing lean-to conservatory to be removed, and significant separation between this and the main dwelling roof.

Photo 2 – View of garage (B2 - centre) and shed (B3 – left) from the south.

Photo 3 – Area of back garden lawn, hardstanding, shrubs and trees to south-east of site.

Photo 5 – Front garden with shrubs, trees and lawn looking south.

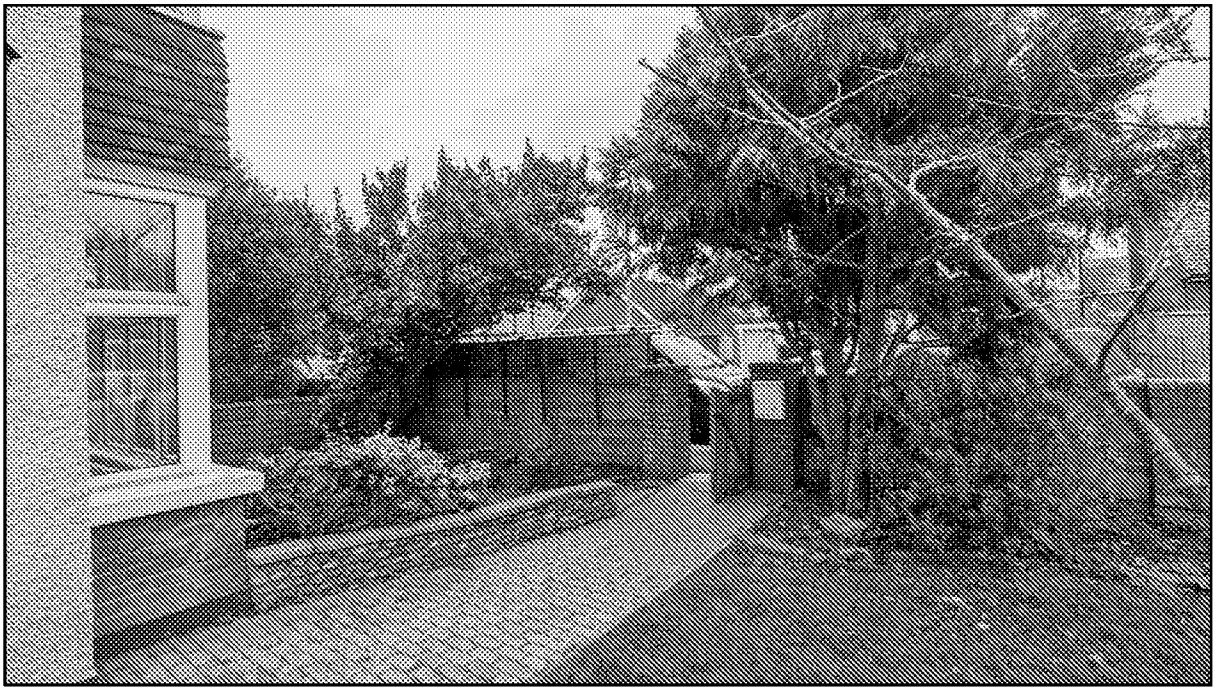


Photo 6 – Vacant land in the northwest corner.

Photo 8 – Soffits and facias of the main house.

Photo 9 – Lifted tiles on the garage.

Photo 10 – Inside of garage, the large windows allowing significant light into the structure.

12.0 Species Lists

Modified Grassland

Common Name	Scientific Name	DAFOR
Creeping Bent	*Agrostis stolonifera*	R
Creeping Bent	*Agrostis stolonifera*	R
Daisy	*Bellis perennis*	F
Dandelion	*Taraxacum sp.*	R
Ordinary Moss	*Brachythecium rutabulum*	LF
Perennial Ryegrass	*Lolium perenne*	D
Sedge	*Carex sp.*	R
Smooth Sow-thistle	*Sonchus oleraceus*	R
Snowdrop	*Galanthus nivalis*	O
Sorrell	*Rumex acetosa*	R
Spear Thistle	*Cirsium vulgare*	R
White Clover	*Trifolium repens*	O

Vacant Land

Common Name	Scientific Name	DAFOR
Bramble	*Rubus fruticosus agg.*	O
Broadleaved Willowherb	*Epilobium montanum*	F
Cock's-foot	*Dactylis glomerata*	F
Creeping Bent	*Agrostis stolonifera*	R
Creeping Buttercup	*Ranunculus repens*	O
Cyclamen	*Cyclamen*	R
Dandelion	*Taraxacum sp.*	R
Forget-me-not	*Myosotis arvensis*	R
Groundsel	*Senecio vulgaris*	R
Hairy Bittercress	*Cardamine hirsutum*	R
Herb Robert	*Geranium robertianum*	R
Lords and Ladies	*Arum maculatum*	R
Nettle	*Urtica dioica*	F
Perennial Ryegrass	*Lolium perenne*	O
Smooth Sow-thistle	*Sonchus oleraceus*	R
Stinking Iris	*Iris foetidissima*	R
Wood Avens	*Geum urbanum*	R

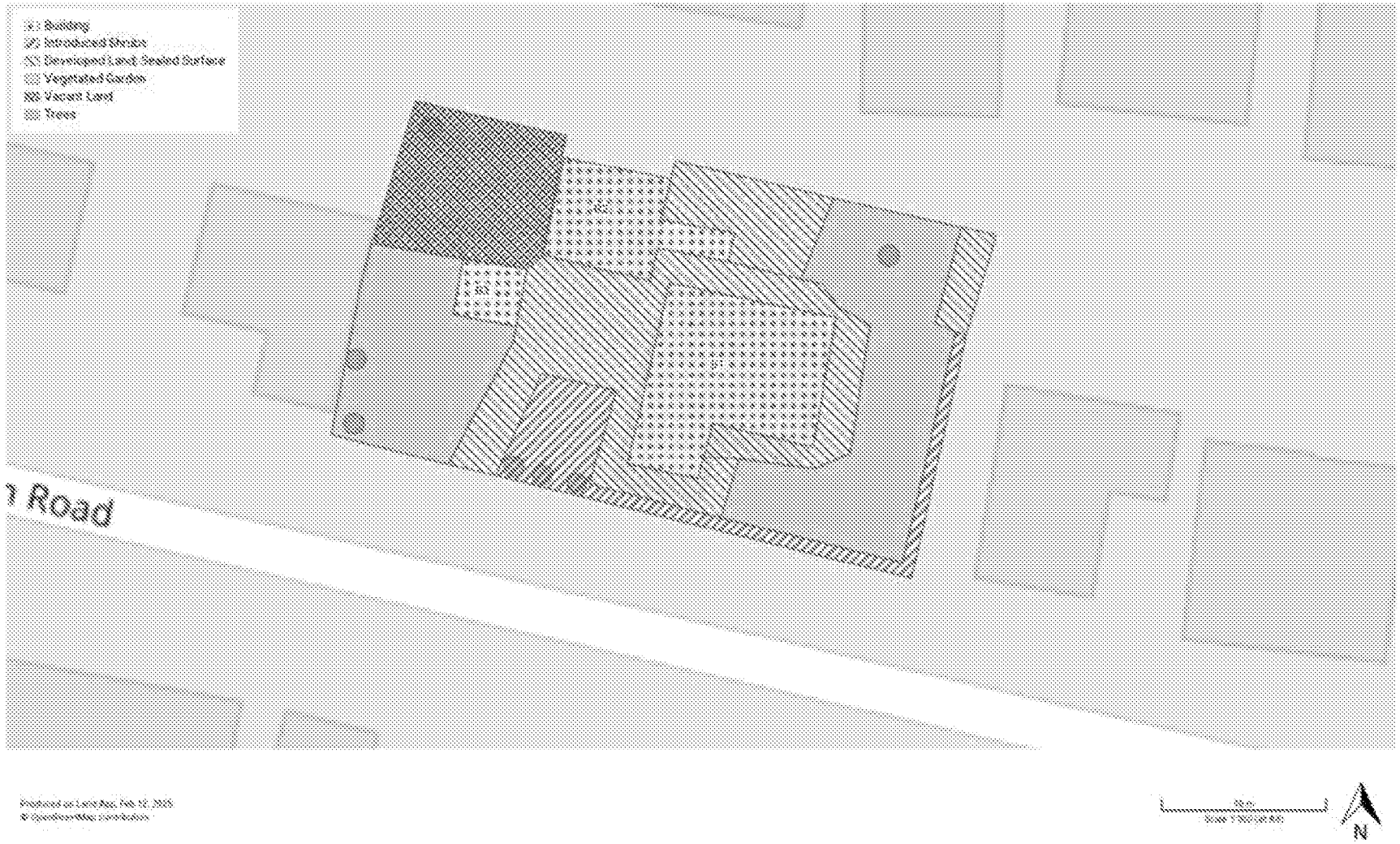
Introduced shrubs

Common Name	Scientific Name	DAFOR
Cypress	*Cupressus sp.*	O
Hart's-tongue Fern	*Asplenium scolopendrium*	R
Hebe	*Hebe sp.*	O
Iris	*Iris sp.*	O
Japanese Laurel	*Aucuba japonica*	O
Kohuhu	*Pittosporum tenuifolium*	F
New Zealand Broadleaf	*Griselina littoralis*	F
Passionflower	*Passiflora sp.*	R
Silverberry	*Elaeagnus ebbingii*	O
Tea Plant	*Camellia sinensis*	R
Yucca	*Yucca sp.*	R

Trees

Common Name	Scientific Name	DAFOR
Apple	*Malus sp.*	O
Ash	*Fraxinus excelsior*	O
Bay Laurel	*Laurus nobilis*	O
Cherry	*Prunus sp.*	R
Holly	*Ilex aquifolium*	R
Japanese Cedar	*Cryptomeria japonica*	R
Lawson's Cypress	*Chamaecyparis lawsoniana*	R
Sycamore	*Acer pseudoplatinus*	F

13.0 Figure No. 01 - Site Habitat Plan



14.0 Figure No. 02 – Site Aerial