PRELIMINARY ECOLOGICAL APPRAISAL & PRELIMINARY BAT ROOST ASSESSMENT OF:

GUNNER ROCK 7 JACKSONS HILL ST MARY'S ISLES OF SCILLY TR21 0JZ

Client: Sibleys on Scilly

Our reference: BS35-2020

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Non-Technical Summary

- On 2nd November 2020, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological
 Appraisal (PEA) and Preliminary Roost Assessment (PRA) of Gunner Rock, 7 Jacksons Hill, St Mary's, Isles of
 Scilly, TR21 0JZ (BS35-2020), to establish baseline conditions, determine the importance of any ecological
 features within and around the survey area and to establish the actual or potential use of the building by
 bats to help inform the determination of Planning Application P/20/073
- This report outlines the findings of the PEA and PRA assessment and provides advice based on the surveys'
 conclusions. As the proposals contained within the planning application relate only to works within the
 existing footprint and structure of the existing building, this assessment is primarily focused on the PRA of
 the building.
- During the PRA, an external/internal inspection of the building was undertaken (where accessible).
- The immediate habitat surrounding the proposed development present moderate habitat for foraging bats, but quickly becomes optimal with mature gardens, allotments, and abundant semi-natural habitat, particularly to the north and east.
- All areas could be accessed and evaluated for roost potential and for evidence of bats.
- The building, both internally and externally has negligible features that could be used by crevice-roosting species such as Common and Soprano Pipistrelle, or void-roosting species such as Brown Long-eared Bat.
- Taken in combination, the characteristics of the building and the surrounding habitat suggest negligible
 roost potential for bats
- To assist in meeting both national and local planning policy obligations for net gains in biodiversity the
 proposed development should undertake at least one of the suggested enhancement measures outlined in
 this report
- The recommendations of this PEA and PRA are that no further surveys or an EPS license application are required
- If the recommendations given in this report are adhered to, there should be no further ecological constraints to the proposal.
- This report is sufficient to support a planning application.

1.0 Introduction

1.1 Survey and reporting

This report details the results of a preliminary ecological appraisal and a preliminary bat roost assessment (PRA) of Gunner Rock, 7 Jacksons Hill, St Mary's, Isles of Scilly, TR21 0JY. The survey was carried out on the 2nd November 2020.

1.2 The application site

Gunner Rock is located along the north-eastern edge of Hugh Town, St Mary's (National Grid Reference SV9082210577). The application site is comprised of a large, detached 3 storey dwelling, set within its own plot (see Figure 1 below).



Figure 1. Location

1.3 Details of proposed works

The planning application (P/20/073) proposes a single storey extension of the south-west elevation, to include new access into the first floor; conversion below of the existing ground floor gym to an office and the replacement of some of the existing UPVc windows and doors on all the elevations to Aluminium (see Photo 1.)



Photo 1. South-west elevation

2.0 Methodology

2.1 Preliminary Ecological Appraisal - Desk Study

A desk study data search was undertaken. This involved carrying out a review of the Local Records Centres (LRC) available records for bat species and publicly available datasets and citations of statutory designated sites of importance for nature conservation for sites within the zone of influence (ZOI) of the survey area (considered to be a maximum of 2km in this case). The desk study was also undertaken to identify habitats and features that are likely to be important for bats and assess their connectivity using aerial photographs.

2.2 Preliminary Bat Roost Assessment

The Preliminary Bat Roost Assessment comprised a survey of the building for bats, signs of bats and features potentially suitable for use by roosting bats, and an assessment of the surrounding habitat in terms of its suitability for commuting and foraging bats.

The survey consisted of a ground based inspection and a detailed search of the interior and exterior of the building (from ground level), looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, a ladder and a high-powered torch were used as required.

2.3 Classification of building

The building was classified according to its suitability for use by roosting bats. The classification was dependent on several factors including (but not limited to):

- Bats and/or signs of bats;
- External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards etc);
- Setting;
- Night time light levels;
- Disturbance levels;
- Proximity of suitable foraging habitat and commuting routes (e.g. ponds, streams, woodland, large gardens, hedgerows).

The categories used to classify buildings and the survey effort required to determine the presence or absence of bats (as per the Bat Conservation Trust's Bat Survey Guidelines¹, referred to by Natural England in their standing advice to planning officers) are described in Table 1 (see below).

2.4 Surveyor details

The survey was undertaken by Darren Mason BSc (Hons) of the Isles of Scilly Wildlife Trust. Darren has undertaken professional Bat Licence Training and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2020-46277-CLS-CLS which permits him to survey bats using artificial light and endoscopes and capture bats using hand and hand-held static nets.

Table 1 – Description of the categories used to classify a building's bat roost potential and the survey effort required to determine the likely presence or absence of bats

	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
ial	High	Numerous features potentially suitable for use by roosting bats, optimal or good quality bat foraging habitat nearby and good habitat connectivity. Alternatively, a building with fewer features potentially suitable for use by roosting bats and optimal foraging habitat nearby.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
Roost Potential	Moderate	More than a few features potentially suitable for use by roosting bats, good foraging habitat nearby and limited habitat connectivity. Alternatively, a building with a few features potentially suitable for use by roosting bats but optimal foraging habitat nearby.	Two or three dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
Bat R	Low	Only a few features potentially suitable for use by roosting bats but good bat foraging habitat nearby. Alternatively, a building with more than a few features potentially suitable for use by roosting bats but sub-optimal foraging habitat nearby and limited habitat connectivity.	One or two dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Negligible	Very few features potentially suitable for use by roosting bats and / or in an area (such as a densely populated urban area) which has limited habitat connectivity and poor foraging habitat.	No further surveys required.

Table 1. Categorising and classifying a building's bat roost potential

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

3. Results

Preliminary Ecological Appraisal

3.1 Pre-existing information on bat species

The desk study showed that no species of bat had previously been recorded within the building. A data search of LRC records for bats revealed information on 6 species of bat recorded within the 2km ZOI of the site. The species conclusively identified were Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared Bat (*Plecotus* auritus) both UK Biodiversity Action Plan (BAP) priority species, Whiskered Bat (*Myotis mystacinus*), Leisler's Bat (*Nyctalus leislerli*) and the rare Nathusius Pipistrelle (*Pipistrellus nathusii*). Seventeen bat roosts are known to exist within the 2km of the proposed development, with 3 known roosts within 500m of the property, the nearest being 115m southwest of the proposed development.

3.2 Statutory and non-statutory sites

In addition, the desk study revealed the presence of the following statutory designated sites within the 2Km ZOI of the site:

- i.) Peninnis Head SSSI Lying 686m due south of the proposed development is Peninnis Head SSSI. The site designated primarily for its maritime heathland, maritime grassland and scrub habitats together with good populations of a number of rare plant and lichen species, in addition to its significant quaternary geomorphology.
- ii.) Lower Moors SSSI Situated 280m east-north-east of Teeki is Lower Moors SSSI. A topogenous mire that has a range of wetland habitats supporting a diverse range of wetland wildflower species, including the Nationally Scarce Tubular Water-dropwort (*Oenanthe fistulosa*). The site also holds locally important populations of Royal Fern (*Osmunda reglis*) and Southern Marsh Orchid (*Dactylhoriza praetermissa*) and is particularly important feeding for passage and wintering birds including Corncrake (*Crex crex*) and Spotted Crake (*Porzana porzana*).

- **Higher Moors & Porth Hellick Pool SSSI** 1.3km east north-east of the proposed development is Higher Moors SSSI. A topogenous mire designated for several rare and notable plant species) including; Bog pimpernel (*Anagallis tenella*), Star Sedge (*Carex echinata*) and Marsh St John's-wort (*Hypericum elodes*).
- **iv.) Porthloo SSSI** Situated 738m north-east of Teeki lies Porthloo SSSI designated for its geology, particularly for its Quaternary sediments in the cliffs that show changes in the climates and environments of the Quaternary period in Scilly.

3.3 Habitats surrounding the application site

Jackson's Hill is situated within the Built-Up Areas Boundaries² (2011) for England and Wales (published by the Office for National Statistics, Geography), lying just within its northern border and is a small residential complex comprising several large detached properties set within mature gardens, which back onto the Old School site at Carn Thomas, an area consisting of open grassland, scrub and deciduous woodland.

South-east of the property lie a small group of allotments and a tree-lined avenue of Dutch Elm (*Ulmus x hollandica*) before reaching the wetland of Lower Moors SSSI, which is dominated by reedbed, wet woodland and open water habitats. Further south-east, eastwards and north-eastwards a contiguous landscape of small cultivated fields enclosed by hedgerows and used in the flower-farming industry as productive 'fallow' leys or improved pasture is dominant for over 2km, interspersed with a variety of sized deciduous and coniferous woodland blocks or shelterbelts of Dutch Elm, Monterey Pine and Lodge Pole Pine (*Pinus radiata* and *Pinus contorta*). This habitat helps to link the wider countryside and to sites such as the wetland of Higher Moors SSSI, the woodland block and stream at Holy Vale and to the open expanses of the coastal headlands and semi-natural grassland at the airport.

Immediately north-east is the beach and associated strand-line at Porth Mellon. To the north the mixed farming landscape continues, before reaching the open expanse of the golf course with its mown seminatural grassland and heathland habitats and beyond this the coastal headlands grazed extensively by cattle. West of Gunner Rock lies the main conurbation of Hugh Town where mature gardens become less frequent. However, south-west of the old school site lies Buzza Hill, which comprises and open area of grassland and scrub, which at its base are further mature gardens which open onto the beach at Porthcressa. Five hundred and sixty metres west, the beach meets the eastern slopes of the Garrison with

its mixed woodland and low-lying cliffs. The Garrison contains a cattle-grazed mosaic of grassland and scrub, shelterbelts and areas of open amenity grassland.

In summary, the habitat surrounding the proposed development and its links to the wider countryside provides optimal foraging habitat for all 6 species of bat, despite Gunner Rock being situated in a suburban setting with its associated street lighting. The dark corridors, particularly to the south and east of the property, and the beach at both Porth Mellon and Porthcressa will assist bats in reaching their favoured feeding habitat. These dark corridors are important as it has been shown that street lighting can negatively impact upon a bats' commuting and foraging route³. In contrast, it has been shown that species such as Common Pipistrelle and Leisler's Bat will feed around street-lighting, to take advantage of the insectivorous prey that congregates around them⁴. However, this has been shown to be dependent on the light emitting from the lamps, with orange sodium light (found here in this instance) having the greatest negative impact on feeding opportunities⁴.

Though Soprano Pipistrelle have been shown to utilise more built up areas compared to Common Pipistrelle⁵, all species of bat require 'edge' habitat (like hedgerows) to both feed from and commute to other feeding areas^{6, 7&8}. This type of habitat is frequent throughout St Mary's particularly to the north and east of Gunner Rock, with only a limited number of areas which are very open which most species of bat prefer not to utilise⁹. These continuous linked hedgerows provide access to a wider variety of habitats for which Common Pipistrelle are known to take advantage of ¹⁰, including the strand-line along the beaches ¹¹. These hedge-lined commuting routes are also important for both Soprano and Nathusius Pipistrelle as they provide commuting and feeding corridors to their preferred habitat of open water and watercourses ^{6, 7&8}, habitats such as those found at both Lower and Higher Moors SSSIs and Holy Vale. The location of Gunner Rock also falls within the core sustenance zones of all three species being 1.7km, 1.5km to 3km respectively¹².

In contrast, Whiskered Bat in Britain has been shown to favour more open areas of semi-natural grassland and pasture with scattered hedgerows, or small woodland blocks ^{13&14} in which to feed. Habitat such as the Garrison to the west and the golf course to the north are typical examples of such habitat which they could exploit and fall within the typical core sustenance zone for this species¹³. Brown Long-eared bat have been shown to prefer to feed in open canopy deciduous woodland typically located close to their

roosts, which would also have larger tracts of woodland available to feed no greater than .5km away¹⁵, making the Garrison to the west and the former school site at Carn Thomas potential sites to feed. Both sites fall within this species core sustenance zone of 1.1km¹⁶. Likewise, Leisler's Bat also take advantage of woodlands, particularly woodland edge¹⁷, making these woodland blocks and the woodlands at Lower Moors, Higher Moors and Holy Vale and even Trenoweth shelterbelt at 2.2km away as Leisler's Bat has a large core sustenance zone of 4.2-7.4km¹⁸. Leisler's Bat in England is also known to take advantage of open areas of pasture¹⁸, making the coastal headlands to the north, south and east potential feeding areas also. This contrasts with most other species of bat which typically avoid this type of open habitat, particularly during peak times of prey abundance (dusk and dawn) to avoid predation¹⁹⁸²⁰.

3.4 Habitats within the application site

Gunner Rock is bounded on three sides by vegetation. To the north-east several mature Dutch Elm trees form the boundary, creating a tall canopy structure to the rear of the garden. In contrast, the north-west and south east boundaries comprise of two low-growing mixed species and well managed hedgerows that includes; Karo (*Pittosporum tenufolium*); New Zealand Laurel (*Coprosma repens*); Lawsons Cypress (*Chamaecyparis lawsoniana*); Leyland Cypress 'Goldconda' (*Cupressus x leylandii 'Goldconda'*); Salt Cedar sp. (*Tamarix* sp.) and Pampas grass (*Cortaderia selloana*).

The garden is terraced, the lower terrace is laid to lawn with scattered shrubs throughout including; Cabbage Palm (*Sabal palmetto*); New Zealand Flax (*Phormium tenax*); Rhododendron (*Rhododendron* sp.); African Lily (*Agapanthus africanus*); Showy-speedwell (*Hebe* sp.) and Castor-oil plant (*Ricinus communis*). Separating the upper terrace (which is similar in terms of its vegetation to the lower terrace) is a screen of vegetation that includes tree specimens including Wild Cherry (*Prunus avium*) and Leyland Cypress and shrubs including; Tsubaki (*Camellia japonica*) and French Hydrangea (*Hydrangea macrophylla*). The garden to the front (south-west elevation) is laid primarily to concrete, but a small, vegetated border in the southern corner which is set to be removed includes Tree fuchsia (*Halleria lucida*); African Daisy (*Osteospermum ecklonis*) and Male Fern (*Dryopteris filix-mas*). No species of conservation concern were recorded in this border.

There are outside lights above the main entrance door on the ground floor, above the side entrance door on the south-east elevation and above the steps on the north-west elevation (some PIR).

In summary, there are several species of shrub and plants that may attract invertebrates which bats may prey upon within the immediate footprint of Gunner Rock. The lower terrace and north-east boundary provide optimum cover for bats leaving a roost. However, the external lighting is likely to cause light-spill, particularly onto the north-west and south-east boundary hedgerows, which may deter bats from using these naturally vegetated corridors.

Preliminary Roost Assessment

3.5 External

Gunner Rock is brick/block built smooth-rendered and smooth-rendered in construction. Set within its own plot and built into the side of a north-east facing hill over three-storeys. The render is in good condition throughout, with no cracks or lifted render for bats to roost behind. The north-east elevation is dominated by UPVc windows, which will be replaced by Aluminium. Examination of the fenestration revealed no obvious gaps between the frames and the blockwork providing no opportunities to bats to roost between or gain access into the interior of the building. Likewise, the 1st floor windows on the north-west elevation and the single window and door configuration on the south-east elevation.

The conversion of the existing gym set on the ground floor below an existing car parking space revealed that



Photo 2. North-west elevation of ground floor gym fenestration

all render was in good condition throughout. Examination of the fenestration on the north-west and south-east elevations revealed no obvious gaps between the frames and the blockwork and examination of the arched lintel and the adjoining flat, concrete parking space above (which forms the roof) revealed no crevices, or voids which a bat could utilise as a roost. Furthermore, exterior security lighting above the existing front door on the south-west elevation and the side entrance on the south-east elevation would cause light-spill onto the gyms elevations, reducing the likelihood of use as a roost further (see Photo 2.).

The roof of the main house is 'hipped' in construction, with an approximate pitch of 25° on a south-west/north-east aspect. The roof is laid with fibre cement tiles and capped with glazed cement ridge tiles. Throughout the tiles are tightly laid to one another, including the replacement slate tiles on the south-west aspect, with no obvious crevices which a bat may use to roost in. The ridge tiles are well mortared in place, with no obvious loss of cement to create a void and no ventilation gaps to permit access into the internal loft space. There is a soil pipe situated on the lower third of the south-west aspect which is tied into the roof by lead/zinc flashing, which is well-fitted with no obvious voids which a bat may use. Likewise, the UPVc fascia and soffit boards are well-fitting to each other and are well tied-in to the roof and their associated wall plates and offer no suitable roosting spaces for bats to occupy.

3.6 Internal

The internal roof space is constructed in a modern 'fink' design, with square cut timber and butt joints, held together with metal roof truss straps (see Photo 3.). These modern joints and frame construction provide



Photo 3. View of internal roof space and modern roof truss construction

no gaps wide enough for bats to utilise as a roost. No ridge board was present either, minimising perching opportunities for void-dwelling species such as Brown Long-eared Bat. The roofing membrane throughout was in good condition, presenting very limited roosting space for bats between the membrane and the roofing tiles above. Cobwebs were present on some, but not all the roof trusses and no small mammal droppings were recorded along the wall plates, the palisade floor, exposed loft insulation and the limited storage items in the roof space. A large fluorescent loft light was also present centrally, facing south-westwards which would illuminate this roof aspect extensively. However, the limited amount of storage items present would suggest disturbance in the loft space would be minimal.

3.7 **Summary**

The relatively modern, well-constructed nature of Gunner Rock limits any potential roosting opportunities for both crevice-dwelling and void-dwelling bats. The external lighting on of the 4 elevations that will illuminate the surrounding tall boundary hedges also reduces the likelihood of the development being used as a roost. Though the internal roof space appears to very dark, sheltered from the prevailing winds and likely to be rarely disturbed the modern construction, well-fitting roof membrane and lack of ridge board minimises the any available roosting and perching opportunities.

Assessment and recommendations (excluding bats)

4.1 Protected sites

The proposed development falls into the SSSI Impact Risk Zones of Lower Moors, Higher Moors and Peninnis Head SSSIs. Impact zones are used in the assessment of planning applications for likely impacts on SSSI's, Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar Sites (England). However, the likely attributable impact in these zones is for residential developments of 100, or 50 or more houses outside existing settlement/urban areas. Therefore, in this instance the development is not likely to impact on the surrounding SSSIs.

4.2 **Nesting birds**

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of this Act makes it an offence to kill, injure or take any wild bird, or intentionally to take damage or destroy the nest of any wild bird while that nest is in use or being built²². During this survey, no evidence of nesting birds was identified. However, if work was to commence between the months of March and August inclusive, then the site would need to be checked first for nesting birds and if, any evidence of breeding activity was found, or nests are identified works that would disturb the adults, the nest or young must be postponed until all young have fledged the nest and it is no longer in use.

4.3 Flowering plants

During the survey it was noted that the vegetated border on the south-west side of the building was to be lost to make way for the proposed new entrance on the first floor. No vegetation in this border was found to be protected under the Wildlife and Countryside Act 1981, therefore no special measures will be required when undertaking the removal of this border. However, to meet the statutory authorities obligation to provide a net gain in biodiversity replacement shrubs that contribute to increased pollination

opportunities for invertebrates, or shrubs that are attractive to the insect prey of bats and birds should be incorporated into the design (see section 5.3 below).

4.3 Ecological features of importance

To identify which ecological features are important and which could potentially be affected by the proposed project, an evaluation of their importance for example; in a geographical context, degree of scarcity or level of protected status needs to be undertaken²³. The table below outlines those features identified as important, the nature conservation legislation relevant to those features and an assessment of the level of impact from the proposed development on those features.

Ecological	Relevant	Evaluation	Mitigation	Impact Level		
Feature	Legislation	(of importance)	Hierarchy			
Habitat						
Building (roost)	CHSR, W&CA, NPPF	Local	A & E	Low		
	Impacts:					
	Demolition: – None predicted as long as Reasonable Avoidance Measures (RAM) are					
	followed (see section 5)					
	Construction: – None. Positive impact may result through enhancement by					
	creating/incorporating new nests in the building ²⁴					
	Operational impact: -	None predicted, however	one predicted, however please note a summary of criminal			
offences with respect to bats and their ro						
	http://www.bats.org.uk/	p://www.bats.org.uk/pages/bats and the law.html				
Species:						
Bats	CHSR, W&CA, NPPF	International	A & E	Medium		
	Demolition – None predicted as long as Reasonable Avoidance Measures (RAM) are followed (see section 5)					
	Construction/post-construction - Positive impact may result through enhancement by					
	increased roost availability ^{24, 25}					
	Operational impact: - None predicted, however please note a summary of criminal					
	offences with respect to bats and roosts. http://www.bats.org.uk/pages/bats and the law.html					
Koy to Logislation and Mitigation Higrarchy						

Key to Legislation and Mitigation Hierarchy

CHSR – Conservation of Habitats and Species Regulations 20172⁶ - http://www.legislation.gov.uk/uksi/2017/1012/made W&CA – Wildlife & Countryside Act 1981 (as amended)²² - http://www.legislation.gov.uk/ukpga/1981/69/contents NPPF – National Planning Policy Framework 2019²⁵ - https://www.gov.uk/government/publications/national-planning-policy-framework--2

 \boldsymbol{A} – Avoid, \boldsymbol{M} – Mitigate, \boldsymbol{C} – Compensate, \boldsymbol{E} - Enhancement

5. Recommendations and Mitigation

The recommendations in this section are provided as information only and specialist legal advice may be required. If works are delayed for more than one year, then re-assessment may be required.

5.1 Survey constraints

The survey was undertaken at an appropriate time of year to assess roost potential. All areas were accessible during the survey to assess the likelihood for presence of bats.

5.2 Further survey requirements

In the professional opinion of the author there are **no further surveys required**. The justification for this is; BCT guidance suggests that for buildings with negligible roost potential no further surveys are required¹. The survey carried out to date follows this guidance, is proportionate to the scale of the development and the information provided is believed to be sufficient to inform the planning decision.

5.2 EPS Licence requirement

For any development that is likely to commit an offence (or offences) in respect to a European Protected Species (EPS) i.e. bat, or their habitat, a licence will be required. In this instance based on sufficient survey work **no licence is required**. If, in the unlikely event a bat was found during the demolition phase of the project, Reasonable Avoidance Measures (RAM) must be followed and will determine any further action, such as licensing if necessary.

5.3 Mitigation – Further Action

As there is a very low risk that bats may roost within the building, prior to demolition, precautions should be taken to reduce the probability of committing an offence. By undertaking Reasonable Avoidance Measures (RAM), if affected RAM should include:

Avoidance – Bats

- i. When roofing works are planned these should avoid the main breeding and mating season of Vespertilionidae bats, work should typically take place between the 1st November and 1st May inclusive.
- **ii.** Ensure all workers on site (including sub-contractors) are made familiar with bat legislation and agree to work in accordance with and fully follow best practice measures.
- **iii.** Carry out prior to demolition careful checks of any cracks/crevices and cavities in or on the building. Signs of usage include; bat droppings, dis-colouration or polishing of access points where bats rub against them, urine stains and a lack of cobwebs, particularly if other crevices around them have plenty.
- iv. Individual bats may be found in/under; cladding, between timber boards, between corrugated sheeting, in soffit boxes, behind lead flashing and sometimes just clinging to timber beams around joins as well as others areas. When any of these are removed, please do so carefully, lifting outwardly, and checking for bats continually. If in doubt, consult a licensed bat worker.
- v. Try to minimise any dust generated from demolition works from entering off-site buildings and gardens
- vi. In the unlikely event that a bat is found please see below:
 - 1. At no point should a worker handle a bat. Untrained handling may cause undue stress and injury to the bat, and if bitten may expose the worker to rabies-related European Bat Lyssavirus
 - 2. Where possible replace any covering without damaging the bat, then halt works and contact **Natural England** (Tel: 0845 601 4523), or the **Bat Conservation Trust Helpline** (0845 1300 228), or **IoSWT** (01720 422153) for advice.
 - **3.** Any bats that go to ground should be covered with a box and left alone until a licensed bat worker arrives to assess the condition of the bat
 - **4.** If the bat attempts to fly at any point allow it to do so. Preventing natural behavior will cause unnecessary stress and may cause injury. Attempt to see where bat goes. If the bat returns to the building, halt works and report the escaped bat to the local bat worker

Enhancement (E) – Bats

The Isles of Scilly have the most southern population of Common Pipistrelle (*Pipistrellus pipistrellus*) bats in the United Kingdom. The islands also hold small populations of Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brown Long-eared Bat (*Plecotus* auritus) both UK Biodiversity Action Plan (BAP) priority species and holds records for the rare Nathusius Pipistrelle (*Pipistrellus nathusii*). Any loss of roosting, commuting or foraging sites could have a detrimental effect on these species distributions as a whole and cause a net loss in biodiversity on the islands.

Each local planning authority in England and Wales has a statutory obligation under Part 3 Section 40 of the Natural Environment & Rural Communities Act 2006²⁷ (NERC 2006) to have due regard for biodiversity when carrying out their functions and under Section 15 paragraph 170(d) of the NPPF 2019, all planning policies and decisions shall contribute to and enhance the natural and local environment by providing net gains in biodiversity. **Therefore, to assist in meeting these obligations the following suggestion could be undertaken:**

- i. Erect a single integrated bat box (Habibat, or Schwegler) at the apex of the gable end of the proposed new 1st floor extension on the south-west elevation (See Appendix A for example and suppliers).
- ii. Or, erect two free-standing bat boxes developed for crevice-dwelling species (see Appendix A for example and suppliers) one on each of the north-east and south-west elevations. Erect as high as possible below the fascia of the roof and away from any external security lighting.
- **iii.** Replace lost vegetation from the existing border (south-west elevation) with species that provide a nectar source for invertebrates and will be attractive for bats to feed from (see Appendix B for suitable example plant and shrub species).

6. Summary

Gunner Rock (planning application P/20/073) is found to have negligible roost potential for bats, despite the optimal foraging habitat immediately surrounding the development and its commuting and foraging links to the wider countryside. In the professional opinion of the author no further surveys are required, and no EPS license is required. However, to enhance the area for local populations of bat and assist the local authority's obligation to provide net gain in biodiversity the erection of a single integrated bat box into the apex of the proposed 1st floor extension, or the erection of 2 free-standing bat boxes alongside some bat and insect friendly planting to replace the vegetation being lost as part of the new development should be undertaken.

If the recommendations given in this report are adhered to, there should be no further ecological constraints to the proposal.

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APPENDIX A – SUPPLIERS

1. Natural History Book Service

1-6 The Stables

Ford Road

Totnes

Devon, TQ9 5LE Tel: 01803 865913

Email: customer.services@nhbs.com
Website: https://www.nhbs.com/

2. Habibat

Tel: 01642 724626

Email: http://www.habibat.co.uk/contact

Website: www.habibat.co.uk

3. Dreadnought Tiles

Dreadnought Works

Brierley Hilly

West Midlands, DY5 4TH

Tel: 01384 77405

Email: sales@dreadnought-tiles.co.uk
Website: www.dreadnought-tiles.co.uk

4. Wildlife & Countryside Services

Covert Cottage Pentre Lane Rhuddlan

North Wales, LL18 6LA

Tel: 0333 9000927

Email: support@wildlifeservices.co.uk
Website: www.wildlifeservices.co.uk

5. Wildcare

Eastgate House Moreton Road Longborough

Gloucestershire, GL56 0QJ

Tel: 01451 833181

Email: sales@wildcare.co.uk
Website: www.wildcare.co.uk

APPENDIX 2 – SUITABLE PLANTING

List of species taken from the Bat Conservation Trust Leaflet: "Encouraging Bats. A Guide for Bat Friendly Gardening and Living" (BCT 2015)¹⁰

Plants marked * are hybrids or exotics that may be useful in the garden

Flowers for Borders	Flowering period
*Aubretia	Spring to early summer
Bluebell	Spring
*Candytuft	Summer to autumn
*Cherry pie	Summer to autumn
Corncockle	Summer to autumn
Corn marigold	Summer to autumn
Corn poppy	Summer to autumn
*Echinacea	Summer to autumn
*Evening primrose	Summer to autumn
Field poppies	Summer
*Honesty	Spring
*Ice plant 'Pink lady'	Early autumn
Knapweed	Summer to autumn
Mallow	Summer to autumn
*Mexican aster	Summer to autumn
*Michaelmas daisy	Summer to autumn
*Night-scented stock	Summer
Ox-eye daisy	Summer
*Phacelia	Summer to autumn
*Poached egg plant	Summer
Primrose	spring
*Red valerian	Summer to autumn
Scabious	Summer
St John's wort	Spring
*Sweet William	Summer
*Tobacco plant	Summer
*Verbena	Summer to autumn
*Wallflowers	Spring to early summer
Wood forget-me-not	Spring
Yarrow	Early summer
Herbs	Flowering period
Angelica	Summer
Bergamot	Summer to early autumn
Borage	Spring to early autumn
Coriander	Summer
Fennel	Summer to early autumn
Feverfew	Summer to early autumn
English marigold	Summer
Hyssop	Summer to early autumn
Lavenders	Summer
Lemon balm	Summer

Herbs	Flowering period
Marjoram	Summer
Rosemary	Spring
Sweet Cicely	Spring to early summer
Thyme	Summer
Trees, shrubs and climbers	Туре
*Bramble	climber
Buddleia	shrub
Common Alder	tree (suitable for coppicing)
Dog rose	climber
Elder	tree (small)
Gorse	shrub
Hawthorn	tree (suitable for coppicing)
Hazel	shrub (suitable for coppicing
Honeysuckle (native)	climber
Hornbeam	tree
*Jasmine (night-scented)	climber
Grey Willow	tree (suitable for coppicing)
Rowan	tree
Silver birch	tree
Ivy	climber