



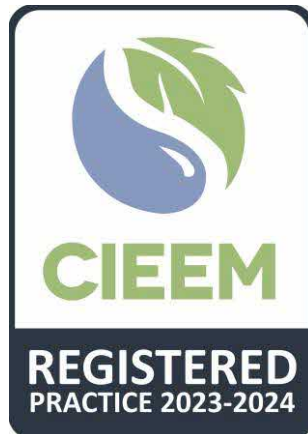
Update Ecological Impact Assessment (EcIA) & Preliminary Bat
and Bird Assessment Report

Meadowbrook House, 52 Grenville Rd, Lostwithiel, Cornwall

Grid Reference: SX 1122 5980

5th February 2024

Version 3



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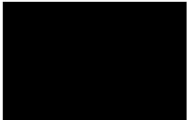


Document Control:

Site Name:	Meadowbrook House, 52 Grenville Road, Lostwithiel, Cornwall, PL22 0RA
OS Grid Reference:	SX 1122 5980
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Client:	Porthia Group Limited
Report Reference Number:	P4E2882
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Declaration:

"The information, evidence and advice, which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology & Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions."

Naomi Scala	
Lucy Wight	

Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. Typically, Cornwall Council considers Ecological Impact Assessment Reports (EcIAs) to be valid for one year (until June 2025), unless stated otherwise.



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1.0 Non-Technical Summary

Porthia Group Ltd commissioned Plan for Ecology Ltd to update the Ecological Impact Assessment/ Preliminary Ecological Appraisal, to include a Preliminary Bat and Bird Assessment of the buildings, at Meadowbrook House, Lostwithiel, Cornwall (OS Grid Ref: SX 1122 5980) in January 2023. The client has planning permission for a new 4 storey, 22 unit new build extra care apartment block and 11 additional parking spaces situated to the east of the site (planning reference: PA19/07117). The client proposes a revised scheme, to demolish the existing buildings and construct two new purpose-built premises providing 113 care beds and parking.

Plan for Ecology Ltd previously undertook a Preliminary Ecological Appraisal and a Preliminary Bat and Bird Assessment of the site in 2019 (Plan for Ecology, 2019). Plan for Ecology Ltd undertook an update Phase 1 Habitat Survey and Preliminary Bat and Bird Assessment of the buildings on 9th February 2023 to identify any changes to the Phase 1 Habitat types present and their potential to support protected species, followed by further bat surveys of the buildings in June 2023 (Plan for Ecology, 2023). This report describes and evaluates the results of the updated Ecological Impact Assessment in accordance with the 'Guidelines for Preliminary Ecological Appraisal' (CIEEM, 2017) and the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

The site, measuring c. 0.7 ha, is located off Grenville Road, on the easterly outskirts of the town of Lostwithiel, Cornwall. There are three features of ecological importance on-site: scattered trees (A3), native species-rich Cornish hedgerow with trees (J2.3.1), and introduced shrub with scattered trees (J1.4/ A3). Notable species / species groups with potential to occur on-site include reptile species (UK BAP; Schedule 5 WCA; NERC Act, 2006); breeding birds (Section 1 WCA; UK BAP; Section 41 NERC Act, 2006; RSPB Lists); bats (foraging and commuting and roosting) (UK BAP; Section 41 NERC Act 2006; EPS); dormouse (UK BAP; NERC Act 2006; EPS); amphibian species; hedgehog (UK BAP; NERC Act, 2006); badger (Protection of Badgers Act, 1992); and invertebrate species (UK BAP; Section 41 NERC Act, 2006). Ecological constraints and opportunities are detailed on the accompanying 'Ecological Constraints and Opportunities Plan' (ECOP) (below). Mitigation recommendations are summarised below:

- Hedgerow (loss and degradation): The current site proposals appear to retain all hedgerow habitat within the site. Retained and any new sections of hedgerow will be protected by incorporating a minimum 2m development free buffer at the base of the hedgerows. Hedgerows buffers will be fenced during the construction period.
- Any hedgerow loss will be mitigated by 1) translocating the hedgerow to a new part of the site (if feasible); or 2) by constructing a new hedgerow(s) elsewhere on-site to achieve a net gain of hedgerow habitat post-development. Hedgerows should not be enclosed by garden habitat on both sides.
- Scattered trees and hedgerow trees: Retain and protect scattered and hedgerow trees wherever possible. Any loss of mature trees will be compensated by replacement planting of an equivalent (or greater) number of trees within the site post-development. The proposed development appears to retain scattered and hedgerows trees with no loss evident.
- Follow BS5837: 2012 Trees in relation to design, demolition and construction and ensure that root protection areas of retained trees are observed; commission a specialist arboriculture assessment if BS5837 cannot be followed. Install tree protection fencing prior to construction activities commencing.



- Introduced shrub with scattered trees (loss): Mitigate loss of this habitat by seeding landscaped areas within the development with a native species-rich grassland seed mix (where feasible), and by planting native tree and shrub species in amenity areas and gardens.
- Badger: A pre-construction walkover to search for badger setts is required, to be undertaken no sooner than 8 weeks prior to works commencing.
- Badger, hedgehog and other mammals: Implement measures to 1) ensure that harm to individual animals during construction is prevented; and 2) provide continued access to the site post-development.
- Bats (commuting and foraging): In accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Colins, 2016) the site is assessed as being of 'low suitability' for commuting and foraging bats. Further surveys for foraging and commuting bats are not required due to the small size of the site. The indicative site layout has sought to retain/ incorporate important features for foraging and commuting bats (i.e., all hedgerows). A sensitive lighting scheme must be incorporated to prevent negative impacts on foraging and commuting bats; any artificial lighting proposed must be minimised and directed towards the centre and eastern areas of the site, away from retained semi-natural habitats such as the hedgerows.
- Bats (roosting): The two-storey section of Meadowbrook House was assessed as being of moderate suitability for roosting bats. Further emergence/ re-entry surveys are required. The single-storey sections of Meadowbrook House were assessed as being of negligible suitability for roosting bats; precautionary recommendations are provided. A Preliminary Ground Level Roost Assessment of trees did not form part of this assessment but would be required if any mature trees are to be felled/ pruned or impacted by artificial lighting.
- Breeding birds, reptiles and dormouse: Schedule works for a time of year when these species/ species groups will not be present/ susceptible to harm. Alternatively, carryout works under an ecological watching brief.
- Invasive plants: Montbretia (*Crococsmia × crocosmiiflora*) and rhododendron (*Rhododendron ponticum*) (Schedule 9 Wildlife and Countryside Act, 1981 invasive plant) are present within the site. Development of the site must be guided by an invasive plant mitigation method statement, to include a post-planning, pre-construction site survey between May – August.
- Two plants listed as injurious (harmful) under the Weeds Act (1959) are also present on-site: creeping thistle (*Cirsium arvense*) and broad-leaved dock (*Rumex obtusifolius*). Development of the site should include measures to control these species. Control measures will comprise targeted weed control (i.e., seasonal mowing, pulling or herbicide application).
- All Habitats: In Cornwall, all major developments must quantify and describe habitat loss using the latest version of the DEFRA Biodiversity Metric (Natural England, 2021, 2022). Cornwall Council require all major developments to give rise to a biodiversity net gain of at least 10%. NB. The requirement for biodiversity net gain calculations using the DEFRA metric will be confirmed by the Local Planning Authority.
- Further surveys & ecological monitoring: Further surveys for roosting bats of the two-storey section of Meadowbrook House are required. If it becomes necessary to remove and/ or prune any mature trees, or if any mature trees will be impacted by artificial lighting, then a Preliminary Ground Level Roost Assessment (PGLRA) of trees to be impacted may be required.



A pre-construction walkover to search for badger setts is required. Development of the site to be guided and monitored through the implementation of a Construction Environmental Management Plan (CEMP).

- Biodiversity Enhancements: There is opportunity to incorporate features to enhance aspects of the site for biodiversity. See the accompanying 'Ecological Constraints and Opportunities Plan' (ECOP) (below).

The baseline statement of predicted change (habitat losses and gains) resulting from the proposed development is summarised below:

Baseline statement of predicted change (ecologically valuable habitat losses and gains):

Ecological Receptor	Ecological Value	Loss (approximate)	Gain (approximate)
Introduced shrub/ scattered trees (J1.4/ A3)	Local Value	Likely 100%	To be confirmed
Scattered trees (A3)	Local Value	Understood to be zero (to be confirmed by client)	To be confirmed
Native species-rich hedgerow with trees (J2.3.1)	Local Value	Understood to be zero (to be confirmed by client)	Understood to be zero (to be confirmed by client)

The residual impact of the proposed development cannot be determined until the results of the recommended further surveys are available. This Ecological Impact Assessment (EcIA) will be updated and supplemented with detailed species survey reports following provision of the outstanding ecological survey information and finalized site layout.



2.0 Phase 1 Habitat Distribution and Ecological Constraints & Opportunities Plan (Map 1)

Map 1: Meadowbrook House, Cornwall - Phase 1 Habitat and Ecological Constraints and Opportunities Plan (ECOP)

Target Notes:
 1. Rhododendron ponticum - Schedule 9 WCA (1981) Invasive Plant
 2. Crocosmia x crocosmiflora - Schedule 9 WCA (1981) Invasive Plant

Opportunities:
 There is some opportunity to incorporate the following features/ measures that will likely enhance the value of the site for biodiversity:
 1. Install bat/ bird boxes within new buildings.
 2. Install bee bricks within new buildings.
 3. Construct deadwood piles within landscape parts of the site.
 4. Plant native tree and shrub species as opposed to introduced ornamental species within any landscaped parts of the site.
 5. Eradication of Schedule 9 (WCA, 1981) invasive plant species.
 6. Consider installing green roofs on the proposed new dwellings.

Constraint: Badger, hedgehog and other mammals
 Implement measures to ensure that harm to individual animals during construction is prevented and provide continued access to the site post-development. A preconstruction walkover to search for badger setts is required, to be undertaken sooner than 8 weeks prior to works commencing.

Constraint: Montbretia & Rhododendron (Schedule 9, WCA, 1981) are present within the site. Steps must be taken to prevent the inadvertent spread of these species. There is opportunity to eradicate these species from the site.

Constraint: Further surveys for roosting bats are required to inform the planning application. Preconstruction (postplanning) surveys are required for badgers and invasive plants.

Constraint: Introduced shrub with scattered trees (loss): Retain where possible then mitigate loss of dense scrub and scattered trees by planting native tree and shrub species, together with a mosaic of other ecologically valuable habitats to achieve a habitat of equivalent or greater ecological value postdevelopment.

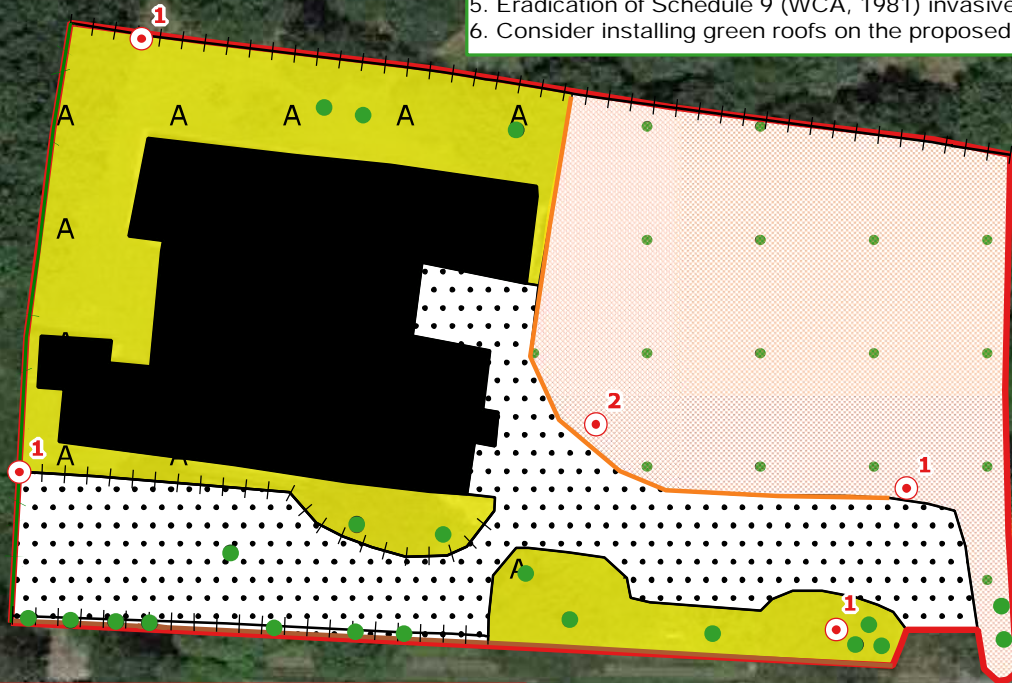
Constraint: All Habitats: In Cornwall, all major developments must quantify and describe habitat loss using the latest version of the DEFRA Biodiversity Metric. Cornwall Council require all major developments to give rise to a biodiversity net gain of at least 10%. NB. The requirement for biodiversity net gain calculations using the DEFRA metric will be confirmed by the Local Planning Authority.

Constraint: Scattered trees: Follow BS5837: 2012 Trees in relation to design, demolition and construction. Commission a specialist arboricultural survey if BS5837 cannot be followed.

Constraint: Bats (roosting): The two-storey section of Meadowbrook House was assessed as moderate suitability for roosting bats. Further surveys for bats in the form of two bat emergence/ re-entry surveys and a static detector survey in the bat active season (May-September) are required.

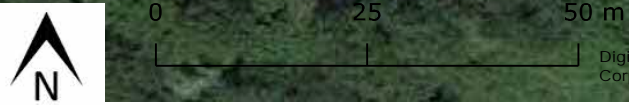
Constraint: Birds, reptiles & dormouse: Any future works will implement measures to ensure that harm to or disturbance of breeding and foraging birds, dormouse and reptiles during vegetation clearance/ construction works is prevented / minimised.

Constraint: Hedgerow (loss/ degradation): Retain the west site boundary hedgerow. Retained hedgerows must be protected with a minimum 2m development-free buffer at the base of the hedgerow; to be fenced during the construction period to protect hedgerows from degradation arising from construction.



Key

- Scattered tree
- ⊙ Target note
- ⊢⊢ Fence
- Native species-rich hedgerow with trees
- Stone-faced earth bank
- Wall
- Approx site boundary
- Amenity grassland
- Bare ground
- Building
- Introduced shrub with scattered tree





3.0 Introduction

3.1 Background & Purpose of Survey

Porthia Group Ltd commissioned Plan for Ecology Ltd to update the Ecological Impact Assessment/ Preliminary Ecological Appraisal and Preliminary Bat and Bird Assessment of Meadowbrook House, Lostwithiel, Cornwall (OS Grid Ref: SX 1122 5980) in January 2023. The client has planning permission for a new 4 storey, 22 unit new build extra care apartment block and 11 additional parking spaces to the east of the site (planning reference: PA19/07117). The client proposes a revised scheme, to demolish the existing buildings and construct two new purpose-built premises proving 113 care beds and parking. Plan for Ecology Ltd previously undertook a Preliminary Ecological Appraisal and Preliminary Bat and Bird Assessment of the site in 2019 (Plan for Ecology Ltd, 2019). Plan for Ecology Ltd undertook an update Phase 1 Habitat Survey and Preliminary Bat and Bird Assessment of the site on 9th February 2023 to identify any changes to the Phase 1 Habitat types present and their potential to support protected species, followed by further bat surveys in June 2023 (Plan for Ecology, 2023). The proposed site layout is provided in Appendix 1. A location plan showing the designated sites of nature conservation importance within a 1 km radius of the site is provided at Appendix 2. The Phase 1 Habitat distribution is shown on Map 1 above.

3.2 Site Location & Description

The site, measuring c. 0.7 ha, is located off Grenville Road, on the eastern outskirts of the town of Lostwithiel, Cornwall, c. 7.9 km south of Bodmin, and c. 9.7 km north-east of St Austell, Cornwall. A plan showing the location of the site and of designated sites of nature conservation importance is shown at Appendix 2. The site comprises the existing nursing home buildings, with amenity grassland, hardstanding and scattered trees. An area of introduced shrub with scattered trees is situated to the east of the building. A native species-rich Cornish hedgerow with trees forms the west site boundary, a fence forms the north site boundary and a stone-faced earth bank forms the south site boundary. Beyond the site boundary, Grenville Road is situated to the south, with mixed farmland beyond, residential development is situated to the east and west and mixed farmland to the north.

3.3 Proposed Site Plans

The client has planning permission for a new 4 storey, 22 unit new build extra care apartment block and 11 additional parking spaces to the east of the site (planning reference: PA19/07117). The client proposes a revised scheme, to demolish the existing building and construct two new purpose-built premises proving 113 care beds and parking.; an indicative site layout is provided at Appendix 1.



3.4 Project Administration

Site Name:	Meadowbrook House, 52 Grenville Road, Lostwithiel, Cornwall, PL22 0RA
OS Grid Reference:	SX 1122 5980
Client:	Porthia Group Ltd
Planning Authority:	Cornwall Council
Report Reference Number:	P4E2882
Site proposals:	Demolition of existing care home and construction of two new purpose-built premises with parking.
Survey Date:	9 th February 2023
Surveyor & Licence Numbers:	Naomi Scala BSc (Hons), MSc, ACIEEM (Bat licence no: 2018-34120-CLS-CLS; Dormouse licence no: 2016-20661-CLS-CLS)

4.0 Methodology

This assessment has been carried out in accordance with the 'Guidelines for Preliminary Ecological Appraisal' produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017); CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018); and BS42020-2013 Biodiversity – Code of Practice for Planning & Development, as adopted by local planning authorities (British Standard, 2013).

4.1 Survey Methods

The Ecological Impact Assessment (EcIA):

The Ecological Impact Assessment (EcIA) comprised a desk study, a survey and a report. The desk study is a search of all ecological records and site designations held by the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS, to 2023) within a 1km radius of the site. The distance between the site boundary and nearby European sites was measured using MAGIC <http://www.magic.gov.uk> and the Cornwall Council Interactive Map <https://www.cornwall.gov.uk/mapping> was used to determine if the site falls within a European site Zone of Influence.

The update survey comprised an extended Phase 1 Habitat Survey. The site is defined as all land within the red boundary as shown on Map 1 above. The Phase 1 Habitat Survey identifies the habitats present and their associated plant species (JNCC, 2010), and assesses the potential of the site to support protected species. The surveyor also searched for conspicuous invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (WCA) (1981, as amended) within the site area and 7m beyond the site boundary (where access was available); and evidence of badger, notably setts, within the site and within 30m of the site boundary (where access was available); however, a detailed survey for these species was not undertaken.

The Preliminary Bat & Bird Assessment:

The ecologist assessed the suitability of the buildings, and the surrounding habitat to support bats and birds. A high-power torch was used to illuminate all accessible areas of the building with



potential to support roosting bats and roosting/ nesting birds. The ecologist searched for signs of bats and birds including droppings, staining, feeding remains, bird nests, barn owl pellets and liming. Accessible crevices with potential to conceal a roosting bat were inspected using an endoscope.

4.2 Ecological Impact Assessment (EclA)

Within the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018), produced by the Chartered Institute of Ecology and Environmental Management (CIEEM), CIEEM recommend an approach to ecological evaluation that utilises available guidance and information, such as the distribution and status of the species or features within the locality of the site, and professional judgment.

The methods and standards for site evaluation within the British Isles are defined in 'A Nature Conservation Review' (Ratcliffe, 2009). They are broadly used across the United Kingdom to rank sites, so priorities for nature conservation can be attained. The criteria are size, diversity, naturalness, rarity and fragility, with secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units.

The assessment judges features within the site in relation to other sites because a number of habitats may be of nature conservation importance when combined. Habitats of local importance are often highlighted within a local BAP.

Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.

The legislative and planning policy context are important and have been given full consideration in this assessment.

The likely value of ecological features is determined within a geographical context in accordance with the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018). Value is assigned in decreasing order of importance as follows: International/ European, UK, Regional (southwest), County, District, Parish, Local, within the Zone of Influence and Negligible.

There are also a number of other important considerations as follows:

- Designated Sites and Features (e.g. Special Protection Areas, SPA; SAC; Sites of Special Scientific Interest, SSSI; ecologically important hedgerows etc.);
- Biodiversity Value (use of BAP and local development plans);
- Potential Value;
- Secondary or Supporting Value;
- Social or Economic Value; and
- Legal Designation.

Ecologically important features to be affected by the proposed development were identified using the criteria described above. Likely impact upon a feature(s) was determined to be significant or not by considering the factors that categorize its ecological structure and function.

Where an impact (positive or negative) on the integrity of a defined feature (habitat, species or ecosystem) was identified, the impact significance has been described in the following terms: major, moderate, minor and negligible. The likelihood of the impact occurring was described as: certain / near certain (probability estimated at 95% chance or higher), probable (probability



estimated above 50% but below 95%), unlikely (probability estimated above 5% but below 50%) and extremely unlikely (probability estimated below 5%). Reference has also been made to the extent and magnitude of impact (i.e. area affected) and duration (short-term impacts associated with construction and long-term impacts associated with the operational phase of the development). A significant effect is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general (CIEEM, 2019).

The impact significance of the proposed development on the integrity of the site as a whole has been determined using the framework described above. Site integrity has been defined as follows: 'The integrity of a site is the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified (CIEEM, 2017). Site integrity is dependent on the extent, magnitude and duration of impacts upon each ecological feature (habitats or species). The accumulative impact, across all features, is therefore used to determine overall impact significance on the integrity of the site, and in EIA terms. Available guidance and information, such as the distribution and status of the species or features, and professional judgment have been used to determine impact significance. Where an identified adverse impact cannot be fully mitigated, the residual impact remains. This residual impact in combination with similar impacts locally could constitute a cumulative impact. Due to the small scale and nature of the proposed development, only cumulative impact arising from potential development of adjoining land is considered within this assessment.

This report describes and evaluates the ecological interest of the site, identifies potential impacts that the works may have on wildlife, and provides recommendations to mitigate/compensate for these impacts, in accordance with the 'Guidelines for Preliminary Ecological Appraisal' produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017) and BS42020-2013 Biodiversity – Code of Practice for Planning & Development (British Standard, 2013).

Recommendations are provided using the Mitigation Hierarchy in accordance with BS42020-2013 (British Standard, 2013). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures. Possible enhancements are also detailed.

4.3 Bat Roost Evaluation

Potential bat roosts identified during the visual inspection of the buildings were categorised as to their suitability in accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins, 2016) as described below:

Negligible: negligible features with potential to support roosting bats.

Low: one or more features with potential to support individual bats on an occasional basis. Unlikely to support large numbers of bats.

Moderate: one or more features with potential to support roosting bats but unlikely to be of high conservation status.

High: one or more features with potential to support large numbers of bats on a regular basis.



4.4 Limitations

February is a sub-optimal time of year to undertake vegetation surveys (Phase 1 Habitat surveys) because some species (including some Schedule 9 WCA, 1981, invasive plant species and bluebell (*Hyacinthoides non-scripta*) (Schedule 8 WCA, 1981)), will have undergone vegetative dieback and may not be visible, although the vegetative characteristics of most species will be visible enabling species identification and habitat classification in most instances. In general, however, Phase 1 Habitat surveys can be undertaken at any time of year because vegetative characteristics enable categorisation of Phase 1 habitat types.

The area of introduced shrub and scattered trees to the east of the site was not accessed. Hedgerow and introduced shrub with scattered trees on-site have potential to conceal a badger sett.

Weather conditions during the surveys were in line with seasonal norms. There are no limitations to the surveys associated with weather conditions.



5.0 Assessment Results

5.1 Designated Sites and Local Conservation Initiatives

The site is not located within a designated site of nature conservation importance. There are, however, two designated sites of nature conservation importance located within 1 km of the site boundary: Upper Fowey and Pont Pill Marine Conservation Zone (MCZ), and Lantyan, Woodgate & Penquite Woods County Wildlife Site (CWS) (R/CN4.7); these sites are described below and their locations are shown on the designated sites plan at Appendix 2.

- Upper Fowey and Pont Pill MCZ: this site is representative of the estuarine habitats found across the south-west region. The habitats and associated species within the site make an important contribution to the marine protected areas network. The Fowey estuary contains intertidal mud and sediments, as well as saltmarshes and unusual estuarine rocky habitats which create an environment capable of supporting a diverse range of species. This designated site is located c. 600m west of the proposed development site.
- Lantyan, Woodgate & Penquite Woods CWS (R/CN4.7): this site forms part of the Fowey River system, with the majority of the site ancient semi-natural woodland. The site is designated for the presence of the UK BAP Priority Habitats: Upland Oakwood, Intertidal Mudflats and Coastal Saltmarsh; and the UK BAP Priority Species: Curlew (*Numenius arquata*), song thrush (*Turdus philomelos*), herring gull (*Larus argentatus*), dormouse (*Muscardinus avellanarius*), otter (*Lutra lutra*) and lesser horseshoe bat (*Rhinolophus hipposideros*). The designated site is located c. 770m south-west of the proposed development site.

The site is considered to be sufficiently distant for the proposed constructional activities and subsequent operational use not to impact the Upper Fowey and Pont Pill MCZ and the Lantyan, Woodgate & Penquite Woods CWS.

The site does not fall within a Zone of Influence of European Sites (Special areas of Conservation (SAC) and Special Protection Areas (SPA) that are vulnerable to recreational impacts; the proposals are unlikely to increase recreational pressure within the wider area.

5.2 Site Description

In general, the habitats within the survey area are largely as described in Plan for Ecology Ltd (2019) (Map 1). A total of nine Phase 1 Habitats were recorded within the site during the updated Phase 1 Habitat Survey: scattered trees (A3), amenity grassland (J1.2), introduced shrub with scattered trees (J1.4/ A3), native species-rich hedgerow with trees (J2.3.1), building (B6), bare ground (J4), stone-faced earth bank (J2.8), wall (J2.5) and fence (J2.4) (see Map 1 above for the Phase 1 Habitat Distribution) (Figures 1 – 12). Of the habitats within the site, introduced shrub with scattered trees (J1.4/ A3), scattered trees (A3) and native species-rich hedgerow with trees (J2.3.1) are considered to be of significant ecological value. NB: Habitats of negligible or low ecological value may support protected or notable species; see section 3.4 in relation to species. Amenity grassland (J1.2), stone-faced earth bank (J2.8), building (J3.6), bare ground (J4), wall (J2.5) and fence (J2.4) are of low or negligible ecological value and are briefly described below:

Amenity grassland (J1.2)



The gardens of the nursing home consist of amenity grassland (Fig 1). Vegetation comprises dominant Yorkshire fog; frequent ribwort plantain, creeping buttercup, creeping thistle and ground ivy; occasional hart's tongue fern, dandelion, selfheal and hogweed; and locally frequent white clover, primrose and bamboo. Overall, amenity grassland offers limited ecological opportunities for biodiversity and is considered to be of no greater biodiversity value than 'within the Zone of Influence'.

Building (B6)

Meadowbrook House is an 1870's building which was converted into a nursing home in 1984. The nursing home consists of the original main two-storey building with several single storey extensions (Figs 7-12). The building is proposed to be demolished to allow for the development.

This habitat is largely devoid of vegetation. The building itself is considered to be of negligible ecological value. The potential of the building to support roosting bats and nesting birds is discussed in section 5.4 below.

Bare ground (J4)

Bare ground habitat consists of a tarmac access road running through the centre of the site and parking areas (Map 1; Fig 2). This feature is largely devoid of vegetation. Bare ground habitat offers very limited ecological opportunities for biodiversity and is considered to be of negligible ecological value.

Stone-faced bank (J2.8)

A stone-faced earth bank which slopes upwards into the amenity grassland forms the south site boundary. This habitat does not qualify as the UK BAP priority habitat 'hedgerow' as it is devoid of shrubs. Overall, this habitat offers limited ecological opportunities for biodiversity and is considered to be of no greater biodiversity value than 'within the Zone of Influence'.

Fence (J2.3.4)

A wooden fence forms the north site boundary and bounds the parking area to the south of the site (Map 1; (Figs 1-2). This feature is largely devoid of vegetation and is considered to be of negligible ecological value.

Wall (J2.5)

A wall is situated either side of the access road and carpark area (Map 1; Fig 3). This feature is largely devoid of vegetation and is considered to be of negligible ecological value.

The assemblage of vascular plant species associated with each habitat including Latin names is provided in the table at Appendix 3. A description of notable habitats and species is provided below.



Figure 1: View of amenity grassland and fence to the north of the site.



Figure 2: View of parking area, with fence beyond, to the south of the site.



Figure 3: View of wall, with introduced shrubs and scattered trees beyond.



Figure 4: View of introduced shrubs with scattered trees to the east of the site.



Figure 5: View of native species-rich hedgerow with trees forming the west site boundary.



Figure 6: View of scattered trees to the south of the site.



Figure 7: View of south elevation of two-storey section of Meadowbrook House.



Figure 8: View of north elevation of two-storey section of Meadowbrook House, showing single-storey office in front; red arrow shows access into void.



Figure 9: View of south elevation of single-storey extensions to the north of Meadowbrook House.



Figure 10: View of north and west elevations of single-storey extensions to the north of Meadowbrook House.



Figure 11: View of west elevation of single-storey extensions to the west of Meadowbrook House.



Figure 12: View of south elevation of single-storey extensions to the west of Meadowbrook House.



5.3 Notable Habitats

Introduced shrub with scattered trees (J1.4/ A3):

An area of introduced shrub with scattered immature trees is situated to the east of the site (Map 1; Fig 4). Vegetation comprises abundant ash and bramble; frequent buddleja, creeping buttercup, sycamore and willowherb species; occasional rhododendron (Schedule 9, WCA, 1981), English oak, cypress, creeping thistle (Weeds Act, 1959), ivy, Montbretia (Schedule 9, WCA, 1981), common figwort, holly, teasel, and prickly sow thistle; locally abundant white clover and pendulous sedge; and locally frequent herb Robert, nipplewort and red valerian. Lords-and-ladies and pampas grass occur rarely.

Introduced shrub with scattered trees provides potential habitat for nesting birds, hedgehog, badger, invertebrate species, and commuting and foraging bat species, but due to the small area within the proposed development site, this habitat is considered unlikely to be of significant value for these species groups.

Introduced shrub with trees is considered to be of up to Local Value for biodiversity.

Under the current proposals, introduced shrub with scattered trees habitat within the site is likely to be lost to allow for the proposed development. In the absence of mitigation, loss of introduced shrub with scattered trees is considered likely to have a long-term negative impact of likely occurrence, of minor significance on a local scale. Mitigation measures are provided in Section 6.2 below.

Scattered trees (A3)

Mature and immature scattered trees are situated within garden (amenity grassland) habitat on-site and along the south site boundary (Map 1; Fig 6). Tree species comprise occasional apple, hazel, plum, beech and pine species. Rowan and copper beech occur rarely.

Scattered trees provide potential habitat for nesting birds and commuting and foraging bat species, and with time will provide habitat for a greater number of invertebrates and non-vascular plants.

Scattered trees on-site are considered to be of up to Local Value for biodiversity.

According to current proposals, all scattered trees will be retained and protected on-site. Construction activities and operational use of the site have potential to result in degradation of retained scattered trees. In the absence of mitigation, degradation of scattered trees is considered likely to have a short-term negative impact of likely occurrence, of minor significance on a local scale. Mitigation measures are provided in Section 6.2 below.

Native species-rich hedgerow with trees (J2.3.1)

A native species-rich hedgerow with trees forms the west site boundary (Fig 5).

Tree and shrub species present comprise frequent hazel, ivy and bramble; and occasional ash, sycamore, holly and hawthorn. Herbaceous vegetation comprises frequent harts tongue fern; occasional dandelion, nettle, herb Robert, broad-leaved dock (Weeds Act, 1959), cleavers, red campion and pendulous sedge; and locally frequent lords-and-ladies, bracken, moss species and enchanter's nightshade.



Hedgerow with trees on-site qualifies as the UK BAP priority habitat and Section 41 NERC Act (2006) habitat of principle importance, hedgerow.

Hedgerow habitat enhances connectivity across the site, providing a potential corridor through which wildlife can travel. Hedgerow vegetation on-site provides potential habitat for nesting birds, dormouse, reptile species, invertebrate species, badger, hedgehog and commuting and foraging bat species.

Hedgerow habitat on-site is considered to be of up to Local Value for biodiversity.

The site proposals retain all hedgerow habitat on-site. Construction activities and operational use of the site have potential to result in the degradation of retained hedgerow habitat. In the absence of mitigation, degradation of hedgerows is considered likely to have a long-term negative impact of likely occurrence, of minor significance on a local scale. Mitigation measures are provided in Section 6.2 below.

5.4 Notable Species

Notable species and species groups with potential to use the site are described below:

Badger

There are six records for badger (*Meles meles*) within a 1km radius of the site (ERCCIS, 2023); this indicates that badger is common and widespread within the area and is likely to use the site on occasion. No badger setts were recorded on-site or within 30m of the site boundary (where access was available) and no evidence of badger was recorded on-site. Hedgerow vegetation and introduced shrub with scattered trees has limited potential to conceal a badger sett. It is likely that introduced shrub with scattered trees habitat will need to be cleared to allow for the development. A preconstruction survey for badger is required to ensure that no badger setts are present on site.

The site provides likely foraging habitat for badger, a common and widespread species in the UK. The proposed development site is unlikely to be of significant importance for badger due to the small size of the site (c. 0.7 ha) and likely absence of badger setts. Habitat (woodland, scrub, hedgerows and grassland) within the wider area (off-site) is likely to be of significantly greater value for badger than habitat on-site.

Although widespread and common in Cornwall, badgers and their setts are legally protected under the Protection of Badgers Act 1992 (HM Government, 1992) (see Appendix 4).

The site is considered to be of no greater importance for badger than 'within the Zone of Influence'. Construction activities have potential to disturb or harm individual animals (trap individual animals within excavated pits/ trenches) and disrupt foraging activities. The nature of the identified impacts on badger is considered to be short-term in duration, of unlikely occurrence, negative within the Zone of Influence and of minor significance.

A preconstruction badger walkover survey to search for badger setts is recommended as outlined above. Works within 30m of a badger sett may require a licence from Natural England.

See Section 6.3 below for mitigation measures.

Bats (Commuting and Foraging)



The ERCCIS desk study revealed 26 records for 10 bat species within 1km of the site. These comprise 11 records for common pipistrelle bat (*Pipistrellus pipistrellus*), 1 record for daubenton's bat (*Myotis daubentonii*), 1 record for whiskered/ brandts bat (*Myotis mystacinus/ brandtii*), (European Protected Species, EPS; Cornwall Red Data Book, CRDB), 1 record for noctule bat (*Nyctalus noctula*), 4 records for brown long-eared bat (*Plecotus auritus*), 3 records for soprano pipistrelle (*Pipistrellus pygmaeus*) (EPS; CRDB; UK BAP priority species; Section 41 NERC Act (2006)), 1 record for lesser horseshoe bat (*Rhinolophus hipposideros*), 1 record for greater horseshoe bat (*Rhinolophus ferrumequinum*), 1 record for barbastelle bat (*Barbastella barbastellus*) (EPS; CRDB; UK BAP priority species; Section 41 NERC Act (2006); Annex II Habitats Directive), and 2 records for pipistrelle bat (*Pipistrellus*) (EPS).

Habitats on-site with the potential to support foraging and commuting bats are limited to the west site boundary hedgerow, scattered trees and introduced shrub with scattered trees. Due to the small size of these habitats, as well as the site in general, the site is unlikely to be of significant importance for commuting and foraging bats. In accordance with the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (2016) the site is assessed as being of 'low suitability' for commuting and foraging bats. No further surveys are recommended.

Off-site woodland and hedgerow habitat provide potentially important foraging and commuting routes for bat species.

The site is considered to be of up to Local Value for foraging and commuting bat species. NB: this is based on the quality of habitat present and the species recorded within 1km of the site, and not on detailed survey.

In the UK all bat species are European Protected Species (EPS) protected under both UK and European Legislation; for further information on legal protection see Appendix 4.

The indicative site plans indicate that the hedgerow will be retained, and new garden and amenity areas will be incorporated, which will provide continued foraging and commuting habitat for bats. Therefore, subject to implementation of a sensitive lighting scheme, designed to retain the west site boundary hedgerow unlit, development of the site is unlikely to significantly impact foraging and commuting bats. Further surveys are not recommended.

Construction activities and operational use of the site, including installation of artificial lighting, have potential to disrupt bat foraging activity and commuting routes. The nature of the identified impacts on bat species is considered to be long-term in duration, of likely occurrence, negative on a local level and of minor significance. Mitigation measures are provided in Section 6.3.

Bats (roosting)

Meadowbrook House comprises the original two-storey building with numerous single storey extensions.

The original building is an 1870's two-storey building of brick construction with a pebble dash finish and a pitched slate tile roof (Figs 7-8). The building supports Victorian ornate clay ridge tiles and wooden soffits. A gap/ vent on the north elevation provides potential bat access to the roof void (Fig 8). Internally, there is one large L-shaped void above the first floor with a traditional roof structure. The roof is bitumen lined and there is rolled insulation between the joists. There is a large central brick chimney and single water tank. Gaps at the wall tops provide access into the



void. A scattering of c. 1000 bat droppings was observed throughout the void, with clusters of bat droppings observed under the central ridge (Fig 13). Moth wings (potential bat feeding remains) were observed centrally, beneath the central ridge and below the apex at the southern elevation (Fig 14). The original building was assessed as being of moderate suitability for roosting bats.

A single-storey brick-built office is situated to the north of the original building (Fig 8). The office supports a slate hip roof which has recently been re-roofed with clay ridge tiles. Externally, there are no obvious gaps and it is well sealed throughout. Internally, the office has a small void with a traditional roof structure. The roof is lined with a synthetic membrane and is heavily cobwebbed. There was no evidence of roosting bats. The office was assessed as being of negligible suitability for roosting bats.

A single storey extension of stone construction with a slate hip roof is situated to the north west of the office (Fig 9). There are no obvious gaps externally and roof tiles are well sealed throughout. Internally, there is one large void with a traditional roof structure which is lined with a synthetic membrane. There is rolled insulation between the joists. There was no evidence of roosting bats. This extension was assessed as being of negligible suitability for roosting bats.

A single storey long extension is situated to the north of the original building (Figs 9-10). The extension is of stone construction with a pitched slate roof, clay ridge tiles and plastic soffits. Externally, the long extension is well sealed with no obvious gaps. Internally, the long extension is divided into three voids. The voids have a traditional roof structure, rolled insulation between the joists and are lined with a synthetic membrane. There was no evidence of roosting bats in any of the three voids. The long extension was assessed as being of negligible suitability for roosting bats.

A single storey extension is situated to the west of the original building, running north to south (Fig 11). This extension is of stone construction with a slate pitched roof. There are no obvious gaps externally and the tiles are well sealed throughout. Internally, there are two voids with a traditional roof structure, lined with a synthetic membrane and rolled insulation between the joists. There was no evidence of roosting bats in either of the voids and this part of the building was assessed as being of negligible suitability for roosting bats.

A single storey extension is situated to the west of the original building, running east to west (Fig 12). This extension is of stone construction with a slate hip roof. There are no obvious gaps externally and the tiles are well sealed throughout. Internally, there is one void with a traditional roof structure, lined with a synthetic membrane and rolled insulation between the joists. There was no evidence of roosting bats and this part of the building was assessed as being of negligible suitability for roosting bats.

In the UK all bat species are European Protected Species (EPS) protected under both UK and European Legislation; for further information on legal protection see Appendix 4.

Proposals require demolition of Meadowbrook House. Further bat emergence/ re-entry surveys of the two-storey section are required to inform the proposed development (see section 6.3). The importance of the site for roosting bats, and the likely impact of the proposed development on these species, cannot be determined until the results of the further surveys are available.

See section 6.3 below.



Figure 13: View of bat droppings within two-storey section.



Figure 14: View of bat droppings and moth wings beneath the apex at the southern elevation of the two-storey section.



Hedgehog

The ERCCIS desk study revealed 13 records for hedgehog (*Erinaceus europaeus*) (UK BAP priority species/ Section 41 NERC Act (2006) species of principal importance) within 1km of the site (ERCCIS 2023). Hedgerow, introduced shrub with scattered trees and grassland on-site provide potentially suitable habitat for hedgehog, as do the gardens of nearby properties located off-site.

The site is considered to be of no greater importance for hedgehog than 'within the Zone of Influence' (if present). Development of the site is unlikely to negatively impact hedgehog; proposed amenity and landscaped areas are likely to provide continued habitat for this species post-development. In the absence of mitigation, the nature of the identified impacts on hedgehog is predicted to have a short-term negative impact, of unlikely occurrence and minor significance within the Zone of Influence. Some precautionary measures are recommended to prevent harm to individual animals; see Section 6.3 for mitigation recommendations.

Dormouse

The ERCCIS desk study revealed two records for dormouse within a 1km radius of the site.

The hazel dormouse (*Muscardinus avellanarius*) occurs within woodland, hedgerows and scrub habitats. There are limited suitable habitats for dormice on-site and the site is poorly connected to suitable habitat off-site. Furthermore, the current proposals retain all hedgerow habitat.

The hazel dormouse is a European Protected Species (EPS) protected under both European and UK Legislation; see Appendix 4 for further information on legal protection in the UK. Dormice and their nests are legally protected under the Conservation Regulations 2017 (as amended), Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (see Appendix 4); they are also UK and Cornwall BAP priority species for conservation and are listed under Section 41 of the NERC Act (2006) as a species of principle conservation importance (see Appendix 4).

The site is considered to be of no greater importance for dormouse than 'within the Zone of Influence' (if present) due to the small site area. The site proposals retain and protect hedgerow habitat on site.

Further surveys for dormouse are not recommended but some precautionary recommendations are provided to prevent harm/ disturbance to individual animals.

Development of the site is unlikely to negatively impact dormouse, but construction activities have some potential to disturb and/ or harm individual dormouse (if present). In the absence of mitigation, the nature of the identified impacts on dormouse is predicted to have a short-term negative impact, of unlikely occurrence and of minor significance within the Zone of Influence. Precautionary measures to avoid and mitigate any potential impacts on dormouse are provided in section 6.3 and must be implemented.

Otter

There are three records for otter (*Lutra lutra*) (CRDB; UK BAP priority species) within 1km of the site (ERCCIS 2023). Otter typically inhabit semi-aquatic habitats such as rivers and streams, but also utilise grassland, hedgerows and woodland. Due to the lack of any standing or running water, or any wetland habitat, the site is unlikely to be of significant importance for otter.

The site is considered to be of negligible value for otter. Further surveys for otter are not recommended.

Other mammals



The ERCCIS desk study returned five records for Harvest mouse (*Micromys minutus*) (Section 41 NERC Act (2006); CRDB) within a 1km radius of the site (ERCCIS, 2023). The harvest mouse is typically associated with arable fields, but also inhabits reed beds, grassland and hedgerow habitats. The native species-rich hedgerow on-site and immediate margins provide some potentially suitable habitat for this species. The site is considered to be of no greater value for harvest mouse than 'within the Zone of Influence' (if present).

The current site layout retains all hedgerow habitat. Development of the site is unlikely to negatively impact harvest mouse, but construction activities have some potential to disturb and/or harm individual animals (if present). In the absence of mitigation, the nature of the identified impacts on harvest mouse is considered to be short-term, negative, of unlikely occurrence, and of minor significance within the Zone of Influence. See section 6.3 for precautionary mitigation recommendations.

Reptiles and Amphibians

The ERCCIS desk study revealed four records for slow worm (*Anguis fragilis*) (UK BAP priority species; Section 41 NERC Act (2006); Schedule 5 Wildlife & Countryside (WCA)) within a 1km radius of the site.

The desk study also revealed two records for common toad (*Bufo bufo*) (UK BAP priority species; Section 41 NERC Act (2006)), eight records for common frog (*Rana temporaria*) and one record for palmate newt (*Lissotriton helveticus*) (amphibian species).

Reptiles: slowworm, adder (*Vipera berus*), common lizard (*Zootoca vivipara*) and grass snake (*Natrix natrix*), the four commonly occurring reptile species in the UK, are protected under Schedule 5 of the WCA (1981, as amended); see Appendix 4 for further details of legal protection.

On-site suitable habitat for reptiles, notably slowworm and common lizard, is confined to the native species-rich Cornish hedgerow and immediate adjacent margins. Adder and grass snake tend to have more complex habitat requirements that are unlikely to be met by conditions on-site.

Further surveys for reptiles are not recommended because the site is dominated by hardstanding and buildings, with regularly managed amenity grassland, which is likely to be largely unsuitable for reptile species and because all hedgerow habitat is retained under the proposals. Impacts upon reptiles arising from the proposed development are, therefore, anticipated to be low.

The site is considered to be of no greater importance for reptile species than 'within the Zone of Influence' (if present). Development of the site is unlikely to impact the local reptile populations, but construction activities have potential to disturb and/or harm individual animals (if present). In the absence of mitigation, the nature of the identified impacts on reptile species is considered to be short-term in duration, of unlikely occurrence, negative within the Zone of Influence, and of minor significance. Follow mitigation for habitats (section 6.2).

Habitat on-site also has potential to support the commonly occurring amphibian species common toad, common frog and palmate newt; however, the site lacks standing water, a prerequisite for breeding amphibians.

The site is considered to be of no greater importance for amphibian species than 'within the Zone of Influence' (if present). Development of the site is unlikely to impact the local amphibian populations, but construction activities have potential to disturb and/or harm individual animals (if present). In the absence of mitigation, the nature of the identified impacts on amphibian species is



considered to be short-term in duration, of unlikely occurrence, negative within the Zone of Influence, and of minor significance. Follow mitigation for habitats (section 6.2).

Birds

A large number of bird species have been recorded within a 1km radius of the site (ERCCIS, 2023). On-site, suitable bird nesting habitat is present in the building, hedgerows, scattered trees and introduced shrub with scattered trees. Species of conservation significance recorded within a 1km radius of the site, and with potential to breed within habitat on-site, are as follows: starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), yellowhammer (*Emberiza citrinella*), swift (*Apus apus*) (RSPB Red List; UK BAP; Section 41 NERC Act (2006)), song thrush (*Turdus philomelos*), hedge sparrow (*Prunella modularis*), wren (*Troglodytes troglodytes*) and bullfinch (*Pyrrhula pyrrhula*) (RSPB Amber List; UK BAP priority species; Section 41 NERC Act (2006)).

All birds are legally protected whilst nesting under the WCA (1981, as amended) (Appendix 4).

The buildings on site were visually inspected and assessed for their potential to support nesting birds including barn owl (*Tyto alba*). The survey identified no evidence of use of the buildings by barn owl. A large likely jackdaw (*Coloeus monedula*) nest was observed at the apex at the northern elevation of the two-storey section (Fig 15). Demolition of the building and clearance of introduced shrub with scattered trees to allow for the development has the potential to disturb or harm nesting birds. Measures to avoid and mitigate potential impacts on nesting birds during works to the building and clearance of vegetation on-site are provided in section 6.3.

Whilst the site has potential to support breeding bird species of conservation significance, the site is small. The indicative site layout proposes new planting and retains existing hedgerows and some grassland habitats; and there is potential to enhance the value of these habitats for breeding birds. Overall, the site is considered unlikely to be of significant conservation importance for breeding birds; and the proposed site plans are unlikely to significantly impact the local breeding bird population.

The site is considered to be of up to Local Value for birds. In the absence of mitigation, the nature of the identified impacts on bird species is predicted to have a long-term negative impact, of likely occurrence and of minor significance on a local level. Mitigation recommendations are provided in section 6.3.



Figure 15: View of likely jackdaw nest within two-storey section.

Invertebrates

The ERCCIS desk study revealed a large number of invertebrate species of conservation significance within a 1km radius of the site. The site, however, lacks those features typically associated with the most diverse invertebrate fauna (heathland, wetland, standing water and significant areas of bare ground). Given the small size of the site (c. 0.7 ha) and sub-optimal habitat present, detailed surveys for invertebrate species are not considered necessary.

The site is considered to be of no greater biodiversity value for invertebrates than 'within the Zone of Influence'. The indicative site plans will result in the loss of introduced shrub with scattered tree habitat, but elsewhere will retain hedgerow, scattered trees and grassland, and there is potential to enhance the value of these habitats for invertebrates. The proposed site plans are unlikely to significantly impact the local invertebrate populations.

In the absence of mitigation, the nature of the identified impacts on invertebrate species is predicted to have a short-term negative impact, of likely occurrence and of minor significance within the Zone of Influence. Follow mitigation for habitats (Section 6.2).

Vascular Plants

A total of 49 vascular plant species were recorded on-site (see Appendix 3). This is in line with the number of species that would be expected at a site of this size and character. Introduced shrub with scattered trees is floristically the most diverse habitat on-site. No species of conservation significance were recorded on-site during the update Phase 1 Habitats survey.



The ERCCIS desk study revealed records for a large number of species of conservation significance within 1km of the site (ERCCIS, 2023). Of these, 3 have some potential to occur on-site; these species are described below:

- Balm-leaved figwort (*Scrophularia scorodonia*) is listed in the RDB for Cornwall and the Isles of Scilly, and as Nationally Scarce. This species was not observed during the extended Phase 1 Habitat Survey but has potential to occur within hedgerow habitat on-site.
- Field woundwort (*Stachys arvensis*) is listed in the CRDB and as Near Threatened. This species was not observed during the extended Phase 1 Habitat Survey but has some potential to occur within hedgerow habitat on-site.
- Bluebell (*Hyacinthoides non-scripta*) (WCA, Sch.8). This species was not observed during the extended Phase 1 Habitat Survey but has some potential to occur within hedgerow habitat on-site.

The site is considered to be up to Local Value for vascular plant species.

The indicative site layout will result in the loss of introduced shrub with scattered trees, but elsewhere will retain hedgerow, scattered trees and grassland habitats, and there is potential to enhance the value of these habitats post-development. Construction activities and operational use of the site have potential to impact notable plant species as a result of habitat loss, disturbance and dust generation, but are unlikely to significantly impact the local vascular plant populations.

In the absence of mitigation, the nature of the identified impacts on plant species is predicted to have a long-term negative impact, of likely occurrence and of minor significance on a local scale. Follow mitigation for habitats in Section 6.2 below.

Invasive Plants

In the UK, a number of 'invasive plant species' are listed on Schedule 9 of the Wildlife and Countryside Act (WCA) (1981, as amended) making it an offence to cause them to spread to the wild. The ERCCIS desk study revealed records for 6 Schedule 9 invasive plant species within 1km of the site (ERCCIS 2023): three-cornered garlic (*Allium triquetrum*), wall cotoneaster (*Cotoneaster horizontalis*), montbretia (*Crococsmia x crocosmiiflora*), rhododendron (*Rhododendron ponticum*), Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and variegated yellow archangel (*Lamiastrum galeobdolon* subsp. *argentatum*).

Two Schedule 9 (WCA, 1981) invasive plant species were observed during the update site survey: montbretia and rhododendron (see Map 1, above).

Development of the site has potential to cause invasive non-native plant species to spread to the wild. See section 6.3 for mitigation recommendations.

Three additional non-native plant species that are not listed on Schedule 9 WCA (1981, as amended) but that do behave invasively were also recorded on-site: buddleja, bamboo and pampus grass. Eradication of these species provides an opportunity to enhance the value of the site for biodiversity.



Two plants listed as injurious (harmful) under the Weed Act (1959) are present on-site: broadleaved dock (*Rumex obtusifolius*) and creeping thistle (*Cirsium arvense*). Steps should be taken to control these species; see section 6.3 for mitigation recommendations.

Non-Vascular Plants

A specialised survey for non-vascular plants, bryophytes and lichens, was outside the scope of this study. The desk study revealed one record for lower plant species of conservation significance within a 1km radius of the site with potential to occur on site:

- Nicholson's Beard moss (*Didymodon nicholsonii*) (CRDB) is a moss species, that has some potential to occur within bare ground and native species-rich Cornish hedgerow habitats on site.

Overall, the site lacks those features such as metalliferous mining waste with potential to support the most diverse assemblages of lower plant species of conservation significance.

The site is considered to be of no greater value for non-vascular plants than 'within the Zone of Influence'.

In the absence of mitigation, the nature of the identified impacts on non-vascular plant species is considered to be short-term in duration, of unlikely occurrence, negative within the Zone of Influence and of minor significance.

Follow mitigation for habitats in Section 6.2 below.



6.0 Mitigation Recommendations

Recommendations are provided using the Mitigation Hierarchy in accordance with BS42020-2013 (British Standard, 2013). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures. The avoidance, mitigation, compensation and enhancement measures are detailed on the Ecological Constraints and Opportunities Plan, which accompanies the Non-Technical Summary (Section 1.0).

6.1 Designated Sites

The site is considered to be sufficiently distant for the proposed constructional activities and subsequent operational use not to impact the Upper Fowey and Pont Pill MCZ and Lantyan, Woodgate & Penquite Woods CWS within a 1km radius of the proposed development site. The site does not fall within a Zone of Influence of any European Sites (Special areas of Conservation (SAC) and Special Protection Areas (SPA) that are vulnerable to recreational impacts.

Mitigation not required.

6.2 Habitats

Of the habitats within the site, introduced shrub with scattered trees, scattered trees and native species-rich hedgerow with trees are considered to be of significant ecological value. Mitigation recommendations are detailed below. The remaining habitats present are considered to be of low ecological value; there is no specific requirement to mitigate loss of / disturbance to these habitats. NB: habitats of low biodiversity value may support legally protected species (see Section 6.3 below for species mitigation recommendations).

- Introduced shrub with scattered trees (loss and degradation): It is likely that introduced shrub with scattered trees habitat will be lost as a result of the proposed development. The loss of this habitat should be mitigated by seeding landscaped areas within the development with a native species-rich grassland seed mix (where feasible), and by planting native tree and shrub species in amenity areas and gardens to achieve a habitat of equal or greater biodiversity value post-development.
- Scattered trees and hedgerow trees (loss and degradation): The current proposals retain all scattered and hedgerow trees within the proposed development site. Any loss of scattered trees should be mitigated by planting of an equal or greater number of trees post-development to achieve no net loss and, ideally, a net gain in trees on-site.
- Follow BS5837: 2012 Trees in relation to design, demolition and construction and ensure that root protection areas of retained trees are observed; commission a specialist arboriculture assessment if BS5837 cannot be followed. Install tree protection fencing prior to construction activities commencing.
- Hedgerow (loss and degradation): The proposed site layout indicates that all hedgerows will be retained under the current proposals. Retained (and any new) hedgerows will be protected with a minimum 2m development-free buffer at the base of the hedgerows. Hedgerow buffers must be fenced during the construction period to protect hedgerows from degradation arising from construction.



- If it becomes necessary to remove any existing hedgerow within the site, any hedgerow loss must be mitigated by 1) translocating the hedgerow to a new part of the site (if feasible); or 2) by constructing a new hedgerow(s) elsewhere on-site to achieve a net gain of hedgerow habitat post-development. Any new sections of hedgerow must be planted with native trees and shrubs and bordered by a minimum 2m development free buffer seeded with a native wildflower/ grass seed mix or native shrubs; positioned to maximize connectivity across the site by connecting directly to retained hedgerows; and must be of the same construction type and width as the hedgerow that will be lost. Hedgerows should not be enclosed by garden habitat on both sides.
- All Habitats: In Cornwall, all major developments (>9 dwellings) must quantify and describe habitat loss using the latest version of the DEFRA Biodiversity Metric (Natural England, 2021; 2022). This metric calculates the pre- and post-development biodiversity value of the site based on the value and area of the habitat(s) present / lost, and the value and area of the habitat(s) reinstated. The metric includes all land use features within the site including those of no or low biodiversity value. It will, therefore, be necessary to mitigate loss of all habitat features irrespective of biodiversity value. Cornwall Council require all major developments to give rise to a biodiversity net gain of at least 10%. NB. The requirement for biodiversity net gain calculations using the DEFRA metric will be confirmed by the Local Planning Authority.

6.3 Species

Development of the site has potential to impact: badger, hedgehog, reptile species, amphibians, invertebrates, breeding birds, dormouse, bats (foraging and commuting and roosting) and vascular and non-vascular plants; impact on these species/ species groups can be avoided/ mitigated by following the mitigation recommendations below.

- Badger: A post-planning, preconstruction survey for badger setts on-site (and within 30m of the site boundary, where access is available) will be required to check that no new badger setts have been constructed in the time elapsed between the most recent site survey and commencement of works. This should be undertaken no more than 8 weeks prior to works commencing. Works within 30m of a badger sett and with potential to cause significant disturbance may need to be carried out under a Natural England badger disturbance licence.
- Badger, hedgehog and other mammals: All excavated pits associated with the proposed development site must be covered overnight and all trenches must have sloping planks (no greater than 45° angle) placed in them as a means of escape so that animals will not become trapped.
- All fences (temporary and permanent) must have a minimum 13cm x 13cm gap below to permit movement of faunal species (notably hedgehog).
- Bats (foraging and commuting): In accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016) the site is assessed as being of 'low suitability' for foraging and commuting bats. Further surveys for foraging and commuting bats are not recommended due to the small size of the site, subject to implementation of a sensitive lighting scheme that retains hedgerow habitat unlit as outlined below. The indicative site layout retains existing hedgerow and retains / incorporates new areas of grassland within the site, along with new garden/ amenity habitat; these features will provide continued suitable foraging and commuting habitat for bats post-development.



- A sensitive lighting scheme must be incorporated that retains all hedgerow habitat and retained semi-natural areas unlit. Artificial light spill will be minimised by using directional lighting, to ensure that light spill remains below or near the horizontal; use of narrow spectrum bulbs that emit minimal ultra-violet light; minimising height of lighting columns; use of warm white LED luminaires with a colour temperature of 3000k or less. Lighting should be confined to the eastern and central parts of the site away from the western perimeter hedgerow. A lux level of no greater than 0.5 lux is required along hedgerows; the purpose being to retain bat commuting routes and foraging habitat post-development. We recommend that security / garden lighting is avoided/ minimised where possible.
- Bats (roosting): The two-storey section of Meadowbrook House was assessed as being of 'moderate suitability' to support roosting bats. Further surveys in the form of two bat emergence/ re-entry surveys and a static detector survey in the bat active season (May-September) are required of the two-storey section to inform the proposed development.
- All single-storey sections on site were assessed as being of 'negligible suitability' to support roosting bats. No further surveys are currently recommended to inform development of these buildings. A precautionary approach should be adopted during demolition of the buildings; in the unlikely event that a bat is uncovered during works, the bat must not be handled, and works must stop immediately (as soon as it is safe to do so). Advice must be sought from an experienced and licensed bat ecologist (Plan for Ecology Ltd: 01326 218839) or Bat Conservation Trust (Tel: 0345 1300 228). In this scenario, it may be necessary to obtain a bat licence from Natural England before works are permitted to resume.
- A preliminary ground level roost assessment (PGLRA) of trees within the site was outside the scope of the assessment but would be required if any trees are to be felled, pruned or lit with artificial light.
- Birds: Habitats within the site have potential to support breeding bird species of conservation significance, notably within hedgerow, introduced shrub with scattered trees, scattered trees and the two-storey section of Meadowbrook house. Demolition of the two-storey section and clearance of vegetation should be undertaken outside of the bird nesting season (i.e., between October-February). If this is not possible, demolition/ vegetation clearance works should be preceded with an inspection for nesting birds (to be undertaken by an ecologist). If an active bird nest is uncovered during works, works within 5m of the nest must stop until nesting activity has ceased. Works are most likely to be delayed between April and July.
- Dormouse (if present): All hedgerow habitat is retained under the current proposals, therefore, construction is unlikely to impact dormouse (if present, considered unlikely). In the event that some hedgerow vegetation clearance is required, undertake any clearance/ pruning of any hedgerow vegetation during the winter months (October – February inclusive) to avoid the bird nesting season and when any dormice (if present; considered highly unlikely) will be hibernating at ground level. Alternatively, precede vegetation clearance with a thorough search of vegetation for nesting birds/ dormouse (to be undertaken by an ecologist). The hazel dormouse is a European Protected Species (EPS) protected under both European and UK Legislation. In the unlikely event that a dormouse is uncovered during removal of vegetation, works must stop (as soon as it is safe to do so) and advice sought from Natural England (NE). Under this scenario, it may be necessary to obtain an EPS mitigation licence from NE prior to resuming works.



- Reptiles and amphibians: Further surveys for reptiles are not recommended due to the small size of the site and because hedgerows and associated margins are fully retained by the proposed development.. Precautionary reptile avoidance measures must be implemented; removal of any hedgerow vegetation or any areas of longer grassland vegetation should be carried out in a two-phased process comprising a first cut to a height of 200mm (to be undertaken between October-February to avoid the bird nesting season, or under an ecological watching brief), followed by a second cut to ground level, during the reptile active season (April – October) so any reptiles (if present) can escape. Alternatively, carry out works under an ecological watching brief. These measures will also protect amphibian species (if present). The amenity grassland should be retained at a short sward height prior to and throughout the construction period to prevent reptiles from moving into these areas.
- Invertebrates, vascular and non-vascular plants: Follow mitigation recommendations for habitats (section 6.2).
- Invasive and injurious plants: Rhododendron and Montbretia are present within the site (Map 1). These species are listed on Schedule 9 WCA (1981) making it an offence to cause them to spread to the wild. Development of the site must be informed with an invasive plant method statement to include a post-planning, pre-construction survey to map invasive plant stands.
- Removal of buddleja, bamboo species and pampus grass (non-native plant species that behave invasively) has potential to enhance the value of the site for biodiversity.
- Two plants listed as injurious (harmful) under the Weeds Act (1959) are also present on-site: broad-leaved dock and creeping thistle. Development of the site should include measures to control these species. Control measures will comprise targeted weed control (i.e. seasonal mowing, pulling or herbicide application).

6.4 Opportunity for Biodiversity Enhancements

The biodiversity value of the site could potentially be enhanced by successfully implementing the following recommendations:

- There is opportunity to enhance the site for roosting bats and nesting birds by installing bat tubes/ bird boxes within the fabric of proposed new buildings. In accordance with the Cornwall Planning for Biodiversity Guide (Cornwall Council, 2018), one bat tube/ box (or bird box) per unit is recommended. Suitable products for bats include 1FR & 2FR Schwegler bat tubes and the 1FF Schwegler bat box. Suitable products for birds include 1SP Schwegler sparrow terrace, WoodStone swift nest box, and 1MR Schwegler Avianex.
- There is opportunity to enhance the site for invertebrates by installing bee bricks within the proposed buildings (or within landscape features such as walls and posts within the site) and by incorporating deadwood piles into landscaped parts of the site. See <https://www.greenandblue.co.uk/products/beepost>. In accordance with the Cornwall Planning for Biodiversity Guide (Cornwall Council, 2018), one bee brick is required in 50% of new residential units.
- Maximise the value of the site for invertebrates, amphibians, reptiles and hedgehog by enhancing the piles of deadwood or stones or by adding standing water within development free hedgerow buffers and other undeveloped parts of the site.



-
- Plant native tree and shrub species as opposed to introduced ornamental species within any landscaped parts of the site post-development.
 - The successful eradication of Schedule 9 (WCA, 1981) invasive plant species (also buddleja, bamboo and pampus grass) will also enhance the biodiversity value of the site and help to protect semi-natural habitats within the wider area.
 - Consider installing green roofs on the proposed new dwellings.

6.5 Further surveys

Further surveys for roosting bats are required to inform the planning application. Pre-construction (post-planning) surveys for badger setts and invasive plants are required to inform the subsequent construction works. If it becomes necessary to fell any mature hedgerow trees, or if any mature trees will be impacted by artificial lighting, then a Preliminary Ground Level Roost Assessment (PGLRA) may be necessary to assess their suitability to support roosting bats.

6.6 Monitoring

Ecological monitoring of the site during construction will be required to inform the CEMP and any planning conditions. Ecological monitoring of the site post-development is required to ensure that the adopted mitigation is successfully implemented.



7.0 Impact Assessment

Table 3: Assessment of impact of the proposed development on features of ecological importance before and after mitigation.

Feature	Characterisation of unmitigated impact	Effect without mitigation	Significance of effect of residual impact after mitigation
Introduced shrub with scattered trees	Loss and degradation (construction and operational)	Long-term negative impact of likely occurrence, of minor significance on a local scale	Neutral
Scattered Trees	Loss and degradation (construction and operational)	Short-term negative impact of likely occurrence, of minor significance on a local scale	Neutral
Hedgerows	Degradation (construction and operational)	Long-term negative impact of likely occurrence, of minor significance on a local scale	Neutral
Badger	Loss of or disturbance to sett (construction) Harm or disturbance to individual animals (construction)	To be determined following completion of recommended further surveys	To be determined following completion of recommended further surveys
Badger, hedgehog & other mammals	Harm or disturbance to individual animals (construction)	Short-term negative impact, of unlikely occurrence and minor significance within the zone of influence	Neutral – positive
Bats (foraging and commuting)	Loss or degradation of habitat (construction and operational)	Long-term negative impact of likely occurrence, of minor significance on a local level.	Neutral
Bats (roosting) (if present)	Loss of roosting habitat (construction) Harm to individual animals (construction)	To be determined following completion of recommended further surveys	To be determined following completion of recommended further surveys
Birds	Loss or disturbance to nesting habitat (construction and operational)	Long-term negative impact, of likely occurrence and of minor significance on a local level.	Neutral - positive
Dormouse	Harm or disturbance to individual animals	Short-term negative impact, of unlikely occurrence and minor	Neutral



Feature	Characterisation of unmitigated impact	Effect without mitigation	Significance of effect of residual impact after mitigation
	(construction) (if present; considered unlikely)	significance within the zone of influence	
Reptiles & Amphibians	Loss of or degradation of habitat (construction and operational) Harm or disturbance to individual animals (construction)	Long-term negative impact, of unlikely occurrence and minor significance within the zone of influence	Neutral - positive
Invertebrates	Loss of or degradation of suitable habitat (construction and operational) Harm or disturbance to individual animals (construction)	Long-term negative impact, of likely occurrence and of minor significance within the zone of influence	Neutral - positive
Vascular plants	Loss or degradation of habitats (construction and operational)	Long-term negative impact, of likely occurrence and of minor significance on a local level.	Neutral - positive
Non-vascular plants	Loss or degradation of habitats (construction and operational)	Long-term negative impact, of unlikely occurrence and of minor significance within the zone of influence	Neutral

7.1 Residual Impacts

It is not possible to fully determine the residual impact of the proposed development in the absence of the results of the recommended further surveys.

This Ecological Impact Assessment (EclA) will be updated following provision of the outstanding ecological survey information and finalized site layout.



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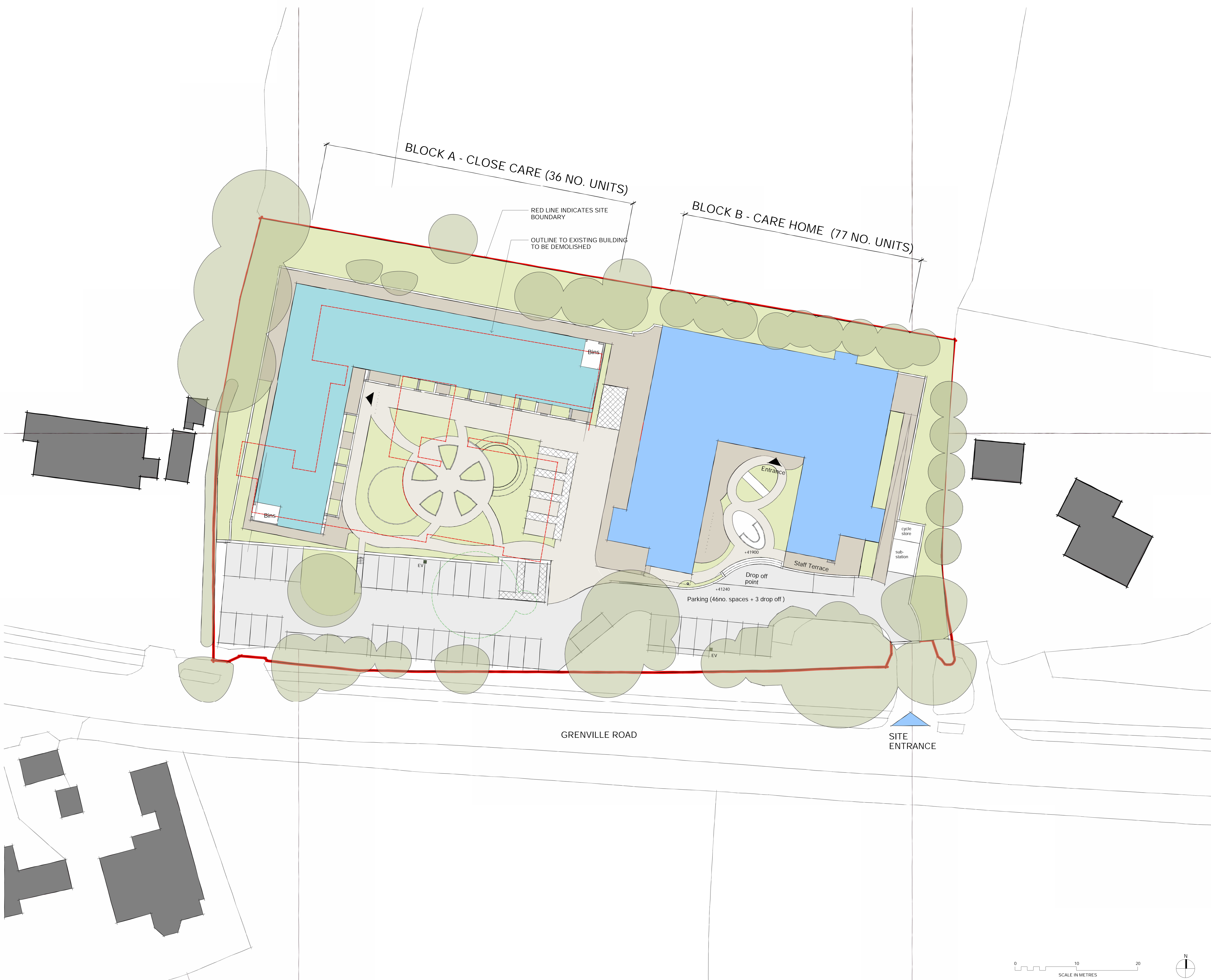
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9.0 Appendix 1: Indicative Site Proposals



NOTES

- 1 THIS DRAWING IS THE COPYRIGHT OF THE ARCHITECT AND MAY NOT BE REPRODUCED WITHOUT LICENCE.
- 2 DO NOT SCALE OFF THIS DRAWING EXCEPT FOR THE PURPOSES OF PLANNING ONLY.
- 3 ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR BEFORE COMMENCEMENT OF WORK AND ANY DISCREPANCIES REPORTED TO THE ARCHITECT.
- 4 NO RESPONSIBILITY CAN BE ACCEPTED FOR ERRORS ARISING ON SITE DUE TO UNAUTHORISED VARIATIONS FROM THE ARCHITECTS DRAWINGS.
- 5 DRAWINGS ISSUED ELECTRONICALLY MAY LOSE SOME DETAIL.

NOTES:

This drawings contains the following model files:
3849-PBWC-00-ZZ-M3-A-0001-Site-S1-P01

AMENDMENTS

Rev No.	Revision Description	Rev Date	Review by	Issued by
1	First Issue	05-04-23		PDP
2	Additional information indicated	06-04-23		PDP
3	Site Plan amended, Parking relocated, Block B no. of units increase	12-04-23		PDP
4	Care home repositioned, close care reduced in size following Town Council presentation	17-05-23		PDP
5	Site plan updated to align with draft Mei Loci Landscape Design	27-07-23		CF
6	Area to ground floor aligned with latest plans, narrower. Sub-station & cycle store aded	15-08-23		CF
7	Issued for planning	05-09-23		PDP
8	Update following FE comments	21-09-23		PDP
9	Plant room and cycle store relocated	06-12-23CF		PDP
10	Minor amendments to block B entrance	05-01-24CF		PDP

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Client
Cornwallis Care Services Ltd

Job
**Meadowbrook Care Home
Grenville Road, Lostwithiel**

Title
Proposed Site Plan

Project/Sheet
3849 -PBWC -00 -XX -DR -A -1102

Purpose of Issue
Planning

Status
S2

Revision
P10

Scale
1 : 200@A0

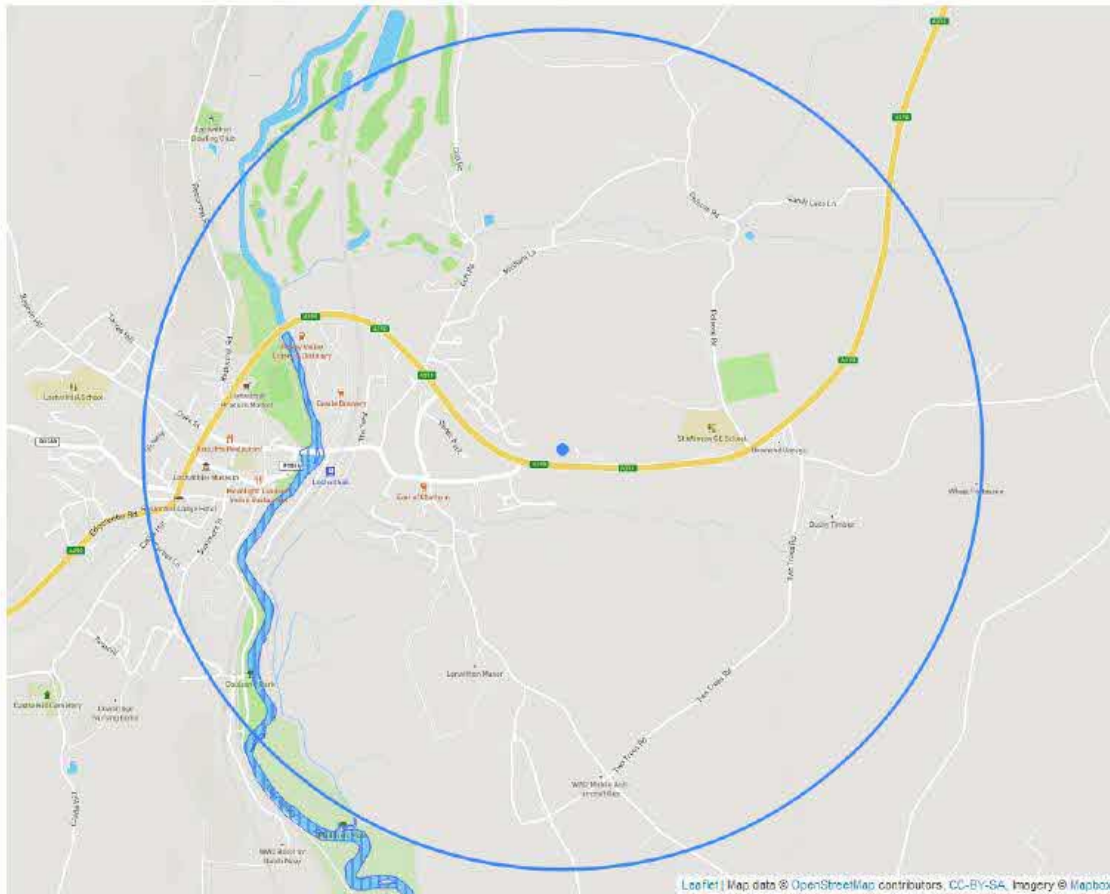
Director In Charge CT	Project Lead CF	Off. Project No. 3849
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10.0 Appendix 2: Location of Site and Designated Sites of Nature Conservation Importance.

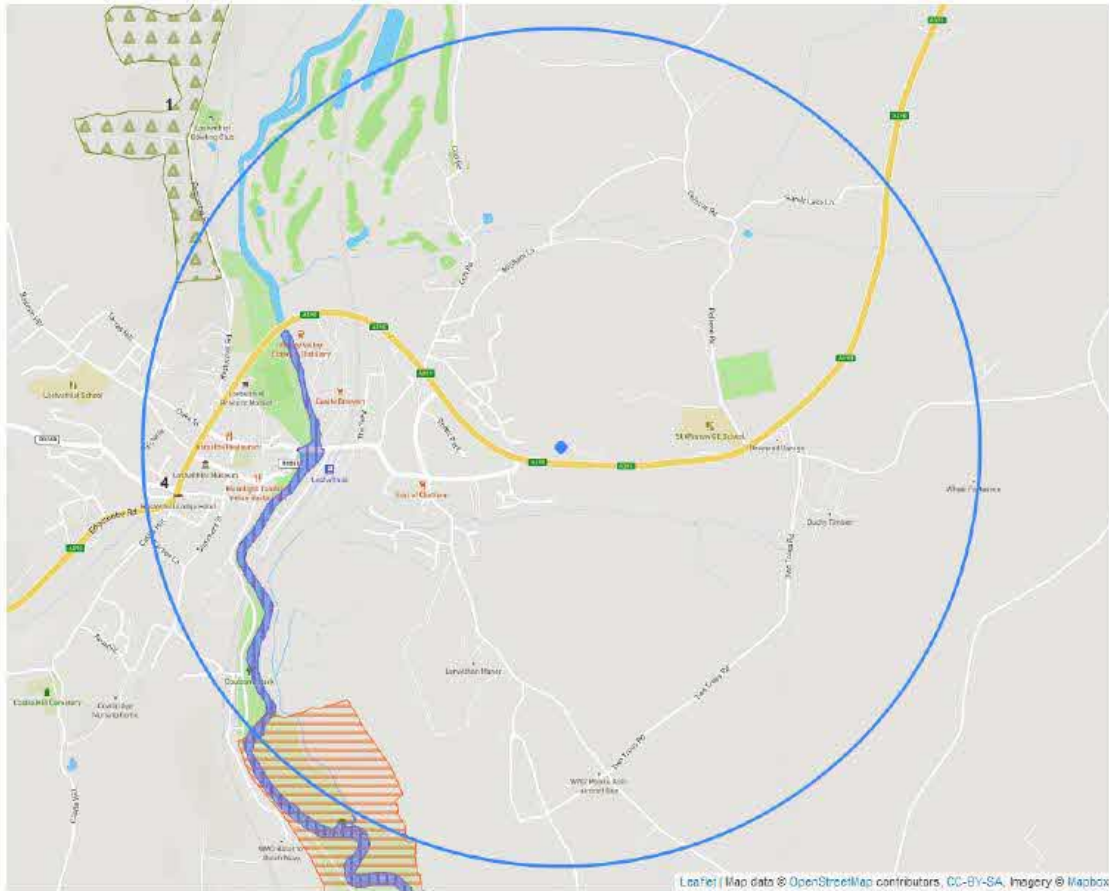
Statutory Sites Map



Location	Site Code	Site Type	Site Name	Colour
1	UKMCZ0020	MCZ	Upper Fowey and Pont Pill	



Non-Statutory Sites & Reserves Map



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Location	Site Code	Site Type	Site Name	Colour
1	AW249	Ancient Woodland	CHURCHPARK WOOD	
2	R/13	CGS	Fowey Estuary	
3	R/CN4.7	CWS	Lantyan, Woodgate & Penquite Wds	
4	8K7B4/50T1	TPO Site	Tanhouse Rd. Lostwithiel	
5	n/a	VMCA	Fowey VMCA	



11.0 Appendix 3: Phase 1 Habitat Plant List

	Common Name	Introduced shrubs with scattered trees (J1.4/ A3)	Amenity grassland (J1.2)	Native species-rich hedgerow with trees (J2.3.1)	Scattered trees (A3)
<i>Acer pseudoplatanus</i>	Sycamore	F		O	
<i>Arum maculatum</i>	Lords-and-Ladies	R		LF	
<i>Asplenium scolopendrium</i>	Hart's tongue		O	F	
Bambusoideae sp.	Bamboo		LF		
Bryophyta sp.	Moss species			LF	
<i>Buddleja davidii</i>	Buddleja	F			
<i>Carex pendula</i>	Pendulous sedge	LA		O	
<i>Centranthus ruber</i>	Red valerian	LF			
<i>Circaea lutetiana</i>	Enchanter's-nightshade			LF	
<i>Cirsium arvense</i>	Creeping thistle	O	F		
<i>Convolvulus arvensis</i>	Field bindweed	F			
<i>Cortaderia selloana</i>	Pampus grass	R			
<i>Corylus avellana</i>	Hazel			F	O
<i>Crataegus monogyna</i>	Hawthorn			O	
<i>Crocsmia x crocosmiiflora</i>	Montbretia	O			
<i>Cupressus</i> spp.	Cypress species	O			
<i>Dipsacus fullonum</i>	Teasel	R			
<i>Epilobium</i> sp.	Willowherb	F			
<i>Fagus sylvatica</i>	Beech				O
<i>Fagus sylvatica</i> f. <i>purpurea</i>	Copper beech				R
<i>Fraxinus excelsior</i>	Ash	A		O	
<i>Galium aparine</i>	Cleavers			O	
<i>Geranium robertianum</i>	Herb-robert	LF		O	
<i>Glechoma hederacea</i>	Ground ivy		F		
<i>Hedera helix</i>	Ivy	O		F	
<i>Heracleum sphondylium</i>	Hogweed		O		
<i>Holcus lanatus</i>	Yorkshire fog		D		
<i>Ilex aquifolium</i>	Holly	O			
<i>Ilex aquifolium</i>	Holly			O	
<i>Lapsana communis</i>	Nipplewort	LF			
<i>Malus</i> spp.	Apple				O
<i>Pinus</i> spp.	Pine species				O
<i>Plantago lanceolata</i>	Ribwort plantain		F		
<i>Primula vulgaris</i>	Primrose		LF		
<i>Prunella vulgaris</i>	Selfheal		O		
<i>Prunus</i> spp.	Plum				O
<i>Pteridium aquilinum</i>	Bracken			LF	
<i>Quercus robur</i>	Oak	O			



Ranunculus repens	Creeping buttercup	F	F		
Rhododendron ponticum	Rhododendron	O			
Rubus fruticosus agg.	Blackberry/bramble	A		F	
Rumex obtusifolius	Broad-leaved dock			O	
Scrophularia nodosa	Common figwort	O			
Silene dioica	Red campion			O	
Sonchus asper	Prickly sow thistle	O			
Sorbus aucuparia	Rowan				R
Taraxacum officinale agg.	Dandelion		O	O	
Trifolium repens	White clover	LA	LF		
Urtica dioica	Common nettle			O	

DAFOR is a nominative scale where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare. L = Locally; or combination of.



12.0 Appendix 4: Legislation and Planning Policy

Protected Habitats, Species and Designated Sites

- The Conservation of Habitats and Species Regulations (HM Government, 2017) (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), referred to here after as the 'Habitat Regulations', encompasses Special Areas of Conservation (SACs) and provides additional protection for Special Protected Areas (SPA's), RAMSAR Sites and European Protected Species (EPS). Protection is afforded from direct and indirect impacts, particularly where mobile wildlife populations for which the SAC is designated may be significantly affected. A Habitats Regulations Assessment/Appropriate Assessment must be completed by the competent authority, based on sufficient information provided by the applicant, to meet Regulation 63 of the Habitats Regulations. The Waddenzee judgement ruled that a plan or project may be authorised only if a competent authority has made certain that the plan or project will not adversely affect the integrity of the site. A decision can only be reached "where no reasonable scientific doubt remains as to the absence of such effects". Competent authorities must be "convinced" that there will not be an adverse affect. Where doubt remains as to the absence of adverse affects, the plan or project must not be authorised, subject to the procedure outlined in the Habitats Regulations regarding imperative reasons of overriding public interest.
- The Countryside and Rights of Way (CRoW) Act (HM Government, 2000, as amended) The CROW Act places a statutory duty on Statutory Nature Conservation Organisations (SNCO) to have regard to biodiversity conservation and to promote conservation action by others. Section 74 of the Act requires the preparation and maintenance of lists of priority species and habitats. It also places a statutory duty on public bodies to conserve SSSIs and enhance their value, and provides SNCOs with the power to impose Management Schemes on owners of SSSIs. The CROW Act strengthens the legal protection for threatened species with regard to killing, injuring, disturbing or destroying places used for shelter and protection.
- The Hedgerows Regulations (1997) The Hedgerow Regulations 1997 were made under Section 97 of the Environment Act 1995 (HM Government, 1995) and took effect on 1 June 1997. They introduced arrangement for local planning authorities (LPAs) to protect important countryside hedgerows through a system of notification. Such hedgerows are frequently valuable because of their historical, ecological and landscape characteristics.

Under the Hedgerow Regulations 1997, an offence occurs when:



- A person intentionally or recklessly removes, or causes or permits another person to remove, a hedgerow in contravention of regulation 5(1) or (9); and when
- A person contravenes or fails to comply with regulation 6(2).
- A hedgerow is a boundary line of shrubs or trees and is 'important', and protected, under the Hedgerow Regulations 1997 if it meets a specific criterion (see Table 1 and Appendix 1). Cornish hedgerows do not necessarily meet the criteria of the Hedgerow Regulations 1997 but are typically of great historic, landscape and biodiversity value. The Hedge (and wall) Importance Test (HIT), developed by the Guild of Cornish Hedgers, is an alternative measure of value and is required to inform planning decisions impacting hedgerows in Cornwall (Cornwall Council, 2018).
- The Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) bestows a legal duty on public authorities to conserve biodiversity. The Section 40 duty requires Local Authorities to have regard to the purpose of conserving biodiversity. This particularly relates to Section 41 Habitats and Species of Principal Importance (sometimes called 'priority habitats' or 'priority species'.
- The Protection of Badgers Act (1992) protects badgers as specified below.
- The Wildlife and Countryside Act (HM Government 1981, as amended) encompasses the protection of wildlife (fauna and flora), SSSIs, SPAs, National Nature Reserves (NNRs) and RAMSAR Sites.

Badgers: Badgers are legally protected under the Protection of Badgers Act 1992. As a result of this statutory legislation it is an offence to:

- Purposely kill, injure or take a badger;
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett;
- Disturb a badger when occupying a sett.

Birds: In Britain the nests (whilst in use or being built) and eggs of wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended) (HM Government, 1981).

Some species (i.e. barn owl) are also listed on Schedule 1 of the Wildlife and Countryside Act (HM Government, 1981 as amended); it is an offence to:

- Intentionally capture, injure or kill a Schedule 1 listed species;
- Intentionally or recklessly disturb a Schedule 1 listed species whilst nesting;
- Intentionally or recklessly disturb a dependent young Schedule 1 listed species.

European Protected Species (EPS) (Bat, dormouse, otter, water vole, sand lizard, smooth snake & great crested newt): EPS are listed on Annex IV(a) of the European Communities Habitats Directive.



In Britain protection of EPS is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2019 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000 & 2010).

As a result of this statutory legislation, it is an offence to:

Deliberately capture, injure or kill an EPS;

Intentionally or recklessly disturb an EPS in its place of rest/ breeding Site;

Intentionally or recklessly damage, destroy or obstruct access to a EPS place of rest/ breeding Site (even if the EPS is not occupying the resting / breeding place at the time);

Possess or sell or exchange an EPS (dead or alive) or part of an EPS.

Reptiles (adder, common lizard, slow worm and grass snake): reptiles are protected under Schedule 5 (section 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill and/ or injure reptiles, and sell or transport for the purpose of sale. Sand lizard and smooth snake are also EPS (see above legal protection of EPS).

Invasive plants: The WCA 1981 states that if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence. Anyone convicted of an offence under Section 14 of the WCA 1981 may face a fine of £5,000 and/or 6 months imprisonment, or 2 years and/or unlimited fine or indictment. The following legislation is relevant to invasive plants:

Control of Pesticides Regulations (CoPR) 1986: CoPR 1986 require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water. For application of pesticides in or near water, approval from the Environment Agency should be sought before use.

Environmental Protection Act 1990 (EPA 1990): EPA 1990 contains a number of legal provisions concerning 'controlled waste', which is set out in Part II. Material containing the propagules of species listed on Schedule 9 is classified as controlled waste and must be safely disposed of at an appropriately licensed landfill site in accordance with the Environmental Protection Act 1990 (Duty of Care) Regulations 1991. Section 33 (1a) and (1b) create offences to do with the deposit, treating, keeping or disposing of controlled waste without a license. Exemptions from licensing are available in some circumstances, and are set out in Schedule 3 to the Waste Management Licensing Regulations 1994 as amended, which makes it an offence to keep, treat or dispose of controlled waste in a manner likely to cause pollution of the environment or harm to human health. Anyone convicted is subject to a maximum fine of £20,000 and/or 6 months imprisonment and if prosecuted under the Crown court, this escalates to an unlimited fine and/or a maximum of two years imprisonment. Section 34 places duties on any person who imports, produces, carries, keeps, treats or disposes of controlled waste. Waste must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorized person i.e. either a registered carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicle Regulations 1991). A waste transfer note must be completed and signed giving a written description of the waste, which is sufficient to enable the receiver of the waste to handle it in accordance with his or her own duty of care. The provisions



concerning waste transfer notes are set out in the Environmental Protection (Duty of Care) Regulations 1991 (as amended). Failure to comply with these provisions is an offence, with a penalty of a fine not exceeding £5000 up to an unlimited fine in Crown court.

Hazardous Waste Regulations 2005 (HWR 2005): HWR 2005 contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which include details about the hazardous properties and any special handling requirements. If a consignment note is completed, a waste transfer note is not necessary. Material containing knotweed that has been treated with herbicide may be classified as hazardous waste.

Waste Management Licensing Regulations (WMLR 1994): WMLR state that failure to use a licensed operative could leave you liable to prosecution. The 'waste relevant objectives' are described in paragraph 4 of Schedule 4. These objectives require that waste is recovered or disposed of "without endangering human health and without using processes or methods which could harm the environment and in particular without risk to water, air, soil, plants or animals; or causing nuisance through noise or odours; or diversely affecting the countryside or places of special interest".

Statutory Designated Sites

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are of International nature conservation importance.

Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) are of National importance. Development proposals with potential to affect a SAC, SSSI or NNR require permission from Natural England.

Local Nature Reserves (LNRs) are protected from development; the Local authority is responsible for LNRs.

Non-Statutory Designations

Non-statutory Sites include County Wildlife Sites (CWS), Site of Nature Conservation Interest (SNCI), Site of Importance for Nature Conservation (SINC), County Geology Sites (CGS), Roadside Verge Audit Biological Sites and Ancient Woodlands. CWSs, SNCI, SINC and CGSs are of at least county importance for wildlife/geology; all are given increased protection through the planning process.

Biodiversity Action Plans (BAPs): BAPs distinguish National and County level priority habitats and species for conservation. The list of habitats and species of principal importance under Section 41 NERC Act (2006) in England includes 56 habitats and 943 species first identified as priority habitats and species. The Local Authority has a duty to conserve habitats and species of principal importance; these habitats and species were previously identified as UK BAP priority habitats and species under Section 74 of the CRoW Act (2000).

Red Data Books & Lists: detail the status of species in relation to threat.

Planning Context

The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Paragraph 99 ODPM Circular 06/2005 states: 'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all



relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted’.

National Policy: The National Planning Policy Framework (NPPF) was revised on 20 July 2021 and sets out the government’s planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018 and updated in February 2019.

Chapter 15 of the NPPF (2021) ‘conserving and enhancing the natural environment’ sets out how the planning system should contribute to and enhance the natural and local environment by:

- a) 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);
- b) 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;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Of note are the following paragraphs:

NPPF Paragraph 175 states that ‘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’.

NPPF Paragraph 179 states that ‘To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and



b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity. English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters. For the purposes of paragraphs 176 and 177, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined. Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system. Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them'.

NPPF Paragraph 180 states that '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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate'.

NPPF Paragraph 181 states that '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 Areas of Conservation, and listed or proposed Ramsar sites'.

NPPF Paragraph 182 states that '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 Policy - Cornwall

Cornwall Local Strategic Plan Policies 2010 - 2030

The latest Local Plan was adopted on 22nd November 2016. The key relevant policies from the Local Plan relating to ecology and nature conservation are Policy 22 (European Protected Sites) and Policy 23 (Natural Environment).

Policy 22 is detailed below:



For residential development and student and tourist accommodation, mitigation measures for recreational impacts on European Sites will be required where development is proposed within the identified zones of influence around those European Sites that are vulnerable to adverse recreational impacts. Residential development, student, and tourist accommodation within these zones of influence will be required to provide for appropriate management, mitigation and monitoring on Site, and/ or financial contributions towards off site mitigation and management. This will need to be agreed and secured prior to approval of the development.

Policy 22 is reinforced with the pending Cornwall Council European Sites Supplementary Planning Document (SPD) .

Policy 23 comprises a number of measures for development proposals including:

Development should conserve, protect and where possible enhance biodiversity and geodiversity interests and soils commensurate with their status and giving appropriate weight to their importance (3).

All development must ensure that the importance of habitats and designated sites are taken into account and consider opportunities for the creation of a local and county-wide biodiversity network of wildlife corridors which link County Wildlife Sites and other areas of biodiversity importance (3).

The highest level of protection will be given to potential and existing Special Protection Areas, candidate and existing Special Areas of Conservation and listed or proposed RAMSAR sites (3a).

Development proposals within or outside an SSSI or Marine Conservation Zone which would be likely to adversely affect the site (either individually or in combination with other developments) will not be permitted unless the benefits of the development, at this site, clearly outweigh both the adverse impacts on the site and any adverse impacts on the wider network of SSSI and Marine Conservation Zones (3b).

Development likely to adversely affect locally designated sites, their features or their function as part of the ecological network, including County Wildlife Sites, Local Geological Sites and sites supporting Biodiversity Action Plan habitats and species, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained (3c).

Adverse impacts on European and UK protected species and Biodiversity Action Plan habitats and species must be avoided wherever possible (i) subject to the legal tests afforded to them, where applicable (ii) otherwise, unless the need for and benefits clearly outweigh the loss (3d).

Development must avoid the loss or deterioration of ancient woodland and veteran trees, unless the need for, or benefits of, development on that site clearly outweigh the loss (3e).

Development should avoid adverse impact on existing features as a first principle and enable net gains by designing in landscape and biodiversity features and enhancements, and opportunities for geological conservation alongside new development. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort (4).

Cornwall Council Planning for Biodiversity Document



This document was adopted on 16th October 2018 by Cornwall Council and is a material consideration in planning decisions. It is supplementary to policies of the Cornwall Local Plan: Strategic Policies (2016). Considering the amended NPPF (2018) and the Council's approach to calculating and securing Environmental/Biodiversity Net Gain, the document will be reviewed alongside engagement on the Council's approach to Net Gain and adopted in a revised form as a Supplementary Planning Document, forming part of a suite of adopted guidance designed to promote good practice in the built and natural environment in Cornwall.

Cornwall Council Terrestrial European Sites Supplementary Planning Document (SPD)

'This SPD provides a solution for Appropriate Assessment and mitigation for those submitting planning applications that fall within the zones of influence of European protected sites in Cornwall, and where recreational disturbance is the only Habitat Regulations issue. It sets out a strategic approach to the provision of mitigation for an increase in potentially harmful recreational impacts arising from new housing and tourism growth. The intention of this strategically led mitigation is to provide the best joined up solution for the European sites management to ensure their future conservation status. This approach addresses the requirements of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and in doing so provides individual developers with a standard solution to Appropriate Assessment and mitigation. This SPD explains where Appropriate Assessment and mitigation of recreational impacts is required and why and sets out the solutions to achieving this'.

Biodiversity Net Gain: A how to guide for the development process - <https://www.cornwall.gov.uk/media/muhmug45/draft-biodiversity-net-gain-guidance-for-developers-and-planners-web.pdf>

'This aim of this document is to enable developers and planners to understand how Biodiversity Net Gain will apply to planning applications in Cornwall. The document will overview the core concepts of Biodiversity Net Gain and Biodiversity Metrics, describe the typical process for successful validation of planning applications and explain what steps developers need to take to have a successful Net Gain application. It will also give guidance on fulfilling ongoing Biodiversity Net Gain requirements into the future and what to do when struggling to achieve Biodiversity Net Gain onsite'.

Draft Chief Planning Officers Advice Note: Biodiversity Net Gain in Cornwall - <https://old.cornwall.gov.uk/media/43031716/draft-chief-planning-officer-note-biodiversity-net-gain.pdf>

The Environment Act (2021) requires all developments to achieve a minimum 10% Biodiversity Net Gain. Cornwall Council has adopted this policy as set out in the Draft Chief Planning Officers Advice Note and requires all major developments to quantify and describe habitat loss using the latest Biodiversity Metric and achieve a minimum 10% biodiversity net gain.

Cornwall's Environmental Growth Strategy 2020 - 2065 - https://old.cornwall.gov.uk/media/24212257/environmental-growth-strategy_jan17_proof.pdf

Cornwall's Environmental Growth Strategy provides a long-term framework for Cornwall and the Isles of Scilly to not just conserve, but to grow nature in line with the Environment Act (2021). Environmental growth is about both protecting and enhancing nature, ensuring that there is more of it, and that it is bigger, better, more diverse, and more connected. A Nature Recovery Network has been identified and mapped by LAGAS Natural Capital Information and Management Hub.



Climate Emergency Development Plan Document (Anticipate adoption date: 21st Feb 2023 - https://www.cornwall.gov.uk/media/1pzjuzln/appendix-3-finalclimate-emergency-dpd-appendix-3-final-with-map_p1.pdf)

Policy C1 - Climate Change Principles: Development in Cornwall should represent sustainable development and manage our natural, historic and cultural assets wisely for future generations. Of particular relevance are the following objectives:

2. Mitigate against and improve resilience to the effects of climate change;
3. Contribute positively to the health, wellbeing and resilience of our communities and the natural world;
4. Use and reuse land efficiently and minimise impact of development on soils through over compaction, pollution or reduction in the quality of soil and encourage regenerative practice to conserve the capacity of soils for sustainable production of food, water, raw materials and energy;
5. Contribute positively to environmental growth, protecting irreplaceable habitats and the integrity of ecosystems, restoring natural processes and strengthening nature recovery networks, and ensuring a net gain for biodiversity.
7. Conserve and enhance our natural and historic environment and cultural heritage according to their international, national and local significance and increase built and natural environment distinctiveness through locally distinctive, high quality and sustainable design and multi-functional green infrastructure provision;
8. Avoid or minimise light, water, air and noise pollution and improve or maintain air and water quality;
9. Protect and enhance carbon storage in our natural environment (including the marine environment); and
10. Regenerate, improve or maintain the natural functioning of coastal and river processes, avoiding areas at risk of flooding and coastal change and further reducing flood risk elsewhere wherever possible.

Policy G1 - Green Infrastructure Design and Maintenance: Green infrastructure should be central to the design of schemes, ensuring permeability of the site for wildlife and people and creating a multi-functional network of spaces and uses. All developments should be planned around the protection and enhancement of nature. Development proposals will be expected, where appropriate to the scale and nature of the development, to meet the following principles of green infrastructure design:

1. The green infrastructure should form a multifunctional network through the creation of linear and other green infrastructure features to provide and enhance natural connections using important local character features, including existing planting, trees, groups of trees, copses, wetland, hedgerows and opportunities for wild food foraging as the key starting point for green infrastructure proposals and retain, reinforce and embed them into the design of the development to create distinctive places with permeable boundaries that reference, reflect and enhance the local environment; and
2. The green infrastructure shall be accessible for all with high levels of accessibility in public areas, and promote health, wellbeing, community and cohesion and active living; and



3. The green infrastructure shall incorporate sustainable drainage and blue infrastructure wherever possible and create better places for people and wildlife; and
4. The green infrastructure shall be resilient to climate change, minimise the development's environmental impact and enhance the quality of water, soil and air, aiding resilience and adaptation to climate change; and
5. Priority shall be given in landscaping schemes and natural planting to at least 50% pollinator friendly planting of predominantly native species; and
6. Street trees and other greening shall be integrated into street design and public open spaces wherever possible while remaining sympathetic to the historic environment. Streets should be designed to accommodate tree pits, whilst maintaining the space for the necessary runs of services (e.g. water, electric, sewerage); and,
7. The design and maintenance of green infrastructure shall conserve and enhance the historic environment and contribute to local distinctiveness; and
8. Homes should have access to a well-proportioned and well-orientated garden (generally equal in size to the footprint of the house) or other communal green space that provides a cohesive and useable space which is suited to a range of activities and space for nature; and,
9. The development shall make provision for long-term post-development management and maintenance for all green infrastructure, including provision for community representation and management; and,
10. The development proposal shall include a scheme for the provision of bird and bat boxes and bee bricks tailored to habitat conditions existing on or being created on and/or adjoining the site including the location and clustering (as appropriate) of those measures. These should normally be provided at the rate of one measure per unit, provided in the most suitable locations, either as single units or a cluster of such (e.g. close to hedgerows and flightpaths).

Policy G2 - Biodiversity Net Gain: 1. All development proposals (except those defined as exempt in secondary legislation) must achieve a minimum of 10% Biodiversity Net Gain (or any higher percentage mandated by national policy/legislation) over the pre-development site value as measured by the latest version of the DEFRA Biodiversity Metric

In advance of national mandating of biodiversity net gain this policy shall only apply to major development proposals.

2. Proposals for Biodiversity Net Gain must:

- a) be supported by core biodiversity gain information;
- b) be secured for at least a 30 year period from the substantive completion of the development;
- c) be delivered in accordance with an agreed management plan;
- d) follow the mitigation hierarchy set out in National Policy and Local Plan Policy 23(3) and (4) and demonstrate evidence of adequate avoidance and mitigation measures. Biodiversity net gain should be additional to any habitat creation required to mitigate or compensate for impacts; and



e) aim to achieve the required net gain onsite within the site boundary.

3. where a proposal adequately demonstrates in the Biodiversity Gain Plan that the mitigation hierarchy has been followed and the required net gain, or any compensation for lost biodiversity cannot be achieved onsite within the site boundary, it must secure the alternative provision of the required biodiversity units as registered offsite gains through:

a) the purchase of registered offsite biodiversity units to enable provision to be made by an approved biodiversity provider; provided the in-perpetuity management and monitoring of the receptor site can be assured; or

b) direct provision of the habitat types in a suitable location by the applicant provided the in-perpetuity management and monitoring of the offset site can be assured; or

c) a Biodiversity Offset Contribution to the Cornwall Council Habitat Bank.

d) the purchase of statutory Biodiversity Credits from National Government.

4. The receptor site for any local offsite biodiversity gains should have regard to the local priorities for nature as set out in any adopted Local Nature Recovery Strategy to be provided, be in a suitable location where local climatic conditions suit the type of offset offsite habitat to be provided, informed by a comprehensive understanding of habitats and species associated with the site and should avoid the best and most versatile agricultural land.

Minor development (as defined in secondary legislation) shall demonstrate biodiversity net gains in accordance with a Cornwall Council approved Small Site Biodiversity Metric.

Policy G3 – Canopy: 1. All major development should provide, through the retention of existing and or / the establishment of new, canopy coverage equal to at least 15% of the site area (excluding areas of the site that are priority habitat types) in accordance with a Cornwall Council approved calculator or metric.

2. Any proposal to remove canopy on the site should be justified in accordance with the canopy mitigation hierarchy.

3. Where a pre-development site already contains canopy that exceeds the 15% requirement, the development proposal should ensure the retention of as much canopy as possible on site in line with the mitigation hierarchy and should justify the losses proposed. An alternative canopy cover percentage, as evidenced by a council approved canopy metric, should be agreed with the Local Authority.

4. Where there are significant ecological, historical, landscape or operational reasons to justify a canopy requirement of less than 15% on site and this can be fully evidenced, an alternative percentage of canopy provision shall be agreed with the Council.

5. Minor development sites (with the exception of householder development and Change of Use (not creating new dwellings or additional floorspace) are not required to demonstrate the 15% canopy target but should explore all options in relation to canopy provision, and take appropriate measures to both avoid or reduce harm to existing onsite trees. Proposals shall include where appropriate and practicable provision of new canopy.



6. New canopy should provide a mix of species that are resilient to pests, diseases and climate change and should be delivered in sustainable locations, in a manner that supports the growth and spatial requirements of canopy. New canopy should positively contribute to the climate resilience of the site in a manner which protects and enhances existing canopy.

Policy G4 – Local Nature Recovery Networks: Where development is sited within or adjacent to an adopted Local Nature Recovery Network it should demonstrate how the proposal will maintain and enhance the integrity and connectivity of the network and support the principles of the Local Nature Recovery Strategy.

Policy RE1 – Renewable and Low Carbon Energy: Proposals for renewable and low carbon energy-generating and distribution networks, will be supported in the context of sustainable development and climate change.

Policy CC1 – Coastal Vulnerability Zone: Relevant parts include:

1) New development including replacement buildings (unless classified as exempt) within the Coastal Vulnerability Zone will only be permitted where it can be demonstrated through a Coastal Vulnerability Assessment that it:

a) Is consistent with policy statements for the local policy unit in the current Shoreline Management Plan; and

b) would not impair the ability of communities and the natural environment /biodiversity to adapt sustainably to the impacts of coastal change (including coastal squeeze).

3) Soakaways and other infiltration based sustainable systems within 5 metres of the Cornwall Coastal Vulnerability Map (CCVM) zone or discharge of surface water over or down the face of a cliff will not be permitted unless demonstrated through a Coastal Vulnerability Assessment that the proposed drainage method would not adversely affect coastal stability.

Policy CC3 – Reduction of Flood Risk: Development proposals shall be designed to reduce flood risk to the application site and its surroundings.

Policy CC4 – Sustainable Drainage System (SuDS) Design: SuDS proposals shall prioritise the use of above non-buried SuDS, including retrofit SuDS and where feasible within existing town centres, commercial and retail areas, and redevelopment projects and shall be designed to achieve the following criteria:

1) Maximise the benefits to the sense of place, amenity and biodiversity; and

2) Reduce the overall level of flood risk on the site and the surrounding areas; and

3) Provide attractive, biodiverse and non-buried systems; and

4) Incorporate SuDS within greenspace, blue and green infrastructure, amenity, and biodiversity schemes to manage surface water flows, improve water quality, educate and improve the wellbeing of communities; and

5) Where built into public green or open space have sufficient room to provide a safe, naturalised system without the need for fencing or barriers; and



6) Provide for simple and straightforward maintenance, including the provision of a plan and mechanism for on-going maintenance.

13.0 Appendix 5: ERCCIS desk study – Notable species recorded within 1km of the site.

