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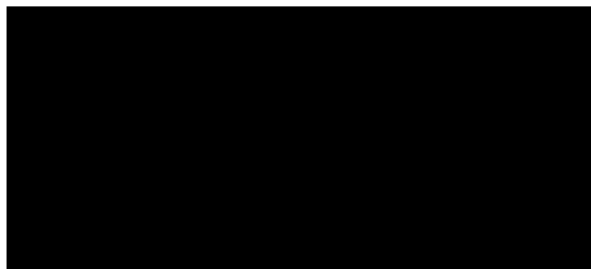


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Summary

Cove Ecological Surveys was commissioned to undertake a PEA at Mys Hedra Farm, St. Buryan SW4069727604. The site includes a single old farm building (used for storage), an improved grassland meadow, a boulder/spoil pile covered by a mixture of tall ruderal species and introduced shrubs, and an access track.

It is proposed to remove an old farm building and erect a replacement agricultural building on the site (as shown on plans supplied by the client: drawing nos. WILL 101, WILL 102, WILL 103, WILL 104 and WILL 105, prepared by Lodge & Thomas)

A walkover survey was undertaken on 22 March 2024 by John Sproull MSc, MCIEEM and Scott Barron (currently a CIEEM qualifying member). Plant species and habitats present were recorded and mapped. A preliminary search for signs of protected/notable faunal species was also undertaken.

This report provides an account of baseline site conditions. Anticipated ecological impacts of the development are assessed and recommendations (including recommendations for achieving BNG) are provided. Specific BNG calculations are beyond the scope of this report.

The site has been assessed as of value within the immediate vicinity for hedgehog, birds, reptiles and amphibians. The site periphery (outside the redline area) contains hedges, a stream and a small marshy area of local conservation value. The invasive plant species *Gunnera* is present within the area of marshy grassland peripheral to the site.

Development will require the movement of the spoil / stone pile and without mitigation has potential to impact protected faunal species including nesting birds, hedgehog, reptiles and amphibians.

Recommendations for mitigation include:

- Fence off or otherwise clearly demarcate the working area during clearance and construction (with Heras fencing or similar) to prevent disturbance to surrounding areas of retained habitat such that areas of habitat outside of the site can be adequately protected.
- Develop a landscape plan to favour native plant species and species of known wildlife value to maximise habitat and opportunities for as wide a range of species as possible, offset habitat loss and deliver BNG.
- Retain and buffer all hedges (and hedgerow trees) from built development by at least 2m (and to at least the crown-spread where trees are present).
- When removing/relocating the boulder/spoil pile follow guidance for nesting birds, reptiles and amphibians.
- Undertake vegetation clearance affecting woody vegetation (including hedges, scattered trees and scrub) during winter months (1 October to the end of February).

Recommendations for site enhancement in section 4.2 include:

- Develop a landscape plan to favour planting of native plants /species of known wildlife value, including enhanced hedges, areas of grassland, native scrub and scattered trees to offset habitat loss and deliver BNG.
- Favour areas of lightly managed grassland for species richness rather than frequently mown, species poor lawn within at least some less regularly used areas when planning garden layouts.
- Incorporate purpose made bat or bird boxes / bricks and bee bricks into the scheme.

1. INTRODUCTION

Mr J. Willis commissioned Cove Ecological Surveys in March 2024 to undertake a Preliminary Ecological Appraisal of Mys Hedra Farm, St. Buryan, TR19 6EJ (OS grid reference: SW4069727604).

The c.966m² site includes a single old farm building (used for storage), an area of improved grassland, a boulder/spoil pile covered by a mixture of tall ruderal species and introduced shrubs and an access track. It is proposed to remove the old farm building and erect a replacement agricultural building on the site (as shown on plans supplied by the client: drawing nos. WILL 101, WILL 102, WILL 103, WILL 104 and WILL 105, prepared by Lodge & Thomas). The site periphery (outside the redline area) contains Cornish hedges, a stream and a small marshy area included within the survey area and described briefly in the report for context.

This report seeks to describe and evaluate the baseline ecological conditions within the site at the time of the site survey, assess the likely ecological impact of the proposal and inform the planning application. Recommendations for further ecological surveys and mitigation will be made (if appropriate). This report should be used (as required) to inform the development of the site such that negative ecological impacts are avoided and/or minimised wherever possible. Where further surveys are recommended an update or addendum to this report may be required before submission to planning. The local authority is generally unable to condition ecological surveys and will normally be unable to determine an application for planning permission until all surveys have been completed.

The scale of the proposed development falls below that beyond which formal use of the biodiversity metric calculation tool is required to assess BNG (Biodiversity Net Gain). General recommendations for achieving BNG are included in this report but calculations are not included.

2. 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). It comprises three elements: a desk study, a site survey and a report as detailed below.

2.1. Desk Study

A desk study search for designated sites of nature conservation occurring within a 1km radius of the site (centred at approximately SW7894929502) was undertaken using information available on the DEFRA Magic Mapping website (DEFRA, 2024a) and Cornwall Council Interactive Mapping website (Cornwall Council, 2024).

2.2. Field Survey

A walkover survey was undertaken in accordance with standard Phase 1 Habitat Survey guidelines (JNCC, 2010) on Friday 22 March 2024 by experienced ecologists by John Sproull MSc, MCIEEM and Scott Barron. Dominant plant species and habitats present within the development site were recorded and mapped. A preliminary search for signs of protected and/or notable faunal species (such as tracks, prints, hairs, droppings, nests and burrows) was also undertaken.

2.3. Report

This report was written by Scott Barron with the assistance of John Sproull. It describes and evaluates ecological features within the proposed development site and provides an account of existing baseline conditions at the time of the site visit. Anticipated ecological impacts of the proposed development are then assessed and recommendations are made for their mitigation (including any need for further survey). Possible enhancements are also detailed.

The biodiversity value of ecological features and resources is evaluated according to various characteristics such as designation, rarity, threat, species richness, etc, based on the Guidelines for Ecological Impact

Assessment (CIEEM, 2006). Based on such characteristics, each ecological feature is assigned a biodiversity value using a geographic scale:

- International
- National
- County
- Local
- Immediate vicinity

2.4. Limitations

This assessment is based upon a site visit undertaken during March; the findings of the survey concern the condition of the site as it appeared on the day of the visit. March is a sub-optimal though acceptable time of year to undertake this type of survey: it is acknowledged that some flowering plant species may not have been visible or readily identifiable at this stage in the year. The weather on the day of the survey was dry with broken cloud and sunny spells, and a north-westerly wind of Beaufort Force 3. Temperatures were in line with seasonal norms.

There was good access across the site allowing a clear view of habitats within the site; , it is therefore considered unlikely that further ecological features, not visible at the time of the survey, may be present within the site.

Impact assessment is based upon interpretation of available plans as supplied by the client. If the final nature of the development differs significantly from how here characterised this report should be updated. As a guide it is suggested that this report should remain valid for 12–18 months from the date of survey. If work does not start on the development site during this period this report should be updated.,

Amenity based designations including Tree Preservation Orders (TPO's) and Conservation Area status are beyond the scope of this ecological report.

3. ECOLOGICAL DESCRIPTION AND EVALUATION

3.1. Survey area description

The c.966m² site is situated 1.7km north of the village of St. Buryan near Penzance and comprises a roughly L-shaped area (including the access track) with a farmyard area to the east containing an old farm building to be removed and the improved grassland area to the west containing a boulder/spoil pile. Access is gained directly from the A30 public highway via an existing hard-surfaced track passing through private grounds (initially with a Cornish hedgerow to the east and grassland to the west, then past residential and farm buildings), terminating within an area of hardstanding / farmyard where the farm building (to be demolished) is situated.

Habitats present within the survey area are described in more detail below in *Section 3.3* and shown on *Map 1*; a species list for each habitat is included in *Appendix 2*. Associated with each habitat description is a rationale for its evaluation at a given geographic scale and an initial assessment of the type and scale of impacts on the habitat likely to be associated with the proposed development.



Figure 1: Aerial photo of site showing approximate survey area in red.

3.2. Designated Sites

Designated sites of nature conservation importance within a 1km radius of the site are as follows:

The West Penwith Moors and Downs Site of Scientific Interest (SSSI) lies c.10m to the east of the site access track on the opposite side of the A30 public highway, and c.70m to the east and c.200m to the north of the actual development site.

Given the location of the site and nature of the development, subject to the guidance within this report (and other best practice guidance for construction) being followed it is anticipated that there will be no impacts upon designated sites should the development proceed.

3.3. Habitats

Phase 1 habitats recorded within the site are briefly described below with reference to the annotated plan (included with this report as *Map 1, Appendix 1*). A list of the species recorded within each habitat is included in *Appendix 2*.

3.3.1. Boulder/spoil pile

At the time of the visit a boulder/spoil pile was present in the western section of the site. This had a covering of vegetation made up from a mixture of ruderal species, grasses and introduced shrubs including dominant and abundant species such as Cock's-foot *Dactylis glomerata*, Yorkshire Fog *Holcus lanatus*, Common Nettle *Urtica dioica* and Common Figwort *Scrophularia nodosa*. Less frequent and occasional species

included Buddleja *Buddleja davadii*, Ribwort Plantain *Plantago lanceolata*, Pampas-grass *Cortaderia selloana* and Herb Robert *Geranium robertianum* with individual plants such as European Gorse *Ulex europaeus*, Rose *Rosa* sp. and Pheasant Berry *Leycesteria formosa* being some of the rarer species completing the floral assemblage found on the spoil pile. This habitat has some potential for faunal species (such as reptiles, amphibians, invertebrates and small mammals—see below) and is consequently considered to be of conservation value within the immediate locality. The boulder/spoil pile will need to be removed to make way for the proposed new agricultural building, and will be relocated elsewhere within the property (see recommendations).



Figure 2: Boulder/spoil pile located in the improved grassland in the location of the new agricultural building.

3.3.2. Improved Grassland

The western section of the proposed site (and the location of the new agricultural building) encroaches on a predominantly improved grassland field, which includes bare patches associated with a small amount of hardcore at the field entrance. Perennial Rye-grass *Lolium perenne* and Yorkshire Fog *Holcus lanatus* were the dominant species within the habitat. Frequent and occasional species included Broadleaved Dock *Rumex obtusifolius*, Creeping Buttercup *Ranunculus repens*, Dandelion *Taraxacum officinale* agg., White Clover *Trifolium repens* and Spear Thistle *Cirsium vulgare* with rarer species such as Silverweed *Potentilla anserina* and Green Alkanet *Pentaglottis sempervirens* found as isolated clumps or individual plants. Beyond some limited potential for faunal species such as reptiles (particularly Slow Worm *Anguis fragilis*) around the base of the spoil pile and invertebrates it is **not considered to be of any particular conservation value.**



Figure 3: The improved grassland area and localised areas of bare ground in the field entrance.



Figure 4: Improved grassland looking north towards the boulder/spoil pile which will be the site of the new agricultural building.

3.3.3. Tree

One single planted Cherry *Prunus* sp. tree sapling c.2 to 3m in height was present within the survey area. The tree is immature and relatively recently planted: it is **not considered to be of conservation value**.

3.3.4. Farm Building

The existing farm building within the site (to be demolished) was an open fronted wooden framed building with metal sheeting and wooden walls and a corrugated asbestos roof. At the time of the visit this farm building was being used for storage purposes. The building was surrounded by patchy vegetation including coarse grasses such as Cock's-foot *Dactylis glomerata*, bramble *Rubus fruticosus* agg. and various moss species. An ecological statement regarding bats will be produced separately assessing the suitability of this building for these species.



Figure 5: Farm building to be removed, looking west towards the improved grassland area.

3.3.5. Peripheral habitat

The peripheral habitat is that located just outside of the survey area and was therefore not surveyed in detail, but is described within this report for context.

A Cornish hedge at the south-eastern corner of the property is a stone faced earth bank, with woody species of plants along the top; semi-mature, multi-stemmed Sycamore *Acer pseudoplatanus* of 10–15m height with smaller Hawthorn *Crataegus monogyna* are dominant and locally abundant respectively. Ground flora included abundant Atlantic Ivy *Hedera hibernica* and locally abundant ferns including Broad Buckler Fern *Dryopteris dilatata* and Common Polypody *Polypodium vulgare*.

There is also a stream on the southern boundary of the property with an adjacent somewhat nutrient enriched area of marshy grassland which was locally dominated by Soft Rush *Juncus effusus*, Common Nettle, Broad-leaved Dock and the locally abundant invasive species Giant Rhubarb *Gunnera* sp.



Figure 6: Hedgerow which will be to the east of the new agricultural building.

Native hedgerows and most natural watercourses qualify as a priority habitat for conservation under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006¹. In general, hedges and watercourses can provide potential habitat for a range of wildlife including birds, reptiles, amphibians, invertebrates and mammals as well as valuable corridors via which wildlife can travel through developed landscapes, linking larger areas of semi-natural habitat. In view of this these peripheral habitats are assessed as of local conservation value.

¹ This legislation requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. It is the duty of Local Authorities to further the conservation of NERC / Section 41 (S41) habitats and species under section 40 of NERC Act and in accordance with the National Planning Policy Framework (NPPF, 2012).

It is assumed that the hedge, stream and marshy grassland (as well as habitats along the access track) will be retained and not directly affected by the development. Notwithstanding this, without care there may be some potential for degradation to peripheral habitats during demolition and construction, resulting from factors such as vehicle movements, dust deposition, materials storage and unintentional release of pollutants etc.



Figure 7: Water course and marshy ground area at the southern boundary of the property.

3.4. Species

3.4.1. Vascular plants

In total, 66 flowering plant species were recorded during the site visit; no notable species were recorded during the survey and the site overall is not particularly species rich. On this basis the site is assessed as of **no particular conservation value for vascular plants**. However, it would be possible to enhance parts the site to maximise floral diversity as part of the development and in contribution to BNG (see below).

3.4.1. Non-vascular plants

A dedicated survey of bryophytes (mosses and liverworts) was beyond the scope of the survey. The moss species *Brachythecium rutabulum* was recorded as abundant on the boulder/spoil pile during the survey; the site is considered likely to support a reasonable suite of common bryophyte species but is **not considered to be of special value for this group**.

3.4.2. Invasive plants

Invasive alien plant species are those listed on Schedule 9 of the Wildlife and Countryside Act making it an offence to “cause [them] to spread in the wild”. No invasive species were recorded in the survey area during the visit, but the following species was present in the peripheral area of marshy ground outside the survey area on the southern boundary of the property:

Giant Rhubarb *Gunnera* sp.

Without appropriate precautions invasive species could be spread during construction of the proposed development.

3.4.3. Badger

No Badger *Meles meles* setts, tracks or prints were seen during the survey; potential badger dung was found in the improved grassland west of the boulder/spoil pile. Badger is relatively common and widespread in Cornwall and likely to be present in the vicinity. Although this species could on occasion make use of the site, based on the findings of the survey it is **not considered to be of particular value for this species**. Badgers and their setts are legally protected under the Protection of Badgers Act 1992 (HM Government, 1992).

3.4.4. Bats

The value of the single farm building within the site has been separately assessed and will be reported on in a separate bat ecological statement which should be read in conjunction with the current report

3.4.5. Hedgehog

Hedgehog *Erinaceus europaeus* could occur within the site, potentially nesting and / or hibernating within areas of scrub, the boulder pile, introduced shrubs and debris. Although formerly common Hedgehog is in decline due to the loss of suitable habitat and is listed on S41 of the NERC Act as a priority species for conservation. The site is therefore considered to be potentially of **value within the immediate vicinity for this species**. If present, Hedgehog could be negatively impacted during site clearance.

3.4.1. Otter

Otter *Lutra lutra* is likely to be present in the local area (Drift Reservoir is located c3km north-east of the site) and the small stream on the southern boundary of the property (outside the redline area) could potentially be used on occasion by this species but the site is **not considered to be important for Otter**. Otters and their resting places are legally protected under the Conservation Regulations 2010 and are a S41 priority species for conservation.

3.4.2. Other mammals

Evidence of Mole *Talpa europaea* was present in the improved grassland in the form of mole hills. There is no suitable habitat within the site for other protected mammal species (such as Dormouse *Muscardinus avellanarius*, Brown Hare *Lepus lepus* or Harvest Mouse *Micromys minutus*) and the site is considered to be of **no value for these species**.

3.4.3. Birds

Blackbird *Turdus merula*, Chaffinch *Fringilla coelebs* and Robin *Erithacus rubecula* were seen within the site during the March survey. A dedicated bird survey was beyond the remit of the assessment. The hedges, trees, scrub and introduced shrubs within the site, as well as to a lesser extent the building, have potential to provide foraging, shelter and nesting opportunities for a range of common garden bird species. On this basis, the site is considered to be of **value to birds within the immediate vicinity**. Without mitigation, clearance of trees, hedges and scrub could impact nesting birds. All birds are legally protected whilst nesting under the Wildlife & Countryside Act 1981, as amended.

3.4.4. Reptiles and amphibians

Reptiles and amphibians require small scale variations in habitat with bare ground or short vegetation immediately adjacent to taller dense vegetation in which to retreat from predators and protected sites for hibernation. Whilst reptiles require open habitat for basking, amphibians require aquatic habitat for breeding.

The boulder/spoil pile could potentially be used by low to moderate numbers of more common and widespread species of this group—in particular Slow Worm and Common Toad *Bufo bufo*. On this basis the site is assessed as potentially **of value within the immediate vicinity** for this group and a precautionary approach during site clearance is therefore advised (see below). Adder *Vipera berus*, Common Lizard *Zootoca vivapora*, Slow Worm, Grass Snake *Natrix helvetica* and Common Toad are priority S41 species. All UK native reptiles and amphibians are partially protected under the Wildlife and Countryside Act 1981.

3.4.5. Invertebrates

No invertebrates were recorded during the March site visit. The development site includes habitats likely to support a varied range of invertebrates **but is considered unlikely to be of particular value to this group**. Proposals for the site are likely to have a localised temporary effect on this, generally, highly mobile group. Nevertheless, opportunities to enhance the site through future management for invertebrates should be pursued (see below).

4. RECOMMENDATIONS

4.1. Relevant legislation/policy and recommended mitigation

Based upon the above evaluation of the ecological features within the site and assessment of likely ecological impacts of the proposed development the following mitigation is recommended. Key relevant legislation/policy is highlighted to provide context (see also *Appendix 3* for a summary of relevant wildlife legislation and policy).

4.1.1. General

Local authorities have a duty to further the conservation of UK S41/BAP priority habitats under Section 74 of the Countryside and Rights of Way (CROW) Act 2000 and to protect, restore, re-create and aid recovery of these habitats under the **National Planning Policy Framework** (NPPF, 2021). The Natural Environment and Rural Communities (NERC) Act (HM Government, 2006) also confers a legal duty on every public authority to conserve biodiversity under Section 40(1). **Cornwall Council Planning for Biodiversity Guide** (Cornwall Council, 2018) sets out what the planning department expects from applicants when considering potential impacts upon biodiversity.

Fence off or otherwise clearly demarcate the working area during clearance and construction (with Heras fencing or similar) to prevent disturbance to surrounding areas of retained habitat .
Develop a landscape plan to favour native plant species and species of known wildlife value to maximise habitat and opportunities for as wide a range of species as possible, offset habitat loss and deliver BNG.

Cut vegetation (following guidance below) and strip any topsoil from parts of the site where built development is planned prior to the start of work and store appropriately within previously cleared areas for subsequent re-use within landscaped areas of the site where possible. Do not pile up or store excavated soils alongside hedgebanks or bury areas of habitat without prior clearance.

4.1.2. Boulder/spoil pile and improved grassland

The boulder/spoil pile and topsoil from the surrounding grassland area in the redline area will need to be removed to allow for the building of the new agricultural building. This should be done methodically using mechanical machinery under an ecological watching brief to account for the possible presence of reptiles and amphibians (see section 4.1.8 for methodology).

Do not pile up or store excavated soils alongside hedgebanks or bury areas of habitat without prior clearance.

The boulder/spoil pile should be relocated (with ecological input) to an appropriate position such as toward the south-western corner of the property boundary in the improved grassland area. Care should be taken to leave a buffer (minimum 2m) between the relocated boulder/spoil pile and hedgerows, watercourse and marshy area.

4.1.3. Peripheral habitat to development site

Local authorities have a duty to further the conservation of UK S41/BAP priority habitats under Section 74 of the Countryside and Rights of Way (**CROW**) Act 2000 and to protect, restore, re-create and aid recovery of these habitats under the **National Planning Policy Framework** (NPPF, 2021). The Natural Environment and Rural Communities (**NERC**) Act (HM Government, 2006) also confers a legal duty on every public authority to conserve biodiversity under Section 40(1). **Cornwall Council Planning for Biodiversity Guide** (Cornwall Council, 2018) sets out what the planning department expects from applicants when considering potential impacts upon biodiversity.

In line with Cornwall Council guidelines (2018) retain and buffer all hedges (and hedgerow trees as well as the stream and marshy grassland habitat) from built development by at least 2m (and to at least the crown-spread where trees are present).

Fence off the development site to protect the above habitats during construction. Do not deposit or store excavated spoil or any other materials, or otherwise change existing soil levels alongside retained hedges, the stream or marshy grassland.

4.1.4. Invasive species

These species are listed on Schedule 9 of the **Wildlife and Countryside Act** making it an offence ‘to cause [them] to spread in the wild’.

Contractors must be made aware of the presence of an invasive species within the site and the importance of not causing it to spread. Removal of *Gunnera* from the site should be considered.

4.1.5. Badger

Badgers and their setts are legally protected under the **Protection of Badgers Act** 1992 (HM Government, 1992).

As a precaution, any excavations left open overnight during construction should be provided with a means of escape (such as a sloping plank placed within) to prevent badgers (and other mammals) from falling in and becoming trapped.

4.1.6. Bats

All UK bat species and their roosts are legally protected under the **Conservation Regulations** 2010. UK BAP / S41 priority species are protected under legislation and planning policy as follows: **CROW Act** 2000, the **NERC Act** 2006 and **NPPF** 2021.

Follow the guidance within the separate bat ecological statement.

4.1.7. Hedgehog

Local authorities have a duty to further the conservation of UK BAP priority species under the **NERC Act** (2006), the **CROW Act** (2000) and **NPPF** (2021).

Carry out groundwork including site clearance with care during the active season for hedgehogs (March–October) so that any individuals present have a chance to move out of the way.

Any new fencing surrounding and sub-dividing the site should be hedgehog permeable, incorporating small gaps to allow them to continue to pass through the site.

4.1.8. Birds

All birds, their young and eggs are legally protected whilst nesting under the **Wildlife & Countryside Act** 1981, as amended. Local authorities have a duty to further the conservation of UK BAP priority species under the **NERC Act** (2006), the **CROW Act** (2000) and **NPPF** (2021).

Avoid disturbance to nesting birds by undertaking vegetation clearance affecting woody vegetation (namely introduced shrubs on the spoil mound) and demolition / removal of the building during winter months (1 October to the end of February). If this is not practicable, an ecologist must carry out a search of the vegetation / buildings immediately before clearance / demolition / removal. If nesting birds are found, work within 5m of the active nest must stop until the chicks have fledged. Peak nesting season is usually April to July and works are most likely to be delayed during these months.

4.1.9. Reptiles (and amphibians)

Local authorities have a duty to further the conservation of S41 priority species under the **NERC Act** (2006), the **CROW Act** (2000) and **NPPF** (2021). Legal protection is also given under the **Wildlife & Countryside Act** 1981.

Adopt a precautionary approach when undertaking work with potential to impact these groups (including vegetation clearance and movement of the stone pile) as follows:

- Cut vegetation and carry out site clearance including soil stripping, removal of the spoil / stone pile and stored materials, as well as initial ground works, during the active season for reptiles and amphibians (March to October) with an ecologist present to carry out a watching brief and direct the works such that any individuals present can be moved to safety.
- Undertake this work during warm weather working in one direction toward areas of suitable retained habitat (such as the hedges) to allow any individuals present a chance to move out of the way and avoid them becoming trapped in areas of unsuitable habitat.

4.2. Potential for Site Enhancement

Under the Environment Bill (HM Government, 2021) there is a legal requirement for all development requiring planning permission to deliver at least a 10% Biodiversity Net Gain (BNG). Provision is made for this in terms of planning policy under The **Cornwall Council Climate Emergency Development Plan Document** (2023b), **NPPF** (2021) and in the **Cornwall Local Plan** (Cornwall Council 2016). Best practice guidance for developers is provided in the **Cornwall Planning for Biodiversity Guide** (Cornwall Council, 2018). Use of the **Statutory Biodiversity Metric tool** (DEFRA, 2024b) to measure BNG became mandatory for *major* development on 12 February 2024. This requirement will be extended to apply to *minor* development from 2 April 2024. The current proposal falls below the threshold for major development; general recommendations for achieving BNG (Biodiversity Net Gain) are included in this report but calculations using the metric are not included.

Develop a landscape plan to favour native plant species and species of known wildlife value in order to offset habitat loss and maximise opportunities for as wide a range of species as possible. Parts of the improved field could be enhanced by planting native trees and shrubs, such as Grey Willow *Salix cinerea*, European Gorse *Ulex europaeus*, Wild Privet *Ligustrum vulgare*, Hawthorn *Crataegus monogyna* and Blackthorn *Prunus spinosa* and / or other species of known wildlife value within corners and along hedges. Berry or fruit bearing species with single, scented flowers are, in general, likely to be more attractive to wildlife. Native grassland seed mixes are commercially available and a seed mix appropriate to local conditions could be selected for grassland enhancement with ecological input.

Hedges should be managed sensitively following construction to favour wildlife. Allow native shrubs to grow up and maintain woody growth as high and wide as possible and cut during winter as infrequently as possible; avoid cutting all hedges, sides and tops in any one year and allow the development of new hedgerow trees wherever possible.

Favour areas of lightly managed grassland for species richness rather than frequently mown, species poor lawn within at least some less regularly used areas when planning garden layouts. Cut these areas as infrequently and late in the season as possible to allow plants a chance to flower and set seed and always remove the arisings in order to avoid a build-up of fertility, which will help less competitive wildflower species to establish and persist.

Cornwall Council, (2018) requires that all new residential development should incorporate one bat or bird box / bricks per unit and one and bee brick for every two units.

Report ends.

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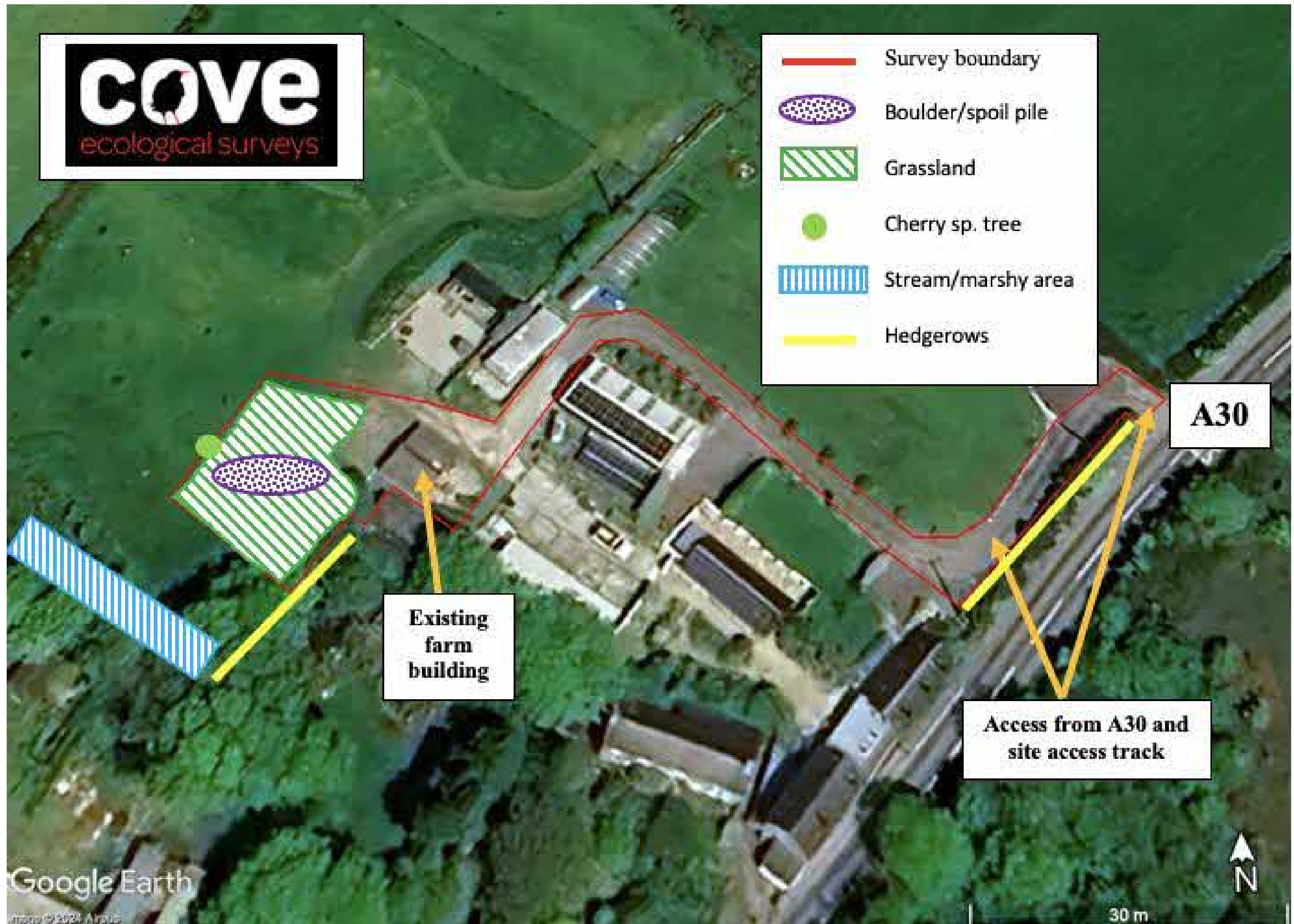
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Appendix 1: Map 1 Phase 1 Habitat Distribution



Appendix 2: Table 1 Species list

Common Name	Latin Name	Boulder Pile/spoil	Improved grassland	Trees	Building	Peripheral habitat - hedge	Peripheral habitat -
Sycamore	<i>Acer pseudoplatanus</i>					D	
Yarrow	<i>Achillea millefolium</i>		R				
Creeping Bent	<i>Agrostis stolonifera</i>		R/vLA				
Bugle	<i>Ajuga reptans</i>	LF					
Wild Angelica	<i>Angelica sylvestris</i>						O
Lesser Burdock	<i>Arctium minus</i>				R		
Lords-and-Ladies	<i>Arum maculatum</i>					O	
Hart's Tongue	<i>Asplenium scolopendrium</i>					O	
Lady Fern	<i>Athyrium filix-femina</i>						F
A moss	<i>Brachythecium rutabulum</i>	LA					
Mosses	<i>Bryophyte spp.</i>				O	LA	
Buddleia	<i>Buddleja davidii</i>	F			O		
Large Bindweed	<i>Calystegia silvatica</i>	O					
Wavy Bitter-cress	<i>Cardamine flexuosa</i>						F
Pendulous Sedge	<i>Carex pendula</i>						O
Common Mouse-ear	<i>Cerastium fontanum</i>		R				
Marsh Thistle	<i>Cirsium palustre</i>						F
Spear Thistle	<i>Cirsium vulgare</i>		O				
Pampas-grass	<i>Cortaderia selloana</i>	F					
Hawthorn	<i>Crataegus monogyna</i>					O	
Cock's-foot	<i>Dactylis glomerata</i>	D	O		F		
Broad Buckler Fern	<i>Dryopteris dilatata</i>					O	
Willowherb	<i>Epilobium sp.</i>	R					
Cleavers	<i>Galium aparine</i>	O					
Common Marsh-bedstraw	<i>Galium palustre</i>						O
Broom species	<i>Genista sp.</i>	R					
Herb-robert	<i>Geranium robertianum</i>	R			R	R	
Geranium species	<i>Geranium sp.</i>	R					
Wood Avens	<i>Geum urbanum</i>					R	
Giant Rhubarb	<i>Gunnera tinctoria</i>						LA
Fool's Water-cress	<i>Heloscadium nodiflorum</i>						LF
Hebe	<i>Hebe sp.</i>	R					
Atlantic Ivy	<i>Hedera hibernica</i>					A	
Yorkshire Fog	<i>Holcus lanatus</i>	A	LD		F		LA
Bluebell	<i>Hyacinthoides non-scripta</i>					LF	
Common Cat's ear	<i>Hypochaeris radicata</i>		R				
Soft Rush	<i>Juncus effusus</i>						LA
Pheasant Berry	<i>Leycesteria formosa</i>	R					
Snowberry	<i>Symphoricarpus sp</i>					LF	
Perennial Rye-grass	<i>Lolium perenne</i>		LD				
Water Mint	<i>Mentha aquatica</i>						O
Daffodils	<i>Narcissus sp.</i>					R	
Green Alkanet	<i>Pentaglottis sempervirens</i>		R				
Ribwort Plantain	<i>Plantago lanceolata</i>	F	O				
Annual Meadow Grass	<i>Poa annua</i>		R				

Common Name	Latin Name	Boulder Pile/spoil	Improved grassland	Trees	Building	Peripheral habitat - hedge	Peripheral habitat - road
Common Polypody	<i>Polypodium vulgare</i>					LA	
Silverweed	<i>Potentilla anserina</i>		R				
Creeping Cinquefoil	<i>Potentilla reptans</i>		R				
Cherry	<i>Prunus sp.</i>			R			
Lesser Celandine	<i>Ficaria verna</i>						R
Creeping Buttercup	<i>Ranunculus repens</i>	R	LF				LA
Rose	<i>Rosa sp.</i>	R					
Blackberry/bramble	<i>Rubus fruticosus agg.</i>	O			O	F	O
Common Sorrel	<i>Rumex acetosa</i>		O				
Curled Dock	<i>Rumex crispus</i>	R					
Broad-leaved Dock	<i>Rumex obtusifolius</i>	F	O				
Grey Willow	<i>Salix cinerea</i>					R	
Common Figwort	<i>Scrophularia nodosa</i>	LA					F
Red Campion	<i>Silene dioica</i>	O				R	
Sow Thistle	<i>Sonchus sp.</i>	R					
Dandelion	<i>Taraxacum officinale agg.</i>		O				
White Clover	<i>Trifolium repens</i>		O				
European Gorse	<i>Ulex europaeus</i>	R					
Navelwort	<i>Umbilicus rupestris</i>					R	
Common Nettle	<i>Urtica dioica</i>	LA				LA	F/LA
Cornsalad species	<i>Valerianella sp.</i>	R					
Ivy-leaved Speedwell	<i>Veronica hederifolia ssp. lucorum</i>	R					
Common Dog-violet	<i>Viola riviniana</i>					R	

DAFOR is a nominative scale where:

D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare.

L = Locally, e = Edge, v = Very, sd = seedling .

Appendix 3: Summary of Key Wildlife Legislation and Relevant Planning Policy

Legislation

Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain. This Act gives legal protection to birds, other animals and plants, Sites of Special Scientific Interest (SSSI's) and other protected areas and contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife

Conservation of Habitats and Species Regulations 2017. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites. Under the Regulations, competent authorities i.e. any Minister, government department, public body, or person holding public office, have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive and Wild Birds Directive.

Countryside and Rights of Way (CRoW) Act 2000. This Act increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation. The Act places a duty on Government Departments to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity

Natural Environment and Rural Communities (NERC) Act 2006. This legislation requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. It is the duty of Local Authorities to further the conservation of NERC / Section 41 (S41) habitats and species under section 40. S41 habitats and species were previously referred to as Biodiversity Action Plan (BAP) habitats and species.

Environment Act (HM Government, 2021) This legislation requires that all development requiring planning permission delivers at least a 10% Biodiversity Net Gain (BNG).

Protection of Badgers Act 1992 This Act gives legal protection to badgers and their setts. Making it an offence to disturb a badger when it is occupying a sett.

Planning Policy

National Planning Policy Framework 2021. The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied. Chapter 11 is entitled: *Conserving and enhancing the natural environment.*

Relevant policies include:

- Protecting and enhancing valued landscapes, geological conservation interests and soils
- Recognising the wider benefits of ecosystem services
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible
- If significant harm resulting from a development cannot be avoided, adequately mitigated or compensated for, then planning permission should be refused
- Proposed development on land within or outside a SSSI likely to have an adverse effect on a SSSI should not normally be permitted
- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted
- Opportunities to incorporate biodiversity in and around developments should be encouraged
- Planning permission should be refused for development resulting in the loss of deterioration of irreplaceable habitats

- By encouraging good design, planning decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation (HM Government, 2012).

Cornwall Local Plan 2016. This document provides an overarching planning policy framework for Cornwall covering the period up to 2030. Policy 23, section 3 relate to biodiversity. Key points are as follows:

- Developments should conserve, protect, and where possible, enhance biodiversity and geodiversity interests and soils commensurate with their status and giving appropriate weight to their level of importance.
- 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, helping to deliver the actions set out in the Cornwall Biodiversity Action Plan.
- Adverse impacts on designated sites, priority habitats or species must be avoided and suitable mitigation/compensation be provided subject to the relevant legislation.
- 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 (Cornwall Council, 2016).

Cornwall Council Planning for Biodiversity Guide (Cornwall Council, 2018) sets out what the planning department expects from applicants when considering potential impacts upon biodiversity.

Cornwall Council Climate Emergency Development Plan Document (2023) forms part of the Cornwall Local Plan and provides further direction on planning for a sustainable future

- Policy C1 states that 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
- Policy C2 states that 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.
- Policy G3 states that 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) by year 25 in accordance with a Cornwall Council approved calculator or metric.