



# Kemps Meadow, Tregony

## Cornwall

# Ecological Assessment

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The conclusions and recommendations contained in this document are based upon information gathered by TEP and provided by third parties. Information provided by third parties and referred to herein has not been independently verified by TEP, unless otherwise expressly stated in the document.

Nothing in this report constitutes legal opinion. If legal opinion is required, the advice of a qualified legal professional should be secured.

# Executive Summary

Site Details	The site is located at Kemps Meadow near Tregony, Cornwall. The site consists of a square arable field approximately 1.1ha with hedgerow boundaries. An old barn constructed mainly of corrugated panel walls and roof is present in the southeast corner of the field. The field is accessed through an existing field gate off a rural lane paralleling the field boundary to the north west. The site slopes down towards the northwest boundary.
Proposals	The application site measures approximately 0.08ha and is located at the southern end of the Kemps Meadow site. Proposals are to remove the existing barn and to rebuild a new barn possessing a similar footprint. A new 3m wide access track will be constructed from an existing field access off the road to the new barn. Two 70m new native hedgerows will be planted either side of the track. An area measuring 0.033ha ley grassland beyond the application boundary (indicatively located in the northeast field corner) will be enhanced to native wildflower meadow.
Designated wildlife sites	There are no designated wildlife sites within the site boundary or adjacent. The proposals do not meet any of the risk categories of the SSSI Impact Risk Zone in which the site is located. The site is within Zone 1 of the Strategic Net Gain Zones of the Cornwall Nature Recovery Network, (meaning high strategic significance for the purposes of Biodiversity Net Gain (BNG) assessment).
Surveys undertaken	An extended Phase I habitat survey, habitat condition assessment, ground-based bat assessment of the existing barn and an appraisal for other protected or notable species were completed in October 2023. No bats or evidence of bats was recorded, and the barn is categorised as having negligible suitability for roosting bats. However, swallows and potentially hedgehogs will require consideration.
Recommendations	Swallow nests were identified within the barn. Removal of the barn to a point where it is rendered unsuitable for nesting should avoid the bird nesting season (generally accepted as March - August inclusive but can be variable according to weather conditions). Precautionary ecological works will be required prior to and during removal of the existing barn, including a toolbox talk and careful removal of swallow nests and other potential ecological features such as the stacked cardboard boxes and fallen corrugated metal panels. Protection of the hedgerows on the field boundaries should be implemented in accordance with British Standard BS2012:5837 (Trees in relation to design, demolition and construction – Recommendations) to avoid accidental damage or degradation of the hedgerows). The loss of arable grassland within the application boundary will be mitigated by enhancement of at least 330m <sup>2</sup> ley grassland to native wildflower meadow. Arable use (tiling) has already been ceased. Additional proposals for biodiversity net gain include planting of new hedgerows (140m) along the track and installation of bat and bird boxes on the new barn.
Conclusion	The site is of generally low ecological value given its arable use. Ecological impacts arising from the proposals are likely to be significant at no more than the site level. There will be no impact on any statutory or non-statutory wildlife sites or priority habitats. With implementation of the recommended precautionary works and habitat creation and enhancement measures, no residual negative ecological effects will impact hedgerows or protected or notable species. Minimum 10% BNG targets for area habitats and hedgerows were exceeded and Trading Rules were satisfied.

This Executive Summary is not a substitute for the full report. Refer to the full text of this report for further detail.

Contents	Page
1.0 INTRODUCTION.....	1
Site Location .....	1
Proposals and Assumptions .....	2
Planning Context .....	3
Scope.....	4
2.0 METHODS .....	5
Desk Study .....	5
Habitats and Flora .....	7
Fauna.....	8
Ecological Assessment Process.....	9
Assumptions .....	11
3.0 RESULTS.....	12
Designated Sites.....	12
Habitats and Flora .....	12
Fauna.....	18
4.0 ASSESSMENT OF POTENTIAL IMPACTS .....	22
Wildlife Sites .....	22
Habitats and Flora .....	22
Biodiversity Net Gain .....	22
Fauna.....	26
5.0 MITIGATION AND ENHANCEMENT .....	28
Habitats and Flora .....	28
Fauna.....	28
6.0 SUMMARY .....	31

## Figures

Figure 1: Site location.....	2
Figure 2: Site proposals.....	3
Figure 3: Habitat map .....	13
Figure 4: View facing south (uphill) towards the barn in the southeast field corner.....	14

Figure 5: Views of hedgerows H1 (left image) and H2 (right image).....	16
Figure 6: Existing field access between H1 (left) and H4 (right).....	16
Figure 7: Views of barn exterior.....	18
Figure 8: Internal views of the barn .....	19
Figure 9: Old holes in hedgebank of H2 .....	20
Figure 10: Illustrated post-development habitats.....	24
Figure 11: BNG (Metric 4.0) Headline Results .....	25

## Tables

Table 1: DAFOR Scale .....	7
Table 2: Categorisation of buildings for bat roost suitability .....	8
Table 3: Arable field plant species list .....	14
Table 4: Hedgerows plant species list.....	17
Table 5: Baseline and post-development habitat summaries.....	24

## Annexes

Annex A: Ecology Trigger List

Annex B: Biodiversity Net Gain Assessment – Metric 4.0 Data Tables

## 1.0 Introduction

- 1.1 The Environment Partnership (TEP) was commissioned by Nicola Zaina in October 2023 to undertake an Ecological Assessment in support of a planning application for the removal of a small metal-built barn at Kemps Meadow, Tregony. Proposals are to replacement the existing barn with a new construction of similar size but with an associated small yard area and an access track connecting the barn to the existing field access in the northwest field corner. These works are confined to the southern end of the field parcel known as Kemps Meadow (hereafter referred to as ‘the site’).
- 1.2 This Ecological Assessment includes detailed methods and results with supporting maps, together with an evaluation of the ecological features within the site, an assessment of the potential impacts associated with the development proposals and requirements for mitigation. The assessment has been undertaken with due consideration for current best practice guidelines (CIEEM 2017a<sup>1</sup>, 2018<sup>2</sup>).

### Site Location

- 1.3 The site is located southeast off an un-named road connecting to the B3078 on the outskirts of the village of Tregony, Cornwall. The location of the site is indicated by the red line shown in Figure 1. The approximate central grid reference of the site is SW 9197 4455.
- 1.4 The site boundary contains an existing barn located in the southern corner of the site and an arable field parcel. It is understood that the arable field has not been tilled or cropped since the site was acquired in November 2022.
- 1.5 This field is situated upon a steep southeast incline and is bordered on each side by Cornish hedgerows with the only access into the field by a wooden farm gate located in the eastern corner of the site. This gate provides access onto an un-named road, a typical rural road.
- 1.6 The wider area generally comprises maintained arable field parcels with a water treatment site to the southwest, the village of Tregony and road network to the northeast. A small brook runs south-westward paralleling the un-named road and further to the north is the

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<sup>1</sup> CIEEM (2017a) Guidelines for Ecological Report Writing, 2nd Edition. Chartered Institute of Ecology & Environmental Management

<sup>2</sup> CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester



River Fal. The field has connecting hedgerows to small areas of woodlands and scrub in the wider area.

*Figure 1: Site location*



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## Proposals and Assumptions

- 1.7 The proposals are to remove the existing barn and to replace it with a similar sized new barn in addition to a new small yard area and access track. The yard and track are assumed to be hard-surfaced. The access track will use the existing field access in the northwest field corner. No hedgerows will require reduction or removal to facilitate access or replacement of the barn.
- 1.8 The proposals include other biodiversity enhancements including bat and bird boxes to be sited on or within the new barn.
- 1.9 The site proposals are illustrated in Figure 2, supplied by the Client.

Figure 2: Site proposals



## Planning Context

- 1.10 No relevant planning history was identified for the site from a search on Cornwall County Council planning portal.
- 1.11 The Ecology Trigger List is presented at Annex A.
- 1.12 The proposals constitute Minor Development. The Cornwall Climate Emergency Development Plan Document<sup>3</sup> includes minor developments in its net gain policy. Minor developments will therefore soon need to use the recently released Small Sites Metric. Given the relative simplicity of the habitats present and proposed, a BNG assessment is included within this Ecological Assessment.

<sup>3</sup> <https://www.cornwall.gov.uk/media/muhmug45/policy-g2-biodiversity-net-gain-guidance.pdf>



## Scope

- 1.13 This Ecological Assessment considers potential impacts and effects upon any notable habitats or species which may be present or adjacent to the site.
- 1.14 This report provides baseline information on the habitats and protected species present on site, gathered during a desk study and an extended Phase I habitat survey undertaken in October 2023.
- 1.15 This report presents the findings of the Ecological Assessment, the objectives of which are to:
- Detail the methods and results of the aforementioned surveys;
  - Identify features of ecological value within the application site such as legally protected species or habitats of importance to biodiversity;
  - Identify any non-native invasive species on site and provide advice regarding removal or management;
  - Advise on avoidance or mitigation requirements that may be needed prior to development commencing; and
  - Provide outline recommendations for biodiversity enhancement within site proposals in accordance with the National Planning Policy Framework (NPPF).

## 2.0 Methods

### Desk Study

- 2.1 In line with current best practice (CIEEM, 2016<sup>4</sup>, 2017b<sup>5</sup>), information regarding designated sites, notable habitats and existing protected and notable species records of the past decade, within a 1km minimum radius of the site was collated and reviewed to inform this Ecological Assessment.
- 2.2 In brief, key data sources included Natural England (open source data), Cornwall Council and Magic Map.
- 2.3 Statutory designated wildlife sites were searched for as follows (EZOI applied for each is indicated in brackets):
- Ramsar sites (10km);
  - National Sites Network (10km), includes Special Areas of Conservation (SAC) and Special Protection Areas (SPA);
  - Site of Special Scientific Interest (SSSI) (5km);
  - National Nature Reserve (NNR) (5km);
  - Marine Nature Reserve (MNR) (5km); and
  - Local Nature Reserves (LNR) (2km).
- 2.4 Non-statutory designated wildlife sites were searched for within 1km of the site and, within Cornwall, these may include:
- County Wildlife Sites (CWS);
  - Potential County Wildlife Sites (pCWS);
  - Unconfirmed Wildlife Sites (UWS); and
  - Other Sites of Wildlife Interest (OSWI).
- 2.5 Notable habitats were searched for within 1km of the site. Notable habitats may include those listed under any of the following:
- Ancient woodland;

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<sup>4</sup> CIEEM (2016) Guidelines for Accessing and Using Biodiversity Data. Chartered Institute of Ecology & Environmental Management

<sup>5</sup> CIEEM (2017b) Guidelines for Preliminary Ecological Appraisal, 2nd Edition. Chartered Institute of Ecology & Environmental Management

- Main rivers;
- Habitats of principal importance (HPI) as listed by the requirements of Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006<sup>6</sup>; and
- Local Biodiversity Action Plan Habitats (LBAP).

2.6 Pre-existing records for notable species were reviewed from the combined data sources, where available from public accessible data sources (Natural England, Local Planning Authority, Environment Agency, National Biodiversity Network Atlas, local atlases and other relevant open data sources), from within approximately 1km of the site. Notable species include those listed under any of the following:

- Protected animal species under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (EPS);
- Protected bird species under Schedule 1 of the Wildlife and Countryside Act 1981, as amended (WCA1);
- Protected animal species under Schedule 5 of the Wildlife and Countryside Act 1981, as amended (WCA5);
- Protected plant species under Schedule 8 of the Wildlife and Countryside Act 1981, as amended (WCA8);
- Invasive non-native plant species under Schedule 9 of the Wildlife and Countryside Act 1981, as amended (WCA9);
- Invasive non-native species under the Invasive Alien Species (Enforcement and Permitting) Order 2019 (IAS);
- Species of principal importance (SPI) as listed by the requirements of S41 of NERC;
- Protection of Badgers Act 1992 (PBA); and
- Red and Amber listed Birds of Conservation Concern (BRd/BAm).

## Limitations

2.7 Species records can provide a useful indication of the species present within the search area, although the absence of a given species from the dataset cannot be taken to represent actual absence.

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<sup>6</sup> Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England

## Habitats and Flora

### Habitat Survey

- 2.8 An extended Phase 1 habitat survey was completed by an experienced TEP ecologist, certified to Level 4 under the Field Identification Skills Certification, on 16th October 2023. The survey was carried out in accordance with the Phase 1 habitat assessment methods (JNCC, 2010) / UK Habitat Classification (UKHab) assessment method and Guidelines for Ecological Assessment (CIEEM, 2017b). The method records the habitat types present, within the survey route, based on the JNCC/UKHab descriptions. Plant species were identified in accordance with the New Flora of the British Isles (Stace, 2019<sup>7</sup>) and recorded as target notes using the DAFOR (Table 1).

*Table 1: DAFOR Scale*

Value	Cover	Notes
D = Dominant	>75%	Rarely used in practice
A = Abundant	51-75%	Very common in many parts of the site
F = Frequent	26%-50%	Several plants in several locations across the site
O = Occasional	11-25%	Several plants in a few locations, or vice versa
R = Rare	1-10%	Small number of individuals, scattered or clustered within target note area/ site

- 2.9 The survey included a visual appraisal of adjacent habitats to provide additional context. Adjacent habitats were viewed from accessible locations within the site boundary and using aerial photography.

### Limitations

- 2.10 Any ecological survey represents a snapshot of ecological conditions at the time of survey; ecological conditions may change over time. Efforts to identify dominant plant species for the purposes of characterising broad habitat types do not constitute a detailed botanical survey.

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<sup>7</sup> Clive Stace (2019) New Flora of the British Isles

2.11 The ecological survey was undertaken with no weather or access limitations. The habitat survey was undertaken during a sub-optimal time of the year, however due to the simplicity of habitat types present, this timing did not limit survey effectiveness.

## Fauna

2.12 Ordnance Survey maps and aerials were reviewed to identify potentially suitable habitats offsite within influence (e.g., dispersal distances for mobile species) of the site.

2.13 The habitat survey included an assessment of the habitats present for their potential to support notable or protected wildlife species, as described at paragraph 2.6. Any signs indicating the presence of these species were recorded.

2.14 In combination, this data informed the ecological evaluation of the application site and impact assessment for the proposed development.

## Preliminary Roost Appraisal of Buildings

2.15 A daytime preliminary roost appraisal (PRA) was undertaken on 16<sup>th</sup> October 2023 by an experienced TEP bat surveyor with a Level 2 Bat Survey licence from Natural England. The PRA included two buildings, a barn within the application boundary and a smaller agricultural building located offsite against the southwest field boundary .

2.16 The buildings were inspected externally and, where safely accessible, internally for field signs of bats such as droppings, scratch marks, insect remains and urine smear marks. Binoculars and an endoscope were used as aids. The survey was conducted with year-round use by bats in mind. Although the barn was showing evidence of weathering, the internal areas could be robustly assessed.

2.17 The buildings were categorised according to their bat roost suitability as determined by the characteristics and potential roost features (PRF) detailed in Table 2.

*Table 2: Categorisation of buildings for bat roost suitability*

Suitability	Characteristics		Potential Roost Features
High	<i>Several of the following features:</i>	Pre – 20th century buildings. Agricultural buildings of traditional brick, stone or timber construction. Large unobstructed flying spaces. Roof warmed by sun, in particular south facing roofs without shade. Large roof timbers with gaps at joints	PRF that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time (e.g., maternity/hibernation) due to their size, shelter, protection, conditions and surrounding habitat.



Suitability	Characteristics		Potential Roost Features
Moderate	<i>Some of the following features:</i>	(e.g., mortise joints), cracks and holes. Numerous access points for bats to fly into. Buildings near woodland and/or water. Low levels of disturbance. Buildings may be poorly maintained or aged, providing access points for bats into roof structures or crevices in bridges, but at the same time not too draughty, wet or cool.	One or more PRF that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (maternity/hibernation).
Low	Modern/intact buildings with few potential access points for bats. Brick buildings often with pitched slate or tile roofs but may have small or cluttered roof space. Flat roofed buildings with weatherboards or similar feature at the eaves with potential bat access behind or into building. Cooler, shaded, light or draughty voids. Buildings often lacking connectivity to woodland or areas of water.		One or more PRF that could be used by individual bats opportunistically, however, these PRFs do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Negligible	Flat roof structures lacking weatherboards, hanging slates or cladding. Modern/intact buildings with no bat access points. Lacking connectivity to any woodland or areas of water. High levels of regular disturbance. High levels of internal/external lighting. Buildings in very poor condition such that internal spaces are not weatherproof, being exposed to high levels of light, wind and/or rain.		Negligible habitat features on site likely to be used by roosting bats.

## Limitations

- 2.18 In some areas of the barn, parts of the corrugated roof where unsafe to walk under. Only a visual survey at distance was possible for these internal areas. However, this did not limit the effectiveness of the PRA.

## Ecological Assessment Process

- 2.19 This Ecological Assessment follows the published guidelines (CIEEM, 2018) and accepted best practice approach (BS42020:2013<sup>8</sup>) of the mitigation hierarchy whereby impacts are first avoided or, where this is not possible, reduced or mitigated or, as a last resort, compensated.

<sup>8</sup> British Standards Institution (2013) BS 42020:2013: Biodiversity — Code of practice for planning and development. BSI Standards Limited, London

- 2.20 In summary, the following procedure was undertaken during this Ecological Assessment:
- Describe the baseline and identify important ecological features;
  - Describe important ecological features and identify those which may potentially be affected by the proposals;
  - Identify potential impacts upon important ecological features and characterise the effect of such impacts (in respect of biophysical changes and taking account of relevant aspects of ecosystem structure or function);
  - Incorporate measures to avoid or reduce these effects;
  - Determine whether residual ecological effects are considered significant after avoidance or mitigation;
  - Identify appropriate compensation measures to offset significant residual effects; and
  - Identify opportunities for ecological enhancement.
- 2.21 Important ecological features are identified and valued, ecological impacts are characterised and assessed, and recommendations for appropriate mitigation, compensation and enhancement are made, in accordance with CIEEM guidance.
- 2.22 BS42020:2013 defines a significant effect as one “which is important, notable, or of consequence, having regard to its context”. CIEEM describes significance as “a concept related to the weight that should be attached to effects when decisions are made”. CIEEM defines an ecological effect as significant if it is “sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project”.
- 2.23 BS42020:2013 sets out a practical approach to determining the significance of an ecological effect, applicable at all levels of decision making in legal and policy terms, as follows:
- will the effect on biodiversity influence the balance of planning considerations and therefore the decision as to whether planning permission is likely to be refused or granted; and
  - if planning permission is granted, is the effect important enough to warrant the use of planning conditions and/or obligations to guarantee proposed measures or to impose restrictions, or to seek further requirements (e.g., for mitigation, compensation, enhancement, monitoring or site management).
- 2.24 Significance is therefore assessed on a case-specific basis according to the importance of the ecological feature (site, habitat or species) within the conservation hierarchy, and the effect upon it.

## Assumptions

- 2.25 Information provided by third parties, including publicly available information, is assumed to be correct at the time of publication.
- 2.26 It is assumed that the bordering Cornish hedgerows are not to be directly or indirectly affected during the removal of the existing barn and construction of the new barn and installation of the track. This includes the access point connecting to the un-named road.
- 2.27 There is a small agricultural structure, similar in construct to the existing barn, which is situated adjacent to H1. This structure is not included within proposals and is excluded from the assessment.
- 2.28 It is assumed that the proposed barn construction will be similar in scale to that of the existing barn which is to be removed.
- 2.29 The proposed track is assumed to be a standard 3m width and will connect from the existing field access off the unnamed road directly to the barn.

## 3.0 Results

### Designated Sites

- 3.1 The site is situated within the Fal and Helford SAC zone of influence. The SAC is located approximately 4km to the southwest and is the only National Site Network site within 10km.
- 3.2 The Upper Fal Estuary and Woods SSSI is the only statutory wildlife site identified within 5km of the site. The SSSI is located approximately 3km to the southwest, overlapping with the Fal and Helford SAC. The only other SSSI located within 5km is Cuckoo Rock to Turbot Point SSSI, designated for its geological interest and therefore not considered further in this Ecological Assessment.
- 3.3 The site falls within a single Impact Risk Zone (IRZ). The site proposals do not meet any of the risk parameters identified for this IRZ.
- 3.4 The nearest County Wildlife Site (CWS) is Upper Fal Woodlands, located over 200m away to the west across from the River Fal.
- 3.5 The site does lie within the Cornwall Council Strategic Network - Zone 1.

### Habitats and Flora

#### Pre-Existing Data

- 3.6 No ancient woodland and no TPO were identified in or within likely influence of the site on the Cornwall Council Environmental mapping tool.
- 3.7 The site does not contain any priority habitats identified on the Priority Habitat Inventory (PHI). The only priority habitats identified on the PHI are small areas of deciduous woodlands, the nearest of which is located to the north of the site on the north side of the road.
- 3.8 The River Fal is a main river. It is located approximately 33m from the site boundary. The small unnamed brook between the River Fal and the road is approximately 22m from the site boundary. Neither are to be influenced by the proposals and both are beyond the scope for watercourse assessment as part of the biodiversity net gain assessment.

## Field Survey

3.9 The site comprised a square arable field bordered by four Cornish hedges (species rich intact hedgerows). There was a weathered metal construct barn in the southwest corner of the site and a small agricultural building of similar construction located against the southwest field boundary. The habitats across the wider site in relation to the application boundary are illustrated in Figure 3.

Figure 3: Habitat map



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## Arable

3.10 The arable field measures approximately 1.18ha and was situated upon a slight southward incline. The former arable grassland field had not been tilled or cropped since the site was acquired by the current landowner in November 2022. The grass sward still comprised abundant white clover and perennial rye grass from the last arable rotation,



with frequent creeping buttercup. Several remnant arable crop species remained in evidence.

*Figure 4: View facing south (uphill) towards the barn in the southeast field corner*



3.11 The species recorded in the grassland across the wider field extent at the time of the survey are listed at Table 3 and are generally typical of an arable rotation of ley grassland. Additional forb species were likely present as a consequence of cessation of arable rotation since November 2022.

*Table 3: Arable field plant species list*

Binomial Name	Common Name	DAFOR
<i>Lolium perenne</i>	Perennial Ryegrass	A
<i>Trifolium repens</i>	White Clover	A
<i>Ranunculus repens</i>	Creeping Buttercup	F

Binomial Name	Common Name	DAFOR
<i>Trifolium pratense</i>	Red Clover	F
<i>Brachypodium sylvaticum</i>	False Brome	O
<i>Cichorium intybus</i>	Chicory	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cirsium vulgare</i>	Spear Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Phleum pratense</i>	Timothy	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Urtica dioica</i>	Nettle	O
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Plantago major</i>	Greater Plantain	R
<i>Sonchus asper</i>	Prickly Sow-thistle	R
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	R
<i>Vicia cracca</i>	Tufted Vetch	R

## Hedgerows

3.12 The field is bordered by four intact species-rich Cornish hedgerows:

- H1 was along the south-west field boundary with a wooden gate at its northern end. A high hedgerow situated upon a 1m high earth and stone bank. A mixture of mature and young trees, several large English oaks. No recent evidence of flailing or other management;
- H2 was along the south-east field boundary. Situated upon a 1.5m stone-faced earth bank. Average 3m in height for the majority of its length, where it appeared to be flailed regularly. Dense with hawthorn, hazel and blackthorn. The southern end contains trees, mainly willow species;
- H3 formed the northeast field boundary. A high hedgerow with mature and young trees varying in species, several large English oaks are present. This hedgerow is situated upon a 2m high earth and stone bank; and



- H4 formed the northwest field boundary. A high hedgerow with several tree species from mature to young, several old sycamores and English oaks are present. Base near ground level to the field parcel rising onto a hedgebank which makes up part of the shared boundary with the residential property adjacent to the site.

*Figure 5: Hedgerow H2*



*Figure 6: Hedgerows H1 (left) and H4 (right) with existing field access gate inbetween*



3.13 The plant species for the hedgerows combined are detailed in Table 4.

*Table 4: Hedgerows plant species list*

Binomial Name	Common Name	DAFOR
<i>Corylus avellana</i>	Hazel	A
<i>Crataegus monogyna</i>	Hawthorn (A in H2)	F
<i>Hedera helix</i>	Ivy	F
<i>Alliaria petiolata</i>	Garlic Mustard	O
<i>Asplenium scolopendrium</i>	Hart's-tongue	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Epilobium sp.</i>	Willowherb species	O
<i>Galium album</i>	Hedge Bedstraw	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Ilex aquifolium</i>	Holly	O
<i>Moss sp.</i>	Moss species	O
<i>Prunus spinosa</i>	Blackthorn (A in H2)	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Quercus robur</i>	English Oak	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Sambucus nigra</i>	Elder	O
<i>Silene dioica</i>	Red Campion	O
<i>Umbilicus rupestris</i>	Wall Pennywort	O
<i>Urtica dioica</i>	Nettle	O
<i>Acer pseudoplatanus</i>	Sycamore (Only in H4)	R
<i>Anthriscus sylvestris</i>	Cow Parsley	R
<i>Arctium minus</i>	Lesser Burdock	R
<i>Calystegia sepium</i>	Hedge Bindweed	R
<i>Jacobaea vulgaris</i>	Common Ragwort	R
<i>Prunus padus</i>	Bird Cherry	R
<i>Rosa canina agg.</i>	Dog Rose (Only in H2)	R



## Buildings

- 3.14 There are two buildings within the wider field, but only the barn to be removed is within the site boundary. The barn is located in the southwest corner of the site and is largely unused except for storage. It has a wooden frame structure with three internal compartments. The walls and roof are all constructed from corrugated metal sheets. The condition of these corrugated sheet walls and roof is generally poor, with evidence of weathering (Figure 6, left). Many of the sheet panels are rusted and some are damaged by wind, in some cases whole panels have come off creating large open access points to the interior. Adjacent ivy vegetation has grown into the interior and has caused some structural damage. The interior contains old boxes and some old farming materials.
- 3.15 The second building, located outside of the application boundary, is a small agricultural building (Figure 6, right) of similar metal construct, situated along the southwest field boundary (H1).

*Figure 7: Views of barn exterior*



## Notable or Invasive Flora

- 3.16 During the survey there were no Schedule 9 Non-native invasive species recorded.

## Fauna

### Bats

### Pre-existing data

- 3.17 The desktop search revealed no existing active bat licences within the site boundary. Three bat licences were returned within a 1km search area from the site boundary:



- 300m southwest, for common and soprano pipistrelle and brown long-eared bat;
- 300m north, for common pipistrelle; and
- 730m northwest, for common pipistrelle and brown long-eared bat.

### Daytime assessment of the buildings

- 3.18 A daytime ground-based external and internal inspection of the barn in the field corner and the smaller offsite building against the southwest field boundary (H1) was undertaken. No bats or evidence of bats were recorded.
- 3.19 The barn was of negligible bat roost suitability. The structure lacked any dark internal spaces as there were no doors and several areas of the walls and roof were missing due to weather damage. The simple wooden frame structure, to which the corrugated metal wall and roof panels were fixed, lacked any small cavities or suitable roosting features.
- 3.20 Although the barn does not provide suitable daytime roosting habitat, it offers suitable conditions for nighttime foraging and may therefore provide some opportunities to local bats as a nighttime feeding perch.

*Figure 8: Internal views of the barn*



- 3.21 The second smaller building against the southwest field boundary was offsite, will not be affected directly or indirectly by proposals and is excluded from further assessment.

### Birds

- 3.22 During the survey wren and goldfinch were recorded within the site boundary, using the hedgerows for foraging and cover. The hedgerows offer suitable habitat for a range of nesting birds.

3.23 Several swallow nests were noted within the barn during the preliminary bat roost appraisal. Although unoccupied at the time of survey due to the time of year these nests could be reoccupied in the nesting season. There was no evidence of barn owl nesting or roosting within the barn.

## Badger

3.24 Two holes in the centre of H2 could have historically been created by badgers, being of appropriate size and shape (Figure 9). The holes appeared to create a ‘cut-through’ the hedgebank. However, there was no field evidence to substantiate their origin and the holes were filled with debris from past hedge cutting works. No current or evidence of badgers was recorded during the survey within the site boundary. The holes were located more than 30m from the proposed work area.

*Figure 9: Old holes in hedgebank of H2*



## Reptiles

- 3.25 Several suitable habitat features for reptile species were noted in the site:
- Several corrugated metal panels were present on the ground around the barn which would offer shelter and basking opportunities for reptiles;
  - Cornish hedgerows provide suitable shelter and winter refuge opportunities; and
  - The long grass within the arable field parcel would support suitable foraging habitat for reptiles, namely slow worm, if present in the locality.
- 3.26 No reptiles were noted on or under items that could be safely searched during the course of the survey.

## Other species

- 3.27 The hedgerows offer suitable habitat for hazel dormouse. However, the existing hedgerows will not be affected by proposals. Consequently, hazel dormouse is scoped out of further assessment.
- 3.28 Deer hairs were snagged upon barbed wire where H2 connects with H3. The hedgerows will remain unaffected by the proposals and the proposed land changes would not significantly impact upon deer. Consequently, deer are scoped out of further assessment.
- 3.29 The site provides several opportunities for hedgehog habitat both summer nesting and winter hibernation and offers suitable habitat for foraging. Remove of the barn has potential to put hedgehogs at risk and therefore hedgehogs are taken forward for assessment.
- 3.30 As there are no waterbodies within or near the site, breeding amphibians will be absent. Should there be unmapped ponds present (in gardens, for example), the hedgerows surrounding the field offer suitable shelter and winter refuge and localised cover items in the form of the corrugated metal panels that had fallen from the barn would provide at least temporary cover. No amphibians were noted under such items that could be safely searched. Hedgerows will be retained unaffected. Consequently, amphibians are not considered further in this assessment.



## 4.0 Assessment of Potential Impacts

### Wildlife Sites

- 4.1 The proposed development will not introduce any new accommodation and will therefore have no additional effect upon recreational pressure on the Fal and Helford SAC.
- 4.2 Given the distance from the site, there are no impact pathways by which the proposals could result in adverse impacts upon the Upper Fal Estuary and Woods SSSI.
- 4.3 The site falls within a single Impact Risk Zone (IRZ). The site proposals do not meet any of the risk parameters identified for this IRZ.
- 4.4 Given the distance between the site and the nearest non-statutory wildlife site in combination with the nature of the proposals, there are no impact pathways by which the development proposals would adversely affect this site.
- 4.5 Statutory and non-statutory wildlife sites are therefore not taken further forward in this Ecological Assessment.

### Habitats and Flora

- 4.6 The only habitats that will be affected by the proposals are the arable ley grassland, of which approximately 680m<sup>2</sup> will be lost, and the barn (developed land) which is to be replaced. These habitats are considered a low ecological value.
- 4.7 The barn to be removed and the proposed new barn are located in proximity to two Cornish hedges, H1 in the southwest and H2 in the southeast. The new barn is estimated to be located approximately 9m from H1 and 3m from H2. While proposals (removal of the existing barn or construction of the new barn) do not directly affect these hedgerows, and the new footprint affords a greater standoff to the hedges than the existing barn, removal and construction works in proximity to these hedgerows may pose risk of accidental damage to the hedgerows.

### Biodiversity Net Gain

- 4.8 Proposals are to construct a new barn similar in design and dimensions to the existing building. A new 3m wide track will connect from the road via the existing field access to the new barn build. Hedgerow planting is proposed on either side of the new track.
- 4.9 To compensate for the loss of grassland within the application site, an area of grassland will be enhanced within the wider field. Figure 10 identifies the indicative area, located to



the north east corner of the Kemps Meadow site, within which grassland enhancement is presently anticipated.

4.10 For the purposes of the BNG assessment, the following assumptions are made:

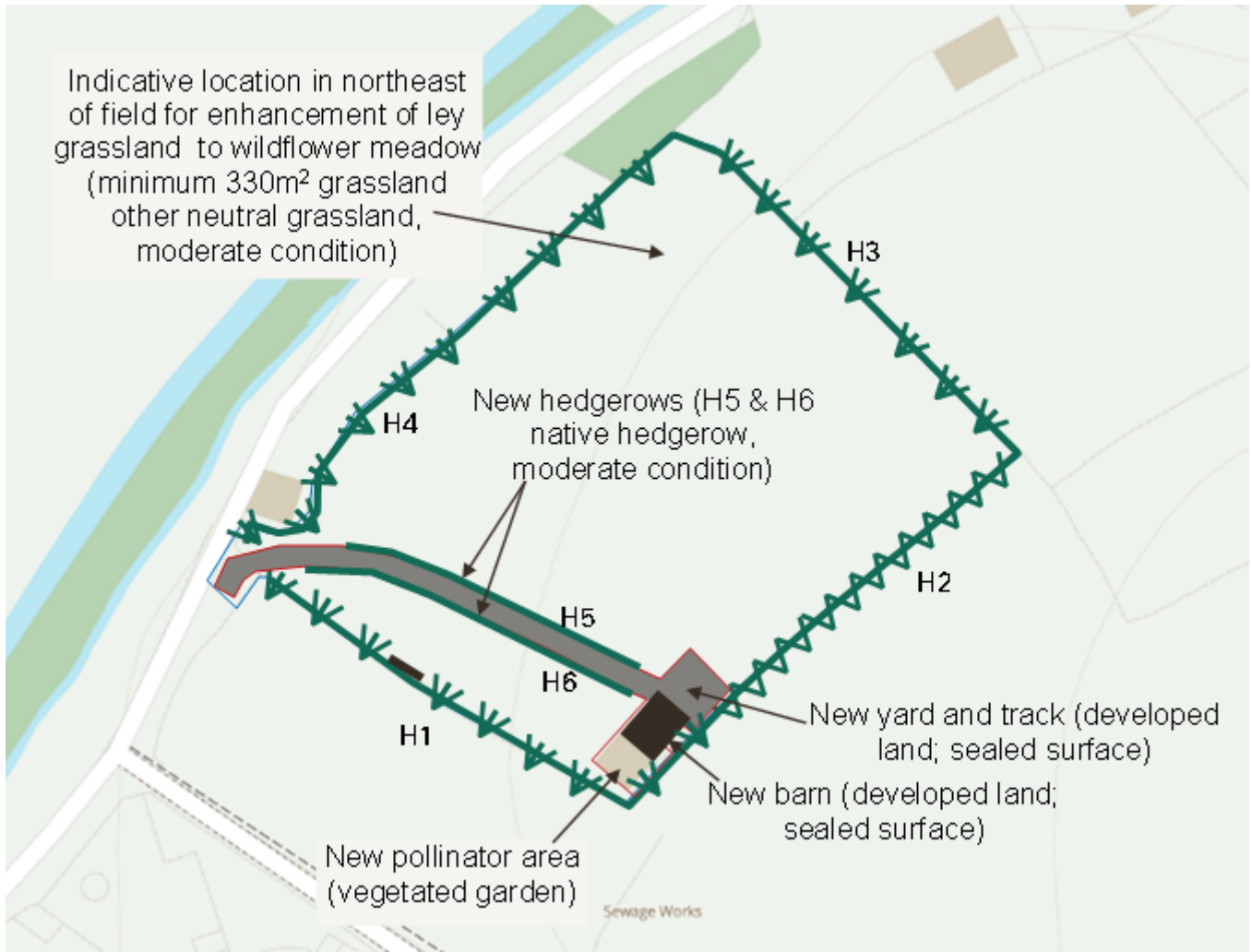
- The application site (on-site) measures 780m<sup>2</sup> and encompasses the footprint for the existing barn, new access track, new barn and new yard;
- The application site area habitats comprise cropland; temporary ley grassland and developed land; sealed surface, neither of which require condition assessment;
- The southeast boundary of the application site is considered to comprise a short part (35m) of H2, categorised as ‘species rich hedgerow associated with a bank or ditch’ in good condition;
- Part of the north boundary of the application site is formed by a short part (15m) of H4, categorised as ‘species rich hedgerow with trees associated with a bank or ditch’ in good condition;
- Planting specifications were not available at time of writing, but the new hedges to be planted along both sides of the new access tracked will, as a minimum commitment, comprise native species and are categorised as ‘native hedgerows’ which will achieve at least moderate condition;
- The southern part of the existing barn footprint will, once the barn is removed, be restored to a pollinator feature. For the purposes of the BNG calculations, in the absence of detailed planting plans, this area is categorised as ‘vegetated garden’ (no condition assessment required) and is estimated to measure approximately 75m<sup>2</sup>;
- Enhancement of an area of existing ley grassland will be implemented outside of the application boundary but within the wider field and therefore within the same land ownership. This is currently anticipated to be located in the northeast corner of the field. The location may be subject to change, but the minimum area will be at least 330m<sup>2</sup>;
- It is understood that wildflower seed from a suitable donor site in Cornwall is being sourced from the Wildlife Connective for the grassland enhancement. For the purposes of the BNG calculations, the enhanced grassland is categorised as ‘other neutral grassland’ which achieve at least moderate condition; and
- All areas of the application site (on-site) and enhancement area indicatively to the northeast corner of the field (offsite) are categorised to be of high strategic significance, as the whole field area is situated within Zone 1 of the Strategic Net Gain Zones in the Cornwall Nature Recovery Network<sup>9</sup>.

4.11 Figure 10 illustrates the proposals adopting the above assumptions. Table 5 summarises the baseline and post-development habitats on this basis.

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<sup>9</sup> <https://lagas.co.uk/app/product/nature-recovery-network>

Figure 10: Illustrated post-development habitats



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Table 5: Baseline and post-development habitat summaries

Habitat Type	Measure within application site		Measure within offsite enhancement area	
<b>Baseline</b>				
Cropland (ley grassland)	680	m <sup>2</sup>	330	m <sup>2</sup>
Developed land; sealed surface	100	m <sup>2</sup>	0	m <sup>2</sup>
Species rich native hedgerow with trees associated with ditch or bank, good condition (35m section H2 + 15m section H4)	50	m	0	m

Habitat Type	Measure within application site		Measure within offsite enhancement area	
<b>Post-development</b>				
Pollinator feature (vegetated garden)	75	m2	0	m2
Developed land; sealed surface	705	m2	0	m2
Other neutral grassland, moderate condition	0	m2	330	m2
Species rich native hedgerow with trees associated with ditch or bank, good condition (35m section H2 + 15m section H4)	50	m	0	m
Native hedgerow, moderate condition (new H5 and H6)	140	m	0	m

4.12 The area habitats and hedgerows tables and the results of the BNG assessment using the Biodiversity Metric 4.0 are presented at Annex B. Figure 11 summarises the predicted BNG results.

Figure 11: BNG (Metric 4.0) Headline Results

<b>FINAL RESULTS</b>		
<b>Total net unit change</b> (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.02
	<i>Hedgerow units</i>	0.54
	<i>Watercourse units</i>	0.00
<b>Total net % change</b> (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	12.60%
	<i>Hedgerow units</i>	39.05%
	<i>Watercourse units</i>	0.00%
<b>Trading rules satisfied?</b>	<b>Yes ✓</b>	

4.13 Assuming that the habitat proposals are implemented at least as summarised at paragraph 4.10 there would be a net gain of 12.6% in habitat unit value and a net gain of 39.05% in hedgerow unit value. Trading Rules would be satisfied.

## Fauna

### Bats

- 4.14 All British bats are European protected species, afforded full protection under the Habitats Regulations and the Wildlife & Countryside Act 1981 (as amended). Bats are protected from killing or injury, and from disturbance at the place of rest. Bat roosts are also protected from obstruction, damage or destruction (whether or not a bat is in occupation at the time).
- 4.15 Bats are not currently using the barn to roost. There will be no impact upon roosting bats or bat roost habitat. Proposals for the new barn include provision of a new bat box. This would be beneficial for roosting bats locally, providing additional roost opportunity.
- 4.16 It is likely bats are using the site and surrounding area for commuting and foraging purposes. There will be no hedgerow removal as part of the proposals. Three new hedgerows will be planted as part of the proposals, which would be beneficial for foraging and commuting bats locally.

### Birds

- 4.17 Native nesting birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981 (as amended) from damage and destruction, from the time of nest construction to fledging of the young.
- 4.18 There is a risk of damage or destroying a nest if removal of the barn were to be carried out within the nesting period (generally considered to be between March to August inclusive, although geographical position of the site will influence this period and some species nest also commonly nest outside this period).
- 4.19 The barn supports swallow nests. However, replacement nest habitat will be provided within the new barn. There will be no net loss of nesting habitat.

### Reptiles

- 4.20 Common lizard, slow-worm, grass snake and adder are protected under the Wildlife and Countryside Act 1981 (as amended) from killing and injury and are all SPI.
- 4.21 Reptiles could be present around the base of the barn, under fallen metal sheets and surrounding hedgerow bank areas. Clearance around the barn could potentially put reptiles at risk of killing or injury, should they be utilising these fallen materials for shelter



at the time. Precautionary working measures will be required to avoid risk of killing or injury of reptiles during removal of the existing bar and construction of the new barn.

## Badgers and Hedgehogs

- 4.22 Badgers are protected under the Protection of Badgers Act 1992 from killing, injury and certain acts of cruelty. Their setts are also protected from damage, obstruction or destruction.
- 4.23 Hedgehogs are partially protected under the WCA, prohibiting killing or capture by certain means, and are protected from cruel treatment by the Wild Mammals Protection Act 1996. They are also a SPI.
- 4.24 Hedgehogs and badgers could potentially be using the site for foraging and commuting purposes. In particular, the stored materials within the barn may provide some winter hibernation opportunities for hedgehogs. Sensitive removal methods will need to be taken so not to have a negative impact on this species. Construction activities are not anticipated to require substantial excavations but measures to avoid wildlife entrapment within the works should be implemented as best practice.

## 5.0 Mitigation and Enhancement

- 5.1 This section describes appropriate and proportionate measures for impact avoidance, mitigation and enhancement required or recommended to address the potential ecological effects described in Section 4.0.

### Habitats and Flora

#### Avoidance and Mitigation Required

- 5.2 Tree and hedgerow protection measures should be implemented for hedgerows H1 and H2 before works to remove the barn commence to avoid accidental damage. Tree and hedgerow protection measures should be implemented in accordance with British Standard BS5837:2012 Trees in Relation to Design, Demolition and Construction.

#### Enhancement Recommended

- 5.3 Planting within the scheme design proposals should take place to ensure the predicted net gain in biodiversity is delivered for habitats and hedgerows, in compliance with national and local policy.
- 5.4 In the absence of detailed planting plans, the BNG assessment assumed species poor hedgerows would be planted along the track. Additional gains in biodiversity could be achieved by diversifying the hedgerows to be planted, to incorporate at least six native woody species per 30m. If these hedgerows were to be created as traditional Cornish hedges, additional net gains would be delivered as a consequence of the hedgebanks.

### Fauna

#### Bats

#### Avoidance and Mitigation Required

- 5.5 Although the barn has been classified as negligible suitability following the BCT guidance, precautionary working methods are recommended prior to and during removal of the barn as best practice. It is recommended a pre-start inspection be completed by a licenced bat ecologist holding a Level 2 bat licence from Natural England. Precautionary measures should also include:
- A pre-start toolbox talk given by the ecologist; and
  - Careful removal of the corrugated metal panels prior to dismantling of the remaining structure.

- 5.6 In the unlikely event evidence of bats is established during removal of the barn, all works must stop, a Natural England licence must be required before works can proceed.

#### Enhancement Recommended

- 5.7 A Kent style bat box will be installed on the new barn to provide new roost habitat.

## Birds

#### Avoidance and Mitigation Required

- 5.8 If any clearance is to be carried out it should be undertaken outside the nesting period (generally considered to be between March to August inclusive, although geographical position of the site will influence this period and some species nest also commonly nest outside this period). Works to remove the barn should ideally have progressed to a point which renders the structure unsuitable for nesting birds before the nesting season starts.
- 5.9 If avoidance of the nesting period is not practicable, a nesting bird check must be carried out by an ecologist no more than 24 hours prior to the works, to confirm that no active nests are present within the barn or immediately surrounding habitat that would be impacted due to removal works. In the event that an active nest is identified, works within the surrounding area must halt until the chicks have fledged. The required radius of the exclusion area will depend on the species found nesting and the context of the nesting location. Monitoring of the nest would need to be completed by an ecologist to verify when nesting is completed, allowing works to restart.

#### Enhancement Recommended

- 5.10 Swallow nest units will be installed on or within the new barn to provide replacement nesting habitat.
- 5.11 Further enhancement for nesting birds could be delivered through additional placement of a bird box for other species, for example a barn owl box and/or a box model that would be suitable for smaller birds such as house sparrow or wren.

## Reptiles

#### Avoidance and Mitigation Required

- 5.12 Corrugated metal panels make for optimal hibernacula for reptiles. Corrugated metal panels on the ground surrounding the barn should be carefully removed by hand under supervision of the ecologist. Upon discovery of any reptiles, they should be hand captured and relocated by the ecologist to a pre-determined location that will remain

undisturbed by the removal of the existing barn, construction of new barn and associated yard and access, and habitat enhancement works.

## Badgers and Hedgehogs

- 5.13 The footprint of the barn and adjacent hedges should be reinspected by an ecologist prior to the start of works to ensure no badger setts have established within the work area or within 30m of the work area in the intervening time since the walkover.
- 5.14 There are several piles of cardboard boxes, rubble piles and other suitable features within and surrounding the barn where hedgehogs would find suitable nesting habitat. These areas are to be removed carefully under supervision of the ecologist and upon discovery of hedges the ecologist will relocate.
- 5.15 Construction and operation of the track and new barn would not pose significant risk to hedgehogs or badgers. However, as best practice any excavations that are required should be covered overnight or alternatively provided with a ramp with a 40 degree incline that would create safe egress for badgers, hedgehogs and other small animals.



## 6.0 Summary

- 6.1 The site is currently of low ecological value, comprising an agricultural ley grassland dominated by perennial rye grass and white clover. The exceptions are the field boundaries, which comprise Cornish hedges and are species rich. With the exception of most of the southeast hedgerow H2, which is maintained to a more compact shape, the hedges are outgrown with several mature trees.
- 6.2 The barn is a metal panel construct that shows evidence of weathering. The barn is to be removed and a replacement structure rebuilt in addition to a small hard standing yard area to the north and a hardstanding pathway to the existing field access in the northwest corner.
- 6.3 Proposals do not include any hedgerow removal. Tree and hedgerow protection in accordance with BS5837:2012 is recommended to prevent accidental damage of H1 or H2 during works.
- 6.4 Two new hedgerows are proposed paralleling the new track. Detailed planting proposals are unavailable, but it is assumed these would, as a minimum, be considered as 'native hedgerows' for the purposes of the BNG assessment. No hedgerows would be lost or degraded and approximately 140m native hedgerow would be created. This would deliver an estimated 39.05% net gain in hedgerow units, based on the BNG assumptions and calculations presented in Section 4.0.
- 6.5 Loss of arable ley grassland to the construction of the new barn, yard and path will be compensated by enhancement of the ley grassland elsewhere within Kemps Meadow (indicatively, to the northeast corner) to native wildflower meadow. The minimum area to be enhanced for this proposed development will be 330m<sup>2</sup>. This would deliver an estimated 12.6% net gain in habitat units, based on the BNG assumptions and calculations presented in Section 4.0.
- 6.6 The barn presented no evidence of roosting bats and was assessed to be of negligible bat roost suitability (as was the offsite smaller building located against the southwest field boundary). The barn supported nesting swallows. Removal of the barn to a point that renders it unsuitable for nesting birds should be completed outside of the nesting season i.e., avoiding the months March to August inclusive. To accord with best practice, it is recommended that removal of the barn be covered by an ecological watching brief, to include a pre-start inspection by a licensed ecologist to reinspect the barn for bats and nesting birds.

- 6.7 There are habitats with suitability for other protected species present within proximity of the works, including hedgehog, reptiles and badger, although no field evidence of such species was noted during the site visit. Precautionary measures are recommended to avoid risk of killing, injury or disturb to these species prior to and during works. A reinspection of the area around the barn should be completed to ensure no badger setts have been established since the site visit prior to start of the works. Debris around and within the barn should be carefully cleared prior to removal. Construction and operation of the site are not considered to pose significant risk to wildlife, but best practice measures are recommended, such as ensuring any excavations created are provided with safe means of egress for wildlife.
- 6.8 Providing the avoidance measures and recommendations are implemented in accordance with this Ecological Assessment, the proposed development will be compliant with wildlife legislation, and with national and local policy relating to BNG and wildlife protection.

## Annex A: Ecology Trigger List

## Do you need to submit an Ecology, Geology or Invasive Species Report with your planning application?

***Anyone causing a wildlife crime (e.g. destruction/loss of a bat roost) can be prosecuted, irrespective of the planning process. Schedule works to ensure no disturbance to protected species, including nesting birds and hibernating reptiles and dormice.***

Please fill in Parts A1a and 1b, B and C of the table below. The completed table must be included with your application.

Part A. If there is a tick in the 'yes' column you must include an Ecology report with your application. The report may vary from a short written statement produced by a suitably qualified consultant to an Ecological Impact Assessment (EcIA) containing species surveys and mitigation proposals.

Part B. If there is a tick in the 'yes' column you must include a Geology Report with your application.

Part C. If there is a tick in the 'yes' column you must include an Invasive Species Control Plan Report.

All reports must be produced by a consultant with suitable qualifications and experience.

### Ecology report Trigger Table

PART A - TRIGGERS FOR AN ECOLOGY REPORT		Yes (Ecology Report required)	No
1a).	The application site (red line) is greater than 0.1 hectares*		N
1b).	The proposal:		
i.	Involves demolition of a building.	Y	
ii.	Conversion and extension of rural and agricultural buildings or involves works to a roof, roof space, weather boarding or hanging tiles e.g. loft conversion and roof raising		N
iii.	Involves works to a quarry or built structures such as bridges, viaducts, aqueducts, tunnels, mines, engine houses kilns, ice houses, military fortifications, air raid shelters, cellars and similar underground ducts and structures.		N
iv.	Applications for wind turbine(s), including domestic turbines.		N
v.	Will illuminate / cause light spill onto a building, mature tree (see ix), woodland, field hedge, pasture, watercourse, water body, tree line or a known bat roost.		N





**IMPORTANT .....**

- If detailed protected species surveys are required these **MUST** be included with your planning application. The application cannot be validated without them. They cannot be conditioned.
- Some ecological surveys can only be undertaken at certain times of year. It is essential that these are timetabled into your project plan. A survey calendar can be found at <https://ecenvironment.co.uk/ecology/ecological-survey-calendar/>
- All details of avoidance, mitigation, compensation and enhancement actions **MUST** also be included with your application. It is very likely that any planning permission will be conditional on these being implemented.

March 2023

# Annex B: Biodiversity Net Gain Assessment – Metric 4.0 Data Tables

Kemp Meadows, Tregony		Return to results menu			
<b>Headline Results</b>					
Scroll down for final results ▲					
On-site baseline	Habitat units	0.16			
	Hedgerow units	1.38			
	Watercourse units	0.00			
On-site post-intervention <small>(Including habitat retention, creation &amp; enhancement)</small>	Habitat units	0.02			
	Hedgerow units	1.92			
	Watercourse units	0.00			
On-site net change <small>(units &amp; percentage)</small>	Habitat units	-0.14	-89.36%	On-site net gain is less than target set ▲	
	Hedgerow units	0.54	39.05%		
	Watercourse units	0.00	0.00%		
Off-site baseline	Habitat units	0.08			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site post-intervention <small>(Including habitat retention, creation &amp; enhancement)</small>	Habitat units	0.24			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site net change <small>(units &amp; percentage)</small>	Habitat units	0.16	210.08%		
	Hedgerow units	0.00	0.00%		
	Watercourse units	0.00	0.00%		
Combined net unit change <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	Habitat units	0.02			
	Hedgerow units	0.54			
	Watercourse units	0.00			
Spatial risk multiplier (SRM) deductions	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
<b>FINAL RESULTS</b>					
Total net unit change <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	Habitat units	0.02			
	Hedgerow units	0.54			
	Watercourse units	0.00			
Total net % change <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	Habitat units	12.60%			
	Hedgerow units	39.05%			
	Watercourse units	0.00%			
Trading rules satisfied?	Yes ✓				
<b>Unit Type</b>	<b>Target</b>	<b>Baseline Units</b>	<b>Units Required</b>	<b>Unit Deficit</b>	
Habitat units	10.00%	0.16	0.17	0.00	Unit requirement met or surpassed ✓
Hedgerow units	10.00%	1.38	1.52	0.00	Unit requirement met or surpassed ✓
Watercourse units	10.00%	0.00	0.00	0.00	Unit requirement met or surpassed ✓

Kemp Meadows, Tregony

Detailed Results

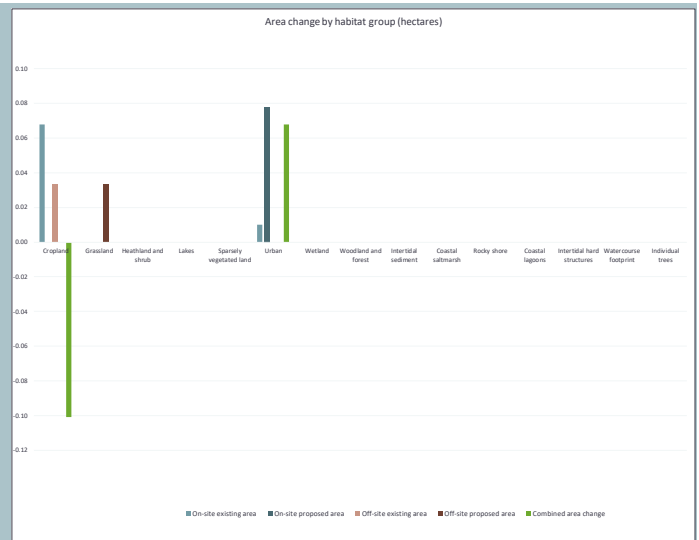
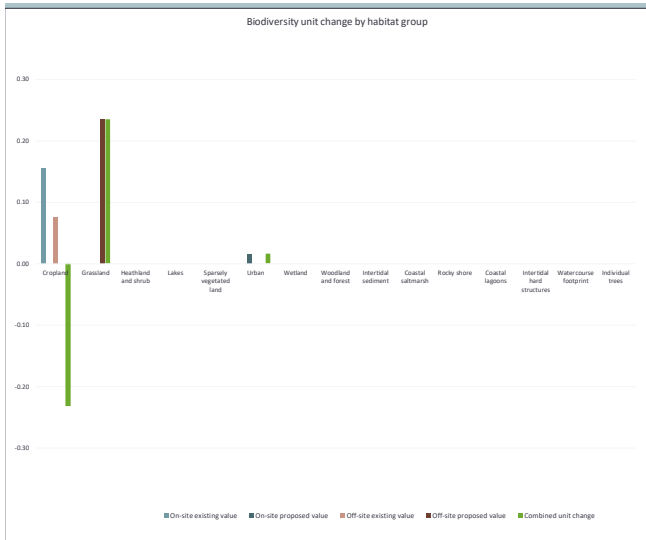
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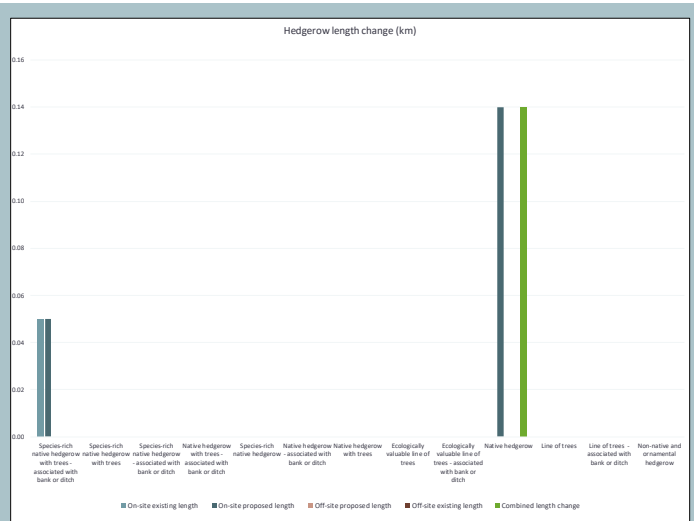
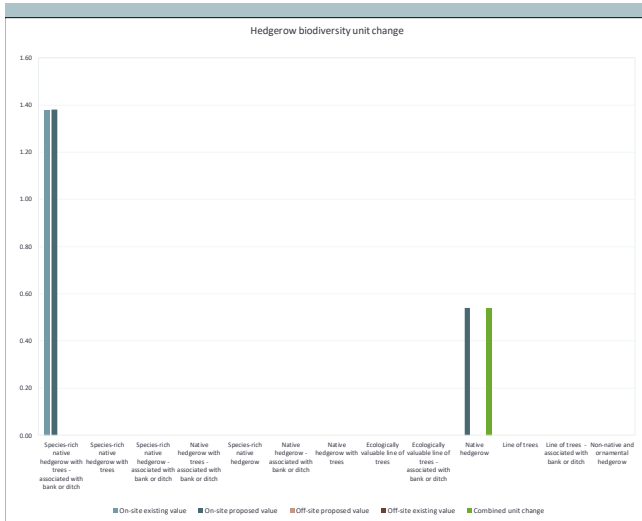
Summary Figures

Net project biodiversity units (Including all on-site & off-site habitat retention / creation)	Habitat units	0.02
	Hedgerow units	0.54
	Watercourse units	0.00
Total project biodiversity % change (Including all on-site & off-site habitat creation + retained habitats)	Habitat units	12.60%
	Hedgerow units	39.05%
	Watercourse units	0.00%

Combined habitat retention and enhancement

	Habitats	Hedgerows	Watercourses
Total on-site and off-site baseline area / length	0.11	0.05	0.00
Total on-site and off-site baseline units	0.23	1.38	0.00
Total on-site and off-site baseline area / length retained	0.00	0.05	0.00
Total on-site and off-site baseline units retained	0.00	1.38	0.00
Area / length proposed for enhancement	0.03	0.00	0.00
Baseline units proposed for enhancement	0.08	0.00	0.00
Total on-site and off-site baseline area / length lost	0.08	0.00	0.00
Total on-site and off-site baseline units lost	0.16	0.00	0.00





Project Name: Kemp Meadows, Tregony Map Reference: Figure 1

**A-1 On-Site Habitat Baseline**

Condense / Show Columns      Condense / Show Rows

Main Menu      Instructions

Area habitat summary	
Total Net Unit Change	0.02
Total Net % Change	12.60%
Trading Rules Satisfied	Yes ✓

Ref	Broad Habitat	Existing area habitats		Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
		Habitat Type	Area (hectares)					
1	Cropland	Temporary grass and clover leys	0.068	Low	Condition Assessment N/A	Formally identified in local strategy	Same distinctiveness or better habitat required ≥	0.16
2	Urban	Developed land; sealed surface	0.01	V Low	N/A - Other	Formally identified in local strategy	Compensation Not Required	0.00
3								
4								
5								
6								
7								
			<b>Total habitat area</b>	<b>0.08</b>				<b>0.16</b>
			<b>Site Area (Excluding area of individual trees and Green walls)</b>	<b>0.08</b>				

Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost		User comments	Consenting body comments
		0.00	0.00	0.07	0.16	Within LNRN (existing network). Lost to new access track, new barn and yard.		
		0.00	0.00	0.01	0.00	Within LNRN (existing network). Small area under existing building restored and converted to pollinator garden or similar.		
0.00	0.00	0.00	0.00	0.08	0.16			
				<b>Total area lost (excluding area of individual trees and Green walls)</b>	<b>0.08</b>			





Project Name: Kemp Meadows, Tregony Map Reference: Figure		<b>Area habitat summary</b>	
<b>D-3 Off-Site Habitat Enhancement</b>		Total Net Unit Change	0.02
		Total Net % Change	18.60%
		Trading Rules Satisfied	Yes ✓
Condense / Show Columns		Condense / Show Rows	
Main Menu		Instructions	

Baseline ref	Baseline habitats	Proposed Habitat (Pre-Populated but can be overridden)		Change in distinctiveness and condition		Area ha
	Baseline habitat	Proposed Broad Habitat	Proposed Habitat	Distinctiveness change	Condition change	
1	Cropland - Temporary grass and clover leys	Grassland	Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Moderate	0.033
<b>Total habitat area</b>						<b>0.03</b>

Post development/ post intervention habitats								Habitat units delivered	User comments
Distinctiveness	Condition	Strategic significance		Temporal multiplier		Difficulty multipliers			
		Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Difficulty	Spatial risk category			
Medium	Moderate	Formally identified in local strategy	Standard time to target condition applied	10	Low	Compensation inside LPA boundary or NCA of impact site		0.24	Land within wider field area. Minimum 330m2 will be enhanced to wildflower meadow using native seed from Cornwall donor site.
<b>Total</b>								<b>0.24</b>	

Project Name: Kemp Meadows, Tregony Map Reference: Figure		<b>Hedgerow summary</b>	
<b>B-1 On-Site Hedge Baseline</b>		Total Net Unit Change	0.54
		Total Net % Change	39.06%
		Trading Rules Satisfied	Yes ✓
Condense / Show Columns		Condense / Show Rows	
Main Menu		Instructions	

Baseline ref	Hedge number	Existing hedgerow habitats		Distinctiveness		Condition		Strategic significance		
		Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier
1	H2	Species-rich native hedgerow with trees - associated with bank or ditch	0.035	V.High	8	Good	3	Formally identified in local strategy	High strategic significance	1.15
2	H4	Species-rich native hedgerow with trees - associated with bank or ditch	0.015	V.High	8	Good	3	Formally identified in local strategy	High strategic significance	1.15
3										
4										
5										
6										
7										
<b>Total</b>			<b>0.05</b>							

Strategic significance				Required Action to Meet Trading Rules	Ecological baseline Total hedgerow units	Retention category biodiversity value						User comments
Strategic significance	Strategic significance	Strategic position multiplier	Score			Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	
Formally identified in local strategy	High strategic significance	1.15	8	Like for like	0.97	0.035		0.97	0.00	0.00	0.00	H2 - Cornish hedge with trees - approx 35m adjacent to application area southeast boundary with trees. Retained and protected
Formally identified in local strategy	High strategic significance	1.15	8	Like for like	0.41	0.015		0.41	0.00	0.00	0.00	H4 - Cornish hedge with trees - 15m length at west end is near adjacent to application site. Retained and protected
<b>Total</b>					<b>1.38</b>	<b>0.05</b>	<b>0.00</b>	<b>1.38</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	

Project Name: Kemp Meadows, Tregony Map Reference: Figure  
**B-2 On-Site Hedge Creation**

Hedgerow summary	
Total Net Unit Change	0.54
Total Net % Change	39.05%
Trading Rules Satisfied	Yes ✓

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Main Menu

Instructions

		Proposed habitats		Distinctiveness	Condition
Baseline ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Condition
1	H5	Native hedgerow	0.07	Low	Moderate
2	H6	Native hedgerow	0.07	Low	Moderate
3					
4					
5					
6					
7					
			0.14		

Strategic significance	Temporal multiplier		Difficulty risk multipliers	Hedge units delivered	Comm
Strategic significance	Standard or adjusted time to target condition	Final time to target condition (years)	Final difficulty of creation		User comments
Formally identified in local strategy	Standard time to target condition	5	Low	0.27	New hedges planted along access track -
Formally identified in local strategy	Standard time to target condition	5	Low	0.27	New hedges planted along access track -
				0.54	



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