The natural choice for good advice

Land at Higher Biscovillack, St Austell, Cornwall

Biodiversity Net Gain Strategy

November 2025

A report by

Emily Andrew BSc (Hons) MSc, Senior Ecologist

Trading address: Unit 2, The Workshed, Liskeard Cattle Market, Liskeard, Cornwall PL12 5HA
Telephone: 0800 622 6828 Email: office@westernecology.co.uk

Registered office: Western Ecology, 1 Geffery Close, Landrake, Cornwall, PL12 5HA

Report details

Site address:	Land at Higher Biscovillack, Trenance Downs, Saint Austell PL25 5RH
Grid reference:	SW997544
Report date:	18th November 2025
Report author:	Emily Andrew BSc (Hons) MSc
Report reviewer:	Colin Hicks BSc (Hons), MCIEEM
Report Reference:	WOR 5667

Declaration of compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development and British Standard 8683: 2021 Process for designing and implementing Biodiversity Net Gain.

Code of Professional Conduct

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

Table of contents

1. Introduction

Western Ecology has been commissioned to complete a Biodiversity Net Gain calculation for land at Higher Biscovillack, St Austell in Cornwall. The proposed development concerns the installation of a wind turbine.

This report accompanies the Biodiversity Net Gain (BNG) calculation using the Statutory Biodiversity Metric and is based on the plans provided by the developer at the time of the report.

N.B. All Statutory Metric resources used or referenced in relation to this project, including guidance, the metric and condition sheets, can be found online at https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides.

2. Methodology

A walkover of the site was completed by Emily Andrew BSc (Hons), MSc. The survey was undertaken on 30th September 2025 in suitable weather conditions with an additional survey for off-site land carried out on 13th November 2025. The baseline habitat map (Map 1) is included in Appendix 1.

2.1. Classification of habitats

Habitats have been classified using UK Habitats Classification v2 (UKHab Ltd, 2023) and plant species were identified according to Stace (1997).

Taking into account the habitat type and management (as evidenced by Google Earth Pro) and the species found, the timing of the survey is not considered to be a constraint with respect to classification of habitat in this instance.

2.2. Strategic significance of site

Recommendations from Statutory Metric BNG user guide require identification of whether a development site is situated in an area: formally identified in local strategy; location desirable but not in local strategy; area/compensation not in local strategy/no local strategy. This relates to location of the site in relation to statutory and non-statutory conservation sites.

The on-site areas of this development are not in identified the Cornwall Local Nature Recovery Strategy and therefore are identified as ‘area/compensation not in local strategy/no local strategy’.

However, the off-site area to the west of the Site is identified in Strategic Zone 2 - Nature Recovery opportunity areas, for Nature rich grasslands. Following Statutory Metric Guidance[1], the grassland habitat created within the area identified by the strategy are input as ‘formally identified’.

[1]https://assets.publishing.service.gov.uk/media/689c5ee17b2e384441636196/The_Statutory_Biodiversity_Metric_-_User_Guide_-_July_2025.pdf pp.27-29

2.3. Mapping and condition of baseline habitats

Professional judgement was used to make condition assessments of habitats, when applicable. Condition assessments are provided in the associated 'HBV Statutory Biodiversity Metric Condition Assessments Nov2025.xlsx'.

2.4. Biodiversity Net Gain calculation

This calculation uses the Statutory Biodiversity Metricutilising the guidance, technical supplements and habitat condition assessment sheets provided by Natural England, and following CIEEM Biodiversity Net Gain: Good practice principles for development (2016) and Mandatory Biodiversity Net Gain in England: A Guide (2024). Areas are measured in ha and lengths in km.

Please note: the metric rounds units up/down, and metric summaries may not show the exact units lost/enhanced/retained or required to achieve net gain.

3. Biodiversity net gain: baseline habitats

3.1. Pre-development biodiversity value

Table 1: baseline habitats mapped as follows (see Appendix 1, Map 1):

Habitat category/type	Area (Ha)	Units	Condition assessment	Units lost/retained/enhanced
On-site				
Urban- Artificial unvegetated, unsealed surface	0.16	0.00	NA- other	0.00
Grassland – modified grassland	3.5	14.00	Moderate	1.60 lost
				12.40 retained
Heathland and shrub – bramble scrub	0.0147	0.06	Condition assessment N/A	0.02 lost
				0.04 retained
Heathland and scrub – gorse scrub	0.0147	0.06	Poor	0.02 lost
				0.04 retained
Off-site				
Grassland – modified grassland	0.75	3.0	Moderate	3.0 enhanced
Grassland – modified grassland	0.1	0.40	Moderate	0.4 lost
Habitat category/type	**Length (km)**	**Units**	**Condition assessment**	**Units lost/retained/enhanced**
On-site				
Native hedgerow - associated with bank or ditch	0.191	1.53	Moderate	0.44 enhanced
				1.09 retained
Native hedgerow - associated with bank or ditch	0.062	0.25	Poor	0.25 retained

Total on-site baseline area habitat units = 14.12
Total on-site baseline hedgerow habitat units = 1.78

Total off-site baseline area habitat units = 3.40

3.2. Proposed development biodiversity value

Table 2: proposed plans associated with the site are shown on Appendix 2 as follows:

Habitat category/type	Area (Ha)	Condition assessment	Predicted units delivered through creation/ enhancement
On-site			
Urban- Artificial unvegetated, unsealed surface	0.38	N/A - Other	0.00
Urban – developed land; sealed surface	0.04	N/A - Other	0.00
Off-site			
Grassland – other neutral grassland	0.75	Moderate	5.87 enhancement from modified grassland

Heathland and shrub – mixed scrub	0.1	Moderate	0.67 created
Habitat category/type	**Length (km)**	**Condition assessment**	**Predicted units delivered through enhancement**
On-site			
Species-rich native hedgerow - associated with bank or ditch	0.055	Moderate	0.62 enhancement from native hedgerow associated with bank or ditch

On-site post-intervention area units = 12.47
On-site post-intervention hedgerow units = 1.96

Off-site post-intervention area units = 6.54

4. Biodiversity Net Gain and losses

4.1. Principals of net gain

Ten principles setting out good practice for achieving Biodiversity Net Gain[2] have been applied as follows:

Principal	Principal met?	Comments
Utilise the mitigation hierarchy to minimise impact on biodiversity	Yes	Where feasible, enhancements have been made on-site however given type of development and habitats on site, adjacent habitats will be enhanced.
Eliminate negative impacts on biodiversity that cannot be offset elsewhere	Yes	There is to be loss within the redline however where feasible habitats are to be retained and there will be suitable creation in adjacent off-site habitats
Involve all pre-development and post-development stakeholders in forming mandatory net gain solutions	Yes	Landowners and LPA involved. No other stakeholders.
Communicate all BNG proposals in transparent and timely manner to all relevant stakeholders.	Yes	BNG assessment clearly outlined in report format and made available to stakeholders.
Understand the potential risks and variable factors to achieving biodiversity net gain	Yes	Risks involved with habitat management minimised: realistic habitat types and condition enhancements proposed.
Determine a suitable method to secure measurable net gains for biodiversity	Yes	To be provided in a management plan via monitoring regime.
Ensure the best possible outcomes from biodiversity net gain	Yes	Realistic potential for at least 10% net gain.
Offer nature conservation that exceed the BNG requirements	Yes	Potential for more than 10% gain to be achieved for areas within the Site.
Focus on generating long-term environmental benefits from biodiversity net gain	Yes	Proposed habitats can realistically be managed over the required 30 yr period.
Cover all areas of sustainability, incorporating economical and societal factors	Yes	Proposed habitats enhance the environment for people and local wildlife, and support the ecological functionality of adjacent habitats.

[2] https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf

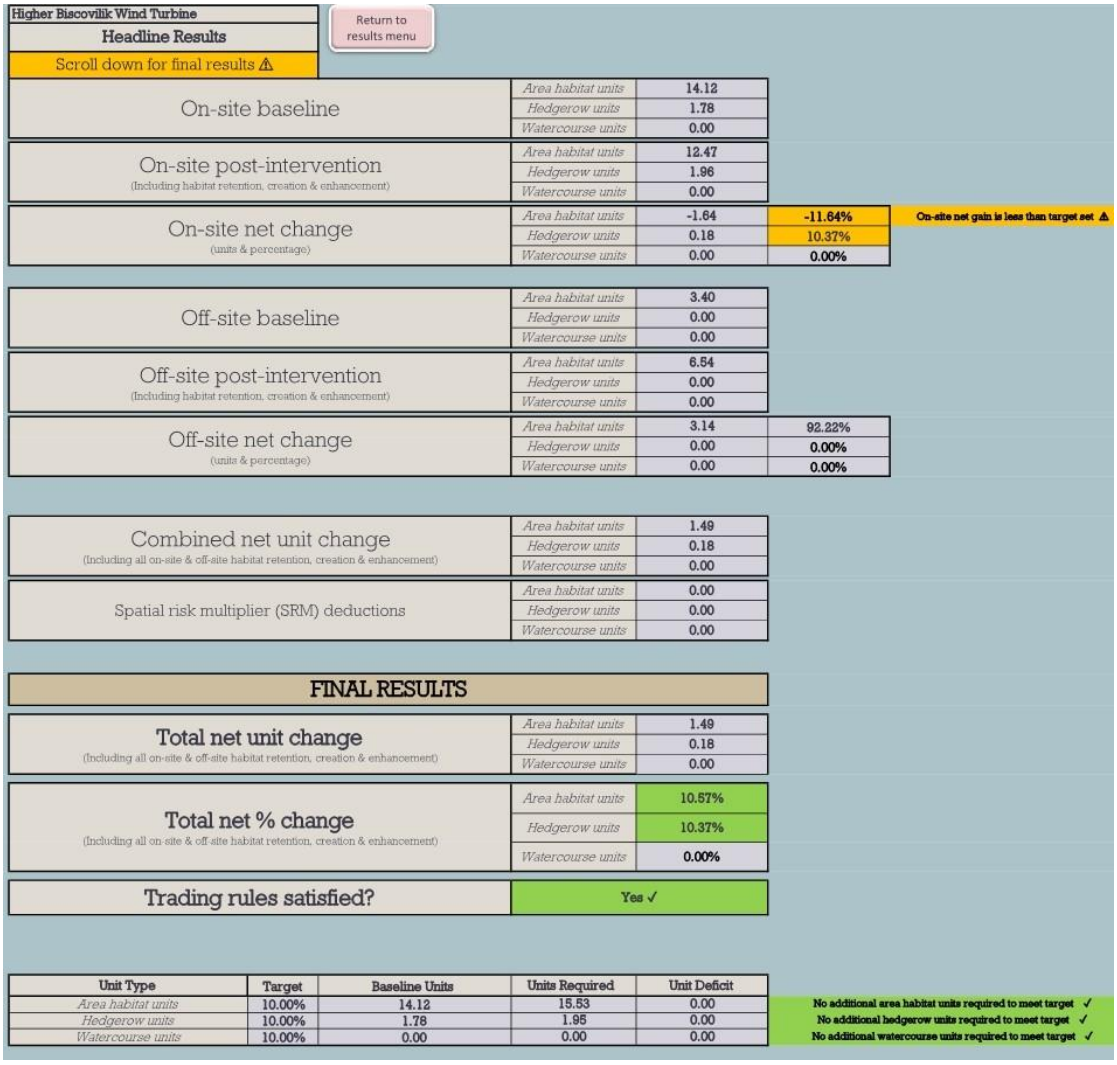
4.2. Biodiversity Net Gain Summary Figures

Summary of percentage change and biodiversity net gain in units; detail taken from HBV Statutory Metric Nov 25, 'Headline Results' sheet. This predicts the following, with appropriate management over the 30 year period:

Within the red line development footprint, -11.65% biodiversity net loss in habitat areas (-1.64 units) and a 10.37% net gain in hedgerow areas (0.18 unit gain).

With the proposed offsite mitigation, 10.57% biodiversity net gain in habitat areas (1.49 unit gain) is predicted.

It is predicted that trading rules have been satisfied.



Higher Biscovilik Wind Turbine

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	Area habitat units	14.12		
	Hedgerow units	1.78		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	12.47		
	Hedgerow units	1.96		
	Watercourse units	0.00		
On-site net change (units & percentage)	Area habitat units	-1.64	-11.64%	On-site net gain is less than target set ⚠
	Hedgerow units	0.18	10.37%	
	Watercourse units	0.00	0.00%	
Off-site baseline	Area habitat units	3.40		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	6.54		
	Hedgerow units	0.00		
	Watercourse units	0.00		
Off-site net change (units & percentage)	Area habitat units	3.14	92.22%	
	Hedgerow units	0.00	0.00%	
	Watercourse units	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	1.49		
	Hedgerow units	0.18		
	Watercourse units	0.00		
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00		
	Hedgerow units	0.00		
	Watercourse units	0.00		

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	1.49	
	Hedgerow units	0.18	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	10.57%	
	Hedgerow units	10.37%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Area habitat units	10.00%	14.12	15.53	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	1.78	1.95	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

5. Planting, management and targets

Planting and on-going site management external to domestic curtilages will be undertaken by suitably experienced operatives/contractors employed by site operator for the operational life of the development.

Details of habitat creation will be provided in Biodiversity Management and Monitoring Plan (conditioned) where identified as 'significant' by the LPA.

5.1. Habitat enhancement on-site

Species-rich native hedgerow associated with bank - 0.055km, aiming for Moderate condition

An existing native hedgerow associated with bank (0.055km) will be enhanced on Site. The hedgerow will be infill planted with a mix of at least 5 native woody species and managed to meet the following criteria, in order to achieve Moderate condition.

Target (30 year objective)

The target habitat condition is 'Moderate' as follows:

1. Height >1.5m
2. Width >1.5m
3. Gap between ground and base of canopy <0.5m for 90% of length
4. Gaps make up <10% of total length and no gaps greater than 5m
5. >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length, present at least on one side of the hedgerow.

It is predicted that these criteria are realistically achievable, at a minimum, under appropriate management.

5.2. Habitat creation off-site

Heathland and shrub - Mixed scrub - 0.1ha, aiming for moderate condition.

A total of 0.1ha will be created throughout the Site: habitat creation will involve planting of native shrub species.

Target (30 year objective)

Planting of an appropriate mix of native shrub species (including hazel, elder, dogwood and hawthorn and dog rose).

Target habitat condition for this habitat is 'Moderate', achieving 3 or 4 of criteria below:

A. Habitat is representative of UKHab description (where in its natural range). There areat least three woody species, with no one species comprising more than 75% of the cover.
B. There is a good age range- all of the following are present: seedlings, young shrubs and mature shrubs.
C. There is an absence of invasive non-native species (as listed on Schedule 9 of WCA,1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.

D. The scrub has a well-developed edge with scattered scrub and tall grassland and/orherbs present between the scrub and adjacent habitat(s).
E. There are clearings, glades or rides present within the scrub, providing shelterededges.

It is predicted that criteria B, C and D is realistically achievable under appropriate management.

5.3. Habitat enhancement off-site

A total of 0.75ha of other neutral grassland will be enhanced from modified grassland baseline habitat. Habitat creation will involve scarification and over-sowing an appropriate seed mixture such as EM2[3] or similar.

Target (30 year objective) via the following criteria for Grassland Med High and V. High Other neutral grassland habitat managed to achieve moderate condition achieving 3-5 of the 6 criteria below (*including essential criteria A*).

A. The parcel is a good representation of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitattype. Note- this criterion is essential for achieving Moderate or Good condition for non-acid grassland type;
B. Sward height is varied at least 20% of the sward is less than 7 cm and at least 20per cent is more than 7 cm) creating microclimates which provide opportunities forinsects, birds and small mammals to live and breed;
C. Cover of bare ground between 1% and 5%, including localised areas, for example,rabbit warrens;
D. Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.
E. Combined cover of species indicative of sub-optimal condition and physical damage(such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. (If any invasive non-native plant species are present, this criterion is automatically failed.)
F. There are 10 or more vascular plant species per m^2, including forbs that arecharacteristic of the habitat type.

It is predicted that criteria A, B, C, D and E are realistically achievable under appropriate management.

3 EM2 – Standard General Purpose Meadow Mixture

6. Conclusion

Within the red line development footprint, -11.65% biodiversity net loss in habitat areas (-1.64 units) and a 10.37% net gain in hedgerow areas (0.18 unit gain).

With the proposed offsite mitigation, 10.57% biodiversity net gain in habitat areas (1.49 unit gain) is predicted.

It is predicted that trading rules have been satisfied.

It is predicted that the proposed development as it stands provides a suitable net gain for biodiversity to align the project with the mandatory requirement for 10% biodiversity net gain and local planning guidance.

7. References

Durkin, F., Baker, J. (2024) Mandatory Biodiversity Net Gain in England: A Guide. CIEEM, IEMA and CIRIA.

CIEEM (2025) BNG for Small Sites: Delivering on its potential

Institute of Environmental Assessment (IEA), 1995. *Guidelines for Baseline Ecological Assessment,* Institute of Environmental Assessment. E&FN Spon, aJn Imprint of Chapman and Hall. London.

Joint Nature Conservation Committee, 2010. *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. Reprinted by JNCC, Peterborough

Stace, C., 1997. *New Flora of the British Isles.* 2nd edition. Cambridge University Press, Cambridge.

UKHab Ltd (2023) *UK Habitat Classification Version 2.0 (at https://www.ukhab.org).*

western ECOLOGY

Unit 2,
The Workshed,
Liskeard Cattle Market,
Liskeard
PL14 4BA

Tel: 0800 622 6828
email: office@westernecology.co.uk

Legend

- Survey area (approx.)
- Mitigation area
- Native hedgerow - associated with bank or ditch (Cornish hedgebank)
- g4 - modified grassland
- Scrub mosaic h3d- bramble scrub and h3e-gorse scrub
- u1c - artificial unvegetated unsealed surfac

Title: Map 1. UK Habitat Survey Baseline Map

Project: Land at Higher Biscovillack, St Austell, Cornwall

Checked by: CDH
Version: 01
Date: 18/11/2025

western ECOLOGY

Unit 2,
The Workshed,
Liskeard Cattle Market,
Liskeard
PL14 4BA

Tel: 0800 622 6828
email: office@westernecology.co.uk

Legend

- Survey area (approx.)
- Mitigation area
- Native hedgerow - associated with bank or ditch (Cornish hedgebank)
- g3c - other neutral grassland
- g4 - modified grassland
- h3h - mixed scrub
- Scrub mosaic h3d- bramble scrub and h3e-gorse scrub
- u1b - developed land. sealed surface
- u1c - artificial unvegetated unsealed surface

Title: Map 2. UK Habitat Survey Post-development map

Project: Land at Higher Biscovillack, St Austell, Cornwall

Checked by: CDH
Version: 01
Date: 18/11/2025

Appendix 3: Legislation and Policy associated with biodiversity net gain in the UK include:

Environment Act 2021
This act introduces a mandatory biodiversity net gain requirement of at least 10% for developments in England, to be maintained for at least 30 years.

National Planning Policy Framework (NPPF)
The NPPF sets out the government's planning policies for England and how these are expected to be applied, including policies for conserving and enhancing the natural environment and achieving biodiversity net gain.

Planning Practice Guidance (PPG)
This provides further details and guidance related to the NPPF, including ways to achieve biodiversity net gain through the planning system.

Local Nature Recovery Strategies (LNRS)
These strategies are part of the Environment Act 2021, aimed at establishing a more coordinated approach to nature recovery across England.

Biodiversity 2020
This strategy is a part of the broader commitment to halt overall biodiversity loss, support healthy well-functioning ecosystems, and establish coherent ecological networks.

Appendix 4: Details for submission

Details for submission

You will need the following information during the submission of the biodiversity net gain metric.

Question	Answer
Do you believe that if the development is granted permission, the general Biodiversity Gain Condition (as set out in Paragraph 13 of Schedule 7A of the Town and Country Planning Act 1990 (as amended)) would apply?	Yes
Please provide the pre-development biodiversity value of onsite habitats on the date of calculation	Baseline units (sum): 15.9
Please provide the date the onsite pre-development biodiversity value was calculated	30th September 2025
If an earlier date, to the date of the planning application, has been used, please provide details why this date has been used	NA.
Has there been any loss (or degradation) of any onsite habitats resulting from activities carried out before the date the onsite pre-development biodiversity was calculated either: • on or after 30 January 2020 which were not in accordance with a planning permission; or • or after 25 August 2023 January 2020 which were in accordance with a planning permission	No
Does the development site have irreplaceable habitat which are; • On land to which the application relates; and • Exists on the date of the application for planning permission, (or at an earlier agreed date)	No
When was the version of the biodiversity you used published?	Currently 03.07.2025