BIODIVERSITY NET GAIN



Land off Shore Road, Drigg

August 2024

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PLANNING PORTAL QUESTIONS

Please provide the date the onsite pre-development biodiversity value was calculated (this should be either the date of the application, or an earlier proposed date)	24 September 2024
If an earlier date, to the date of the planning application, has been used, please provide details why this date has been used.	Site conditions have not changed between date of assessment and planning submission
When was the version of the biodiversity metric published?	Statutory Metric 05/12/2023
Please provide the pre-development biodiversity value of onsite habitats on the date of calculation	0.57 Habitat Units
Please provide the reference or supporting document/plan names for the: i. Biodiversity metric calculation ii. Onsite irreplaceable habitats (if applicable) iii. Onsite habitats existing on the date of the application for planning	Biodiversity Net Gain – Drigg Shore Road
permission (if applicable)	N/A
Has there been any loss (or degradation) of any onsite habitat(s), resulting from activities carried out before the date of the onsite pre-development biodiversity value was calculated. Either:	
 On or after 30 January 2020 which were not in accordance with a planning permission; or On or after 25 August 2023 which were in accordance with a planning permission? 	No
Does the development site have irreplaceable habitats (corresponding to the descriptions in column 1 of [Schedule to the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2023)) which are:	
 i. On land to which the application relates; and ii. Exist on the date of the application for planning permission (or an earlier agreed date) 	No

INTRODUCTION

Planning Branch Ltd has been commissioned to produce this Biodiversity Net Gain report in support of the proposed development on land on Shore Road, Drigg for Mr Ireland. The proposal is for the creation of handling pens.

COMPETENT PERSON

Anthea Jones is considered a competent person for the following reasons.

Qualifications

- BTEC in Land Based Studies from Harper Adams Agricultural College
- BSc (Hons) Agriculture with Land and Farm Management from Harper Adams Agricultural College
- HND in Arboriculture from Myerscough College

Anthea Jones often attends conferences, seminars and workshops run by both Arboricultural Association and Natural England (NE). Anthea has attended many courses run by NE as part of the Farm Environment Plans (FEP) that she used to prepare.

Attendance of Royal Town Planning Institute (RTPI) courses in relation to Biodiversity Net Gain and Natural Environment.

Practical experience

As part of the FEP full assessments of the vegetation on the sites were required. Both courses at Harper Adams required assessment of vegetation. The understanding of surrounding vegetation in relation to impact on trees is part of the Arboricultural requirements.

ASSESSMENT INTRODUCTION

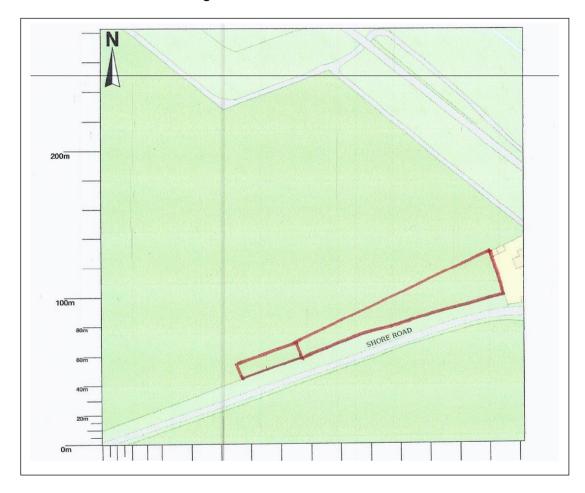
Each habitat type was mapped using the standard habitat mapping convention using UK Habitat Classification V2 (Butcher et al., 2023) for the purposes of using the Defra metric.

Using the findings of the baseline surveys, pre-construction ecology was measured against proposed habitat changes arising from future ecological enhancements based on an Illustrative block/site plan (post-construction) provided by the client (Drawing No PB2).

This report presents the results of this desk-based study to assess net change in biodiversity 'units' in connection with the removal of habitats for the proposed development at the site.

Ecological Context

The site is 0.28 Ha and *Figure 1* shows the site location.



Policy context

The primary aims of Biodiversity Net Gain are to secure a measurable improvement in habitat for biodiversity, to minimize biodiversity losses and to help to restore ecological networks whilst streamlining development processes.

The National Planning Policy Framework (NPPF) makes provisions for the delivery of biodiversity net gain. Additionally, there is a 10% net gain requirement in the Environment Bill.

METHODS

Introduction

The statutory biodiversity metric is designed to quantify biodiversity to inform and improve planning, design, land management and decision-making (Natural England, 2024).

This study has been carried out as a desk-based exercise, using the results of field survey carried out at the site by Anthea Jones and a block/site plan provided by the client.

Biodiversity Assessment Methods

To calculate biodiversity units for the site and assess any changes arising from the proposed development this study uses methods set out within the latest Statutory Biodiversity Metric user guide (Natural England, 2024).

The biodiversity metric uses three core measurements:

- Habitat area
- · Length of linear terrestrial habitats
- Length of linear aquatic habitats.

Consequently, a site can have three biodiversity unit values, which are assessed using the same metric, but cannot be summed together.

Habitat area is multiplied by several factors that indicate its quality: distinctiveness, condition, strategic location and connectivity, and this gives its biodiversity unit value. This can be used for existing and future created habitats. In addition, when habitats are to be enhanced or newly-created, the risk of failure is accounted for by applying multipliers for risk factors (difficulty, time to target condition, and off-site risk).

Habitat Distinctiveness

Habitats are classified using the UK habitat classification V2 system (Butcher et al., 2023).

The metric pre-assigns each habitat type to a distinctiveness band according to its distinguishing features, i.e. species richness, rarity (at local, regional, national and international scales), and the degree to which it supports species rarely found in other habitats. On rare occasions, the habitat distinctiveness of a habitat can be altered up or down from the preassigned value. Any alterations must then be fully explained using evidence relevant to the site, e.g. an increase in distinctiveness because of rare flora or fauna or a decrease in distinctiveness because of significant damage to the habitat.

Habitat Condition

Habitat condition measures the varying quality of similar habitats against what is perceived to be their optimal state. The statutory biodiversity metric technical supplement (Natural England, 2023) contains condition sheets for all habitats to which the metric can apply. The condition sheets contain a habitat description, contextual information to aid the assessment, and the assessment criteria. The criteria describe what components need to be present for a habitat to be in good, moderate or poor condition.

Strategic Location

Strategic location - sometimes called 'strategic significance' – works at a landscape scale, allowing additional value to be added to habitats in 'priority' or 'biodiversity target areas'. They include statutory and non-statutory sites and other areas with biodiversity value

or potential, and they are mainly identified from local plans and objectives. If a habitat is within such a target area, a multiplier is applied to increase its value.

Difficulty of Creation and Restoration

The risks associated with creating new or enhancing existing habitats, are known as difficulty factors; for example, where habitats fail to establish owing to natural changes in local conditions, incorrect management or for unknown reasons. The statutory biodiversity metric contains default values for each habitat based on the average difficulty of creating or enhancing a habitat. Occasionally, under exceptional circumstances, these can be modified, but any deviation from the default value must be fully justified.

Time to Target Condition

There is often a lag between a habitat being removed and the new compensation habitats achieving their target condition. This gives reduced biodiversity value for a time. The statutory biodiversity metric preassigns the time to target condition based on good practice and typical conditions, and assigns a multiplier based on the number of years required to achieve it.

Using bespoke techniques under unique conditions, or creating compensation habitats prior to impacts taking place, the time to target condition can be adjusted. Any changes must again be fully justified.

Off-site Risk

Sometimes it is not possible to compensate adequately for loss of biodiversity within the site boundary, so off-site compensation is required. If the off-site compensation is a significant distance from the development site, then there will be a local loss of biodiversity and a multiplier is applied to any off-site compensation.

BIODIVERSITY ASSESSMENT

Baseline:

The sites baseline BNG value was calculated using the Statutory BNG metric and UKHabs v2 methodology. This is shown in drawing PB2.

The baseline value for the site is as at 18.09.2024. This is the date that our assessment was undertaken. We consider there will have been no substantive changes to habitat condition at the time of the planning application being made.

Reviewing the ariel maps we are not aware of any habitat features which have been purposefully degraded after 30th January 2020.

We consider planning permission, if granted, would be subject to the biodiversity gain condition.



Avoidance

The first step of the mitigation hierarchy comprises measures taken to avoid creating impacts from the outset, such as careful spatial placement of infrastructure, or timing construction sensitively to avoid disturbance. Examples include the placement of roads outside of rare habitats or key species' breeding grounds. Avoidance is often the easiest, cheapest and most effective way of reducing potential negative impacts, but it requires biodiversity to be considered in the early stages of a project.

There are no irreplaceable habitats on the site

There are no High or Very High distinctiveness habitats on the site

Minimisation.

These are measures taken to reduce the duration, intensity and/or extent of impacts that cannot be completely avoided. Effective minimisation can eliminate some negative impacts, such as measures to reduce noise and pollution, designing powerlines to reduce the likelihood of bird electrocutions, or building wildlife crossings on roads.

Rehabilitation/restoration

The aim of this step is to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised. Restoration tries to return an area to the original ecosystem that was present before impacts, whereas rehabilitation only aims to restore basic ecological functions and/or ecosystem services – such as through planting trees to stabilise bare soil. Rehabilitation and restoration are frequently needed towards the end of a project's life cycle but may be possible in some areas during operation.

Offset

Offsetting aims to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy. Biodiversity offsets are of two main types: 'restoration offsets' which aim to rehabilitate or restore degraded habitat, and 'averted loss offsets' which aim to reduce or stop biodiversity loss in areas where this is predicted. Offsets are often complex and expensive, so attention to earlier steps in the mitigation hierarchy is usually preferable.

The UK Habs V2 habitat survey has been used to identify relevant habitat areas, linear habitat areas and watercourse units.

These habitats have been input into the statutory biodiversity metric calculator and indicate a total of 1.05 area units and 0 terrestrial linear units and 0 watercourse units. The results of the calculations are presented in the full biodiversity assessment calculation in the Excel document.

The condition assessments for each of the area habitats are presented in Appendix A. No deviations have been made from the default methods for baseline habitats assessment.

Post-development Habitat Creation and Enhancement

The Block/Site Plan has been used to identify that there will be no retained habitats, the BNG enhanced habitat and no new habitats.

The enhanced habitat area will consist of 0.242 ha of other neutral grassland of a moderate condition.

Creation of Other neutral grassland (ONG)

Other neutral grassland (ONG) will be created. This has greater habitat than modified grassland but is of a poorer habitat value than meadow grassland.

The area for the BNG mitigation will be fenced off, no management of thistles etc will be undertaking ensuring livestock is removed off the site whilst these are flowering. No fertilisers will be used on the BNG area.

Sowing of Hemiparasitic plant seeds such as Yellow Rattle will be applied to areas of the BNG area in patches to allow reduced vigour of the grasses. The area will be scarified with use of chain harrows before the Yellow Rattle is applied.

Use of livestock for grazing avoiding mowing of the area reduces nutrient levels in the area.

Collectively, avoidance, minimisation and rehabilitation/restoration serve to reduce, as far as possible, the residual impacts that a project has on biodiversity. Typically, however, even after their effective application, additional steps will be required to achieve no overall negative impact or a net gain for biodiversity.

There are no changes to default values for post development habitats.

Details of the assumptions made to achieve the proposed conditions are found in Appendix B

Change in Biodiversity Value

Under the current proposals set out in the block/site plan (PB2) there will be a GAIN of biodiversity area units (+186.24%). This is shown in Table 2.

Table 2. Change in Biodiversity Units Calculation

	Habitat units	0.57	1	
On-site baseline	Hedgerow units	0.00		
On-site baseline	waterourse	0.00		
	Habitat units	1.62	1	
On-site post-intervention	Hedgerow units	0.00		
(Including habitat retention, creation & enhancement)	wateroouse	0.00		
	11.15		400 04-4	1
On-site net change	Habitat units	1.05	186.24%	1
(units & percentage)	Hedgerow units watercourse	0.00	0.00%	-
, , , , , , , , , , , , , , , , , , ,		0.00	0.00%	J
			1	
0.00 11 1	Habitat units	0.00		
Off-site baseline	Hedgerow units watercourse	0.00		
		0.00		
Off site most intersenti	Habitat units	0.00		
Off-site post-intervention	Hedgerow units	0.00		
(Including habitat retention, creation & enhancement)	watercourse	0.00		
	Habitat units	0.00	0.00%	1
Off-site net change	Hedgerow units	0.00	0.00%	1
(units & percentage)	พลังของเรย	0.00	0.00%	1
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units Hedgerow units warercourse	1.05 0.00 0.00		
			ļ	
	Habitat units	0.00		
Spatial risk multiplier (SRM) deductions	Hedgerow units watercourse	0.00		
	materoodise.	0.00	J	
FINAL RESULTS				
m + 1 +	Habitat units	1.05		
Total net unit change	Hedgerow units	0.00		
(Including all on-site & off-site habitat retention, creation & enhancement)	watercourse	0.00		
	Habitat units	186.24%		
Total net % change	Hedgerow units	0.00%		
(Including all on-site & off-site habitat retention, creation & enhancement)	Watercourse	0.00*		
	units	0.00%		
Trading rules satisfied?	Ye	s√		