

bng**report**

for

Land to South West of Summergrove,
Whitehaven
CA28 8YN
National Grid Field No. NX 9915 9646

October 2024



bringing ecological excellence to local environments

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Appendices

Appendix 1. Site Location of BNG and Off site BNG. SBs/BNG/01/SF

Appendix 2. Habitat Examples. SBs/os/BNG/01/HE



1.0 Introduction

- 1.1 Whistling Beetle Ecological Consultants in partnership with Rubecula Ecology were commissioned by John Swift Homes (the applicant) to undertake a Biodiversity Net Gain (BNG) Assessment of the proposed Phase 1 development on an area of land to Southwest of Summergrove, Whitehaven CA28 8YN, National Grid Field No NX 9915 8061 (the Site).

This report should read in conjunction with the Phase 1 Statutory Metric Calculation Tool which relates to all aspects of the project.

- 1.2 All assessments and surveys were supervised by Principal Ecologist Graham Workman who has over forty-five years professional experience in the ecology field. He has the specialist knowledge and ecological skills to undertake and complete all the surveys contained within this report. Rebecca Curtis at Rubecula Ecology, MSc in Conservation Biology, BSc in Conservation, Wildlife and Zoo Biology, 6 years field experience, over 10 years' experience using QGIS and various data analysis software and recently completed multiple CIEEM training courses on UKHab, QGIS, DEFRA Metric and Biodiversity Net Gain.

2.0 Non-Technical Summary

- 2.1 This report assesses the Biodiversity Net Gain or loss anticipated as a result of the proposals for the change of use from grazed farmland to a large-scale housing development (Phase 1). Please see the Design and Access Statement for exact details of the project. The landscapes contained within the site will be affected and as such a Biodiversity Net Gain Assessment will be carried out.

- 2.2 The Biodiversity Net Gain Assessment relies on a number of assumptions which are detailed within this report. The most recent version of the Statutory Biodiversity Metric Calculation Tool was used for the calculations of this project (Microsoft excel format). As such, the Biodiversity Metric calculator spreadsheet should always accompany this report and vice versa.

- 2.3 The baseline habitat calculations are based on site habitat data collected prior to any development-related activities. The post-development habitat calculations are based on proposed landscape plans (see report for details).

- 2.4 This report assesses the biodiversity value of the existing habitats on site and the proposed changes to the development site. This report provides an overview of the change in Biodiversity Value (Biodiversity Net Gain/Loss) generated by the proposals.

- 2.5 The BNG Assessment will indicate how a net loss in biodiversity has occurred as a result of the Phase 1 current proposed development.

2.6 Key Results

The development is estimated to result in a Biodiversity Net Loss of -27.33% compared with the baseline habitats present. This is largely due to the loss of good and poor condition modified grassland and areas of good condition mixed scrub. There was an increase of 160.45% in hedgerows habitat.

It is important to note that the mapping and calculations have been made using the landscape plans M3508-RM-01-V02 Landscape Layout combined with the most recent footprint drawings '70 Dwelling Scheme'. Changes have recently been made to the footprint and therefore the final landscape plan are still being completed at the



time these figures were calculated. This will mean that there may be some small amendments needed to be made to patio areas surrounding some of the properties, ground level planting and garden size once this is completed. These changes should not significantly impact the results.

3.0 Project Description

- 3.1 The proposals are for the change of use from grazed farmland to a housing development consisting of 30 houses with gardens, areas of other neutral grassland, mixed scrub, introduced shrub, communal grass areas, 47 native trees and the creation of two reedbeds.
Please see the Design and Access Statement for more details.

4.0 Site Location

- 4.1 The site is located to the Land to South West of Summergrove, Whitehaven, CA28 8YN, National Grid Field No NX 9915 8061. Entrance to the site is via Dalzell Street. The land is currently in use as grazing pasture for sheep.
(see Appendix 1 Site Location Drawing SWS/SL/WB/01)
- 4.2 The land consists of poor-quality grazed grassland surrounded by hedges, trees, and a disused refuse tip, bounded by a housing estate to the east and a road to the southeast.
- 4.3 The field has an area of good quality mixed scrub to the east with a singular oak tree.
- 4.4 The site covers an area of approximately 4Ha (09.88Acres).
- 4.5 Although the whole field was surveyed only a proportion of the area will be currently impacted as there will be 2 Phases to this development.
- 4.6 The Local Plan took into consideration - Copeland's Local Green Spaces.



Figure 1. Location Map of Red-line Boundary, Summergrove Park, Whitehaven.



5.0 Methodology

- 5.1 Ordnance Survey (OS) maps, baseline and proposed site plans, aerial photographs and a site visit were used to identify features of ecological interest within the redline boundary and areas surrounding the site.

Habitat parcels and condition assessments were determined using the UKHab Minimum Mapping Unit of 25m² and where appropriate a 1m² quadrat. Essential secondary codes were used and when applicable additional secondary codes to assist the project. Field data information was digitised using QGIS v3.34.4 software, using co-ordinate reference system EPSG: 27700 OSGB 1936 / British National Grid and the Statutory Biodiversity Metric QGIS template at a scale of 1:100.

5.2 Pre-development baseline habitat information

This report is based on data collected during a survey undertaken on the 4th October 2024. Habitat identification and condition assessments were undertaken by Graham Workman of Whistling Beetle Ecological Consultants, an experienced Consultant Ecologist and Rebecca Curtis from Rubecula Ecology. Vegetation and habitat types within the site were noted in accordance with the categories specified in the UK Habs Classification (v2.01) and habitat conditions assessed using the Statutory Biodiversity Metric Condition Assessment sheets.

- 5.3 The site has been used for sheep grazing for several years which has resulted in a species poor modified grassland. The area of mixed scrub had been fenced off so had not been impacted by grazing.
- 5.4 The field was surveyed using a 1m² quadrat. Results showed that there were less than 5 species present on the majority of the field (Parcel 3) apart from an area adjacent to Delzell St that was assessed as being in good-condition modified grassland. In this area (Parcel 4) there were more than 6 vascular species present with varied sward height, species recorded included bramble (*Rubus fruticosus*), broad-leaved dock (*Rumex obtusifolius*), common nettle (*Urtica dioica*) creeping buttercup (*Ranunculus repens*) and wavy hair grass (*Deschampsia flexuosa*). Along the edge of parcel 4, dividing the field from the road was a good condition native hedge dominated by Hawthorn (*Crataegus* sp.). An accurate assessment of the plant species was determined by using remaining material and structures which provided a confident identification of which species would be present during the growing periods.

To the east lies a strip of good condition mixed scrub (parcel 5). Species present included bramble (*Rubus fruticosus*), broad-leaved dock (*Rumex obtusifolius*), common nettle (*Urtica dioica*) creeping buttercup (*Ranunculus repens*) and wavy hair grass (*Deschampsia flexuosa*). Also present was a single oak tree (*Quercus robur*) assessed to be in good condition.

The willow (*Salix* sp.) hedge that is present on the boundary with the road was assessed as in good condition



A photo sheet detailing habitat examples is available in Appendix 2 SWS/BNG/PS01



Figure 2. Baseline Habitats Map, Summergrove Park, Whitehaven.

There are no irreplaceable habitats present on site.

Parcel	Broad Habitat Type	UK Habs	Secondary Codes	Condition	Area
3	Grassland	g4	102	Poor	33448m ²
4	Grassland	g4	102 128	Good	2474m ²
4	Heathland and shrub	h2a	522	Good	117m
5	Heathland and shrub	h3h	200	Good	4010m ²

Table.1 UK Habs polygon attributes (See UK Habs Key and parcel Map)

5.5 Post-development habitat information

For reference, the post-development habitat plan is included as Figure 3 of this report. The post-development calculations are based on M3508-RM-01-V02 Landscape Layout and proposed drawing '70 Dwelling Scheme'.

Please note, this plan may be superseded or updated without warranting an update of this report, if the changes are insignificant to the impact of the development on biodiversity. The version included within this report is for indicative purposes only and should not be relied upon as the definitive version.

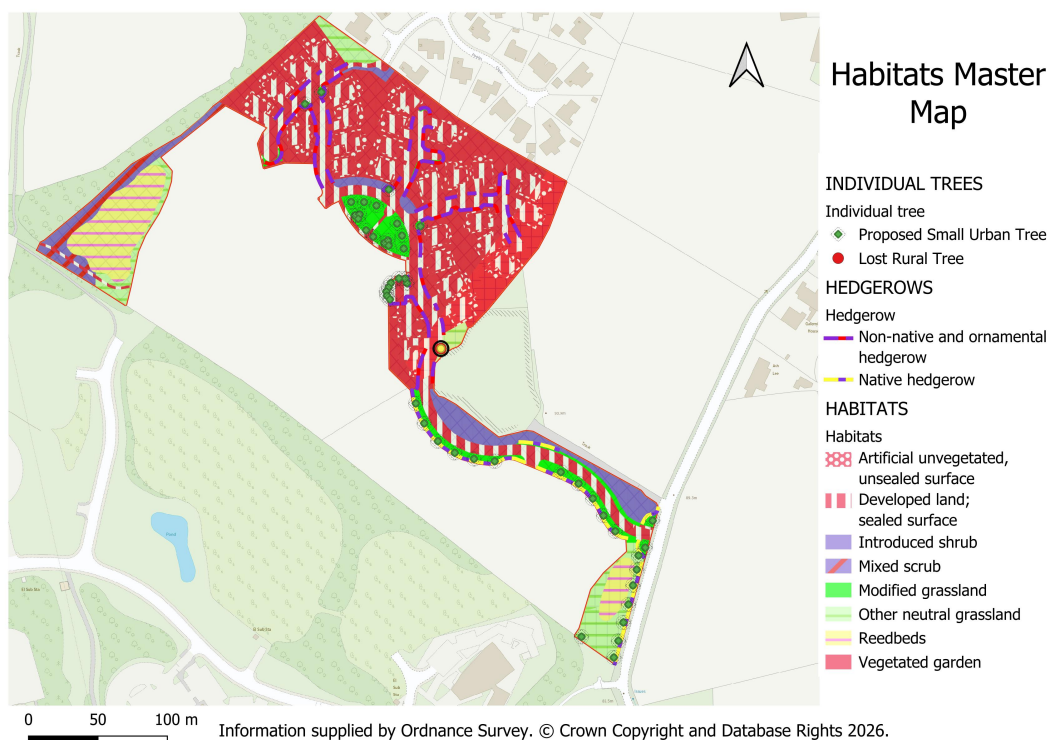


Figure 3. Proposed Habitats Map, Summergrove Park, Whitehaven.

On-site baseline	Area habitat units	13.04	
	Hedgerow units	0.70	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	9.48	
	Hedgerow units	1.81	
	Watercourse units	0.00	
On-site net change (units & percentage)	Area habitat units	-3.57	-27.33%
	Hedgerow units	1.12	160.45%
	Watercourse units	0.00	0.00%

Table 2. Displays the Headline unit change as shown in the Statutory Biodiversity Metric

- 5.6 As a result of the Phase 1 development substantial areas of both poor and good condition modified grassland, good condition mixed scrub, a single oak tree and a section of good condition native hedgerow will be lost.
- 5.7 These habitats will be replaced by 30 houses with attached gardens surrounded by pavements and roads. There will be a large communal area of managed modified grassland as well as smaller pockets of grassland along roadsides. There will be areas of planted shrubs along road sides and particularly on the access road into the estate.
- 5.8 Two pockets of other neutral grassland will be created that lie adjacent to two properties, one to the north and one east. These will need to be managed as part of the HMMP so will not have hedges at the access points. With the correct management this would be expected to be reach good condition.
- 5.9 Two areas of reedbed will be developed which, as well as being a benefit to the hydrology on site, will be a significant uplift to the site's ecological interest. The reedbed will primarily be of Common Reed (*Phragmites australis*) and Great



Reedmace (*Typha latifolia*) with other typical marginals such as Meadow Sweet (*Filipendula ulmaria*) Purple Loosestrife (*Lythrum salicaria*) and Reed Canary Grass (*Phalaris arundinacea*). The reedbed to the south will be surrounded by good quality other neutral grassland, 6 trees and a newly planted native hedge will be introduced as a boundary between this area and the access road. The reedbed to the northwest will be bordered by an area of good quality other neutral grassland to the south of it and surrounded by good quality mixed scrub to the north. This will help with the scrub lost as part of the development. It will border the adjacent field acting as a buffer. This scrub will continue along the north border and finish just before the first house.

- 5.10 47 native trees will be planted in non-privately owned areas, specifically along road boundaries on the main entrance into the development and in communal grass areas.
- 5.11 A section of the native hedgerow dividing the road from the field will be removed in order to provide an access road to the properties however multiple native and non-native/ornamental hedgerows will be planted lining the roads and private gardens to compensate for this.

6.0 Biodiversity Net Gain Summary

- 6.1 The development required a minimum of 10% BNG and with the proposed plans this target has not been achieved. The development results in a habitat loss of -25.06%. The hedgerow had an uplift of 126.84% which was achieved by planting large amounts of native and non-native/ornamental hedgerow along the roadsides and garden boundaries. With no opportunity to achieve the uplift on-site then an off-site BNG is required. There is opportunity to achieve this in a separate area of the field (blue line boundary).

See the Statutory Biodiversity Metric Calculation Tool attached for a breakdown of all results.

6.3 UK Habs Key

102 - Sheep grazed
128 - Tall or tussocky sward
200 - Tree
522 - Native

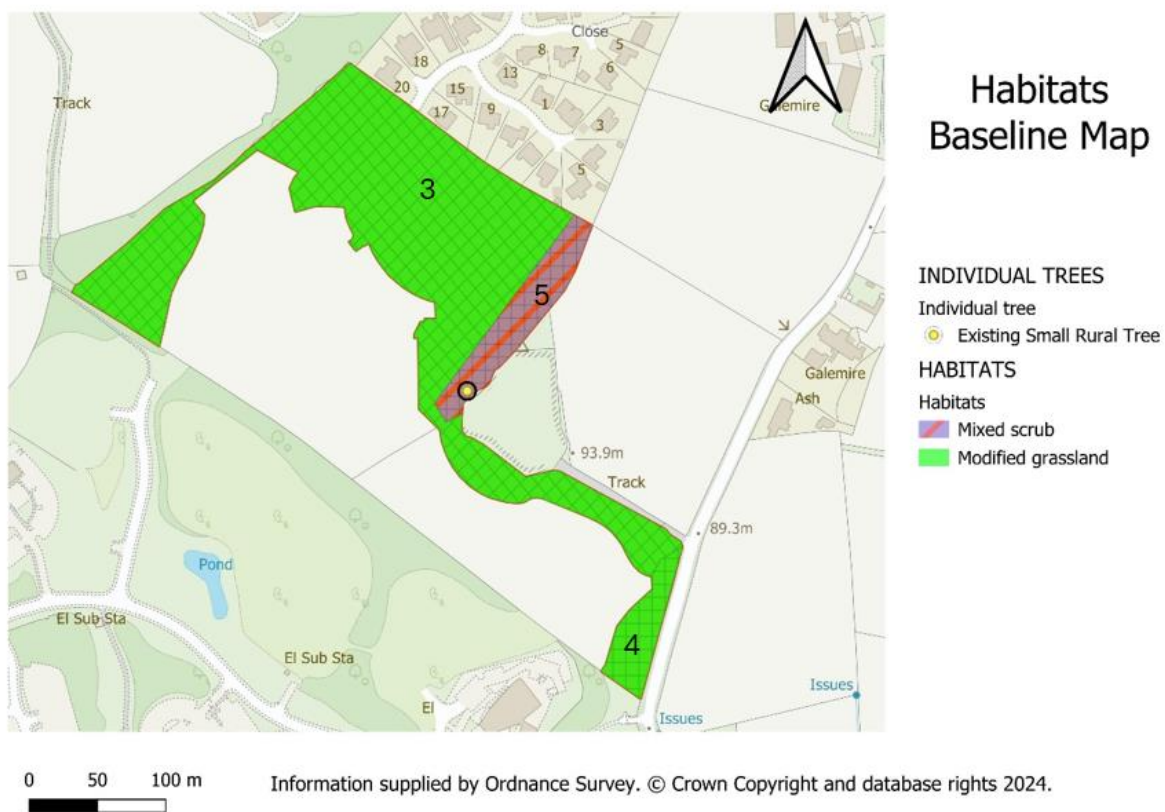


Figure 4. Habitat parcels, Summergrove Park, Whitehaven.



7.0 References

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rhs.org.uk/plantsforpollinators

Appendix 1



1. Existing hedge on south west boundary of site.



2. Inside area of hedge and area of adjoining mixed Juncus.



3. Rush meadow



4. Majority of site is dominated by modified grass (sheep grazed).



5. Using quadrant to assess modified grass areas on site



6. Mixed scrub area in centre of site. Scrub area 0.4HA (1acre) with a perimeter of 390m



7. Mixed scrub area is fences to exclude sheep.



8. Good mixture of tall ruderal species and occasional shrubs.



9. Unmanaged hedge on site with damage from grazing.



Project

Biodiversity Net Gain
Assessment.
Habitat Examples

Site

Land to South West of
Summergrove, Whitehaven
CA28 8YN
N. G. Field No. NX 9915 9646

Photo Sheet SWS/BNG/PS01

Date October 2024

Scale N/A

Appendix 2



Project

Biodiversity Net Gain
Assessment Report

Title

Land to South West of
Summergrove, Whitehaven
CA28 8YN

Approximate extent of land
surveyed for BNG
assessment and report



Photo Sheet SWS/SL/WB/01

Date October 2024

Scale N/A

Google Earth

