



2964 Meadow Road, Mirehouse

Ecological Appraisal



For Home Group Developments Ltd

June 2018

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Executive Summary

Contents	Summary
Site Location	The site is located on Meadow Road in Mirehouse and is centred at Ordnance Survey National Grid Reference NX 97757 16334. The survey area comprises two garage blocks surrounded by bare ground, ephemeral / short perennial vegetation, dense scrub and mixed semi-natural woodland.
Proposals	Details of the proposed development were unknown at the time of writing.
Existing Site Information	WYG is not aware of any previous ecology reports for the site.
Scope of this Survey(s)	<p>WYG was commissioned to undertake an Ecological Appraisal of the site in May 2018. The objectives of this assessment were to carry-out:</p> <ul style="list-style-type: none"> • A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence; • A walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species; and, • An assessment of the potential ecological receptors present on site, any constraints they post to future development and any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).
Results	<p>Designated Sites</p> <ul style="list-style-type: none"> • No direct or indirect impacts on European (Natura 2000) designated sites are anticipated. • No direct or indirect impacts on statutory or non-statutory designated sites are anticipated. <p>Habitats</p> <p>The site includes the following habitats:</p> <ul style="list-style-type: none"> • Buildings; • Mixed Semi-natural Woodland; • Bare Ground; • Ephemeral/Short Perennial Vegetation; • Dense Scrub. <p>Protected and notable species:</p> <ul style="list-style-type: none"> • Great Crested Newt: There are no ponds on site or within 500m of the site. GCN are considered unlikely to be present. • Reptiles: The desk study identified records for reptiles within 2km of the site. The scrub on the site boundaries could provide shelter for reptiles, and the hardstanding is suitable for basking if reptiles are present. • Bats: The buildings within the site are considered to be of 'negligible' suitability for roosting bats; • The woodland adjacent to the site is suitable for foraging and commuting bats;



	<ul style="list-style-type: none"> • Birds: Trees and scrub on the site boundaries are suitable for common nesting bird species. • Invertebrates: The bare ground and ephemeral/short perennial habitats are likely to support a range of common invertebrate species. • Red squirrel: There are records for red squirrel within 2km of the site. The woodland adjacent to the site could support red squirrel. • Hedgehog: The dense scrub on the site boundaries could provide suitable habitat for hedgehog.
<p>Recommendations</p>	<p>No further survey is required to support the planning application however mitigation will be required as detailed below:</p> <ul style="list-style-type: none"> • Habitats: The trees and woodland adjacent to the site to the west should be protected in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. • The ecology of the site could be enhanced by incorporating some additional planting into the landscaping design. • Reptiles: It is recommended that vegetation on the site is removed in a phased fashion, supervised by an ecological clerk of works; with an initial cut to a height of approximately 30 cm, then 15 cm, with a final cut to ground level. In the unlikely event that a reptile is found during works, it should be moved to a safe area away from roads, i.e. the woodland to the west of the site. • It is recommended that a toolbox talk is given to contractors to provide advice regarding legislation, appropriate precautions and actions to take should a reptile be found on site. • Bats: As a precautionary approach it is recommended that a tool box talk is given to contractors prior to demolition. In the unlikely event that a bat is found, works should stop immediately and a bat licensed ecologist contacted for advice. • It is recommended that light spill adjacent to the woodland edge is avoided and new lighting should only be used where necessary. • The site could be enhanced for roosting bats by the provision of a bat box (1 x Schwegler 2F or similar design) within the new development. • Breeding Birds: Any vegetation removal or demolition of the buildings on site should be undertaken outside of the breeding bird season (March to September, inclusive) or otherwise should only take place immediately after a nesting bird check by a suitably qualified ecologist to confirm the absence of nests. • Badger: As badgers may be present in the wider area, it is recommended that a pre-works check for badger setts is conducted approximately one month prior to works commencing on site. • During the construction phase of the development, excavations should be covered at the end of each working day, or a means of escape provided in case any animal should fall in. • Red Squirrel: Red squirrel are not anticipated to pose a constraint to development but as a precaution should any of the trees need to be felled, then a pre-felling check should be carried out to check for dreys.



	<ul style="list-style-type: none"> • Hedgehog: Any areas of scrub to be removed should be checked for hedgehog nests. If any hedgehogs are found, they should be moved to a safe area away from any roads.
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Glossary

ACIEEM	Associate Member of Chartered Institute of Ecology & Environmental Management
Badger Act	Protection of Badgers Act 1992
BCT	Bat Conservation Trust
BoCC	Bird(s) of Conservation Concern
CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
CWS	County Wildlife Site
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EPS	European Protected Species
EPSL	European Protected Species Licence
GCN	Great Crested Newt
Habitat Regulations	Conservation of Habitats and Species Regulations 2017
HAP	Habitat Action Plan
Hedgerow Regulations	Hedgerow Regulations 1997
HPI	Habitat(s) of Principal Importance
JNCC	Join Nature Conservancy Council
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NE	Natural England
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
SAC	Special Area of Conservation
SAP	Species Action Plan
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981 (as amended)



1.0 Introduction

1.1 Background

WYG was commissioned by Home Group Developments Ltd on the 9th May 2018 to undertake an Ecological Appraisal of the site known as 2964 Meadow Road, Mirehouse.

This report has been prepared by WYG Principal Ecologist Kirstin Aldous ACIEEM.

1.2 Site Location

The site is located on Meadow Road in Mirehouse, Cumbria and is centred at Ordnance Survey National Grid Reference NX 97757 16334. The survey area, hereafter referred to as the 'site', is shown on Figure 1 and comprises a number of garages surrounded by bare ground, ephemeral / short perennial vegetation, dense scrub and mixed semi-natural woodland. The site location is shown in Figure 1.

1.3 Development Proposals

Details of the proposed development were unknown at the time of writing.

1.4 Purpose of the Report

The objective of this report is to complete:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence;
- A preliminary ecological appraisal involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species;
- An assessment of the potential ecological receptors present on site, identify any constraints they pose to future development and also any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.



2.0 Methodology

2.1 Desk Study

2.1.1 Previous Reports

WYG is not aware of any previous ecological reports for the site.

2.1.2 Local Ecological Records Centre

Information was requested from the Cumbria Biodiversity Data Centre (CBDC) for information on any nature conservation designations and protected or notable species records within 2km of the site.

The data search covers:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely LWS;
- Legally protected species, such as great crested newts, bats and badger;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance; and,
- Priority habitats or species within the Cumbria LBAP.

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

2.1.3 Online Resources

A search for relevant information was also made on the following websites:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any EPSL applications that have been granted in the local area since 2015.

2.2 Field Surveys

The following methodologies have been used to identify the ecological receptors present on or near the site, which are relevant to the proposed development.

2.2.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on the 17th May 2018 by WYG Principal Ecologist Kirstin Aldous BSc (Hons) MSc ACIEEM. Kirstin holds a Natural England Level 2 class licence to survey bats (2015-12548-CLS-CLS). The weather conditions were dry, temperature 15°C, cloud cover 20% and a light breeze.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee, 2010). Dominant plant species were recorded for each habitat present using



nomenclature according to Stace (2010). The site was also appraised for its suitability to support notable flora, with regard to the CIEEM Guidelines for Preliminary Ecological Appraisal (2nd ed, 2017).

2.2.2 Protected & Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRoW Act, those given extra protection under the NERC Act, and species included in the Cumbria LBAP.

Great Crested Newt

The site was appraised for its suitability to support great crested newt *Triturus cristatus* (GCN). The assessment was based on Guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

Bats

Roosting bats – Buildings/structures/trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd ed, 2016) – hereafter referred to as the 'BCT Guidelines'. The following system has therefore been used to categorise the bat roost suitability of any features found:

Table 1 Categories of Bat Roost Suitability (BCT Guidelines)

Suitability	Typical Roosting Features
Negligible	Negligible habitat feature on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites 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 (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites 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 (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions & surrounding habitat.



Foraging/commuting bats

The BCT Guidelines use the following criteria to categorise the potential value of habitats and features for use by foraging and commuting bats and these have been used to characterise the value of this site:

Table 2 Categories of Habitat Suitability (BCT Guidelines)

Suitability	Typical Foraging & Commuting Features
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Joint Nature Conservation Committees' published *Herpetofauna Workers' Manual* (Gent & Gibson, 2003).

Badgers

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989).

Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to CIEEM's *Guidelines for Preliminary Ecological Appraisal* (2nd ed, 2017) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development*. Evidence of any current or historical presence of such species was recorded.

2.2.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, wall



cotoneaster *Cotoneaster horizontalis* and rhododendron *Rhododendron ponticum* – however see Appendix B for a full list.

2.3 Limitations

The optimal period to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in May 2018 which is within the optimal survey window. As such this is not considered to be a limitation to the accurate assessment of the habitats and the dominant species of the respective vegetation types were visible and identifiable.

There was dense bramble scrub to the west of the buildings on site and the western elevations of the buildings could not be accessed. The woodland to within and adjacent to the site could not be fully accessed due to dense vegetation. This is considered to be a minor limitation to the survey, however we have provided mitigation measures to address this within this report.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

The details of this report will remain valid for a period of **two years** from the date of the survey (i.e. until 17th May 2020), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 Baseline Conditions

3.1 Designated Sites

The following designated sites of ecological importance have been identified within 2km of the site.

Table 3 Designated Sites within 2km

Designation	Site Name	Distance & Direction	Summary of features
SSSI, Site of Invertebrate Significance.	St Bees Head	1.5km west	The biological interest of the site is represented in a number of habitats including natural cliff-top grassland and heath, sheer cliff face and cliff-fall rubble, shingle and wave-cut platform. The sheer cliffs provide the only breeding site on the coast of Cumbria for a variety of colonial seabirds. These include over 2,000 pairs of guillemots <i>Uria aalge</i> along with lesser numbers of fulmar <i>Fulmarus glacialis</i> , kittiwake <i>Rissa tridactyla</i> , razorbill <i>Alca torda</i> , cormorant <i>Phalacrocorax carbo</i> , puffin <i>Fratercula arctica</i> , shag <i>Phalacrocorax aristotelis</i> and herring gull <i>Larus argentatus</i> . The cliffs are, in addition, the only breeding site on the entire coast of England for black guillemots <i>Cephus grylle</i> .
CWS	Woodhouse Quarry	0.4km west	No details available.
CWS	Midgey Gill	1.3km north	Ancient semi-natural woodland. Planted ancient woodland site.
CWS	Roska Park and Bellhouse Gill Wood	1.4km south	Designated for woodland habitats. Includes ancient woodland.
CWS	Castle Park Wood	1.5km north	Designated for woodland habitats. Includes ancient woodland.

In addition to the above designations, the nearest Natura 2000 site is the River Ehen SAC approximately 4.9km west of the site. The River Ehen supports the largest freshwater pearl mussel *Margaritifera margaritifera* population in England.

3.2 Habitats

The following habitats have been identified through our assessment and are shown in Figure 2.

3.2.1 Buildings

The site includes one single storey and one two storey garage block.

Building 1a is two storey and constructed from breeze block with corrugated metal cladding. The roof is mono pitched and of corrugated metal. Internally (viewed through garage doors whilst open), there is no loft void. There are sliding metal garage doors on the eastern elevation. The building is currently in use.

Photograph 1: Building 1a.



Building 1b is joined to the northern elevation of Building 1a. Building 1b is a single storey garage with a corrugated sheet (presumed asbestos) roof. The walls are pebbledash with metal lintels over boarded up windows. There is a metal garage door on the eastern elevation. The building does not appear to be in use.

Photograph 2: Building 1b



3.2.2 Mixed Semi-Natural Woodland

Within the north-west of the site and adjacent to the site to the west there is dense mixed semi-natural woodland. Tree species present included alder *Alnus glutinosa*, sycamore *Acer pseudoplatanus*, hawthorn *Crataegus monogyna* and scot's pine *Pinus sylvestris*.

Photograph 3: Woodland to the west of the site



3.2.3 Bare Ground

Within the east of the site there are large areas of bare ground including concrete and crushed hardcore.

Photograph 4: Example of bare ground within the site



3.2.4 Ephemeral/short perennial

There is ephemeral / short perennial vegetation growing on the site boundaries at the south and north-west of the site and through the crushed hardcore in the centre of the site. Species present included dandelion *Taraxacum* sp., rosebay willowherb *Chamerion angustifolium*, colt's foot *Tussilago farfara*, common hogweed *Heracleum sphondylium*, creeping buttercup *Ranunculus repens*, ribwort plantain *Plantago lanceolata*, field horsetail *Equisetum arvense*, dock *Rumex* Sp., pendulous sedge *Carex pendula*, cock's foot *Dactylis glomerata*, daisy *Bellis perennis*, herb Robert *Geranium robertianum*, common nettle *Urtica dioica* and white clover *Trifolium repens*.

Photograph 4: Example of ephemeral/short perennial vegetation within the site



3.2.5 Dense Scrub

Scrub is present on the site boundaries which becomes dense and inaccessible within the west of the site (behind the buildings). Species include bramble *Rubus fruticosus* and tree saplings.

3.3 Protected & Notable Species

3.3.1 Great Crested Newts

The desk study found no records for GCN within 2km of the site. A search of the MAGIC database identified no EPS licences for GCN granted within 2km of the site.

There are no ponds within the site boundary and a review of Ordnance Survey maps and aerial photography identified no ponds within 500m of the site. Pow beck lies approximately 0.1km east of the site and flows northwards towards Whitehaven. Pow beck is unlikely to support GCN as it has flowing water. The buildings, bare ground and ephemeral / short perennial vegetation within the site do not provide suitable habitat for GCN. The mixed semi-natural woodland within the site and adjacent to the site to the west and the dense scrub within the site provide suitable terrestrial habitat, but as there is no suitable habitat for breeding GCN within 500m, GCN are unlikely be present and are not considered further within this assessment.

3.3.2 Reptiles

The desk study returned 44 records for reptiles within 2km of the site. There were 21 records for common lizard *Zootoca vivipara*; the closest records were 0.98km north of the site at land adjacent to Corkickle Station, recorded in 2014. There were 23 records for slow worm *Anguis fragilis* within 2km of the site. The closest records were also from Corkickle Station, 0.98km north of the site recorded in 2014.

There is habitat connectivity between Corkickle Station and the wider area via the railway line that runs from north to south, 0.2km east of the site. However, the railway line is separated from the site by Pow Beck which would form a barrier to reptile dispersal. Scrub on the site boundaries and at the south-west of the site could provide shelter for reptiles, and the bare ground is suitable for basking if reptiles are present. The mixed semi-natural woodland within the site to the north-west and adjacent



to the site to the west connects the site to habitats in the wider area. Piles of debris within the site could provide suitable refugia for overwintering reptiles.

3.3.3 Bats

The desk study returned nine records for bats within 2km of the site. Records were for common pipistrelle *Pipistrellus pipistrellus*, brown long eared-bat *Plecotus auritus* and unconfirmed bat species. The closest record was for a *Pipistrellus* species bat recorded 0.7km south east of the site in 2007. A search of MAGIC identified no EPS licenses for bat species granted within 2km of the site.

No bat droppings or evidence of roosting bats was identified during the external bat roost assessment.

Building 1a is constructed from breezeblock with corrugated metal cladding and a corrugated metal roof. There are limited opportunities for roosting bats and the building is considered to be of negligible suitability for roosting bats.

Building 1b has some gaps around the garage doors which could provide access to the interior of the building. There are some potential gaps behind the boarded up windows which may offer suitable roosting locations for bats. There are cracks above the metal window lintel, but these do not appear deep enough to support roosting bats. Building 1b is also considered to be of negligible suitability for roosting bats, but precautionary working methods are recommended in section 5.3.2 below.

Trees within the woodland could have suitability for roosting bats and the woodland edge could be used by foraging and commuting bats.

3.3.4 Badger

The desk study returned one record for badger *Meles meles* recorded 1.3km south-east of the site in 1999. This record was of a badger recorded dead on the road.

The site mainly comprises buildings and bare ground which are not suitable for foraging or sett building. No evidence of badger was recorded within the site during the survey. The mixed semi-natural woodland was very dense and could not be fully accessed (refer to limitations). The mixed semi-natural woodland could be suitable for badger.

3.3.5 Otter & Water Vole

The desk study returned three records for otter *Lutra lutra* and no records for water vole *Arvicola amphibious* within 2km of the site. The nearest recent record for otter was recorded 1.5km south-east of the site in 2015. The nature of the record was not disclosed.

There are no water courses within or adjacent to the site and terrestrial habitats are considered to be suboptimal for otter and unsuitable for water vole. The buildings and bare ground are unsuitable for use as otter resting places. Otter could be present within the wider area (for example along Pow beck or the woodland to the west), but are unlikely to utilise the site as separated from the site by Meadow Road. Otter and water vole are not considered further within this assessment.



3.3.6 Birds

The desk study returned 2326 records for birds recorded within 2km of the site. The majority of the records were for species associated with the coastal habitats approximately 1.5 km to the west. There were no records from the site itself.

Coal tit *Periparus ater* and chiffchaff *Phylloscopus collybita* were recorded during the survey. A coal-tit was observed briefly on the roof of the buildings and chiff-chaff was heard in the mixed semi-natural woodland to the west of the site. No evidence of nesting birds was noted on the exterior of the buildings during the survey. The majority of the site has limited suitability for nesting birds, but the scrub and woodland habitats within the site and to the west of the site could support common nesting bird species.

3.3.7 Invertebrates

The desk study returned 58 records for invertebrates within 2km of the site. One record for a mollusc was returned - large black slug *Arion (Arion) ater* recorded 0.9km east of the site in 1996. One record for a bug was returned - *Scolopostethus grandis*, recorded 0.9km east of the site in 2006. Records for five species of beetle were returned: *Orthochaetes insignis* 0.9km east of the site in 2001, *Pterostichus (Pterostichus) cristatus* recorded 0.9km east of the site in 2012, *Barynotus squamosus* recorded 0.9km east of the site in 2006 and *Elaphropus parvulus* 0.9km east of the site in 2015.

The following records of butterfly species were returned: wall *Lasiommata megera* recorded 0.9km east of the site in 2015, grayling *Hipparchia semele* recorded 0.9km east of the site in 2003, and comma *Polygonia c-album* recorded 0.9km east of the site in 2010.

Invertebrate species may utilise the bare ground and ephemeral/short perennial vegetation within the site. However, the site is small (approximately 0.2ha) and it is unlikely that notable invertebrate species would be dependent upon habitats within the site in isolation. There are more suitable habitats for invertebrates within the wider area.

3.3.8 Other species

The desk study returned 164 records for red squirrel *Sciurus vulgaris* within 2km of the site. The closest records were recorded 0.2km south-west of the site in 2014. No dreys were noted within the site, however red squirrel could be present within the mixed semi-natural woodland immediately west of the site.

The desk study returned 71 records for hedgehog within 2km of the site. The closest records were recorded 0.4km km south-east of the site in 1997. The most recent record was recorded 1km north-east of the site in 2015. There is limited suitable habitat within the site for foraging hedgehog, however the dense scrub at the south-west of the site and mixed semi-natural woodland at the north-west of the site could provide suitable cover for hedgehog.

3.3.9 Invasive Species

The desk study returned records for Japanese knotweed and *Rhododendron ponticum* within 2km of the site, however there were no records from the site itself. No invasive species were recorded during the survey, however the area of dense scrub within the site to the south-west could not be fully accessed due to dense vegetation.



3.4 Importance of Ecological Features

In line with the CIEEM PEA Guidelines, and based on the above baseline information, each ecological feature recorded within the study area is considered to have the following importance, as defined within the CIEEM EcIA Guidelines (2016):

Table 4 Importance of Ecological Features

Feature	Importance	Rationale
St Bees Head SSSI/ Site of invertebrate importance.	National	Site designated at a national level for its habitats and assemblage of birds and invertebrates.
Woodlouse Quarry CWS	County	Site designated at county level for its habitats.
Midgey Gill CWS	County	Site designated at county level for its woodland habitats.
Roska Park and Bellhouse Gill Wood CWS	County	Site designated at county level for its woodland habitats.
Castle Park Wood CWS	County	Site designated at county level for its woodland habitats.
Buildings	Negligible	Habitats of limited ecological value. Unlikely to support protected or notable species.
Mixed semi-natural woodland	Local	Woodland supports invertebrates, birds, foraging and commuting bats.
Bare ground	Negligible	Habitat common and widespread. Unlikely to support protected or notable species.
Dense scrub	Negligible	Habitat common and widespread.
GCN	N/A	EPS. Unlikely to be present on site.
Reptiles	Local	May be present on site boundaries/habitats adjacent to site. Protected from killing or injury under the W&CA 1981 (as amended).
Roosting bats	N/A	EPS. Unlikely to be present on site. However, precautionary working methods recommended during site clearance and demolition.
Foraging and commuting bats	Local	EPS. Woodland and woodland edge within the site may support foraging and commuting bats.
Badger	Local	Unlikely to be present on site, but may be present in woodland to the west. Badgers and their setts are protected under the Badger's Act 1992.
Otter and Water vole	N/A	Unlikely to be present on site.
Birds	Local	Woodland and scrub on the site boundaries may support nesting birds. Nesting birds are protected under the W&CA 1981 (as amended).
Invertebrates	Negligible	The site is unlikely to support protected or notable invertebrate species.



Feature	Importance	Rationale
Red squirrel	Local	SPI and LBAP. May be present in woodland to the west of the site.
Hedgehog	Local	SPI and LBAP. May be present on site.
<p>Either: International (incl. European) / National / Regional / County / Local / Negligible Or: Unknown (i.e. further surveys/information needed)</p>		

The potential for the proposals to have adverse or beneficial impacts on these features, along with the need for any mitigation or enhancement measures are discussed in detail below.



4.0 Relevant Planning Policy & Legislation

4.1 National Planning Policy Framework

The NPPF was adopted in March 2012. Section 11 of the NPPF, *Conserving and Enhancing the Natural Environment* replaces *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*. However, government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 117 of the NPPF also states that *'planning policies should...promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets'*.

Furthermore, central and local government policy now points towards ecological enhancement on development sites. The NPPF considers enhancement further in the paragraph 109, stating:

'The planning system should contribute to and enhance the natural and local environment by...:

- *recognising the wider benefits of ecosystem services*
- *minimising impacts on biodiversity and **providing net gains in biodiversity where possible**, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures'*

4.2 Biodiversity 2020: A strategy for England's wildlife & ecosystem services

Biodiversity 2020 replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix B for further details).

4.3 Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Cumbria LBAP is the relevant document for this site and it contains the following Habitat & Species Action Plans:

**Table 5 LBAP SAPs**

Species Action Plans	
Bats	Natterjack Toad
Red Squirrel	Geyer's Whorl Snail
Water Vole	Sandbown Snail
Barn Owl	High Brown Fritillary
Song thrush	Pearl-Bordered Fritillary
Vendace	Marsh Fritillary
Great Crested Newt	Netted carpet moth
Variable damselfly	White-faced darter
A water beetle <i>Hydroporus rufifrons</i>	A Caddisfly <i>Glossosoma intermedium</i>
Slender Green Feather-moss	A lichen <i>Lobaria amplissima</i>
Juniper	

Table 6 LBAP HAPs

Habitats Action Plans	
Mesotrophic standing waters	Rivers and streams
Cities, towns and villages	Coastal habitats
Honeycomb worm reefs	Ancient and/or species-rich hedgerows
Ancient and/or species-rich hedgerows	Calcareous grassland
Hay Meadows and Lowland Pastures	Limestone Pavement
Purple Moor-grass and Rush Pasture	Blanket Bog
Upland Heathland	Basin Mire
Reedbed	Upland Oak Woodland
Upland Mixed Ashwood	Wet Woodland

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats/species, rather than to protect a county-scarce feature (for example).

4.4 Local Plan

The Copeland Local Plan 2013 – 2028 was adopted in December 2013 and sets out the council's policies and proposals for the region (Copeland Borough Council, 2017).

The following Strategic Objectives are listed under Environmental Protection and Enhancement and are of relevance to ecology:



"Strategic Objective 18

Improve green infrastructure and protect and enhance the rich biodiversity and geodiversity both within and outside of the Borough's many nationally and internationally designated sites, ensuring that habitats are extended, connected by effective wildlife corridors and that lost habitats are restored.

Strategic Objective 20:

Facilitate the best use of land i.e. prioritise previously developed land for development (where this does not threaten valued biodiversity features) and secure an appropriate density of development on any given site."

Policy ENV3 – Biodiversity and Geodiversity states that:

"The Council will contribute to the implementation of the UK and Cumbria Biodiversity Action Plan within the plan area by seeking to:

- Improve the condition of internationally, nationally and locally designated sites;*
- Ensure that development incorporates measures to protect and enhance any biodiversity interest;*
- Enhance, extend and restore priority habitats and look for opportunities to create new habitat;*
- Protect and strengthen populations of priority or other protected species;*
- Boost the biodiversity value of existing wildlife corridors and create new corridors, and stepping stones that connect them, to develop a functional Ecological Network; and,*
- Restrict access and usage where appropriate and necessary in order to conserve an area's biodiversity value."*

4.5 Legislation

Full details of the UK legislation and offences which are relevant to the ecological receptors identified are included in Appendix B. However, based on the findings of our assessment, it is considered that the proposals will need to consider the following legal provisions:

- Disturbance of nesting wild birds;
- Killing/injury of common reptile species.
- Disturbance of species listed under the W&CA



5.0 Discussion

5.1 Designated Sites

Natura 2000 Sites

The nearest Natura 2000 site is the River Ehen SAC approximately 4.9km west of the site. Due to small footprint of the development site, and the localised nature of any development, and the lack of ecological or hydrological corridors between the site and the SAC, no direct or indirect effects are anticipated.

Sites of Special Scientific Interest

The nearest SSSI is St Bees Head, approximately 1.5km west of the site. Due to the small footprint of the development site and the localised nature of any development, no direct or indirect effects are anticipated.

Local Wildlife Sites

The nearest LWS is Woodhouse Quarry, 0.4km west of the site. Mixed semi-natural woodland habitat to the west of the site connects the site to the LWS, however due to the localised nature of the development no direct or indirect effects are anticipated.

5.2 Habitats

The buildings, bare ground, dense scrub and ephemeral/short perennial vegetation are considered to have limited ecological value. The mixed semi-natural woodland within the site to the north-west and adjacent to the site to the west are of local importance and it is recommended that the biodiversity interest of this habitat is protected in accordance with Policy ENV3 of The Copeland Local Plan 2013. It is recommended that the afforded protection is in accordance to BS 5837:2012 *Trees in relation to design, demolition and construction*. The woodland area within the site could not be fully inspected due to the dense nature of the vegetation (refer to limitations). If mature trees are to be removed it is recommended that these are checked first by an ecological clerk of works (ECoW) to confirm that they have no suitability for roosting bats or nesting birds.

The biodiversity of the site could be enhanced in accordance with Policy ENV3 of The Copeland Local Plan 2013 – 2028 by incorporating some additional planting into the landscaping design. Ideally native species of local provenance should be chosen to enhance the biodiversity value of the site.

5.3 Protected & Notable Species

5.3.1 Reptiles

The desk study identified records for reptiles within 2km of the site. The scrub on the site boundaries could provide shelter for reptiles, and the bare ground is suitable for basking if reptiles are present. Piles of debris within the site could provide suitable refugia for overwintering reptiles.

All native species of reptile are protected against intentionally killing and injury under the Wildlife and Countryside Act 1981 (as amended). Habitats on site could support common reptile species; most notably common lizard and slow worm, which are protected from intentional or reckless harm.



Due to the small areas of land to be impacted upon, it is not considered necessary to conduct targeted reptile surveys on the site. However, as a precautionary measure, it is recommended that vegetation on the site is removed in a phased fashion, from north to south, supervised by an ECoW with an initial cut to a height of approximately 30 cm, then 15 cm, with a final cut to ground level. In the unlikely event that a reptile is found during works, it should be moved to a safe area away from roads, i.e. the woodland to the north of the site.

A Toolbox Talk is also recommended to be given to contractors to provide advice regarding associated legislation, appropriate precautionary working methods and actions to take should a reptile be found on site.

5.3.2 Bats

All UK bats and their roosts receive full protection both under the Habitat Regulations and as EPS under the W&CA. Bats are also listed under the Cumbria LBAP. The provisions of the NERC Act require local authorities to have due regard to the conservation of such protected species, including their commuting and foraging habitat, when determining planning applications.

The buildings within the site are considered to be of negligible suitability for roosting bats. However, as a precautionary approach it is recommended that a Toolbox Talk is given to all site staff (including contractors) prior to demolition. It is recommended that the boards covering the windows of building 1b are removed carefully by hand, and that the contractor checks behind each boarded up window for signs of bats prior to removal. Contractors should also take care when removing the roofs of the garages, checking the wall tops for signs of bats. In the unlikely event that a bat is found, works should stop immediately and a bat licensed ecologist contacted for advice.

No trees with features suitable for roosting bats were noted during the survey. However, there were limitations to the survey of the woodland due to the dense nature of the vegetation. The mixed semi-natural woodland to the west of the site (outside the site boundary) could support roosting, foraging and commuting bats. It is our understanding that woodland to the west of the site will be retained and protected.

It is recommended that light spill adjacent to the woodland edge is avoided and new lighting should only be used where necessary.

The site could be enhanced for roosting bats in accordance with Policy ENV3 of The Copeland Local Plan 2013 – 2028 by the provision of a bat box (No.1 x Schwegler 2F or similar design) within the new development.

5.3.3 Breeding Birds

All nesting birds, their nests (whilst being built or in use), eggs and dependent young, are protected from disturbance by the W&CA.

The development will result in the loss of scrub habitat within the site which could be used by common bird species.

Any vegetation removal or demolition of the buildings on site should be undertaken outside of the breeding bird season (March to September, inclusive) or otherwise should only take place immediately after a nesting bird check by a suitably qualified ecologist to confirm the absence of



nests. If birds are found to be nesting within vegetation due for removal, it will be necessary to establish a species-specific buffer zone around the nest and to allow the young to fledge before removing the vegetation. Vegetation could only then be removed once the ecologist has advised that the nest has fledged and the buffer can be removed.

It should be noted that some birds, such as woodpigeon, can nest outside of the bird breeding season; therefore, should any nests be identified or suspected to be present on site at any time then works should cease and an ecologist contacted for advice on appropriate working methods.

The site could be enhanced for nesting birds in accordance with Policy ENV3 of The Copeland Local Plan 2013 – 2028 by incorporating native shrub or hedge planting into the landscaping proposals. Nest boxes (suggested No.2) could also be installed on trees adjacent to the site or on buildings to further enhance the site for local breeding birds.

5.3.4 Badger

Badgers and their setts are protected under the Badger Act, and the NPPF stipulates that considering their welfare and mitigating for damage to their habitat are material considerations when considering planning applications. No badgers, setts, or signs of badgers were observed on site during the field survey, however the woodland adjacent to the site to the west could not be fully inspected (refer to limitations).

As badgers may be present in the wider area, it is recommended that a pre-works check for badger setts is conducted approximately one month prior to works commencing on site. A licence from NE will be required if badgers are to be disturbed.

During the construction phase of the development, excavations should be covered at the end of each working day, or a means of escape provided in case any animal should fall in. Any temporarily exposed open pipe system should be capped in a way as to prevent badgers gaining access when contractors are off site.

5.3.5 Red Squirrel

CBDC provided red squirrel records within 2km of the site. Red squirrels are protected under Schedules 5 and 6 of the W&CA 1981 (as amended) and are a SPI and LBAP species.

No dreys were observed on site during the survey and the mixed semi-natural woodland adjacent to the site to the west will be retained and protected. Red squirrel are not anticipated to pose a constraint to development but as a precaution **should any of the trees need to be felled, then a pre-felling check should be carried out to check for dreys.** If a drey is found to be present, the ecologist will advise on an appropriate buffer zone and timing of works to avoid sensitive periods for red squirrel.

5.3.6 Hedgehog

Hedgehog are a SPI. It is recommended that reasonable avoidance and awareness measures are taken to prevent adverse impacts upon hedgehogs during construction. Vegetation should be checked for hedgehog prior to clearance. During construction, any excavations should be back-filled or covered when not in use, and any stored materials checked at the beginning of each day. **Any areas**



of woodland or scrub to be removed should be checked for hedgehog nests. If any hedgehogs are found, they should be moved to a safe area away from any roads.

6.0 Summary

6.1 Designated Sites

- No direct or indirect impacts on European (Natura 2000) designated sites are anticipated.
- No direct or indirect impacts on statutory or non-statutory designated sites are anticipated.

6.2 Habitats

- The mixed semi-natural woodland to the west of the site should be retained and protected in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction*.
- The ecology of the site could be enhanced by incorporating some additional planting into the landscaping design.

6.3 Protected & Notable Species

Reptiles

- It is recommended that vegetation on the site is removed in a phased fashion, supervised by an ecological clerk of works; with an initial cut to a height of approximately 30 cm, then 15 cm, with a final cut to ground level. In the unlikely event that a reptile is found during works, it should be moved to a safe area away from roads, i.e. the woodland to the north of the site.
- It is recommended that a Toolbox Talk is given to contractors to advise regarding associated legislation, appropriate precautionary working methods and actions to take should a reptile be found on site.

Bats

- The buildings within the site are considered to be of negligible suitability to support roosting bats.
- As a precautionary approach it is recommended that a Toolbox Talk is given to contractors prior to demolition. It is recommended that the boards covering the windows of building 1b are removed carefully by hand, and that the contractor checks behind each boarded up window for signs of bats prior to removal. Contractors should also take care when removing the roofs of the garages, checking the wall tops for signs of bats. In the unlikely event that a bat is found, works should stop immediately and a bat licensed ecologist contacted for advice.
- It is recommended that light spill adjacent to the woodland edge is avoided and new lighting should only be used where necessary.
- The site could be enhanced for roosting bats by the provision of a bat box (1 x Schwegler 2F or similar design) within the new development.

Breeding Birds

- Any vegetation removal or demolition of the buildings on site should be undertaken outside of the breeding bird season (March to September, inclusive) or otherwise should only take



place immediately after a nesting bird check by a suitably qualified ecologist to confirm the absence of nests.

Badger

- As badgers may be present in the wider area, it is recommended that a pre-works check for badger setts is conducted approximately one month prior to works commencing on site.
- During the construction phase of the development, excavations or exposed pipes should be covered at the end of each working day, or a means of escape provided in case any animal should fall in.

Red Squirrel

- Red squirrel are not anticipated to pose a constraint to development but as a precaution should any of the trees need to be felled, then a pre-felling check should be carried out to check for dreys.

Hedgehog

- Any areas of scrub to be removed should be checked for hedgehog nests. If any hedgehogs are found, they should be moved to a safe area away from any roads.



7.0 References

- Bright PW, Morris PA and Mitchell-Jones A (2006). Dormouse Conservation Handbook, 2nd Edition. English Nature, Peterborough.
- Chartered Institute for Ecology and Environmental Management (2013). Guidelines for Preliminary Ecological Appraisal.
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed). The Bat Conservation Trust, London.
- Copeland Borough Council (2017) Copeland Local Plan 2017 – 2035. Accessed via https://www.copeland.gov.uk/sites/default/files/attachments/copelandc_local_plan_october_2017.pdf 25th May 2018.
- Communities and Local Government (2012) National Planning Policy Framework.
- English Nature (2011). Badgers and Development. English Nature, Peterborough, UK.
- Eaton, M. et al (2015) Birds of conservation concern 4: the population status of birds in the UK, channel islands and isle of man. *British birds*, 108:708-746.
- Gent, T. & Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Harris, S., Cresswell, P. & Jeffries, D. (1989) Surveying badgers. An occasional publication of the mammal society – No. 9. Mammal Society, London.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.
- Langton, T.E.S, Beckett, C.L and Foster, J.P. (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.
- Oldham R.S., Keeble J., Swan M.J.S & Jeffcote M., (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155.
- Stace, C. (2010) *New Flora of the British Isles* (3rd edition). Cambridge University Press, Cambridge.



FIGURES

Figure 1 – Site Location Plan

Figure 2 – Phase 1 Habitat Plan



Rev	Date	Notes
A	24/05/18	Initial map production

Legend

 Site boundary

0 12.5 25 50 Meters

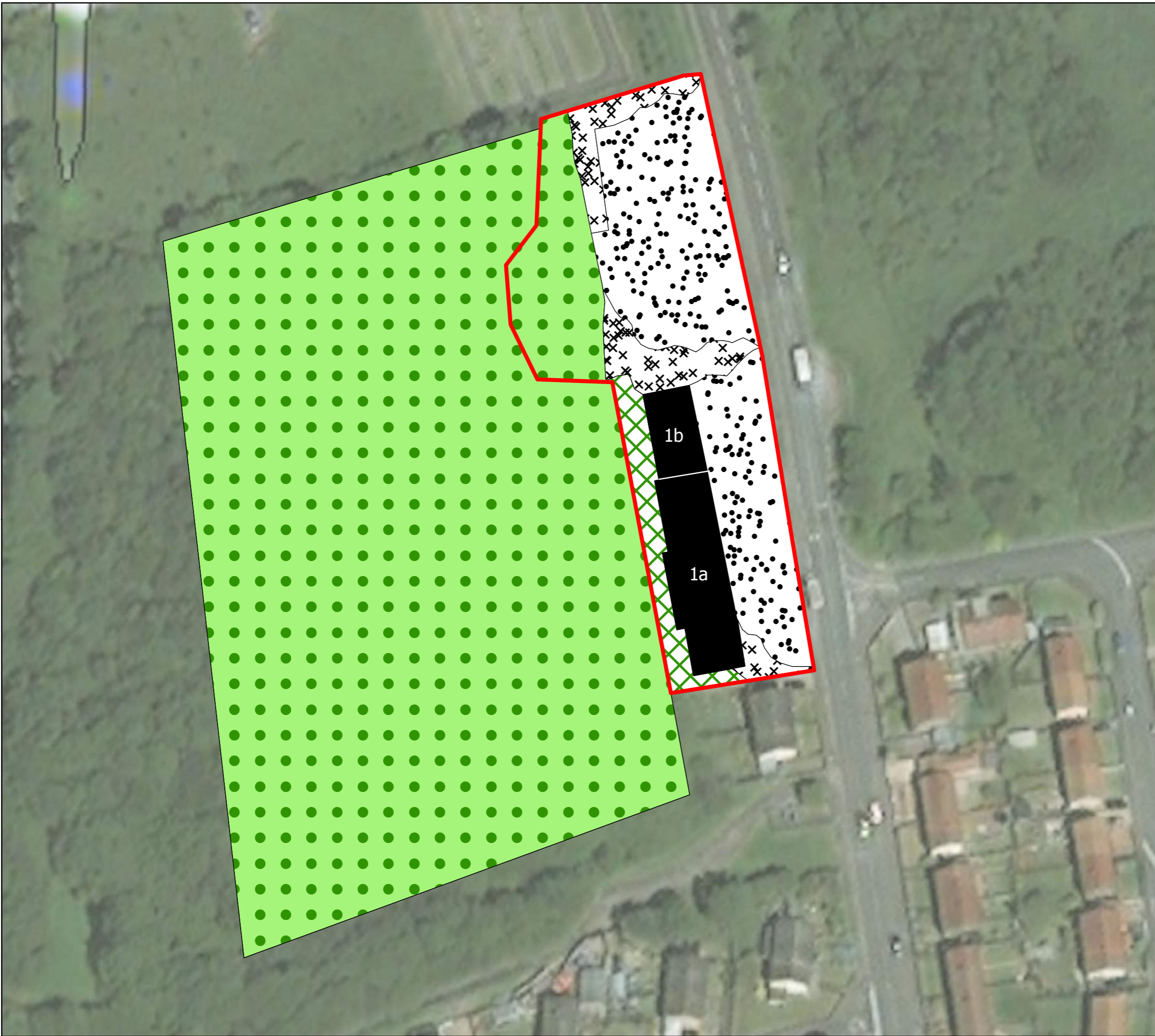


Site Location Plan

**Meadow Road, Mirehouse
Home Group Developments Ltd**







Scale at A3: 1:1,500	Project No: A108518	Drawing No: Figure 1	Revision: A
Drawn by: michelle.mcgin	Drawn date: 24/05/2018	Approved by: kirstin.aldous	

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Rev	Date	Notes
A	24/05/18	Initial map production

Legend

-  Site boundary
-  Bare ground
-  Buildings
-  Dense scrub
-  Ephemeral / short perennial
-  Mixed semi-natural woodland



Phase 1 Habitat Plan

**Meadow Road, Mirehouse
Home Group Developments Ltd**

Scale at A3: 1:750	Project No: A108518	Drawing No: Figure 2	Revision: A
Drawn by: michelle.mcgin		Drawn date: 24/05/2018	Approved by: kirstin.aldous

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Appendix A – Report Conditions



REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of Home Group Developments Ltd ("the Client") for the proposed uses stated in the report by WYG Environment Planning Transport Limited "WYG". WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

No liability is accepted or warranty given for; unconfirmed data, third party documents and information supplied to WYG or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. WYG does not purport to provide specialist legal, tax or accounting advice.

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.



Appendix B – Wildlife Legislation



Bern Convention

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.



Conservation of Habitats and Species Regulations 2017

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:

Schedule 2 – European Protected Species of Animals	Schedule 5 – European Protected Species of Plants
Horseshoe bats <i>Rhinolophidae</i> - all species	Shore dock <i>Rumex rupestris</i>
Common bats <i>Vespertilionidae</i> - all species	Killarney fern <i>Trichomanes speciosum</i>
Large Blue Butterfly <i>Maculinea arion</i>	Early gentian <i>Gentianella anglica</i>
Wild cat <i>Felis silvestris</i>	Lady's-slipper <i>Cypripedium calceolus</i>
Dolphins, porpoises and whales <i>Cetacea</i> – all sp.	Creeping marshwort <i>Apium repens</i>
Dormouse <i>Muscardinus avellanarius</i>	Slender naiad <i>Najas flexilis</i>
Pool frog <i>Rana lessonae</i>	Fen orchid <i>Liparis loeselii</i>
Sand lizard <i>Lacerta agilis</i>	Floating-leaved water plantain <i>Luronium natans</i>
Fisher's estuarine moth <i>Gortyna borelii lunata</i>	Yellow marsh saxifrage <i>Saxifraga hirculus</i>
Great crested newt <i>Triturus cristatus</i>	
Otter <i>Lutra lutra</i>	
Lesser whirlpool ram's-horn snail <i>Anisus vorticulus</i>	
Smooth snake <i>Coronella austriaca</i>	
Sturgeon <i>Acipenser sturio</i>	
Natterjack toad <i>Epidalea calamita</i>	
Marine turtles <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> , <i>Dermochelys coriacea</i>	

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;



- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant;
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Schedule 1 - Birds which are protected by special penalties

Avocet	<i>Recurvirostra avosetta</i>	Osprey	<i>Pandion haliaetus</i>
Bee-eater	<i>Merops apiaster</i>	Owl, Barn	<i>Tyto alba</i>
Bittern	<i>Botaurus stellaris</i>	Owl, Snowy	<i>Nyctea scandiaca</i>
Bittern, Little	<i>Ixobrychus minutus</i>	Peregrine	<i>Falco peregrinus</i>
Bluethroat	<i>Luscinia svecica</i>	Petrel, Leach's	<i>Oceanodroma leucorhoa</i>
Brambling	<i>Fringilla montifringilla</i>	Phalarope, Red-necked	<i>Phalaropus lobatus</i>
Bunting, Cirl	<i>Emberiza cirlus</i>	Plover, Kentish	<i>Charadrius alexandrinus</i>
Bunting, Lapland	<i>Calcarius lapponicus</i>	Plover, Little Ringed	<i>Charadrius dubius</i>
Bunting, Snow	<i>Plectrophenax nivalis</i>	Quail, Common	<i>Coturnix coturnix</i>
Buzzard, Honey	<i>Pernis apivorus</i>	Redstart, Black	<i>Phoenicurus ochruros</i>
Capercaillie	<i>Tetrao urogallus</i>	Redwing	<i>Turdus iliacus</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>	Rosefinch, Scarlet	<i>Carpodacus erythrinus</i>
Corncrake	<i>Crex crex</i>	Ruff	<i>Philomachus pugnax</i>
Crake, Spotted	<i>Porzana porzana</i>	Sandpiper, Green	<i>Tringa ochropus</i>
Crossbills (all species)	<i>Loxia</i>	Sandpiper, Purple	<i>Calidris maritima</i>
Curlew, Stone	<i>Burhinus oediconemus</i>	Sandpiper, Wood	<i>Tringa glareola</i>
Divers (all species)	<i>Gavia</i>	Scaup	<i>Aythya marila</i>
Dotterel	<i>Charadrius morinellus</i>	Scoter, Common	<i>Melanitta nigra</i>
Duck, Long-tailed	<i>Clangula hyemalis</i>	Scoter, Velvet	<i>Melanitta fusca</i>
Eagle, Golden	<i>Aquila chrysaetos</i>	Serim	<i>Serinus serinus</i>
Eagle, White-tailed	<i>Haliaeetus albicilla</i>	Shorelark	<i>Eremophila alpestris</i>
Falcon, Gyr	<i>Falco rusticolus</i>	Shrike, Red-backed	<i>Lanius collurio</i>
Fieldfare	<i>Turdus pilaris</i>	Spoonbill	<i>Platalea leucorodia</i>
Firecrest	<i>Regulus ignicapillus</i>	Stilt, Black-winged	<i>Himantopus himantopus</i>
Garganey	<i>Anas querquedula</i>	Stint, Temminck's	<i>Calidris temminckii</i>
Godwit, Black-tailed	<i>Limosa limosa</i>	Swan, Bewick's	<i>Cygnus bewickii</i>



Goshawk	<i>Accipiter gentilis</i>	Swan, Whooper	<i>Cygnus cygnus</i>
Grebe, Black-necked	<i>Podiceps nigricollis</i>	Tern, Black	<i>Chlidonias niger</i>
Grebe, Slavonian	<i>Podiceps auritus</i>	Tern, Little	<i>Sterna albifrons</i>
Greenshank	<i>Tringa nebularia</i>	Tern, Roseate	<i>Sterna dougallii</i>
Gull, Little	<i>Larus minutus</i>	Tit, Bearded	<i>Panurus biarmicus</i>
Gull, Mediterranean	<i>Larus melanocephalus</i>	Tit, Crested	<i>Parus cristatus</i>
Harriers (all species)	<i>Circus</i>	Treecreeper, Short-toed	<i>Certhia brachydactyla</i>
Heron, Purple	<i>Ardea purpurea</i>	Warbler, Cetti's	<i>Cettia cetti</i>
Hobby	<i>Falco subbuteo</i>	Warbler, Dartford	<i>Sylvia undata</i>
Hoopoe	<i>Upupa epops</i>	Warbler, Marsh	<i>Acrocephalus palustris</i>
Kingfisher	<i>Alcedo atthis</i>	Warbler, Savi's	<i>Locustella luscinioides</i>
Kite, Red	<i>Milvus milvus</i>	Whimbrel	<i>Numenius phaeopus</i>
Merlin	<i>Falco columbarius</i>	Woodlark	<i>Lullula arborea</i>
Oriole, Golden	<i>Oriolus oriolus</i>	Wryneck	<i>Jynx torquilla</i>
Invasive plant species listed in Schedule 9			
Australian swamp stonecrop or New Zealand pygmyweed	<i>Crassula helmsii</i>	Japanese rose	<i>Rosa rugosa</i>
Californian red seaweed	<i>Pilea californica</i>	Japanese seaweed	<i>Sargassum muticum</i>
Curly waterweed	<i>Lagarosiphon major</i>	Laver seaweeds (except native species)	<i>Porphyra</i> spp
Duck potato	<i>Sagittaria latifolia</i>	Parrot's-feather	<i>Myriophyllum aquaticum</i>
Entire-leaved cotoneaster	<i>Cotoneaster integrifolius</i>	Perfoliate alexanders	<i>Smyrnium perfoliatum</i>
False Virginia creeper	<i>Parthenocissus inserta</i>	Pontic rhododendron	<i>Rhododendron ponticum</i>
Fanwort or Carolina water-shield	<i>Cabomba caroliniana</i>	Purple dewplant	<i>Disphyma crassifolium</i>
Few-flowered garlic	<i>Allium paradoxum</i>	Red algae	<i>Grateloupia luxurians</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>	Rhododendron	<i>Rhododendron ponticum</i> × <i>Rhododendron maximum</i>
Floating water primrose	<i>Ludwigia peploides</i>	Small-leaved cotoneaster	<i>Cotoneaster microphyllus</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>	Three-cornered garlic	<i>Allium triquetrum</i>
Giant kelp	<i>Macrocystis</i> spp.	Variegated yellow archangel	<i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>
Giant knotweed	<i>Fallopia sachalinensis</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Giant rhubarb	<i>Gunnera tinctoria</i>	Wakame	<i>Undaria pinnatifida</i>
Giant salvinia	<i>Salvinia molesta</i>	Wall cotoneaster	<i>Cotoneaster horizontalis</i>
Green seafringers	<i>Codium fragile</i>	Water fern	<i>Azolla filiculoides</i>
Himalayan cotoneaster	<i>Cotoneaster simonsii</i>	Water hyacinth	<i>Eichhornia crassipes</i>
Hollyberry cotoneaster	<i>Cotoneaster bullatus</i>	Water lettuce	<i>Pistia stratiotes</i>
Hooked asparagus seaweed	<i>Asparagopsis armata</i>	Water primrose	<i>Ludwigia grandiflora</i>
Hottentot fig	<i>Carpobrotus edulis</i>	Water primrose	<i>Ludwigia uruguayensis</i>
Hybrid knotweed	<i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i>	Waterweeds	<i>Elodea</i> spp.
Indian (Himalayan) balsam	<i>Impatiens glandulifera</i>	Yellow azalea	<i>Rhododendron luteum</i>
Japanese knotweed	<i>Fallopia japonica</i>		



Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed



Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.



Appendix C – Relevant Desk Study Data

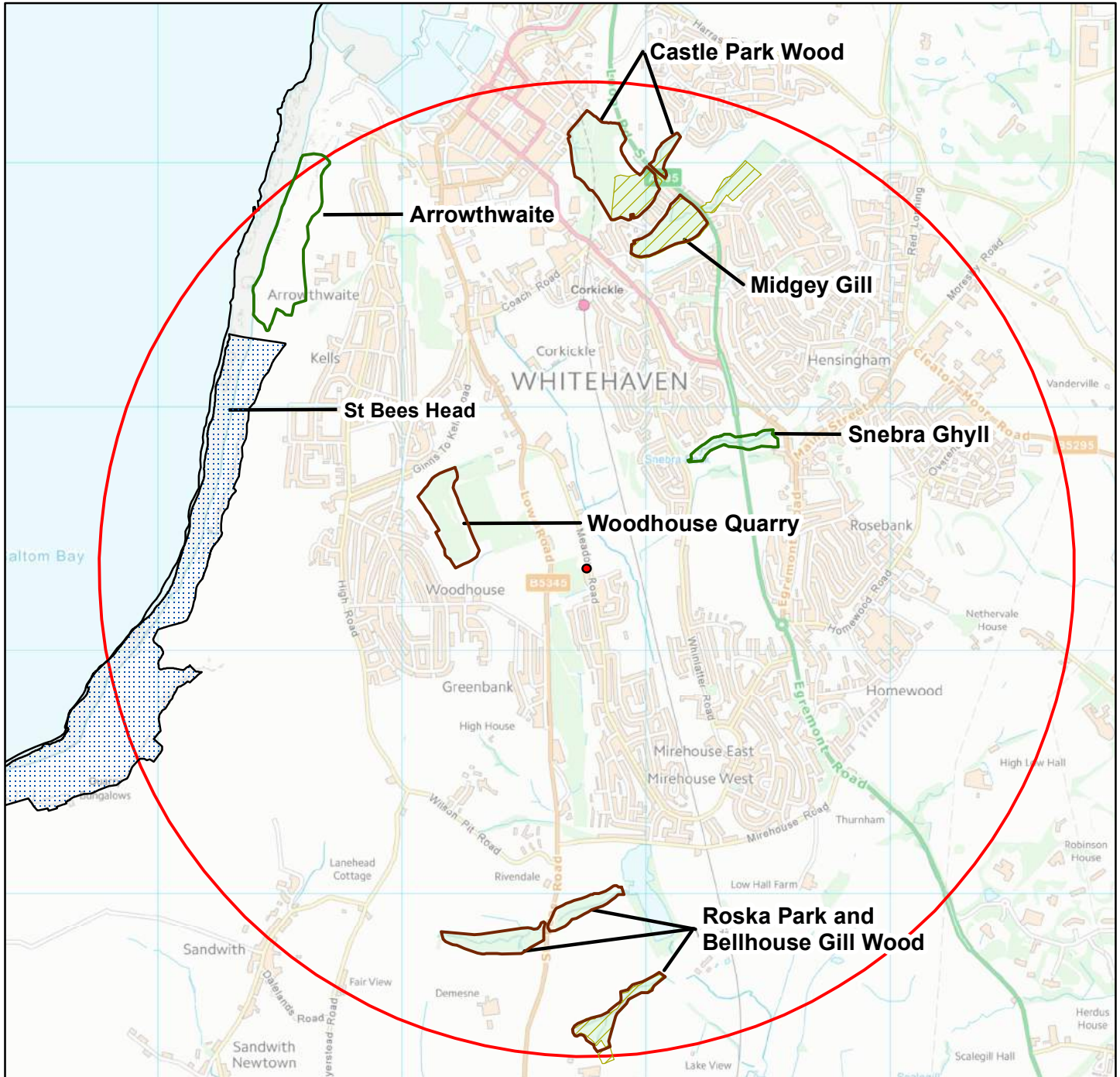
Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search



For: Kirstin Aldous at WYG

Centroid: NX97757 16334
 Site Name: Meadow Road, Mirehouse
 Search Buffer: 2km
 Search Date: 15/05/2018

N.B. Sites are displayed only if they exist within the search area



Key

County Wildlife Sites

Local Geological Sites

Site of Invertebrate Significance

Ancient Woodland

0 250 500 1,000
 Metre



Any queries in the first instance contact:
 Dr Moustafa Eweda
 Biological Data Officer
 Cumbria Biodiversity Data Centre (CBDC)

T. 01228 618770
 E. dataofficer@cbdc.org.uk



ecology@wyg.com

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