

Preliminary Ecological Appraisal

Land off Nethertown Road, St. Bees, Whitehaven, Cumbria, CA27 0AY

2021

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Contents

1.	Introd	uction	4
	1.1.	Background and Pre-Existing Site Information	4
	1.2.	Full Details of Proposed Works on Site	4
2.	Leais	ation and Policy	6
	2.1.	Designated Sites	6
	2.2.	Internationally Designated Sites	6
	2.3.	Domestically Designated Site	7
	2.4.	Locally Designated Sites	7
	2.5.	Protected Species	7
	2.6.	Schedule 2 - European Protected Species of Animal	8
	2.7.	Schedule 5 - European Protected Species of Plants	9
	2.8.	Otters	9
	2.9.	Badgers	10
	2.10.	Breeding Birds	10
	2.11.	Reptiles	10
	2.12.	Other Mammals	10
	2.13.	Invasive Non-Native Species	11
	2.14.	Natural Environment and Rural Communities (NERC) Act (2006)	12
	2.15.	UK Biodiversity Action Plan (BAP) priority species / UK Post-2010 Biodiversity Frame-	
		work	12
	2.16.	National Planning Policy Framework (NPPF) 2019	13
3.	Metho	odology	15
٠.	3.1.	Desk Based Investigation	15
	3.2.	Field Survey	15
	3.3.	Timing	17
	3.4.	Weather conditions	17
	3.5.	Personnel	18
4.	Resul		20
т.	4.1.		20
	4.1. 4.2.	Designated Sites	21
	4.2.	Habitat Description	25
	4.3. 4.4.	Legally Protected Species Bats	26
	4.5.	Amphibians	26
	4.6.	Otters	27
	4.7.	Badgers	27
	4.8.	Reptiles	27
	4.9.	Breeding Birds	28
	4.10.	Red Squirrels	29
	4.11.	Other Mammals	29
	4.12.	Invasive Non-Native Species	29
5.		•	30
6.	•		33
	6.1.	Summary of Predicted Impacts	33
	6.2.	Breeding Birds	33
	6.3.	'Other Mammals'	33
	6.4.	Invasive Non-Native Species	33
7.	Mitiga	tion / Recommendations	34

Page 3 of 37

	7.1.	Breeding Birds	34
	7.2.	'Other Mammals'	34
	7.3.	Invasive Non-Native Species	34
8.	Sum	mary	35
	8.1.	Summary of development and mitigation	35
10.	Refe	rences / Bibliography	36

Introduction 1.

1.1. BACKGROUND AND PRE-EXISTING SITE INFORMATION

This report details a Preliminary Ecological Appraisal conducted on Land off Nethertown Road, St. Bees, Whitehaven, Cumbria, CA27 0AY (Nat. Grid Ref. NX 97223 10970 - Approx. centre of site).

Plans 'as proposed' have been provided (see Figure 2) and it is thereby understood that a proposal exists for a residential development. It is understood (pers. comms. Simon Blacker) that outline planning consent has already been granted for 3no. Residential units on the site, however it is now proposed to extend this extent outline consent to increase the development site boundary and to erect 5no. residential units. It is understood that the initial planning application was not accompanied by any kind of ecological survey, but the Copeland Borough Council planning application search facility (https://www.copeland.gov.uk/planning/ application-search) does not allow planning applications to be searched using 'location', 'site name' nor 'post-code' and is therefore unfit for the purpose of verifying the planning history of the site.

This survey has been commissioned to complete a baseline preliminary ecological assessment of the site and specifically to identify;

- Any areas of potential conservation interest,
- Any potential impacts to legally protected species / species groups,
- · Any likely impacts on statutory and non-statutory designated sites as a result of the proposal,
- The presence of any invasive species listed in Schedule 9 of The Wildlife and Countryside Act 1981 (as amended).
- Opportunities to enhance the biodiversity value of the site in line with the National Planning Policy Framework (2019)

Simon Blacker of SRE Associates (Cumbria) Ltd. commissioned Hesketh Ecology to complete this survey and report in April 2021. It is understood that this report will be used to accompany a full planning application for the proposed development.

1.2. FULL DETAILS OF PROPOSED WORKS ON SITE

Outline planning consent has already been granted for 3no. residential units on the site. It is now proposed to extend this extent outline consent to increase the development site boundary and to erect 5no. residential units.



Figure 2: Nethertown Road, St. Bees - Site Plan. Drawing Number 1956 005 - by Ashwood Design Associates Ltd.

Legislation and Policy

2.1. DESIGNATED SITES

There are broadly 3 levels of designation currently in place to protect the most significant areas for habitats and wildlife. These are Internationally Designated Sites (Special Areas of Conservation, Special Protection Areas etc.), Domestically Designated Sites (Sites of Special Scientific Interest, National Nature Reserves etc.) and Locally Designated Sites (County Wildlife Sites, Local Nature Reserves etc.).

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

2.2. Internationally Designated Sites

Special Areas of Conservation (SACs) are areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats. All SAC's are also designated as SSSI's. The legal requirements relating to the designation and management of SACs in England are set out in The Conservation of Habitats and Species Regulations 2017. The SAC designation is recognition that some or all of the wildlife and habitats are particularly valued in a European context.

Special Protection Areas (SPAs) are areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the 'Birds Directive 1979' which provides enhanced protection given by the Site of Special Scientific Interest (SSSI) status all SPAs also hold. The legal requirements relating to the management and protection of SPAs in England are set out in The Conservation of Habitats and Species Regulations 2017.

Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) which they designate under the 1979 Birds Directive. Natura 2000 is not a system of strict nature reserves where all human activities are excluded. Whereas the network does include nature reserves most of the land is privately owned and the emphasis is on ensuring that future management is sustainable, both ecologically and economically.

The 'competent authority' is required to complete an Appropriate Assessment of a proposal, if the proposed activities would be likely to have a significant effect on the Natura 2000 site. An Appropriate Assessment aims to determine if the proposed development would have an adverse effect on the notified interest features of the SAC. The developer or proposers of the plan or project shall provide such information as the competent authority may reasonably require for the purposes of the assessment (Regulation. 43(2)).

2.3. DOMESTICALLY DESIGNATED SITE

Sites of Special Scientific Interest (SSSIs) are the country's very best wildlife and geological sites and give legal protection to these sites in England. Natural England now has responsibility for identifying and protecting SSSIs in England under the Wildlife and Countryside Act 1981 (as amended). The SSSI notification package includes a list of operations requiring Natural England's consent (formerly known as operations likely to damage the special interest). None of the listed operations can be carried out without Natural England's consent, or the consent of another public body (provided that the other body has formally consulted us). Operations listed on the list of operations requiring Natural England's consent (which are not already consented to) requires permission from Natural England. To obtain consent, a written notice must be submitted to Natural England containing the details of the operations in order for the proposal to be assessed and permission granted.

National Nature Reserves (NNRs) are all also designated as SSSIs. It is via this designation that legal protection is afforded to NNRs.

2.4. LOCALLY DESIGNATED SITES

There are currently a number of different terms in use to describe Local Wildlife Sites, including Sites of Importance for Nature Conservation (SINCs), Sites of Nature Conservation Importance (SNCIs) and County Wildlife Sites. Local Wildlife Sites are usually selected within a local authority area and this process is often managed by the local Wildlife Trust together with representatives of the local authority and other local wildlife conservation groups. They support both locally and nationally threatened wildlife, and many sites will contain habitats and species that are priorities under the county or UK Biodiversity Action Plans (BAP).

In Cumbria, Local Wildlife Sites are known as 'County Wildlife Sites'. They are designated and reviewed at a county level by the Wildlife Selection Panel for the Cumbria Local Sites Partnership, administered by Cumbria Wildlife Trust. County Wildlife Sites are not afforded any legal protection.

2.5. PROTECTED SPECIES

The legislation protecting wildlife exists regardless of the requirements of any planning consent.

The legal protection of animals and plants in the United Kingdom is mainly provided for by:

- The Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000,
- The Habitats and Species Directive (92/43/EC) enacted through The Conservation of Habitats and Species Regulations 2017.
- The Protection of Badgers Act 1992.

The level of protection for each species varies according to the conservation status of the species.

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The Countryside and Rights of Way Act 2000 supplemented existing legislation for wildlife protection by prohibiting reckless acts that result in the killing or injuring of protected species.

The Natural Environment and Rural Communities Act 2006 requires that every public authority in exercising its functions must have regard as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Section 41 of this Act requires the Secretary of State to have prepared lists of species and habitats which are considered to be of principal importance for the purpose of conserving biodiversity [The UK Biological Action Plan (BAP) species].

2.6. SCHEDULE 2 - EUROPEAN PROTECTED SPECIES OF ANIMAL

These species are listed in Schedule 2 of the Habitat Regulations and in Schedule 5 of the

Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals
Horseshoe bats Rhinolophidae - all species
Common bats Vespertilionidae - all species
Wild cat (Felis silvestris)
Dolphins, porpoises and whales Cetacea – all sp.
Dormouse (Muscardinus avellanarius)
Pool frog (Rana lessonae)
Sand lizard (Lacerta agilis)
Fisher's estuarine moth (Gortyna borelii lunata)
Great crested newt (Triturus cristatus)
Otter (Lutra lutra)
Lesser whirlpool ram's-horn snail (Anisus vorticulus)
Smooth snake (Coronella austriaca)
Sturgeon (Acipenser sturio)
Natterjack toad (Epidalea calamita)
Marine turtles (Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricata and Dermochelys coriacea)

Table 1: Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals

Wildlife & Countryside Act 1981. The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take);
- · Deliberately disturb;
- Recklessly disturb or obstruct access to any place used for rest and shelter

- Damage or destroy any place used for rest and shelter
- · Possess or transport an animal or any part of, unless acquired legally,
- Sell (or offer for sale) or exchange

Work that disturbs Schedule 2 species is illegal without a Wildlife Development Licence issued by Natural England.

2.7. SCHEDULE 5 - EUROPEAN PROTECTED SPECIES OF PLANTS



Table 2: Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 5 - Plants

These species are listed in Schedule 5 of the Habitat Regulations and in Schedule 8 of the Wildlife & Countryside Act 1981. The legislation makes it illegal to pick, uproot, destroy, or trade in these plants.

2.8. OTTERS

Otters are protected under Section 39 of The Conservation of Habitats and Species Regulations 2017 as European Protected Species and Section 9 of the Wildlife and Countryside Act 1981 (as amended) (Schedule 5). It is an offence to:

- · Deliberately capture, injure or kill an Otter;
- Intentionally or recklessly disturb an Otter in a place used for shelter or protection, or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance.
- · Damage or destroy a breeding or resting place

- Intentionally or recklessly obstruct access to a place used for shelter or protection
- Possess an Otter (alive or dead), or any part of an Otter.

Work that disturbs otters is illegal without a Wildlife Development Licence issued by Natural England.

2.9. **BADGERS**

Badgers are a protected species. In addition to The Wildlife and Countryside Act 1981, The Countryside and Rights of Way (CRoW) Act 2000 and The Conservation of Habitats and Species Regulations 2017, badgers and their setts are also covered by the provisions of the Protection of Badgers Act (1992). A sett is defined as "any structure or place which displays signs indicating current use by a badger". The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take) badgers;
- Damage a badger sett or any part of it;
- · Destroy a badger sett;
- Obstruct access to, or any entrance of, a badger sett;
- Disturb a badger when it is occupying a badger sett;

Work that disturbs badgers is illegal without a Wildlife Development Licence issued by Natural England.

2.10. BREEDING BIRDS

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- · Kill, injure or take wild birds
- Take, damage or destroy the nest of wild birds while in use or being built
- · Take or destroy the eggs of wild birds
- Disturb wild birds listed in Schedule 1 when nest building or at a nest containing eggs or young, or disturb dependent young of wild birds

2.11. **REPTILES**

Reptiles, including common lizards, slow worms and grass snakes, are protected under the Wildlife & Countryside Act 1981 against deliberate killing, injuring and sale (Sub-Sections 9 (1) and 9 (5)). These species are listed in Schedule 5.

2.12. OTHER MAMMALS

Mammal species not covered by the above legislation (rabbits, foxes, hares, moles etc) are protected by the Wild Mammals (Protection) Act 1996. This states; 'any person [whom] mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering he shall be guilty of an offence.' This is potentially relevant in the case of burrowing animals on a development site.

2.13. Invasive Non-Native Species

In the UK, it is an offence under section 14(2) of the Wildlife and Countryside act 1981 to "plant or otherwise cause to grow in the wild" any plant listed in Schedule 9, Part II to the Act. This could include cutting the plant or roots and disturbing surrounding soil if not correctly managed.

An offence under the Wildlife and Countryside Act can result in a criminal prosecution. An infringement under the Environmental Protection Act can result in enforcement action being taken by the Environment Agency (EA) which can result in an unlimited fine.

Schedule 9 – List of Invasive plant species	
Australian swamp stonecrop or New Zealand pygmyweed (<i>Crassula helmsii</i>)	Small-leaved cotoneaster (<i>Cotoneaster micro-phyllus</i>)
Californian red seaweed (Pikea californica)	Three-cornered garlic (Allium triquetrum)
Curly waterweed (Lagarosiphon major)	Variegated yellow archangel (Lamiastrum galeo-bdolon subsp. argentatum)
Duck potato (Sagittaria latifolia)	Virginia creeper (Parthenocissus quinquefolia)
Entire-leaved cotoneaster (Cotoneaster integrifolius)	Wakame (<i>Undaria pinnatifida</i>)
False Virginia creeper (Parthenocissus inserta)	Giant salvinia (Salvinia molesta)
Fanwort or Carolina water-shield (Cabomba caroliniana)	Green seafingers (Codium fragile)
Few-flowered garlic (Allium paradoxum)	Himalayan cotoneaster (Cotoneaster simonsii)
Floating pennywort (<i>Hydrocotyle ranunculoides</i>)	Hollyberry cotoneaster (Cotoneaster bullatus)
Floating water primrose (Ludwigia peploides)	Hooked asparagus seaweed (Asparagopsis armata)
Giant hogweed (Heracleum mantegazzianum)	Hottentot fig (Carpobrotus edulis)
Giant kelp (Macrocystis spp.)	Hybrid knotweed (Fallopia japonica × Fallopia sachalinensis)
Giant knotweed (Fallopia sachalinensis)	Indian (Himalayan) balsam (<i>Impatiens</i> glandulifera)
Giant rhubarb (Gunnera tinctoria)	Japanese knotweed (Fallopia japonica)
Japanese rose (Rosa rugosa)	Wall cotoneaster (Cotoneaster horizontalis)
Japanese seaweed (Sargassum muticum)	Water fern (Azolla filiculoides)
Laver seaweeds (except native species) (Porphyra spp)	Water hyacinth (Eichhornia crassipes)
Parrot's-feather (Myriophyllum aquaticum)	Water lettuce (Pistia stratiotes)
Perfoliate alexanders (Smyrnium perfoliatum)	Water primrose (Ludwigia grandiflora)
Pontic rhododendron (Rhododendron ponticum)	Water primrose (Ludwigia uruguayensis)

Schedule 9 – List of Invasive plant species				
Red algae (Grateloupia luxurians)	Waterweeds (Elodea spp.)			
Rhododendron (Rhododendron ponticum x Rhododendron maximum)	Yellow azalea (Rhododendron luteum)			
Purple dewplant (Disphyma crassifolium)				

Table 3: Schedule 9 – List of Invasive plant species

2.14. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT (2006)

Beyond the legal protection afforded to species in the UK, the Natural Environment and Rural Communities (NERC) Act (2006) states;

'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.'

NERC Act 2006 - Section 40.

'The Secretary of State must, as respects England, publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.'

'Without prejudice to section 40(1) and (2), the Secretary of State must—

- (a) take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or
- (b) promote the taking by others of such steps.'

NERC Act 2006 - Section 41

2.15. UK BIODIVERSITY ACTION PLAN (BAP) PRIORITY SPECIES / UK POST-2010 BIODIVERSITY FRAMEWORK

UK Biodiversity Action Plan (BAP) priority species were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority species was created between 1995 and 1999. In 2007, however, a revised list was produced, following a 2-year review of UK BAP processes and priorities, which included a review of the priority species and habitats lists.

The UK BAP has now been superseded by the UK Post-2010 Biodiversity Framework. The UK Post-2010 Biodiversity Framework covers the period from 2011 to 2020, and was developed in response to two main drivers: the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020 and its five strategic goals and 20 'Aichi Biodiversity Targets', published in October 2010; and the EU Biodiversity Strategy (EUBS), released in May 2011. The UK Post-2010 Biodiversity Framework now serves to meet the

statutory obligation imposed by Section 41 of the NERC Act. The UK BAP list, as revised in 2007, was incorporated into the UK Post-2010 Biodiversity Framework with only minor alterations.

The Cumbria Biodiversity Action Plan (CBAP) was designed to implement national biodiversity targets set out in the UK BAP at a local level, with an emphasis on local priorities. At its inception the CBAP included 40 species / species groups, 21 of which had dedicated action plans with a further 19 without action plans. The original CBAP list was updated in 2010 to include all UK BAP species which occur in Cumbria.

2.16. NATIONAL PLANNING POLICY FRAMEWORK (NPPF) 2019

The National Planning Policy Framework (NPPF) was originally published by the Department of Communities and Local Government in 2012, consolidating over two dozen previously issued documents called Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) for use in England. A revised NPPF was published by the UK Government's Ministry of Housing, Communities and Local Government in 2018 and then again in 2019. The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in 2012, and revised in 2018.

Chapter 15 of the NPPF, Conserving and Enhancing the Natural Environment, states (NB the following is a summary only, selecting points which relate to biodiversity and species only, for the full text see National Planning Policy Framework; February 2019, Ministry of Housing, Communities and Local Government;

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;'

Paragraph 170, Pg. 49.

To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Paragraph 174, Pg. 50.

When determining planning applications, local planning authorities should apply the following principles:

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;

Paragraph 175, Pg. 50.

3. Methodology

3.1. DESK BASED INVESTIGATION

Natural England's MAGIC website (http://www.magic.gov.uk) was consulted for information relating to statutory designated sites adjacent to the site or within the immediate area.

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scare, protected or invasive non-native species and non-statutory designated sites within a 2km radius of national grid ref. NX 97223 10970 (the approximate centre of the site).

3.2. FIELD SURVEY

A daytime inspection of the site was conducted during which all areas of the site were inspected in detail during a walk over survey. A methodology based on that outlined in the JNCC Phase 1 Habitat Survey Guidelines was employed, as per the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013), and the species / habitat codes presented therein used. Areas immediately adjacent the site were inspected from public rights of way only. Mature trees were inspected from ground level only using binoculars and an AG80 20x- 60x spotting scope as necessary. The following evidence of potential for protected species is a brief summary only.

Bats

Evidence of potential for bats includes:

- Evidence of bats (droppings, seeing bats, smelling bats)
- · Older trees/woodlands for foraging and roosting;
 - Woodpecker holes
 - Gap / crevices behind bark
 - Rot holes
 - Bird / bat boxes
 - Cracks associated with damaged limbs
- Linear landscape elements e.g. hedgerows and watercourses for commuting and foraging
- · Built structures e.g. buildings and bridges for summer roosting or hibernation

In relation to bats, the survey methodology conformed with that laid out in 'Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London'. Any buildings, woodland areas and standard trees within the site were categorised (negligible, low, medium or high) for their potential to support roosting bats.

The survey area for bats comprised accessible land within 50m of the site boundary.

Amphibians

Evidence of potential for protected amphibian species includes:

- Evidence of protected amphibian species (seeing great crested newts or natterjack toads)
- Ponds or other bodies of open standing water on site or within 500m of site
- Suitable terrestrial habitat including foraging habitat and / or hibernation potential

In relation to great crested newts, the survey methodology conformed with that laid out in English Nature (2001) Great crested newt mitigation guidelines Version: August 2001. English Nature. ISBN 1 85716 568 3'. All ponds onsite or within 500m of the site boundary were identified using OS maps and a Habitat Suitability Index Score was calculated using 'Oldham R.S., Keeble J., Swan M.J.S., and Jeffcote M. (2000) Evaluating the suitability of habitat for the great crested newt. Herpetological Journal 10: 143-155'.

The survey area for amphibians comprised accessible land within 500m of the site boundary.

Otter

Evidence of potential for otters includes:

- Evidence of otters (seeing otters, spraint, footprints, feeding remains)
- · Watercourses / water bodies
- · Woodland or rough grassland / scrub for holts and lying up

In relation to otter, the survey methodology conformed with that laid out in 'Chanin (2003) Monitoring the Otter and 'Liles (2003) Conserving Otter Breeding Sites'. Any evidence of otter, such as places of rest (holts or couches), spraint sites, prints and slides, as well as any otter sightings would be recorded.

The survey area for otters comprised accessible land within 50m of the site boundary.

Badger

Evidence of potential for badgers includes:

- Evidence of badgers (latrines, setts, footprints, fur, runs)
- Woodland for foraging and setts

In relation to badger, the survey methodology conformed with that laid out in 'Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1.'. Any evidence of badger, such as latrines, setts, footprints, fur and runs, as well as any badger sightings would be recorded.

The survey area for badgers comprised accessible land within 50m of the site boundary.

Birds

Evidence of potential for breeding birds includes:

· Evidence of breeding birds (nests, nest building behaviour, courtship and display behaviour, distraction display, used nests or eggshells)

- · Trees/woodlands for nesting
- · Built structures for nesting
- Natural habitat features for nesting (watercourses, embankments, rough grassland)

In relation to breeding birds the survey methodology employed a simple 'look and see', Visual Encounter Survey technique in which the evidence identified above was recorded as encountered.

The survey area for birds comprised land within the site boundary and immediately adjacent the site boundary only.

Reptiles

Evidence for potential for reptiles includes:

- Evidence of reptiles (seeing reptiles, sloughed skin)
- Rough grassland
- · South facing slopes

In relation to reptiles, the survey methodology involved a Habitat Suitability Assessment using the characteristics laid out in 'Natural England Technical Information Note TIN102 Reptile mitigation guidelines' [WITHDRAWN].

The survey area for reptiles comprised land within the site boundary and immediately adjacent the site boundary only.

'Other Mammals'

Evidence for potential for 'other mammal' species:

• Evidence of 'other mammals' (seeing other mammals, droppings, burrows, mole hills)

In relation to 'other mammals', the survey methodology conformed with that laid out in 'The Mammal Society (2013). How to Find and Identify Mammals'.

3.3. TIMING

The survey was conducted on 24th May 2021.

3.4. WEATHER CONDITIONS

Date	Activity	Weather conditions				
		Temp (°C)	Wind (Beaufort scale)	Cloud (%)	Precipitation	
24/05/2021	Site inspection	14	0	20	None	

Table 4: Weather conditions.

PERSONNEL
PERSONNEL

The site inspection was conducted by Sam Griffin BSc ACIEEM.

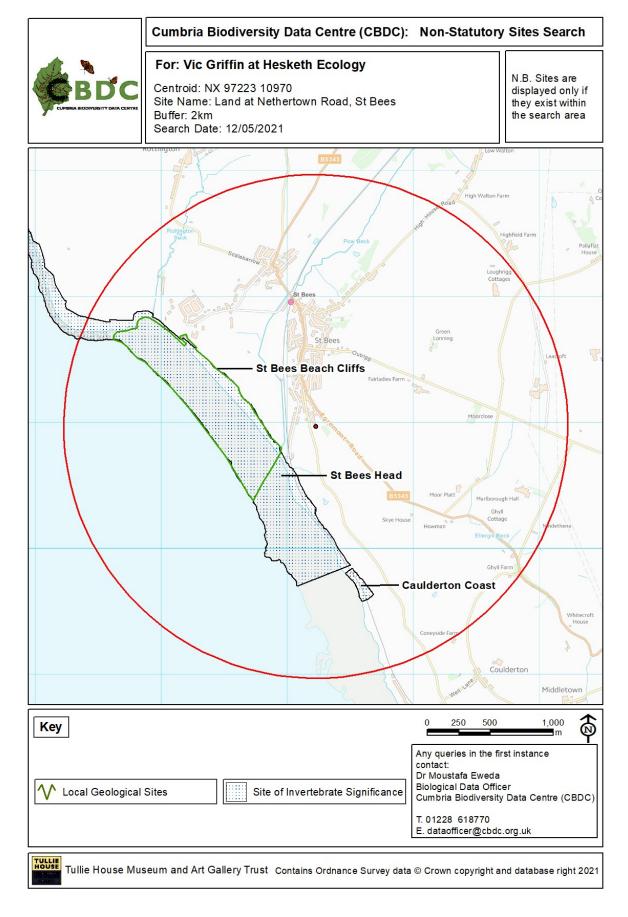


Figure 2: Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search - Centroid: NX 97223 10970, Site Name: Land at Nethertown Road, St. Bees, Search Buffer: 2km, Search Date: 12/05/2021.

4. Results

4.1. DESIGNATED SITES

Internationally Designated Sites

A search for all 'land-based' and 'marine based' designated sites on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 21/06/2021 has confirmed that no internationally designated sites exist within a 2km radius of national grid ref. NX 97223 10970 (the approximate centre of the site). The site is not directly connected to any more distant internationally designated site and consequently it is concluded that the proposed works will not affect any internationally designated site.

No internationally designated sites exist within a 2km radius of the site and therefore no potential impacts to any internationally designated sites are anticipated.

Domestically Designated Sites

A search for all 'land-based' and 'marine based' designated sites on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 21/06/2021 has confirmed that a single domestically designated sites exists within a 2km radius of national grid ref. NX 97223 10970 (the approximate centre of the site). This is St. Bees Head Site of Special Scientific Interest (SSSI) which lies c.0.33km to the west at its closest point.

St. Bess Head is a mixed interest SSSI, having both geological and biological interest features listed on the citation. In summary, the site is notified as 'the best exposure of the Permian rock sequence and marine strata in Cumbria and also the best available exposure of the Whitehaven Sandstone formation' and for 'the sheer cliffs which provide the only breeding site on the coast of Cumbria for a variety of colonial seabirds'.

Unit 5 of St. Bees Head SSSI, that which lies c.0.33km to the west, contains geological interest features only. The Units containing biological interest features lie 1.5km to the north west. The proposed work will not impact geological interest features of Unit 5 of St. Bees Head SSSI and is sufficiently distant from other Units that no impacts to biological interest features are anticipated.

The site is not directly connected to any more distant domestically designated site and consequently it is concluded that the proposed works will not affect any domestically designated site.

No potential impacts to any domestically designated sites are anticipated.

Locally Designated Sites

A detailed data search for all locally designated sites was commissioned from Cumbria Biodiversity Data Centre (CBDC) for all Locally Designated Sites within a 2km radius of Nat. Grid Ref. NX 97223 10970 (the approximate centre of the site). This revealed that the site is not designated as a County Wildlife Site and that no County Wildlife Sites exist within 2km of the site boundary, however St. Bees Beach Cliffs are designated as a Local Geological Site, and

two Sites of Invertebrate Significance also occur on the coast. The details of these are as follows:

- St Bees Cliffs Local Geological Site (approximately 0.3km to the west)
- St Bees Head Site of Invertebrate Significance (approximately 0.3km to the south west)
- · Caulderton Coast Site of Invertebrate Significance (approximately 1.25km to the

The site is not directly adjacent any locally designated site, and is not connected to any such site via a distinct linear habitat feature.

Due to the proximity of these locally designated sites, it is concluded that the proposed development will not impact upon any locally designated site.

4.2. HABITAT DESCRIPTION

The site is located off Nethertown Road on the extreme southern edge of St. Bees village. The site is an enclosed agricultural field, containing improved grassland which is bounded to the north and east by residential properties and to the south and west by similar fields of improved / semi-improved grassland.

A review of historic maps and aerial photography has shown that the site comprised enclosed agricultural fields from at least 1864, at which time the site was surrounded by open agricultural land. Some minor expansion of St. Bees village occurs during the late 1800s and early 1900s, but during the 1960s and 1970s land to the north and east of the site is developed with many of the surrounding properties being constructed during this time. Historic aerial photography shows that in 2003 the field was subdivided along what is the southern red line boundary of the current proposal. At this time the field appears to be improved / semi-improved pasture, grazed by sheep and all adjacent land looks broadly similar to its current condition, with the exception of a large private garden adjacent the north east corner of the site. In 2003 this neighbouring garden appears to be maintained as a lawn. By 2008 the former field boundary which subdivided the site has been removed and the site appears to be managed as an improved grassland fodder crop in much its current state. By 2016, the site is identical but an extensive private garden has been created on the land adjacent the north east corner. This private garden appears to contain planting beds, shrubs / scrub planting and lawn areas.

The site now lies within Landscape Character Type 4: Coastal Sandstone, defined by the 'Cumbria Landscape Character Guidance and Toolkit PART ONE Landscape Character Guidance, Cumbria County Council 2011. This landscape sub type is found between Whitehaven and Sellafield and is characterised by;

- · Coastal sandstone cliffs
- Sandstone rolling hills and plateaus
- Large open fields
- · Prominent hedge banks bound pastoral fields
- · Small woodland blocks along valley sides
- Exposed coastal edge moving to intimate and enclosed farmland inland

Coastal Sandstone cliffs are significant for breeding sea bird colonies, but also 'support large areas of coastal heath and species-rich grassland including sea campion, bloody crane's bill,

kidney vetch, thrift, common scurvy grass and red fescue. Inland the landscape is largely agricultural, but along the valley of Pow Beck there is areas of rush pasture, reed bed and swamp vegetation. Small, deeply incised tributaries to Pow Beck hold small semi natural woodlands.

Cumbria Landscape Character Guidance and Toolkit PART ONE Landscape Character Guidance, Cumbria County Council 2011, Pg. 63.

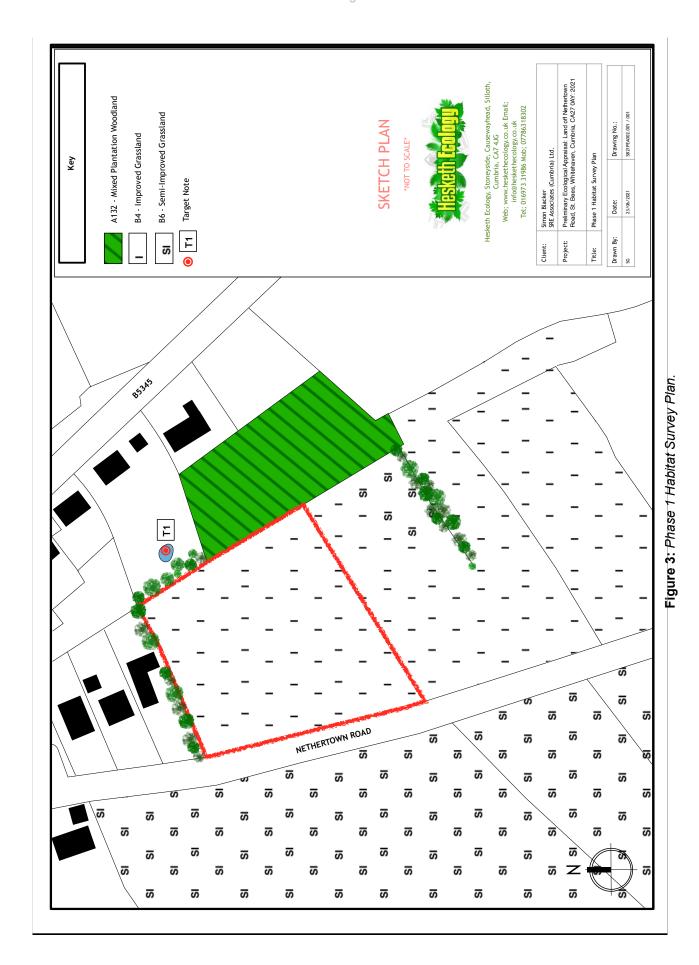
The site consists of improved grassland which is managed as a fodder crop. The interior of the field is therefore intensively managed and dominated by perennial ryegrass (*Lolium perenne*), with occasional common mouse ear (*Cerastium fontanum*), meadow buttercup (*Ranunculus acris*) and white clover (*Trifolium repens*). The field is bounded by a stone wall along the western side which lines Nethertown Road (which is at this point a single track highway). The northern boundary of the site is a garden wall belonging to the adjacent property. The eastern boundary is formed with a stock fence with areas of broadly defunct stone wall and scrub / woodland planting beyond. The southern boundary of the proposed development site is not demarcated on the ground, but follows the line of a former field boundary (removed sometime after 2003).

The peripheries of the site - specifically adjacent the northern eastern and western boundaries - without the cultivated area, contains meadow foxtail (*Alopecurus pratensis*), cocksfoot (*Dactylis glomerata*), rough meadow grass (*Poa trivialis*), Yorkshire fog (*Holcus lanatus*), soft brome (*Bromus hordeaceus*), Barron brome (*Bromus sterilis*), nettle (*Urtica dioica*), creeping thistle (*Cirsium arvense*), common cleavers (*Galium aparine*), daisy (*Bellis perennis*), common sorrel (*Rumex acetosa*), creeping buttercup (*Ranunculus repens*), broadleaved dock (*Rumex obtusifolius*), curly dock (*R. crispus*), ragwort (*Jacobaea vulgaris*), pignut (*Conopodium majus*), hogweed (*Heracleum sphondylium*), foxglove (*Digitalis purpurea*), bracken (*Pteridium aquilinum*) and red campion (*Silene dioica*).

The roadside verge, to the west of the western boundary wall, contains a similar community to the field edges, but also contains cow parsley (*Anthriscus sylvestris*), field horsetail (*Equisetum arvense*), herb Robert (*Geranium robertianum*), common vetch (*Vicia sativa*), hedge woundwort (*Stachys sylvatica*), male fern (*Dryopteris filix-mas*), hairy bittercress (*Cardamine hirsuta*) and ribwort plantain (*Plantago lanceolata*) with a small amount of bramble (*Rubus fruticosus sp. agg.*). This road verge is flower rich and likely to be of some local significance to invertebrates but is very narrow and exists between the boundary wall and carriageway only.

The private garden to the north of the site appears to contain areas of lawn planting and shrubbery. The shrub planting adjacent the northern boundary includes non-native and exotic species such as silverberry (*Elaeagnus commutata*), yucca (Yucca sp.), apple (*Malus domestica* var.), cabbage tree (*Cordyline australis*) and cypress (*Cupressus x*). The garden adjacent the eastern side has similar shrub planting adjacent the eastern boundary, but here it is predominantly cypress. An area of mixed woodland planting to the south of the garden area on the eastern side contains Swedish white beam (*Sorbus* × *intermedia*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*), Scots Pine (*Pinus sylvestris*) and Japanese larch (*Larix kaempferi*) with some underplanting of flowering currant (*Ribes sanguineum*).

The improved grassland - managed as a quick rotation fodder crop - is of no intrinsic conservation value. The uncultivated peripheries of the site are very narrow and although likely to be of some value to wildlife, are typical of field margins in the surrounding area. The field boundaries consist of stone walls and stock fencing - no hedgerows exist.



Preliminary Ecological Appraisal: Land off Nethertown Road, St. Bees, Whitehaven, Cumbria, CA27 0AY: 2021

Target Note	Location	Comment
T1	NX 97271 10985	Garden pond in private garden adjacent to the north east corner of the site (10m from site boundary). Due to the proximity of this pond to the site - consideration must be given to the possibility of great crested newts occurring - See Section 4.5 (below).

 Table 5: Target Notes (See Figure 5).

4.3. LEGALLY PROTECTED SPECIES

Taxon Group	Number of historic records	Number of species	
Fungus	0	0	
Lichen	0	0	
Moss	0	0	
Conifer	0	0	
Flowering Plant	4	3	
Chromist	2	1	
Mollusc	0	0	
Crusacean	0	0	
Spider	0	0	
Insect	322	67	
Jawless Fish	0	0	
Bony Fish	0	0	
Amphibian	24	4	
Reptile	33	5	
Bird	2607	120	
Marine Mammal	50	3	
Terrestrial Mammal (including unidentified bat species)	52	14	
TOTAL	3094	217	

Table 6: Summary of detailed biological records search from Cumbria Biodiversity Data Centre.

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scare, protected or invasive non-native species within a 2km radius of nat. grid. ref. NX 97223 10970 (the approximate centre of the site). The search was conducted on 12/05/2021. This detailed biological records search returned a total of 3094 records of 217 rare, scarce and protected species.

With 3094 individual historic records of 217 species; species of all taxon groups are well recorded in this search area. However, historic biological records are of use in identifying potential presence of a species in an area, but should never be taken to imply likely absence. A lack of records is more likely to suggest lack of recorder effort than likely absence. This being the case, each species / species group is considered individually in relation to the site and the features of the site which may offer potential for the species / species group.

4.4. BATS

Records obtained from Cumbria Biodiversity Data Centre include 5 historic records of bat species from within 2km of the site. These historic records positively identify three species, specifically soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bats (*Plecotus auritus*). A single record of 'bats' also exists. All bat records which identify to species level were collected by the author of this report (Sam Griffin).

Of the 5 historic records, none relate to bat roosts but instead relate to 'field records' and 'bat detector recordings'. All historic records of bats are >1.4km from the site boundary. No bat roosts nor individual bats have been previously recorded with CBDC on the site, or anywhere closer to the site than 1.4km.

No buildings or built structures exist on site. No large mature trees exist on site nor within the site boundary.

The risk of bat roosts occurring within the works area is 'nil'. The site is unlikely to be of significance to foraging or commuting bats in the wider area and the risk to bats is therefore considered to be 'nil'.

4.5. AMPHIBIANS

Records obtained from Cumbria Biodiversity Data Centre include 24 historic records of amphibians from within 2km of the site. These historic records include common toad (*Bufo bufo*), common frog (*Rana temporaria*), smooth newt (*Lissotriton vulgaris*) and palmate newt (*Lissotriton helveticus*) within the search area. Great crested newt (*Triturus cristatus*) have not been previously recorded within the search area.

A review of data contained on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 23/06/2021 has identified no 'Great Crested Newt Class Licence Returns' and no granted 'European Protected species Applications' for great crested newts within 2km of the site boundary. The review of MAGIC data did identify three ponds included in 'Great Crested Newt Pond Surveys 2017 - 2019' within 2km of the site. All three of these ponds - which lie to the north, south and east of the site - were surveyed in April 2019 when great crested newts were found to be 'absent'.

The Association of Local Government Ecologists (ALGE) trigger list for when protected species surveys may be required suggests that any pond within 500m of a major proposal (one that is more than 10 dwellings or more than 0.5 hectares) or within 100m of a minor proposal (fewer than 10 dwellings or less than 0.5 hectares) may require full survey work for great crested newts unless a barrier to dispersal exists. The site here considered must be considered as a 'major' proposal meaning that ponds within 500m of the site boundary should be identified and potentially surveyed for great crested newts if deemed to be suitable for this species.

No ponds or other bodies of open standing water (I.e. wet ditches) were identified via OS maps, but a single garden pond was identified via Google earth within a private residential garden adjacent the north east boundary of the site. Access to this pond was granted by the owners, and water samples were collected for eDNA analysis. The samples were analysed by SureScreen Scientifics Division Ltd. using their standard service. The eDNA test returned a 'negative' result, meaning that no evidence of great crested newts was discovered in wa-

ter samples taken from the pond. This is considered to be conclusive as no constraints to the survey were experienced and the methodology for collecting and submitting samples to the registered laboratory were strictly followed.

Lab Sample No.	Site Name	Co-ordinates	SIC	DC	IC	Result	Positive Replicates
4071	Headland View	NX 97271 10984	Pass	Pass	Pass	NEGATIVE	0

Table 8: eDNA Technical Report Results Summary for pond adjacent north eastern boundary.

Great crested newts have been confirmed as 'absent' from the pond via an eDNA test. The risk of great crested newts being affected by the proposed works is therefore 'nil'.

4.6. OTTERS

Records obtained from Cumbria Biodiversity Data Centre include 11 historic record of otter (*Lutra lutra*) within 2km of the site. These records relate to 'field records' (i.e. sightings) and 'dung or other signs', all relating to coastal habitats to the west of the site.

Otter are now widespread in Cumbria and are likely to at least occasionally use *any* water-course. No main rivers exist on or adjacent the site. The site contains no ponds or other bodies of standing water and contains no habitat suitable for otters to lie-up.

No evidence of otters having been present on the site was discovered during the site inspection.

The risk of otter being affected by the proposed works is considered to be 'nil'.

4.7. BADGERS

Records obtained from Cumbria Biodiversity Data Centre include a single historic record of badger (*Meles meles*) within 2km of the site. This single record relates to a road casualty which was recorded in 1997.

The site currently consists of imported grassland which is intensively managed and is broadly unsuitable for badgers. An area of woodland does exist adjacent the eastern boundary, and this woodland does lie on a slope and could be theoretically suitable for badger setts, however no evidence of badgers having been present on the site was discovered during the site inspection.

The risk of badger being affected by the proposed works is considered to be 'nil'.

4.8. REPTILES

Records obtained from Cumbria Biodiversity Data Centre include 33 historic records of reptiles within 2km of the site. The species previously recorded in the search area are common

lizard (Zootoca vivipara), slow worm (Anguise fragilis), grass snake (Natrix helvetica), adder (Vipera berus) and leatherback turtle (Dermochelys coriacea).

The majority of these historic records come from St. Bees village. Although slow worms particularly have been recorded throughout the area, most historic records of this species were collected during pre-development surveys on Abbey Road, St. Bees. The grass snake records were all collected during the period 1980 - 1989 and come from St. Bees village and St. Bees Head, and are notable as they are well outside of the current range of the species.

The following list gives characters that influence reptile habitat suitability;

- Location in relation to species range
- Vegetation structure
- Isolation
- Aspect
- Topography
- Surface geology
- · Connectivity to nearby good quality habitat
- · Prey abundance
- Refuge opportunity
- · Hibernation habitat potential
- Disturbance regime

The site is currently intensively managed improved grassland and is therefore unsuitable for reptiles. The peripheries of the site - including the narrow strip of road verge on the western side - are superficially suitable for species such as slow worm and common lizard, but these are very small in extent and are rather isolated from other suitable habitat in the surrounding area.

The risk of reptiles being affected by the proposed works is considered to be 'nil'.

4.9. **BREEDING BIRDS**

Records obtained from Cumbria Biodiversity Data Centre include 2607 records of birds relating to 120 species occurring within 2km of the site. The majority of species recorded are identified as either possible, probable or confirmed as breeding. The precise location of bird records, specifically nest sites, is rarely provided in historic data.

The site is currently intensively managed improved grassland and is therefore broadly unsuitable for breeding birds. The boundaries of the site are formed by stone walls and stock fencing, with no hedgerows. No trees exist within the site boundary.

Scrub and trees within adjacent habitat do offer potential for nesting birds, but these habitats will be unaffected by the proposed works and no impacts to any breeding birds in adjacent habitat are anticipated.

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- · Kill, injure or take wild birds
- · Take, damage or destroy the nest of wild birds while in use or being built

· Take or destroy the eggs of wild birds

The risk of breeding birds being affected by the proposed works is considered to be 'negligible'.

4.10. RED SQUIRRELS

Records obtained from Cumbria Biodiversity Data Centre included 9 records of red squirrels (Sciurus vulgaris) and 3 records of grey squirrels (Sciurus carolinensis) within 2km of the site. Red squirrels have been recorded between 1998 - 2017; grey squirrels have been recorded between 2005 and 2011. Both red and grey squirrels have been previously recorded in suitable habitat in the wider area, but the closest historic record to the site (for both species) is c.0.5km.

The Site does not contain any areas of woodland nor any trees.

The risk of red squirrels being affected by the proposed works is considered to be 'nil'.

4.11. OTHER MAMMALS

Records obtained from Cumbria Biodiversity Data Centre include records of hedgehog (Erinaceus europaeus), weasel (Mustela nivalis), polecat (Mustela putorius), mink (Neovison vison), roe deer (Capreolus capreolus), brown hare (Lepus europaeus) and rabbit (Oryctolagus cuniculus) from within 2km of the site.

No small mammal burrows were identified during the site inspection but small mammal species are likely to occur on site.

'Other mammals', including burrow dwelling species may occur on site. There is a risk that 'other mammals' will be affected by the proposed works.

4.12. INVASIVE NON-NATIVE SPECIES

Records obtained from Cumbria Biodiversity Data Centre include historic records of a single Schedule 9 - Invasive Plant Species occurring within 2km of the site. This is Japanese rose (Rosa rugosa) which has been previously recorded at St. Bees Head, c.1.6km to the north west.

During the survey no Schedule 9 - Invasive Plant Species were recorded on site. Non-native species were recorded - a single Russian comfrey (Symphytum × uplandicum) was identified in the extreme north east corner of the site and bluebells on land adjacent the site boundary are hybrids between Hyacinthoides non-scripta and Hyacinthoides hispanica - but none of the non-native species identified are listed as Schedule 9 (i.e. invasive non-natives).

The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'nil'. The generic risk of invasive non-native species being introduced to the site and then spread within or beyond the site boundary is considered to be 'low'.

5. Photographs



Figure 1: Showing the site looking south from the northern boundary.



Figure 2: Showing the eastern boundary of the site looking south.



Figure 3: Showing the site looking north west towards St. Bees Head from beyond the southern boundary.



Figure 4: Showing the western boundary of the site and Nethertown Road, looking north.



Figure 5: Showing the pond which exists in an adjacent garden - which returned a 'negative' great crested newt eDNA sample result.

6. Impact Assessment

6.1. SUMMARY OF PREDICTED IMPACTS

This survey has identified potential ecological impacts to;

- · Breeding birds
- · 'Other Mammals'
- Invasive Non-Native Species

Each of these features will be discussed below.

6.2. Breeding Birds

The risk of breeding birds being affected by the proposed works is considered to be 'negligible'.

Potential impacts to breeding birds as a result of activities on site include;

 <u>Disturbance / destruction of active nest sites and harm to nesting birds</u>. Clearance of vegetation and the stone wall on the western boundary of the site (to create vehicular access) during the bird nesting season would risk disturbing / destroying active nest sites and harming nesting birds. This would only be a risk during the bird breeding season (March - September inclusive).

6.3. 'OTHER MAMMALS'

'Other mammals', including burrow dwelling species may occur on site. There is a risk that 'other mammals' will be affected by the proposed works.

The proposed works could have the following impacts;

• <u>Harm to burrow dwelling mammals.</u> Burrow dwelling mammals (i.e. rabbits) could be crushed or asphyxiated in burrows if heavy plant is operated on ground above active burrows.

6.4. INVASIVE NON-NATIVE SPECIES

The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'nil'. The generic risk of invasive non-native species being introduced to the site and then spread within or beyond the site boundary is considered to be 'low'.

The potential risks as regards invasive non-native species are as follows;

• <u>Spread of invasive non-native species on / off site.</u> There is a generic risk that any top soil or materials imported to site could contain invasive non-native species which could then be spread within or beyond the site boundary.

7. Mitigation / Recommendations

The following potential impacts have been identified;

- · Breeding Birds
 - Disturbance / destruction of active nest sites and harm to nesting birds.
- · 'Other Mammals'
 - Harm to burrow dwelling mammals
- Invasive Non-Native Species
 - Spread of invasive non-native species on / off site.

7.1. **BREEDING BIRDS**

<u>Disturbance / destruction of active nest sites and harm to nesting birds</u>

- · Vegetation clearance and / or demolition of the western boundary wall to create access should occur outside of the bird nesting season (March - August).
- If any vegetation clearance and / or demolition of the western boundary wall must occur during the bird breeding season, a breeding bird survey must be conducted immediately prior to vegetation clearance commencing. Should evidence of active nest sites (or dependant young) be identified, no work will be possible until the nest can be confirmed as no longer active or the young have fledged and / or moved out of the works area. This should be conducted by a suitably experienced ecologist.

7.2. 'OTHER MAMMALS'

Harm to burrow dwelling mammals

 All plant operatives will be vigilant for mammal burrows. If burrows are discovered, no plant will operate within 5m of any burrow entrance until an experienced ecologist can confirm if the burrow is active. If burrows are found to be active, measures will be taken to exclude mammals before works in the area may proceed.

7.3. INVASIVE NON-NATIVE SPECIES

Spread of invasive non-native species on / off site.

- Any plant or equipment used on site during the construction phase must be washed so as to remove any mud or debris (which may contain viable vegetative material or seeds) before being delivered to the site.
- · All materials delivered to site will be clean and free from contamination with seeds or vegetative material from invasive non-native species.

8. Summary

8.1. SUMMARY OF DEVELOPMENT AND MITIGATION

This report details a Preliminary Ecological Appraisal conducted on Land off Nethertown Road, St. Bees, Whitehaven, Cumbria, CA27 0AY (Nat. Grid Ref. NX 97223 10970 - Approx. centre of site).

Plans 'as proposed' have been provided (see Figure 2) and it is thereby understood that a proposal exists for a residential development. It is understood (pers. comms. Simon Blacker) that outline planning consent has already been granted for 3no. Residential units on the site, however it is now proposed to extend this extent outline consent to increase the development site boundary and to erect 5no. residential units. It is understood that the initial planning application was not accompanied by any kind of ecological survey, but the Copeland Borough Council planning application search facility (https://www.copeland.gov.uk/planning/application-search) does not allow planning applications to be searched using 'location', 'site name' nor 'post-code' and is therefore unfit for the purpose of verifying the planning history of the site.

The Site consists of improved grassland - managed as a quick rotation fodder crop - and is of no intrinsic conservation value. The uncultivated peripheries of the site are very narrow and although likely to be of some value to wildlife, are typical of field margins in the surrounding area. The field boundaries consist of stone walls and stock fencing - no hedgerows exist.

This survey has identified potential ecological impacts to;

- · Breeding birds
- · 'Other Mammals'
- Invasive Non-Native Species

Mitigation measures have been presented in Section 7 to address identified risks to ecological receptors. Provided that these measures are adhered to, no residual ecological impacts as a result of the proposed works are anticipated.

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