



Brighter strategies
for greener projects



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Project: Iron Line
Report: Construction Environmental Management Plan Addendum

QUALITY ASSURANCE

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1.0 INTRODUCTION

Greengage Environmental Ltd (Greengage) was commissioned by Cumberland Council to produce a Construction Ecological Management Plan (CEcMP) for Hodbarrow Nature Reserve (excluding Hodbarrow lagoon) and a parcel of land immediately north of the nature reserve proposed for development as a Visitor Centre and car park, located on the south-west coast of Cumbria, hereafter referred to as 'the site'.

For the purposes of this report, the planning application boundary encompasses the site shown in Appendix A. However, the actual development footprint occupies only a much smaller portion of that area.

This CEcMP details the mitigation strategies to support the existing Construction Environmental Management Plan¹ produced by Story Contracting Ltd (hereafter referred to as the 'Story Contracting CEMP')

Hodbarrow Nature Reserve (hereafter referred to as 'the nature reserve') including Hodbarrow Lagoon, covers approximately 105 hectares (ha) and comprises lagoons, grassland and scrub across a former iron mine managed by the Royal Society for the Protection of Birds (RSPB) since 1986. The land immediately north of the nature reserve extends to approximately 2.1 ha and comprises hardstanding, dense scrub, lowland meadow and calcareous grassland, where the proposed Visitor Centre and car park will be located.

In total, the site (excluding Hodbarrow Lagoon) to which this CEcMP applies covers 57.69 ha.

1.1 PROPOSED DEVELOPMENT

This CEcMP has been produced to inform a planning application for the site which seeks *“Erection of visitor centre with café/shop, group room, staff/volunteer, toilet facilities and vehicle parking; consolidation, repair and installation of interpretive sculpture to Towsey Hole Windmill; refurbishment of existing Tern Island Hide; new bird hides, pathways, gateway features, street furniture, and demarcation of spaces at existing car park; enhancement of wildlife habitats; associated landscaping and drainage infrastructure; and maintenance of byway with restricted vehicular access -The Iron Line Project.”*

A summary of the proposals has been separated into the Visitor Centre and car park and improvements across the nature reserve:

- Development of a Visitor Centre and car park, which will involve:
 - Clearance of 0.29 ha of dense scrub habitat and 0.02 ha (of a total 7.83 ha) lowland calcareous grassland habitat to facilitate the proposed development;
 - Retention and protection of 0.0546 ha of existing lowland meadow and retention protection and enhancement of the remaining 0.5778 ha of lowland calcareous grassland;
 - Development of the land proposed for the Visitor Centre and car park which will comprise a two-story building, the ground floor will include a café, a shop, toilets, staff room and a total of 63 car parking spaces; and
 - 0.0358 ha of existing hardstanding will be broken up and removed to create other neutral grassland.
- Improvements across the nature reserve, which include:

- restricting of vehicular access along the Byway Open to All Traffic (BOAT) to emergency and maintenance vehicles only which should decrease the opportunities from disturbance to wildlife and degradation to habitats from anti-social driving of vehicles along the BOAT;
- Some desire lines to be formalised with sensitive substrate/materials and fencing in some areas to restrict disturbance from footfall;
- Maintenance and repairs to Towsey Hole Windmill;
- Installation of art and education features across the site to engage visitors in wildlife and promote behavioural change;
- Reinforcement of bunding along sea wall to restrict unauthorised access; and
- The building of three hides, one overlooking the 'hidden lagoon' one overlooking the old quarry lagoon and the third on the old sea wall.

Design Process

Greengage have liaised with the design team on a weekly basis and engaged with the Council, Natural England and RSPB throughout the design process to support an earlier planning application. Greengage have communicated the ecological constraints and opportunities to the design team which has been informed by the Phase II survey results² and Phase II survey addendum.³ The designs have been adapted throughout the process as and when any new relevant ecological constraints were identified. The proposals for the updated planning application have followed the same principals as an earlier planning application and RSPB and Natural England have been kept up to date. The development process has sought to follow the mitigation hierarchy throughout the design stage.

The proposed development design has been adapted throughout the process and have followed the mitigation hierarchy throughout the design stage:

- Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).
- Mitigation - Negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.
- Compensation - Where there are significant residual negative ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- Enhancement - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2.0 GENERAL BEST PRACTICE

Story Contracting Ltd have been instructed as the contractor. As per Story Contracting CEMP,¹ the following general best practice measures have been set out that the scheme will follow. This will be reviewed and updated where necessary to provide bespoke advice for the machinery and method of works once known. Both this CEcMP and the Story Contracting CEMP are live documents and includes but is not limited to the measures detailed in these reports.

Some of the habitats and species on site are protected under international and national legislation (see Appendix B for protection legislation). See map in Appendix C which sets out some of the zones that are of importance or measures in place to protect these.

2.1 PRE-COMMENCEMENT

Site Walkover

Ahead of any works starting on site an ecological site walkover will be undertaken by a Suitably Qualified Ecologist (SQE). The SQE will provide an update to this CEcMP on any ecological changes relevant to the approved planning permission within the three months ahead of arrival of the construction teams on site. They will make note of any mammal holes that may need monitoring, invasive species or other considerations.

Invasive Species Removal

Invasive species previously recorded within the development footprint, including Montbretia *Crocsmia* sp., Cotoneaster species (such as wall cotoneaster *Cotoneaster horizontalis*, small leaved cotoneaster *Cotoneaster microphyllus*), variegated yellow archangel *Lamium galeobdolon*, and sea buckthorn *Hippophae rhamnoides* will be removed by specialist contractors and disposed of in accordance with best practice guidance⁴ before any works commence, to prevent accidental spread.

Ahead of the projected March 2026 start date, an SQE will undertake an updated site walkover to identify and map any invasive non-native species within the construction areas. A removal plan will then be prepared for any species found.

Where invasive non-native species occur outside but within 3m of the development a Work Exclusion Zone (WEZ) will be established using protective barriers (e.g. Heras fencing) and clear signage.

As March is outside the optimal botanical survey season (April–September), some invasive non-native species, particularly non-woody species may not be identifiable. To mitigate this risk:

- A toolbox talk will brief contractors on likely invasive non-native species, with photos and identifying features.
- Contractors must remain vigilant and follow the correct reporting and containment protocols if any suspected invasive non-native species are encountered.

Signage will display images and descriptions of invasive non-native species known or likely to be present.

Although Japanese knotweed *Reynoutria japonica* has not been recorded within the development footprint, it is present elsewhere on the nature reserve and must be treated as a high-risk species

with a 10m WEZ. The former reserve manager also confirmed New Zealand pigmyweed *Crassula helmsii* in site ponds between 2018-2020, though no works are planned within these waterbodies.

All imported soils, aggregates and construction materials must be responsibly sourced and certified free of invasive non-native species to prevent inadvertent introduction.

Protective Fences, Exclusion Barriers and Warning Signs

Prior to commencement of development (inclusive of site clearance or de-vegetation works), temporary fencing will be erected around all nearby protected and retained features for that phase, including dune habitats and grasslands (hereafter referred to as Biodiversity Protection Zones (BPZ), to delineate exclusion areas for construction workers and machinery. Areas beyond which works are not to take place are to be clearly marked out.

Site Compound

The first stage of the works will be to establish the location of the site compound areas for the different phases of construction. The compounds will be located on existing roads, outside of BPZ and will be clearly signposted and fenced off. In compliance with industry standard practices for construction sites, the working area will be secure, and the general public will be separated from the works.

Zones for the stock piling of soil or storage of materials associated with the development will be clearly defined and located on existing areas of hardstanding. All materials such as loose materials, bricks, timber will be raised off the ground such as on pallets. Fuel, oil and other chemicals will be stored in appropriate containers that are impervious to the material being stored also stored on areas of existing hardstanding with bunding. Leaking and empty containers will be removed from the site immediately.

The site compound and piling zones will be agreed with the SQE in advance of arriving on site.

Ecological Clerk of Works

The Ecological Clerk of Works (ECoW) is responsible for ensuring that all construction activities comply with ecological legislation, planning conditions, and agreed mitigation measures, and for safeguarding protected species and habitats throughout the works.

- A Suitably Qualified Ecologist (SQE) will act as the ECoW and oversee key phases of work with the highest ecological risk.
- The ECoW will undertake pre-works checks ahead of each phase of activities, checking for mammal holes, Potential Roosting Features (PRFs) for bats, nesting or overwintering bird species using lagoon and confirm BPZs. ECoW to make updates to CEcMP as required.
- The ECoW will determine which activities require their presence on site.
- Contractors must notify the ECoW in advance of planned works, machinery, and methods so an informed decision can be made.
- The ECoW will prepare a Precautionary Method of Works Statement (PMWS) for each new phase and provide it in sufficient time for the construction team to read and understand.
- When the ECoW is not required on site, an SQE will remain on call to respond to contractor questions.

- ECoW responsibilities relevant to each ecological receptor are detailed in the sections below.

Toolbox talk

Prior to commencement of construction on site, all personnel involved in the construction works will be briefed on ecological mitigation and relevant wildlife legislation. This will be delivered in the form of a toolbox talk provided to the site team by the ECoW. The toolbox talk will cover:

- A summary of survey findings and overview of the ecological receptors, their ecology, habitat requirements and conservation status;
- Maps of the Biodiversity Protection Zones and buffer zones that will be kept throughout the construction. Contractors will be informed that no equipment will be stored and no activities are to be undertaken within the buffer zones and habitats;
- The legal protection afforded to the ecological receptors;
- The role of the ECoW and the contractors responsibilities;
- A description of the mitigation measures that need to be implemented and followed at all times; and
- Species to look out for during construction and what to do in the event that an ecological receptor is found.

A record of this talk will be kept and all attendees will be asked to sign that they have understood the measures discussed. The Biodiversity Champion is responsible for ensuring subsequent toolbox talks are provided for any new site members and at the start of a new work phase.

Precautionary Method of Works Statement

Ahead of each phase of activities on site a Precautionary Method of Works Statement (PMWS) to outline the legislative considerations for habitats and species on site and within the surrounding area and detail how the works will be carried out to ensure compliance. This will be signed by the site operatives and remain on site for the duration of the construction works for the proposed visitor centre.

2.2 DURING THE WORKS

Roles and Responsibilities

Story Contracting Ltd have been instructed as the contractor. As per the Story Contracting CEMP⁵, they will nominate an internal Biodiversity Champion. This person will be responsible for day-to-day implementation of this CEcMP and shall liaise directly with the ECoW. They will commission and arrange for ECoW input and site attendance in advance, as required.

Should management on the site change, the new personnel will be made aware of and action this CEcMP.

Pollution management

To protect habitats on site, the following good practice mitigation measures in line with Best Practicable Means (as set out in BS 5228:2009) will be followed throughout the construction

phase. To ensure best practice is implemented during the construction phase and existing retained habitats on site and ecological receptors are protected, this will specifically include, but may not be limited to:

Noise and vibration management

Table 2.1 outlines noise and vibration issues requiring attention and identifies the control measures to be implemented which are detailed with the Story Contracting CEMP⁵.

Table 2.1 Noise and vibration management

Noise and Vibration	Control Measures
Site set-up and operating hours	<ul style="list-style-type: none"> Normal working hours will be 8.00am - 6.00pm Monday to Friday, and 9.00am - 1.00pm Saturday.
Construction traffic (delivery vehicles, site personnel etc.)	<ul style="list-style-type: none"> All goods, equipment, plant and materials will be transported by existing roads. Deliveries times will be planned to be delivered during the operating hours set out above.
Construction plant and equipment	<ul style="list-style-type: none"> Site compounds to be located on existing areas of hardstanding as far as reasonably possible from sensitive areas, with fencing / barriers to prevent encroachment on the Biodiversity Protection Zones (BPZ). Any static plant is to be sited within the fenced off compound. Site compounds will be chosen to be as far from the lagoon and Duddon Estuary as reasonably possible. Plant and equipment to be switched off when not in use. Plant and equipment to be maintained and operated in accordance with operators instruction and to ensure that excessive noise levels are not generated Regular integrity checks of noise mitigation measures fitted to items of plant Acoustics screens or enclosures for stationary or semi-stationary plant (e.g. generators) will be considered for works along the BOAT along the new sea wall. The ECoW will decide whether these are necessary. Best practicable means will be included to control construction noise in the form of low noise emission plant, as specified in BS5228-1. Timing of works to avoid sensitive periods (see relevant timings to avoid for each phase in Section 3.0 below) in order to reduce impacts on wildlife.

Materials and Waste

Table 2.2 outlines the control measures for materials and waste to be implemented which are also detailed with the Story Contracting CEMP⁵.

Table 2.2 Materials and waste management

Materials and waste	Control Measure
Storage, handling and management of materials and waste	<ul style="list-style-type: none"> • Materials and waste to be stored in a commercial skip sited within the works compound before removal from site. • Potentially polluting substances will be stored on impermeable surfaces. • All temporary drainage and drainage arrangements intended to be used during the construction period will be fully detailed in the site surface water management plan will be confirmed during the design phase and will form a part of the Story Contracting CEMP. This will control drainage away from notable habitats, storm water sewers, watercourses and ditches, or adequate measures will be taken to protect against pollution; • Waste containers to be securely covered to ensure wastes cannot be blown or washed away. • Any oils, fuels and liquids used will be appropriately labelled and securely stored within the site compound (storage to include bunding and tamper proof and lockable valves, as appropriate). • All hazardous substances on site will be controlled in accordance with Control of Substances Hazardous to Health (COSHH) Regulations. The storage compound will be fenced off and locked when not in use to prevent theft and vandalism. • Refuelling of plant and machinery will take place with appropriate spillage controls. Vehicles will not be left unattended during refuelling. • Fuel storage tanks will be locked when not in use to prevent unauthorised access and reduce the risk of vandalism. • Spill kits to be located near to the works areas and within storage compounds, with personnel being trained in their use. • Any wheel washing will be undertaken in a designated area. Water from wheel washing facilities and wash down areas will be recycled or fully contained and disposed of via a tanker. • Daily walkover will be undertaken to collect other material.
Waste disposal strategy	<ul style="list-style-type: none"> • Domestic waste shall be taken off-site and disposed of daily. • Site foul drainage will be removed from site, in accordance with relevant permissions obtained from the sewerage or statutory authority. • Leaking or empty oil drums will be removed from site immediately and disposed of via an appropriately licensed waste disposal contractor. • Recyclable waste shall be taken for disposal at the available recycling facilities; any metalwork for example will seek to be recycled through the local scrapyards or reused.

Air Quality, Dust and Emissions

Table 2.3 outlines the air quality, dust and emissions requiring attention and identifies the control measures to be implemented which are detailed with the CEMP⁵.

Table 2.3 Air Quality, Dust and Emissions management

Air Quality, Dust and Emission	Control Measures
Site set-up and operation	<ul style="list-style-type: none"> • Toolbox talk on dust and air quality management
Air quality and emissions	<ul style="list-style-type: none"> • Vehicles, plant and equipment on site to be well maintained and regularly serviced. • Fleet is largely Electric Vehicles (EV) or Hybrids. • Vehicles, plant and equipment to be switched off when not in use. • Where reasonably practicable, fixed items of construction plant will be electrically powered in preference to diesel or petrol driven.
Dust/debris	<ul style="list-style-type: none"> • Site roads will be periodically swept to prevent a build up of materials. In periods of dry weather, dampening down will be undertaken to prevent dust blow off. • Any dust generating materials transported to and from site to be securely covered. • Any dust generating materials stored on site to be located out of the wind, screened or covered. • Any dust generating activities such as cutting of blocks, bricks, roof tiles will be controlled via dust dampening techniques. Control measures will be detailed in task specific Risk Assessment Method Statement (RAMS) in addition to the CEMP.
Monitoring	<ul style="list-style-type: none"> • Regular visual checks for dust, debris and emissions arising will be undertaken across the site and log of results maintained.

Invasive Species

Table 2.4 outlines the invasive species control measures to be implemented during works.

Table 2.4 Invasive species control measures

Invasive species management	Control measures
During construction	<ul style="list-style-type: none"> • In accordance with Storeys internal policy, vehicular traffic will always run on either tarmac or clean hard compounds to avoid dragging mud on the roads which will reduce the likelihood of spreading invasive non-native species. • Set up of 3m WEZ for all invasive non-native species and 10m WEZ for Japanese knotweed within the vicinity of the development footprint using clear signage and fencing

Invasive species management	Control measures
	<ul style="list-style-type: none"> • If vehicles require movement across habitats then biosecurity protocols such as thorough wheel washes will be undertaken • Regular washing of vehicles entering site. • Control of materials leaving site (following the waste management plan). • Should the ECoW or contractors suspect or identify an invasive species within the development footprint during the works, the area will be cordoned off and left undisturbed until a suitable biohazard waste contractor has been contacted and removed the invasive species and any soil that may have plant material within. • The ECoW will carry out regular checks to ensure that biosecurity protocols are followed. • Track or mud mats should be available for use where vehicles need to cross habitats that are to be retained, with the ECoW advising when their use is required.

Lighting

Table 2.5 outlines the lighting control measures to be implemented during the works.

Table 2.5 Lighting control measures

Lighting management	Control Measures
During Construction	<ul style="list-style-type: none"> • Works will mostly be undertaken during the daylight hours • Task lighting required will follow the Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP) guidelines.⁶ • Task lighting will be directional, use hoods and shields to avoid light spill onto surrounding habitats such as the lagoons, the pools/scrapes, grassland, sand dunes and scrub. • Lighting will be switched off when not in use.

General Wildlife Protection Measures

Table 2.6 outlines the best practice measures for the protection of habitats and animals to be implemented during works.

Table 2.6 General wildlife protection measures

General Wildlife Protection Measures	Control measures
During Works	<ul style="list-style-type: none"> • All habitat clearance must be undertaken in the presence of an ECoW

General Wildlife Protection Measures	Control measures
	<ul style="list-style-type: none"> • All site operative staff will remain vigilant throughout the duration of the works and notify the ECoW if any natterjack toads, reptiles, bird nests, mammal holes, invasive species or other ecological constraints are found. • Any deep trenches and holes will be covered at the end of each working day, or include a ramp e.g. scaffold board at suitably shallow gradient as a means of escape for any animals falling in. • Incomplete pipework will be temporarily / capped closed overnight to avoid animals entering. If this is not possible, before working on any pipework, the pipework will be inspected by the Biodiversity Champion for presence of any wildlife before works continue. • All trenches and pipework will be checked by the Environmental Manager prior to backfilling. • Site operatives will check under wheels of machinery/vehicles each morning for any animals before works commencing. • Materials (including loose materials, bricks, stones, timber) will be stored in a raised manner such as on pallets and on areas of existing hardstanding • All material should be compressed and sealed with the back of a bucket, making the spoil heaps solid and without gaps that amphibians and reptiles could burrow into • Biosecurity protocols followed throughout duration of the works • Any potential refugia/hibernacula (piles of rubbles/stones/tree roots) should be dismantled by hand and in the presence of ECoW

Emergency Measures for Natterjack toad

Should any natterjacks be found on site or within the proximity of the works or spoil storage area at any point during site preparation or construction works, the natterjack toad will be left in-situ and all works in that area are to be halted immediately. The Biodiversity Champion will contact the ECoW who will provide advice and contact Natural England.

No further works would be able to be undertaken that could impact natterjack toads until a Natural England licence for the site is granted, this may involve further surveys which are seasonal in nature.

3.0 CONSTRUCTION MITIGATION STRATEGIES

The works have been divided into sections below for ease of reference; however, these do not represent official phases of the development (see map in Appendix A for location of these works). During all works, the adoption of the best practice methods such as the measures set out in Section 2.0 above will be implemented and are therefore not repeated in the following descriptions.

3.1 WORKS ASSOCIATED WITH THE VISITOR CENTRE

Timing and Duration

At the time of the production of this report, the development of the Visitor Centre and car park is predicted to start in March 2026 for 18 months. If this changes this document will need to be updated.

Pre-works actions

Protection of Retained Habitats

There will be approximately 1.5045 ha of scrub for retention and 0.6324 ha of retained Annex I and Priority grassland habitat. All retained habitats will be protected during the works through signage and fencing. See locations for fencing in Appendix C.

Scrub clearance

- ECoW supervision is required for all scrub clearance. The ECoW will undertake pre-works checks ahead of each phase of activities, checking for mammal holes, Potential Roosting Features (PRFs) for bats, nesting or overwintering bird species using lagoon and confirm BPZs. ECoW to make updates to CEcMP as required.
 - If any of the above species or features are identified, scrub clearance may need to be postponed until further surveys are completed and any necessary licences are obtained.
- Timing of scrub clearance:
 - Carry out vegetation clearance April–mid-October when night temperatures are above 5°C (active amphibian/reptile season).
 - Avoid the bird nesting season (March–August). If works must occur then, the ECoW must inspect and confirm no active nests.
- If active bird nests are found:
 - The ECoW will cordon off the area.
 - No works may take place inside the cordon until the nest is no longer active.
 - The ECoW will monitor and remove the cordon when birds have fledged and works in this area can resume.
- Scrub clearance method (avoidance measures):
 - Use a two-stage cut:

- Cut vegetation to no lower than 150 mm, directing debris toward retained scrub. Leave in place for 24 hours.
- ECoW to conduct a fingertip search or hand-raking of the area to move any reptiles, amphibians, or hedgehogs to retained habitat.
- Once checked and cleared, remove vegetation to ground level and keep the area bare to prevent animals returning.

These measures protect nesting birds, bats, otters and other mammals, as well as amphibians, reptiles, and hedgehogs during scrub-clearance works.

During works actions

Installation of Gully Ladders

Seven grill covered drainage gullies will be located within the Visitor centre and car park site (see Appendix D for locations of gullies requiring ladders) each will require installation of gully ladders to help to ensure amphibians which may accidentally fall into any gully are able to exit.

The gully ladders must match the full length of the gully to ensure effective egress.

Figure 3.1 Example of a suitable gully ladder product advertised on the British Herpetological Society website



Hardstanding removal and relocation and Habitat Creation of Other Neutral Grassland

- A section of existing hardstanding on the layby access road will be broken up and removed and the area will be used to create 0.0358 ha of new neutral grassland (see Appendix D for location).
- The removed hardstanding material will be retained but relocated and reused to create natterjack toad habitat elsewhere on the nature reserve (see Landscape and Ecological Management Plan (LEMP)⁷).
- The area of land where the hardstanding has been removed from will be sown with a suitable seed mix to create a new grassland. The seed source will either be collected from the site (where suitable neutral grassland species are present) or purchased to match the site's grassland species composition (see LEMP). Details regarding timings of seed sowing and any necessary substrate modifications are also detailed in the accompanying LEMP.

3.2 WORKS TO FACILITATE DRAINAGE STRATEGY

Timing and Duration

At the time of the production of this report, the works to facilitate the drainage strategy is predicted to start in September 2026 and is expected to take 8 weeks. If this changes this document will need to be updated.

Pre-works actions

Notable Plant Mitigation Strategy

Irish dandelion, an internationally important plant species, is located along the scrub margins south of the access road to the proposed Visitor Centre and car park (see Appendix D). A service trench must be installed where these plants currently occur, alternative trenching to the north was explored but ruled out due to landownership constraints.

The translocation receptor area will be the southern side of the access road which offers similar sunlight levels and orientation, improving translocation success. Throughout the steps below the Irish dandelion plants must be translocated under supervision of an ECoW.

- Timing:
 - Translocation should occur in the dormant season, ideally early autumn, avoiding periods of heavy rain or freezing temperatures to reduce compaction and plant damage.
- Donor Site Preparation:
 - Identify the locations of the Irish dandelions from the locations detailed in the NVC surveys (you'll need to ref this report)
 - Clear scrub habitat on the same south side of the access road, immediately south of the existing Irish dandelions in an area outside of the area proposed for the service trench.
 - Prepare the donor site by stripping 40 cm of topsoil and subsoil from the 1.5 m × 1.5 m quadrats marked adjacent to the existing specimens.
- Translocation Method:
 - As translocation is planned outside the flowering season, remove turfs with a 0.5 m buffer around each grid reference, resulting in 1.5 m × 1.5 m turves. Remove turf and soil to at least 40 cm depth using a turf stripper, preserving soil profile and minimising plant damage.
 - Translocated on the same day to avoid deterioration.
- Record a new 10-figure grid reference for each translocated turf for monitoring purposes.

Scrub clearance

Scrub clearance will take place under the same methodology and precautionary measures as set out in the Scrub clearance section above.

3.3 WORKS ASSOCIATED WITH THE NEW HIDES

Timing and Duration

At the time of the production of this report, the works to create the new hides is due to start in September 2026 and is expected to take 8 weeks. If this changes this document will need to be updated.

The first hide, adjacent to the old sea wall, will be built in September to avoid disturbing breeding gulls on gull Island (~111 m away), barn owls nesting along the old sea wall, and overwintering birds on Hodbarrow Lagoon. The remaining hides are situated beyond the distance at which construction noise is expected to cause disturbance.

Pre-works actions

Protection of surrounding habitats

Works will be limited to well used desire lines or where there is scrub habitat. All surrounding retained habitats will be protected during the works through signage or fencing.

Scrub Clearance

Scrub clearance will take place under the same methodology and precautionary measures as set out in the Scrub clearance section above.

During works actions

As the ground will be kept bare throughout the works no additional actions are anticipated during the works.

3.4 WORKS ALONG THE BOAT AND PATH (NOT INCLUDING NEW SEA WALL)

Timing and Duration

At the time of the production of this report, the works to maintain the BOAT and paths is due to start in Autumn 2026 and is expected to take 20 weeks. If this changes this document will need to be updated.

It is estimated that the works within these BZP shown in Figure 3.2 below will take approximately one week.

Pre-works actions

Protection of surrounding habitats

Works will be limited to well-used desire lines or areas currently supporting scrub habitat. All surrounding retained habitats such as natterjack habitat (see Figure 3.2), grassland and sand dunes will be protected during the works through signage or fencing.

Protection of Natterjack toad habitats

RSPB have provided the following map in January 2026 of terrestrial habitat made suitable for natterjack toads.

The majority of works taking place within these areas will be along the existing paths and the BOAT. Where limited vegetation clearance is required (taking place in dense scrub and on existing desire lines) these will follow a precautionary method of works.

Figure 3.2 Terrestrial habitat and connectivity



Image 1: Likely Natterjack Terrestrial Habitats on RSPB Hodbarrow Reserve

Partial resurfacing of areas of existing footpath and the maintenance to the BOAT will be undertaken within approximately 10m of the existing and newly created natterjack toad pond habitat.

Figure 3.3 10m Biodiversity Protection Zones from Natterjack toad habitat



Measures detailed in the general best practice section will be mitigate for construction impacts on the adjacent natterjack toad habitat.

During works actions

Works should take place in daylight hours only within the BZP to avoid light disturbance on the suitable natterjack toad habitat.

As the works will be taking place on the existing path and BOAT no additional actions are anticipated during the works.

3.5 WORKS ASSOCIATED WITH THE WINDMILL AND WITH THE BOAT (ADJACENT TO WHITEROCK JUNCTION)

Timing and Duration

At the time of the production of this report, the works associated within the BOAT within 200m of the habitat in Figure 3.2 below is due to start in Autumn 2026 will take between approximately six to 10 weeks.

At the time of the production of this report, the works associated with the with the formalisation of the desire line to Towsey Hole Windmill and the maintenance and repairs to Towsey Hole Windmill and develop an interpretive structure is expected to begin in the spring of 2027 and take up to 12 weeks.

If times changes deviate this document will need to be updated.

Pre-works actions

Protection of surrounding habitats

Along the BOAT and adjacent vegetated areas, there is Annex I habitat: Fixed coastal dunes with herbaceous vegetation (grey dunes), supporting a number of high-conservation plant species (see Figure 3.2).

- Site compounds will be placed outside the BZP in Figure 3.2
- No works are planned within the grey dune habitat.
- Protective barriers and signage will be installed ahead of works to prevent habitat degradation (see Figure 4.1 for locations).

Figure 3.4 200m Biodiversity Protection Zone from Annex I Fixed coastal dunes with herbaceous vegetation ("grey dunes") habitat



During works actions

As the works will be taking place on existing heavily used desire lines no additional actions are anticipated during the works.

3.6 WORKS ASSOCIATED WITH THE BOAT ALONG THE NEW SEA WALL

Timing and Duration

Works along the BOAT will be restricted to September/October time to avoid disturbance to breeding and overwintering bird species.

The works along the BOAT which include maintenance of the BOAT along the sea wall, refurbishment of the existing hide, infrastructure to restrict vehicle access along the BOAT (timber fencing and timber/Corten bollards), and re-enforcement of the existing slag bund.

At the time of the production of this report, the works are due to start in September 2026 of which some elements, for example the hide refurbishment, could take up to 10 weeks.

Any works that are not finished before November will require advice from an ECoW and these works may need to be postponed until the following September/October 2027. Works that are small scale, short in duration and produce low noise (e.g below 70 dBA) may be able to take place under the supervision of the ECoW, provided they are unlikely to cause disturbance to any birds associated with the lagoon.

If times changes deviate this document will need to be updated.

Pre-works action

Breeding bird survey by SQE

Pre commencement breeding bird survey by a SQE to confirm likely absence of late breeding birds.

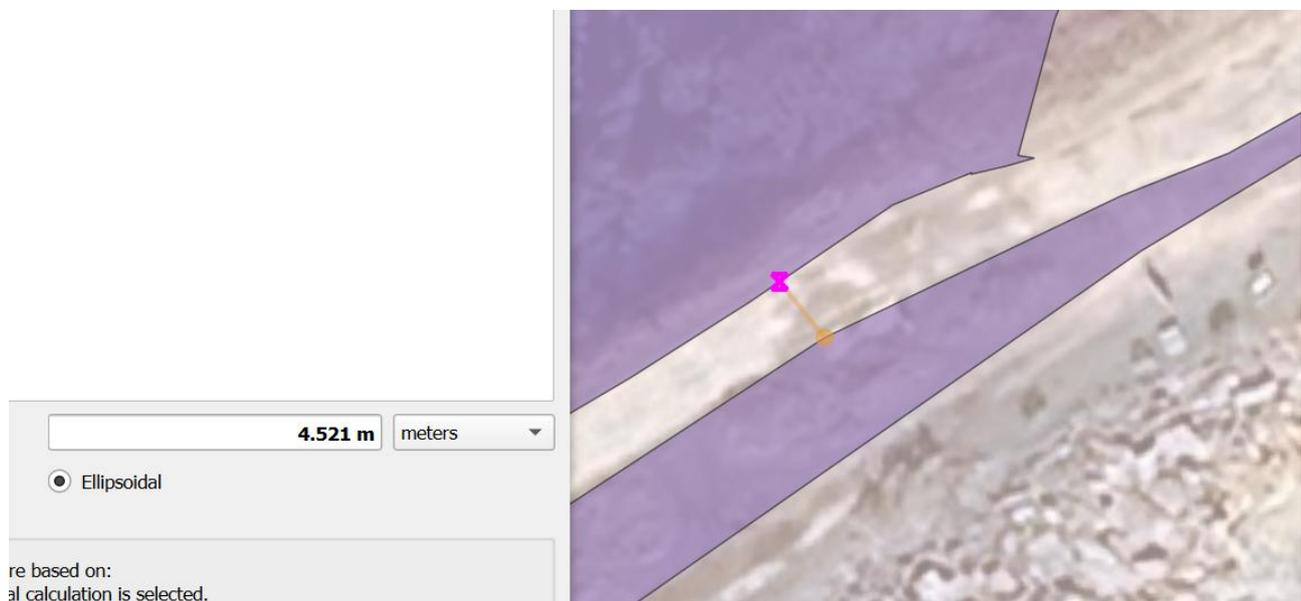
Protection of habitats

- Protective fencing and signage (see Appendix C) will be installed to safeguard Annex I habitat along the BOAT.
- Compound location to be agreed with the SQE; a suitable option is the northern end of the BOAT near the caravan park.
- The BOAT is wide enough to allow 3.9 m of surface to be scarified for pothole infilling and surface restoration without removing surrounding vegetation.

Plate 3.1 The BOAT along the sea wall. The darker areas show vegetated habitats of importance which will be protected during the works.



Figure 3.5 Distance between vegetated habitats along the BOAT at the closest points as measured on QGIS



During Works actions

Protection of Wintering birds

As described in the timing of works above, disturbance on wintering birds will be avoided. However, should works be delayed into early November and the ECoW considers the works to be of low risk to disturbance, temporary acoustic screens should be available if required.

As the works will be taking place on the BOAT no additional actions are anticipated during the works.

APPENDIX A PLANNING APPLICATION AND DEVELOPMENT FOOTPRINT BOUNDARY

APPENDIX B RELEVANT LEGISLATION

A.1 LEGISLATION

Current key legislation relating to ecology includes The Environment Act⁸ Wildlife and Countryside Act 1981 (as amended)⁹; The Conservation of Habitats and Species Regulations 2019 ('Habitats & Species Regulations')¹⁰, The Countryside and Rights of Way Act 2000 (CROW Act)¹¹, and The Natural Environment and Rural Communities Act, 2006¹².

The Environment Act, 2021

The Environment Act, 2021 has mandated the requirement for new development in England to deliver a minimum 10% biodiversity net gain (BNG), as measured by the Statutory Biodiversity Metric, secured through planning condition as standard (as per schedule 14 of the Act). Approach to the delivery of BNG must follow the mitigation hierarchy, with avoidance of impact and on-site compensation/gains prioritised, ahead of the use of offsite biodiversity unit offsets, or the purchase of biodiversity credits.

The Act introduces the condition that no development may begin unless a biodiversity net gain plan has been submitted and approved by the local planning authority (LPA).

The Act also amends requirements of the NERC Act, 2006, adding the need to not just conserve, but enhance biodiversity through planning projects. Furthermore, it introduces the need for the LPA to have regard to relevant local nature recovery strategies and relevant species/protected site conservation strategies, when making their decision.

Under the Act, the enhancements must be maintained for at least 30 years.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats & Species Regulations replace The Conservation (Natural Habitats, etc.) Regulations 1994 (as amended)¹³, and transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive')¹⁴, and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive')¹⁵ into UK law (in conjunction with the Wildlife and Countryside Act).

Regulation 43 and 47 respectively of the Conservation of Habitats & Species Regulations makes it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (European protected species of animals), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5 (European protected species of plant). Development that would contravene the protection afforded to European protected species requires a derogation (in the form of a licence) from the provisions of the Habitats Directive.

Regulation 63 (1) states: 'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which —

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and

(b) is not directly connected with or necessary to the management of that site;

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats¹⁶ (the 'Bern Convention') and the Birds Directive and EU Habitats Directive are implemented in Great Britain.

The Countryside and Rights of Way Act 2000

The Wildlife and Countryside Act has been updated by the CRoW Act. The CRoW Act amends the law relating to nature conservation and protection of wildlife. In relation to threatened species it strengthens the legal protection and adds the word 'reckless' to the offences of damaging, disturbing, or obstructing access to any structure or place a protected species uses for shelter or protection, and disturbing any protected species whilst it is occupying a structure or place it uses for shelter or protection.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act 2006 states that 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. Biodiversity Action Plans provide a framework for prioritising conservation actions for biodiversity.

Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. The list, a result of the most comprehensive analysis ever undertaken in the UK, currently contains 1,149 species, including for example, hedgehog (*Erinaceus europaeus*), and 65 habitats that were listed as priorities for conservation action under the now defunct UK Biodiversity Action Plan¹⁷ (UK BAP). Despite the devolution of the UK BAP and succession of the UK Post-2010 Biodiversity Framework¹⁸ (and Biodiversity 2020 strategy¹⁹ in England), as a response to the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020²⁰ and EU Biodiversity Strategy (EUBS)²¹, this list (now referred to as the list of Species and Habitats of Principal Importance in England) will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

Biodiversity Action Plans

Non-statutory Biodiversity Action Plans (BAPs) have been prepared on a local and regional scale throughout the UK over the past 15 years. Such plans provide a mechanism for implementing the government's broad strategy for conserving and enhancing the most endangered ('priority') habitats and species in the UK for the next 20 years. As described above the UK BAP was succeeded in England by Biodiversity 2020 although the list of priority habitats and species remains valid as the list of Species of Principal Importance for Nature Conservation.

Regional and local BAPs are still valid however and continue to be updated and produced.

Detail on the relevant BAPs for this site are provided in the main text of this report.

Legislation Relating to Nesting Birds

Nesting birds, with certain exceptions, are protected from intentional killing, destruction of nests and destruction/taking of eggs under the Wildlife and Countryside Act 1981 (as amended) and the CROW Act. Any clearance of dense vegetation should therefore be undertaken outside of the nesting bird season, taken to run conservatively from March to August (inclusive), unless an ecologist confirms the absence of active nests prior to clearance.

Legislation Relating to Bats

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

Although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

The Wildlife & Countryside Act 1981 (WCA) was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annex IV of the Habitats Directive, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2017, which transposes the Habitats Directive into UK law. Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England.

Legislation Relating to Reptiles

All species of reptile native to the UK are protected to some degree under national and/or international legislation, which provides mechanisms to protect the species, their habitats and sites occupied by the species.

Sand lizards and smooth snakes are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981 and Regulation 43 of the Conservation of Habitats and Species Regulations 2017. However, these species are rare and highly localised. Their occurrence is not considered as relevant in this instance, as the ranges and specialist habitats of these species do not occur at this site.

The remaining widespread species of native reptiles (adder, grass snake, slow worm and viviparous lizard) are protected under part of Section 9(1) and all of Section 9(5) of the Wildlife and Countryside Act 1981. They are protected against intentional killing and injury and against sale, transporting for sale etc. The habitat of these species is not protected. However, in terms of development, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence under the Wildlife and Countryside Act 1981. It is therefore important to identify the presence of these species within a potential development site. If any of these species are confirmed, all reasonable measures must then be taken to ensure the species are removed to avoid the threat of injury or death associated with development activities.

Each species of native reptile has specific habitat requirements but general shared features include a structurally diverse habitat that provides for shelter, basking, foraging and hibernating.

All reptiles are BAP species and as such are also of material consideration in the planning process due to the NPPF.

Legislation Relating to Natterjack Toads

Natterjack Toads are a European Protected Species (EPS) listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2019 (EU Exit) (as amended), and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), as well as recognised as a species of national conservation importance under section 41 (S.41) of the Natural Environment Rural Communities Act 2006 (NERC Act) - England.

Specifically, the existing legal framework makes it illegal to:

- Intentionally or deliberately capture, injure or kill a Natterjack Toad,
- Damage or destroy a breeding or resting place of a Natterjack Toad, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection,
- Intentionally or recklessly disturb a Natterjack Toad in a place used for shelter or protection, or deliberately disturb Natterjack Toad in such a way as to be likely significant to affect (i) the ability of any significant group to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance,
- Intentionally or recklessly obstruct access to a place used for shelter or protection,
- Possess a Natterjack Toad (alive or dead), or any part of a Natterjack Toad.

A.2 PLANNING POLICY

National

National Planning Policy Framework

The National Planning Policy Framework (NPPF) 2024²² sets out the Government's planning policies for England, including how plans and decisions are expected to apply a presumption in favour of sustainable development. Chapter 15 of the NPPF focuses on conservation and enhancement of the natural environment, stating plans should 'identify and pursue opportunities for securing measurable net gains for biodiversity'.

It goes on to state: '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'. Alongside this, it acknowledges that planning should be refused where irreplaceable habitats such as ancient woodland are lost.

Regional

Copeland Local Plan²³

Policy DS7: Sustainable Drainage

New development must incorporate Sustainable Drainage Systems unless it can be demonstrated that this not appropriate. Drainage systems should be well designed with consideration given to the additional benefits they can provide as spaces for landscape, biodiversity and recreation.

Development on greenfield sites should seek to achieve pre-development or better levels of surface water run-off and on previously developed sites, a reduction in surface water discharge should be sought. In demonstrating a reduction clear evidence of existing connections from the site and associated rates of discharge calculations should be provided. In both cases, measures should be put in place to prevent pollution entering watercourses with surface water managed at source. Where identified on the local validation list applicants should submit a Drainage Strategy that shows how foul and surface water will be effectively managed and maintained. Where SuDS are being incorporated details of their long-term management should be provided. This will be secured through the use of s106 agreements. Surface water should be discharged in the following order of priority:

1. To a suitable soakaway or some other form of infiltration system
2. An attenuated discharge to a surface water body such as a watercourse giving full consideration to the catchment and sub-catchments
3. An attenuated discharge to a public surface water sewer, highway drain or another discharge system where there is clear evidence, to the satisfaction of the Council, that alternative preferred options are not available
4. An attenuated discharge to a public combined sewer where there is clear evidence, to the satisfaction of the Council, that alternative preferred options are not available

Strategic Policy T1: Tourism Development

The Local Plan will support the creation, enhancement and expansion of tourist attractions, new build visitor accommodation and infrastructure in locations consistent with the settlement hierarchy. All tourism development must be of an appropriate scale, located where the environment and infrastructure can accommodate the visitor impact, and where it does not result in unacceptable harm to environmental assets (including landscapes, heritage assets and biodiversity) or the character of the area. Proposals for tourism development outside of defined settlements will be supported where:

- The proposal is for a specific activity or function that requires such a location; or
- The proposal enhances Copeland's existing place bound assets; or
- The proposal is for the change of use, or diversification of an existing building, to provide overnight or longer stay visitor accommodation; or
- The proposal is for a farm diversification scheme in a rural area that will provide or enhance tourist provision.

Policy T2: Tourism Development along the Developed Coast

Opportunities for tourist development in close proximity to the coastline (with the exception of areas designated as undeveloped coast) of an appropriate type and scale will be supported in principle where the proposal:

- a) Provides improved accessibility to the coastal walkways and cycle routes; or
- b) Improves the quality and range of holiday accommodation including overnight tourist provision; or
- c) Creates or enhances gateways and/or hubs; or
- d) Enhances the offer for both onshore and offshore visitors at Whitehaven Harbour including provision for the docking of cruise ships; or
- e) Provides opportunities to enhance the tourism offer in South Copeland.

In all circumstances development should be of an appropriate scale located where the environment and infrastructure can accommodate the visitor impact, and where it does not result in unacceptable harm to environmental assets including landscapes, heritage assets, and biodiversity. All development should ensure local landscape character is maintained and avoid detrimental impacts on setting of Heritage Coast.

Strategic Policy N1: Conserving and Enhancing Biodiversity and Geodiversity

The Council is committed to conserving Copeland's biodiversity and geodiversity including protected species and habitats.

Potential harmful impacts of any development upon biodiversity and geodiversity must be identified and considered at the earliest stage

Proposals must demonstrate, to the satisfaction of the Council, that the following mitigation hierarchy must have been undertaken:

Avoidance – Biodiversity and geodiversity must be considered when drafting up proposals and any potential harmful effects on biodiversity and geodiversity must be identified along with appropriate measures that will be taken to avoid these effects.

Mitigation – Where harmful effects cannot be avoided, they must be appropriately mitigated in order to overcome or reduce negative impacts.

Compensation – Where mitigation is not possible or viable or in cases where residual harm would remain following mitigation, harmful effects should be compensated for. Where this is in the form of compensatory habitat an area of equivalent or greater biodiversity value should be provided. Compensation is a last resort and will only be accepted in exceptional circumstances.

Where harm remains to a National Site Network, Ramsar site, or functionally linked land, or Site of Special Scientific Interest, development will only be approved where it can be demonstrated that there are imperative reasons of overriding public interest. In such cases, compensatory measures must ensure the overall coherence of the network of European or National Sites as a whole is protected.

Planning permission will be refused for any development if significant harm cannot be avoided, mitigated or compensated for.

A Construction Environmental Management Plan should be submitted where appropriate and sustainable construction methods must be used where possible.

Development proposals where the principal objective is to conserve or enhance biodiversity and geodiversity interests will be supported in principle.

Strategic Policy N2: Local Nature Recovery Networks

The Council will support the identification, implementation, protection and enhancement of Local Nature Recovery Networks that provide important linkages for wildlife within Copeland and beyond. Development which protects or enhances Local Nature Recovery Networks will be supported in principle.

Strategic Policy N3: Biodiversity Net Gain

All development, with the exception of that listed in the Environment Act 2021 and any documents which may supersede it must provide at least 10% biodiversity net gain over and above existing site levels, following the application of the mitigation hierarchy set out in Policy N1 above. This is in addition to any compensatory habitat provided under Policy N1.

Net gain should be delivered on site where possible. Where on-site provision cannot be achieved in full, the remaining provision must be made elsewhere. This should be provided in order of the following preference:

- Off site in an area identified as a Local Nature Recovery Network in the Plan area;
- Off site on an alternative suitable site within Cumberland ;
- Off-site on an alternative suitable site;
- Through the purchase of off-site biodiversity units on the market;
- Through the purchase of an appropriate amount of national biodiversity credits.

Sites where net gain is provided (on or off site) must be managed and monitored by the landowner for a minimum period of 30 years. Where appropriate applicants should supply a Habitat Creation Plan and a Habitat Management and Monitoring Plan (HMMP). Monitoring reports detailing the site's condition post-enhancement must be submitted to the Council each year over this period.

Where there is evidence of deliberate neglect or damage to any of the habitats on development sites in order to reduce its biodiversity value the biodiversity predevelopment value of the onsite habitat will be calculated as the biodiversity value of the habitat on the date immediately before the degradation took place.

Strategic Policy N8: The Undeveloped Coast

The Council will ensure that the landscape character of the undeveloped coast is maintained by conserving the intrinsic qualities, natural beauty and open character of the undeveloped coast from inappropriate development. Inappropriate development includes that which affects views within or towards/from the St Bees and Whitehaven Heritage Coast. The following types of development will however be supported:

- Development which supports the management of the undeveloped coast for biodiversity;
- Development which provides or improves safe access to and interpretation of the undeveloped coast for residents and visitors such as appropriate fencing, signage and interpretation boards;
- Energy generating developments that that require a coastal location along the undeveloped coast, provided that the potential impacts on biodiversity, landscape and heritage assets are carefully assessed against the benefits. Where negative impacts are likely these must be mitigated against and compensated for

APPENDIX C BIODIVERSITY PROTECTION ZONES AND ACTIONS ON THE NATURE RESERVE

APPENDIX D BIODIVERSITY PROTECTION ZONES AND ACTIONS ASSOCIATED WITH THE VISITOR CENTRE AND ADJACENT AREAS

REFERENCES

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- ² Greengage Environmental Ltd (2023) Phase 2 survey (ref: 551959ltJun23FV02_Phase2Surveys)
- ³ Greengage Environmental Ltd (2025) Phase 2 survey Addendum (ref: 553023lt05Dec25FV03_Phase2Surveys)
- ⁴ Defra (2022) <https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants>
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- ⁶ Bat Conservation Trust and Institution of Lighting Professionals (2023) Guidance Note 08/23: Bats and artificial lighting in the UK. ILP, Rugby
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- ²³ Cumberland Council (2024) Copeland, Local Plan 2021-2039