Outline Habitat Management Plan

Scoop Hill Community Wind Farm

November 2020

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community windpower

Starling Learning

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Community Windpower Ltd

Godscroft House,
Frodsham
Cheshire
WA6 6XU

Tel: +44 (0)1928 734544
Fax: +44 (0)1928 734790

www.communitywindpower.co.uk

Starling Learning

22 Braehead
Lochwinnoch
Renfrewshire PA12 4AS
Tel: 01505 843849
starlinglearning@hotmail.co.uk

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1 Introduction

1.1 Project Overview

1.1.1 Community Windpower Ltd (CWL) and CWL Energy Ltd have applied for S36 consent for Scoop Hill Community Wind Farm within the Southern Uplands, situated to the south of the town of Moffat in Dumfries and Galloway.

1.1.2 The proposed wind farm has been surveyed over a number of years from 2017 to 2020. A wide range of ecological and ornithological surveys have been carried out and an Environmental Impact Assessment completed, with mitigation measures proposed to ensure residual effects are minimal.

1.2 Objectives of the Habitat Management Plan

1.2.3 This Outline Habitat Management Plan (OHMP) has been prepared by Starling Learning on behalf of CWL and the Applicant.

1.2.1 This OHMP has been guided by the various ecological surveys carried out by Starling Learning and is intended to build on the information contained within the Environmental Impact Assessment Report (EIAR). It is also guided by the UK Post-2010 Biodiversity Framework, the Scottish Biodiversity List, the Dumfries and Galloway Local Biodiversity Action Plan (LBAP), and the Dumfries and Galloway Local Development Plan 2 (LDP2) 2019.

1.2.4 The OHMP proposes enhancement measures to mitigate any potential adverse impacts of the development on the ecology and nature conservation interests of the site. It also includes projects to enhance local biodiversity with community involvement. This will primarily involve the protection of habitats and species, mitigation and the creation and enhancement of habitats to diversify and improve biodiversity and conditions of the existing habitats on site.

1.2.5 This OHMP includes the following key aspects:

- Details of protected habitats and species;
- Details of appropriate compensatory habitat creations;
- Protection of species and habitats;
- Suggested timings of the provision of proposals; and
- A programme of monitoring and reporting on the success of mitigation measures.

1.2.6 This HMP should be considered to be an Outline HMP (OHMP). It is proposed that this is a working document which will evolve following planning permission and discussions between the developers, the landowners, the ECoW and organisations with responsibility for and an interest in key wildlife species such as the Biodiversity Officer at the Local Authority, Nature Scot (formerly SNH) and the RSPB. A Habitat Management Group (HMG) will be set up which will develop and co-ordinate an effective and workable plan for the site.

1.3 Background

1.3.1 Starling Learning has a comprehensive understanding of the ecological and ornithological conditions on site, following several years of survey work.

1.3.2 An Extended Phase 1 Habitat Survey, in accordance with the Joint Nature Conservation Committee (JNCC) methodology 2005, was also conducted and included searches for scarce or rare plants, assisted by the use of aerial photography.

1.3.3 An NVC survey was also carried out by Starling Learning in 2018 to 2020 which identified Groundwater Dependant Terrestrial Ecosystems (GWDTEs).

1.3.4 Ornithological surveys of various sections of the Scoop Hill development area were carried out by Starling Learning from 2017 to 2020.

1.3.5 Protected species surveys were also carried out by Starling Learning. Bats, badger, otter, red squirrel, pine marten and common lizard were recorded within the survey area and measures are incorporated to protect these species and to improve their habitats.

1.3.6 An Electrofishing survey was carried out during summer 2018 by the River Annan District Salmon Fishery Board.

1.3.7 These surveys revealed a number of significant habitats and species of conservation value that have the potential to be affected by the construction of a wind farm.

2 Aims and Broad Objectives of the HMP

2.1.1 The main aims and objectives are to:

- Examine ways to minimise disturbance and possible problems for key species;
- Examine how the ecological value of the site may be improved by changes in land management; and
- Increase overall biodiversity through management targeted at specific species.

2.2 Aim 1: To protect and enhance significant habitats

2.2.2 An Ecological Clerk of Works (ECoW) will be employed to ensure compliance with planning regulations and ensure protection of habitats and wildlife. This post will commence prior to the construction of the wind farm and will continue for the duration of the construction phase, during operation of the turbines and for the decommissioning phase, and will include the following:

- Ensuring the implementation of the HMP;
- Visits to the site during key periods such as track setting out and turbine installation;
- Micro-siting of turbines within the requested 100 m to avoid key habitats or possible disturbance to wildlife;
- Ensuring that the work is completed without contravening the Wildlife and Countryside Act and generally monitoring the Habitat and Species Protection Plan;
- Progress will be reported on a regular basis to Community Windpower, Dumfries and Galloway Council, the Landowners, SNH, and RSPB with any suggested alterations required being agreed by these bodies;
- Planning officers will be invited to site to check implementation of the works;
- Liasing at all stages with CWL and the landowners; and
- Ensuring post-construction monitoring takes place.

2.2.3 The habitats of significant conservation value and GWDTEs have generally been avoided, and where this is not possible, mitigation measures will be put in place. Good practice will be followed at all times in order to avoid pollution and damage to habitats.

2.3 Aim 2: To protect bird species and enhance bird habitats

2.3.1 Care will be taken to avoid disturbing all nesting birds. Special care will be taken to avoid disturbing any potential breeding Annex 1 species including golden eagle and black grouse.

2.3.2 Positive management will also improve the site, or off-site where possible, for various species including black grouse.

2.4 Aim 3: To protect and to enhance the site for mammal species, in particular otter, badger, and bat species

2.4.1 The site has localised otter activity, and in these areas, they will be protected and enhancements will be made to their environment. It is the aim that the HMP will lead to increased use of the site within the currently used areas and possibly also to expand the range of this species within the site.

2.4.2 Bats were recorded foraging in generally low numbers. Attracting bats to the area is not advisable due to the risk of collision with the turbines. However, the HMP aims to increase the number of bats using the lower farmland areas and villages by increasing the scope for feeding and roosting. Turbines will also be located at a suitable distance from forest edges to reduce the risk of collision.

2.4.3 The area has a high badger population; setts will be protected, and it is intended to improve an area of the site for this species by providing improved areas for foraging.

2.5 Aim 4: To enhance the site for other species of conservation concern including common toad and common lizard

2.5.1 Measures will be put in place to protect reptiles and amphibians and enhance habitats for them.

2.6 Aim 5: To protect watercourses and enhance water quality for freshwater invertebrates and fish

2.6.1 The information gained from the series of electrofishing surveys will be used to inform the Construction Environmental Management Plan (CEMP) (which will be submitted prior to construction beginning onsite) on appropriate mitigation to be employed throughout the construction phase of the wind farm;

2.6.2 Robust measures will be put in place to protect the water environment.

2.6.3 Riparian planting at the headwaters and along sections of various watercourses will enhance water quality.

2.7 Aim 6: Education and Community Involvement

2.7.1 To contribute to the Dumfries and Galloway Local Biodiversity Action Plans.

2.7.2 To work with school children and the local community to increase their awareness and appreciation of local wildlife.

2.7.3 To provide work experience for local college students looking to gain experience of working in the ecological and environmental management sectors.

3 Habitat Protection and Enhancement

3.1.1 The locations for all infrastructure including turbine bases, tracks, borrow pits, site storage areas and temporary construction compounds have already been chosen to avoid and reduce impacts on the most important habitats and avoiding GWDTEs. The direct impact of the development will be mitigated further by alterations through micro-siting to various turbine locations and the route taken by the access track.

3.1.2 The Construction and Environmental Management Plan (CEMP) will include a constraints map detailing all GWDTEs. These will also be included in the SEPA Construction Site Licence with details on avoidance or measures to greatly reduce negative impacts. Prior to construction, the footprint of the wind farm will be walked by the ECoW with the site engineer and the GWDTEs identified with discussions regarding whether any amendments are required, these will be discussed with SEPA and any amendments made to the Construction Site Licence.

3.1.3 Robust surface water management measures including suitably sized attenuation ponds in groups of three at each location, silt traps and silt nets will be put in place following good practice and these will be overseen by and agreed with the ECoW. All locations of the pollution prevention measures will be detailed in the SEPA Site Construction Licence.

3.1.4 Construction phase potential impacts resulting from pollution by fuels, oil, servicing chemicals and leaching from cement will be avoided by the adoption of best working practices, choice of the most appropriate cement mix and design of servicing areas.

3.1.5 During construction, the working area will be kept to a minimum to avoid unnecessary peripheral habitat disturbance and the accumulation of unnecessary amounts of loose material that might be washed away during periods of heavy rain.

3.1.6 Good practice will be followed to design an effective drainage system to allow proper distribution of water to down slope areas. Where cut tracks are used these will have cross pipes inserted at suitable intervals to spread out the supply of water.

3.1.7 The outflow from cross drains will be carefully designed to vent diffusely, close to the ground, and will be positioned to avoid areas with silty or saturated soil.

3.1.8 Wherever necessary, floating tracks will be used to traverse mire habitats and where peat depth is 0.5m or deeper, thus allowing water to pass underneath the track, or through its lower layers.

3.1.9 Where flush habitat has to be crossed, an additional lower layer design will be used with perforated pipes spaced over the width of the flush and set within a matrix of open graded free draining material wrapped in separator geotextile.

3.1.10 Regular inspections will be made to check whether the drainage systems remain operating as intended. This should ensure a proper supply of water for sensitive communities.

3.1.11 Best practice will be employed during and after deep excavations for turbines and borrow pits. Settling ponds will be used to store excess water accumulating in the excavation areas. Clean filtered water from the settling ponds will be released in appropriate areas, maintaining water supply to downslope wetland communities.

3.1.12 Turves with vegetation representative of the site from excavation work will be stored for use in dressing the disturbed edges around the infrastructure. This will prevent the erosion of loose soil and colonisation by undesirable plant species. The turves will be stored separately from the peat and topsoil.

3.1.13 Habitat enhancement at Scoop Hill will aim to improve the condition of the upland habitat mire complex. The habitats have been subject to much drainage and grazing for many years. Much of the blanket bog in the area has been slowly converted to poorer quality dry modified bog. The dry modified bog has been identified as having the potential for recovery and would respond to a programme of grip-blocking and a reduction in grazing pressure. There is some peat hagging which will continue to deteriorate over time; this too will benefit greatly from bog enhancement measures. This will consist of grip blocking, pool excavation and re-sculpting of some of the peat hags.

3.1.14 Areas of blanket bog that will be considered by the HMG include Milne Height, and the open spaces in the eastern conifer plantation (Silton Forest). The rest of the blanket bog is quite close in composition to heath: heavily dominated by heather, with little cottongrass, and limited Sphagnum suggesting poor blanket bog, on probably quite thin peat.

3.1.15 Figure 1 highlights examples of areas where bog enhancement would be possible. The full extent of bog enhancement will be agreed with the HMG but will be carried out over a minimum area of 100ha.

3.1.16 Where the topography is suitable there is potential for increasing the value of the mire habitats by creating the conditions for basin mire during the restoration of borrow pits. Few examples of basin mire are currently found in the study area and the former borrow pits provide an ideal opportunity to increase the number.

3.1.17 Habitat enhancement will also include the establishment of cleuch riparian woodland. At present, very little broadleaved woodland exists at the site. The biodiversity of the site would be improved for many species including badger, black grouse, and songbird populations and would enrich the available habitat. Care will be taken to plant so that other bird species such as curlew will not be displaced. It will also avoid encouraging bats into the areas with turbines. Areas will be selected carefully in order not to encourage grey squirrels into the conifer forest areas. The full extent of the riparian planting will be agreed with the HMG but will cover a minimum of 3.5 ha.

3.1.18 Upland cleuch woodland planting will include a mixture of upland birchwoods, upland montane-scrub communities and juniper scrub. Species will include downy birch, some silver birch, rowan, aspen, hawthorn, blackthorn and downy willow. In lower reaches there will be some native broad-leaved planting of climax species such as sessile oak, ash and wych elm. Some examples of areas where cleuch planting may take place are shown on Figure 1.

3.1.19 One main area is the Wamphray Water and some of its tributaries in the Laverhay area. This would join up existing areas of woodland. A second potential area is the Staffenbigging Burn, another tributary of the Wamphray Water linking to woodland along the Kirk Burn. A third is a steep cleugh containing the Brunstone Burn to the south of Brock Hill. However, final planting areas will be agreed by the HMG.

3.1.20 A belt of native woodland will be planted to screen the turbines from Kirkhill cottages. The planting will consist of a substantial belt of strategically placed attractive native broad-leaves with some evergreen understorey such as Holly, planted to the east of Kirkhill Cottages. This is shown in Figure 2.

3.1.21 The trees will be planted approximately 5m from the boundary of the Kirkhill cottages and will be in a band approximately 5m wide. This planting belt will be established on land under the control of the applicant using semi standard trees that grow to maximum heights of between 15 to 60m thereby maximising the screening benefits without totally compromising access to open views. It will be ensured that the trees do not overhang the gardens of the cottages. Table 1 shows suggested species.

3.1.22 The native deciduous trees will be varied and will provide a mix of final heights. Aspen is very fast growing and this and the other species are very attractive with good autumn colours.

Table 1. Suggested Native Broad-leaved Trees

Deciduous species	**Rate of growth**	**Height after 4 to 5 years (2024/25)**	**Final height (approximate)**
Aspen *Populus tremula*	Plant at 2m high, then average of 60cm per year	5m	25 to 40m
Silver Birch *Betula pendula*	Plant at 2.5m, 40 cm per year	4.5m	15 to 20m high
Downy Birch *Betula pubescens*	As with Silver Birch	4.5m	15 to 20m high
Dawn Redwood *Metasequoia glyptostroboides*	Plant at 2m, grows 60cm per year	5m	50-60m

3.1.23 These will be planted during the 2020/21 growing season in order to maximise the benefits of the screen giving the trees four to five years to establish prior to the construction of the wind farm.

3.1.24 There is currently a band of conifers to the south of the proposed planting site and a band of deciduous trees to the north and a mature hedgerow to the east. These current areas of woodland and the proposed planting will join to one of the proposed areas of riparian planting detailed above forming a wildlife corridor.

4 Species Protection and Specific Habitat Enhancement

4.1 Birds

4.1.1 Any disturbance to nesting birds will be avoided, by ensuring that all ground clearance will be undertaken outside the bird breeding season (from March to August inclusive) on the moorland. Key-hole felling will also take place out with the breeding season. Should any ground clearance or felling work be required during the breeding season this will be kept to an absolute minimum and a nest check survey will be carried out by a competent ornithologist prior to any works. SNH have requested a Species Protection Plan for Common Crossbill. This species is a Schedule 1 species and nests very early in the season (can start as early as December). This is very much dependant on the cone crop and this will be written nearer to the time of felling in order that suitable mature conifer stands can be identified and felled at the correct time (September to November).

4.1.2 The ECoW will ensure that measures are put in place should nests be discovered to ensure no further disturbance to nesting birds. For example, the area with the nest will be avoided till after birds have fledged, this will be monitored by the ECoW. Buffer zones will be set up round the nest, the size of which will be determined by the bird species.

4.1.3 Displacement to breeding birds will mainly be temporary and outside the breeding season. Improvements suggested within the HMP will ensure any permanent displacement is insignificant.

4.1.4 The turbines, access tracks and ancillary structures will avoid habitats of bird significance as far as possible. Any micro-siting will be agreed with the ECoW.

Black Grouse

4.1.5 A buffer zone will be set up around the black grouse lek on Broadfield Height. No work will take place within 750m during April and May before 9 am to avoid disturbing lekking birds.

4.1.6 The riparian planting will include birch, hawthorn and willow and other species that will attract black grouse. Any fencing will have coloured markers in order to avoid collision by black grouse following Forestry Commission guidance '*Fence marking to reduce grouse collision'* [1]. Fencing will be removed once the trees are established (approximately 5 years).

4.1.7 Planting will take place of small areas of open broadleaved woodland/scrub in suitable locations such as Stots Cleugh around Broadfield/Glengap Burn, near the locations of the confirmed lek. Open woodland is a significant part of the habitat requirements of black grouse. The maturing woodland will also support mountain hare.

4.1.8 Heather management will take place on the Broken Back and Craig Fell area to ensure a range of heights for feeding, nesting and cover, by swiping rather than burning. General areas of dense heather are shown in Figure 1. Areas will be swiped in a rotational fashion, with 0.1ha being swiped each year, outwith the bird breeding season.

[1] Trout R. Kortland K. 2012. Fence marking to avoid grouse collision. Forestry Commission

Goshawk

4.1.9 Pre-construction surveys will identify any goshawk nests and no work will take place within 1km of the nest during the breeding season. The nest will be monitored by the ECoW who will liaise directly with the Scottish Raptor Study Group.

4.1.10 There are very few areas left within the site after recent commercial felling that are suitable for goshawk nests and there is the possibility it may not have another nest for some years. Discussions will take place with forest managers to agree an area where trees can be left to mature past the felling age, in order that they may be used by goshawk in the future.

Barn Owl

4.1.11 Barn owl nestboxes will be erected at two locations which are a minimum of 2km from the turbines.

4.1.12 A barn owl tower will also be erected. The Gillesbie area would be suitable where the habitats are relatively open.

Examples of Barn Owl towers are shown below:

Golden Eagle

4.1.13 A buffer zone will be set up around the golden eagle roost locations.

4.1.14 The general enhancement of the habitat to the northwest of the site will offset the immediate negative impact of the development on golden eagles which can be displaced where wind farm construction is occurring.

4.1.15 There will be liaison with the South of Scotland Golden Eagle Project (SoSGEP). As well as agreeing habitat enhancement with them, there will be assistance given to the SoSGEP project, to help their work with golden eagle monitoring and their work with schools and communities promoting the release of the eagles in the area. Current participants in the SoSGEP are: Scottish Government, Nature Scot (SNH), RSPB Scotland, Forestry Commission, Buccleugh Estates and Scottish Land and Estates. Discussions have already taken place with

SoSGEP who expressed an interest in working with CWL. SoSGEP have requested permission to access the wind farm site to monitor the golden eagle and potential interactions with the released eagles and liaison will take place between the project and CWL.

4.1.16 Management of the available ground within the site would potentially focus on:

1) Taking general steps to increase the food sources (i.e. red grouse/mountain hare/ black grouse) for the eagles;
2) Red grouse numbers could be increased by some extent by cutting/burning the heather for new growth in the northern parts (Craig Fell/Gallatae/Glengap Head – Dryfe Valley (Rue Gill/Ewelairs/South Loch Fell/Jock's Shoulder). Red grouse management would also benefit mountain hare;
3) Maintaining the current availability of rabbits in the Broadfield/Gallatae area;
4) Consider supplementary feeding of carrion (deer supplied by local stalkers (such as the current forest stalker); and
5) Enhancements for black grouse, see section 4.1.5.

Other Species

4.1.17 A variety of other nestboxes will be erected at adjacent farms and maintained for the duration of the wind farm, including kestrel.

4.1.18 Flocks of golden plover have the potential to be displaced in winter during construction. These will be carefully monitored by the ECoW, their roost locations noted, and attempts made to minimise disturbance.

4.1.19 A Species Protection Plan will include common crossbill, see section 4.1.1.

4.1.20 Heather will be allowed to grow long on the slopes of Broken Back. The site looks ideal for hen harrier but none were recorded breeding. Merlin were recorded in this area, and the long heather would provide nest sites for this species too.

4.1.21 Habitat enhancement for blanket bog will improve the site for breeding waders including curlew, see section 3.1.13. To the west of Brock Hill there are wet rushy areas, so two wader scrapes will be dug and maintained in this area.

4.2 Protected Species

Bats

4.2.1 To minimise the potential for disturbance to bats during the construction process, ground clearance along the woodland edge will be undertaken in winter or early spring when bats are less likely to be active. If construction works are undertaken during the active season for bats, construction activities will be limited to daylight hours and no work is undertaken at dawn or dusk near to preferred foraging areas for bats. This would limit the potential for disturbance to bats by avoiding the need for night-time lighting on the construction site, which could deter foraging around the site. It would also attract moths to the lights encouraging bats to feed around them.

4.2.2 To minimise the potential for collision, turbines will be placed a minimum distance of 50 m from the tip of the blade to the forest edge.

4.2.3 Broad-leaved tree planting within the cleughs away from turbine locations will enhance foraging opportunities. Bat boxes will be erected in suitable locations such as at farmhouses and in woodland distant from the turbines.

4.1.22 Bat boxes and a bat tower will be erected in suitable locations such as at farmhouses and in woodland distant from the turbines. This will include the property at Finniegill where bats are already present. A long-term maternity roost facility will be erected here.

4.1.23 Some mitigation work will be carried out to enhance the habitat for bats with a view to keeping them away from the turbine ridges. Bats were recorded very frequently in the areas below the wind farm such as Leithenhall. Tree planting will take place along the watercourses with insect attracting nectar plants such as ivy and honeysuckle (see Section 3.1.18 for more information).

Otters

4.1.24 A pre-construction survey for otters will also be carried out to determine the current status of otters on the site at that time and ensure that, if there has been any recent change in otter activity around the site, any necessary mitigation measures which have been proposed, can be implemented.

4.1.25 The ECoW, in liaison with the construction engineers, will ensure the location of the access tracks and structures are more than 30m from holts or lie-ups (100m for a breeding holt), and a strict precautionary method of working will be set in place by the ECoW. This may necessitate an application for a European Protected Species Licence (EPSL) from Nature Scot prior to any works being carried out. However, it may also be possible to avoid any potential for disturbance to otters by careful timing of the works and sensitive working methods, depending on the proximity of the holt/lie up to the works, and thereby avoiding the need for a licence.

4.1.26 Watercourse crossings have been identified in the Hydrology assessment (Section 10 of the EIAR). Should the access tracks need to be altered, any culverts or bridges will be designed with sufficient headroom to allow passage by otters along watercourses, including during spate conditions, and to maintain water quality and flow. This may necessitate the inclusion of ledges and diversionary fences to facilitate movement; however the specific design will be agreed with SEPA/Nature Scot prior to construction.

4.1.27 Any scrub woodland or other dense vegetation, beside watercourses, will be retained to provide suitable cover for lie-up areas and facilitate movement of otters through the site. Site contractors will be informed of any sensitive areas to ensure no accidental disturbance to holts or resting places.

4.1.28 If culverts or piping are to be stored on site, these will be capped to avoid entrapment of otters inside. In addition, any excavations over 0.5m deep, such as turbine bases or borrow pits, will be covered over at night or ramped on one side to enable otters (and other animals) to escape if they fall in. Temporary fencing will also be installed around these excavations to avoid animals falling in.

4.1.29 Strict pollution prevention measures will be implemented to ensure no impacts on water quality, which could have indirect impacts on the otter population. These will include

standard good practice measures to control silt levels, oil and fuel spills. Water monitoring will be carried out.

Fish

4.1.30 Robust surface water management measures will be put in place following good practice and overseen by the ECoW. Water quality monitoring will take place. All infrastructure will be located a minimum of 50 m from any watercourse. Culverts and bridges will be designed to allow fish passage at all times and their construction agreed with the ECoW, SEPA and the River Annan District Salmon Fishery Board (RADSFB).

4.1.31 Any in-stream construction procedures will be discussed with SEPA and the RADSFB prior to works commencing.

Badgers

4.1.32 A 30m buffer zone will be implemented around any badger setts to avoid any potential disturbance during the construction process. A pre-construction check will be made across the site to check on existing sett locations and to search for any newly excavated badger setts or any not located during the original survey, which could be impacted by the construction. Disturbance will be avoided during the breeding season (1st December to 30th June) by the implementation of buffer zones of 100 m around each known sett These buffer zones will be set up by the ECoW on site who will monitor badger use of the site during construction, to further assess the disturbance impacts associated with construction and advise construction workers if any changes are necessary. Setts within 100 m of a borrow pit will require a license from Nature Scot and excavation of the borrow pit will not take place during the breeding period between December and June. Exclusion of badgers from setts will not be considered unless it is absolutely necessary.

4.1.33 Sources of seasonal food will be planted e.g. gean, elder, apple and plum. This will take place near to setts in the Gillesbie area.

Red Squirrels

4.1.34 A pre-construction check will take place where all key-hole felling is to take place to check for dreys. To reduce the impact on breeding squirrels, all felling will take place outwith the breeding season of March to August inclusive. No broad-leaved tree planting will take place within the forest as this may attract grey squirrels.

Reptiles

4.1.35 During spring and summer, the site will be checked for reptiles immediately prior to each stage of the work, and then it may be necessary to translocate reptiles from the development area. Although, the only reptile recorded was common lizards and very few of them were recorded.

4.1.36 Carrying out ground clearance out with spring and summer months will minimise disturbance to reptiles. However, there is the possibility of disturbing hibernating reptiles. Any suitable hibernaculums that require to be removed for construction, such as stone walls, will be de-constructed in July (post breeding and prior to hibernation). This will be overseen by the ECoW. Two new hibernaculums will be constructed on site. An example is shown in Appendix 1.

Amphibians

4.1.37 As with reptiles, avoiding ground clearance in spring and summer will minimise disturbance to amphibians. Strict pollution measures during construction will also minimise the risk of pollution to wet areas and ponds.

4.1.38 Habitat enhancement for amphibians will also take place including creation of wildlife friendly attenuation ponds for construction which will be left on site following completion of construction. It will be ensured these have shallow sides and will be suitable for use by amphibians.

5 Schools and Community Benefits

5.1.1 The Scotland's Rural College (SRUC) Barony Campus students from the *Rural Skills* course will be offered the chance to assist with various conservation tasks relevant to their course, some examples include:

- Tree planting; and
- Students invited to accompany ecologists on to the site to learn about and assist with post construction monitoring as part of the rural species identification and habitats.

5.1.2 The participating students will be provided with a certificate outlining the skills learnt, thus helping them with employment opportunities.

5.1.3 Tree planting will be assisted by various community groups including volunteers, Scottish Wildlife Trust (SWT) members, forestry students, long term unemployed, and refugee groups. This has been very successful at the CWL Calder Water Wind Farm compensatory planting scheme.

5.1.4 Local schools (such as Beattock, Johnstonebridge and Hutton Primaries) will each be offered a workshop focusing on planting for birds, butterflies and bees and other biodiversity features of their school playgrounds. Plants and assistance with planting will be provided by CWL. The local secondary schools (Moffat Academy) will be offered a day of biodiversity recording to assist with their Eco School programme.

5.1.5 The secondary schools will also be offered opportunities for work experience, taking part in ecological surveys in their local area and within the wind farm.

5.1.6 Dumfries House has a Science Technology Engineering and Maths (STEM) Centre. Training courses on ecology will be offered to teachers as part of their on-going 'In Service' training for teachers in STEM using Starling Learning environmental education section. Discussions have been had with Dumfries House and they feel ecology and biology topics have been lacking in their education programme and Starling Learning and CWL could help to improve this.

5.1.7 A series of short training courses will be made available to unemployed people in the Moffat, Boreland, Johnstonebridge area. This will involve learning various skills including:

- Tree growing and planting;

- Growing and planting of wild flowers;
- Nestbox and Batbox construction;
- Wildlife gardening;
- Basic ecological surveys;
- Ponds for wildlife; and
- Hedgerow planting.

5.1.8 The participants will be provided with a certificate outlining the skills learnt, helping them with employment opportunities.

5.1.9 Workshops will be offered to surrounding communities including Moffat and Boreland for individuals and families to take part in various activities including building nestboxes and bat boxes and wildlife gardening.

5.1.10 In conjunction with local primary schools, bird feeding stations will be set up in a number of care homes including Bankfoot House. Pupils will help set up a bird table, feeding station and identification chart and will assist the residents with feeding the birds and bird identification.

5.1.11 Working with the SoSGEP will include eco tourism benefits.

6 Implementation

6.1.1 The majority of the work will be implemented by CWL, in conjunction with the landowners. Ecological Contractors will also be employed to carry out various aspects of the conservation management.

6.1.2 The HMG will be set up giving organisations an input into the HMP. This will be organised by the CWL ecologist with various bodies invited to participate (e.g. Biodiversity Officer, RSPB, Nature Scot, Scottish Raptor Study Group). It is envisaged that the HMP will be an evolving document; all alterations will be agreed with the HMG prior to implementation.

6.1.3 Following agreement of the HMG, work will commence within three months of generation. An approximate timetable is given in Appendix 2.

6.2 Monitoring and Reporting

6.2.1 An Ecological Clerk of Works (ECoW) will be appointed to monitor the progress of the HMP and to ensure the Species Protection Plan is implemented. The ECoW role will also include responsibility for advising on any practical ecological issues that may arise and, where necessary, make recommendations where changes to the HMP may be required.

6.2.2 The black grouse lek adjacent to Broadfield Height will be monitored every year before and during construction.

6.2.3 Pre-construction surveys will be carried out close to the commencement of the building of the wind farm to check existing and any new setts, holts or other protected structures.

6.3 Post-Construction Monitoring

6.3.1 Post construction monitoring will be undertaken to assess the status of habitats, birds and protected species within the wind farm site and also in the various areas where mitigation has taken place. If necessary, a prescription of measures would be put in place in order to reduce any negative impacts of the wind farm.

6.3.2 Various target bird species including golden eagle, black grouse, goshawk and waders will be monitored during construction, one year following the completion of the works and again when operational at a level agreed with Nature Scot and again during decommissioning. A report will be submitted to the above bodies in the HMG regarding their status. The status will be discussed, and should management need to be changed, discussions will take place and the management plan revised accordingly.

6.3.3 For mammals, there will be surveys in years one and three of the operational phase which will monitor their status and progress. This will be done again on a level agreed with Nature Scot and again during decommissioning. Amendments to habitat management will be made if deemed necessary.

6.3.4 Follow up surveys of fish will be repeated, during construction and following completion of construction activities. Thus, an assessment of overall impacts can be made on the fish community now known to exist in the vicinity of the Scoop Hill wind farm.

6.3.5 Surveys of amphibians and invertebrates using the attenuation ponds will take place one year and five years following construction.

6.3.6 Habitats will be monitored following HMP enhancements. This will include monitoring of tree planting and beating up where necessary and enhancement of the bog.

6.3.7 Reports will be produced after each year of monitoring and shall be made available to the members of the HMG for review.

Appendix 1. Two common lizard hibernaculums

A 50cm base will be dug out and lined with sand and gravel. The hole will be filled with rocks and logs and brash piled on top. This will create nooks and crannies for common lizards. Soil and turf from the excavation will be piled on top for insulation. Gaps will be left for reptiles to enter and leave.

The hibernaculum would be constructed using local materials

Appendix 2. Timetable

Prescription Summary	Prior to construction	During construction	Following construction	Regularly
ECoW in place, discussing construction with contractors	✓	✓	✓	✓
Habitat and species protection	✓	✓	✓	✓
HMG meeting		Groups invited to meeting prior to habitat management commencing		✓
Riparian Woodland			Commence planting within 1 year of completion of construction	
Beating up of trees			One year and five years later	
Native planting screen Kirkhill cottages	✓			
Nestboxes and bat boxes erected			Commence within 1 year of completion of construction	replaced if necessary
Bog enhancement		Areas agreed for bog enhancement	Will commence within one year following construction	
Barn Owl tower		✓		
Hibernacula for reptiles			Within one year following construction	
Nestboxes and bat boxes for local properties		✓		
Ponds for amphibians		✓	Maintained post construction	
School and community work			Commence immediately following construction	
Assessment of HMP				✓
Monitoring	✓	✓	✓	✓

374 Scoop Hill

Legend

- Site Boundary
- Wind Turbine (180m to tip)
- Wind Turbine (200m to tip)
- Wind Turbine (225m to tip)
- Wind Turbine (250m to tip)
- Permanent Met Masts
- Access Tracks
- Site Entrance
- Existing Access Tracks to be Upgraded
- Substation & Control Room
- Substation & Control Room Construction Compound
- Temporary Construction Compound
- Borrow Pit
- Existing Quarries or Borrow Pit
- Borrow Pit Area of Search
- Potential Native Planting Areas
- Potential Riparian Planting Areas
- Potential Bog Enhancement Areas
- Potential Heather Swiping Areas
- Potential Areas for Wader Scrapes

Notes: N/A
Revisions: N/A

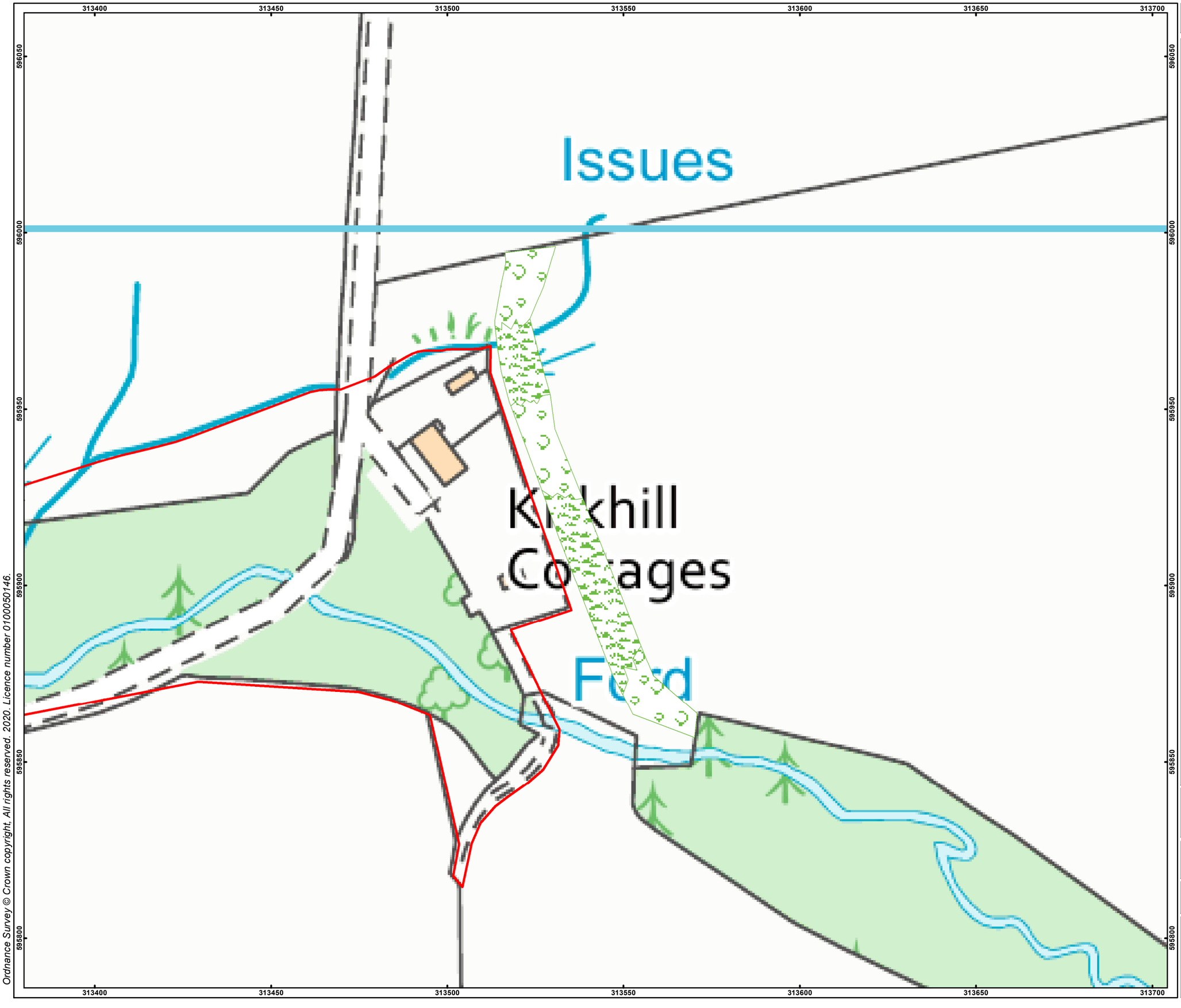
0 500 1,000 2,000 m
Scale: 1:55,000 @ A3

N

Figure 1 - HMP

Date: 28/07/2020 Ref: 374-200820-7406
Produced: DR Reviewed: SM Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk



374 Scoop Hill

Legend

- Site Boundary
- Lower Planting
- Taller Planting

Notes: N/A
Revisions: N/A

0 12.5 25 50 m

Scale: 1:1,000 @ A3

N

Figure 2 - Native planting screen for Kirkhill Cottages

Date: 05/11/2020 Ref: 374-201105-7428

Produced: DR Reviewed: SM Approved: GC

community windpower
Godscroft Lane
Frodsham - WA6 6XU
t: 01928 734544 f: 01928 734790
e: info@communitywindpower.co.uk w: www.communitywindpower.co.uk