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Introduction

15.1 The Schedule of Commitments identifies the mitigation, compensation and enhancement measures that have been proposed throughout the Environmental Impact Assessment (EIA) Report to prevent, reduce or offset the effects of the proposed development on the environment.

15.2 Mitigation measures have been integral to the design evolution of the proposed development as described in **Chapter 2: Site Description and Design Evolution**. A series of environmental and technical constraint design reviews were undertaken to minimise potential significant environmental impacts prior to finalising the final design of the proposed development. Areas which were examined in depth include landscape and visual constraints, peat, sensitive habitats, cultural heritage and hydrological constraints.

15.3 The mitigation measures in **Table 15-1** are those which would be applied during the construction, and operation of the proposed development. A number of these measures are embedded mitigation, undertaken through good practice and to adhere to relevant legislation during all stages of the proposed development.

15.4 Embedded design mitigation measures are not included in the table but are described in **Chapter 2: Site Description and Design Evolution**.

Schedule of Commitments

Table 15-1: Schedule of Commitments

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
Chapter 3: Description of Development	Pre and during Construction (CEMP)	**Outline Construction and Environment Management Plan (CEMP)** An outline Construction Environmental Management Plan (CEMP) for the proposed development is provided in **Technical Appendix 3.1** which sets out the principles which would be detailed in a detailed CEMP, to be agreed prior to construction commencing. This detailed CEMP would be agreed with Clackmannanshire Council and Perth and Kinross Council in consultation with relevant statutory consultees. The detailed CEMP would, as a minimum, include key details of: • An updated Schedule of Mitigation (SM); • A Construction Methodology Statement (CMS); • A Site Health and Safety Plan; • A Pollution Prevention Plan (PPP); • A Site Waste Management Plan (SWMP); • A Water Management Plan (WMP); and • A Construction Traffic Management Plan (CTMP); From the list above an outline CTMP (within **Technical Appendix 12.3**) has been prepared. This document would be updated into a detailed version, in conjunction with preparation of the detailed CEMP, prior to construction commencing and in agreement with Clackmannanshire Council, Perth and Kinross Council, and other relevant stakeholders.
	Construction	**Battery Storage Fire Safety Plan** A Battery Energy Storage System (BESS) Fire Risk Statement has been prepared and included as **Technical Appendix 3.3** of the EIA Report. This document would be updated, post consent, to a full BESS Fire Safety Plan which would be applicable to the construction phase of the proposed development. The

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		BESS Fires Safety Plan would be prepared, prior to construction commencing, in agreement with Perth and Kinross Council, and other relevant stakeholders.
	Construction	**A Peat Management Plan (PMP)** An Outline Peat Management Plan has been prepared and included as **Technical Appendix 10.2** of the EIA Report. This document would be updated, post consent, to a full Peat Management Plan which would be applicable to the construction phase of the proposed development. The full Peat Management Plan would be prepared, prior to construction commencing, in agreement with Clackmannanshire Council, Perth and Kinross Council, and other relevant stakeholders.
	Construction	**An Access Management Plan** An Access Management Plan has would be prepared, post consent, which would be applicable to the construction phase of the proposed development. The Access Management Plan would be prepared, prior to construction commencing, in agreement with Clackmannanshire Council, Perth and Kinross Council, and other relevant stakeholders.
	Construction	**Environmental Clerk of Works (EnvCoW)** The applicant will engage an EnvCoW onsite during the construction phase. The services of other specialist advisors will be retained as appropriate, such as an Archaeological Advisor, to be called on as required to advise on specific environmental issues. The Principal Contractor will ensure construction activities are carried out in accordance with the mitigation measures outlined in this Schedule of Commitments, the EIA Report and any planning conditions, and this will be monitored by the applicant and the EnvCoW.
	Construction (Micrositing)	**Micrositing** It is proposed that a 50m micrositing tolerance of turbines and all other infrastructure would be applied to the proposed development. Within this distance any changes from the consented locations would be subject to approval of the ECoW as required and in consideration of other known constraints.
	Construction (Access Tracks – Peat)	**Floating Road Construction** It is anticipated that approximately 1.68km of floating tracks will be required where peat has been consistently identified on site in depths (typically over 0.5m). Floating road construction is described in the

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Peat Management Plan (**Technical Appendix 10.2**). The construction comprises the laying of a geosynthetic (geotextile mat or geogrid reinforcement) across soils prior to constructing the road. Where required, risk from run-off would be mitigated by directing drainage to settlement ponds. Erosion processes on the roadside embankments and cuttings would be mitigated by ensuring that gradients are below stability thresholds, which would also enable effective regeneration of vegetation. Sediment traps would also be required in the early years following construction until natural regeneration is established. The tracks would be left in place following construction to provide access for maintenance, repairs, and eventual decommissioning of the proposed development. At the end of the construction period the edges of all new tracks would be restored using materials stripped from excavations.
	Construction	**Watercourse Crossings** Two new watercourse crossing will be constructed as part of the proposed development to minimise impacts upon the water environment. Details of watercourses crossings are set out within **Technical Appendix 10.4: Schedule of Watercourse Crossings**, with further detail (as required), post consent, being provided as part of the full CEMP.
	Construction	**Lighting** Artificial lighting may be required during the construction phase to ensure safe working conditions, during periods of limited natural light. Examples include vehicle and plant headlights, construction compound lighting, floodlights and mobile lighting units - to be used around specific construction activities. It is intended that the type of lighting would be non-intrusive (e.g. directed towards work activity and away from the site boundary), to minimise impact on local properties and any other environmental considerations. Further details on lighting are provided in **Technical Appendix 3.1: Outline Construction Environmental Management Plan**. A detailed CEMP would be agreed with Clackmannanshire and Perth and Kinross Councils in consultation with relevant statutory consultees, prior to construction work commencing.
	Construction	**Materials Sourcing and Waste Management** For construction, the proposed development would require a range of materials (e.g. stone for access tracks, the temporary site compound and the substation compounds). Excavated material from the turbine bases and access tracks would be used on site for restoration/reinstatement. A Site Waste Management Plan would be developed for implementation during construction, as discussed in the **Outline CEMP (Technical Appendix 3.1)**. This outlines the materials requirements and waste generation during construction and how the applicant intends to consider the management of these aspects.

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		Concrete would be batched onsite at the construction compound for which water would be required. Water would also be required for welfare facilities and to dampen track during dry weather, although this would be minimal and an abstraction license is not anticipated to be required.
	Construction	**Borrow Pits** Two borrow pits may be utilised (following ground investigation work). These are detailed within **Technical Appendix 10.3 Borrow Pit Assessment**, with further detail (as required) to be secured via planning condition (borrow pit scheme of works and borrow pit blasting). .
	Post Construction	**Reinstatement** After construction has been completed, the crane hardstandings will remain in place for future maintenance, but the construction compounds and turbine laydown areas will be restored as close as possible to their original condition. All portacabins, machinery and equipment will be removed from the compounds prior to the proposed development becoming operational. Site restoration will be programmed, managed and carried out to allow restoration of disturbed areas as early as possible and in a progressive manner. A Decommissioning and Restoration Plan will be agreed with Clackmannanshire Council and Perth and Kinross Council prior to construction.
	Post Construction	**Foundations and Hardstanding** Soils that are excavated during construction (i.e. foundations and hardstanding areas) would be set aside for backfilling the batter areas around the turbine bases and hardstandings and for use of small bankings either side of access tracks. Further details of soil storage are contained within the associated **Technical Appendix 10.2 Peat Management Plan**.
	Post Construction	**Site Restoration – Peat** Soils and peat would be used for reinstatement works associated with access tracks, cable trenches, turbine foundations, crane hardstandings, borrow pits and the temporary construction area. The upper vegetated turfs would be used to dress infrastructure edges and to reinstate the surface of restoration areas. It is anticipated that most of the soil resources within areas directly affected by construction activities would be stored and reinstated as close as possible to where they were excavated in accordance with best practice; so that the site would be restored with minimal movement of material from its original location. It is not anticipated that any excavated material would leave the site. Detail of how excavated peat would be

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		used for reinstatement works would be set out in the full Peat Management Plan and the Borrow Pit Scheme of Works. **Habitat Management Plan (HMP)** As part of the proposed development, an area of approximately 251.31ha would be targeted for active blanket bog restoration, and an area of approximately 360.59ha targeted for blanket bog restoration through reduction of grazing. An Outline HMP is provided in **Technical Appendix 8.4**. A detailed HMP would be agreed with the Clackmannanshire Council and Perth and Kinross Council in consultation with relevant statutory consultees, prior to construction work commencing.
	Post Construction	**Battery Storage Fire Safety Plan** A Battery Energy Storage System (BESS) Fire Risk Statement has been prepared and included as Technical Appendix 3.3 of the EIA Report. This document would be updated, post consent, to a full BESS Fire Safety Plan which would be applicable to the operational phase of the proposed development. The BESS Fires Safety Plan would be prepared, prior to construction commencing, in agreement with Perth and Kinross Council, and other relevant stakeholders.
	Decommissioning	**Decommissioning and Restoration Plan** At the end of its operational life, the proposed development would be decommissioned unless an application is submitted and approved to extend the operational period or to repower the site. The decommissioning period would be expected to take up to one year. The ultimate decommissioning protocol would be agreed with Clackmannanshire Council, Perth and Kinross Council and other appropriate regulatory authorities in line with best practice guidance and requirements of the time. This would be done through the preparation and agreement of a Decommissioning and Restoration Plan (DRP). Financial provision for the decommissioning would be provided. It is anticipated that the DRP would be the subject of a planning condition and would reflect the relevant legislation and best practice current at the time of decommissioning and restoration. **Turbines** Turbines would be dismantled and removed from site. Turbine components would be dismantled onsite using standard engineering techniques similar to those used for the original installation. The re-use or

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		recycling of components would be prioritised, which would include exploration of any viable second-hand turbine market. Turbine oils or any other oils would be removed from the site and disposed of appropriately. **Turbine Foundations** Topsoil material that has revegetated around the foundations would be excavated first and temporarily stored for re-use following partial removal of foundations. The top 1m of the turbine foundation would be removed and disposed of appropriately. This is considered preferential to removing all infrastructure, due to the potentially lower environmental impacts associated with excavating, processing and removing concrete from the site. The excavated foundation would be reprofiled with soil and reseeded. **Crane Hardstandings** Topsoil material that has revegetated the crane hardstandings would be excavated first and temporarily stored for reuse following partial removal of crane hardstandings. The top 1m of the crane hardstandings would be removed and disposed of appropriately. This is considered preferential to removing all infrastructure, due to the potentially lower environmental impacts associated with excavating, processing and removing aggregate from the site. The excavated hardstandings would be reprofiled with soil and reseeded. Recovered geogrids and geotextiles would be disposed of appropriately. All granular materials would be excavated and removed from the site, for re-use where practicable. **Access Tracks** Access tracks would be left in-situ, which would reduce potential environmental impacts associated with potential sediment migration into watercourses as a result of removing all tracks. **Watercourse Crossings** These would remain in-situ in association with the access tracks after decommissioning. This would reduce decommissioning activities in the vicinity of watercourses and thus potential for contamination as a result of run-off.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Underground Cabling These are underground and therefore all cables would be made safe and left in-situ. This is considered preferential to extracting cables from the cable trenches due to the potentially greater environmental impacts associated with excavating, processing and removing the cable from the site. **Substation Compound** All equipment from within the substation compound would be removed from site and either reused, recycled or disposed of appropriately. Oils or lubricants from the compound would be removed and disposed of appropriately. The control building, and related infrastructure, would then be demolished and all materials would be reused, recycled or disposed of appropriately. **Substation Compound Foundation** The top 1m of the compound foundations would be removed and disposed of appropriately. The excavated hardstandings would be reprofiled with soil and reseeded.
Chapter 8: Ecology	Pre-Construction	**Pre-Construction Surveys** Due to the time that will have elapsed since the surveys undertaken for this EIA and the determination of this application, and the possibility that activity by protected mammal species could have changed in the intervening period, a pre-construction survey for otter, water vole and pine marten would be undertaken during the last available season prior to construction taking place. This would cover all watercourses and other suitable habitat within 250m of infrastructure and associated working areas. The results of the pre-construction surveys would inform the need for further mitigation (if required) in respect of working practices or to consult with NatureScot if required. **Invasive Species** If, during pre-construction surveys, invasive non-native species are identified, an Invasive Species Management Plan would be prepared and form a stand alone document, or be included within the full HMP.

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		Protected Mammals If protected mammal presence is recorded close to working areas (e.g. watercourse crossings) during pre-construction surveys, additional mitigation measures would be employed to avoid significant disturbance. These additional measures are considered likely to be required and would likely include displacement/exclusion of protected mammals from working areas. This would be undertaken under appropriate licences and at the recommended time so year (ideally mid-March to mid-April in Scotland (as per Dean, Strachan, Gow, & Andrews, 2016)). **Fish Monitoring** Prior to construction commencing, a fish monitoring plan including surveys pre-construction, during construction and post construction would be agreed with the local fisheries board and NatureScot. This would likely include electro-fishing surveys to establish and monitor fish population sizes and demography. These data would facilitate identification and mitigation of any potential impacts to fish that may occur during the construction period. **Reptiles** Given the low numbers of reptiles likely to be present, the large areas of suitable habitat that would remain unaffected by the works and given also the large spatial scale of the works, fencing and translocation are not considered appropriate. Proposed mitigation, therefore, would involve vegetation management and the identification/removal of potential refugia and hibernacula if present. Where appropriate and safe to do so, potentially suitable habitats for reptiles located within construction working areas would be cut, under the supervision of the Environmental Clerk of Works (EnvCoW), prior to construction works commencing in that area, in order to encourage reptiles to leave the area. Suitable habitat within working areas would also be searched by the EnvCoW prior to construction commencing and any potentially suitable refuges would be removed. These works would take place during the active season for reptiles (typically April to October, although this is dependent upon the nature of the weather conditions in any one year).
	Pre and During Construction	**Environmental Clerk of Works (EnvCoW)** A suitably qualified EnvCoW would be appointed prior to the commencement of construction to advise on all ecological management. The ECoW would be employed for the duration of the construction and

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		reinstatement periods, to oversee the safeguarding of natural heritage interests. The role of the EnvCoW would include the following tasks: • giving briefings to relevant staff regarding any ecological sensitivities onsite; • undertake pre-construction surveys (bats, reptiles, otter, water vole, pine marten etc.) and advise on ecological issues where required; • supervision of implementation of the HMP measures which are to be undertaken during the construction phase; • monitoring compliance during the construction and decommissioning phase of the proposed development phases and reporting any breaches to the applicant's Construction Project Management Team; • give toolbox talks to all staff on site, e.g. an ecological induction, so staff are aware of the ecological sensitivities on the Site and the legal implications of not complying with agreed working practices; • agree and monitor measures designed to minimise damage to retained habitats (and habitats for which restoration is proposed as part of the HMP); • undertake pre-construction surveys and checks and advise on ecological issues where required; and • undertaken pre-construction inspections of areas which require reptile mitigation and carry out an appropriate level of supervision during vegetation clearance. The EnvCoW would also undertake additional roles such as assisting with water quality monitoring and checking for nesting birds (see **Chapter 9: Ornithology** and **Chapter 10: Hydrology, Hydrogeology and Geology** of the EIA Report). **Hazards to Protected Mammals** All potentially dangerous substances or materials within the temporary construction compound would be carefully stored to prevent them causing any harm to otters or other mammal species which may enter the compound at night. During construction, all excavations greater than 1m depth would either be temporarily covered at night or designed to include a ramp to allow otters and other animals a means of escape should they fall in.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		A speed limit of no greater than 15mph would be implemented on site to reduce the risk of road traffic collisions. **Surface Water and Peat Soils** Good practice measures in relation to pollution risk, sediment management and watercourse crossings to be adopted during the construction and operation phases are set out in **Chapter 10** and **Technical Appendix 3.1: Outline CEMP** (detailed CEMP to be agreed with Clackmannanshire Council and Perth and Kinross Council in consultation with relevant statutory consultees, prior to construction work commencing). These will be implemented during construction, reinstatement and habitat restoration required to fulfil the aims of the HMP. During the construction phase, good practice techniques with respect to peatland environments, as contained within 'Good Practice during Wind Farm Construction' (SNH, 2019), would be implemented. **Retained Habitat and Habitat Reinstatement** Good practice measures to protect retained habitats during the construction phase would be implemented, including the erection of temporary protective fencing demarcating the working footprint, to be overseen and policed by the EnvCoW. Good practice techniques for vegetation and habitat reinstatement would be adopted and implemented on areas subject to disturbance during construction as soon as is practicable. Primary targets of the outline HMP (A detailed HMP would be agreed with Clackmannanshire Council and Perth and Kinross Council in consultation with relevant statutory consultees, prior to construction work commencing) include the management of Blanket Bog and Wet Heath. This management will comprise: • Reinstatement of blanket bog that is disturbed during construction, ditch and drain blocking, and reduction in grazing pressure; and

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		• Restoration of borrow pits where wet heath is damaged in the creation, plus reduction in grazing pressure in wet heath areas. **Construction and Environment Management Plan (CEMP)** Further details of pollution prevention control measures will be provided in the detailed CEMP. Measures will include: • emergency spill kits will be readily available on site to protect against accidental release, leakage or spillage of potentially contaminative substances and materials; • construction plant to be checked regularly for leakages and will undergo maintenance on a regular basis; • construction traffic to be limited to allocated areas of the proposed development; • concrete and cement mixing and washing areas will be sited at appropriate distances from any surface watercourses to limit potential pollution of the water environment; • site drainage measures, including drainage ditches and silt traps, will be provided to collect and treat increased surface run off; and • assessment of Earthworks Specification, chemical analysis and assessment of imported fill materials.
	Construction (Good Practice Measures)	No significant effects on protected species have been identified as a result of the construction of the proposed development. However, should any evidence be found, a Species Protection Plan will be prepared to ensure that all reasonably practicable measures are taken so that provisions of the relevant wildlife legislation are complied with in relation to all protected species. Both the **Outline Habitat Management Plan (OHMP) Technical Appendix 8.4** and **Outline CEMP Technical Appendix 3.1** detail the standard good practice measures and species-specific mitigation recommended for the construction and operational phases of the proposed development. A detailed CEMP and detailed HMP would be agreed with the Clackmannanshire Council and Perth and Kinross Council, in consultation with relevant statutory consultees, prior to construction work commencing. Some of the key recommended mitigation is however highlighted below:

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Fish Construction phase monitoring (including a baseline survey pre-construction) is proposed, to allow any changes due to construction of the proposed development to be monitored and addressed. **Protected Mammals** As targeted within the outline HMP, some disturbance/displacement of otter is possible during wind farm construction in association with installation of watercourse crossing points. Reducing grazing pressures and introducing broadleaf tree planting in riparian habitat will also improve habitat and foraging for otters using the watercourses onsite. Due to the time that will have elapsed since the last surveys and the possibility that otter activity could have changed in the intervening period, and/or pine marten or badger could have colonised the site, a pre-construction survey for otter, badger and pine marten would be undertaken. This would cover all watercourses and other suitable habitat within 250m of wind farm infrastructure (including access tracks). The results of the pre-construction surveys would inform the need for further mitigation within the CEMP in respect of working practices, or consultation with NatureScot, if required. During construction, site speed limits of 15mph would reduce the likelihood of accidental injury/killing or otter by construction traffic. All potentially dangerous substance or materials within the temporary construction compound would be carefully stored to prevent then causing any harm to otters which may enter the compound at night. During construction all excavations greater than 1m depth would either be covered at night or designed to include a ramp to allow otter and other animals a means of escape should they fall in. **Environmental Clerk of Works** A suitably qualified EnvCoW would be employed for the duration of the construction and reinstatement periods, to ensure natural heritage interests are safeguarded, although this may not necessarily be a full-time role throughout. The role of the ECoW would include the following tasks:

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		• to give toolbox talks to all staff onsite, e.g. an ecological induction, so staff are aware of the ecological sensitivities on the site and the legal implications of not complying with agreed working practices; • to undertake pre-construction surveys (otter, badger and pine marten) and advise on ecological issues where required; and • to carry out pre-construction inspections of areas which require reptile mitigation (i.e. supervision during vegetation clearance). The EnvCoW would also undertake additional roles such as assisting with hydrological measures or checking for nesting birds (see **Chapter 9: Ornithology** and **Chapter 10: Hydrology, Hydrogeology and Geology**). **Reptiles** In order to comply with the Wildlife and Countryside Act 1981 (as amended in Scotland) mitigation would be employed to reduce the chances of inadvertently killing or injuring individual reptiles during construction works. Given the low numbers of reptiles likely to be present, the large areas of suitable habitat that would remain unaffected by the works and given also the large spatial scale of the works, fencing and translocation are not considered appropriate. Proposed mitigation therefore would involve identification/removal of potential refugia and hibernacula if present. The proposed site speed limit of 15mph would also reduce the likelihood of accidental injury/killing of reptiles by construction traffic. Where appropriate and safe to do so, the vegetation of all construction working areas with potentially suitable open habitats for reptiles will initially be cut during the active season for reptiles (April to October). Taking into account ornithological sensitivities, October is likely to be the optimal month for this task. Mitigation works will be carried out to reduce the height of vegetation (e.g. use of a brush cutter or tractor mounted flail) and make it less attractive for reptile habitation. The works will be carried out under the supervision of the EnvCoW. Working areas would then be kept unsuitable for reptiles through regular cutting until construction in that location commences.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		General A site speed limit of 15mph would be in place at all times to reduce the risk of collision and protected species mortality associated with construction vehicles. Excavations would be covered at the end of each working day to minimise the risk of faunal species becoming injured or trapped. Alternatively, a wooden plank or similar means of egress will be placed inside to allow a means of escape for animals should they enter the excavation. Any temporarily exposed open pipe system would be capped in such a way as to prevent wildlife gaining access. Works would be conducted during daylight hours where possible, avoiding the sensitive periods of dawn and dusk when wildlife is most active. In the event that a protected species is discovered on site, all work in that area would stop immediately and the EnvCoW contacted. Increased buffer areas may be required in these locations. Details of the local police Wildlife Crime Officer, NatureScot Area Officer, and Scottish Society for the Prevention of Cruelty to Animals (SSPCA) relevant Officer would be held in the site emergency procedure documents.
	Operation	**Outline Habitat Management Plan (Outline HMP) Technical Appendix 8.4** sets out its proposals / aims (a detailed HMP would be agreed with Clackmannanshire Council and Perth and Kinross Council, in consultation with relevant statutory consultees, prior to construction work commencing). These proposals / aims as follows: • 251.31ha of active blanket bog restoration; • 360.59ha of blanket bog restoration via grazing management (reduced grazing); • 162.39ha of heathland and grassland enhancement; • 14.43ha of riparian tree planting; • Six reptile hibernacula; and • Reinstate habitats temporarily disturbed within 5m of wind farm infrastructure.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		The outline HMP provides high level proposals for the above aims. The full HMP would provide further detail on how and where these proposals would be carried out, and management plans for doing so where appropriate. This includes e.g. a reduced grazing plan. **Outline Habitat Management Plan (Outline HMP) Technical Appendix 8.4** sets out the monitoring anticipated to be required during the operational phase of the wind farm (a detailed HMP would be agreed with Clackmannanshire Council and Perth and Kinross Council, in consultation with relevant statutory consultees, prior to construction work commencing). This monitoring is as follows: **Botanical Monitoring** • Drone Surveys – Every year for first five years after construction, then every five years until at least year 20. • Common Standards Monitoring (including blanket bog condition monitoring) – In the first year following construction, then every five years thereafter. • Riparian Tree Planting - All broadleaf tree planting should be monitored once a year between April and September for five years after planting. **Peatland Restoration Monitoring** • Dipwell Monitoring – in the first year following construction, then the fifth year. Requirements for further monitoring would be assessed at year five. **Blanket Bog Restoration Dam Monitoring** • Dam Monitoring – in years one and two following construction. Requirements for further monitoring would be assessed at year two.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Reptile Hibernacula Monitoring • Reptile Hibernacula Monitoring - Monitoring should take place one year after construction works have completed and every five years thereafter. Should the monitoring find that target conditions, and therefore the goals and objectives of the HMP are not being met, then remedial action would be employed, and the HMP updated accordingly, in consultation with the HMP Working Group. Monitoring results would be reported annually (in years when monitoring takes place) and recommendations made for changes to management prescriptions if objectives are not being met, as appropriate. As such, the detailed HMP would be a live document, such that it can be altered following monitoring results, unexpected events or evolving guidance. Any amendments to the HMP because of the outcome of monitoring would be agreed with the HMP Working Group in advance of any such revised prescriptions being implemented. The HMP would be reviewed every five years.
Chapter 9: Ornithology	Pre and during Construction	If site clearance and construction activities are required to take place during the main breeding bird season, from mid-March to August inclusive, pre-commencement survey work would be undertaken to ensure that nest destruction and disturbance to sensitive species (i.e., breeding raptors and waders) are avoided. Where applicable, construction would not take place within specified disturbance-free buffer zones for certain sensitive species during the breeding season. Disturbance-free buffer zones around nest sites of sensitive species would be applied and monitored closely. For breeding waders, disturbance-free buffer zones are only required until chicks have hatched and are capable of walking away from any sources of disturbance. Based on survey data and the relevant literature (e.g., Goodship and Furness 2022), the following disturbance-free buffer zones are considered likely to be required to help prevent nest failure due to disturbance during construction. It should be noted that this represents a guide only and may vary according to topography and other factors at each nest site: • Kestrel: 100-200m; • Snipe: 200-300m; • Curlew: 200-300m; and

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		• Short-eared owl: 300-500m.
		Environmental Clerk of Works A suitably qualified Environmental Clerk of Works (EnvCoW) would be employed to oversee activity at key points for the duration of the construction and reinstatement periods (at a frequency to be agreed with the relevant Local Planning Authorities and NatureScot), to ensure natural heritage interests are safeguarded. The role of the EnvCoW would include the following specific roles with regard to the ornithology interest of the site: • prior to the start of construction and / or the breeding bird season, the EnvCoW would make contractors aware of the ornithological sensitivities within the site (particularly with regard to the potential presence of sensitive breeding species, i.e. breeding waders and raptors); and • the EnvCoW would undertake surveys for nesting birds throughout the construction period that falls within the nesting season and set up and monitor appropriate exclusion areas whilst nests of relevant species are in use.
		Bird Protection Plan (BPP) A Bird Protection Plan (BPP) would be developed by a suitably experienced ornithologist, and agreed in consultation with NatureScot, in advance of works commencing on the site. The BPP would set out in sufficient detail the measures and procedures that would be followed to ensure the protection of sensitive species as well as legally protected species during construction. The employment of good practice measures through the BPP would serve to minimise disturbance, by avoiding construction activity around snipe and curlew nest sites by up to 300m depending on topography.
	Operation	**Habitat Management Plan (HMP) - Ornithology** A detailed Habitat Management Plan (HMP) will be developed, pre construction, using the current proposed outline HMP (**Technical Appendix 8.4**) as a starting point. This detailed HMP will aim to monitor the occurrence of sensitive species on the Site with a view to identifying habitat management measures in support of species present.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Golden Plover Golden plover are protected under the Annex 1 of the Wildlife and Countryside Act and are known to be present on site. Some disturbance/displacement of Golden plover is possible during wind farm construction and Golden plover are also at risk of collision with turbine during wind farm operation. Restoration of wet and dry heath and peatland restoration works, focussed on blanket bog areas, are likely to benefit golden plover populations. The creation of wet and dry heath provides nesting and foraging habitat for a number of protected bird species including golden plover. **Snipe** Snipe is of medium conservation concern, on the UK BoCC Amber List and are known to be present on site. Some disturbance/displacement of snipe is possible during wind farm construction and Snipe are also at risk of collision with turbine during wind farm operation. Restoration of wet and dry heath and peatland restoration works, focussed on blanket bog areas, are likely to benefit snipe populations. The creation of wet and dry heath provides nesting and foraging habitat for a number of protected bird species including snipe. **Curlew** Curlew is of is of high conservation concern and is a priority for biodiversity action. It is on the UK BoCC Amber List and are known to be present on site. Some disturbance/displacement of curlew is possible during wind farm construction and Curlew are also at risk of collision with turbine during wind farm operation. Restoration of wet and dry heath and peatland restoration works, focussed on blanket bog areas, are likely to benefit curlew populations. The creation of wet and dry heath provides nesting and foraging habitat for a number of protected bird species including curlew.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Raptors and Waders Breeding raptor and waders species protected under the Annex 1 of the Wildlife and Countryside Act are present on site. Some disturbance/displacement of breeding raptor and waders is possible during wind farm construction and raptors are also at risk of collision with turbines during wind farm operation. Restoration of wet and dry heath and peatland restoration works, focussed on blanket bog areas, are likely to benefit breeding raptor and waders populations. The creation of wet and dry heath provides nesting and foraging habitat for a number of protected bird species including breeding raptor and waders. The exact scope of works would be confirmed in the detailed HMP, following consultation, but is likely to include carcass searches, collision monitoring, flight activity surveys and breeding raptor and wader surveys. It is proposed that ornithological monitoring should take place during and post-construction, in line with NatureScot guidance (SNH, 2009) as outlined below: • Year-round ad-hoc collision monitoring should be completed by site operational staff as part of standard maintenance activities. Carcasses of all species found on site should be reported to NatureScot; • Breeding bird surveys focusing on breeding wader, grouse and raptor species should be undertaken to monitor the numbers and status of these species within the vicinity of the proposed development, in order to monitor the success of habitat management actions undertaken as part of the HMP. The consequences of any management actions may not become apparent for a number of years. Monitoring is suggested annually during construction, and after the proposed development becomes operational, during years 1, 5, and 10, with the requirement for further surveys to be determined based on previous survey results.

Chapter 10: Hydrology, Hydrogeology and Geology	Pre and during Construction (PLHRA)	**Peat Landslide Hazard** Detailed PLHRA recommendations for site specific infrastructure – including for turbine locations, crane pads, borrow pits, access tracks, cable routes, watercourse crossings, substation and construction compound are provided in **Technical Appendix 10.1 Peat Landslide Hazard Risk Assessment**. More detailed ground investigations will be required to facilitate the geotechnical design of the various foundations and access track, particularly the vertical and horizontal alignment and the design of the river/stream crossings. These will be incorporated into the Construction Method Statement which will be submitted to the Planning Authority for approval as part of the condition compliance prior to any site works commencing. Good construction practice and methodologies to prevent peat instability within areas that contain peat deposits are identified in the PLHRA. These include: • measures to ensure a well-maintained drainage system, to include the identification and demarcation of zones of sensitive drainage or hydrology in areas of construction; • minimisation of 'undercutting' of peat slopes, but where this is necessary, a more detailed assessment of the area of concern would be required; • careful micrositing of turbine bases, crane hardstandings and access track alignments to minimise effects on the prevailing surface and sub-surface hydrology; • raising peat stability awareness for construction staff by incorporating the issue into the site induction (e.g. peat instability indicators and good practice); • introducing a 'Peat Hazard Emergency Plan' to provide instructions for site staff in the event of a peat slide or discovery of peat instability indicators; • developing methodologies to ensure that degradation and erosion of exposed peat deposits does not occur as the break-up of the peat top mat has significant implications for the morphology, and thus hydrology, of the peat (e.g. minimisation of off-track plant movements within areas of peat); • developing robust drainage systems that would require minimal maintenance; and • developing drainage systems that would not create areas of concentrated flow or cause over/under-saturation of peat habitats. • An experienced and qualified engineering geologist/geotechnical engineer would be appointed as a supervisor, to provide advice during the setting out, micrositing and construction phases of the proposed development.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
	Pre and during Construction (CEMP)	**Construction Environment Management Plan (CEMP)** Good practice measures would be applied in relation to pollution risk, sediment management and management of surface runoff rates and volumes. Prior to construction, section specific drainage plans would be produced. These would take into account any existing local drainage which may not be mapped and incorporate any section specific mitigation measures identified during the assessment. Measures would be included in the final detailed CEMP for dealing with pollution/sedimentation/flood risk incidents and would be developed prior to construction. This would be adhered to should any incident occur, reducing the effect as far as practicable. The final detailed CEMP would contain details on the location of spill kits; identify 'hotspots' where pollution may be more likely to originate from; provide details to site personnel on how to identify the source of any spill; and state procedures to be adopted in the case of a spill event. As identified in the outline CEMP, a specialist spill response contractor would be identified to deal with any major environment incidents. A wet weather protocol would be developed. This would detail the procedures to be adopted by all staff during periods of heavy rainfall. Toolbox talks would be given to engineering/construction/supervising personnel. Roles would be assigned to site staff and the inspection and maintenance regimes of sediment and runoff control measures would be adopted during these periods. In extreme cases, this protocol would dictate that work onsite may have to be temporarily suspended until weather/ground conditions allow.
	Pre and during Construction (Water Quality Monitoring)	**Water Quality Monitoring** Water quality monitoring before and during the construction phase would be undertaken to ensure the proposed development has no significant impacts to water quality and/or water quantity in the main water channels. Monitoring would be carried out at a specified frequency (depending upon the construction phase) in these catchments.).

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Water quality monitoring during the construction phase would be undertaken for the surface water catchments that drain from the proposed development to ensure that none of the tributaries of the main channels are carrying pollutants or suspended solids. Monitoring would be carried out at a specified frequency (depending upon the construction phase) on these catchments. This would comprise the deployment of real-time water quality monitoring telemetry with predetermined water quality trigger levels based on baseline water quality data (e.g. for pH, dissolved oxygen and electrical conductivity). The private water supply risk assessment (**Technical Appendix 10.5: PWSRA**) also identifies locations that should be included in a site-specific monitoring plan. Monitoring would continue throughout the construction phase and immediately post construction. Monitoring would be used to allow a rapid response to any pollution incident as well as assess the efficacy of good practice or remedial measures. Monitoring frequency would increase during the construction phase if remedial measures to improve water quality were implemented. Detailed water quality monitoring plans would be developed during detailed design. Clackmannanshire Council, SEPA, Marine Scotland, Forth Rivers Trust (FRT) and Forth District Salmon Fishery Board (FDSFB) as well as Highland Spring would be consulted on the plans which would be set out within the final CEMP. The performance of the good practice measures would be kept under constant review by the water monitoring schedule, based on a comparison of data taken during construction with a baseline data set, sampled prior to the construction period. **Good Practice Measures (Pollution)** Good practice measures in relation to pollution prevention would include the following: • refuelling would take place at least 50m from watercourses and where possible it would not occur when there is risk that oil from a spill could directly enter the water environment; • foul water generated onsite would be managed in accordance with best practice and be drained to a sealed tank and routinely removed from site;

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		• drip trays would be placed under vehicles which could potentially leak fuel/oils when parked; • areas would be designated for washout of vehicles which are a minimum distance of 50m from a watercourse; • washout water would also be stored in the washout area before being treated and disposed of; • if any water is contaminated with silt or chemicals, run-off would not enter a watercourse directly or indirectly without treatment; • water would be prevented as far as possible, from entering excavations; • procedures would be adhered to for storage of fuels and other potentially contaminative materials in line with the CAR to minimise the potential for accidental spillage; and • a plan for dealing with spillage incidents would be designed prior to construction, and this would be adhered to should any incident occur, reducing the effect as far as practicable. This would be included in the final detailed CEMP. **Good Practice Measures (Sedimentation and Erosion)** Good practice measures for the management of erosion and sedimentation would include the following: • all stockpiled materials would be located outwith a 50m buffer from watercourses; • where possible, stockpiled material would either be seeded or appropriately covered; • water would be prevented, as far as possible, from entering excavations such as borrow pits through the use of appropriate cut-off drainage; • where the above is not possible, water that enters a borrow pit would pass through a number of settlement lagoons and silt/sediment traps to remove silt prior to discharge into the surrounding drainage system. Detailed assessment of ground conditions would be required to identify locations where settlement lagoons would be feasible; • clean and dirty water onsite would be separated, and dirty water would be filtered before entering the water environment; • if the material is stockpiled on a slope, silt fences would be located at the toe of the slope to reduce sediment transport;

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		• the amount of ground exposed, and time period during which it is exposed, would be kept to a minimum and appropriate drainage would be in place to prevent surface water entering deep excavations, specifically borrow pit excavations; • a design of drainage systems and associated measures to minimise sedimentation into natural watercourses would be developed – this may include silt traps, check dams and / or diffuse drainage; • silt/sediment traps, single size aggregate, geotextiles or straw bales would be used to filter any coarse material and prevent increased levels of sediment. Further to this, activities involving the movement or use of fine sediment would avoid periods of heavy rainfall where possible; and • construction personnel and the Principal Contractor would carry out regular visual inspections of watercourses to check for suspended solids in watercourses downstream of work areas. **Good Practice Measures (Fluvial Flood Risk and Watercourse Crossings)** It is proposed to adopt Sustainable Drainage Systems (SuDS) as part of the proposed development. SuDS techniques aim to mimic pre-development runoff conditions and balance or throttle flows to the rate of runoff that might have been experienced at site prior to development. Good practice in relation to the management of surface water runoff rates and volumes and potential for localised fluvial flood risk would include the following: • drainage systems would be designed to ensure that any sediment, pollutants or foreign materials which may cause blockages are removed before water is discharged into a watercourse; • onsite drainage would be subject to routine checks to ensure that there is no build-up of sediment or foreign materials which may reduce the efficiency of the original drainage design causing localised flooding; • appropriate drainage would attenuate runoff rates and reduce runoff volumes to ensure minimal effect upon flood risk; • where necessary, check dams would be used within cable trenches in order to prevent trenches developing into preferential flow pathways; and • as per good practice for pollution and sediment management, prior to construction, section specific drainage plans would be developed and construction personnel made familiar with the implementation of these.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		Further information on ground conditions and drainage designs would be provided in the final CEMP. The design of new watercourse crossings would be agreed with SEPA prior to construction as required by CAR. The crossings would be designed to have a water conveyance capacity of at least the 1 in 200-year flood event. The structural integrity of the existing culverts that will be retained to afford site access will be assessed prior to any construction and any maintenance or replacement works recorded. As above, any required works would be undertaken with approval and authorisation from SEPA. **Good Practice Measures (Water Abstractions)** Abstraction of water for construction activities is proposed from a suitable source yet to be identified. An application for a CAR Licence would be made to SEPA and managed through the regulation of the CAR Licence. Should a suitable source not be identified, a water bowser would be used. Good practice that would be followed in addition to the CAR Licence regulations includes: • water use would be planned so as to minimise abstraction volumes; • water would be re-used where possible; and • abstraction volumes would be recorded.
	Pre and during Construction (Other Monitoring Requirements)	• a Design and Geotechnical Risk Register would be compiled to include risks relating to peat instability, as this would be beneficial to both the developer and the Contractor in identifying potential risks that may be involved during construction. Areas of potential risk would be subject to routine inspection; and • an EnvCoW would supervise activities on site and monitor the efficacy of the drainage, erosion and pollution control measures and ensure that receptors identified in this assessment, including saturation of soils (inc. peat), ground and surface water quality, are not impaired as a consequence of the proposed development.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
Chapter 11: Cultural Heritage and Archaeology	Construction (Watching Brief)	With regard to further mitigation to be implemented as a condition to consent, the undertaking of an archaeological watching brief, specifically relating to the construction of the access tracks, is to be used to ascertain the absence/presence of unknown assets in the vicinity that may relate to assets listed below (See Chapter 11 for further detail and location on the following heritage assets): • SLR44 • SLR12 • SLR53 • SLR6 The precise scope of the mitigation works would be negotiated with the Perth and Kinross Council Archaeological Officer and an agreed mitigation program would be documented in an approved Written Scheme of Investigation (WSI).
Chapter 12: Traffic and Transport	Construction (CTMP)	**Construction Traffic Management Plan (CTMP)** An Outline CTMP is provided within **Technical Appendix 12.3**. A detailed CTMP would be agreed with Perth and Kinross Council, with input from Police Scotland and Transport Scotland, prior to the commencement of development. The detailed CTMP would include a number of measures to reduce the effects of the construction of the proposed development on local receptors and communities, including effects from turbine deliveries (abnormal loads). This would include details of any required temporary widening and other road improvement measures, together with detailed consideration of vehicle swept paths, loadings, structural assessments (where required), temporary street furniture removal details, dust and dirt management, and community engagement. An element of preparation of the detailed CTMP would be a trial run, which would be undertaken through a special licence, with Perth and Kinross and Transport Scotland as the Roads Authorities, and Police Scotland in attendance. Information, with regards to abnormal loads, would be provided to local residents and users of amenities.

Chapter	Type of Mitigation Compensation or Enhancement	Mitigation, Compensation or Enhancement Measure
		The detailed CTMP would include provision for no works vehicles to use the C468 / Sheriffmuir Road between the site and Dunblane. It would also include provision for 'left in, left out' traffic management for all construction vehicles using the junction from the A9 to the C468 / Sheriffmuir Road.
	Construction (General)	**General** A reputable construction contractor would be procured, with an Environmental Policy and good environmental track record; • All HGVs delivering materials to the site would be roadworthy, adequately maintained and sheeted as required; • Adequate traffic management and banksmen would be deployed for the movement of HGVs and abnormal loads; and • HGV loads would be maximised to ensure that part load deliveries would be minimised. Turbine deliveries would be undertaken in consultation with the relevant roads authorities (Perth and Council, Fife Council and Transport Scotland) and Police Scotland. Mitigation measures to reduce the potential for dust and dirt to make its way on to the local highway network would be undertaken including the cleaning of vehicle wheels during wet periods and the sheeting of aggregate lorries.
Chapter 14: Other Issues	Construction	An informal walking route would be created by linking the wind farm access track to the top of the existing path that runs alongside Glenwinnel Burn. This informal walking route would be included in the Access Management Plan produced post consent.