

Chapter 16 Schedule of Commitments



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Chapter 16 Schedule of Commitments

16.1 Introduction

- 1. The Schedule of Commitments provides a summary of good practice, mitigation measures and commitments 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.
- 2. Good practice and mitigation measures have been integral to the design evolution of the proposed Development as described in Chapter 2. A series of environmental and technical constraint lead 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.

16.2 Schedule of Commitments

- 3. The mitigation measures and best practice commitments in **Table 16.1** are those which would be applied prior to construction, during construction and during operation of the proposed Development. A number of these measures are embedded mitigation, undertaken through good practice and a strict adherence to relevant legislation during all stages of the proposed Development.
- 4. Monitoring commitments, which would be applied prior to construction, during construction and during operation are detailed in **Table 16.2.**

16.3 Overall Statement of Significance

- 5. Provided that the proposed mitigation measures are successfully implemented, the residual effects related to most environmental disciplines would not be considered significant in the context of the EIA regulations, with the exception of Landscape and Visual effects. Detailed information regarding the potential effects and magnitude of impact, included within EIA Chapter 7 – Landscape and Visual Impact Assessment (LVIA).
- 6. All renewable energy developments incorporating wind turbines are likely to give rise to some significant Landscape and Visual effects. In the case of the proposed Development, due a series of proposed mitigation measures, design alterations and the topographic containment of the Kintyre peninsula, significant effects would be contained within a relatively moderate area around the Site.

Table 16.1: Summary of Mitigation and Best Practice Commitments

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
Chapter 3: Proposed Development	Environmental Management	Construction	The Principal Contractor (PC) would ensure construction activities and procedures set out in the outline Construction Environmental Management Plan (CEMP) are carried out in accordance with the mitigation measures outlined in this EIA Report and any planning conditions, and this would be monitored by SPR and the appointed Ecological Clerk of Works (ECoW). To ensure all mitigation measures outlined within this EIA Report are carried out onsite, contractors would be required to develop a site-specific CEMP (Technical Appendix 3.1) which would form an overarching document for all site management requirements, including: • a Traffic Management Plan (TMP); • a Construction Methodology Statement (CMS) • a Pollution Prevention Plan (PPP) (including monitoring, as appropriate); • a Site Waste Management Plan (WMP). • Access Management Plan (WMP). • Access Management Plan (MMP) • Peat Management Plan (PMP) The construction of the proposed Development would be based on the adoption of good practice, supported by robust project management and the supervision of an ECoW. Good practice, supported by robust project management and the supervision of an ECoW. Good practice includes the adoption of Pollution Prevention Guidelines (PPGs) and replacement Guidance for Pollution Prevention (GPPs). The services of other specialist advisors would be retained as appropriate, such as an Environmental Advisor, to be called on as required to advise on specific environmental issues. Further details of the good practice and the role of the ECoW is set out in the outline CEMP (Technical Appendix 3.1). The outline CEMP provides an overview of the following aspects of environmental management required to mitigate any potential environmental incidents during construction: • surface water management; • oil and chemical delivery storage; • wastewater and water supply monitoring control:

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
	Compensatory planting	Construction / Pre- Operation / Operation	 waste and resource management; air, noise, vibration, land and flora and fauna; emergency environmental spill response; spill kits; method statements and risk assessments; and traffic and transport. Argyll and Bute Council (A&BC) and other stakeholders, as required, would be consulted on these documents prior to commencement of construction, and performance against the CEMP would be monitored by SPR, the ECoW and PC throughout the construction period. The construction of the proposed Development is predicted to result in a net loss of woodland development area. Thus, the area available for stocked woodland area for removal are provided in Chapter 15 and Technical Appendix 15.1 . In accordance with the criteria of the Scottish Government's Control of Woodland Removal Policy, SPR is committed to providing appropriate compensatory planting (CP). In accordance with CP regulations, SPR has developed a bespoke Habitat Management Plan (HMP), aiming to restore 251 ha of peatland habitat in the surrounding area as part of CP obligations. Forestry and Land Scotland (FLS) have reviewed and approved the HMP and peatland restoration programme, which would take place in conjunction with the construction and operation stages.
Chapter 7: Landscape and Visual Impact Assessment	Wind turbine layout and height of turbines	Operation	The extent of operational effects upon the landscape character would be limited by the topographic containment of the Kintyre peninsula. Significant effects would be contained within the LCT 6 Upland Forest Moor Mosaic, with most notable influence within 2-4 km of the proposed turbines. Beyond this there would be no significant effects on landscape character on any other landscape character types. The operational period of the proposed Development would not be time limited and would include site and forestry management to ensure the adequate maintenance of site facilities and landscape features such as access tracks, field boundaries, gates, and signage. Measures to

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			 reduce landscape and visual impacts have been embedded into the design of the proposed Development and include; arranging turbines to ensure improved cohesion of design with the scale of the receiving landscape and adjacent arrays; keeping turbines in a single group within the Site and minimise the lateral extent of turbines; keeping most infrastructure to the east of the break of slope on the northern end of the Kintyre peninsula; adjustments in turbine heights to improve visual composition and minimise inconsistent turbine spacing, such as, relatively large gaps, outliers or excessive overlapping turbines and ensure a balanced/compact array especially from key views and sequential receptors; use of the existing forestry tracks where possible (even if some require upgrading), to minimise the requirement for new tracks within the Site; and location of new borrow pits where rock resource is likely, but views more contained within the Site itself and/or making use of existing ones. Furthermore, the proposed wind turbines would require visible aviation lighting on both; nacelles and towers. As a result, the incorporation of lighting could impose significant impacts on visual receptors during night-time. To mitigate the potential impacts, several mitigation measures have been considered via the Indicative Aviation Lighting Landscape and Visual Plan (IALLVIMP). To reduce the potential effects to negligible, the provision of aviation detection lighting systems, that would only operate in the detection of flight activity, has been selected as additional mitigation (for additional information refer to Texperiod Approx dive for the potential information refer to Texperiod Approx dive for the potential information refer to Texperiod Approx dive for the potential information refer to Texperiod Approx dive for the potential information refer to Texperiod Approx dive for the potential information refer to Texperiod Approx dite for the potential inf
Chapter 8: Ecology	Designated Sites of Special Conservation	Pre-Construction	The Site is located within 10 km of seven statutory designated sites for nature conservation (Figure 8.1), including Tarbert Woods SAC and Tarbert to Skipness Coast SSSI which are located adjacent to the eastern extent of the Site.
			Nevertheless, the design evolution of the proposed Development and reduction in the application boundary (from the west) has ensured that no infrastructure is located within Tarbert Woods SAC or Tarbert to Skipness Coast SSSI, and there would be no direct impacts

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			upon these designated sites or any other statutory designated site for nature conservation with ecological qualifying interests.
	Protective species; Otter and water vole, badger, squirrels, pine marten, wildcat	Pre-Construction	During the baseline surveys, no designated site for nature conservation, designated by virtue of its terrestrial mammal interests, was found located within 2 km of the Site and no existing records of badger, pine marten, water vole or wildcat were identified during the desk study within 2 km of the Site.
			Evidence of badger, otter and pine marten within the Site was limited and did not include any breeding or resting places. No field signs for red squirrel, water vole or wildcat were found within the Site. Due to the relatively small footprint of the proposed Development in the wider context of the Site, and the availability of similar habitats remaining unaffected within the Site, immediate and wider surrounding area, significant negative effects upon these terrestrial mammal species are considered unlikely.
			Good practice measures, including pre-construction surveys and the appointment of a suitably qualified Ecological Clerk of Works (ECoW), will also ensure the protection of protected species during construction and operation of the proposed Development.
			Pre-construction surveys for protected terrestrial mammals including otter, water vole, badger, pine marten, wild cat and red squirrel would therefore be undertaken, prior to the commencement of construction works and as outlined within the CEMP.
			This would cover all areas within 250 m of the proposed Development infrastructure and associated working areas. In the event of increased observations of protected species prior to construction commencement, if necessary, mitigation in respect of working practices would be developed, licences obtained and consultation with NatureScot undertaken.
	Bats	Pre-Construction / Operation	According to Chapter 8 and Technical Appendix 8.4 , the Overall Risk Assessment for common pipistrelle and soprano pipistrelle is considered to fall under "Low/Medium Site Risk" and "Medium Site Risk". These were based on Bat activity surveys that were undertaken in 2019 and 2020 in accordance with NatureScot guidance (SNH, 2019) comprising the use of 10 automated monitoring stations distributed within the Site at representative turbine locations. Despite the identified "Low/Medium Site Risk", all relevant guidance shall be followed, and additional mitigation measures would still be introduced to maximise mitigation.

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			For the proposed Development, the specified layout has adopted a minimum 106 m key-hole felling radius of plantation woodland habitat around all 13 turbines, which satisfies NatureScot guidance (SNH, 2019) in relation to maintaining a 50 m 'stand-off' distance between turbine blade tips and the nearest potential woodland edge features for bats. This is based on the calculation provided within NatureScot guidance (SNH, 2019) adopting a precautionary top tree height for surrounding woodland of 31 m over lifespan of the proposed Development. As such, the proposed Development provides at least a 50 m 'stand-off' distance for all turbine locations from woodland edge features.
			In addition, re-planting within 106 m of proposed turbine locations, would not be undertaken within the felled area, to minimise the risk of collision mortality.
			 During operation, bat activity and collision would be monitored on an annual basis via: static bat detectors – set at six randomly selected turbines during July – September which is when most fatalities are found to occur; carcass searching within 50 m radius at the same turbines every two weeks from 1st of July until end of September i.e., seven searches in total. Carcass searching would be facilitated via trained detection canines, so that an effective observer of efficiency rate of 80 % or more can be achieved.
			Currently, no curtailment parameters (i.e., the shutdown of wind turbines for a specific period and time of the day) are being proposed due to the nature of the Site, low presence of bat species and "Low/Medium risk". Nevertheless, following each annual monitoring period, if the number of bat fatalities is more than two bats per turbine per year, the operator shall introduce curtailment measures to minimise bat collision mortalities.
	Fish	Pre-Construction	As part of the required CEMP, pollution prevention measures would be implemented. Prior to the commencement of construction works, Scottish Environment Protection Agency (SEPA) and NatureScot would be consulted on the plan. These measures would ensure the protection of the water environment and the fauna they contain.
			In addition, the requirement four new watercourse crossings (further details in Chapter 10), will be of a design to maintain hydraulic connectivity and allow the free passage of fish and other wildlife beneath.

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	Wet and dry modified bog	Construction	The design of the proposed Development ensured the provision of infrastructure within areas, where high-quality blanket bog is limited or non-existent. It has however, not been possible to entirely avoid areas of wet and dry modified bog habitats, due to the distribution of these habitat types within the Site.
			The layout of infrastructure (e.g., solar arrays, wind turbines, tracks and substation) has however, sought to avoid areas of deeper peat as far as possible, minimising the potential for impacts to habitat types with greater future restoration potential.
			Furthermore, the indirect loss of 2.5 hectares of wet modified bog and 3.85 hectares of habitat mosaic containing wet modified bog will be offset by proposed peatland restoration, as detailed within the Draft Habitat Management Plan (HMP), which will return areas of lower quality modified bog into higher quality blanket bog habitat.
	Reptiles	Construction	Although existing records of common toad Bufo bufo and adder Vipera berus, were identified during the desk study within 2 km of the Site, no records of any reptile or amphibian species listed as an EPS were identified. This included no records of great crested newt Triturus cristatus with the species considered to be absent from this area (McInerny and Minting, 2016).
			Due to the relatively small footprint of the proposed Development and the availability of similar habitats remaining unaffected within the Site, immediate and wider surrounding area, significant negative effects upon amphibian and reptile populations are considered unlikely.
			Nevertheless, during the removal of any vegetation, vegetation management would comprise 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 ECoW, prior to construction works commencing in that area, to encourage reptiles to leave the area. Suitable habitat within working areas would also be searched by the ECoW 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 weather conditions in any one year).

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	Protective species; Otter and water vole, badger, squirrels, and pine marten	Construction	All potentially dangerous substances or materials within the 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 1 m 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 9: Ornithology	Birds	Pre-Construction / Construction	 The following design considerations have been incorporated to avoid or minimise adverse effects upon ornithological features: wind turbines were located within lower conservation value conifer plantation forestry, where the importance of habitat important ornithological features, and therefore activity rates are likely to be low; the design layout process has taken into consideration breeding golden eagle, hen harrier and short-eared owl, applying an appropriate buffer between nest sites and wind turbines (and infrastructure where possible) and locating wind turbines within low value conifer plantation (1.5 km buffer, 500 m and 500 m buffers applied respectively around nest sites for these species). The process took into consideration golden eagle flight activity survey results and GET model predictions; all waterbodies used by breeding red-throated divers were buffered by at least 500 m from wind turbines (and infrastructure where possible); all black grouse lek sites recorded during baseline surveys were buffered by at least 500 m from wind turbine locations and infrastructure, extending to 750 m for construction works April/May; and
			 a Bird Protection Plan (BPP) would be in place prior to the onset of construction activities. The BPP will describe survey methods for the identification of the sites used by Schedule 1 birds and will detail protocols for the prevention, or minimisation, of disturbance of birds as a result of activities associated with the proposed Development. The developed BPP would be overseen by the ECoW. In line with the developed BPP, to avoid potential disturbance to breeding Schedule 1 and Schedule 1A species, all areas within at least 600 m of Site clearance activities will be

surveyed in advance of works being commenced during the core breeding se to 31st August, inclusive), to identify any nesting locations for such species. an active nest or roost is discovered within the 600 m radius, a disturbance ri will be prepared under the BPP and if necessary, work exclusion buffers arou sites will be established in accordance with best available species guidance a time and/or as agreed in consultation with Nature Scot.	eason (1st March In the event that isk assessment und identified nest applicable at the
Furthermore, should the nest of any other wild bird not listed in Schedule 1 b construction activities within 50 m of the site should be halted and the ECoW immediately. Again, in line with the BPP, a disturbance risk assessment shou and any measures considered necessary to prevent disturbance to the nest implemented.	e located, ' informed uld be undertaken, site should be
The qualified ECoW who would be present for the duration of the construction reinstatement periods, apart from other responsibilities on site, must ensure interests are safeguarded. Thus, the role of the ECoW would include the following the following the term of term of the term of term of term of term of term of the term of ter	n and that ornithological owing tasks:
 provide information to all staff onsite, so staff are aware of the ornitholog within the Site and the legal implications of not complying with agreed we implement the developed Bird Protection Plan (BPP) agree and monitor measures designed to minimise damage to retained I undertake pre-construction surveys and advise on ornithological issues a restrictions where required; and complete site-supervision works as required, in relation to sensitive habit ornithological species. 	jical sensitivities orking practices; habitats; and working itats and protected
Operation No significant adverse effects upon any important ornithological feature woul of the operation of the proposed Development. As such, no additional mitigat required.	d occur as a result tion measures are
Enhancement measures, provided as part of the HMP would however remain throughout the operational phase, subject to periodic review in accordance w best practice management advice.	∩ in place <i>v</i> ith any emerging

Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
Pollution risk, sediment management and management of surface runoff rates and volumes	Construction	Temporary water control measures would be implemented as necessary adjacent to areas of larger excavation. These measures would take the form of temporary settlement ponds, filter drains or proprietary treatment measures such as Silt Busters. Detail would be provided within the Pollution Prevention Plan(s) required for the Construction Site Licence and suitability would be determined following appropriate on-site soil tests.
		and storage requirements, waste management, traffic and transport management and would specify monitoring requirements for wastewater, water supply including an Environmental Incident Response Plan (EIRP) and all appropriate method statements and risk assessments for the construction of the proposed Development.
		Prior to construction, section specific drainage plans would be produced. These would consider 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 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.
		Construction activities would be restricted during periods of wet weather, particularly for any work occurring within 20 m of a watercourse or within areas of identified deeper peat, to minimise mobilisation of sediment in heavy rainfall. The following 'stop' weather condition protocols would be followed to guide construction activity:
		 high intensity rainfall: during construction, greater that 10 mm per hour long duration waterfall: preceding 24 hours greater than 25 mm 7-day cumulative rainfall (1): Preceding 7 days of rainfall greater than 50% of the monthly average; and 7-day cumulative rainfall (2): Preceding 7 days of rainfall greater than 50 mm.
Pollution risk	Construction	 Good practice measures in relation to pollution prevention would include the following: refuelling would be undertaken in a designated area, at least 50 m from watercourses, or location with adequate precautions in place, such as a dedicated impermeable surface
	Matter / effect requiring mitigation Pollution risk, sediment management and management of surface runoff rates and volumes	Matter / effect requiring mitigationTiming / phasePollution risk, sediment management and management of surface runoff rates and volumesConstructionImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates and volumesImage: Construction of surface runoff rates

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			 no maintenance or refuelling activities would take place within 500 m of the private water supplies (PWS) except as required within the designated area of the construction compound; in line with PPG 4, temporary welfare facilities and site utilities including water supply and foul water disposal; routine monitoring checks of project infrastructure, including track and hardstanding surfaces and all drainage infrastructure, would be undertaken on a quarterly basis throughout operation of the proposed Development; where vehicle maintenance is necessary in the field, owing to breakdown, additional precautions would be taken to contain contaminants, such as spill/drip trays or absorbent mattresses; Although it is not expected that concrete batching would take place on site, if necessary, dedicated drainage would be installed to ensure that water from the batching area can be suitably treated to reduce alkalinity and suspended sediment load prior to discharge, or removed from site by tanker for treatment and disposal offsite; water would be prevented as far as possible, from entering excavations such as borrow pits (refer to Technical Appendix 10.3); all storage tanks would be located within impermeable, bunded containers where the bund is sufficient to contain 110 % of the tank's capacity. For areas containing more than one tank, the bund would be sufficient to contain 110 % of the largest tank's capacity or 25 % of the total capacity, whichever is the greater; 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 CEMP for the proposed Development.
	Erosion and sedimentation	Construction	 Good practice measures for the management or erosion and sedimentation would include the following: stockpiled material would be located on flat or nearly flat ground where possible, with at least a 50 m buffer from watercourses; care would be taken to maintain separate stockpiles for separate soil types in order to preserve the soil quality; water would be prevented as far as possible, from entering excavations such borrow pits through the use of appropriate cut-off drainage (refer to Technical Appendix 10.3); 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

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			 the surrounding drainage system. Detailed assessment of ground conditions would be required to identify locations where settlement lagoons would be feasible; 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 monitoring and maintenance programme would be put in place for the drainage infrastructure, to include regular visual inspection of drainage ditches, crossing structures and cross-drains to check for blockages, debris or damage that might impede water flow; 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; a monitoring and maintenance programme would be put in place for the drainage infrastructure, to include regular visual inspection of drainage ditches, crossing structures and cross-drains to check for blockages, debris or damage that might impede water flow; a monitoring and maintenance programme would be put in place for the drainage infrastructure, to include regular visual inspection of drainage ditches, crossing structures and cross-drains to check for blockages, debris or damage that might impede water flow; and SPR construction personnel and the Principal Contractor would carry out regular visual inspections of watercourses to check for suspended soils in watercourses downstream of work areas.
	Fluvial flood risk	Construction	 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

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			 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. Further information on ground conditions and drainage designs would be provided in the final CEMP.
	Water abstractions	Construction	The groundwater sources of Coalfin and Campbells Cottage are assessed as very low risk due to the distance downstream from the proposed Development and distance between the Skipness River and the groundwater abstraction points, reducing the potential for pollution. The Bardaravine surface water source has been assessed as low risk due to the distance from the development and the construction works that could affect the watercourse being limited to the access track. Furthermore, in line with good practice techniques, although concrete batching is not expected to take place on site, concrete would be delivered via mixer lorries. Nevertheless, if concrete batching is deemed necessary, SPR would apply for a CAR Licence and comply with relevant regulations under CEMP guidelines.
	Watercourse crossings	Construction	 Watercourse crossings have been kept to a practical minimum, with 16 regulated crossings and 8 minor crossings required for the proposed Development. Most of these are on relatively small headwater channels, and most are existing crossings on the existing forestry track. Only 3 are completely new crossings, 2 are regulated crossings and 1 is a minor crossing. Good practice in relation to new water crossings involves the following aspects: The design of the watercourse crossings would be agreed with SEPA prior to construction and be regulated in accordance with CAR; The appropriate crossing type would be identified from SEPA's good practice guidance and would take into account any ecological and hydrological constraints; and The crossing would be sized and designed so as to minimise effect upon flood risk (sized to accommodate at least the 200-year flow).

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	Peat management	Construction / Pre- Operation / Operation	 Peat Management Plan - Technical Appendix 10.2 <u>Temporary Construction Areas:</u> During the construction of the proposed Development, the Principal Contractor will adopt the following good practice guidelines with relation to peat excavation for crane hardstandings and the construction compounds: where peat conditions are suitable, peat turves will be excavated as intact blocks of the uppermost 0.5 m including the vegetated surface acrotelm layer and the upper part of the catotelm; in areas where peat conditions do not allow clean removal of peat turves, the upper layer of peat will be removed as divots or much rather than as turves. Careful handling will help to keep the vegetated blocks largely the right way up; underlying peat will be extracted as close to intact as is feasible within the constraints of the site. Remoulding of the peat by the excavator will be kept to a minimum; excavated materials will be classified depending on their composition, and each type will be stored separately. Anticipated material classes are: peaty soils and topsoil, subsoil, acrotelmic peat, catotelmic peat, mineral soil, and rock; and excavated peat will be transported as short a distance as practicable for either reuse or temporary storage, in order to minimise loss of structure during transport. Temporary Storage: The ECoW will maintain a schedule of reuse and restoration areas and will direct whether excavated peat should be stored or transported directly to a suitable reuse location. Immediate reuse is likely to be more practicable in the later stages of construction. Soils, peat turves and peat will all be stored separately. The following outline good practice will be applied to all areas of peat and soil storage:
			 excavated materials will not be stored immediately above excavation faces, in order to prevent overburden-induced failure; local drainage lines, areas of very wet ground and locally steep slopes will be avoided for excavated material storage, including peat;

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			 peat turves will be stored vegetation-side up; careful handling of upper-layer peat divots, from areas where peat turves cannot be excavated, will help to retain vegetated blocks the right way up; catotelmic peat will stored separately from vegetated peat blocks, in mounds up to 1 m high; limited smoothing or 'blading' of stockpiled catotelm peat, topsoil and subsoil will help to shed rainwater and prevent ponding of water on the stockpile; in periods of dry weather, light spraying of the temporary peat stores will be applied in order to minimise drying; all temporary storage areas for excavated peat and soils will be at least 50 m from any watercourse; runoff from stored peat and soils will be managed to avoid impacts to habitats and watercourses. Where necessary, drainage control measures such as use of silt fences or straw bales will be put in place; and monitoring of peat storage areas may be required during wet weather or snowmelt. This would be undertaken by the Principal Contractor, with findings reported to the ECoW. Reinstatement and Restoration carefully evaluate potential restoration sites, such as borrow pits for their suitability, and agree that these sites are appropriate with the ECoW, Forestry and Land Scotland (FLS) and Consultees; undertake reinstatement and restoration work as soon as practically possible; reinstatement of peat turves and vegetated peat divots will ensure that surface revegetation is encouraged as early as possible. Vegetated peat must only be used for surface layer reinstatement and restoration; re-seeding of any significant areas of bare peat will be undertaken with a suitable species mix appropriate to the surrounding habitats. Careful planning of reinstatement should minimise areas of bare peat by appropriate distribution of vegetated peat turves and divots;

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			 in the event that stored peat becomes dewatered or desiccated, this material would not be exposed in the upper part of any reinstatement or restoration area in order to minimise any further character loss; storage of excavated peat will be minimised, to prevent or limit dewatering and desiccation; and where reinstatement of peat or soil is required on steeper slopes, a biodegradable geotextile may be appropriate to provide additional stability to the slope until vegetation becomes re-established. The Outline Peat Management Plan, as a live document, would be updated and refined as necessary with further site-specific detail once site investigation results become available.
	Peat landslide hazard	Construction	 Construction work would make use of current best practice guidance relating to developments in peatland areas. A risk management system, such as a Design and Geotechnical Risk Register, would be developed as part of the post-consent detailed design works. This would be maintained through all subsequent stages of the proposed Development and updated as necessary whenever new information becomes available. The following principles in line with the Peat Slide Risk Assessment (Technical Appendix 10.1) will be applied in all situations where peat is being reinstated or used in restoration: during construction, members of construction staff would undertake advance inspections and carry out regular monitoring for signs of peat landslide indicators. A geotechnical specialist would be on call to provide advice, if required by study area conditions; carfeful micrositing of infrastructure to avoid possible problem areas, where possible. This would be assisted by additional verification of peat depths, to full depth, in any highlighted areas where construction work is required. Track drainage would be installed in accordance with published good practice documentation and would be minimised in terms of length and depth in order to minimise concentration of flows;
			 construction activities would be restricted during periods of wet weather, particularly for any work occurring within 20 m of a watercourse or within areas of identified deeper peat. Careful track design would ensure that the volume and storage timescale for excavated materials would be minimised as far as practicable during construction works; vegetation cover would be re-established as quickly as possible on track and infrastructure verges and cut slopes, by re-laying of excavated soil turves and peat acrotelm, to improve slope stability and provide erosion protection. Additional methods,

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			 including hydroseeding and/or use of a biodegradable geotextile, would be considered if necessary, in specific areas; and construction staff would be made aware of peat slide indicators and emergency procedures such as introducing a 'Peat Hazard Emergency Plan'. Emergency procedures would include measures to be taken in the event that an incipient peat slide is detected.
	Erosion and sedimentation	Operation	Only tracked or low ground pressure vehicles would be permitted access to unstripped ground. Existing tracks have been incorporated into the proposed Development as far as possible and use of these would help to keep additional soil disturbance to a minimum.
			Soil stripping would be undertaken with care and would be restricted to as small a working area as practicable. Topsoil would be removed and laid in a storage bund, up to 2 m in height, on unstripped ground adjacent to the working area. It would be attempted to retain the turf layer vegetation-side-up where possible, although ground conditions may make this challenging. Subsoils and superficial geological deposits would be removed subsequently and laid in storage bunds, also up to 2 m in height, clearly separated from the topsoil bund. Care would be taken to maintain separate stockpiles for separate soil types in order to preserve the soil quality.
			Limited smoothing or 'blading' of stockpiled soils and catotelmic peat would be undertaken to help shed rainwater and prevent ponding of water on the stockpile. Stockpiles on notably sloping ground would have sediment control measures installed near the base, on the downslope side, to collect and retain any sediment mobilised by rainfall. Stockpiles would be located on flat or nearly flat ground where possible.
			Excavated soil and peat would be used in site restoration and rehabilitation works immediately post-construction, in order to promote fast re-establishment of vegetation cover on worked areas and areas of bare soil or peat that are not required for the operational phase of the proposed Development.
			Vegetation cover would be re-established as quickly as possible on track and infrastructure verges and cut slopes, by re-laying of excavated peat acrotelm and soil turves, to improve slope stability and provide erosion protection. Additional methods, including hydroseeding and/or use of a biodegradable geotextile, would be considered if necessary, in specific areas.

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
	Pollution risk	Operation	Antifreeze liquids and Hydraulic fluids for gearbox utilisation, would be kept in storage tanks located within impermeable, bunded containers where the bund is sufficient to contain 110 % of the tank's capacity. For areas containing more than one tank, the bund would be sufficient to contain 110 % of the largest tank's capacity or 25 % of the total capacity, whichever is the greater.
	Infrastructure and man-made drainage	Operation	Drainage may be required to service new sections of access track. For additional information regarding watercourse crossings, refer to Technical Appendix 10.5 .
	Maintenance	Operation	It is anticipated that routine maintenance of infrastructure and tracks would be required across the Site. This may include work such as maintaining access tracks and drainage and carrying out wind turbine, solar panel and battery energy storage system (BESS) maintenance.
Chapter 11: Archaeology and Cultural Heritage	Protection of on-site and off-site assets	Construction / Operation	No direct impacts upon any known archaeological remains have been identified. No areas requiring protection from accidental damage by fencing during construction have been identified. Given the negligible-low potential for hitherto unknown archaeological remains to be preserved, the need for any mitigation works will be agreed with West of Scotland Archaeology Service (WoSAS). If necessary, the programme and scope of mitigation will be specified in a Written Scheme of Investigation (WSI) which will be agreed with the WoSAS in advance of the works. The magnitude of impact on Skipness Castle and Kilbrannan Chapter (SM13225) has been reduced in EIA terms from Significant to Not Significant through measures embedded in the design of the proposed Development, i.e. the complete removal of one the turbines at the final EIA stages (T10), and further relocation of another turbine (T05) further north. There are no
			further mitigation is suggested.

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
Chapter 12: Access, Traffic, and Transport	Traffic Management Plan	Construction	An Outline Construction Traffic Management Plan (CTMP) would be in place to actively mitigate effects associated with road disturbance, and an outline CTMP has been prepared at this stage and submitted as part of this Section 36 Application to outline the mitigation measures recommended during the construction stage. This is provided as a Technical Appendix 12.2 to this EIA Report.
			The purpose of the Outline CTMP is to provide preliminary details of proposed traffic management measures and associated interventions that would be implemented during the construction phase of the proposed Development in order to minimise disruption and ensure safety.
			The Outline CTMP would be supplemented with additional information as appropriate by SPR's appointed contractor(s), prior to commencement of construction activities.
			Should consent be granted, the Outline CTMP would be updated to a CTMP, the content of which would be agreed with A&BC through consultation and enforced via a planning condition.
			The CTMP would be used during the construction phase of the proposed Development to ensure traffic to, from and on the Site is properly managed.
			Given the length of the access track to and from the A83(T), it is likely that most loose materials will not be deposited onto the highway. Should there be evidence of this following the commencement of construction, suitable measures would be implemented within the Site to ensure materials are not transferred onto the highway, and road cleaning would take place if required to remove any deposits that are carried from the Site.
	Abnormal loads	Construction	An Abnormal Load Assessment would be provided to Transport Scotland to secure permissions for the movement of abnormal loads and would include detail of any required temporary widening and other road improvement measures. Together with detailed consideration of key points and issues associated with the selected route for the abnormal loads, to verify that the route is feasible for the selected turbine delivery, subject to physical and operational mitigation works.
			Detailed abnormal load delivery traffic management measures would need to be identified and included in the final CTMP (or provided as stand-alone report) setting out the mitigation required to address the potential issues the Abnormal Loads Assessment might identify. Prior

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			to the movement of abnormal loads, extensive public awareness is required to allow residents to plan and time their journeys to avoid disruption. The haulage Contractor shall remain responsible for obtaining all necessary permits from the relevant road and bridge authorities along the access route. The movement of abnormal loads will be timed to avoid periods of heavy traffic flow (e.g., it is proposed to move the loads during the night) to minimise disruption to the public. Specific timing restrictions imposed by the police or local authority have not been determined at this stage. Through urban areas temporary parking restrictions may be necessary to guarantee a clear route for the abnormal loads, and these need to be arranged in advance through the appropriate local authority. The parking restrictions would need to be locally enforced. Due to the size of vehicles required to transport these loads, escorts would be required for the entire route to control oncoming and conflicting traffic. Details of passing places such as those identified in Table 12.16 within Chapter 12 of this EIA Report, would assist in minimising the delay experienced by vehicles on the A83(T), albeit very few predicted during the night. A separate Abnormal Transport Management Plan (ATMP) would be prepared for the transport of the Abnormal Indivisible Loads (AILs).
	Dirt on roads	Construction	Due to the length of the on-site access track, the majority of any loose mud and debris collected on construction vehicles is most likely to fall on the access track and therefore unlikely to reach the public highway (the A83(T)). However, should any deposits onto the A83(T) be observed once construction commences, a wheel washing facility would be installed on-site, as set out in the CTMP. This would minimise the amount of material and dirt deposited on the road surface and the site Liaison Officer / Principal Contractor would ensure that the public road is kept clean by utilising a mechanical road sweeper if necessary.
Chapter 13: Noise	Construction Noise	Construction	Noise during construction works would be controlled by generally restricting works to standard working hours and exclude Sundays, unless specifically agreed otherwise with A&BC and the Principal Contractor undertaking the construction works. An Outline CEMP is provided as Technical Appendix 3.1 and the final CEMP would be secured through a planning condition. This would include measures to control construction noise and vibration levelsin an appropriate manner.

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			BS 5228 states that the 'attitude of the contractor' is important in minimising the likelihood of complaints and therefore consultation with the local authorities would be required along with providing information to residents on intended activities.
			The construction works on-site would be carried out in accordance with: relevant EU Directives and UK Statutory Instruments that limit noise emissions from a variety of construction plant;
			 the guidance set out in PAN1/2011 and BS 5228: 2009; PAN50; and, Section 61 of the Control of Pollution Act 1974 and Section 80 of the Environmental Protection Act.
			Additionally, a Noise Control Plan would be produced that includes:
			 procedures for ensuring compliance with statutory or other identified noise control limits; procedures for minimising noise from construction related traffic on the existing road network; procedures for ensuring that all works are carried out in accordance with the principle of "Best Practicable Means" as defined in the Control of Pollution Act 1974; and general induction training for site operatives, and specific training for staff having responsibility for particular aspects of controlling noise from the Site.
	Blasting operations	Construction	Unless otherwise agreed in consultation with A&BC, If blasting is to be employed at some of the borrow pits, the potential noise and vibration effects of blasting operations would be reduced (unless otherwise agreed with A&BC) according to the guidance set out in:
			 the relevant British Standards, and PAN50 Annex D.
			The most appropriate mechanism is for a pre-blasting noise management programme to be prepared which would identify the most sensitive receptors that could be potentially affected by blasting noise. The programme would contain details of the proposed frequency of blasting, and proposed monitoring procedures. The Principal Contractor, in conjunction with A&BC, would inform the nearest residents of the proposed times of blasting and of any deviation from this programme in advance of the operations.

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			The programme would be a matter for negotiation between the Principal Contractor and A&BC but would contain contact details and be provided to local residents should concerns arise regarding construction and blasting activities. In addition, each blast would be designed carefully to maximise its efficiency and to reduce the transmission of noise.
	Operational noise	Operation	Embedded mitigation measures have been adopted into the design of the proposed Development in order to minimise any potential noise impacts. The final selection of wind turbine would be made on the basis of enabling the proposed Development to satisfy the ETSU-R-97 noise limits.
			Operational noise levels are predicted to comfortably meet the requirements of ETSU-R-97. As a result, no specific mitigation is prescribed here. However, it is entirely possible that noise from the proposed Development would be audible at receptor locations at times. Operational noise would, in practice, be controlled via planning conditions which set out noise limits for the proposed Development.
Chapter 14: Socio- economics, Recreation and Tourism	Public access	Pre – Construction / Construction	During the construction phase of the proposed Development, where possible recreational access to the Site will be maintained along publicly accessible paths such as the Kintyre Way. Where access along the existing route is not possible, a diversion will be agreed and implemented. There will likely be occasions when access to the Site for members of the public is not possible for short periods during the construction phase for health and safety reasons (e.g., during delivery of certain infrastructure components). Changes to access arrangements within the Site will be detailed in an Access Management Plan prepared in advance of construction commencing. These will include an arrangement Plan
			details will be discussed with A&BC's Outdoor Access Manager and shared with key stakeholders such as Local Community Council's and the Kintyre Way Scottish Charitable Incorporated Organisation (SCIO).
	Vulnerable road users		The principal potential effects arising from construction, relate to construction traffic affecting vulnerable users of the local highway network e.g., pedestrians and cyclists. Measures are set out in Chapter 12 and Technical Appendix 3.1 which relate to how delivery of goods and

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			services would be managed during construction so as to minimise impacts on sensitive receptors.
			Based on the adoption of good practice, the following measures, as specified in the final CTMP for the proposed Development, would be adopted:
			 contractors with experience of the nature of the construction works proposed and of this type of development, would be appointed following a tendering process. Despite the appointed ECoW whose responsibilities would evolve primarily around ecology and ornithology related works, SPR would also appoint an Environmental Clerk of Works (EnvCoW) who would liaise with the Principal Contractor to ensure that all activities on site comply with appropriate construction methods, relevant planning conditions and protection of the environment. The EnvCoW would act as the first point of contact for any environmental related concerns; all contractors would be required to supply detailed method statements which would incorporate all planned mitigation methods. All Sub-Contractors are required to read, understand and adopt all procedures outlined within the final CTMP; Sub-Contractors who formulate a CTMP for their work activity would be required to issue it to the Principal Contractor for approval and acceptance prior to site issue. Any traffic management procedures required to secure a work area or safeguard Sub-Contractor operatives would be co-ordinated with SPR (e.g., use of banksmen, operatives carrying out works roadside); the Principal Contractors Site Management would be required to be informed of any planned site activity and movement of site traffic; the issue of this information would be required to be received within a suitable and agreed timescale to allow co-ordination of other site activities; any signage required on the public highway would be erected and positioned in accordance with the requirements of the Traffic Signs Manual and Safety at Street Works and Road Works – A Code of Practice, and in consultation with T& A&BC and Transport Scotland (TS); any permanent signs and street furniture which are required to be relocated to allow abnormal loads to pass would be identified in consultation with TS, A&BC and through a Trial Run, also known as Test Drive,

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			• warning signage on the Site would need tobe complied with. The two most important signs would be <i>"no entry"</i> and <i>"no unauthorised vehicles"</i> . In order to proceed beyond these signs, vehicle drivers would need to stop and contact the ganger/ foreman in control of the area to be escorted through the local area.
Chapter 15: Other Issues	Air quality	Construction / Operation	Mitigation measures as part of the CEMP (Technical Appendix 3.1) would be implemented based on good construction practice to reduce the potential for dust emissions.
			Some of the standard mitigation measures implemented on site may include, but will not be limited to, the following
			 adherence to the speed limit on site to reduce the dust generated from transport on site roads; water bowsers - spraying with water to dampen dust down; road sweepers - remove silt from the road surface to reduce the potential for dust on the public road, if required; materials with the potential to produce dust must be stored accordingly to prevent dust generation e.g., materials stored out of the wind and covered; and transport of dust generating material will be covered.
	Aviation	Construction / Operation	 The following guidance and industry standards on the potential effects of wind turbines on aviation and potential mitigation have been considered: Scottish Government Onshore Wind Policy Statement, December 2017; Civil Aviation Authority (CAA), CAP 168: Licensing of Aerodromes, March 2019; CAA, CAP 2038A00: Air Navigation Order 2016, January 2021; CAA, CAP 670: Air Traffic Services Safety Requirements, Part B, Section 4, June 2019; CAA, CAP 738: Safeguarding of Aerodromes, October 2020; CAA, CAP 764: CAA Policy and Guidelines on Wind Turbines, February 2016; CAA, Policy Statement: Lighting of Onshore Wind Turbine Generators in the United Kingdom with a maximum blade tip height at or in excess of 150m Above Ground Level, June 2017; NATS wind farm self-assessment maps available on the NATS website; and

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Mitigation Measure
			 Planning Circular 2 2003: Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2003, January 2003.
			Mitigation should only be required where radar clutter generated by the proposed Development's turbines has a detrimental impact on the ATS provided in the airspace in the vicinity of the Site.
			Although it is not considered that the turbines would have a detrimental impact on GPA's ATS, should mitigation be deemed necessary then the Terma PSR could be re-optimised to filter out any turbine-induced radar clutter.
			Again, although it is not considered that clutter associated with Lowther Hill PSR would have an impact on NERL's ATS, there would be mitigation options available. Infill radar feeds could be used from PSRs that are integrated into NERL's Multi-Radar Tracking infrastructure, including Tiree PSR (minimum infill coverage of 3,500 ft amsl), Cumbernauld PSR (minimum infill coverage of 4.000 ft amsl) and the two Glasgow Airport PSRs (minimum infill coverage of 6,000 ft amsl).
			Perimeter turbines would be fitted with infrared lighting with an optimised flash pattern of 60 flashes per minute of 200 ms to 500 ms duration at the highest practicable point.
			Provision of the following information to the MOD so that flying charts can be plotted with the proposed Development's infrastructure:
			 The date construction starts and ends; The maximum height of construction equipment; and The latitude and longitude of every turbine.
	Site Safety	Construction	There would be no public access to the Site during construction.
			Appropriate warning signs would be installed concerning restricted areas such as the substation compound, transformers, switchgear, and metering systems. All onsite electrical cables would be buried underground with relevant signage.

Table 16.2: Summary of Monitoring Commitments

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Monitoring Requirement
Chapter 3: Proposed Development	Environmental Management	Construction	 An Environmental Clerk of Works (ECoW) would be onsite during the construction phase to monitor the implementation of the following: a Traffic Management Plan (TMP); a Construction Methodology Statement (CMS); a Pollution Prevention Plan (PPP) (including monitoring, as appropriate); a Site Waste Management Plan (SWMP); and a Water Management Plan (WMP).
Chapter 8: Ecology	Avoid negative effects on habitats, protected species and aquatic interests	Construction	To ensure all reasonable precautions are taken to avoid negative effects on habitats, protected species and aquatic interests, a suitably qualified ECoW would be appointed prior to the commencement of construction, and they would advise SPR and the Principal Contractor on all ecological matters. The ECoW would be required to be present on the Site during the construction period and would carry out monitoring of works and briefings with regards to any ecological sensitivities on the Site to the relevant staff within the Principal Contractor and subcontractors.
			Vegetation monitoring would be undertaken as part of the HMP, as detailed in Technical Appendix 8.5 , to assess the efficacy of the implemented measures.
	Habitat restoration	Construction / Operation	Vegetation monitoring would be undertaken as part of the HMP, as detailed in Technical Appendix 8.3 , to assess the efficacy of the implemented measures.
Chapter 9: Ornithology		Pre-Construction / Construction / Operation	The following monitoring is proposed for ornithology: Any mitigation that is required around active lek sites, will be monitored by the ECoW to ensure there is no evidence of disturbance to black grouse by construction and operation works. Monitoring of the number and locations of lekking black grouse within 1.5 km of the proposed Development would be commissioned and would be undertaken in years 1-5, 10, 15 and 20 of the operational phases of the proposed Development.

EIA Report chapter	Matter / effect requiring mitigation	Timing / phase	Monitoring Requirement
			A report detailing the monitoring work would be published on an annual basis and made publicly available. Monitoring would be undertaken in line with best practice guidance, SNH Guidance on Methods for Monitoring Bird Populations at Onshore Wind Farms (2009).
Chapter 10: Hydrology, hydrogeology, geology and soils	Water quality monitoring	Pre-Construction / Construction	 A water quality monitoring programme would be established at multiple key locations around the proposed Development (refer to Table 10.18 and Figure 10.7). Monitoring would begin prior to any construction works, to allow pre-construction baseline quality to be determined. Details would be agreed with SEPA, but are anticipated to include at least the following: visual checks for entrained sediment; and in-situ measurements of pH, temperature, specific conductivity. Monitoring during the construction phase would be undertaken by the EcoW or suitably experienced alternative individual. Any change from baseline conditions of pH and/or specific conductivity would potentially indicate an incident and additional investigation would be required to identify the origin of the change.
Chapter 13: Noise	Blasting operations	Construction	In terms of the blasting for the proposed Development, unless otherwise agreed in consultation with A&BC, for example due to large separation distances, if blasting is to be employed at some of the borrow pits, the potential noise and vibration effects of blasting operations would be reduced according to the guidance set out in the relevant British Standards and PAN50 Annex D.
			prepared which would identify the most sensitive receptors that could be potentially affected by blasting noise. The programme would contain details of the proposed frequency of blasting, and proposed monitoring procedures. The operator would inform the nearest residents of the proposed times of blasting and of any deviation from this programme in advance of the operations. The programme would also contain contact details which would be provided to local residents should concerns arise regarding construction and blasting activities. In addition, each blast will be designed carefully to maximise its efficiency and to reduce the transmission of noise

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