

18 Schedule of Environmental Commitments

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18 Schedule of Environmental Commitments

18.1 Introduction

- 18.1.1 Best practice in Environmental Impact Assessments (EIA) recommends the use of a Draft Scheme of Mitigation, which can act as a quick reference for anyone interested in the mitigation measures to which the Applicant has committed to implementing and upon which the assessment of residual effects presented within the EIA Report has been based. It will be utilised by the Applicant throughout development of the detailed design, and the appointed contractors will be required to allow for, and ultimately implement, each of the measures in this schedule as a minimum.
- 18.1.2 Table 18.1 presents a Schedule of Environmental Commitments for the Proposed Development, listed according to the relevant environmental topic area. Individual EIA Report chapters should be referred to for full details of the mitigation.

Table 18.1 – Schedule of Environmental Commitments

Subject Area	Commitment	Timing
Project Design		
Micrositing	An agreement is sought for a micrositing allowance of 50 m around the wind farm infrastructure. During construction the need for any micrositing would be assessed and agreed with the onsite Environmental Clerk of Works (ECoW).	Construction
Crane Hardstandings	A detailed ground investigation will be completed prior to construction to inform the final crane hardstanding design.	Pre-construction
Access Tracks	Both northern and western delivery routes include road section off the public road network and will utilise exiting infrastructure (e.g. forestry tracks) where possible.	Construction and Operation
	Prior to construction, any required improvements to public roads will be undertaken and appropriate highway safety measures will be agreed with South Ayrshire Council (SAC) and Transport Scotland, with necessary signage or traffic control measures implemented throughout the construction phase on the agreed basis.	Pre-construction
Water Crossings	The final solution and detailed design for all water crossings, including any potential upgrades or amendments required to existing crossings, will be addressed through an appropriately worded condition and in accordance with the requirements of the <i>Water Environment (Controlled Activities) (Scotland) Regulations 2011</i> .	Pre-construction
Gatehouse and Construction Compound	The detailed location, size and engineering properties of the gatehouse and construction compound will be confirmed prior to the start of construction.	Pre-construction
	On completion of construction works, it is proposed that all temporary structures be removed and the compound area be restored.	Post-construction

Subject Area	Commitment	Timing
Borrow Pits	Detailed site investigations prior to construction will be carried out to further confirm the rock type, rock characteristics and suitability, as well as potential volumes to be extracted from the search area. The final borrow pit(s) identified during the geotechnical evaluation will be defined within the Construction Environmental Management Plan (CEMP) (refer to Section 3.4 below and Technical Appendix 3.1 Outline CEMP). The pollution control measures to be implemented during usage of the borrow pit(s) and its reinstatement will also be covered within this document.	Pre-construction
	Following construction, the borrow pit(s) will be restored and reinstated to agreed profiles.	Post-construction
Substation and Energy Storage Facility	The substation and energy storage facility will be located on land which avoids sensitive habitats, areas of deep peat and steep slopes.	Pre-construction
	The design of the substation and control room building is relatively flexible and where appropriate clad in local materials to match in the with surroundings.	Construction
	Details of the final external design of all components of the substation and energy storage compound are proposed to be secured through an appropriately worded planning condition.	Pre-construction
Construction Hours	The construction working hours will be between 07:00 and 19:00 Monday to Friday and 07:00 to 13:00 on Saturday. These times have been chosen to minimise disturbance to local residents. It must, however, be noted that out of necessity due to weather conditions and health and safety requirements, some generally quiet activities, for example abnormal load deliveries (which are controlled by Police Scotland) and also the lifting and installation of the turbine components, may occur outside the specified hours stated.	Construction
Landscape and Visual		
The primary mitigation adopted in relation to the Proposed Development is embedded within the design of the Proposed Development and relates to the consideration that was given to avoiding and minimising landscape and visual effects during the evolution of the Proposed Development layout.		

Subject Area	Commitment	Timing
Access Tracks	The use of existing tracks would minimise the amount of new and upgraded track required and so minimising further landscape and visual effects.	Construction and Operation
Turbine Lighting	Specific requirements for aviation and navigational lighting would be agreed with the relevant stakeholder's post-consent and prior to construction.	Pre-construction
	<p>Proposed turbine lighting scheme includes a reduced number of visible aviation lights in line with CAA guidance. Visible aviation lighting will be located on only six turbine hubs and intermediate lighting on four of the turbine towers.</p> <p>Visibility sensors will be installed on relevant turbines. If visibility around the site is greater than 5 km from the Proposed Development lights will operate in a lower intensity mode of 200 candela, if visibility reduced to 5 km or less then light would operate at 20000 candela</p> <p>It is also proposed to explore the possibility of using 'smart' aviation lighting (aviation obstruction lighting detection system) whereby the lights would only be switched on when low altitude aircraft enter a specified volume of airspace around the proposed turbines</p>	Operation
Ornithology		
CEMP	The CEMP will include good practice construction measures, pollution prevention controls and monitoring to be implemented over the course of the construction and operation of the Proposed Development in line with current industry and statutory guidance.	Construction and Operation
Construction Breeding Bird Protection Plan (CBBPP)	<p>Prior to commencement of construction activities, a CBBPP will be prepared and submitted for agreement in consultation with South Ayrshire Council and NatureScot. This will be informed by a pre-commencement breeding survey undertaken by a competent ornithologist to identify any active wild bird nests.</p> <p>Should any active nests be found, works will only proceed under the advice of the appointed ornithologist. Work exclusion buffers around identified nest sites would be implemented where necessary in accordance with best available species guidance applicable at the time and/or as agreed in consultation with NatureScot.</p>	Pre-construction

Subject Area	Commitment	Timing
Ecological Clerk of Works (ECoW)	<p>A suitably qualified ECoW will be employed for the duration of the construction and reinstatement periods, to ensure ornithological interests are safeguarded. The role of the ECoW will include the following tasks:</p> <ul style="list-style-type: none"> • provide toolbox talks and information to all staff onsite, so staff are aware of the ornithological sensitivities within the site and the legal implications of not complying with agreed working practices; • agree and monitor measures designed to minimise damage to retained habitats; • undertake pre-construction surveys and advise on ornithological issues and working restrictions where required; and • complete site-supervision works as required, in relation to sensitive habitats and protected ornithological species. 	Construction
Habitat Management Plan (HMP)	The HMP details enhancement measures to compensate for the adverse effects of habitat loss associated with the Proposed Development. This includes riparian native tree planting, peat/bog restoration and grassland management.	Operation
Ecology		
CEMP	The CEMP will include all good practice construction measures, pollution prevention controls and monitoring to be implemented over the course of the construction and operation of the Proposed Development in line with current industry and statutory guidance.	Construction
Faunal Species	Good practice measures to prevent harm to faunal species, will also include the careful storage of potentially dangerous substances or materials within construction compounds. Excavations will either be temporarily covered at night or designed to include a ramp.	Construction
HMP	Good practice habitat reinstatement measures will be adopted and implemented, on areas subject to disturbance during construction works as soon as it is practical to do so. Further details of habitat reinstatement measures are provided in the outline HMP.	Construction

Subject Area	Commitment	Timing
Fish Monitoring Plan	A fish monitoring plan will also be implemented to record pre-, during and post- construction fish populations in watercourses on and adjoining the site, with input from Ayrshire Rivers Trust (ART) and River Girvan District Salmon Fishery Board (DSFB).	Pre-, during and post-construction
Pre-construction Surveys	<p>Pre-construction surveys for protected terrestrial mammals including otter, water vole, badger, pine marten and red squirrel will be undertaken, within a defined period prior to the commencement of construction works and as outlined within the draft CEMP.</p> <p>This will cover all areas within 250 m of the Proposed Development infrastructure and associated working areas.</p> <p>The results of the pre-construction surveys will inform the need for further mitigation (if required) in respect of sensitive working practices, SPPs and the requirement to consult with NatureScot, in relation to protected species licensing.</p>	Pre-construction
ECoW	<p>A suitably qualified ECoW will be employed for the duration of the construction and reinstatement periods, to ensure ecological interests are safeguarded. The role of the ECoW will include the following tasks:</p> <ul style="list-style-type: none"> • provide toolbox talks and information to all staff on-site, so staff are aware of the ecological sensitivities within the site and the legal implications of not complying with agreed working practices; • agree and monitor measures designed to minimise damage to retained habitats; • undertake pre-construction surveys and advise on ecological issues and working restrictions where required; and • complete site-supervision works as required, in relation to sensitive habitats and protected species. 	Construction
Geology, Peat, Hydrology and Hydrogeology		
Glenalal Farm Access Track	The western section of existing forestry track to be widened above the catchment for the Glenalla Farm potable Private Water Supplies (PWS) will be monitored before, during and after the construction period on foot to avoid disturbing the Glenalla Farm access track which also	Pre-, during and post construction

Subject Area	Commitment	Timing
	drains into the water supply abstraction watercourse. A monitoring and contingency plan will be developed and approved by SAC prior to construction commencing.	
Hydrological Clerk of Works (HCOW)	Other areas of site that have a minor/moderate significance of effect will also be subject to additional monitoring and HCOW advice during construction. The HCOW will provide advice on drainage control and sediment management as well as on dewatering and other aspects potentially effecting the water environment.	Construction
Noise		
The turbine layout of the Proposed Development has been iteratively developed so as to achieve an acceptable noise impact on local residential amenity, based on a representative candidate turbine model, whilst maintaining as far as possible the generation capacity of the Proposed Development.		
Turbines	The selection of the final turbines to be installed at the Proposed Development will be made on the basis of enabling the derived site specific noise limits to be achieved at surrounding properties, including any relevant tonality corrections.	Pre-construction
Noise Compliance	Conditions attached to the planning consent should include the requirement that, in the event of a noise complaint, noise levels resulting from the operation of the Proposed Development are measured in order to demonstrate compliance with the noise limits. Such monitoring should be done in full accordance with ETSU R 97 and current good practice and include penalties for characteristics of the noise (if present).	Post-construction
Archaeology and Cultural Heritage		
Preservation of heritage assets in situ	Heritage assets 30-32, 33a, 12, 13, 30, 12, 13, 31-33a will be marked out for avoidance during the construction phase. The features will be identified by placing high visibility markers 5 m from the outer limit of the visible remains, facing the working area. Any required micrositing of the access tracks or of turbine (T3) will be managed to avoid the visible remains and the demarcated areas. The markers will be left in place for the duration of the construction phase and removed on completion of the Proposed Development.	Construction
	Two heritage asses (11-m and 29) will be directly affected by construction and warrant offsetting by archaeological investigation and recordings.	Construction

Subject Area	Commitment	Timing
Archaeological Investigation and Recording	Remains of two field banks (11-m), part of a small field system, will be investigated by archaeological excavation of a section across each bank. The purpose of the investigations will be to record the character and method of construction of the two field banks and recover any material that may help to date their construction; thereby helping to establish a possible date for the establishment or development of the farmstead.	Construction
	A small circular platform (29), of unknown purpose, will be investigated; initially by archaeological excavation of two opposed quadrants across the feature. The purpose of the investigation will be to establish the nature, character and condition of the feature and its archaeological significance. If this excavation reveals the feature to be a genuine archaeological feature, the whole platform will be excavated to a strategy to be agreed with WoSAS once the character of the feature is revealed	Construction
Watching Briefs	The Applicant will seek to agree the scope of the archaeological watching brief with WoSAS in advance of construction works. It is proposed that watching briefs will be carried out at asset 28. This will involve recording the character of the field banks and identify any evidence for historic cultivation that may remain as buried features and record any sequential development of cultivation and recover any artefactual evidence that may be present or any underlying archaeological features of earlier date.	Construction
Post-excavation assessment and reporting	If new, archaeologically significant discoveries are made during archaeological monitoring, and it is not possible to preserve the discovered remains in situ, provision will be made for the excavation where necessary, of any archaeological deposits encountered. The provision will include the consequent production of written reports, on the findings, with post-excavation analysis and publication of the results of the works, where appropriate.	Construction
Traffic and Transport		
	During the construction period, a project website, blog or Twitter feed would be regularly updated to provide the latest information relating to traffic movements associated with vehicles accessing the site. This would be agreed with the local roads authority.	Construction

Subject Area	Commitment	Timing
Construction Traffic Management Plan (CTMP)	The CTMP will detail the management of traffic to and from site, including abnormal loads and daily workers commute. It shall also include mitigation for impacts to public transport, local private access and public footpaths/rights of way, cycleways and bridleways.	Construction
	Before the AILs traverse the route, the following tasks would be undertaken to ensure load and road user safety: <ul style="list-style-type: none"> • Ensure any vegetation which may foul the loads is trimmed back to allow passage; • Confirm there are no roadworks or closures that could affect the passage of the loads; • Check no new or diverted underground services on the proposed route are at risk from the abnormal loads; and • Confirm the police are satisfied with the proposed movement strategy. 	Pre-construction
Abnormal Load Transport Management Plan	An Abnormal Load Transport Management Plan will be prepared to cater for all movements to and from the Proposed Development. This would include: <ul style="list-style-type: none"> • Procedures for liaising with the emergency services; • A diary of proposed delivery movements; • A protocol for working with local businesses; and • And proposal to establish a construction liaison committee. 	Pre-construction
Core Path Management Plan	Users of the Core Path will be separated from construction traffic through the use of barriers. Crossing points will be provided where required, with core path users having right of way. Appropriate compliant temporary road signage would be provided to assist at these crossing for the benefit of all users.	Construction
	The principal contractor will ensure that speed limits are always adhered to by their drivers and associated subcontractors. Advisory speed limit signage will also be installed on approaches to areas where core path users may interact with construction traffic.	Construction
	Signage will be installed on the site exit that makes drivers aware of local speed limits and reminding drivers of the potential presence of pedestrians and cyclists in the area. This will also be emphasised in the weekly toolbox talks.	

Subject Area	Commitment	Timing
Site Access Maintenance	The site entrance will be well maintained and monitored during the operational life of the Proposed Development. Regular maintenance will be undertaken to keep the site access track drainage systems fully operational and the road surface in good condition and to ensure there are no adverse issues affecting the public road network	Operation
Wear and Tear Agreement	Video footage of the pre-construction phase condition of the abnormal loads access route and the construction vehicles route would be recorded to provide a baseline of the condition of the road prior to any construction work commencing. Any necessary repairs would be coordinated with South Ayrshire Council and Ayrshire Roads Alliance. Any damage caused by traffic associated with the Proposed Development during the construction period that would be hazardous to public traffic would be repaired immediately.	Pre- and during construction
	There would be a regular road review and any debris and mud would be removed from the carriageway using an onsite road sweeper to ensure road safety for all road users.	Construction
Site Access Traffic Management Plan	<p>Additional site specific measures will be included in the CTMP to further improve road safety across the Study Area. These are:</p> <ul style="list-style-type: none"> • A voluntary 15 mph speed limit for HGV traffic associated with the site located when passing through Crosshill village and along sections of the access route which comprises core paths; and • The greater use of on-site borrow pits would help reduce the number of HGV movements leading to and from site than what has been assumed within the assessment. • On site concrete batching 	Construction
Socio-economics, Recreation and Tourism		
Skills Initiatives	The Applicant seeks to engage in activities developing local skills and interest in the onshore wind industry. When possible, the Applicant would welcome having people from Dumfries and Galloway College and other local educational establishments visit the Proposed Development's site.	Operation

Subject Area	Commitment	Timing
	It is expected that the turbine delivery vehicles will go through Maybole. This is seen as an opportunity to engage with the children from the two local primary schools. Engagement could take place through the organisation of a meeting with explanations of onshore wind energy.	Construction
Aviation		
Aviation Obstruction Lighting	The locations and heights of the turbines and of any cranes will be provided to the military and civil aviation authorities prior to turbine erection in order for the information to be publicised in Notices To Airmen (NOTAM) and the aviation mapping authorities for inclusion on aviation charts where appropriate.	Construction
	Aviation lighting will be installed and operated as detailed in Appendix 14.1	Operation
	The locations and heights of the wind turbines will remain on aeronautical charts, enabling aircraft to avoid the Proposed Development vertically or horizontally.	Decommissioning
Telecoms		
As there are no telecommunications links close to the Proposed Development, no effects have been identified and no mitigation is required.		
Shadow Flicker		
No mitigation measures are required during construction, operation and decommissioning of the Proposed Development in terms of shadow flicker.		

