Appendix 1.1: Schedule of Mitigation, Good Practice, Enhancement and Monitoring

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Introduction

This appendix provides a consolidated list of mitigation, good practice, enhancement and monitoring measures which have been identified through the Environmental Appraisal Report, and which will be implemented during construction and operation of the 400kV OHL ZV Diversion. Measures are presented on a topic-by-topic basis, reflecting the chapters of the EAR. Where SPEN will commit to other mitigation/good practice in relation to topics not assessed in the EAR (such as noise and traffic and transport), these are also included.

Good Practice / Embedded Mitigation	Additional Mitigation	Enhancement	Monitoring
Chapter 2: Project Description			
A Construction Environmental Management Plan (CEMP) will be prepared prior to the start of construction, detailing measures to avoid or mitigate potential effects associated with key construction activities. The CEMP will identify those responsible for the management and reporting on the environmental aspects during construction. The CEMP will be used to ensure a commitment to meeting all relevant conditions attached to the Section 37 consent and deemed planning permission. Adherence to the CEMP will be a contractual requirement of each contractor that SPEN appoints. The purpose of the CEMP is to: ■ Provide a mechanism for ensuring that construction methods avoid, minimise and control potentially adverse significant environmental effects; ■ Ensure that good construction practices are adopted and maintained throughout construction; ■ Provide a framework for mitigating unexpected effects during construction and decommissioning; ■ Provide assurance to third parties that agreed environmental performance criteria are met; ■ Establish procedures for ensuring compliance with environmental legislation and statutory consents; and ■ Detail the process for monitoring and auditing environmental performance. The CEMP will be updated when necessary to account for changes or updates to legislation and good practice methods throughout the construction and decommissioning phases. The CEMP will also be amended to incorporate information obtained during detailed ground investigations which will be undertaken post consent and prior to construction activities. Compliance with the CEMP (including procedures, record keeping, monitoring and auditing) will be overseen by a suitably qualified and experienced Environmental Manager from SPEN. The CEMP will contain the following documents, which the Principal Contractor and their sub-contractors will be required to adhere to throughout the construction process: ■ A Pollution Prevention Plan (PPP); ■ Construction Method Statements (CMS); ■ A Water Protection Plan (WPP); ■ A Site Waste Management Plan (SWMP); ■ A Construction Traffic Management Plan (CTMP). ■ Bird Protection Plan (BPP) and Species Protection Plan (SPP).	Additional mitigation is set out as required for each topic below.	See **Chapter 4: Ecology** below for proposed biodiversity enhancements.	The Principal Contractor will be responsible for the continual development of the CEMP to take account of monitoring and audit results during the construction phase and changing environmental conditions and regulations.
Chapter 3: Landscape and Visual Amenity			
All mitigation of potential landscape and visual effects arising from the construction phase of the proposed development, such as the protection of vegetation during construction and the restoration of disturbed areas after construction will be detailed in a Construction Environmental Management Plan (CEMP) which includes reference to construction method statements. Landscape and visual effects during the operational phase of the Proposed Development have been considered and minimised by embedded mitigation as through the design of the project.	No further mitigation measures are proposed.	None proposed.	None proposed.
Chapter 4: Ecology			
The following outlines the avoidance and embedded mitigation measures in relation to ecology that will be adopted by SPEN: ■ The development and application of a CEMP, which will set out (amongst others) guidance on compliance with nature conservation legislation and policy. This will include adherence to Guidelines on Pollution Prevention and construction Method Statements incorporation of relevant measures in relation to lighting, waste management and minimisation of vegetation removal required. ■ The appointment of an Advisory Environmental Clerk of Works (ECoW) to advise, monitor and report on compliance with relevant legislation, policy and project specific mitigation during construction.	If any new protected species are discovered through pre-construction surveys, the ILA will allow for the protection of sheltering and resting sites. Where this not possible, the NatureScot licensing system will be used to ensure works are completed in full compliance	A Biodiversity Enhancement Strategy (BEP) will be developed and implemented post consent to provide meaningful habitat enhancement appropriate to the scale of the Proposed Development. The key objective of the BEP will be to	SPEN will appoint an Advisory Ecological Clerk of Works (ECoW) to advise, monitor and report on compliance with relevant legislation, policy and project specific mitigation during construction.

Good Practice / Embedded Mitigation	Additional Mitigation	Enhancement	Monitoring
■ Pre-construction surveys to be completed to confirm the status of protected species prior to works commencing. This will include update preliminary bat roost potential, badger, water vole and red squirrel surveys. ■ Production of a Species Protection Plan (SPP) to set out the approach to the monitoring of protected species prior to and during construction. ■ The 'Infrastructure Location Allowance'(ILA) will be applied to allow micro-siting of towers to avoid ecologically sensitive locations, such as: breeding shelters of protected species (e.g. badger setts, water vole burrows). This will include applying a 30m buffer zone around the conifer plantation and implementation of standard pollution prevention controls and best practice during the construction phase will be implemented to protect from damage and prevent any significant effects on this feature. This will be advised by an Ecological Clerk of Works (ECoW) during construction. ■ Where possible, the ILA will allow for the protection of sheltering and resting sites. Where this is not possible, the NatureScot licensing system will be used to ensure works are completed in full compliance with welfare and conservation standards. Any micrositing required to protect sensitive species will again be advised by the ECoW during construction. ■ Where appropriate, vegetation will be protected during construction in localised locations via appropriate matting or other appropriate methods as directed by the ECoW. This will be particularly relevant to works either within or in proximity to marshy grassland habitats.	with welfare and conservation standards. Any micrositing required to protect sensitive species will again be advised by the ECoW during construction.	deliver SPEN's 'No Net Less' objective for the Proposed Development which will be measured by the use of the Biodiversity Net Gain metric to demonstrate this.	
Chapter 5: Ornithology			
The appraisal of effects on ornithological receptors is made under the assumption that a Bird Protection Plan (BPP) is in place and implemented prior to construction commencing. The BPP will detail protocols for maintaining compliance with relevant species protection legislation and best practice during the construction phase, to ensure that bird species and important sites for birds (nests, roosts, key feeding sites) are safeguarded from disturbance during critical periods. The BPP will be cognisant of relevant legislation, especially the Wildlife and Countryside Act 1981, taking account of the enhanced protections afforded to nest sites and to nesting and roosting birds listed in the Schedules of the Act. Further requirements which should be included in the BPP are: ■ Timing of work: Where possible, any tree-felling and ground clearance should be scheduled outside of the breeding bird season, but should also take account of winter roosts. ■ Pre-construction surveys: If work is scheduled to take place during the breeding bird season (April to August inclusive), pre-construction bird surveys should be undertaken within a series of distance buffers from construction works, with specific methods dependent on target species, affected habitat and the likely stage of the breeding cycle. ■ Nest protection: Protocols should be developed to ensure nests and other sensitive bird sites are protected from destruction, or to ensure that disturbance is prevented or minimised during construction activities. This will include species-specific stand-off distances and work protocols to ensure nesting birds are safeguarded. ■ Toolbox talk: The BPP should be overseen by a suitable experienced Environmental Clerk of Works who will oversee the delivery of 'toolbox talks' to contractors to make them aware of bird sensitivities, legislative requirements and relevant working protocols.	None proposed	Enhancement measures that benefit birds will be developed within the overarching Biodiversity Enhancement Strategy (BEP) that will deliver SPEN's No Net Loss objective for the Proposed Development	None proposed
Chapter 6: Hydrology, Hydrogeology, and Peat			
The proposed route of the OHL was located as far as reasonably practical from watercourses and other natural hydrological features. An infrastructure buffer of 50m from watercourses was achieved where possible. Watercourse crossings (of access tracks) have been avoided, and existing tracks were used where possible to avoid new crossings. The OHL crosses two small unnamed watercourses, but construction works (and tower locations) will be set back from the watercourses by an appropriate buffer (of at least 50m where possible). Locations where a 50m buffer could not be achieved are described in the 'Appraisal of Effects' section and additional mitigation provided if required. Stringing the OHLs across watercourses will not impact the bed and banks. In accordance with NPF4, the Proposed Development site is not within a flood risk area. Good practice mitigation measures will be implemented during construction to prevent pollution and minimise the impact of construction on the receiving water environment in line with the CEMP, which will reflect best practice guidance and recognised industry standards, as well as SPEN's recent experience of constructing OHLs. SEPA Guidance for Pollution Prevention (GPP) will be followed, as will SEPA's general binding rules (GBR) under the Water Environment (Controlled Activities) Scotland Regulations 2011, as amended (CAR Regulations). Many of the measures mitigate several potential effects (e.g., mitigation to minimise sedimentation and pollution such as construction Sustainable Drainage Systems (SUDS) can also serve to attenuate surface water run-off). Mitigation measures that are incorporated into project design during construction will include: ■ Measures to reduce effects of increased surface water run-off; ■ Measures to reduce sedimentation and erosion; ■ Measures to reduce pollution and accidental spillage; and ■ Measures to be put in place at watercourse crossings.	Additional mitigation and pollution control (e.g. silt fences) will be put in place during the upgrade works at this tower to minimise impacts to the water environment. During construction, additional pollution protection measures will be put in place round construction working areas that are within 50m of watercourses to prevent silt or other pollutants from leaving the construction area and entering watercourses (e.g. swales, silt fences). Watercourse crossing management and mitigation plans will be outlined in the CEMP and design of temporary crossings will follow SEPA guidance and minimise effects	None proposed.	An Ecological Clerk of Works (ECoW) will be on site throughout construction to monitor and assess the works and check the mitigations outlined in the PPP are adhered to and function properly.

Good Practice / Embedded Mitigation	Additional Mitigation	Enhancement	Monitoring
The identified limited areas of shallow peat in the OHL corridor will be avoided during the upgrade works.	on the bed and banks of watercourses. Peat management measures will be outlined in the CEMP, following best practice guidance. If it is necessary to remove any peat around the ZV111 tower working area, a Peat Management Plan (PMP) will be produced. Excavated peat will be managed following SEPA requirements and guidelines (SEPA, WST-G-052, 2017) and will be reused on site wherever possible.		
Chapter 7: Cultural Heritage			
The layout of the Proposed Development, including associated access routes, was subsequently designed to avoid or minimise direct effects and minimise the effects on setting on cultural heritage assets as far as possible. The layout shown on Figure 7.1 of the EAR therefore embeds design based mitigation int the siting of the Proposed Development.	Mitigation measures have been set out that would avoid or reduce the predicted effects. The proposed mitigation includes the demarcation of two cairns for preservation in-situ. Any requirement for a programme of archaeological mitigation, either in advance of construction works (archaeological trial trenching excavation), or during construction works (archaeological monitoring and recording) would be agreed through consultation with the South Lanarkshire Council archaeological advisors (WoSAS) and carried out under the terms of any condition attached to planning consent. If significant discoveries were made during trial trenching or archaeological monitoring and preservation in situ were not possible, provision would be made for an appropriate amount of investigation and recording to a programme to be agreed in writing with WoSAS.	None proposed.	None in addition to that already stated.
Traffic and Transport			
A Construction Traffic Management Plan (CTMP) has been developed and serves as a good practice measure providing preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the Proposed Development to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s), prior to commencement of construction activities and as necessary during the construction phase.	No additional mitigation proposed.	None proposed.	The adopted CTMP will be implemented by the appointed contractor who will ensure execution of all traffic management measures.
Noise			
SPEN is committed to implementing accepted good practice measures for controlling construction noise, which may include the following, as appropriate: ■ Restricted hours of construction work to avoid sensitive periods; ■ The use of equipment with appropriate noise control measures (e.g. silencers, mufflers and acoustic hoods); ■ Additional good practice measures as set out in BS5228:2009.	None proposed.	None proposed.	None proposed.