10. MITIGATION PROPOSALS

The key mitigation measures proposed to reduce the potential effects of the Project are described in **Table 10.1.** Mitigation measures are split into two elements: those specific to the Proposed Development (substation and ancillary infrastructure) and those specific to the Associated Development (overhead line diversion).

Embedded mitigation measures have been integral to the design evolution of the Project as described in Chapter 2: Project Description.

Table 10.1 Mitigation Summary

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
General	General	A Construction Environmental Management Plan (CEMP) will be the overarching document which combines the principles of all other management plans and environmental plans outlined within this EA Report and would support Construction Method Statements. SSEN Transmission's General Environmental Management Plans (GEMPs) (see **Annex A**) will be implemented through the CEMP and include: • Bad Weather • Biosecurity (On Land) • Contaminated Land • Dust Management • Forestry • Oil Storage and Refuelling • Private Water Supplies • Restoration • Soil Management • Waste Management • Watercourse Crossings • Working in or Near Water • Working in Sensitive Habitats • Working with Concrete	
Landscape and Visual	Embedded Mitigation	A number of design principles have been considered in order to minimise landscape and visual impacts as described in Chapter 3: Landscape and Visual: • Land clearance and occupation will be limited to necessary areas only to minimise the geographic spread of the infrastructure and limit the potential impact on the local landscape fabric. • The Proposed Development and Associated Development access tracks will utilise existing forestry tracks to minimise effects associated with peripheral parts of the Project; • The number of new towers comprising the Associated Development has been limited as far as possible to minimise the effects resulting from this component of the Project; • Temporary tracks and temporary overhead line diversions (for construction purposes) would be reinstated at the end	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		of the construction phase, thereby further limiting the geographic extent of potential residual effects; • In terms of colour and materials, buildings would be painted with a recessive colour (mid-brown, such as RAL 8008: Olive Brown or similar approved) to assist blending in with the surrounding landscape context comprising plantation forestry; • Proposed planting would incorporate the creation of new parcels of native woodland edge tree/scrub around peripheral parts of the Proposed Development Site. This would provide a natural context to the proposed built form, whilst also providing additional habitat type and further visual screening; • Ground cover, such as species-rich grassland / meadow (comprising upland / shade-tolerant woodland meadow mix in accordance with the context) would be introduced within the Proposed Development Site, along the route of the Associated Development.	
Ecology & Ornithology	Habitats and Flora	Mitigation planting will replace lost habitat to achieve a net gain of biodiversity.	
	Protected Species	A pre-construction site walkover survey will be completed by a suitably qualified Ecological Clerk of Works (ECoW). Should a species be identified, the appropriate Species Protection Plans (SPPs) (see **Annex H** of this EA Report) will be followed during construction. SPPs include bats, otter, red squirrel and badger, wild cat, reptiles and pine marten.	
	Nesting birds	Habitat removal will be undertaken outside the breeding season if practicable (March to August inclusive)[1]. If this is not possible, a pre-construction site walkover survey focussing on the habitat to be lost within the Project will be undertaken to determine if any nesting birds are present. If nesting birds are identified, the SSEN Transmission SPPs (**Annex H**) will be implemented by a suitably experienced ECoW. If there is a delay to commencing construction following habitat removal, further mitigation may be necessary to deter birds using the site (e.g., regular human presence, tapes across the site, other scaring devices).	
Forestry	General	Best practice as specified by Scottish Forestry and Forest Industry Safety Accord (FISA) will be implemented at all times, including:	

[1] UK Government Wild birds: surveys and mitigation for development projects. Available at https://www.gov.uk/guidance/wild-birds-surveys-and-mitigation-for-development-projects

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction; and • The Forestry Commission publication 'Managing Forest Operations to Protect the Water Environment'.	
	Replanting	• A detailed tree planting design plan will be created and the site will be largely replanted with commercial conifers where appropriate. Off-site compensatory planting will be confirmed. • The management felling area (either side of the 85m overhead line route) will be replanted by the landowner in-line with Scottish Forestry felling licence regulations.	
Hydrology, Hydrogeology and Geology	Embedded Mitigation	The following mitigation measures relating to the hydrological environment are embedded into the design and construction of the Project: • 50 m watercourse buffers for construction works with the exception of watercourse crossings along access tracks; • Watercourse crossings will be avoided in the design where possible; and • Access will utilise existing forestry tracks where practicable.	
	WCEMP	Construction good practice methods and works for protection of hydrological receptors are provided in **Annex M: Water Construction Environmental Management Plan (WCEMP)**. This make reference to relevant SSEN Transmission General Environmental Management Plans.	
	Site Drainage	Drainage from the site will include elements of SuDS design.	n/a
	Peat Management	A Peat Management Plan has been produced (See **Annex N**) which details the necessary measures that should be followed with regards to handling and storing peat including: • The surface layer of peat (acrotelm) and vegetation will be stripped separately from the catotelmic peat. This will typically be an excavation depth of up to 0.5 m; • Careful handling is required to retain any existing structure and integrity of the excavated materials and thereby maximise the potential for excavated material to be re-used; • Acrotelmic material will be replaced as intact as possible once construction progresses/as it is complete; • To minimise handling and transportation of peat, acrotelmic will be replaced, as far as is reasonably practicable, in the locality from which it was removed. Acrotelmic material is to be placed on the surface of reinstatement areas; • Temporary storage of peat will be minimised, with reinstatement occurring as early as possible during the construction works;	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		• Suitable areas should be sited in locations with lower ecological value, low stability risk and at a suitable distance from water courses; • Reinstatement will, in all instances, be undertaken at the earliest opportunity to minimise storage of turves and other materials; • Managing the construction work as much as possible to avoid periods when peat materials are likely to be wetter (i.e., high rainfall events); and • Transport of peat on-site from excavation to temporary storage and re-use Site should be minimised.	
	Peat Slide Hazard Risk Assessment	The following mitigation measures should be adopted post-consent stage and pre-construction to validate the PSRA and influence the detailed design of the Project: • Ground investigations prior to detailed design; • Update the PSRA as necessary following detailed ground investigations; • Identification of areas sensitive to changes in drainage regime prior to detailed design; • Development of a drainage strategy that will not create areas of concentrated flow and will not affect the current peatland hydrology; • Design of a Development drainage system for tracks and hardstanding that will require minimal ongoing maintenance during the operation of the substation; • Inspection and maintenance of the drainage systems during construction and operation; • Identification of suitable areas for stockpiling material during construction prior to commencement of works; and • Consideration of specific construction methods appropriate for infrastructure in peat land (i.e., geogrids) as part of design Development. During the construction stage, toolbox talks should be delivered to site personnel, which should contain but not be limited to the following information: • Peat slide risks and associated indicators; • Best practise techniques when working in the peatland environment; and • Discussion on being careful not to disrupt or disturb the natural drainage on slopes.	
Archaeology and Cultural Heritage	Consultation	The mitigation strategy developed will involve consultation with the West of Scotland Archaeological Service (WoSAS).	
	Surface Walkover	A rapid preliminary walkover to identify surface archaeological remains will be conducted prior to works on each of the Proposed and Associated Development elements.	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
	Watching brief	An archaeological watching brief is required for all ground-breaking works. It is recommended that archaeological exclusion zones are established 15 m each side of watercourses, where the ground has been less disturbed by forestry planting and felling.	It is recommended that an archaeological watching brief be maintained during all ground-breaking activity.
	Heritage assets	There is potential for minor direct impacts to other drystone walls (AS_005-7) during access track improvements. An exclusion zone of 5 m is recommended if works take place in close proximity and a watching brief will be maintained during ground-breaking works.	For the known non-designated dyke wall (AS_008), avoidance is the preferred mitigation strategy with a 5 m exclusion buffer maintained during works. If not, then a full qualitative, drawn and photographic record shall be made prior to removal under archaeological evaluation or watching brief conditions.
Noise	Embedded Mitigation	Construction works are not to take place during the night-time period, without prior written agreement from ABC and only in exceptional circumstances.	
Traffic and Transport	Construction Traffic Management Plan (CTMP)	The Contractor will share a CTMP with ABC and Transport Scotland (where appropriate) identifying appropriate and safe routes for construction traffic which will include the following mitigation measures: • The Contractor will liaise with ABC to determine appropriate traffic management arrangements for construction vehicle movements; • The Contractor will agree appropriate and safe routes to and from the Project with ABC. All construction vehicles will be required to use approved access routes; • Movement of abnormal loads will be restricted to take place outside peak flow hours to minimise disruption to general traffic flows; • Measures will be implemented to minimise dust and dirt being deposited on the carriageway due to construction operations; • Appropriate signage warning other motorists and pedestrians of the presence of construction vehicles will be implemented; • Appropriate signage restricting vehicle speeds will be considered in discussion with ABC; • Police escort or other escort approved by Police Scotland will accompany abnormal load vehicle movements for the	

Chapter	Topic	Proposed Development Mitigation Measures	Associated Development Mitigation Measures
		delivery of transformer components or any other loads deemed necessary by the road's authorities; and • Use of the CEMP to monitor and ensure that agreed mitigation measures are being implemented.	
	Abnormal Invisible Load (AIL)	Further consultation and notification will be undertaken with relevant local authorities including ABC and Police Scotland. A SSEN Transmission Community Liaison Manager will be appointed to the Project to ensure that the local community and the general public have enough information to plan their journey and avoid abnormal load movements. n/a	

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