

VOLUME 1: CHAPTER 14: SCHEDULE OF MITIGATION MEASURES

14.	SCHEDULE OF MITIGATION MEASURES	
1.1	Introduction	1
1.2	Summary of Measures	1

14. SCHEDULE OF MITIGATION

14.1 Introduction

14.1.1 The purpose of this Chapter is to provide a summary of the mitigation measures proposed throughout this EIA Report, to minimise or offset the potential effects of the Proposed Development on the receiving environment.

14.1.2 During the construction phase of the project, relevant mitigation measures will be detailed within and implemented through the site-specific Construction Environmental Management Plan (CEMP).

14.2 Summary of Measures

14.2.1 **Table 14.1** provides a summary of those mitigation measures identified throughout the EIA Report.

Table 14.1: Schedule of Mitigation Measures

Mitigation Reference	Issue	Mitigation / Monitoring Measure	EIA Report Reference	Responsibility
General Mitigation				
G1	Construction Employment and Hours of Work	Construction working is likely to be during daytime periods only. Weekend working would also be proposed with timings to be confirmed by the Principal Contractor in due course. Working hours are anticipated 7 days a week between approximately 07.00 to 19.00 March to September and 07.30 to 17.00 (or within daylight hours) October to February. Working hours would be confirmed by the Principal Contractor and agreed with The Highland Council as planning authority.	Volume 1, Chapter 3, Paragraph 3.11.2	Principal Contractor
G2	Best Practice Construction Measures, GEMPs and SPPs	All works would be carried out in accordance with industry best practice construction measures, guidance and legislation, together with General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) that have been developed by the Applicant.	Volume 1, Chapter 3, Paragraph 3.12.1 – 3.12.3 Volume 4, Appendix 3.5: GEMPs Volume 4, Appendix 3.6: SPPs Volume 1, Chapter 7, Paragraph 7.9.3 Volume 1, Chapter 9, Paragraph 9.8.3 to 9.8.5	Principal Contractor
G3	Construction Environmental Management Plan (CEMP)	A contractual management requirement of the Principal Contractor would be the development and implementation of a site-specific Construction Environmental Management Plan (CEMP). This document would provide information on the proposed infrastructure and aid in avoiding, minimising and controlling adverse environmental impacts associated with the Proposed Development. The CEMP would also reference the aforementioned GEMPs and SPPs. The implementation of the CEMP would be managed on site by a suitably qualified and experienced Environmental Clerk of Works (EnvCoW), with support from other environmental professionals as required.	Volume 1, Chapter 3, Paragraph 3.12.4 – 3.12.6 Volume 4, Appendix 3.5: GEMPs Volume 4, Appendix 3.6: SPPs Volume 4, Appendix 3.7: Outline CEMP Volume 1, Chapter 7, Paragraph 7.9.4 Volume 1, Chapter 9, Paragraph 9.8.6 – 9.8.10	Principal Contractor / ECoW

G4	Reinstatement	<p>Reinstatement works are generally undertaken during construction (and immediate post-construction phase) and aim to address any areas of ground disturbance and changes to the landscape as part of the construction works. Such works would involve the reinstatement of areas disturbed during the construction phase.</p> <p>An outline site reinstatement and restoration plan has been prepared to describe the principles and best practice guidance and measures that would be followed in the reinstatement and restoration of disturbed ground. This is included in Volume 4, Appendix 3.4: Outline Site Restoration Plan, and would be developed by the Applicant, the Principal Contractor and consenting authorities as required prior to construction commencing. In more sensitive areas, further site-specific measures are required to ensure successful reinstatement, including site specific soil and peat management measures, and the employment of specialist advisers (i.e. Ecological Clerk of Works (ECoW)). Such measures are set out in Volume 4, Appendix 3.4: Outline Site Restoration Plan.</p>	<p>Volume 1, Chapter 3, Paragraph 3.12.7 - 3.12.13</p> <p>Volume 4, Appendix 3.4: Outline Site Restoration Plan</p> <p>Volume 4, Appendix 9.2: Peat Management Plan</p> <p>Volume 1, Chapter 7, Paragraph 7.9.14 – 7.9.21</p>	Principal Contractor / SSEN Transmission
Mitigation for Landscape and Visual (see Volume 1 – Chapter 6)				
LV1	General Landscape and Visual Mitigation	Mitigation would involve the use of best practice construction and reinstatement methods during the implementation phase, to assist with the revegetation of disturbed areas and minimise longer term effects.	Volume 1, Chapter 6, Paragraph 6.12.2	Principal Contractor / SSEN Transmission
LV2	Implementation Stage – Temporary Working Areas and Temporary Tracks	The reinstatement of areas disturbed during construction would be fundamental to ensuring that the Proposed Development would be successfully accommodated into the existing landscape in the longer term. Careful reinstatement of landform would be employed across working areas and temporary tracks, re-using materials excavated during the construction period to reflect the terrain within adjacent areas as far as practicable. Further details on these measures are included in Volume 4, Appendix 3.4: Outline Site Restoration Plan .	<p>Volume 1, Chapter 6, Paragraph 6.12.3</p> <p>Volume 4, Appendix 3.4: Outline Site Restoration Plan</p>	Principal Contractor / SSEN Transmission
LV3	Earthworks	Landform around infrastructure would be remodelled to ensure smooth transition into surroundings, and reinstatement of landform would include the creation of suitable gradients for cut and fill slopes associated with access tracks to enable the replacement of peat/soils and re-establishment of vegetation.	Volume 1, Chapter 6, Paragraph 6.12.4 – 6.12.5	Contractor / SSEN Transmission

LV4	Vegetation Restoration	The natural regeneration of native species is the preferred method of achieving vegetation restoration. Where native soils or vegetation may be considered insufficient to support natural re-vegetation, this would be supplemented by seeding with an agreed seed mix.	Volume 1, Chapter 6, Paragraph 6.12.6 Volume 4, Appendix 3.4: Outline Site Restoration Plan, Volume 4, Appendix 9.2: Outline Peat Management Plan	Principal Contractor / SSEN Transmission / ECoW
Mitigation for Ecology (see Volume 1 – Chapter 7)				
E1	Pre-Construction Surveys	Pre-construction surveys for protected species will be undertaken no more than 6 months in advance to identify any new ecological constraints and to ascertain the activity status of previously identified features within proximity of planned works.	Volume 1, Chapter 7, Paragraph 7.9.5	Principal Contractor / ECoW
E2	Micrositing of Infrastructure	Any micrositing of infrastructure within the defined Limit of Deviations will be based on a review of existing ecological data and the completion of pre-construction surveys (as mentioned above), to take into consideration the potential for direct encroachment onto protected species features, sensitive habitats or groundwater dependent terrestrial ecosystems (GWDTE) or indirect alteration of hydrological flows supporting sensitive habitats of GWDTEs. Any micrositing will also take consideration of any buffer distances on protected features identified, as detailed within the SPPs.	Volume 1, Chapter 7, Paragraph 7.9.6 Volume 4, Appendix 3.5: GEMPs Volume 4, Appendix 3.6: SPPs	Principal Contractor / ECoW
E3	Ecological Clerk of Works (ECoW)	To ensure all reasonable precautions are taken to avoid negative effects on habitats and protected species, a suitably qualified Ecological Clerk of Works (ECoW) will be appointed prior to the commencement of construction to advise the Applicant and the Principal Contractor on all ecological matters. The ECoW will be required to be present onsite as appropriate during the construction phase and will carry out monitoring of works and briefings with regards to any ecological sensitivities to the relevant staff of the Principal Contractor and subcontractors.	Volume 1, Chapter 7, Paragraph 7.9.22	Principal Contractor / ECoW

E4	Operation Maintenance	During operation of the Proposed Development, it may be necessary to manage vegetation to maintain required safety clearance distances from infrastructure. However, this would be undertaken with advice from an ecologist and an ECoW employed for the duration of any works as necessary.	Volume 1, Chapter 7, Paragraph 7.9.24 - 7.9.25	SSEN Transmission / ECoW
E5	Habitat Management Plan	A landscape scale HMP, combining the HMPs of the 'Connagill Cluster Grid Connection' projects, is being developed in consultation with NatureScot to address the cumulative habitat losses of peatland, including within the boundaries of the Flow Country WHS and Caithness and Sutherland Peatlands SAC / Ramsar.	Volume 1, Chapter 7, Paragraph 7.11.2 Volume 4, Appendix 7.8: Connagill Cluster Outline Habitat Management Plan	SSEN Transmission / Contractor / ECoW
Mitigation for Ornithology (see Volume 1 – Chapter 8)				
O1	Bird Protection Plan (BPP)	<p>A detailed Bird Protection Plan (BPP) would be developed post-consent to ensure compliance with the legislation protecting breeding birds and roosting Schedule 1A species during construction of the Proposed Development. The exact measures would be determined in consultation with NatureScot, but would likely include:</p> <ul style="list-style-type: none"> • Appointment of an ECoW to ensure that embedded mitigation measures are reactive to changing conditions during the Proposed Development and compliant with relevant legislation protecting breeding birds and roosting Schedule 1A species; • Appointment of a Professional Ornithologist should construction overlap with the breeding bird season (defined as March to August inclusive); • Toolbox talk delivered by an ECoW to all contractors to ensure they are aware of the ornithological sensitivities and relevant legislation; • Timing of construction works where possible to be outside the main breeding bird season; • Pre-construction checks for breeding crossbill within 200 m of any felling works by a suitably qualified ECoW; 	Volume 1, Chapter 8, Paragraph 8.9.8 – 8.9.10	Principal Contractor / ECoW / SSEN Transmission

		<ul style="list-style-type: none"> • Pre-construction surveys for other breeding Schedule 1/Annex I species where construction works are required during the breeding bird season and suitable habitat is present; • Pre-construction checks for nesting birds prior to any felling or vegetation clearance within the breeding season (March to August inclusive), checks of the relevant works areas for nesting birds (all species) would be completed immediately prior to (within the preceding 72 hours) commencement of works in the relevant area • Protection of all nesting birds, if any nests or confirmed/suspected breeding territories of species listed on Schedule 1 of the Wildlife & Countryside Act or Annex I of the Birds Directive, are identified during pre-construction surveys or pre-construction nest checks, an exclusion zone around the nest (or territory) would be established, appropriate to the species. No works would be permitted within the exclusion zone and no personnel or vehicles would be allowed to enter or pass through it until the ECoW has confirmed that the breeding attempt has concluded. Where this is not feasible, NatureScot would be contacted, and further mitigation measures agreed to ensure compliance with relevant legislation protecting breeding birds • Additional, targeted measures to protect breeding Schedule 1/Annex I species throughout the construction phase of the Proposed Development will be required for hen harrier and may also be required for other species. It is therefore proposed that targeted species protection plans are produced as required for relevant species, which would include hen harrier as a minimum. Any additional species requiring a targeted protection plan would be identified during the pre-construction bird surveys, nesting bird checks and regular site presence of the professional ornithologist and appointed ECoW. Specific mitigation measures would be agreed with NatureScot. The survey area should include suitable habitat within 750 m of the works for hen harrier, within 500 m for 		
--	--	---	--	--

		<p>eagle species and within 300 m for red kite¹, and surveys should follow the methods detailed in Hardey <i>et al.</i> (2013).</p> <ul style="list-style-type: none"> • Where works are proposed in areas of suitable roosting habitat for a Schedule 1A species, regardless of the time of year, it is proposed that a pre-construction survey would be undertaken by a suitably experienced ornithologist, prior to commencement of works, to identify any regular roost sites. • Protection of roosting Schedule 1A species. If any Schedule 1A species are confirmed or suspected to be roosting within 300-750 m of construction works (with the exact distance dependent on the species), a specific protection plan would be developed to avoid disturbance to this species. Specific mitigation measures would be agreed with NatureScot but would likely include implementation of an appropriate disturbance buffer within which works are excluded whilst roosting birds are present. <p>Should significant operational maintenance works be required during the breeding bird season, or if any roosting Schedule 1A species are suspected or confirmed to be present, implementation of the mitigation measures outlined in the BPP would be implemented to protect breeding birds and roosting Schedule 1A species, and ensure compliance with relevant legislation.</p>		
O2	Line Marking to reduce collision risk to Red-throated diver and Hen harrier	<p>Line markers would be installed along key sections of the OHL component of the Proposed Development (on the Optical Ground Wire) where breeding red-throated diver and hen harrier are considered to be at increased risk of collision. The following key areas for line marker deployment have been identified:</p> <ul style="list-style-type: none"> • Between towers 1 and 8 to reduce collision risk to red-throated diver; and • Between towers 13 and 19 to reduce collision risk to hen harrier. <p>Implementation of line markers along these sections of the OHL is also expected to reduce collision risk to other bird species, including merlin.</p>	Volume 1, Chapter 8, Paragraph 8.11.1 – 8.11.5	Principal Contractor / ECoW

¹ As the Proposed Development is outside the current wintering range for this species (Balmer *et al.*, 2007), it is considered unlikely that roosting red kite will be present. However, as the range is expanding and potentially suitable habitat is present, it has been included for completeness.

		<p>It is proposed that the most suitable line marker model and optimal spacing would be determined post-submission in consultation with NatureScot. However, in line with recommendations in Martin (2022)², as far as possible, the following line marker design and deployment characteristics would be sought and implemented to maximise detectability.</p> <ul style="list-style-type: none"> • As large a surface area as possible. • A repeat chromatic pattern to generate a high degree of internal contrast so that markers are detectable regardless of landscape background conditions (rather than relying upon the markers contrasting with the landscape background). • An element of movement or flicker (i.e., an oscillating or rotating device), which will allow markers to be detected more readily than static markers. • Deployment of markers at small intervals along the OHL. • High durability of markers to minimise wear and tear. <p>The line markers would be monitored at regular intervals, with maintenance or replacement completed at regular intervals to ensure markers remain functional and in the correct position throughout the lifetime of the OHL component of the Proposed Development.</p>		
O3	Habitat Management for Hen harrier	<p>As part of the Outline Habitat Management plan, in the wider area to the east of the Proposed Development (outwith the Caithness and Sutherland Peatlands SPA and more than 500 m from the Proposed Development to minimise collision risk) will be appraised to identify one or more potential areas where habitats can be managed to improve quality for hen harrier, by increasing foraging resource and providing additional nesting sites.</p> <p>Suitable area(s) and management measures would be agreed in consultation with NatureScot and the RSPB. Consideration will be given to historic breeding territories. Additionally, relevant existing and proposed HMPs for other developments in the surrounding area will be reviewed so that, where possible, opportunities to create corridors or mosaics of good</p>	<p>Volume 1, Chapter 8, Paragraph 8.11.6 – 8.11.10</p> <p>Volume 4, Appendix 7.8: Connagill Cluster Outline Habitat Management Plan</p>	<p>Principal Contractor / ECoW / SSEN Transmission</p>

² Martin, G.R. (2022) Vision-Based Design and Deployment Criteria for Power Line Bird Diverters. Birds 3, 410–422.

		<p>quality hen harrier habitat (rather than small, isolated pockets) can be identified.</p> <p>The success of the HMP measures would be monitored and reviewed at regular intervals throughout the lifetime of the Proposed Development.</p> <p>In addition to hen harrier, the targeted habitat mitigation measures are likely to benefit a range of other upland breeding bird species, such as wader species and red grouse.</p>		
O4	Ornithological Enhancements	Artificial nest rafts are proposed to be installed at one or more suitable lochs within the wider area to provide additional nesting opportunities for breeding red-throated and black-throated divers.	Volume 1, Chapter 8, Paragraph 8.11.11	Principal Contractor / ECoW / SSEN Transmission
O5	Ornithological Monitoring	<p>In addition to monitoring of the habitat enhancements for breeding hen harrier as part of the Outline HMP, and the pre-construction surveys that would be completed as part of the BPP (as mentioned above), it is proposed that a programme of ornithological monitoring around the Proposed Development is undertaken by a suitably experienced ornithologist during construction of the Proposed Development.</p> <p>It is likely that the monitoring programme would include surveys for breeding waders, raptors, and divers, including annual checks of any diver nest rafts installed.</p> <p>Surveys would include the Proposed Development and appropriate species-specific buffers around it, with the aim of assessing how IOFs and other sensitive bird species respond to the construction and operation of the Proposed Development</p>	Volume 1, Chapter 8, Paragraph 8.11.12 – 8.11.13	SSEN Transmission / ECoW
Mitigation for Soils, Geology and Water (see Volume 1 – Chapter 9)				
SGW1	Construction and Environmental Management Plan (CEMP)	A contractual management requirement of the successful Principal Contractor would be the development and implementation of a comprehensive and site-specific CEMP. This document would detail how the successful Principal Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA Report, Applicant's GEMPs, statutory consents and authorisations, and industry best practise and guidance, including pollution prevention guidance.	Volume 1, Chapter 9, Paragraph 9.8.6 – 9.8.10 Volume 4, Appendix 3.7: CEMP	Principal Contractor / SSEN Transmission

		<p>The CEMP would also outline measures to ensure that the works minimise the risk to soils (inc. peat), groundwater, surface water and water dependent designated sites.</p> <p>It is expected that the following would be included within the CEMP and would ensure the works are undertaken in accordance with good practice guidance, which includes, but is not limited to the following:</p> <ul style="list-style-type: none"> • any above ground on-site fuel and chemical storage would be banded; • emergency spill response kits would be maintained during the construction works; • a vehicle management system would be put in place wherever possible to reduce the potential conflicts between vehicles and thereby reduce the risk of collision; • suitable access routes will be chosen which minimise the potential requirement for either new access tracks or for tracking across open land which could contribute to the generation of suspended solids; • a speed limit would be used to reduce the likelihood and significance of any collisions; • drip trays will be placed under vehicles which could potentially leak fuel / oils; • any temporary construction / storage compounds required would be located remote from any sensitive surface water receptors or private water supplies and would be constructed to manage surface water run-off in accordance with best practice - details of which will be provided by the Principal Contractor and agreed with regulators as required by the Controlled Activity Regulations; • any water contaminated with silt or chemicals would not be discharged directly or indirectly to a watercourse without prior treatment; and • water for temporary site welfare facilities would be brought to site, and foul water would be collected in a tank and collected for offsite disposal at an appropriately licensed facility. 		
--	--	--	--	--

		<p>A wet weather protocol would be developed. This would detail the procedures to be adopted by all staff during periods of heavy rainfall. Tool box talks would be given to engineering / construction / supervising personnel. Roles would be assigned and the inspection and maintenance regimes of sediment and runoff control measures would be adopted during these periods.</p> <p>In extreme cases, the above protocol would dictate that work on-site may have to be temporarily suspended until weather / ground conditions allow.</p>		
SGW2	Environmental Clerk of Works (EnvCoW)	<p>To ensure all reasonable precautions are taken to avoid negative effects on the water environment, a suitably qualified EnvCoW would be appointed prior to the commencement of construction to advise the Applicant and the Principal Contractor on all ecological and hydrological matters. The EnvCoW would be required to be present on-site during the construction phase and would carry out monitoring of works and briefings with regards to any ecological and hydrological sensitivities on the site to the relevant staff of the Principal Contractor and subcontractors.</p> <p>With respect to the water environment, the EnvCoW would also have responsibility to ensure water flow paths and quality to water dependant habitat are sustained during all phases of the Proposed Development.</p>	Volume 1, Chapter 9, Paragraph 9.8.11 – 9.8.12	Principal Contractor / SSEN Transmission / EnvCoW
SGW3	Geotechnical Risk Register	<p>A Design and Geotechnical Risk Register would be compiled to include risks relating to peat instability, as this would be beneficial in identifying potential risks that may be involved during construction.</p>	<p>Volume 1, Chapter 9, Paragraph 9.8.14</p> <p>Volume 4, Appendix 9.1: PLHRA</p>	Principal Contractor
SGW4	Peat Instability	<p>Good construction practice and methodologies to prevent peat instability within areas that contain peat deposits are identified in Volume 4, Appendix 9.1: Peat Landslide Hazard and Risk Assessment. These include:</p> <ul style="list-style-type: none"> • minimisation of ‘undercutting’ of peat slopes, but where this is necessary, a more detailed assessment of the area of concern would be required; • careful micro-siting of access track alignments to minimise effects on the prevailing surface and sub-surface hydrology; 	<p>Volume 1, Chapter 9, Paragraph 9.8.15 - 9.8.16</p> <p>Volume 4, Appendix 9.1: PLHRA</p>	Principal Contractor

		<ul style="list-style-type: none"> raising peat stability awareness for construction staff by incorporating the issue into the Site Induction (e.g. peat instability indicators and good practice); introducing a 'Peat Hazard Emergency Plan' to provide instructions in the event of a peat slide or discovery of peat instability indicators; developing methodologies to ensure that degradation and erosion of exposed peat deposits does not occur as the break-up of the peat top mat has significant implications for the morphology, and thus hydrology, of the peat (e.g. minimisation of off-track plant movements within areas of peat); and developing drainage systems that would not create areas of concentrated flow or cause over-, or under-saturation of peat habitats. <p>Notwithstanding any of the above good construction practices and methodologies, detailed design and construction practices would need to consider the particular ground conditions and the specific works at each location throughout the construction period.</p> <p>An experienced and qualified engineering geologist / geotechnical engineer would be appointed as a supervisor, to provide advice during the setting out, micro-siting and construction phases of the Proposed Development.</p> <p>A variety of mitigation measures have been proposed at locations which have been identified to have a medium to high risk of peat instability on the Proposed Development infrastructure, as detailed within Table K of Appendix 9.1.</p>		
SGW5	Buffer to Water Features	<p>As part of the Proposed Development design, a buffer of more than 20 m has been applied to watercourses and water features such as lochs and ponds, where technically and practically possible. All the proposed towers have been designed to be outwith the 20 m watercourse buffer however the temporary working areas (in some locations) may be a minimum of 10 m from watercourses and water features. These areas will be demarked and necessary additional safeguards agreed with the site EnvCoW prior to construction works commencing. A 10 m buffer is specified in the Applicant's GEMP 'Working in or Near Water' (Revision 1.02, March 2024) and has been previously agreed with stakeholders and is typical for</p>	<p>Volume 1, Chapter 9, Paragraph 9.8.17</p> <p>Volume 4, Appendix 3.5: GEMPs</p>	<p>Principal Contractor / SSEN Transmission</p>

		developments of this nature and provides a standoff to watercourses and water features that, in combination with industry good practice, minimises the risk to water bodies.		
SGW6	Water Quality Monitoring	<p>Water quality monitoring would be used to ensure that the quality and / or quantity of water within the study area is not significantly impacted by the Proposed Development. Monitoring would be undertaken throughout the construction phase and immediately post construction. Monitoring would be used to allow a rapid response to any pollution incident and also to assess the impact of good practice or remedial measures. Monitoring frequency would increase during the construction phase if remedial measures to improve water quality were implemented.</p> <p>Water quality monitoring plans would be developed during the detailed design stage of the project (Scottish Water, SEPA, THC and local fishery board would be consulted on the plans) and would be contained within the CEMP.</p> <p>The performance of the good practice measures would be kept under constant review by the water monitoring schedule, based on a comparison of data taken during construction with a baseline data set, sampled prior to the construction period.</p>	Volume 1, Chapter 9, Paragraph 9.8.18 – 9.8.19	Principal Contractor / SSEN Transmission
SGW7	Pollution Risk	<p>Good practice measures in relation to pollution prevention would include the following:</p> <ul style="list-style-type: none"> • refuelling would take place at least 30 m from watercourses and where possible it would not occur when there is risk that oil from a spill could directly enter the water environment. For example, periods of heavy rainfall or when standing water is present would be avoided; • foul water generated onsite would be managed in accordance with GPP04; • areas would be designated for washout of vehicles which are a minimum distance of 30 m from a watercourse; • washout water would also be stored in the washout area before being treated and disposed of; • a vehicle management plan and speed limit would be strictly enforced onsite to minimise the potential for accidents to occur; 	Volume 1, Chapter 9, Paragraph 9.8.20	Principal Contractor / SSEN Transmission

		<ul style="list-style-type: none"> • if any water is contaminated with silt or chemicals, runoff would not enter a watercourse directly or indirectly prior to treatment; • water would be prevented as far as possible, from entering excavations such as tower foundations; • procedures would be adhered to for storage of fuels and other potentially contaminative materials in line with the Controlled Activity Regulations, to minimise the potential for accidental spillage; and • a plan for dealing with spillage incidents would be designed prior to construction, and this would be adhered to should any incident occur, reducing the effect as far as practicable. This would be included in the final CEMP for the Proposed Development. 		
SGW8	Erosion and Sedimentation	<p>Good practice measures for the management of erosion and sedimentation would include the following:</p> <ul style="list-style-type: none"> • all stockpiled materials would be located out with a minimum 10 m buffer from watercourses; • water would be prevented as far as possible, from entering excavations such as tower foundations through the use of appropriate cut-off drainage; • where the above is not possible, water would pass through a number of settlement areas and silt / sediment traps to remove silt prior to discharge into the surrounding drainage system; • clean and dirty water on-site would be separated and dirty water would be filtered before entering the water environment; • if the material is stockpiled on a slope, silt fences would be located at the toe of the slope to reduce sediment transport; • the amount of ground exposed, and time period during which it is exposed, would be kept to a minimum; • silt / sediment traps, single size aggregate, geotextiles or straw bales would be used to filter any coarse material and prevent increased levels of sediment. Further to this, activities involving the movement or use of fine sediment would avoid periods of heavy rainfall where possible; and 	Volume 1, Chapter 9, Paragraph 9.8.21	Principal Contractor / SSEN Transmission

		<ul style="list-style-type: none"> SSEN Transmission construction personnel and the Principal Contractor would carry out regular visual inspections of watercourses to check for suspended solids in watercourses downstream of work areas. 		
SGW9	Fluvial Flood Risk	<p>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 prior to development. Good practice in relation to the management of surface water runoff rates and volumes where new permanent tracks or temporary compounds and laydown areas are proposed would include the following:</p> <ul style="list-style-type: none"> 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; on-site 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; and appropriate drainage would attenuate runoff rates and reduce runoff volumes to ensure minimal effect upon flood risk. <p>Further information on ground conditions and drainage designs would be provided in the final CEMP.</p>	Volume 1, Chapter 9, Paragraph 9.8.22 to 9.8.23	Principal Contractor / SSEN Transmission
SGW10	Water Abstraction	<p>Abstraction of water for construction activities is not anticipated. If, however, a source of water is required for construction, an application for a CAR Licence would be made to SEPA and managed through the regulation of the CAR Licence(s). Should a suitable source not be identified, a water bowser would be used.</p> <p>Good practice that would be followed in addition to the CAR Licence regulations includes:</p> <ul style="list-style-type: none"> water use would be planned so as to minimise abstraction volumes; water would be re-used where possible; abstraction volumes would be recorded; and 	Volume 1, Chapter 9, Paragraph 9.8.24 to 9.8.25	Principal Contractor / SSEN Transmission

		<ul style="list-style-type: none"> abstraction rates would be controlled to prevent significant water depletion in a source. 		
SGW11	Temporary Access Tracks	<p>In general, proposed construction site access would be taken via the existing public road network and would utilise the existing access track that was upgraded for the construction of the operational Strathy North Wind Farm. New permanent and temporary 'spurs' constructed off the existing track to access each tower/ pole location would be required where there are no existing tracks. All new tracks would be constructed in accordance with best practice construction methods, and with reference to NatureScot's good practice guide on constructing tracks in Scottish uplands.</p> <p>No new temporary watercourse crossings are required to facilitate the Proposed Development. Should any temporary watercourse crossings be required, the following methodology would be applied:</p> <ul style="list-style-type: none"> Fording would be used where an appropriate crossing point is already in place (on current tracks) with a suitable bed for crossing (where necessary the bed will be protected by the installation of bog mats or similar for running on). Forging would only be used where limited traffic is expected and impacts on the bed and crossing point generally would be monitored with appropriate mitigation being implemented if required. For watercourses less than 2 m wide, General Binding Rules (GBRs) would be adhered to. Bog mats, or similar, would be positioned across the watercourse to enable access, where necessary, side rails would be installed with silt mitigation at either end and / or across if required to ensure that silt impacts from vehicles crossing are controlled at all times. Crossings would be cleaned at the end of the day if required. Where possible large water crossings would be avoided by works being accessed and undertaken on either side of the watercourse. Appropriate protection measures (trestles and tables, pilot lines and supports etc.) would be implemented for conductor works to ensure that conductor does not enter the watercourse. <p>Once access routes have been confirmed, water crossing requirements would be assessed in advance of works with regards to compliance with the CAR and any required authorisations would be gained prior to works</p>	Volume 1, Chapter 9, Paragraph 9.8.26 – 9.8.30	Principal Contractor / SSEN Transmission / EnvCoW

		<p>progressing – at this time it is expected that all works would be able to be completed under appropriate GBRs.</p> <p>All proposed crossing locations and methodologies would be reviewed and approved by the EnvCoW, prior to any works being undertaken.</p>		
SGW12	Steel Lattice Tower Foundation Construction	<p>The following measures are proposed to mitigate the effects of tower foundation construction on the water environment:</p> <ul style="list-style-type: none"> • tower foundations would be located and excavated wherever possible in the driest locations with well consolidated superficial geology, and wetland areas such as deep peat would be avoided. Wherever technically feasible, towers would not be located within 10 m of waterbodies; • wherever possible and technically feasible, towers have and would be located out with the floodplain to reduce potential effects on flooding; • where excavations for tower foundations encounter localised limited quantities of groundwater or become flooded due to surface water runoff or heavy rainfall, appropriate treatment of dewatering would be instigated under direction of the site EnvCoW; • no dewatering discharge would be permitted directly adjacent to watercourses; • unless directed otherwise by the site EnvCoW, dewatering discharge would drain across buffer areas of vegetation (e.g. grassland, heather) of at least 10 m width, which would provide for natural attenuation and dispersal of the flow and removal of silt; • where no suitable vegetation is available for natural treatment of dewatering, the discharge would be passed through on-site settling tanks / lagoons prior to discharge by soakaway or to watercourse; • the requirement for dewatering would be minimised in all locations by timely and efficient excavation of the foundation void and subsequent concrete pouring and backfilling; • excavated soils would be used to restore foundations and be placed in the order they were removed from the foundation; • turves would be used to dress the restored foundations; 	Volume 1, Chapter 9, Paragraph 9.8.31	Principal Contractor / SSEN Transmission / EnvCoW

		<ul style="list-style-type: none"> all procedures for dewatering would be agreed by the Principal Contractor with SEPA, THC and NatureScot and detailed within the CEMP; and the Principal Contractor would develop a method statement to address the transport, transfer, handling and pouring of liquid concrete at tower foundation sites. 		
SGW13	Concrete Batching, Transport and Pouring	<p>In relation to works involving concrete batching, transport and pouring, the following mitigation would be adopted:</p> <ul style="list-style-type: none"> where concrete transfers are required, measures would be adopted at the point of concrete transfer to prevent accidental spillage of liquid concrete and no transfers would be undertaken in proximity to watercourses or areas of standing water; there would be no wash-out of concrete carrying vehicles at tower foundation sites (except the concrete chute) with wash-out undertaken at the nearest compounds where suitably bunded / protected facilities would be provided. Chutes would be washed out to a suitable container, allowed to settle and disposed at suitably licensed facilities; excess concrete or wash-out liquid would not be discharged to drains or watercourses. Drainage from washout facilities would be collected and treated or removed to an appropriate treatment point / licensed disposal site; and vehicles and plant working at tower foundations would be confined to the area required for safe working only to prevent compaction, rutting and habitat damage to adjacent areas of land. Working areas would be clearly marked out and temporary fencing used where risk assessments indicate a requirement. Similar procedures would be adopted to demarcate areas where plant access is required for conductor stringing and tensioning works. 	Volume 1, Chapter 9, Paragraph 9.8.32	Principal Contractor / SSEN Transmission
SGW14	Peat Management	<p>Where peat and peaty soils are to be excavated, reused or reinstated, a number of good practice measures, as set out in Volume 4, Appendix 9.2: Outline Peat Management Plan, would be applied. This also covers the good practice to be applied for the handling, storage and transportation of peat.</p>	Volume 4, Appendix 9.2: Outline Peat Management Plan	Principal Contractor / SSEN Transmission

Mitigation for Cultural Heritage (see Volume 1 – Chapter 10)				
CH1	Protection of Cultural Heritage Sites during Construction	<p>During the construction phase, it is recommended that all four cultural heritage Sites (listed in Section 10.7 of Chapter 10) are protected from accidental damage in the form of identifying and clearly marking off with some form of barrier, and appropriate signage. The exclusion zones should extend as far as practicable out from the visible features of each heritage asset. This measure would prevent temporary parking and laydown of materials during construction.</p> <p>In addition, awareness of site workers to the significance and sensitivity of the archaeological exclusion zones should be raised through on-site toolbox talks.</p> <p>This should be carried out by, or under the supervision of, a qualified archaeologist or Archaeological Clerk of Works (ACoW). The archaeologist should also be on call in case of any unanticipated archaeological discoveries or concerns.</p>	Volume 1, Chapter 10, Paragraph 10.8.2 – 10.8.4	Principal Contractor / Archaeologist
CH2	Protection of Cultural Heritage Sites during Construction	<p>Unavoidable direct impact is predicted for one heritage Site; Site 4c: Bowside Hut Circles at Dallangwell (to the south of Uidh nan Con Luatha). Reduction of this impact is recommended by, firstly, avoidance of laying or dragging conductors across the feature. If this proves not practicable, then the application of matting or temporary earth banking should be laid over the structure and that, even with this protection in place, no plant, vehicles or other machinery cross the feature.</p>	Volume 1, Chapter 10, Paragraph 10.10.1	Principal Contractor / Archaeologist
CH3	Monitoring during Construction	<p>Archaeological monitoring of works in the vicinity of Site 4c is to be carried out by an ACoW during the construction stage of works, to ensure that the mitigation proposed above is carried out correctly.</p>	Volume 1, Chapter 10, Paragraph 10.10.2	Principal Contractor / ACoW
Mitigation for Traffic and Transport (see Volume 1 – Chapter 11)				
T1	Construction Traffic Management Plan	<p>A Construction Traffic Management Plan (CTMP) is proposed to help reduce the slight traffic impact of the construction phase on the study area. The following measures would be implemented through a CTMP during the construction phase.</p> <ul style="list-style-type: none"> • Where possible the detailed design process would minimise the volume of material to be imported to Site to help reduce HGV numbers; 	<p>Volume 1, Chapter 11, Paragraph 11.9.1 – 11.9.2</p> <p>Volume 4, Appendix 11.1: Transport Assessment</p>	Principal Contractor / SSEN Transmission

		<ul style="list-style-type: none"> • Explore whether onsite borrow pits could be used to reduce or eliminate the need for external sources of aggregate, thus reducing the traffic accessing the site; • A Site worker transport and travel arrangement plan, including transport modes to and from the work Site (including pick up and drop off times); • All materials delivery lorries (dry materials) should be sheeted to reduce dust and stop spillage on public roads; • Specific training and disciplinary measures should be established to ensure the highest standards are maintained to prevent construction vehicles from carrying mud and debris onto the carriageway; • Wheel cleaning facilities may be established at the A836 junction, depending on the views of THC; • Normal Site working hours would be limited to between the following hours: <ul style="list-style-type: none"> • March to September – 07:00 to 19.00 – 7 days a week • October to February – 07.30 to 17.00 (or within daylight hours) • Appropriate traffic management measures would be put in place on the A836 to avoid conflict with general traffic, subject to the agreement of THC and TS. Typical measures would include HGV turning and warning signs; • Provide construction updates on the project website and or a newsletter to be distributed to residents within an agreed distance of the Site; • Adoption of a voluntary speed limit of 20 mph for all construction vehicles travelling through local villages and towns; • Adoption of a maximum speed limit of 15 mph for all construction vehicles travelling on the access track south of the A836; • All drivers would be required to attend an induction to include: <ul style="list-style-type: none"> • A tool box talk safety briefing; • The need for appropriate care and speed control; 		
--	--	---	--	--

		<ul style="list-style-type: none"> • A briefing on driver speed reduction agreements (to slow Site traffic at sensitive locations through the villages); and • Identification of the required access routes and the controls to ensure no departure from these routes. <p>The CTMP would be agreed with THC prior to construction works commencing.</p>		
T2	Road Wear and Tear	<p>THC may require an agreement to cover the cost of abnormal wear and tear on the A836 between Thurso and the site access junction with the A836. Video footage of the pre-construction phase condition of the construction vehicles route would be recorded to provide a baseline of the state of the road prior to any construction work commencing. This baseline would inform any change in the road condition during the construction stage of the Proposed Development. Any necessary repairs would be coordinated with the Roads Authority. 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.</p> <p>Any damage to road infrastructure caused directly by construction traffic would be made good, and street furniture that is removed on a temporary basis would be fully reinstated.</p> <p>There would be a regular road edge review and any debris and mud would be removed from the public carriageway to keep the road clean and safe during the initial months of construction activity, until the construction junction and immediate access track works are complete.</p>	<p>Volume 1, Chapter 11, Paragraph 11.9.3 – 11.9.5</p> <p>Volume 4, Appendix 11.1: Transport Assessment</p>	Principal Contractor / SSEN Transmission
T3	Public Information	<p>The Applicant would ensure information was distributed through its communication team via the project website, local newsletters and social media.</p>	<p>Volume 1, Chapter 11, Paragraph 11.9.7</p>	SSEN Transmission
T4	Outdoor Access Management Plan	<p>Consideration would be given to pedestrians and cyclists alike due to potential interactions between construction traffic and users of the Scottish Hill Track 344. These measures would be formulated into an Outdoor Access Management Plan.</p> <p>The Principal Contractor would ensure that speed limits are adhered to by their drivers and associated subcontractors. Advisory speed limit signage</p>	<p>Volume 1, Chapter 11, Paragraph 11.9.8 – 11.9.10</p> <p>Volume 1, Chapter 13, Paragraph 13.10.3</p>	Principal Contractor / SSEN Transmission

		would also be installed on approaches to areas where core path users may interact with construction traffic. Signage would 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 would also be emphasised in weekly toolbox talks.	Volume 4, Appendix 11.2: Outdoor Access Management Plan	
T5	Horses	On similar projects, the British Horse Society recommends the following actions that will be included in the Site training for all Heavy Goods Vehicles (HGV) staff: <ul style="list-style-type: none"> • On seeing riders approaching, drivers must slow down and stop, minimising the sound of air brakes, if possible; • If the horse still shows signs of nervousness while approaching the vehicle, the engine should be shut down (if it is safe to do so); • The vehicle should not move off until the riders are well clear of the back of the HGV; • If drivers are wishing to overtake riders, please approach slowly or even stop in order to give riders time to find a gateway or lay by where they can take refuge and create sufficient space between the horse and the vehicle. Because of the position of their eyes, horses are very aware of things coming up behind them; and • All drivers delivering to the Site must be patient. Riders will be doing their best to reassure their horses while often feeling a high degree of anxiety themselves. 	Volume 1, Chapter 11, Paragraph 11.9.11 – 11.9.12	Principal Contractor
T6	Operational Maintenance	Site entrance roads would be well maintained and monitored during the operational life of the Proposed Development. Regular maintenance would be undertaken to keep the Site access track drainage systems fully operational and to ensure there are no run-off issues onto the public road network.	Volume 1, Chapter 11, Paragraph 11.9.13	Principal Contractor / SSEN Transmission
Mitigation for Forestry (see Volume 1 – Chapter 12)				
F1	Good Practice	Although the areas of standing, blown and regenerating trees is small, good forest practice for removing these trees will be followed as detailed within a site-specific Construction Environmental Management Plan	Volume 1, Chapter 12, Paragraph 12.8.3	

		(CEMP) that will be prepared by the successful Principal Contractor, and through the good practice guides within UK Forestry Standard (UKFS).		
F2	Mitigation during construction	At the time of construction and operation of the Proposed Development, the Applicant will, where possible, take the opportunity to reduce the width of the Operational Corridor.	Volume 1, Chapter 12, Paragraph 12.11.1	SSEN Transmission
F3	Compensatory Planting	Given the Proposed Development would result in the permanent loss of woodland (5.24 hectares), the Applicant is committed to making arrangements to plant off-site the equivalent area of woodland as compensatory planting, meeting the Scottish Government's Control of Woodland Removal (CoWRP) objective of no net loss of woodland. Compensatory planting to be undertaken will comply with UKFS and associated guidelines which may apply, or any other such replacement standard applied by the planning (consenting) authority. Planting will be supported by an approved replanting plan and shall identify, location, species and woodland design, timing, maintenance, monitoring, and reporting standards.	Volume 1, Chapter 12, Paragraph 12.11.2	SSEN Transmission
Mitigation for Socio-Economic, Tourism and Recreation (see Volume 1 – Chapter 13)				
SE1	Local Economy and Employment Opportunities	<p>SSEN Transmission has committed to maximise the economic opportunities for the local area and business and communities in the Highland Council area, where possible.</p> <p>SSEN Transmission are committed to using local supply chain where feasible and their Principal Contractors are also encouraged to do the same.</p> <p>The potential for utilisation of a recently launched Community Benefit Funding programme for local community groups.</p>	Volume 1, Chapter 13, Paragraph 13.10.1 – 13.10.5	SSEN Transmission