

17.

Schedule of Mitigation

17 Schedule of Mitigation

17.1 Introduction

- 17.1.1 This chapter summarises all mitigation associated with the design, construction and operation of the Project to avoid, prevent, reduce and offset adverse environmental effects, and where relevant deliver environmental enhancements. Any monitoring required by the technical assessments is also summarised here.

17.2 Schedule of Mitigation

Overview

- 17.2.1 Table 17-1 provides a consolidated list of all mitigation and monitoring measures which have been identified in the EIA Report, and which are embedded in the design of the Project or would be implemented during its construction and operation. Measures are presented for each environmental aspect including those scoped out at scoping stage where relevant.
- 17.2.2 Mitigation associated with the Project has been broken down into the following categories:
- **Embedded Mitigation:** These measures have been incorporated into the design of the Project at the outset and following Design Interventions by the EIA topic leads. Embedded Mitigation is already implemented at the time of the EIA Report submission. Mitigation measures applied through the development of route options and the Overhead Line alignment are described in Chapter 3: Design Evolution and Alternatives and are not detailed here.
 - **Additional/Site-specific Mitigation:** These measures have been identified within each technical EIA assessment, requiring implementation post-consent.
- 17.2.3 **Standard Practice Mitigation:** These are standard industry best practice measures, requiring implementation post-consent. It is the intention that the Schedule of Mitigation will be secured through conditions attached to the Section 37 consents and its deemed planning conditions and also through conditions attached to the Town and Country planning Application for Cumbernauld Substation or incorporated into the Construction Environmental Management Plan (CEMP) and other topic-specific plans.

Table 17-1 Schedule of Mitigation and Monitoring

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
General (covers multiple aspects)				
G1	Production and implementation of CEMP (Construction Environmental Management Plan).	Pre-construction and during Construction	Principal Contractor	Standard Practice Mitigation
Chapter 6 Landscape and Visual				
LV1	All landscape and visual mitigation planting measures are embedded within the design and are illustrated in Figure 6.9 and Figure 6.10, Volume 2. These measures have been developed collaboratively with ecology, forestry and heritage specialists to ensure a cohesive and integrated mitigation strategy. Bonnybridge Substation Extension The proposed mitigation planting includes a new hedgerow with shrub planting on the southern side of the Bonnybridge Substation Extension to provide screening for receptors viewing from the south. Bunding of up to 2m in height (the exact height would be determined by the cut and fill balance at detailed design stage) would be incorporated to further enhance the screening effect. The planting would also help to continue the existing road-edge vegetation along the A803. Additional hedgerow, shrub planting and woodland planting are proposed adjacent to the existing substation entrance along A803. This planting would help soften the appearance of the infrastructure within the existing substation when viewed from the south, and would provide some screening of the Bonnybridge Substation Extension when viewed from the south-east. A species-rich grass seed mix is proposed across the remaining landscape areas to create a softer and more naturalistic appearance around the substation. The scale of the new planting proposal is given as follows (to note that the following is given an indicative values and species and would be further reviewed at the detailed design stage): 1960m² native shrub planting mix with key species including <i>Pinus spinosa</i>, <i>Crataegus monogyna</i> and <i>Viburnum opulus</i>; 21060m² species diverse meadow mix (Scotiaseeds MG5 Meadow Mix or similar); 359m native hedgerow with key species including <i>Ilex aq</i> uifolium and <i>Prunus avium</i>; and	During Construction and Operational Phase	Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	2130m² wet grassland seed mix (Scotiaseeds Dry Places Wildflower Mix (SCF5 or similar). Cumbernauld Substation Extension The proposed mitigation planting includes a new hedgerow with woodland behind it to soften views of the Project for visual receptors located to the west. Bunding of up to 2m in height (the exact height would be determined by the cut and fill balance at detailed design stage) would be incorporated to further enhance screening. Towards the north-eastern part of Forest Road new woodland and shrub planting would extend the retained woodland, feathering into the site to create a more naturalistic appearance. The cut-slopes surrounding the perimeter of the Cumbernauld Substation Extension would be seeded to soften the engineered landform. Collectively, these interventions would help reinforce the rural landscape character and contribute to a landscape-scale approach to native planting and regeneration. The scale of the planting proposal is given as follows (to note that the following is given an indicative values and species and would be further reviewed at the detailed design stage): 410m² native woodland with key species including <i>Betula pubescens</i>, <i>Corylus avellana</i> and <i>Sorbus aucuparia</i>; 4315m² native shrub planting mix with key species including <i>Pinus spinosa</i>, <i>Crataegus monogyna</i> and <i>Viburnum opulus</i>; 23190m² species diverse meadow mix (Scotiaseeds MG5 Meadow Mix or similar); 290m native hedgerow with key species including <i>Ilex aquifolium</i> and <i>Prunus avium</i>; 3130m² perimeter grassland (Emorsgate Seeds EM1F Basic General Purpose WildFlowers or similar); and 2360m² wet grassland seed mix (Scotiaseeds Dry Places Wildflower Mix (SCF5 or similar).			

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	For both the Bonnybridge Substation Extension and the Cumbernauld Substation Extension, where planting proposals and habitat creation does not conflict with construction activity, these areas would be planted in advance of the Operational phase of the Project to enable early establishment. This could happen in the first available planting season within the Construction phase but would be determined within the detailed design stage. All mitigation is considered to be embedded with no additional mitigation appropriate to be proposed to further reduce landscape and visual effects.			
Chapter 7 Cultural Heritage				
CH1	Archaeological monitoring to be undertaken during construction and ground works (i.e., stripping for access tracks, bell-mouths, and tower foundation) in areas where archaeological remains have been recorded, and within the World Heritage Site (WHS) Buffer. The purpose of this is to identify, excavate, and record previously unrecorded archaeological features. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigation (WSI).	Pre-construction	Principal Contractor / Archaeological Clerk of Works (ACOW)	Additional Mitigation
CH2	Archaeological monitoring to be undertaken during construction and ground works (i.e., stripping for access tracks, bell-mouths, and tower foundation) in areas in close proximity to previously recorded archaeological remains, or where the archaeological potential is considered to be higher due to aspects such as limited ground disturbance. The purpose of this is to identify, excavate, and record previously unrecorded archaeological features, as well as above ground features such as drystone walls. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigation (WSI).	During construction	Principal Contractor / ACOW	Additional Mitigation
CH3	Temporary fencing to be installed around scheduled monuments to avoid accidental damage where construction works are undertaken in the same field as a scheduled monument. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigation (WSI).	During construction	Principal Contractor / ACOW	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
CH4	Temporary fencing to be installed around previously recorded assets to avoid accidental damage where construction works are undertaken within 10m of a previously recorded asset. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigation (WSI).	During construction	Principal Contractor / ACOW	Additional Mitigation
CH5	Any sections of historic landscape features removed (i.e., dry-stone walls, boundary dykes etc) to be reinstated / restored once construction has been completed. In areas where the need for a permanent access means reinstatement/restoration is not possible, exposed ends of walls and similar features should be 'made good' by a qualified individual to avoid further loss of the features through erosion. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigation (WSI).	During construction	Principal Contractor / ACOW	Additional Mitigation
CH6	Pre- and post-condition surveys to be undertaken in fields where construction works are being undertaken. Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a WSI.	Pre-condition and during construction	Principal Contractor / ACOW	Additional Mitigation
CH7	Full open area excavation of any archaeological remains identified as part of the archaeological evaluation phase that cannot be avoided or preserved in situ. An Archaeological Strategy to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a WSI.	Pre-construction and during construction	Principal Contractor / ACOW	Additional Mitigation
CH8	Scheduled Monument Consent (SMC) will be required for any works within a scheduled monument. A strategy will be developed with HES as part of the SMC application.	Pre-construction	The Applicant	Additional Mitigation
CH9	Where possible, the Project, including all access tracks, has been designed to avoid previously recorded heritage assets, thereby avoiding the potential for physical impacts.	Design stage	The Applicant	Embedded Mitigation
CH10	Although scheduled monuments fall within or close to areas marked for works associated with the Project, no works will take place within the scheduled monuments, which will be marked as exclusion zones during construction. If the designs change in any of these areas, the Applicant or their Principal Contractor will need to apply for Scheduled Monument Consent (SMC) and develop an appropriate mitigation strategy should there be a direct impact on the Scheduled Monument.	Design stage and during Construction	The Applicant and Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
CH11	Evaluation works, in the form of trial trenching, will be required to inform mitigation. A detailed mitigation strategy will be agreed through consultation with stakeholders and may include, but not be limited to, full archaeological excavation, archaeological monitoring, and strip, map and record. Where possible assets will be avoided and will be fenced off to avoid accidental damage.	During Construction	The Applicant and Principal Contractor	Additional Mitigation
CH14	New-build overhead line (WB Route) Evaluation works, in the form of evaluation trenching, will be required to inform mitigation. A detailed mitigation strategy will be agreed through consultation with stakeholders and may include, but not be limited to, full archaeological excavation, archaeological monitoring, and strip, map and record. Where possible assets will be avoided and will be fenced off to avoid accidental damage. Provisional mitigation types are set out in CH1 to CH8 of this table. Works during the Construction Phase have the potential to result in physical impacts on scheduled components of the Antonine Wall WHS. While proposed access tracks works in this area will be limited to the upgrade of an existing track that is likely to be constructed in an unscheduled area between SM8244, there may be the need to undertake site clearance below the WB Route line. Any work within the scheduled area would require SMC, and an application for SMC will be submitted which will include a detailed proposal for site specific mitigation. As such, mitigation will be agreed as part of the SMC application and in pre-application consultation with HES. Due to the nature of the Operational phase of the Project, there is no suitable mitigation, other than mitigation through design, to reduce impacts on setting resulting from the introduction of the Overhead Line. All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor (currently assume to be Stirlingshire Archaeological Advisor acting on behalf of Falkirk Council and North Lanarkshire Council), and HES in the case of designated assets, once full details of the construction works have been agreed and prior to works commencing.	During construction	The Applicant and the Principal Contractor	Additional Mitigation
CH15	Upgraded Overhead Line (XX and XR Route) In areas where heritage assets have been previously recorded and where stripping is required, mitigation is assumed, subject to consultation with relevant stakeholders. This would consist of archaeological monitoring during the stripping of access tracks to allow any buried archaeological remains that might survive to be recorded prior to construction. Based on the current findings, no areas of strip, map, and record or	During construction	The Applicant / Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	archaeological excavations are proposed, due to the limited intrusive works in areas of previously recorded heritage assets. Based on the current design all scheduled monuments will be avoided and there will be no impact upon them. If the design alters and temporary works are required that may affect any scheduled monuments, an application for SMC will be submitted which will include a detailed proposal for site specific mitigation. All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor, and HES in the case of designated assets, once full details of the construction works have been agreed and prior to works commencing.			
CH16	<u>CB Route Removal</u> Mitigation measures, subject to consultation with stakeholders, may include but are not limited to archaeological monitoring, trial trenching and strip, map and record. The works associated with the removal of the CB Route will include the removal of one tower (Tower CB035) located within the scheduled component of the World Heritage Site (SM90013). The removal of this tower, as well as an associated works (including, but not limited to, access tracks) will require Scheduled Monument Consent. All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor, and HES in the case of designated assets, once full details of the construction works have been agreed and prior to works commencing.	During Construction	Principal Contractor	Additional Mitigation
CH17	<u>AA Route Undergrounding</u> Evaluation works, in the form of trial trenching, will be required to inform mitigation. A detailed mitigation strategy will be agreed through consultation with stakeholders and may include, but not be limited to, full archaeological excavation, archaeological monitoring, and strip, map and record. Where possible assets will be avoided and will be fenced off to avoid accidental damage. Provisional mitigation types are set out in Table 7.8. In areas where historic landscape features, such as drystone walls and stone dykes cannot be avoided, any elements removed during construction should be rebuilt in the same form once construction is complete. In areas where this cannot take place due to a permanent access being required, the ends of walls / dykes should be 'made good' during the construction phase to avoid the feature deteriorating through erosion. Based on the current design most scheduled monuments will be avoided and there will be no impact. If the design alters and temporary works are required that may affect any	Pre-construction and during construction	Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	scheduled monuments, an application for SMC will be submitted which will include a detailed proposal for site specific mitigation. As such, mitigation will be agreed as part of the SMC application and in pre-application consultation with HES. Works during the Construction Phase have the potential to result in physical impacts on scheduled components of the Antonine Wall WHS, as well as other scheduled monuments north of the Antonine Wall. Any work within the scheduled area would require SMC, and an application for SMC will be submitted which will include a detailed proposal for site specific mitigation. As such, mitigation will be agreed as part of the SMC application and in pre-application consultation with HES. All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor, and HES in the case of designated assets, once full details of the construction works have been agreed and prior to works commencing.			
CH18	Denny North Substation Works The review of baseline conditions against the current design has revealed that the Project is located within an area of land that has been previously disturbed. As such, no impacts are predicted, and no mitigation is proposed. An existing fence provides protection for the scheduled Doghillock Dun (SM6929), located to the west of the Project. As such, no further protection is required based on the current design. If the Project alters, and works are required near to the scheduled monument, protective fencing mitigation might be required.	During construction	Principal Contractor	Additional Mitigation
CH19	Bonnybridge Substation Extension The review of baseline information has suggested that most of the Site is likely to have been disturbed as a result of the construction of the former Bonnybridge Power Station, as well as the existing Bonnybridge Substation and arable cultivation. This has, however, not been confirmed by evaluation trenching. As such, it is recommended that evaluation trenching is undertaken in advance of construction. If previously unrecorded archaeological features are identified, mitigation may include, but not be limited to, archaeological excavation, strip, map, and record, and archaeological monitoring. While significant impacts on the setting of heritage assets have not been identified, landscape mitigation in the form of woodland planting, to supplement existing woodland belts, will help screen the Project and reduce its visual appearance.	During construction	Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor once full details of the construction works have been agreed and prior to works commencing.			
CH20	<u>Cumbernauld Substation Extension</u> Mitigation Works will be agreed with the relevant Local Authority Advisor (Currently Stirlingshire Archaeological Advisor (SAA) acting on behalf of North Lanarkshire Council), and Historic Environment Scotland (HES) in the case of designated sites. This will include archaeological monitoring during site clearance likely to be agreed as part of a Written Scheme of Investigation. This could be targeted in areas that appear to have suffered from less disturbance, such as the area of the possible enclosure (AECOM05). Archaeological monitoring visits during construction might also be undertaken by the Local Authority Archaeological Advisor (currently SAA). It is expected that an Archaeological Clerk of Works (ACoW) will be appointed to supervise works during the construction phase.	During construction	Principal Contractor	Additional Mitigation and Monitoring
Chapter 8 Biodiversity				
B1	An Ecological or Environmental Clerk of Works (ECOW) will be employed for the duration of the construction of the Project. The ECOW will advise on ecological matters and visit the Site as necessary, mark-out any required works exclusion zones, monitor implementation of ecological mitigation and compliance with nature conservation legislation and provide Toolbox Talks to personnel, where required.	During construction	Principal Contractor / Environmental Clerk of Works (ECOW)	Standard Practice Mitigation
B2	All personnel involved in the construction of the Project will be made aware of relevant ecological features and the mitigation measures and working procedures to be adopted. This will be achieved as part of the induction process and through the delivery of Toolbox Talks, where required.	During construction	Principal Contractor / ECOW	Standard Practice Mitigation
B3	The works area will be restricted to within the footprint of the Project and retained habitats will not be accessed by personnel, vehicles or other equipment during the Construction phase.	During construction	Principal Contractor / ECOW	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
B4	In line with NatureScot guidance, pre-works survey for protected and/or notable species (where required) will be carried out by the ECoW or other qualified ecologist, no more than three months before works commence (including facilitating works such as vegetation clearance), to check for any changes to the baseline conditions described in this EIA Report. The results will be reported and communicated to the appointed Principal Contractor and other relevant stakeholders, and additional avoidance / mitigation measures implemented, if required.	Pre-construction	ECoW	Standard Practice Mitigation
B5	Following pre-works surveys the ECoW will provide advice on micro-siting to avoid ecological features of interest where it is avoidance is likely to be possible.	Pre-construction	ECoW	Standard Practice Mitigation
B6	The ECoW or other suitably qualified and experienced ecologist would carry out an updated survey for plant Invasive Non-Native Species (INNS) prior to commencement of works and, if required (likely due to the presence of rhododendron and Japanese knotweed), a Biosecurity Management Plan (BMP) would be prepared and appropriate mitigation implemented to prevent the spread of INNS.	Pre-construction	ECoW	Standard Practice Mitigation
B7	A Construction Environment Management Plan (CEMP) will be prepared and submitted for approval by North Lanarkshire Council, in consultation with NatureScot and SEPA, where necessary, prior to commencement of construction. The CEMP will set out all environmental management measures and the roles and responsibilities of construction personnel.	Pre-construction and during construction	Principal Contractor	Standard Practice Mitigation
B8	Pollution prevention – as a minimum, construction will adhere to SEPA Guidance for Pollution Prevention (GPP)/ Pollution Prevention Guidance (PPG), including: – Airbourne dust will be controlled via the use of dust suppression techniques (i.e. water used in crushing operations as per GPP/PPG, watering access tracks in dry weather); – Controls and contingency measures to manage run-off and sediment from construction areas; – Storage of oils, lubricants or chemicals in an appropriate secure container in a suitable storage area at least 10m from any watercourse, with spill kits at this location and across the Site; and – Refuelling and servicing of vehicles/plant in a designated bunded area with an impermeable base, situated at least 50m from any watercourse.	During construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
B9	Water crossings – water crossings will be designed and installed to comply with all relevant legislation and Scottish Environment Protection Agency (SEPA) River Crossings guidance;	Design and during construction	Principal Contractor	Standard Practice Mitigation
B10	Tree protection – works near or at any retained trees or woodland will follow guidance in British Standard 5837:2012, Trees in relation to design, demolition and construction – Recommendations.	During construction	Principal Contractor	Standard Practice Mitigation
B11	Nesting bird mitigation – in compliance with legislation protecting active bird nests, works directly impacting vegetation that could be used by nesting birds (e.g trees, shrubs and rushy grassland areas) will be undertaken outside of the breeding season (taken as March to August, inclusive) as far as possible. Should vegetation clearance works be required during the breeding season, a pre-works search for active nests will be carried out by the ECoW or other suitably experienced ornithologist, no more than 72 hours in advance of clearance works taking place since nests can be quickly established. Where any active nests are identified, suitable species-specific exclusion zones will be established and maintained until the breeding attempt has concluded. All measures will be incorporated into a site-specific Bird Protection Plan which will be approved by North Lanarkshire Council, in consultation with NatureScot, prior to the commencement of construction works.	During construction	Principal Contractor / ECoW	Standard Practice Mitigation
B12	Construction lighting – as far as possible, works will be carried out in daylight (to finish each day at 19:00 latest from March to September and 17:30 latest from October to February) to minimise the risk of disturbing protected and / or important nocturnal species (such as foraging / commuting bats and badger); any temporary artificial lighting required for construction works will be strongly directional and directed only on to the works area, and will be turned off when not required, to minimise light spill and adverse effects on nocturnal wildlife. It will follow Guidance Note GN08/23 Bats and Artificial Lighting at Night (ILP and BCT, 2023).	During construction	Principal Contractor	Embedded Mitigation
B13	Permanent lighting - Full operational lighting for maintenance/ emergencies will be temporary and sporadic. Lower-level permanent security/perimeter lighting will be operated throughout the hours of darkness and will be directional, downward-facing and shielded to minimise upward spill and horizontal glare, minimising adverse effects on nocturnal wildlife.	During operation	The Applicant	Embedded Mitigation
B14	General wildlife protection – if any excavations are made, they will be covered overnight or a means of escape for any animals that may enter provided (such as a suitably battered slope) and will be checked at the start of each working day to ensure no animals are trapped within them. Similarly, any open pipes will be capped or otherwise screened	During construction	Principal Contractor / ECoW	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	at the end of each working day, or if left for extended periods of time, to ensure no animals become trapped.			
B15	Further measures to prevent the injury or mortality of animals which would be implemented include: - Where possible, pre-stressing whereby wildlife are encouraged to leave the area prior to works commencing (e.g. by having people walk over the area making noise); and - If and where necessary, phased vegetation clearance following a pattern to encourage wildlife to move out of the working area to alternative undisturbed habitats.	During construction	Principal Contractor / ECoW	Standard Practice Mitigation
B16	Note that there are legal requirements relating to works which have the potential to impact certain protected species. Protected species licenses from NatureScot may be required to permit such works and must be in place before works commence. Species Protection Plans (SPP) are required to support applications for such licenses and will include appropriate mitigation measures. For the likely content of these SPPs for each component of the Scheme see the following ref. in this table: B20, B21, B22, B23, B24, B25, B26, B27, B28.	Pre-construction	The Applicant / Principal Contractor	Standard Practice Mitigation / Licensing requirement
B17	<u>New-build Overhead Line (WB Route)</u> Design mitigation relating to the New-build Overhead Line includes the following: - New Build Overhead Line was designed to avoid crossing the Slamannan Plateau Special Protection Area /Site of Special Scientific Interest (except in one location – between WB024 and WB025) and was therefore routed to the north; - Proposed access tracks near WB002 were rerouted to prevent negative impacts to a known water vole population on the Shank Burn (WV03); and, - Where the Overhead Line crosses the Luggie Water, a route has been selected which minimises the loss of ancient semi-natural woodland.	Design stage	The Applicant	Embedded Mitigation
B18	<u>New-build Overhead Line (WB Route) - Habitats</u> Following removal of any temporary culverts for access across small watercourses, an appropriate seed mix will be sown on any short bare sections of bank, should these be present and if necessary stabilising coir matting installed, as advised by the ECoW, to stabilise any bare watercourse bank;	During construction and post-construction	The Applicant / Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	- Following removal of laydown or other works/access substrates across the Raised bog and Blanket bog areas, the ECoW will monitor to check for any bare peat, and if this exists it will be seeded with an appropriate seed mix including a high proportion of hare's-tail cottongrass <i>Eriophorum vaginatum</i> and common cottongrass <i>Eriophorum angustifolium</i>, as well as common heather <i>Calluna vulgaris</i>, cross-leaved heath <i>Erica tetralix</i> and purple moor-grass <i>Molinia caerulea</i>. These species are appropriate for the areas of bog likely to be affected and (especially the common cottongrass) will help to quickly colonise and stabilise any exposed bare peat; - Where Ancient Woodland Inventory (AWI) woodland, Scottish Biodiversity List (SBL) Priority woodland or non-notable broadleaved/mixed woodland is removed for the Overhead Line wayleave, it is likely to regenerate into scrubby vegetation with a woodland ground flora (where this currently exists) following completion of the works and removal of any laydown. This regeneration will be monitored by the ECoW, and in the unlikely event that it is found to be failing after 5 years, then this will be rectified by planting appropriate shrub species that will not exceed permitted height for wayleave vegetation; - Any other areas of vegetation impacted by the works will be inspected by the ECoW post-works, and any significant bare ground that does not show signs of rapid regeneration will be sown with a seed mix appropriate to the relevant habitat; On completion of works at applicable locations where small extents of hedgerow/tree line are lost, hedgerows (with trees if replacing tree loss and where tree planting is appropriate) will be planted to fill the created gaps. These hedgerows will be species-rich rather than species-poor. Planted hedgerow species (including trees) will be native to the region and sourced to be of as local origin as possible.			
B19	Slamannan Plateau SPA/SSSI and West Fannyside Moss SSSI The installation of Bird Flight Diverters (BFDs) on overhead lines is recommended by NatureScot as a mitigation measure to reduce the potential for collision. Based on the distribution of taiga bean goose the risk of collision with the New-build Overhead Line is low. However, to further reduce this risk, BFDs are proposed between identified foraging areas to the west of the overhead line, albeit infrequently used, and roost sites to the east of the overhead line. As such, BFDs will be installed on the earth wire of the New-build Overhead Line between towers WB030 and WB038 (see Figure 8.36 in Volume 2 Figures).	During construction	Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	BFDs will be installed during construction at a minimum of 5m intervals along the earth wire in this section and will be monitored and maintained throughout the lifespan of the Project. The type and specification will be determined by the principal contractor and agreed in advance of construction with the Energy Consents Unit and NatureScot. Earth wires are considered a greater risk of collision than conductors as they are thinner and are positioned above the more visible conductors.			
B20	Bats In line with BCT Guidance, further bat surveys are required to confirm presence/likely absence of bats and characterise roosts. These surveys would be undertaken at least 3 months in advance of Works to inform licensing. An additional pre-works / pre-felling check of any trees with suitability for roosting bats would be required immediately prior to felling to ensure no bats were present. Following these surveys, the number of bat licenses required to permit destruction/possible disturbance can be confirmed – WB Route: currently loss is 67 trees and possible disturbance of 32 trees with suitability to supporting roosting bats – CB Route: currently loss of one tree and possible disturbance of 37 trees with suitability to supporting roosting bats is taken as the worst case). It is likely that the numbers of confirmed roost presence, will be lower that these numbers. – AA Route Undergrounding: currently loss of one tree and possible disturbance of seven trees with suitability to supporting roosting bats is taken as the worst case). – Cumbernauld Substation Extension: current loss of six trees with suitability to support roosting bats. It is likely that the numbers of confirmed roost presence, will be lower that these numbers. The Bat Species Protection Plan (SPP) will specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timings of works/ lighting, details on works methods such as soft felling, and provision of compensatory roosts in the form of bat boxes. In addition, roost features known to be used by less common species which may be lost should be reused where practical, for example by isolating felled branches containing such features and attaching to nearby retained trees.	During construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	To compensate for the loss of trees with bat roost potential detailed above, bat boxes will be provided at a suitable ratio, once the final numbers of confirmed roosts which will be lost are known. The details in terms of locations and specifications for bat boxes will be set out within the Ecological Enhancement Plan, to be agreed with the North Lanarkshire and Falkirk Local Authorities.			
B21	Badgers The following protected species licenses will be required at the following components: - WB Route: A Protected Species licence for badger will be required to permit the disturbance of 34 badger setts. Of these: - four setts will require works be undertaken under ONLY a standard badger license to permit disturbance which may occur within 30m of proposed access tracks and/or tower compounds, the site compound and pulling positions; 13 setts will require works be undertaken under ONLY the Standard Forestry Operations Licence 2021, which permits disturbance to badger setts caused by felling; and, 17 setts are within both 30m of proposed access tracks and/or tower compounds, the site compound and pulling positions AND within 20m of felling, and are thus relevant to BOTH license types. - AA Route Undergrounding: No badger licensing will be required given that, based on the information provided, no badger setts are expected to be damaged/destroyed/obstructed. However, a badger sett is located ~33m from the Works. If a works exclusion zone of 30m cannot be maintained, a badger license may be required to permit disturbance to this sett. - CB Route: A Protected Species licence for badger will be required to permit disturbance to a single badger sett due to it being within 30m of the proposed access track. No additional badger licenses to permit destruction of setts are required for the Works. - Cumbernauld Substation Extension: A badger license will be required to permit the destruction of two badger setts - one likely main sett (Sett B) and one likely outlier sett (Sett E). No additional setts will be disturbed given that they are more than 30m from the Project. 30m is sufficient to avoid disturbance given that no blasting or piling works are currently planned. As a main sett (Sett B) will need to be closed, an	During construction	Principal Contractor	Additional Mitigation / Licensing requirement

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	artificial sett will be required as part of the mitigation measures set out in the licence application. Badger SPPs will be produced to accompany the applications for the standard badger license and the Standard Forestry Operations Licence 2021, with content tailored appropriately to each licence type. Badger SPPs which will accompany the applications for the licenses will likely specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timing of works and detailed works methods. The exact content of the SPPs would be updated by the results of pre-works surveys.			
B22	Great Crested Newts (GCN) For the WB Route a Protected Species licence for GCN will be required to permit possible harm to the animals themselves (death/injury/disturbance) and to their resting sites (destruction/damage/obstruction) in this area. No ponds which were confirmed as supporting GCN are expected to be impacted and this license will apply to terrestrial habitat only. This is because GCN are assumed to use all suitable terrestrial habitat within the wider Drum WS area, and any works in this area have the potential to harm the species. For the CB Route Removal in-line with Nature Scot Guidance, further GCN survey (likely eDNA survey initially) is required to confirm presence / likely absence of GCN at pont CB01, and to determine the size of the population. Following these surveys, the requirement of GCN licenses can be confirmed. A GCN license may be required to permit possible harm to the animals themselves (death/ injury/disturbance) and to their resting sites (destruction/ damage/obstruction) where it could occur within 250m of pond CB01, if eDNA survey to confirm presence. No ponds (including CB01) are expected to be impacted, and this license will apply to terrestrial habitat only. The GCN SPP will likely specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timing of works and works methods (including hand searching and phased vegetation clearance to exclude the species from certain areas, and phased removal by hand of any refugia). In addition, where practical, GCN underpasses should be installed beneath access tracks to allow the species to cross. The results of the GCN surveys detailed in Appendix 8.4 will be used to inform the content of SPPs.	Pre-construction and during construction	ECoW / The Applicant	Additional Mitigation / Licensing requirement

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
B23	<u>Red Squirrels</u> Red squirrel licensing is likely to be required to permit the loss of and disturbance of red squirrels dreys across the WB Route and the CB Route. A pre-work survey will be undertaken to confirm the presence of any dreys, and monitoring may be required to confirm the species using the drey, given the presence of grey squirrels within the area as well. In addition, along the AA Route Undergrounding red squirrel licensing may be required to permit the loss of and disturbance of red squirrels dreys should pre-construction surveys identify any to be present. Along the WB Route and the CB Route this will occur where tree felling (or other Works) occurs within the range of red squirrel (taken to be north of Beam Road) In the event that the pre-construction surveys identify a requirement for a Protected Species licence for red squirrel, a Red Squirrel SPP which will accompany the license application will likely specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timing of works and works methods. The exact content of the SPP would be updated by the results of pre-works surveys and of ongoing monitoring throughout the Works. Timing in particular is critical given that disturbance to red squirrel dreys is possible within 50m of dreys during the breeding season (February to September inclusive), as opposed to within 5m/one trees distance in the non-breeding season. NatureScot state that there is a presumption against licensing disturbance/damage/destruction of active breeding dreys. As in general vegetation removal will be undertaken outwith this period this is unlikely to be a consideration.	Pre-construction and during construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirements
B24	<u>New-build Overhead Line (WB Route) - Otter</u> A Protected Species licence for otter will be required to permit the disturbance of one otter resting site, WB.O.04. No additional resting sites will be disturbed given that they are more than 30m from the Works (or more than 200m where they are possible natal holts). An Otter SPP which be prepared to accompany the license application will likely specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timing of works and works methods. The exact content of the SPP would be updated by the results of pre-works surveys, which will also confirm the current status of the resting site and licensing requirements (noting features can change overtime, particularly after flood events).	During construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
B25	<u>New-build Overhead Line (WB Route) - Water vole</u> No water vole licensing will be required given that no water vole burrows are expected to be damaged/destroyed/obstructed. However, water vole burrows are located 10m from tower compound WB002. A pre-work survey will be undertaken to confirm any changes to the baseline. To ensure the continued avoidance of harm to water vole and water vole burrows (and thus avoid the need for water vole licensing), a Water Vole SPP will be adhered to, outlining the following precautions: The ECoW will mark-out a minimum 10m works exclusion zone around water vole burrows (and other water vole evidence if necessary), which will be adhered to during construction; and, De-vegetation within the footprint of compound WB002 (and outside of the above works exclusion zone) will be undertaken prior to the arrival of any vehicles to make the area unsuitable for water vole and thus avoid individuals straying into the WB002 works area. This will be undertaken by hand-held strimmer (or other lightweight equipment) under supervision of the ECoW. If a 10m works exclusion zone cannot be maintained then a water vole license from NatureScot to allow disturbance of burrows is likely to be required .	Pre-construction and during construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement
B26	<u>New-build Overhead Line (WB Route) – GCN</u> GCN are assumed to use all suitable terrestrial habitat within the wider Drum Wildlife Site (WS) area, and any works in this area have the potential to harm the species. A Protected Species licence for GCN will be required to permit possible harm to the animals themselves (death/injury/disturbance) and to their resting sites (destruction/damage/obstruction) in this area. No ponds which were confirmed as supporting GCN are expected to be impacted and this license will apply to terrestrial habitat only. The GCN SPP will likely specify measures including adherence to appropriate works exclusion zones, ECoW supervision of works, restrictions on the timing of works and works methods (including hand searching and phased vegetation clearance to exclude the species from certain areas, and phased removal by hand of any refugia). In addition,	Pre-construction and during construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	where practical, GCN underpasses should be installed beneath access tracks to allow the species to cross. The baseline for GCN is unlikely to change in the interim, and the results of the GCN surveys detailed in Appendix 8.4 will be used to inform the content of SPPs.			
B27	<u>New-build Overhead Line (WB Route) – Curlew</u> To further reduce an already low risk of collision mortality for curlew in the Drum Moss area Bird Flight Divertors will be installed on the earth wire of the New-build Overhead-line as it crosses Drum Moss. BFDs will be installed between Towers WB038 and WB044 following the specification detailed for Slamannan Plateau SPA above (see Volume 2 Figure 8.36)	During construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement
B28	<u>New-build Overhead Line (WB Route) – Barn owl</u> To minimise the potential that nesting barn owl will be displaced or disturbed by the works no works will be undertaken at the WB Tower site directly north of the barn owl nest box, and within 100m of the nest box, between March and May (inclusive) (see Appendix 8.5 – Confidential Annex D for location of barn owl nest box). After May it is considered likely that if the barn owl box is unoccupied it will remain unoccupied for the rest of the breeding season. Restrictions may extend beyond May, to as late as August, if breeding barn owl are present (as confirmed by the ECoW) to avoid the potential of disturbance. If works cannot be restricted as above the barn owl box will be relocated prior to the works. The Barn owl nest box will be relocated to a minimum of 100m from the Works Site. A suitable area could be the field boundary trees directly to the east which would be approximately 150m from the WB Tower sites. The above measures will be confirmed within the Breeding Bird Protection Plan (which will be approved by Falkirk/North Lanarkshire Council and NatureScot prior to construction). In particular, Falkirk Council ecologists, who are monitoring the barn owl box, will be consulted for comment on any proposed relocation.	Pre-construction and during construction	Principal Contractor / ECoW	Additional Mitigation / Licensing requirement
B29	<u>AA Route Undergrounding</u> Following completion of the trenching for undergrounding, and removal of any temporary culverts for access over the Rowan Tree Burn, an appropriate seed mix will be sown on the short bare sections of bank, and if necessary, stabilising coir matting installed, as advised by the ECoW, to stabilise any bare watercourse bank;	Post-Construction	Applicant / ECoW	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	Where Long-Established Woodlands of Plantation Origin (LEPO) or SBL Priority woodland or non-notable broadleaved/mixed woodland is removed, it is likely to regenerate into scrubby vegetation with a woodland ground flora (where this currently exists) following completion of the works and removal of any laydown. This regeneration will be monitored by the ECoW, and in the unlikely event that it is found to be failing, then this will be rectified by planting appropriate shrub species that will not exceed permitted height for wayleave vegetation, if required; Any other areas of vegetation impacted by the works will be inspected by the ECoW post-works, and any significant bare ground that does not show signs of rapid regeneration will be sown with a seed mix appropriate to the relevant habitat; On completion of works at applicable locations where small extents of hedgerow/tree line are lost, hedgerows (with trees if replacing tree loss and where trees are appropriate) will be planted to fill the created gaps. These hedgerows will be species-rich rather than species-poor. Planted hedgerow species (including trees) will be native to the region and sourced to be of as local origin as possible.			
B30	<u>CB Route Removal Habitats</u> – Where LEPO or SBL Priority woodland or non-notable broadleaved/mixed woodland is removed, it is likely to regenerate into scrubby vegetation with a woodland ground flora (where this currently exists) following completion of the works and removal of any laydown. This regeneration will be monitored by the ECoW, and in the unlikely event that it is found to be failing, then this will be rectified by planting appropriate shrub species that will not exceed permitted height for wayleave vegetation, if required; – Following removal of laydown or other works/access substrates across the raised bog and blanket bog areas, the ECoW will monitor to check for any bare peat, and if this exists it will be seeded with an appropriate seed mix including a high proportion of hare's-tail cottongrass and common cottongrass, as well as heather, cross-leaved heath and purple moor-grass. These species are appropriate for the bog in question and (especially the common cottongrass) will help to quickly colonise and stabilise any exposed bare peat; – In raised bog and blanket bog areas where peat excavation cannot be avoided, turves won and peat horizons excavated would be stored separately. Excavated	Post-construction	ECoW / The Applicant	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	peat would be stored in bunds as a temporary measure during the construction period with the reinstatement/restoration of the peat conducted immediately after the works are completed (e.g. within 6-12 month period). Excavated peat would be stored in such a way as not to cause pollution from surface run-off from erosion. Turves would be stored separately, upright and wetted in dry weather (if needs be) to maintain live vegetation, then returned to a peatland surface following careful landscaping of temporarily stored peat, placed back in reverse order from which it was excavated. Following replacement of turves, monitoring will be carried out by the EcOW, with interventions (such as reseedling) conducted, if deemed necessary, to ensure successful revegetation; - Any other areas of vegetation impacted by the works will be inspected by the ECoW post-works, and any significant bare ground that does not show signs of rapid regeneration will be sown with a seed mix appropriate to the relevant habitat; - On completion of works at applicable locations where small extents of tree line are lost, trees will be planted to fill the created gaps (where appropriate). Trees will be of a mix of species appropriate to the surrounding habitat, native to the region and sourced to be of as local origin as possible.			
B31	<u>Denny North Substation Works</u> For the Denny Substation works, temporary construction compounds will be sited on the existing substation platform, rather than within surrounding habitats (such as those associated with deep peat).	Design Stage and during construction	The Applicant	Embedded Mitigation
B32	<u>Bonnybridge Substation Extension</u> For the Bonnybridge Substation works, the construction compound is to be sighted on pre-existing hardstanding of artificial surface, rather than land adjacent to the existing substation (e.g. on arable land within close proximity to the Rowan Tree Burn). The Works would involve removing species-poor hedgerow and broadleaved plantation woodland. An area of woodland and shrub planting, other areas will reinstated as neutral grassland post-construction. Details are provided in Chapter 6 Landscape and Visual.	Post-construction	The Applicant / Principal Contractor	Embedded Mitigation
B33	<u>Bonnybridge Substation Extension</u> Appropriate works exclusion zones must be in place around otter resting sites. In the unlikely event that works are required within proximity to protected species resting sites, licenses from NatureScot would be required to permit such works, and must be in place	Design stage and during construction	Principal Contractor / The Applicant	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	before works commence. SPPs are required to support applications for licenses, and would include appropriate mitigation measures, if required.			
B34	<u>Newarthill Substation Works</u> The works at Newarthill substation will be completely contained within the existing substation platform, preventing any requirement for permanent habitat loss and limiting impacts to within an area that is disturbed at baseline. Moreover, access will be taken via existing tracks and access points to further reduce habitat loss and ensure impacts are localised to already disturbed areas. The construction compounds are mostly sited on species-poor, dry grasslands with low conservation value, rather than on land with woodland or wetland. No significant effects have been identified, and no further mitigation beyond that which is embedded is required.	Design stage	Principal Contractor / The Applicant	Embedded Mitigation
B35	<u>Uprating (XX Route and XR Route)</u> Habitats – No habitat effects associated with the Proposed Uprating Works are significant, however in line with best practice and National Planning Framework 4 (NPF4), compensation and enhancement will nevertheless be provided where feasible to address habitat loss. This will comprise the following additional measures: – Following removal of any temporary culverts for access across small watercourses, an appropriate seed mix will be sown on the short bare sections of bank, and if necessary, stabilising coir matting installed, as advised by the ECoW, to stabilise any bare watercourse bank; – Following removal of laydown or other works/access substrates across the limited raised bog and blanket bog areas, the ECoW will monitor to check for any bare peat, and if this exists it will be seeded with an appropriate seed mix including a high proportion of hare's-tail cottongrass and common cottongrass, as well as heather, cross-leaved heath and purple moor-grass. These species are appropriate for the bog in question and (especially the common cottongrass) will help to quickly colonise and stabilise any exposed bare peat; – Where shrubs/short trees in the existing wayleave within AWI LEPO is removed for tower uprating, it is likely to regenerate following completion of the works and removal of any laydown. However, this regeneration will be monitored by the ECoW, and in the unlikely event that it is found to be failing, then this will be	During construction and post-construction	Principal Contractor / ECoW	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	rectified by planting appropriate shrub species that will not exceed permitted height for wayleave vegetation; – Minor removal of broadleaved semi-natural woodland (regardless of whether constituting priority habitat) for uprating works will also likely regenerate following completion of works and removal of laydown areas. However, this will also be monitored by the ECoW and appropriate shrub species planted in the unlikely event that regeneration is found to be failing; – Any other areas of vegetation impacted by the works will be inspected by the ECoW post-works, and any significant bare ground that does not show signs of rapid regeneration will be sown with a seed mix appropriate to the relevant habitat; – On completion of works at applicable locations where small extents of hedgerow/tree line are lost, hedgerows (with trees if replacing tree loss) will be planted to fill the created gaps. These hedgerows will be species-rich rather than species-poor. Planted hedgerow species (with trees where replacing loss of hedgerows with trees or tree lines) will be native to the region and sourced to be of as local origin as possible.			
Chapter 9 Water Environment				
WE1	Where possible, existing non-public roads and tracks would be utilised to minimise the need for construction temporary trackways, thereby reducing potential impacts on the water environment.	Design stage	Principal Contractor / Applicant	Embedded Mitigation
WE2	Runoff from the temporary trackways surface would be intercepted by channel drains along the road edges. These drains would direct runoff into temporary attenuation basins, where it would undergo treatment prior to controlled release.	Design stage	Principal Contractor / Applicant	Embedded Mitigation
WE3	Where possible, the works associated with the Project would utilise existing watercourse crossings.	Design stage	Principal Contractor / Applicant	Embedded Mitigation
WE4	Where culverting of watercourses or ditches is required, the design would maintain existing hydrological connectivity, conveyance capacity (where applicable), and appropriate freeboard. The temporary culverts and clear-span bridges would be installed to enable the construction of temporary trackways, although the duration may vary depending on construction progress. Culverts would be installed by the laying of a geotextile membrane onto the watercourse bed and banks, with a 150mm bedding layer of compacted crushed stone or granular fill laid on top, followed by a twin wall pipe to the requisite diameter as per the specific	Design stage	Principal Contractor / Applicant	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	culvert design. Granular fill would then be installed around and over the pipe to the requisite depth to provide the minimum cover over the pipe (900mm as per standard detail). It is possible that the watercourse may need to be temporarily damned depending on the level of water and flow rate. This would be determined based on each individual watercourse, and the specific design and method produced for each culvert. The construction of watercourse crossings would take place during drier periods of the year or where flows in the watercourse are low due to a period of dry weather where possible. If this is not possible flow would be over pumped during the installation works to keep the works area dry and reduce pollution risks.			
WE5	Upon completion of the construction phase, all temporary crossings would be removed and affected riverbed and adjacent banks would be fully reinstated to their original condition, ensuring minimal long-term impact on the water environment.	Post construction	Principal Contractor	Embedded Mitigation
WE6	During excavation of tower foundations for the WB Route, groundwater ingress may occur. If encountered, it would be appropriately managed in accordance with the measures outlined within the project's Water Management Plan (WMP), to prevent contamination or uncontrolled discharge to the surrounding environment. De-watering from any excavations would be treated using a combination of settlement tanks, silt fencing, silt socks, and silt busters, as appropriate. All abstracted water would be treated before being discharged to the wider water environment. These measures would be implemented in conjunction with a site-specific pollution prevention plan, developed to ensure compliance with relevant environmental regulations and best practice standards. The appropriate secondary consents would be acquired before abstraction and discharge to the water environment.	During construction	Principal Contractor	Embedded Mitigation
WE7	A Water Management Plan (WMP) will set out the scope of proposed water quality, flow and level monitoring of water features and Private Water Supplies (PWS) that are proposed, covering pre-construction, during construction, and post-construction phases. It is assumed that the WMP will be secured through the application of pre-commencement planning conditions on any successful planning application.	Pre-construction, construction, and post-construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	Liaison with SEPA's operations team will be undertaken post-planning permission to confirm what activities require an EASR (Environmental Authorisations (Scotland) Regulations 2018). During Pre-construction and Construction phases, the principal contractor(s) will ensure that all secondary consents are obtained in advance of any relevant works in, over, under or near watercourses, and / or abstractions/discharges (including dewatering), and that the works are carried out in accordance with them.			
WE8	Along the AA Route undergrounding cable ducts would be installed within the trench and would be surrounded by a material (usually concrete, sand or cement bound sand) to cover the ducts. Sections would be backfilled with excavated material.	During construction	Principal Contractor	Additional Mitigation
WE9	Where possible intrusive watercourse crossings would be carried out during drier periods of the year or during a period of dry weather where flows in the watercourse are low (this may be baseflow or where the channels are very small and not as well connected to groundwater, they may even be dry). However, this cannot be guaranteed and so any water flow within the watercourse would need to be over-pumped / flumed through the works area to maintain a dry trench and to reduce pollution risks.	During construction	Principal Contractor	Embedded Mitigation
WE10	Excavated areas would be limited to areas where work would currently be taking place to reduce the amount of sediment mobilised at one time.	During construction	Principal Contractor	Embedded Mitigation
WE11	At the Denny North Substation Works, the surface water from the platform extension would be managed using a filter drain located beneath the platform. The existing swale would be re-aligned and integrated into this filter drain system, discharging at the existing culvert beneath the access road from the east. The drainage connection to the smaller platform to the east would be assessed and, if necessary, replaced to ensure effective conveyance. All surface water would ultimately flow southwards through the existing swale and attenuation basin, discharging into the River Carron. The system is designed to provide water quality treatment through filtration and sedimentation within the filter drains and basin, helping to remove suspended solids and potential pollutants prior to discharge. The filter drains also add attenuation volume to the Project, helping to capture surface water runoff and reduce pluvial flood risk.	Design stage	Principal Contractor / Applicant	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
WE12	A SuDS Pond would provide attenuation volume and discharge via controlled hydrobrake for the Bonnybridge Substation Extension, ensuring regulated release and minimising downstream impacts on flow	Design stage	Applicant	Embedded Mitigation
WE13	Swale and filter drain system will be designed according to SuDS standards to be installed at Wishaw Substation Extension.	Design stage	Applicant	Embedded Mitigation
WE14	Production and implementation of a Surface Water Management Strategy.	Pre-construction	Principal Contractor	Standard Practice Mitigation
WE15	All works on Site are to be undertaken in accordance with CEMP for the Project, which shall be developed in the detailed design phase and refined for the consented project in advance construction, and then as necessary as construction progresses. It is assumed that both the CEMP will be secured through the application of pre-commencement planning conditions on any successful planning application.	Pre-construction and during construction	Principal Contractor	Standard Practice Mitigation
WE16	Contractors would undertake all works in accordance with 'Guidance for Pollution Prevention', Construction Industry Research and Information Association (CIRA) documents, and SEPA guidance to support the implementation of the Environmental Authorisations (Scotland) Amendment Regulations 2025.	During construction	Principal Contractor	Standard Practice Mitigation
WE17	Management of Construction Site Runoff - Avoidance of wet weather working for sensitive activities, where practical, especially site clearance, earthworks and works to water features; - Appropriate separate storage of topsoil / subsoil and materials, and at least 50m from water features on flat ground, other than where works are necessary adjacent to water features in which case a site/works-specific risk assessment would be carried out and additional measures added if required; - Any earth bund / stockpile to be present for longer than two weeks would be either seeded, covered using geotextiles, or other measures provided to ensure it is not a source of excessive fine sediment in runoff to water features; - The implementation of a temporary drainage system and other measures to manage pollution risk during construction (e.g., fabric silt fences, lagoons, bunds, straw	During construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	bales, sandbags, lamella clarifiers or other proprietary measures etc. as may be required); - Any dewatering of excavations would include measures where necessary to filter the water prior to discharge to a watercourse or ground (there shall be no discharge of any construction site runoff to existing ponds); - The control of mud deposits at entry and exit points to the Site using wheel washing facilities and / or road sweepers operating during earthworks or other times as considered necessary; and - All plant would be kept clean but washed in dedicated areas only where runoff can be captured and appropriately treated prior to discharge from the site to watercourse or ground. Any contaminated water that cannot be treated on site would be collected and disposed of at a suitable licenced wastewater facility.			
WE18	Management of Spillage Risk To prevent chemicals, fuels / oils and other such substances from entering the water environment, adequate measures to control the storage, handling and disposal of these substances would be put in place prior to and during construction. Mitigation measures to control of spillages and leaks during construction works would include: - Storage of fuel and chemicals would be in accordance with GPP 2: Above ground oil storage; - Surface water drains on local roads or within the Site would be identified by the contractor(s) and where there is a risk that fine particulates or chemical spillages could enter them, they would be protected (e.g. covers or sandbags); - Any containers / tanks of contaminating substances (e.g. fuel) onsite would be leak-proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism. The containers would be protected by temporary impermeable bunds (or drip trays for small containers) with a capacity of 110% of the maximum stored volume. Areas for transfer of contaminating substances (including refuelling areas) would be similarly protected;	During construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	- Any permanent oil storage tanks and temporary storage of 201 litres or more of oil in drums and mobile bowzers, and ancillary pipe work, valve, filters, sight gauges and equipment would have secondary containment (e.g. bunding or drip trays); - No oil / chemical tanks would be stored within 50m of a water feature and potentially further if ground is angled towards a water feature except for fixed / large plant associated with works that must occur close to water features or hand tools that must be placed in that location. Such chemical storage would be on flat, impermeable hard standing, and with an isolated drainage system; - Particular care would be taken with the delivery and use of concrete and cement as these materials are highly corrosive and alkaline. No washing out of delivery vehicles to take place on the Site without suitable provision for the washing out water and provision of a suitable location (e.g. geotextile wrapped sealed skip, container or earth-bunded area) that is lined with a geotextile to prevent infiltration to ground. Such washing would not be allowed to flow into any drain or over the edge of a floating barge. The CEMP / WMP would contain a methodology for dealing with any washing out water, or wheel wash. Wash / wheel wash water would be adequately contained, prevented from entering any water feature, and either treated by an on site Water Treatment Plant or removed from the Site for appropriate disposal at a suitably licensed waste facility; - Where possible re-fuelling would be undertaken in designated areas within main compounds or satellite compounds. It is possible that refuelling of mobile plant may be required by mobile fuel bowser. This would not be undertaken within 50m of a water feature, and only on flat land (or otherwise a greater distance and other measures may be required subject to an on site/ works-specific risk assessment) and with a drip tray / plant nappy. Certain semi-mobile very large plant (e.g. cranes) may need to be located close to watercourses and potentially within 50m. Due to the difficulties in moving plant such as this they may need to be refuelled in situ. Again, a site / works-specific risk assessment would need to be undertaken by the contractor(s); - Biodegradable hydraulic oils would be used where possible in all plant used during pre-construction and construction works, and only in plant and equipment working in or over water features; - Spill kits and oil absorbent material would be available on the site in watertight containers in compounds, areas of works, strategically near water receptors and carried on all mobile plant. They would be regularly checked and topped up, especially after use. Appropriate training would be given to all construction workers in their use and spillage response;			

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	– The CEMP would include an Emergency Response Plan; – Any plant, machinery or vehicles would be regularly inspected and maintained to ensure they are in good working order and clean for use in a sensitive environment. This maintenance is to take place offsite if possible or only at designated areas in the site compounds; – All fixed plant used for the construction of the Project will be self-bunded; – Mobile plant to be in good working order, kept clean and fitted with plant 'nappies' at all times; – The Site is to be secure to prevent any vandalism that could lead to a pollution incident; and – Construction waste / debris are to be prevented from entering any surface water drainage or water feature.			
WE19	Management of Groundwater Activities To minimise the impact of any groundwater control activities during construction on the water receptors, the contractor will undertake works in accordance with good practice as described earlier, as well as a project specific CEMP and WMP. The mitigation options deployed by the contractor will be informed by the findings from the ground investigation which will provide information of site-specific ground conditions, including groundwater quality and quantity data. As a minimum the contractor will adhere to the following mitigation measures: – Groundwater control would be implemented to ensure water levels in adjacent water features are maintained and any discharge is of a suitable quality; – If discharging water to a nearby watercourse, the rate of discharge would need to be agreed with the relevant authority to ensure that there is no unacceptable increase in flood risk or risk of scour. Any discharge would need to be undertaken with the agreement of the relevant statutory regulator and would need to comply with the pollution prevention requirements set out in the CEMP / WMP; and – Managing the risk from groundwater flooding through appropriate working practices (during excavations) and with adequate plans and equipment in place for de-watering to ensure safe dry working environments.	During construction	Principal Contractor	Standard Practice Mitigation
WE20	Management of Leachate Migration from Cement-Bounded Sand (CBS) In instances where CBS application is necessary, the installation of impermeable liners or membranes beneath the CBS layer is strongly recommended to prevent the migration	During construction	Principal Contractor/Applicant	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	of alkaline leachate into the broader water environment. Additionally, CBS should be allowed to fully cure prior to any contact with soil or water to minimize potential contamination risks. Temporary, localised drainage trenches would be constructed to divert surface water runoff away from the work areas during CBS installation, helping to keep the trenches dry. If water does enter the trenches, it would be pumped to a designated treatment area and treated with carbon dioxide to neutralise pH levels. Any products used in the trench (e.g., settlement ponds) must be impermeable to prevent leachate migration. CBS would be either batched on site at a centralised location and then transported to the cable route as needed or transported from other Sites requiring CBS nearby. The batching plant would operate as a closed system to contain and manage any cementitious water. If discharge to the water environment is required, the water would be treated to meet quality standards, and appropriate discharge consents or registrations would be obtained in advance. All mitigation measures outlined above would be verified through on-site pH monitoring, the frequency of which would be determined with SEPA through the production of a monitoring plan. Should significant changes in pH be detected, the mitigation approach would be reviewed and revised as necessary.			
WE21	WB Route Micro-siting of WB040 and WB023 as far from the watercourses as practicable within the constraints of the detailed design. This micro-siting exercise would be undertaken during the detailed design phase and would aim to maximise separation from both BW-10 and BW-14 while maintaining engineering feasibility. In line with SEPA guidance, a 50m riparian buffer is recommended for excavations; this buffer would be used as a benchmark during micro-siting, and every effort would be made to implement it or achieve the greatest possible offset. Where full compliance with the buffer cannot be achieved, mitigations such as temporary silt fencing, drainage controls, and pollution prevention measures would be incorporated where feasible to reduce residual risk, with additional space provided by increased separation through micro-siting enabling these measures to be placed. Water quality monitoring before, during and after construction would also be implemented to ensure that mitigation measures selected are effective.	During construction	Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
WE22	The water quality monitoring programme would be developed by the Principal Contractor in consultation with SEPA and other relevant stakeholders during the process of obtaining EASR authorisation for works affecting, or for temporary discharges to, the water features and watercourses in and around the Project. Monitoring is recommended at Bonnybridge Substation Extension. Water receptors considered for incorporation into the monitoring plan are BW-1, BW-3, BW-4, BW-6, BW-7, BW-8, BW-10, BW-11, BW-12, BW-13, BW-14 and BW-17 should be considered for incorporation into the monitoring plan. As these receptors have been deemed to be at negligible impact and not significant risk, daily visual observations upstream and downstream of active works close to or discharging into these watercourses (increasing in frequency during storms) would likely be sufficient, if any monitoring is deemed necessary at all.	During construction	Principal Contractor	Monitoring
WE23	ABS-01 is a groundwater abstraction required for industrial use. To ensure that groundwater levels and flows are maintained it is recommended that groundwater level monitoring is carried out during construction. Monitoring would help identify any impacts that might be a consequence of the construction works so that appropriate action can be taken. Recommends at least 12 months of monitoring groundwater from the abstraction before construction, fortnightly during construction and at least monthly for 12 months post construction. Additional sampling may be required in the event of an investigation of an incident as described below. However, given the small scale of the works it may be sensible to carry out a reduced baseline monitoring period.	Pre-construction and during construction	Principal Contractor	Monitoring
WE24	<u>AA route:</u> Where open cut crossing techniques are used, watercourses would be reinstated as found. A Pre-works Hydromorphological and Riparian Survey would be undertaken to provide the baseline against which reinstatement would be provided. Bank and bed sediments must be stored separately and in distinct layers as excavated on geotextile layers so they can be reinstated as found following completion of the works. The banks and the bed would need to be appropriately reprofiled with the inclusion of suitable geomorphic features to provide betterment on the original channel. Once the watercourses are reinstated, silt fences, geotextile matting or straw bales would be used	During construction	Principal Contractor	Additional Mitigation and monitoring

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	initially to capture mobilised sediment until the watercourse was returned to a settled state. Regular observations of the watercourses would be undertaken post-works during vegetation re-establishment of the banks, to ensure that no adverse impacts have occurred (Observations would be determined with SEPA through the production of a monitoring plan).			
WE25	<u>Cumbernauld Substation Extension</u> Foul drainage would be connected to an appropriate septic tank and discharged via an agreed outfall and soakaway. Water supply for flushing toilets and hand washing would be supplied by the nearby Scottish Water's mains water supply system.	During construction and operation	Principal Contractor / The Applicant	Embedded Mitigation
WE26	<u>Cumbernauld Substation Extension</u> In regard to Surface Water Management, rainwater falling on the compound would be collected via a network of perforated pipes and directed into a surrounding system of filter drains. These filter drains would discharge into two SuDS ponds - one located to the northeast and the other to the west of the site. The western SuDS pond would discharge to the Glencryan Burn, situated west of the site. The northeastern SuDS pond would discharge across the adjacent road and downhill to the Bonny Water / Red Burn, utilising existing drainage infrastructure. Both SuDS ponds are designed to provide water quality treatment through natural filtration and sedimentation processes, helping to remove suspended solids and potential contaminants prior to discharge into receiving watercourses, and reduce surface water runoff to the 1-in-2-year greenfield runoff rate. Surface water runoff originating from the surface water catchment southeast of the site would be intercepted by a cut-off ditch positioned at the crest of the earthworks cut. This flow would then be conveyed to the filter drain network, where it would undergo treatment before reaching the eastern SuDS ponds. The cut-off ditch would also extend along the southern border of the site, intercepting overland flows and realigning a small watercourse to flow into the Glencryan Burn. The permanent drainage design would employ a new oil containment and separation system scheme utilising an Entexol BUND-SEP, certified Class-1 above ground full	During construction	Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	retention oil/water separator. This system would be alarmed and fitted with an automatic shut off valve which would operate when the concentration of oil exceeds an appropriate regulatory threshold level. Groundwater drainage would be incorporated into the drainage strategy. It will ensure that controls are in place for perched water arising through the platform foundations.			
WE27	<u>Cumbernauld Substation Extension</u> In line with SEPA guidance, Riparian Buffer Zones will be adhered to. The SEPA provides guidance on recommended buffer widths for riparian corridors based on channel size : - For watercourses with a channel width of 2 m or less, a 10-metre buffer is recommended. - For channels between 2 and 15 m wide, the recommended buffer is 15m. - For channels 15 m wide or greater, a 30-metre buffer is recommended. Where excavations exceed 1 m in depth, the recommended buffer increases to 50 m, regardless of channel width, to mitigate the risk of disturbance to the water environment and surrounding habitats A breach of the recommended buffer zone occurs at water feature UD1 and GB1, where the Project footprint overlaps the existing channels. Neither water feature appears on 1:50k OS mapping and they are likely artificial drainage ditches, indicated by straight alignment, uniform profile and partially piped sections. To manage downstream flow, a cut-off ditch will be installed at the crest of the cutting to intercept UD1 and GB1 and redirect its flow. This measure is essential to prevent overland flow from higher ground from entering the substation drainage system, which could otherwise increase flood risk to critical infrastructure. Due to site elevation requirements and excavation depth, complete avoidance of the watercourse is not feasible. However, during detailed design and following ground investigation, opportunities to steepen earthwork slopes will be explored to minimise diversion length.	During Construction	Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
SEPA has confirmed that authorisation will not be required for this diversion.				
Chapter 10 Ground Conditions				
GC1	Ground investigation (geo-environmental and geotechnical) will be undertaken before construction to inform the development of the detailed design (including earthworks and foundation design). The geo-environmental ground investigation will validate the assumptions made in the initial Conceptual Site Model (iCSM) and Preliminary Risk Assessment (“PRA”) (Appendix 10.1 In Volume 3 Appendices) and provide site-specific data upon which to base a generic quantitative risk assessment (Stage 1, Tier 2 under Land Contamination Risk Management (LCRM) (Environment Agency, 2025)). The ground investigation will adhere to UK Specification for Ground Investigation (2022), and carried out in accordance with Eurocode 7 (BS EN 1997-2:2007), BS 5930:2015+A1:2020) and BS 10175:2011+A2:2017). It is recommended that the ground investigation and subsequent reporting include the following: • Characterisation of the ground conditions to ascertain more certainty in geotechnical, mining and contaminated land assessments; • Sampling and analysis of soil, groundwater, surface water and leachate to confirm the presence / absence of contaminants; • Ground gas and groundwater monitoring to confirm the groundwater level and the presence / absence of contamination and elevated ground/mine gas concentrations in addition to a CL:AIRE (2021) Mine Gas Risk Assessment; • Preparation of a preliminary engineering assessment for the site; and, • Preparation of a quantitative risk assessment of risks to human health and water environment. It is recommended that the ground investigation be designed in accordance with the UK Specification for Ground Investigation (version 3).	Pre-construction	Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	Targeted ground investigation of peat to determine the extent, depth and nature of peat across the Project. Peat probing already scheduled at the time of reporting. Further peat probing may be required. Targeted Ground Investigation- investigate the risk from legacy underground mine workings and mine entries. Where the Project is planned over recorded or potentially unrecorded underground and opencast mines, mine entries, or mineral quarries, targeted ground investigation may be required to ensure appropriate construction methods proposed at these locations. Targeted ground investigation will address potential contaminative sources identified within the Project boundary, including: – Made Ground (associated with construction and demolition of former and current railways and roads, and unspecified/refuse heaps and pits) – infilled land (associated with disused and abandoned quarries and pits), – current and historical railways (on-site), – mining activities including former collieries and associated shafts / entries, – electricity production and distribution centre within the Project, and – former industrial activities within the study area of the Project. If unacceptable risks are identified, a detailed quantitative risk assessment and detailed remediation strategies will be developed. The ground investigation findings would feed into the detailed design process for the pole foundation design so that appropriate measures can be implemented. A Ground Investigation Report (GIR) and Geotechnical Design Report will assess geotechnical considerations / ground stability, and how the Project design will mitigate any effects. A Verification Report and the scope of any Remediation Strategy (if required) will be agreed with the Local Authority and the Verification Report sent to the Local Authority for approval.			
GC2	The Project has been designed to avoid and minimise areas of recorded peat. During the detailed design phase, prior to construction, final steel tower locations and temporary infrastructure would be micro-sited to avoid recorded peat areas where feasible. Areas of deep peat (>1.0m) as identified through ground investigation (inclusive of peat probing) would be avoided. Where deep peat is unavoidable due to other constraints,	Pre-construction	Principal Contractor	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	methods to reduce disturbance or damage of the peat would be employed. This may include using deep foundation solutions (e.g. piles) through the peat, although it should be noted that the minimum depth of the conventional shallow foundations is proposed at 1.0m bgl and as such deep foundation may only be considered if peat or unsuitable soils are present below this depth. Class 1 Nationally Important peatlands and areas of deep peat not underlying the proposed permanent works or associated temporary infrastructure should be demarked onsite and the working areas during construction controlled to minimise the chances of these areas being disturbed. As part of the Project any excavated peat would be proposed to be temporarily stored and reused within the Project, such as in reinstatement of the ground above the foundations at the steel tower locations.			
GC3	During the design of the Project areas of mining and quarrying have been identified and taken into consideration within the outline alignment process. This includes Mining Remediation Authority Development High Risk Areas, mine entries and quarries / pits. The identified areas of mining risk / potential for mineral resource sterilisation were avoided, wherever possible, during the outline alignment process of the Project.	Pre-construction	Applicant	Embedded Mitigation
GC4	Undertake a Mining Risk Assessment for the sections of the Project where the Development High Risk and other areas of mining risk have been identified. This would require obtaining a detailed Consultant's Coal Mining Report from the Mining Remediation Authority, along with other supplementary information such as mine entry data sheets and mine plans. The Mining Risk Assessment would allow an understanding of where legacy mining represents a constraint, allow agreement with the Applicant on a risk management approach, identify any areas where ground investigation would be recommended to inform the detailed design and allow identification on any mitigation measure to be imposed on the design and construction. As part of the Mining Risk Assessments, further investigation and treatment of shallow underground workings would only be required where permanent structures (e.g. steel tower locations) are proposed, and micro-siting to avoid mining risk areas is not feasible. Where temporary works are proposed, including access tracks, laydown areas and construction compounds, it would be anticipated that further investigation and treatment of shallow underground workings would generally not be required due to the type of infrastructure being proposed. In these locations a reactive approach, where if	Pre-construction	Principal Contractor and the Applicant	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	subsidence occurred any maintenance or remediation would then be undertaken, would be agreed by the Applicant and any relevant parties (e.g., local Council, Mining Remediation Authority, etc.). As part of the design development of the final alignment associated temporary infrastructure (e.g., access tracks, laydown areas, construction compounds), careful design to avoid areas where mine entries and their associated exclusion zones (to be confirmed as part of the Mining Risk Assessments undertaken) may be present will be required. Similarly areas of shallow mine workings and former quarries should be avoided where possible. Where mine entries are avoided as part of the Project, however, are still present within the immediate vicinity, the mine entry exclusion zone should be demarked onsite and the working areas during construction controlled to minimise the chances of these areas being disturbed. Note that as the presence of unrecorded mine entries or shallow mine workings cannot be discounted and will only have limited discussion and mitigations within the Mining Risk Assessments undertaken, the micro-siting of steel towers, temporary access tracks, laydown areas and construction compounds may be required during construction if these unrecorded features are encountered.			
GC5	As the Project is within close proximity to Network Rail Assets within areas of identified mining risk, within those relevant sections Network Rail mining reports may be required, along with the preparation of a separate Mining Risk Assessment, to satisfy Network Rails requirements. Should it be required, the Network Rail Mining Risk Assessment would define what additional mitigation would be required.	Pre- construction	The Applicant	Additional Mitigation Measures
GC6	Ensure good site practice and management throughout the development and adherence to a CEMP. Including measures – to limit the potential for dispersal and accidental releases of potential contaminants, soil derived dusts and uncontrolled run-off to occur during construction. – set out how material is to be excavated, segregated, and stockpiled to minimise the potential for run-off, soil quality degradation and wind dispersal of dusts. – procedures for dealing with unexpected soil or groundwater contamination that may be encountered.	During construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
GC7	Potential impacts specific to construction workers during site preparation and construction / decommissioning works would be controlled and mitigated by the following measures and through working in accordance with CIRIA C811: – measures to minimise dust generation, – provision of Personal Protective Equipment (“PPE”), such as gloves, barrier cream, overalls etc. to minimise direct contact with soils, – provision of adequate hygiene facilities and clean welfare facilities for all construction site workers, – monitoring of confined spaces for potential ground gas accumulations, restricting access to confined spaces, i.e., to suitably trained personnel only, and use of specialist PPE, where necessary, such as the use of personal gas alarms and – preparation and adoption of a site and task specific health and safety plan as is required under Health and Safety legislation. The CEMP will set out procedures for dealing with unexpected soil or groundwater contamination that may be encountered. This would typically require affected works to stop to enable a suitably qualified environmental consultant to be notified, and further characterisation and risk assessment to be undertaken before remediation or mitigation proposals are agreed with all stakeholders. If unacceptable risks are identified or encountered during construction, and routing through these areas is unavoidable, specific mitigation measures may be required in the form of treating / remediating contamination. This will be confirmed based on information gathered through ground investigation. Any remediation works, or the removal of contaminated soils or waters associated with the construction of the Project would be expected to result in the enhancement of the local environment.	During construction	Principal Contractor	Standard Practice Mitigation
GC8	A pre-construction earthworks strategy will prioritize reuse and minimize waste, adhering to SEPA and DEFRA guidelines. Soil handling will follow best practices to protect resources, prevent contamination, and reduce landfill disposal. Surplus soil will be characterized for hazardous or non-hazardous classification, with appropriate disposal or reuse options identified. Asbestos management will be integrated into the CEMP to address potential risks.	During construction	Principal Contractor	Standard Practice Mitigation
GC9	Soil, Groundwater and Surface Water Pollution Control Mitigation	Pre-construction and during construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	The following measures will be adopted to prevent creating flow paths between potentially contaminated soils and / or groundwater in the underlying superficial deposits and the bedrock aquifers. – The Pollution Prevention Plan will outline key pollution mitigation measures to be adopted including a Control of Substances Hazardous to Health (“COSHH”), fuel inventory and key contacts to be notified in the event of a significant pollution incident, which may subsequently lead to the contamination of the water environment or soils. – All bulk fuel and COSHH items will be stored in accordance with the relevant GPP (NetRegs, 2024), Pollution Prevention notes, and storage regulations. Tanks and dispensing pumps will be locked when not in use to prevent unauthorised access. – Any hazardous materials will be stored in designated locations with specific measures to prevent leakage and the release of their contents. This will include a requirement for storage areas to be set back an appropriate distance from surface water features / drains to prevent any uncontrolled discharge (and take into consideration the positions of any groundwater abstraction wells), on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain at least 110% of the contents. Valves and trigger guns will be protected from vandalism and kept locked when not in use. Furthermore, storage of hazardous material will be avoided in areas at risk of flooding. – Only well-maintained plant and other equipment will be used during construction to minimise the potential for accidental pollution from leaking machinery or damaged equipment. Static machinery and plant are expected to be stored on hardstanding areas when not in use and, where necessary, to make use of drip trays beneath oil tanks / engines / gearboxes / hydraulics. Spill response kits containing equipment that is appropriate to the types and quantities of materials being used and stored during construction will be maintained within the Project boundary for the duration of the works. Refuelling of vehicles will be in a designated area where spillage containment measures are in place.			
GC10	An outline PMP is to be developed following the completion of peat probe surveying. This PMP will be submitted for review and approval to the relevant stakeholders (i.e., SEPA) prior to construction. A detailed PMP will be reviewed and updated throughout the design and construction process by the Principal Contractor based on any new relevant information becoming available. The outline PMP is expected to include the following:	Pre-construction and during construction	Principal Contractor	Standard Practice Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	– Description of all information available indicating the extents and depths of peat present within the Project (inclusive of project specific GI information). – Reference and consideration of the information outlined in SEPA's scoping response and all other planning and best practice/guidance in relation peat and working within peatland habitats. – The volume of peat estimated to be generated from the Project splitting this into acrotelm and catotelm and how the excavated peat will be reused / reinstated as part of the Project taking cognisance of NatureScot's (2025) Peatland Action's Technical Compendium. – How the peat will be excavated, handled and temporarily stored. It is expected the peat will be excavated in turves with the full depth of acrotelm excavated together and the catotelm excavated as blocks. Where the acrotelm and catotelm are required to be excavated separately due to peat depth, then these should be stored separately. It is also anticipated excavated peat will be temporarily stored in close vicinity to where it was excavated and reinstated as soon as possible on completion of the foundation installation or at set durations or lengths when encountered within cable trenches (e.g., weekly or every 100 m). – Outline mitigation measures on how damage and disturbance to the peat in relation to its excavation, temporary storage, handling, transport and reuse / reinstatement will be minimised, looking to prevent / reduce: ▪ Loss of structural integrity and peat strength, ▪ Erosion and gullyng, caused by exposure and desiccation of bare peat surfaces, ▪ Contamination, caused by leaks, spillages or inappropriate laydown of materials, and ▪ Peat slide, caused by laying wet peat on top of wet peat, laying other heavy materials (including excavated mineral soil or other construction materials) on top of wet peat or by inappropriate stockpiling, such as attempting to create stockpiles of peat that are too high, without bunding, engineering or geotechnical support. – Monitoring and inspection plan highlighting how the reused / reinstated peat will be monitored both during and post construction to ensure successful recovery.			
GC11	Monitoring for signs of peat instability as Ground Investigation takes place and further development of the alignment.	Pre-construction	Principal Contractor	Additional Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	On further development of the alignment and where ground investigation identifies more significant extents and depths of peat are present within the final alignment, along with detailed topographic data identifying slope angles conducive to peat instability, there could be an increased risk of peat instability. As such based on these factors, a Peat Landslide Hazard and Risk Assessment (PLHRA) would be produced by the principal contractor and mitigation measure proposed, where required.			and Monitoring
GC12	<u>Mining / Quarrying</u> Where micro-siting of critical infrastructure is not sufficient to mitigate mining risk, localised treatment of mine entries or mine workings may be required 9e.g. infill grouting). Infill grouting can have an effect on a number of other receptors such as superficial deposits, hydrology, hydrogeology, and agricultural soils. Thus, should the treatment of mine entries or workings be required to ensure the control of grout mitigation measures as below should be implemented if required: – Control grout run-off on the ground surface and prevent grout reaching agricultural soils, watercourses or causing contamination of groundwater – Minimise disturbance to superficial deposits and agricultural soils during grouting by use of appropriate construction controls such as perimeter bunds, soil protection matting, silt traps and the like and best practice during drilling – Prevent grout leaks into the surrounding environment below ground from mine workings or mine entries that are being infilled with grout – Implement monitoring to detect displacement of mine gases and potentially contaminated mine waters Obtain agreement from SEPA for mine entry and / or mine working treatment. Comply with guidance from SEPA including BRE (2009) Stabilising mine workings with pulverised fuel ash (“PFA”) grouts, Environmental code of practice (BR 509), Notify local SEPA team when the grouting works start, what works are involved and what watercourse / ditches they may affect. The Mining Remediation Authority shall be consulted to obtain their agreement and permission to proceed with proposed works relating to the stabilisation of coal mine workings and mine entries.	During construction	Principal Contractor	Additional mitigation and monitoring
GC13	<u>Cumbernauld Substation Extension</u> A Mining Risk Assessment (MRA) is required for the Cumbernauld Substation Extension site. Purchase and review of a Mining Remediation Authority Consultants Mining Report is required as part of the MRA.			

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
Chapter 11 Traffic and Movement				
TM1	The implementation of a Construction Traffic Management Plan (CTMP) to include: – Key stages of the construction process – Details of construction working hours – Routes to be used by construction traffic – Access from public roads to the Project including Bell Mouths and traffic management requirements to prioritise mainline public traffic. – Construction vehicle traffic management and signing strategy. – Details of any condition surveys required on construction traffic roads (for Section 96 Agreement purposes) – Arrangements for road cleaning / sweeping of public roads used by construction traffic in the immediate vicinity of the Project, and wheel cleaning / dirt control arrangements for construction vehicles leaving the work zones. – Arrangements for minimising the effects of construction traffic during road network peak periods, by managing the timing of vehicles arriving and departing. – A strategy for expected driving standards for construction traffic, including extending courtesy to all other road users with regard to providing overtaking opportunities for general traffic, construction traffic vehicle speeds, and encountering pedestrian or cycle traffic. – Community and emergency service liaison and protocols.	During construction	Principal Contractor	Standard Practice Mitigation
Chapter 12 Noise and Vibration				
NV1	Newbuild Overhead Line (WB Route), Up-rated Overhead Lines All conductors which are to be operated at 275kV or 400kV should be surface treated to increase surface wettability and reduce magnitude of audible noise (although this does not always remove noise altogether). As a minimum this should involve blasting the conductor surface.	Design stage	Applicant	Embedded Mitigation
NV2	Where necessary to achieve “no adverse impact level”, as an alternative to the twin GZTAR Matthew conductor, the triple GZTACSR 400mm ² (Upas sized) conductor has been proposed. Compared to the twin GZTAR Matthew conductor, the triple GZTACSR 400mm ² (Upas sized) conductor features a larger radius, a higher number of sub-conductors, and reduced bundle spacing. These design changes effectively lower the audible noise emitted by the overhead line, thereby reducing the offset distance required to meet noise limits at sensitive receptors.	Design stage	Applicant	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
	The following sections of line are proposed to use the triple GZTACSR 400mm² (Upas sized) conductor: – WB Route where necessary – XX019B – Newarthill Substation (XX049) – Newarthill Substation (XR001) – Wishaw Substation (XR050)			
NV3	The following mitigation measures are proposed to be implemented as part of a Construction Environmental Management Plan to minimise the noise and vibration impacts at receptors in the vicinity of the construction works: – All construction activities to be undertaken in accordance with Best Practicable Means as set out in BS 5228-1 (Code of practice for noise and vibration control on construction and open sites). – All equipment will be maintained in good working order and will be fitted with appropriate noise control at all times (for example, silencers, mufflers and acoustic hoods). Quieter options for equipment to be used where possible. – All site employees to be advised of the noise sensitive nature of the area and be informed to adopt the quietest work practices, where appropriate. – Site terrain, material stockpiles and suitable work locations will be used so as to screen work locations and maximise the distance between work activities and receptors. – Additional temporary enclosures will be used to screen all static or semi-static plant from noise sensitive receptor locations. – A programme of community liaison will be carried out, including notification of works and details of the complaints process.	During construction	Principal Contractor	Additional mitigation
NV4	Construction vibration monitoring is likely to be required for Bellmouth construction for the Uprated Overhead Lines which is predicted to be at a level that could be classed as “intolerable for any more than a very brief exposure to this level”. Should any noise-related complaints be received during either construction, operation or decommissioning, the Applicant could consider undertaking targeted monitoring.	During construction	Principal Contractor / the Applicant	Monitoring
NV5	The construction programme for the Uprated Overhead Lines can be finalised in order to ensure the exceedances for noise do not occur for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any 6 consecutive months.	During construction	Principal Contractor	Additional Mitigation / Monitoring

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
NV6	A robust Construction Noise Management Plan (CNMP) should be developed for the construction of Bonnybridge Substation Extension and Cumbernauld Substation Extension. The CNMP should ensure that construction noise is reduced. The CNMP will detail the mitigation methods such as reduction of equipment on time or quantity, or by sourcing lower noise equipment or placing acoustic barriers near the source or receiver. The CNMP will ensure the BS 5228 criteria is met.	Pre-construction and during construction	Principal Contractor	Monitoring / Standard Practice Mitigation
Chapter 13 Socioeconomics and Recreation				
SR1	Primary mitigation measures are embedded within the Project to reduce other construction and operational effects (such as noise, transport, and landscape and visual – with mitigation set out in their respective chapters) which in turn would mitigate the effects on the local community and existing facilities from a socio-economic and recreation (including human health) perspective.	Design stage	The Applicant	Embedded Mitigation
SR2	A Construction Environmental Management Plan (CEMP) describes the specific mitigation measures to be followed to control and reduce impacts on the environment during the construction phase. The measures details include controls associated with: – Traffic and access; – Resource and material management; – Noise and vibration; – Dust generation; and – Waste management.	During construction	Principal Contractor	Standard Practice Mitigation
SR3	A Construction Traffic Management Plan (CTMP) will be produced for each component of the Project providing an overview of proposed construction traffic movements, and associated management strategy, and mitigation measures to be considered to minimise impacts on the local trunk road networks and environment, site traffic, and disruption to local communities.	During construction	Principal Contractor	Standard Practice Mitigation
Chapter 14 Land Use, Forestry and Agriculture				
F1	Mitigation by design has been achieved through limiting the buffer either side of the Overhead Line's centreline to 40 m, thereby not requiring additional forestry felling for reinforcing existing Overhead Line to 400 kV.	Design stage	Applicant	Embedded Mitigation
F2	An offset has been applied to the edge of the earthworks equal to that of the estimated average tree height of the adjacent stand of trees, forming a buffer between the adjacent forest cover and the development proposals.	Design stage	Applicant	Embedded Mitigation

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
F3	Where any extended management felling is advised, this would be at the discretion of the landowner. Forestry removal would be undertaken under a separate felling permission and contain specific conditions attached which would ensure mitigation for forest removal.	During construction	Principal Contractor / Applicant	Embedded Mitigation
F4	Felling within the Overhead Line corridor cannot be mitigated in-situ. Off-site planting will be required to facilitate compensation for woodland removal. It is proposed that the compensation area would as a minimum match to area to be removed. The final details of the compensation area, including hectareage, will be agreed in consultation with the relevant authorities.	Design Stage	Applicant	Additional Mitigation
Chapter 15 Other Environmental Matters - Air Quality				
AQ1	Undertake and implement all mitigation specified by a Construction Dust Risk Assessment in accordance with IAQM Guidance (Guidance on the assessment of dust from Demolition and construction) to be detailed in the CEMP which is to be updated during detailed design. General dust control measures include: – Where feasible, electric/battery powered plant will be used in preference to diesel or petrol-powered units – Engines will be turned off when vehicles are not in use to avoid ‘idling’ where possible. Plant operators are encouraged to switch off as soon as practically sensible. – Evidence of poor plant maintenance, such as black exhaust fumes, dark smoke, frit or dust will be monitored by supervisory staff on a continuing basis. Plant with unacceptable performance is prohibited from work until rectified or replaced. Plant will be routinely inspected in line with prescribed requirements including emissions as well as leaks and drips. – Ensure the use of a local grid connection for temporary site power has been considered and used where viable – Where not viable use the next most sustainable option such as appropriately sized alternative, solar, hybrid generators etc.	Pre-construction	Principal Contractor	Standard Practice Mitigation
Chapter 15 Other Environmental Matters – Climate Change				
CC1	The Project is designed and maintained in accordance with relevant standards including those set out in SPEN’s Climate Resilience Strategy to mitigate climate-related risks.	Design stage	Applicant	Embedded Mitigation
Chapter 15 Other Environmental Matters – Human Health				
No mitigation required.				
Chapter 15 Other Environmental Matters – Materials and Waste				

Ref.	Mitigation/Monitoring Measure	Stage	Responsibility	Type
ME1	The Principal Contractor will be required to prepare a Site Waste Management Plan to ensure best practice principles are applied to reduce, re-use or recycle all materials as part of the CEMP. Measures to reduce possible environmental effects associated with the storage and transportation of wastes will include: – the careful location of stockpiles and other storage areas; – the use of good practice in the design of waste storage areas and the use of suitable waste containers; – the use of sheeting, screening, and damping where appropriate and practicable; – the control and treatment of runoff from soil and waste soil stockpiles; – minimising storage periods; – minimising haulage distances; and – the sheeting of vehicles.	During construction	Principal Contractor	Standard Practice Mitigation