Scottish & Southern Electricity Networks
TRANSMISSION

CONTENTS

16. SCHEDULE OF ENVIRONMENTAL MITIGATION

16.1 Introduction

16.1.1 The purpose of this chapter is to provide a summary of the mitigation measures proposed throughout this Environmental Impact Assessment (EIA) Report, to minimise or offset the potential effects of the Proposed Development on the receiving environment.

16.1.2 **Table 16-1** provides a summary of those mitigation measures identified throughout the EIA Report.

16.1.3 The following mitigation codes are used in this section:

- GE – General Mitigation
- FO – Forestry
- LV – Landscape and Visual Impact
- EC – Ecology, Nature Conservation and Ornithology
- CH – Cultural Heritage
- TT – Traffic and Transport
- HG – Hydrology, Hydrogeology, Geology and Soils
- NV – Noise and Vibration

Table 16-1 Schedule of Mitigation

ID	Title	Description
General Mitigation Measures		
GE1	Construction and Employment and Hours of Work	Construction activities would in general be undertaken during daytime periods. Working hours are currently anticipated seven days a week between approximately 07:00 to 19:00 March to September and 07:30 to 17:30 (or within daylight hours) October to February. Any out of hours working would be agreed in advance with Aberdeenshire Council.
GE2	Best Practice Construction Measures, GEMPs and SPPs	All works would be carried out in accordance with industry best practice construction measures, guidance, and legislation, together with General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) that have been developed by the Applicant (the GEMPs and SPPs relevant to the Proposed Development are provided in **Volume 4, Appendix 3.1: General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs)**).
GE3	Construction Environmental Management Plan (CEMP)	A contractual management requirement of the Principal Contractor would be the development and implementation of a CEMP. This CEMP would detail how the Principal Contractor would manage the Site in accordance with all commitments and mitigation detailed in the EIA Report, statutory consents and authorisations, and industry best practice and guidance. The CEMP would also include the following specific measures: • Erection of tree protection fencing around retained trees at the Site in accordance with BS5837:2012[1]. • Any excavations to be back-filled or covered overnight, or a 45-degree ramp will be left to allow wildlife to escape should they fall in and become trapped. • Storage of materials, waste, plant, and vehicles to be a minimum of 30 m from the Burn of Greens.

[1] British Standards Institution (2012) BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. British Standards Institution, London.

ID	Title	Description
		• Dampening down of potential sources of dust. • Pollution prevention measures which align to best practice e.g., Guidance for Pollution Prevention documents[2] including specific protocols for construction of the outfalls (e.g., enhanced silt protection). • General compliance measures for working in adverse weather conditions – particularly for works associated with the surface water outfalls. • Working hours to be restricted to daylight as far as reasonably possible. • Specific roles, responsibilities, and reporting requirements. • The materials and waste associated with construction activities will be captured and managed through a Materials Management Plan and Site Waste Management Plan. They will detail the material, efficient use of material to minimise waste, and other waste management measures. An Outline CEMP has been included in **Volume 4, Appendix 3.2: Outline Construction Environmental Management Plan**, which the CEMP will comply with.
GE4	Restoration and Reinstatement	All temporary work areas would be reinstated to an agreed standard with landowners for future use. Reinstatement would form part of the contract obligations for the Principal Contractor and include the removal of all temporary works areas. Some temporary areas of hardstanding would be required, reinstatement would involve topsoil re-spread and the areas sown with suitable wildflower grass meadow with shrub and tree planting, where applicable.
GE5	Environmental Manager	An Environmental Manager would be appointed by the Principal Contractor for the duration of the construction phase. Their role would include coordinating input from specialists, reviewing incoming information from additional surveys, and coordinating any subsequent recommendations of mitigation measures and licensing requirements. The Environmental Manager would be responsible for continued review of incoming information and coordinating any additional specialist input to meet the Proposed Development's environmental obligations.
GE6	Environmental Clerk of Works (EnvCoW)	An EnvCoW will be appointed by the Principal Contractor to monitor, report and advise on the environmental compliance of the construction works. The EnvCoW will report to the Environmental Manager and Applicant. The EnvCoW will be competent, demonstrated by relevant experience and accreditations.
Topic Specific Mitigation Measures		
Mitigation for Forestry (see Volume 2, Chapter 7)		
FO1	Good practice	Good practice measures with respect to felling requirements will be incorporated into environmental management controls, including:

[2] NetRegs. Guidance for Pollution Prevention (GPP) documents. [Online] Available at: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/ (Accessed: August 2024).

ID	Title	Description
		• adherence to Forestry Commission (Scottish Forestry) Forest and Water Guidelines e.g. to ensure protection and enhancement of the water environment; • management of forestry waste (SEPA) to ensure all excess waste resulting from forestry operations is correctly disposed of; and • implementation of tree harvesting and extraction methods to ensure minimisation of soil disturbance and compaction.
FO2	Woodland Report	A Woodland Report (**Volume 4, Appendix 7.1: Woodland Report**) has been created as mitigation for the following: • to address the likely significant effect predicted for forest land-use management during construction and operation; and • to reduce the risk of future windthrow by identifying felling to stable forest edges outside the Proposed Development.
FO3	Compensatory Planting Management Plan	A Compensatory Planting Management Plan has been created to ensure forest and woodland lost through felling is replaced. This will be delivered on and off-site.
Mitigation for Landscape and Visual Impact (see Volume 2, Chapter 8)		
LV1	Site Platform Levels	The site platforms will be set slightly below the mean level of the platform area in order to generate sufficient fill to allow the creation of landforms that help screen the proposed infrastructure in views from surrounding minor roads and nearby residential properties.
LV2	Landforms	New naturalistic landforms will be created to the east and northeast of the substation platform, and at intervals along the minor road to the south to provide immediate screening from Greenford, assist in screening views from Greenfield, Latchford Croft and Newton, whilst allowing a balance of cut and fill to minimise requirements for materials import or export.
LV3	Landforms – Construction Period	As far as possible, landforms will be created early in the construction period, and construction activities will be concentrated in the area screened by the new landforms.
LV4	Main Site Drainage	The main site drainage (excluding drainage of the operational site platforms) will be by open watercourses designed with a long profile, cross-section and plan profile mimicking that of a natural burn.
LV5	Landform Profiles and Gradients	New landforms will be rounded off both top and bottom to the largest radius practical where visible to the public, and generally shaped to create a naturalistic landform. The landforms will have gentler but irregular slopes to the outward (public facing) side - average 16% (1:6) - mimicking local landforms albeit slightly steeper. Inward facing slopes (sides towards the development platforms) may be steeper and more regular.
LV6	Tapered Landforms	The ends of new landforms will be tapered out at a gradient of not more than 15% to avoid sharp and un-natural transitions between landforms.
LV7	Underground Cable Easements	Land over underground cable easements will be graded to no more than 1 in 10 slopes due to technical restrictions on cable alignment.
LV8	Vegetation Retention	Existing trees on site will be retained wherever possible.

ID	Title	Description
LV9	Landform Shape – Landscape Architect	The final shape of the new landforms will be determined on site, by eye, by an experienced landscape architect employed directly by SSEN or their contractor to ensure that the finished form meets the commitments given above, as the degree of subtlety cannot be easily translated into 3D setting-out coordinates.
LV10	Amendment to Platform Levels	If circumstances arise during the construction works that require amendment to the platform levels, any design development shall consider the relationship between landform height and site platform level, so that the screening effect described in this assessment and provided on the application drawings is not reduced.
LV11	Native Species Planting	All native species planting will be carried out using plant material of local provenance (the closest provenance that is available in commercial quantities) to ensure maximum benefit for local biodiversity.
LV13	Landscape and Habitat Management Plan	A Landscape and Habitat Management Plan will be prepared at detailed design stage and updated on completion of construction to ensure the long-term objectives of the LVIA and BNG mitigation are met.
Mitigation for Ecology, Nature Conservation and Ornithology (see Volume 2, Chapter 9)		
EC1	Construction Mitigation for Otter	Sensitive timings of works: • Work to commence from two hours after sunrise and cease two hours before sunset. At discretion of EnvCoW to adjust these timings in winter. Sensitive lighting: • Artificial lighting to avoid Burn of Greens and other watercourses and ditches within and around the periphery of the Site, especially at night. Pre-construction survey: • Survey to search for otter resting sites will be undertaken along the Burn of Greens and other watercourses / ditches within 200 m of the Site. Surveys may be phased to match the phasing of the Proposed Development to ensure data remains valid. Findings will be reported to the EnvCoW and Environmental Manager. • EnvCoW to closely monitor outfall construction in Burn of Greens. Licensing: • Licensing requirement to be reviewed by EnvCoW following pre-construction surveys.
EC2	Construction Mitigation for Water Vole	Avoidance: • Final location of outfalls will seek to avoid areas where potential water vole burrows have been observed. • Removal of bankside vegetation should be minimised as far as reasonably possible. Priority given to avoid tree felling. Sensitive lighting: • Artificial lighting to avoid Burn of Greens and other watercourses and ditches within and around the periphery of the Site, especially at night. Pre-construction survey: • Survey to search for water vole resting sites will be undertaken along the Burn of Greens and other watercourse / ditches within 100 m of the Site. Surveys may be phased to match the phasing of the Proposed Development to ensure data remains valid. Findings will be reported to the EnvCoW and Environmental Manager.

ID	Title	Description
		• EnvCoW to closely monitor outfall construction in Burn of Greens. Licensing: • Licensing requirement to be reviewed by EnvCoW following pre-construction surveys.
EC3	Construction Mitigation for Barn Owls	Barn Owl Protection Plan Produced by the Principal Contractor and agreed in advance of construction commencing with Aberdeenshire Council, in consultation with NatureScot. To include the following: • A pre-demolition survey to be undertaken, comprising an internal inspection of buildings by the ECoW. If buildings cannot be accessed, then Vantage Point surveys overlooking the buildings during the dusk period will be undertaken to record evidence of barn owl leaving / entering the buildings. These surveys should be undertaken the day, or night, immediately prior to the onset of demolition. • Non-breeding barn owl may be disturbed from their roosting place if present, providing they are not harmed. This should be actioned on the day of demolition, so any barn owls exit the building. If unsafe to enter a building, a slow, methodical demolition process, with pauses in work should be undertaken, which is supervised and directed by an ECoW. • ECoW to remain alert throughout construction programme to the possibility of barn owl using partially constructed substation buildings as roost sites. If any temporary roosting did occur the ECoW will monitor and advise on a suitable course of action.
EC4	Construction Mitigation for Fish	Avoidance • Final location of outfalls will seek to avoid suitable salmonid spawning habitat. Removal of bankside vegetation should be minimised as far as reasonably possible. Priority to be given to avoid tree felling. Sensitive timing of works • If possible, no in-channel works within the Burn of Greens between 01 October and 31 May. If works must proceed in this timeframe, all efforts should be made to ensure works are completed in as short a timeframe as possible, and culverts are constructed to ensure fish passage. EnvCoW to monitor. • Work to commence from two hours after sunrise and cease two hours before sunset. At discretion of EnvCoW to adjust these timings in winter. Sensitive lighting / noise • Artificial lighting to avoid Burn of Greens and other watercourses and ditches within and around the periphery of the Site, especially at night. • Fish sensitivity to noise and vibration should be considered by the Principal Contractor to ensure disturbance and avoidance behaviour is minimised. Sediment management • Sediment management and water quality monitoring should be included in the CEMP. A plan should be in place for appropriate remediation measures to ameliorate any adverse effects, should they occur. Licensing • Anticipated that CAR will apply. If a CAR licence is required, this will be obtained prior to construction works.

ID	Title	Description
		Outfall construction • The in-channel works area at Burn of Greens will be isolated by a sealed wall of dumpy bags (or other suitable means). The isolated works area will cover the minimum area of channel possible so free passage of fish both up and downstream can occur for the duration of the works at outfalls. • Fish rescue should be undertaken, whereby fish will be removed from within the works area using electrofishing equipment and released back into the Burn away from works. Further rescues would be required if the wall is overtopped in a high-water event. A report on the implementation of construction mitigation / fish rescues will be prepared by the aquatic ecologist and submitted to the EnvCoW. EnvCoW to closely monitor outfall construction. Culvert • In accordance with the Institute of Fisheries Management's (IFM) Fish Pass Manual[3], a cost-benefit analysis of watercourse crossing options is recommended. Should the options appraisal result in culverts being selected then the following measures should be implemented. As a minimum, culvert design should meet the criteria specified in the IFM Fish Pass Manual. This is to ensure the culvert could be passed by fish known to be present in the Burn of Greens. The manual states the following: – Mean water velocities through the culvert, and through any fitted screen, should not exceed 0.5 ms^{-1} at any flow within the passage design flow range. – The minimum pipe diameter of the culvert should be no less than 0.3 m; – The minimum depth of water through the culvert should be no less than 0.1 m; – The water level drop at either the intake or outlet of the culvert should not exceed 0.1 m; and – The minimum gap between the bars of any fitted screen should be no less than 0.1 m. • Construction of new culverts should seek to reduce the impacts on aquatic species by using designs that simulate natural channel conditions. • Culverts should span a width adequate to facilitate the development of a natural channel and bed characteristics within the structure. Ideally this will result in a structure that spans the channel and includes terrestrial land on either bank, to account for especially high flows. Where a culvert of natural channel width is not possible, structures should be installed to modify the current characteristics, to provide heterogeneity in flow and reduce overall speed. • Roughened beds, baffles and refuge areas should be installed, to increase the probability of fish movement. • Energy dissipators should be installed at culvert outlets to reduce harmful impacts to the receiving channel and for minimising natural substrate loss through scour and erosion. This will prevent the culvert outlet becoming "perched" above a lowered streambed.

[3] Armstrong, G.S., Aprahamian, M.W., Fewings, G.A.,Gough, P.J., Reader, N.A. and Varallo, P.V. (2010). Environment Agency Fish Pass Manual: Guidance Notes On The Legislation, Selection and Approval Of Fish Passes In England And Wales. Environment Agency, Bristol.

ID	Title	Description
		• Culvert entrances and exits should be appropriately planted to fragment the sudden light / dark interfaces. • Periodic removal of debris from culverts should take place to ensure they do not present a barrier to animal movement. • Ledges should be installed where feasible, as these allow the upstream movement of animals (e.g. water voles, otter) at times of high flows. Monitoring: • An electrofishing survey will be undertaken post-construction of the outfalls at Burn of Greens, during the next seasonal window following construction (between 1 July and 30 September). The objective will be to demonstrate there have been no significant changes to the species and population size classes using these burns post-construction or, if changes have occurred, to inform the requirement for any remedial measures. • Should any dead or visibly injured fish be observed during construction they should be reported immediately to SEPA.
EC5	Construction Mitigation for Bats	Avoidance: • Trees, scrub, and hedgerows will be retained as far as reasonably possible as foraging resources for bats and for connectivity across the landscape. Sensitive timing of works: • Preference will be given to demolition / felling during the transitional roosting period for bats – April, September, and October. • If a maternity roost is identified through additional surveys, demolition / felling of the roost building / tree will be timed to avoid the maternity period (May to August). If the additional surveys are undertaken during the optimal season without substantial limitations on the detectability of maternity roosts and there is no evidence of maternity roosts, demolition / felling may be timed during this period. Pre-works surveys will apply (see below). Sensitive lighting: • Artificial lighting should not spill over to vegetation that is retained around the periphery of the Site. • Artificial lighting should consider use of LED luminaires with peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats, and a warm white spectrum (ideally less than 2700 Kelvin) to reduce blue light component. Prevailing guidance from BCT and ILP[4] should be followed. Licensing: • Where no suitable alternative exists, and licensing tests can be satisfied, a licence will be obtained for works affecting bats. This will include roost destruction, as well as potential disturbance effects where roosts will be retained but will be in proximity to construction works (e.g., within 30 m). A licence will be in place prior to commencement of works affecting bats. A species protection plan supporting the licence will detail any specific roost exclusion requirements, timing restrictions, and additional mitigation and compensation measures, depending on the type and structure of the roost.

[4] BCT and ILP (2023). Guidance Note 08/23: Bats and artificial lighting at night.

ID	Title	Description

		Surveys:
		• All building demolition and tree felling will be preceded by a survey for roosting bats. This will ensure the baseline information remains valid and reduce the risk of encountering bats during invasive works. For trees, this will comprise an inspection of PRFs within 24-48 hours before felling, regardless of the time of year. For buildings, this will comprise a dusk emergence survey of PRFs 24-48 hours before demolition, when demolition is planned between April and October (inclusive). If a new roost is identified, works will be postponed until a licence is in place.
		  • Any works taking place within 30 m of the likely hibernation roosts will be preceded by a survey for roosting bats.
		  • A licensed bat surveyor will oversee building demolition and tree felling, regardless of the known presence of a roost or time of year.
		• With the above protocols in place, in the unlikely event that a bat is encountered during demolition / felling, the works will cease (if safe to do so). The bat licensed surveyor should try to collect any exposed bats by gloved hand and move them to a nearby bat box (see Compensation below). NatureScot will be consulted for a licence before continuing works.

EC6	Barn Owl Compensation	A minimum of two barn owl boxes will be placed in the vicinity of the Site, a minimum of 200 m from construction works. Suitable placement of the nest boxes will be overseen by the ECoW using guidance from the Barn Owl Trust and in consultation with the North East Scotland Raptor Study Group. Nest box site selection and installation will take place pre-construction. Indicative locations for barn owl boxes are shown in **Volume 3, Figure 9.1 Indicative Mitigation Locations**. Across the three year construction programme, barn owl boxes will be inspected by a suitably qualified and licensed ecologist on an annual basis to check if the boxes are in use by barn owls. In addition, data from annual monitoring of barn owls by the Northeast Scotland Raptor Study Group will be requested to provide context to the use of the compensatory barn owl boxes erected near the Site. The search area for requesting data will extend to 1 km beyond the Site.
EC7	Bat Compensation	To compensate for the loss of roost resources within trees (if not retained) and buildings at the Site, a combination of the following will be undertaken: fix artificial bat boxes on trees retained on the periphery of the Site, install bat rocket boxes within the Site, and translocate reclaimed PRFs from trees to be felled onto existing trees on the periphery of the Site. Replacement roosts must incorporate the roost requirements of the species present together with the features being lost in terms of access points, roost site, size and material; and temperature. The location and specification of the replacement roost would be developed as part of the detailed design and would, as a minimum, recreate the summer and winter hibernation potential through appropriate heating / cooling. It is proposed that the number of replacement roosts (bat boxes, rocket boxes, or reclaimed PRFs) will be undertaken at a ratio of one replacement roost per building or tree with roost potential being lost. This is in accordance with NPF4. The bat boxes and/or reclaimed PRFs will be installed between 3-4 m above ground, at a variety of aspects, away from artificial lighting and at

ID	Title	Description
		least 30 m from any proposed works. The location of bat rocket boxes must be carefully considered to ensure they are sheltered and connected to natural habitat (i.e., not within open habitat) and away from artificial lighting. Indicative locations for bat boxes / reclaimed PRFs are shown in **Volume 3, Figure 9.1 Indicative Mitigation Locations**. The approximate locations / types of roosts utilised will be agreed upon through the licensing process and as part of the SPP, then further advice on site should be sought from the Project Ecologist / ECoW on the positioning of PRFs. A competent arborist should be appointed to remove and reclaim the PRFs wherever possible without compromising the structure of the PRF and health of any retained tree to which it will be fixed. The PRFs should be installed prior to tree felling / building demolition. It is anticipated that monitoring surveys of compensatory roost features that will be required for the loss of confirmed roosts will be conditioned through licensing. A single inspection of each bat box, artificially created PRF and / or bat rocket to compensate for the loss of roost resources will be undertaken by a licensed bat surveyor, between 2-5 years after the removal of the original roost resource (regardless of the potentially ongoing construction phase). If any boxes are found to be defective during this inspection, the boxes will be replaced.
Mitigation for Cultural Heritage (see Volume 2, Chapter 10)		
CH1	Historic Building Recording	The non-designated heritage asset of Mains of Greens Farmstead (HA5) would be demolished prior to the construction of the Proposed Development. A programme of Historic Building Recording works would be required prior to any construction works in order to record the buildings in their current state. The methodology of the works would be set out within a Project Design, to be agreed with Aberdeenshire Council Archaeology Service (ACAS). The works would be carried out to standards set by the Chartered Institute for Archaeologists (CIfA) and would constitute Level 2 Building Recording for the farmstead, including photographic recording, detailed recording of elevations to be impacted, recording of internal elements, and a written account.
CH2	Preservation through Records	After archaeological evaluation, and where heritage assets are anticipated to be completely removed, a programme of archaeological excavation may be required. The methodology for the works will be set out within an Archaeological Project Design to be approved by ACAS, setting out the excavation methodology, reporting, post-excavation assessment and analysis, publication of the findings, and archiving requirements.
Mitigation for Traffic and Transport (see Volume 2, Chapter 11)		
TT1	Physical Measures	These measures are proposed to mitigate against the potential impacts of construction traffic, which include: • Site Access – formation of a new access on the unclassified C29S • Road Widening Scheme – the C29S carriageway will be upgraded to a 6.5 m carriageway with 2 m wide verges on either side. Route Signage – temporary route signage would be erected in the vicinity of the proposed Site access, and other locations as necessary. Exact nature and location of signage to be agreed with Aberdeenshire Council prior to construction starting.
TT2	Good Construction	Prior to construction, a finalised Construction Traffic Management Plan (CTMP) would be prepared and agreed with Aberdeenshire Council. The

ID	Title	Description
	Practices and General Construction Management	CTMP would include measures to reduce the effects of construction on local receptors and communities. The CTMP is to be treated as a live document and details the mitigation measures, which would be updated as and when additional information becomes available, prior to the publication of the final CTMP.
Mitigation for Hydrology, Hydrogeology, Geology and Soils (see Volume 2, Chapter 12)		
HG1	Private Water Supply (PWS) and licensed abstractions consultation	Scottish Environmental Protection Agency (SEPA) abstractions will require further investigation by the Principal Contractor prior to construction to verify the authorisation activity, the infrastructure location, and its use. Potential further unregistered supplies may also need to be established through consultation with local property owners and SEPA. If applicable, measures to mitigate for temporary interruption of water supply, or permanent alternative supply to be agreed prior to works commencing. If applicable, water quality and/or quantity monitoring of water supply before, during and after construction should be implemented. The Principal Contractor will be required to consider all construction activities and satisfy themselves that they are aware of all PWS, registered activities and abstractions in the local area that may be at risk of adverse effects as a result of the Proposed Development. Should any PWS and abstraction be identified which require protection, specific mitigation will be developed and agreed with SEPA.
HG2	Identification of Scottish Water (SW) assets	Consultation with SW is required prior to construction by Principal Contractor to verify that there are no SW assets which require protection. Should any such assets be identified, specific mitigation measures will be developed and agreed with SW.
HG3	Flood risk mitigation	The risk of fluvial flooding should be mitigated by the inclusion of a 600 mm freeboard to sensitive equipment and buildings. The substation platform is to be set at 129.5 mAOD, which is over 20 m higher than the modelled flood levels in Burn of Greens. Residual risk of flooding should be mitigated by profiling ground levels to route flood water around and away from sensitive infrastructure.
HG4	Identification of PWS infrastructure	To protect PWS during the construction phase, the Principal Contractor will undertake investigations to locate PWS assets prior to commencing any activities. These investigations will prioritise non-intrusive methods, such as cable avoidance technology (CAT) scanners, ground-penetrating radar (GPR), and other geophysical surveys, to accurately locate and assess PWS infrastructure. Where necessary, systematic trial pit surveys will be conducted by hand to minimise disruption.
HG5	Protection of PWS infrastructure	Following further investigation, it may be confirmed that there is the potential for the PWS infrastructure to be impacted through planned construction works. Should this be the case, an assigned contractor will prepare specific construction or working methods to ensure the continuity of the PWS. These methods include refining the engineering design and a general arrangement drawing for crossing pipework.
HG6	Provision of alternative PWS	There is a high probability of detrimental impact to the PWS at the properties of Borderside (ID: 1), Oldtown (ID: 12), Newton of Northburn (ID: 13), and unregistered property (ID: 18). If the Proposed Development is granted planning permission, and further investigation by the Principal Contractor prior to construction deems that the supply cannot be protected through mitigation, then prior to the commencement of construction, the owners of PWS which will be affected would be

ID	Title	Description
		provided with a suitable alternative supply. The Applicant will cover the costs of providing alternative supplies.
HG7	Provision of a PWS Monitoring Plan & PWS Monitoring Method Statement	A PWS Monitoring Plan (PWSMP) and PWS Monitoring Method Statement will be prepared by the Principal Contractor prior to construction. This will detail all mitigation measures to be delivered to secure the quality, quantity, and continuity of water supplies (which may be affected by the Proposed Development). The PWSMP will be provided to the PWS user, prior to construction and will contain contact information for the Construction Site Manager (or similar). PWS users will be informed of any planned works that may affect their supply.
HG8	Further ground investigation requirements	Prior to works being undertaken further ground investigation should be completed with a particular focus in the areas of historical land use. Further ground investigation would include the laboratory analysis of soil and groundwater samples for identified potential contaminants of concern (including asbestos), and groundwater and gas monitoring.
HG9	Requirements for a Generic Quantitative Risk Assessment (GQRA)	A Generic Quantitative Risk Assessment (GQRA) would be undertaken to further assess potential contamination sources associated with the area of historical land use in the south eastern corner. Further assessment would be completed prior to construction to assess the requirement for any potential remediation measures ahead of construction. This assessment would lead to updating the initial conceptual site and model and refine the understanding of potential source pathway receptor linkages in line with LCRM guidance. Further assessment would also include ground gas risk assessment to focus on areas of occupied structures, if proposed. Should the GQRA identify contaminant linkages, a Remediation Options Appraisal and Remediation Strategy will be produced to specify remediation measures required. The Remediation Options Appraisal would consider the available options for each contaminant linkage and would establish the most effective and sustainable approach. The Remediation Strategy would set out measures to break the pollutant linkages, where identified. The measures could include for examples the removal of contaminated soil or the placement of a barrier between the contaminant source and the receptor, amongst others. This further ground investigation and GQRA would be secured by way of condition of planning. In the event that a Remediation Strategy is required, validation of remedial measures will also be required, and will be reported in a Verification Report.
HG10	Earthworks and reuse of materials	Information obtained via further ground investigation could also be used to assess the suitability of materials for potential reuse as part of the Proposed Development. Reuse of site won material would be required to be undertaken in accordance with a Materials Management Plan (MMP), prepared in line with the requirements of CL:AIRE guidance 'The Definition of Waste: Development Industry Code of Practice'.
Mitigation for Noise and Vibration (see Volume 2, Chapter 13)		
NV1	Noise Barriers	Portable noise barriers are to be placed strategically to mitigate noise from mobile plant (rock breakers, track excavator and bulldozer). The Principal Contractor will be responsible for planning construction activities and movement of the portable barriers to provide effective noise screening.

ID	Title	Description
NV2	Construction Timings	The Principal Contractor will be responsible for reducing the "on-time" of any mobile plant. They will also be responsible for organising the programme so that the noisiest activities are only carried out close to noise sensitive receptors (NSR) NSR1 and NSR3 during the weekday period and not during the weekends.
NV3	Noise Mitigation Scheme	A Noise Mitigation Scheme will be based on a robust acoustic design process and will identify the most cost-effective measures including for example localised noise barriers, acoustic enclosures, cladding with enhanced acoustic specification on buildings containing noisy plant, acoustically attenuated louvres, or a combination of these measures, where required. The scheme would be prepared during detailed design in close liaison with the Council's environmental health team, to ensure their requirements are fully considered.