



Cloich Forest Wind Farm Connection Project

EIA Scoping Report

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Chapter 1

Introduction

Introduction

1.1 This Environmental Impact Assessment (EIA) Scoping Report has been prepared by LUC on behalf of SP Energy Networks (SPEN). SPEN intends to submit a Section 37 (S37) consent application to the Scottish Government's Energy Consents Unit (ECU) under the Electricity Act 1989 (as amended) ('the Electricity Act') for a new 132 kilovolt (kV) Overhead Line (OHL) supported on wood poles. This is required to provide the proposed Cloich Forest Wind Farm (application reference: ECU00003288) with a connection to the electricity transmission system at the Currie Substation, which is the nearest Grid Supply Point (GSP) to the proposed Cloich Forest Wind Farm.

1.2 The connection will comprise both a 132 kV overhead line and a section of underground cabling. The connection, including underground and overhead line components, and associated development, is hereafter referred to as the 'Proposed Development'.

1.3 The Proposed Development will be located between the proposed Cloich Forest Wind Farm substation in the Scottish Borders Council area, and the existing substation at Currie in the City of Edinburgh Council area, as shown on **Figure 1.1**.

1.4 A detailed, environmentally led, routeing appraisal process has been undertaken, which identified a preferred route corridor for the Proposed Development. The preferred route is set out in **Figure 1.2**. This was subject to public consultation and has since been reviewed following responses received during the consultation process, to determine a Proposed Route. The Proposed Route is set out in **Figure 1.3** and is considered further in this EIA Scoping Report.

1.5 The Proposed Route will cross four unitary authority boundaries: Scottish Borders Council, South Lanarkshire Council, West Lothian Council, and City of Edinburgh Council. The Proposed Development will fall within the boundaries of the Proposed Route and will be confirmed following further technical design and environmental survey work.

1.6 This report sets out the proposed scope of the EIA Report which will accompany the S37 consent application in due course, for Scottish Ministers to review and provide written confirmation through the adoption of an EIA Scoping Opinion.

The Applicant

1.7 SPEN owns and operates the electricity transmission and distribution networks in Southern and Central Scotland through its wholly-owned subsidiaries, SP Transmission plc (SPT) and SP Distribution plc (SPD). SPT is the holder of a transmission licence. SPEN's transmission network is the backbone of the electricity system within its area, carrying large amounts of electricity at high voltages from generating sources such as wind farms, power stations and various other utilities across long distances to connect homes and businesses. The transmission network consists of approximately 4,500 km of OHLs and over 600 km of underground cables. The electricity is then delivered via the distribution network which has over 150 substations and in excess of 100 grid supply points which serves approximately two million customers in Southern and Central Scotland.

1.8 SPEN is required to identify electrical connections that meet the technical requirements of the electricity system, which are economically viable, and cause on balance, the least disturbance to both the environment and the people who live, work and enjoy recreation within it.

The Need for the Proposed Development

1.9 There is substantial interest in renewable energy generation development in Southern and Central Scotland and SPEN continues to receive associated grid connection requests from developers wishing to develop such schemes.

1.10 Cloich Forest Wind Farm was consented by the ECU in 2016, for 18 turbines. A new application for 12 turbines was submitted on the 30th of June 2021 and is still awaiting determination (ECU00003288).

1.11 SPEN has received an application from the Cloich Forest Wind Farm developer requesting a 67.2 megawatt (MW) connection from the proposed wind farm substation to a nearby GSP, via an 132 kV OHL. The nearest appropriate GSP is the Currie substation.

1.12 To comply with its statutory and license obligations, SPEN must provide Cloich Wind Farm with a connection to the electricity transmission system.

Background to the Proposed Development

1.13 LUC has already undertaken an environmentally led routing and consultation exercise, whereby four route corridors were identified and appraised within a defined study area. A preferred route was then identified and is shown on **Figure 1.2**.

1.14 The findings of this appraisal were published in a Routeing and Consultation Document (May 2024) which is available to view at the Proposed Development website:

<https://www.spenergynetworks.co.uk/pages/cloch.aspx>

1.15 The construction and operation of a transmission line can result in potential effects on people and the environment, including potential effects on:

- Landscape and visual amenity (including recreation and tourism);
- Biodiversity (including ecology and ornithology designations);
- Cultural heritage including archaeology;
- Forestry and woodland (including areas of ancient woodland and native woodland);
- Hydrology, hydrogeology, and peat (such as watercourses, flood risk, carbon rich soils and deep peat); and
- Planning and land uses (including agricultural uses).

1.16 These environmental considerations were therefore taken account of alongside technical considerations. Technical considerations include the existing electricity transmission network, access requirements, slope gradient, altitude, waterbodies, peat and the presence of wind turbines.

1.17 As part of the routeing appraisal process, SPEN carried out consultation with stakeholders and the public. The consultation ran for five weeks from Monday 13th May to Monday 17th June 2024. Adverts appeared in local weekly newspapers prior to the consultation, consultation leaflets were distributed to local properties located within 1 km of the route options, and three public exhibitions were held.

1.18 The consultation sought to gain views from the following broad groups:

- Statutory and non-statutory consultees, including community councils (as listed in **Appendix A**);
- Known local interest and community groups operating in Scottish Borders, South Lanarkshire, City of Edinburgh, and West Lothian Council areas;
- Locally elected members of the following wards: Pentland Hills, East Livingston and East Calder, Clydesdale East, and Tweeddale West;
- Elected members of Scottish Borders, South Lanarkshire, West Lothian and City of Edinburgh Council areas, the Member of Parliament (MP) and Members of the Scottish Parliament (MSPs) whose constituencies are within the above mentioned Council areas closest to the project; and

- Local residents, businesses and the wider public.

1.19 Since then, SPEN and LUC have reviewed the stakeholder feedback and amended the preferred route option to define the narrower Proposed Route for the purposes of EIA scoping. SPEN and LUC also continue to review the implications of this feedback for the more detailed alignment, details of which will follow through the S37 application process in due course. The comments received in this consultation have also been collated into a Consultation Feedback Report¹ which is available on SPEN's website.

The Consenting and EIA Process

1.20 SPEN will apply to the ECU for consent under Section 37 of the Electricity Act, to install and keep installed, the Proposed Development. In conjunction with the Section 37 application, SPEN will apply for deemed planning permission under Section 57(2) of the Town and Country Planning (Scotland) Act 1997, as amended, for any ancillary development such as access tracks.

1.21 The Electricity Works (Environmental Impact Assessment) (Scotland) EIA Regulations 2017 define those development projects for which an EIA is required. Schedule 1 (3) includes "*construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres*". An EIA will always be required for Schedule 1 projects.

1.22 Schedule 2 projects require EIA if they exceed certain thresholds and are likely to give rise to significant environmental effects. Schedule 2 (a) includes "*an electric line installed above ground with a voltage of 132 kilovolts or more*".

1.23 The Proposed Development is a c. 40 kilometres (km) 132 kV overhead line with the potential to give rise to significant environmental effects. SPEN has therefore decided to undertake EIA to accompany the application for Section 37 consent.

1.24 The next steps in the consenting and EIA process are as follows:

- Scoping: The next step in progressing the S37 application is submitting a Scoping Opinion request to ECU to confirm the scope of the EIA.
- EIA and Detailed Design: The next stage in the design of the proposed OHL route will involve plotting the location of the wood poles, confirming underground cabling and access routes and identifying working areas. This will be informed by the emerging EIA survey findings.

- Second Round of Consultation: A second round of public consultation will be undertaken, so that people can give their views on the detailed route alignment and on the findings of the EIA.

- Section 37 Submission: After considering feedback received in the second round of consultation, the proposals will be finalised and an application submitted to the ECU under Section 37 of the Electricity Act for consideration by Scottish Ministers.

The EIA Team

1.25 The EIA is being coordinated by LUC. LUC is accredited with the Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark. This accreditation is independently reviewed each year and recognises commitment to excellence in EIA activities and sharing good practice. The EIA Quality Mark demonstrates that LUC has sufficient expertise to ensure that all EIA related activities are undertaken to a high standard in accordance with Regulation 5(5)(a) of the EIA Regulations:

5) In order to ensure the completeness and quality of the EIA report-

1.26 The organisations listed in **Table 1.1** have undertaken the specialist assessments and inputs into the Scoping Report and are providing expertise and competence in relation to the Proposed Development.

¹ SP Energy Networks, Cloch Forest Wind Farm Connection Project Consultation Feedback Report (February 2024). Available [online] at: [Cloch Consultation Feedback Report.pdf](#)

Table 1.1 Scoping/EIA Team

Topic	Team
EIA Report Co-ordination	LUC
Landscape and Visual Amenity	
Ecology and Biodiversity	
Ornithology	
Cultural Heritage	
Hydrology, Hydrogeology, Geology and Peat	Kaya Consulting Ltd Offshore Wind Consultants (OWC) Ltd
Forestry	RTS
Traffic and Transport	Mott MacDonald
Socio-Economics / Tourism	LUC
Climate Change	
Human Health	
Major Accidents and Disasters	

Document Structure

1.27 The remainder of this report is structured as follows:

- **Chapter 2** provides information on the EIA process and assessment methodology.
- **Chapter 3** provides a brief description of the Proposed Development and its location.
- **Chapters 4 to 8** provide details of the topic areas to be considered in the EIA.
- **Chapter 9** sets out the topics proposed to be scoped out of the EIA.

1.28 Appendix A details the consultees that will be approached by the ECU to inform the scope of the EIA, as well as those that will be approached for information to inform the EIA. **Appendix B** provides a consolidated list of the questions put forward to the consultees to focus the response to the Scoping Report; these are also included at the end of each chapter.

Chapter 2

The EIA Process and Assessment Methodology

What is EIA?

2.1 EIA is the process of systematically compiling, evaluating and presenting all the likely significant environmental effects, both positive and negative, of a proposed development, to assist the determining authority in considering the application. It enables the significance of these effects to be clearly understood, and where required, mitigation to be identified to address significant effects.

2.2 The information compiled during the EIA is presented within an EIA Report to accompany the application for consent.

2.3 EIA is an iterative process and runs in tandem with project design. As potential effects are identified, for example through baseline surveys, the design of the Proposed Development will be adjusted to reduce or avoid adverse effects where possible and mitigation measures will be proposed as appropriate.

The EIA Process

2.4 The EIA will be conducted in accordance with current legislation, policy and guidance. The EIA process usually includes the following key stages as set out below.

Scoping

2.5 The purpose of Scoping is to focus the EIA on the likely and relevant significant environmental effects associated with the Proposed Development. On the basis of the expert judgement of the assessment team, experience from similar projects, as well as relevant policy, guidance and standards, each topic chapter within this report outlines:

- Potential likely significant effects associated with construction and/or operation of the Proposed Development, which will be assessed in detail in the EIA Report.
- Effects which are considered unlikely to be significant and require limited or no further consideration within the EIA.

Baseline Conditions

2.6 The EIA Regulations require that the aspects of the environment, which are likely to be significantly affected by the

Proposed Development, be defined within the EIA Report. To achieve this, it will be necessary for each of the topic specialists to gather information on the environment, as it currently exists, i.e. 'baseline conditions'. This will be undertaken as the first step in the assembly of data for the EIA Report through a combination of consultation with relevant stakeholders, field survey work and desk-based research.

2.7 The study area for each discipline is defined separately to reflect the potential extent of likely significant effects associated with the Proposed Development. The study area for each discipline is not necessarily defined by the extent of the Proposed Route; with some study areas being smaller and some larger depending on the nature of effects and taking into account professional judgement and best practice. Details on the existing conditions of the study area, and the surveys which will be undertaken for each topic are detailed in **Chapters 4 to 9** in this report.

2.8 In accordance with the EIA Regulations, climate change will also be considered in the context of understanding how baseline conditions for each topic area could change during the lifetime of the Proposed Development.

Assessment of Effects

2.9 For each topic that is identified as requiring further consideration, a detailed technical assessment will be carried out in line with the scope and methodology agreed with relevant consultees. Technical assessments will be undertaken appropriately by qualified consultants in line with technical standards and relevant guidance. The assessments will take into account both the construction and operational phases of the Proposed Development in relation to the study area and its environs.

Assessment of Significance

2.10 The EIA Regulations do not define significance and it is, therefore, necessary to define this for the Proposed Development. The methods used vary according to the topic assessed and may be quantitative (e.g. comparing predicted values against published thresholds/criteria) or qualitative, based on experience and professional judgement. The proposed methodology to be used for determining the significance of effects for each topic area is detailed in this Scoping Report and will also be fully described within the individual chapters of the EIA Report.

Cumulative Assessment

2.11 An assessment will be made of the likely significant cumulative effects of the Proposed Development in combination with developments, including other existing electricity infrastructure, where relevant. These will include:

- Developments which are the subject of applications for consent and which have been submitted to the relevant authorities but not yet determined;
- Developments which are consented; and
- Developments which are under construction.

2.12 The scope and methodology for the cumulative assessment will be agreed with the relevant statutory consultees. As the study areas will be defined separately for each topic assessed in the EIA, this will mean that the number of cumulative schemes considered in each topic will vary.

2.13 Cumulative schemes will be reviewed at the EIA stage of the process and agreed with the relevant planning authorities in advance of undertaking the assessments.

Approach to Mitigation

2.14 Part 7 of Schedule 4 of the EIA Regulations notes that the EIA Report should include details of proposed mitigation measures to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, set out monitoring measures which will be put in place.

2.15 To ensure a proportionate approach is taken to the EIA process, the EIA will assume in many cases that mitigation measures are embedded within the Proposed Development. This can include avoiding and/or mitigating likely significant environmental effects associated with overhead lines through careful routeing, as has been undertaken for the Proposed Development during the routeing appraisal process. Embedded mitigation can also include 'standard' practices and procedures, such as implementing a Construction Environmental Management Plan (CEMP) and use of good practice construction techniques to minimise environmental effects thereby reducing, as far as practicable, the need for additional mitigation measures or environmental controls. Further detail on embedded mitigation is provided in each technical chapter.

2.16 Where necessary, additional mitigation measures are proposed to reduce the significance of effects, and these will be set out in detail in the EIA Report.

2.17 The EIA Report will identify and assess likely significant effects prior to any required additional mitigation measures and, where mitigation measures are proposed, their likely effectiveness will be examined and the significance of the 'residual' effect then assessed. SPEN will be committed to implementing all the mitigation measures identified in the EIA Report and where appropriate, the mitigation measures implemented will be monitored for effectiveness.

2.18 Where there are opportunities for offsetting and/or positively enhancing effects, these will be identified through

the EIA process. SPEN is committed to delivering 'No Net Loss' and has adopted a Biodiversity Net Gain (BNG) metric to demonstrate this. Therefore, a BNG report and associated calculator will also be produced in relation to the Proposed Development.

Uncertainty

2.19 The EIA process is designed to enable good decision-making based on the best possible information about the environmental effects of a project. There will, however, always be an element of uncertainty as to the exact scale and nature of the effects. These may arise through shortcomings in available information or due to the inherent limitations of the professional judgement process. As required in Schedule 4, Part 6 of the EIA Regulations, any uncertainty will be explicitly recognised and detailed in the EIA Report.

EIA Report Structure

2.20 The EIA Report will be structured as follows, subject to any changes to the scope identified through the consultation process:

- Description of the EIA process, including details of consultation which has taken place;
- Description of the Proposed Development; and
- Individual environmental assessment topic chapters, including a description of the mitigation measures required to prevent, reduce and, where possible, offset any significant adverse effects on the environment; enhancement measures where appropriate will also be included.

2.21 Each chapter of the EIA Report, where practicable, will adopt a consistent format. This will ensure compliance with the EIA Regulations regarding completeness and accuracy. Each chapter will comprise an opening introduction to the topic, including a summary of the expertise of the chapter author, followed by:

- Legislation/Policy/Guidance;
- Environmental Baseline (derived from desk studies and surveys undertaken);
- Effects Assessment (identification of the effects and their significance);
- Mitigation (and monitoring as appropriate);
- Residual Effects (assessment of effect significance once additional mitigation has been incorporated); and
- Summary of Significant Effects.

2.22 The EIA Report will also include a Non-Technical Summary (NTS) and supporting appendices including tables, figures and reports.

Chapter 3

Proposed Development Description

3.1 The Proposed Development will comprise a new 132 kV OHL, and a section of underground cabling, to connect the proposed Cloich Forest Wind Farm to the GSP at Currie substation. The Proposed Development is approximately 40 km in length and will mostly comprise a 132 kV OHL supported on trident wood poles, as shown in **Figure 3.1**, with c. 600m of underground cabling. The Proposed Development is subject to detailed alignment but will be located within the Proposed Route.

3.2 The Proposed Route starts at the proposed Cloich Wind Farm substation on the Cloich Hills and generally runs north-east towards the Currie GSP. The Proposed Route initially heads south along the A701 towards Rommanobridge. It then turns south-west towards Garvald and Fernihaugh before winding north-west along Crosswood Burn. The Proposed Development would then weave north-east, broadly following the A70, towards Ravelrig Quarry. Finally, the Proposed Route continues north-east along the northern settlement boundary towards Currie substation.

3.3 The Proposed Route avoids crossing the dominant central landscape features within the Pentland Hills Regional Park, minimises impacts on sensitive heritage assets including conservation areas and a historic battlefield, residential amenity and core paths, and avoids priority peatland.

3.4 The detailed location of the new wood poles, and alignment of the cabled section, within the route corridor has still to be developed through a detailed design/technical review process. The details of the Proposed Development components are set out below.

Overhead Line Infrastructure

3.5 The OHL will be supported on trident wood poles (double H poles) with galvanised steelwork cross-arms supporting aluminium conductors on insulators. These are suitable for supporting single circuit lines operating at 132 kV.

3.6 Wood poles are fabricated from pressure impregnated softwood, treated with a preservation to prevent damage to structural integrity.

3.7 Conductors can be made either of aluminium or steel strands. This connection will include a single three-phase circuit with no earth wire which means that the wood poles will support three conductors. One of the phase conductors will incorporate a fibre optic cable for communication purposes.

3.8 Conductors are strung from insulators attached to the steelwork at the top of the pole and prevent the electric current from crossing to the pole body.

3.9 There are three types of wood pole structure, in terms of appearance:

- *Intermediate*: Where the pole structure is part of a straight-line section;
- *Angle*: where there is a horizontal or vertical deviation in line direction of a specified number of degrees; and
- *Terminal*: where the overhead line terminates into a substation or on to an underground cable section via a separate cable sealing end compound or platform.

3.10 With an OHL, conductors (or wires) are suspended at a specified height above ground, incorporating minimum safety clearances and supported by wooden poles, spaced at intervals.

3.11 Examples of trident pole designs are shown on **Figure 3.1**.

Wood Pole Heights and Span Lengths

3.12 The standard height of trident poles (including steel work and insulators) varies from 11 m to 16 m. Whilst wood poles have a standard height above ground of 13 m, these can be extended or reduced in height, as required. Pole heights may require to be increased where circumstances dictate, e.g. over elevated land, structures or features.

3.13 The section of OHL between wood poles is known as the 'span', with the distance between them known as the 'span length'. Span lengths between wood poles average between 80 m to 100 m but can be increased if there is a requirement to span a larger distance due to the presence of a feature in the landscape such as a river or reservoir.

3.14 Wood poles are used to regulate the statutory clearances required for conductor height, which is determined the voltage of the OHLs (the higher the voltage, the greater the safety clearance that is required) and the span length between wood poles.

Wood Pole Colouring

3.15 Wood poles are dark brown in colour when first erected and weather to a silver/grey after a period of about five years.

3.16 The wood pole top cross-arms are galvanised steel and support the aluminium conductors on stacks of grey insulator discs. Both the steelwork and aluminium will weather and darken after a few years.

Underground Cable Infrastructure

3.17 It is anticipated that sections of underground cable will be required to facilitate entry to Currie substation.

3.18 The sections to be undergrounded will comprise three cables in tri-foil arrangement with a multi-celled duct laid alongside to allow for telecommunications control and monitoring cables. Each cable will comprise a copper or aluminium central conductor encased in XLPE insulation material, overlaid with a metallic sheath and final outer sheath of graphite coated polythene. The cables will be surrounded with well compacted, thermally selected sand and backfilled with suitably screened excavated material. Cable markers will be deployed approximately every 250 m along the route as a warning and indication that high voltage cable exists in the vicinity.

3.19 A typical 132 kV underground cable cross-section is provided in **Figure 3.2**. Where connected to an OHL, an underground cable may also involve the creation of a fenced compound for the siting of terminal supports and sealing end compounds above ground.

Construction Process

3.20 The construction of OHLs requires additional temporary infrastructure such as temporary accesses to pole locations. All have limited maintenance requirements, and all are subject to well-established procedures for dismantling/ decommissioning.

Wood Pole Construction / Steel Tower Construction

3.21 The construction of the OHL will follow a well-established sequence of methods as outlined below:

- Preparation of accesses and felling of woodland to allow safe operation of the OHL;
- Excavation of foundations;
- Delivery of wood poles;
- Erection of wood poles;
- Delivery of conductor drums and stringing equipment;
- Insulators and conductor erection and tensioning; and
- Clearance and reinstatement.

3.22 Prior to constructing the OHL, temporary working areas around each pole location will be required for foundation excavation and pole erection. Any vegetation that requires removal will be removed or pruned / lopped. Following commissioning of the OHL, all equipment and temporary access of construction areas will be removed with the land

being reinstated to as similar a condition as possible prior to the works having taken place.

3.23 The erection of the wood poles will require a small excavation to allow the pole brace block and/or steel foundation braces to be positioned in place. A typical pole excavation will be 3 m² by 2 m deep. The excavated material will be sorted and stored and used for backfilling purposes. No concrete is required.

3.24 Poles are erected in sections, i.e. between angle support poles and/or terminal support pole. The insulator fittings, and wood poles forming the pole support, will be assembled local to the pole site and lifted into position utilising a tracked excavator which excavates the foundations. The pole foundation holes will then be backfilled, and the pole stay wire supports attached to the ground in preparation for conductor stringing, erection and tensioning.

Underground Cable Construction

3.25 Where underground cables are required, the conductors are encased in insulated material and buried in a backfilled trench of suitable depth and width. **Figure 3.2** shows the typical width and depth of the cable trench, which is approximately 1-1.5 m wide by 1-1.5 m deep.

3.26 The number of underground cables and length of them have not yet been confirmed and are still subject to detailed routing. The width and depth would be dependent on the installation method, environmental issues, ground conditions and access requirements during construction. Where cables are required to run along an existing road or verge, appropriate traffic management measures would be adopted and set out in the Travel Plan and Construction and Traffic Management Plan.

3.27 Where an underground cable connects to an OHL, a cable may also involve the siting of terminal supports. Details of the cable construction process will be fully detailed in the EIA Report.

Access

3.28 Temporary accesses to all pole locations will be taken from the existing main road network wherever feasible, with the use of selected unclassified roads also likely to be required. The use of existing tracks and watercourse crossings will be maximised, with the upgrading of these where necessary.

3.29 The initial preference when taking temporary access is to use low ground pressure vehicles and plant. Where access is required to be taken through any sensitive areas identified during the EIA process, other less intrusive methods such as temporary steel matting, or timber roadways may be employed.

3.30 The use of temporary stone tracks is normally minimal for wood pole connections. All temporary tracks will be removed after commissioning with land being restored to its former condition.

Temporary Working

3.31 Temporary working areas will be required for the duration of the construction works. Temporary vehicular access is required to every pole location. Wood pole locations will have a working area of approximately 30 m x 15 m and could also extend to accommodate conductor pulling if required.

3.32 In some cases, the shape or size of the working area will be determined by nearby environmental or land use constraints, identified during the EIA process / prior to construction. Each working area will be taped off to delineate the area for environmental protection reasons.

3.33 Following the completion of the construction works, the temporary working areas will be reinstated and restored to former conditions.

Construction Timescales

3.34 Construction and erection of a standard single pole generally takes approximately half a day depending on ground conditions and location, i.e., it may take more hours if the ground is softer. Angle poles can also take longer due to the need for 'stay wires' to stabilise the pole in the ground.

Operation and Maintenance

3.35 Whilst most OHL components are maintenance free, exposed elements which suffer from corrosion, wear, deterioration and fatigue may require inspection and periodic maintenance. OHL cables generally require refurbishment after approximately 40 years. Maintenance may also be required periodically to carry out inspections, repairs or remedial works associated with the underground cable components.

3.36 Wooden pole damage could lead to potential bird nesting and bat roosting sites within the operational period of the OHL. Inspections of the poles would be carried out prior to any refurbishment works to identify any nesting/roosting potential.

3.37 Any felled wayleave areas will also have to be managed to maintain the required clearances whilst the connection remains in service. Walkover surveys or flyovers will identify where there is a requirement to clear wayleaves of new growth. Line marking should be considered to avoid avian collisions in sensitive areas (as identified during appropriate vantage point surveys).

Decommissioning

3.38 When the operational life of the proposed Cloich Forest WF Connection Project comes to an end, it is possible that the line may be re-equipped with new conductors and insulators and refurbished. Alternatively, the OHL and underground cable components may be decommissioned fully. Wood poles will be removed in their entirety, with components re-used where possible. All ground disturbance will be fully reinstated to its former condition.

Use of Natural Resources and Production of Waste

Use of Natural Resources

3.39 The Proposed Development will not require significant use of natural resources, including resources which are non-renewable or in short supply. There would be no major changes to land use within the local area as a result of the Proposed Development, with only minimal long-term land take required for the wood poles and underground cables, although small areas of land may require to be removed from forestry.

3.40 The construction methodology will ensure that watercourse crossings do not give rise to any reduction in water quality or impede water flow, while there would be no requirement for potable water consumption.

Production of Waste

3.41 The Proposed Development will not give rise to any significant quantities of waste as a result of installation. Any soils or peat removed as part of the excavation of pole footings will be replaced in situ as per standard industry practice. Good practice waste management methods will be implemented during the construction phase. These will encourage the reduction, reuse and recycling of wastes. Mitigation measures will be put in place to further minimise the potential environmental effects associated with the storage and transportation of waste, with further details provided below:

- Waste will be generated, and will require management, at a number of construction stages including:
 - Clearance of vegetation along the route to enable access to pole locations and construction of the OHL;
 - Stripping of topsoil and excavation of materials for construction of poles; and
 - Construction of ancillary works, including temporary working areas.

3.42 Measures to reduce possible environmental effects associated with the storage and transportation of waste 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.

3.43 Any materials that cannot be reused will be disposed of according to relevant waste management legislation which will serve to address a number of possible environmental effects.

3.44 All of the above details will be implemented through a Site Waste Management Plan (SWMP) as part of the Construction Environmental Management Plan (CEMP), details of which will be further outlined in the EIA Report.

Environmental Management

3.45 The CEMP will be developed and adopted by the Principal Contractor during the construction phase. The principal objective of this document is to provide information on the proposed infrastructure and to aid in avoiding, minimising and controlling adverse environmental effects. Furthermore, this document will define good practice as well as specific actions required to implement mitigation identified in the EIA Report, the planning process and / or other licencing or consenting processes.

3.46 The CEMP will be updated during the pre-construction phase and form part of the contractor documents between the Applicant and the appointed construction contractor.

Forestry

3.47 The potential removal of forestry forms part of the project description and will be considered in the topics included in the EIA Report accordingly. Implications for forestry are considered in detail throughout the design stage of the development proposals. Through the review of the route alignment, the removal of forestry will be minimised where possible.

3.48 The Proposed Development may result in:

- Forestry loss: SPEN will be committed to deliver off site compensatory planting for the full area of tree loss in keeping with The Scottish Government Policy on the control of Woodland removal.
- An impact on designated woodlands. The Proposed Route crosses areas of Ancient Woodland, Native Woodland Survey of Scotland (NWSS) and National Forest Inventory woodland (NFI) designated land. However, Ancient Woodland will be avoided and will not be impacted as part of the Proposed Development. Where NWSS or NFIs are noted, due to the sparse nature of the trees within these areas and opportunity to microsite the route and / or overfly these riparian areas, only minor impacts are anticipated.

3.49 Potential implications on forestry will be discussed in the project description chapter of the EIA Report. All efforts will be taken through the detailed alignment design to minimise forestry removal unless it is unavoidable due to other balancing environmental factors.

Chapter 4

Landscape and Visual Amenity

Introduction

4.1 This chapter sets out the proposed approach to assessing the potential effects of the Proposed Development on landscape character and visual amenity through a Landscape and Visual Impact Assessment (LVIA). The primary guidance for LVIA is the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3).

4.2 The LVIA will consider direct and indirect effects on landscape resources, landscape character, and the implications for designated landscapes, and cumulative effects, i.e. the incremental effects of the Proposed Development in combination with other existing and proposed developments. It will examine the nature and extent of effects arising from the introduction of the proposed OHL and cabled sections, during both construction and operation, as well as any temporary ancillary infrastructure (i.e. access tracks etc.) associated with the construction phase.

4.3 In accordance with GLVIA3, landscape and visual effects will be considered separately. GLVIA3 states that the nature of landscape and visual receptors, commonly referred to as their sensitivity, should be assessed in terms of the susceptibility of the receptor to change and the value attached to the existing landscape or views. The nature of the effect, commonly referred to as the magnitude of change, should be assessed in terms of the size and scale, geographical extent, duration and reversibility of the effect. These aspects will all be considered, to form a judgement regarding the overall significance of landscape and visual effects.

Proposed Surveys and Assessment Methodologies

Guidance

4.4 The following guidance will be referred to where appropriate:

- Landscape Institute and the Institute of Environmental Management and Assessment (2013), Guidelines for Landscape and Visual Impact Assessment. Third Edition. (GLVIA3);
- Landscape Institute (2019) Visual Representation of Development Proposals – Technical Guidance Note 06/19; and

- NatureScot (previously SNH) (2017) Visual Representation of Wind Farms Guidance

Landscape Effects

4.5 Predicted changes to both the physical landscape of the Proposed Development and landscape character within the 1 km Study Area will be identified.

4.6 The assessment of landscape effects will take account of the sensitivity of the landscape, acknowledging the value placed on the landscape through formal designation at either a national or local level.

4.7 Landscape effects will be determined in relation to the magnitude and type of change to the landscape, with consideration of the landscape characteristics and special qualities identified in the relevant NatureScot Landscape Character Type descriptions.

Visual Effects

4.8 Visual effects are experienced by people (visual receptors) at different locations across the Study Area, including at static locations (for example from settlements or promoted viewpoints) and transitional locations (such as sequential views experienced from routes, including roads, footpaths, or cycle routes). Visual receptors are the people who will be affected by changes in views at these places, and they are usually grouped by what they are doing at those locations (for example residents, motorists, recreational users etc.).

4.9 Visual effects resulting from the Proposed Development will be considered within the context of the existing baseline conditions. The assessment of visual effects arising from the introduction of the Proposed Development will be based on analysis of a Zone of Theoretical Visibility (ZTV), field studies and consideration of changes in views from representative viewpoints.

Residential Visual Amenity

4.10 Effects upon residential visual amenity become a matter of public rather than private interest when properties or groups of properties become widely regarded as unattractive places to live. Given the scale of the Proposed Development (varies from 11-16 m in height) and that the design of the Proposed Development to date has enabled flexibility to maintain a distance of 100 m from residential properties, a Residential Visual Amenity Assessment (RVAA) to accompany the LVIA is not deemed to be necessary and has been scoped out.

Cumulative Effects

4.11 The cumulative landscape and visual assessment (cumulative LVIA) will be carried out in accordance with the principles outlined in GLVIA3.

4.12 The LVIA will consider the potential effects of the addition of the Proposed Development to the existing landscape against a baseline that includes existing OHLs and those under construction. The cumulative LVIA will consider the potential additional effects of the Proposed Development, against a baseline that includes developments, such as OHLs or wind farms, that may or may not be present in the landscape in the future, i.e. including developments that are consented but unbuilt, and undetermined planning applications (including those which may have been refused and are currently at appeal stage).

Field Survey

4.13 Field survey work will be carried out during several visits, and records will be made in the form of field notes and photographs. Field survey work will include visits along the entire length of the route, to viewpoints, designated landscapes, and extensive travel around the Study Area to consider potential effects on landscape character and on experiences of views seen from designated landscapes, settlements and routes.

Visualisations

4.14 Wirelines and photomontage visualisations will be used to consider and illustrate changes to views. Photomontages will involve overlaying computer-generated perspectives of the Proposed Development over the photographs of the existing situation to illustrate how the views will change against the current baseline. Visualisations will be prepared in accordance with SNH (2017) visualisation guidance, which although intended for use to represent wind farms, is also suitable for OHLs.

Study Area

4.15 Informed by the type and scale of OHL infrastructure proposed (i.e. wood poles with an average height of 11 – 16 m above ground), the LVIA study area will comprise 1 km from the Proposed Route, as shown on **Figure 4.1**. An initial indicative bare ground ZTV was prepared for a central line along the proposed route corridor as shown on **Figure 4.2**. The extent of the Study Area is informed by the ZTV and based on professional judgement. It is defined on the basis that at distances greater than 1 km significant effects on landscape character and visual amenity are unlikely to occur, in this context.

Existing Conditions

4.16 The LVIA Study Area crosses four administrative boundaries: Scottish Borders Council, South Lanarkshire Council, West Lothian Council, and The City of Edinburgh Council. The landscape of the Study Area is varied and extends from the north of the proposed Cloich Forest Wind Farm substation in the south-east of the Study Area, to Currie substation in the north-west, on the outskirts of the City of Edinburgh.

4.17 The landscape of the Study Area is strongly influenced by the presence of the Pentland Hills, a regionally designated park (Pentland Hills Regional Park), which form a prominent feature, as experienced from all parts of the Study Area. Beyond the Pentland Hills, the landscape generally comprises lowland plains and upland fringe to the north-west of the Pentlands and rolling and undulating farmland to the south-east of the Pentlands. Landscapes of Scotland² divides Scotland into 79 distinctly unique areas, considering physical, cultural and human influences on the landscape. Units 65 (Slammanan Plateau) and 67 (Lammermuirs and Moorfoots) broadly correspond with the lowland plains to the north-west and south-east of the Pentland Hills, respectively. The Pentlands are classified as their own unit (unit 66). The topography of the Study Area is varied, ranging from lows of approximately 70 m Above Ordnance Datum (AOD) in the north of the Study Area near Currie to a maximum elevation of 451 m AOD within the Pentland Hills, at the summit of Mendick Hill.

4.18 In terms of land use, much of the lower-lying part of the Study Area is predominantly used as agricultural land, although there are also areas of low-lying peat moorland and heath. Many forestry blocks and shelterbelts are present throughout the landscape and running up the lower slopes of the Pentland Hills. As the landform rises, the land use transitions to rough grazing across the open moorland and hills. Rough grazing extends up the slopes of the Pentland Hills, with open heather moorland, acid heathland and grassland, and some areas of bare rock and scree being present.

4.19 Land uses include recreation (including walking, biking, fishing), sheep farming, and grouse shooting. The watercourses and reservoirs are used by Scottish Water as part of the water supply for Edinburgh.

4.20 In terms of development, existing electricity transmission infrastructure is present within the Study Area. Several large overhead lines (132 kV, 275 kV, 400 kV) are present in the north-west of the Study Area, connecting into Currie

substation. The presence of these lines is particularly noticeable in the northernmost extents of the Study Area near Currie and Balerno. Other electricity infrastructure is generally limited to the distribution network.

4.21 In terms of recreational access, the Study Area encompasses the western extents of the Pentlands Regional Park near the A70. The Pentland Hills are a popular recreational resource, drawing in visitors daily, such as hill walkers and mountain bikers. In addition, the Cross Borders Drove Road crosses the Study Area to the north-west of the Pentland Hills and in the north-eastern extent of the Study Area, between West Linton and the Cloich Hills. Parts of this route are on the Core Path network. National Cycle Network (NCN) Route 75 passes through Balerno, then follows the Water of Leith Walkway north-east.

4.22 Much of the area around the northern end of the Pentlands is well settled and populated, with the villages of Currie and Balerno to the north-west of the Pentlands, and the City of Edinburgh immediately north, across the City Bypass (A720). Settlement is more scattered within the section of the Study Area to the south-east of the Pentlands, with small villages at West Linton, Mountain Cross, Romannobridge and Dolphinton. The Pentland Hills do not have any dense settlement; however, some isolated properties and farms are located on the lower slopes.

4.23 The main vehicular routes within the Study Area comprise the A70 between Currie and Tarbrax, and short sections of the A702 between West Linton and Dolphinton, and A701 west of Cloich Hills.

Landscape Character

4.24 The following landscape character types (LCTs), as defined in NatureScot's National Landscape Character Assessments (2019) are located within the Study Area and would be directly affected by the Proposed Development (refer to **Figure 4.3**):

- LCT 90 – Dissected Plateau Moorland;
- LCT 92 – Plateau Outliers;
- LCT 99 – Rolling Farmland – Borders;
- LCT 212 – Moorland Hills – Glasgow Clyde Valley;
- LCT 268 – Upland Hills – Lothians;
- LCT 269 – Upland Fringes – Lothians; and
- LCT 274 – Lowland Plain.

² NatureScot (2024) Landscape Variety in Scotland. Available at: <https://www.nature.scot/landscapes-and-habitats/about-scotlands-landscapes/landscape-variety-scotland>

4.25 In addition, several other LCTs are within the wider study area but are not expected to be directly affected by the Proposed Development:

- LCT 102 – Upland Fringe with Prominent Hills;
- LCT 201 – Plateau Farmland – Glasgow & Clyde Valley; and,
- LCT 210 - Undulating Farmland and Hills.

4.26 The LVIA will consider the potential for direct effects upon LCTs within which the Proposed Development is located and for indirect effects upon LCTs in a 1km Study Area from which there is potential visibility of the OHL.

Landscape Designations

4.27 Much of the Study Area falls within locally designated landscapes. The Pentland Hills Special Landscape Area (SLA) (West Lothian Council and Scottish Borders Council), Pentlands SLA (City of Edinburgh Council), Pentland Hills and Black Mount SLA (South Lanarkshire Council) and Pentland Hills Regional Park, are found across an extensive proportion of the Study Area, in association with the Pentland Hills as shown on **Figure 4.4**.

4.28 All SLAs within the Study Area will be considered in the assessment.

Visual Amenities

4.29 Visual receptors within the Study Area identified include:

- Residential receptors in scattered properties and within the settlements of Currie and Balerno, West Linton, Dolphinton, Mountain Cross and Romannobridge;
- Recreational users of the Pentland Hills, Cross Borders Drove Road, the National Cycle Network and Core Paths; and
- Road users travelling along the A70, A70 and A702.

4.30 The ZTV, in conjunction with fieldwork, has been used to inform the selection of representative assessment viewpoints to be considered in the LVIA. Viewpoints have been identified to represent a range of receptors, distances and viewing experiences.

4.31 The proposed viewpoint locations are listed in the table below and are shown on **Figure 4.2**. Viewpoints would be micrositied during site visits once the exact alignment of the OHL is known.

Table 4.1 Proposed Viewpoint Locations (from north to south)

VP Ref.	Name	Grid Ref.	Reason for selection
1	A701 near Ironstone Cottages	318608, 650421	Represents views experienced by road users travelling along the A701 and nearby residential receptors.
2	B7059 near Kaimhouse	316572, 649749	Represents views of road users and residents.
3	Romannobridge	316066, 648085	Represents views experienced by residential receptors in the settlement of Romannobridge.
4	Minor Road near Hamiltonhall	315098, 648234	Represents views experienced by residential receptors at Hamiltonhall and road users travelling along the minor road network.
5	Dolphinton	311339, 647903	Represents views experienced by residential receptors in the settlement of Dolphinton.
6	A702 layby near Medwyn Cottage	312388, 648814	Represents views experienced by road users travelling along the A702 and parked in the layby. This viewpoint represents views from the Pentland Hills SLA (Scottish Borders).
7	Mendick Hill	312153, 650533	Represents views experienced by recreational receptors at the summit of Mendick Hill. This viewpoint represents elevated views from the near the south-eastern Pentland Hills SLA (Scottish Borders). Although located just beyond the 1 km Study Area, Mendick Hill offers

VP Ref.	Name	Grid Ref.	Reason for selection
			panoramic views towards the higher Pentland Hills in the north-west and south-west.
8	Track near Ferniehaugh	309661, 650329	Represents views experienced by residential receptors at Garvald and Ferniehaugh and recreational receptors using paths in this part of the Pentland Hills.
9	Bleak Law	306467, 651263	Represents views experienced by recreational receptors at the summit of Bleak Law in the Pentland Hills. This viewpoint represents views from the Pentland Hills and Black Mount SLA (South Lanarkshire).
10	Darlees Rig	306515, 653133	Represents views experienced by recreational receptors at the summit of Darlees Rig. This viewpoint represents views from the Pentland Hills SLA (South Lanarkshire).
11	A70 north of Crosswoodhill	304650, 657147	Represents views experienced by road users and residential receptors along the A70 near Crosswoodhill. This viewpoint represents views from the Pentland Hills SLA (West Lothian).
12	Harperrig Reservoir	309840, 660758	Represents views experienced by recreational receptors at Harperrig Reservoir. This viewpoint represents views from the Pentland Hills SLA (West Lothian).
13	Cross Borders Drove Road/ Thieves Road	310254, 662591	Represents views experienced by recreational receptors travelling along the Cross Borders Drove Road/ Thieves Road to the north-west of the Pentlands. This viewpoint represents views from the Pentland Hills SLA (West Lothian).
14	Heaughead Road	313352, 664589	Represents views experienced by road users near Hayloft Barn.
15	Dalmahoy Hill	313555, 666948	Represents views experienced by recreational receptors at the summit of Dalmahoy Hill.

Siting and Design Considerations

4.32 To date, the Proposed Route has been designed with consideration of the Holford Rules. The Proposed Route has sought to avoid the highest and most popular sections of the Pentland Hills, by routeing across the lower hills in the south-west. This is in line with Holford Rule 1 which seeks to avoid the major areas of highest amenity. Whilst avoiding the highest amenity areas as far as practicable, the Proposed Route represents one of the most direct lines between Cloich Forest Wind Farm and Currie Substation, in line with Holford Rule 3, which sets out that “*other things being equal, choose the most direct line, with no sharp changes of direction*”. To

avoid the Pentland Hills completely would require a much longer route.

4.33 In considering the Proposed Route, allowance has been made to give flexibility to route the OHL around residential properties. A 100 m distance from properties has been maintained, and finalisation of the alignment will seek to avoid encroaching into this zone, to minimise the likely effects experienced by residential receptors.

Potential Significant Effects

4.34 The selection of receptors to include in the assessment is based on the requirement for EIA to consider the likely

significant effects. Effects that are not likely to be significant do not require assessment under the EIA Regulations.

4.35 The assessment will identify landscape and visual effects separately, as detailed in the approach to the assessment set out above and will set out any implications of these effects on designated landscapes. The assessment will focus on the identification and, wherever appropriate, the mitigation of potential significant landscape and visual effects.

4.36 The primary form of mitigation for landscape and visual effects arising from OHL development is through iterative design of the route, with reference to key views, viewpoints and receptors. Design evolution will be set out in detail in the design strategy that will form part of the EIA Report and will demonstrate how the design of the Proposed Development has sought to avoid, reduce or minimise landscape and visual effects wherever feasible.

4.37 Further mitigation will be considered where relevant and appropriate, and the residual effects taking account of the implementation of this mitigation will be presented in the assessment.

Potential Effects Scoped Out of Assessment

4.38 Based on the baseline conditions and distance from the Proposed Development, it is proposed that the following are scoped out:

- Views experienced by visual receptors beyond the 1 km study area;
- Effects on LCTs beyond the 1 km study area, and any LCTs within 1 km with limited theoretical visibility; and,
- Effects on SLAs beyond the 1 km study area.

Approach to Mitigation

4.39 The primary form of mitigation for landscape and visual effects, including cumulative effects, is through iterative design of the route, as seen from key viewpoints and receptors. Design development will be set out in detail in the design strategy that will form part of the EIA Report.

Consultee List

4.40 It is proposed that the following stakeholders will be consulted in relation to the assessment:

- Scottish Borders Council;
- South Lanarkshire Council;
- West Lothian Council;
- City of Edinburgh Council; and,
- NatureScot.

Questions for Consultees

Q4.1 Can consultees confirm that GLVIA3 is an appropriate methodological starting point for the LVIA assessment? Are there any comments on the overall methodology proposed to assess effects on landscape and visual receptors, including cumulative effects?

Q4.2 Are there other sources of information which should inform the baseline and assessment of potential effects on landscape character and designated landscapes?

Q4.3 Are there any comments on the landscape character types which are to be scoped in and scoped out of the assessment?

Q4.4 Are there any comments on the designated landscapes which are to be scoped in and scoped out of the assessment? As the Regional Park is encompassed within the SLA, can consultees confirm that it is acceptable to consider the landscape and visual aspects of this within the assessment for the SLA? The visitor/tourism aspect of this will be considered elsewhere.

Q4.5: Are there any comments on the proposed list of assessment viewpoint locations listed in Table 4.1?

Q4.6: Are there any further landscape or visual receptors to be considered within the assessment (i.e. where it is expected that significant effects may occur)?

Q4.7: Can consultees confirm that an RVAA will not be required, given the proposed size of the offset from any residential property?

Chapter 5

Ecology and Biodiversity

Introduction

5.1 This chapter sets out the proposed approach to the assessment of likely significant effects on ecology arising from the Proposed Development. Ornithology is considered separately within **Chapter 6** below.

5.2 The assessment of effects on ecology will be undertaken by suitably qualified and experienced ecologists.

Proposed Study Area, Surveys and Assessment Methodologies

5.3 The Study Area for the Proposed Development is defined as the Proposed Route plus the following buffer zones, in line with species specific best practice:

- Desk Study
 - Statutory designated sites for nature conservation³ (excluding those designated for ornithological features); 5 km.
 - Non-statutory designated sites for nature conservation⁴; 1 km.
 - Records of extant protected and notable species⁵ (records from 2004 onwards); 1 km.
- Field Studies
 - Habitats of conservation concern⁶; up to 250 m from the Proposed Development; and
 - Protected and notable species; up to 200 m from the Proposed Development.

5.4 The ecological assessment will be carried out in cognisance of relevant legislation and standards, as well as having regard for the following guidance:

- National Planning Framework 4 (NPF4)⁷;

³ The following designated areas are considered where non-ornithological qualifying features are present: Special Areas of Conservation (SAC), Ramsar Convention Wetlands of International Importance designated under the Ramsar Convention (Ramsar), and Sites of Special Scientific Interest (SSSI), National and Local Nature Reserves (NNR and LNR respectively).

⁴ These include woodlands listed on the Ancient Woodland Inventory (AWI) and Local Nature Conservation Sites (LNCS).

⁵ Protected species refers to those offered legal protection under the Wildlife and Countryside Act 1981 (as amended) and those listed on the Scottish Biodiversity List and / or Local Biodiversity Action Plans.

⁶ Habitats of conservation concern are those which are Annex 1 habitats, habitats listed on the Scottish Biodiversity List, Habitats on the Local Biodiversity Action Plan, Groundwater Dependent Terrestrial Ecosystems and Priority Peatland Habitats.

⁷ Scottish Government (2023) Scottish Planning Policy. Available at: <https://www.gov.scot/publications/scottish-planning-policy/pages/2/> [Accessed October 2024]

- Chartered Institute of Ecology and Environmental Management (CIEEM), Guidelines for Ecological Impact Assessment in the UK and Ireland; Terrestrial, Freshwater, Coastal and Marine⁸;
- NatureScot standing advice and guidance series for Planning and Development⁹;
- NatureScot Species Advice Notes for Developers series¹⁰;
- CIEEM's species survey guidelines¹¹;
- NatureScot's Development in Peat guidance¹²; and
- Scottish Environment Protection Agency (SEPA)'s Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (GWDTEs)¹³.

Desk Study

5.5 A desk study will be undertaken to inform field surveys and identify features of potential ecological importance within the Study Area. The desk study will include searches of the following data sources to identify existing records of

designated sites, habitats of conservation concern and protected and notable species:

- NatureScot SiteLink Website¹⁴;
- Scotland's Environment Mapping Service¹⁵;
- City of Edinburgh Council Local Development Plan (LDP)¹⁶;
- Midlothian Council LDP¹⁷;
- West Lothian Council LDP¹⁸;
- South Lanarkshire Council LDP¹⁹;
- Scottish Borders Council Adopted LDP²⁰;
- The Wildlife Information Centre (TWIC)
- National Biodiversity Network Atlas Scotland under a CC-BY licence²¹ for areas not covered by TWIC;
- Ancient Woodland Inventory²²; and
- The Carbon and Peatland Map²³.

Field Surveys

5.6 An Extended Phase 1 Habitat survey of the Site will be conducted in line with best practice guidelines²⁴ and to record broad habitat types and their suitability to support protected

⁸ Chartered Institute of Ecology and Environmental Management (CIEEM) (2018), Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Marine. Available at: <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf> [Accessed October 2024]

⁹ NatureScot. Planning and Development: Standing Advice and Guidance Documents. Available [online] at: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-standing-advice-and-guidance-documents> [Accessed October 2024]

¹⁰ NatureScot. Planning and Development – Protected Species Available at <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-protected-species> [Accessed October 2024]

¹¹ CIEEM (May 2021) Good Practice Guidance for Habitats and Species. Available [online] at: <https://cieem.net/resource/good-practice-guidance-for-habitats-and-species/> [Accessed October 2024]

¹² NatureScot (2023) Advising on peatland, carbon-rich soils and priority peatland habitats in development management. Available online: <https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management> Accessed October 2024.

¹³ SEPA Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and GWDTE. Available at: [lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions.pdf](https://www.sepa.org.uk/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions.pdf) (sepa.org.uk) [Accessed October 2024]

¹⁴ NatureScot SiteLink. Available [online] at: <https://sitelink.nature.scot/home> [Accessed October 2024]

¹⁵ Scottish Environment Protection Agency (n.d.) Scotland's Environment Map. Available [online] at:

<https://map.environment.gov.scot/sewebmap/> [Accessed October 2024]

¹⁶ City of Edinburgh (2014-2016) Edinburgh Local Development Plan Environmental Reports. Available online: <https://www.edinburgh.gov.uk/downloads/download/13859/local-development-plan-environmental-reports> Accessed October 2024.

¹⁷ Midlothian Council (2017) Midlothian Local Development Plan. Available online: https://www.midlothian.gov.uk/downloads/download/885/midlothian_local_development_plan Accessed October 2024

¹⁸ West Lothian Council (2018) West Lothian Local Development Plan (LDP 1). Available online

<https://www.westlothian.gov.uk/article/33793/Local-Development-Plan-LDP-1>. Accessed October 2024.

¹⁹ South Lanarkshire (2020) South Lanarkshire Local Development Plan 2. Available online: <https://www.southlanarkshire.gov.uk/developmentplan2>. Accessed October 2024.

²⁰ Scottish Borders (2024) Scottish Borders Local Development Plan (LDP2). Available online: <https://www.scotborders.gov.uk/plans-guidance/local-development-plan>. Accessed October 2024.

²¹ NBN Atlas Scotland. Available [online] at: www.nbnatlas.org. [Accessed October 2024]

²² Ancient Woodland Inventory. Available [online] at: <https://map.environment.gov.scot/sewebmap/> [Accessed October 2024]

²³ Scotland's Soils (2024) Carbon and Peatland Map. Available online: https://map.environment.gov.scot/Soil_maps/?layer=10 [Accessed October 2024]

²⁴ JNCC (2016) Handbook for Phase 1 habitat survey; A technique for environmental audit. Available online: <https://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14df2a/Handbook-Phase1-HabitatSurvey-Revised-2016.pdf>. [Accessed October 2024]

species. The survey will include a National Vegetation Classification (NVC)²⁵ survey of all habitats of conservation concern⁶ to categorise the plant community or communities present.

5.7 Protected species surveys, are expected to be undertaken for the following receptors:

- Otter *Lutra lutra*;
- Badger *Meles meles*;
- Mountain hare *Lepus timidus*;
- Pine marten *Martes martes*;
- Red squirrel *Sciurus vulgaris*²⁶; and
- Water vole *Arvicola amphibius*²⁷.

Assessment Approach

5.8 Impact assessments presented within the EIA Report will be undertaken in accordance with CIEEM guidance⁸. The approach to assessment will take account of existing guidance and published scientific literature, together with professional judgement and experience of undertaking EIA on similar developments.

5.9 The EIA Report will provide a detailed description of the existing baseline for terrestrial ecology within the Study Area, along with the assessment of the potential effects of the Proposed Development on the identified important ecological features, taking account of good practice measures to avoid and reduce significant impact where appropriate.

5.10 Impacts will be considered during the construction phase and assessed on the basis that a clearly defined range of avoidance and standard good practice measures are implemented, including a Species Protection Plan (SPP) and the presence of an Environmental Clerk of Works (ECOW) during construction as appropriate.

5.11 The assessment within the EIA Report will only assess in detail impacts upon important terrestrial ecological features i.e. those that are considered important and likely significantly affected by the Proposed Development. A detailed assessment of features that are sufficiently widespread,

unthreatened and resilient to project impacts will not be undertaken and justification for 'scoping out' these features will be provided within the EIA Report.

5.12 The cumulative effects of the Proposed Development will be assessed in isolation and in combination with other relevant large-scale developments within 5 km of the Proposed Development.

Existing Conditions

5.13 Whilst a desk-based review of designated sites has been conducted to inform this Scoping Report, no field surveys have been undertaken as yet, nor further desk-based assessments.

5.14 A review of statutory and non-statutory sites designated for nature conservation purposes was undertaken to inform selection of the Proposed Route, results of which are listed in **Table 5.1**.

5.15 Local Nature Conservation Sites (LNCS), include sites designated for their geological and / or biological attributes. Only those designated for their biological attributes, or for unknown reasons are included in **Table 5.1**. Sites designated for their biological attributes may be called Local Wildlife Sites (LWS) or Local Biodiversity Sites (LBS) instead of LNCS to differentiate from Local Geological Sites. Although there is a standardised selection criteria for LNCS²⁸, the exact reasons for designating a particular site are often unknown due to the passage of time and changes in council boundaries, amongst other reasons. Scottish Borders Council reviewed their Local Biodiversity Sites in 2020 and formally kept or adopted a total of 188 sites but noted that a number of proposed / provisional sites have not yet been subject to assessment. Although the City of Edinburgh and West Lothian Councils do not appear to have undertaken a similar assessment and published their findings in the same way as Scottish Borders Council, meaning less information is available online, the same logic has been applied in that it is assumed that potential LNCS / LWS / LBS may be formally adopted in the near future. Thus, all proposed and provisional sites have been included in **Table 5.1**.

²⁵ Rodwell *et al.* National Vegetation Classification (vols 1 – 5). 1991 – 2002.

²⁶ Gurnell, J & Pepper, H (1994) Red Squirrel Conservation: Field Study Methods. Research Information Note 255. Forestry Commission, Edinburgh. Available [online] at: Red squirrel conservation: field study methods (windows.net) [Accessed 30/08/23]

²⁷ Strachan, R. & Moorhouse, T. (2006) Water Vole Conservation Handbook 2nd Edition. Wildlife Conservation Research Unit, University of Oxford, Oxford.

²⁸ NatureScot (then Scottish Natural Heritage) (2006) Guidance on Establishing and Managing Local Nature Conservation Site Systems in Scotland. Available online: <https://digital.nls.uk/pubs/e-monographs/2020/216636018.23.pdf> [Accessed October 2024].

Table 5.1 Designated Sites

Site Name	Designation	Approximate Distance (at nearest point) and Direction to Proposed Route	Designated Features
Statutory Designated Sites (within 5 km)			
River Tweed	Special Area of Conservation (SAC)	Within the Proposed Route	Otter Atlantic salmon River lamprey Brook lamprey Sea lamprey Rivers with floating vegetation often dominated by water-crowfoot
Craigengar	SAC	1.1 km east	Dry heaths Marsh saxifrage Species-rich grassland with mat-grass in upland areas
	Site of Special Scientific Interest (SSSI)	420 m east	Blanket bog Spring-head, rill and flush Marsh saxifrage Subalpine dry heath
Westwater	Ramsar, Special Protection Area and SSSI	2 km northeast	Non-breeding pink-footed goose Non-breeding waterfowl assemblage
Cobbinshaw Moss	SSSI	50 m west	Intermediate bog (blanket)
Dolphinton – West Linton Fens and Grassland	SSSI	four parts; two approximately 250 m and 370 m south and two approximately 370 m north	Bryophyte assemblage Lowland calcareous grassland Valley fen
Cobbinshaw Reservoir	SSSI	2.3 km west	Open water transition fen
Whim Bog	SSSI	2.4 km north	Raised bog
Balerno Common	SSSI	2.6 km southeast	Bryophyte assemblage Mesotrophic loch Raised bog Transition open fen
Linhouse Valley	SSSI	2.7 km northwest	Lowland acid grassland Lowland neutral grassland

Site Name	Designation	Approximate Distance (at nearest point) and Direction to Proposed Route	Designated Features
			Upland mixed ash woodland Valley fen
Auchencorth Moss	SSSI	3.4 km north	Raised bog
Hermand Birchwood	SSSI	4.0 km northwest	Upland birch woodland
Calderwood	SSSI	4.1 km northwest	Upland oak woodland Valley fen
Harperrig Reservoir	Local Nature Reserve (LNR)	Within the Proposed Route	A 96-hectare reservoir owned by City of Edinburgh and managed as part of the Water of Leith Flood Prevention Scheme ²⁹ . Intensively grazed neutral grassland dominates the vegetation structure around the reservoir, with large areas of marshy grassland. Immediately to the west of the reservoir is a five hectare wildlife refuge largely separated from the main body of Harperrig Reservoir by a stone built causeway. The wildlife refuge has a range of habitats including marsh and swamp and commercial plantations of Scots pine and mixed mature woodland southwest of the river. Harperrig Reservoir is an important habitat as it supports a variety of plants, such as Floating Sweet Grass (<i>Glyceria fluitans</i>) and Bog Pondweed (<i>Potamogeton polygonifolius</i>) with rushes and sedges in the drier areas and animals, such as otters and a range of other protected and notable species.
Non-statutory designated sites (within 1 km)			
Dalmahoy Hill / Kaimess Hill / Ravelrig Quarry	Local Nature Conservation Site (LNCS), City of Edinburgh	Within the Proposed Route	Unknown ³⁰

²⁹ West Lothian Council (2009) Harperrig Local Nature Reserve Management Plan

³⁰ Information on the reason(s) for designation are not provided by the relevant council. This information will instead be sought through The Wildlife Information Centre and consultation.

Site Name	Designation	Approximate Distance (at nearest point) and Direction to Proposed Route	Designated Features
Harelaw Reservoir / Water of Leith / Bavelow Burn / Black Springs / Threipmuir and Harlaw Reservoirs	LNCS, City of Edinburgh	Within the Proposed Route	Unknown ³⁰
Crosswood Burn	LNCS, West Lothian	Within the Proposed Route	Unknown ³⁰
Garvald Burn	Proposed Local Biodiversity Site (pLBS), Scottish Borders	Within the Proposed Route	Unknown ³⁰
Ingraston Moss	Local Biodiversity Site (LBS) to be adopted, Scottish Borders	Within the Proposed Route	Semi-improved grassland and marsh, with breeding Lapwing and a nationally scarce moss ³¹ .
Longstruther Burn	Wildlife Site, Scottish Borders	Within the Proposed Route	Bursides, including species-rich marshy grassland and base-rich flushes, with locally rare plants and Biodiversity Action Plan Priority fishes ³¹ .
Bog Wood	pLBS, Scottish Borders	Within the Proposed Route	Unknown ³⁰
Spital Haugh	pLBS, Scottish Borders	Within the Proposed Route	Unknown ³⁰
Riccarton Estate	LNCS, City of Edinburgh	420 m north	Unknown ³⁰
Water of Leith – Inveroe to Glenbrook & Cock Burn	LNCS, City of Edinburgh	210 m east	Unknown ³⁰
River Almond / Gogar Burn / Union Canal	LNCS, City of Edinburgh	575 m northwest	Unknown ³⁰
Kirknewton Estate	LNCS, West Lothian	830 m northwest	Unknown ³⁰
Crosswood Reservoir	LNCS, West Lothian	70 m east	Unknown ³⁰
Middlemuir	LNCS, West Lothian	160 m east	Unknown ³⁰
Blyth Muir Moss and Blyth Dean	LBS to be adopted, Scottish Borders	850 m south	Wet modified bog, marshy grassland and swamp with a small but species-rich dene woodland to the south. The site hosts some locally rare plants and mosses as well as protected mammals. The area may be significant for wintering wildfowl.
White Moss	LBS to be adopted, Scottish Borders	130 m north	Raised sphagnum bog with nationally rare bryophyte and

³¹ Scottish Borders Council (2020) Local Biodiversity Sites Technical Note 4. Available online: https://www.scotborders.gov.uk/downloads/file/7554/local_biodiversity_technical_note.pdf. [Accessed October 2024]

Site Name	Designation	Approximate Distance (at nearest point) and Direction to Proposed Route	Designated Features
			priority butterfly and reptile species.
Lyne Water / Broomlee	pLBS, Scottish Borders	500 m north	Unknown ³⁰
Pond Knowe - Macabiehill	pLBS, Scottish Borders	280 north	Unknown ³⁰
Unnamed woodland Woodland ID: 34,203	Ancient Woodland	Within the Proposed Route	Long-established plantation origin (LEPO)
Unnamed woodland Woodland ID: 34,218	Ancient Woodland	Within the Proposed Route	Long-established plantation origin (LEPO)
Unnamed woodland Woodland ID: 34,214	Ancient Woodland	Within the Proposed Route	Long-established plantation origin (LEPO)
Shear Burn Plantation Woodland ID: 33,419	Ancient Woodland	Within the Proposed Route	Long-established plantation origin (LEPO)
Little Moss / Sheep House Plantation Woodland ID: 33,423	Ancient Woodland	Within the Proposed Route	Long-established plantation origin (LEPO)
22 other woodland blocks of LEPO	Ancient Woodland	Within 1 km of the Proposed Route	Long-established plantation origin (LEPO)
3 other woodland blocks of AWI	Ancient Woodland	Within 1 km of the Proposed Route	Ancient woodland of semi-natural origin

Siting and Design Considerations

5.16 Ecological baseline data collected during the desk and field surveys will inform the design process. There will be a particular focus on avoiding direct and indirect impacts on the sites designated for nature conservation purposes described in **Table 5.1**, and significant impacts on protected and notable species, and habitats of conservation concern.

5.17 To comply with nature conservation legislation, suitable buffers will be included around habitats of conservation concern, breeding or resting / sheltering locations for protected and notable species, as defined by best practice guidelines.

Potential Significant Effects

Potential Effects Scoped In to Assessment

5.18 The assessment will consider the following potential effects:

- Effects on statutory and non-statutory sites designated for nature conservation purposes as a result of the construction phase of the Proposed Development;
- Effects on habitats of conservation concern⁶ arising from permanent loss and/or fragmentation during the construction phase of the Proposed Development; and
- Effects on protected and notable species within the Study Area arising from disturbance, habitat fragmentation and permanent habitat loss during the construction phase of the Proposed Development.

Potential Effects Scoped Out of Assessment

5.19 The following effects are proposed to be scoped out of the assessment;

- Direct and indirect effects during operation as a result of the operation of the Proposed Development on the basis that there will be minimal ongoing disturbance following construction.

- Direct and indirect effects of decommissioning given that it is not certain when this will be, nor whether the Proposed Development will be re-equipped or refurbished.

5.20 While the effects above are scoped out because they are not likely to be significant in EIA terms, the need to ensure compliance with international and national nature conservation legislation still applies. The presence and potential presence of protected species within the Study Area will require to be established and appropriate avoidance, mitigation and enhancement measures implemented accordingly.

Approach to Mitigation

5.21 The adoption of embedded mitigation measures to avoid or minimise adverse impacts upon ecological features resulting from the Proposed Development will continue to be part of the design process. Ecological baseline data will be used to inform the iterative design process.

5.22 Full details of the scheme's design evolution and embedded mitigation measures in relation to ecology will be detailed within the EIA Report. This will include the specification of any species-specific buffers as necessary.

5.23 Where effects are assessed as being significant, within the context of the EIA regulations, mitigation measures will be identified and agreed in consultation with relevant stakeholders. All mitigation measures will be developed on the basis of robust science, drawing on current and emerging good practice, and its likely efficacy and success will be considered.

5.24 The following good practice mitigation measures are assumed to be in place for the purposes of the assessment:

- Careful timing of activities and other construction measures such as ramping of trenches to avoid effects on protected species.
- The production of Species Protection Plans (SPPs) where appropriate, which may include the rigors of the species licencing process. The species licencing process requires detailed and targeted mitigation, and if necessary, biodiversity compensation.
- The development and application of a Construction Environment Management Plan (CEMP), which will set out guidance on compliance with nature conservation legislation and policy.
- Production of a Pollution Prevention Plan (PPP) and adherence to Guidelines on Pollution Prevention (GPPs), which will significantly reduce the likelihood and severity of pollution events and associated impact to water ecology.

- Update pre-construction protected species surveys to be completed to confirm the status of protected species prior to works commencing.
- The appointment of an ECoW to advise, monitor and report on compliance with relevant legislation, policy and project specific mitigation during construction.

Approach to Enhancement

5.25 SPEN is committed to delivering 'No Net Loss' and has adopted a Biodiversity Net Gain metric to demonstrate this. The metric is reported separately.

5.26 A Biodiversity Enhancement Plan (BEP) will be developed and implemented to provide meaningful habitat enhancement appropriate to the scale of the Proposed Development. The key objective of the BEP will be to deliver SPEN's 'No Net Loss' objective for the Proposed Development, which will be measured by the use of a Biodiversity Net Gain metric to demonstrate this. The BEP will seek to improve habitat networks.

Consultee List

5.27 It is proposed that the following stakeholders will be consulted in relation to the assessment:

- NatureScot;
- City of Edinburgh Council;
- Midlothian Council;
- West Lothian Council;
- South Lanarkshire Council; and
- Scottish Borders Council.

Questions for Consultees

Q5.1 Do consultees agree that the scope of the desk studies and ecological baseline surveys proposed are sufficient and proportionate to inform the design and assessment of the Proposed Development?

Q5.2 Do consultees agree with the assessment method, including effects scoped in and effects scoped out?

Q5.3 Do consultees hold any datasets that could be made available to inform the assessment?

Chapter 6

Ornithology

Introduction

6.1 This chapter sets out the proposed approach to the assessment of likely significant effects on ornithology arising from the Proposed Development.

6.2 The assessment of effects on ornithology will be undertaken by suitably qualified staff at LUC.

Proposed Surveys and Assessment Methodologies

6.3 The ornithological receptors that will be considered for assessment comprise:

- Statutory designated sites, namely Special Protection Areas (SPAs) and SSSIs where the qualifying features of the site include ornithological interests;
- The avian species listed as qualifying features of the above sites; and
- Other species deemed to be of High or Moderate Nature Conservation Importance, due to their inclusion on Annex I of the EC Birds Directive (Annex 1 species), Schedule 1 of the Wildlife and Countryside Act (1981), as amended (Schedule 1 species) and occurrence on the Red List of UK Birds of Conservation Concern³² (Red-list species).

6.4 The following guidance has been consulted:

- NatureScot guidance (SNH 2016) on assessment and mitigation of impacts of power lines on birds³³; and
- NatureScot guidance (SNH 2017) on bird survey methods at onshore wind farms³⁴. A desk study, collated information on the likely occurrence of key bird species and compiled information on designated sites in the vicinity of the Proposed Development.

6.5 Field studies undertaken to date have included the following:

³² Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747.

³³ SNH. (2016) Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. July 2016.

³⁴ SNH (2017) Recommended bird survey methods to inform impact assessment of onshore wind farms. March 2017, Version 2.

- Flight activity surveys for the Proposed Route, comprising 36 hours of watches from each of the three vantage points (VPs) overlooking areas of upland habitat in which the Proposed Development alignment may cross over, in the breeding season (April to August) in 2024.
- Flight activity surveys for the Proposed Route, comprising 36 hours of watches from each of the five VPs are ongoing (at the time of writing) for the non-breeding season (September 2024 to March 2025); the period in which wintering geese are in the area.

6.6 Field studies which are planned to be conducted include the following:

- Breeding bird surveys comprising four visits to habitats within 500 m of the Proposed Route between April and July 2025;
- Raptor and owl surveys to locate any potential nest or roosting sites for Schedule 1/Annex 1 species.

6.7 Impact assessments presented within the EIA Report will be undertaken in accordance with relevant NatureScot guidance (SNH, 2018)³⁵ and based on CIEEM guidance (2019)³⁶. In addition, assessments will take account of published scientific literature in relation to avian ecology, the interactions between birds and OHLs, and alongside professional judgement and experience of OHL EIA.

6.8 Effects on species' populations will be evaluated with reference to an appropriate regional or national spatial unit. Regional populations will be spatially defined, and effects evaluated with reference to the NatureScot (SNH) Natural Heritage Zone (NHZ) containing the largest part of the Proposed Development in this case both NHZ 20 – Border Hills.

6.9 The identification and characterisation of effects on ornithological receptors will be undertaken in accordance with the CIEEM guidelines with reference to effect magnitude (e.g. proportion of a population affected), extent, duration and reversibility as appropriate. Effect magnitude will be considered alongside the likelihood of its occurrence to help make a judgement on the significance of effects.

6.10 The assessment within the EIA Report will only assess in detail effects upon important ornithological receptors present, and where these receptors are known to be susceptible to the effects likely to arise from the Proposed Development. This will include species defined as having high or moderate nature conservation importance, where individuals of these species make substantial or meaningful

use of habitats or airspace in the area. A detailed assessment of species that are sufficiently widespread, unthreatened and resilient to the potential effects arising from OHL development will not be undertaken and justification for 'scoping out' these features will be provided.

Study Area

6.11 The study area for ornithology is defined with reference to the infrastructure of the Proposed Route, plus the following buffer areas, in line with best practice guidance:

Desk Study

- International and national designated sites within 10 km of the Proposed Route where there is likely ecological connectivity between the Proposed Development and the ornithological qualifying features.

Field Studies

- Habitats within at least 500 m of the Proposed Route.
- Airspace above the Proposed Route, and within flight corridors between designated sites and key foraging areas.

Existing Conditions

6.12 Baseline ornithological conditions to inform the design and assessment of the Proposed Development will be established through desk-based and field studies.

6.13 The following international designated sites are within 10 km of the Proposed Route:

- Westwater Reservoir SPA/RAMSAR is approximately 2 km east-northeast of the Proposed Route at its closest point and is designated for wintering (non-breeding) pink-footed geese.
- Firth of Forth SPA/RAMSAR is approximately 8.5 km north of the Proposed Route at its closest point and is designated for several non-breeding species of waders including, but not limited to, bar-tailed godwit, curlew, dunlin, and knot, and its wintering (non-breeding) waterfowl assemblage.
- Gladhouse Reservoir SPA/RAMSAR is approximately 9 km east-northeast of the Proposed Route at its closest point and is designated for wintering (non-breeding) pink-footed geese.

³⁵ SNH (2018) Assessing significance of impacts from onshore wind farm outwith designated areas. Guidance. Version

³⁶ <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.1.pdf>.

6.14 The following national designated sites with ornithological features are within 10 km of the Proposed Route:

- Westwater Reservoir SSSI is approximately 2 km east-northeast of the Proposed Route at its closest point and is designated for wintering (non-breeding) pink-footed geese.
- Firth of Forth SSSI is approximately 8.5 km north of the Proposed Route at its closest point and is designated for several non-breeding species of waders and wildfowl including, but not limited to, bar-tailed godwit, common scoter, curlew, dunlin, golden plover, red-breasted merganser, and oystercatcher, as well as breeding eider.
- Gladhouse Reservoir SSSI is approximately 9 km east-northeast of the Proposed Route at its closest point and is designated for wintering (non-breeding) pink-footed geese.

6.15 Field surveys undertaken to date have focussed on the collection of flight activity information. Key species recorded in the breeding season included short-eared owl, peregrine falcon, red kite, curlew, and greylag goose. Occasional flights were recorded by golden eagle, goshawk, and hen harrier. Curlew probably bred within 500 m of the Proposed Route, and short-eared owl may have bred within 2 km of the Proposed Route. Golden plover may have bred within 500 m of the Proposed Route but were only recorded incidentally.

6.16 Key species recorded in the non-breeding season include pink-footed goose, goshawk, hen harrier, and peregrine falcon. A possible hen harrier roost is within 500 m of the Proposed Route.

6.17 Full details of the existing ornithological conditions will be presented within the EIA Report.

Siting and Design Considerations

6.18 To avoid or minimise disturbance effects and to comply with relevant legislation, suitable buffers will be included around breeding or roosting locations for protected or notable species, as defined by best practice³⁷.

Potential Significant Effects

6.19 The Proposed Development has the potential to cause significant effects. These may arise due to:

- Indirect habitat loss arising from disturbance if birds are displaced from nesting, foraging or roosting habitats during construction;

- Mortality from collision with the proposed new OHL; and
- Cumulative effects arising from any of the above combined with effects from other proposed or existing developments in the same geographic area (NHZ 16&17) which act on the same regional bird populations.

Potential effects scoped out of assessment

6.20 Effects arising from temporary and permanent habitat loss resulting from the installation of infrastructure associated with the Proposed Development are proposed to be scoped out, as the scale of loss will be insubstantial relative to the home range requirements of bird species of nature conservation importance.

6.21 Effects of operational disturbance are proposed to be scoped out on the basis that maintenance visits will be infrequent, comprising limited visits on foot or in vehicles. These visits, and the presence of the OHL and towers, are not likely to lead to significant effects on regional bird populations.

6.22 Effects of electrocution are proposed to be scoped out. Electrocution on OHLs is possible either where a bird can touch a conductor while it is perched on an earthed tower, touch a conductor and the earth wire simultaneously or touch two conductor wires simultaneously. The design and configuration of the wires and towers of modern OHLs means that none of these scenarios are possible as the gaps between the conductors and the perch points would be greater than the wingspan of perching bird species likely to be encountered in this area.

Approach to Mitigation

6.23 The following embedded mitigation measures are assumed to be in place for the purposes of the assessment of the Proposed Development:

- A Bird Protection Plan (BPP) which will ensure legislative compliance and accordance with current good practice guidance. This will be incorporated into any Construction Environmental Management Plan (CEMP) and overseen by an Environmental Clerk of Works (ECoW).
- The assumption is that the clearance of vegetation likely to support breeding birds will aim to be avoided during the bird breeding season (March to August inclusive). Where this would be required, an ECoW will undertake a disturbance risk assessment as part of the BPP and will supervise the work to ensure that disturbance is avoided or minimised. Where active nests are discovered, suitable no disturbance buffers will be maintained until

³⁷ NatureScot (2022) Disturbance Distances in Selected Scottish Bird Species – NatureScot Guidance.

chicks have fledged. Where possible, scheduling construction and maintenance activities outside certain periods will be proposed for seasonally sensitive species

6.24 Where significant effects are identified, or where the assessment identifies sections of the proposed OHL that may give rise to elevated collision mortality, additional mitigation measures may be proposed to offset identified effects, including marking the proposed OHL to make it more visible to birds.

Consultee List

6.25 It is proposed that the following stakeholders will be consulted in relation to the assessment:

- NatureScot; and
- RSPB Scotland

Questions for Consultees

Q6.1: Do consultees agree that the range of desk studies and ornithological surveys being proposed are sufficient and proportionate to inform the design and assessment of the Proposed Development?

Q6.2: Do consultees agree with the assessment approach proposed, including effects scoped in/out of detailed assessment?

Chapter 7

Archaeology and Cultural Heritage

Introduction

7.1 This chapter sets out the proposed approach to the assessment of potentially significant effects on cultural heritage assets as a result of the Proposed Development, including physical effects, setting change and cumulative effects. This chapter has been prepared by LUC's Historic Environment team.

7.2 In this context, cultural heritage is held to be "the physical evidence for human activity that connects people with place, linked with the associations we can see, feel and understand" (Historic Environment Scotland (HES) 2014; 2019).³⁸ It comprises tangible, physical assets including: historic buildings and structures; archaeological assets; the remains of past environments shaped by human action; gardens and designed landscapes; historic landscapes and townscapes; and other sites, features or places in the landscape that have the potential to provide information on past human activity. It also incorporates non-tangible associations of place with events, such as historical battlefields, or with historical figures and folklore.

Terminology

National Planning Framework 4 (NPF4) uses a mix of terms to describe the components of the historic environment, including 'historic environment asset', 'historic asset' and 'historic places'. These are synonymous with the widely used and understood '**heritage asset**' that has been adopted for this chapter.

Similarly, Policy 7 of NPF4 applies terminology from various pieces of relevant legislation describing the importance of heritage assets. For the purposes of this chapter, '**cultural significance**', as defined in NPF4 glossary and in the Historic Environment Policy for Scotland (HEPS) is used and should be assumed to be synonymous with 'special architectural and historic interest', 'significance' and 'outstanding universal value' (for World Heritage Sites).

7.3 Designated heritage assets can be categorised as world heritage sites, historic marine and protected areas, scheduled monuments, listed buildings, conservation areas, Inventory-

³⁸ Historic Environment Scotland (2014) The Historic Environment Strategy for Scotland <https://www.gov.scot/publications/place-time->

[historic-environment-strategy-scotland/pages/3/](https://www.gov.scot/publications/place-time-historic-environment-strategy-scotland/pages/3/) (accessed 28/10/2024).

listed historic gardens and designated landscapes, and Inventory-listed historic battlefields.

7.4 Non-designated assets may be recorded in the National Record of the Historic Environment ('Canmore') and/or Historic Environment Records (HER), whilst many other assets are currently unrecorded. Heritage assets may also derive some of that interest from their 'setting'.

7.5 NPF4 defines the setting of historic assets as "[...] *the way the surroundings of a heritage asset or place contribute to how it is understood, appreciated and experienced. Setting is more than the immediate surroundings of a site or building and may be related to the function or use of a place, or how it was intended to fit into the landscape or townscape, the view from it or how it is seen from areas round about, or areas that are important to the protection of the place, site or building*".³⁹

7.6 For the purposes of EIA, cultural heritage receptors comprise assets with both statutory and non-statutory designations, and other non-designated assets as described in NPF4 and HEPS.

7.7 This chapter sets out the proposed approach to assessing the Proposed Development's potential effects on cultural heritage assets. The assessment will consider the potential for direct construction effects on features of archaeological and cultural heritage interest arising from construction activities, and operational effects (including cumulatively) upon assets as a result of change in their setting.

7.8 The assessment of effects on cultural heritage will be undertaken by suitably qualified and experienced staff at LUC.

Study Area

7.9 The following study areas are proposed:

- **Construction corridor:** the area comprising the proposed construction footprint and an appropriate micro-siting buffer will be used to assess the potential for physical effects and effects related to setting change for all heritage assets (i.e. designated and non-designated) located within it.
- **Setting Study Area:** the area within a maximum of 2 km from the Proposed Development's alignment will be used to inform the understanding of its archaeological potential of the area. This study area will also be used to assess the potential for effects arising from setting change to designated

heritage assets lying within the indicative Zone of Theoretical Visibility (ZTV) of the Proposed Development.

7.10 In addition, designated heritage assets at greater distance would be screened, and any asset with particular susceptibility to effects due to setting change would be included in the baseline for the assessment.

7.11 For the purposes of data analysis supporting the route options appraisal process, an outer study area of 3 km from the Preferred Route was used to ensure a robust baseline was collected to facilitate assessment against the potential use of L7 steel transmission towers ('pylons'). However, the Proposed Development will use wood poles and will not be as tall. The asset counts provided below relate to this larger 3 km precautionary study area for continuity but will reduce when the 2 km study area is applied for the EIA; with the use of a ZTV further tightening the scope.

Desk-based study

7.12 A desk-based study will be undertaken in line with the Chartered Institute for Archaeology (CifA)'s guidance⁴⁰, to determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within the construction corridor and the setting study area to establish the impact of the Proposed Development on their cultural significance.

7.13 The following data sources will be consulted to inform the desk-based assessment:

- Data on designated heritage assets:
 - world heritage sites;
 - scheduled monuments;
 - listed buildings;
 - conservation areas;
 - Inventory-listed historic gardens and designated landscapes; and
 - Inventory battlefields.⁴¹
- National Record of the Historic Environment
- Historic Environment Record data, sourced from West of Scotland Archaeology Service (WoSAS),⁴² Scottish Borders Council, South Lanarkshire Council and City of Edinburgh Council.

³⁹ National Planning Framework 4 (2023 update) <https://www.gov.scot/publications/national-planning-framework-4/> (accessed 28/10/2024).

⁴⁰ CifA (2017) 'Standard and guidance for historic environment desk-based assessment'.

⁴¹ No historic marine protected areas will be affected, given the nature and location of the Proposed Development.

⁴² Providing HER and curatorial archaeology services to South Lanarkshire Council and West Lothian Council.

- Published sources on the archaeological and historical background of the area.
- Historic mapping, including archival sources such as tithe maps.
- Aerial photography – both recent digital and historical coverage.
- Publicly accessible LiDAR data.
- Available grey literature reports from recent archaeological work undertaken in the area, the Excavation Index for Scotland, and archaeological journals and monographs.
- Regional and national research framework assessments and strategies, including Scottish Archaeological Research Framework (ScARF 2012) and the emerging South East Scotland Archaeological Research Framework (SESARF, ongoing).
- Findings of other relevant topics (Landscape and Visual Amenity, Hydrology, Hydrogeology and Geology).

Field survey

7.14 The assessment will be informed by targeted walkover survey, including infrastructure locations, and site visits to heritage assets likely to experience effects related to physical impact or setting change. Should any previously unknown heritage assets be identified during the walkover survey, an appropriate record (i.e. location, extent, apparent form and significance of asset) would be made. A photographic record would be taken, and a selection of images utilised in the baseline reporting.

7.15 The results of the assessment process will be reported as a Historic Environment Assessment (HEA), which will comprise the assessment of the archaeological potential of the Proposed Development. The EIA Report chapter will include an appropriate summary of the conclusions of the HEA, plus any other supporting surveys / studies, and detail the likely significant effects of the Proposed Development.

Proposed Surveys and Assessment Methodologies

Legislation, planning policy and technical guidance

7.16 The assessment of effects of the Proposed Development will be carried out in accordance with the principles contained within the following documents:

Legislation

- Town and Country Planning (Listed Buildings and Conservation Areas) (Scotland) Act (1997);⁴³
- Ancient Monuments and Archaeological Areas Act 1979;
- The Historic Environment Scotland Act 2014; and
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations' / 'the Regulations').

Planning policy

7.17 National and local planning policies also contain specific requirements regarding the conservation and enhancement of heritage assets. Key considerations include the following policies:

- National Planning Framework 4 (2023) Policy 7: Historic assets and places.
- HES, Historic Environment Policy for Scotland (HEPS) (2019).
- West Lothian, Local Development Plan (2018) - Policy Env23 -33.⁴⁴
- Edinburgh Local Development Plan (2016) - Policy Env 1- 20.⁴⁵
- South Lanarkshire Local Development Plan, Vol 1 & 2- Policy 14; Policy NHE1 -NHE6.⁴⁶
- Midlothian Local Development Plan (2017) - Policy ENV19 -25.⁴⁷
- Scottish Borders, Scottish Borders Council Local Development Plan (2024) - Policy EP7 -11.⁴⁸

⁴³ All references to legislation should be assumed to be the versions in force, and as amended, at the time of writing of this document.

⁴⁴ <https://www.westlothian.gov.uk/article/33793/Local-Development-Plan-LDP-1> (accessed 28/10/2024).

⁴⁵ <https://www.edinburgh.gov.uk/localdevelopmentplan> (accessed 28/10/2024).

⁴⁶ <https://www.southlanarkshire.gov.uk/developmentplan2> (accessed 28/10/2024).

⁴⁷ https://www.midlothian.gov.uk/downloads/file/4893/midlothian_local_development_plan (accessed 28/10/2024).

⁴⁸ <https://www.scotborders.gov.uk/downloads/download/1655/adopted-ldp2---volume-1> (accessed 28/10/2024).

organised religion, particularly with regard to specific places of worship, but can also be drawn from wider human responses such as a sense of peace, wonder, or inspiration.⁵²

7.22 Whilst heritage values help describe the cultural significance of assets, they do not articulate their relative importance.

7.23 The importance of a heritage asset can be understood as a measure of the degree to which its cultural significance is afforded protection by legislation and/or policy. For the purposes of the EIA Report, the 'importance' of assets would be assigned using the following criteria:

- **High** – heritage assets of national importance. This would comprise designated heritage assets and non-designated assets of demonstrably equivalent importance;
- **Medium** – heritage assets of regional importance. Identified with reference to priorities from ScARF and relevant regional research frameworks; or
- **Low** – heritage assets of local importance.

Effects

7.24 All effects would be assessed in relation to how the Proposed Development would, either physically or through setting change, affect the cultural significance of the heritage asset. If relevant, indirect physical (or secondary) effects will also be considered.

7.25 In articulating effects, a judgement would be made on the level of harm or benefit a heritage asset would experience as a result of the Proposed Development. This would be supported by an appropriate narrative linking this to how the asset would have its cultural significance changed. The criteria for determining the significance of effect will be informed by guidance published in Appendix 1 of SNH and HES' 'EIA Handbook' and HES' 'Managing Change in the Historic Environment: Setting'. A clear statement would be made as to whether the effect is considered to be significant in EIA terms.

7.26 Only assets identified as likely to experience significant effects will be assessed in the EIA Report chapter. Effects to assets that are not significant in EIA terms will still be fully considered and reported upon in a technical appendix.

Existing Conditions

Introduction

7.27 The Proposed Development is broadly contained within a c-shaped corridor that crosses the River North Esk valley and encompasses the Pentland Hills Regional Park. The Proposed Route begins in an area of non-native conifer forest in the Cloich Hills, passing through rolling agricultural land between Romannobridge and Garvald⁵³. It then enters the Pentlands through the lower-lying pass between Mid Hill, Bleak Law, and Black Law. As the Proposed Route approaches the northern side of the Pentlands, the route traverses marginal agricultural land and moorland foothills. The Proposed Route then runs along the eastern side of the Water of Leith Valley as far as Currie substation.

Geology

7.28 The geology of the Proposed Route varies and includes several types of sedimentary and igneous bedrock, all formed between 440 and 330 million years ago.⁵⁴ The Pentlands have a complex solid geology, but are principally Devonian and Carboniferous sandstone, bookended by earlier volcanic members at the southwest and northeast extremities.

7.29 These strata are overlain by superficial deposits composed of peat, glacial till, glaciofluvial and alluvium deposits formed between 1 million and 11.5 thousand years ago during the terminal Pleistocene and early Holocene epochs.

7.30 Peat deposits, relating to (albeit generally extensively modified) blanket bog are recorded in patches within the Proposed Route where it passes over the southern end of the Pentlands. Peatlands can provide important information about climate and environmental change since the early Holocene, which can include evidence of human activities that interacted with the upland landscape. Therefore, paleoenvironmental evidence (i.e. evidence of past environments and climate such as seeds, pollen, etc.) from peat deposits can help to reconstruct the environment in which human activities took place and enhance archaeological remains' significance.

Preliminary environmental baseline

Within the Proposed Route

7.31 There are no world heritage sites, scheduled monuments, registered battlefield inventory designations,

⁵² Collated and summarised from HES (2019) 'Designation Policy and Selection Guidance' and Australia ICOMOS (2013) Burra Charter

⁵³ <https://en-gb.topographic-map.com> (accessed 29/10/2024)

⁵⁴ Bedrock of the Site includes Ballagan Formation, Gullane Formation, Kinnesswood Formation, Biggar Volcanic Clyde Plateau Volcanic Formation, Auchtitench Sandstone Formation, and Kirkcolm Formation, <https://bgs.ac.uk> (accessed 29/10/2024)

conservation areas, or gardens and designed landscapes within the Proposed Route.

7.32 The Proposed Route includes 9 listed buildings,⁵⁵ all Category B, and a preliminary count of 91 non-designated heritage assets. The listed buildings include a range of medieval and post-medieval agricultural, domestic, civic, and commercial buildings. The non-designated assets include a wider range of periods, for example: a Roman road (Canmore ref: 72226, 72225, 72224), deserted medieval villages (Canmore ref: 86452, 343862), likely medieval/modern agricultural buildings and features, a 17th century battle site (Canmore ref: 49954) are recorded to lie partly or fully within the Proposed Route boundary.

7.33 Every designated and non-designated heritage asset within the Proposed Route may experience change in their cultural significance due to the Proposed Development. Therefore, all assets will be considered as potentially directly (physically or through setting changes) impacted by the Proposed Development for the purposes of assessment. Their cultural significance will be assessed and any potential effects deriving from the Proposed Development weighted according to the methodology presented. Significant effects will be reported in the EIA Report.

Within the Study Area

7.34 Within the 3 km outer study area applied for route options appraisal, the following assets were noted based on a desk-based exercise:

- 203 listed buildings, of which: 20 Category A, 99 Category B, and 83 Category C;
- 42 scheduled monuments;
- Four inventory-listed gardens and designed landscapes; and
- Seven conservation areas.

7.35 The historic environment of the study area is, in many ways, typical of the Pentland Hills area, containing principally evidence of occupation dating from at least the later prehistoric period, sporadic Roman presence, medieval settlements and natural resource exploitation, and, in modern times, significant agricultural development and settlement expansion.

7.36 The prehistoric period is mostly characterised by several prehistoric scheduled monuments of domestic, as well as funerary and ritual purposes. Some of these are located in close proximity to the Proposed Route, like Romanno Mains barrow (SM2728), situated approximately 100 m to the south

of the Proposed Route. The Roman occupation is sporadically attested by a few scheduled monuments related to infrastructure and defensive remains, such as Camitly Hill Roman fortlet (SM1933).

7.37 The majority of listed buildings and more recent scheduled monuments in the wider relate to agricultural activities, especially around the south of the Proposed Route; whereas in the northern part of the Proposed Route, designated heritage assets principally relate to the expansion of settlements like Currie and Balerno.

7.38 The intervisibility between heritage assets and the Proposed Development does not necessarily result in effects to their cultural significance. For instance, the majority of the farmsteads, cottages, and historical infrastructure located within the outer study area are not considered likely to be affected by the Proposed Development. Designated heritage assets such as Harburn House (GDL007208), Camitly Hill Roman fortlet (SM1933), prehistoric and funerary monuments such as cairns (HES ref: SM3544) and Romanno Mains barrow (SM2728) share heritage values, of which prominent position in the landscape and rural view represent key elements of their cultural significance. The Proposed Development has the potential to affect the functional and visual relationship between the assets and the landscape or representing a visual distraction. Supporting visualisations such as wireframes and photomontage will be considered for these type of heritage assets and discussed with consultees.

7.39 Due to the upland nature of most of the Proposed Route, there are relatively few post-medieval landscaped parks and gardens that require consideration. Harburn House (GDL007208), located outside the northern portion of the route, is the closest example, but is separated from the Proposed Development by extensive plantation woodland. (Other route options were rejected partly on grounds of more extensive interaction with large Inventory-listed gardens and designed landscapes at Penicuik House and Newhall.)

7.40 The Old and New Towns of Edinburgh is a UNESCO World Heritage Site (WHS) and lies approximately 7 km to the north-east of the route. The WHS's Outstanding Universal Value is not considered to be affected by the Proposed Development due to the intervening settlements, topography, vegetation and distance.

7.41 The ZTV will be used to assess the potential for theoretical visibility between designated heritage assets and the Proposed Development and identify those that might experience setting change.

⁵⁵ Nine list entries, with 20 separate points of spatial data – relating to multi-part listings

Siting and Design Considerations

7.42 Key design considerations will be to identify and avoid physical effects to heritage assets along the proposed OHL route. Generally, this can be successfully accomplished during the design process, with flexibility in positioning wooden poles, access and other infrastructure. Avoidance of designated assets will be a priority.

7.43 Similarly, the assessment and design processes will enable avoidance and minimisation of setting change to sensitive assets within in the study area, and beyond where appropriate, through careful routeing to optimise topographical screening, and the siting, design and height of wooden poles.

Potential Significant Effects

Scoped in

7.44 At this stage, likely significant effects scoped into the assessment including cumulative effects, associated with the construction and / or operation of the Proposed Development include:

- Direct physical effects to heritage assets arising from construction; and
- Effects related to change in the setting of assets during operation.

Scoped out

7.45 On the basis of the work undertaken to date, the professional judgement of the assessment team and experience from other similar projects and consultation responses, it is proposed that the following effects can be scoped out due to the design evolution process and implementation of standard good practice construction measures:

- Direct physical effects to heritage assets during operation and maintenance (since direct physical effects would only occur during construction);
- Direct physical effects to assets beyond the land required for construction and operation of the Proposed Development;
- Effects resulting from change in the setting of assets during construction (due to the temporary nature of construction activities);
- Indirect physical effects resulting from construction, as these are judged to be unlikely due to the nature and method of construction; and
- Effects during decommissioning.

7.46 At the end of the operational phase, the Proposed Development would either be decommissioned, or its operational lifetime extended through repair and maintenance of the poles and lines. Decommissioning might involve the removal of the OHL and wood poles support and other associated structures and fixture. The effects are not considered to further physically impact potential heritage assets. The effects resulting from change in the setting of assets during decommissioning are not considered significant.

Approach to Mitigation

7.47 In the first instance, the Proposed Development would seek to avoid and minimise as far as reasonably practicable effects through design.

7.48 The outcomes of the HEA process will inform design of poles, the cable alignment and infrastructure locations. Where assets are located within construction corridors or micro-siting allowances, specific measures will be put in place through a Construction Environmental Management Plan (CEMP) to secure their conservation and avoid accidental damage.

7.49 Setting change will be avoided and minimised through the detailed design process and the use of topographic screening wherever possible.

7.50 Where interaction cannot be completely avoided, good practice and additional mitigation measures to prevent, reduce, and / or, where possible, offset these effects would be proposed.

7.51 Owing to the nature of the Proposed Development, it is envisaged that mitigation is likely to focus on addressing direct physical effects to heritage assets, particularly those to below-ground assets (archaeological remains). The approach to mitigation would be guided by industry practice and appropriate procedures as laid out in the relevant CfA standards and guidance documents.

In this case archaeological remains will be preserved by recording, undertaking appropriate investigations (watching brief, excavations) in consultation with HES and local archaeological advisors.

Consultee List

7.52 It is proposed that the following stakeholders will be consulted in relation to the assessment:

- HES;
- City of Edinburgh Council archaeology service and conservation officers;
- East Lothian Council archaeology service – provides curatorial archaeology support to East Lothian and Midlothian Councils;

- East Lothian Council conservation officers;
- South Lanarkshire Council conservation officers;
- West of Scotland Archaeology Service (provides curatorial archaeology support to West Lothian Council);
- West Lothian Council conservation officers.

Questions for Consultees

Q7.1 Are there any additional sources of baseline information which should be referred to, to inform the appraisal of effects on cultural heritage?

Q7.2 Are the proposals to scope out certain elements of cultural heritage from detailed assessment appropriate?

Q7.3 Is the proposed methodology clear and appropriate?

Q7.4 Are there specific heritage assets that should be considered in the impact assessment?

Q7.5 Are there heritage assets or locations which you wish to see visualisations for?

Chapter 8

Hydrology, Hydrogeology and Peat

Introduction

8.1 This chapter sets out the proposed approach to the assessment of the likely significant effects of the Proposed Development on hydrology, hydrogeology and peat. The assessment will be carried out in line with relevant legislation and standards.

8.2 The assessment of effects on hydrology, hydrogeology and peat will be undertaken by Kaya Consulting Limited.

Study Area

8.3 The study area for hydrology and hydrogeology comprises the Proposed Route and watercourses and catchments it interacts with and those downstream (**Figure 8.1**).

8.4 The study area for detailed assessment of groundwater abstraction, including private water supplies (PWS) and groundwater dependent terrestrial ecosystems (GWDTE) comprises the Proposed Route, buffered by 250 m as per SEPA guidance⁵⁶. A 1 km buffer from the Proposed Route has been used as the search area for nearby PWS and groundwater abstractions.

8.5 The study area for peat comprises the Proposed Route area.

Proposed Surveys and Assessment Methodologies

8.6 In addition to the desk-based surveys undertaken to date, consultation with the four local authorities, Scottish Water, SEPA and NatureScot will be undertaken to obtain relevant flood, water supply and peat information, including abstractions data and PWS. Relevant flow and water quality data will also be obtained from SEPA.

8.7 A walkover hydrological survey of the full Proposed Development will be carried out to supplement the desk-based work and data collection to identify the existing baseline conditions, including identifying and documenting watercourse crossings (proposed and existing), identifying other water features such as wetlands and springs, undertaking an

⁵⁶ SEPA (2017) Land Use Planning System SEPA Guidance Note 31 Guidance on Assessing the Impacts of Development Proposals on

Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, LUPS-GU31

overview assessment of areas identified as floodplain within the SEPA Future Flood Maps and providing a general overview of landscape and land cover of importance to hydrology and peat.

8.8 PWS questionnaires and site visits to PWS supplied properties will be undertaken to verify the source location, if required.

8.9 GWDTEs will be identified based on habitat mapping and ecology surveys and reviewed by hydrologists in the field (see **Chapter 5: Ecology and Biodiversity**).

8.10 Phase 1 peat probing will be undertaken at 100 m spacing along the centreline (with offsets) of the Proposed Route where peat deposits are shown on the geological, soil and NatureScot carbon and peatland mapping to delineate the spatial coverage and depth of peat within the study area, with particular focus around proposed infrastructure. The above data sources will also be cross-referenced with satellite imagery to determine likelihood of the presence of peat and/or peatland habitats. Where the Phase 1 probing indicates peat is present, more extensive Phase 2 probing will be undertaken.

8.11 The proposed frequency for Phase 2 probing and coring will follow relevant guidance⁵⁷, adapted for the Proposed Development:

- Detailed probing survey on a 10 m-by-10 m grid basis will be undertaken around the centre of each proposed wood pole and additional proposed infrastructure.
- Probes will then be taken at 50 m spacing both along the centre line of any access tracks and at 10 m offsets.
- Cores will be undertaken at representative locations to verify the actual peat depth, the thickness of the acrotelm, determine the mineral soil characteristics and allow for Von Post tests to be undertaken.

8.12 The data obtained from the site investigations will be used to produce maps of peat depths along the route and around proposed infrastructure. A shaded contour interval of <0.3 m, >0.3 m-0.5 m, >0.5 m-1 m, >1 m-1.5 m, >1.5 m-2 m, >2 m-2.5 m, etc. will be used to demonstrate the occurrence of peat along the Proposed Development alignment.

8.13 The findings of the survey work and baseline assessment will contribute to environmental constraints mapping and will provide input and feedback into design iterations and subsequent environmental assessment.

8.14 The peat survey results will also be used to inform the preparation of a peat management plan and peat landslide hazard and risk assessment, if required.

8.15 The peat management plan will follow relevant guidance and identify potential excavation volumes of peat (both acrotelm and catotelm). Early calculations will be used to optimise infrastructure locations with respect to peat depth (in balance with other constraints). Detailed calculations of excavation and reuse of acrotelmic and catotelmic peat will be undertaken using the design-freeze layout and opportunities to reuse peat will be explored based on infrastructure and site conditions. This may include integration of peat reuse measures with habitat management proposals to improve site conditions where there is benefit in so doing.

8.16 A peat landslide hazard and risk assessment will be undertaken according to Scottish Government guidance and will assess the likelihood of peat instability in association with construction. Early calculations will be used to minimise overlap with areas of higher natural likelihood. Assessment of the design-freeze layout will consider all relevant receptors and provide mitigation measures and good practice recommendations to minimise risks associated with peat landslides.

8.17 The predicted significance of effects will be determined through a standard method of assessment based on professional judgement, considering both sensitivity and magnitude of change. Sensitivity criteria will consider existing flood risk, water quality classification, presence of GWDTE, PWS and groundwater abstractions, peat depth, NatureScot peat class and conservation designations. Major and moderate effects are considered significant in the context of the EIA Regulations.

Existing Conditions

8.18 A desk-based review of 1:10,000 and 1:25,000 scale Ordnance Survey maps, 1:50,000 scale British Geological Survey (BGS) Geology maps, 1:250,000 scale Soils maps of Scotland and 1:250,000 NatureScot (2016) Carbon and Peatland Map has been undertaken to identify watercourses and ground conditions within the vicinity of the Proposed Route (**Figures 8.1** and **8.2**).

8.19 The geology underlying the Proposed Route is comprised of a variety of lithologies including Kirkcolm formation, Marchburn Formation and Auchtitench sandstone sedimentary formations, comprising wackes, sandstones and siltstones. Further west, the route crosses over Biggar Volcanic formation trachyte and basaltic/andesitic lavas of extrusive origin then over Kinneswood formation sandstones.

⁵⁷ Scottish Government, Scottish Natural Heritage, SEPA (2017) Peatland Survey. Guidance on Developments on Peatland

South of Crosswood Reservoir the route crosses the Clyde Plateau Volcanic Formation of extrusive basaltic rock, before turning north and northeast through complex sedimentary rock formations including Hopetoun Member and Calder Member lacustrine sedimentary rock cycles, Gullane formation sandstones and a small lens of Crosswood Ash. Within Gullane Formation units the route crosses Dinantian to Westphalian Sills of Lothian and Fife igneous microgabbro of intrusive origins. The final lithologies crossed by the route include the Ballagan formations sandstones and dolostones, Dalmahoy intrusive volcanic microgabbros and Gullane formation sedimentary units.

8.20 The Proposed Development is underlain by a variety of superficial lithologies. These include Devensian Till and diamicton of glaciogenic origin, alluvium, peat, glaciofluvial ice contact deposits of sand, silt and gravel and Hummocky (Moundy) glacial deposits of diamicton sand and gravel.

8.21 The NatureScot Carbon and Peatland (2016) mapping (**Figure 8.2**) indicates that the Proposed Route does not extend over any indicative areas of Class 1 or Class 2 priority peatland habitat. The route does extend over several areas of Class 4 and Class 5 peat, indicating peat is likely to be present.

8.22 The Proposed Development extends across the catchments of numerous watercourses including the Middle Burn, Cowieslinn Burn, Dead Burn, Lyne Water, Tarth Water, Medwin Water, West Water, Adder Burn, Dry Burn, Green Burn, Shear Burn, Kelly Syke, Whitelea Burn, the Water of Leith and the Murray Burn.

8.23 A review of the SEPA Future Flood Map indicates that the Proposed Route extends across some flood risk areas associated with several watercourses. These include the Dead Burn, Lyne Water, Tarth Water, West Water, Medwin Water, Green Burn and the Water of Leith (**Figure 8.1**).

8.24 SEPA has characterised surface water quality status under the terms of the Water Framework Directive. Classification by SEPA considers water quality, hydromorphology, biological elements including fish, plant life and invertebrates, and specific pollutants known to be problematic. The classification grades through High, Good, Moderate, Poor, and Bad status. This provides a holistic assessment of ecological health. Within the project area eight watercourses are large enough to be classified:

- Cowieslinn Burn (Waterbody ID 5308) was classified by SEPA as overall 'Good' in 2022.

- Dead Burn (Waterbody ID 5319) was classified by SEPA as overall 'Moderate' in 2022. This is noted as a heavily modified waterbody.
- Lyne Water (Source to Tarth Water confluence) (Waterbody ID 5312) was classified by SEPA as overall 'Moderate' in 2022. This is noted as a heavily modified waterbody.
- Tarth Water (Waterbody ID 5314) was classified by SEPA as overall 'Moderate' in 2022. This is noted as a heavily modified waterbody.
- Medwin Water (Waterbody ID 10932) was classified by SEPA as overall 'Good' in 2022.
- Unnamed tributary to the North Medwin (Adder Burn) (Waterbody ID 10105) was classified by SEPA as overall 'Good' in 2022.
- Linhouse Water/Camilty Burn/ Green Burn (Waterbody ID 3014) was classified by SEPA as overall 'Poor' in 2022. This is noted as a heavily modified waterbody.
- Water of Leith (Harperrig Reservoir to Poet's Burn confluence) (Waterbody ID 3703) was classified by SEPA as overall 'Poor' in 2022. This is noted as a heavily modified waterbody.

8.25 Consultation with Scottish Borders, South Lanarkshire, West Lothian and City of Edinburgh councils will obtain Private Water Supply (PWS) data for a 1 km buffer around the Proposed Route. Similarly, licenced abstractions will be obtained via consultation with SEPA for the same search area.

8.26 The entire route is located within a Drinking Water Protected Area (DWPA) for Groundwater (as is the whole of Scotland). The Proposed Development route runs through two Surface DWPA, the Lyne Water (Waterbody ID5312) and South Medwin (Waterbody ID 10933) (**Figure 8.1**). The route also just encroaches on the boundary of the Water of Leith DWPA (Surface) (Waterbody ID 3704).

Siting and Design Considerations

8.27 Where possible, all watercourses and waterbodies will be buffered using SEPA's recommended riparian corridor buffers (SEPA, 2024⁵⁸) which recommend that all waterbodies (watercourses/lochs/wetlands etc) should have a minimum buffer of 10 m (either side of the water feature) and SEPA recommend the following site specific buffers as a minimum: 10 m buffer for channels <2 m wide, 15 m buffer for channels 2-15 m wide and 30 m buffer for channels >15 m wide.

⁵⁸ SEPA (2024) Recommended Riparian Corridor Layer for use in Land Use Planning

8.28 Design of the temporary access tracks to be used for construction will aim to use existing tracks and public roads to avoid the need for new watercourse crossings, where possible.

8.29 All components of the Proposed Development will avoid flood risk areas (based on SEPA future flood maps), where possible.

8.30 The infrastructure and temporary access tracks will avoid areas of deep peat, if possible. There is no priority peatland habitat (Class 1 and 2) noted by NatureScot (2016) Carbon and Peatland mapping along the route. Peat depth surveys will be carried out early in the design process such that areas of deeper peat can be avoided, if possible, by careful pole and track siting. This will reduce the volume of peat required to be excavated and has benefits for ecology and carbon balance, as well as reducing the potential to interrupt localised shallow subsurface flow-paths.

8.31 Where possible all excavations <1 m will be over 100 m away from any groundwater abstractions, PWS or GWDTEs as per SEPA guidance. Excavations >1 m will be over 250 m away.

Potential Significant Effects

8.32 Potential effects on hydrology, hydrogeology and peat will be assessed as part of the EIA process. This will include the identification of effects of construction on specific receptors, such as sensitive habitats (i.e. GWDTEs, PWS, peat and watercourses) which are sensitive to pollution risk and / or disturbance from required engineering works.

8.33 Potentially significant effects are considered more likely to occur during the construction phase. SPEN is committed to implementing good practice construction methods and has extensive working knowledge of construction methods due to constructing a number of similar projects throughout Scotland. With embedded and additional mitigation, it is considered that none of the effects on hydrology, hydrogeology and peat will be significant. However, the following effects will be considered in the EIA to assess the effects and to inform embedded and site-specific locations of additional mitigation and monitoring:

- Effects on surface and groundwater quality, including public/private drinking water supplies caused by releases of sediment/pollutants to watercourses from excavated/stockpiled material during construction, or as a result of watercourse crossings or works near watercourses during construction.

- Effects on hydrology and flood risk, due to modifications to natural drainage patterns, changes to runoff rates and volumes during construction. Existing flood risk to the Proposed Development will also be considered in the EIA baseline and flood risk areas will be avoided where possible.

- Effects on peat and soils (including potential peat instability).

- Effects on GWDTEs

Potential Effects Scoped Out of Assessment

8.34 The following effects are proposed to be scoped out of the assessment:

- Potential adverse effects on bedrock geology during construction and operation;
- Potential adverse effects on hydrology, water quality, PWS, groundwater abstractions and GWDTE during operation; and
- Potential effects on peat and other soils during the operational phase. The main impacts on peat (if any) will be in the construction phase.

Approach to Mitigation

8.35 In addition to the careful siting of infrastructure components and given SPEN's commitment to, and prior experience of, implementing accepted good practice during construction and operation, and the current regulatory context, many potential effects on the water environment can be avoided or reduced. With respect to the current regulatory context, since the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR) came into force, CAR authorisation will be required in relation to a number of activities e.g. engineering works in inland waters and wetlands. A Construction Site Licence (CSL) will also be required for the works under the CAR Regulations for the discharge of water run-off to the water environment. Consultation with SEPA throughout the EIA process will be undertaken in relation to those activities for which a licence or registration is required.

8.36 A number of good practice pollution prevention and control measures will be put in place during construction. These will be embedded into the project design and will reflect best practice guidance and recognised industry standards (e.g. SEPA guidance, including their Guidance for Pollution Prevention (GPPs), CIRIA SUDS Manual⁵⁹, control of water pollution from construction sites⁶⁰ control of water pollution

⁵⁹ CIRIA: The SUDS Manual (C753) 2015

⁶⁰ CIRIA: Control of water pollution from construction sites: Guidance for consultants and contractors (C532) 2001

from linear construction projects technical⁶¹ and site guidance⁶² and the joint publication Good Practice during Windfarm Construction⁶³ amongst others).

8.37 As a consequence, a number of measures are not considered to be mitigation as such, but rather an integral part of the design/construction process as part of good practice; and it is proposed that these will be taken into account prior to assessing the likely effects of the Proposed Development. However, where appropriate, more tailored mitigation measures will be identified prior to determining the likely significance of residual effects.

Consultee List

- SEPA
- NatureScot
- Scottish Water
- Scottish Borders Council
- South Lanarkshire Council
- West Lothian Council
- City of Edinburgh Council

Questions for Consultees

Q8.1 Are there any additional sources of baseline information which should be referred to inform the appraisal of effects on hydrology, hydrogeology and peat?

Q8.2 Is the proposed methodology considered appropriate?

Q8.3 Are the proposed lists of effects which are scoped in/out appropriate?

⁶¹ CIRIA Control of water pollution from linear construction projects. Technical guidance (C648), 2006

⁶² CIRIA Control of water pollution from linear construction projects. Site guide (C649), 2006

⁶³ Good Practice during Windfarm Construction (Scottish Renewables, SNH, SEPA & Forestry Commission Scotland, 4th Edition 2019)

Chapter 9

Topics Proposed to be Scoped Out

Introduction

9.1 The aim of this EIA Scoping Report is to identify the information to be included in the EIA. In doing so, certain effects associated with a particular topic may be 'scoped out' and these have been discussed in the preceding chapters (under 'potential effects to be scoped out of assessment'). This Chapter provides details of whole assessment topics that are proposed to be 'scoped out' of the EIA where it has been deemed unlikely that the Proposed Development will result in significant effects on these topics. Justification for the proposal to 'scope out' these topics is provided below.

Traffic and Transport

Baseline

9.2 The Proposed Route is serviced by a number of major and minor roads, which provide access and transport routes to residences and the wider strategic road network.

9.3 Construction traffic will access the south of the Proposed Development at the Cloich Forest Wind Farm substation from the A701 (also access from the Edinburgh Bypass to the north), and the Proposed Route here already benefits from existing forestry tracks to the east of the A701. Minor roads from the A701 will be utilised around Damside, Romannobridge and between the A701 and the A702.

9.4 Existing access tracks to the south and east of the Proposed Route, across the Pentland Hills, around Bleak Law, Cairn Knowe and North Muir from Ferniehaugh will be accessed from the A702 from the east. Existing off-road access tracks to the south-west of the Proposed Route around Black Birn will be accessed from the A70 for the temporary construction period.

9.5 The majority of the Proposed Development would be accessed directly from the A70 where possible as far as the Crosswood Burn. From there, the Proposed Development will be accessed from minor roads to access the land to the north of Currie, and construction traffic will likely access the north of the Proposed Route, at Currie substation, via the M8 Motorway from the north-west, then via the A720 (City of Edinburgh Bypass) and south along the A70.

Appraisal

9.6 Existing access tracks will be used as far as practicable, and the Proposed Route has been routed through the Pentlands carefully to maximise the use of existing tracks. Where new tracks are required for construction, these will be temporary and reversible.

9.7 Due to the nature and design of the proposed new OHL, it is expected that vehicle movements at any one location during construction will be limited such that there is unlikely to be material changes to the current traffic baseline that would give rise to significant effects on the local road network.

9.8 With respect to construction effects on residential receptors and local road users, the Proposed Route generally avoids major settlements. Currie and Balerno are located in close proximity to the Proposed Route to the north, and several smaller settlements/villages are noted to the north-east of the Proposed Route. Therefore, construction effects are expected to be minor, and not significant.

9.9 Part of the National Cycle Network Route 75 crosses the Proposed Route north of Balerno, to the north and east of the Ravelrig Quarry, and crosses over the railway bridge towards Dalmahoy Golf Course connecting Edinburgh with Portavadie. The Proposed Development will be able to span the cycle route network, and direct impacts can be avoided. Visual impacts will be limited as the Proposed Development will run perpendicular to the cycle route. It is therefore not considered that impacts will therefore be significant.

Mitigation

9.10 No significant adverse impacts have been identified through the initial assessment; therefore, no specific mitigation or monitoring is proposed.

9.11 However, SPEN is committed to implementing accepted good practice during construction and operation, thereby ensuring that many potential effects in relation to access, traffic and transport activity can be avoided or reduced.

9.12 Therefore, through consultation and agreement with Transport Scotland, Network Rail and SBC, a Construction Traffic Management Plan (CTMP) will be prepared for implementation during the construction phase. The CTMP will include details of any temporary traffic management measures required. On the basis of the short-term nature of the construction process, the geographic spread of the construction works and public road network, and SPEN's commitment to appropriate management of traffic during construction it is considered that there will be no significant traffic or transport effects during construction. Therefore, the impact of traffic and transport related issues on the local road network are not considered to be significant and it is proposed that this topic is 'scoped out' and not given detailed

consideration in the EIA. Details of the construction process and any traffic management proposals will however be detailed within the development description chapter of the EIA Report.

Socio-Economics, Tourism and Recreation

9.13 Due to the short term and localised nature of the construction process, any temporary disturbance created during construction and decommissioning works is likely to be minimal and concentrated in small areas at any one time as the contractors progress. Once the Proposed Development is in place, there will be no further works required unless maintenance works are needed and use of the land can continue as normal, with the exception of the land take along the route. As the construction and decommissioning process requires only a small labour force and is short in duration, this also means that it is unlikely that the employment created will affect local employment levels or generate a significant source of income for the area.

9.14 In relation to tourism, Cairns Farm Estate (wedding venue) is located within the Proposed Route. Core paths are also located within the Proposed Route such as those located south of Harburn and north of Dolphinton. Where there is intervisibility with any tourism features identified, these will be identified as viewpoints and addressed in the landscape and visual assessment. On this basis, potential effects on tourism are not considered likely to be significant.

9.15 In terms of recreation, the National Cycle Network (NCN) Route 75 passes through Balerno, then follows the Water of Leith Walkway north-east. The Proposed Development covers the western edges of the Pentlands Regional Park near the A70. The Cross Borders Drove Road crosses the Proposed Route twice: once to the north-west of the Pentland Hills, between West Linton and the Cloich Hills, and once to the north-east of the Proposed Route to the north of Romannobridge. A number of Core Paths are also noted along the Proposed Route where it crosses the Pentlands to the south, between Camilty Plantation and Romannobridge.

9.16 Whilst temporary diversions may be required during construction, construction works at any one location will be short in duration therefore the impact of a diversion would be limited. All recreational paths would be open during operation of the OHL. No comments regarding the application in regard to effects on core paths were raised during the consultation period. It is therefore proposed that effects on socio-economics, tourism and recreation are scoped out from detailed assessment within the EIA.

Climate Change

9.17 The Project directly supports the delivery of national net zero targets. The project description included in the EIA Report will outline any included measures to avoid/reduce greenhouse gas emissions and to seek to ensure resilience to climate change. The potential for in-combination climate effects will be considered on a topic-by-topic basis.

Human Health

9.18 The EIA Regulations require that potential effects on human health are considered. An EMF report will be produced as part of the application. However, it is not proposed to undertake a separate assessment of potential effects of the Proposed Development on human health on the basis that air quality, traffic and socio-economic impacts are being proposed to be scoped out of the EIA. Furthermore, it is considered that air quality, and dust will be adequately mitigated through implementation of good practice construction methods.

Major Accidents and Disasters

9.19 The Proposed Development is not located in an area with a history of natural disasters such as extreme weather events. The construction and operation of the Proposed Development will be managed within the requirements of a number of health and safety related Regulations, including the Construction (Design and Management) Regulations 2015 and the Health and Safety at Work etc. Act 1974.

Consultee List

- Transport Scotland
- NatureScot

Questions for Consultees

Q9.1 Are consultees in agreement with the topics to be scoped out of the EIA Report?

Appendix A

Consultee List

A.1 The consultees listed below are proposed to be consulted as part of the EIA Scoping process, in agreement with the ECU.

Statutory Consultees

- City of Edinburgh Council
- West Lothian Council
- Scottish Borders Council
- South Lanarkshire Council
- SEPA (south)
- NatureScot
- Historic Environment Scotland

Internal Scottish Government Advisors

- Transport Scotland
- Scottish Forestry
- The Coal Authority

Community Councils

- Currie
- Balerno
- Ratho and District
- East Calder and District
- Kirknewton
- West Calder and Harburn
- Tarbrax, Woolfords, Auchengray and District
- Black Mount
- West Linton
- Lamancha, Newlands and Kirkurd
- Eddleston and District

Non-Statutory Consultees

- British Horse Society
- Telecommunications (Virgin, BT, etc.)

- Civil Aviation Authority
- Crown Estate Scotland
- Defence Infrastructure Organisation
- Edinburgh Airport
- Fisheries Management
- Friends of the Pentlands
- The Water of Leith Conservation Trust
- John Muir Trust
- Kirknewton Airport
- Mountaineering Scotland
- NATS Safeguarding
- National Farmers Union of Scotland
- The Ramblers Association
- RSPB Scotland
- Raptors
- Scottish Rights of Way and Access Society (ScotWays)
- Scottish Water
- Scottish Wildlife Trust
- Scottish Badgers
- South Scotland Red Squirrel Group
- Scottish Outdoor Access Network
- Sports Scotland
- The British Association of Shooting and Conservation
- The Health and Safety Executive
- The National Trust for Scotland
- Network Rail
- Visit Scotland

- West Calder and Harburn

■ South Lanarkshire:

- Tarbrax, Woolfords, Auchengray, and District
- Black Mount

■ Scottish Borders:

- West Linton
- Lamancha, Newlands and Kirkurd
- Eddleston and District

Ward Councillors for:

- Pentland Hills
- East Livingston and East Calder
- Clydesdale East
- Tweedale West

Community Councils

- City of Edinburgh:
 - Currie
 - Balerno
 - Ratho and District
- West Lothian:
 - East Calder and District
 - Kirknewton

Appendix B

Questions for Consultees

B.1 Comments from consultees are invited in relation to the following questions detailed within the EIA Scoping Report.

Landscape and visual amenity

Q4.1 Can consultees confirm that GLVIA3 is an appropriate methodological starting point for the LVIA assessment? Are there any comments on the overall methodology proposed to assess effects on landscape and visual receptors, including cumulative effects?

Q4.2 Are there other sources of information which should inform the baseline and assessment of potential effects on landscape character and designated landscapes?

Q4.3 Are there any comments on the landscape character types which are to be scoped in and scoped out of the assessment?

Q4.4 Are there any comments on the designated landscapes which are to be scoped in and scoped out of the assessment? As the Regional Park is encompassed within the SLA, can consultees confirm that it is acceptable to consider the landscape and visual aspects of this within the assessment for the SLA? The visitor/tourism aspect of this will be considered elsewhere.

Q4.5: Are there any comments on the proposed list of assessment viewpoint locations listed in Table 4.1?

Q4.6: Are there any further landscape or visual receptors to be considered within the assessment (i.e. where it is expected that significant effects may occur)?

Q4.7: Can consultees confirm that an RVAA will not be required, given the proposed size of the offset from any residential property?

Ecology

Q5.1 Do consultees agree that the scope of the desk studies and ecological baseline surveys proposed are sufficient and proportionate to inform the design and assessment of the Proposed Development?

Q5.2 Do consultees agree with the assessment method, including effects scoped in and effects scoped out?

Q5.3 Do consultees hold any datasets that could be made available to inform the assessment?

Ornithology

Q6.1: Do consultees agree that the range of desk studies and ornithological surveys being proposed are sufficient and proportionate to inform the design and assessment of the Proposed Development?

Q6.2: Do consultees agree with the assessment approach proposed, including effects scoped in/out of detailed assessment?

Archaeology and Cultural Heritage

Q7.1 Are there any additional sources of baseline information which should be referred to, to inform the appraisal of effects on cultural heritage?

Q7.2 Are the proposals to scope out certain elements of cultural heritage from detailed assessment appropriate?

Q7.3 Is the proposed methodology clear and appropriate?

Q7.4 Are there specific heritage assets that should be considered in the impact assessment?

Q7.5 Are there heritage assets or locations which you wish to see visualisations for?

Hydrology, Hydrogeology and Peat

Q8.1 Are there any additional sources of baseline information which should be referred to inform the appraisal of effects on hydrology, hydrogeology and peat?

Q8.2 Is the proposed methodology considered appropriate?

Q8.3 Are the proposed list of effects which are scoped in/out appropriate?

Other Issues

Q9.1 Are consultees in agreement with the topics to be scoped out of the EIA Report?