

# **Environmental Impact Assessment**

## **Scoping Report**

### **Muaitheabhal Wind Farm 132 kV Overhead Line Connection (LT73)**

**March 2025**



## QUALITY MANAGEMENT

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### APPENDIX A: FIGURES

## GLOSSARY AND ABBREVIATIONS

132 kV	132 kilovolt (132,000 volt) capacity.
AC	Alternating Current
Ancient Woodland	Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750.
AOD	Above Ordnance Datum
BAP	Biodiversity Action Plan
BGS	British Geological Survey
BNG	Biodiversity Net Gain
BoCC	Birds of Conservation Concern
CEMP	Construction Environment Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CnES	Comhairle nan Eilean Siar – the Planning Authority.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
CTMP	Construction Traffic Management Plan
DfT	Department of Transport
DMRB	Design Manual for Roads and Bridges
DTM	Digital Terrain Model
EcIA	Ecological Impact Assessment
ECoW	Environmental Clerk of Works
ECU	Energy Consents Unit
EIA	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The national regulations are set out in <i>The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017</i> . The EIA process is set out in regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental impacts of a proposed project or development.
EMF	Electromagnetic Field
ESQCR	Electricity Safety, Quality and Continuity Regulations
GDL	Garden and Designed Landscape, as listed on the Inventory of Gardens and Designed Landscapes held by Historic Environment Scotland.
GEMP	General Environmental Management Plan

GHG	Greenhouse Gases
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GWDTE	Groundwater Dependent Terrestrial Ecosystem
HCA	Habitat Condition Assessment
HER	Historic Environment Record
HES	Historic Environment Scotland
HGV	Heavy Goods Vehicle
HRA	Habitats Regulation Assessment
ICNIRP	International Commission on Non-Ionising Radiation Protection
IEMA	Institute of Environmental Management and Assessment
IBA	Important Bird Areas are designated by Birdlife as places of international significance for the conservation of birds and other biodiversity. They are a non-statutory, international designation.
LCT	Landscape Character Type exhibiting distinctive pattern of elements and features.
LHRSG	Lewis & Harris Raptor Survey Group
LOD	Limits of Deviation
Mitigation	Term used to indicate avoidance, remediation, or alleviation of adverse impacts.
NBN	National Biodiversity Network
NETS SQSS	National Electricity Transmission System Security and Quality of Supply
NHRE	National Record of the Historic Environment
NPF4	National Planning Framework
NS	NatureScot – the public body responsible for Scotland's natural heritage, especially its natural, genetic and scenic diversity. It advises the Scottish Government and acts as a government agent in the delivery of conservation designations, i.e. national nature reserves, local nature reserves, national parks, Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation, Special Protection Areas and the national scenic areas.
NVC	National Vegetation Classification
OHL	Overhead Line – an electric line installed above ground, usually supported by lattice steel towers or wooden poles.
OS	Ordnance Survey
OPMP	Outline Peat Management Plan

Planning application	An application for planning permission under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006.
PLHRA	Peat Landslide Hazard Risk Assessment
Proposed Development	The Proposed Development is taken to be the description of: the location of the development; the physical characteristics of the development, also specifying access arrangements and any associated construction activities and land use requirements. The Proposed Development also comprises a description of the main characteristics of the operational development and an estimate of residues and emissions associated with both the construction and operational phases (as set out in Schedule 4 of the EIA Regulations).
RVAA	Residential Visual Amenity Assessment
SAC	Special Area of Conservation – designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (known as - The Habitats Directive).
SBL	Scottish Biodiversity List
Scottish Hydro Electric (SHE) Transmission plc	SHE Transmission plc is the Applicant, who, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.
SCTs	Seascape Character Types
SEPA	Scottish Environment Protection Agency
SLVIA	Seascape, Landscape and Visual Impact Assessment
SM	Scheduled Monument
SSEN Transmission	Scottish & Southern Electricity Networks (SSEN) Transmission plc – part of Scottish and Southern Electricity Networks, and the transmission license holder for the transmission of electricity in the north of Scotland.
SPA	Special Protection Area – designated under <i>Directive 2009/147/EC on the Conservation of Wild Birds</i> (the Birds Directive)
SPP	Species Protection Plan
SSSI	Site of Special Scientific Interest – designated by NatureScot under the <i>Nature Conservation (Scotland) Act 2004</i>
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	A defined study area for the consideration of effects (including direct, indirect and cumulative) on each factor defined under Regulation 4(3) of the EIA Regulations
TA	Technical Appendices

Visual Receptors	Visual receptors are individuals or defined groups of people whose visual amenity or viewing experience may be affected by development.
VISTA	Visual Impact of Scottish Transmission Assets
VP	Vantage Point
Volts	The international unit of electric potential and electromotive force
UKHab	UK Habitat Classification
UN	United Nations
WHO	World Health Organisation
WLA	Wild Land Areas – those areas comprising the greatest and most extensive areas of wild characteristics within Scotland, as classified by Scottish Natural Heritage (2014).
WSI	Written Scheme of Investigation
Zol	Zone of Influence
ZTV	Zone of Theoretical Visibility – the computer generated theoretical visibility of an object in the landscape.

## EXECUTIVE SUMMARY

Scottish Hydro Electric Transmission plc ('the Applicant'), operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.

The Applicant holds a licence under the Electricity Act 1989 (the "1989 Act") for the transmission of electricity in the north of Scotland and has a duty under Section 9 of the 1989 Act to develop and maintain an efficient, coordinated and economical system of electricity transmission and to facilitate competition in the generation and supply of electricity in its license area. In order to meet these license obligations, the Applicant is required to provide new 132 kV Overhead Line (OHL) connection between the proposed Muaitheabhal Wind Farm Substation and the proposed Balallan Switching Station ('the Proposed Development').

The primary requirement for the Proposed Development is to address the need to connect the Muaitheabhal Wind Farm into the electricity transmission network.

Ramboll (UK) Ltd has been appointed by the Applicant to undertake the Environmental Impact Assessment (EIA) for the Proposed Development. This Scoping Report is provided to support a formal request by the Applicant under Regulation 12 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 for a Scoping Opinion to determine the information to be provided within the EIA Report.

The proposed scope of the EIA is summarised in Table 1 below.

**Table 1: Issues Scoped In and Out of the EIA Report**

Topic	Scoped In	Scoped Out
Seascape, Landscape and Visual Impact	✓	<ul style="list-style-type: none"> <li>Effects on Wild Land Areas and the Cnoc and Lochan Landscape Character Types.</li> </ul>
Cultural Heritage	✓	<ul style="list-style-type: none"> <li>Effects on the settings of World Heritage Sites, Listed Buildings, Conservation Areas, Inventory Garden and Designed Landscapes and Inventory Historic Battlefields.</li> <li>Effects on the settings of designated heritage assets more than 2 km from the Proposed Development or outside the Zone of Theoretical Visibility.</li> <li>Effects from changes in the setting of designated heritage assets during construction or decommissioning of the Proposed Development.</li> <li>Effects from direct impacts during the operation of the Proposed Development.</li> </ul>
Ecology	✓	<ul style="list-style-type: none"> <li>Effects on ecological receptors related to lighting, noise, dust and visual disturbance during the construction.</li> </ul>

<b>Topic</b>	<b>Scoped In</b>	<b>Scoped Out</b>
		<ul style="list-style-type: none"> <li>• Effects on protected or notable species, with the exception of otter populations.</li> <li>• Effects on designated sites.</li> <li>• Effects during the operational phase of the Proposed Development.</li> </ul>
Ornithology	✓	x
Water Environment	✓	<ul style="list-style-type: none"> <li>• Effects related to flood risk and detailed flow rate calculations for watercourse crossing.</li> <li>• Effects to Ground Water Terrestrial Ecosystems.</li> </ul>
Peat	✓	<ul style="list-style-type: none"> <li>• Effects related to contaminated land or geology.</li> </ul>
Traffic and Transport	✓	<ul style="list-style-type: none"> <li>• Effects related to Traffic and Transport during the operational or decommissioning phases of the Proposed Development.</li> </ul>
Land Use	x	✓
Socio-economics, Recreation and Tourism	x	✓
Population and Human Health	x	✓
Air Quality and Climate Change	x	✓

## 1. INTRODUCTION

### 1.1 The Proposal

- 1.1.1 Muaitheabhal Wind Farm was originally granted consent by the Scottish Ministers under Section 36 of the Electricity Act 1989 in 2010. In order for the Isle of Lewis and mainland Scotland to benefit from future electricity generated from this wind farm, and for Scottish & Southern Electricity Networks (SSEN) to meet its licence obligations to offer connection to the transmission system for new sources of electricity generation, there is a need connect the proposed Muaitheabhal Wind Farm into the transmission network.
- 1.1.2 Accordingly, SSEN Transmission (hereafter referred to as ‘the Applicant’) is proposing to construct and operate a new 132 kV Overhead Line (OHL) between the proposed Muaitheabhal Wind Farm Substation and proposed Balallan Switching Station as illustrated on the site location plan (**Figure 1.1: Site Location Plan, Appendix A**).
- 1.1.3 It should be noted that a new application was submitted in 2023 for Uisenis Wind Farm on the same site as Muaitheabhal Wind Farm. This application is still under consideration (ECU Ref: ECU00004568). If granted consent, Uisenis Wind Farm would be built instead of Muaitheabhal Wind Farm. For ease of reference, the wind farm into which the proposed OHL would connect will be referred to as ‘Muaitheabhal Wind Farm’.

### 1.2 The Regulations

- 1.2.1 An application for consent for the Proposed Development will be made to Scottish Ministers under Section 37 of the Electricity Act 1989<sup>1</sup>, for construction and operation of the OHL along with a request for a direction that planning permission be deemed to be granted under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997<sup>2</sup> for ancillary works.
- 1.2.2 Certain ancillary works would be associated with the Proposed Development, such as the formation of bellmouths at public road access points, temporary construction access tracks and working areas, vegetation clearance and management, and other temporary measures required during construction. Whilst the Section 37 consent would be concerned only with the installation of the OHL, the Applicant will also seek deemed planning permission for the OHL and such ancillary works under Section 57(2) of the Town and Country Planning (Scotland) Act 1997.
- 1.2.3 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017<sup>3</sup> (hereafter referred to as the ‘EIA Regulations’) contain two schedules: Schedule 1 lists projects where EIA is mandatory, while Schedule 2 lists projects where EIA may be required ‘where proposed development is considered likely to give rise to significant effects on the environment by virtue of factors such as its nature, size or location’.

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<sup>1</sup> The Electricity Act 1989, c29.

<sup>2</sup> Town and Country Planning (Scotland) Act 1997, c8.

<sup>3</sup> The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, No.101.

- 1.2.4 The Proposed Development is categorised as a ‘Schedule 2’ development under the EIA Regulations. However, rather than seeking a Screening Opinion, the Applicant is proposing to voluntarily submit an EIA Report to support the planning application.

### 1.3 Sustainability Strategy

- 1.3.1 The Applicant’s Sustainability Strategy<sup>4</sup> contains five ambitions to drive the agenda for a net zero pathway. These being: a reliable network, enabling net zero, climate action, serving their customers and their people. A key part of the Applicant’s Sustainability Strategy<sup>5</sup> is to achieve Biodiversity Net Gain (BNG)<sup>6</sup> as part of project delivery. As such, the ambition is to ensure that activities not only maintain the balance that exists but enhance the biodiversity in the area.
- 1.3.2 For new infrastructure projects, the Applicant proposes to:
- Ensure natural environment considerations are included in decision making at each stage of a project’s development;
  - Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;
  - Positively contribute to the United Nations (UN) and Scottish Government Biodiversity strategies by achieving an overall ‘No Net Loss’ on new infrastructure projects gaining consent in 2020 onwards and achieving Net Gain on projects gaining consent in 2025 onwards; and
  - Work with its supply chain to gain the maximum benefit during asset replacement and upgrades.
- 1.3.3 BNG is a key consideration throughout project development and is discussed further here in **Chapter 6: Ecology** and **Chapter 7: Ornithology**.

### 1.4 Purpose of the EIA Scoping Report

- 1.4.1 The purpose of this EIA Scoping Report is to ensure that the subsequent EIA is focused on the impacts likely to have significant effects on the environment by virtue of factors such as their nature, size or location. As well as identifying aspects to be considered in the EIA, this document also identifies those aspects that are not considered necessary to assess further and therefore may be scoped out of the EIA. All relevant environmental issues are identified.
- 1.4.2 This Scoping Report, prepared by Ramboll UK Limited on behalf of the Applicant, is provided in support of a request by the Applicant to the Scottish Ministers for a Scoping Opinion under Regulation 12<sup>7</sup> of the EIA Regulations.
- 1.4.3 In accordance with the EIA Regulations, this Scoping Report contains:
- A description of the location of the development, including a plan sufficient to identify the land;
  - A brief description of the nature and purpose of the Proposed Development and its likely significant effects on the environment; and
  - Additional supporting information or representations.

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<sup>4</sup> <https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/> (Accessed 4/8/2024)

<sup>5</sup> <https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/> (Accessed 12/1/2025)

<sup>6</sup> <https://www.ssen-transmission.co.uk/globalassets/documents/sustainability-strategy/sustainability-action-plan.pdf> (Accessed 12/1/2025)

<sup>7</sup> Regulation 17 – Request for Scoping Opinions. Available at <https://www.legislation.gov.uk/ssi/2017/102/regulation/17/made>

- 1.4.4 This Scoping Report has been issued to the Energy Consents Unit (ECU) of the Scottish Government to inform the preparation of its Scoping Opinion.
- 1.4.5 The Applicant invites consultees to comment on the following:
- What environmental information do you hold or are aware of that will assist in the EIA as described here?
  - Do you agree with the proposed approach for baseline collection, prediction and significance assessment?
  - Are there any key issues or possible effects which have been omitted?
  - Do you agree with the list of issues to be scoped out, and the rationale behind the decision?

## 1.5 Consideration of Relevant Factors in the EIA Scoping Report

- 1.5.1 This Scoping Report is structured to provide information on the individual factors which require consideration under the EIA Regulations. The Scoping Report presents the findings of an initial appraisal of the likely environmental effects of the Proposed Development on the receiving environment, based on the current understanding of the baseline conditions. The Scoping Report identifies the potential for likely significant effects with reference to:
- The current understanding of baseline sensitivity;
  - The proposed approach to further baseline data collection (where required);
  - Issues that can be scoped out from further assessment;
  - Issues that require further assessment on the basis of potential for significant effects; and
  - The methodology proposed for the assessment of significant environmental effects in each case.
- 1.5.2 The EIA Regulations require an EIA Report to identify, describe and assess the likely significant effect on the factors specified in Regulation 4(3) and the interaction between those factors. **Table 1.1: Consideration of Factors in the EIA Scoping Report** lists the factors and outlines how this EIA Scoping Report addresses each, including how the report describes the potential interactions between the factors.

**Table 1.1: Consideration of Factors in the EIA Scoping Report**

<b>Regulation 4 (3) Factor</b>	<b>How this is addressed in the Scoping Report</b>
Landscape	<b>Chapter 4: Landscape and Visual</b> incorporates a consideration of potential for likely significant effects designated landscape areas, landscape character and visual receptors.
Cultural Heritage	<b>Chapter 5: Cultural Heritage and Archaeology</b> incorporates a consideration of potential for likely significant effects on cultural heritage and archaeology assets as well as the cultural setting.
Biodiversity	<b>Chapter 6: Ecology</b> incorporates a consideration of potential for likely significant effects on terrestrial habitats, protected mammals, reptiles and amphibians and aquatic ecology.

Regulation 4 (3) Factor	How this is addressed in the Scoping Report
	<b>Chapter 7: Ornithology</b> incorporates a consideration of potential for likely significant effects on ornithology.
Water Environment	<b>Chapter 8: Water Environment</b> incorporates a consideration of potential for likely significant effects on the water environment including hydrology, hydrogeology and GWDTEs.
Soil	<b>Chapter 9: Peat</b> incorporates a consideration of potential for likely significant effects on soils including peatland habitat.
Material assets	<b>Chapter 10: Traffic and Transport</b> incorporates a consideration of the potential for likely significant effects on transport. <b>Chapter 11: Topics Scoped Out</b> (Socioeconomic, Recreation and Tourism) incorporates a consideration of potential for likely significant effects on socio-economic factors, recreation and tourism.
Land	<b>Chapter 11: Topics Scoped Out</b> (Land Use), incorporates a consideration of potential for likely significant effects on land use including agriculture and forestry.
Population and Human Health	<b>Chapter 11: Topics Scoped Out</b> (Population and Human Health) incorporates a consideration of potential for likely significant effects on community health and wellbeing in relation to: perceived health effects related to electromagnetic fields (EMF); and potential for impact resulting from major accidents or disasters.
Air and Climate	<b>Chapter 11: Topics Scoped Out</b> (Air Quality and Climate Change) incorporates a consideration of potential for likely significant effects on air quality and the carbon footprint of the Proposed Development.

## 2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

### 2.1 Introduction

2.1.1 The Proposed Development consists of a 132 kV OHL as illustrated in the site layout plan (**Figure 2.1: Site Layout Plan, Appendix A**).

### 2.2 Purpose of Proposed Development

2.2.1 The Applicant owns and operates the electricity transmission network infrastructure on the Isle of Lewis. As part of its Electricity Transmission Licence, it has a number of obligations, including:

- The development and maintenance of an efficient, coordinated and economical system of electricity transmission;
- Facilitating competition in the supply and generation of electricity; and,
- Ensuring that the security of the network is maintained as the demand and/or generation connections change over time.

2.2.2 These licence obligations mean that the Applicant must endeavour to ensure that this connection is maintained, and should do so in an efficient, coordinated and economic way. The primary requirement for this project is to address the need to connect the Muaitheabhal Wind Farm into the electricity transmission network.

### 2.3 Proposed Development

2.3.1 The Applicant has sought to identify a preferred alignment for the construction and operation of a new 132 kV OHL supported by trident steel poles, between the proposed Muaitheabhal Wind Farm Substation and proposed Balallan Switching Station (hereafter referred to as the 'Preferred Alignment').

2.3.2 The Preferred Alignment for the Proposed Development is located on the Isle of Lewis, starting at the proposed Balallan Switching Station approximately 3 km south-west from the town of Balallan. The Preferred Alignment ends at the consented Muaitheabhal Wind Farm Substation, approximately 3.7 km north of Eishken.

2.3.3 The spacing between steel poles would vary depending on topography, altitude, and land use, but would likely be between 60 m and 160 m, with an average span length of 80 m. At this stage, it has been assumed that steel poles would be a maximum of 17 m above ground level. To install the majority of the steel poles, existing tracks would be used where possible. The use of bog mats may be necessary in some areas depending on existing access conditions, terrain and altitude. New temporary access tracks would also be required in some areas, some of which will remain permanently in place following construction to allow for operational maintenance.

2.3.4 Ancillary works would be required to facilitate construction, operation and decommissioning of the Proposed Development. These would include:

- Vegetation clearance along the OHL for the lifetime of the Proposed Development to comply with the Electricity Safety, Quality and Continuity Regulations 2002;
- Upgrade existing or establishment of new junction bellmouths;
- Establishment and reinstatement of temporary site compounds;
- Establishment of temporary and permanent access, including installation of bridges and culverts, for the construction and maintenance of the OHL;

- A Limits of Deviation (LOD) for proposed new access tracks, as defined in section 2.4;
  - Establishment of material drop off points, in which all terrain vehicles or helicopters may be used; and
  - Installation of temporary measures to protect road and water crossings during construction (scaffolding etc.)
- 2.3.5 The Proposed Development as outlined above, subject to this request for an EIA Scoping Opinion, has recently been subject to public consultation as part of the alignment selection stage. The scoping exercise presented in this Scoping Report has been undertaken against the Preferred Alignment.
- 2.3.6 The Proposed Development would not have a fixed operational life, however it is assumed that it will be operational for 40 years or more. The effects associated with the construction phase are considered representative of worst-case decommissioning effects, and therefore no separate assessment, of decommissioning effects, is proposed as part of the EIA.

## 2.4 Limits of Deviation

- 2.4.1 The LOD is the area either side of the Proposed Alignment within which micro-siting of structures may take place. Consideration was given to the following principles in defining the LOD for the Proposed Development, including presumption towards:
- The optimum LOD whilst providing flexibility for micro-siting during the detailed design phase;
  - Avoiding sensitive environmental features; and
  - Avoiding residential properties.
- 2.4.2 The following parameters have been applied to the Proposed Development:
- A horizontal LOD of 100 m width (50 m either side of the OHL) where no specific environmental constraints have been identified; and
  - A vertical LOD set at a maximum of 18 m (height) above ground level (agl), based on the height of the tallest structure.
- 2.4.3 The LOD is illustrated in **Figure 2.1: Site Layout Plan, Appendix A**. An LOD will also be applied to any new access tracks and this will be defined within the Section 37 application.

## 2.5 Indicative Overhead Line Design

- 2.5.1 The Proposed Development would comprise the construction of a new 132 kV OHL supported by trident steel poles.
- 2.5.2 The spacing between the trident poles would vary depending on topography, altitude and land use, but most likely will be between 60 m and 120 m, with an average span of 80 m. To install the majority of the trident poles, existing tracks would be used where possible. However, the use of bog mats may be necessary in some areas depending on existing access conditions, terrain and altitude. The trident poles would be a maximum of 17 m agl, with a typical average pole height of 12 m above ground level.

- 2.5.3 The Proposed Alignment, as illustrated in **Figure 2.1: Site Layout Plan, Appendix A**, has been determined based on the environmental assessments, engineering and cost analysis and stakeholder consultation undertaken to date. The detailed pole schedule (for the purposes of the application for consent) is under development.
- 2.5.4 Following consent, the investigation of sub-surface and geotechnical conditions at proposed pole locations would be undertaken and may result in the requirement for additional adjustments (micrositing) in the pole locations or heights. It is proposed that the application for consent (and the EIA Report) will be based on the Indicative Proposed Alignment and detailed pole schedule, subject to an agreed horizontal LOD to allow for flexibility in the final siting of individual poles and access tracks (up to 50 m). Similarly, the pole height may vary from the pole schedule proposed, and therefore would be subject to a vertical LOD.
- 2.5.5 It is proposed that the EIA Report provides an assessment of the likely significant environmental effects based on a proposed pole schedule and access track locations. The application of the LOD would be limited to the variation of pole and access track details that do not result in adverse change to the level of significance of effects on the environment as detailed in the EIA Report. Any utilisation of the LOD would be evaluated against the level of significance of effects reported in the EIA Report. Should the evaluation identify an adverse change to the level of significance identified in the EIA Report, consultation would be carried out with the ECU (and any relevant statutory consultees) for approval of the proposed change.

## 2.6 Construction

- 2.6.1 High voltage OHL construction typically follows a standard sequence of events as follows:
- Phase 1 – enabling works;
  - Phase 2 – OHL construction;
  - Phase 3 - OHL commissioning; and
  - Phase 4 – re-instatement.
- 2.6.2 Further detail on typical construction activities and work methods will be set out in the EIA Report. An outline of the likely programme, phasing and working methods is provided below for the purpose of informing the initial scoping stage environmental assessment.

### Construction Programme

- 2.6.3 It is anticipated that construction would commence in April 2028 (subject to consents and approvals being granted). It is anticipated that construction will be completed in June 2030, with full energisation of the project scheduled for October 2030.
- 2.6.4 The detailed construction phasing and programme could be subject to change as the design progresses and also due to necessary planning permissions and other required consents and wayleaves being obtained or agreed. Further information will be provided in the EIA Report on the indicative construction programme.

## Construction Practices and Phasing

### *Construction Environmental Management Plan*

#### **CEMPs**

- 2.6.5 A Construction Environment Management Plan (CEMP) will be developed for the project by the Contractor in consultation with the Applicant, and key consultees as required. The principal objective of the CEMP is to provide information on the proposed infrastructure and to aid in avoiding, minimising and controlling adverse environmental impacts associated with the Proposed Development. Furthermore, the CEMP will aim to define good practice as well as specific actions required to implement mitigation identified in the EIA, the planning process and/or other licencing or consenting processes. Mitigation measures relevant to the Proposed Development will be incorporated into the overall CEMP for the project. The CEMP will be updated during the pre-construction phase and form part of the contractual requirements between the Applicant and the Principal Contractor.

#### **GEMPs**

- 2.6.6 General Environmental Management Plans (GEMPs) have been developed by the Applicant and all construction work would be undertaken in accordance with these. The GEMPs would form part of the overarching CEMP.

#### **SPPs**

- 2.6.7 Species Protection Plans (SPPs) have been developed by the Applicant and have been agreed with NatureScot (NS). These would be implemented during construction of the Proposed Development. The SPPs would form part of the overarching CEMP.

#### *Phase 1 – Enabling Works*

##### Distribution Assets

- 2.6.8 To enable the construction of the Proposed Development, some rationalisation of the existing distribution circuits will be necessary. This will take the form of either undergrounding sections of the distribution lines or moving them to a location where they will not interfere with the construction of the new line. At this stage, exact details for the rationalisation are still to be confirmed by the district operator, SSE Distribution who will apply for any consents necessary.

##### Road Improvements and Access

- 2.6.9 To install the majority of the steel poles and any permanent access tracks, existing roads / tracks would be used where possible. Preference will be given to lower impact access solutions including the use of low pressure tracked personnel vehicles and rackway in boggy / soft ground areas to reduce any damage to, and compaction of, the ground. The use of these accesses would be kept to a minimum to minimise disruption to habitats along the route. Any temporary tracks would be restored as closely as possible to their pre-existing condition using natural regeneration techniques on completion of the works, with the exception of those that would be retained for permanent access.

## Vegetation Management and Forestry Clearance

- 2.6.10 No forestry clearance would be anticipated for the construction of the Proposed Development. Furthermore, minimal vegetation clearance would be required for the construction of the Proposed Development given the existing baseline. Any clearance required would be completed in compliance with standard best practice.

## Site Compounds

- 2.6.11 It is anticipated that a single main construction compound will be required, with a safe area for parking away from the public highway, the location of which will be confirmed by the Principal Contractor. Temporary construction compound locations may be required along the Operational Corridor<sup>8</sup>, the location of which will be determined through ongoing design works.

### *Phase 2 – OHL Construction*

- 2.6.12 The following process would be followed for steel pole erection:
- Turf and topsoil would be removed using an excavator; these would be removed together to retain the turf root system and placed to one side for later reinstatement. The approach will be set out in the CEMP in agreement with the statutory bodies.
  - A hole would be excavated to allow the pole brace block and/or steel foundation braces to be positioned in place. A typical pole excavation is 3 m<sup>2</sup> x 2.5 m deep.
  - The poles would be erected using normal agricultural machinery such as a digger with a lifting arm.
  - The excavator(s) would then hoist the assembled structure into position and, once the structure has been braced in position, the excavation would be backfilled.
  - The hole would be backfilled with soil replaced in reverse order to the order of excavation.
  - Backfilling would be progressed in layers of approximately 300 – 400 mm deep, with stone hardcore added as required around foundation blocks to ensure adequate compaction and suitable geotechnical conditions are maintained between each layer.
  - When replacing the topsoil / turf around the pole it would be left slightly proud of ground level (approximately 150 / 300 mm) to allow for the excavation to naturally settle further through time.
  - Once all the poles are erected the conductor will be strung between the poles in sections and brought up to full tension.
- 2.6.13 It is anticipated that all material excavated for the installation of the poles and stays would be used in backfilling the excavations.

### *Phase 3 – OHL Commissioning*

- 2.6.14 The OHL and steel poles would then be subject to an inspection and snagging process. This allows the Contractor and the Applicant to check that the works have been built to specification and are fit to energise. The Proposed Development would also go through a commissioning procedure for the switchgear, communications, and

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<sup>8</sup> See Section 2.7

protection controls through the substation at Stornoway. The circuits would then be energised.

#### *Phase 4 - Reinstatement*

- 2.6.15 Following commissioning of the Proposed Development, all construction sites will be reinstated.
- 2.6.16 Reinstatement will form part of the contract obligations for the Principal Contractor and will include the removal of all temporary access tracks, all work sites around the pole locations and the re-vegetation of all construction compounds.

### **Construction Employment and Hours of Work**

- 2.6.17 The Applicant takes community responsibilities seriously. The delivery of a major programme of capital investment provides the opportunity to maximise support of local communities.
- 2.6.18 Employment of construction staff will be the responsibility of the Principal Contractor but the Applicant encourages the Principal Contractor to make use of suitable labour and resources from areas local to the location of the works.
- 2.6.19 It is envisaged that there will be a number of separate teams working at the same time at different locations within the Proposed Development corridor. The resource levels will be dependent on the final construction sequence and will be determined by the Principal Contractor.
- 2.6.20 Construction working is likely to be during daytime periods only. Working hours are currently anticipated between approximately 07.00 to 19.00 Monday to Friday and 07.00 to 13.00 on Saturdays during the months of April to September and 07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturdays during the months of October to March (inclusive). Any changes to these hours, as well as any out of hours working, would be agreed in advance with Comhairle nan Eilean Siar (CnES).

### **Construction Traffic**

- 2.6.21 The construction will give rise to regular numbers of staff transport movements, with small work crews travelling to work site areas. It is anticipated that the Principal Contractor will identify a single main compound area, with a safe area for parking away from the public highway.
- 2.6.22 Vehicle movements will be required to construct upgraded access tracks; deliver the foundation and pole components and conductor materials to site; deliver and collect materials and construction plant from the main site compound and to individual pole locations.
- 2.6.23 The EIA Report would provide a summary of the total anticipated traffic movements associated with construction of the Proposed Development, broken down by phases. A Construction Traffic Management Plan will also be developed.

## **2.7 Operation and Management of the Transmission Connection**

- 2.7.1 In general, given the nature of the Proposed Development, there would be a negligible demand for energy, materials or natural resources during the operational life of the Proposed Development.

- 2.7.2 Regular inspections are undertaken to identify any unacceptable deterioration of components, so that they can be replaced. From time to time, inclement weather, storms or lightning can cause damage to either the insulators or the conductors. If conductors are damaged, short sections may have to be replaced. The design life of steel poles is 40 years.

### Managed Operational Corridor

- 2.7.3 In addition to the removal of vegetation to facilitate construction it is necessary to create safe corridors for operation. The operational corridor required where there is forestry is calculated as: maximum height of tree + safety distance (1.4 m taken from the ENA 43-8<sup>9</sup>) + ½ width of OHL (2.5 m). This is to maintain the resilience of the connection by considering the falling distance of adjacent trees plus the industry applied safety distance and the width of the relevant pole type. As a result, the final corridor width would be based on the safety distance required to allow for a mature tree falling towards the OHL at the mid-point on a span between two trident poles, taking account of topography and tree height at maturity.
- 2.7.4 On the basis that there is no removal of commercial forestry required to create the operational corridor, there would be no likely significant effect on forest resource.

## 2.8 Use of Natural Resources

- 2.8.1 The EIA Regulations require the consideration of the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources. The Proposed Development will use land and the permanent footprint of the Proposed Development will be described in the EIA Report.
- 2.8.2 Other than the change of land use, given the nature of the Proposed Development, there would be a negligible or no demand for natural resources during the operational life of the OHL and therefore no likely significant effect on the sustainable availability of such resources.

## 2.9 Residues and Emissions

- 2.9.1 The EIA Regulations require that the EIA Report provides an estimate, by type and quantity, of expected residues and emissions (such as water, air and soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced) resulting from the construction and operation of the Proposed Development.
- 2.9.2 **Table 2.1: Residues and Emissions** provides a summary of the anticipated residues and emissions for the purpose of informing the scope of the EIA.

**Table 2.1: Residues and Emissions**

Topic	Potential residue / emission
Water	Construction: Localised change to surface water runoff patterns is likely during construction associated with any impermeable surfaces or temporary diversion of runoff. Localised discharge of water to the environment

<sup>9</sup> Energy Networks Association (ENA) 43-8 Technical Specification

Topic	Potential residue / emission
	<p>may arise from pumping, or over-pumping in order to dewater any excavations. Pollution sources may arise as a result of soil erosion or from oil / fuel or chemical storage and use.</p> <p>Operation: No water emissions or pollution sources have been identified for the operational phase.</p>
Air	<p>Construction: The construction phase would require the transport of people and materials by road and air, with associated emissions to the atmosphere. There are no air quality management areas within the vicinity of the Proposed Development. No significant air emissions are anticipated.</p> <p>Operation: Due to the nature of the Proposed Development no significant point source or diffuse air emissions would be produced during its operation.</p>
Soil and subsoil	<p>Construction: Soil and subsoil excavation, handling and storage would be required during construction. All soil and subsoil would be stored temporarily for use in reinstatement.</p> <p>Operation: No requirement for soil or subsoil excavation or handling during the operation phase has been identified. No pollution sources have been identified for the operational phase.</p>
Noise and Vibration	<p>Construction: Noise sources during the construction phase would include increased traffic flows and noise from construction plant. Further detail is provided in <b>Chapter 10: Traffic and Transport</b>.</p> <p>There would be no significant vibration emissions associated with the Proposed Development.</p> <p>Operation: Noise emission levels from a 132 kV OHL are unlikely to be perceptible during dry weather; however, perceptible noise can arise in wet weather. Further detail is provided in <b>Chapter 11.3: Population and Human Health</b>.</p>
Light	<p>Construction: The temporary construction compounds are likely to be equipped with lighting installations for use during low light conditions and passive infra-red sensor-controlled security lighting. Any effect would be temporary and not expected to be significant.</p> <p>Operation: No light sources have been identified during normal operation of the Proposed Development.</p>
Heat and radiation	<p>Construction: No heat or radiation sources have been identified during the construction phase.</p> <p>Operation: EMFs are emitted from OHLs, with potential effects on human health. Further detail is provided in <b>Chapter 11.3: Population and Human Health</b>.</p>

Topic	Potential residue / emission
Waste	<p><b>Construction:</b> Construction will generate general waste in the form of domestic wastes and other materials, for example, wood, metals, plastics and stone. Waste will be managed in accordance with good practice guidance on the use of a Site Waste and Materials Management Plans<sup>10</sup>, to implement the waste management hierarchy<sup>11</sup></p> <p><b>Operation:</b> Electricity transmission does not produce any waste. However, the general maintenance of the OHL has the potential to produce a small amount of waste. This is likely to be restricted to waste associated with employees and visiting contractors.</p>

## 2.10 Disaster Resilience

- 2.10.1 The EIA Regulations require the consideration of the potential risks to human health, cultural heritage or the environment associated with the vulnerability of the Proposed Development to major accidents and disasters. This requirement is interpreted as requiring the consideration of low likelihood but high consequence events which would result in serious harm or damage to environmental receptors.
- 2.10.2 Relevant types of accident / disaster, given the predominantly rural context of the Proposed Development, include:
- Severe weather events, including high winds, high rainfall leading to flooding, or extreme cold leading to heavy snow and ice loading;
  - Wild fire;
  - Traffic related accidents; and
  - Mass movement associated with ground instability.
- 2.10.3 Severe weather resilience is a core component to the network design, and includes consideration of flooding resilience, OHL design and vegetation management to reduce the risk of unplanned power cuts. Crisis management and continuity plans are in place across the Applicant's network. These are tested regularly and are designed for the management of, and recovery from, significant energy infrastructure failure events. Where there are material changes in infrastructure (or the management of it) additional plans are developed.
- 2.10.4 Given the nature of the Proposed Development, no potential for risks to human health related to the vulnerability to major accidents and disasters are considered likely. While there is potential for extreme events (e.g. weather, fire, or other cause of structural damage) to disconnect the wind farm from the grid, this would not cause large-scale power outages or potential indirect impact to human health.
- 2.10.5 It is noted that the Scottish Government will expect information to be provided on the risks associated with mass movement (Peat Landslide Hazard Risk Assessment (PLHRA)); however, given the subdued topography and the limited physical

<sup>10</sup> URL <https://www.netregs.org.uk/environmental-topics/waste/waste-from-construction-and-demolition-sites/site-waste-management-plans/> (accessed 10/12/2024)

<sup>11</sup> Scottish Government (2017) Applying the waste hierarchy: guidance: URL [https://www.gov.scot/publications/guidance-applying-waste-hierarchy/pages/3/#:-:text=The%20waste%20hierarchy%20ranks%20waste,the%20lifecycle%20of%20the%20material.&text=When%20waste%20is%20created%2C%20it,all%20disposal%20\(i.e.%20landfill\).](https://www.gov.scot/publications/guidance-applying-waste-hierarchy/pages/3/#:-:text=The%20waste%20hierarchy%20ranks%20waste,the%20lifecycle%20of%20the%20material.&text=When%20waste%20is%20created%2C%20it,all%20disposal%20(i.e.%20landfill).) (accessed 10/01/2024)

interventions required to build an OHL supported by steel poles, no significant risks to cultural heritage or the environment have been identified.

### 3. EIA METHODOLOGY

#### 3.1 Introduction

- 3.1.1 This chapter sets out the approach that will be taken to complete the EIA of the Proposed Development, including reference to legal requirements, best practice and the assessment of parameters.
- 3.1.2 The EIA Report will be prepared to meet the requirements of Schedule 4 of the EIA Regulations and the Institute of Environmental Management and Assessment (IEMA) Quality Mark criteria<sup>12</sup>. In line with requirements of Regulation 5(5) of the EIA Regulations, this EIA Scoping Report has been prepared by competent experts. The relevant expertise and qualifications of the technical team will be provided in the EIA Report.
- 3.1.3 A detailed overview of the guidance and methodology adopted for each technical study is provided within the respective technical chapters of this Scoping Report (**Chapters 4-11**). All figures are located in **Appendix A**.

#### 3.2 Identification of Baseline

- 3.2.1 To identify the scale of likely significant effects as a result of the Proposed Development, it is necessary to establish the existing baseline environmental conditions.
- 3.2.2 The baseline scenario will be established through the following methods, where relevant:
- Desk-based studies, including review of existing information;
  - Site visits and surveys;
  - Modelling;
  - Review of relevant national and local planning policies;
  - Consultation with the relevant statutory consultees; and
  - Identification of Sensitive Receptors.
- 3.2.3 Consistent with Part 1 of Schedule 4 of the EIA Regulations, an identification of the aspects of the environment likely to be significantly affected by the Proposed Development has been undertaken to inform this EIA Scoping Report. In particular, this has focused on potential impacts upon population, fauna, flora, soil, material assets including the architectural and archaeological heritage, landscape and inter-relationship between those factors.

#### 3.3 Assessment of Likely Significant Environmental Effects

- 3.3.1 Each assessment chapter will include a description of:
- The detailed methodology covering the approach to establishing the current state of the baseline environment, the relevant baseline scenario used in the assessment (which may be the current baseline or a future baseline scenario) and the criteria used to identify and assess the likely significant effects;

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<sup>12</sup> <https://www.iema.net/corporate-programmes/eia-quality-mark> (accessed: 10/10/24)

- How the assessment deals with LOD<sup>13</sup>;
  - The relevant aspects of the current state of the environment (baseline conditions) and an outline of likely evolution of the baseline conditions in the absence of the Proposed Development (the ‘do nothing’ scenario) for the purpose of defining any relevant ‘future baseline’ scenarios that may be used as a basis for the impact assessment;
  - The likely significant effects;
  - The measures proposed to avoid, prevent, reduce, or, if possible, offset any likely significant effects (mitigation measures) and where appropriate, any proposed monitoring arrangements; and
  - Residual effects remaining following the implementation of proposed mitigation measures.
- 3.3.2 The description of the likely significant effects will cover direct effects and indirect (including secondary) effects as a result of construction or operational activities. The description of effects will identify the effect duration (short-term, medium-term and long-term), whether effects are permanent or temporary, and if effects can be categorised as adverse or beneficial.
- 3.3.3 Consideration will be given to the potential for cumulative effects, where the assessment will describe the effects associated with the Proposed Development when considered in combination with other reasonably foreseeable plans or projects. At this stage, it is considered that the following cumulative schemes would be considered in the EIA Report:
- Harris to Stornoway 132kV OHL Replacement (Consented, construction commencing in 2025) (ECU Ref: ECU00004490), immediately west of the Proposed Development;
  - Uisenis Wind Farm (Under Consideration) (ECU Ref: ECU00004568), immediately south of the Proposed Development;
  - Heastabhal Wind Farm (EIA Scoping stage) (ECU Ref: ECU00005011), immediately west of the Proposed Development; and
  - Other SSEN Transmission plans or projects, which are not yet the subject of an application or consent (but are foreseeable to the Applicant and relevant to this EIA).
- 3.3.4 The list of developments to be considered in the cumulative effects assessment will be finalised approximately four months prior to submission to allow sufficient time to compile the EIA Report.
- 3.3.5 It is considered that there would be no potential for transboundary<sup>14</sup> effects associated with the Proposed Development, and therefore no further assessment of transboundary effects is proposed.

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<sup>13</sup> An area which defines the practical limits within which micro-siting of the OHL infrastructure can occur within the terms of the s37 consent which is to be sought. The purpose of Limits of Deviation is to allow flexibility within a s37 consent for the final micro-siting of individual poles to respond to localised ground conditions, topography, engineering, and environmental constraints.

<sup>14</sup> Transboundary effects under the EIA Directive are effects of certain projects implemented in one Member State, likely to have significant effects on the environment of another Member State.

### 3.4 Scoping Methodology

- 3.4.1 The following **Chapters (4 – 11)** aim to provide sufficient detail to characterise the potential interactions between the Proposed Development and the environmental receptors identified. In presenting a rationale for the proposed scope of each environmental assessment, this Scoping Report has taken the sensitivity of the current state of the environment into account, based on an understanding of the baseline conditions. The Scoping Report has also been prepared with reference to the potential magnitude of impacts, considering the typical construction and operational activities, physical characteristics and potential emissions / residues associated with the Proposed Development.
- 3.4.2 Where there is sufficient evidence to support scoping a topic out of the EIA process, this is presented. Otherwise, where it is considered that there is the potential for likely significant effects, the Scoping Report provides details of the proposed scope or detailed impact assessment, including the approach to further baseline data collection and brief details of the proposed methodology for impact assessment which will be employed for each topic.

### 3.5 Identification of Mitigation Measures

- 3.5.1 Following the initial assessment, mitigation measures will be recommended to prevent, reduce or remedy any significant adverse environmental effects identified. Such measures will be implemented during design, construction and/or operation of the Proposed Development. Each technical chapter will detail the measures recommended to mitigate any identified significant adverse effects, and a summary of the recommended mitigation measures will be provided.
- 3.5.2 Following the implementation of mitigation measures, an assessment of the significance of any residual effects will be undertaken. The findings will be presented in each technical chapter of the EIA Report.

### 3.6 Assumptions and Limitations

- 3.6.1 The key assumptions and limitations applied to the preparation of this EIA Scoping Report are set out below. Assumptions and limitations specific to certain topics are identified in the appropriate technical chapter:
- Baseline conditions have been established from a variety of sources, including historical data but, due to the dynamic nature of certain aspects of the environment, conditions will change during the construction and operation of the Proposed Development.
  - Information received by third parties is complete and up to date.
  - The design, construction and completed stages of the Proposed Development would satisfy minimum environmental standards, consistent with contemporary legislation, practice and knowledge.

## 4. SEASCAPE, LANDSCAPE AND VISUAL AMENITY

### 4.1 Introduction

- 4.1.1 This chapter of the EIA Scoping Report has been prepared to identify, predict and evaluate potential landscape and visual effects arising from the Proposed Development, and presents the assessment methodology to be used in the Seascape, Landscape and Visual Impact Assessment (SLVIA).
- 4.1.2 The assessment process describes the seascape, landscape and visual baseline and associated receptors, assigning their sensitivity to the type of development proposed, before establishing the magnitude of impact and consequential residual effects that would arise from construction and operational elements of the Proposed Development. The identification of sensitive receptors and potential significant effects would afford the opportunity for mitigation, where appropriate, via design iterations of the layout and associated infrastructure, including avoidance where possible.

### 4.2 Baseline Conditions

- 4.2.1 Given the vertical scale and elevation of the Proposed Development, there is a potential for effects on identified seascape and landscape character and visual amenity receptors both within the LOD and within a wider area (referred to as the 'Study Area'). The Study Area has been determined based on a Zone of Theoretical Visibility (ZTV), which indicates the scale of intervisibility between the Proposed Development and potentially sensitive receptors.
- 4.2.2 A ZTV has been prepared for the Proposed Development and is illustrated in **Figure 4.1: Zone of Theoretical Visibility, Appendix A**, which determined the Study Area to comprise a 6 km buffer around the LOD (**Figure 4.2: Seascape, Landscape and Visual Impact Assessment Study Area and Topography, Appendix A**). The baseline conditions within the Study Area, which have been collated from desk-based studies, are summarised below.

#### Site Context

- 4.2.3 The landscape surrounding the Proposed Development is characterised by irregular, stepped rocky topography and small lochans, and Loch Strannabhat is located 100 m just north-west of the Proposed Development, Loch Eireasort 900 m to the north-east, Loch Sgiobacleit 40 m to the east and Loch Seaforth 80 m to the south. The Proposed Development starts within the valley of Loch Eireasort, with rugged and rocky hills to its south and north-west. It then continues south-east past the Crionaig and associated summits, ending in the valley of Loch Sgiobacleit, consisting of rocky moorland.
- 4.2.4 The closest transport link to the Proposed Development is the A859, which runs through the northern end of the Proposed Development, and is an artillery road that connects Stornoway to the north-east, to the south of the Isle of Lewis. Some crofting and settlements are seen along the sides of the road at Balallan (1.5 km to the north-east). The B8060 routes along the south of Loch Eireasort, connecting some small settlements. Eishken Road runs parallel to the Proposed Development.
- 4.2.5 The majority of the settlement pattern is located to the north-east and is associated with Loch Eireasort and the gentler sweeping slopes. The north and west of the

Study Area have a sense of remoteness and are largely uninhabited, except for some isolated croft houses, near Loch Seaforth and Loch Sgiobacleit.

## Landscape Fabric

- 4.2.6 The landscape consists of small hills and rocky outcrops enclosing small lochs and lochans. There is limited tree cover, with vegetation predominately consisting of peat vegetation. Built Infrastructure in the study area is small to medium scale, and consists of transport routes, linear settlements with some dispersed crofts and farmsteads, and low voltage OHLs.

## Landscape Character

- 4.2.7 **Figure 4.3: Seascape and Landscape Character Types, Appendix A**, illustrates the location and extent of Landscape Character Types (LCTs) and Seascape Character Types (SCTs) within the Study Area. The LCTs and SCTs of relevance to the SLVIA with potential for significant effects on landscape character are set out in **Table 4.1: Landscape and Seascape Character Types**. The Cnoc and Lochan LCT is located within the Study Area but will be scoped out of the assessment on the basis that there is no theoretical visibility of the Proposed Development.

**Table 4.1: Landscape and Seascape Character Types**

LCT	Key Characteristics
LCT 323 Rocky Moorland – Outer Hebrides. The 'host' LCT within which the Proposed Development would be located.	<ul style="list-style-type: none"> <li>Rocky, stepped landscape with irregular topography.</li> <li>Rocky knolls interlocked with peaty moorland vegetation and small lochans.</li> <li>Considerable diversity of form and texture.</li> <li>Occasional areas of forestry, small woodlands and shelter planting.</li> <li>Medium scale.</li> <li>Predominantly uninhabited and sense of remoteness.</li> </ul>
LCT 326 Prominent Hills and Mountains. Situated on the south-western edge of the Proposed Development.	<ul style="list-style-type: none"> <li>Individual peaks with pronounced summits, long ridges and slopes.</li> <li>Rises steadily from surrounding terrain, contrasting in character between the open remote character of the uplands, and the more diverse patterns of settlement of the coastal crofting areas.</li> <li>Massive vertical scale.</li> <li>Irregular rock buttresses, ledges, shelves and deep gullies on upper slopes.</li> <li>Lower slopes of windswept heather moorland.</li> <li>Uninhabited.</li> </ul>
LCT 318 Linear Crofting <sup>15</sup> . Situated to the north-east of the Proposed Development.	<ul style="list-style-type: none"> <li>Strong linear rectangular field patterns on irregular landform of sweeping slightly concave slopes with rocky knolls, rising to rocky or boggy moor inland and sloping down to rocky shores or broad shallow glens.</li> <li>Medium scale landscape.</li> </ul>

<sup>15</sup> Scottish Natural Heritage, SNH National Landscape Character Assessment, Landscape Character Type 326 Linear Crofting (2019) Available at: <https://www.nature.scot/sites/default/files/LCA/LCT%20318%20-%20Linear%20Crofting%20-%20final%20pdf.pdf>

LCT	Key Characteristics
	<ul style="list-style-type: none"> <li>• Landcover dominated by improved and semi-improved grassland fields.</li> <li>• Lack of tree cover, limited to a few small mixed and coniferous woodlands.</li> <li>• Limited colour and textural diversity.</li> <li>• Sharp contrast between inbye and outbye.</li> <li>• House siting relates to topography, giving overall effect of being dispersed.</li> <li>• Narrow buffer of common grazing between townships.</li> <li>• Callanish stone circle complex.</li> <li>• Strong, simple relationship between croft houses and land holdings, with occasional views outwards to open moorlands, giving townships a feeling of rural remoteness.</li> </ul>
<p>SCT Type 9 Sounds, Narrows and Islands<sup>16</sup>. Situated to the south and south-west of the Proposed Development.</p>	<ul style="list-style-type: none"> <li>• Fragmented coastline.</li> <li>• Islands and mainland enclosing narrows.</li> <li>• Low and rocky coastline.</li> <li>• Occasional sandy beaches.</li> <li>• Backed with crofting and moorland.</li> </ul>
<p>SCT Type 13 – Low Rocky Island Coasts<sup>17</sup>. Situated to the north-east of the Proposed Development.</p>	<ul style="list-style-type: none"> <li>• Low and rocky coastline rising to cliffs in places.</li> <li>• Moorland, either rocky, ‘stepped’ or boggy, tends to back a narrow sparsely settled open coastal fringe, usually some crofting and few settlements.</li> <li>• Views of open Atlantic Ocean in the main; dramatic mountain backdrops. ‘Fragmented’ island coastlines.</li> </ul>

## Landscape Designations and Classifications

4.2.8 There are no landscape designations within the Proposed Development. The following landscape designations and classifications are located within the Study Area, as illustrated in **Figure 4.4: Landscape Designations and Classifications, Appendix A**.

- Wild Land Area (WLA) 30 Harris - Uig Hills, which lies 800 m north-west of the Proposed Development (at the closest measured point).
- WLA 31 Eishken, which lies 2.9 km south of the Proposed Development (at the closest measured point).
- South Lewis, Harris and North Uist National Scenic Area, which lies 8 km south and south-west of the Proposed Development (at the closest measured point).

<sup>16</sup> Scotland's Nature Agency, Description of Coastal character types - (including Caithness) (2024) Available at: <https://www.nature.scot/doc/description-coastal-character-types-including-caithness>

<sup>17</sup> Scotland's Nature Agency, Description of Coastal character types - (including Caithness) (2024) Available at: <https://www.nature.scot/doc/description-coastal-character-types-including-caithness>

## Visual Amenity

- 4.2.9 The Visual Assessment will address effects on visual amenity, as experienced by people within areas of potential visibility within the Study Area, as indicated by the ZTV (refer to **Figure 4.1: Zone of Theoretical Visibility, Appendix A**). The baseline seeks to identify the areas of potential visibility where views may be changed by the Proposed Development, in accordance with Guidelines for Landscape and Visual Impact Assessment (GLVIA) guidance<sup>18</sup>.
- 4.2.10 Visual amenity is primarily concerned with scenic views of the interplay of landscape characteristics of the area, particularly with respect to views from summits, recreational routes, cultural heritage assets, key transport routes and settlements and residential properties (including isolated dwellings and farmsteads), as well as for views of lochs and glens.
- 4.2.11 Visual effects are experienced by people at both static locations and sequentially as they travel along transport or recreational routes. Based on this analysis a series of visual receptors have been identified to assess potential effects on the visual amenity within the Study Area, as illustrated in **Figure 4.5: Residential Receptors** and **Figure 4.6: Visual Amenity, Appendix A**.

### *Settlements*

- 4.2.12 There are several settlements within the Study Area with potential for intervisibility with the Proposed Development, which include those listed in the following:
- Balallan – a linear settlement, located 2.5 m north-east of the Proposed Development, along the A859. Houses consist mainly of detached bungalows / crofts and two-storey houses, and occur at intervals along the A859.
  - Sildinis – a small cluster of dwellings, located 1.4 km east from the Proposed Development, branching off to the north of B8060 towards Loch Eireascort. The settlement comprises of a few single-storey bungalows and crofts and a public house / hotel.
  - Arivruaich – a linear settlement, located 1.9 km south-west of the Proposed Development along the A859. The settlement is comprised of scattered single-storey crofts and bungalows.
  - Tabost – made up of two crofting settlements, located 3.7 km north-east of the Proposed Development, along the B8060. The settlement is comprised of scattered single-storey bungalows and crofts.
  - Kershader – a small cluster of dwellings, located 4.7 km north-east of the Proposed Development, along the B8060. The settlement is comprised of scattered single-storey bungalows / crofts and a stone youth hostel.
  - Laxay – a small settlement, located 3.2 km north-east of the Proposed Development, along the A859. The settlement is comprised of scattered single-storey bungalows / crofts and two-storey houses.
  - Garyvard – a small settlement, located 5.6 km north-east of the Proposed Development along the B8060. The settlement is comprised of scattered single-storey bungalows and crofts.
  - Glenside – a larger settlement, located 4.7 km east of the Proposed Development, along the B8060. It is comprised of scattered two-storey houses,

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<sup>18</sup> Landscape Institute. and IEMA, 2013. Guidelines for Landscape and Environmental Impact Assessment. Hoboken: Taylor and Francis.

single-storey bungalows and crofts with key amenities, such as a church, school, medical centre and a fire station.

- Leumrabhaugh – a small settlement, located 7 km south-east of the Proposed Development, along the B8060. The settlement is comprised of scattered single-storey bungalows.
- Orasaigh – a small settlement, located 5.9 km south-east of the Proposed Development, along the B8060. The settlement is comprised of scattered single-storey bungalows.
- Eishkin – a small settlement, located 4.9 km south of the Proposed Development. The settlement is comprised of scattered two -storey houses.

### *Transport Routes*

4.2.13 There are three key roads within the Study Area that would have potential views of the Proposed Development, which include those listed in the following:

- The A859, which at its closest, is located 250 m south-east of the Proposed Development. It is the main transport route through the area, connecting Stornoway in the north to Harris in the south.
- The B8060, located on the south side of Loch Eireasort, lies 1 km north-east of the Proposed Development, at its closest point. The B8060 connects the A859 with the settlements of Sildinis, Tabost, Kershader and Garyvard, continuing south to Gravir.
- Eishken Road, a single-track road located to the south of the B8060, connecting the A859 with Eishken 250 m south-east of the Proposed Development.

### *Recreational Routes and Summits*

4.2.14 There are no core paths identified within the Study Area. The Hebridean Way, a long-distance cycling and walking route that typically follows the A859, and approaches Balallan from the south-west is located in the Study Area. The trail temporarily splits into two alternative routes just south of Loch Stranndabhat: the cycle route continues to follow the A859, while the walking route extends around the eastern and northern sides of Loch Stranndabhat and Loch Cuthaig, before reconnecting with the cycle route at Balallan. At their closest, the walking route is located 500 m west of the Proposed Development, while the cycle route runs through the Proposed Development.

4.2.15 There are four nearby summits that may be used by hill walkers within the Study Area, which include those listed in the following:

- Guineamol, 406 m Above Ordnance Datum (AOD) and located 3.8 km south of the Proposed Development.
- Beinn Mheadhanach, 288 m AOD and located 2.4 km south of the Proposed Development.
- Griamacleit, 155 m AOD and located 7.7 km south-west of the Proposed Development.
- Sleiteachal Mhor, 248 m AOD and located 4.8 km south-west of the Proposed Development.

4.2.16 The cultural heritage asset, the Pairc Land Raiders Cairn also provides a potential viewpoint. This asset is located 70 m north of the Proposed Development.

### 4.3 Sensitive Receptors

4.3.1 The sensitive landscape and visual receptors identified in the Study Area with the potential for significant effects are set out in **Table 4.2: Sensitive Receptors**.

**Table 4.2: Sensitive Receptors**

Type	Receptor
<b>Landscape Receptors</b>	<ul style="list-style-type: none"> <li>• LCT 323 Rocky Moorland – Outer Hebrides.</li> <li>• LCT 326 Prominent Hills and Mountains.</li> <li>• LCT 317 Gently Sloping Crofting.</li> <li>• SCT Type 9 Sounds, Narrows and Islands</li> <li>• SCT Type 13 Low Rocky Island Coasts</li> </ul>
<b>Visual Receptors</b>	<ul style="list-style-type: none"> <li>• Users of the A859, the B8060 and Eishken Road.</li> <li>• Users of the Hebridean Way Cycle Route.</li> <li>• Users of the Hebridean Way Walking Route.</li> <li>• Summits within the Study Area, including Guaineamol, Beinn Mheadhanach, Griamacleit and Sleiteachal Mhor.</li> <li>• Residential receptors at Balallan, Sildinis, and Arivruaich and isolated / scattered properties within 2km to the Proposed Development.</li> <li>• Visitors to the Pairc Land Raiders Cairn</li> </ul>

### 4.4 Potential Significant Effects

4.4.1 **Table 4.3: Potential Construction Effects** and **Table 4.4: Potential Operational Effects** below present a summary of the scoping process, identifying which likely environmental effects, with respect to landscape and visual, will be assessed in the EIA (i.e. considered potentially significant and therefore 'scoped in').

**Table 4.3: Potential Construction Effects**

Receptor	Potential significant effects
<b>Landscape</b>	
Landscape fabric	Direct effects on the landscape fabric of the Site.
LCT	Direct and indirect effects on the host LCT (LCT 323: Rocky Moorland – Outer Hebrides) and indirect effects on surrounding LCTs and SCTs (LCT 326 Prominent Hills and Mountains, LCT 317 Gently Sloping Crofting, SCT Type 9 Sounds, Narrows and Islands and SCT type 13 Low Rocky Island Coasts).
<b>Visual Amenity</b>	
Road users	Visual effects from neighbouring roads, as identified in <b>Section 4.3</b> .
Recreational routes	Visual effects on users of recreational routes, summits and vantage points within the Study Area, as identified in <b>Section 4.3</b> .
Settlements and residential properties.	Visual effects from settlements and properties in proximity to the Proposed Development, as identified in <b>Section 4.3</b> .

**Table 4.4: Potential Operational Effects**

Receptor	Potential significant effects
<b>Landscape</b>	
Landscape Fabric	Direct effects on the landscape fabric of the Site.
LCT and Seascape Character Type	Direct and indirect effects on the host LCT (LCT 323: Rocky Moorland – Outer Hebrides) and indirect effects on surrounding LCTs (LCT 326 Prominent Hills and Mountains and LCT 317 Gently Sloping Crofting). Potential indirect effects on Seascape Character Type 9 - Sounds, Narrows and Islands and Type 13 - Low Rocky Island Coasts.
<b>Visual Amenity</b>	
Road users	Visual effects from neighbouring roads, as identified in <b>Section 4.3</b> .
Recreational routes	Visual effects on users of recreational routes, summits and vantage points within the study area, as identified in <b>Section 4.3</b> .
Settlements and residential properties.	Visual effects from settlements and properties in proximity to the Proposed Development, as identified in <b>Section 4.3</b> .

- 4.4.2 In assessing potential cumulative landscape and visual effects, consideration will be given to cumulative effects arising from combined and/or consecutive (concurrent) visibility (where the observer is able to see two or more developments from one viewpoint location), and sequential effects where a number of similar developments would be visible individually or simultaneously over a sequence of connected viewpoints, such as would be found along a road or footpath.

## 4.5 Issues Scoped Out

- 4.5.1 No WLA assessment is proposed as the Proposed Development is not located within or adjacent to a WLA. This is considered consistent with the provisions of Policy 4 (g) of National Planning Framework (NPF) 4 which states that “*buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration.*” As such, no significant effects on the surrounding WLAs would occur and the effects on WLAs will not be considered further in the EIA Report.
- 4.5.2 The Cnoc and Lochan LCT is located within the Study Area but will be scoped out of the assessment on the basis that there is no theoretical visibility of the Proposed Development:

## 4.6 Assessment Methodology

### Study Area

- 4.6.1 As stated in the above, a preliminary ZTV has been prepared for the Proposed Development and is illustrated in **Figure 4.1: Zone of Theoretical Visibility, Appendix A**. It is considered that the Proposed Development would be visually recessive to an average observer beyond a distance of 6 km based on the preliminary ZTV. Consequently, it has been assumed, for the purposes of the SLVIA,

that significant landscape or visual effects would be limited to receptors within 6 km of the Site, which has determined the appropriate Study Area, including for the cumulative assessment.

- 4.6.2 A detailed Residential Visual Amenity Assessment (RVAA) will also be undertaken in respect of individual properties within a 1 km of the Proposed Development. These are illustrated on **Figure 4.5: Residential Receptors, Appendix A**.

### Further Baseline Characterisation

- 4.6.3 A description of the existing seascape, landscape and visual baseline context, and cumulative context, will be included within the SLVIA and defined using the following sources of information:

- Ordnance Survey (OS) Terrain 5 m Digital Terrain Model (DTM);
- OS Mapping (1:25,000);
- NatureScot Landscape Character Assessment – 2019 on-line database<sup>19</sup>;
- Commercially available aerial photography;
- Computer generated ZTVs (based on 5 m DTM data);
- Field reconnaissance / field notes; and
- Site photography.

- 4.6.4 Fieldwork will be undertaken to ‘groundtruth’ and verify the findings of the preliminary desk top study. ZTV mapping represents theoretical visibility and is therefore an over-estimation of visibility. Actual visibility will be confirmed or refined by field work and in some cases, viewpoints will be micro sited or scoped out for further analysis.

### Assessment Approach

- 4.6.5 A detailed description of the methodology utilised for the assessment will be set out within the SLVIA. The SLVIA will be prepared in accordance with the following guidance and professional standards:
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017<sup>20</sup>;
  - NPF4<sup>21</sup>;
  - GLVIA Third Edition, Landscape Institute and Institute of Environmental Management and Assessment (2013) and subsequent technical notes and clarifications<sup>22</sup>;
  - Landscape Character Assessment: The Countryside Agency and NatureScot (2002)<sup>23</sup>;
  - Technical Guidance Note 06/19 Visual Representation of Development Proposals, Landscape Institute (2019)<sup>24</sup>;

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<sup>19</sup> Available at <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions> (Last accessed 24-07-2024)

<sup>20</sup> Available at [https://www.legislation.gov.uk/ssi/2017/102/pdfs/ssi\\_20170102\\_en.pdf](https://www.legislation.gov.uk/ssi/2017/102/pdfs/ssi_20170102_en.pdf) (last accessed 24-07-2024)

<sup>21</sup> Available at <https://www.gov.scot/publications/national-planning-framework-4/documents/> (last accessed 24-07-2024)

<sup>22</sup> Available at <https://www.landscapeinstitute.org/technical/glvia3-panel/> (last accessed 24-07-2024)

<sup>23</sup> Available at <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/what-landscape-character-assessment> (last accessed 24-07-2024)

<sup>24</sup> Available at [https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI\\_TGN-06-19\\_Visual\\_Representation.pdf](https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf) (last accessed 24-07-2024)

- Technical Guidance Note 02/17 Visual Representation of Wind Farms, Version 2.2, NatureScot (2017)<sup>25</sup>;
- Technical Guidance Note 02/19 Residential Visual Amenity Assessment (RVAA), Landscape Institute (2019)<sup>26</sup>;
- NatureScot Commissioned Report 103: An Assessment of the Sensitivity and Capacity of the Scottish Seascape in Relation to Windfarms (2005)<sup>27</sup>;
- Guidance - Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments, NatureScot (2021)<sup>28</sup>;
- Landscape Sensitivity Assessment Guidance (Methodology), NatureScot (2022)<sup>29</sup>;
- Assessing Impacts on Wild Land Areas – Technical Guidance, NatureScot (2020)<sup>30</sup>; and
- Visual Impact of Scottish Transmission Assets (VISTA), Scottish & Southern Electricity Networks Transmission (2019)<sup>31</sup>.

## Assessment of Effects

### Assessment Criteria

- 4.6.6 The effects of the Proposed Development on seascape, landscape and visual receptors will be assessed based on their type (direct effects, indirect effects, and effects on setting (including cumulative effects)) and nature (adverse or beneficial). Effects can be permanent (lasting for a long time or forever), temporary (not lasting for very long) and/or reversible (can be changed back to what it was before).
- 4.6.7 The assessment will take into account the sensitivity of the seascape, landscape and visual receptors and its setting and the magnitude of the predicted impact, following the approach advised in the Scottish Natural Heritage (SNH) / Historic Environment Scotland (HES) (2018) EIA guidance<sup>32</sup>.
- 4.6.8 The sensitivity of the asset and the magnitude of the predicted impact will be used to inform an assessment of the significance of the effect, using a widely accepted matrix approach. Where the application of a matrix identifies two possible outcomes, professional judgment supported by reasoned justification, will be used to determine the level of significance.
- 4.6.9 Major and moderate effects will be considered ‘significant’ in the context of the EIA Regulations. Minor and negligible effects will be considered ‘not significant’.
- 4.6.10 Road user visual amenity effects will be based on tourist and visitor experience due to the higher sensitivity rather than the commuters in the SLVIA.

<sup>25</sup> Available at <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/01/02-17-Visual-Representation.pdf> (last accessed 24-07-2024)

<sup>26</sup> Available at <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/03/tgn-02-2019-rvaa.pdf> (last accessed 24-07-2024)

<sup>27</sup> Available at <https://www.nature.scot/doc/naturescot-commissioned-report-103-assessment-sensitivity-and-capacity-scottish-seascape-relation> (Last accessed 24-07-2024)

<sup>28</sup> Available at <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments> (last accessed 24-07-2024)

<sup>29</sup> Available at <https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology> (last accessed 24-07-2024)

<sup>30</sup> Available at <https://www.nature.scot/doc/assessing-impacts-wild-land-areas-technical-guidance> (last accessed 24-07-2024)

<sup>31</sup> Available at <https://www.ssen-transmission.co.uk/globalassets/documents/vista/vista-policy-document.pdf> (last accessed 24-07-2024)

<sup>32</sup> SNH & HES (2018). *Environmental Impact Assessment Handbook*, Scottish Natural Heritage and Historic Environment Scotland, Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0>

- 4.6.11 A description of micro siting of pole locations and design priorities and any mitigation measures proposed to address any potential significant effects will be detailed within the SLVIA.

#### *Assessment of Impacts*

- 4.6.12 The assessment of seascape and landscape will consider effects on landscape fabric, seascape and landscape character types and the special qualities and integrity of landscape designations and classifications. The assessment will consider the visual amenity of people at key visual receptor locations, including residents of settlements, scattered individual residential properties, users of key transport routes, users of recreational routes, including strategic trails, cycleways and core pathways and key summits and routes used by hill walkers. The assessment will also describe key aspects and constituents of the visual amenity of the Study Area such as key visual elements, connecting / linking views, and sequential views.

#### *Assessment Viewpoints*

- 4.6.13 To inform and verify the assessment findings, a series of preliminary assessment viewpoints have been identified. The viewpoints have been selected to provide a range of representative views to establish an overview 'in the round' from a range of LCTs, SCTs, classified landscapes, designated landscapes, and visual receptors within the Study Area. The preliminary list of assessment viewpoints is set out in **Table 4.5** and their location is shown on **Figure 4.7: Viewpoint Locations, Appendix A**.

**Table 4.5: Proposed Viewpoints and Associated Receptors**

VP	Name	Location (Easting & Northing)		Visual Receptors at Viewpoint	Landscape and Seascape Receptors at Viewpoint
1	Hebriddean way	125132	920399	Tourist, Recreational user	LCT 323 Rocky Moorland - Outer Hebrides
2	Arivruaich	125120	917847	Tourist, Road user and Residential Receptors	LCT 317 Gently Sloping Crofting
3	Sildinis	127921	919570	Road user and Residential Receptors	LCT 318 Linear Crofting, Type 13 – Low Rocky Island Coasts
4	Ceann Shiphoirt	128160	916696	Road user and Residential Receptors	LCT 323 Rocky Moorland – Outer Hebrides
5	Lacasaidh	133071	922030	Tourist, Road user and Residential Receptors	LCT 317 Gently Sloping Crofting
6	Northern Minch	126964	916538	Tourist, Recreational user	Rocky Moorland - Outer Hebrides, SCT Type 9 -

VP	Name	Location (Easting & Northing)		Visual Receptors at Viewpoint	Landscape and Seascape Receptors at Viewpoint
					Sounds, Narrows and Islands
7	Community woodland	120425	914240	Tourist, Recreational user	LCT 323 Rocky Moorland - Outer Hebrides
8	Guaineamol	126314	913741	Tourist, Recreational user	LCT 326 Prominent Hills and Mountains
9	Balallan	128488	920807	Tourist, Road user and Residential Receptors	LCT 317 Gently Sloping Crofting
10	Glenside	137129	915691	Road user and Residential Receptors	LCT 318 Linear Crofting

- 4.6.14 Photography from each viewpoint location will be taken using a digital SLR camera and will follow Landscape Institute Technical Guidance Advice Note 06/19: Visual Representation of Development Proposals NatureScot Technical Guidance 02/17: *Visual Representation of Wind Farms*<sup>33</sup>. Fieldwork will be undertaken to capture winter photography. Where this is not possible and the seasonal variation in leaf cover may give rise to greater visibility in the winter, this will be noted.
- 4.6.15 The SLVIA submission will present a photograph showing the 90-degree baseline view from each viewpoint and an indicative visualisation will be presented to illustrate the potential view following the development of the Proposed Development. A 3D model, prepared in Ventus True View visualisation software will be montaged into all 10 baseline photographs to show the scale and extent of the Proposed Development. The model will be used to show the Proposed Development post construction<sup>34</sup>.

#### *Supporting Assessments and Graphics*

- 4.6.16 The SLVIA will be accompanied by a series of Technical Appendices (TAs) that will provide detailed assessment of residual effects on different aspects of the landscape and visual resource within the Study Area, these include:
- An assessment of residual effects on SCTs and LCTs;
  - An assessment of residual effects on the special qualities of designated and classified landscapes;
  - A detailed viewpoint assessment; and
  - An assessment on residential visual amenity.

<sup>33</sup> Available at [https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI\\_TGN-06-19\\_Visual\\_Representation.pdf](https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf) (last accessed 24-07-2024)

<sup>34</sup> Available at <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/01/02-17-Visual-Representation.pdf> (last accessed 24-07-2024)

4.6.17 The SLVIA will be accompanied by a series of baseline and analysis figures, as well as visualisations and annotated photographs for selected assessment viewpoints set out in **Table 4.5**.

#### **4.7 Summary and Questions to Consultees**

4.7.1 The SLVA will identify and evaluate the likely residual effects of the Proposed Development on seascape, landscape and visual receptors within the Study Area. The effects of the Proposed Development on seascape, landscape character and on views and visual amenity will be assessed and mitigation measures, where appropriate, will be proposed to prevent, reduce, or offset any likely significant adverse effects identified.

4.7.2 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the SLVIA, specifically with regards to the following:

- Is the proposed methodology, data sources, and extent of the receptor specific Study Areas accepted?
- Are the receptors and impacts scoped out of the assessment accepted?
- Do consultees agree that the location of assessment viewpoints proposed will provide a representative basis for the assessment?

## 5. CULTURAL HERITAGE

### 5.1 Introduction

5.1.1 This chapter of the Scoping Report provides an overview of the cultural heritage baseline along and in the vicinity of the Proposed Development, describes the potential effects associated with construction and operation of the Proposed Development, and presents the assessment methodology to be used in the cultural heritage impact assessment.

### 5.2 Baseline Conditions

5.2.1 The cultural heritage baseline summarised here has been identified through a desktop study carried out during the route and alignment selection stages of the project, drawing on data from the CnES Historic Environment Record (HER) and designation lists held by HES. The data was obtained from the HER in May 2023 and from HES in October 2024.

5.2.2 A walkover field survey along a 200 m wide corridor centred on the Proposed Development has been carried out between 9 and 13 December 2024, to record the baseline condition of assets recorded in the HER and identify any hitherto unrecorded heritage assets.

#### **Statutory Protected Sites (Designated Sites)**

5.2.3 Designated heritage assets within 2 km of the Proposed Development (hereafter referred to as the 'Outer Study Area') are shown on **Figure 5.1: Cultural Heritage, Appendix A**.

5.2.4 There is one Scheduled Monument within 2 km of the Proposed Development: "Sideval, stone circle 400 m south of (SM 5351)", situated approximately 625 m west of the Proposed Development at the head of Loch Seaforth and partly incorporated into the walls of a 19<sup>th</sup> Century blackhouse.

5.2.5 There are no other designated heritage assets (World Heritage Sites, Listed Buildings, Conservation Areas, Inventory Garden and Designed Landscapes, or Inventory Historic Battlefields) within the 'Outer Study Area'.

#### **Non-Statutory Protected Sites (Non-designated Sites)**

5.2.6 The CnES HER records 30 non-designated heritage assets (excluding 13 duplicate entries) within 100 m of the Proposed Alignment (the 'Inner Study Area') (shown on **Figure 5.1: Cultural Heritage, Appendix A**). The records include a findspot of Bronze Age pottery sherds recovered during peat-cutting, to the west of Loch Eireasort. Two other entries, likely to be of prehistoric date, comprise records of a possible cairn to the south-west of Beinn Iobhair and a possible crannog in Loch Beag. The remaining non-designated heritage assets relate to medieval or post-medieval settlement and farming and include shieling sites, blackhouses, head-dykes and lazy bed cultivation associated with the crofting township at Loch Seaforth Head.

5.2.7 A commemorative monument, the Pairc Land Raiders Cairn (MWE 118897), occupies a prominent position beside the A859 public road, 120 m from the north-western end of the Proposed Alignment.

### 5.3 Sensitive Receptors

- 5.3.1 Based on the characteristics of the Proposed Development, one designated heritage asset is likely to be sensitive to change within its setting: “Sideval, stone circle 400 m south of (SM 5351)”, a Scheduled Monument of national heritage value and high sensitivity. This scheduled monument lies close to the shore of Loch Seaforth, partly incorporated into the walls of a former blackhouse to the south of Sideval, and is approximately 625 m from the Proposed Development. The stone circle is situated at low elevation with principal views across Loch Seaforth and of the skyline to the south.
- 5.3.2 Consideration should be given to the potential adverse impact to the landscape setting of the Pairc Land Raiders Cairn (MWE 118897), a non-designated commemorative monument situated on a ridge 120 m to the north-west of the Proposed Alignment, at the north-west side of the A859 public road, south-west of Balallan. As a prominent memorial integral to local history, it is assessed as having heritage value at a local level and to be of low sensitivity.

### 5.4 Potentially Significant Effects

- 5.4.1 The routing process, completed prior to the scoping, ensured that the Proposed Development would avoid the majority of known cultural heritage assets along the route (i.e. mitigation by design). Where avoidance is not possible, any disturbance would be kept to a minimum or offset through appropriate mitigation.
- 5.4.2 There are no designated heritage assets within the Inner Study Area and therefore, no designated heritage assets would be directly affected by the construction or decommissioning of the Proposed Development. The nature and locations of the known non-designated heritage assets within the Inner Study Area are such that it may be possible to avoid some or all of them by design and significant adverse direct effects from construction or decommissioning can be avoided. It is also possible that there could be other, as yet unrecorded or unknown and buried remains of archaeological interest within the Inner Study Area that could be directly affected by construction or decommissioning of the Proposed Development. Where avoidance is not possible, any disturbance would be kept to a minimum or offset through appropriate mitigation.
- 5.4.3 A desk-based assessment has been completed to establish the cultural heritage baseline and to identify cultural heritage assets for which the Proposed Development may adversely affect their setting. Two cultural heritage assets were identified: Sideval, stone circle (SM 5351); and the Pairc Land Raiders Cairn (MWE 118897), both of which have long views across the landscape as important aspects of their settings.
- 5.4.4 The potential cultural heritage impacts associated with the construction and operation of the Proposed Development include:
- Direct physical damage to, or destruction of, cultural heritage assets, arising from construction activities, including from the installation of poles and pull through working areas, the establishment of construction compounds and laydown areas, and from track construction (temporary or permanent), within the Inner Study Area;

- Operational effects on the settings of designated cultural heritage assets resulting from the introduction of the Proposed Development into their settings, detracting from their cultural significance, within the Outer Study Area; and
- Cumulative effects arising as a result of impact interactions, either of different impacts of the proposal itself or between the impacts of other projects, or additive impacts resulting from incremental changes caused by the proposal together with other projects already in the planning system or allocated in a Local Development Plan.

5.4.5 It is considered that the potential impacts of decommissioning of the Proposed Development would be the same as, or of less magnitude than the construction impacts.

## 5.5 Issues Scoped Out

5.5.1 Assessment of the effect of the Proposed Development on the settings of World Heritage Sites, Listed Buildings, Conservation Areas, Inventory Garden and Designed Landscapes and Inventory Historic Battlefields will be scoped out as no such designated assets are situated within 2 km of the Proposed Development.

5.5.2 Furthermore, assessment of the effect of the Proposed Development on the settings of designated heritage assets more than 2 km from the Proposed Development will be scoped out, as none have been identified through initial analysis as having settings sensitive to change from the Proposed Development. It is reasonable to consider that, given the characteristics of the Proposed Development (steel pole mounted OHL), the setting of assets more than 2 km from the Proposed Development would not be adversely affected.

5.5.3 Where there would be no intervisibility between the Proposed Development and cultural heritage assets, adverse effects on their setting would be unlikely. Accordingly, it is proposed that where designated heritage assets fall outside of the ZTV for the Proposed Development, the assessment of the potential effects on their setting will be scoped out.

5.5.4 Assessment of setting impacts on designated heritage assets during construction or decommissioning of the Proposed Development will be scoped out. Construction activities would be temporary, resulting in only short-term / low magnitude effects on heritage assets within the Outer Study Area and would have no permanent effects.

5.5.5 Assessment of direct physical impacts on heritage assets during operation of the Proposed Development will be scoped out. There are no heritage assets likely to receive a direct effect during operation of the Proposed Development as any required maintenance or replacement works would use the as-built tracks and infrastructure to facilitate any such works as may be required.

## 5.6 Assessment Methodology

5.6.1 Effects on cultural heritage assets will be assessed, informed by the results of the desk-based study already undertaken and by further desk-based assessment of historic maps, aerial photography and lidar imagery, and verified by field survey along the OHL route and proposed access requirements.

## Further Baseline Characterisation

### Study Areas

5.6.2 The following study areas will be adopted for the cultural heritage assessment.

- The LOD: a 100 m wide corridor centred on the Proposed Alignment and a 50 m wide corridor centred on the routes of proposed new access tracks (temporary or permanent) will form the study area for the identification of cultural heritage assets that could be directly affected by construction of the Proposed Development. The study area will be sufficient to include potential micro-siting of pole positions, access requirements, include on-line construction access between pole positions, and allow for working areas around pole positions.
- An Inner Study Area: a 200 m wide corridor centred on the Proposed Alignment and a 100 m wide corridor centred on the routes of proposed new access tracks (temporary or permanent) will be used to inform the cultural heritage baseline in the vicinity of the Proposed Development.
- An Outer Study Area for effects on setting: a study area extending 2 km either side of the LOD will be used, in combination with the Proposed Development ZTV model, to identify those designated heritage assets with statutory or non-statutory designations (Scheduled Monuments) that could have their settings adversely affected by the Proposed Development.

### Desk-Based Assessment

5.6.3 Further desk-based assessment will be carried out for the proposed cultural heritage EIA Report chapter, which will add to the existing cultural heritage baseline identified within the study areas to date. This will encompass the Proposed Development and construction access routes. It is proposed that the following information sources will be consulted:

- HES Spatial Data Warehouse (HES 2024a<sup>35</sup>): for up-to-date data on the locations and extents of Scheduled Monuments, Listed Buildings, Conservation Areas, Inventory status Garden and Designed Landscapes and Inventory status Historic Battlefields.
- CnES Council's HER: for up-to-date data for the Inner Study Area.
- The National Record of the Historic Environment (NHRE) database (Canmore) (HES 2024b<sup>36</sup>): for any information additional to that contained in the HER.
- Map Library of the National Library of Scotland: for OS maps and other historical map resources that may provide information of historic settlement and land use.
- Aerial photography and satellite imagery (Google Earth, Bing maps, ESRI World Imagery): for the identification of sites and features potentially of historic environment value not recorded elsewhere or shown on historic maps.
- Scottish Remote Sensing Portal<sup>37</sup>: for Lidar data (where available) covering the Inner Study Area.

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<sup>35</sup> HES (2024a) Historic Environment Scotland (HES) GIS downloader, available at [https://portal.historicenvironment.scot/apex/f?p=PORTAL:HOME::::: .](https://portal.historicenvironment.scot/apex/f?p=PORTAL:HOME:::::) (Accessed: 24/07/2024)

<sup>36</sup> HES (2024b) Historic Environment Scotland's National Record of Historic Environment (NRHE) database (Canmore), available at: <http://pastmap.org.uk>. (Accessed: 24/07/2024)

<sup>37</sup> Scottish Government (2024). Scottish Remote Sensing Portal. Available at: <https://remotesensingdata.gov.scot>. (Accessed: 24/07/2024)

- Historic Land Use Assessment Data for Scotland (HLAMap) (HES 2024c<sup>38</sup>): for information on the historic land use character of the Inner Study Area.

### *Field Surveys*

- 5.6.4 A walk-over field survey has been carried out covering the Inner Study Area in order to:
- Locate and record the baseline character and condition of heritage assets identified through the desk-based assessment;
  - Identify any upstanding heritage assets not revealed through the desk-based study;
  - Identify any area of archaeological potential; and
  - Assess and record the heritage value of the heritage assets identified through the desk-based assessment and field survey.
- 5.6.5 It is considered that no further field survey will be required to inform the baseline for the Proposed Development and construction access requirements.

## **Assessment of Effects**

### *Assessment Method*

- 5.6.6 The effects of the Proposed Development on cultural heritage assets will be assessed based on their type (direct effects, indirect effects, and effects on setting (including cumulative effects)) and nature (adverse or beneficial). Effects can be permanent (lasting for a long time or forever), temporary (not lasting for very long) and/ or reversible (can be changed back to what it was before).
- 5.6.7 The assessment will take into account the value / sensitivity of the heritage asset and its setting and the magnitude of the predicted impact, following the approach advised in the SNH / HES (2018) EIA Handbook<sup>39</sup>.
- 5.6.8 Adverse effects are those that detract from or reduce cultural significance or special interest of heritage assets. Beneficial effects are those that preserve, enhance or better reveal the cultural significance or special interest of heritage assets.

### *Criteria for Assigning Sensitivity to Heritage Assets*

- 5.6.9 Cultural heritage assets are assigned value / importance through the designation process. Designation ensures that sites and places are recognised and protected by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES 2019<sup>40</sup>).

### *Criteria for Assessing the Magnitude of Impact*

- 5.6.10 The magnitude of impact (adverse or beneficial) will be assessed in the categories, high, medium, low and negligible, in accordance with the guidance set out in the SNH / HES EIA Handbook (version 5; 2018). The assessment of sensitivity of

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<sup>38</sup> HES (2024c) Historic Land Use Assessment Data for Scotland (HLAMap), available at: <http://hlapmap.org.uk>. (Accessed: 24/07/2024)

<sup>39</sup> SNH / HES (2018). *Environmental Impact Assessment Handbook*, Scottish Natural Heritage and Historic Environment Scotland, Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0> (Accessed: 24/07/2024)

<sup>40</sup> HES (2019). *Designation Policy and Selection Guidance*. Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b> (Accessed: 24/07/2024)

heritage assets (including their settings), the magnitude of impact, and the resulting significance of effect, will be undertaken in accordance with the guidance set out in the SNH / HES EIA Handbook (version 5; 2018).

#### *Assessment of Effects on Setting*

- 5.6.11 Adopting the approach as set out within the SNH / HES EIA Handbook (version 5; 2018) and HES's guidance document, 'Managing Change in the Historic Environment: Setting' (HES 2016<sup>41</sup>), the ZTV for the Proposed Development will be used to identify those heritage assets within the Outer Study Area from which there would be theoretical visibility of the Proposed Development, and the degree of theoretical visibility.
- 5.6.12 Consideration has been given to designated heritage assets beyond 2 km where long-distance views or intervisibility are an important aspect of their settings. In this instance, none currently stand out as being sensitive receptors.
- 5.6.13 Consideration has also been given to designated heritage assets where there is no predicted visibility from the asset but where views of, or across, the asset are important factors contributing to its cultural significance. There are no cultural heritage assets considered to be sensitive receptors in this capacity.

#### *Criteria for Assessing the Significance of Effects*

- 5.6.14 The sensitivity of the asset and the magnitude of the predicted impact will be used to inform an assessment of the significance of the effect, using a widely accepted matrix approach. Where the application of the matrix (**Table 5.1**) identifies two possible outcomes, professional judgment supported by reasoned justification, will be used to determine the level of significance.

**Table 5.1 Significance of Effects**

Magnitude of Impact	Sensitivity of Asset			
	High	Medium	Low	Negligible
High	Major	Major / Moderate	Moderate / Minor	Minor / Negligible
Medium	Major / Moderate	Moderate	Moderate / Minor	Minor / Negligible
Low	Moderate / Minor	Moderate / Minor	Minor	Negligible
Negligible	Minor / Negligible	Minor / Negligible	Negligible	Negligible

- 5.6.15 Major and moderate effects will be considered 'significant' in the context of the EIA Regulations. Minor and negligible effects will be considered 'not significant'.

#### *Assessment of Cumulative Effects*

- 5.6.16 The assessment of cumulative construction effects on cultural heritage assets will be based on the combined direct effect of the Proposed Development in combination

<sup>41</sup> HES (2016). *Managing Change in the Historic Environment: Setting*. Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549>. (Accessed: 24/07/2024)

with cumulative schemes, where these share the same footprint for direct physical impacts during construction.

- 5.6.17 The assessment of cumulative operational effects on cultural heritage assets will be based upon consideration of the effects of the Proposed Development on the settings of assets with statutory designations and non-statutory designations within the Outer Study Area (which includes the Inner Study Area), together with likely effects of cumulative developments. For assessment of the potential cumulative effects on cultural heritage assets, cumulative developments with footprints situated within the Outer Study Area of the Proposed Development will be considered. There are no designated assets within the Outer Study Area that could have their settings adversely affected by the Proposed Development, in combination with any cumulative developments more than 2 km from the Proposed Alignment.
- 5.6.18 The assessment will take into account the nature and relative scales of the various developments, their distance from the affected cultural heritage assets, and the potential degree of visibility from the assets of the various developments.

### **Mitigation**

- 5.6.19 The routing process, completed prior to the scoping, ensured that the Proposed Development would avoid the majority of known cultural heritage assets along the route (i.e. mitigation by design) and allowed consideration of likely significant effects on cultural heritage receptors throughout the evolution of the project to date. Such embedded mitigation measures will be considered to be implemented for the assessment of likely significant effects.
- 5.6.20 Further assessment will continue through the EIA process, and mitigation measures developed to avoid or minimise adverse effects on cultural heritage where practicable. Where avoidance is not possible, any disturbance would be kept to a minimum or offset through appropriate mitigation. Standard mitigation measures that would be applied to the Proposed Development, and incorporated into the CEMP, include the following.
- A professionally qualified Archaeological Contractor would be appointed to act as an Archaeological Clerk of Works (ACoW) during the construction phase. The role of the ACoW would be to provide advice to the appointed Construction Contractor regarding archaeological matters as they might arise, and to undertake archaeological monitoring of topsoil stripping operation in areas designated and approved by the CnES Council's Archaeologist. The activities of the ACoW would be carried out according to the scope of work and terms specified in a Written Scheme of Investigation (WSI) submitted to and approved by the Council's Archaeologist prior to any construction works (including enabling works) commencing onsite.
  - Implementation of the scope of works outlined in the WSI during the construction phase.
  - Any heritage asset identified as potentially being affected by construction works that can be avoided would be marked out for avoidance, where possible, or other mitigation to be agreed with by the Council's Archaeologist, would be implemented to reduce and offset unavoidable impacts.
  - Written guidelines would be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known heritage

assets. The guidelines would set out arrangements for calling upon retained professional support if buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts, etc.) should be discovered in areas not subject to archaeological monitoring. The guidelines would make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

- 5.6.21 Additional mitigation, in the form of archaeological investigations, excavations or watching briefs, may be required under the terms of any planning conditions applied. Details of the agreed scope of work would be set out in a WSI for the approval of the CnES Council's Archaeologist and would be implemented in accordance with the terms of the agreed WSI.
- 5.6.22 If new, archaeologically significant discoveries are made during any archaeological investigations or watching briefs, and it is not possible to preserve the discovered remains in situ, provision would be made for the excavation, where necessary, of any archaeological deposits encountered. The provision would include the consequent production of written reports on the findings, with post-excavation analysis and publication of the results of the works, where appropriate.

#### *Residual Effects*

- 5.6.23 Residual effects will be assessed taking into account the effectiveness of proposed additional mitigation measures, that will be identified through the EIA process and set out within the cultural heritage EIA Report chapter.

## **5.7 Summary and Questions to Consultees**

- 5.7.1 An initial phase of desk-based assessment has been used to inform the route alignment stage of the design of the Proposed Development. The desk-based assessment identified cultural heritage assets within the Inner Study Area, including 30 non-designated heritage assets recorded in the CnES HER, predominantly comprising various features associated with medieval or post-medieval settlement and farming.
- 5.7.2 There is one Scheduled Monuments within the Outer Study Area: Sideval, stone circle 400 m south of (SM 5351), situated on the north shore of Loch Seaforth and within 625 m to the west of the Proposed Development.
- 5.7.3 One HER asset, the Pairc Land Raiders Cairn (MWE 118897), comprises a monument with commemorative significance informed by its landscape setting. The monument lies to the north-west of the A859 public road, within 120 m to the north-west of the Proposed Development and will be considered in the proposed assessment.
- 5.7.4 This chapter of the EIA Scoping Report sets out the proposed study areas for the EIA and the assessment methodology. A further scope of desk-based assessment of the LOD and access tracks will be carried out to fully inform the baseline reported in the EIA and to inform mitigation proposals.
- 5.7.5 Likely mitigation options to avoid, reduce and offset any likely adverse effects have been identified and described. Where required, these will be developed as part of the EIA and, where likely significant effects are identified, additional measure will be proposed within the EIA Report.

5.7.6 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the cultural heritage assessment, specifically whether consultees agree with or have any comments regarding the following:

- CH1: Do consultees agree that the scope of the proposed assessment is appropriate?
- CH2: Do consultees agree that the proposed study areas are appropriate?
- CH3: Do consultees agree that the proposed assessment methodology is appropriate?
- CH4: Do consultees agree with the main potential setting impacts identified?
- CH5: Are there any specific assets for which consultees would wish to have visualisations provided and what type(s)?

## 6. ECOLOGY

### 6.1 Introduction

- 6.1.1 This chapter of the EIA Scoping Report provides an overview of the existing ecological baseline and the potential effects associated with the construction and operation of the Proposed Development relating to ecology and nature conservation. This chapter also describes the key ecological issues associated with the Proposed Development and the proposed approach to the Ecological Impact Assessment (EclA). This chapter does not include for ornithological receptors, which instead are considered within **Chapter 7: Ornithology**.
- 6.1.2 This chapter, including the work completed to define the proposed assessment scope, has been undertaken in accordance with the Guidelines for Ecological Impact Assessment in the UK (Chartered Institute of Ecology and Environmental Management (CIEEM), 2018)<sup>42</sup>.

### 6.2 Baseline Conditions

- 6.2.1 The following information has been gathered to inform the baseline ecological conditions of the Proposed Development and the study areas, which comprise:
- The Proposed Development and a 5 km buffer for designated and non-designated sites (including ancient woodland); and
  - The Proposed Development and a 250 m buffer (Zone of Influence (Zol)) for habitats and a 100 m buffer used for protected and notable species.

#### Desk Study

- 6.2.2 A search of the NatureScot Sitelink website<sup>43</sup> and MAGIC website<sup>44</sup> has been carried out to establish if any European and/or nationally designated sites are present within the 5 km study area, as illustrated in **Figure 6.1: Ecological Designations, Appendix A**. In addition, a search of NatureScot's Ancient Woodland Inventory was undertaken to establish the presence of ancient woodland (including those of plantation origin).

#### *Designations*

- 6.2.3 Four designated sites have been identified within the 5 km study area. Details of these designated sites, including the qualifying features associated with them, are provided in **Table 6.1**.

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<sup>42</sup> <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf>

(Accessed: 23/09/2024)

<sup>43</sup> <https://sitelink.nature.scot/home> (Accessed: 23/09/2024)

<sup>44</sup> <https://magic.defra.gov.uk/> (Accessed: 23/09/2024)

**Table 6.1: Statutory Designated Sites of International and National Importance**

Site Name	Designation	Qualifying Feature	Distance and Direction from the Proposed Development (measured at the closest point)
Lewis Peatlands	RAMSAR Site	Notified protected habitats.	1 km, north
Lewis Peatlands	Special Area of Conservation (SAC)	Classified for: <ul style="list-style-type: none"> <li>• Blanket bog;</li> <li>• Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels;</li> <li>• Depressions on peat substrates;</li> <li>• Otter <i>Lutra lutra</i>; and</li> <li>• Wet heathland with cross-leaved heath <i>Erica tetralix</i>.</li> </ul>	3.8 km, north
Langavat	SAC	Designated for Atlantic Salmon <i>Salmo salar</i> .	3.8 km, north-west
Loch nan Eilean Valley Bog	Site of Special Scientific Interest (SSSI)	Classified for: <ul style="list-style-type: none"> <li>• Blanket bog; and</li> <li>• Valley fen.</li> </ul>	4.3 km, north-west

### *Non-statutory Designations*

- 6.2.4 There are no non-statutory designated sites within 5 km of the Proposed Development.

### *Protected Species*

- 6.2.5 The National Biodiversity Network (NBN) Atlas<sup>45</sup> shows historical records of otter, recorded in the immediate vicinity of the Site. No other records for Protected Species were publicly available from the NBN Atlas. Further to this, otter and bat species are the only terrestrial Protected Species present in the Outer Hebrides.

## **Field Survey**

### *Habitats*

- 6.2.6 Field surveys were undertaken in July 2024 for the Proposed Development and the 250 m study area. The surveys included an extended UK Habitat Classification (UKHab) survey, National Vegetation Classification (NVC) surveys and protected species surveys. The UKHab survey consisted of classifying and mapping habitats in

<sup>45</sup> <https://nbnatlas.org/> (Accessed 23/09/2024)

accordance with UKHab Guidance<sup>46</sup> and was 'extended' to include consideration of the likely presence of protected or otherwise notable species in line with the CIEEM<sup>47</sup>. The findings from the habitat surveys are shown on **Figure 6.2: Baseline UKHab Survey Results, Appendix A**.

- 6.2.7 For each area of habitats mapped during the UKHab survey, a Habitat Condition Assessment (HCA) was undertaken. The HCA followed Scottish Hydro Electric (SHE) Transmission Guidance<sup>48</sup> and involved scoring each habitat area using established criteria. If a habitat passes all criteria it is considered to be in good condition, if it fails one criterion it is considered to be of moderate condition and if it fails two or more criteria it is considered to be of poor condition. The condition of each habitat is used in the BNG analysis.
- 6.2.8 The NVC surveys were completed in line with NVC survey guidelines<sup>49</sup>, classifying communities in accordance with the NVC system<sup>50</sup>. These surveys worked to identify sensitive habitats, consisting of potential GWDTEs, Annex I habitats under the EU Habitats Directive (Council Directive 92/43/EEC)<sup>51</sup> and those with protection under the Scottish Biodiversity List (SBL)<sup>52</sup>. The Proposed Development crosses mostly blanket bog and wet heath on the alignment from Loch Strannadhat to Loch Sgiobacleit. Adjacent and surrounding land features include a mix of deep peatland including blanket bog habitats, and extensive wet heathland with cross-leaved heath. In several areas bedrock is apparent at the surface. Inland surface water habitats are present in the immediate vicinity, within 250 m of the Proposed Development.
- 6.2.9 The habitats onsite are mostly rainwater fed, with those adjacent to the streams and lochs determined to be surface water fed, blanket bog, and no habitats with the potential to be GWDTE were identified during the NVC survey.
- 6.2.10 Blanket bog and Upland heath habitats are UK Biodiversity Action Plan (BAP) Priority Habitats<sup>53</sup>, listed under Annex I of the Habitats Directive and in the SBL as important habitats for supporting species<sup>54</sup>.

#### *Protected species*

- 6.2.11 A Protected Species Survey was undertaken in July 2024. No evidence of protected species presence, including otter, was recorded during the field survey. However, the study area comprises suitable habitat for supporting otter and as such, there is potential for otter to be present within the Site / study area during the construction or operational stages of the Proposed Development.

## 6.3 Sensitive Receptors

- 6.3.1 The main features that could be impacted by the Proposed Development include habitats such as Blanket bog habitat (Annex 1 and UK BAP Priority Habitat)<sup>55</sup> and

<sup>46</sup> <https://ukhab.org/about-ukhab/> (Accessed: 23/09/2024)

<sup>47</sup> CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester

<sup>48</sup> SHE Transmission, Biodiversity Net Gain Toolkit User Guide - TG-NET-ENG-526, October 2020

<sup>49</sup> Rodwell, J. S. (2006). NVC Users' Handbook. ISBN 978 1 86107 574 1.

<sup>50</sup> Rodwell, J. S. (Ed), et al. (1991 – 2000). British Plant Communities (5 volumes). Cambridge University Press.

<sup>51</sup> [https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm) (Accessed: 23/09/2024)

<sup>52</sup> Chanin, P. (2003), Monitoring the otter *Lutra lutra*, Conserving Natura 2000 Rivers Monitoring Series No 10, Peterborough: English Nature.

<sup>53</sup> <https://jncc.gov.uk/our-work/uk-bap-priority-habitats/#list-of-uk-bap-priority-habitats> (Accessed: 23/09/2024)

<sup>54</sup> <https://www.nature.scot/doc/scottish-biodiversity-list> (Accessed: 23/09/2024)

<sup>55</sup> <https://data.jncc.gov.uk/data/aadfff3d-9a67-467a-ac65-45285e123607/UKBAP-BAPHabitats-03-BlanketBog.pdf> (Accessed: 23/09/2024)

Upland heathland habitat (UK BAP Priority Habitat)<sup>56</sup> and otter. The designated sites listed in **Table 6.1** are not considered further as no impact pathways have been identified.

- 6.3.2 The importance or sensitivity of an ecological feature will be ascertained via consultation with NatureScot, review of literature and guidance, field survey data, legal protection / conservation status and professional judgement.

## 6.4 Potentially Significant Effects

- 6.4.1 The assessment will consider the potential for significant effects associated with:
- Direct impacts such as habitat loss and inadvertent killing or injuring of protected or otherwise notable species during construction;
  - Disturbance to protected or otherwise notable species (otter), or inadvertent damage to their breeding sites, resting places and foraging resources during construction;
  - Indirect impacts from potential pollution or nutrient enrichment or hydrological disruption during construction; and
  - Cumulative impact from other developments, either built or proposed, within the zone of influence for ecological features identified as sensitive receptors of the Proposed Development.

## 6.5 Issues Scoped Out

### General

- 6.5.1 It is considered that all ecological features identified within this Scoping Report could be affected by inappropriate lighting, noise, dust and visual disturbance caused by construction activities, however it is considered reasonable to expect that these potential effects are managed through best practice construction methods and guidance.
- 6.5.2 In addition, a CEMP will be produced, which will capture all mitigation measures required in respect of ecological features, both as a result of the outcome of the EclA and in order to comply with relevant legislation mentioned above, to be implemented onsite. The implementation and audit of these measures will be overseen by an Environmental Clerk of Works (ECoW). With the adherence to a CEMP (and SPPs if required), as overseen by an ECoW, it is not considered that there is potential for significant effects associated with these impacts. Therefore, no further assessment is proposed.

### Species

- 6.5.3 Reptiles and amphibians are likely to be present in open moorland and rough grassland and, therefore, may be negatively affected by vegetation clearance associated with the Proposed Development. However, the impacts are considered to be small in scale when considered in the context of the extensive habitat that will remain available for these species.
- 6.5.4 Furthermore, pre-construction surveys will confirm the presence of sensitive features used for shelter and hibernation and will inform micro-siting of the design. Where this

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<sup>56</sup> <https://hub.jncc.gov.uk/assets/1be8bec3-0437-4758-adc8-ac866d4e0769#UKBAP-BAPHabitats-61-UplandHeathland.pdf> (Accessed: 23/09/2024)

is not possible, surveys will inform non-licensed precautionary methods of working under the supervision of the ECoW, and will be set out within the CEMP.

- 6.5.5 Surveys for terrestrial invertebrates are considered unnecessary as the assessment will adopt a precautionary approach and include appropriate mitigation, where required, to avoid significant effects.
- 6.5.6 It is recommended that the mitigation measures required to avoid the spread of invasive species are included within the CEMP. It is therefore considered that no significant effects will occur from the spread of invasive species as a result of the Proposed Development.
- 6.5.7 Accordingly, the proposed EIA Report chapter will assess the likely significant effects associated with otter populations, but in the context of suitable habitat and standard mitigation, it is considered that no other protected or notable species will be adversely affected and, therefore, will not be included within the EIA.

### **Designated Sites**

- 6.5.8 Langavat SAC, designated for Atlantic Salmon, will not be assessed further as there is no known hydrological connection between the Site and the SAC and no adverse impacts are considered likely.
- 6.5.9 Lewis Peatlands SAC and Ramsar (and their qualifying features) will not be assessed further as no pathways have been identified for impacts to the qualifying features due to the distance from the Site, and no hydrological connectivity between the Site and the designated sites exist. It is not considered that the Proposed Development will result in a likely significant effect upon the SAC or Ramsar site.
- 6.5.10 Loch nan Eilean Valley Bog SSSI (and its qualifying features) will not be assessed further as no pathway has been identified for impacts to the qualifying features due to the distance from the Site and no hydrological connectivity between the Site and the SSSI exists. No adverse impacts are considered likely.
- 6.5.11 Accordingly, given their lack of ecological connectivity with the Site, together with the implementation of standard mitigation, it is considered that no ecological designated sites will be adversely affected and, therefore, will not be assessed within the EIA.

### **Operational Effects**

- 6.5.12 Given the nature of the Proposed Development and the minimal maintenance activities required throughout the operational phase, it is reasonable to assume that there would be no likely significant effects on the identified sensitive receptors. Accordingly, given the lack of potential for impacts during the operational phase of the Proposed Development, further consideration of the operational phase will not be included within the EIA.

## **6.6 Assessment Methodology**

- 6.6.1 The assessment will be completed in accordance with the CIEEM EclA guidance. The assessment will use the ecological baseline to identify the sensitive ecological features that could be affected by the construction of the Proposed Development. Each sensitive ecological feature will be assigned a geographic level of importance based on its national and local conservation status and population / assemblage trends and other relevant criteria (including size, naturalness, rarity and diversity).

Where mitigation is already imbedded in the design of the Proposed Development, this is considered in advance of impacts being assessed. The mitigation hierarchy will be followed when deciding on the appropriate mitigation method to implement. This sets out that the preferred options are, in order: avoid, reduce, replace and compensate. This process has been used during the design phase, also referred to as mitigation by design, to avoid potential impacts on sensitive features, e.g. avoiding area of blanket bog. SSEN Transmission GEMPs and SPPs will be adopted as well as a project specific CEMP.

- 6.6.2 Details of the Proposed Development will then be considered to determine the magnitude of impact for each sensitive ecological feature, including whether the effects, if any, will be beneficial or adverse, significant or negligible, and temporary or permanent.
- 6.6.3 Where appropriate, mitigation measures will be recommended within the EIA Report to remedy any adverse impacts and, where appropriate measures will be proposed to enhance the local ecology, setting out where these will be incorporated into the Proposed Development. An assessment of residual effects will then be undertaken and reported within the EIA Report.
- 6.6.4 A BNG assessment will be undertaken for the Proposed Development. BNG is a process whereby development leaves biodiversity in a measurably better state than before. The HCA data is combined with habitat distinctiveness, connectivity and strategic significance to determine biodiversity units per habitat polygon. The relative biodiversity value per polygon is indicated by calculating the biodiversity units per hectare (BU/ha). Any irreplaceable habitats identified, including good / moderate condition blanket bog, will not be entered into the optioneering toolkit. This is a requirement of the BNG process as it is not possible to compensate for losses to irreplaceable habitat and they are therefore not quantified. This follows UK best practice and the SHE Transmission BNG guidance.
- 6.6.5 The cumulative assessment will consider the likely significant effects associated with the Proposed Development, together with other developments proposed within the study area, to determine the potential for likely significant cumulative effects.

## **6.7 Summary and Questions to Consultees**

- 6.7.1 This Chapter of the Scoping Report outlines the proposed approach for assessing potential effects related to the construction of the Proposed Development within the study area, as defined by the CIEEM guidelines. Potential effects of the Proposed Development, associated with ecology, are anticipated to be limited to the construction phase. Potential likely significant effects are not anticipated for the operation or decommissioning phases of the Proposed Development and, therefore, are proposed to be scoped out of the EIA Report.
- 6.7.2 Accordingly, it is proposed that the scope of the ecology assessment, to be included within the EIA Report, will be limited to the potential likely significant effects associated with the construction phase of the Proposed Development.
- 6.7.3 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the ecology assessment, specifically regarding the following questions:

- ECO1: Do consultees agree with the proposed study area and the associated survey coverage?
- ECO2: Do consultees agree with those designated sites proposed to be scoped out of the assessment?
- ECO3: Do consultees agree that operational effects on all ecological features are considered unlikely and can therefore be scoped out of the EIA?
- ECO4: Do you agree with the use of a CEMP in combination with SPPs and a GEMP to control construction related dust and noise?

## 7. ORNITHOLOGY

### 7.1 Introduction

- 7.1.1 This chapter of the EIA Scoping Report provides an overview of the existing baseline and the potential effects associated with the construction and operation of the Proposed Development relating to ornithology. This chapter also describes the key ornithological issues associated with the Proposed Development and the proposed approach to the EIA. This chapter does not cover ecological receptors, which instead are considered within **Chapter 6: Ecology**.
- 7.1.2 This chapter, including the work completed to define the proposed assessment scope, has been undertaken in accordance with the Guidelines for Ecological Impact Assessment in the UK CIEEM<sup>57</sup>. A Habitats Regulations Appraisal (HRA) screening assessment will be undertaken to assess the impact of the Proposed Development on the qualifying features of Lewis Peatlands SPA and Ramsar, in accordance with the Conservation of Habitats and Species Regulations 2017.

### 7.2 Baseline Conditions

- 7.2.1 The following information has been gathered to inform the baseline ornithological conditions of the Proposed Development and the study areas, which comprise:
- The Proposed Development and a 10 km buffer for designated and non-designated sites; and
  - The Proposed Development and a buffer of up to 2 km (ZoI) for habitats and protected and notable species.

#### Desk Study

##### *Designations*

- 7.2.2 A search of the NatureScot Sitelink website<sup>58</sup> and MAGIC website<sup>59</sup> has been carried out to establish if any European and/or nationally designated sites are present within the 10 km study area, as illustrated in **Figure 7.1: Ornithological Designation, Appendix A**, and set out in **Table 7.1**. In addition, a search of NatureScot's Ancient Woodland Inventory was undertaken to establish the presence of ancient woodland (including those of plantation origin).

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<sup>57</sup> <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf>

(Accessed: 23/09/2024)

<sup>58</sup> <https://sitelink.nature.scot/home> (Accessed: 23/09/2024)

<sup>59</sup> <https://magic.defra.gov.uk/> (Accessed: 23/09/2024)

**Table 7.1: Statutory Designated Sites of International and National Importance**

Site Name	Designation	Qualifying Feature	Distance and Direction from the Proposed Development (measured at the closest point)
Lewis Peatlands	SPA	Breeding: <ul style="list-style-type: none"> <li>• Black-throated diver <i>Gavia arctica</i>;</li> <li>• Dunlin <i>Calidris aschinzii</i>;</li> <li>• Golden eagle <i>Aquila chrysaetos</i>;</li> <li>• Golden plover <i>Pluvialis apricaria</i>;</li> <li>• Greenshank <i>Tringa nebularia</i>;</li> <li>• Merlin <i>Falco columbarius</i>; and</li> <li>• Red-throated diver <i>Gavia stellata</i>.</li> </ul>	1 km, north
Lewis Peatlands	Ramsar	Notified for breeding divers, waders, raptors and protected habitats.	1 km, north

### *Non-statutory Designations*

- 7.2.3 There are two Important Bird Areas (IBAs) within 10 km of the Proposed Development. The Proposed Development overlaps with Park IBA on the south side of Loch Sgiobaclait. This IBA is designated for breeding golden eagle. Lewis Peatlands IBA shares a border with Lewis Peatlands SPA and is designated for the same species as the SPA, bar greenshank.

### *Species Records*

- 7.2.4 A golden eagle territory monitored by the Lewis & Harris Raptor Survey Group (LHRSG) is located 450 m south of the Proposed Alignment, to the south of Loch Sgiobacliet. This is within the potential disturbance buffer for golden eagle, which is a buffer of 750 to 1,000 m<sup>60</sup>. A further six golden eagle nest sites were also identified by the LHRSG within 10 km of the Proposed Alignment.
- 7.2.5 Surveys undertaken for the proposed SSEN Transmission LT245 Stornoway - Harris 132 kV Overhead Line Connection project in 2021 covered the western end of the Proposed Development where it connects into the proposed Balallan Switching Station. These surveys recorded merlin and red-throated diver flights with greenshank also recorded on the shore of Loch Strannabhat.

### **Field Survey**

- 7.2.6 Bird surveys, including Flight Activity Surveys and Moorland Bird Surveys, commenced in March 2023 and were completed in February 2025. Moorland Bird Surveys were also undertaken between April and July 2023. These surveys covered

<sup>60</sup> Goodship, N.M. and Furness, R.W. (MacArthur Green) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

the length of the Proposed Development within the Survey Area, with a buffer of up to 2 km where required to assess potential Schedule 1 raptor<sup>61</sup> territories present.

- 7.2.7 The Vantage Point (VP) surveys identified a white-tailed eagle territory located 1.5 km north of the Proposed Development. The most recorded species were golden eagle and white-tailed eagle, with 175 flights and 131 flights recorded respectively. Flights of black-throated diver, red-throated diver and merlin (all classifying species for Lewis Peatlands SPA), were also recorded.
- 7.2.8 The Moorland Bird Surveys recorded red-throated diver, black throated diver, greenshank, golden plover and curlew along the length of the Proposed Development. These surveys also recorded meadow pipit, cuckoo, stonechat and greylag goose.

### 7.3 Sensitive Receptors

- 7.3.1 The main features that could be impacted by the Proposed Development include designated and non-designated sites, including Lewis Peatlands SPA, Ramsar and IBA and Park IBA, and ornithological species including Schedule 1, Red and Amber listed bird species using the area, in particular, golden eagle territory and white-tailed eagle territory.
- 7.3.2 The importance or sensitivity of an ornithological feature will be ascertained via consultation with NatureScot, review of literature and guidance, field survey data, data held by local groups such as the Lewis and Harris Raptor Study Group, legal protection / conservation status and professional judgement.

### 7.4 Potentially Significant Effects

- 7.4.1 The assessment will consider the potential for significant effects associated with:
- Disturbance to protected, Schedule 1 bird species, and/or Birds of Conservation Concern (BoCC), such as Red and Amber listed bird species, during construction;
  - Disturbance to protected, Schedule 1 bird species, and/or BoCC, such as Red and Amber listed bird species, during operation, limited to activities related to the maintenance of bird flight diverters;
  - Indirect impacts from potential pollution or nutrient enrichment or hydrological disruption during construction; and
  - Cumulative impact from other developments, either built or proposed, within the zone of influence for ecological features identified as sensitive receptors of the Proposed Development.

### 7.5 Issues Scoped Out

- 7.5.1 No effects on ornithological features have been scoped out of the EIA.

### 7.6 Assessment Methodology

- 7.6.1 The assessment methodology for Ornithology will follow the same process as that stated for the Ecological assessment, see **Section 6.6**.
- 7.6.2 The assessment will be completed in accordance with the CIEEM Ecological Impact Assessment Guidance. The assessment will use the ecological baseline to identify

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<sup>61</sup> Raptors listed for protection under Schedule 1 of the Wildlife and Countryside Act 1981

the sensitive ornithological features that could be affected by the construction or operation of the Proposed Development. Each feature will be assigned a geographic level of importance based on its national and local conservation status and population / assemblage trends and other relevant criteria (including size, naturalness, rarity and diversity). Details of the Proposed Development will then be used to assess what level of effect each feature is likely to receive and whether that impact will be beneficial or adverse, significant or negligible, and temporary or permanent.

- 7.6.3 Where appropriate, mitigation measures will be recommended within the EIA to remedy any adverse impacts and measures to enhance the local ecology will also be incorporated into the Proposed Development. An assessment of residual effects will then be undertaken and reported within the EIA Report. The mitigation hierarchy will be followed when deciding on the appropriate mitigation method to use. This sets out that the preferred options are, in order: avoid, reduce, replace and compensate. This process has been used during the design phase to avoid potential impacts on sensitive features, e.g. reducing disturbance impacts on the golden eagle territory. SSEN GEMPs and SPPs will be adopted as well as a project specific CEMP.

### **Collision Risk Modelling**

- 7.6.4 As per the SHE Transmission Ornithology Methods for Transmission Developments Guidance, the requirement for and the method of Collision Risk Modelling will be agreed with NatureScot.

### **Provision of Information for Appropriate Assessment**

- 7.6.5 Where the Proposed Development is considered likely to have a significant effect on an SPA, there is a requirement for the Scottish Ministers (in consultation with NatureScot) to complete an Appropriate Assessment as part of the HRA process.
- 7.6.6 Based on the data collected from the consultation and desk-based study, together with a review of relevant data already obtained on the Site, an HRA screening assessment of the Proposed Development in relation to the potential for likely significant effects on the Lewis Peatlands SPA will be required. The HRA will utilise data pertaining to the qualifying species presented in this report as well as external data sources, such as confidential territory reports provided by NS. A study to inform any Appropriate Assessment will be provided as part of the EIA, taking account of the potential for connectivity with the SPAs as detailed above.

## **7.7 Summary and Questions to Consultees**

- 7.7.1 This chapter of the Scoping Report has set out the proposed approach to the assessment of the potential effects, those associated with the construction of the Proposed Development, within the study area, as defined by the CIEEM guidelines.
- 7.7.2 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the ornithological assessment, specifically regarding the following questions:
- ORN1: Do consultees agree with the proposed study area and associated survey coverage?
  - ORN2: Do consultees agree with the proposed methodology and assessment approach?

- ORN3: Do you agree with the use of a CEMP in combination with SPPs and a GEMP to control construction related dust and noise?

## 8. WATER ENVIRONMENT

### 8.1 Introduction

- 8.1.1 This chapter of the EIA Scoping Report provides an overview of the existing water environment baseline and the potential effects associated with the construction and operation of the Proposed Development relating to the water environment, and sets out the proposed approach to assessing these potential effects.
- 8.1.2 The scope of assessment is based on a high-level review of the baseline data information sources and observations made during a hydrological walkover / site visit (which was carried out in November 2024) and will be confirmed through consultation with stakeholders. The assessment will rely upon publicly available information, and information to be provided by third parties.
- 8.1.3 The water environment EIA Report chapter will:
- Describe the current water environment conditions in the area around the Proposed Development;
  - Identify and assess the likely environmental effects associated with the water environment;
  - Identify and describe the mitigation measures proposed to address potential significant effects; and
  - Assess residual effects post mitigation implementation.
- 8.1.4 The following policy and guidance documents will be used to inform the water EIA Report chapter:
- Water Environment and Water Services (Scotland) Act 2003<sup>62</sup>;
  - Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)<sup>63</sup>;
  - The Water Environment (Miscellaneous) (Scotland) Regulations 2017<sup>64</sup>;
  - Flood Risk Management (Scotland) Act 2009<sup>65</sup>;
  - The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017<sup>66</sup>;
  - The Public and Private Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015<sup>67</sup>;
  - The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013<sup>68</sup>
  - Scottish Government (2012) River Crossings and Migratory Fish<sup>69</sup>.

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<sup>62</sup> Scottish Government (2003). Water Environment and Water Services (Scotland) Act 2003. Available at: <http://www.legislation.gov.uk/asp/2003/3/contents> (Accessed: 19/1/2024)

<sup>63</sup> Scottish Government (2011, 2013, 2017) Water Environment (Controlled Activities) (Regulations) Scotland 2011 (CAR) and their further amendments of 2013 and 2017 and 2021 Available at: <https://www.sepa.org.uk/regulations/water/> (Accessed: 19/1/2024)

<sup>64</sup> Scottish Government (2017) The Water Environment (Miscellaneous) (Scotland) Regulations 2017. Available at: <http://www.legislation.gov.uk/ssi/2017/389/contents/made> (Accessed: 19/1/2024)

<sup>65</sup> Scottish Government (2009) Flood Risk Management (Scotland) Act 2009. Available at: <http://www.legislation.gov.uk/asp/2009/6/contents> (Accessed: 19/1/2024)

<sup>66</sup> Scottish Government (2017) the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017 Available at: <https://www.legislation.gov.uk/ssi/2017/282/note/made> (Accessed: 19/1/2024)

<sup>67</sup> Scottish Government (2015) the Private and Public Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015. Available at: <https://www.legislation.gov.uk/ssi/2015/346/contents> (Accessed: 19/1/2024)

<sup>68</sup> Scottish Government (2013) The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013 [Online] Available at: <http://www.legislation.gov.uk/ssi/2013/29/introduction/made> (Accessed: 19/1/2024)

<sup>69</sup> <https://webarchive.nrsotland.gov.uk/3000/https://www.gov.scot/Topics/marine/science/Publications/publicationslatest/rivercrossings> (Accessed: 19/1/2024)

- GPP 1<sup>70</sup>: Understanding your environmental responsibilities - good environmental practices (June 2021);
- GPP 5<sup>71</sup>: Works and maintenance in or near water (February 2018);
- GPP 6<sup>72</sup>: Working at construction and demolition sites (April 2023)<sup>73</sup>;
- GPP 21<sup>74</sup>: Pollution incident response planning (June 2021)
- GPP 22<sup>75</sup>: Incident response - dealing with spills (October 2018)
- PAN 79: Water and Drainage (September 2006);
- LUPS-DP-GU2a: Development Plan Guidance on Flood Risk (2018);
- LUPS-GU31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, Version 3 (September 2017);
- WAT-SG-25: Good Practice Guide - River Crossings (November 2010)<sup>76</sup>;
- WAT-SG-26: Good Practice Guide - Sediment Management (September 2010); and
- WAT-SG-29: Good Practice Guide - Temporary Construction Methods (March 2009).

## 8.2 Baseline Conditions

- 8.2.1 The following information has been gathered through desk-based research and a site visit, during November 2024, to inform the baseline hydrological conditions of the Proposed Development and the associated Study Area, which comprises the Proposed Development and a 2 km buffer Zol for flood risk, water resources and downstream sensitive receptors.

### Desk Study

#### *Hydrology*

- 8.2.2 The Proposed Development is located in the Lewis and Harris Coastal catchment, and within proximity to a number of surface water features including lakes (lochs), rivers, streams and unnamed drains / ditches. The surface water features in relation to the Proposed Development are shown on **Figure 8.1: Surface Water Features, Appendix A**.
- 8.2.3 The northernmost end of the Proposed Development is located approximately 100 m east of the Loch Strannadabhat which drains towards Lewis' eastern coast via the Albainn Mhor river (approximately 500 m north of the Proposed Development) at the northern Loch boundary, and consequently via the Loch Eireasort which is directly connected to the sea to the north-east.
- 8.2.4 Approximately 5.07 km south-east of the Proposed Development's northernmost point, the Proposed Development is shown to directly cross over the River Seaforth,

<sup>70</sup> [netregs.org.uk/media/1898/guidance-for-pollution-prevention-1-2022-update.pdf](https://www.netregs.org.uk/media/1898/guidance-for-pollution-prevention-1-2022-update.pdf) (Accessed: 24/02/2025).

<sup>71</sup> <https://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf> (Accessed 24/02/2025).

<sup>72</sup> <https://www.netregs.org.uk/media/tsybv2y3/gpp6-working-on-construction-and-demolition-sites.pdf> (Accessed 24/02/2025).

<sup>73</sup> Guidance provided in recent GPPs will be followed and take precedent over information provided in PPG 6, which was withdrawn on 14th December 2015, where there is overlap in the provision of advice. For example, guidance on the storage of handling of oils /fuels in GPP 2 will take precedent over guidance provided in Section 5 (Oil use, storage and refuelling) of PPG 6.

<sup>74</sup> <https://www.netregs.org.uk/media/1436/gpp-21-final.pdf> (Accessed 24/02/2025).

<sup>75</sup> <https://www.netregs.org.uk/media/1643/gpp-22-dealing-with-spills.pdf> (Accessed 24/02/2024).

<sup>76</sup> SEPA Engineering Guidance. Available at: <https://www.sepa.org.uk/regulations/water/engineering/engineering-guidance> (Accessed: 19/1/2024)

which is classified by Scottish Environment Protection Agency (SEPA) as being of Good water quality and Good overall condition. The River Seaforth is categorised as a 'Main River' flowing in a westerly direction. The river is 0.8 km in length, connecting the Loch Sgiobacleit (upstream) to the Loch Seaforth (downstream), which is directly connected the south coast of Lewis. The aforementioned Lochs are all classified as being of a High overall condition by SEPA<sup>77</sup>.

- 8.2.5 The Proposed Development would interact with a number of smaller watercourses and drains that are associated with the above-mentioned main surface water features. Within the northern extent of the Proposed Development (north of the Seaforth River) streams and drains following the natural topography of the landscape have been identified to discharge into the Loch Sgiobacleit and Loch Seaforth, as well as smaller Lochs such as the Loch an Iar, Loch na Muilne, and Loch Beag which are located within 500 m of the Proposed Development. Within the southern extent of the Proposed Development, the route is additionally shown to cross a number of streams (ditches) and unclassified rivers including the Abhainn Sgeireabhat, the Allt nan Lagan Dubha, the Allt Cleite na h-Uamha, and the Abhainn Ghlas (located from west to east respectively).

#### *Flood Risk*

- 8.2.6 A review of SEPA's online flood risk maps<sup>78</sup> show that the extent of fluvial (river) flood risk within proximity to the Proposed Development is limited to land adjacent to the River Seaforth, including areas at a high risk of flooding (1 in 10 (10%) annual probability).
- 8.2.7 Tidal (coastal) flood risk is limited to land located along the edges of the Lock Eireasort (north of the Site) and the Loch Seaforth (south-west of the Site) which are directly influenced by the sea. The nearest area identified to be at a high risk of tidal flooding (1 in 10 (10%) annual probability) is located approximately 50 m south of the Proposed Development, on the northern edge of the Loch Seaforth.
- 8.2.8 SEPA mapping identifies some very limited areas of elevated surface water flood risk within proximity to the Proposed Development, all of which are shown to remain within surface water features including aforementioned lochs and rivers. Generally, the Study Area is at a very low risk of surface water flooding (less than a 1 in 1,000 (0.1%) annual probability).
- 8.2.9 SEPA's reservoir flood extent mapping indicates that the Proposed Development is not located within an area at risk of flooding related to a reservoir failure.
- 8.2.10 Areas of fluvial, tidal and surface water flood risk, within proximity to the Proposed Development are shown on **Figure 8.2: Flood Risk, Appendix A**.

#### *Water Resources*

- 8.2.11 According to British Geological Society (BGS) 1:625 hydrogeological mapping<sup>79</sup>, the majority of the Proposed Development is underlain by an aquifer of Fault Zone Rocks which are classified as a low productivity aquifer. Within the middle of the Proposed Development route, a vertical strip of land is shown to be underlain by the Lewisian Complex which is similarly classified as a low productivity aquifer. No

<sup>77</sup> SEPA, Water Classification Hub. [Online]. Available at: <https://informatics.sepa.org.uk/WaterClassificationHub/> (Accessed 19/10/2024)

<sup>78</sup> SEPA, Flood Extent Map. [Online]. Available at: <https://map.sepa.org.uk/floodmap/map.htm> (Accessed: 19/10/2024)

<sup>79</sup> BGS, Hydrogeological Maps of the UK. [Online]. Available at: <https://www.bgs.ac.uk/datasets/hydrogeology-625k/> (Accessed: 19/10/2024)

superficial deposits have been identified to underlie the Proposed Development within BGS mapping. However, findings from the site walkover completed during the week commencing 11 November 2024, indicated that areas of the Proposed Development are likely underlain by Peat.

- 8.2.12 Following a request for information made to the local authority in 2023, CnES has confirmed to Ramboll the presence of two active Private Water Supplies (PWS) within 2 km of the Proposed Development. These are called '5 Seaforth Head' and 'Keepers Cottage, Seaforth Head'.
- 8.2.13 The Study Area is not located within a surface water Drinking Water Protected Area (DWPA, Surface) assigned by the Scottish Government<sup>80</sup>. The nearest surface water DWPA is situated over 10 km to the south-west of the Proposed Development. Consultation will be carried out with Scottish Water to confirm the absence of assets under their management within the Study Area.

### *GWDTes*

- 8.2.14 There is potential that areas within proximity to the Proposed Development could be classified as moderate or high potentially groundwater dependent. Ramboll carried out NVC habitat surveying in July 2024 (refer to **Chapter 6: Ecology**), classifying communities in accordance with the NVC system<sup>81</sup>. During these surveys, habitats onsite were identified to comprise entirely of rainwater or surface water fed, blanket bog and wet heath. No habitats considered to be GWDTes were identified during the NVC Survey, therefore, further hydrological and hydrogeological consideration of GWDTes will not be included within the EIA Report.

### **Field Study**

- 8.2.15 Site hydrological condition surveying was conducted in November 2024, comprising a visual inspection of watercourses and land uses across the Proposed Development.
- 8.2.16 During the walkover, all visible watercourse / stream locations within proximity to the Proposed Development were recorded alongside a description of their main characteristics. The majority of surface water features observed along the Proposed Development were considered to be minor streams and drainage ditches transporting shallow water in line with the area's natural topography towards nearby lochs.
- 8.2.17 For the majority of small surface water features observed, particularly in the southern half of the Proposed Alignment (below Seaforth River), many existing minor road-watercourse crossings were identified along the route of the Proposed Alignment. These mostly comprised of small circular culverts or open-bottomed culverts which allowed water to cross the Eishken Road.
- 8.2.18 Two larger surface watercourses were identified as potential sensitive receptors for the Proposed Alignment. These were the Seaforth River, located 5.07 km south-east of the northernmost point of the Proposed Alignment, and the Abhainn Sgeireabhat, which is a tributary of the Seaforth River. The Abhainn Sgeireabhat is proposed to interact with the Proposed Development 135 m south of the Seaforth River whilst

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<sup>80</sup> Scottish Gov. Drinking water protected areas – Scotland river basin district maps. [Online]. Available at: <https://www.gov.scot/publications/drinking-water-protected-areas-scotland-river-basin-district-maps/> (Accessed: 19/1/2024)

<sup>81</sup> Rodwell, J. S. (Ed), et al. (1991 – 2000). British Plant Communities (5 volumes). Cambridge University Press.

flowing in a north-easterly direction. Existing crossing structures for these watercourses comprise of an 8 m wide (approx.) road bridge for the Seaforth River, and three 0.8 m (approx. diameter) circular culverts for the Abhainn Sgeireabhat.

- 8.2.19 Regarding PWSs, records presented two within proximity to the Proposed Alignment. During the site walkover, observation of the Keeper's Cottage PWS Holding Tank was made at a location topographically higher than the property. However, 5 Seaforth Head, blue piping led up the hillside away from the property and the Proposed Development. During the site walkover, the surveyors were not able to locate the sources of either PWS. Site observations suggested that the Proposed Development construction works will be downslope of the PWS sources due to the steep downslope terrain in these locations from north to south. It is therefore considered unlikely that the installation of the OHL would impact the quality or quantity of water supply (micrositing of the pole locations could leave the maximum possible buffer). The supply of water from source to property at both locations is piped across the Proposed Development, so more detailed consultation will be carried out with the property owners to confirm the precise locations of the PWS sources. In the case of Keeper's Cottage, surveyors were able to see the holding tank above the property and at the 5 Seaforth Head piping led up the hillside away from the property and the Proposed Development, although the site walkover did not confirm the location of the sources themselves.
- 8.2.20 Of additional note, the surveyors did not observe the emergence of groundwater at any location along the Proposed Development.

### 8.3 Sensitive Receptors

- 8.3.1 A number of watercourses are shown to directly interact with the Proposed Development the most sizable of which are the Seaforth River and the Abhainn Sgeireabhat. Therefore, the assessment will focus on the potential impacts during the construction and operational phases of the Proposed Development on watercourses and waterbodies in this area.
- 8.3.2 Additional consideration will be required regarding the proximity of the Proposed Alignment to PWS sources and the potential impact on temporary and long-term groundwater quantity and quality that may occur as a consequence of construction. Initial observations of PWS related features suggests that the Proposed Development would be set downslope of PWS sources.
- 8.3.3 Lastly, using the ecological survey data gathered (see **Chapter 6: Ecology**), hydrological assessment will confirm the sensitivity of blanket bog and heathland habitats to hydrological and hydrogeological alteration.

### 8.4 Potentially Significant Effects

- 8.4.1 It is anticipated that standard best practice measures will be implemented during the construction phase of the Proposed Development, in accordance with a CEMP. It is also anticipated that the work completed to date in determining the optimum alignment for the Proposed Development, also referred to as mitigation by design, will minimise the potential for impacts to the water environment (i.e. embedded mitigation).
- 8.4.2 Considering the inherent and embedded mitigation, it is anticipated that several likely significant effects would be sufficiently mitigated, as set out in the following section.

In the event the potential for likely significant impacts is identified within the proposed water EIA Report chapter, the assessment will address additional design or management measures that would be implemented.

- 8.4.3 Considering the baseline water environment described above, it is anticipated that the following potentially significant effects could occur as a result of the Proposed Development, with the aforementioned inherent and embedded mitigation assumed as implemented, under a worst-case scenario:
- There is the potential to alter in-channel or overland flow regimes through excavations, exposure of bare earth or rock, alteration to field drains and the construction of watercourse crossings (if required). Where existing infrastructure is retained, the Site would rely on previously consented watercourse crossings and drainage infrastructure. Assessment of the condition and suitability of existing crossings and drainage measures would be carried out, alongside surveying of any new crossing points that may be required for the development of a watercourse crossing register.
  - Consequently, there is the potential to disrupt surface water conditions supporting sensitive, non-groundwater dependent habitats (if present).
  - The peat erosion potential of any peat disturbed may also be exacerbated as a consequence of localised drying of the peat and resultant oxidation.
  - In the event that the two PWS are found to be in hydrological or hydrogeological connection to the Proposed Development, there is the potential that the quality or quantity of water supply could be affected as a result of alterations in groundwater supplies. Detailed assessment and consultations will be carried out where PWS are within potential hydrogeological connectivity to the Proposed Development (within 250 m), as per the SEPA guidance<sup>82</sup>, or where PWS are in downstream connectivity from construction activities.
  - Increase in erosion and transport of sediment to watercourses as a result of construction near watercourse crossings, vegetation and soil stripping, and excavations, with potential effects including indirect effects on aquatic ecology, fluvial morphology and PWS.

## 8.5 Issues Scoped Out

### Flood Risk

- 8.5.1 Based on a review of SEPA Flood Maps<sup>83</sup>, it is noted that flood risk is highly unlikely to increase as a result of the Proposed Development, either through development taking place on areas considered to be at risk of flooding or through an increase in flood risk downstream. Surface water flood risks would be accounted for during detailed drainage design and as such, it is sought to scope out flood risk.
- 8.5.2 If required a detailed assessment of potential flow rates at proposed watercourse crossing locations would be carried out by the contractor at the detailed design stage, such that all of the watercourse crossings identified for the Proposed Development would be designed in compliance with the requirements of The Water

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<sup>82</sup> [https://www.sepa.org.uk/media/143868/lupsgu31\\_planning\\_guidance\\_on\\_groundwater\\_abstractions.pdf](https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf). (Accessed 25/02/2025).

<sup>83</sup> SEPA, Flood Extent Map. [Online]. Available at: <https://map.sepa.org.uk/floodmap/map.htm> (Accessed: 19/1/2024)

Environment (Controlled Activities) (Scotland) Regulations 2011 as amended<sup>84</sup>. The design of watercourse crossings would also take account of the future 'with climate change' baseline and (to avoid altering the flow regime) would be appropriately sized. As such, detailed flow rate calculations will be scoped out and not carried out within the EIA Report.

## Groundwater

- 8.5.3 According to the BGS Hydrogeological digital mapping<sup>85</sup> and Groundwater Vulnerability Maps of Scotland<sup>86</sup> (1:625,000), the Site is underlain by low productivity aquifers. Based on the limited extent of excavations for pole installation (typically 3 m<sup>2</sup> x 2.5 m deep) and short period of time for which excavations would be exposed, there is limited potential for alteration to the groundwater regime. Should dewatering be required, this would be carried out in accordance with the CEMP and pollution prevention measures would ensure groundwater quality would not be impacted.
- 8.5.4 Excavation of soil and bedrock during the construction phase of the Proposed Development could cause localised disruption and interruption to groundwater flow. Interruption of groundwater flow would potentially reduce the supply of groundwater to GWDTEs (if determined present) thereby causing an alteration / change in the quality or quantity of and/or the physical or biological characteristics of the GWDTEs. Contamination of groundwater may also cause physical or chemical contamination to the GWDTEs. However, following the completion of NVC surveys undertaken in July 2024, no GWDTEs were identified within the study area and, as such, it is reasonable to assume that significant effects are not likely and can, therefore, be scoped out of the EIA Report.

## Surface Water and Watercourses

- 8.5.5 The proposed pole locations are suggested to be micro-sited to ensure ground level infrastructure is located outside of a 50 m buffer of watercourses and would require limited construction of short lengths of track to provide access.
- 8.5.6 There is the potential to impact on receiving soils, groundwater and watercourse quality through the release of contaminated water and stored chemicals used onsite during construction works, with potential effects including those on water quality and indirect effects on aquatic ecology. However, the potential for such impacts would be managed through the implementation of a CEMP and regulation of the Site under CAR<sup>87</sup>. In the unlikely event that chemical storage or stockpiling of materials would be carried out in close proximity to sensitive hydrological receptors, mitigation measures would be provided in the CEMP. Suitable sites and precautions for such activities will be identified in advance to avoid colocation with sensitive hydrological receptors. The CEMP would be prepared prior to the commencement of construction that would detail standard best practice measures to be implemented during the

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<sup>84</sup> The Scottish Government. The Water Environment (Controlled Activities) (Scotland) Regulations 2011 and The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2021.

<sup>85</sup> BGS, Hydrogeological Maps of the UK. [Online]. Available at: <https://www.bgs.ac.uk/datasets/hydrogeology-625k/> (Accessed: 19/1/2024)

<sup>86</sup> Scotland's Environment, Groundwater Classifications. [Online]. Available at: <https://map.environment.gov.scot/sewebmap/?layers=groundwaterClassification> (Accessed: 19/1/2024)

<sup>87</sup> SEPA The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), A Practical Guide. Version 9, January 2022. Available online: <https://www.sepa.org.uk/regulations/water/> (Accessed: 19/1/2024)

construction phase that would ensure the protection of watercourses and, therefore, downstream receptors.

8.5.7 Once ground conditions are re-instated no significant effects would occur.

## 8.6 Assessment Methodology

8.6.1 The Study Area, in respect of potential impacts on water resources, will include the Proposed Development extent plus a 2 km buffer. Additionally, the assessment will consider potential hydrological downstream connectivity to areas extending beyond this buffer as required.

8.6.2 It is proposed that a focussed hydrological and hydrogeological impact assessment is provided. The assessment will be used to identify key interactions between the Proposed Development and the water environment. In doing so, the EIA Report chapter will identify the requirement for construction mitigation measures and provide an initial assessment of the requirements under the Controlled Activities Regulations (CAR).

8.6.3 The proposed technical reports to accompany the EIA Report are as follows and will inform design and construction mitigation::

- **Watercourse Crossings Assessment:** A map of the location of all proposed engineering activities in the water environment will be provided. A systematic table detailing the justification for the activity; possible crossing types and level of CAR authorisation; and how any adverse impact will be mitigated will be included, accompanied by photography and dimensions. The crossings for the Proposed Development are anticipated to be related to access tracks. and
- **PWS Risk Assessment:** Should it be determined that one of the PWSs is within hydrological connection to the Proposed Development and downstream of construction works, a detailed risk assessment for PWS abstractions (in line with SEPA Land Use Planning System (LUPS) SEPA Guidance Note 31<sup>88</sup>) will be prepared to assess the severity of the potential risk and set out mitigation were such measures are required.

## 8.7 Summary and Questions to Consultees

8.7.1 This chapter of the Scoping Report has set out the proposed approach to the assessment of the potential effects, those associated with the Proposed Development, within the study area. Potential effects of the Proposed Development, associated with the water environment, are anticipated to be limited to the construction phase and would be temporary in nature. Potential likely significant effects are not anticipated for the operational phase of the Proposed Development and, therefore, are proposed to be scoped out of the EIA Report.

8.7.2 It is proposed the scope of the water environment assessment, to be included within the EIA Report, will be limited to the potential likely significant effects associated with the watercourse crossing and PWSs. The application will be accompanied by Technical Appendices to cover these topics.

8.7.3 Further consultation with the local authority and relevant landowners (if possible) will be carried out to determine whether PWS source and piping locations are within

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<sup>88</sup> Available at: [https://www.sepa.org.uk/media/143868/lupsgu31\\_planning\\_guidance\\_on\\_groundwater\\_abstractions.pdf](https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf) (Accessed: 19/1/2024)

influential proximity to the Proposed Development. Scottish Water would be consulted to confirm presence / absence of Scottish Water assets on the Site or within a 2 km radius of the Proposed Alignment.

8.7.4 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the water environment assessment, specifically regarding the following questions:

- WE1: Do consultees agree that the scope of the proposed assessment is appropriate?
- WE2: Do consultees agree that the proposed assessment methodology is appropriate?
- WE3: Do consultees agree with the technical appendices anticipated to accompany the EIA Report?

## 9. PEAT

### 9.1 Introduction

9.1.1 This chapter of the Scoping Report provides an overview of the peat and carbon rich soils baseline along and in the vicinity of the Proposed Development, describes the potential effects associated with the construction and operation of the Proposed Development, and presents the assessment methodology to be used in the impact assessment.

### 9.2 Baseline Conditions

- 9.2.1 The peat and carbon rich soils baseline summarised below has been identified through a desktop study carried out during the route and alignment selection stages of the project and a Stage 1 peat depth survey undertaken in September 2024.
- 9.2.2 According to the BGS ‘Geology Viewer’ website<sup>89</sup> (1:625,000), no superficial deposits are mapped along the length of the Proposed Development. The bedrock geology within the Proposed Development predominantly comprises metamorphic rock, protocataclasite interspersed with cataclasites, belonging to the Outer Hebrides Thrust Zone Mylonites Complex. The central part of the Proposed Development located at the eastern end of Loch Seaforth, has gneiss bedrock belonging to the Lewisian Complex. Extracts of the geological baseline is illustrated in **Figure 9.1: Bedrock Geology** and **Figure 9.2: Superficial, Appendix A**.
- 9.2.3 A review of the NatureScot Carbon and Peatland Map (2016)<sup>90</sup> indicates that the majority of the Proposed Development is underlain by Class 1 and Class 2 peatland soils which comprise nationally important carbon rich soils, deep peat and priority peatland habitat likely to be of high conservation value. Two small areas of Class 3 and Class 5 peatland are shown at the eastern end of Loch Seaforth. An extract of the NatureScot Carbon and Peatland map is illustrated in **Figure 9.3: Carbon and Peatland Map, Appendix A**.
- 9.2.4 The National Soil Map of Scotland<sup>91</sup> indicates that the Proposed Development is underlain by ‘peaty gleys with dystrophic blanket peat’, and landform comprising ‘hillsides and undulating land with gentle and strong slopes’.
- 9.2.5 No nationally important environmental designations for peat or geological conservation are located within 1 km of the Proposed Development. No Local Geodiversity Sites are located within 1 km of the Proposed Development.
- 9.2.6 An initial review of aerial imagery and OS mapping indicates that no potentially contaminative land uses are present.
- 9.2.7 Peat depth probing (Stage 1 survey) was undertaken across the Proposed Development in September 2024 in accordance with NatureScot guidance<sup>92</sup> to provide peat depth data along the route. The survey confirmed that peat is present throughout the Proposed Development, with a maximum peat depth recorded of 5.5 m. The results of the Stage 1 peat depth survey are shown on **Figure 9.4: Peat**

<sup>89</sup> <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (Accessed: 9/12/2024)

<sup>90</sup> <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/> (Accessed: 9/12/2024)

<sup>91</sup> <https://soils.environment.gov.scot/maps/> (Accessed: 9/12/2024)

<sup>92</sup> NatureScot. Peat Depth and Peatland Condition Survey. Available at: <https://www.nature.scot/sites/default/files/2021-06/Peatland%20Action%20-%20GUIDANCE%20-%20Peat%20depth%20and%20peatland%20condition%20survey%20guidance.pdf>

**Probing (Stage 1), Appendix A.** A more refined Stage 2 peat depth survey will be undertaken to inform the EIA and peat and carbon rich soils assessment.

### 9.3 Sensitive Receptors

9.3.1 The main receptor identified which will be considered in EIA is peat and carbon rich soils within the Proposed Development, which are of national importance in accordance with the NatureScot Carbon and Peatland map and National Planning Framework 4 (2023)<sup>93</sup>, and are shown to be present across the majority of the Proposed Development.

### 9.4 Potentially Significant Effects

9.4.1 Based on the baseline conditions set out in the above, the Proposed Development has the potential to result in the following effects on peat and carbon rich soils.

- Potential for loss, disturbance and compaction of peat and carbon rich soils during the construction and operation of the Proposed Development.
- Potential for peat instability during the construction and operation of the Proposed Development which could result in peat slides.
- Erosion and disturbance of peat that may result in localised drying and resultant oxidation and carbon release.
- Construction activities and excavations that could result in surplus peat that will require sustainable re-use or reinstatement either within the Proposed Development or in suitable locations offsite.

9.4.2 Potential effects on the natural capital of peat and associated habitats will be considered in the ecology chapter within the EIA.

### 9.5 Issues Scoped Out

9.5.1 Based on an initial review of the historical mapping it is proposed to scope out contaminated land from the assessment on the basis that there is limited potentially contaminative land uses at the Site. It has also been assumed that potential impacts on geology can also be scoped out as no sensitive geological receptors have been identified.

### 9.6 Assessment Methodology

9.6.1 The EIA Report will include assessment of the potential significance effects on peat and carbon rich soils resources from the Proposed Development.

9.6.2 Following the determination of impacts, mitigation measures will be identified, and residual effects identified. The significance of residual effects would be defined as a function of the sensitivity of receptors and the magnitude of change, taking account of any mitigation proposed. Differentiations between categories, and thus the final significance ratings, would be based upon professional judgement.

9.6.3 An Outline Peat Management Plan (OPMP) will be produced in accordance with SEPA guidance<sup>94,95</sup> which would include information on the peat characteristics, extent, details of proposed excavation, surplus and re-use options based on peat

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<sup>93</sup> <https://www.gov.scot/publications/national-planning-framework-4/pages/3/> (Accessed: 9/12/2024)

<sup>94</sup> SEPA (2012) Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste.

<sup>95</sup> Scottish Government, SNH, SEPA (2017) Peatland Guidance on Development on Peatland, on-line-version-only.

probing data and desk-based baseline data. This will include an estimation of peat volumes and will outline measures necessary to minimise peat and habitat disturbance and provide a clear description of mitigation measures to minimise potential adverse impacts on peat and peatland functioning, and ensure best practice and effective excavating, moving and re-using / reinstating of peat. This may include integration of peat reuse measures with habitat management proposals. The OPMP will be developed using the peat mitigation hierarchy as specified in NPF4.

- 9.6.4 A PLHRA will be undertaken (if required, subject to the design) in accordance with the Scottish Government guidance<sup>96</sup> and included as a Technical Appendix to the EIA Report. The assessment will assess the potential stability risks associated with the Proposed Development and will incorporate:
- Desk study information supplemented by site reconnaissance information;
  - Review of peat depth survey data including peat characteristics, identification of areas of potential or past instability, flow pathways for potential peat slide events and identification of down gradient environmental receptors;
  - Preliminary stability analysis and hazard ranking; and
  - Reporting to include the assessment, identification of hazards, mitigation measures and recommendations for further assessment to be included during post-consent detailed design and construction phases.
- 9.6.5 The potential carbon emissions from peatland disturbance will be assessed and included as a technical appendix to the EIA Report. This will be undertaken based on the collation of desk and field based data, design inputs and summarised within a carbon assessment tool, which will report the total quantity of carbon stored within the peatland being disturbed by the Proposed Development and its carbon flux over the lifetime of the scheme.

## 9.7 Summary and Questions to Consultees

- 9.7.1 It is proposed that the peat chapter will review the geological conditions at the Proposed Development, specifically only those regarding peat and carbon-rich soils. General geological conditions would be scoped out of the EIA Report as no sensitive geological receptors have been identified. Other issues such as contaminated land are to be scoped out of the assessment based on the current and likely historical land uses.
- 9.7.2 The assessment will consider the potential effects on peat and carbon rich soils, and measures to minimise its disturbance, erosion and loss as part of the Proposed Development. An OPMP will be produced as an appendix to the EIA Report which will include the materials balance and mitigation measures to manage peat during construction and operation of the Proposed Development. A PLHRA will also be undertaken to determine whether the Proposed Development has the potential to affect stability of peat, and outline measures to mitigate these impacts.
- 9.7.3 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the peat and carbon rich soils assessment, specifically whether consultees agree with the following.

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<sup>96</sup> The Scottish Government (2017) Peat Landslide Hazard and Risk Assessments – Best Practice Guide for Proposed Electricity Generation Developments.

- PEAT1: Do consultees agree that contaminated land and geology can be scoped out of the EIA Report?

## 10. TRAFFIC AND TRANSPORT

### 10.1 Introduction

- 10.1.1 This chapter of the Scoping Report provides an overview of the traffic and transport baseline and assesses the potential effects associated with the construction of the Proposed Development relating to traffic and transport. Traffic associated with the operation of the Proposed Development will be negligible and, therefore, effects associated with the operational phase of the Proposed Development are not proposed to be included within the EIA process. Traffic associated with the decommissioning of the Proposed Development in the future is anticipated to be significantly less than that generated during the construction phase and, therefore, transport effects associated with decommissioning are not proposed to be assessed.
- 10.1.2 The assessment will be based on the effect of Heavy Goods Vehicles (HGVs), delivery vehicles and private car movements during the construction of the Proposed Development.
- 10.1.3 The traffic and transport EIA Report chapter will:
- Describe the current traffic and transport conditions in the area around the Proposed Development;
  - Identify and assess the likely environmental effects associated with increased traffic;
  - Identify and describe the mitigation measures proposed to address potential significant effects; and
  - Assess residual effects post mitigation implementation.
- 10.1.4 The following policy and guidance documents will be used to inform the traffic and transport chapter:
- Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023)<sup>97</sup>;
  - Transport Assessment Guidance (Scottish Government, 2012)<sup>98</sup>;
  - Planning Advice Note 75: Planning for Transport (Scottish Government, 2005)<sup>99</sup>; and
  - Design Manual for Roads and Bridges (DMRB).

### 10.2 Baseline Conditions

- 10.2.1 Traffic data for use in the assessment would be obtained from the UK Department of Transport (DfT) traffic survey database or commissioned traffic surveys for the A859, A858, A857 and Eishken Road.
- 10.2.2 Baseline traffic flows will be increased where necessary to represent the anticipated year of construction using factors derived from National Road Traffic Forecast (NRTF) 'low growth' rates.

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<sup>97</sup> <https://www.iema.net/resources/blogs/2023/07/12/iema-guidance-ea-of-traffic-and-movement/> (Accessed: 19/1/2024)

<sup>98</sup> [https://www.transport.gov.scot/media/4589/planning\\_reform\\_-\\_dpmtag\\_-\\_development\\_management\\_\\_dpmtag\\_ref\\_\\_17\\_-\\_transport\\_assessment\\_guidance\\_final\\_-\\_june\\_2012.pdf](https://www.transport.gov.scot/media/4589/planning_reform_-_dpmtag_-_development_management__dpmtag_ref__17_-_transport_assessment_guidance_final_-_june_2012.pdf) (Accessed: 9/12/2024)

<sup>99</sup> <https://www.gov.scot/publications/planning-advice-note-pan-75-planning-transport/> (Accessed: 9/12/2024)

- 10.2.3 It is noted that the above links effectively make up the study area for the traffic and transport assessment. The Proposed Development is accessed from the A859 so all construction traffic will require to use the A859 corridor to access the Proposed Development. The A859 is the key north-south route on the Isle of Lewis extending from the settlement and Port of Stornoway to the north of the Site and to Harris to the south.
- 10.2.4 From the A859, the Proposed Alignment routes west for approximately 250 m where it will connect to the proposed Balallan Switching Station, with this section accessed via existing farm tracks from the A859. The proposed OHL then routes south-east for approximately 9.6 km following the route of Eishken Road (a single track road with passing places), to Eishken, where it will connect to Muaitheabhal Wind Farm. Most construction traffic will require to use Eishken Road to access the Proposed Development and several access points will be created along this public road to provide construction traffic access.
- 10.2.5 The A858 runs in an east-west axis to the west of Stornoway before turning northwards and running to the north end of Lewis. It is possible that some construction materials and Site staff would come from origins on this road corridor so a temporary uplift in traffic movements is anticipated during the construction phase of the Proposed Development.
- 10.2.6 The final road link included within the study area is the A857 through Stornoway. This road links to both the A859 and A858 and provides the link to the port facilities within Stornoway as well as other commercial areas of the settlement where some materials for the Proposed Development are likely to be sourced from. It is also likely that a high proportion of the construction workforce would be drawn from Stornoway.

### 10.3 Sensitive Receptors

- 10.3.1 The main sensitive receptors to increased traffic levels and associated environmental effects are likely to be residents of the isolated dwellings along the road corridors within the study area and other road users, including for leisure and recreational purposes (pedestrians and cyclists etc.), as well as the settlement of Stornoway, which is located approximately 22 km north-east of the Proposed Development.

### 10.4 Potentially Significant Effects

- 10.4.1 The main potential impact of the Proposed Development will be increased traffic flows, or changes to the traffic composition, as a result of traffic movements during the construction phase. These potential traffic impacts (and associated environmental effects) may arise during the construction phase and would affect existing road users and those resident along the road corridors that will be used to access the Proposed Development.
- 10.4.2 The assessment, to be set out within the proposed traffic and transport EIA Report chapter, would consider potential temporary changes in traffic movements and the resultant temporary effects on the road network during the construction phase, for residents and users of the roads within the study area. The following potential environmental effects would be considered:
- Severance of communities.

- Road vehicle driver and passenger delay.
- Non-motorised user delay / amenity.
- Fear and intimidation on and by road users.
- Road user and pedestrian safety.
- Hazardous / large loads.

10.4.3 The proposed assessment would also consider the design of new access infrastructure required for the Proposed Development and, if required, practical mitigation measures to offset any temporary effects detailed in an accompanying Construction Traffic Management Plan (CTMP).

## 10.5 Issues Scoped Out

10.5.1 Following the completion of a detailed desktop study, together with the application of professional judgement and experience from other relevant projects and policy guidance, the following impacts would be scoped out of the proposed traffic and transport assessment:

- Operational Stage – Once the Development is operational, the amount of traffic associated with maintenance of the OHL would be minimal. It is estimated that on average there will be just a small number of vehicles accessing the Site on an infrequent basis. Therefore, the effect of vehicle movements during the operational phase will be negligible. In respect of traffic and transport, the operational phase of the Proposed Development would therefore not be assessed in this EIA Report chapter.
- Decommissioning Stage – At some point in the future, the Proposed Development will be decommissioned. Traffic associated with the decommissioning stage is anticipated to be significantly less than that generated during the construction phase. Given the potential timescales involved and the likelihood for changes to the baseline situation during this period, the access, traffic and transport effects of decommissioning will not be assessed in this EIA Report chapter.

## 10.6 Assessment Methodology

10.6.1 The impact of the increase in construction vehicle traffic movements will be quantified through comparison of the baseline data, comprising the existing traffic movements and vehicle composition, with the movements predicted as a result of the construction phase of the Proposed Development. Consideration of the potential environmental impacts on other road users will also be made where road links used by said users are likely to be affected by construction traffic. The following rules taken from the IEMA Guidelines would be used as a screening process to define the scale and spatial extent of the assessment:

- Rule 1 – Include highway links where flows are predicted to increase by more than 30% or where the number of HGVs is predicted to increase by more than 30%; and
- Rule 2 – Include any other specifically sensitive areas where traffic flows are predicted to increase by 10% or more.

10.6.2 Where the predicted growth in traffic flow is below the thresholds, the IEMA guidelines suggest the significance of the effects can be stated to be negligible and

further detailed assessment is not warranted. Where a detailed assessment is required, sensitivity and magnitude criteria will be used to determine the significance of effects. In addition, the potential for cumulative effects will be considered with other developments which are proposed to use the same public roads as the Proposed Development during the construction phase.

- 10.6.3 The proposed CTMP would be submitted alongside the application for consent for the Proposed Development. This management plan would set out, and secure, the measures identified to mitigate potential significant effects of the construction phase traffic (and associated environmental effects). The measures to be included would likely fall within categories including:
- Construction programme and phasing;
  - Quantification of construction movements;
  - Defined working hours;
  - Measures to minimise construction traffic impacts (delivery control, sustainability, speed limits, designated haul routes, staff induction, workforce travel arrangements, signage etc); and
  - Communication arrangements (with local community, highway authorities and other construction sites).

## 10.7 Summary and Questions to Consultees

- 10.7.1 This chapter of the Scoping Report has set out the proposed approach to the assessment of the potential effects, associated with the increased construction movements, within the study area, as defined by the IEMA guidelines. Potential effects of the Proposed Development, associated with traffic and transport, are anticipated to be limited to the construction phase and would be temporary in nature. Potential likely significant effects are not anticipated for the operational or decommissioning phases of the Proposed Development and, therefore, are proposed to be scoped out of the EIA Report.
- 10.7.2 Accordingly, it is proposed that the scope of the traffic and transport assessment, to be included within the EIA Report, will be limited to the potential likely significant effects associated with the construction phase of the Proposed Development. The application will also be accompanied by a standalone CTMP.
- 10.7.3 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the traffic and transport assessment, specifically whether consultees agree with the following:
- T&T1: Is the proposed study area considered correct and covers the potential sensitive receptors?
  - T&T2: Is the proposed methodology considered both appropriate and proportionate?

## 11. TOPICS SCOPED OUT

### 11.1 Land Use

#### Baseline

- 11.1.1 Land capability for agriculture in the vicinity to the Proposed Development is predominantly classified by the James Hutton Institute<sup>100</sup> as rough grazing (Class 6.3) with approximately 0.5 km of the Proposed Development within land classified as land capable of use as improved grassland (Class 5.3). The Proposed Development is not located on what is considered to be good quality agricultural land. However, the land surrounding the Proposed Development includes extensive areas of common grazing or land held runrig. The Proposed Development does not interact with land included in the public registry of crofts.
- 11.1.2 The Proposed Development does not interact with any forestry or areas of Ancient Woodland.

#### Potentially Significant Effects

##### *Agricultural Land*

- 11.1.3 The design of the Proposed Development has included consideration of the locations of angle structures (towers where the line changes direction) in particular given that these structures have greater potential for impact on agricultural land use. On the basis that the agricultural land within the LOD is of low sensitivity and that only a small proportion of the area (access tracks and pole bases) would be affected, the Proposed Development would not result in significant effects across the entire resource.
- 11.1.4 Construction work may result in some local temporary loss of land or access restriction; however, this can be adequately managed through agreements with the relevant landowners. In general, the permanent loss of land to pole locations and permanent access tracks would be minimal and it would remain possible for agricultural use to continue around these permanent features during their operational lifetime.

##### *Forestry*

- 11.1.5 On the basis that the Proposed Development does not interact with any forestry, there will be no likely significant effect on the woodland resource.

#### Issues Scoped Out

- 11.1.6 The Proposed Development is not anticipated to impact upon landowner choice over the type or intensity level of land operations and would not require any significant management changes. Therefore, no further assessment of land use, agriculture or forestry is proposed as part of the EIA and would be scoped out of the EIA Report.

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<sup>100</sup> The James Hutton Institute (2023) Land Capability for Agriculture. Available at: <https://www.hutton.ac.uk/learning/natural-resource-datasets/landcover/land-capability-agriculture>. [Accessed 1/12/24].

## Summary

11.1.7 The scoping exercise has confirmed the presence of low sensitivity agricultural land use and no interaction between the Proposed Development and commercial forestry or ancient woodland. The likely impacts of the Proposed Development on agricultural land use would potentially be localised loss of grazing access during construction; however, it is anticipated that normal farming activities would be able to resume once the Proposed Development is in operation. No likely significant effects are anticipated on agricultural land use and no further assessment is proposed.

## 11.2 Socio-economics, Recreation and Tourism

### Baseline

11.2.1 The main settlements in the area surrounding the Proposed Development are Balallan and Orinsay. Smaller scattered settlements in closer proximity to the Proposed Development include:

- Airidh a Bhruaich;
- Eisgean;
- Eishken; and
- Seaforth Head.

11.2.2 The Proposed Development crosses the A859. The A859 is the main road through the island and is used by residents and tourists. The A859 also forms part of a long-distance path, known as the Hebridean Way; a 186-mile route which connects Vatersay with the Butt of Lewis.

11.2.3 There are no core paths within 1 km of the Proposed Development.

### Potentially Significant Effects

11.2.4 Potential effects may include:

- potential beneficial socio-economic effects including from direct employment and indirect spend in the local economy;
- temporary loss of amenity resulting from construction traffic and construction activity close to recreational routes and settlements; and
- loss of visual amenity for recreational routes and tourism receptors resulting from the installation of steel poles.

### Issues Scoped Out

11.2.5 During the construction period, the Proposed Development is likely to create temporary jobs with a small proportion of the workforce being from the local area. It is also anticipated that there will be a temporary increase in spending on the supply of goods and services, however this is likely to not be significant beyond the local construction area.

11.2.6 The Proposed Development, in the long-term, will ensure electricity supply security and facilitate the increase in renewable energy generation for the region. Beneficial impacts are to be highlighted within the EIA Report; however, no standalone impact assessment chapter is proposed to cover these issues.

- 11.2.7 Potential impacts on visual amenity for recreational receptors and tourism assets will be fully assessed in the EIA Report as part of the SLVIA. Potential impacts on national cycle routes and core paths will be managed in line with the CTMP. No likely significant effects are anticipated on recreation and tourism and as such, a standalone recreation and tourism assessment is not proposed as part of the EIA Report.

### **Summary**

- 11.2.8 The scoping exercise has reviewed the current socio-economic, recreation and tourism baseline of the Proposed Development. The likely impacts of the Proposed Development would potentially be beneficial in relation to the construction related employment on a local scale and energy supply. Furthermore, the potential effects on visual amenity for recreational receptors and tourism assets will be fully assessed in the EIA Report as part of the SLVIA. Accordingly, no further assessment is proposed in relation to socio-economics, recreation and tourism.

## **11.3 Population and Human Health**

### **Introduction**

- 11.3.1 The World Health Organisation (WHO) defines health as a state of physical, mental and social wellbeing, as well as the absence of disease or infirmity. The focus of the section is on community health and wellbeing and not on occupational health and safety. The term 'health' is used to describe 'human health' and 'wellbeing' unless specifically referenced otherwise.
- 11.3.2 Given the nature of the Proposed Development, the potential and perceived effects on population and human health include:
- nuisance related to noise and vibration during construction and operation;
  - perceived health effects related to electromagnetic fields (EMFs); and
  - potential for impact resulting from major accidents or disasters (considered to be limited to impacts from poles being destabilised).

### **Baseline**

- 11.3.3 The Proposed Development is predominantly located in a rural area; however, several properties are in close proximity to the Proposed Development including within the settlements of Balallan, Orinsay, Airidh a Bhruaich, Eisgean, Eishken and Seaforth Head.

#### *Noise and Vibration*

- 11.3.4 A desk-based review has been undertaken to identify potential noise sensitive receptors. There are two residential properties within 60 m of the Proposed Development (at Seaforth Head), with the next closest properties situated approximately 650 m north-east (at Balallan). Due to the remote nature of the area and the nature of the Proposed Development being one that is considered unlikely to give rise to significant increases in noise, a site visit or a noise survey is not proposed.

### EMFs during Operation

- 11.3.5 EMFs arise from electric charges and current flow. Exposure guidelines have been developed by the International Commission on Non-Ionising Radiation Protection (ICNIRP) to ensure protection of human health in different situations, occupational exposures and public exposure. These guidelines have been adopted by the UK Health and Protection Agency for application in the UK.
- 11.3.6 The calculated EMF strengths for the Proposed Development are within the ICNIRP guidelines as shown in **Table 11.1**.

**Table 11.1 Typical EMF and UK Exposure Guidelines**

Source	Electric Field (kV/m)		Magnetic Field (µT)	
	Calculated field beneath line	Typical field 25 m from line	Calculated field beneath line	Typical field 25 m from line
ICNIRP public exposure limit <sup>101</sup>	9		360	
Typical Field 132 kV OHL <sup>102</sup>	1-2	0.1-0.2	0.2-0.5	0.01-0.05

### Major Accidents and Disasters

- 11.3.7 The potential for impact resulting from major accidents or disasters is limited to impacts from poles being destabilised. The design process seeks to avoid the potential for impacts arising from major accidents or disasters in the following two ways.
- Altitudes over 300 m above sea level are avoided to reduce the extent of pole strengthening (and speed of refurbishment) required due to the higher potential for ice and high winds in such locations.
  - Pole locations are chosen that are generally 100 m from sensitive receptors; which is greater than the topple distance of the poles.
- 11.3.8 A review was undertaken regarding the expected effects deriving from the vulnerability of the Proposed Development to risks of major accidents and disasters. An initial list of major accidents and disasters was compiled using a variety of sources including the Cabinet Office National Risk Register of Civil Emergencies 2015 Edition and UK Government Emergency Response & Recovery Guidance. This list was screened in two stages to identify risks which would be applicable to the Proposed Development; firstly, based on the location and use / nature of the Proposed Development; and then based on the likelihood of the event and consequence of the outcome. The final screened list was then considered in terms of existing mitigation or prevention measures such as regulations and guidance. Key documents included:
- Health and Safety Executive Guidance Note GS6 (Forth edition)<sup>103</sup> Avoiding danger from overhead power lines;

<sup>101</sup> <https://www.emfs.info/limits/limits-organisations/icnirp-1998/> (Accessed 06/08/2024)

<sup>102</sup> <https://www.emfs.info/sources/overhead/> (Accessed 06/08/2024)

<sup>103</sup> Health and Safety Executive. Avoiding danger from overhead power lines, 2013. GS6 (Forth edition).

- Forestry Industry Safety Accord Safety Guide 804 Electricity at work: Forestry; and
  - ENA Technical Specification 43-8 2004: Overhead Line Clearances.
- 11.3.9 The baseline conditions for the following topics which have the potential to impact human health can be found in the following chapters of this Scoping Report:
- Landscape and Visual Impact (**Chapter 4**);
  - Water Environment (**Chapter 8**);
  - Peat (**Chapter 9**);
  - Traffic and Transport (**Chapter 10**);
  - Socio-economics, Recreation and Tourism (**Section 11.2**); and
  - Air Quality and Climate Change (**Section 11.4**).

### **Sensitive Receptors**

- 11.3.10 Potential sensitive receptors that have been identified in the area surrounding the Proposed Development include:
- Onsite populations (e.g. site personnel);
  - Offsite populations (e.g. local residences / towns / villages); and
  - Noise sensitive receptors within 300 m of the Proposed Development, along the length of the Proposed Development.

### **Summary of Likely Significant Effects**

- 11.3.11 At this preliminary stage, potential effects associated with construction and operation of the Proposed Development include:
- Effects of construction noise (including traffic) on the surrounding area and on nearest residential properties;
  - Effects of vibration during construction on receptors in the area surrounding the connections; and
  - Operational effects of noise along the overhead lines.
- 11.3.12 Appropriate control measures to ensure potential effects on human health are managed appropriately in the construction phase will be addressed through the CEMP, which would be produced to manage the construction of the Proposed Development and would address the following issues related to human health and well-being:
- Water quality;
  - Noise controls; and
  - Air and dust management.

### **Issues Scoped Out**

- 11.3.13 Construction noise will be short-term and intermittent and can be controlled through the implementation of an appropriate CEMP. The CEMP would include working hours agreed with CnES. As such, no detailed assessment of construction noise associated with plant or traffic is proposed as part of the EIA Report.

- 11.3.14 Based on the scope and duration of construction activities required for pole installation, it is expected that construction traffic noise impacts and construction traffic vibration impacts would be negligible; therefore, no detailed assessment of construction traffic noise and vibration is proposed as a part of the EIA Report.
- 11.3.15 Operational noise is likely to be minimal; the noise associated with overhead lines is a result of a phenomenon known as ‘corona discharge’. This phenomenon generally occurs during damp weather when rain enhances the local electrical field strength allowing an audible discharge to occur.
- 11.3.16 The typical field strengths for 132 kV OHL are within the ICNIRP exposure guidelines. As such there is no likely significant effects on human health associated with EMFs and this issue is scoped out from further assessment.
- 11.3.17 This review did not identify potentially significant effects from major accidents or disasters that would require assessment under the EIA Regulations and therefore this topic would be scoped out from further assessment.

### Summary

- 11.3.18 The potential for significant effects on human health in terms water quality, air quality, noise, visual impacts, traffic and transport have been considered in the appropriate sections of this Scoping Report.
- 11.3.19 There is no potential for public or occupational exposure to EMFs above appropriate thresholds as a result of the Proposed Development.
- 11.3.20 As such, a separate human health and population impact assessment chapter will not be presented in the EIA Report.

## 11.4 Air Quality and Climate Change

### Baseline

#### *Climate Change*

- 11.4.1 The latest UK Climate Change Risk Assessment 2022 (CCRA3)<sup>104</sup> details some of the hazards related to climate change of most relevance to the Proposed Development. The hazards include:
- Increased precipitation (heavier rainfall) leading to potential flooding and erosion;
  - Higher extreme temperatures leading to risks associated with wildfire or risks to the grid connection; and
  - Increased severity of storms with the potential for damage to plant and infrastructure.
- 11.4.2 Priority Risk Area 6 (Risk to people and the economy from climate-related failure of the power system) identified by the CCRA3 is particularly relevant to the Proposed Development which outlines the UK’s future dependency on the electricity network and the increased exposure and vulnerability to electricity system failures<sup>105</sup>.

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<sup>104</sup> HM Government (2022) UK Climate Change Risk Assessment 3. Available at:

<https://assets.publishing.service.gov.uk/media/61e54d8f8fa8f505985ef3c7/climate-change-risk-assessment-2022.pdf> [Accessed 4/12/24].

<sup>105</sup> HM Government (2022) UK Climate Change Risk Assessment 3. Available at:

<https://assets.publishing.service.gov.uk/media/61e54d8f8fa8f505985ef3c7/climate-change-risk-assessment-2022.pdf> [Accessed 4/12/24].

### *Air Quality*

- 11.4.3 There are no Air Quality Management Areas within proximity to the Proposed Development. This indicates the area is meeting national air quality objectives and European Directives<sup>106</sup> limits and target value for the protection of human health.

## **Summary of Likely Significant Effects**

### *Climate Change*

- 11.4.4 IEMA guidance<sup>107</sup> indicates all greenhouse gas (GHG) emissions should be considered as significant; however, in this case it is anticipated that the Proposed Development will indirectly result in a net-reduction / saving of GHG emissions. Construction of the OHL is likely to contribute to GHG emissions from vehicles during construction, and from the carbon footprint (embodied carbon) of the materials required to build the OHL. The emissions directly associated with construction are likely to be temporary and short in duration from exhaust gases from vehicles and potentially from the construction plant. The amount of material and potential emissions required during construction and operation of the plant is not disproportionate for a development of this scale. Therefore, the GHG emissions from the Proposed Development are unlikely to increase the nature and magnitude of GHG emissions, as annually there will be projects of this scale that are required to ensure that infrastructure needs are met in Scotland.
- 11.4.5 In relation to climate adaptation, the design and location of the OHL will consider the potential risk posed by locations with increased flood risk and ground instability. The intention is to reduce potential risks to the electricity assets so that repairs and upgrades are less frequent.
- 11.4.6 The Proposed Development is required for asset management purposes and would also provide capacity for connection of distributed renewable energy generation to the electricity transmission network. This development aligns with the "Strategic Renewable Electricity Generation and Transmission Infrastructure" designation within National Planning Framework 4 (NPF4)<sup>108</sup>, which supports renewable electricity generation and the expansion of the electricity grid. The NPF4 emphasises the essential role of renewable energy infrastructure to meet Scotland's net-zero emissions targets by 2045. It therefore comprises a nationally significant development in planning terms and will play an important role in facilitating the transition to net zero emissions. Therefore, a climate change assessment to consider GHG emissions is not proposed and this topic is scoped out from further assessment.
- 11.4.7 The Proposed Development's vulnerability to climate change hazards is considered low on the basis that design (to be set out in the EIA Report) will include embedded mitigation to ensure any significant effects are avoided or reduced to an acceptable level. An assessment of the vulnerability of the Proposed Development to climate change hazards is not proposed as part of the EIA Report.

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<sup>106</sup> Directive 2008/50/EC, Directive 2004/107/EC and 2001/81/EC

<sup>107</sup> IEMA (2017). Assessing Greenhouse Gas Emissions and Evaluating their Significance. Available at:

[https://www.iema.net/media/xmgpooopk/2022\\_iema\\_greenhouse\\_gas\\_guidance\\_eia.pdf](https://www.iema.net/media/xmgpooopk/2022_iema_greenhouse_gas_guidance_eia.pdf) . (Accessed 06/08/2024)

<sup>108</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf> (Accessed 5/10/2024)

### *Air Quality*

- 11.4.8 Significant effects on air quality are not anticipated as a result of the Proposed Development. Localised and temporary air quality effects do have potential to occur during construction associated with dust (pole construction, passage of vehicles along access track) and construction plant and traffic exhaust emissions. The nature of the construction activities means that any impacts are likely to be short in duration, intermittent and managed through the construction best practice. Once operational, the Proposed Development will not lead to significant air quality effects.
- 11.4.9 Potential for nuisance effects on residential receptors or recreational and tourism assets will be limited and strictly controlled in accordance with a detailed CEMP.
- 11.4.10 The Proposed Development is not anticipated to result in significant adverse effects on air quality during construction and operation. Air quality is therefore scoped out of the EIA and a standalone air quality assessment is not proposed as part of the EIA Report.

### **Issues Scoped Out**

- 11.4.11 The Proposed Development would not result in significant adverse effects on air quality or climate change during the construction or operational phases. The Proposed Development would provide capacity for connecting renewable electricity generation to the transmission network, in turn displacing emissions associated with fossil fuel based electricity generation elsewhere. As such, this issue would be scoped out of the EIA and no assessment of air quality and climate change is proposed as part of the EIA Report.

## 12. SUMMARY OF TOPICS

12.1.1 As explained above, a number of topics are considered to be not significant, and will be scoped out from further consideration within the EIA process. **Table 12.1** below lists each topic and the elements scoped in and out from further assessment; with a summary of the justification for doing so.

**Table 12.1 Proposed EIA Report Scope**

Topic	Scoped In	Scoped Out
Seascape, Landscape and Visual Impact	✓	<ul style="list-style-type: none"> <li>Effects on WLAs and the Cnoc and Lochan LCTs.</li> </ul>
Cultural Heritage	✓	<ul style="list-style-type: none"> <li>Effects on the settings of World Heritage Sites, Listed Buildings, Conservation Areas, Inventory Garden and Designed Landscapes and Inventory Historic Battlefields.</li> <li>Effects on the settings of designated heritage assets more than 2 km from the Proposed Development or outside the ZTV.</li> <li>Effects from changes in the setting of designated heritage assets during construction or decommissioning of the Proposed Development.</li> <li>Effects from direct impacts during the operation of the Proposed Development.</li> </ul>
Ecology	✓	<ul style="list-style-type: none"> <li>Effects on ecological receptors related to lighting, noise, dust and visual disturbance during the construction.</li> <li>Effects on protected or notable species, with the exception of otter populations.</li> <li>Effects on ecological designated sites.</li> <li>Effects during the operational phase of the Proposed Development.</li> </ul>
Ornithology	✓	✗
Water Environment	✓	<ul style="list-style-type: none"> <li>Effects related to flood risk and detailed flow rate calculations for watercourse crossing.</li> <li>Effects to Ground Water Terrestrial Ecosystems.</li> </ul>
Peat	✓	<ul style="list-style-type: none"> <li>Effects related to contaminated land or geology.</li> </ul>
Traffic and Transport	✓	<ul style="list-style-type: none"> <li>Effects related to Traffic and Transport during the operational or decommissioning phases of the Proposed Development.</li> </ul>
Land Use	✗	✓
Socio-economics, Recreation and Tourism	✗	✓

<b>Topic</b>	<b>Scoped In</b>	<b>Scoped Out</b>
Population and Human Health	x	✓
Air Quality and Climate Change	x	✓

## 13. NEXT STEPS

13.1.1 The Applicant invites consultees to comment on the following:

- What environmental information do you hold or are aware of that will assist in the EIA described here?
- Do you agree with the proposed approach for baseline collection, prediction and significance assessment?
- Are there any key issues or possible effects which have been omitted?
- Do you agree with the list of issues to be scoped out, and the rationale behind the decision?
- Of those issues identified for assessment, which do you consider the most important / material and which the least?

13.1.2 All responses should be addressed to:

Email: [Econsents\\_Admin@gov.scot](mailto:Econsents_Admin@gov.scot)

OR

Energy Consents Unit

Scottish Government

5 Atlantic Quay

150 Broomielaw

Glasgow,

G2 8LU

13.1.3 The Scoping Opinion provided will be used to finalise the terms of the EIA and the specific approach to the individual assessments.

13.1.4 All comments received will be included in the EIA Report for reference, unless consultees request otherwise.

## **APPENDIX A: FIGURES**