

Beauly to Blackhillock to New Deer to
Peterhead 400 kV Project
Environmental Impact Assessment Report
Volume 5 | Appendices

Appendix 12.1.27: Woodland Report Parcel 13788, Scaniport





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1 Introduction

- 1.1.1 This Appendix presents information relevant to the Beauly to Blackhillock to New Deer to Peterhead 400 kV proposed Overhead Line (OHL) Project (the Proposed Development). It should be read in conjunction with the Environmental Impact Assessment (EIA) Report, specifically **Chapter 12: Forestry**, for full details of the Proposed Development.
- 1.1.2 As part of the EIA, it has been identified that construction of the Proposed OHL Alignment and the associated access tracks would cross several woodland areas within private or publicly owned landholdings.
- 1.1.3 This woodland report assesses the potential effects of the Proposed Development on Parcel 13788, Scaniport. It includes the requirements for woodland removal and management recommendations to mitigate the impact of the woodland removal. The report provides an overview of the characteristics of the affected woodland, including woodland composition, site conditions, soil conditions, exposure levels and existing felling approvals. The report also provides details of existing infrastructure, and potential constraints related to forestry operations. It aims to inform decision-making by identifying key environmental and logistical considerations associated with the Proposed Development. Additionally, it evaluates the feasibility of timber extraction and access whilst highlighting necessary mitigation measures to minimise disruption to the woodland ecosystem and surrounding landscape.
- 1.1.4 Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics, to identify the woodland removal required and recommended. This document also sets out the area quantity hectare (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

2 Woodland property

2.1.1 The landholding property boundaries are identified in Figure 12.27.1: Parcel 13788 Location Map. The woodlands lie approximately 2.5 km southwest of Inverness and 1 km east of Scaniport and is located at grid reference NH 643600 398811. The landholding includes a mix of woodland area and farmland. The estate's historical relevance is enhanced by the presence of ancient woodlands, historic field boundaries, and cultural landmarks tied to the region's heritage. These woodlands include long-established plantation origins (LEPO)¹.

3 Development Requirements

3.1 400 kV Overhead Line Infrastructure Requirements

- 3.1.1 The Study Area for this assessment initially focussed on a 100 m width either side of the centreline of the Proposed OHL Alignment and ancillary infrastructure, where relevant, prior to the identification of an Operational Corridor (OC). The Applicant defines the OC as the area in which it has rights to remove woodland for the purposes of the safe construction, resilience and continued maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002² and The Electricity Act 1989³. The OC is defined based on two different factors as follows:
 - The first factor in which the OC is determined is with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage. As a result, the OC width would be based on the safety distance required to allow for a mature tree falling towards the OHL at the mid-point on an OHL span between two towers, taking account of topography and tree height at maturity. Standard falling distance for a mature conifer tree is considered to be a minimum of 45 m. Where the OC passes through areas of

¹ NatureScot. A guide to understanding the Scottish Ancient Woodland Inventory (AWI). Available at: https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi

² UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002.

³ UK Gov (1989). Electricity Act 1989. Available at: <u>Electricity Act 1989</u>



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- broadleaved woodland, it is noted that the width of woodland removal is likely to be reduced, due to the general lower height and characteristics of the tree species present.
- The second factor that is considered is the maximum distance that the OHL conductors can blow out from the tower under a 1 in 50-year return period wind condition, plus the required electrical clearance distance. This is to ensure that the OHL conductors do not come into contact with, or come close enough to, any object that could result in an electrical clearance infringement. This conductor blowout distance varies between each tower dependent on span length and must therefore be considered on a span-by-span basis.
- 3.1.2 The typical OC required within areas of commercial conifer forestry for a 400 kV OHL is 90 m (i.e. 45 m either side of the centre line). Where the OC passes through areas of broadleaved woodland, it is proposed that the extent of woodland removal is likely to be reduced due to the lower height of the tree species present. The OC for the Proposed OHL Alignment through areas of broadleaved woodland has been reduced to 70 m (i.e. 35 m either side of the centre line of the OHL). This has been based on the likely height of the woodland at maturity. Where any woodland removal within the OC is proposed to be reduced from the 45 m either side of the line, a site-specific assessment must be carried out to confirm that the conductor blowout does not exceed the OC width. If the conductor blowout exceeds the OC, then the width of the OC must be increased to meet the requirements of the blowout assessment as a minimum. This will ensure compliance with ESQCR requirements and that the required safety clearances are maintained.
- 3.1.3 A resilient OC of 70 m in width is required throughout the broadleaved woodland and 90 m within the commercial woodlands within Woodland Parcel 13788 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.27b: Parcel 13788 Proposed Felling Requirement.

3.2 Access Track Route Design

3.2.1 An existing forest track is proposed for upgrade southwest of CB1-7B. It is also proposed to extend this via a temporary track to the south of CB1-7B. A temporary bellmouth will be created out with the OC at the southern side of the B862, to utilise an existing track, and upgrade an existing track in poor condition, to reach tower CB1-4.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in January 2025. The Proposed OHL Alignment passes through an area of mature Douglas fir (DF) woodland and a stand of younger DF, approximately 10 years old and at thicket stage. The mature DF is up to 30m in height and contribute to the woodland character and age class diversity of the wider woodland
- 4.1.2 This area of young DF is classified within NatureScot's Ancient Woodland Inventory⁴ as Long Established of Plantation Origin (LEPO).
- 4.1.3 The westernmost section of woodland is identified in the Native Woodland Survey of Scotland (NWSS)⁵ as 'Lowland Mixed deciduous woodland', however, only very sparse remnants of this remain on the banks of a small watercourse as individual trees.
- 4.1.4 The area is sheltered, with a maximum Detailed Aspect Method of Scoring (DAMS) score of 116.

⁴ NatureScot. Available at: https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi

⁵ Native Woodland Survey of Scotland. Available at: https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss

⁶ Forest Research (2025). Available at: http://www.forestdss.org.uk/geoforestdss/

The Detailed Aspect Method of Scoring (DAMS) is a system used to assess wind exposure in forestry and land management. It provides a numerical score that quantifies the level of exposure a site experiences based on factors such as elevation, topography, and aspect (the direction a slope faces). The DAMS score helps foresters predict wind risk, which is crucial for understanding tree stability, growth potential, and the likelihood of windthrow (trees being uprooted or broken by wind). The scoring system ranges from 0 to 24, with higher scores indicating more exposure to wind.



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- 4.1.5 The National Soil Map of Scotland⁷ indicates the dominant soil type within the site is humus-iron podzols.
- 4.1.6 The Ecological Site Classification (ESC)⁸ identifies the site as having a cool, sheltered, and moist climate. The soils have a moist moisture status and medium nutrient status.
- 4.1.7 The woodlands appear in the Native Woodland Survey of Scotland⁹.
- 4.1.8 The proposed section of OHL consists of a section of OC between towers CB1-6A and CB1-7B. An existing forest track is proposed for upgrade southwest of CB1-7B. It is proposed to extend this via a temporary track through the young DF crop to the south of CB1-7B. Another temporary track will also be created across agricultural ground to facilitate access.
- The closest forest road suitable for haulage accessible from the ownership is the B862. This is classed as an 4.1.9 Agreed Route by the Timber Transport Forum¹⁰. The existing internal forest and wider estate infrastructure can be utilised for access and extraction purposes. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations.

4.2 Photo Record – Operational Corridor Assessment

4.2.1 The following photographs provide a visual record of key locations along the OC. Each image illustrates existing vegetation types, land use, and notable landscape features relevant to the planning and management of the OC. Particular attention has been given to areas of mature woodland, natural regeneration, and locations where proposed works may intersect with ecologically or visually sensitive habitats. The photos are intended to support site assessments and inform mitigation strategies.

⁷ Scottish Government (2024). Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/

⁸ Ecological Site Classification. Available at: http://www.forestdss.org.uk/geoforestdss/

⁹ Native Woodland Survey of Scotland. Available at: https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-

scotland-nwss

10 The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-

Agreed Routes can be used for timber haulage without restriction (other than as regulated by the Road Traffic Act 1988). "A" roads (e.g. the A9) are assumed to be Agreed Routes unless covered by one of the other TTG classifications (e.g. Consultation Route)



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Photo 1: View at NH 644221 397711 at tower CB1-7B looking southwest. Showing the mature stand of Douglas fir in the OC and the young Douglas fir stand, the location of a proposed temporary track, and one large Scots pine

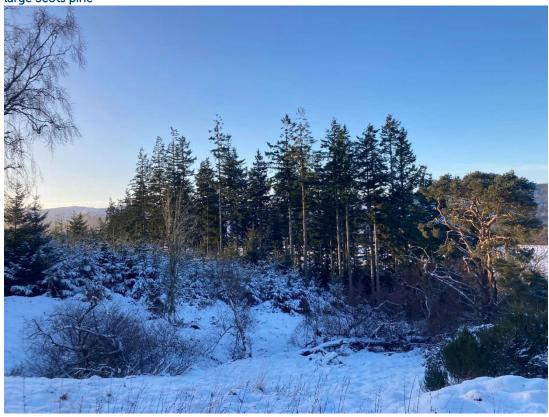




Photo 2: View at NH 642971 398492 between towers BC1-6A and BC1-7B looking south. Showing felled and windblown gaps in mature Douglas fir stand, with developing understory of Douglas fir and birch present.





5 Windblow Risk

- 5.1.1 It is acknowledged that the creation of the OC would result in wider potential indirect effects on the surrounding woodland areas. These areas would be subject to potential increased risk of damage (windblow). Each woodland report identifies further areas of felling to a windfirm edge, defined as 'Management Felling' (categorised as an indirect secondary impact), which is covered in more detail in the **Section 12.4**. Management felling would be considered as part of any application for felling permission. This would provide restocking as agreed with Scottish Forestry which would result in balancing the loss of woodland. Any felling undertaken out with the OC would be solely under the control of the relevant landowner (and not the Applicant). It is the intention of the Applicant to encourage the landowners to follow this good practice in terms of redesign of their current Long-Term Forest Plans, which in-turn would aim to follow the UK Forestry Standard UKFS¹¹ for the implementation of the works required.
- 5.1.2 There is a significant risk of windblow to the remaining mature DF stand out with and adjacent to the OC.

6 Woodland Management Impact

- 6.1.1 While tree felling within the OC will result in a slight reduction in the total area of woodland, this loss is marginal and should not significantly affect overall forest management, or access at a larger scale.
- 6.1.2 The Proposed OHL Alignment furthermore introduces an electrical hazard, but the constraint associated with the electrical hazard will be reduced by regular maintenance of the OC which will avoid the incidences of "Red Zone" trees (Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry" 12).
- 6.1.3 The total loss of commercial conifer woodland resulting from the proposed alignment is 1.35 ha.

7 Mitigation Opportunities

7.1 Protection of Notable Trees

- 7.1.1 A large, open grown Scots pine within the OC, represents an important mature specimen with developing veteran characteristics, ecological value, and landscape significance. By implementing a detailed survey and proactive mitigation strategy, its long-term conservation can be ensured while accommodating the necessary development work. The following management strategies should be implemented:
 - Establishing buffer zones (minimum 10 m–15 m root protection area, RPA¹³) around notable trees to protect roots and soil structure; and
 - Avoiding soil compaction through the use of temporary track matting during construction
- 7.1.2 If notable trees must be felled, compensatory planting should include native species of local provenance, (e.g., SP / SOK).

7.2 Restructuring

7.2.1 The largely commercial woodland of which this mature DF stand forms a part, has already undergone extensive restructuring of the previous rotation and has a diverse age and species structure. Therefore, there is no significant positive or negative impact of the felling on the structure within the ownership.

https://landingpage.bsigroup.com/LandingPage/Undated?UPI=000000000000258384

¹¹ Scottish Forestry (2024). Available online at: https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs (accessed 01/05/2025)

¹² Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804

 $^{^{13}}$ British Standard BS5837 Trees in relation to design, demolition, and construction. (2012). Available at:



7.3 Restocking

7.3.1 Restocking would be carried out by the landowner in areas felled out with the OC with suitable species to continue the commercial objectives of the forest.

8 Net Effect / Summary

8.1.1 **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between CB1-3 to CB1-7B. They detail the areas designated for clear felling, both within the OC and additional recommended Management Felling outside the OC to address windthrow risks and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

ltem	Woodland Type	Area (ha)
OC felling	Mature Conifer Woodland (90 m)	0.78
Access Track Felling	Conifer Woodland	0.57
Total area		1.35

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Conifer Woodland	1.35
Total area		1.35

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	1.35
Total Compensatory Planting Area	1.35
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, out with OC

Item	Woodland Type	Area (ha)
Management Felling	Mature Conifer Woodland	0.76
Replanting / Restocking Opportunities	Conifer Woodland	0.76
Net Loss of Woodland Area		0.00

9 Compensatory Planting

- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹⁴. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically applies to areas where tree removal is necessary for the Proposed Development. See **Appendix 12.3 Compensatory Planting Strategy**.
- 9.1.2 Any additional felling outside the OC, such as areas cleared for windthrow management or forest design improvements, falls under the responsibility of the landowner, and is not included in the compensatory planting requirements. Instead, these areas may be replanted under a forest plan revision or felling license at the landowner's discretion. This approach aligns with national forestry guidelines, balancing infrastructure development with sustainable woodland management.

¹⁴ Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285



- The total amount of net felling requiring compensation under the CoWRP is 1.35 ha.
- In order to provide greater balance, limiting long-term impacts on woodland interests, it is proposed that the 9.1.4 majority of this woodland loss is compensated via off-site compensatory planting within the local authority area.

