

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

Appendix 12.1.15: Woodland Report Parcel 13126, Wester Craggach Woods





APPENDIX 12.1.15: Woodland Report Parcel 13126, Wester Craggach Woods

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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 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 13126, Wester Craggach Woods. 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 12.1.15a**: **Parcel 13126 Location Map**. The woodland parcel is situated approximately 9.64 km southwest of Inverness and approximately 4.93 km southeast of Beauly within the Highland Council region (NH 564331 435482). The landholding includes woodland identified as long-established of plantation origin (LEPO)¹, which is being restructured from predominantly conifer to predominantly native broadleaved woodland.

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. 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>



- 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 within Woodland Parcel 13126 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.15b**: Parcel 13126 Proposed Felling Requirements.

3.2 Access Track Route Design

3.2.1 No access track will be created within the OC within Woodland Parcel 13126.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in October and November 2024. The Proposed OHL Alignment cuts through sections of mature and semi mature broadleaved woodland.
- 4.1.2 The woodland in Parcel 13126 comprises primarily of native species. The dominant structure is presently pole stage, with Silver birch (SBI) and Sessile Oak (SOK) the dominant species in this range. At the eastern extent of the OC the SOK has been high pruned and shows good form. The SOK is most prevalent on the upper slopes of the eastern side of the Allt na Criche burn, with SBI, Hawthorn (HAW), Beech (BE), Rowan (ROW), Holly, (HOL) present, with Ash (AH), which is more prominent towards the burn. In a damper hollow, to the southeast of the woodland there are pole stage and mature Alder (CAR), Aspen (ASP), Holly (HOL), Wild cherry (WCH) and Grey willow (WL) present.
- 4.1.3 The woodland is multi-storeyed with individual mature BE, SBI, and AH. Just out with the OC, there is a stand of mature Scots pine (SP) and larch (L) to 27 m in height extending to approximately 0.1 ha. There are individual open grown Douglas fir (DF) in excess of 30 m in height both within and just out with the OC, (those within standing on the west of the Allt na Criche burn).
- 4.1.4 The understory within the OC contains former HAZ coppice and saplings of SOK, SBI, ASP, ROW, BE, HO, Sitka spruce (SS) and SP, with occasional browsing apparent on broadleaved species.



- 4.1.5 The woodland is categorised within the NatureScot Ancient Woodland Inventory (AWI) as Long Established of Plantation Origin (LEPO). Many LEPO sites, including this one, feature non-native species, which were historically planted for timber or aesthetic purposes. Several of the trees present (shown in **Figure 12.1.15b**) exhibit Notable Tree characteristics⁴ including:
 - larger than average for its species in the local context, these trees may be approaching veteran status;
 - displays early-stage veteran features such as deadwood, cavities, or a hollowing trunk, but not extensively;
 - highly visible in the local area, contributing to woodland structure, hedgerows, or historical features;
 - biodiversity value, including habitat provision for insects, bats, and fungi; and
 - the woodland is associated with historic field boundaries, estate plantings, or traditional coppicing / pollarding.
- 4.1.6 In the OC the topography rises steeply from the banks of the Allt na Criche burn and to the north, undulating into a pronounced hollow, before rising again to the field boundary. The area is moderately sheltered with a maximum Detailed Aspect Method of Scoring (DAMS) score of 9^{5,6}.
- 4.1.7 The National Soil Map of Scotland⁷ indicates soils are alluvial adjacent to the Allt na Criche and elsewhere are identified Humus-iron podsols.
- 4.1.8 The Ecological Site Classification (ESC)⁸ identifies the site as having a warm, sheltered, and moist climate. The soils have a slightly dry moisture status and very poor nutrient status.
- 4.1.9 The woodland is identified as native woodland in the Native Woodland Survey of Scotland⁹ (NWSS) and is described as 'Upland Birchwood', with 80% canopy cover.
- 4.1.10 The closest public road suitable for haulage of timber within the ownership is the U1604, Kiltarlity Road, and the A831. The U1604 is classified as a Consultation Route by the Timber Transport Forum¹⁰. However, the River Beauly presents a significant constraint to forest management and access between BC1-7A and BC2-1, due to the steep gradient of the terrain and potential risks to the river's water quality. Given the steep slope in this section, timber extraction may require the use of a winch system to transport material to the nearest access point. While this method can reduce the environmental footprint, it introduces a risk of pollution from accidental spills or runoff into the river. As such, all timber extraction activities must be carefully planned to include appropriate mitigation measures, such as spill response protocols and erosion control. In contrast, for the section between BC3-2A and BC3-3A, timber extraction can be conducted more efficiently using harvester-forwarder combinations, given the more manageable terrain and accessibility.

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.

 $^{^4\,}Woodland\,Trust.\,Available\,at:\,\underline{https://www.woodlandtrust.org.uk/media/1836/what-are-ancient-trees.pdf}$

⁵ Forest Research (2025). Available at: http://www.forestdss.org.uk/geoforestdss/

⁶The 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.

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/

Scottish Forestry (2014). Available online at: https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss.
 Accessed (01/05/2025)
 The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-

⁹ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/
¹⁰ Consultation Routes are recognised as being key to timber extraction but are not up to Agreed Route standard. Consultation with the Local Authority is required and

¹⁰ Consultation Routes are recognised as being key to timber extraction but are not up to Agreed Route standard. Consultation with the Local Authority is required and it may be necessary to agree limits of timing, allowable tonnage etc. before the route can be used. B roads and minor roads that are not categorised should be assumed to be Consultation Routes unless covered by one of the other classifications (e.g. Severely Restricted Route).



Photo 1: View at NH 564521 434262 looking north into parcel from its legal boundary showing pole stage





Photo 2: View at NH 564383 435564 looking south showing semi mature predominantly native woodland at the eastern extent of the OC.





Photo 3: View at NH 565131 434036 looking northeast. Showing naturally regenerated semi mature native woodland between towers BC4 -9A and BC5-1.

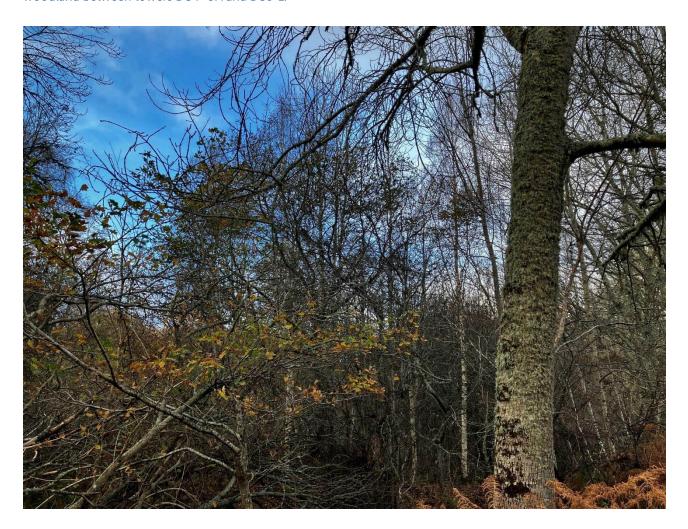
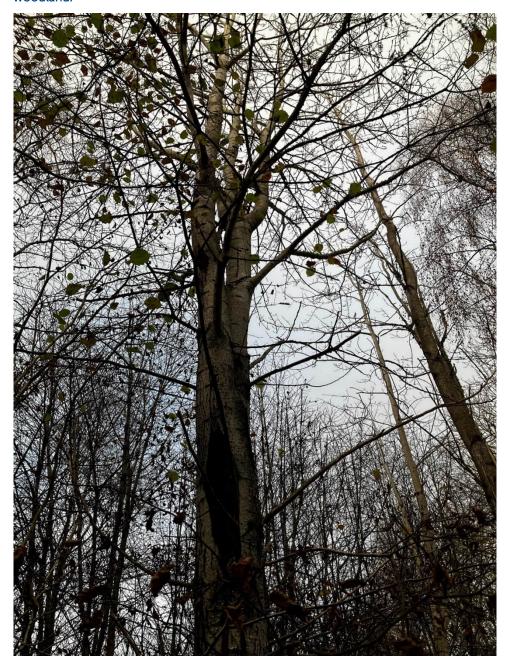




Photo 4: View at NH 564992 434185 looking northeast. Showing varied storey predominantly native woodland.





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 **Chapter 12: Forestry** in **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 UK Forestry Standards (UKFS)¹¹ for the implementation of the works required.
- 5.1.2 There is minimal risk of windblow as a result of the proposed felling, as indicated by the DAMS score and the topography of the site.

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 (FISA 804 "Electricity at Work: Forestry" 12).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.57 ha.

7 Mitigation Opportunities

7.1 Protection of Notable Trees

- 7.1.1 The notable trees within the LEPO woodland (see Figure 12.1.15b: Parcel 13126 Proposed Felling Requirement) represent important mature specimens with developing veteran characteristics, ecological value, and landscape significance. By implementing a detailed survey and proactive mitigation strategy, their 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., SOK / DBI).

7.2 Restructuring

7.2.1 The felling of the OC for the Proposed Development will create a new green edge, allowing the landowner to carry out future clear fell more safely in proximity to the Proposed OHL Alignment.

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 As set out in the Landscape chapter under the 'Landscape Replanting Proposals' restocking can potentially take place within the OC to mitigate the visual impact of the OC. Restocking within the OC will be carried out by the applicant. Detail shown in **Figure 12.1.15c**: **Parcel 13126 Proposed Planting Areas**.

8 Net Effect / Summary

8.1.1 **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between towers BC4-9A and BC5-1. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

ltem	Woodland Type	Area (ha)
OC felling	Native Broadleaved Woodland (70 m)	0.57
Total area		0.57

Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland (70 m)	0.57
Total area		

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	0.57
Total Compensatory Planting Area	0.57
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling		0.00
Replanting / Restocking Opportunities		0.00
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 Management Strategy**.

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



- 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.
- 9.1.3 The total amount of net felling requiring compensation under the CoWRP is 0.57 ha.
- 9.1.4 In order to provide a greater balance limiting long-term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via off-site compensatory planting within the same local authority area. It is proposed that full details of the areas subject to this off-site compensatory planting is notified to Scottish Forestry prior to energising the OHL.

