

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

Appendix 12.1.74: Woodland Report Parcels 3434 & 3435, Blackhills





APPENDIX 12.1.74: Woodland Report Parcels 3434 & 3435, Blackhills

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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 has been prepared to assess the potential impacts of the Proposed Development on Woodland, Parcels 3434 and 3435, Blackhill. 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 hectares (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 12.1.74a: Parcels 3434 and 3435 Location Map. The woodlands are found 7.5 km southeast of Elgin and south of the A96 between Elgin and Fochabers in the Moray council area (NJ 265866 565683).
- 2.1.2 The woodlands consist of a mixture of woodland types ranging from non-native productive to native riparian woodland.

3 Development Requirements

3.1 400 kV Overhead Line Infrastructure Requirements

- 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) 2002¹ and The Electricity Act 1989². 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 UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

² UK Gov (1989). Electricity Act 1989. Available at: Electricity Act 1989



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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 native broadleaved woodland and 90m within the commercial conifer woodland within Woodland Parcels 3434 and 3435 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.74b: Parcels 3434 and 3435 Proposed Felling Requirement.

3.2 Access Track Route Design

3.2.1 The tracks associated with this section of the Proposed OHL Alignment are within the OC or across open agricultural ground.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodlands were surveyed in December 2024. Woodlands impacted by the Proposed OHL Alignment consist of a wide range of woodland types. In the west these consist of strips of native broadleaves along the Logie burn and some of its tributaries. In the centre of the property the Proposed OHL Alignment coincides with a shelterbelt of mature Scots pine (SP) and Larch (LA) and some young broadleaved planting. In the eastern part of the property the Proposed OHL Alignment coincides with well-developed blocks of productive forestry mainly consisting of SP along with a clearfell area.
- 4.1.2 The ownership contains a section of the Proposed OHL Alignment between towers CB11-5 and CB12-2.
- 4.1.3 The landscape character is characterized by rolling hills within a landscape of farmland and forests.
- 4.1.4 The section of Proposed OHL Alignment is mainly moderately exposed with a Detailed Aspect Method of Scoring (DAMS) score of approximately 13^{3,4}.

³ Forest Research (2025). Available at: http://www.forestdss.org.uk/geoforestdss/

⁴ 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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- 4.15 The Ecological Site Classification⁵ describes the site as having a cool, moderately exposed and moist climate. The soils have a slightly dry moisture status and a very poor nutrient status.
- 4.1.6 The Soil Map of Scotland⁶ identifies the soils as being predominantly humus-iron podzols. Soils are variable ranging from well drained but nutrient poor along the burns in the west, nutrient poor with reasonable drainage in the pine in the east and nutrient rich in the recent clearfell area, the belt of larch and pine and the small productive block in the middle of the property.
- 4.1.7 The main forestry blocks were previously covered under a forest plan (4100740) which expired in early 2024.
- 4.1.8 A section of the shelterbelt is classified as LEPO between towers CB11-9 and CB11-10. Between towers CB11-3 and CB11-4 the Proposed OHL Alignment crossed the Coleburn Pasture SSSI but does not coincide with, or is designated for, woodland and therefore will not be discussed further. No other environmental designations apply to this parcel
- 4.19 The existing Beauly to Blackhillock powerline runs parallel and north to the Proposed OHL Alignment and diverges further north from approximately tower CB11-11.
- 4.1.10 There is existing infrastructure in place to the eastern woodland block and recent operations have been carried out. The access track is of good quality and requires little maintenance. The woodland block in the middle along with the shelterbelt currently have limited access for forest operations. Particularly for the shelterbelt, access is constraint because of the existing OHL. The closest road suitable for access within the ownership is the B9103 to the east this is classed as an Agreed Route by the Timber Transport Forum^{7,8}.
- 4.1.11 Considering the crops, quantities and location a mix of operations is required. The mature crops in the east along with the shelterbelt will require felling using harvester / forward combinations, areas of broadleaves along burns can be hand felled and left or timber can be extracted using small scale machinery.

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.

⁵ Ecological Site Classification, Available at: http://www.forestdss.org.uk/geoforestdss/

⁶ National Soil Map of Scotland. Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/

⁷ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/

⁸ Roads which 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 classified as Agreed Routes by default unless covered by one of the other categories (e.g. Consultation Route).



Photo 1: Western strips of broadleaves along Logie Burn and its tributaries at CB11-7 (NJ 257718 562304, looking north)



Photo 2: Strip of riparian woodland around CB11-12 (NJ 272745 568312, looking north)





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Photo 3: Shelterbelt and young broadleaved planting south of existing powerline at proposed towers CB11-9 and CB11-10 (NJ 266225 567505, looking southwest)

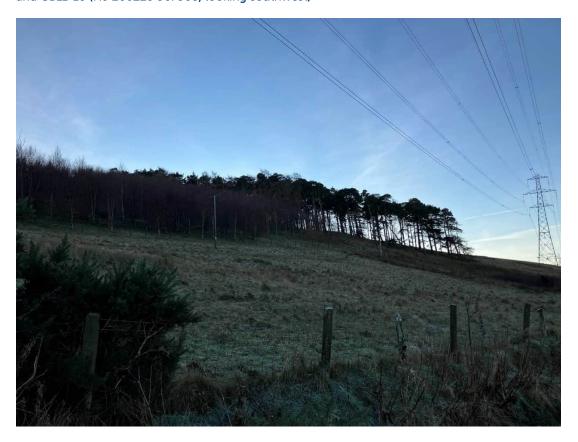


Photo 4: Central block of mixed conifer at CB11-13 (NJ 276251 569214, looking north)





Photo 5: Well developed Scots pine between CB12-1- and CB12-2 (NJ 283341 569594, looking northwest)

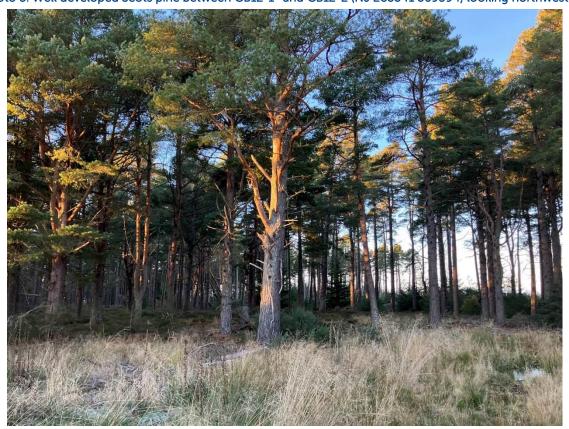


Photo 6: Clearfell and adjacent unstable Sitka spruce from CB12-2 east (NJ 283785 571644, looking northeast)





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 Forestry Chapter 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 outwith 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 Standard (UKFS) for the implementation of the works required.
- 5.1.2 Considering the varying woodland types in this ownership wind risk needs to be assessed per block. In the broadleaved areas along watercourses there is very little risk of windblow. In the shelterbelt there is a medium risk of windblow considering the exposure and age of the crop along with the signs of wind damage. The small block at CB11-13 is at high risk of windblow considering the unthinned nature and maturity of the crop. Wind damage is already present within the block. The mature Scots pine in the eastern block is at medium risk of windblow. The crop has been managed well and as such tree stability is reasonable however, some windblow is visible in the northern part where the OC will take off the windfirm edge.

6 Woodland Management Impact

- 6.1.1 The woodland management impact within this ownership as a result of the Proposed OHL Alignment is limited.
- 6.1.2 In the riparian areas and the area planted with broadleaves adjacent to the shelterbelt the impact is restricted to the OC. There is likely limited commercial interest in these areas, and it is therefore expected that woodland management is not impacted.
- 6.1.3 The smaller block at CB11-13 will be impacted as the felling in the OC and the proposed management felling would lead to the removal of the block. However, the crop in this block is mature and part of it was previously approved for felling.
- 6.1.4 In the area in the east the impact of the OHL will be most significant. The Scots pine here is managed as LISS as can be seen from the currently outdated forest design plan. The removal of the OC means the removal of the windfirm edge on the north. Therefore, it is recommended that the remaining mature pine to the south is felled to prevent windblow. The crop is however mature, and the removal and subsequent reestablishment would have limited impact on the commercial viability of the block.
- 6.1.5 Within the clearfell area the biggest impact of the OHL is the isolation of the area north of the OC. The remaining management unit is less than 1 hectare and is therefore unlikely to be a viable management unit for timber production. Considering the area is not yet restocked and the Proposed OHL Alignment will lead to adjacent felling the operations will lead to an adjacency issue. This could potentially be resolved by combining both areas and restocking them together.
- 6.1.6 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 (reference Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry").
- 6.1.7 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 1.50 hectares (ha).

⁹ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 To balance habitat conservation with infrastructure requirements, it is proposed to selectively fell or crown reduce a section of woodland as per **Figure 12.1.74b**: **Parcels 3434 and 3435 Proposed Felling Requirements**. Total hectarage of this area is 0.39ha, rather than conduct full-scale felling. This approach aims to maintain the ecological integrity of the woodland while ensuring compliance with safety and operational requirements.
- 7.1.2 There is potential for compensatory planting on Blackhills Estate which could be explored with the landowner.

7.2 Restructuring

- 7.2.1 As felling within this area is limited in size and within several different management units there is no need for restructuring. As mentioned there will likely be an adjacency issue as a result of the OC and management felling in the eastern forest area with the recent clearfell.
- 7.2.2 The felling of the OC for the development will create new green edges for the landowner to work to in the future. Considering the size of the remaining management units this is of little benefit to the landowner.

7.3 Restocking

7.3.1 In case management felling takes place there will be a restock obligation on the landowner.

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 CB11-5 and CB12-2. 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

Item	Woodland Type	Area (ha)
Operational corridor felling	Mixed conifer (90 m)	6.14
Operational corridor felling	Native broadleaves (70 m)	1.50
Operational corridor Crown Reduction	Native broadleaves (70 m)	0.39
Total area		8.04

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Mixed conifer	6.14
Compensatory Planting Area	Native broadleaves	1.50
Total area		

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	7.64
Total Compensatory Planting Area	7.64
Total Net Loss of Woodland Area	



Table 8.4: Woodland removal for Management Felling, outwith OC

ltem	Woodland Type	Area (ha)
Management Felling	Mixed conifer	8.59
Replanting / Restocking Opportunities	Mixed Conifer	8.59
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)¹⁰. 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**.
- 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 7.64 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 offsite compensatory planting within the same local authority area. It is proposed that full details of the areas subject to this offsite compensatory planting is notified to Scottish Forestry prior to energising the OHL.

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¹⁰ 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

