

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

Appendix 12.1.98: Woodland Report Parcel 2152, Longmoor Wood





APPENDIX 12.1.98: Woodland Report Parcel 2152, Longmoor Wood

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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, Parcel 2152, Longmoor Wood. 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 12.1.98a: Parcel 2152 Location Map. Longmoor wood is a small mixed native and commercial conifer woodland block which surrounds the A W Jenkinson sawmill, situated 5 km northeast from Huntly, within the Aberdeenshire Council region (NJ 559881 435722). The Operational Corridor (OC) travels through three separate ownerships in the block with this parcel being the largest and central one. The woodland is surrounded by agriculture.

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) 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: <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 90 m in width is required throughout the commercial conifer woodland and 70m within the native broadleaved woodland within Woodland Parcel 2152 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.98b: Parcel 2152 Proposed Felling Requirement.

3.2 Access Track Route Design

3.2.1 The tracks associated with this section of the OHL are within the OC or make use of the existing infrastructure.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in December 2024. The woodland in and around the OC consists of a mixture of conifer, native broadleaves, and open ground. Species present include Scots pine (SP), Norway spruce (NS) Downy birch (DBI) and rowan (ROW). In the eastern part of the woodland conifers are more prevalent whereas in the western part of the woodland more native broadleaves and open ground are found. The young NS in the eastern section of the ownership has sustained severe windblow.
- 4.1.2 The forest block sits within a farmed and wooded river valley and is entirely surrounded by agricultural land. Several houses are found on the edges of the woodland along with a sawmill situated within the woodland.
- 4.1.3 The forest block is on the top end of sheltered sites with a maximum Detailed Aspect Method of Scoring (DAMS) of 12³.
- 4.1.4 The Ecological Site Classification⁴ describes the site as having a cool, sheltered and moist climate. The soils have a slightly dry moisture status and a very poor nutrient status.

³ 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 Ecological Site Classification, Available at: http://www.forestdss.org.uk/geoforestdss/



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- 4.1.5 The Soil Map of Scotland⁵ identifies the soils as being predominantly humus-iron podzols. Soil conditions throughout the ownership are changeable but coinciding with the OC is an area of extremely wet soils with water tables often above ground level.
- 4.1.6 No environmental designations apply to this parcel.
- 4.17 An active management plan is in place for the property and is valid up to 25/5/2026 (MPL310044). A felling permission application is under consideration by Scottish Forestry under FPA-11987.
- 4.1.8 The proposed section of OHL consists of a section of OC between towers BN2-15 and BN2-17.
- 4.1.9 There is limited forest road infrastructure in the block. An existing access comes off the unclassified council road to the south of the OC. Improvements to the existing infrastructure are likely required prior to operations. An existing bridge crosses the watercourse/drain that travels east-west through the block although it is unlikely that this is suitable for timber extraction. The closest forest road suitable for haulage within the ownership is the unclassified C100s to the west. This is classed as an Agreed Route by the Timber Transport Forum⁶,⁷.
- 4.1.10 Considering the quality and quantity of the material and the landform, operations can largely be carried out by harvester / forwarder combinations although hand felling might be required in certain areas to reduce the risk of diffuse pollution. Areas that have recently been established can be mulched.

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

⁶ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/

⁷ 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).



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Photo 1: Wind damaged Norway spruce (NJ 563801 435153 looking east)



Photo 2: Forest edge with Norway spruce and broadleaves (NJ 564661 435471, looking east)





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Photo 3: Young Scots pine and birch planting (NJ 562531 435625, looking west)



Photo 4: High water table leading to unstable woodland (NJ 561514 435352, looking south)





Photo 5: Mature and regenerating birch (NJ 561361 435512, looking north)



Photo 6: Open ground with birch (NJ 561001 435367, looking west)





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Photo 7: Scots pine behind birch, Scots pine on adjacent parcel (NJ 560941 434477, looking west)



Photo 8: Norway spruce plantation (NJ 562160 434661, looking north)





5 Windblow Risk

- 5.1.1.1 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 is required.
- 5.1.2 Considering the current signs of instability and the rooting potential of the crop, there is a high risk of windblow as a result of the felling of the OC. The exception to this is the mature Scots pine in the western section of the block. These have been exposed for a long time and rooting in this area is better.

6 Woodland Management Impact

- 6.1.1 In the short-term woodland management will be impacted through premature removal of productive crops, felling of native broadleaves and mulching of recently established trees. The Norway spruce in the eastern section of the block is already damaged by wind and therefore removal seems the likely approach. The felling in the OC will furthermore require removal of several mature Scots pine trees on the western end of the block.
- 6.1.2 The long-term woodland management will be impacted by the Proposed OHL Alignment but, if given careful consideration, impact to forest management can be kept to a minimum. Significant parts of the area within the OC consists of non-productive crops and open, wet ground, in these areas productivity of the block will not be affected. The removal of the productive crops in the OC will lead to a lasting negative impact on woodland productivity. Furthermore, the OC will cut the property in two halves and will reduce the size of the management units which, particularly north of the OHL, will lead to a small management unit.
- 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide long term access into the block which is currently inaccessible. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s) in particular to access the area north of the OC.
- 6.1.4 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, (FISA⁸ 804 "Electricity at Work: Forestry").
- 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 2.43 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

7.1.1 To mitigate the landscape impact of the proposed OHL a re-planting strategy has been set out in the 'Landscape Replanting Proposals' in the Landscape chapter as shown in **Figure 12.1.98c**: **Parcel 2152 Proposed Planting Areas**.

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

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7.1.2 As the woodland comprises a mixture of conifers and broadleaves the OC felling can potentially be reduced through detailed stratification of the crops.

7.2 Restructuring

- 7.2.1 The current structure of the block is diverse with areas of mature and younger crop alongside recent planting and naturally regenerated broadleaves. The felling of the OC along with the proposed management felling will result in a clear-fell and a subsequent even aged restock along with the open ground of the OC. Considering the scale of the felling and the size of the woodland block this is unlikely to require further restructuring.
- 7.2.2 The felling of the OC for the development will create new green edges for the landowner to work to. In the long term this might benefit forest structure.

7.3 Restocking

- 7.3.1 As set out in the Landscape chapter under the 'Landscape Replanting Proposals' restocking can take place within the OC to mitigate the visual impact of the OC. Restocking within the OC will be carried out by the applicant as shown in Figure 12.1.98c: Parcel 2152 Proposed Planting Areas.
- 7.3.2 In case the 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 BN2-15 and BN2-17. 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)
Operational corridor felling	Conifer Plantation (90 m)	2.32
Operational corridor felling	Native broadleaves (90 m)	2.43
Total area		

Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Conifer Plantation	2.32
Compensatory Planting Area	Native broadleaves	2.43
Total area		

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	4.75
Total Compensatory Planting Area	4.75
Total Net Loss of Woodland Area	



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

ltem	Woodland Type	Area (ha)
Management Felling	Mature Conifer Plantation	3.28
Replanting/Restocking Opportunities		3.28
Net Loss of Woodland Area		3.28

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 4.75 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.

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





