

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

Appendix 12.1.56 – Woodland Report Parcel 440, Burn of Aulthuanachan





APPENDIX 12.1.56 – Woodland Report Parcel 440, Burn of Aulthuanachan

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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 440, Burn of Aulthuanachan. 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 12.1.56a: Parcel 440 Location Map. The woodland along the Burn of Aulthuanachan consists of a non-native productive woodland on both sides of the burn. Situated 12.5 km south of Forres in the Moray Council region (NJ 028641 455302).

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 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.

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>



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 - 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 within Woodland Parcel 440 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.56b**: Parcel 440 Proposed Felling Requirements.

3.2 Access Track Route Design

3.2.1 No access tracks are proposed through the woodland parcel.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The forest consists of approximately 1.5 ha of non-native conifer, mostly lodgepole pine (LP), plantation. It covers both sides of the burn and contains some steep banks along the burn. The forest is mature and unthinned and as such is showing signs of instability.
- 4.1.2 It is surrounded by grazing and is therefore stock fenced.
- 4.1.3 The landscape is characterised by open rolling upland.
- 4.1.4 The Proposed OHL Alignment is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 13³.
- 4.15 The Ecological Site Classification⁴ describes the site as having a cool, moderately exposed and wet climate. The soils have a moderately dry moisture status and are of very poor nutrient status.
- 4.1.6 The Soil Map of Scotland⁵ identifies the soils as being predominantly Peaty gleyed podzols with dystrophic blanket peat. Soil conditions are variable with areas of poor drainage and rooting on shelves and better drainage where landform drops down towards the burn.
- 4.17 No environmental designations were found within the parcel.
- 4.1.8 There is no record of the area being covered under a forest plan or felling permission.

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

⁴ Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: http://www.forestdss.org.uk/geoforestdss/

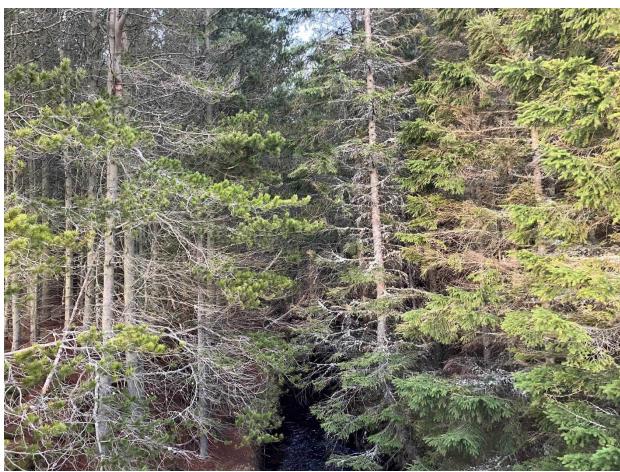
Scotland's Soils (n.d.). National Soil Map of Scotland. Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/

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 - 4.19 The Proposed OHL Alignment consists of a section of OC between towers CB7-15 and CB7-16. A track is proposed to come in from the unclassified road along the western side of the forest.
 - 4.1.10 The topography allows for easy building of infrastructure and timber extraction. Considering the volume, species, quality, and location felling using harvester / forwarder combinations is recommended. Some hand felling might be necessary along the bank of the burn. It is recommended that access from both sides is provided to avoid crossing the burn during forest operations.
 - 4.1.11 The closest forest road suitable for haulage within the ownership is the unclassified road to the west which leads to the A940. This is classed as a Consultation Route by the Timber Transport Forum⁶⁷.

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.

Photo 1: SS along the bank of the burn (NJ 028954 454861, looking north)



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

⁷ Roads which are key to timber extraction but, for a variety of reasons, are not up to Agreed Route Standard. Consultation with the Local Authority is required before any timber haulage takes place and it may be necessary to limit the amount, timing or frequency of timber haulage, or to specify lower impact vehicles to prevent damage. All minor roads (B, C and unclassified roads) should be treated as Consultation Routes by default unless covered by one of the other categories (e.g. Severely Restricted Route).

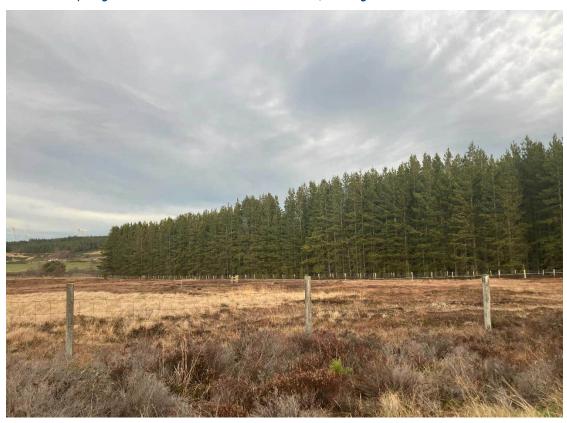


Photo 2: Unthinned LP and stock fence demonstrating unstable crop (NJ 028614 454937, looking northwest)





Photo 3: Crop edge on western side (NJ 028054 455197, 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 **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 Standard (UKFS)⁸ for the implementation of the works required.
- 5.1.2 There is a high risk of windblow in this area of woodland. The site is moderately exposed, but the surrounding land use means there is no vegetation or other windbreak near the crop. The current crop is already unstable due to its management history.

6 Woodland Management Impact

The forest is isolated from other forest areas and is near its optimal felling age from a productive point of view. Therefore, it is unlikely the felling significantly impacts desired woodland management in the short-term.

⁸ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs (Accessed 15 August 2025).

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 - 6.1.2 The subsequent restocking however will need to be done in two separate areas as the OC splits the existing forest into two management units. Neither of these is likely viable as a productive forest which impacts future forest management.
 - 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future land management. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
 - 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, FISA 804 "Electricity at Work: Forestry").
 - 6.1.5 The total loss of broadleaved woodland resulting from the proposed alignment is 0 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

7.1.1 No opportunities for mitigation were found within this ownership.

7.2 Restructuring

- 7.2.1 Considering the small size of this forest area, its homogenous structure, and its relative isolation the impact on forest structure is negligible.
- 7.2.2 The felling of the OC for the development will create new green edges, which will allow the landowner to work to in the future if that is desired. The areas to the north and south of the OC are however too small to be considered a significant management unit and will become isolated and are therefore unlikely to be viable for production.

7.3 Restocking

7.3.1 In case the management felling either side of the OC 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 CB7-15 and CB7-16. 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)	0.73
Total area		0.73

⁹ Forest Industry Safety Accord (2025). FISA Safety Guide 804 – Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804 (Accessed: 15 August 2025).



Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Conifer plantation	0.73
Total area		0.73

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	0.73
Total Compensatory Planting Area	0.73
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC

ltem	Woodland Type	Area (ha)
Management Felling	Conifer plantation	0.76
Replanting / Restocking Opportunities	Conifer plantation	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)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 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 0.73ha.
- 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.

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

