

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

Appendices 12.1.58, 12.1.59 & 12.1.60 - Woodland Report Parcels 1058, 630 and 634 - Altyre





APPENDICES 12.1.58, 12.1.59 & 12.1.60: Woodland Report Parcels 1058, 630 and 634 – Altyre

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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 1058, 630 and 634, Altyre. 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 12.1.58a: Parcel 1058 Location Map, Figure 12.1.59a: Parcel 630 Location Map and Figure 12.1.60a: Parcel 634 Location Map. The woodlands at Altyre consists of a variety of forest and small woodland areas in an agricultural setting in the west and productive native and non-native conifer in the east. Situated 11 km south of Forres just off the A940 at Edinkillie and extend east towards Loch Dallas. They are all within the Moray council area (NJ 050271 477862).

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

¹UK 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; and
- 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 1058, 630 and 634 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.58b: Parcel 1058 Proposed Felling Requirement, Figure 12.1.59b: Parcel 630 Proposed Felling Requirement and Figure 12.1.60b: Parcel 634 Proposed: Felling Requirement.

3.2 Access Track Route Design

3.2.1 The tracks associated with this section of the OHL are either within the OC, make use of existing tracks or are over agricultural ground

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in December 2024. In the southwest of the area impacted by the Proposed OHL Alignment (Parcel 1058), the land use consists mainly of agriculture. The woodland in this area consists of several strips of riparian woodland and smaller areas planted as shelter. The riparian woodland is found along the River Divie and the Berry Burn and consists of a variety of native species with alder forming a dominant component. The western area of plantation within the agricultural area contains a variety of broadleaved species and is relatively young.
- 4.12 The larger forest plantation further east consists of Scots pine (SP), is semi-mature, unthinned and shows signs of instability.
- 4.1.3 South of CB7-25 an area of recent clearfell will be impacted by the OC.
- 4.1.4 In the northeastern part of the property (Parcel 630) the land use consists of open hill and larger scale forest plantation on poor and wet ground. Species composition consists of largely Scots pine with broadleaves just south of the OC.
- 4.15 The far eastern part of the property affected by the OC (Parcel 634), consists of semi-mature Sitka spruce (SS) in extremely wet soils.
- 4.1.6 No environmental designations apply to this parcel.



- 4.17 The exposure across the ownership varies from a Detailed Aspect Method of Scoring (DAMS) score of 12^{3,4}, indicating moderately exposed, in the west, to 17, highly exposed, in the northeast.
- 4.18 The Ecological Site Classification⁵ describes the site as having a cool, moderately exposed and wet climate. The soils have a wet moisture status and are of very poor nutrient status.
- 4.1.9 The Soil Map of Scotland⁶ identifies the soils as being predominantly peaty gleyed podzols with dystrophic blanket peat. Soil conditions are extremely variable with good drainage and rooting in the agricultural areas and poor rooting and drainage, deep peats and gleys in the eastern and northeastern areas.
- 4.1.10 The forests, with the exception of the riparian strips, are covered under LTFP 16FGS09854 which expires on 9/3/27.
- 4.1.11 The Proposed OHL Alignment consists of a section of OC between towers CB7-16 and CB8-5 and a small section between CB8-15 and CB8-16. No tracks are proposed through woodland outwith the OC in this section.
- 4.1.12 The road network within this ownership is limited with access constraints into the larger pine block in parcel 630. To fell and extract the timber a forest road will be required prior to operations taking place. The smaller woodland areas in the west can be accessed with small machinery across agricultural land or using existing infrastructure. The block in parcel 634 can be accessed across the neighbouring estate (Parcel 13810) but a road upgrade will be required. The closest forest road suitable for haulage within the ownership is the unclassified U88E to the west. This is classed as a Consultation Route by the Timber Transport Forum⁷⁸.
- 4.1.13 A mix of operations will likely be required within this ownership. The larger coupes in parcel 630, along with the SP in the agricultural ground and the SS in parcel 634d can be felled using a harvester / forwarder combination. The areas of broadleaves and the riparian areas can be worked using motor manual techniques and timber can be left on-site for deadwood, mulched or taken off depending on landowner preferences.
- 4.1.14 Considering the landform and height of the riparian woodland it is recommended that a detailed assessment of the areas is carried out to determine whether felling of the riparian woodlands is necessary.

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.

³ Forest Research (n.d.). 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.

⁵ Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: http://www.forestdss.org.uk/geoforestdss/

⁶ 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/

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

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).

⁸ 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 1: View from the east looking at the riparian woodland along the Divie, CB7-16 to be built on high ground (NJ 032511 457629, looking SW)





TRANSMISSION

Photo 2: Riparian corridor along the Berry Burn between CB7-17 and CB7-18 (NJ 034021 461048, looking southeast)



Photo 3: Scots pine plantation and windfirm edge at CB7-20 (NJ 040382 467557 looking west)





Photo 4: Broadleaved planting at CB7-18 (NJ 037144 462326, looking south)

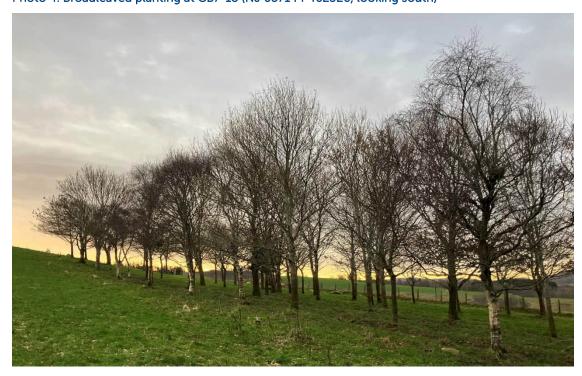
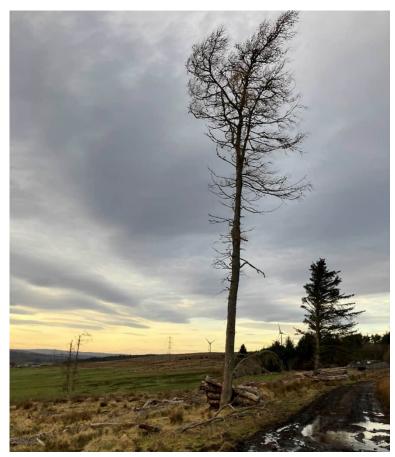


Photo 5: Recent felling at CB7-25 with remaining trees, site not yet restocked (NJ 051491 478900, looking southwest)





TRANSMISSION

Photo 6: Plantation Scots pine at CB8-3 (NJ 059210 483077, looking north)



Photo 7: Windfirm edge north of OC between CB8-3 and CB8-4 (NJ 059831 485326, looking northeast)





TRANSMISSION

Photo 8: Sitka spruce crop in parcel 634 (NJ 099648 481672, looking west)



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 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)⁹ for the implementation of the works required.

⁹ 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).



There is a moderate risk of windblow in this area of woodland. The broadleaves and riparian woodlands are stable, and it is unlikely that felling of the OC will result in significant windblow.

The SP in the agricultural land is unstable and it is therefore recommended to carry out a small additional area of management felling.

The plantation in the northeast is found on peaty soils and as such rooting is not great. The trees here are however still small and it is expected that the felling of the OC will not lead to detrimental windblow. A small area of management felling is proposed where tree height and density are higher and where windfirm edges are nearby.

The SS in parcel 634 is unstable due to extremely high water tables and there is a risk of windblow as a result of the felling of the OC.

6 Woodland Management Impact

- 6.1.1 Considering the current land use, it is expected the line will have limited impact on forest management in the long-term. The OC includes some plantation forest, and the works will therefore mean a loss of productive ground.
- 6.1.2 The infrastructure built for this section of the Proposed OHL Alignment could provide a benefit to the landowner for future forest management as it could provide an access and extraction route for the forest areas in the northeast. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 6.1.3 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" 10).
- 6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.38 ha if all riparian felling is deemed necessary.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 Considering the geomorphology and species in question it is recommended that the need for felling is determined through a detailed height assessment for the riparian woodland elements and in particular the riparian woodland along the River Divie.
- 7.1.2 The area of SS in the east might be candidate for deforestation under current guidance on management of afforested deep peat. This could potentially reduce the compensatory planting and / or restock requirements. It is therefore recommended that a detailed peat depth survey is carried out to determine the extent of the peat.

7.2 Restructuring

7.2.1 The proposed work will have limited impact on the structure of the woodland. In the south and west the felling consists of small areas of woodland in an agricultural setting. In the northeast felling will be kept to the OC and small areas of management felling. As such, the forest structure will remain intact.

7.2.2 In the long-term, 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.

¹⁰ 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).



7.3 Restocking

7.3.1 In case the management felling surrounding 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 CB7-16 and CB8-5 and a section between CB8-15 and CB8-16. 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)		
OC felling	Conifer Plantation (90 m)	7.20		
OC felling	Native broadleaves (70 m)	0.38		
Access Track Felling	Conifer Plantation	0.04		
Total area				

Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Conifer Plantation	7.24
Compensatory Planting Area	Native broadleaves	0.38
Total area		7.62

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	7.62
Total Compensatory Planting Area	7.62
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling	Conifer plantation	4.79
Replanting / Restocking Opportunities	Conifer Plantation	4.79
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)¹¹. 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**.

¹¹ 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 7.62 ha. This could be reduced by deforesting areas of deep peat under current guidelines regarding management of afforested deep peats.
- 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.

