

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

Appendix 12.1.87 – Woodland Report Parcel 13540





# APPENDIX 12.1.87 – Woodland Report. Parcel 13540.

1	Introduction	2	
2	Woodland Property	2	
	<ul><li>3.1 400kV Overhead Line Infrastructure Requirements</li><li>3.2 Access Track Route Design</li><li>Woodland Characteristics</li></ul>	2	
	<ul><li>4.1 Woodland Composition and Site Conditions</li><li>4.2 Photo Record – Operational Corridor Assessment</li></ul>		
5	Windblow Risk	5	
6	Woodland Management Impact	5	
7	Mitigation Opportunities		
	<ul><li>7.1 Woodland Mitigation Measures.</li><li>7.2 Restructuring.</li><li>7.3 Restocking.</li></ul>	6	
0	Net Effect / Summary		
	Compensatory Planting		
_	Compensatory rearrange	/	

### **Appendix Figures**

Figure 12.1.87a: Parcel 13540 Location Map

Figure 12.1.87b: Parcel 13540 Proposed Felling Requirements



#### 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 impacts of the Proposed Development on Parcel 13540. 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 12.1.87a**: **Parcel 13540 Location Map**. The woodland is a small roadside strip of native broadleaves, situated 1.6 km east of Keith, within the Moray council district (NJ 445636 617522).

## 3 Development Requirements

#### 3.1 400kV 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) 2002<sup>1</sup> and The Electricity Act 1989<sup>2</sup>. 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.
  - 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.

<sup>&</sup>lt;sup>1</sup> UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

<sup>&</sup>lt;sup>2</sup> UK Gov (1989). Electricity Act 1989. Available at: <u>Electricity Act 1989</u>



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.

- 312 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 within Woodland Parcel 3266 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.87b: Parcel 3266 Proposed Felling Requirement.

#### 3.2 Access Track Route Design

3.2.1 The woodland is impacted by the creation of a new access track to facilitate access to tower CB15-14A.

#### 4 **Woodland Characteristics**

#### **Woodland Composition and Site Conditions** 4.1

- 4.1.1 The woodland was surveyed in November 2024. A new access track will intersect a mixed aged stand of mixed native broadleaves including Downy birch (DBI) and hawthorn (HAW). This stand appears to be a remnant of a historical hedgerow, suggesting it once served as a field boundary or shelterbelt. The structure of the woodland is somewhat fragmented, with irregular spacing and varying canopy density, indicative of its origin and partial regeneration over time.
- 4.1.2 No environmental designations apply to the parcel.
- 4.1.3 The ownership contains a section of the Proposed OHL Alignment between towers CB15-14A and CB15-15.
- 414 The section of Proposed OHL Alignment is mainly sheltered with a Detailed Aspect Method of Scoring (DAMS) score of approximately 113.
- The Ecological Site Classification (ESC)<sup>4</sup> identifies the site as having a cool, sheltered and moist climate. The soils 4.1.5 have a very moist moisture status and medium nutrient status
- 4.1.6 The National Soil Map of Scotland<sup>5</sup> indicates, the predominant soil type within the affected areas consists of humus iron podzols. The presence of these soils suggests that the area may experience challenges related to tree stability and growth, particularly in wetter conditions.
- 4.1.7 The forest block sits within an upland farmland landscape and is entirely surrounded by agricultural land.

<sup>&</sup>lt;sup>3</sup> 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.

Forest Research Decision Support Tools. Ecological Site Classification. Available at: <a href="http://www.forestdss.org.uk/geoforestdss/">http://www.forestdss.org.uk/geoforestdss/</a>

<sup>&</sup>lt;sup>5</sup> Scottish Government (2024). National soil map of Scotland. Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/



TRANSMISSION

- 4.1.8 This positioning presents challenges for forest management and timber extraction, as there is no existing forest road infrastructure within the block. Access to the site will require the creation of new infrastructure from the A95 council road, which may involve obtaining permissions for temporary road closures.
- 4.19 Given the quality and quantity of the material and the topography of the site, the most suitable harvesting method will be hand felling, particularly in areas with restricted machine access or sensitive ground conditions.
- 4.1.10 Due to the lack of internal access roads and the need for efficient extraction, temporary road closures will be required to facilitate felling operations. Timber will be extracted on to the A95. This is classed as an Agreed Route by the Timber Transport Forum<sup>6,7</sup>.

#### 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: View from NJ 446261 517332 looking northeast from the A95. Showing the hedgerow impacted by the proposed access track running parallel to the A95.



<sup>&</sup>lt;sup>6</sup> The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <a href="https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/">https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/</a>

<sup>&</sup>lt;sup>7</sup> Agreed Routes 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 assumed to be Agreed Routes unless covered by one of the other TTG classifications (e.g. Consultation Route).





#### Windblow Risk 5

- 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 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)8 for the implementation of the works required.
- 5.1.2 Considering the open grown nature of trees there is limited risk of windblow.

#### 6 **Woodland Management Impact**

- As the forest is not managed commercially, there will be no long term negative impact on woodland management.
- 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. 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"9).
- 6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.23 ha.

<sup>8</sup> Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <a href="https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs">https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs</a>
9 Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <a href="https://ukfisa.com/Safety/Safety-Guides/fisa-804">https://ukfisa.com/Safety/Safety-Guides/fisa-804</a>

## 7 Mitigation Opportunities

### 7.1 Woodland Mitigation Measures

7.1.1 No opportunities for mitigation have been identified within this ownership.

### 7.2 Restructuring

7.2.1 There are no restructuring opportunities within the woodland.

### 7.3 Restocking

7.3.1 As no management felling is recommended there will not 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 access track to tower CB15-14A. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
Access Track Felling	Native Broadleaved Woodland	0.23
Total area		0.23

Table 8.2: Compensatory Planting

ltem	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland	0.23
Total area		0.23

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.23
Total Compensatory Planting Area	0.23
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) <sup>10</sup>. 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 CoWRPs 0.23 ha.
  - 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.

Beauly to Blackhillock to New Deer to Peterhead 400 kV Project: EIA Report Volume 5: Appendices - Appendix 12.1.87: Woodland Report. Parcel 13540

<sup>&</sup>lt;sup>10</sup> Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: <a href="https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285">https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285</a>



