

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

Appendix 12.1.126: Woodland Report Parcel 13256, Kinmundy Woodland





# APPENDIX 12.1.126: Woodland Report Parcel 13256, Kinmundy Woodland

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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 assesses the potential impacts of the Proposed Development on woodland, Parcel 13256, Kinmundy Woodland. 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 hectare (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 12.1.126a**: **Parcel 13256 Location Map**. The woodland parcel is situated approximately 5.8 km south of Mintlaw, within the Aberdeen Council region (NK 008451 432682). The woodland consists of a diverse mix of mature native and non-native broadleaved tree species.

# 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) 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.

<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>



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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 70 m in width is required within the native woodland within Woodland Parcel 13256 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.126b**: **Parcel 13256 Proposed Felling Requirement**.

### 3.2 Access Track Route Design

3.2.1 Temporary access tracks will be created within the OC to access towers NP4-11 to NP4-14.

### 4 Woodland Characteristics

#### 4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The woodland affected by the OC comprises a strip of mature native and non-native broadleaves, including sycamore (SYC), hazel (HZ), larch (L), ash (AH), beech (BCH), and Common alder (CAR). These trees form a prominent linear feature along the field edge at the start of the track, with heights ranging from 30–40 m, indicating well-established specimens of significant landscape value.
- 4.1.2 Adjacent to the woodland, within the adjoining field, there are scattered semi-mature trees, primarily Sessile oak (SOK) and SYC, with heights between 6–8 m. These trees contribute to the transition between the woodland edge and the open field.
- 4.1.3 Between towers NP4-13 and NP4-14, a small section of an historical field boundary of mature broadleaves will be impacted by the OC, species present include SYC and BCH.
- 4.1.4 The woodland is classified within NatureScot Ancient Woodland Inventory as Long Established of Plantation Origin (LEPO)<sup>3</sup>. Many LEPO sites, including this one, feature non-native species such as SYC and BCH, which were historically planted for timber or aesthetic purposes.
- 4.1.5 The area is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 14<sup>4,5</sup>.

<sup>&</sup>lt;sup>3</sup> NatureScot (2023). A guide to understanding the Scottish Ancient Woodland Inventory (AWI). Available at: <a href="https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi">https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi</a>

<sup>&</sup>lt;sup>4</sup> Forest Research (2025). Available at: <a href="http://www.forestdss.org.uk/geoforestdss/">http://www.forestdss.org.uk/geoforestdss/</a>

<sup>&</sup>lt;sup>5</sup> 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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  - 4.1.6 The National Soil Map of Scotland<sup>6</sup> indicates identifies the site as being predominantly noncalcareous gleys with peaty gleys, with parent material of drifts derived from intermediate rocks or mixed acid and basic rocks, both metamorphic and igneous.
  - 4.17 The Ecological Site Classification (ESC)<sup>7</sup> identifies the site as having a cool, moderately exposed and moist climate. The soils have a wet moisture status and a very poor nutrient status.
  - 4.18 The proposed section of OHL consists of a section of OC between towers NP4-11 to NP4-14.
  - 4.1.9 The closest public road suitable for haulage of timber within the ownership is A952 running along the western boundary of the woodland. This is classified as an Agreed Route by the Timber Transport Forum<sup>8,9</sup>. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations. An element of hand felling is likely required for the mature trees amongst the crop and along the roadside. A new access track is to be constructed on the western boundary, it is recommended this is constructed prior to felling to facilitate timber extraction.
  - 4.1.10 Liaison with the local road authority will be key to facilitate the felling operations along the roadside as trees are within striking distance of the road.

### 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.

<sup>&</sup>lt;sup>6</sup> Scottish Government (2024). National soil map of Scotland. Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/

<sup>&</sup>lt;sup>7</sup> 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>8</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>9</sup> 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

<sup>&</sup>lt;sup>9</sup> 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).



Photo 1: View at NK 009341 431190 looking northwest into the woodland, showing the varied age class and species present.



Photo 2: View at NK 008271 432756 looking northeast into the woodland from the informal footpath that runs along the southern boundary of the woodland.





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Photo 3: View at NK 009341 431190 looking east towards tower NP4-13, showing the historical field boundary impacted by the felling



### 5 Windblow Risk

- 5.1.1 It is acknowledged that the creation of the access track 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 out with the access track 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 damsStandard (UKFS)<sup>10</sup> for the implementation of the works required.
- 5.1.2 There is minimal risk of windblow as a result of the proposed felling, as indicated by the species present, the age of the crop and the topography of the site.

# 6 Woodland Management Impact

- 6.1.1 While tree felling within the OC will result in a slight reduction in the total area of woodland, this loss is marginal and should not significantly affect overall forest management, or access at a larger scale.
- 6.1.2 The infrastructure built for this section of the OHL could provide a minor benefit to the landowner for future access to the remaining trees. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner.
- 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 (Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry" 11).

<sup>&</sup>lt;sup>10</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> (accessed 01/05/2025)

<sup>(</sup>accessed 01/05/2025)

11 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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6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.16 ha.

## 7 Mitigation Opportunities

## 7.1 Restructuring

7.1.1 The section of forest within this parcel is generally single aged and will likely be felled all at once. Therefore, there is no positive or negative impact of the felling on the structure within the ownership.

### 7.2 Restocking

7.2.1 Given the loss trees from the wider landscape setting, opportunities to strengthen the wider tree network by planting existing gaps and / or extending the network in the locality should be discussed with 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 NP4-11 to NP4-14. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

ltem	Woodland Type	Area (ha)
OC Felling	Native Woodland (70 m)	0.16
OC Felling	Broadleaved Woodland (70 m)	0.11
Total area		0.27

#### Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Woodland	0.16
Compensatory Planting Area	Broadleaved Woodland	0.11
Total area		0.27

#### Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.27
Total Compensatory Planting Area	0.27
Total Net Loss of Woodland Area	0.00

#### Table 8.4: Woodland removal for Management Felling, outwith OC

ltem	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 and access tracks will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)<sup>12</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 and access tracks, 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 0.27 ha.
- 9.1.4 In order to provide greater balance, limiting long-term impacts on woodland 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.

 $<sup>{}^{12}</sup> Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: \\ \underline{https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285}$ 



