

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

**Appendix 12.1.118: Woodland Report Parcel
11698, Elphinstone**



Appendix 12.1.118: Woodland Report Parcel 11698

1	Introduction.....	2
2	Woodland Property.....	2
3	Development Requirements.....	2
3.1	400 kV Overhead Line Infrastructure Requirements	2
3.2	Access Track Route Design.....	3
4	Woodland Characteristics.....	3
4.1	Woodland Composition and Site Conditions	3
4.2	Photo Record – Operational Corridor Assessment.....	4
5	Windblow Risk.....	7
6	Woodland Management Impact	7
7	Mitigation Opportunities.....	7
7.1	Woodland Mitigation Measures.....	7
7.2	Restocking	7
8	Net Effect / Summary.....	8
9	Compensatory Planting	8

Appendix Figures

Figure 12.1.118a: Parcel 11698 Location Map

Figure 12.1.118b: Parcel 11698 Proposed Felling Requirements

1 Introduction

- 1.1.1 This Appendix presents information relevant to the Beaulay 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 11698, Elpinstone 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 for Woodland Parcel 11698 are identified in **Figure 12.1.118a: Parcel 11698 Location Map**. The woodland is situated 4.8 km east of the village of Cumniestown in the Aberdeenshire Council region (NJ 851014 489161). The woodland in parcel 11698 consists of a shelterbelt of beech trees within an agricultural landscape.
- 2.1.2 The main access road is the B9170 to the west of the woodland. This is accessed by a network of unclassified single track roads.

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:

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: [Electricity Act 1989](#)

- 3.1.2 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.
- 3.1.3 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.
- 3.1.4 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.
- 3.1.5 A resilient OC of 70 m in width is required throughout the broadleaved woodland area within Woodland Parcel 11698, based on the type of woodland encountered and the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.118b: Parcel 11698 Proposed Felling Requirement**.

3.2 Access Track Route Design

- 3.2.1 There are no access tracks in woodland associated with this section of the Proposed Development.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The woodland in this parcel comprises a shelterbelt dominated by mature Beech (BCH) trees, located within surrounding farmland. The shelterbelt is largely windfirm along its outer edges, though some internal windblow is present, likely as a result of localized exposure or age-related decline.
- 4.1.2 The Beech trees are open-grown and often multi-stemmed, typically exceeding 20 m in height with a high diameter at breast height (DBH), generally greater than 50 cm. While these dimensions indicate mature trees, a visual assessment confirms that they do not display characteristics typically associated with notable or veteran trees. Specifically, the trees lack key features such as:
- Exceptional girth for the species;
 - Evidence of hollowing or significant decay;
 - Deadwood habitat features;
 - Bark loss, cavities, or substantial pruning wounds; and
 - Ecological microhabitats such as rot holes, sap runs, or epiphytic diversity.

- 4.1.3 The woodland is classified as LEPO (Long-Established Plantation Origin) on the Ancient Woodland Inventory (AWI)³, indicating a history of woodland cover dating back to at least 1750, albeit with plantation origins. Historic Ordnance Survey maps support this classification, with the 1st Edition (1843–1882) showing the woodland as mixed broadleaved and coniferous, and later editions (1892–1960) depicting it as coniferous. It is likely that former coniferous elements have been removed over time, leaving the current stand of mature Beech.
- 4.1.4 The National Soil Map of Scotland⁴ indicates the dominant soil type within the site as podzols. There is likely a moderate to high nutrient availability considering the vegetation and surrounding land use. Rooting is however limited as can be seen from the internal windblow.
- 4.1.5 The site is moderately exposed with a Detailed Aspect Method of Scoring (DAMS) score of 14^{5,6}.
- 4.1.6 The Ecological Site Classification (ESC)⁷ identifies the site as having a cool, moderately exposed and moist climate. The soils have a slightly dry moisture status and very poor nutrient status.
- 4.1.7 The woodlands do not appear in the Native Woodland Survey of Scotland⁸.
- 4.1.8 The grassy undergrowth suggests that the woodland is regularly grazed.
- 4.1.9 There are no current felling permissions or thinning permission showing for this parcel on the Scottish Forestry Web Viewer⁹.
- 4.1.10 The Proposed OHL Alignment consists of a section of OC between towers NP1-11 and NP1-12. Proposed tracks come in from either side and do not pass through the woodland shelterbelt.
- 4.1.11 There is no existing forest road infrastructure into the woodland shelterbelt.
- 4.1.12 Considering the diameter, form, and volume of the standing timber within this compartment, hand felling is recommended as the most appropriate and practical method of removal. The trees in question are relatively small in number but include individuals with irregular shapes or leaning forms, as well as varying diameters that make mechanical felling less efficient and potentially more damaging to surrounding habitat.
- 4.1.13 Hand felling allows for greater precision and control in such situations, reducing the risk of collateral damage to nearby trees, ground flora, and soil structure, particularly important in areas where access to large machinery is limited or where sensitive features are present. It also enables selective removal, allowing operators to assess and respond to conditions tree by tree. Material could be left on site for deadwood or extracted with small machinery across the adjacent farmland.

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 corridor. 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 NatureScot. Available online at: [A guide to understanding the Scottish Ancient Woodland Inventory \(AWI\) | NatureScot](#)

⁴ Scottish Government (2024). Available online at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

⁵ Forest Research (2025). Available online at: <http://www.forestdss.org.uk/geoforestdss/>

⁶ 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.

⁷ Forest Research. Available online at: Ecological Site Classification, <http://www.forestdss.org.uk/geoforestdss/>

⁸ Scottish Forestry (2014). Available online at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

⁹ Scottish Forestry. Available online at: <https://scottishforestry.maps.arcgis.com/apps/webappviewer/index.html?id=0d6125cfe892439ab0e5d0b74d9acc18>

Photo 1: Beech Shelterbelt from adjacent farmland (NJ 849031 489527, looking southeast)



Photo 2: Beech shelterbelt from within corridor showing internal instability (NJ 850896 489513, looking southeast)

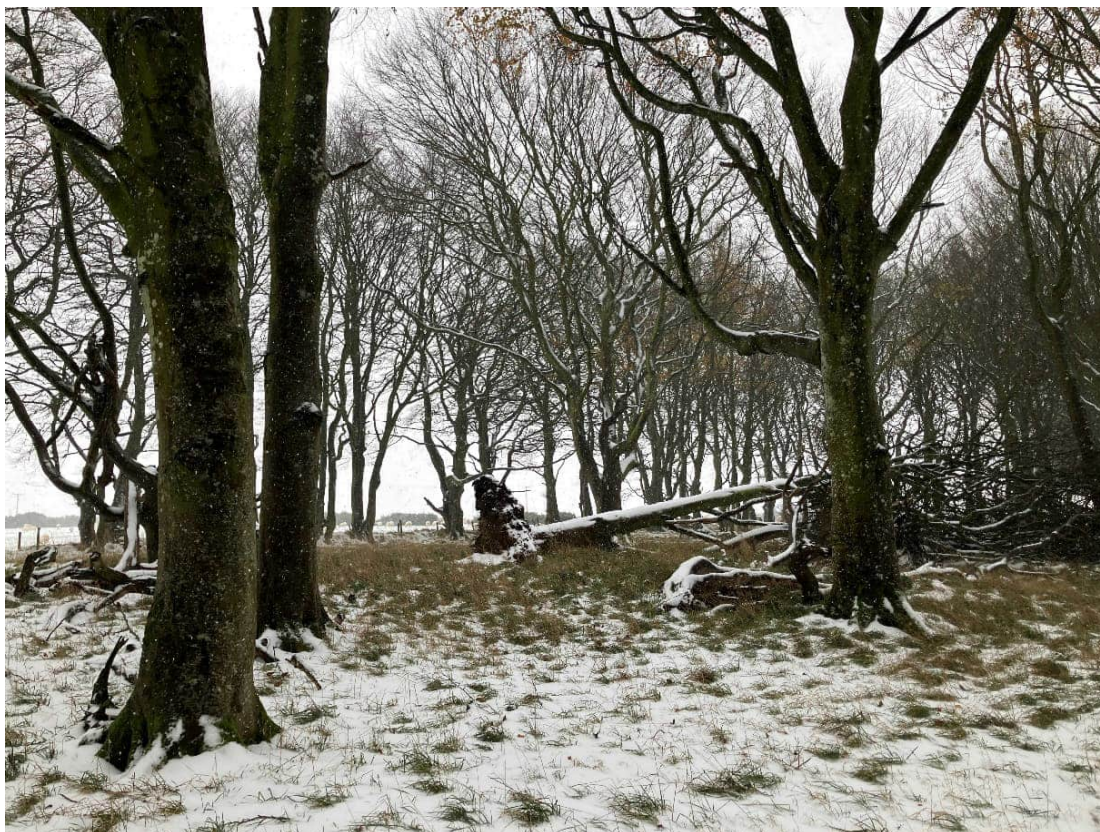
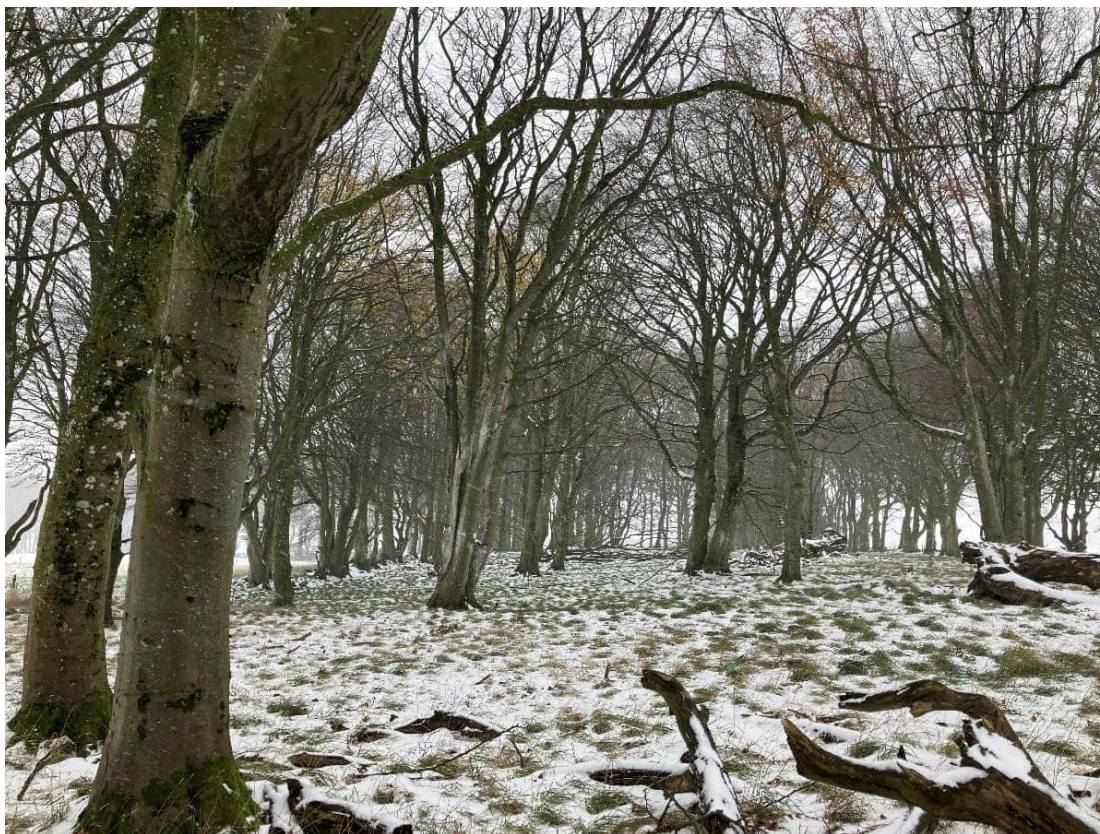


Photo 3: Beech shelterbelt from within corridor (NJ 850961 489213, looking south)



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 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 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)¹⁰ for the implementation of the works required.
- 5.1.2 There is a medium risk of windblow in this area of woodland. As demonstrated in **Photos 1-3** there is some internal windblow, but remaining trees have well developed crowns and a low height to diameter ratio. The edge trees in particular appear very stable as a result of historic exposure.
- 5.1.3 No management felling is identified for this woodland.

6 Woodland Management Impact

- 6.1.1 Considering the current land use, it is expected the Proposed Development will have limited impact on the management of this woodland. The woodland does not appear to be actively managed for a specific purpose. The OC cuts the shelterbelt in two, leaving a small area of woodland to the south of the OC. Therefore, as part of construction works, dedicated crossing points should be discussed once the Proposed Development has been constructed to allow for future access.
- 6.1.2 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 Forestry Industry Safety Accord FISA 804 "Electricity at Work: Forestry"¹¹).
- 6.1.3 The total loss of non-native broadleaved woodland resulting from the proposed alignment is 0.47 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 The Applicant will be using a process of 'managed resilience' which will seek to retain naturally regenerated broadleaved trees and shrubs as close as possible to the line to keep as much tree cover as possible. Smaller-growing species / shrubs thus being able to be retained closer to the line than larger growing species. OHL tree maintenance would take place on a 4-yearly cycle.
- 7.1.2 Given the high and even age structure of the existing shelterbelt, the proposed felling is expected to have a limited impact on overall woodland structure. The construction of the OHL, which will bisect the shelterbelt, presents an opportunity to manage the two resulting woodland compartments separately. This could support a more diverse age structure and improve the long-term ecological and structural resilience of the woodland.

7.2 Restocking

- 7.2.1 As there is no management felling proposed for this woodland parcel there is no restock obligation on the landowner.

¹⁰ Scottish Forestry (2024). UK Forestry Standard (UKFS). Available at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

¹¹ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

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 NP1-11 and NP1-12. They detail the areas designated for clear felling, both within the OC and additional recommended Management Felling outside the OC to address windblow risks and forest design considerations.

Table 8.1: Woodland Removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
OC felling	Broadleaves (70 m)	0.47
Total area		0.47

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Broadleaves	0.47
Total area		0.47

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.47
Total Compensatory Planting Area	0.47
Total Net Loss of Woodland Area	0.00

Table 8.4: Woodland Removal for Management Felling, outwith OC

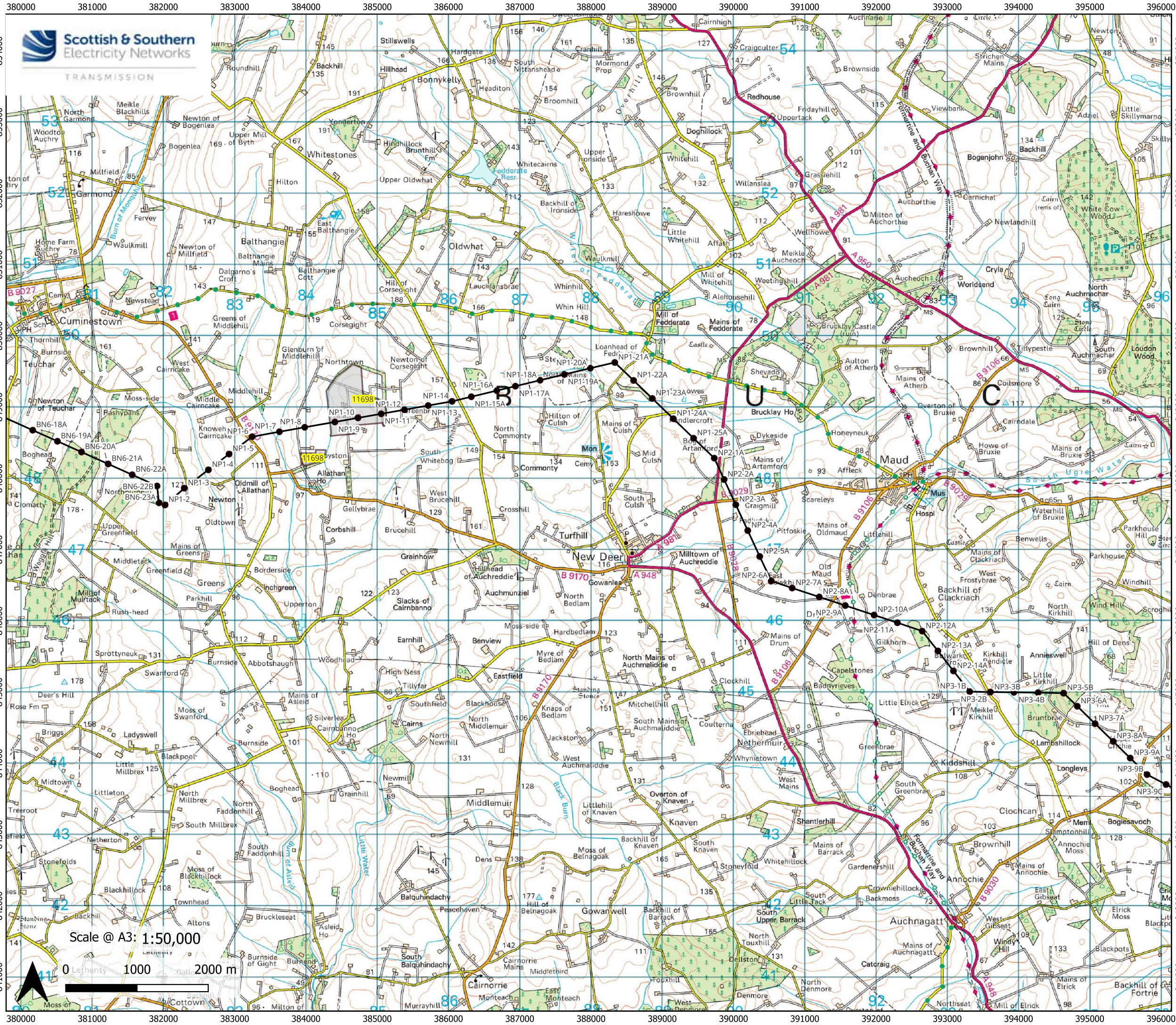
Item	Woodland Type	Area (ha)
Management Felling		0.00
Replanting / Restocking Opportunities		0.00
Net Loss of Woodland Area		0.00

9 Compensatory Planting

- 9.1.1 Only areas of the woodland directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹². 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 windblow 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 licence 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 0.47 ha.

¹² 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>

- 9.1.4 In order to provide a 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 Proposed OHL Alignment .



Legend

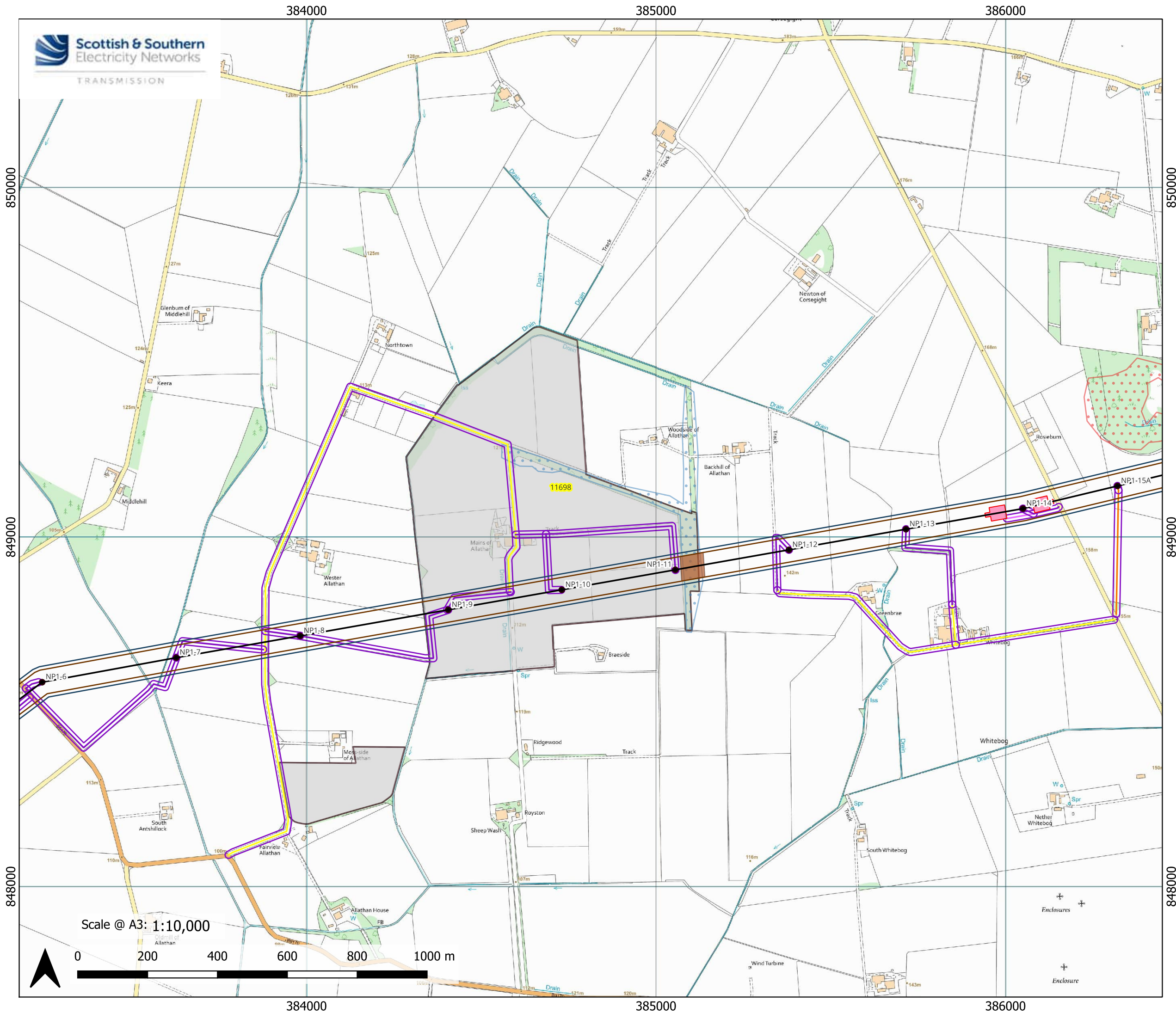
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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Project:
Beaulieu to Blackhilllock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.118a Parcel 11698 Location Map

Drawn by: LA



Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Proposed Conductor Pulling Area (EPZ)
- 70m Operational Corridor - Broadleaved Woodland
- 90m Operational Corridor - Commercial Woodland
- Access Track 20m Buffer

Proposed Access Tracks

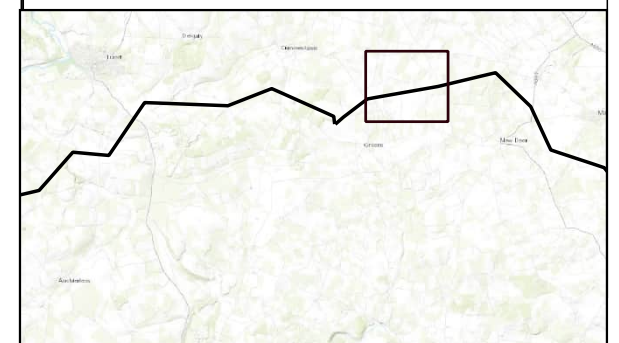
- Existing Access – Upgrade – Good/Fair Condition
- Existing Access – Upgrade – Poor Condition
- Proposed Access – ATV or Temporary Trackway
- Proposed Access – Temporary

Proposed Felling Requirements

- Broadleaved Woodland Operational Corridor Felling

Ancient Woodland Inventory

- Ancient (of semi-natural origin)
- Long-Established (of plantation origin)
- Landownership Boundary/Parcel



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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title: **Figure 12.1.118b** Parcel 11698 Proposed
Felling Requirements

Drawn by: LA