

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

**Appendix 12.1.1 – Woodland Report Parcel 13070,
Lovat**



APPENDIX 12.1.1 – Woodland Report Parcel 13070, Lovat

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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 13070, Lovat. 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 12.1.1a: Parcel 13070 Location Map**. The Lovat woodlands encompass a significant expanse within the Beauly area within the Highland Council region. The woodland is situated 4.8 km southwest of Beauly (NH 486961 425494). Forming a key component of the region's rural and ecological landscape.
- 2.1.2 The woodland landscape is characterised by a mix of mature and semi-mature tree stands, interspersed with remnants of historical field boundaries that contribute to the estate's cultural and environmental heritage. While much of the woodland remains undisturbed, small sections of these historic field boundaries will be affected by the Proposed Development. Additionally, the unclassified C1006 public road runs along the north of the site, serving as a key access route while also influencing land management and development considerations.

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](#)

- 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; 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 proposed OC width. If the conductor blowout exceeds the proposed 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 broadleaved woodland and 90 m through the commercial conifer woodland within Woodland Parcel 13070 taking into account the requirements of the conductor blowout assessment. The proposed OC is illustrated in **Figure 12.1.1b: Parcel 13070 Proposed Felling Requirements**.

3.2 Access Track Route Design

3.2.1 Proposed tracks in this section are found within the OC and across agricultural ground.

4 Woodland Characteristics

4.1.1 The woodlands were surveyed in September 2024. The woodlands in Fanellan Farm are part of an historic Rural Development Contract (RDC) scheme (Case no, 4657555), established between 2007 and 2013, along with historical field boundaries. The Proposed OHL Alignment cuts through the eastern section of the RDC woodland and a small section of mature native woodland. The woodland in the RDC consists of plantation forest of mainly larch (L) and Douglas fir (DF) with a fringe of native broadleaves to the south including aspen (ASP), Downy birch (DBI), Sycamore (SYC), Sessile oak (SOK), rowan (ROW), alder (CAR) and ash (AH).

4.1.2 Where the Proposed OHL Alignment crosses the public road, it intersects with a mature field boundary, consisting of beech (BCH) SYC and willow (WL). This area has been subjected to prolonged grazing, resulting in severe ground compaction and degradation. Several mature BCH and SYC specimens in this section exhibit signs of dieback and disease, indicating existing environmental stressors. The field boundary extends southward into agricultural land, transitioning into a semi-mature woodland area comprising ROW, SYC, SOK, DBI, holly (ILX) and wild cherry (WCH).

4.1.3 The small area of native broadleaved woodland on the northern boundary of Fanellan Wood, between towers BC1-3B and BC1-4B was planted in 1993 and mainly consists of DBI.

- 4.1.4 The area is sheltered with a maximum Detailed Aspect Method of Scoring (DAMS) score of 10^{3,4}.
- 4.1.5 The Ecological Site Classification⁵ describes the site as having a warm, sheltered and moist climate. The soils have a slightly dry moisture status and are of very poor nutrient status.
- 4.1.6 The Soil Map of Scotland⁶ identifies the soils as being predominantly humus-iron podzols. The dominant soil type within the site consists of podzols, which are typically well-drained, nutrient-poor, and acidic. However, given the site's historical use as agricultural land, there is a high likelihood that the soil structure has been altered over time.
- 4.1.7 No environmental designations apply to this ownership.
- 4.1.8 The proposed section of Proposed OHL Alignment consists of a section of OC between towers BC1-1 to BC1-5A.
- 4.1.9 The closest forest road suitable for haulage within the ownership is the C1006, Fanellan Road. This is classed as a Consultation Route⁷ by the Timber Transport Forum⁸. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations.

Photo 1: View at NH 484732 425341 looking south towards BC1-2B showing the historical RDC plantation.



³ Forest Research (2025). 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 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 Timber Transport Forum (n.d.). Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

Photo 2: View at NH 485441 424832 looking north into the historical RDC plantation, showing the broadleaved element of the scheme.



Photo 3: View at NH 485851 424742 Looking northeast at the mature roadside beech and sycamore. Showing signs of dieback.



Photo 4: View at NH 486031 424712, roadside beech showing signs of structural damage and disease.



Photo 5: View at NH 486731 424342, looking south into the semi-mature field boundary towards BC1-2B.



Photo 6: View at NH 489618 427652, of northeastern boundary of Fanellan Wood.



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 the UK Forestry Standard (UKFS)⁹ 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 DAMS score and the topography of the site.

6 Woodland Management Impact

- 6.1.1 As the proposed OC cuts through the eastern section of the RDC plantation and small sections of historical field boundaries, the long-term impact on woodland management is expected to be minimal. While tree felling within the OC will result in a slight reduction in the total area of productive forestry, this loss is marginal and should not significantly affect overall forest management, timber yield, or access at a larger scale.
- 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 Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry"¹⁰).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.44 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 Targeted Replanting: Establishing compensatory native woodland in alternative locations to maintain biodiversity and connectivity.
- 7.1.2 Enhancing Edge Habitats: Managing retained woodland edges to support wildlife corridors and improve structural diversity.
- 7.1.3 Soil Conservation Measures: Preventing soil erosion and maintaining soil fertility in areas affected by tree removal to facilitate natural regeneration.

7.2 Restructuring

- 7.2.1 The section of forest within this ownership is 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.
- 7.2.2 The felling of the OC for the development, will create a new green edge, allowing the landowner to carry out future clear fell more safely in proximity to the new OHL.

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).

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 Restocking will be carried out by the landowner in all areas out-with the OC with suitable species to continue the commercial viability of the forest.
- 7.3.2 It is anticipated that native broadleaved regeneration is likely to occur within the OC in the vicinity of tower BC1-2B along the existing field boundary.

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 BC1-1 to BC1-5A. 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.

Item	Woodland Type	Area (ha)
OC felling	Mature Conifer Plantation (90m)	0.59
OC felling	Native Broadleaved Woodland (70m)	0.44
Total area		1.03

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Mature Conifer Plantation	0.59
Compensatory Planting Area	Native Broadleaved Woodland	0.44
Total area		1.03

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.03
Total Compensatory Planting Area	1.03
Total Net Loss of Woodland Area	0.00

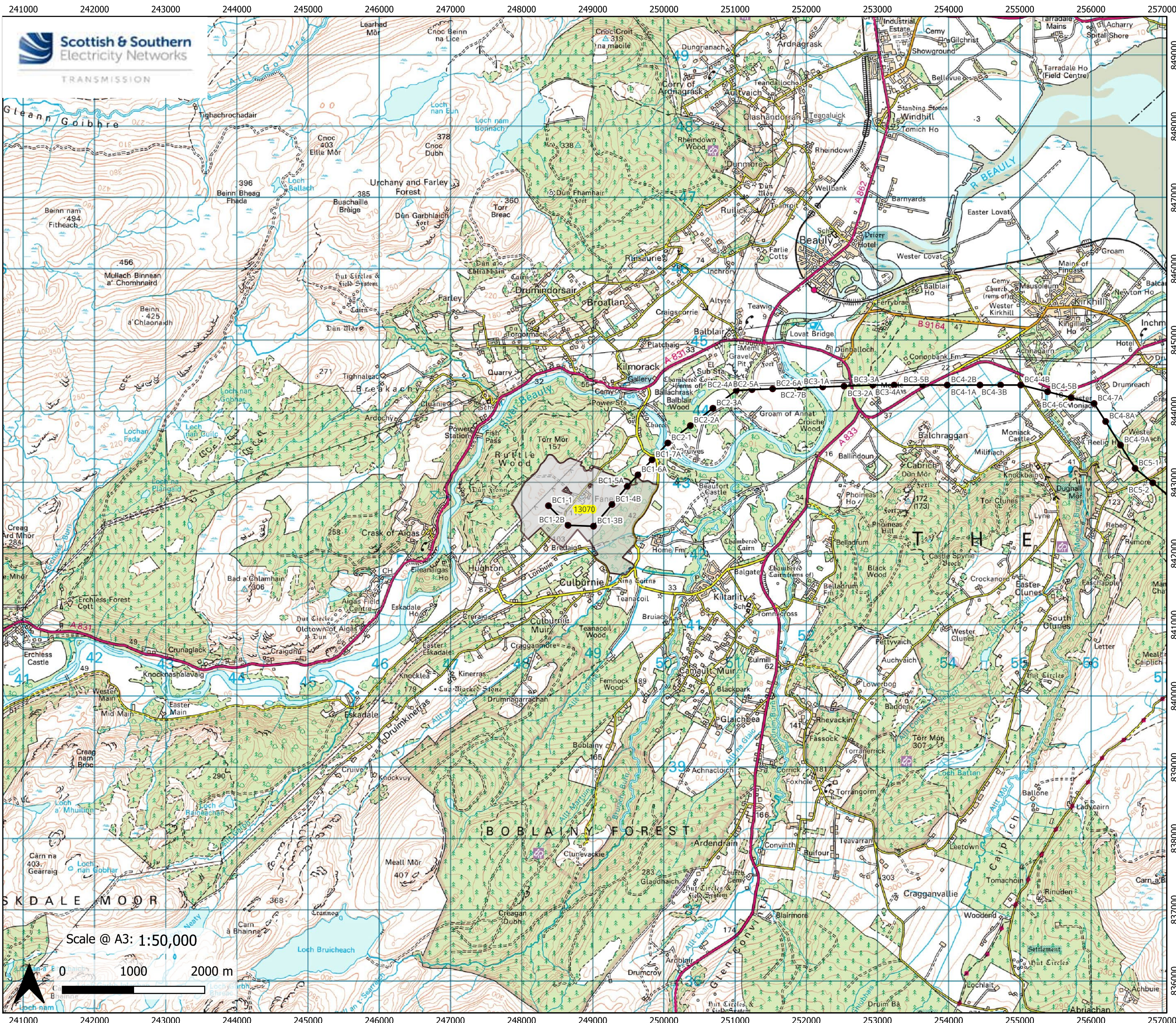
Table 8.4: Woodland removal for Management Felling, outwith OC.

Item	Woodland Type	Area (ha)
Management Felling	Mature Conifer Plantation	0.08
Management Felling	Native Broadleaved Woodland	0.13
Replanting / Restocking Opportunities		0.20
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**.
- 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 1.03 ha.
- 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.

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>



Legend

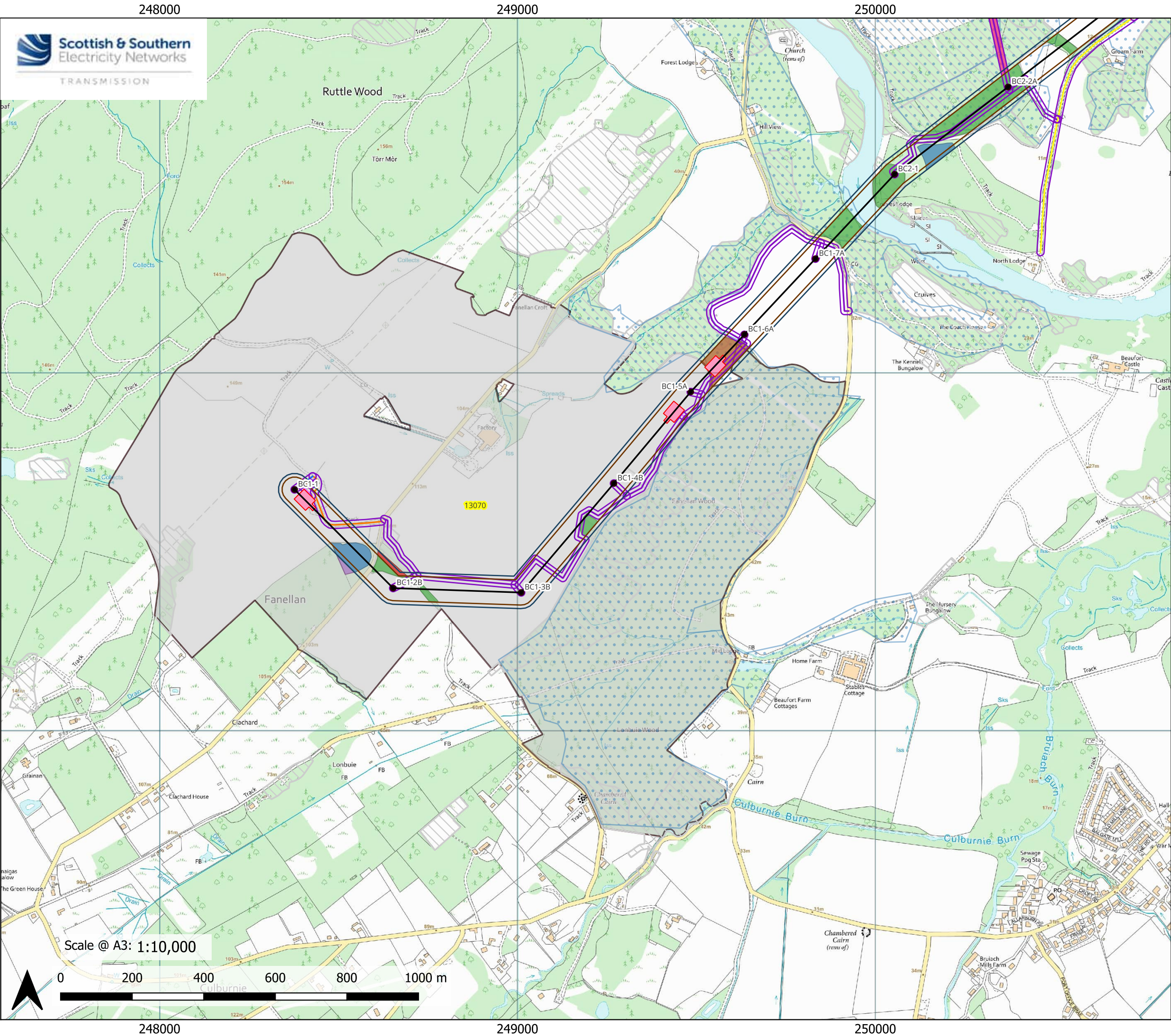
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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

Title:
Figure 12.1.1a Parcel 13070 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 – Permanent
- Proposed Access – Temporary

Proposed Felling Requirements

- Broadleaved Woodland Operational Corridor Felling
- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Native Woodland Management Felling
- Native Woodland Access Track Felling
- Native Woodland Survey Scotland (NWSS)

Ancient Woodland Inventory

- 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 12.1.1b** Parcel 13070 Proposed Felling Requirements

Drawn by: LA