

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

**Appendix 12.1.5 – Woodland Report Parcel 1070,
Lovat**



APPENDIX 12.1.5 – Woodland Report Parcel 1070, 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 assesses the potential effects of the Proposed Development on Woodland Parcel 1070, 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 in order 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 12.1.5a: Parcel 1070 Location Map**. The Lovat woodlands are located approximately 1.6 km southwest from the town of Beauly (NH 504221 438021) within the Highland Council region.
- 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 A831 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:
- 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

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](#)

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 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 native woodland within Woodland Parcel 1070, taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.5b: Parcel 1070 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 The majority of the proposed access tracks in this section are located within the OC; however, an additional temporary track will be constructed extending north from tower BC2-2A. Another temporary track will also be created across agricultural ground to facilitate access.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 Woodland Parcel 1070 was surveyed in February 2025. The Proposed OHL Alignment cuts through sections of mature and semi mature broadleaved woodland. The woodland consists of Downy birch (DBI), Sessile oak (SOK), Sitka spruce (SS) and some semi mature Scots pine (SP). These are designated within NatureScot's Ancient Woodland Inventory (AWI)³ as Ancient Woodland (AWI, 2a) and Long Established of Plantation Origin (LEPO).
- 4.1.2 At tower BC2-2A, the woodland is enclosed within a deer fence, providing protection from excessive browsing and allowing for successful natural regeneration. The woodland consists of mature DBI, SOK, and SP, with a significant volume of natural regeneration of both DBI and SOK, indicating a dynamic and self-sustaining ecosystem.
- 4.1.3 Although the woodland is currently classified as LEPO under the AWI, it exhibits several key indicators of a healthy ancient woodland habitat, suggesting it is moving towards ancient woodland status. These indicators include:

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

- Diverse Woodland Specialist Flora – The understorey and ground layer support characteristic species such as wood sorrel (*Oxalis acetosella*), greater woodrush (*Luzula sylvatica*), and honeysuckle (*Lonicera periclymenum*), which are commonly found in ancient woodland environments;
- Structural Complexity – The presence of mature trees, mixed-age regeneration, standing and fallen deadwood, and varied canopy layers contributes to a rich and stable woodland ecosystem;
- Rich Deadwood Habitat – Decaying wood, including snags, fallen logs, and hollowing trunks, provides vital habitat for invertebrates, fungi, and cavity-nesting birds; and
- Relic Native Trees – Some of the Sessile oaks and Downy birch trees exhibit signs of veteran status, including hollowing, large girths, and significant epiphytic growth, further reinforcing the woodland's ancient characteristics.

- 4.1.4 Given these ecological features, the woodland at BC2-2A has strong potential for ancient woodland reclassification.
- 4.1.5 The woodland at tower BC2-7B is classed as AWI 2a. The species present include DBI and willow (WL). Due to the tower's peripheral location and the relatively small footprint of its installation, the overall impact on the woodland is minimal. 97% of the surrounding woodland will be retained, thereby preserving the majority of the habitat and its associated ecological functions
- 4.1.6 The area is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 9⁴.
- 4.1.7 The National Soil Map of Scotland⁵ indicates the dominant soil types within the site are mineral alluvial soils, as often found in river valleys and floodplains. However, given the site's historical use as agricultural land, there is a high likelihood that the soil structure has been altered over time.
- 4.1.8 The Ecological Site Classification (ESC)⁶ identifies the site as having a warm, sheltered, and moist climate. The soils have a very moist moisture status and medium nutrient status.
- 4.1.9 The woodlands between towers BC2-1 and BC2-2A are recorded in the Native Woodland Survey of Scotland⁷ as mature upland birchwood. At tower BC2-7B the woodland is recorded as mature lowland mixed deciduous woodland.
- 4.1.10 The proposed section of OHL consists of a section of OC between towers BC2-1 to BC2-7B.
- 4.1.11 The closest forest road suitable for haulage within the ownership is the A831. This is classed as a Consultation Route by the Timber Transport Forum^{8,9}. The existing internal forest and wider estate infrastructure can be utilised for access and extraction purposes. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder combinations.

⁴ Forest Research (n.d.). 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.

⁵ 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/>

⁶ Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁷ Scottish Forestry (n.d.). Native Woodland Survey of Scotland. Available at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

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/>

⁹ 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).

4.2 Photo Record – Operational Corridor Assessment

- 4.2.1 The following photographs provide a visual record of key locations along the proposed 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 at NH 502691 437122 at tower BC2-2A looking northeast. Showing the semi mature Sessile oak trees present within the proposed OC.



Photo 2: View at NH 502211 436991 at tower BC2-2A looking northeast. Showing various age classes of native woodland. Significant amount of Sessile oak and Downy birch natural regeneration present.



Photo 3: View at NH 502601 437332 at tower BC2-2A looking northeast. Showing semi mature Scots pine and Downy birch. Significant amount of Sessile oak and Downy birch natural regeneration present.



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). This is covered in more detail in **Chapter 12: Forestry** in **Paragraph 12.4.22**. 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 minimal risk of wind blow as a result of the proposed felling, as indicated by the DAMS score and the topography of the site.

¹⁰ 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).

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 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 (FISA 804 "Electricity at Work: Forestry"¹¹).
- 6.1.3 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 3.49 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 Planting opportunities might exist south of the Proposed OHL Alignment and should be discussed with the landowner.

7.2 Restructuring

- 7.2.1 The section of woodland 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 Proposed Development will create a new green edge, allowing the landowner to carry out future clear fell more safely in proximity to the Proposed OHL Alignment.

7.3 Restocking

- 7.3.1 It is anticipated that native broadleaved regeneration is likely to occur within the OC, as a result of its proximity to existing seed sources.

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 BC2-1 to BC2-7B. 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)
OC felling	Native Broadleaved Woodland (70 m)	3.23
Access Track Felling	Native Broadleaved Woodland	0.26
Total area		3.49

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland (70 m)	3.49
Total area		3.49

¹¹ 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).

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	3.49
Total Compensatory Planting Area	3.49
Total Net Loss of Woodland Area	0.00

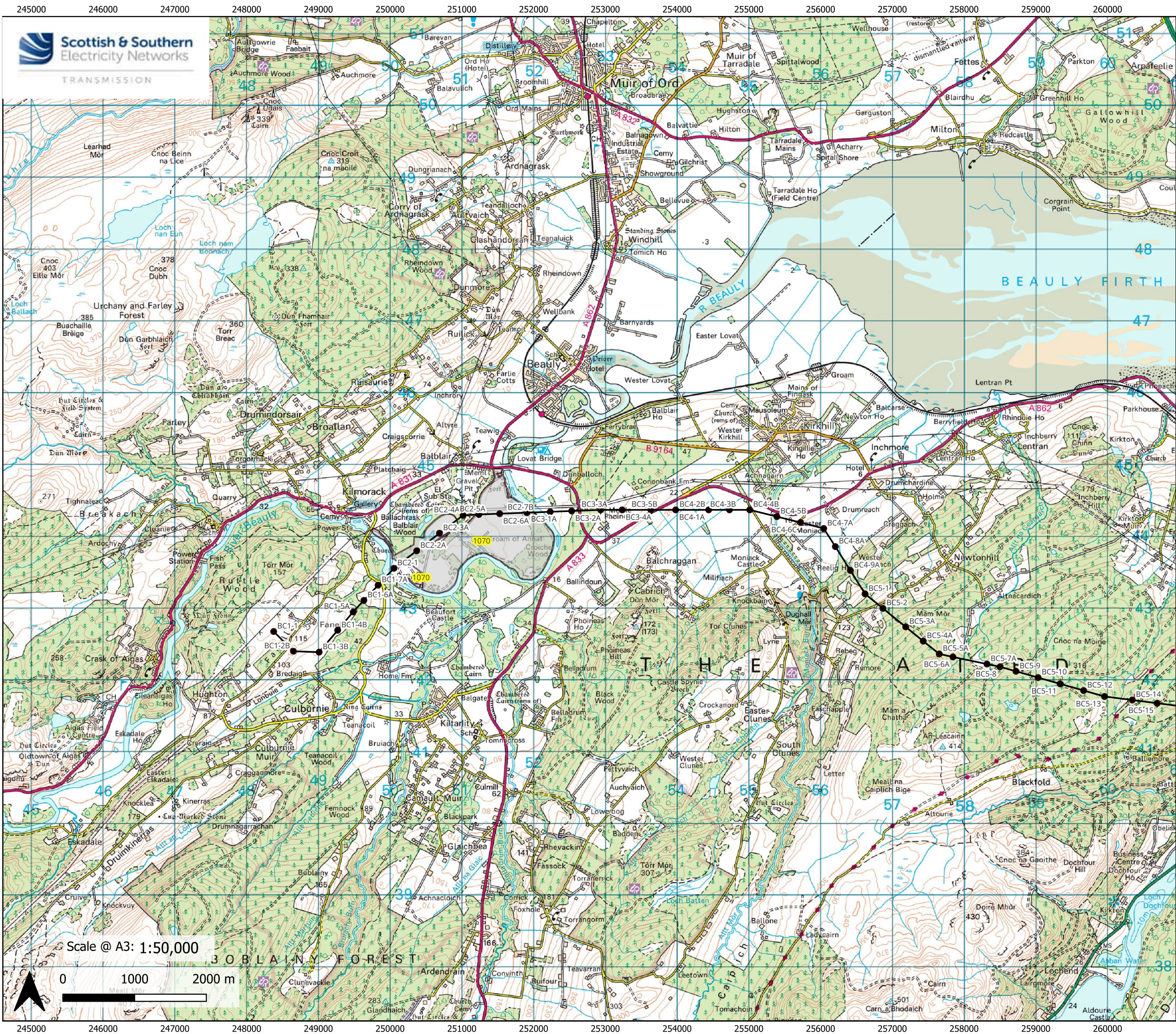
Table 8.4: Woodland removal for Management Felling, outwith OC

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 the Proposed 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 3.49 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.

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>



Legend

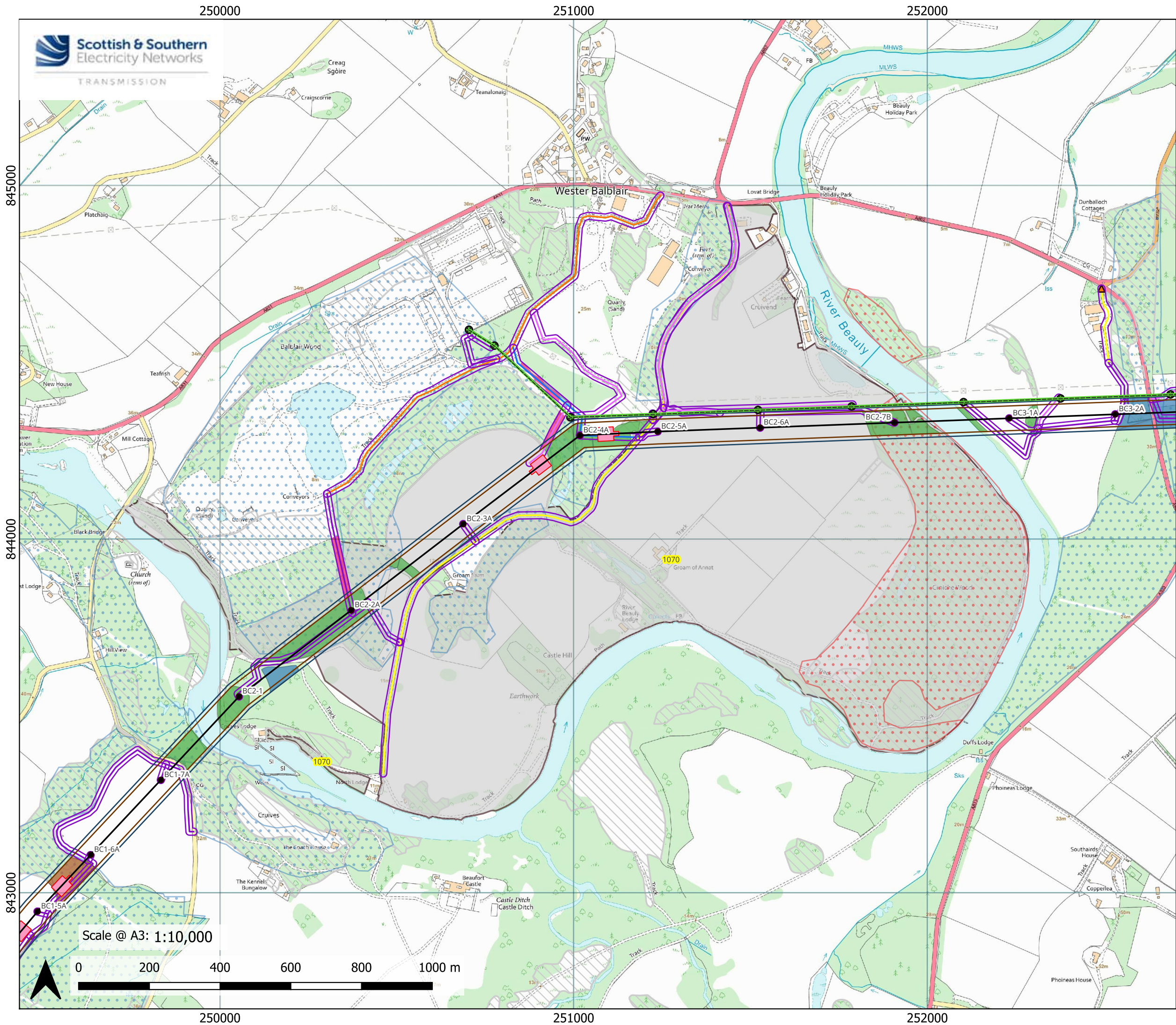
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- ▭ Landownership Boundary/Parcel

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

Title:
Figure 12.1.5a Parcel 1070 Location Map

Drawn by: LA



Legend

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

Proposed Bellmouth

- Proposed Bellmouth - Upgrade

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
- Native Woodland Access Track Felling
- Native Woodland Survey Scotland (NWSS)

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 12.1.5b** Parcel 1070 Proposed Felling Requirements

Drawn by: LA