

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

Appendix 12.1.31: Woodland Report Parcel 13202



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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 13202. 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 12.1.31a: Parcel 13202 Location Map**. The wood is found 3.4 km southeast of Inverness within the Highland Council region (NH 695833 398961) The forest is a semi-mature mixed conifer plantation. The Proposed OHL Alignment intersects this parcel at its far southern tip. The section of the forest impacted by the Proposed OHL Alignment is a small section of the forest just south of the existing Beauly to Blackhillock OHL in the southern extent of the ownership.

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) 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 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

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](#)

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. 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 90 m in width is required within the commercial forest within Woodland Parcel 13202 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.31b: Parcel 13202 Proposed Felling Requirement**.

3.2 Access Track Route Design

- 3.2.1 The tracks associated with this section of the OHL are within the OC.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in December 2024. The forest consists of productive Sitka spruce (SS) plantation, which has recently been thinned. The crop is of variable height depending on ground conditions with an estimated height of 20 metres. The section of Proposed OHL Alignment is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) score of 15^{3,4}.
- 4.1.2 The National Soil Map of Scotland⁵ identifies the site as being predominantly humus iron podzols. Rooting is limited due to poor draining soils.
- 4.1.3 The Ecological Site Classification (ESC)⁶ identifies the site as having a cool, moderately exposed and wet climate. The soils have a moist moisture status and a poor nutrient status.
- 4.1.4 There are no environmental designations on the area affected by the Proposed OHL Alignment.
- 4.1.5 The landscape is characterised by the flat moorland plateau south of Inverness.
- 4.1.6 A thinning permission is in place for the conifer plantation (FPA-10852).

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

⁶ Forest Research Decision Support Tools. Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

- 4.1.7 The Proposed OHL Alignment consists of a section of OC between towers CB2-9 and CB2-10 along with the footprint of tower CB2-10. The Proposed OHL Alignment will run parallel to, and south of, the existing Beauly to Blackhillock line.
- 4.1.8 There is existing forest road infrastructure across the neighboring property which appears to have been used for forest management in recent years. The topography allows for easy building of infrastructure and timber extraction.
- 4.1.9 Considering the volume, species, quality, and location felling using harvester/forwarder combinations is recommended. Timber could easily be extracted to the existing infrastructure to the unclassified C1068 Daviot to Dunlichty Road, this is classified as a Consultation Route by the Timber Transport Forum^{7,8}.

4.2 Photo Record – Operational Corridor Assessment

- 4.2.1 The following photographs provide a visual record of key locations along with 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: Recently thinned Sitka spruce crop adjacent to existing Beauly-Blackhillock OHL (NH 696113 399434, looking southwest)



⁷ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

⁸ Roads which are key to timber extraction but, for a variety of reasons, are not up to Agreed Route Standard. Consultation with the Local Authority is required before any timber haulage takes place and it may be necessary to limit the amount, timing or frequency of timber haulage, or to specify lower impact vehicles to prevent damage. All minor roads (B, C and unclassified roads) should be treated as Consultation Routes by default unless covered by one of the other categories (e.g. Severely Restricted Route).

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 **Chapter 12: Forestry in Paragraph 12.4.22**. 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)⁹ for the implementation of the works required.
- 5.1.2 There is a medium risk of windblow in this area of forest. The development of the existing OHL has resulted in a significant brown edge along the northern side; this has subsequently recovered without severe wind damage. More recently thinning has been carried out in the wider forest area, indicating stability is expected to be reasonable. However, rooting depth is limited and exposure moderate.

6 Woodland Management Impact

- 6.1.1 Considering the current land use, it is expected the Proposed OHL Alignment will have a medium impact on the forest management within and south of the OC. The remaining productive forest area south of the OC is unlikely to be viable due to its size and isolation. It is therefore recommended that this area is felled alongside the OC.
- 6.1.2 The OC will furthermore reduce the area available for growing productive conifer which will have a lasting impact on the forest productivity.
- 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future forest management. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 6.1.4 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).
- 6.1.5 The total loss of broadleaved woodland resulting from the Proposed OHL Alignment is 0.0 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 In discussion with the landowner the area south of the OC could be retained to remove a replanting obligation on the landowner in the short term. The area would likely stabilise after felling but would be isolated. Within the OC no mitigation opportunities were found.

7.2 Restructuring

- 7.2.1 Considering the even age of the wider forest the felling and restocking outwith the OC improves forest structure. However, due to the size of this area the effect is negligible.

⁹ Scottish Forestry (2024). Available online at: <https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs>

¹⁰ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: <https://ukfisa.com/Safety/Safety-Guides/fisa-804>

7.2.2 The felling of the OC for the development will create new green edges, which will allow the landowner to work to in the future if that is desired. The area south of the OC is however too small to be considered a significant management unit and will become isolated and is therefore unlikely to be viable for production.

7.3 Restocking

7.3.1 In case the management felling south of the OC takes place there will 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 OC between towers CB2-9 and CB2-11. 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	Mixed conifer (90 m)	1.37
Total area		1.37

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Mixed conifer	1.37
Total area		1.37

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.37
Total Compensatory Planting Area	1.37
Total Net Loss of Woodland Area	0.00

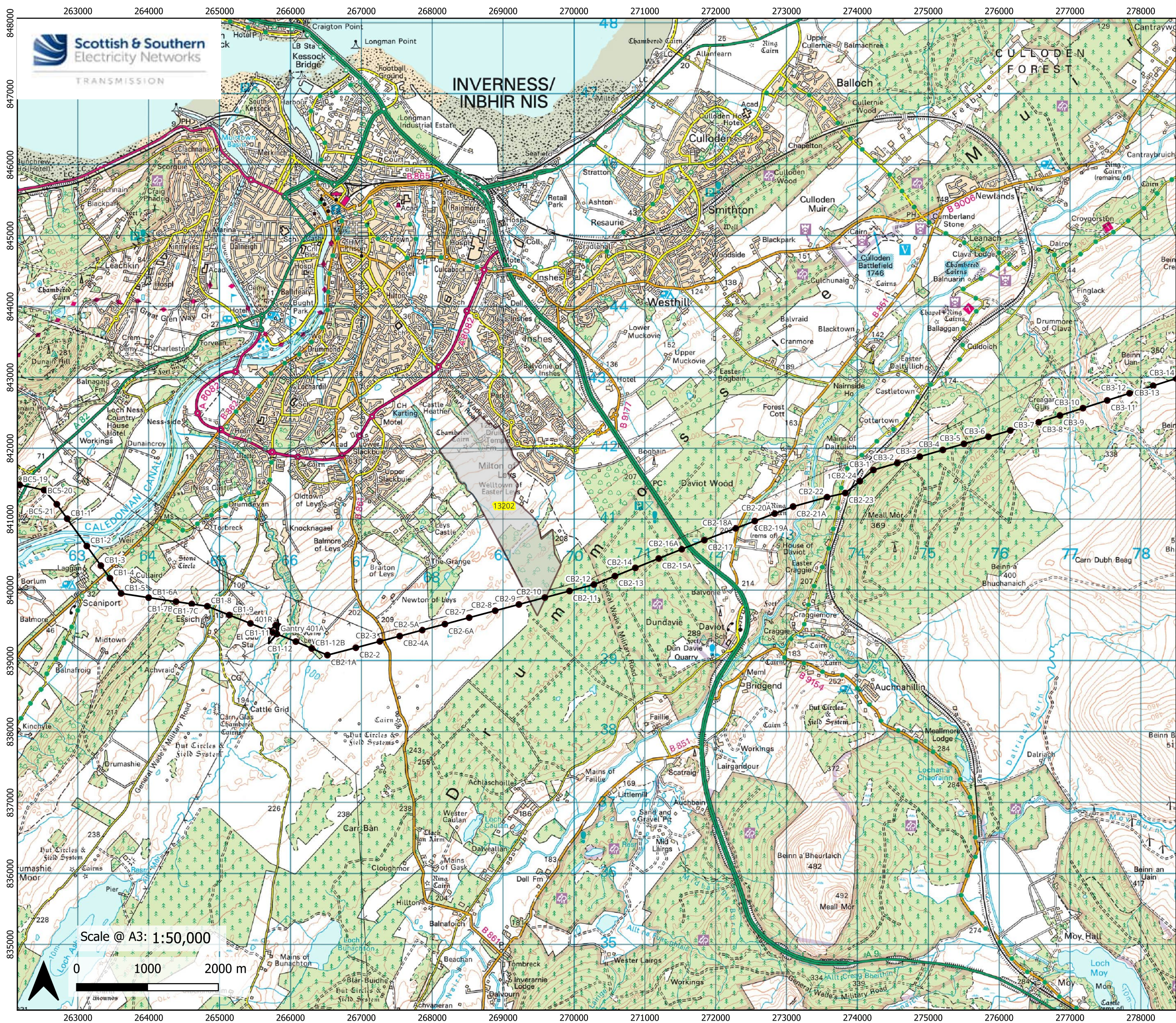
Table 8.4: Woodland removal for Management Felling, outwith OC

Item	Woodland Type	Area (ha)
Management Felling	Mixed conifer	1.10
Replanting / Restocking Opportunities	Mixed Conifer	1.10
Net Loss of Woodland Area		0.00

9 Compensatory Planting

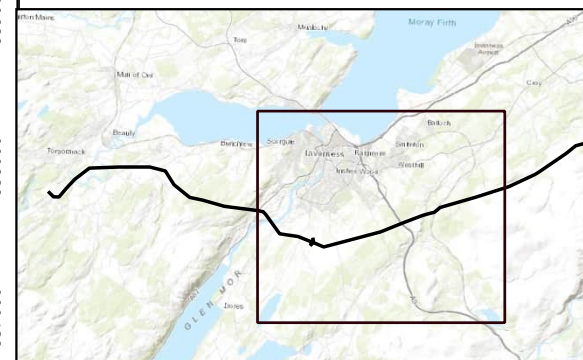
- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹¹. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically applies to areas where tree removal is necessary for the Proposed Development See **Appendix 12.3 Compensatory**.
- 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 1.37 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

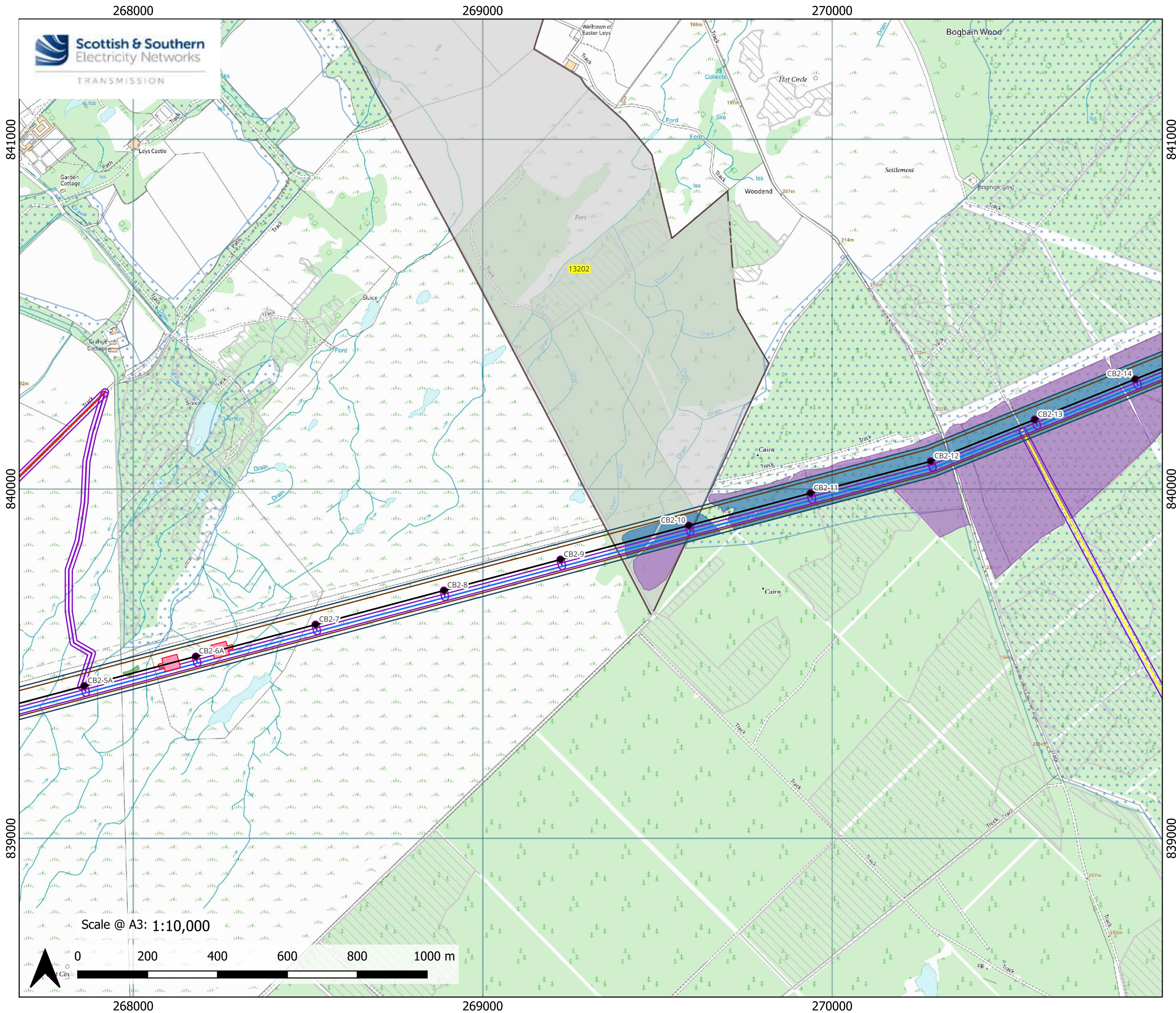


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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.31a Parcel 13202 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 – Very Poor Condition
- Proposed Access – Permanent
- Proposed Access – Temporary

Proposed Felling Requirements

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

Ancient Woodland Inventory

- Long-Established (of plantation origin)
- Landownership Boundary/Parcel
(Landownership boundary extends beyond map extent – relevant area shown)

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

Title: **Figure 12.1.31b** Parcel 13202 Proposed Felling Requirements

Drawn by: LA