

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

**Appendix 12.1.33: Woodland Report Parcel 344,
Balvonie of Daviot Wood**



APPENDIX 12.1.33: Woodland Report Parcel 344, Balvonie of Daviot Wood

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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 Parcel 344, Balvonie of Daviot Wood West. 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 12.1.33a Parcel 344 Location Map**. Balvonie of Daviot Wood (NH 706681 402592) is situated approximately 6.4 km southeast of Inverness, and directly to the west of the A9 trunk road.

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 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.

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 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 throughout the woodland area within Woodland Parcel 344 and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.33b: Parcel 344 Proposed Felling Requirements**.

3.2 Access Track Route Design

- 3.2.1 A permanent access track within the OC is proposed in the western section of the Proposed Development within this parcel, between towers CB2-12 and CB2-15A. To access the western end of the OC it is proposed to upgrade an existing bellmouth at Grid Reference NH 719221 389790 on the C1068 Daviot-Dunlichity road and thereafter upgrade an existing forest track which runs west and then northwest for approximately 2.4 km to access the OC at tower CB2-13. To access tower CB2-16A and tower CB2-15A from the east, a temporary access track is proposed, leading from a temporary bellmouth created adjacent to the A9 trunk road at NH 715881 407011. This temporary track will run south and parallel to the A9 trunk road before entering the OC and turning west to access these two towers.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 In this parcel the Proposed OHL Alignment crosses over a structurally diverse conifer forest of mixed commercial species, dominated by Scots pine (SP) stands, often in mixture with Sitka spruce (SS), Japanese larch (JL) and Lodgepole pine (LP), with occasional pure stands of JL.
- 4.1.2 The Ecological Site Classification³ describes the site as having a cool, moderately exposed and wet climate. The soils are wet moisture status and very poor nutrient status. The area is moderately exposed with a maximum Detailed Aspect Method of Scoring score (DAMS) of 15^{4,5}, indicating some susceptibility to wind exposure but not extreme conditions.
- 4.1.3 The Soil Map of Scotland⁶ identifies the site as being predominantly humus-iron podsols with parent material of drifts derived from Old Red Sandstone strata, often with water-modified material.

³ Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁴ Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

⁵ 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.

⁶ National Soil Map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

- 4.1.4 The woodlands are identified as Long Established of Plantation Origin (LEPO) in the Scottish Ancient Woodland Inventory⁷.
- 4.1.5 The woodlands are identified in the Native Woodland Survey of Scotland⁸ as predominantly young, pole stage or pole stage immature woodland with 90% - 95 % native species and 80% - 90% canopy cover.
- 4.1.6 Between towers CB2-12 and CB2-14, there is a pure stand of JL, planted in 1951 as a fire belt, and lying adjacent to a mature stand of well thinned SP, occasionally in mixture with SS, all planted in 1950. Crops here are to 30 m in height.
- 4.1.7 Between towers CB2-14 and CB2-15A, there is a pure stand of SP, planted in 2011, well stocked and of good form and showing good rates of growth. Crops here are to 5 m in height.
- 4.1.8 Between towers CB2-15A and CB2-16A, there is a small stand of younger open grown native broadleaves, predominantly Downy birch (DBI), on both sides of the existing track lying within the OC. Directly southeast of tower CB2-15A, there is a recently restocked area of SP and crossing the forest track within the OC is a small stand of mature JL, planted in 1953. The Proposed OHL Alignment then passes through a thinned stand of pure SP, planted in 1997, directly to the west, and at, tower CB2-16A. This crop shows good form and trees to a height of 12 m.

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.

⁷ The Scottish Ancient Woodland Inventory. Available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

⁸ Native Woodland Survey of Scotland. Available at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

Photo 1: View at NH 703571 400941 between towers CB2-12 and CB2-13, looking east. Showing JL fire belt and mixed conifer stand to the east



Photo 2: View at NH 706151 402442 between towers CB2-12 and CB2-13 looking southwest at thinned SP crop, planted 1951



Photo 3: View at NH 710701 403752 looking north into SP crop planted in 2011, between towers CB2-14 and CB2-15A



Photo 4: View at NH 712000 404491 at tower CB2-15A. Looking southeast at recently restocked SP and a mature stand of JL, lying within the OC



Photo 5: View at NH 714891 405551 Looking northwest with thinned SP crop planted in 1997, just west of tower CB2-16A



Photo 6: View at NH 703921 400941 looking south on proposed existing access track, to be upgraded to facilitate access to OC at tower CB2-13



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 the **Section 12.4**. 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) for the implementation of the works required.
- 5.1.2 Given the maturity and character of the crops in this parcel there is a significant risk of windblow in crops adjacent to trees to be felled within the OC.

6 Woodland Management Impact

- 6.1.1 These woodlands are currently managed under the Inverness Woods Land Management Plan (LMP), Plan Reference 030/517/407⁹. The felling in the OC will require consideration of adjacent management felling to remove the risk of windblow in adjacent crops. This will bring forward the proposed felling dates of adjacent crops – presently identified within the LMP as between 2029-2033 between towers CB2-12 to CB2-14; beyond 2053 between towers CB2-14 and CB15A, and 2044-2048 directly to the east of, and at, tower CB2-16A.
- 6.1.2 Between towers CB2-15A and CB2-16A, an area of JL identified as Long-Term Retention will be felled within the OC.
- 6.1.3 This management felling and loss of an area of long-term retention may require rephasing of identified felling coupes to the north of the existing OHL in order to maintain desired age class and / or species diversity and compliance with the UK Forestry Standard. In the long-term, woodland management will be impacted as the area of land available for woodland is reduced.
- 6.1.4 The infrastructure upgraded for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide improved long-term access. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner. Track access improvements will not be required prior to mature conifer felling. The C1068 Daviot to Dunlichity public road is identified as a Consultation Route in the Timber Transport Forum's Agreed Routes Map¹⁰.
- 6.1.5 The Proposed OHL Alignment 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 (Forest Industry Safety Accord, FISA) 804 "Electricity at Work: Forestry"¹¹).
- 6.1.6 The total loss of Native Broadleaved woodland resulting from the Proposed Development is 0.13 ha. The total loss of Conifer woodland resulting from the Proposed Development is 10.55 ha.

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

- 7.1.1 To mitigate the landscape impact of the Proposed Development, a re-planting strategy for areas at Daviot has been set out in the 'Landscape Replanting Proposals' in the Landscape chapter as shown in **Figure 12.33.1c: Parcel 344 Proposed Planting Areas**.

7.2 Restructuring

- 7.2.1 There are opportunities to rephase coupes in the area to the north of the existing OHL to maintain mature cover and a varied age structure, and to identify alternative Long-Term Retentions. Therefore, there is no positive or negative impact of the felling on the structure within the ownership.

7.3 Restocking

- 7.3.1 Restocking would be carried out by the landowner in all areas out with the OC with suitable species to continue the commercial viability of the woodland.

⁹ Inverness Woodlands Land Management Plan, Forestry and Land Scotland. Available at: https://forestryandland.gov.scot/media/0wzfm3pz/nr_map4c-5c_management-map-and-future-species-map_daviot_subcomp.pdf

¹⁰ Timber Transport Forum's Agreed Routes Map. Available at: <https://timbertf.maps.arcgis.com/apps/webappviewer/index.html?id=4a23d4910e604b71872956441113c83c>

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

7.3.2 As set out in **Appendix 7.6** the Landscape chapter under the 'Forestry Landscape Mitigation Principles' restocking can take place within the OC to mitigate the visual impact of the Proposed Development. Restocking within the OC will be carried out by the Applicant as shown in **Figure 12.1.33c: Parcel 344 Proposed Planting Areas**.

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 CB2-12 to CB2-16A. They detail the areas designated for clear felling 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	Native Broadleaved Woodland (90 m)	0.13
OC felling	Conifer Woodland (90 m)	10.55
Total area		10.68

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland (90 m)	0.13
Compensatory Planting Area	Conifer Woodland (90 m)	10.55
Total area		10.68

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	10.68
Total Compensatory Planting Area	10.68
Total Net Loss of Woodland Area	0.00

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

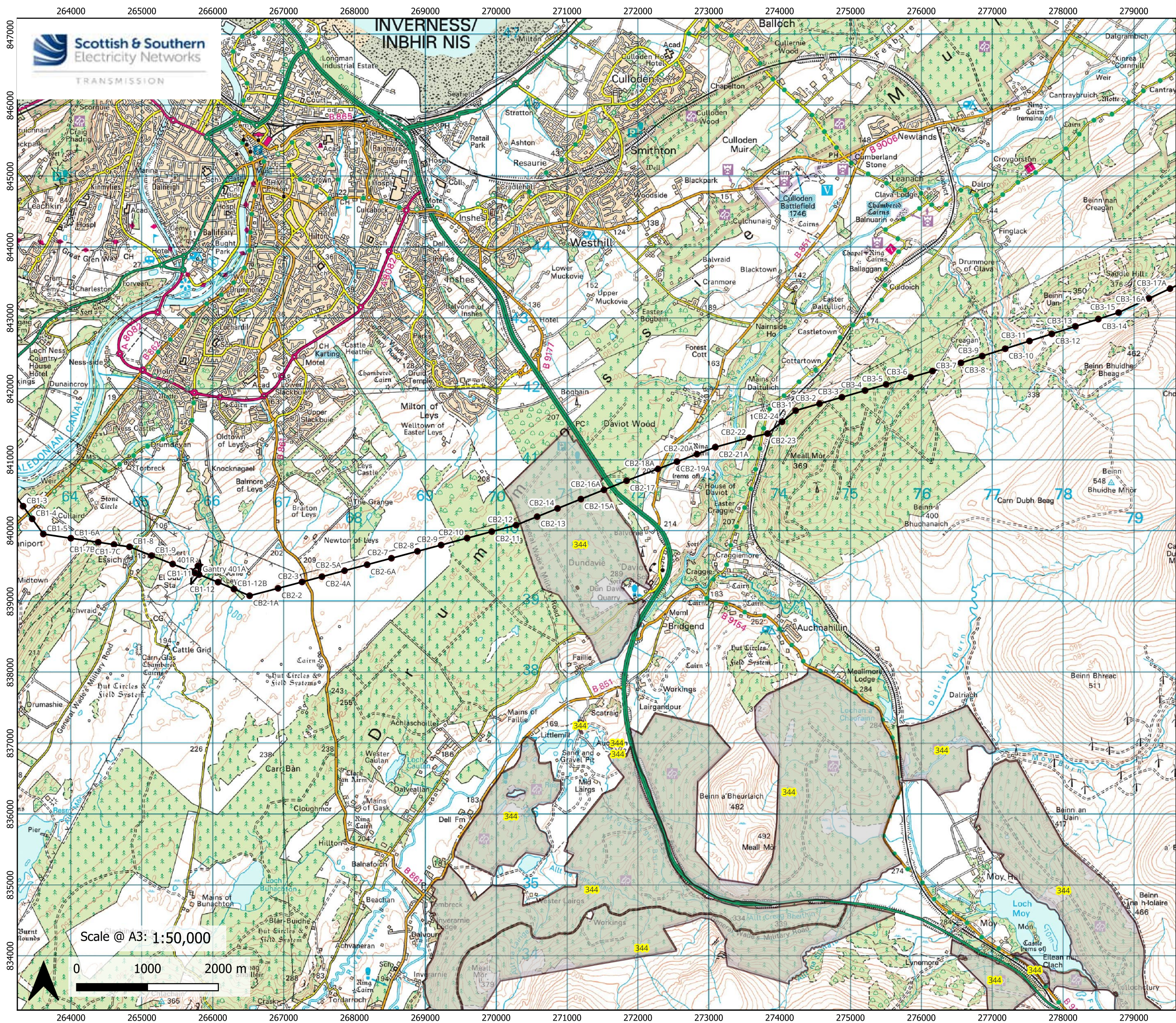
Item	Woodland Type	Area (ha)
Management Felling	Conifer Woodland	20.10
Replanting / Restocking Opportunities		20.10
Net Loss of Woodland Area		0.00

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)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 Strategy**.

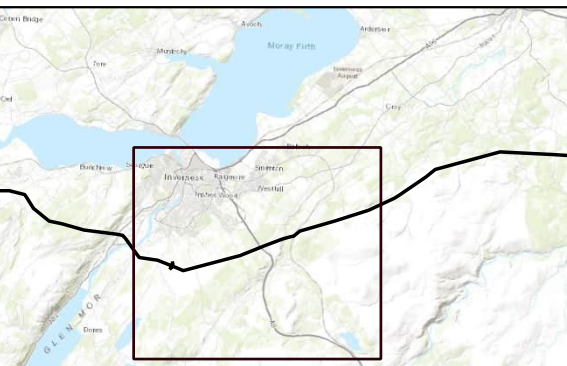
¹² Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: <https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285>

- 9.1.2 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 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 10.68 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.



Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Landownership Boundary/Parcel
(Landownership boundary extends beyond map extent – relevant area shown)

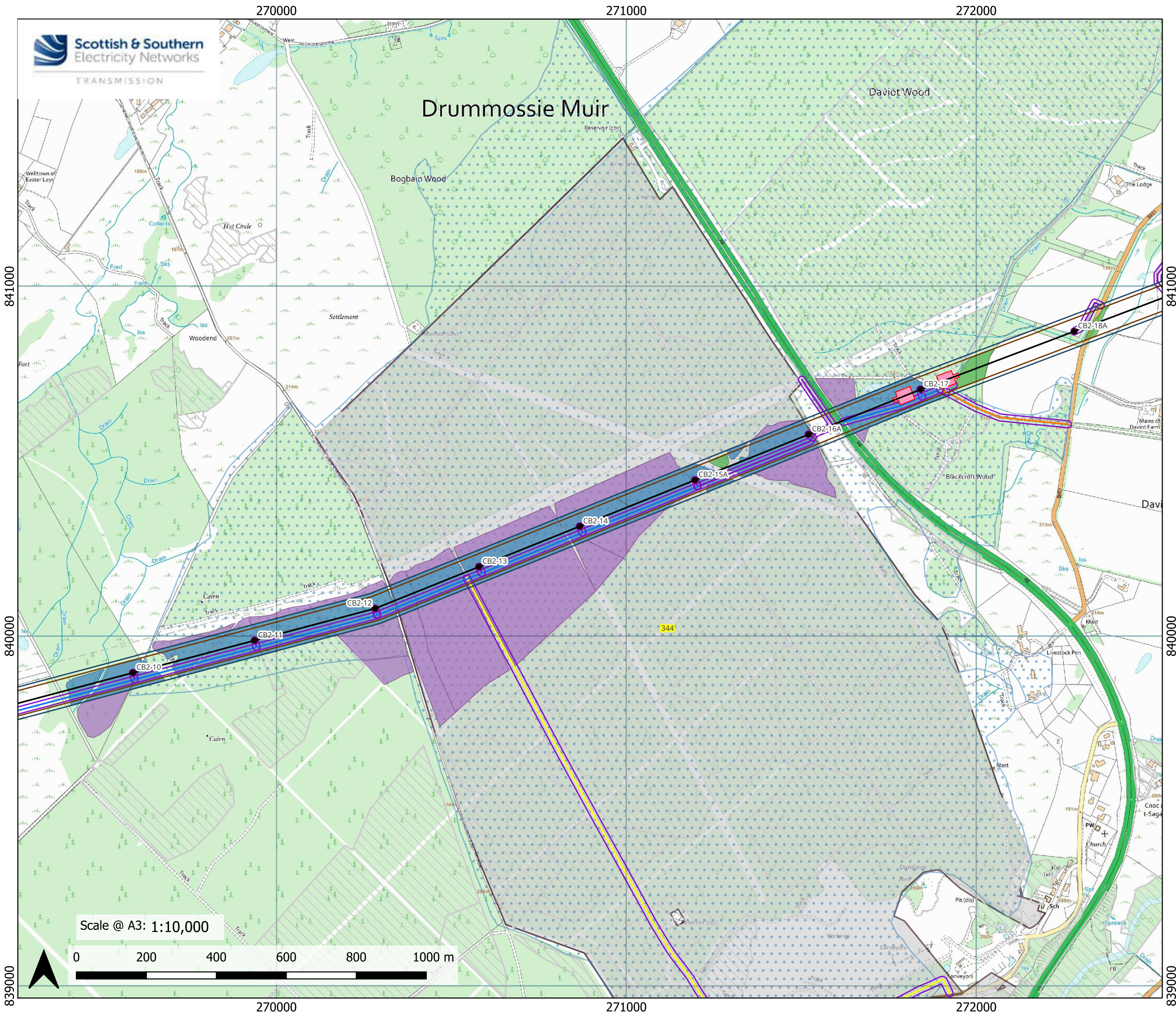


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Project:
Beauly to Blackhillock to New Deer to Peterhead 400 kV
OHL Project

Title:
Figure 12.1.33a Parcel 344 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

- 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

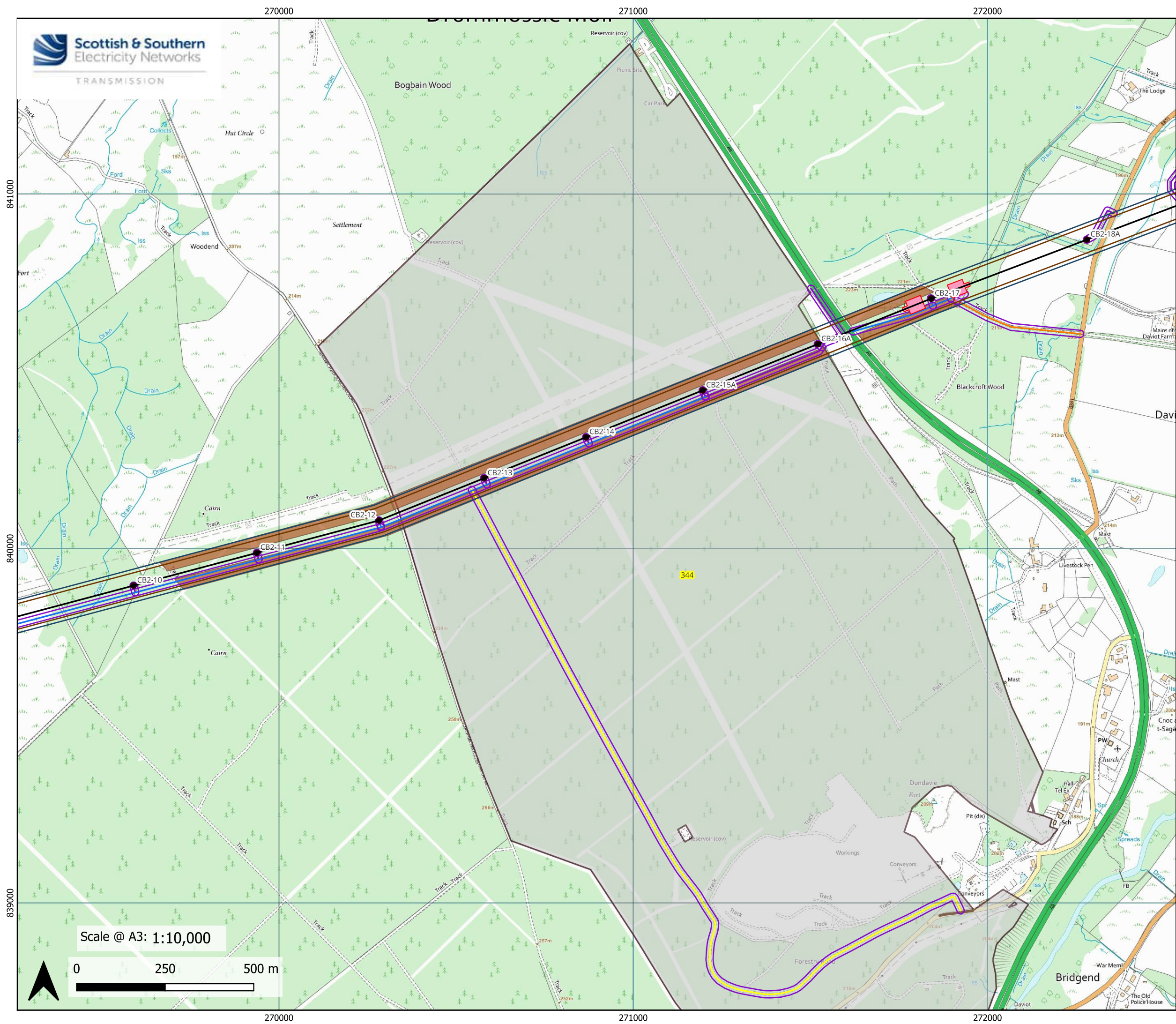
- Long-Established (of plantation origin)
- Landownership Boundary/Parcel
(Landownership boundary extends beyond map extent – relevant area shown)

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

Title: **Figure 12.1.33b** Parcel 344 Proposed Felling Requirements

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
- Landownership Boundary/Parcel
(Landownership boundary extends beyond map extent – relevant area shown)
- Forest Edge Planting Locations

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

Title:
Figure 12.1.33c Parcel 344 Proposed Planting Areas

Drawn by: LA