Scottish & Southern Electricity Networks
TRANSMISSION

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

Appendix 12.1.24: Woodland Report Parcel 1086, Dalreoch Woodland

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Appendix Figures

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 Dalreoch Woodland, Parcel 1086. 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 12.24.1a: Parcel 1086 Location Map**. Dalreoch woodlands are situated approximately 4.8 km southwest of Inverness at Dochgarroch and lie predominantly between the A82 trunk road and the Caledonian Canal, between Grid Reference NH 621011 415900 and NH 628921 409981. They are accessed from an estate track leading off the A82 trunk road at Dunain Mains Farm.

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) 2002[1] and The Electricity Act 1989[2]. 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.
- 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.

[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

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 70 m in width is required throughout the woodland area within Woodland Parcel 1086 where native woodland is present, and 90 m where mature Scots pine woodland is encountered and taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.24b: Parcel 1086 Proposed Felling Requirement**.

3.2 Access Track Route Design

3.2.1 The access track route design proposed in this section of the Proposed OHL Alignment consists of the upgrading an existing access track, (currently in poor condition) and the creation of temporary floated access tracks to service four individual towers. The access track design route design in this parcel does not impact woodland over and above the felling required within the OC.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

4.1.1 In this parcel the Proposed OHL Alignment crosses over predominantly mature native woodland, in mixture with non-native conifer species in a mature landscape mosaic of agricultural fields and mature woodlands between Grid Reference NH 621011 415900 and NH 628921 409981.

4.1.2 Directly to the west of tower BC5-19, on a steep bank, is a stand of predominantly mature Sessile Oak (SOK), mature Scots pine (SP), Hybrid larch (EL) and Downy birch (DBI), with an understory of Rowan (ROW), Hazel (HAZ) and DBI.

4.1.3 Directly to the east of the A82 trunk road and lying between BC5-19 and BC5-20, the Proposed OHL Alignment passes through a line of six semi-mature SOK planted on what appears to be an old field boundary.

4.1.4 To the east of tower BC5-20 the Proposed OHL Alignment passes through a mature woodland planted on a prominent bank, with Silver birch (SBI) and SOK dominant in the canopy with the occasional EL. The woodland is grazed, and the ground layer is dominated by grasses, bracken and gorse. Some of the SBI displays early-stage veteran features such as deadwood, cavities, or a hollowing trunk, but not extensively.

4.1.5 Between towers BC5-21 and CB1-1 is a small area of woodland on a steep bank at a field boundary, comprising mature SOK, with mature Hybrid larch (HL), SP and DBI. Some of the larger trees have suffered wind damage, with tops and large limbs blown out.

4.1.6 South of Tower CB1-1 the Proposed OHL Alignment crosses an area of sparse woodland on a steep bank between two agricultural fields. The tree species present include ROW, SOK and AH and the ground layer is dominated by bracken, gorse and broom. Canopy cover in the OC is estimated at 10%

4.1.7 The Ecological Site Classification[3] describes this site as having a warm, sheltered and moist climate. The soils are slightly dry moisture status and very poor nutrient status, with a maximum Detailed Aspect Method of Scoring (DAMS) of 9[4,5].

4.1.8 The Soil Map of Scotland[6] identifies the woodlands as being predominantly humus iron podsols with parent material of fluvioglacial and raised beach sands and gravels derived from acid rocks.

4.1.9 The woodland between tower BC5-21 and CB1-1 is identified in the Scottish Ancient Woodland Inventory[7] as Long Established of Plantation Origin (LEPO).

4.1.10 The woodlands are described in the Native Woodland Survey of Scotland[8] as follows:

- Directly east of tower BC5-19 - Upland oakwood, with 60% native species, with a mature canopy and varied woodland structure;
- Between towers BC5-19 and BC-20; - Mature native woodland of unidentifiable type, being 70% native species and having 80% canopy cover with a mature canopy and varied woodland structure

4.1.11 Between towers BC5-21 and CB1-1; - Mature nearly native woodland of unidentifiable type, being 40% native species and having 70% canopy cover with a mature canopy and varied woodland structure.

4.1.12 The woodlands were previously managed under Rural Development Contract 4312150. This Forest Plan expired in December 2023.

4.1.13 The closest forest road suitable for haulage within the ownership is the A82. This is classed as an Agreed Route[9] by the Timber Transport Forum[10]. Considering the quality and quantity of the material and the landform operations can be carried out by harvester / forwarder and hand felling combinations.

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.

[3] Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: http://www.forestdss.org.uk/geoforestdss/
[4] Forest Research (n.d.). 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] 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] 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
[8] 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
[9] Roads which can be used for timber haulage without restriction other than as regulated by the Road Traffic Act 1988. "A" roads (e.g. the A9) are classified as Agreed Routes by default unless covered by one of the other categories (e.g. Consultation Route).
[10] 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 1: View at NH 621651 415212 at tower BC5-19, looking northwest. Showing mature native woodland, dominated by SOK.

Photo 2: View at NH 623421 414482 between towers BC5-19 and BC5-20 looking southeast. Showing a line of planted SOK.

Photo 3: View at NH 624322 414741 between towers BC5-19 and BC5-20 looking south. Mature native woodland with SOK and SBI as dominant in the canopy and, with understorey of gorse and bracken in grazed woodland.

Photo 4: View at NH 627991 410101 between towers BC5-21 and CB1-1 looking northwest. Mature native woodland with SOK and EL in mixture on steep bank between agricultural fields.

Photo 5: View at NH 628572 409351 southwest of tower CB1-1, looking southeast open woodland with regenerating native species.

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 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 (UK Forestry Standard) UKFS[11] for the implementation of the works required.

5.1.2 There is a low risk of windblow as a result of the open grown character of adjacent trees at these locations.

6 Woodland Management Impact

6.1.1 In the long-term woodland management will be impacted as the area of land available for woodland is reduced.

6.1.2 The infrastructure upgraded for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide long term access.

[11] 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).

6.1.3 Track access improvements will be required prior to felling, to facilitate removal. The A82 trunk road is identified as an Agreed Route in the Timber Transport Forum's Agreed Routes Map[12].

6.1.4 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 (reference Forest Industry Safety Accord (FISA) 804 "Electricity at Work: Forestry"[13]).

6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 1.53 ha.

7 Mitigation Opportunities

7.1.1 Given the topography south of tower CB1-1, there may be opportunity to retain lower growing shrubs and trees within the OC.

7.1.2 There may be opportunity to carry out compensatory planting and or natural regeneration within the parcel to replace young woodland within the OC. This should be discussed with 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 tower BC5-18A and to the boundary of the parcel southeast of tower CB1-1. They detail the areas designated for clear felling within the OC.

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
OC felling	Native Broadleaved Woodland (70 m)	1.53
Total area		**1.53**

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland (70m)	1.53
Total area		**1.53**

Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	1.53
Total Compensatory Planting Area	1.53
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**

[12] Timber Transport Forum (2025). Agreed Route Map for Timber Transport Forum. Available at: https://timbertf.maps.arcgis.com/apps/webappviewer/index.html?id=4a23d4910e604b71872956441113c83c
[13] 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).

9 Compensatory Planting.

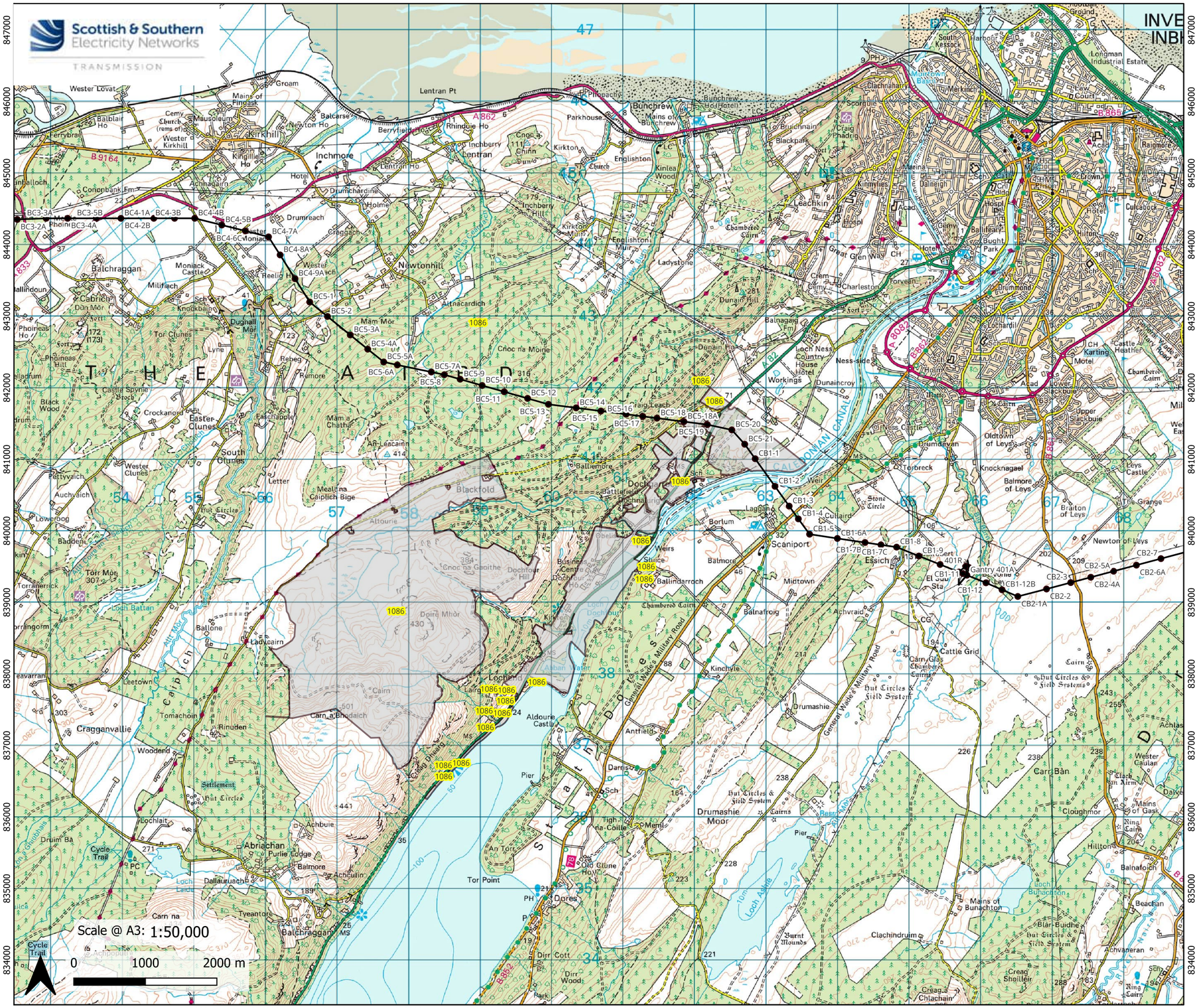
9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)[14]. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically 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 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 is under the CoWRP's 1.53 ha.

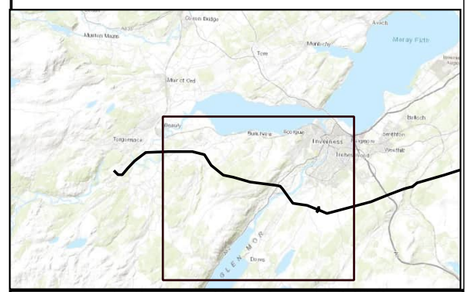
9.1.4 In order to provide a greater balance limiting long-term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via off-site compensatory planting within the local authority area. It is proposed that full details of the areas subject to this off-site compensatory planting is notified to Scottish Forestry prior to energising the OHL.

[14] 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



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

Title:
Figure 12.1.24a Parcel 1086 Location Map

Drawn by: LA

261000 262000 263000

842000 841000 840000

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BC5-15 BC5-16 BC5-17 BC5-18 BC5-18A BC5-19 BC5-20 BC5-21

CB1-1 CB1-2 CB1-3 CB1-4 CB1-5

1086

Scale @ A3: 1:10,000

0 200 400 600 800 1000 m

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 - Access Only/ ATV

Proposed Access Tracks

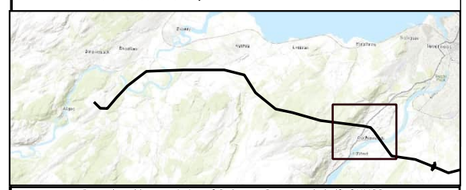
- Existing Access – Upgrade – Good/Fair Condition
- Existing Access – Upgrade – Poor Condition
- Existing Access – Upgrade – Very Poor Condition
- Proposed Access – ATV or Temporary Trackway
- Proposed Access – Permanent
- Proposed Access – Temporary
- Proposed Access – Temporary Floated

Proposed Felling Requirements

- Native Woodland Operational Corridor Felling
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Mixed Conifer Access Track Felling
- Site of Special Scientific Interest (SSSI)
- Native Woodland Survey Scotland (NWSS)

Ancient Woodland Inventory

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



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

Title: **Figure 12.1.24b** Parcel 1086 Proposed Felling Requirements

Drawn by: LA