

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

**Appendix 12.1.71: Woodland Report Parcel 650,  
Glen of Rothes Farm**



## APPENDIX 12.1.71 – Woodland Report Parcel 650, Glen of Rothes Farm.

|     |                                                        |    |
|-----|--------------------------------------------------------|----|
| 1   | Introduction.....                                      | 2  |
| 2   | Woodland Property.....                                 | 2  |
| 3   | Development Requirements.....                          | 2  |
| 3.1 | 400 kV Overhead Line Infrastructure Requirements ..... | 2  |
| 3.2 | Access Track Route Design.....                         | 3  |
| 4   | Woodland Characteristics.....                          | 3  |
| 4.1 | Woodland Composition and Site Conditions .....         | 3  |
| 4.2 | Photo Record – Operational Corridor Assessment.....    | 4  |
| 5   | Windblow Risk.....                                     | 7  |
| 6   | Woodland Management Impact .....                       | 8  |
| 7   | Mitigation Opportunities.....                          | 8  |
| 7.1 | Woodland Mitigation Measures.....                      | 8  |
| 7.2 | Restructuring.....                                     | 8  |
| 7.3 | Restocking .....                                       | 8  |
| 8   | Net Effect / Summary.....                              | 9  |
| 9   | Compensatory Planting .....                            | 10 |

### Appendix Figures

Figure 12.1.71a: Parcel 650 Location Map

Figure 12.1.71b: Parcel 650 Proposed Felling Requirement

# 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 650, Glen of Rothes Farm. 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 12.1.71a: Parcel 650 Location Map**. The woodlands in this parcel are found on either side of the A94 between Elgin and Rothes, 2 km south of Fogwatts in the Moray Council area (NJ 243455 546541). On the western side they consist of mature forest and restock, on the eastern side, a new woodland creation.

# 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<sup>1</sup> and The Electricity Act 1989<sup>2</sup>. 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.

<sup>1</sup> UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: [The Electricity Safety, Quality and Continuity Regulations 2002](#)

<sup>2</sup> 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 commercial conifer woodland within Woodland Parcel 650 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.71b: Parcel 650 Proposed Felling Requirement**.

## 3.2 Access Track Route Design

- 3.2.1 Temporary access tracks are proposed through mature woodland towards tower CB10-18. Other tracks proposed in this section of the OHL are within the OC or make use of existing tracks.

# 4 Woodland Characteristics

## 4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. On the east of the A941 the land use has historically been agricultural but the ground above the Glen Burn is currently being afforested. West of the A941 there is a history of forestry.
- 4.1.2 In the western section recent forest operations have taken place. South and east of the forest road the mature crop has been felled. Fencing and restocking has taken place with Norway spruce south of the forest road, within a fence, and mixed broadleaves, mainly consisting of birch and rowan, east of the forest road in tubes. The remaining mature crop consists of three distinctly different crops. Firstly, mature Scots pine on the western boundary. Subsequently a section of young widely spaced Sitka spruce further east and lastly, a mature Sitka spruce and lodgepole pine area which suffered significant wind damage.
- 4.1.3 In the eastern section the OC only cuts a corner of approximately 0.3 ha of this ownership. This area does, however, form part of a recent woodland creation (23FGS75494) and, at the time of writing, has been fenced and prepared for planting. It can therefore be assumed that going forward part of this area is restocked in line with the approved woodland creation scheme with native broadleaves.
- 4.1.4 The landscape is characterised by upland moorland and forestry however this parcel is found within a more sheltered, agricultural setting.

- 4.1.5 The section of proposed powerline is sheltered with a maximum Detailed Aspect Method of Scoring (DAMS) score of 9<sup>3,4</sup>.
- 4.1.6 The Ecological Site Classification (ESC)<sup>5</sup> identifies the site as having a cool, sheltered and moist climate. The soils have a moderately dry moisture status and very poor nutrient status
- 4.1.7 The National Soil Map of Scotland<sup>6</sup> indicates, the predominant soil type within the affected areas consists of humus-iron podsols. Soil conditions are variable, the majority of the eastern parcels are well drained with the exception of the remaining lodgepole pine and Sitka spruce area. Nutrient levels are moderate.
- 4.1.8 The recent woodland creation is taking place on historical agricultural land and therefore nutrient levels are likely high and drainage good.
- 4.1.9 No environmental designations were found within this parcel.
- 4.1.10 The area was previously covered under a forest plan (4096390) which expired in 2023.
- 4.1.11 The Proposed OHL Alignment consists of a section of OC between towers CB10-18 and CB11-1.
- 4.1.12 There is existing forest road infrastructure on the west side of the A941 which has recently been used for forestry operations. It is likely that this forest road is shared with the property further west (parcel 18326). Timber could easily be extracted to the existing infrastructure and onto main roads. This is classed as an Agreed Route by the Timber Transport Forum<sup>7,8</sup>.
- 4.1.13 Mature crops can be removed using harvester / forwarder combinations. Recent planting can be pulled out by hand to minimise environmental impact of operations or mulched. Tubes and stakes will need to be removed by hand.

## 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.

---

<sup>3</sup> Forest Research (2025). Available at: <http://www.forestdss.org.uk/geoforestdss/>

<sup>4</sup> 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.

<sup>5</sup> Forest Research Decision Support Tools. Ecological Site Classification. Available at: <http://www.forestdss.org.uk/geoforestdss/>

<sup>6</sup> Scottish Government (2024). National soil map of Scotland. Available at: <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/>

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

<sup>8</sup> Agreed Routes 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 assumed to be Agreed Routes unless covered by one of the other TTG classifications (e.g. Consultation Route).

Photo 1: Fenced and planted Norway spruce within OC west of A941 and south of forest road (NJ 242915 546664, looking southwest)



Photo 2: Planted and tubed broadleaves and remnant Scots pine west of A941 (NJ 242551 546874, looking northeast)



Photo 3: Mature Scots pine on western edge of ownership with younger Sitka spruce in the distance (NJ 241145 544797, looking northeast)



Photo 4: Boundary with property to the north showing fence line and high-water table with Sitka spruce crop on left (NJ 241886 546717 looking northwest)



Photo 5: Wind damaged Lodgepole pine and Sitka spruce and existing forest road (NJ 242107 546516, looking southwest)



## 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 Forestry Chapter 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 Standards (UKFS)<sup>9</sup> for the implementation of the works required.
- 5.1.2 In the majority of this ownership there is little to no risk of windblow as there are windfirm edges or the crop is young. In the section of mature Scots pine and particularly the Sitka spruce and lodgepole pine there are obvious signs of instability and working to windfirm edges will be desirable to prevent wind damage after felling of the OC.

---

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

## 6 Woodland Management Impact

- 6.1.1 Where the OC cuts through the woodland on the western side of the A941 the mature forest will need to be removed through harvesting and extraction. An obvious windfirm edge exists between the mature pine and the adjacent crop to the north. The property boundary and edge at the Sitka spruce and lodgepole pine area is less obvious (see Photo 5) but is still expected to respond to felling with perhaps some minor wind damage.
- 6.1.2 Areas of recent planting can be manually removed considering age and size. In the areas of broadleaves, west of the A941 a reduced OC width should be considered to minimise impact. In the new planting this would reduce the necessary removal to almost zero as the majority of the OC is over the burn and surrounding shrub and gorse. Some remnant pines have been retained in the broadleaved areas west of the A941, these will likely require hand felling.
- 6.1.3 Operations will reduce the area of productive forestry but should not impact forest management at large scale.
- 6.1.4 The forest road is key to forest operations within the ownership and likely for the ownership to the west. The proposed powerline crosses over the forest road and as such might limit operations. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 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 (reference Forestry Industry Safety Accord (FISA) 804 “Electricity at Work: Forestry”<sup>10</sup>).
- 6.1.6 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.05 ha.

## 7 Mitigation Opportunities

### 7.1 Woodland Mitigation Measures

- 7.1.1 No opportunities for mitigation were identified in this ownership.

### 7.2 Restructuring

- 7.2.1 The ownership currently consists of a mix of ages and species. The removal of the crops within the OC will remove all mature crops and almost all young open grown Sitka spruce. Restocks of management felling will be in the same age class as the current restock site. The block is however found in a wider landscape of forestry with significant areas of forest of different species and age classes. Considering the proposals the impact on forest structure within the ownership are negative. In the wider landscape the proposals have a limited impact on forest structure.
- 7.2.2 The felling of the OC for the development will not create new green edges for the landowner as the OC cuts through the northernmost part of the ownership. There is therefore no long-term benefit for forest structure as a result of the Proposed OHL Alignment.

### 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.

---

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

## 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 CB10-17 and CB11-1. 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)   |
|------------------------------|--------------------------|-------------|
| Operational corridor felling | Mixed conifer (90 m)     | 3.03        |
| Operational corridor felling | Native Broadleaves (70m) | 0.05        |
| Access Track Felling         | Mixed conifer            | 0.09        |
| <b>Total area</b>            |                          | <b>3.16</b> |

**Table 8.2: Compensatory Planting**

| Item                       | Woodland Type      | Area (ha)   |
|----------------------------|--------------------|-------------|
| Compensatory Planting Area | Mixed Conifer      | 3.12        |
| Compensatory Planting Area | Native Broadleaves | 0.05        |
| <b>Total area</b>          |                    | <b>3.16</b> |

**Table 8.3: Woodland Removal Impact of Infrastructure**

| Item                                   | Area (ha)   |
|----------------------------------------|-------------|
| Total Loss of Woodland Area            | 3.16        |
| Total Compensatory Planting Area       | 3.16        |
| <b>Total Net Loss of Woodland Area</b> | <b>0.00</b> |

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

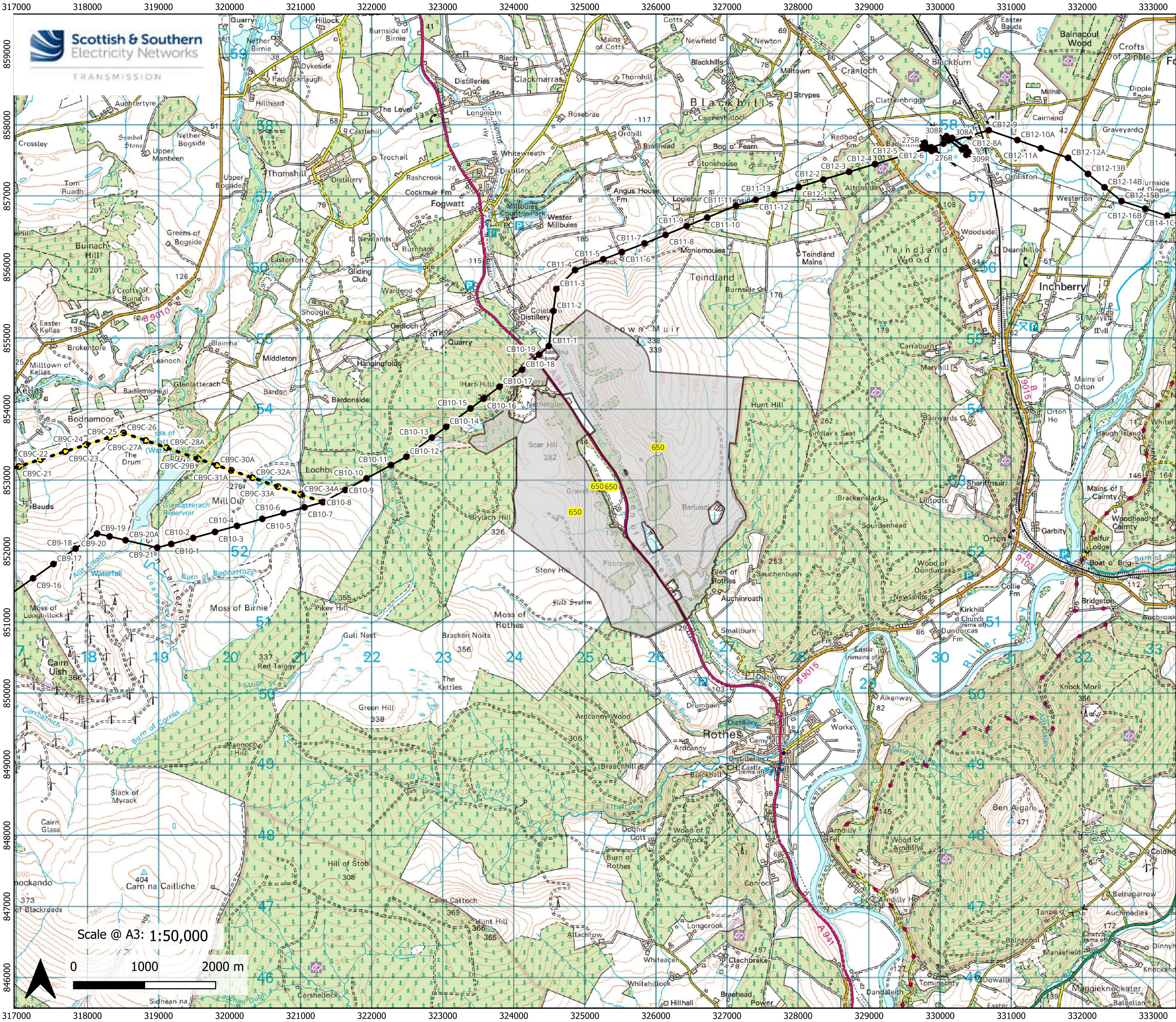
| Item                                  | Woodland Type | Area (ha)   |
|---------------------------------------|---------------|-------------|
| Management Felling                    | Mixed conifer | 0.72        |
| Replanting / Restocking Opportunities | Mixed Conifer | 0.72        |
| <b>Net Loss of Woodland Area</b>      |               | <b>0.00</b> |

## 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)<sup>11</sup>. 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 3.16ha.
- 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 offsite compensatory planting within the same local authority area. It is proposed that full details of the areas subject to this offsite compensatory planting is notified to Scottish Forestry prior to energising the OHL.

---

<sup>11</sup> 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

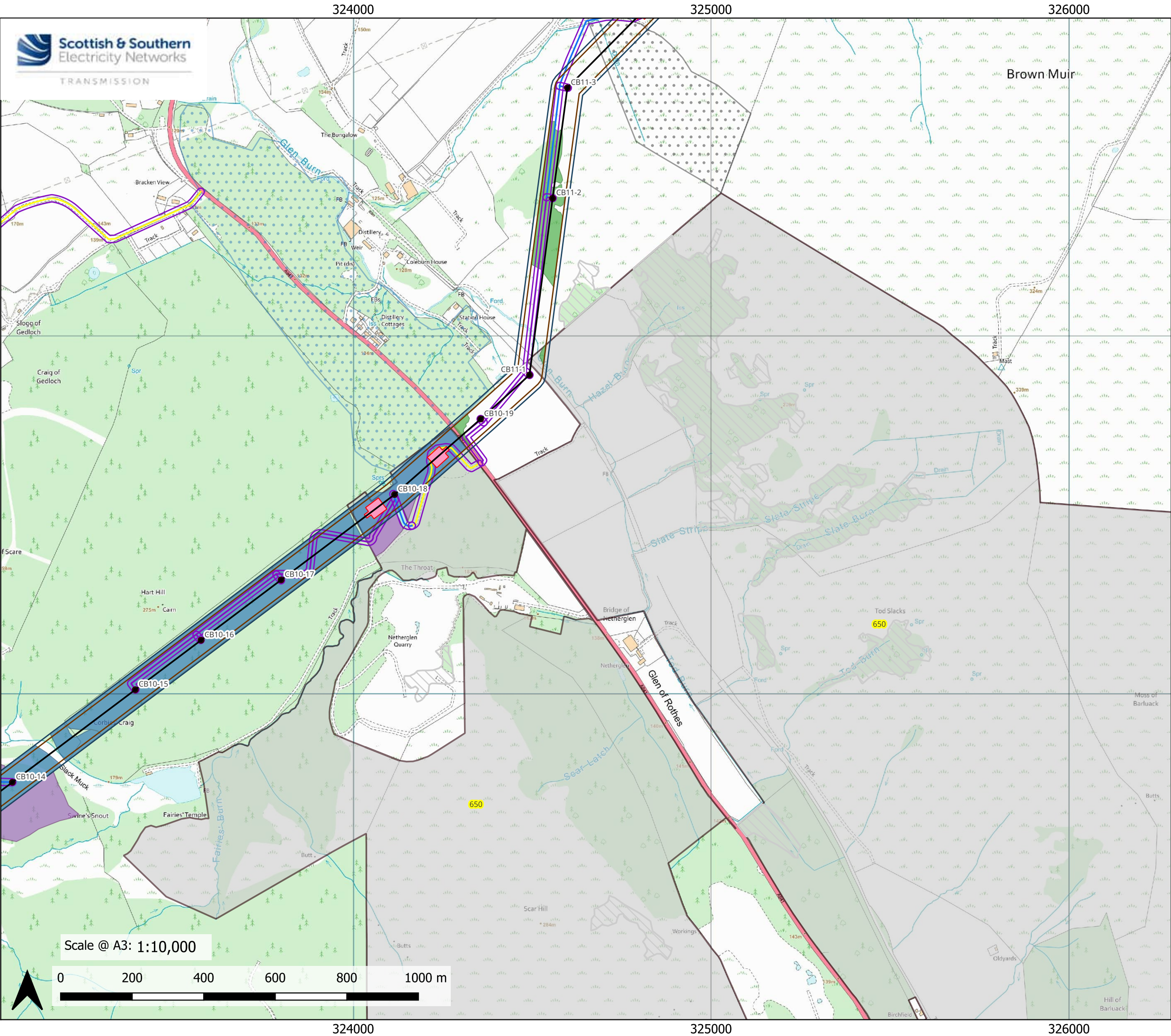
- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- Proposed Tower - Kellas Alternative Alignment
- - - Proposed OHL Alignment - Kellas Alternative
- Landownership Boundary/Parcel

Reproduced by permission of Ordnance Survey on behalf of HMSO.  
Crown copyright and database right 2025 all rights reserved.  
Ordnance Survey Licence number 0100022432.  
SSEN Transmission take no responsibility for the release or accuracy of latest version Basemaps from Ordnance Survey

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

Title:  
**Figure 12.1.71a** Parcel 650 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
- 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
- Site of Special Scientific Interest (SSSI)
- 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)

Reproduced by permission of Ordnance Survey on behalf of HMSO.  
Crown copyright and database right 2025 all rights reserved.  
Ordnance Survey Licence number 0100022432.  
SSEN Transmission take no responsibility for the release or accuracy of latest version Basemaps from Ordnance Survey

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

**Title: Figure 12.1.71b Parcel 650 Proposed Felling Requirements**

Drawn by: LA