

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

**Appendix 12.1.40 – Woodland Report Parcel 3178**



## APPENDIX 12.1.40: Woodland Report Parcel 3178

|     |                                                        |   |
|-----|--------------------------------------------------------|---|
| 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.....                                     | 6 |
| 6   | Woodland Management Impact.....                        | 6 |
| 7   | Mitigation Opportunities.....                          | 6 |
| 7.1 | Woodland Mitigation Measures.....                      | 6 |
| 7.2 | Restructuring.....                                     | 7 |
| 7.3 | Restocking .....                                       | 7 |
| 8   | Net Effect / Summary.....                              | 7 |
| 9   | Compensatory Planting .....                            | 8 |

### Appendix Figures

Figure 12.1.40a: Parcel 3178 Location Map

Figure 12.1.40b: Parcel 3178 Proposed Felling Requirements

Figure 12.1.40c: Parcel 3178 Proposed Planting Areas

## 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 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 3178. 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 12.1.40a: Parcel 3178 Location Map**. The forest plantation in ownership of LFI Silva consist of a mixed conifer plantation. The forest is located 6.2 km east of Inverness within the Highland Council region (NH 761551 422533).

## 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; and

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<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 within the commercial forest within Woodland Parcel 3178 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in **Figure 12.1.40b: Parcel 3178 Proposed Felling Requirement**.

## 3.2 Access Track Route Design

- 3.2.1 The tracks associated with this section of the Proposed OHL Alignment make use of existing infrastructure.

# 4 Woodland Characteristics

## 4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The forest consists of productive, mature conifer plantation of mainly Scots pine (SP) and larch (LA). The crop is semi mature and has been thinned.
- 4.1.2 An active thinning permission (FPA-10313) is in place for the area impacted by the Proposed OHL Alignment.
- 4.1.3 This section of OHL is moderately exposed with a Detailed Aspect Method of Scoring (DAMS) of 14<sup>3</sup>.
- 4.1.4 The National Soil Map of Scotland<sup>4</sup> identifies the site as being predominantly Noncalcareous gleys with peaty gleys.
- 4.1.5 The Ecological Site Classification (ESC)<sup>5</sup> identifies the site as having a cool, moderately exposed and wet climate. The soils have a moist moisture status and a medium nutrient status.
- 4.1.6 There are no environmental designations impacting this stretch of OHL.
- 4.1.7 The landscape is characterised by the rolling uplands of Inverness. Landform consists of undulating hills.
- 4.1.8 This section of OHL consists of a section of OC between towers CB3-6 and CB3-8.

<sup>3</sup> 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.

<sup>4</sup> 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/>

<sup>5</sup> Forest Research (n.d.). Ecological Site Classification (Tree Species). Available at: <http://www.forestdss.org.uk/geoforestdss/>

- 4.1.9 There is existing forest road infrastructure across the adjacent property (parcel 13822) which would provide access and roadside frontage to this property. The infrastructure is in good condition and is actively used. The topography allows for easy building of infrastructure and timber extraction. Timber could be extracted to the existing infrastructure to the unclassified C1052 Dalroy to Budgate Road, this is classified as a Consultation Route by the Timber Transport Forum<sup>67</sup>.
- 4.1.10 Considering the volume, species, quality and location, felling using harvester / forwarder combinations is recommended.

## 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.

**Photo 1: Existing road on adjacent property and forest edge near CB3-7 (NH 762241 423046, looking southwest)**



<sup>6</sup> Timber Transport Forum (n.d.). Introduction to Agreed Routes Map. Available at: <https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/>

<sup>7</sup> 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).

Photo 2: Windfirm edge on east side of the plantation (NH 762006 422608, looking northwest)



Photo 3: Thinned crop showing signs of instability (NH 761671 422043, looking northwest)



## 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 **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 Standards (UKFS)<sup>8</sup> for the implementation of the works required.
- 5.1.2 Considering the height of the crop, the exposure and the current signs of wind damage the risk of wind damage as a result of the proposed felling will be high.

## 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 surrounding the OC. To prevent windblow, management felling is recommended to a windfirm edge on the east, and to the end of the forest plantation to the north. To the east of the windfirm edge, northeast of CB3-7 a small area of plantation within the OC will furthermore need to be felled. This will potentially destabilise the forest plantation north and east from there by creating a brown edge. It is recommended that this felling is kept to an absolutely minimum to retain the stability of the plantation.
- 6.1.2 The Proposed OHL Alignment will split the current management unit leaving a small area of 1.3 ha south of the OC. It is expected that this will not be a viable management unit for productive forestry.
- 6.1.3 The infrastructure built for this section of the OHL could provide a minor benefit to the landowner for future forest management as it could provide an improvement to the existing infrastructure. However, given the quality of the existing infrastructure this is likely of limited benefit. 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"<sup>9</sup>).
- 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.0 ha.

## 7 Mitigation Opportunities

### 7.1 Woodland Mitigation Measures

- 7.1.1 To mitigate the landscape impact on this section of the Proposed OHL Alignment, the 'Landscape Replanting Proposals' as set out in **Chapter 7: Landscape and Visual** will be followed as demonstrated in **Figure 121.40c: Parcel 3178 Proposed Planting Areas**.
- 7.1.2 No other opportunities for mitigation were identified for this parcel.

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<sup>8</sup> 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).

<sup>9</sup> 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).

## 7.2 Restructuring

- 7.2.1 The plantation within the ownership is mostly single aged plantation. The operations planned will therefore have a positive impact on forest structure within the ownership.
- 7.2.2 In the wider area significant felling and restocking appears to have taken place in the last decade and combining the impact within the ownership with impact of the Proposed Development outwith this ownership, the likely impact on structure in the wider area will be negative.
- 7.2.3 The felling of the OC for the Proposed Development will create new green edges, which will allow the landowner to work to in the future if that is desired. In the long-term this might benefit forest structure.

## 7.3 Restocking

- 7.3.1 In case of management felling taking place there will be a restock obligation on the landowner.
- 7.3.2 As set out in **Chapter 7: Landscape and Visual** under the 'Landscape Replanting Proposals' restocking can take place within the OC to mitigate the visual impact of the OC. Restocking within the OC will be carried out by the Applicant. Detail shown in **Figure 121.40c: Parcel 3178 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 CB3-6 and CB3-8. 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) | 2.16        |
| <b>Total area</b> |                      | <b>2.16</b> |

**Table 8.2: Compensatory Planting**

| Item                       | Woodland Type | Area (ha)   |
|----------------------------|---------------|-------------|
| Compensatory Planting Area | Mixed Conifer | 2.16        |
| <b>Total area</b>          |               | <b>2.16</b> |

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

| Item                                   | Area (ha)   |
|----------------------------------------|-------------|
| Total Loss of Woodland Area            | 2.16        |
| Total Compensatory Planting Area       | <b>2.16</b> |
| <b>Total Net Loss of Woodland Area</b> | <b>0.0</b>  |

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

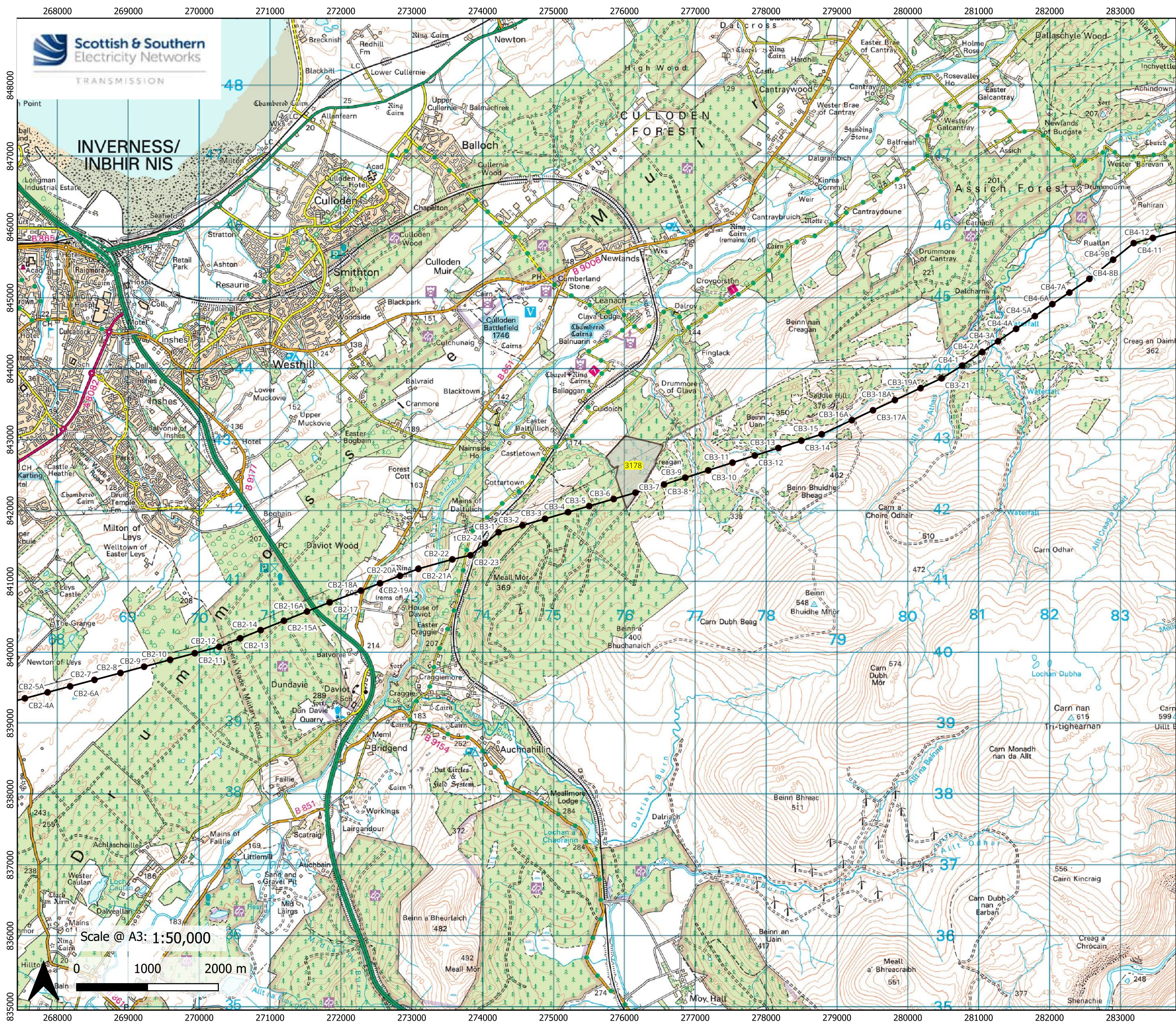
| Item                                  | Woodland Type | Area (ha)   |
|---------------------------------------|---------------|-------------|
| Management Felling                    | Mixed Conifer | 6.68        |
| Replanting / Restocking Opportunities | Mixed Conifer | 6.68        |
| <b>Net Loss 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>10</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 2.16 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.

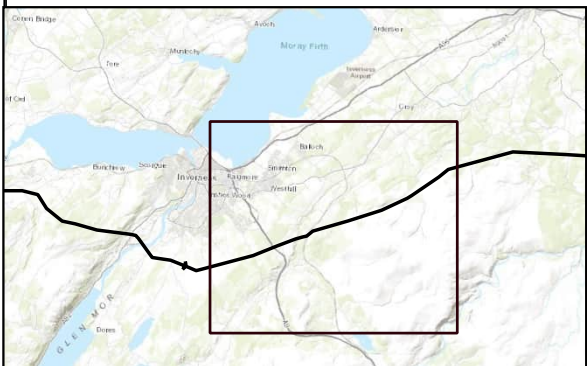
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<sup>10</sup> Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: <https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285>



## Legend

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

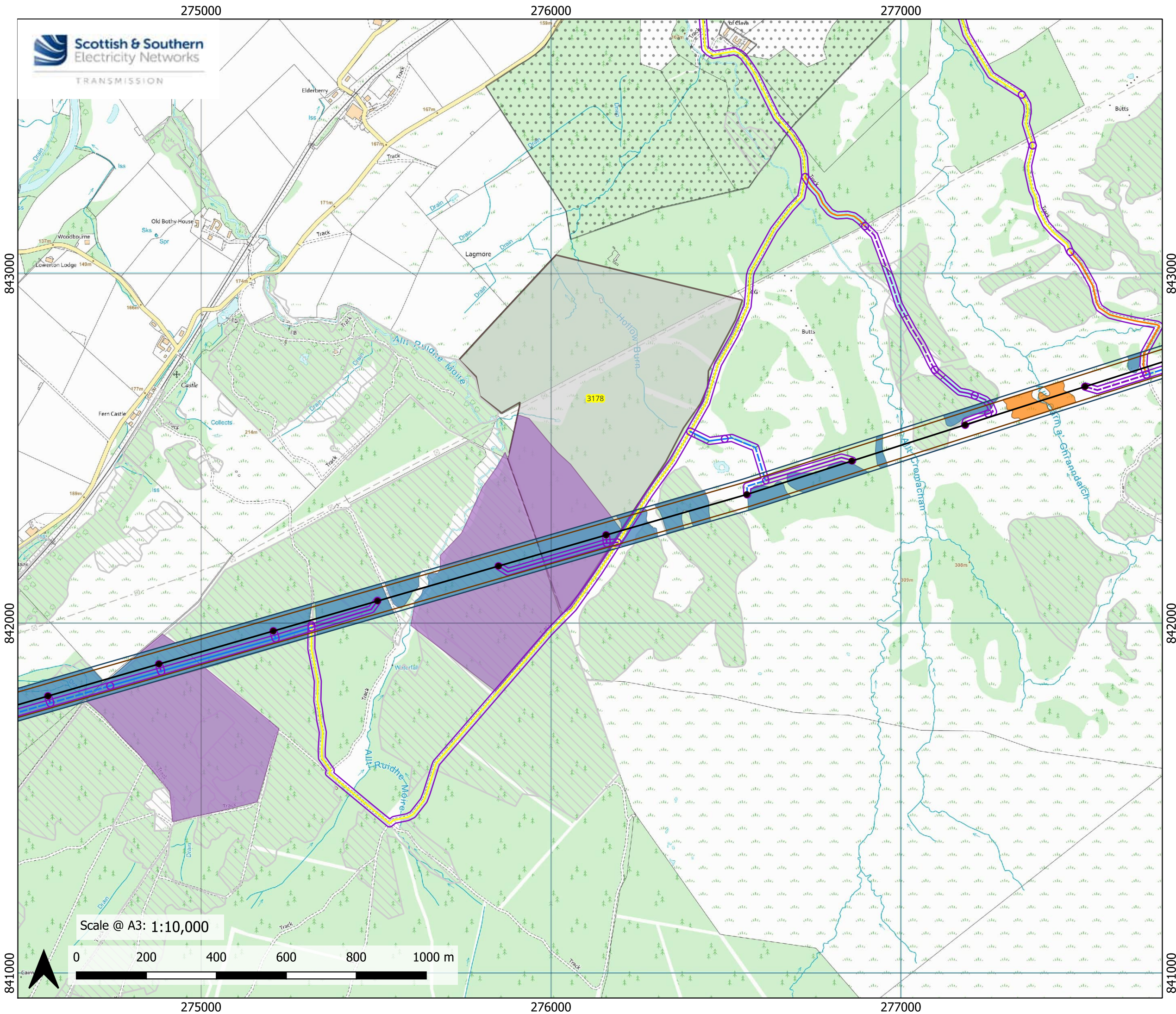


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Project:  
Beauly to Blackhillock to New Deer to Peterhead 400 kV  
OHL Project

Title:  
**Figure 12.1.40a** Parcel 3178 Location Map

Drawn by: LA



### Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- 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 – Permanent
- Proposed Access – Permanent Floated
- Proposed Access – Temporary
- Proposed Access – Temporary Floated

### Proposed Felling Requirements

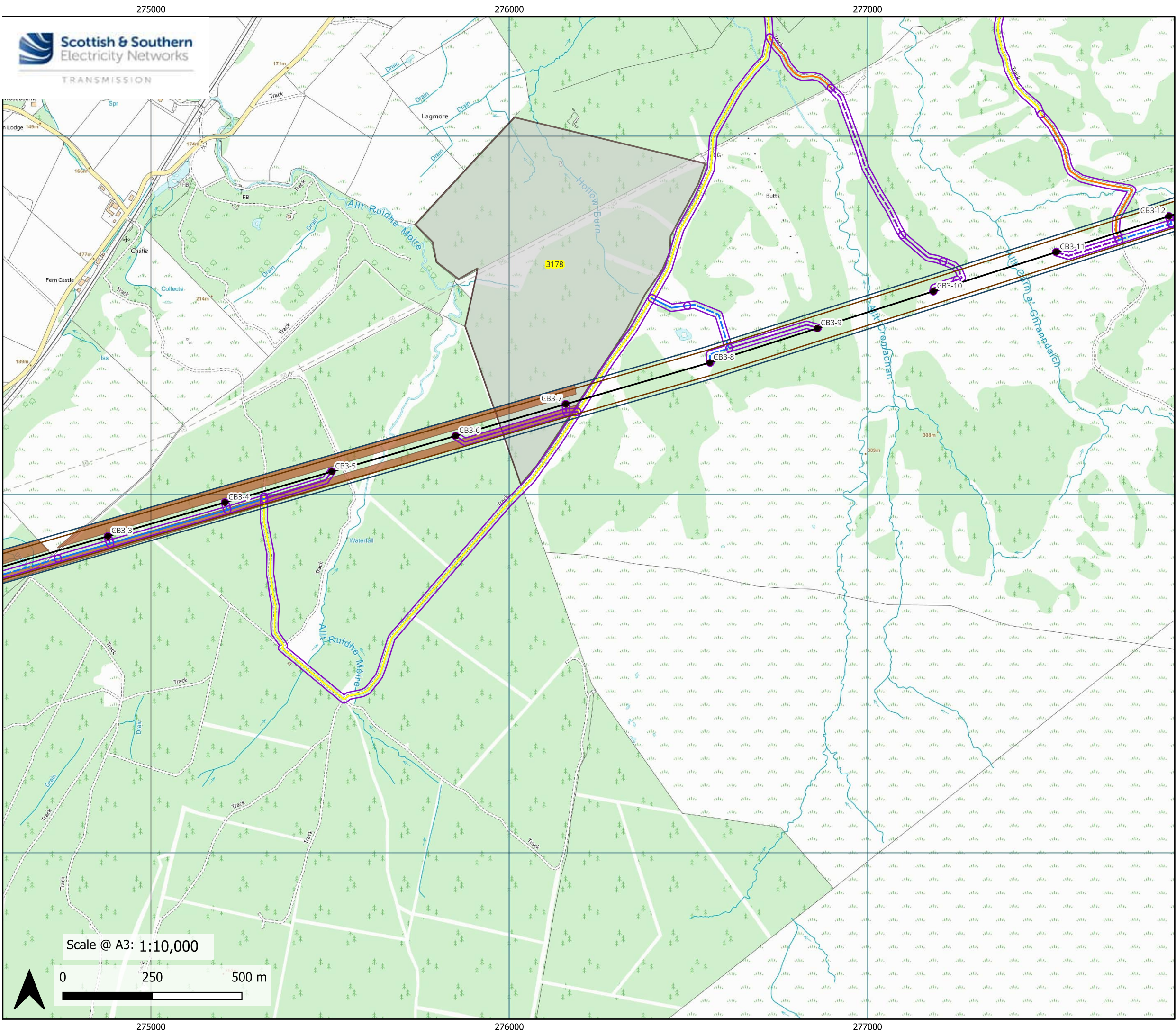
- Mixed Conifer Operational Corridor Felling
- Mixed Conifer Management Felling
- Mixed Conifer Access Track Felling
- Native Woodland Crown Reduction
- Site of Special Scientific Interest (SSSI)
- Native Woodland Survey Scotland (NWSS)
- Landownership Boundary/Parcel

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

Title: **Figure 12.1.40b** Parcel 3178 Proposed Felling Requirements

Drawn by: LA



### Legend

- Proposed Tower - 400 kV
- Proposed OHL Alignment - 400 kV
- 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 – Permanent
- Proposed Access – Permanent Floated
- Proposed Access – Temporary
- Proposed Access – Temporary Floated
- Landownership Boundary/Parcel
- Forest Edge Planting Locations

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

Title:  
**Figure 12.1.40c** Parcel 3178 Proposed Planting Areas

Drawn by: LA