

# **APPENDIX 9.2A-H: WOODLAND REPORTS**

#### Woodland Reports:

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- Appendix 9.2c Doir a' Chatha
- Appendix 9.2d National Forest and Land Forestry (NFE) Central Sutherland

Appendix 9.2e - Rosehall Forestry Remainder

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Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2a Overhead Line (OHL) Woodland Report Property: Cnoc a' Choire

March 2025





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# **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA) specifically **Chapter 9: Forestry**, for full details of the project.

### 2 Purpose of this Woodland Report

As part of the EA process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within single private or publicly owned landholdings. The landholding property boundaries can be seen in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2a**) considers the private ownership of Cnoc a' Choire, see also **Figure 9.2.1**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

Cnoc a' Choire woodlands are located on the northern slopes of the Kyle of Sutherland and reach towards Cnoc a' Choire between the already existing Achany Wind Farm and Rosehall Wind Farm. The woodland property is compact at approximately 87 ha woodland area. The woodland is mixed conifer species with areas felled and replanted and other remaining stands of timber at the harvesting stage.

The National Grid Reference of the woodland property is NC504034, and it covers approximately 87 ha.



# **4** Development Requirements

### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new OHLs, resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.1** for the Cnoc a' Choire woodlands has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

### 4.2 Access Track Route Design

Given the current existing forest tracks in Cnoc a' Choire, there is only one proposed section of temporary access track for the construction of the proposed OHL. The temporary access track felling is based on a 25 m width (12.5 m either side of the track centreline). The track design has attempted to minimise additional tree felling and avoid, where possible any woodland sensitivities.

The temporary track in Cnoc a' Choire falls completely within the OHL OC, so the area of woodland removal has already been accounted for within the OHL OC and has not been double counted. The access track OC has therefore also not been shown on **Figure 9.2.1**.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry..[pdf] Available at: FISA 804 (ukfisa.com)



# **5 Woodland Characteristics**

The forest data has been drawn up from the National Forest Inventory (2022) and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the OHL alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS). The Scottish Forestry Map Viewer also reveals that a Management Plan, reference number MPL300019, was agreed in October 2016 and expires in October 2026.

There are no ancient woodland sites, veteran trees or Plantation on Ancient Woodland Sites (PAWS) within the OC within Cnoc a' Choir.

The area of Cnoc a' Choir woodlands which would be impacted by the Proposed Development comprises 1.86 ha of mature conifer and 2.12 ha of young replanted conifer trees; see **Figure 9.2.1** and **Section 9** below for details.

### 6 Windthrow Risk Impact

Within the Cnoc a' Choire woodlands, no impact of windthrow risk would be created by the removal of the young tree areas within this part of the OHL OC. However, the area which is reaching maturity may be at risk of windthrow resultant from felling an OC.

The total area of management felling proposed is 2.25 ha of commercial conifer woodland (see **Section 9** below). The felling of these areas is subject to forest owner agreement and by method of Scottish Forestry felling permission approval or Long Term Forest Plan formal amendment<sup>4</sup>.

# 7 Woodland Management Impact

The OHL would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. The constraint associated with the electrical hazard would be reduced by regular maintenance of the OC, which would avoid the incidences of 'Red Zone' trees<sup>5</sup>.

The OHL may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

 $<sup>^{2}\</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer$ 

 $<sup>^{3}\</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland$ 

<sup>&</sup>lt;sup>4</sup> This felling is not included within the scope of the proposed development (for the purpose of the application for consent under S37 of the Electricity Act 1989). This additional 'management felling' would be subject to a requirement for separate felling permission approval from Scottish Forestry

<sup>&</sup>lt;sup>5</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



The Proposed Development would permanently remove existing mature and young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

## 8 Mitigation Opportunities

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, however the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the OC woodland removal area by replanting the area quantity (hectares) of woodland removed.

The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2a.1 Woodland Removal for Infrastructure (OHL OC)		
Item	Woodland Type	Area (ha)
	Mature Conifer	1.86
OHL	Young Conifer	2.12
Total		3.98 ha

Table 9.2a.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	3.98 ha

Table 9.2a.3 Woodland Removal Impact of Infrastructure			
Total Loss of Woodland Area	All	3.98 ha	
Total Compensatory Planting Area	All	3.98 ha	
Total Net Loss of Woodland Area		0.00 ha	

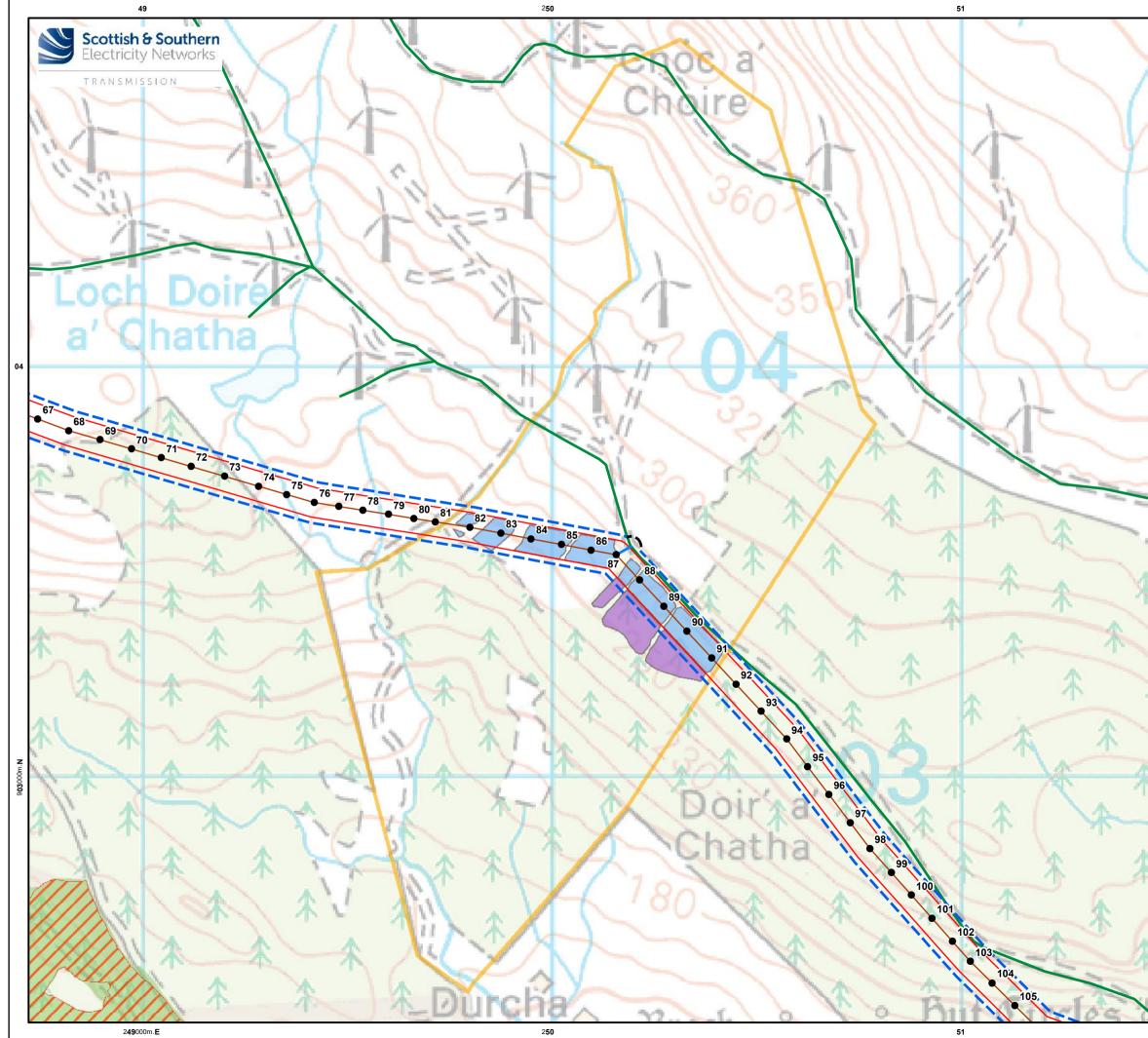
Table 9.2a.4 Woodland Removal for Management Felling		
Item	Woodland Type	Area
Management Felling	Mature mixed conifer plantation	2.25 ha
Replanting / Restocking	Predominantly mixed conifer	2.25 ha
Net Loss of Woodland Area		0.00 ha



# **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.



	Legend
-	S.37 Overhead Line (OHL) Works
	Proposed Pole Location
	Proposed Overhead Line (OHL)
	Limit of Deviation (LoD) for Proposed OHL (50m either side)
_	OHL Operational Corridor (36m either side)
	Ancillary Development
	Temporary Access Track (Likely Trackway)
	Permanent and Temporary Access Track LoD (25m either side)
	Existing Infrastructure
-	Existing Tracks
	Forestry
	Native Woodland Survey of Scotland (NWSS)
04	Ancient Woodland Inventory (AWI)
New York	Ancient (of semi-natural origin)
	Felling
T	Management felling
-	Mixed Conifer Felling
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*	Project: Achany Wind Farm Extension Grid Connection: Environmental Appraisal
_	Title: Figure 9.2.1 - Forestry Operational Corridor and Felling - Cnoc a' Choire
A	Drawn by: F.L., M.T. Date: 03/04/2025
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Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2b Overhead Line (OHL) Woodland Report Property: Creag Liath

March 2025





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	WOODLAND PROPERTY DEVELOPMENT REQUIREMENTS WOODLAND CHARACTERISTICS WINDTHROW RISK IMPACT WOODLAND MANAGEMENT IMPACT MITIGATION OPPORTUNITIES. WOODLAND REMOVAL IMPACT.



### **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV OHL known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Technical Appendix (TA) presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA) specifically **Chapter 9: Forestry**, for full details of the Proposed Development.

### 2 Purpose of this Woodland Report

As part of the EA process, it was identified that the construction of the proposed overhead line (OHL) and proposed access tracks of the Proposed Development would cross a number of woodland areas within single private or publicly owned landholdings. The landholding property boundaries can be seen in **Figure 9.1** of the EA.

This woodland report (Appendix 9.2b) considers the private ownership of Creag Liath, see also Figure 9.2.2.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

Creag Liath woodlands are located on the northern slopes of the Kyle of Sutherland and reach towards Creag Liath between Coille an Fheoir and Doir a' Chatha. The woodland is mixed conifer species having been felled and replanted.

The National Grid Reference of the woodland property is NC519026, and it covers approximately 63.49 ha.



# **4** Development Requirements

### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new OHLs, resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.2** for Creag Liath woodlands has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

### 4.2 Access Track Route Design

Given the current existing forest tracks in Creag Liath there are only two proposed sections of new temporary access tracks for the construction of the proposed OHL. The temporary access track felling is based on a 25 m (12.5 m either side of the track centreline). The track design has attempted to minimise additional tree felling and avoid, where possible any woodland sensitivities.

The two sections of proposed temporary access tracks in Creag Liath both fall in part outwith the OHL OC, so the area of woodland removal for the temporary access track felling has been accounted for in addition to the OHL OC. The access track OC can be seen on **Figure 9.2.2**. The temporary access track OC felling is included in **Table 9.2b.5** in Section 9 below.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry.. [pdf] Available at: FISA 804 (ukfisa.com)



# **5** Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS). Scottish Forestry Map viewer also reveals that a Management Plan, reference number MPL300109, was agreed in November 2020 and expires in November 2025.

There are no ancient woodland sites, veteran trees or Plantation on Ancient Woodland Sites (PAWS) within the OC within Creag Liath.

The area of Creag Liath woodlands which would be impacted by the Proposed Development comprises 3.90 ha of young replanted conifer trees; see **Figure 9.2.2** and **Section 9** below for details.

0.5 ha of forest for the temporary access track felling would be impacted, all of which would be young conifer.

### 6 Windthrow Risk Impact

Within the Creag Liath woodlands, no impact of windthrow risk would be created by the removal of the young tree areas within this part of the OHL OC or the access track OC. No management felling is therefore proposed.

### 7 Woodland Management Impact

The OHL would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. 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<sup>4</sup>.

The OHL may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

<sup>&</sup>lt;sup>2</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer

 $<sup>^{3}</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotl$ 

<sup>&</sup>lt;sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



During the construction phase, a level of disruption would be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

### 8 Mitigation Opportunities

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, however the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the OC woodland removal area by replanting the area quantity (hectares) of woodland removed.

The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development. It should be noted that the felling for the temporary access tracks is not included in the compensatory planting totals or the woodland removal for infrastructure totals as this area would be proposed to be reinstated when the temporary access tracks are removed.

Table 9.2b.1 Woodland Removal for Infrastructure (OHL OC)		
Item	Woodland Type	Area (ha)
OHL	Young Conifer	3.90
Total		3.90 ha

Table 9.2b.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	3.90 ha

Table 9.2b.3 Woodland Removal Impact of Infrastructure			
Total Loss of Woodland Area	All	3.90 ha	
Total Compensatory Planting Area	All	3.90 ha	
Total Net Loss of Woodland Area		0.00 ha	

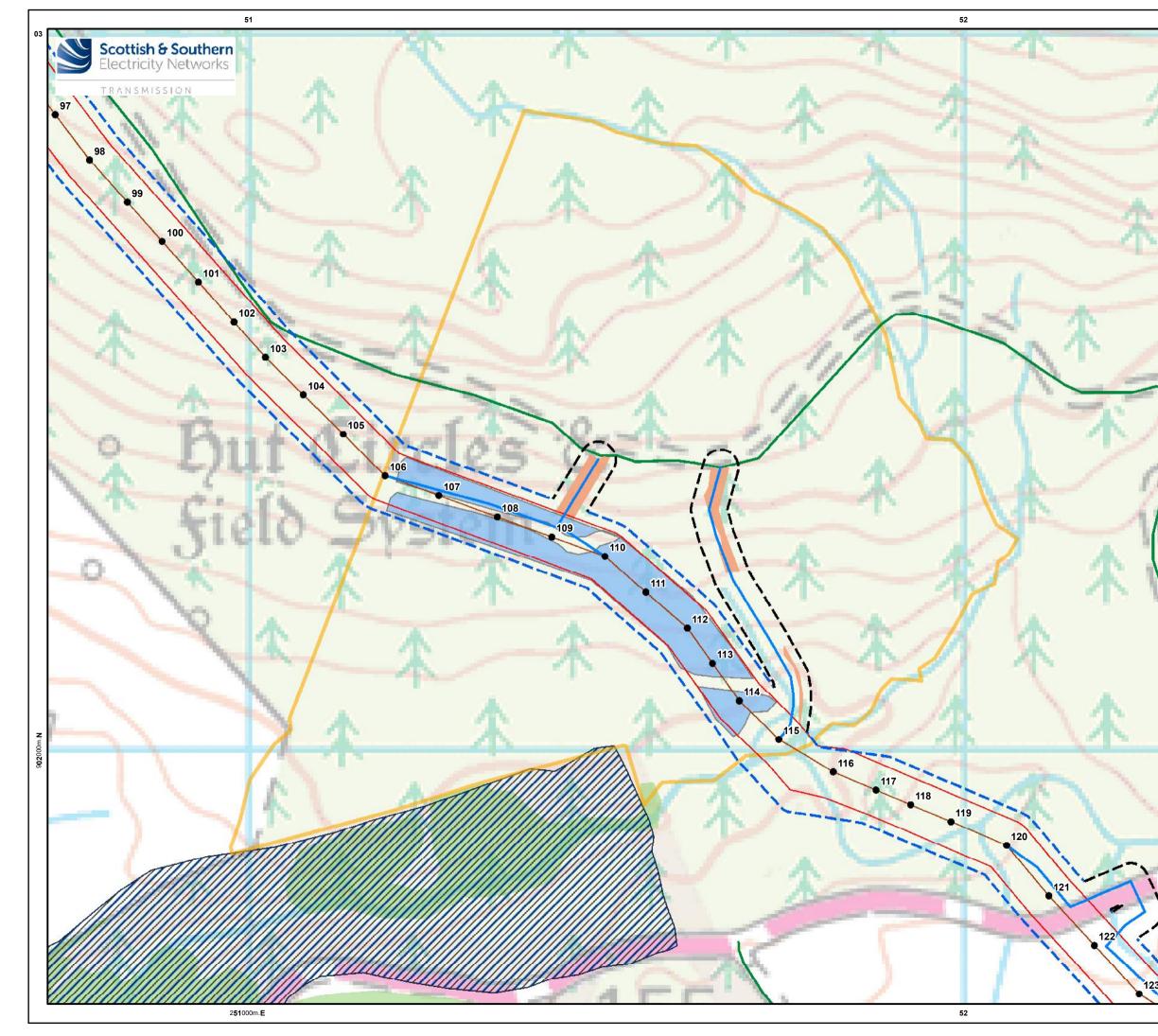
Table 9.2b.4 Woodland Removal for Temporary Access Tracks		
Area		
0.50 ha		
0.50 ha		
0.00 ha		
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### **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.

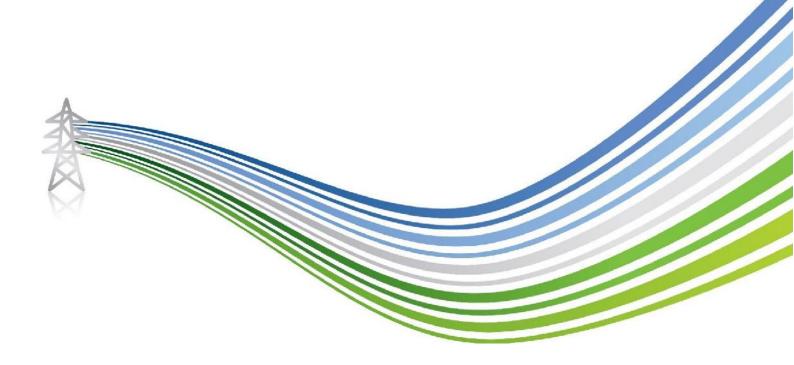


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4	Project:	Achany Wind Farm Extension Grid Connection: Environmental Appraisal	
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Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2c Overhead Line (OHL) Woodland Report Property: Doir a' Chatha

March 2025





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### **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission, hereafter referred to as 'the Applicant', own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

The Applicant is proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA) Report, specifically **Chapter 9: Forestry**, for full details of the project.

### 2 Purpose of this Woodland Report

As part of the EA process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within single private or publicly owned landholdings. The landholding property boundaries can be seen in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2c**) considers the private ownership of Doir a' Chatha see also **Figure 9.2.3**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

Doir a' Chatha woodlands are located on the northern slopes of the Kyle of Sutherland and to the south of the already existing Achany Wind Farm. The woodland is mixed conifer species with having been felled and replanted.

The National Grid Reference of the woodland property is NC519026, and it covers approximately 63.49 ha.



# **4** Development Requirements

### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final OC would be based on the safety distance required to allow for a mature tree falling towards the OHL at the midpoint on an OHL span between two wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.3** for the Doir a' Chata woodlands has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

#### 4.2 Access Track Route Design

Given the current existing wind farm and forest access track network it is not proposed to design and construct additional tracks within this woodland.

### **5** Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry.. [pdf] Available at: FISA 804 (ukfisa.com)

 $<sup>^2\</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer$ 

 $<sup>^{3}\</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scot$ 



The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS). Scottish Forestry Map viewer also reveals that a n approved Long Term Forest Plan, reference number 18FGS30158, was agreed in May 2019 and expires in May 2029.

There are no ancient woodland sites, veteran trees or Plantation on Ancient Woodland Sites (PAWS) within the OC within Doir a' Chatha.

The area of Doir a' Chatha woodlands which would be impacted by the Proposed Development comprises 3.31 ha mature conifers and 3.85 ha young replanted conifer trees; see **Figure 9.2.3** and **Section 9** below for details.

### 6 Windthrow Risk Impact

Within the Doir a' Chatha woodlands, no impact of windthrow risk would be created by the removal of the young tree areas within this part of the OHL OC. However, potential impact of windthrow risk would be created by the removal of the mature conifer areas within this part of the OHL from felling an OC.

The total area of management felling proposed is 13.6 ha of commercial conifer woodland (see **Section 9** below). The felling of these areas is subject to forest owner agreement and by method of Scottish Forestry felling permission approval or Long Term Forest Plan formal amendment.

### 7 Woodland Management Impact

The OHL alignment would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. The constraint associated with the electrical hazard would be reduced by regular maintenance of the OC, which will avoid the incidences of 'Red Zone' trees<sup>4</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

<sup>&</sup>lt;sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



# 8 Mitigation Opportunities

The operational corridor woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the operational corridor, however the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the operational corridor woodland removal area by replanting the area quantity (hectares) of woodland removed.

The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2c.1 Woodland Removal for Infrastructure (OHL OC)		
Item	Woodland Type	Area (ha)
OHL	Mature Conifer	3.31
	Young Conifer	3.85
Total		7.16 ha

Table 9.2c.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	7.16 ha

Table 9.2c.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area	All	7.16 ha
Total Compensatory Planting Area	All	7.16 ha
Total Net Loss of Woodland Area		0.00 ha

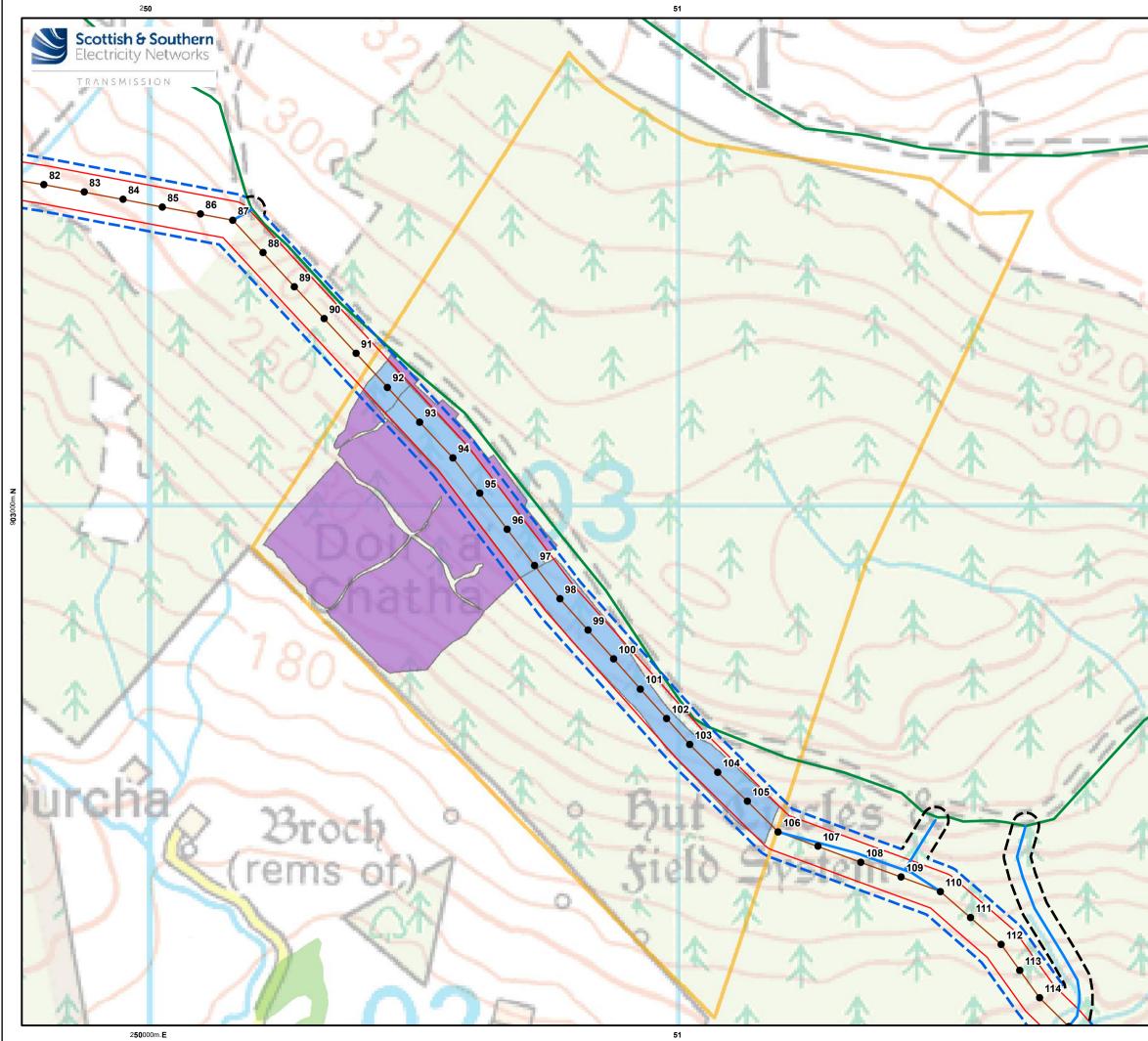
Table 9.2c.4 Woodland Removal for Management Felling		
Item	Woodland Type	Area
Management Felling	Mature mixed conifer plantation	13.60 ha
Replanting/Restocking	Predominantly mixed conifer	13.60 ha
Net Loss of Woodland Area		0.00 ha

# **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.



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 9.1 Compensatory Planting Management Strategy** of the EA.



]	Legen	d	
	-	erhead Line (OHL) V	Vorks
		Proposed Pole Location	
		Proposed Overhead Line (0	OHL)
		Limit of Deviation (LoD) for OHL (50m either side)	Proposed
		OHL Operational Corridor ( side)	36m either
	Ancillar	y Development	
		Temporary Access Track (L Trackway)	ikely
		Permanent and Temporary LoD (25m either side)	Access Track
	Existing	g Infrastructure	
		Exsiting Tracks	
	Forestr	y	
		Native Woodland Survey of (NWSS)	Scotland
	Felling		
		Management Felling	
		Mixed Conifer Felling	
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	Drawn by:	F.L., M.T.	Date: 03/04/202
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Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2d Overhead Line (OHL) Woodland Report Property: National Forest and Land (NFL), Central Sutherland

March 2025





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	PURPOSE OF THIS WOODLAND REPORT WOODLAND PROPERTY DEVELOPMENT REQUIREMENTS WOODLAND CHARACTERISTICS WINDTHROW RISK IMPACT WOODLAND MANAGEMENT IMPACT MITIGATION OPPORTUNITIES WOODLAND REMOVAL IMPACT



### **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA), specifically **Chapter 9: Forestry**, for full details of the project.

### 2 Purpose of this Woodland Report

As part of the EA process, it was identified that the construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within single private or publicly owned landholdings. The landholding property boundaries can be seen in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2d**) considers the National Forest and Land (NFL) forest area affected by the Proposed Development, managed on behalf of the Scottish Government by Forestry and Land Scotland (FLS); the agency responsible for managing the national forests of Scotland. See also **Figure 9.2.4a-d**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

The NFL forest areas form part of the forest units which are managed under the Central Sutherland Land Management Plan (LMP) within North Highland District. This LMP was approved in 2016 and is due to expire in 2026. It is usual for the plan to be revised every ten years and subject to the approval by Scottish Forestry, the Scottish Government agency responsible for forestry regulation.

The overall LMP area covers c. 9,898 ha between Lairg, Bonar Bridge and Rosehall. According to the LMP 2016 statement 50% of the area is productive forest, 13% is currently felled or fallow, 16% is open ground, about 20% is under agricultural tenancy, 1% is open water, and land under other management is under 1%.

The respective woodland NFL woodlands that the Proposed Development would pass through are;



- Inveran Wood / Achany Wood, Approximate National Grid Reference (NGR) NH566978 (see Figure 9.2.4a)
- Linsidecroy Wood, Approximate NGR NH558989 (see Figure 9.2.4b)
- Rosehall Estate / Woodburn Excambium, Approximate NGR NH545995 (see Figure 9.2.4c)
- Linsidemore Wood, Approximate NGR NH535993 (see Figure 9.2.4d)

### **4** Development Requirements

#### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final corridor 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.4a-d** for this part of NFL Central Sutherland has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of native broadleaved woodland is 60 m (30 m either side of the OHL centreline). This has been assessed as a maximum OC width required at these woodland locations, with the potential of further narrowing of the OC prior to construction to allow greater tree retention.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry.. [pdf] Available at: FISA 804 (ukfisa.com)



#### 4.2 Access Track Route Design

There are sections of proposed new access tracks, both temporary and permanent within the various NFL woodlands for the construction of the proposed OHL. Permanent access track OCs have been based on a 25 m width (12.5 m either side of the track centreline). Felling for temporary access tracks have also been based on the same width. The track designs have attempted to minimise additional tree felling and avoid, where possible any woodland sensitivities.

Where access tracks fall completely within the OHL OC or the management felling, then the area of woodland removal has already been accounted for and has not been double counted. Where access tracks fall within an unforested area or a break in forests, felling has not been considered.

One section of permanent access track would be to the north of the settlement of Linsidemore, Linsidemore Wood. This access track OC can be seen on **Figure 9.2.4d**. The permanent access track OC felling is included in **Table 9.2d.1** in **Section 9** below.

Temporary access tracks would be outwith the OC to the north of Shin substation, in Achany Wood / Inveran Wood. This access track OC can be seen on **Figure 9.2.4a**. The temporary access track OC felling is included in **Table 9.2d.5** in **Section 9** below.

### **5** Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory (2022), the NFL sub compartment datasets (2109) and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the OHL alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

Ancient woodland is present within the OC at the eastern extent of Inveran Wood / Achany Wood and listed as Other (on Roy map). Part of the proposed temporary access track at this eastern section also is within the AWI (see **Figure 9.2.4a**).

The proposed new permanent access track to the north of Linsidemore is within woodland recorded as Linsidemore Wood and described as long-established (of plantation origin), LEPO 1860 (**Figure 9.2.4d**).

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS). NWSS records native pinewood within the Achany plantations.

The NFL woodland would be permanently impacted by the Proposed Development with the removal of 22.64 ha of forest for the OHL OC and the permanent access track OC, 8.41 ha of which would be

<sup>&</sup>lt;sup>2</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer

 $<sup>^{3}</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland$ 



young conifer, 13.77 ha of which would be mature conifer and 0.46 of which would be native broadleaf, as shown in **Table 9.2d.1** below and **Figure 9.2.4a-d**.

1.45 ha of forest for the temporary access track felling would also be required, all of which would be Young Conifer (including fallow), as shown in **Table 9.2d.5** below and **Figure 9.2.4a-d**.

### 6 Windthrow Risk Impact

Within Inveran Wood / Achany Wood some impact of windthrow risk would be created by the removal of mature trees within this part of the OHL OC. Areas of management felling to a suitable wind firm boundary have been proposed amounting to 17.63 ha in total (see **Section 9** below).

# 7 Woodland Management Impact

The OHL alignment would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. 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<sup>4</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland with an area of native broadleaved woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

### 8 Mitigation Opportunities

A reduced OC width of 60 m has been assessed for the areas of native broadleaved woodland. Prior to the construction phase these areas will be assessed for further selective felling to identify if greater tree retention can be achieved. This will be dependent on the requirements of the Proposed Development and in particular the safety of OHL wiring operations.

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting, will fully mitigate the OC woodland removal area by replanting the area quantity (hectares) of woodland removed.

<sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development. It should be noted that the felling for the temporary access tracks is not included in the compensatory planting totals or the woodland removal for infrastructure totals as this area would be proposed to be reinstated when the temporary access tracks are removed.

Table 9.2d.1 Woodland Removal for Infrastructure (OHL OC and Permanent Access Track OC)		
Item	Woodland Type	Area (ha)
	Mature Conifer	13.77
	Young Conifer (including fallow)	8.41
	Native Broadleaved	0.46
Total		22.64

Table 9.2d.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	22.64

Table 9.2d.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area	All	22.64
Total Compensatory Planting Area	All	22.64
Total Net Loss of Woodland Area		0.00 ha

Table 9.2d.4 Woodland Removal for Management Felling		
Item	Woodland Type	Area
Management Felling	Mature mixed conifer plantation	17.63 ha
Replanting / Restocking	Predominantly mixed conifer	17.63 ha
Net Loss of Woodland Area		0.00 ha

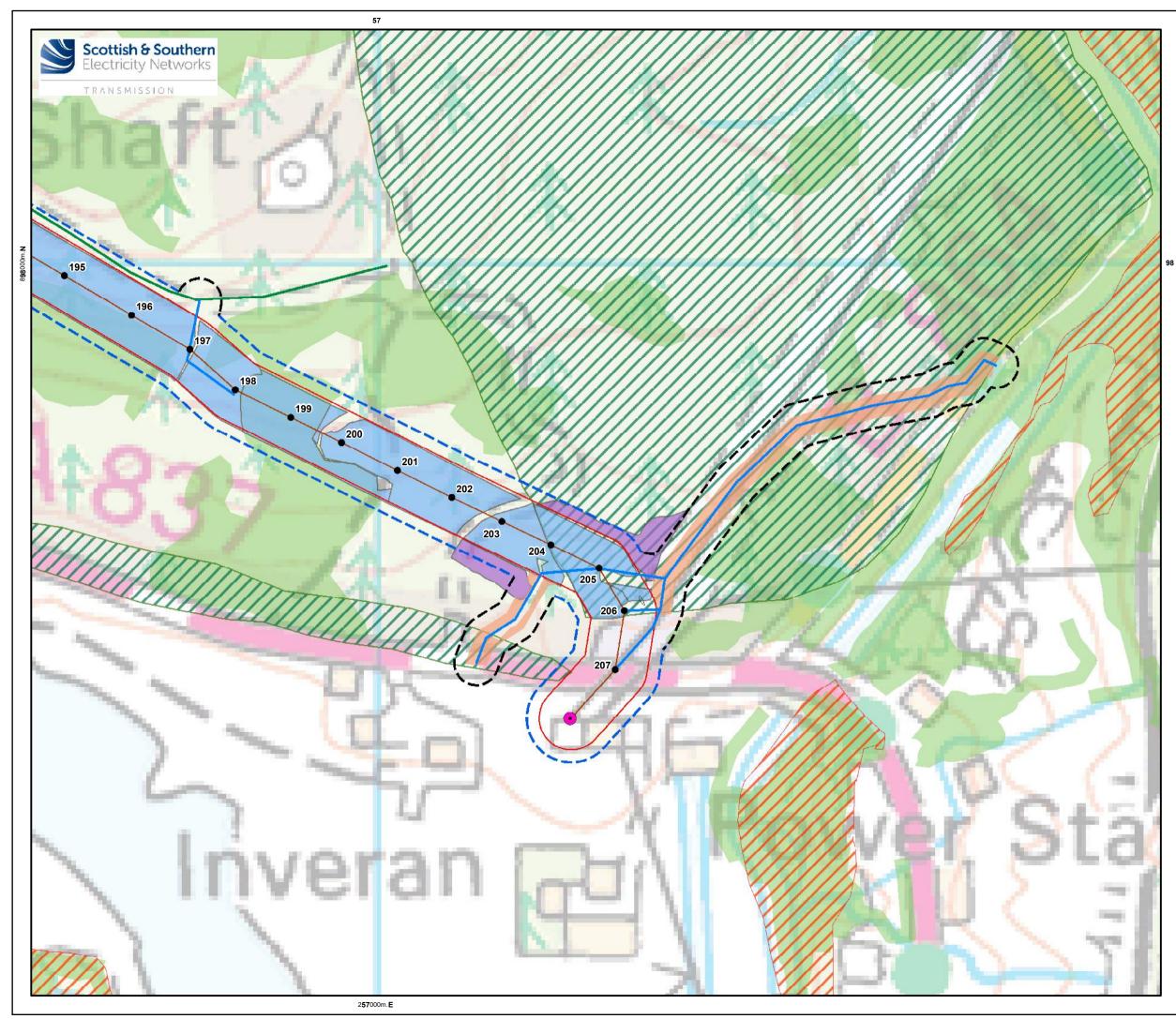
Table 9.2d.5 Woodland Removal for Temporary Access Tracks		
Item	Woodland Type	Area (ha)
	Mature Conifer	1.45 ha
Replanting/ Restocking		1.45 ha
Net Loss of Woodland Area		0.00 ha



## **10 Compensatory Planting**

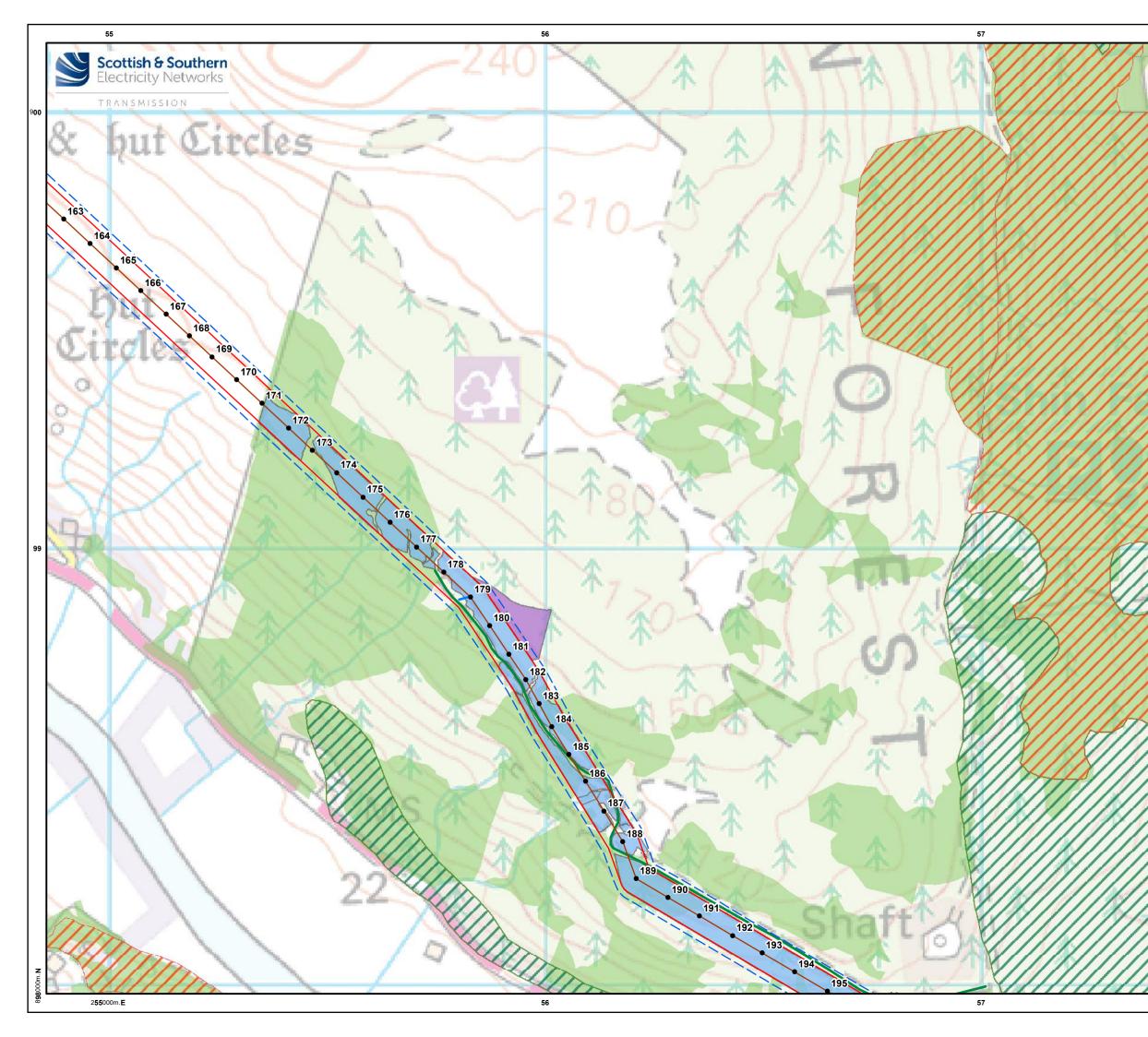
Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC and permanent access track OC areas and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.



S.37 Ov	verhead Line (OHL) W	orks
•	Proposed Pole Location	
	Proposed Overhead Line (O	HL)
	Limit of Deviation (LoD) for OHL (50m either side)	Proposed
	OHL Operational Corridor (3 side)	6m either
Ancillar	y Development	
	Temporary Access Track (Lik	cely
	Permanent and Temporary / LoD (25m either side)	Access Track
Existin	g Infrastructure	
•	Shin Substation	
	Existing Tracks	
Forestr	у	
	Native Woodland Survey of (NWSS)	Scotland
Ancient V	Voodland Inventory (AWI)	
	Ancient (of semi-natural orig	jin)
	Category 3 Other (on Roy m	naps)
Felling		
	Mixed Conifer Felling	
	Management Felling	
	Broadleaf Felling	
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Legend



# Legend

### S.37 Overhead Line (OHL) Works



• Proposed Pole Location

Proposed Overhead Line (OHL)

Limit of Deviation (LoD) for Proposed OHL (50m either side)

OHL Operational Corridor (36m either side)

### **Ancillary Development**

Temporary Access Track (Likely Trackway)

Permanent and Temporary Access Track LoD (25m either side) \_\_\_\_

## Existing Infrastructure

Exsiting Tracks

#### Forestry

#### Ancient Woodland Inventory (AWI)



Ancient (of semi-natural origin) Category 3 Other (on Roy maps)

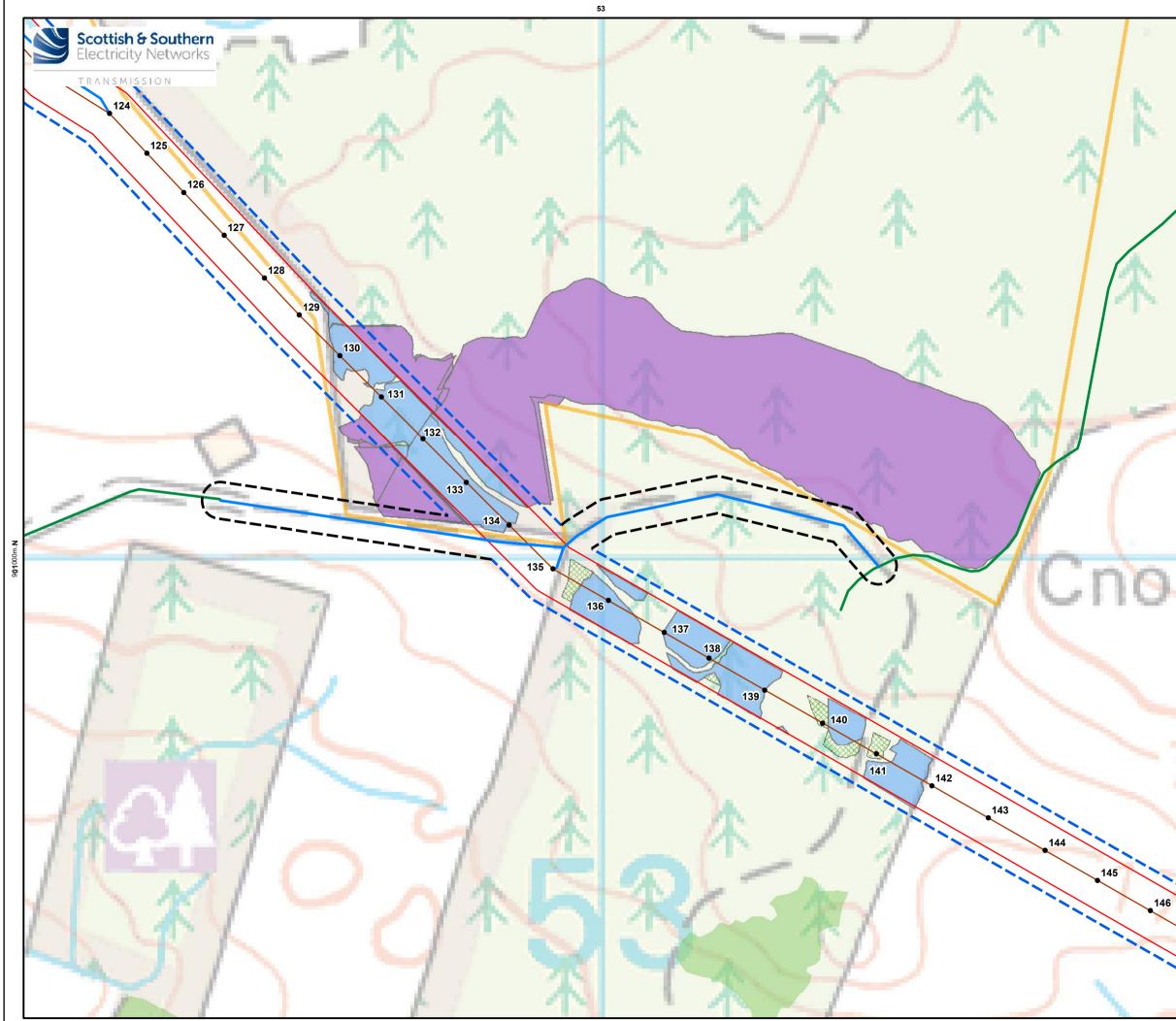
Native Woodland Survey of Scotland (NWSS)

#### Felling

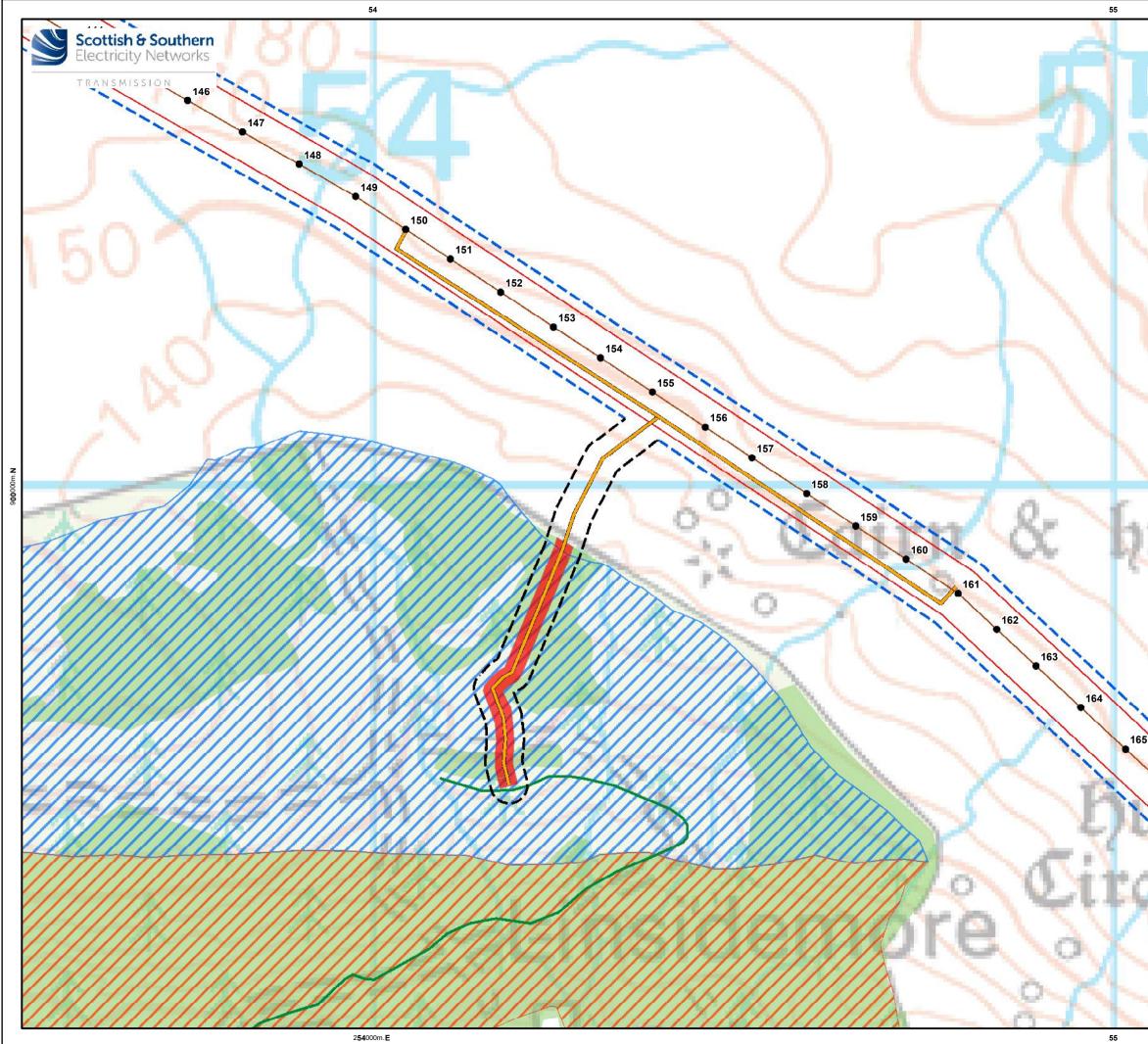
Management Felling	
Broadleaf Felling	
Mixed Conifer Felling	

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S.37 Ov	S.37 Overhead Line (OHL) Works			
	Proposed Pole Location			
	Proposed Overhead Line Limit of Deviation (LoD)	. ,		
	OHL (50m either side) OHL Operational Corrido	or (36m either		
	side)			
Ancillar	y Development			
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	Permanent and Tempora LoD (25m either side)	ary Access Track		
Existing	g Infrastructure			
— I	Exsiting Tracks			
Forestry	,			
	Native Woodland Survey ( (NWSS)	of Scotland		
Felling				
	Mixed Conifer Felling			
	Management Felling			
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	Forestry Felling - Rose Excambium	ehall Estate / Woodburn		
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	S.37 Overhead Line (OHL) Works			
	•	Proposed Pole Location		
		Proposed Overhead Line (OHL)		
		Limit of Deviation (LoD) for Proposed OHL (50m either side)		
		OHL Operational Corridor (36m either side)		
	Ancilla	ry Development		
		New - Permanent Access Track		
		Permanent and Temporary Access Track LoD (25m either side)		
	Existin	g Infrastructure		
		Exsiting Tracks		
	Forest	ry		
		Native Woodland Survey of Scotland (NWSS)		
	Ancient	Woodland Inventory (AWI)		
		Ancient (of semi-natural origin)		
		Long Established Plantation Origin (LEPO)		
	Felling	l		
0		Permanent Access Track Felling (12.5 m either side)		
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	Project:	Achany Wind Farm Extension Grid Connection: Environmental Appraisal		
	Title:	Figure 9.2.4d - Forestry Operational Corridor and Felling - National Forest and Land - Forestry Felling -Linsidemore Wood		

Drawn by: F.L., M.T.

Drawing: 122010-EA-9.2.4d-1.0.0

Date: 03/04/2025



Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2e Overhead Line (OHL) Woodland Report Property: Rosehall Forestry Remainder

March 2025





TRANSMISSION

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	PURPOSE OF THIS WOODLAND REPORT



## **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA), specifically **Chapter 9: Forestry**, for full details of the project.

## 2 Purpose of this Woodland Report

As part of the EA)process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within a single private or publicly owned landholdings. The landholding property boundaries are identified in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2e**) considers the privately owned Rosehall Forestry Remainder woodland. See also Figure 9.2.5.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

The majority of this previously wooded area has been felled for the already existing Rosehall Wind Farm. The small area remaining is mature mixed conifer.

The National Grid Reference of the woodland property is NC495035.

### 4 Development Requirements

#### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.



**IRANSMISSION** 

The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.5** for the Rosehall Forestry Remainder woodland has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

#### 4.2 Access Track Route Design

Given the current existing wind farm and forest access track network it is not proposed to design and construct additional tracks within this woodland.

### 5 Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory (2022), aerial imagery and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the OHL alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS).

No ancient woodland or veteran trees within the OC within this area of land ownership.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry. [pdf] Available at: FISA 804 (ukfisa.com)

 $<sup>^2\</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer$ 

 $<sup>^{3}\</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scot$ 



NWSS records no native woodlands within this area of land ownership.

The area of Rosehall Forestry Remainder which would be impacted by the Proposed Development comprises the removal of 0.18 ha of mature conifer forest for the OC as shown in **Table 9.1** below and **Figure 9.2.5**.

#### 6 Windthrow Risk Impact

Within this forest area some impact of windthrow risk would be created by the removal mature trees within this part of the OHL OC. Areas of management felling have been proposed amounting to 0.09 ha in total. In this situation the management felling would not reasonably be replanted as this would create a small isolated group of trees and would therefore be included within the total woodland loss.

#### 7 Woodland Management Impact

The OHL alignment would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. The constraint associated with the electrical hazard will be reduced by regular maintenance of the operational corridor, which will avoid the incidences of 'Red Zone' trees<sup>4</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

### 8 Mitigation Opportunities

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the OC woodland removal area by replanting the area quantity (hectares) of woodland removed.

<sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



**IRANSMISSION** 

## 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2e.1 Woodland Removal for Infrastructure (OHL OC)		
Item Woodland Type Area (ha)		
OHL	Mature Conifer	0.18 ha
Total		0.18 ha

Table 9.2e.2 Compensatory Planting		
Compensatory Planting Area (Both OC and Management felling)	Mixed conifer or mixed broadleaves	0.27 ha

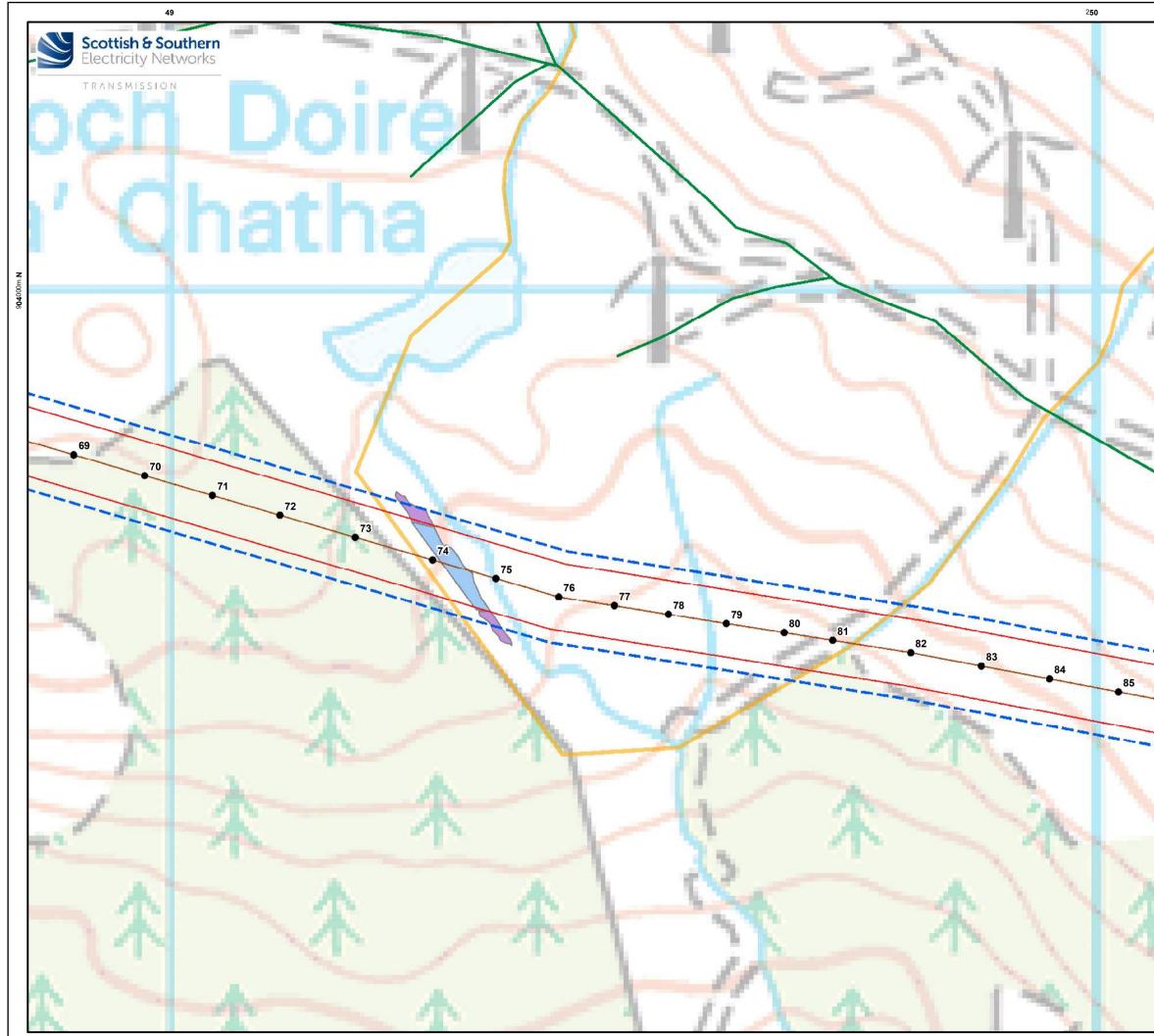
Table 9.2e.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area	All	0.27 ha
Total Compensatory Planting Area	All	0.27 ha
Total Net Loss of Woodland Area		0.00 ha

Table 9.2e.4 Woodland Removal for Management Felling			
Item	Woodland Type	Area	
Management Felling	Mature mixed conifer plantation	0.09 ha	
Replanting / Restocking	Predominantly mixed conifer	0.00 ha	
Net Loss of Woodland Area		0.00ha	
In this situation the 0.09 ha of management felling will be included within offsite compensatory planting			

## **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.



2**49**000m.**E** 

# Legend

#### S.37 Overhead Line (OHL) Works

- Proposed Pole Location
- Proposed Overhead Line (OHL)
- Limit of Deviation (LoD) for Proposed OHL (50m either side)
- OHL Operational Corridor (36m either side)

#### Existing Infrastructure

Existing Tracks

#### Felling

04

86

Mixed Conifer Felling

Management Felling

#### Landownership

Landowner Property Boundaries -Rosehall Forestry Remainder

		0.1 A3	km 0.2
Crown c		ase right 2025	ey on behalf of HMSO. all rights reserved. 0100022432.
Project:	Achany Wind Farm Extension Grid Connection: Environmental Appraisal		
Title:	0	Rosehall Fo	perational Corridor restry Remainder
Drawn by:	F.L., M.T.		Date: 03/04/2025
Drawing:	122010-EA-9	.2.5-1.0.0	



Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2f Overhead Line (OHL) Woodland Report Property: Rosehall Woodlands

March 2025





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## **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA), specifically **Chapter 9: Forestry**, for full details of the project.

## 2 Purpose of this Woodland Report

As part of the EA process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within a single private or publicly owned landholdings. The landholding property boundaries are identified in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2f**) considers the privately owned Rosehall Woodlands. See also **Figure 9.2.6**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

This property is a mixed conifer upland plantation. The upper section of this property has been previously felled for the existing Rosehall Wind Farm.

The National Grid Reference of the woodland property is NC486038 covering an area of approximately 266.07 ha

### **4** Development Requirements

#### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.



The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new OHLs, resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage. As a result, the final 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.6** for Rosehall Woodlands has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

#### 4.2 Access Track Route Design

Given the current existing forest tracks in Rosehall Woodland there is only one proposed section of new temporary access track for the construction of the proposed OHL. The temporary access track OC is based on a 25 m (12.5 m either side of the track centreline). The track design has attempted to minimise additional tree felling and avoid, where possible any woodland sensitivities.

The section of proposed temporary access track in Rosehall Woodland falls predominantly in the OHL OC, and some falls outwith this, but in the proposed management felling area. These areas of woodland removal have therefore already been accounted for within the OHL OC and have not been double counted. The access track OC has therefore also not been shown on **Figure 9.2.6**.

### **5** Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory (2022), aerial imagery and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the OHL alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>1</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>2</sup>, to identify current woodland environmental designations and classifications.

 $<sup>^{1}\, {\</sup>tt https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer}$ 

 $<sup>^2\,</sup>https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland$ 



The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS).

There is no ancient woodland or veteran trees within the OC within this area of land ownership.

There is no native woodlands within the OC within this area of land ownership.

Rosehall Woodlands would be impacted by the Proposed Development comprising the removal of 4.59 ha of mature conifer and 4.80 ha of young conifer for the OC, as shown in **Table 9.1** below and **Figure 9.2.6**.

## 6 Windthrow Risk Impact

Within this forest area some impact of windthrow risk would be created by the removal of mature mixed conifer trees within part of the OHL OC. Areas of management felling have been proposed amounting to 4.77 ha in total.

### 7 Woodland Management Impact

The OHL alignment would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. 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<sup>3</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

## 8 Mitigation Opportunities

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the OC woodland removal area by replanting the area quantity (hectares) of woodland removed.

<sup>3</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



I RANSMISSION

The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2f.1 Woodland Removal for Infrastructure (OHL OC)		
Item Woodland Type Area (ha)		
	Mature Conifer	4.59
	Young tree removal	4.80
Total		9.39 ha

Table 9.2f.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	9.39 ha

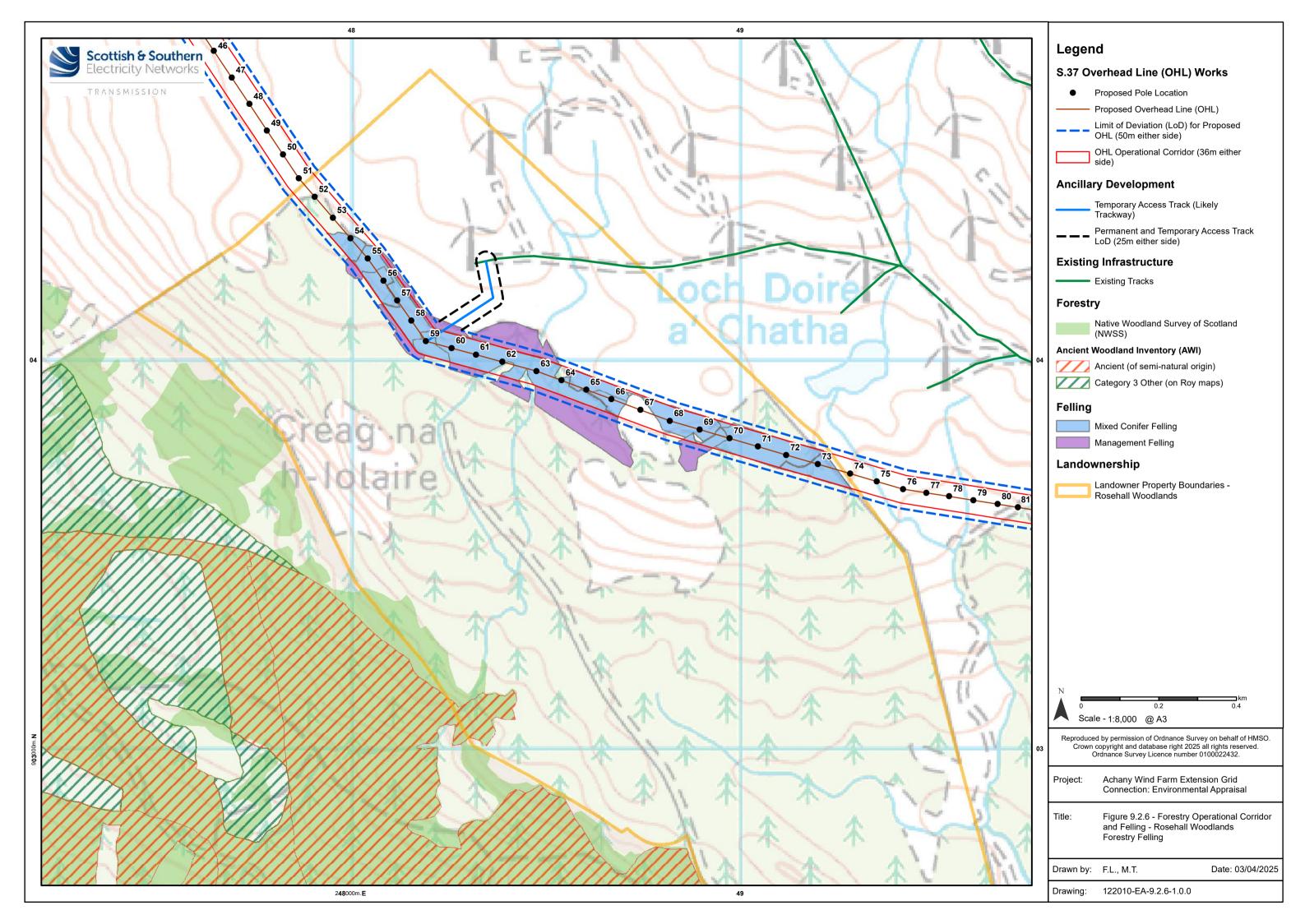
Table 9.2f.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area All 9.39 ha		9.39 ha
Total Compensatory Planting Area	All	9.39 ha
Total Net Loss of Woodland Area		0.00 ha

Table 9.2f.4 Woodland Removal for Management Felling         Item       Woodland Type       Area		
Management Felling	Mature mixed conifer plantation	4.77 ha
<u> </u>	· ·	
Replanting / Restocking	Predominantly mixed conifer	4.77 ha
Net Loss of Woodland Area		0.00 ha

### **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.





Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2g Overhead Line (OHL) Woodland Report Property: Superior Plantation

March 2025





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	0 COMPENSATORY PLANTING	



## 1 Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Technical Appendix (TA) presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal (EA), specifically **Chapter 9: Forestry**, for full details of the project.

### 2 Purpose of this Woodland Report

As part of the EA process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within a single private or publicly owned landholdings. The landholding property boundaries are identified in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2g**) considers the privately owned Superior plantation area. See also **Figure 9.2.7**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

Superior plantation is a relatively small coniferous plantation which lies between the National Forest Estate, Creag Liath and Coille An Fheoir.

The National Grid Reference of the woodland property is NC NC521021, and it covers approximately 13.76 ha.



## **4** Development Requirements

#### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage1. As a result, the final corridor 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.7** has been based on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

#### 4.2 Access Track Route Design

Given the current existing forest tracks in Superior Plantation, there is only one proposed section of temporary access track for the construction of the proposed OHL. The temporary access track OC is based on a 25 m width (12.5 m either side of the track centreline). The track design has attempted to minimise additional tree felling and avoid, where possible any woodland sensitivities.

The temporary track in Superior Plantation falls mostly within the OHL OC, so the area of woodland removal has already been accounted for within the OHL OC and has not been double counted. The parts of the access track outwith the OHL OC pass over an area that does not have trees. The access track OC has therefore also not been shown on **Figure 9.2.7**.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry. [pdf] Available at: FISA 804 (ukfisa.com)



## **5** Woodland Characteristics

The forest data has been drawn up from the National Forest Inventory (2022) and forest walkovers in July 2022 and August 2023, which were conducted for the selection of the OHL alignment.

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications.

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS)

There is no ancient woodland or native woodland present within the OC of the Superior Plantation.

NWSS records indicate there are no native pinewood within the Superior plantation.

No Management Plan appears to be in place for this property.

Superior Plantation would be impacted by the Proposed Development with the removal of 1.93 ha of mixed conifer forest for the OC as shown in **Table 9.1** below and **Figure 9.2.7**.

#### 6 Windthrow Risk Impact

Within Superior Plantation some impact of windthrow risk would be created by the removal of mature trees within part of the OHL OC. Areas of management felling have been proposed amounting to 1.28 ha in total.

### 7 Woodland Management Impact

The OHL alignment would create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. 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<sup>4</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland from the OC. This would reduce the forestry restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

<sup>&</sup>lt;sup>2</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer

 $<sup>^{3}\</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland$ 

<sup>&</sup>lt;sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



During the construction phase, a level of disruption will be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

## 8 Mitigation Opportunities

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the operational corridor woodland removal area by replanting the area quantity (hectares) of woodland removed.

The management felling areas will be replanted by the forest owner, in-line with the Scottish Forestry felling permission regulations of the area felled must be replanted.

#### 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2g.1 Woodland Removal for Infrastructure (OHL OC)		
Item	Woodland Type	Area (ha)
OHL	Mature Conifer	1.93 ha
Total		1.93 ha

Table 9.2g.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	1.93 ha

Table 9.2g.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area All 1.93 ha		1.93 ha
Total Compensatory Planting Area	All	1.93 ha
Total Net Loss of Woodland Area		0.00 ha

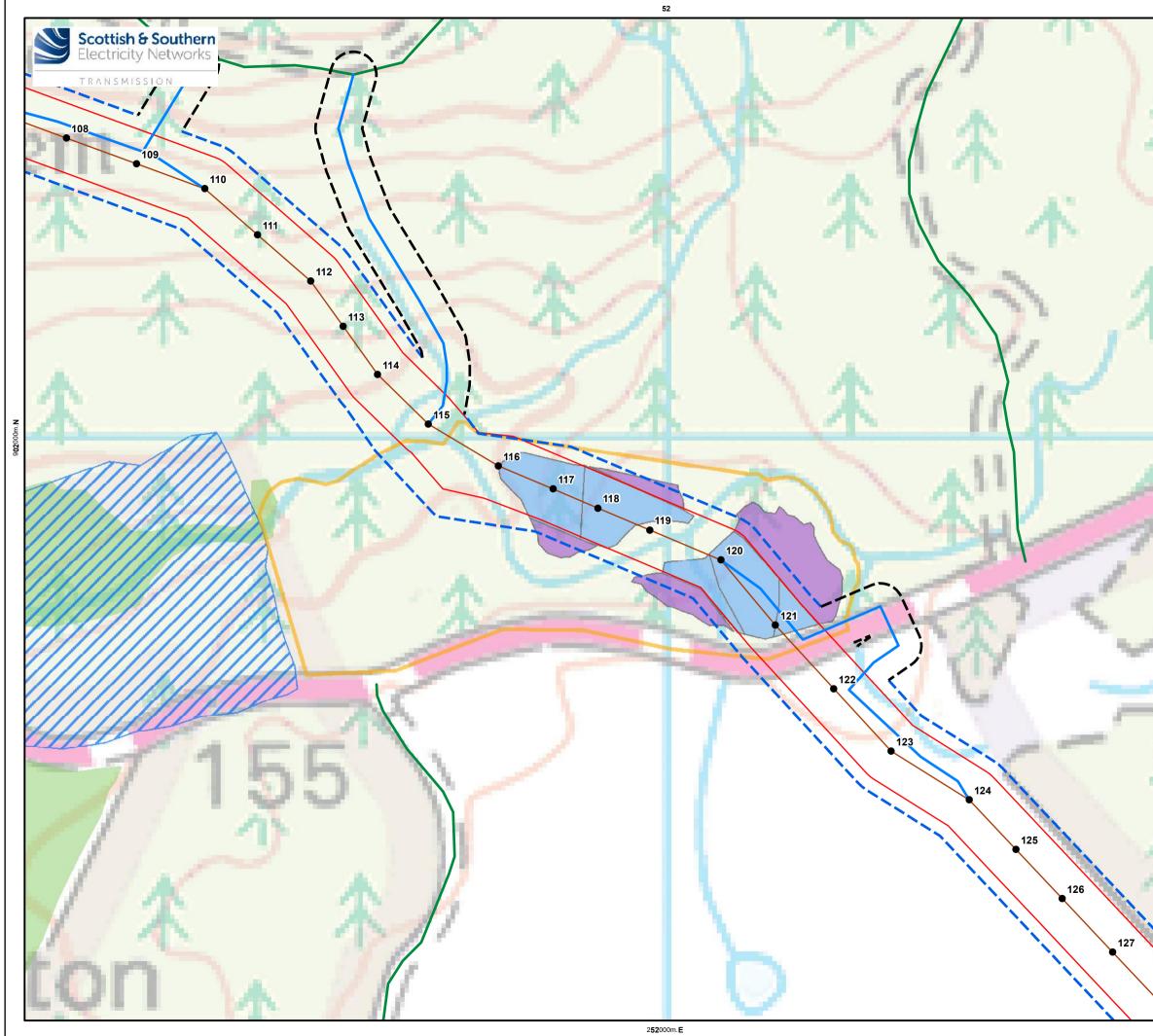
Table 9.2g.4 Woodland Removal for Management Felling		
Item	Woodland Type	Area
Management Felling	Mature mixed conifer plantation	1.28 ha
Replanting/Restocking	Predominantly mixed conifer	1.28 ha
Net Loss of Woodland Area		0.00 ha

### **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.



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 9.1 Compensatory Planting Management Strategy** of the EA.



	Legend
	S.37 Overhead Line (OHL) Works
	Proposed Pole Location
4	Proposed Overhead Line (OHL)
	Limit of Deviation (LoD) for Proposed
The second	OHL (50m either side) OHL Operational Corridor (36m either
	side)
	Ancillary Development
	Temporary Access Track (Likely Trackway)
	Permanent and Temporary Access Track LoD (25m either side)
6. C	Existing Infrastructure
	Existing Tracks
1.0	Forestry
	Native Woodland Survey of Scotland
	(NWSS) Ancient Woodland Inventory (AWI)
	Long Established Plantation Origin
- 0	(LEPO)
02	Felling
	Management Felling
-	Mixed Conifer Felling
-	Landownership
	Landowner Property Boundaries - Superior Plantation
	Superior Frantation
10.0	
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1	
1005	
ALC: N	
A.	
	N km
-	0 0.1 0.2 Scale - 1:4,000 @ A3
<b>1</b>	Reproduced by permission of Ordnance Survey on behalf of HMSO. Crown copyright and database right 2025 all rights reserved.
The second	Ordnance Survey Licence number 0100022432.
17	Project: Achany Wind Farm Extension Grid Connection: Environmental Appraisal
111	Title: Figure 9.2.7 - Forestry Operational Corridor and Felling - Superior Plantation - Forestry Felling
128	Drawn by: F.L., M.T. Date: 03/04/2025
	Drawing: 122010-EA-9.2.7-1.0.0



Achany Wind Farm Extension Grid Connection: Environmental Appraisal Appendix 9.2h Overhead Line (OHL) Woodland Report Property: SSE Shin Substation

March 2025





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## **1** Introduction

Scottish and Southern Electricity Networks (SSEN) Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.

SSEN Transmission (hereafter referred to as 'the Applicant') are proposing to construct a new single circuit 132 kV overhead line (OHL) known as the 'Achany Wind Farm Extension Grid Connection'. The project, hereafter referred to as 'the Proposed Development', is being driven by the requirement to provide a grid connection for the consented Achany Wind Farm Extension.

This Appendix presents information relevant to the Proposed Development's application for consent under section 37 of the Electricity Act 1989. It should be read in conjunction with the Environmental Appraisal, specifically **Chapter 9: Forestry**, for full details of the project.

## 2 Purpose of this Woodland Report

As part of the EA process, it was identified that construction of the proposed OHL and proposed access tracks of the Proposed Development would cross a number of woodland areas within a single private or publicly owned landholdings. The landholding property boundaries are identified in **Figure 9.1** of the EA.

This woodland report (**Appendix 9.2h**) considers the woodland associated with Shin substation. See also **Figure 9.2.8**.

This document provides a conceptual assessment of the woodland areas that are affected by the Proposed Development, including the requirement of woodland removal and management recommendations to mitigate the impact of the woodland removal.

Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity (ha) to be compensatory planted to ensure no net loss of woodland is achieved.

### **3** Woodland Property

The woodlands associated with the Shin substation, at Inveran, are mainly to the north of the A837 and adjacent to the National Forest Estate, Inveran Wood. The woodlands include open ground, shrub species and some mature conifer.

The National Grid Reference of the woodland property is NH571975 covering approximately, and it covers approximately 0.58 ha.



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# **4** Development Requirements

#### 4.1 132 kV Overhead Line

The Proposed Development consists of the installation and operation of approximately 16 km of new trident H-wood pole 132 kV OHL from a Cable Sealing End structure which lies approximately 1.2 km south-west of the consented Achany Wind Farm Extension on-site substation. The OHL would terminate at the existing Shin substation.

The study area for this woodland assessment is based around the Operational Corridor (OC). The Applicant defines the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 and The Electricity Act 1989. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final 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 wood poles, taking account of topography and tree height at maturity. Where the OC passes through areas of native woodland, it is noted that the width of woodland removal is likely to be reduced due to the lower height of the tree species present.

The proposed OC illustrated in **Figure 9.2.8** for the woodlands associated with Shin substation has been based on the likely height of the woodland at maturity, and therefore varies in width according to the woodland type present.

The future plans of landowner woodland restructuring (clearfell and replant), where available, have been reviewed.

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of commercial conifer woodland is 72 m (36 m either side of the OHL centreline).

The OC width that has been assessed and identified for the safe build and energisation of the new OHL through the areas of native broadleaved woodland is 60m (30 m either side of the OHL centreline). This has been assessed as a maximum OC width required at these woodland locations, with the potential of further narrowing of the OC prior to construction to allow greater tree retention.

#### 4.2 Access Track Route Design

Given the current existing wind farm and forest access track network it is not proposed to design and construct additional tracks within this woodland.

<sup>&</sup>lt;sup>1</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry.. [pdf] Available at: FISA 804 (ukfisa.com)



# 5 Woodland Characteristics

The forest data has been drawn up from aerial imagery and forest walkovers in July 2022 and August 2024, which were conducted for the selection of the OHL alignment. The woodlands associated with Shin Substation are not recorded within National Forest Inventory (NFI).

A desk based study of the woodland areas was conducted, utilising web based data provided by Scottish Forestry<sup>2</sup> and referencing the Scottish Government's Ancient Woodland Inventory (AWI)<sup>3</sup>, to identify current woodland environmental designations and classifications. The Scottish Forestry Man Viewer provides spatial data on the Native Woodland Survey of Scotland

The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS).

AWI records a very small area of Category 3 Other (on Roy Maps) at Linsidecroy / Inveran Woods.

No NWSS are present within this area.

No Forest Management Plan appears to be in place for this property.

The Shin substation woodlands would be impacted by the Proposed Development comprising the removal of 0.52 ha of mature conifer forest and broadleaved woodland for the OC as shown in **Table 9.1** below and **Figure 9.2.8**.

The area of AWI is outwith the OC felling area.

#### 6 Windthrow Risk Impact

No windthrow risk is anticipated with the felling of the OC and therefore no management felling is required.

### 7 Woodland Management Impact

The OHL alignment will create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. 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<sup>4</sup>.

The OHL alignment may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the forest owner and if required will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

The Proposed Development would permanently remove existing mature and young conifer woodland with an area of broadleaved woodland from the OC. This would reduce the forestry

<sup>&</sup>lt;sup>2</sup> https://forestry.gov.scot/support-regulations/scottish-forestry-map-viewer

 $<sup>^{3}\</sup> https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland$ 

<sup>&</sup>lt;sup>4</sup> As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804 Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)



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restructuring / planting land available within the woodland property area, as the OC will be maintained clear of trees.

During the construction phase, a level of disruption would be created for the undertaking of routine forestry management activities by the forest owner on the woodland property. This will be project managed through communication and agreement with the affected stakeholders.

# 8 Mitigation Opportunities

A reduced operational corridor width of 60 m has been assessed for the areas of native broadleaved woodland. Prior to the construction phase these areas will be assessed for further selective felling to identify if greater tree retention can be achieved. This will be dependent on the requirements of the Proposed Development and in particular the safety of OHL wiring operations.

The OC woodland removal area is required for the construction and functioning of the new OHL infrastructure. Opportunities will be assessed for woodland replanting within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Compensatory planting will fully mitigate the operational corridor woodland removal area by replanting the area quantity (hectares) of woodland removed.

## 9 Woodland Removal Impact

The tables below show the areas (ha) of this woodland affected by the Proposed Development.

Table 9.2h.1 Woodland Removal for Infrastructure (OHL OC)		
Item	Woodland Type	Area (ha)
OHL	Mature Conifer	0.10
	Native Broadleaved	0.42
Total		0.52 ha

Table 9.2h.2 Compensatory Planting		
Compensatory Planting Area	Mixed conifer or mixed broadleaves	0.52 ha

Table 9.2h.3 Woodland Removal Impact of Infrastructure		
Total Loss of Woodland Area 0.52 ha		0.52 ha
Total Compensatory Planting Area		0.52 ha
Total Net Loss of Woodland Area		0.00 ha

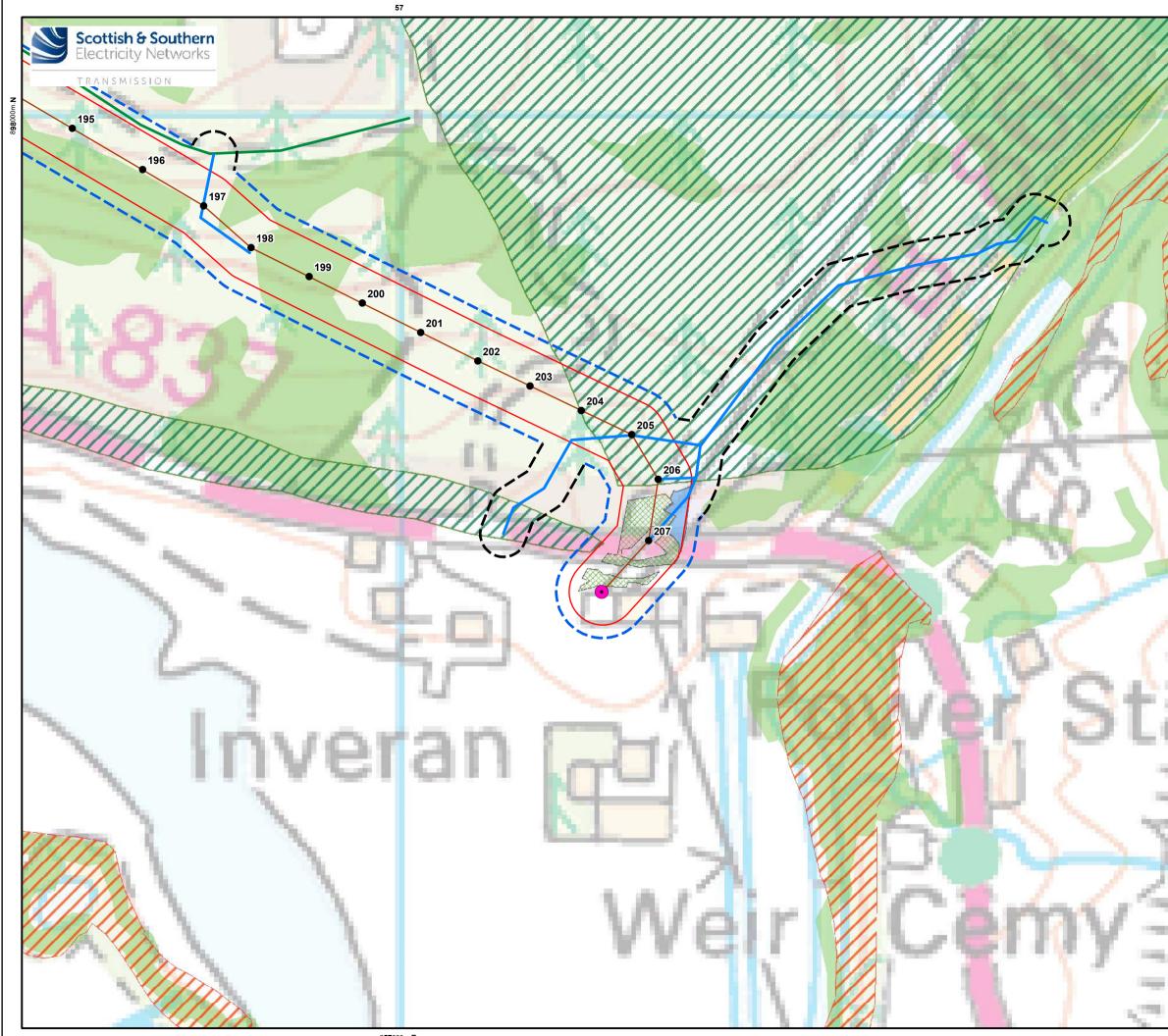
Table 9.2h.4 Woodland Removal for Management Felling			
Item	Woodland Type	Area	
Management Felling	Mature mixed conifer plantation	0.00 ha	
Replanting/Restocking	Predominantly mixed conifer	0.00 ha	
Net Loss of Woodland Area		0.00 ha	



### **10** Compensatory Planting

Compensatory planting to achieve the area quantity (hectares) of woodland removal will be provided for the OHL OC area and will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland.

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 9.1 Compensatory Planting Management Strategy** of the EA.



## Legend

#### S.37 Overhead Line (OHL) Works

- Proposed Pole Location
- Proposed Overhead Line (OHL)
- Limit of Deviation (LoD) for Proposed OHL (50m either side)
  - OHL Operational Corridor (36m either side)

#### Ancillary Development

- Temporary Access Track (Likely Trackway
- Permanent and Temporary Access Track LoD (25m either side)

#### **Existing Infrastructure**



• Shin Substation

Existing Tracks

#### Forestry

Native Woodland Survey of Scotland (NWSS)

#### Ancient Woodland Inventory (AWI)



Ancient (of semi-natural origin) Category 3 Other (on Roy maps)

#### Felling



P Date

#### Mixed Conifer Felling Broadleaved Felling

Felling for the temporary access is within National Forest and Land Forestry, this can be seen on Figure 9.2.4a.

	0.1 9 - 1:4,000 @ A3	km 0.2	
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Project:	Achany Wind Farm Extension Grid Connection: Environmental Appraisal		
Title:	Figure 9.2.8 - Forestry Operational Corridor and Felling - Shin Substation Forestry Felling		
Drawn by:	F.L., M.T.	Date: 03/04/2025	
Drawing:	122010-EA-9.2.8-1.0.0		